LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

ADMINISTRATIVE RECORD

Volume 19

2025

Bate Stamp Numbers
01323301 – 01325262

Prepared for

Department of the Army
Longhorn Army Ammunition Plant

1976–2025

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

VOLUME 19

2025

A.	Title:	(Cont'd) Report – Level IV DoD File No. 2 to Final Fourth Annual Remedial Action Operation Report, LHAAP-16 Landfill, Longhorn Army Ammunition Plant (LHAAP), Karnack, Texas, March 2025
	Author(s):	Department of the Army
	Recipient:	Environmental Protection Agency and Texas Commission on Environmental Quality
	Date:	March 19, 2025
	Bate Stamp:	01323301–01325262

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LabSampID : VSTD000.5

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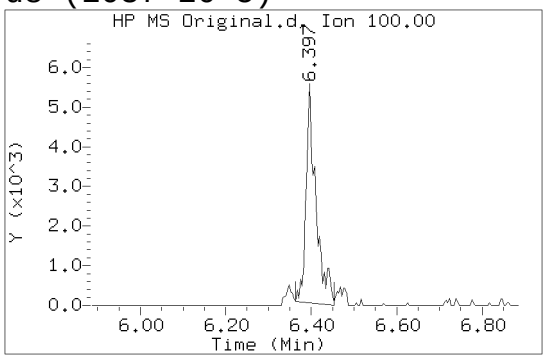

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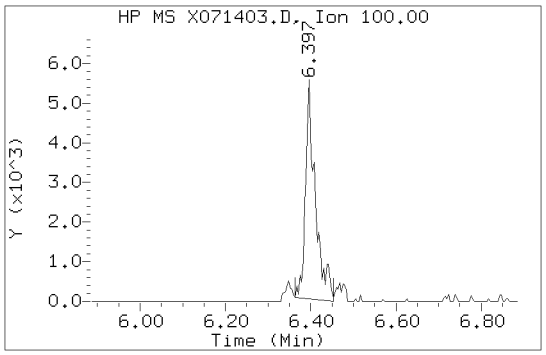

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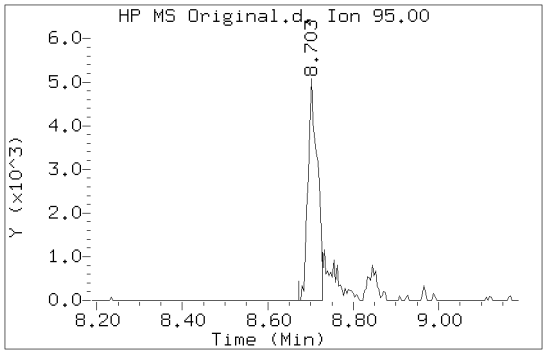

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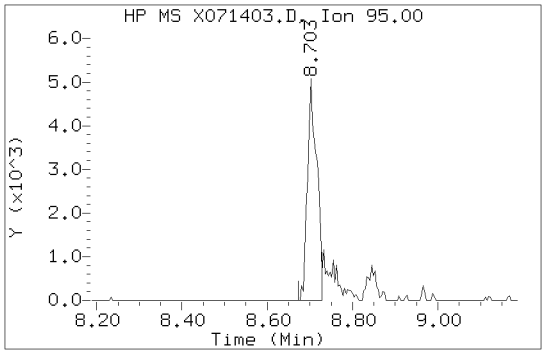

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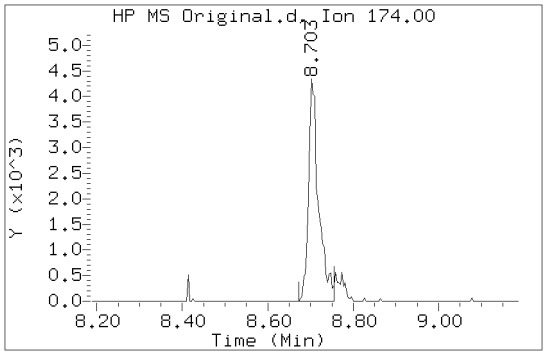

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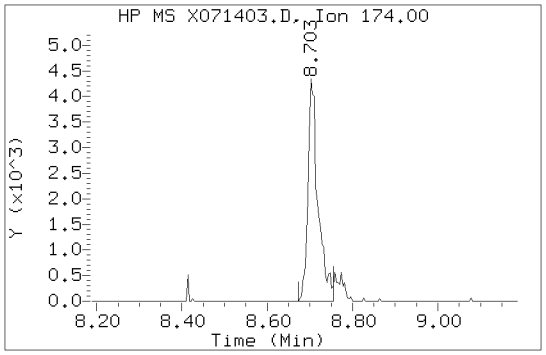

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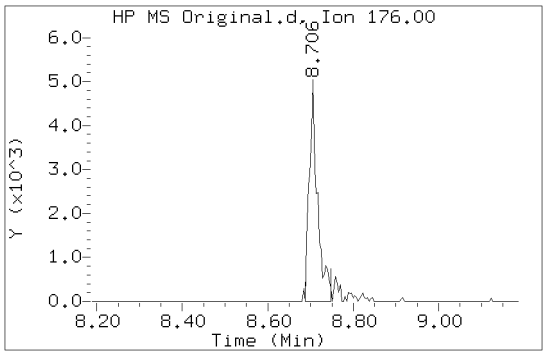

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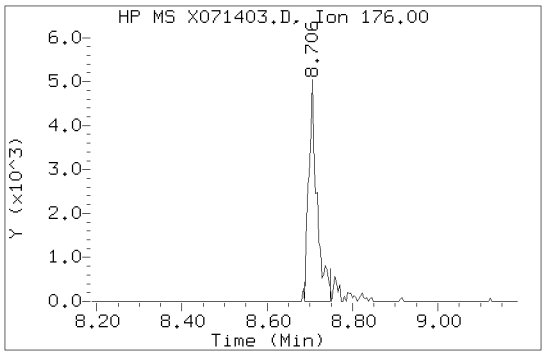

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

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Integrator: HP RTE Compound Sublist: 00000_8260.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	4.178	4.178	(1.000)	527854	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	3668	1.00000	1.76
3	Chloromethane	50	1.081	1.081	(0.259)	7000	1.00000	0.87
4	Propionitrile	54	3.690	3.690	(0.883)	10495	10.0000	10.03(aM)
5	Vinyl Chloride	62	1.149	1.149	(0.275)	5610	1.00000	0.82
6	Bromomethane	94	1.344	1.344	(0.322)	2584	1.00000	0.91
7	Chloroethane	64	1.407	1.407	(0.337)	3779	1.00000	0.96
8	Trichlorofluoromethane	101	1.561	1.561	(0.374)	5888	1.00000	0.85(M)
9	Acrolein	56	1.861	1.861	(0.446)	510	2.00000	3.65(aM)
11	1,1-Dichloroethene	96	1.913	1.913	(0.458)	3525	1.00000	0.91(M)
12	Isobutyl Alcohol	43	4.687	4.687	(1.122)	16938	20.0000	16.92(aM)
13	Acetonitrile	39	2.198	2.198	(0.526)	7835	10.0000	10.58(a)
14	Allyl Chloride	41	2.202	2.202	(0.527)	19290	1.00000	1.11(a)
15	Iodomethane	142	2.030	2.030	(0.486)	4792	2.00000	4.73(M)
16	Acrylonitrile	53	2.551	2.551	(0.611)	4763	2.00000	1.85(M)
18	Methyl tert-butyl ether	73	2.543	2.543	(0.609)	15895	1.00000	1.10
19	Carbon Disulfide	76	2.071	2.071	(0.496)	21621	2.00000	1.77
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.607)	3665	1.00000	0.81
21	Vinyl Acetate	43	3.015	3.015	(0.722)	36157	2.00000	1.95
22	1,1-Dichloroethane	63	2.929	2.929	(0.701)	9261	1.00000	0.94

23 Chloroprene	53	1.786	1.786 (0.428)	2402	1.00000	1.01(aM)
24 2-Butanone	43	3.686	3.686 (0.882)	5549	2.00000	1.97(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	25 Methacrylonitrile	41	3.874	3.874	(0.927)	6195	1.00000	0.90(aM)
	26 2,2-Dichloropropane	77	3.518	3.518	(0.842)	7001	1.00000	1.12(M)
	27 cis-1,2-Dichloroethene	96	3.540	3.540	(0.847)	5828	1.00000	1.02(M)
	28 Chloroform	83	3.915	3.915	(0.937)	10007	1.00000	0.99
	29 Bromochloromethane	128	3.799	3.799	(0.909)	3002	1.00000	0.94(M)
	31 1,1,1-Trichloroethane	97	4.084	4.084	(0.978)	6398	1.00000	0.82(M)
	32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	6097	1.00000	0.91(M)
	33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	9069	1.00000	1.01
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	7002	1.00000	1.04(M)
$	35 1,2-Dichloroethane-d4	65	4.485	4.485	(1.074)	7805	1.00000	0.68
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	814886	50.0000	
	37 Benzene	78	4.515	4.515	(0.909)	18433	1.00000	0.94
	38 Trichloroethene	130	5.212	5.212	(1.050)	4751	1.00000	0.86(a)
	39 Bromodichloromethane	83	5.730	5.730	(1.154)	6967	1.00000	0.93(aM)
	40 Methyl Methacrylate	41	5.628	5.628	(1.347)	7110	1.00000	1.11(a)
	41 2-Chloroethylvinyl ether	63	6.071	6.071	(1.223)	4176	2.00000	1.83(aM)
	42 1,2-Dichloropropane	63	5.441	5.441	(1.096)	5153	1.00000	0.82(aM)
	43 2-Nitropropane	43	5.992	5.992	(1.434)	2054	1.00000	0.97(aM)
	44 Dibromomethane	93	5.557	5.557	(1.119)	3511	1.00000	0.98(a)
	45 4-Methyl-2-Pentanone	43	6.337	6.337	(0.826)	14106	2.00000	1.87(aM)
	46 cis-1,3-Dichloropropene	75	6.168	6.168	(1.242)	7361	1.00000	0.85(a)
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	765384	50.0000	
$	48 Toluene-d8	98	6.397	6.397	(0.834)	21847	1.00000	1.10(aM)
	49 Ethyl Methacrylate	69	6.730	6.730	(1.356)	5749	1.00000	1.07(aM)
	50 Toluene	91	6.453	6.453	(0.842)	17466	1.00000	0.84(a)
	51 trans-1,3-Dichloropropene	75	6.693	6.693	(1.348)	6303	1.00000	0.87(a)
	52 2-Hexanone	43	7.113	7.113	(0.928)	10319	2.00000	2.08(aM)
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	4429	1.00000	1.01(a)
	54 1,3-Dichloropropane	76	6.985	6.985	(0.911)	8584	1.00000	0.96(a)
	55 Dibromochloromethane	129	7.180	7.180	(0.936)	6003	1.00000	0.95(a)
	56 Tetrachloroethene	164	6.929	6.929	(0.904)	3431	1.00000	0.80(aM)
	57 1,2-Dibromoethane	107	7.270	7.270	(0.948)	4879	1.00000	0.97(a)
	58 1-Chlorohexane	55	7.705	7.705	(1.552)	6663	1.00000	1.01(aM)
	59 Chlorobenzene	112	7.698	7.698	(1.004)	13305	1.00000	0.92(a)
	60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	5021	1.00000	0.89(a)
	61 Ethylbenzene	106	7.806	7.806	(1.018)	6243	1.00000	0.86(a)
	62 m,p-Xylenes	106	7.915	7.915	(1.032)	15703	2.00000	1.73(aM)
	63 o-Xylene	106	8.249	8.249	(1.076)	7717	1.00000	0.89(a)
	64 Styrene	104	8.271	8.271	(1.079)	13315	1.00000	0.88(aM)
	66 Bromoform	173	8.421	8.421	(1.098)	3238	1.00000	0.79(TaM)
	67 Isopropylbenzene	105	8.567	8.567	(1.117)	17710	1.00000	0.80(a)
	68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	6483	1.00000	0.99(a)
$	69 4-Bromofluorobenzene	95	8.702	8.702	(1.135)	11517	1.00000	1.09(aM)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	389630	50.0000	
	71 1,2,3-Trichloropropane	75	8.871	8.871	(0.918)	5203	1.00000	1.00(aM)
	72 trans-1,4-Dichloro-2-butene	53	8.912	8.912	(1.162)	1951	1.00000	0.83(aM)
	73 n-Propylbenzene	91	8.920	8.920	(0.923)	19793	1.00000	0.84(a)
	74 Bromobenzene	156	8.815	8.815	(0.912)	5922	1.00000	0.97(a)
	75 1,3,5-Trimethylbenzene	105	9.077	9.077	(0.939)	14649	1.00000	0.83(aM)
	76 2-Chlorotoluene	91	8.980	8.980	(0.929)	15937	1.00000	1.00(aM)
	77 4-Chlorotoluene	91	9.085	9.085	(0.940)	14190	1.00000	0.81(a)
	78 tert-Butylbenzene	119	9.339	9.339	(0.967)	12560	1.00000	0.83(a)

79 1,2,4-Trimethylbenzene	105	9.388	9.388 (0.972)	14383	1.00000	0.81(a)
81 sec-Butylbenzene	105	9.519	9.519 (0.985)	16259	1.00000	0.80(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
82	p-Isopropyltoluene	119	9.651	9.651	(0.999)	15092	1.00000	0.81(aM)
83	1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	9170	1.00000	0.86(a)
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	10311	1.00000	0.88(a)
86	Benzyl Chloride	91	9.827	9.827	(1.282)	10259	1.00000	3.09(aM)
87	n-Butylbenzene	91	10.014	10.014	(1.036)	13321	1.00000	0.86(aM)
88	1,2-Dichlorobenzene	146	10.003	10.003	(1.035)	9791	1.00000	0.93(aM)
89	1,2-Dibromo-3-Chloropropane	155	10.700	10.700	(1.107)	831	1.00000	1.84(aM)
90	1,2,4-Trichlorobenzene	180	11.364	11.364	(1.176)	7113	1.00000	0.99(aM)
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	2109	1.00000	2.96(a)
92	Naphthalene	128	11.574	11.574	(1.198)	18131	1.00000	1.02(aM)
93	1,2,3-Trichlorobenzene	180	11.765	11.765	(1.218)	6973	1.00000	1.04(a)
146	Methyl acetate	43	2.243	2.243	(0.537)	4992	1.00000	1.06(aM)
138	Freon TF	101	1.917	1.917	(0.459)	2818	1.00000	0.25(aM)
141	Cyclohexane	56	4.121	4.121	(0.987)	7673	1.00000	0.83(aM)
142	Tetrahydrofuran	42	3.874	3.874	(0.927)	2815	2.00000	2.07(aM)
147	Methylcyclohexane	55	5.370	5.370	(1.082)	15783	1.00000	0.91(aM)
135	1,4-Dioxane	88	5.613	5.613	(1.344)	1290	20.0000	20.56(M)
132	n-Butanol	56	5.370	5.370	(1.285)	3103	20.0000	17.65(aM)
131	Methyl Acrylate	55	3.750	3.750	(0.898)	5778	1.00000	0.80(aM)
133	Ethyl Acrylate	55	5.370	5.370	(1.285)	18196	1.00000	1.04(M)
136	n-Hexane	57	2.776	2.776	(0.664)	5000	1.00000	0.27(aM)
139	Diethyl ether	59	1.767	1.767	(0.423)	5211	1.00000	1.05(a)
148	Tert-butyl alcohol	59	2.442	2.442	(0.585)	12965	20.0000	19.46(M)
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	9372	20.0000	22.67(TM)
156	Diisopropyl ether	45	3.012	3.012	(0.721)	24757	1.00000	1.13(Ta)
166	1,2,3-Trimethylbenzene	105	9.733	9.733	(1.007)	19017	1.00000	1.05(a)
167	Ethanol	45	1.703	1.703	(0.408)	1613	20.0000	3.59(aM)
172	tert-Butyl formate	59	4.639	4.639	(1.110)	11427	2.00000	2.02(aM)
173	3,3-Dimethyl-1-butanol	57	7.293	7.293	(0.951)	16922	20.0000	20.55(M)
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	19717	1.00000	1.13(a)
175	tert-Butyl ethyl ether	59	3.387	3.387	(0.811)	23746	1.00000	1.06(a)
176	tert-Amyl alcohol	59	4.639	4.639	(1.110)	10855	20.0000	18.82
151	4-Methyl-2-pentanol	45	6.727	6.727	(1.355)	35175	20.0000	20.14(M)
180	1-Methylnaphthalene	142	12.657	12.657	(1.310)	6480	1.00000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	6040	1.00000	0.89(aM)
152	Amyl alcohol	42	6.989	6.989	(0.912)	3944	20.0000	17.91(M)
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	9743	1.00000	1.14(M)
159	Propylene oxide	43	1.805	1.805	(0.432)	1409	2.00000	2.17(aM)
161	3-Methyl-1-butanol	55	6.944	6.944	(0.906)	3623	20.0000	19.22(M)
162	Butyl acrylate	55	8.279	8.279	(1.080)	13586	1.00000	0.93(a)
163	Butyl methacrylate	41	9.178	9.178	(0.950)	9406	1.00000	1.00(a)
164	Dicyclopentadiene	66	9.677	9.677	(1.002)	24319	1.00000	1.08(aM)
182	Epichlorohydrin	57	6.119	6.119	(1.233)	2383	4.00000	3.91(aM)
M 94	1,2-Dichloroethylene (total)	96				9493	2.00000	(a)
130	Ethyl Acetate	43	3.713	3.713	(0.889)	7207	1.00000	0.91(TaM)
134	Cyclohexanone	55	8.646	8.646	(0.895)	7972	20.0000	22.98(aM)
185	Isoprene	39	1.778	1.778	(0.426)	1515	1.00000	0.87(a)
188	Isopropyl acetate	43	4.687	4.687	(0.944)	23748	1.00000	1.10(a)
187	n-Amyl acetate	43	8.474	8.474	(1.105)	15950	1.00000	1.13(aM)
189	n-Butyl acetate	43	7.233	7.233	(0.943)	9795	1.00000	0.83(aM)
150	Allyl alcohol	57	2.776	2.776	(0.664)	5000	20.0000	3.31(aM)
194	Acetaldehyde	44	1.216	1.216	(0.291)	5117	4.00000	(aM)

195 Methyl Amyl Ketone	43	8.406	8.406 (1.096)	14469	1.00000	0.90(a)
200 Dimethyl Disulfide	94	6.202	6.202 (0.809)	9361	1.00000	0.90(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
202 Isobutylene	41	1.246	1.246	(0.298)	875	1.00000	1.00(aM)
205 2-Ethylhexyl Acrylate	55	11.562	11.562	(1.197)	8780	1.00000	0.88(aM)

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.

01323309

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Date : 14-JUL-2023 13:02

Client ID: VSTD001

Instrument: voa6.i

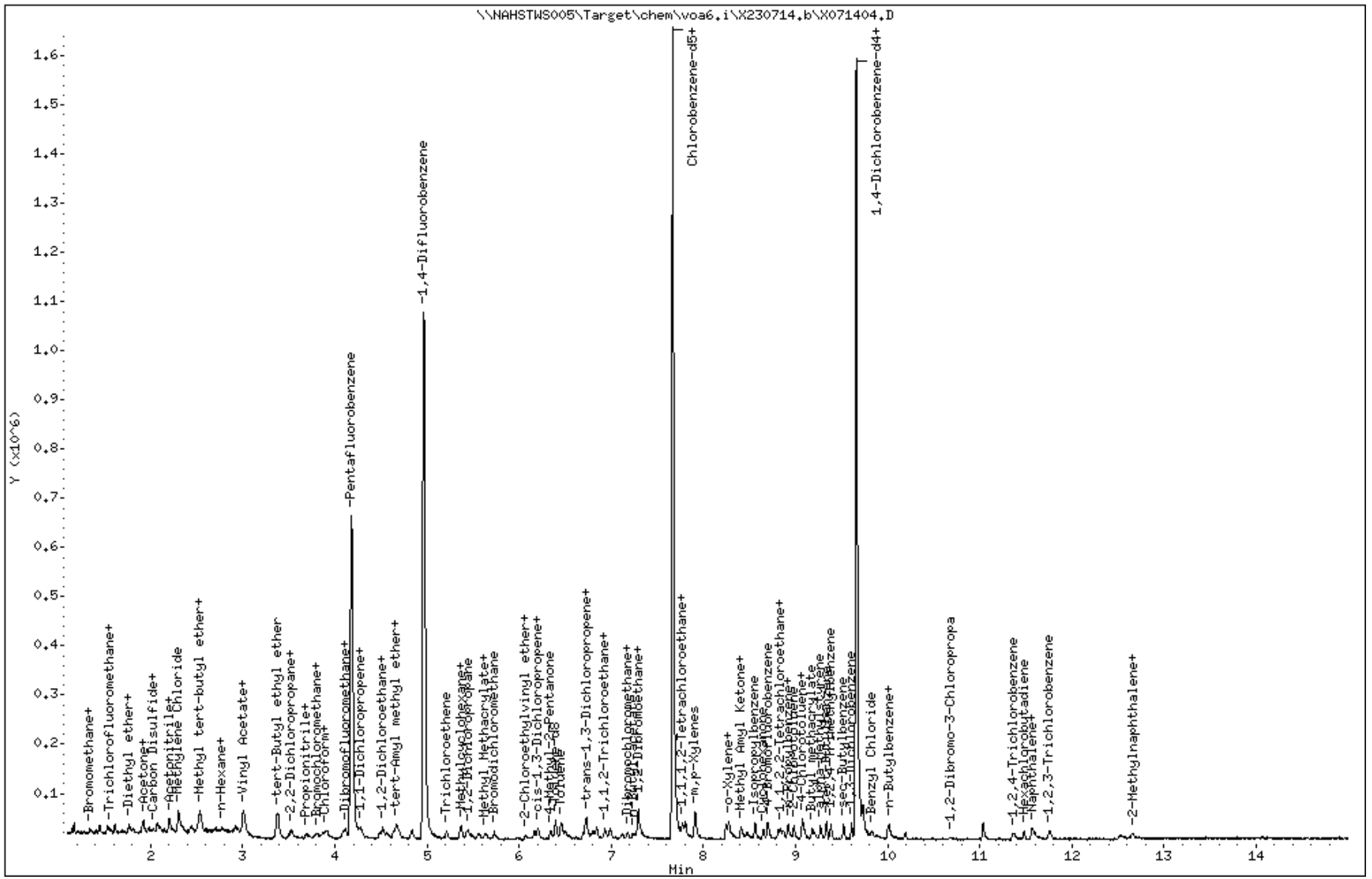
Sample Info: VSTD001;VSTD001;1;3;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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InstruID : voa6.i
LabSampID : VSTD001

Trichlorofluoromethane (75-69-4)

Reason Code:

BEFORE
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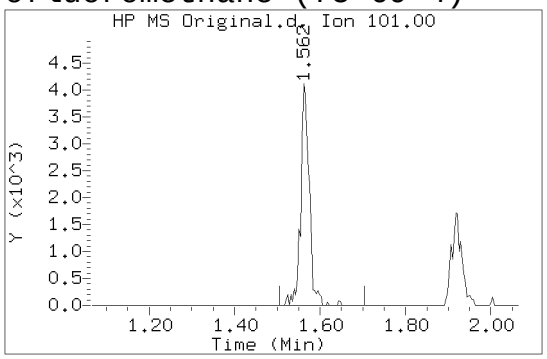
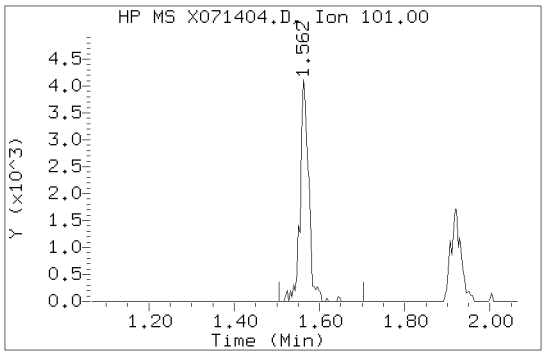
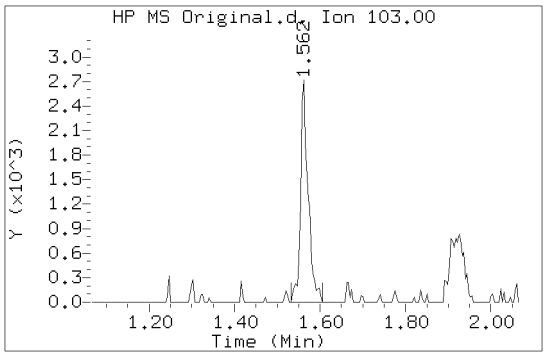
101
AREA
5888
HEIGHT
4116
20-Jul-2023
15:04
linh
pham



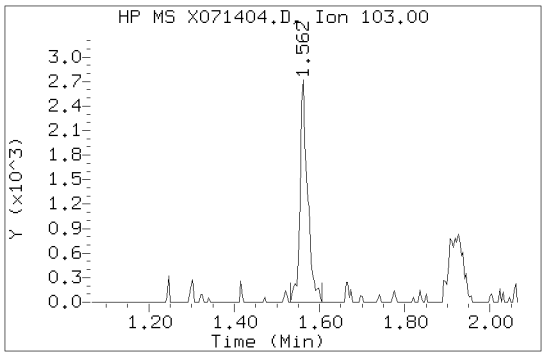
AFTER
MASS
101
AREA
5888
HEIGHT
4116
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
103
AREA
3435
HEIGHT
2720
20-Jul-2023
15:04
linh
pham



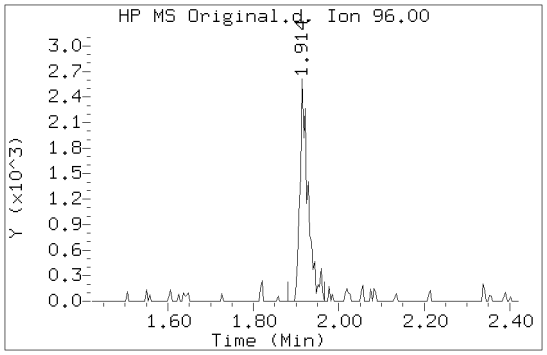
AFTER
MASS
103
AREA
3435
HEIGHT
2720
20-Jul-2023
15:04
linh
pham



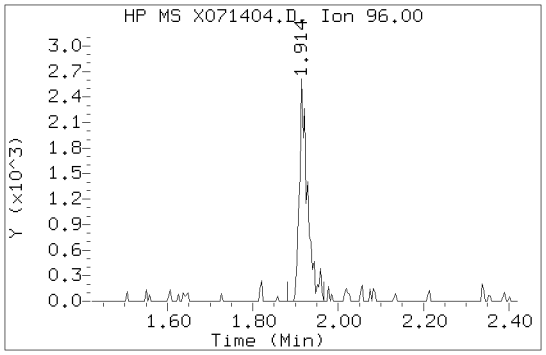
1,1-Dichloroethene (75-35-4)

Reason Code:

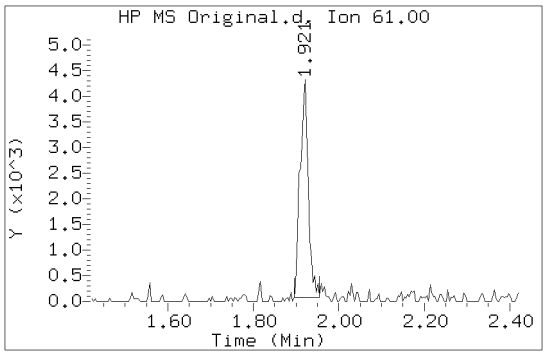
BEFORE
MASS
96
AREA
3525
HEIGHT
2613
20-Jul-2023
15:04
linh
pham



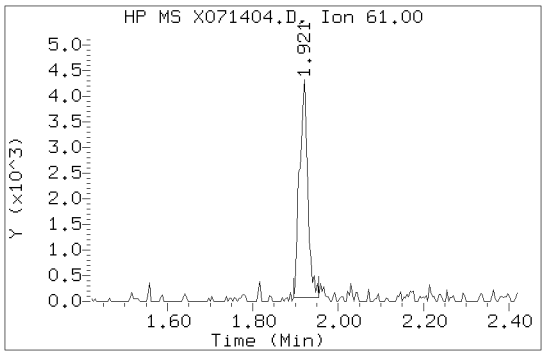
AFTER
MASS
96
AREA
3525
HEIGHT
2613
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
61
AREA
5846
HEIGHT
4244
20-Jul-2023
15:04
linh
pham



AFTER
MASS
61
AREA
5846
HEIGHT
4244
20-Jul-2023
15:04
linh
pham



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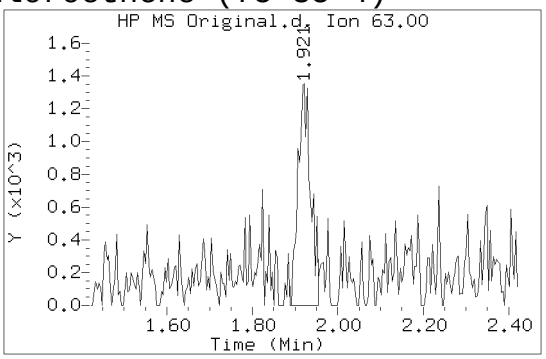
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,1-Dichloroethene (75-35-4)

Reason Code:

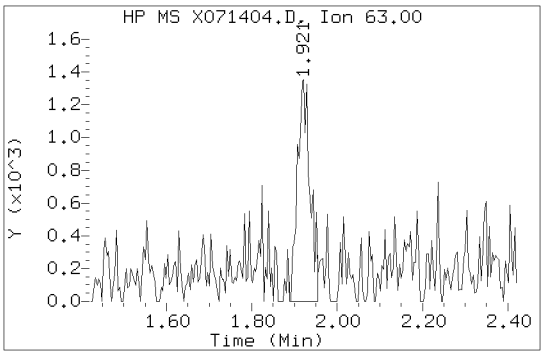
BEFORE

MASS
63
AREA
2823
HEIGHT
1353
20-Jul-2023
15:04
linh
pham



AFTER

MASS
63
AREA
2823
HEIGHT
1353
20-Jul-2023
15:04
linh
pham

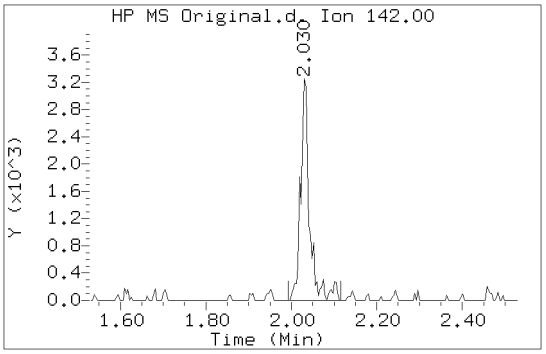


Iodomethane (74-88-4)

Reason Code:

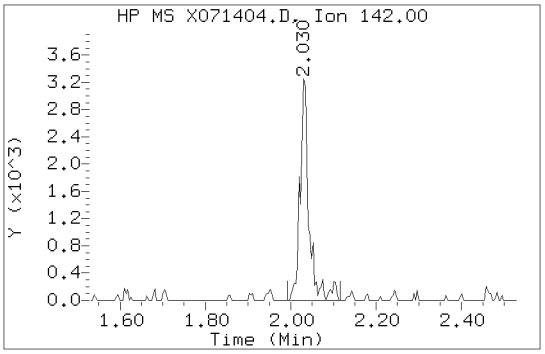
BEFORE

MASS
142
AREA
4792
HEIGHT
3253
20-Jul-2023
15:04
linh
pham



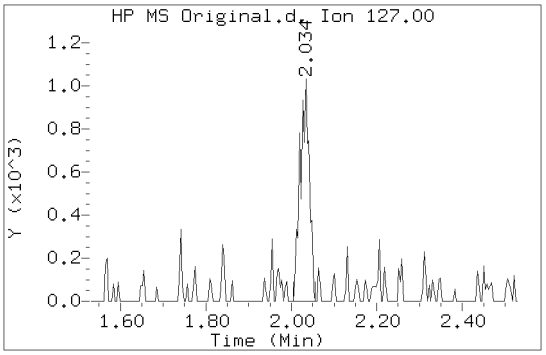
AFTER

MASS
142
AREA
4792
HEIGHT
3253
20-Jul-2023
15:04
linh
pham



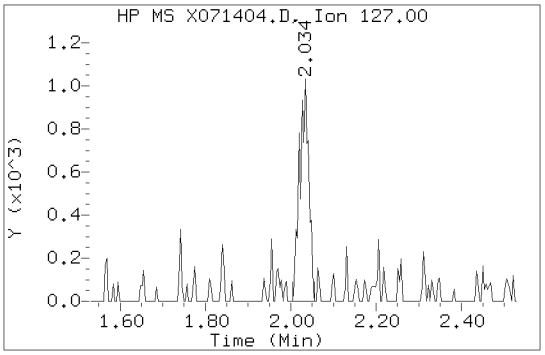
BEFORE

MASS
127
AREA
1562
HEIGHT
1033
20-Jul-2023
15:04
linh
pham



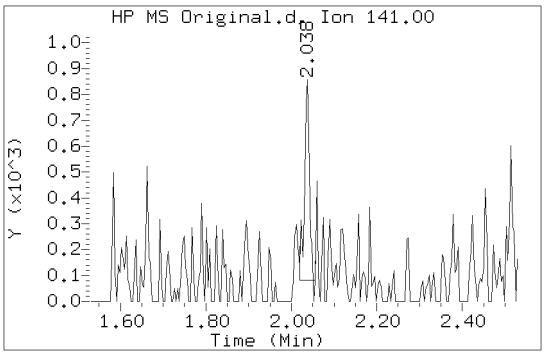
AFTER

MASS
127
AREA
1562
HEIGHT
1033
20-Jul-2023
15:04
linh
pham



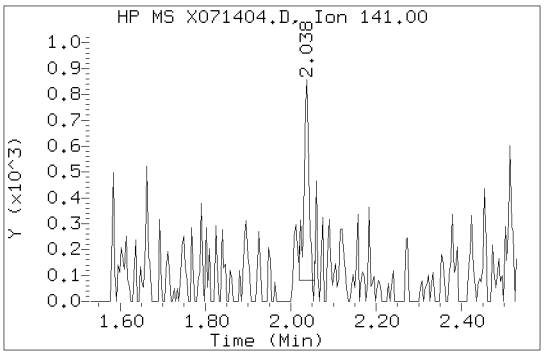
BEFORE

MASS
141
AREA
645
HEIGHT
775
20-Jul-2023
15:04
linh
pham



AFTER

MASS
141
AREA
645
HEIGHT
775
20-Jul-2023
15:04
linh
pham



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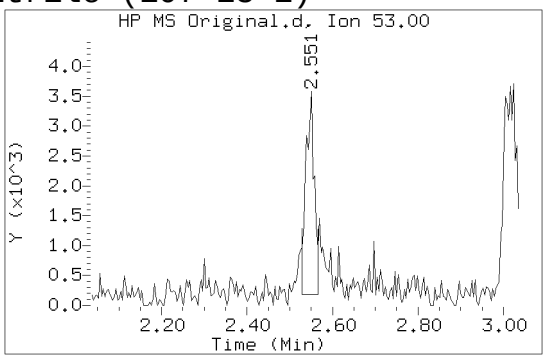
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Acrylonitrile (107-13-1)

Reason Code:

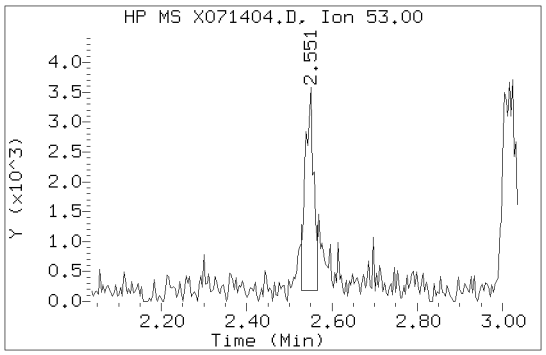
BEFORE

MASS
53
AREA
4763
HEIGHT
3403
20-Jul-2023
15:04
linh
pham



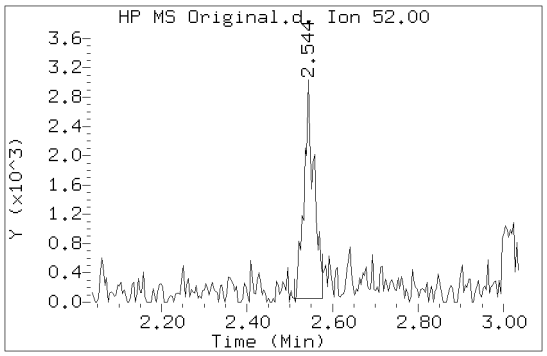
AFTER

MASS
53
AREA
4763
HEIGHT
3403
20-Jul-2023
15:04
linh
pham



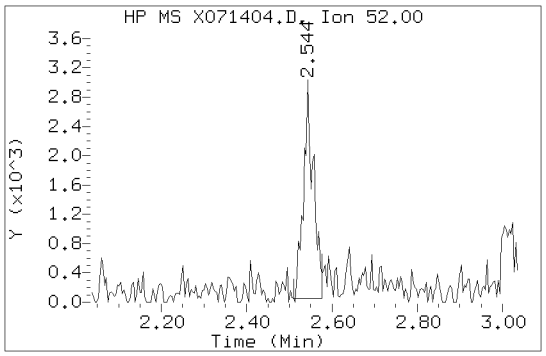
BEFORE

MASS
52
AREA
4911
HEIGHT
2983
20-Jul-2023
15:04
linh
pham



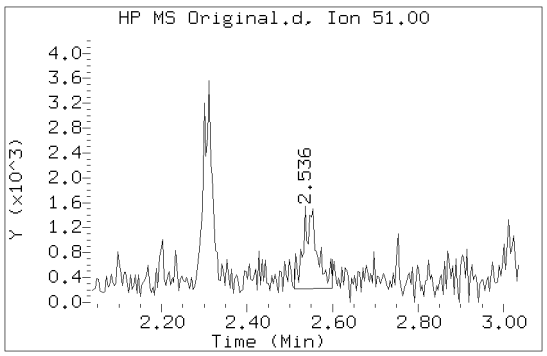
AFTER

MASS
52
AREA
4911
HEIGHT
2983
20-Jul-2023
15:04
linh
pham



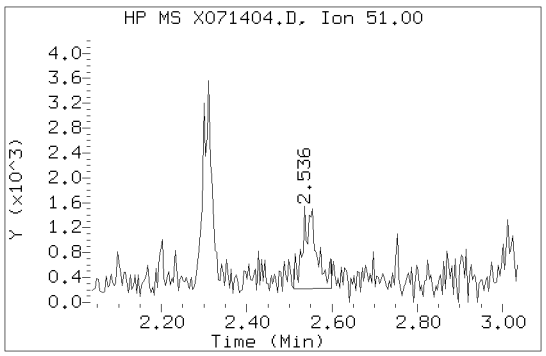
BEFORE

MASS
51
AREA
3020
HEIGHT
1324
20-Jul-2023
15:04
linh
pham



AFTER

MASS
51
AREA
3020
HEIGHT
1324
20-Jul-2023
15:04
linh
pham

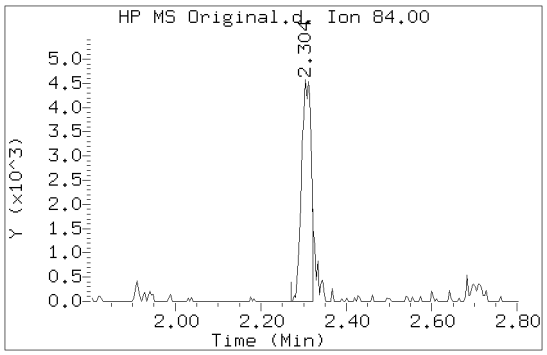


Methylene Chloride (75-09-2)

Reason Code:

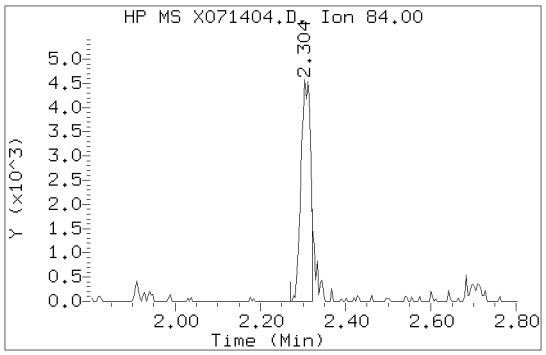
BEFORE

MASS
84
AREA
7389
HEIGHT
4576
20-Jul-2023
15:04
linh
pham



AFTER

MASS
84
AREA
7389
HEIGHT
4576
20-Jul-2023
15:04
linh
pham



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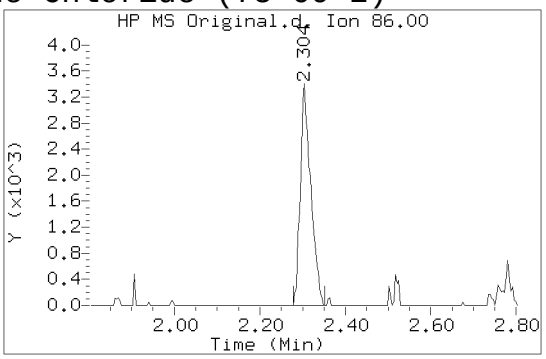
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

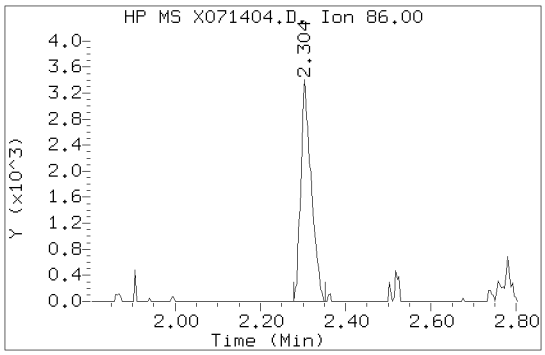
Methylene Chloride (75-09-2)

Reason Code:

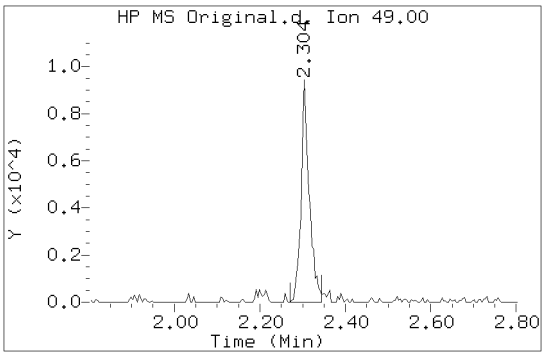
BEFORE
MASS
86
AREA
5890
HEIGHT
3405
20-Jul-2023
15:04
linh
pham



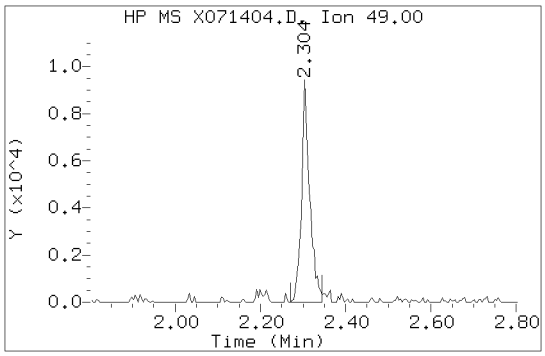
AFTER
MASS
86
AREA
5890
HEIGHT
3405
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
49
AREA
12826
HEIGHT
9432
20-Jul-2023
15:04
linh
pham



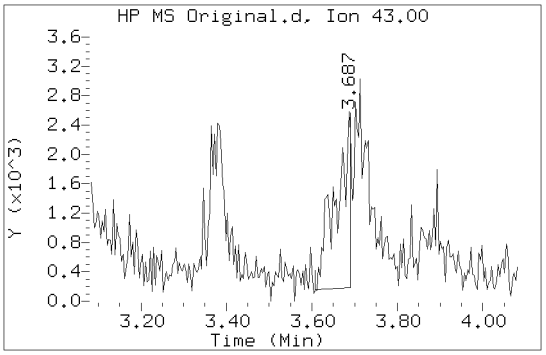
AFTER
MASS
49
AREA
12826
HEIGHT
9432
20-Jul-2023
15:04
linh
pham



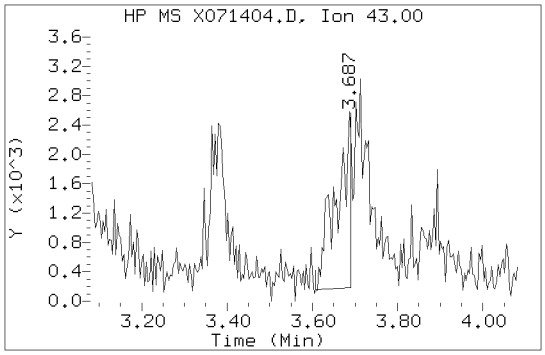
2-Butanone (78-93-3)

Reason Code:

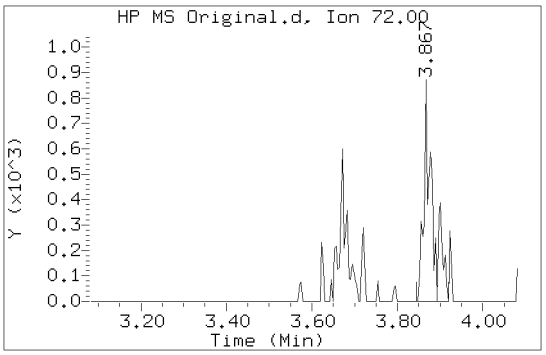
BEFORE
MASS
43
AREA
5549
HEIGHT
2403
20-Jul-2023
15:04
linh
pham



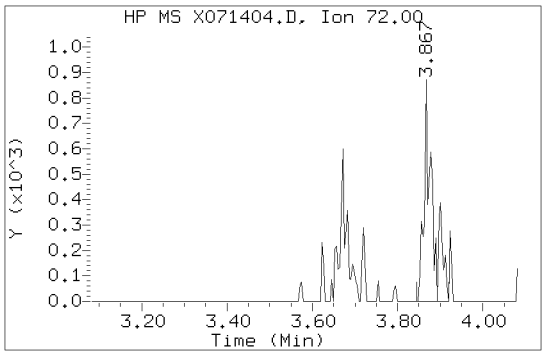
AFTER
MASS
43
AREA
5549
HEIGHT
2403
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
72
AREA
1227
HEIGHT
872
20-Jul-2023
15:04
linh
pham



AFTER
MASS
72
AREA
1227
HEIGHT
872
20-Jul-2023
15:04
linh
pham



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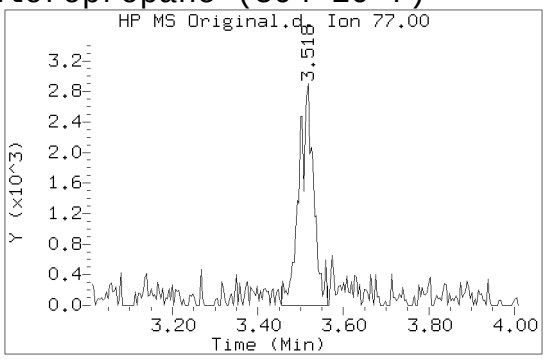
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

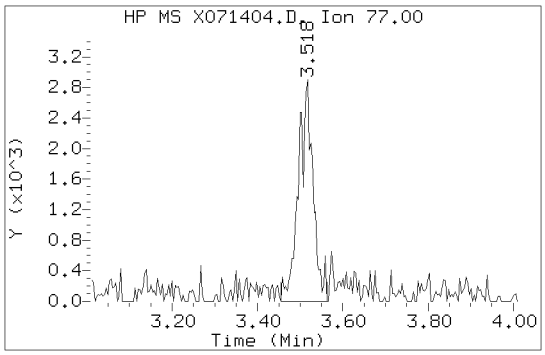
2,2-Dichloropropane (594-20-7)

Reason Code:

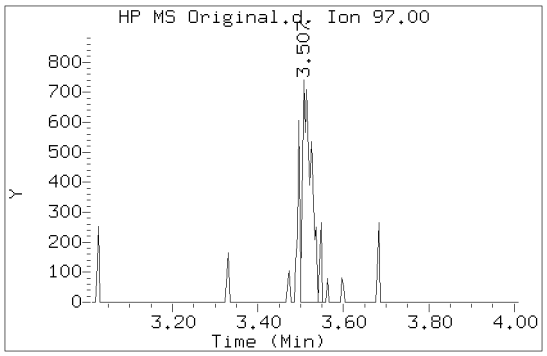
BEFORE
MASS
77
AREA
7001
HEIGHT
2901
20-Jul-2023
15:04
linh
pham



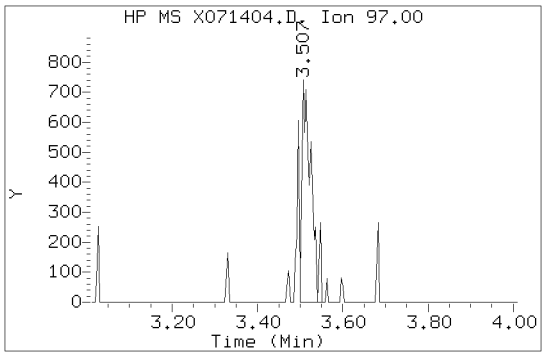
AFTER
MASS
77
AREA
7001
HEIGHT
2901
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
97
AREA
1144
HEIGHT
741
20-Jul-2023
15:04
linh
pham



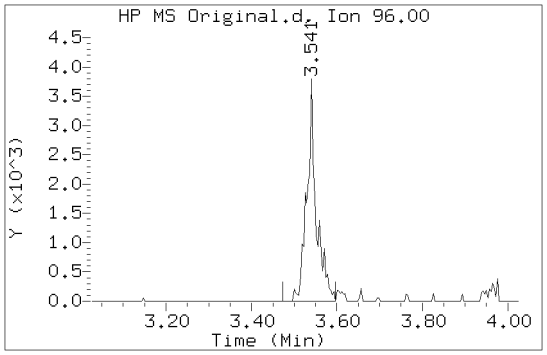
AFTER
MASS
97
AREA
1144
HEIGHT
741
20-Jul-2023
15:04
linh
pham



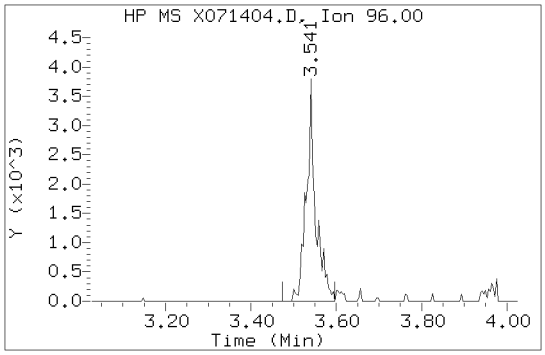
cis-1,2-Dichloroethene (156-59-2)

Reason Code:

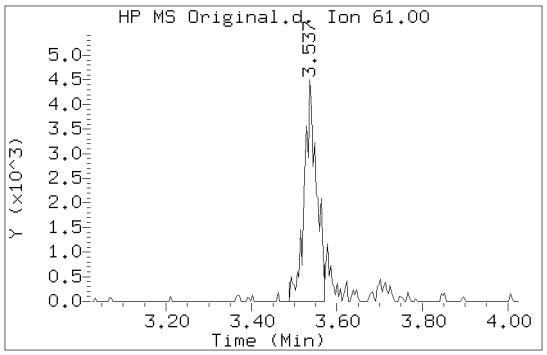
BEFORE
MASS
96
AREA
5828
HEIGHT
3797
20-Jul-2023
15:04
linh
pham



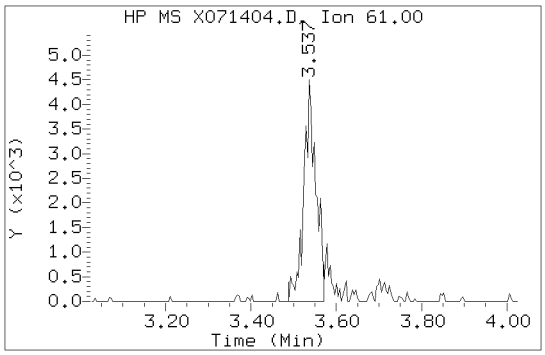
AFTER
MASS
96
AREA
5828
HEIGHT
3797
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
61
AREA
9003
HEIGHT
4504
20-Jul-2023
15:04
linh
pham



AFTER
MASS
61
AREA
9003
HEIGHT
4504
20-Jul-2023
15:04
linh
pham



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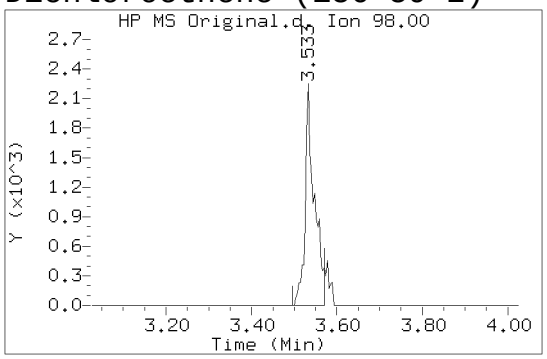
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

cis-1,2-Dichloroethene (156-59-2)

Reason Code:

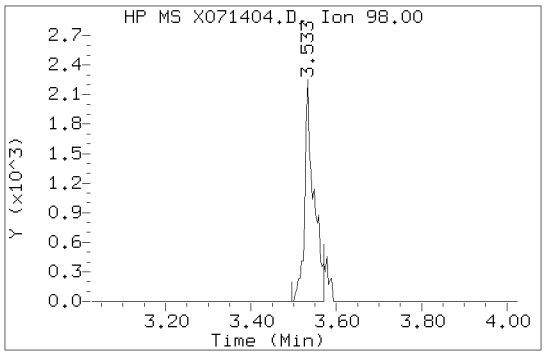
BEFORE

MASS
98
AREA
3384
HEIGHT
2251
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
AREA
3384
HEIGHT
2251
20-Jul-2023
15:04
linh
pham

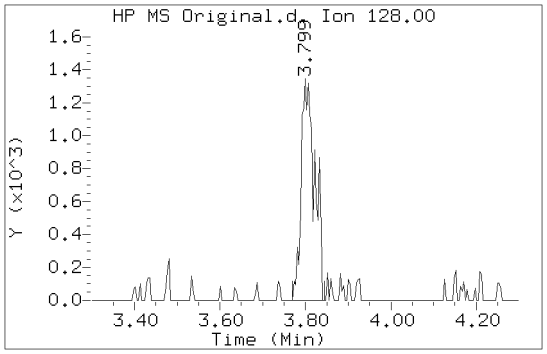


Bromochloromethane (74-97-5)

Reason Code:

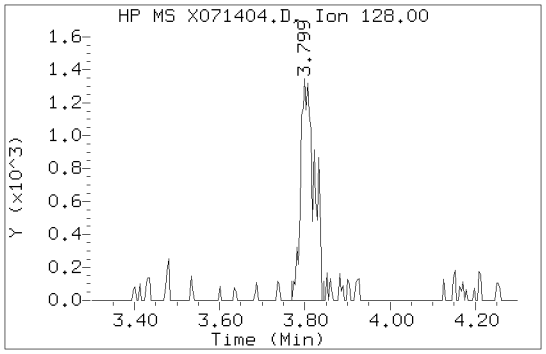
BEFORE

MASS
128
AREA
3002
HEIGHT
1346
20-Jul-2023
15:04
linh
pham



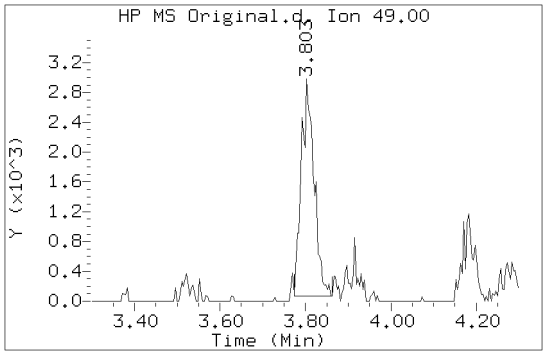
AFTER

MASS
128
AREA
3002
HEIGHT
1346
20-Jul-2023
15:04
linh
pham



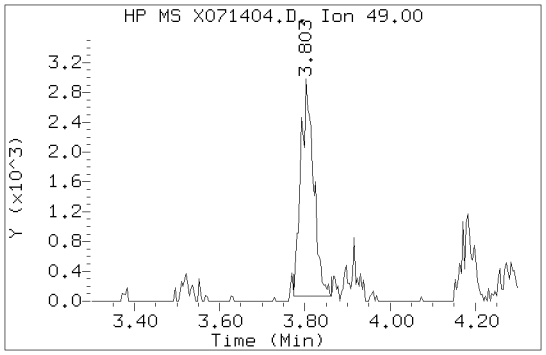
BEFORE

MASS
49
AREA
6119
HEIGHT
2913
20-Jul-2023
15:04
linh
pham



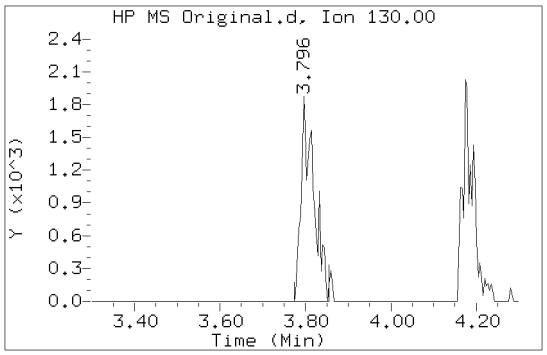
AFTER

MASS
49
AREA
6119
HEIGHT
2913
20-Jul-2023
15:04
linh
pham



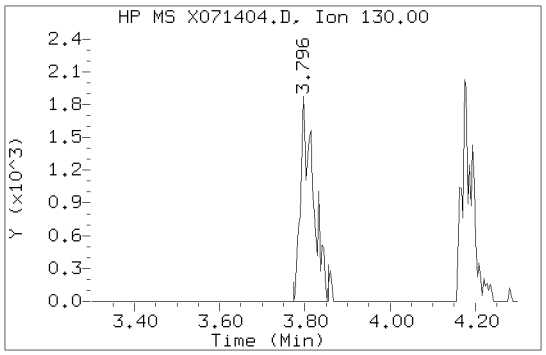
BEFORE

MASS
130
AREA
3970
HEIGHT
1875
20-Jul-2023
15:04
linh
pham



AFTER

MASS
130
AREA
3970
HEIGHT
1875
20-Jul-2023
15:04
linh
pham



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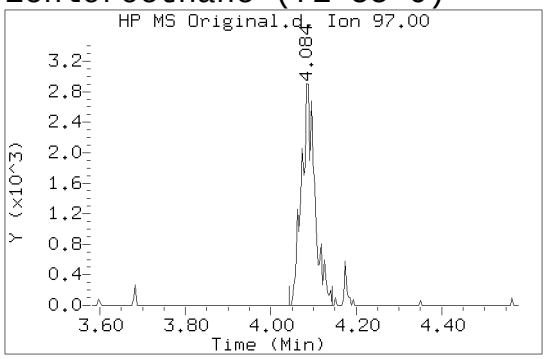
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,1,1-Trichloroethane (71-55-6)

Reason Code:

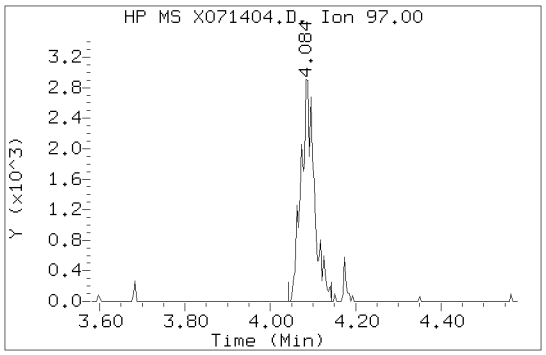
BEFORE

MASS
97
AREA
6398
HEIGHT
2905
20-Jul-2023
15:04
linh
pham



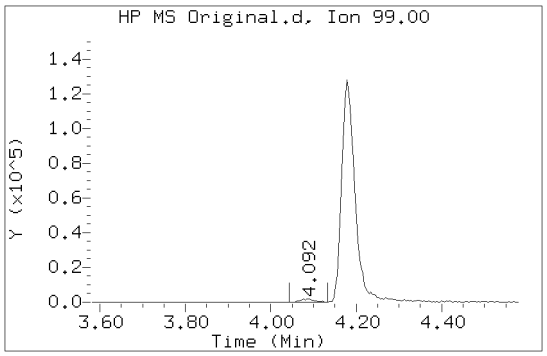
AFTER

MASS
97
AREA
6398
HEIGHT
2905
20-Jul-2023
15:04
linh
pham



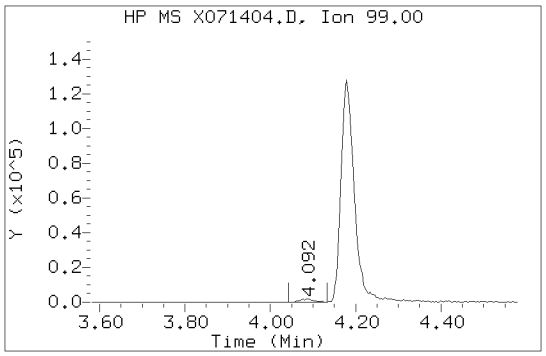
BEFORE

MASS
99
AREA
4128
HEIGHT
1962
20-Jul-2023
15:04
linh
pham



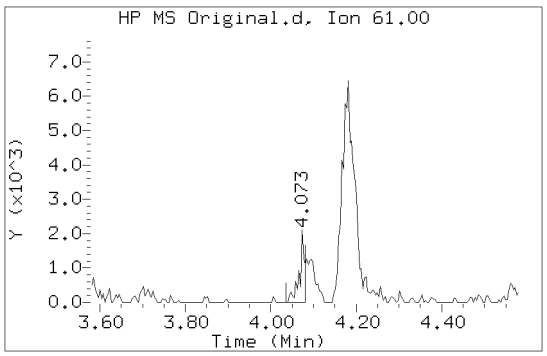
AFTER

MASS
99
AREA
4128
HEIGHT
1962
20-Jul-2023
15:04
linh
pham



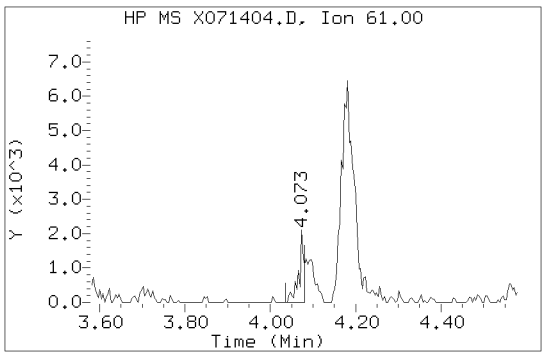
BEFORE

MASS
61
AREA
1719
HEIGHT
2107
20-Jul-2023
15:04
linh
pham



AFTER

MASS
61
AREA
1719
HEIGHT
2107
20-Jul-2023
15:04
linh
pham

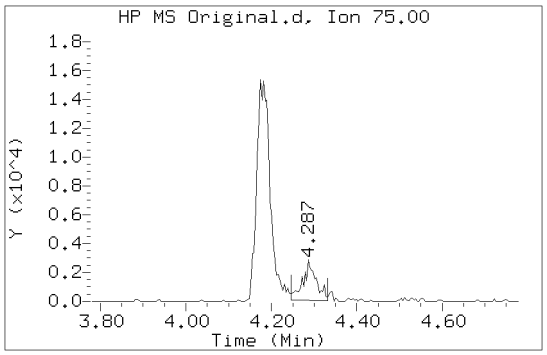


1,1-Dichloropropene (563-58-6)

Reason Code:

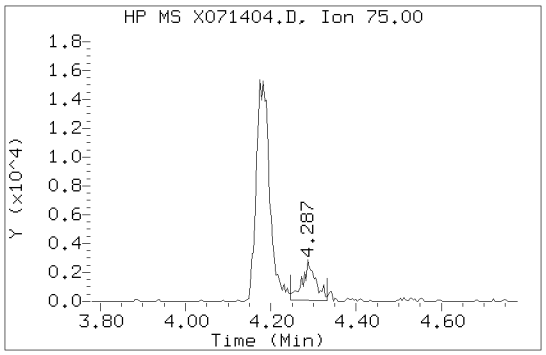
BEFORE

MASS
75
AREA
6097
HEIGHT
2831
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
6097
HEIGHT
2831
20-Jul-2023
15:04
linh
pham



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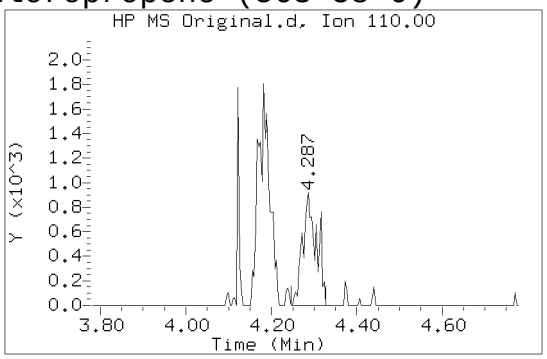
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

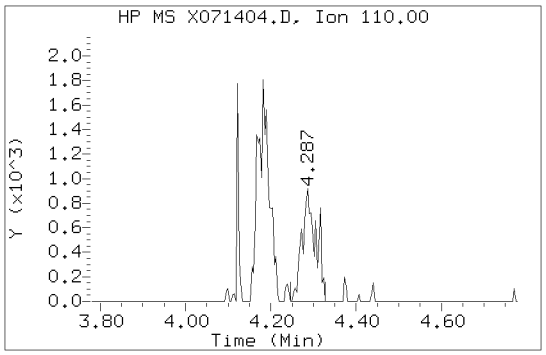
1,1-Dichloropropene (563-58-6)

Reason Code:

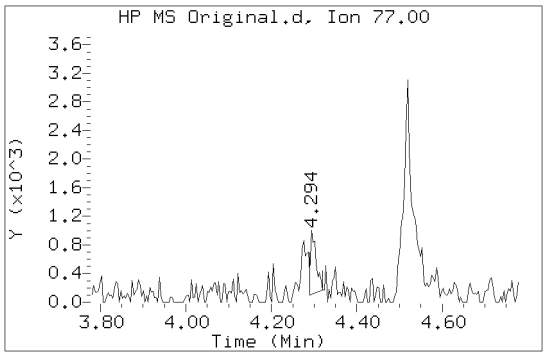
BEFORE
MASS
110
AREA
2079
HEIGHT
917
20-Jul-2023
15:04
linh
pham



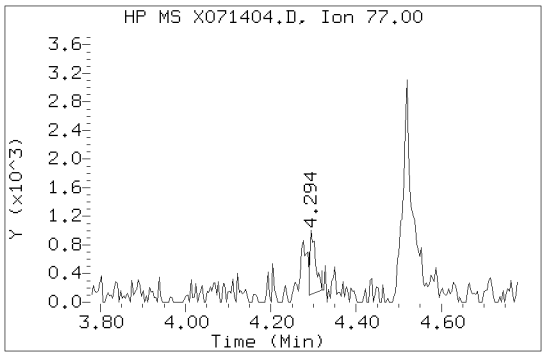
AFTER
MASS
110
AREA
2079
HEIGHT
917
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
77
AREA
821
HEIGHT
892
20-Jul-2023
15:04
linh
pham



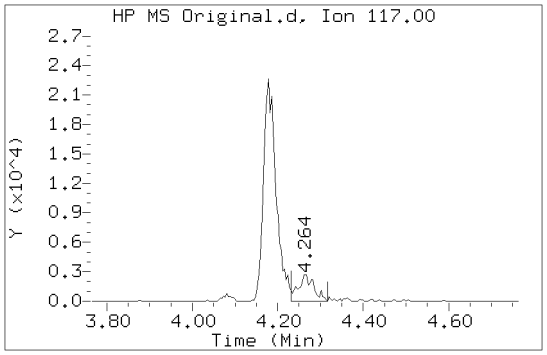
AFTER
MASS
77
AREA
821
HEIGHT
892
20-Jul-2023
15:04
linh
pham



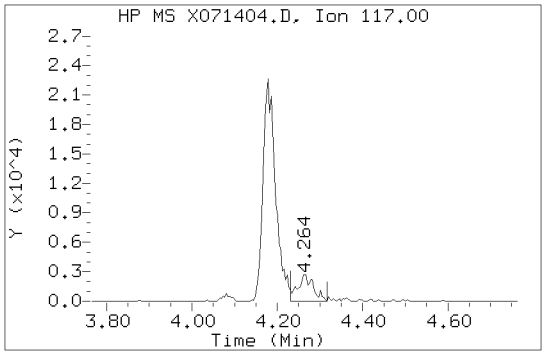
Carbon Tetrachloride (56-23-5)

Reason Code:

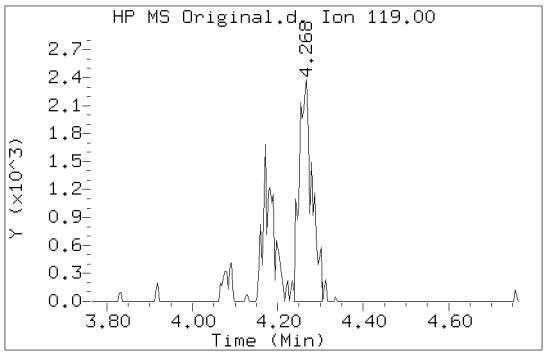
BEFORE
MASS
117
AREA
7002
HEIGHT
2701
20-Jul-2023
15:04
linh
pham



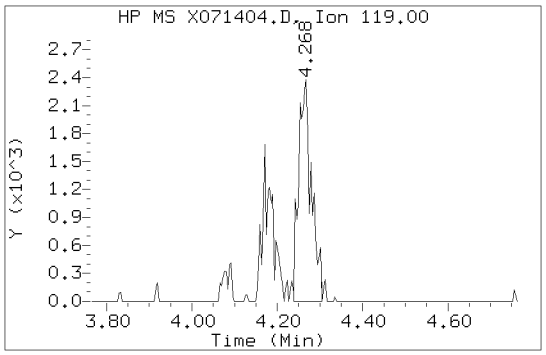
AFTER
MASS
117
AREA
7002
HEIGHT
2701
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
119
AREA
5029
HEIGHT
2378
20-Jul-2023
15:04
linh
pham



AFTER
MASS
119
AREA
5029
HEIGHT
2378
20-Jul-2023
15:04
linh
pham



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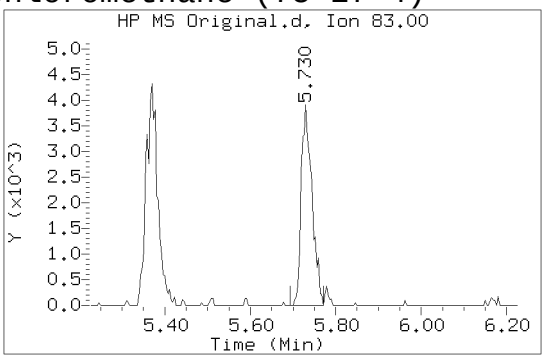
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Bromodichloromethane (75-27-4)

Reason Code:

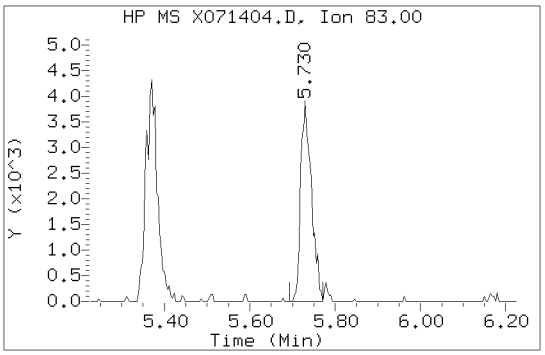
BEFORE

MASS
83
AREA
6967
HEIGHT
3917
20-Jul-2023
15:04
linh
pham



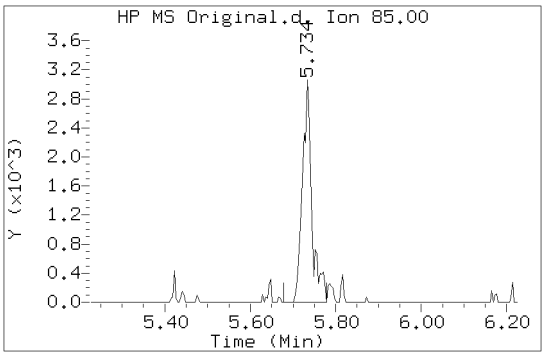
AFTER

MASS
83
AREA
6967
HEIGHT
3917
20-Jul-2023
15:04
linh
pham



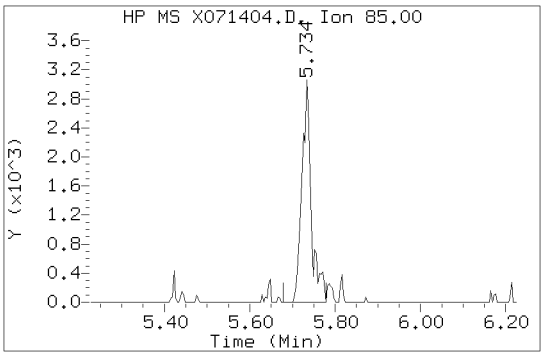
BEFORE

MASS
85
AREA
4797
HEIGHT
3061
20-Jul-2023
15:04
linh
pham



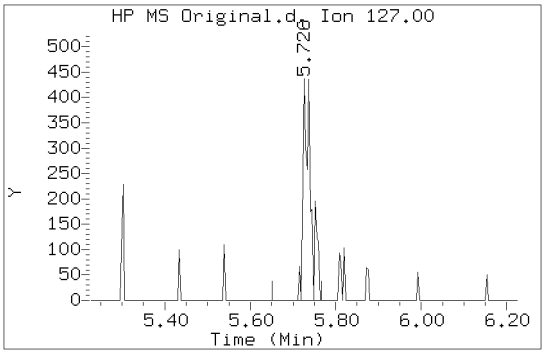
AFTER

MASS
85
AREA
4797
HEIGHT
3061
20-Jul-2023
15:04
linh
pham



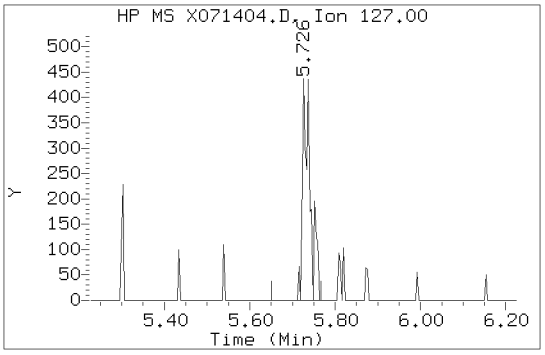
BEFORE

MASS
127
AREA
568
HEIGHT
437
20-Jul-2023
15:04
linh
pham



AFTER

MASS
127
AREA
568
HEIGHT
437
20-Jul-2023
15:04
linh
pham

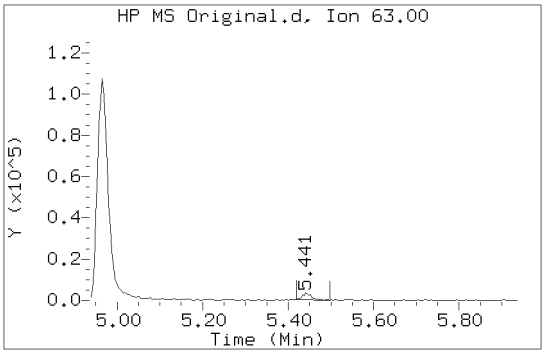


1,2-Dichloropropane (78-87-5)

Reason Code:

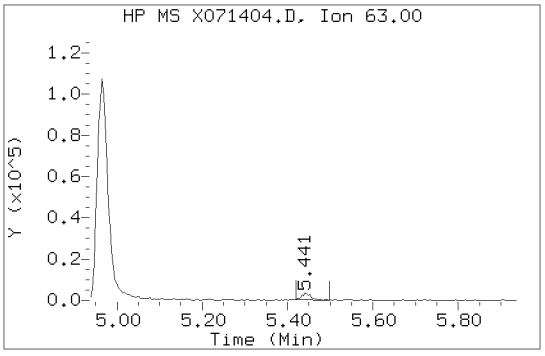
BEFORE

MASS
63
AREA
5153
HEIGHT
3474
20-Jul-2023
15:04
linh
pham



AFTER

MASS
63
AREA
5153
HEIGHT
3474
20-Jul-2023
15:04
linh
pham



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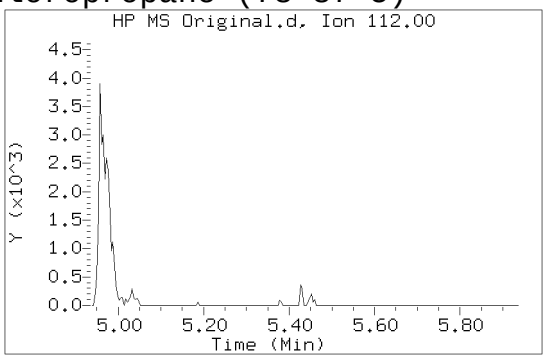
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,2-Dichloropropane (78-87-5)

Reason Code:

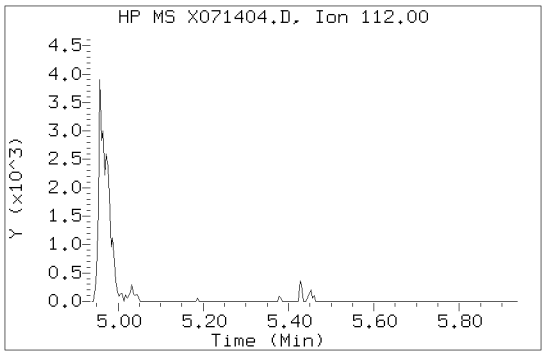
BEFORE

MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

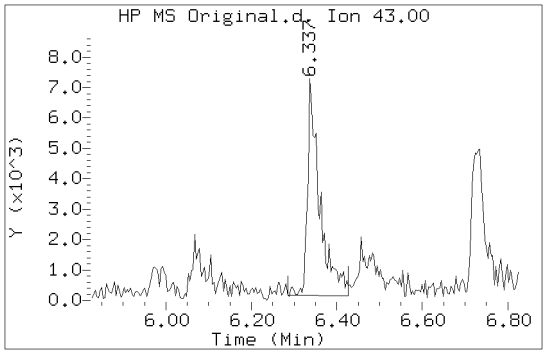


4-Methyl-2-Pentanone (108-10-1)

Reason Code:

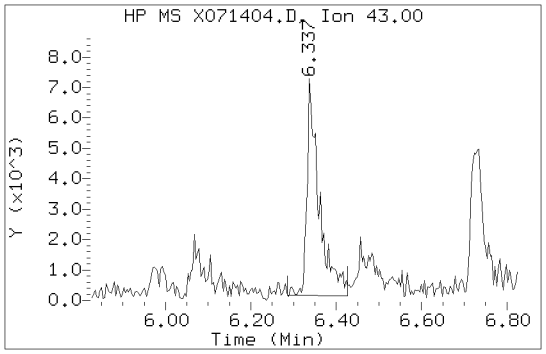
BEFORE

MASS
43
AREA
14106
HEIGHT
7121
20-Jul-2023
15:04
linh
pham



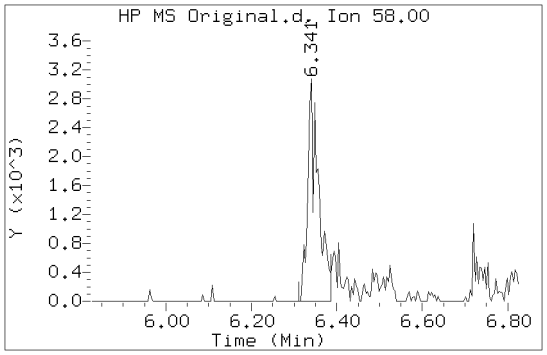
AFTER

MASS
43
AREA
14106
HEIGHT
7121
20-Jul-2023
15:04
linh
pham



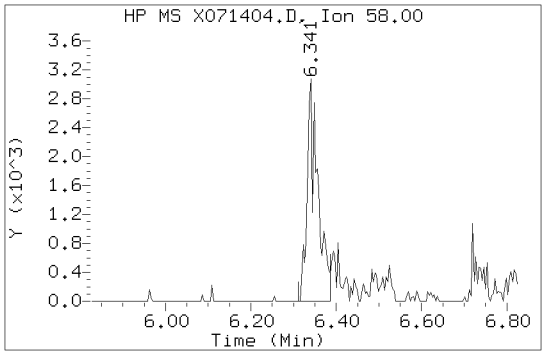
BEFORE

MASS
58
AREA
5370
HEIGHT
3077
20-Jul-2023
15:04
linh
pham



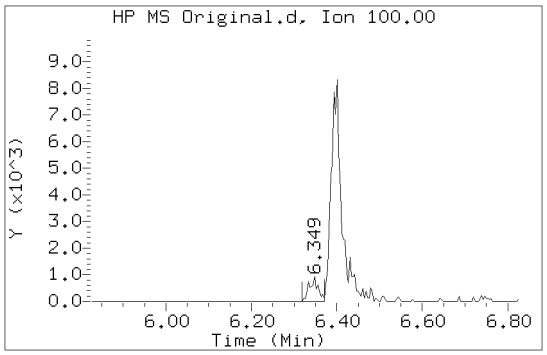
AFTER

MASS
58
AREA
5370
HEIGHT
3077
20-Jul-2023
15:04
linh
pham



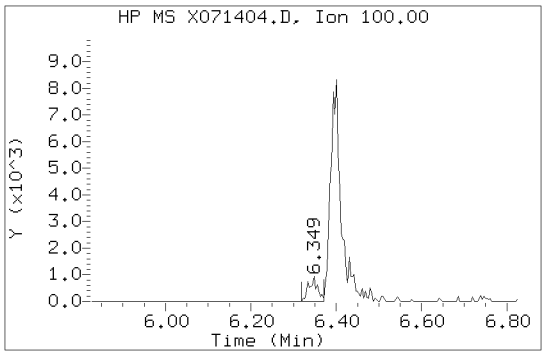
BEFORE

MASS
100
AREA
1328
HEIGHT
944
20-Jul-2023
15:04
linh
pham



AFTER

MASS
100
AREA
1328
HEIGHT
944
20-Jul-2023
15:04
linh
pham



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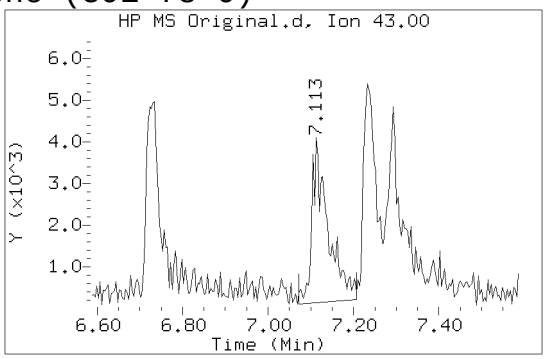
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

2-Hexanone (591-78-6)

Reason Code:

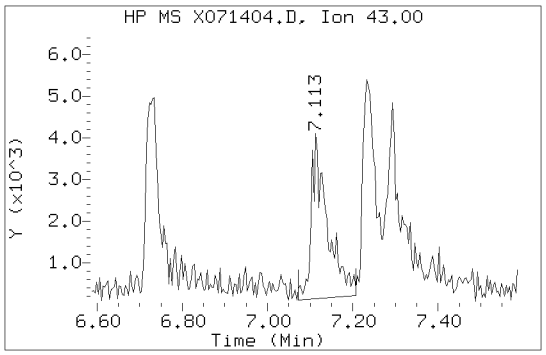
BEFORE

MASS
43
AREA
10319
HEIGHT
3957
20-Jul-2023
15:04
linh
pham



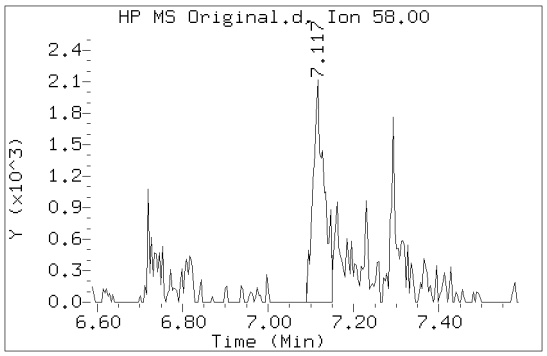
AFTER

MASS
43
AREA
10319
HEIGHT
3957
20-Jul-2023
15:04
linh
pham



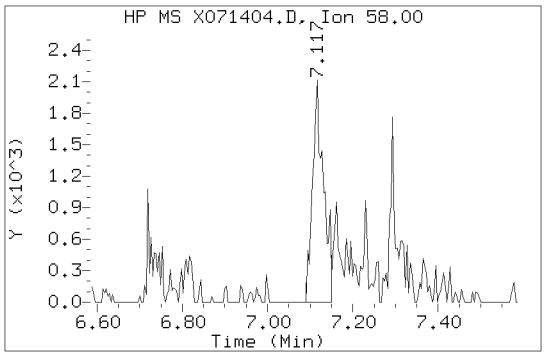
BEFORE

MASS
58
AREA
3772
HEIGHT
2118
20-Jul-2023
15:04
linh
pham



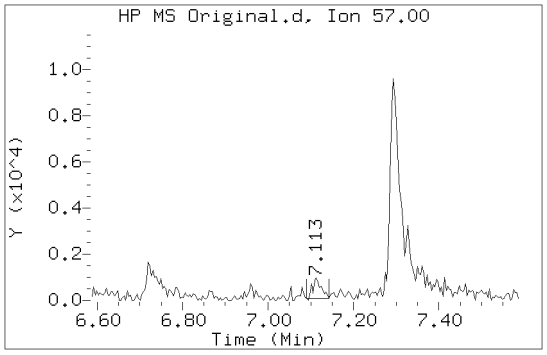
AFTER

MASS
58
AREA
3772
HEIGHT
2118
20-Jul-2023
15:04
linh
pham



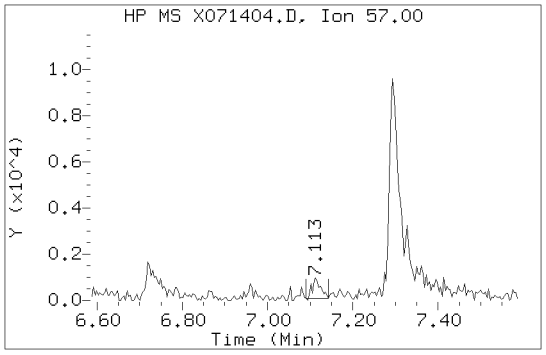
BEFORE

MASS
57
AREA
1177
HEIGHT
882
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
1177
HEIGHT
882
20-Jul-2023
15:04
linh
pham

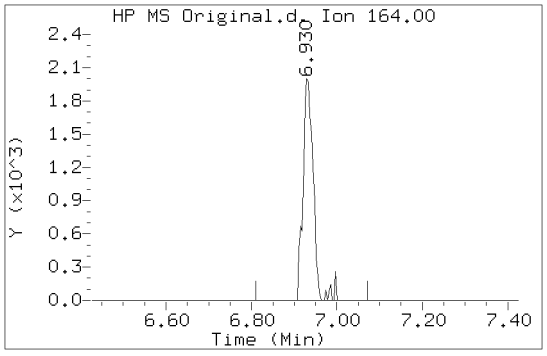


Tetrachloroethene (127-18-4)

Reason Code:

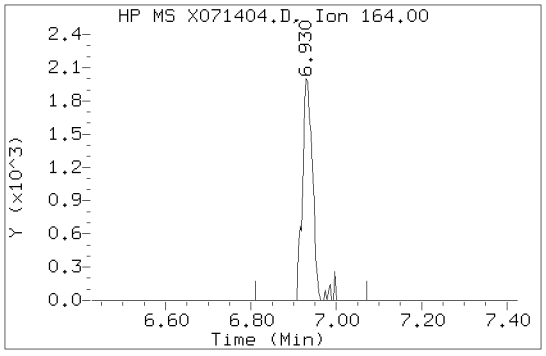
BEFORE

MASS
164
AREA
3431
HEIGHT
2001
20-Jul-2023
15:04
linh
pham



AFTER

MASS
164
AREA
3431
HEIGHT
2001
20-Jul-2023
15:04
linh
pham



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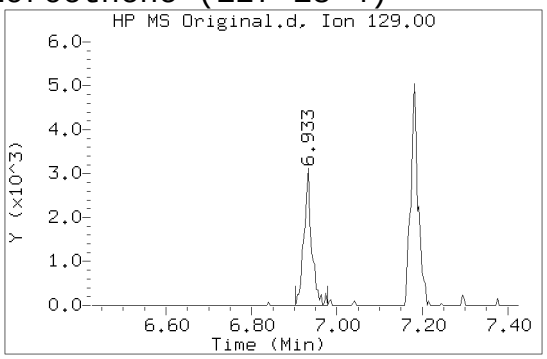
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

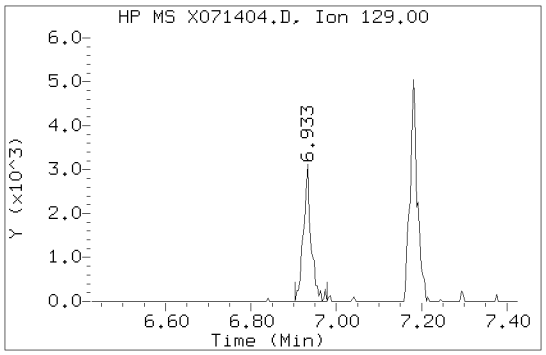
Tetrachloroethene (127-18-4)

Reason Code:

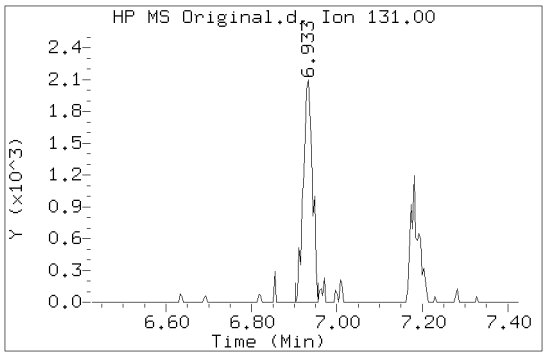
BEFORE
MASS
129
AREA
3977
HEIGHT
3127
20-Jul-2023
15:04
linh
pham



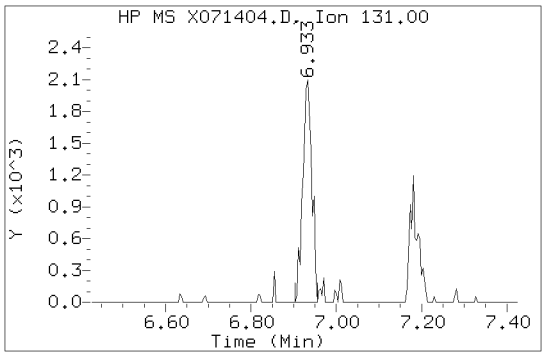
AFTER
MASS
129
AREA
3977
HEIGHT
3127
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
131
AREA
3184
HEIGHT
2098
20-Jul-2023
15:04
linh
pham



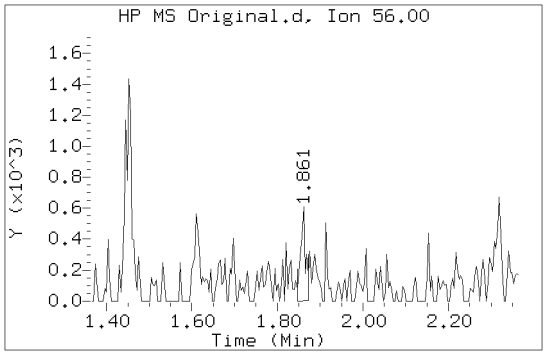
AFTER
MASS
131
AREA
3184
HEIGHT
2098
20-Jul-2023
15:04
linh
pham



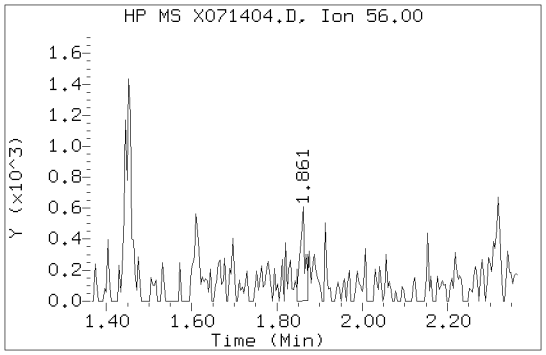
Acrolein (107-02-8)

Reason Code:

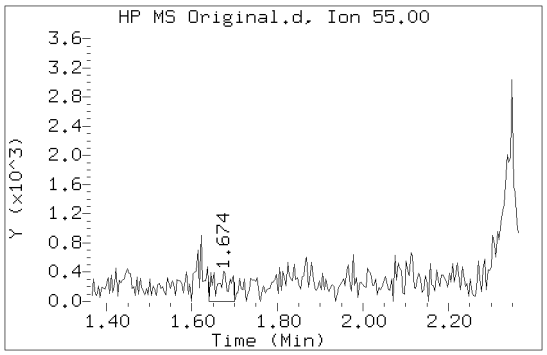
BEFORE
MASS
56
AREA
510
HEIGHT
608
20-Jul-2023
15:04
linh
pham



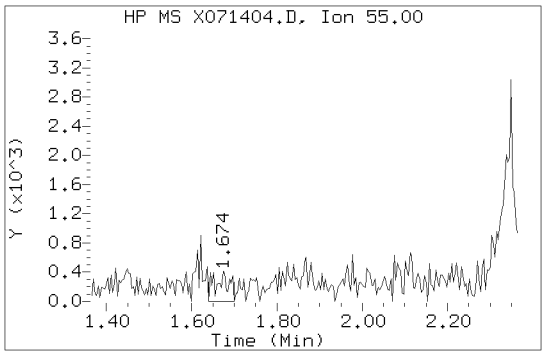
AFTER
MASS
56
AREA
510
HEIGHT
608
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
55
AREA
888
HEIGHT
412
20-Jul-2023
15:04
linh
pham



AFTER
MASS
55
AREA
888
HEIGHT
412
20-Jul-2023
15:04
linh
pham



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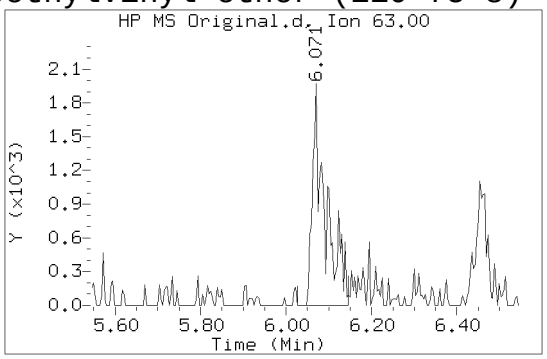
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

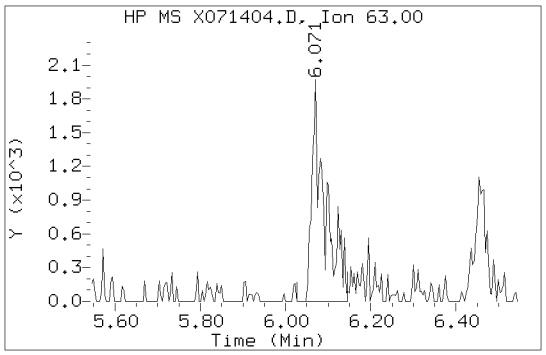
BEFORE

MASS
63
AREA
4176
HEIGHT
1971
20-Jul-2023
15:04
linh
pham



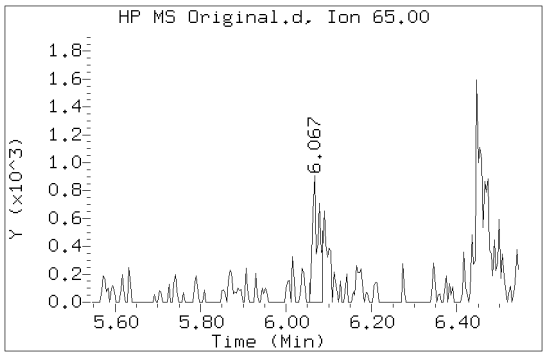
AFTER

MASS
63
AREA
4176
HEIGHT
1971
20-Jul-2023
15:04
linh
pham



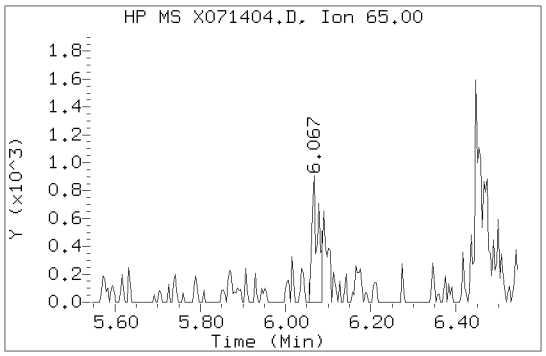
BEFORE

MASS
65
AREA
920
HEIGHT
907
20-Jul-2023
15:04
linh
pham



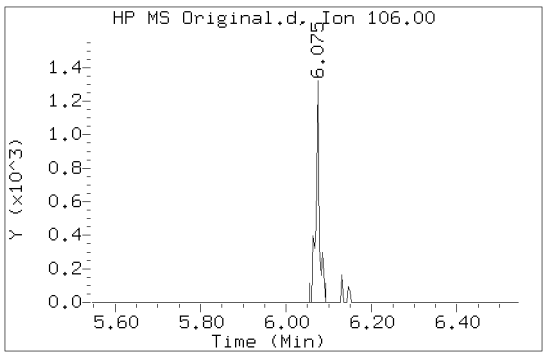
AFTER

MASS
65
AREA
920
HEIGHT
907
20-Jul-2023
15:04
linh
pham



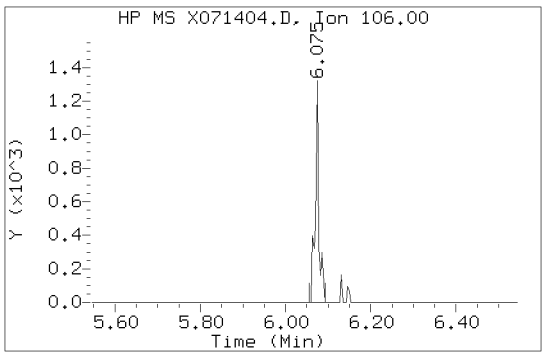
BEFORE

MASS
106
AREA
764
HEIGHT
1322
20-Jul-2023
15:04
linh
pham



AFTER

MASS
106
AREA
764
HEIGHT
1322
20-Jul-2023
15:04
linh
pham

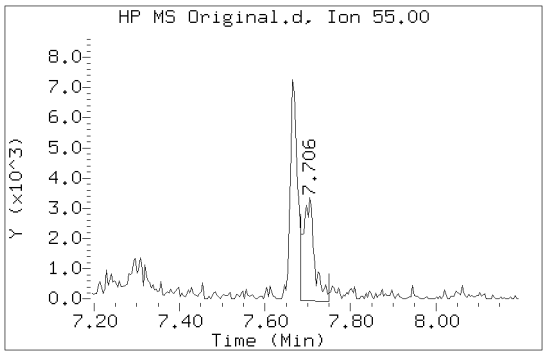


1-Chlorohexane (544-10-5)

Reason Code:

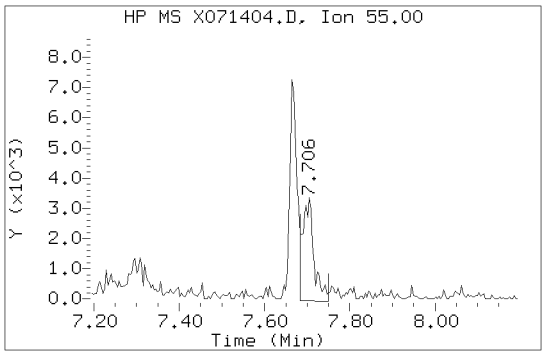
BEFORE

MASS
55
AREA
6663
HEIGHT
3425
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
6663
HEIGHT
3425
20-Jul-2023
15:04
linh
pham



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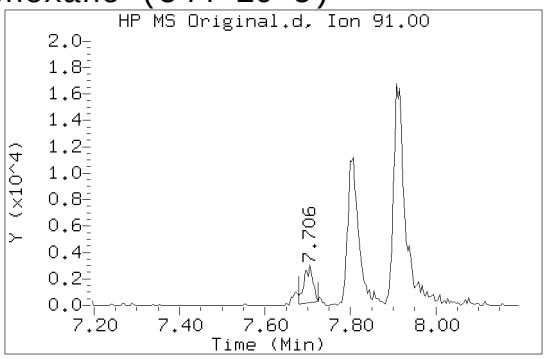
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1-Chlorohexane (544-10-5)

Reason Code:

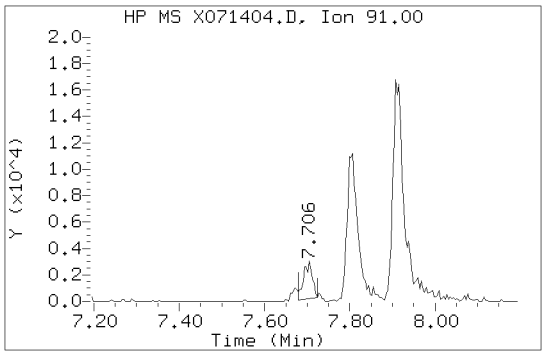
BEFORE

MASS
91
AREA
4133
HEIGHT
2845
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
4133
HEIGHT
2845
20-Jul-2023
15:04
linh
pham

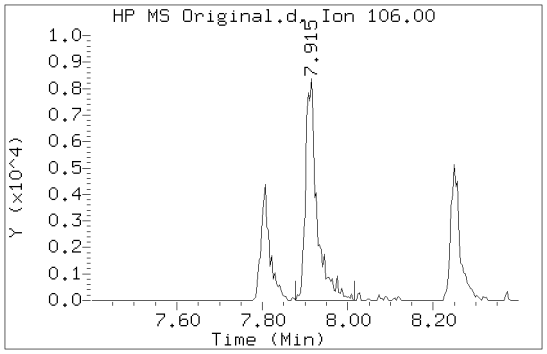


m,p-Xylenes ()

Reason Code:

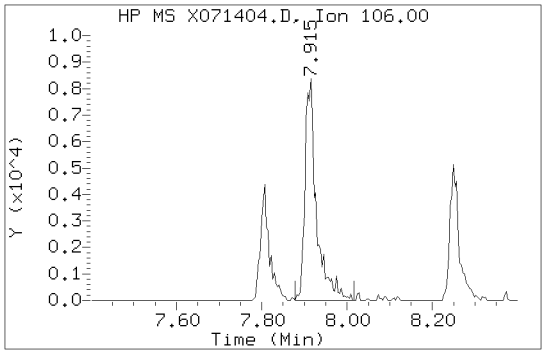
BEFORE

MASS
106
AREA
15703
HEIGHT
8376
20-Jul-2023
15:04
linh
pham



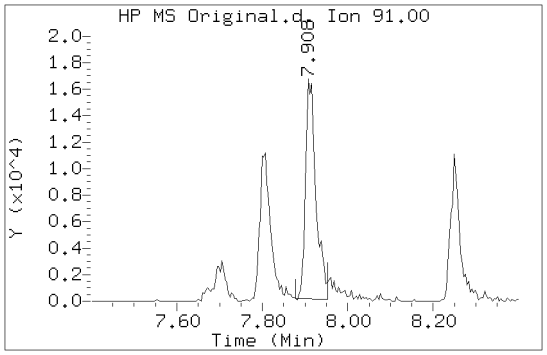
AFTER

MASS
106
AREA
15703
HEIGHT
8376
20-Jul-2023
15:04
linh
pham



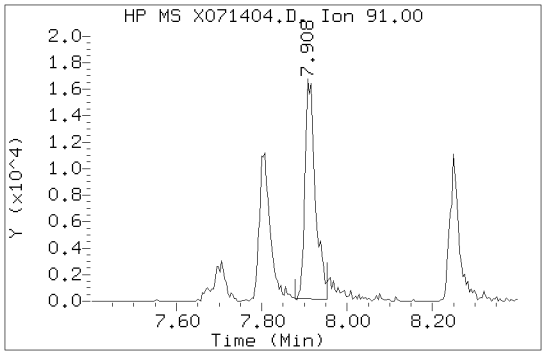
BEFORE

MASS
91
AREA
28386
HEIGHT
16587
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
28386
HEIGHT
16587
20-Jul-2023
15:04
linh
pham

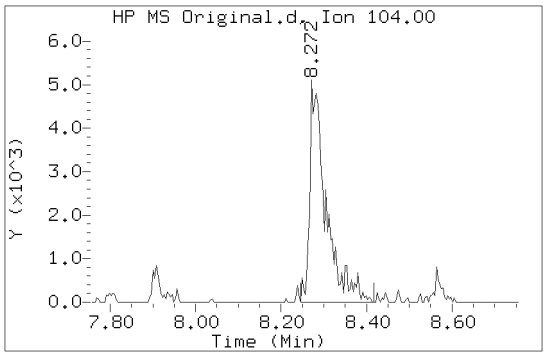


Styrene (100-42-5)

Reason Code:

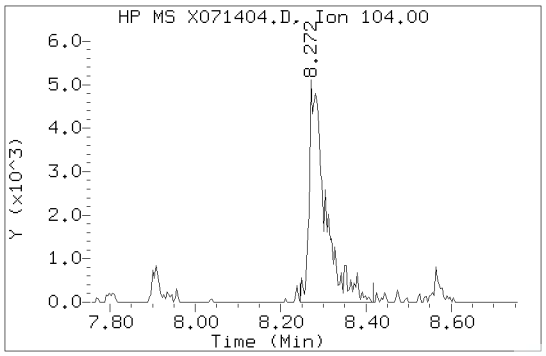
BEFORE

MASS
104
AREA
13315
HEIGHT
5109
20-Jul-2023
15:04
linh
pham



AFTER

MASS
104
AREA
13315
HEIGHT
5109
20-Jul-2023
15:04
linh
pham



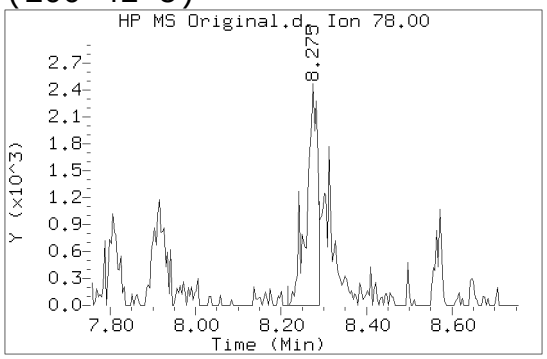
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Styrene (100-42-5)

Reason Code:

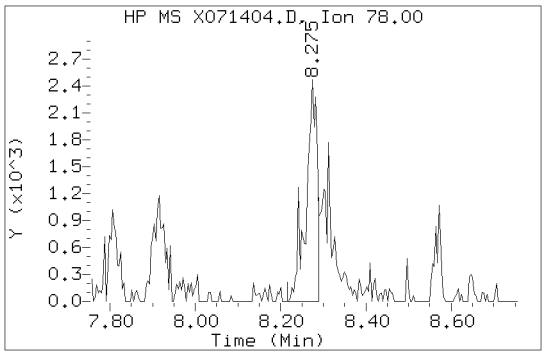
BEFORE

MASS
78
AREA
4442
HEIGHT
2469
20-Jul-2023
15:04
linh
pham



AFTER

MASS
78
AREA
4442
HEIGHT
2469
20-Jul-2023
15:04
linh
pham

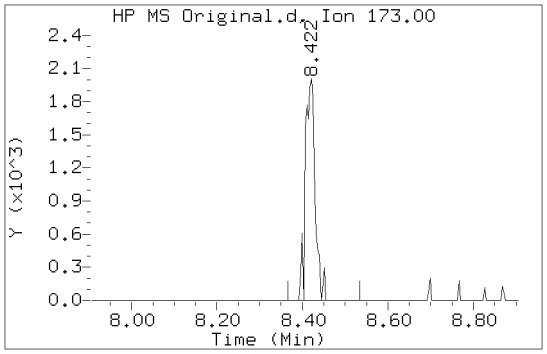


Bromoform (75-25-2)

Reason Code:

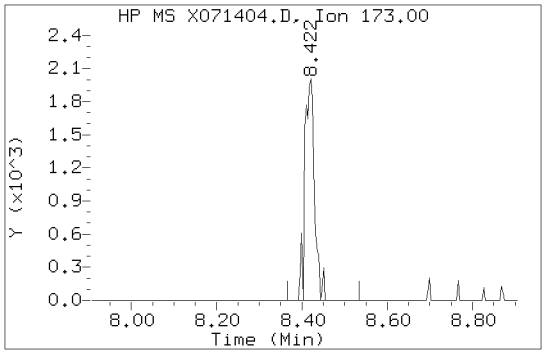
BEFORE

MASS
173
AREA
3238
HEIGHT
2008
20-Jul-2023
15:04
linh
pham



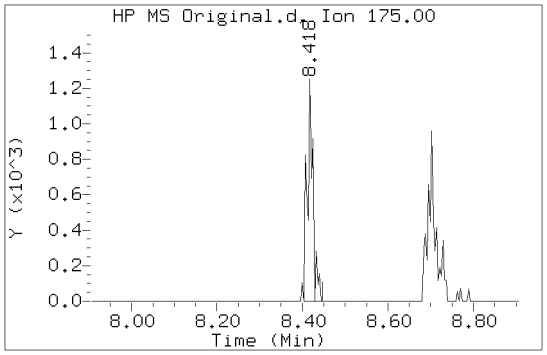
AFTER

MASS
173
AREA
3238
HEIGHT
2008
20-Jul-2023
15:04
linh
pham



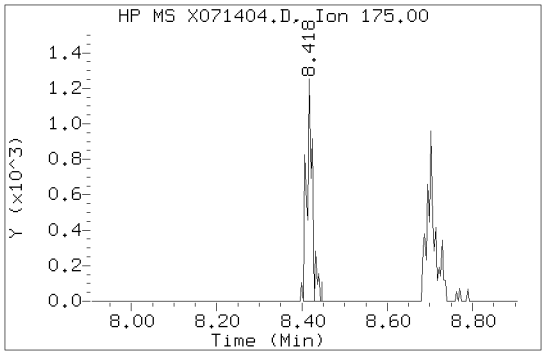
BEFORE

MASS
175
AREA
1174
HEIGHT
1253
20-Jul-2023
15:04
linh
pham



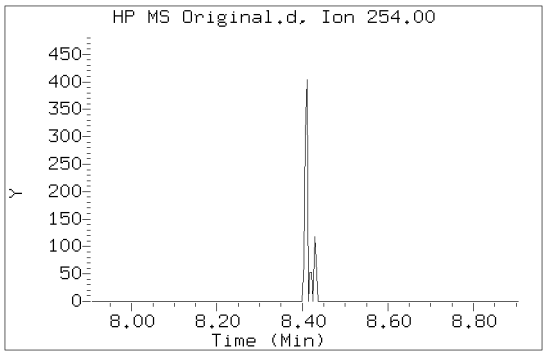
AFTER

MASS
175
AREA
1174
HEIGHT
1253
20-Jul-2023
15:04
linh
pham



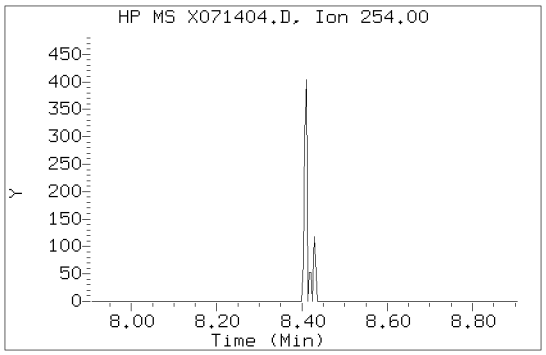
BEFORE

MASS
254
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
254
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

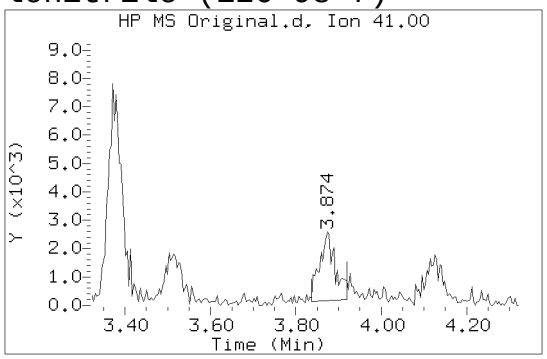


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

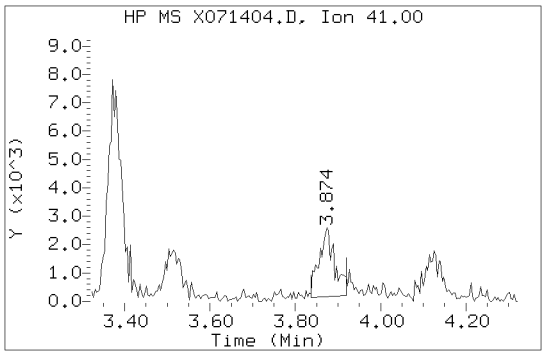
Methacrylonitrile (126-98-7)

Reason Code:

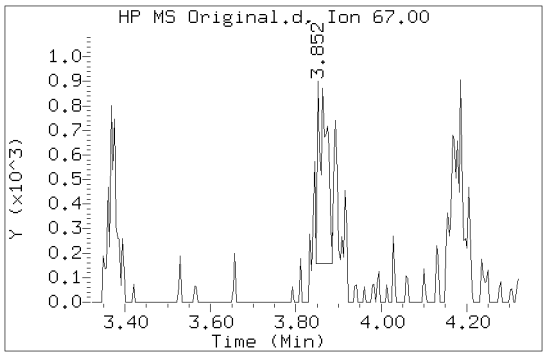
BEFORE
MASS
41
AREA
6195
HEIGHT
2436
20-Jul-2023
15:04
linh
pham



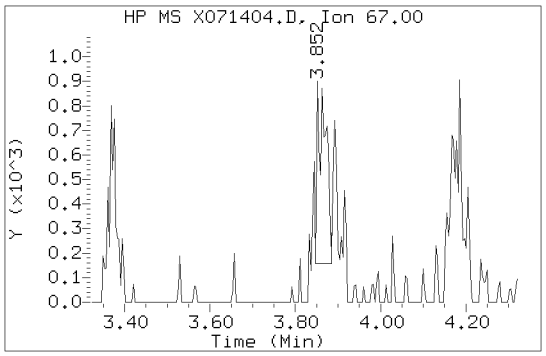
AFTER
MASS
41
AREA
6195
HEIGHT
2436
20-Jul-2023
15:04
linh
pham



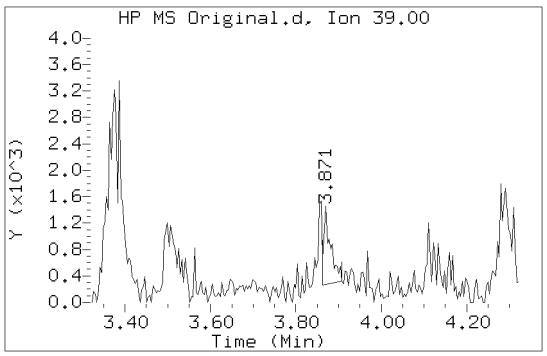
BEFORE
MASS
67
AREA
1024
HEIGHT
744
20-Jul-2023
15:04
linh
pham



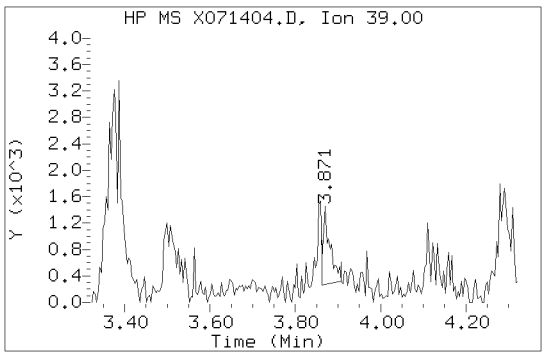
AFTER
MASS
67
AREA
1024
HEIGHT
744
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
39
AREA
1324
HEIGHT
1187
20-Jul-2023
15:04
linh
pham



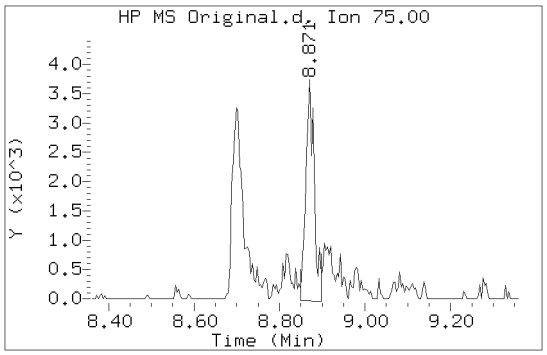
AFTER
MASS
39
AREA
1324
HEIGHT
1187
20-Jul-2023
15:04
linh
pham



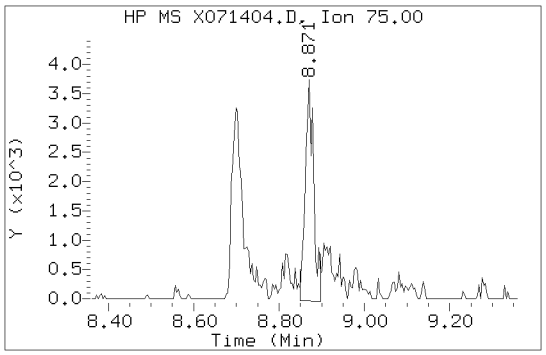
1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE
MASS
75
AREA
5203
HEIGHT
3776
20-Jul-2023
15:04
linh
pham



AFTER
MASS
75
AREA
5203
HEIGHT
3776
20-Jul-2023
15:04
linh
pham



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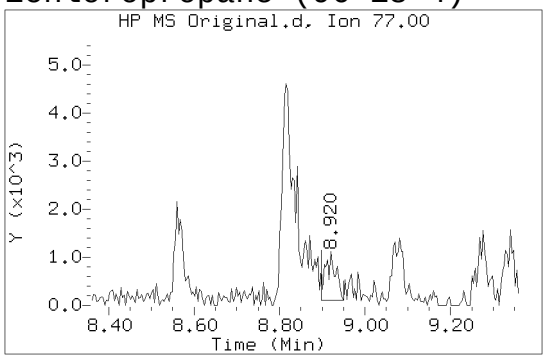
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,2,3-Trichloropropane (96-18-4)

Reason Code:

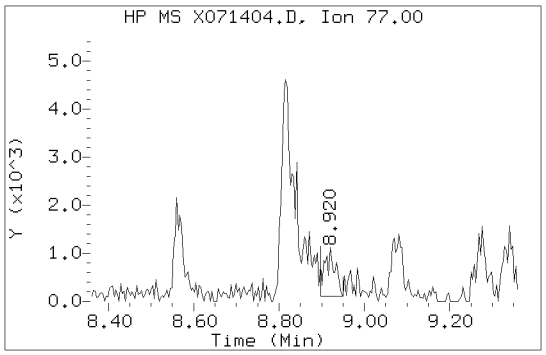
BEFORE

MASS
77
AREA
1749
HEIGHT
1014
20-Jul-2023
15:04
linh
pham



AFTER

MASS
77
AREA
1749
HEIGHT
1014
20-Jul-2023
15:04
linh
pham

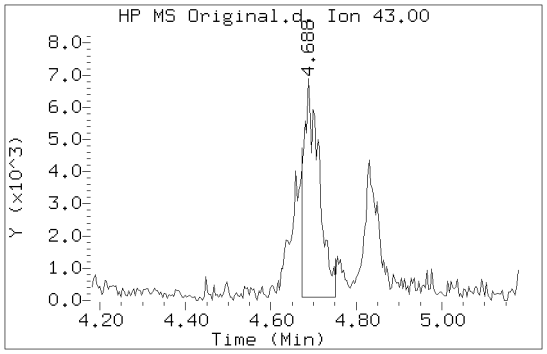


Isobutyl Alcohol (78-83-1)

Reason Code:

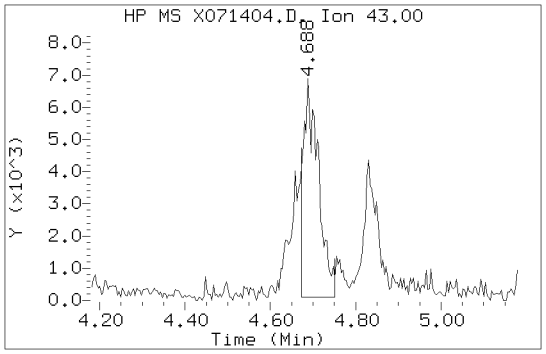
BEFORE

MASS
43
AREA
16938
HEIGHT
6786
20-Jul-2023
15:04
linh
pham



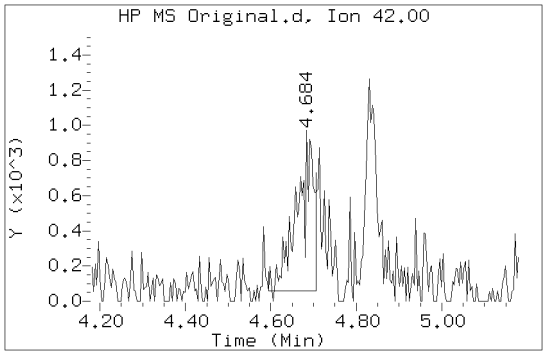
AFTER

MASS
43
AREA
16938
HEIGHT
6786
20-Jul-2023
15:04
linh
pham



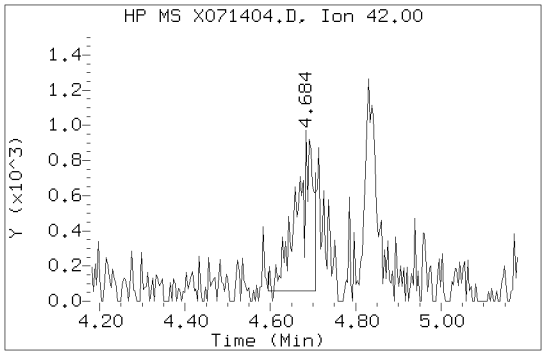
BEFORE

MASS
42
AREA
2469
HEIGHT
914
20-Jul-2023
15:04
linh
pham



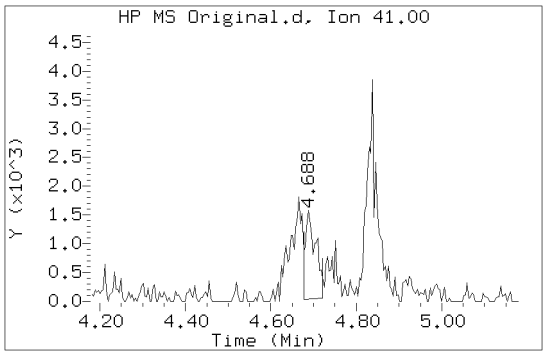
AFTER

MASS
42
AREA
2469
HEIGHT
914
20-Jul-2023
15:04
linh
pham



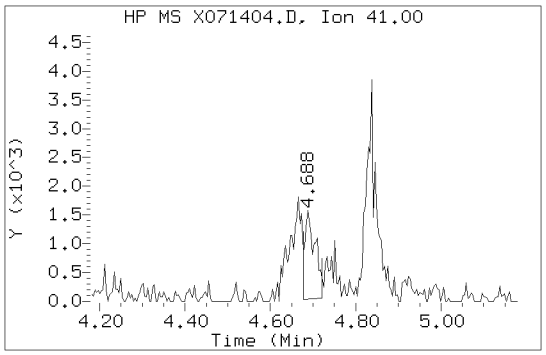
BEFORE

MASS
41
AREA
2733
HEIGHT
1544
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
2733
HEIGHT
1544
20-Jul-2023
15:04
linh
pham



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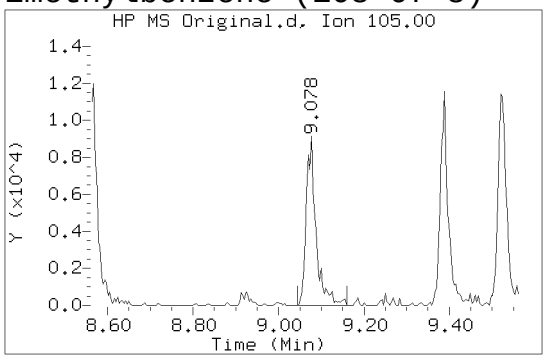
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,3,5-Trimethylbenzene (108-67-8)

Reason Code:

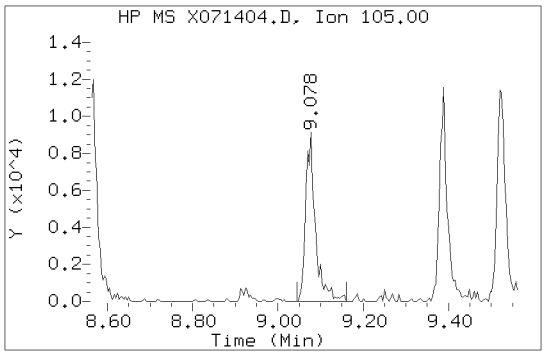
BEFORE

MASS
105
AREA
14649
HEIGHT
9159
20-Jul-2023
15:04
linh
pham



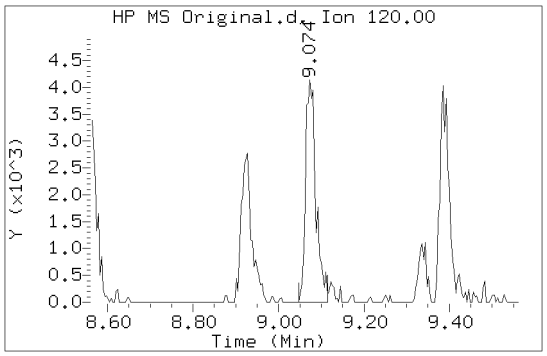
AFTER

MASS
105
AREA
14649
HEIGHT
9159
20-Jul-2023
15:04
linh
pham



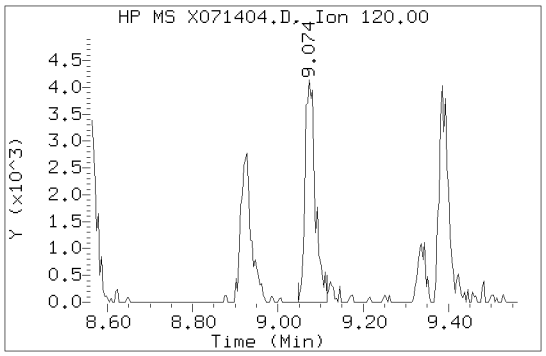
BEFORE

MASS
120
AREA
6985
HEIGHT
4141
20-Jul-2023
15:04
linh
pham



AFTER

MASS
120
AREA
6985
HEIGHT
4141
20-Jul-2023
15:04
linh
pham

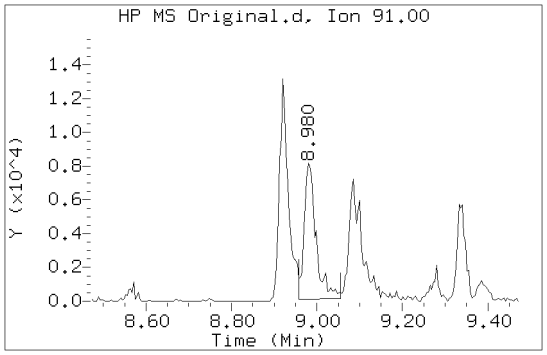


2-Chlorotoluene (95-49-8)

Reason Code:

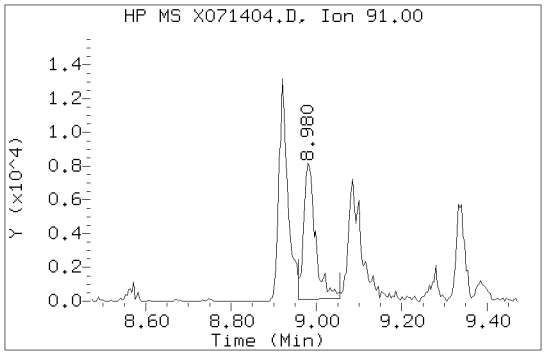
BEFORE

MASS
91
AREA
15937
HEIGHT
8082
20-Jul-2023
15:04
linh
pham



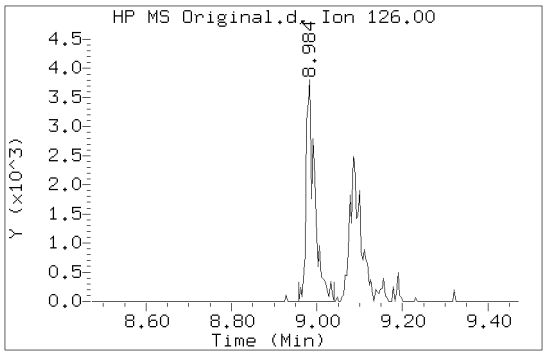
AFTER

MASS
91
AREA
15937
HEIGHT
8082
20-Jul-2023
15:04
linh
pham



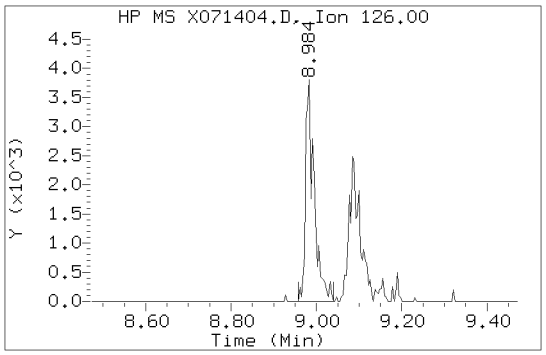
BEFORE

MASS
126
AREA
5351
HEIGHT
3805
20-Jul-2023
15:04
linh
pham



AFTER

MASS
126
AREA
5351
HEIGHT
3805
20-Jul-2023
15:04
linh
pham



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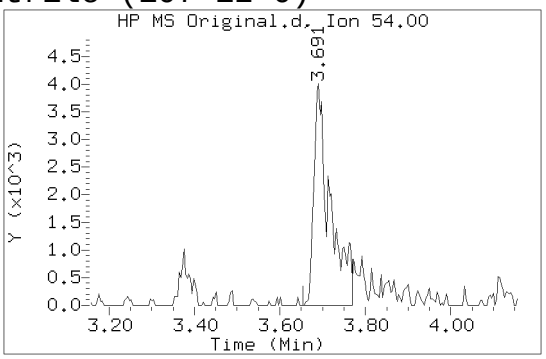
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

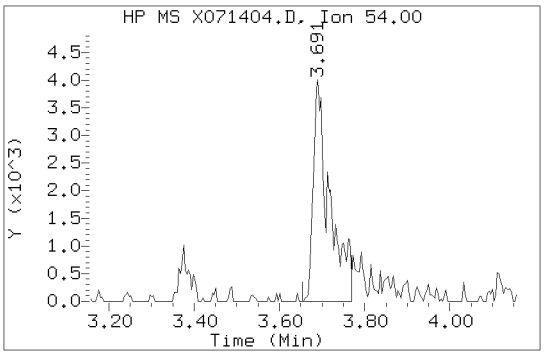
Propionitrile (107-12-0)

Reason Code:

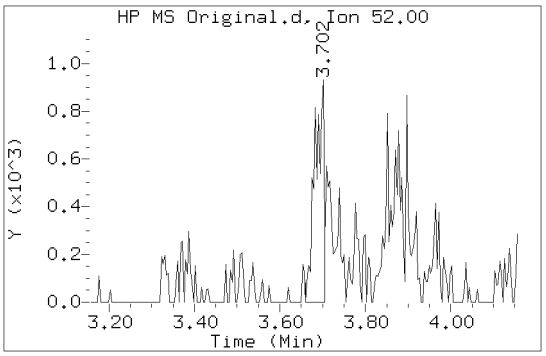
BEFORE
MASS
54
AREA
10495
HEIGHT
4008
20-Jul-2023
15:04
linh
pham



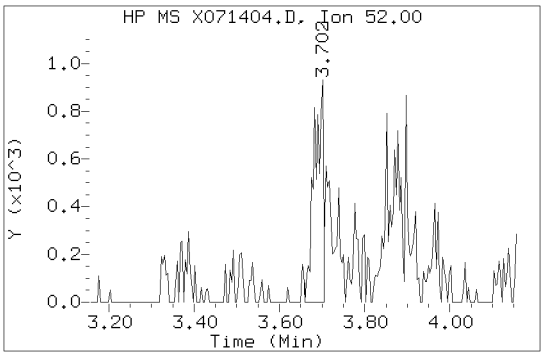
AFTER
MASS
54
AREA
10495
HEIGHT
4008
20-Jul-2023
15:04
linh
pham



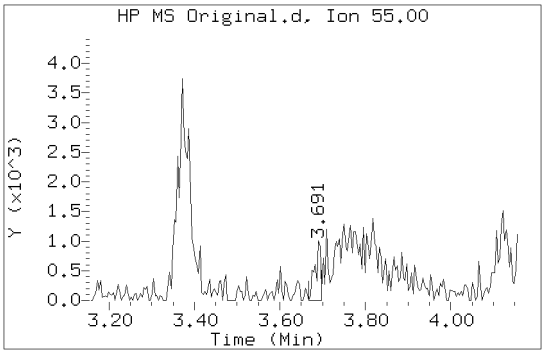
BEFORE
MASS
52
AREA
1356
HEIGHT
931
20-Jul-2023
15:04
linh
pham



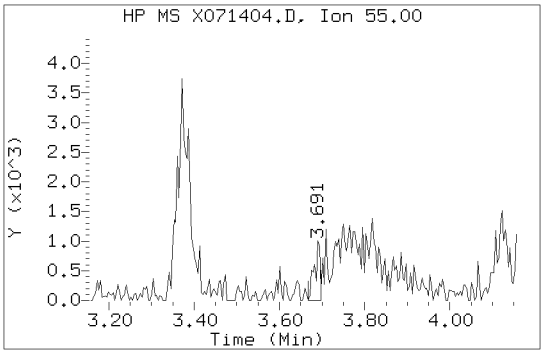
AFTER
MASS
52
AREA
1356
HEIGHT
931
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
55
AREA
924
HEIGHT
1009
20-Jul-2023
15:04
linh
pham



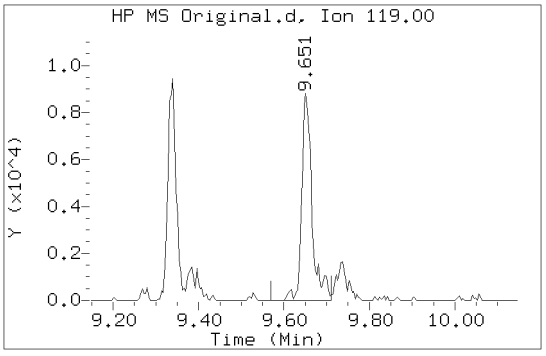
AFTER
MASS
55
AREA
924
HEIGHT
1009
20-Jul-2023
15:04
linh
pham



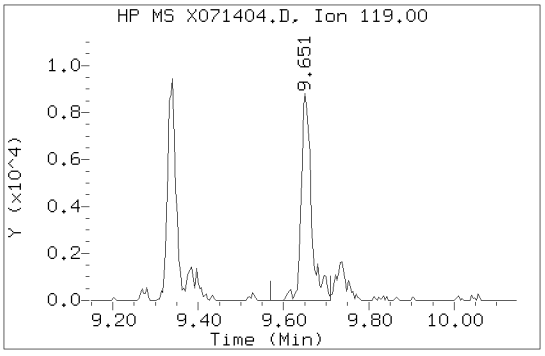
p-Isopropyltoluene (99-87-6)

Reason Code:

BEFORE
MASS
119
AREA
15092
HEIGHT
8813
20-Jul-2023
15:04
linh
pham



AFTER
MASS
119
AREA
15092
HEIGHT
8813
20-Jul-2023
15:04
linh
pham



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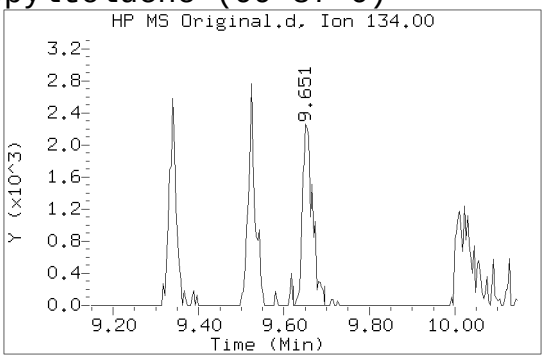
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

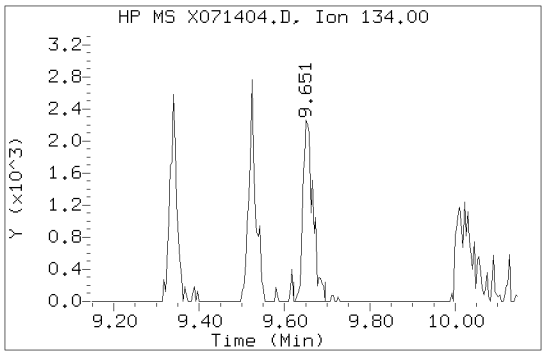
p-Isopropyltoluene (99-87-6)

BEFORE
MASS
134
AREA
3764
HEIGHT
2261
20-Jul-2023
15:04
linh
pham

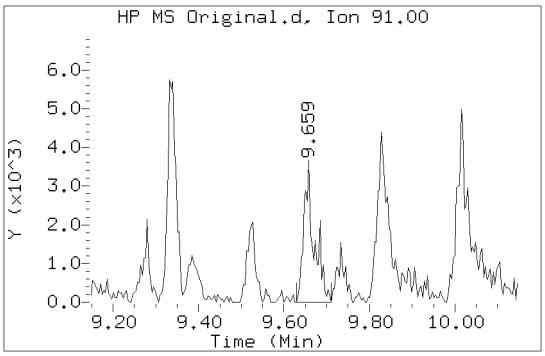


Reason Code:

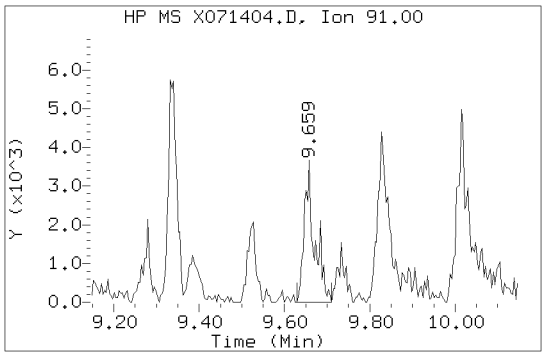
AFTER
MASS
134
AREA
3764
HEIGHT
2261
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
91
AREA
6124
HEIGHT
3669
20-Jul-2023
15:04
linh
pham

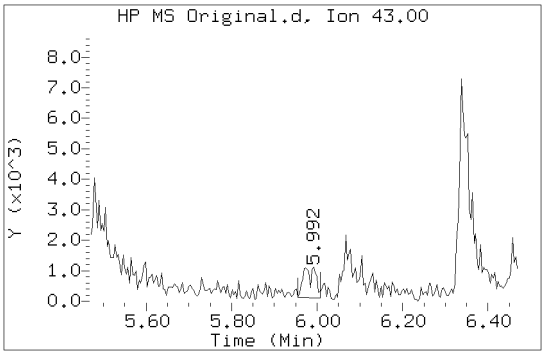


AFTER
MASS
91
AREA
6124
HEIGHT
3669
20-Jul-2023
15:04
linh
pham



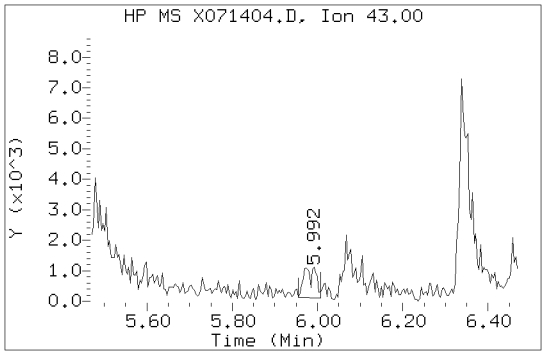
2-Nitropropane (79-46-9)

BEFORE
MASS
43
AREA
2054
HEIGHT
1008
20-Jul-2023
15:04
linh
pham

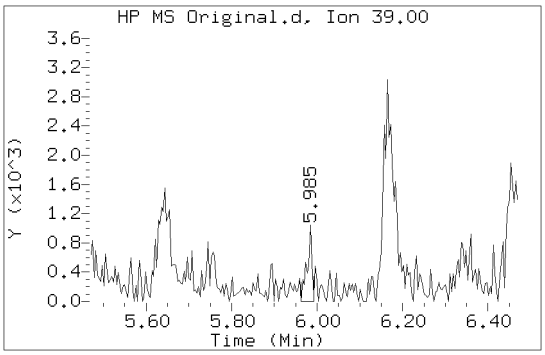


Reason Code:

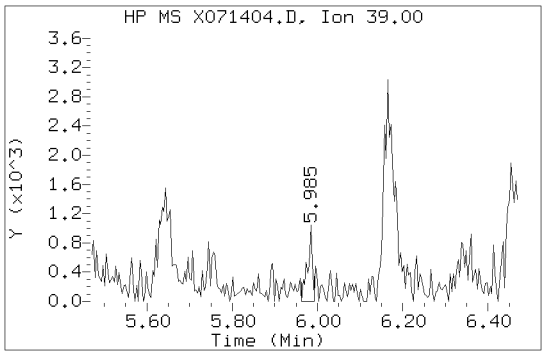
AFTER
MASS
43
AREA
2054
HEIGHT
1008
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
39
AREA
807
HEIGHT
1040
20-Jul-2023
15:04
linh
pham



AFTER
MASS
39
AREA
807
HEIGHT
1040
20-Jul-2023
15:04
linh
pham



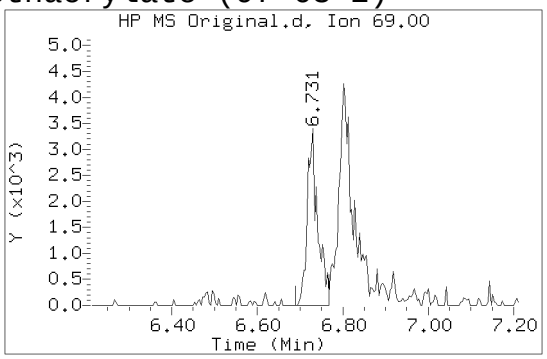
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Ethyl Methacrylate (97-63-2)

Reason Code:

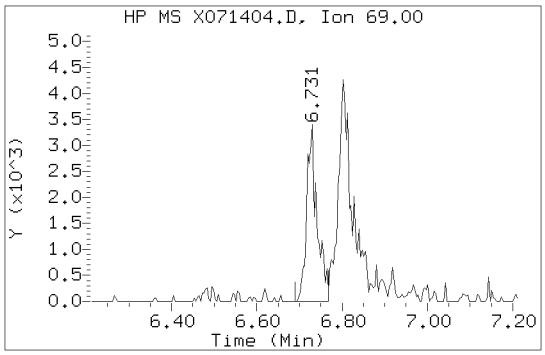
BEFORE

MASS
69
AREA
5749
HEIGHT
3399
20-Jul-2023
15:04
linh
pham



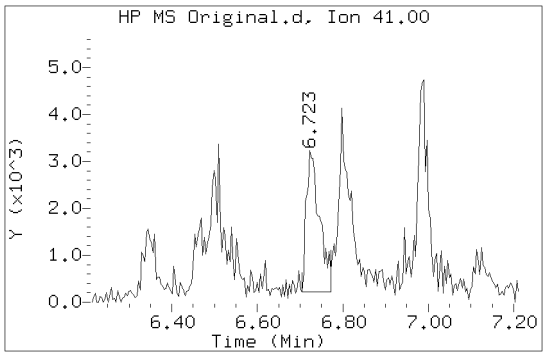
AFTER

MASS
69
AREA
5749
HEIGHT
3399
20-Jul-2023
15:04
linh
pham



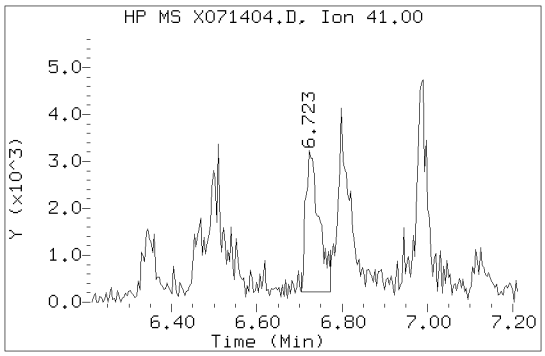
BEFORE

MASS
41
AREA
6505
HEIGHT
3006
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
6505
HEIGHT
3006
20-Jul-2023
15:04
linh
pham

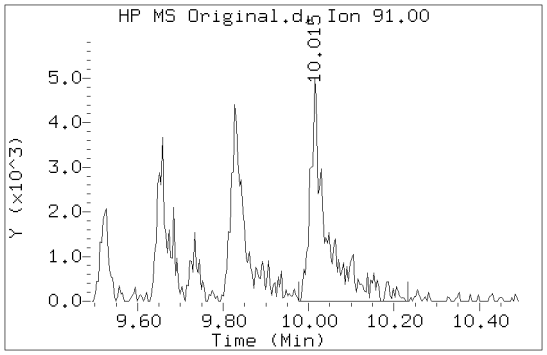


n-Butylbenzene (104-51-8)

Reason Code:

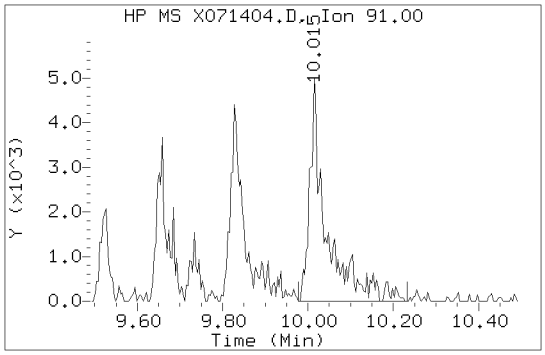
BEFORE

MASS
91
AREA
13321
HEIGHT
4981
20-Jul-2023
15:04
linh
pham



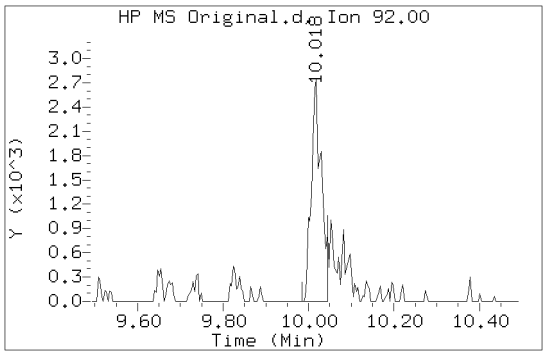
AFTER

MASS
91
AREA
13321
HEIGHT
4981
20-Jul-2023
15:04
linh
pham



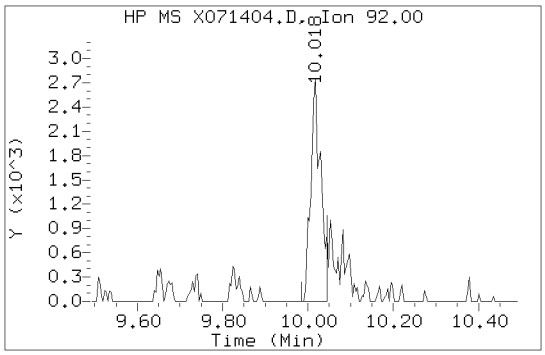
BEFORE

MASS
92
AREA
4505
HEIGHT
2738
20-Jul-2023
15:04
linh
pham



AFTER

MASS
92
AREA
4505
HEIGHT
2738
20-Jul-2023
15:04
linh
pham



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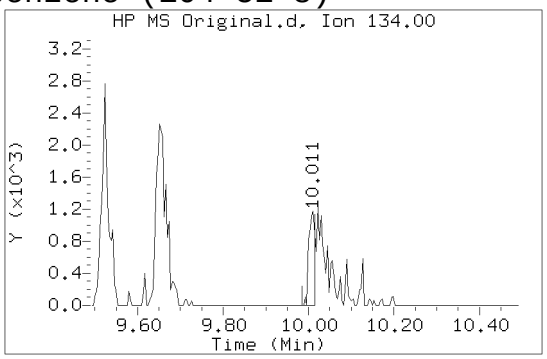
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

n-Butylbenzene (104-51-8)

Reason Code:

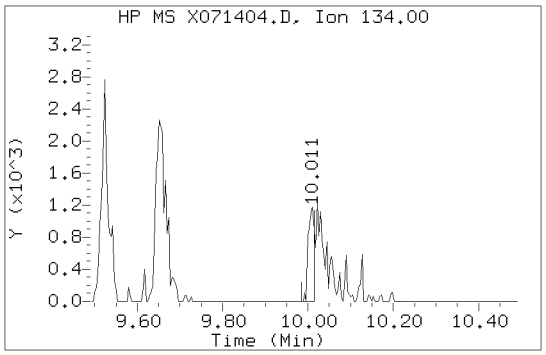
BEFORE

MASS
134
AREA
1125
HEIGHT
1172
20-Jul-2023
15:04
linh
pham



AFTER

MASS
134
AREA
1125
HEIGHT
1172
20-Jul-2023
15:04
linh
pham

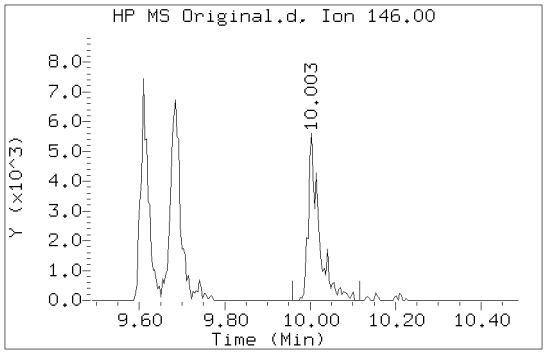


1,2-Dichlorobenzene (95-50-1)

Reason Code:

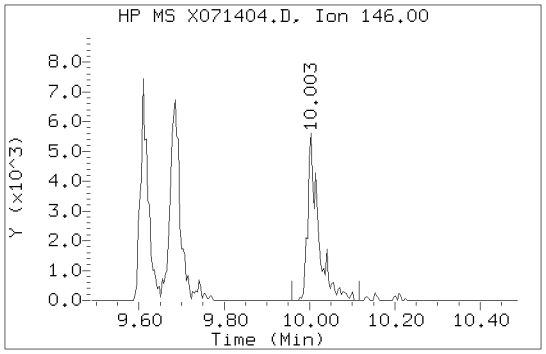
BEFORE

MASS
146
AREA
9791
HEIGHT
5614
20-Jul-2023
15:04
linh
pham



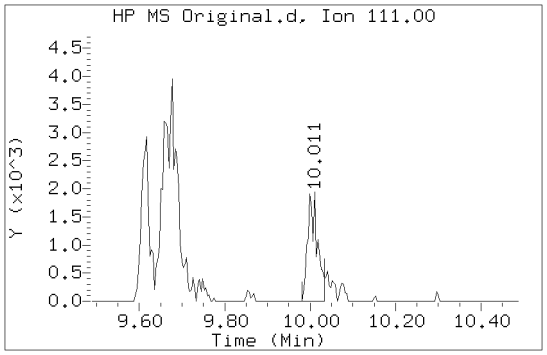
AFTER

MASS
146
AREA
9791
HEIGHT
5614
20-Jul-2023
15:04
linh
pham



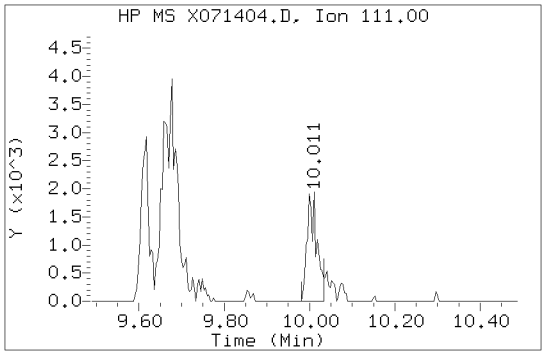
BEFORE

MASS
111
AREA
3070
HEIGHT
1939
20-Jul-2023
15:04
linh
pham



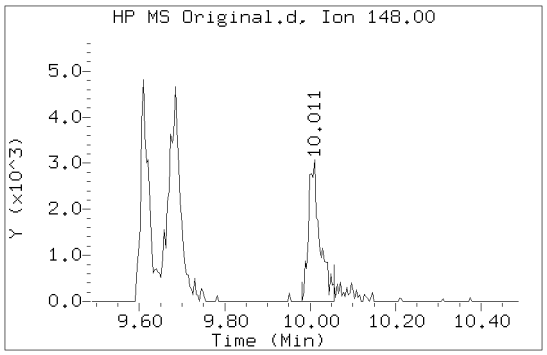
AFTER

MASS
111
AREA
3070
HEIGHT
1939
20-Jul-2023
15:04
linh
pham



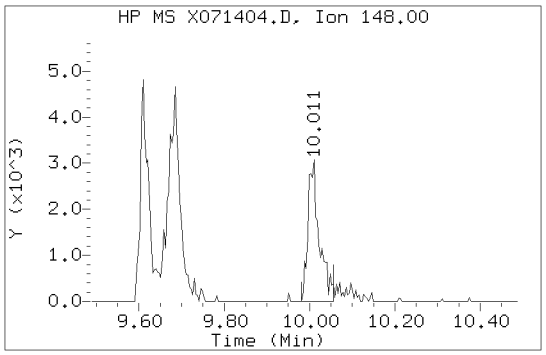
BEFORE

MASS
148
AREA
5707
HEIGHT
3072
20-Jul-2023
15:04
linh
pham



AFTER

MASS
148
AREA
5707
HEIGHT
3072
20-Jul-2023
15:04
linh
pham



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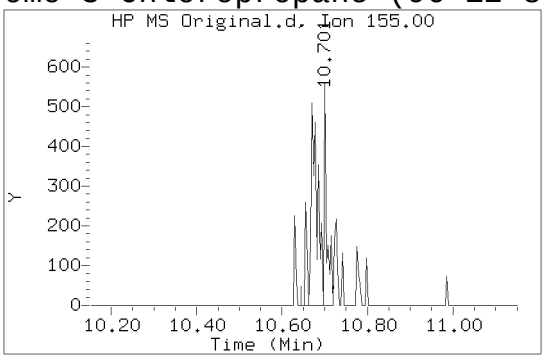
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

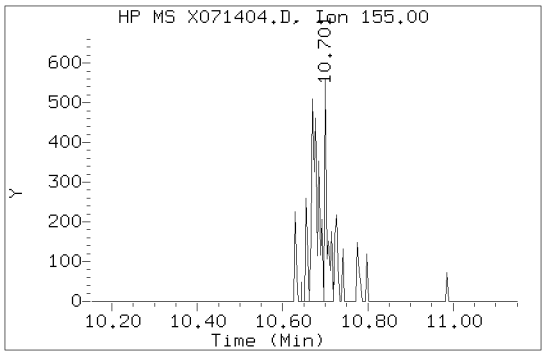
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

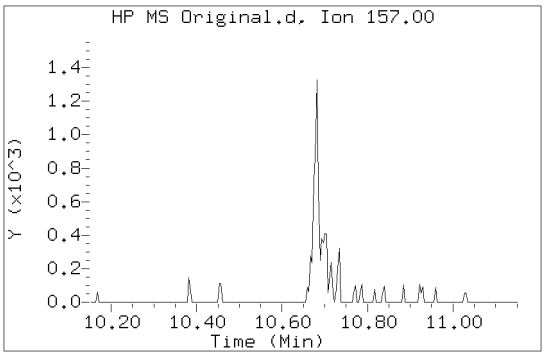
BEFORE
MASS
155
AREA
831
HEIGHT
558
20-Jul-2023
15:04
linh
pham



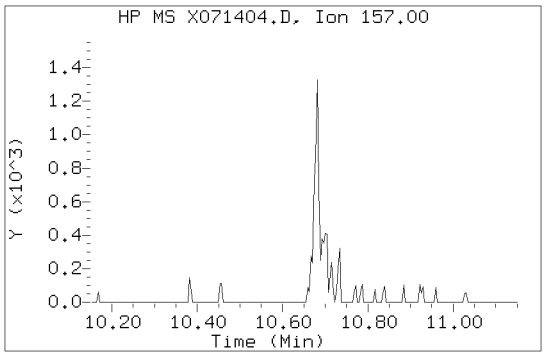
AFTER
MASS
155
AREA
831
HEIGHT
558
20-Jul-2023
15:04
linh
pham



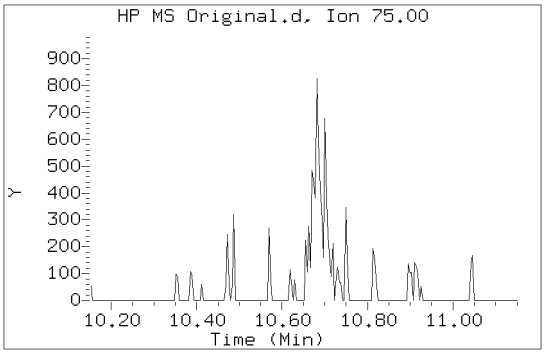
BEFORE
MASS
157
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



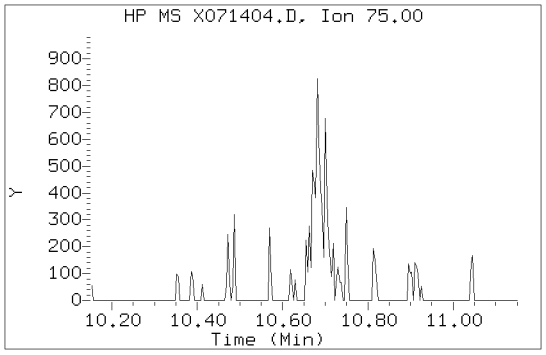
AFTER
MASS
157
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



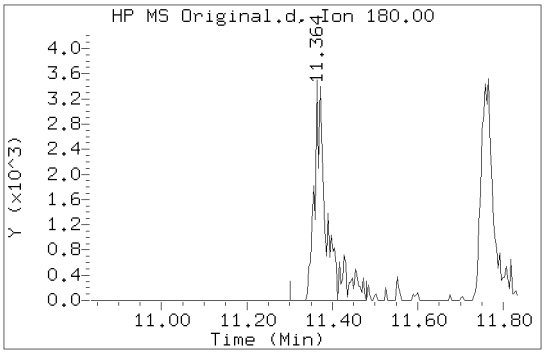
AFTER
MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



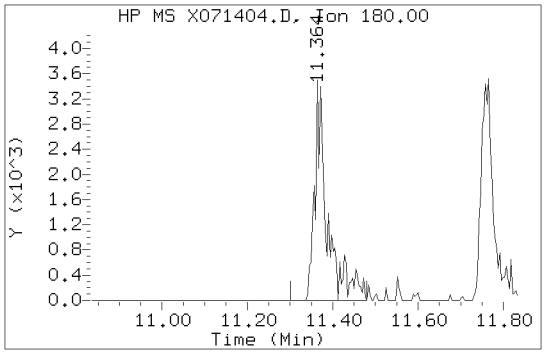
1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

BEFORE
MASS
180
AREA
7113
HEIGHT
3499
20-Jul-2023
15:04
linh
pham



AFTER
MASS
180
AREA
7113
HEIGHT
3499
20-Jul-2023
15:04
linh
pham



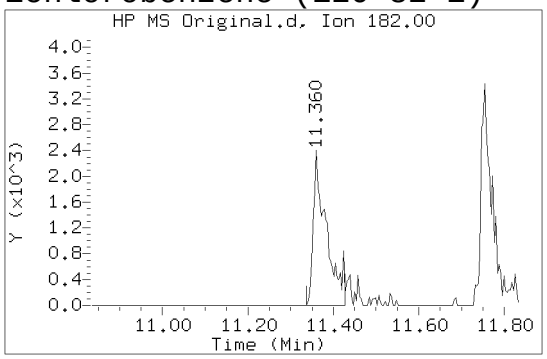
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

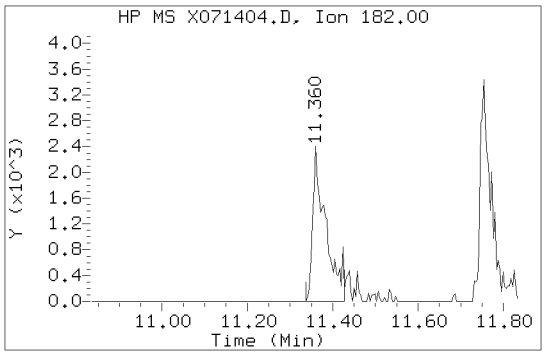
BEFORE

MASS
182
AREA
5066
HEIGHT
2401
20-Jul-2023
15:04
linh
pham



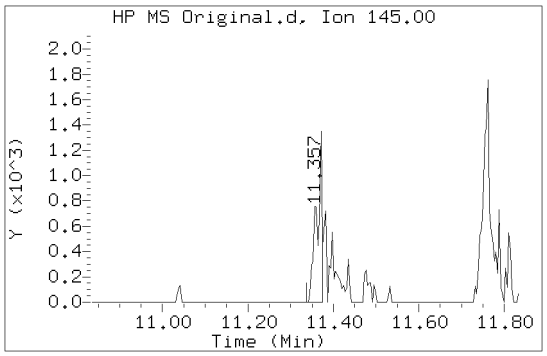
AFTER

MASS
182
AREA
5066
HEIGHT
2401
20-Jul-2023
15:04
linh
pham



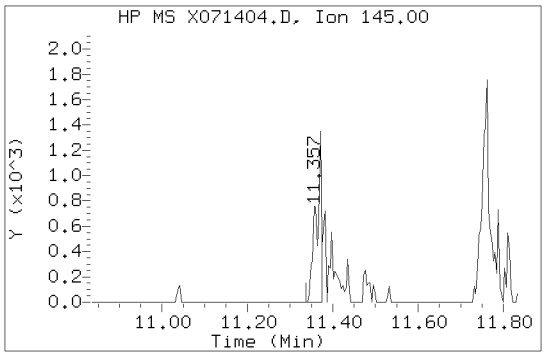
BEFORE

MASS
145
AREA
1146
HEIGHT
757
20-Jul-2023
15:04
linh
pham



AFTER

MASS
145
AREA
1146
HEIGHT
757
20-Jul-2023
15:04
linh
pham

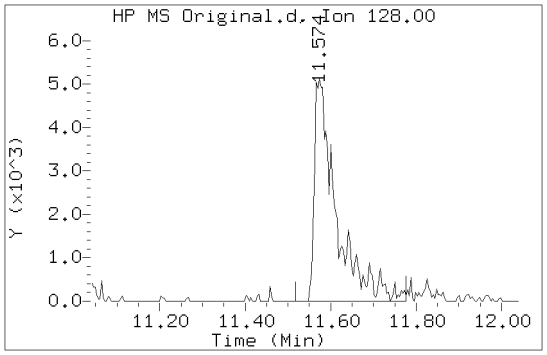


Naphthalene (91-20-3)

Reason Code:

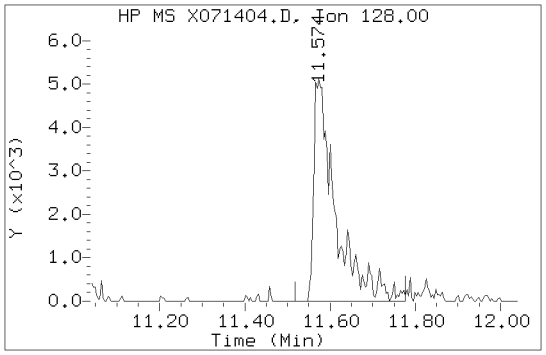
BEFORE

MASS
128
AREA
18131
HEIGHT
5123
20-Jul-2023
15:04
linh
pham



AFTER

MASS
128
AREA
18131
HEIGHT
5123
20-Jul-2023
15:04
linh
pham

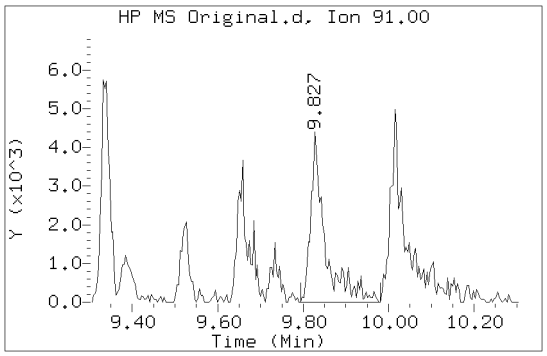


Benzyl Chloride (100-44-7)

Reason Code:

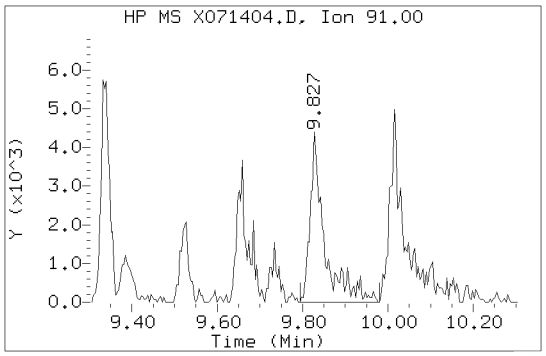
BEFORE

MASS
91
AREA
10259
HEIGHT
4403
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
10259
HEIGHT
4403
20-Jul-2023
15:04
linh
pham



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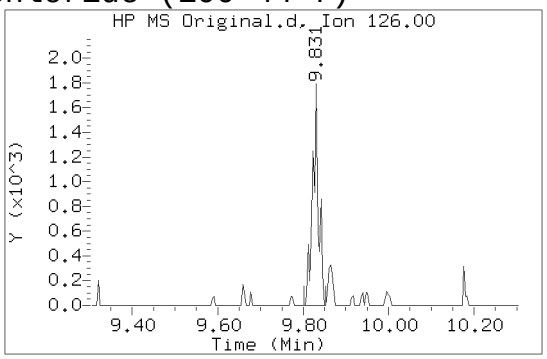
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

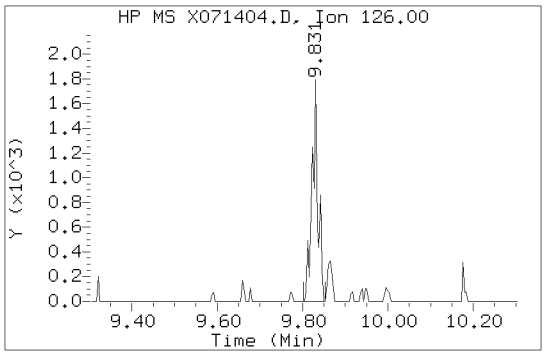
Benzyl Chloride (100-44-7)

Reason Code:

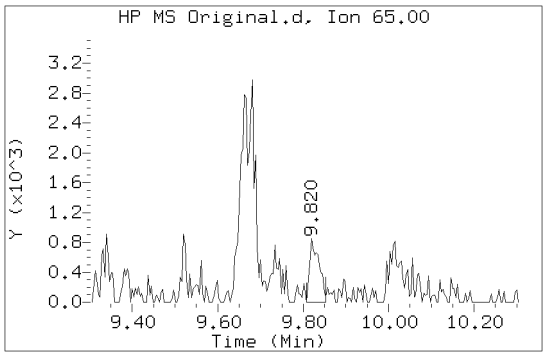
BEFORE
MASS
126
AREA
1709
HEIGHT
1793
20-Jul-2023
15:04
linh
pham



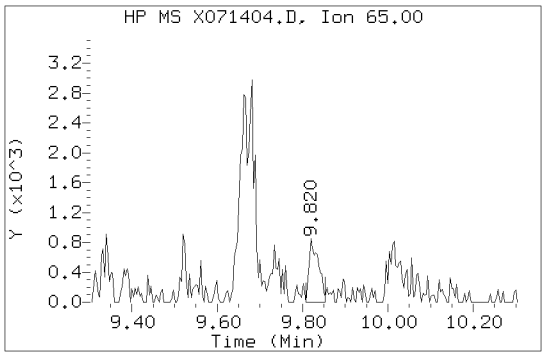
AFTER
MASS
126
AREA
1709
HEIGHT
1793
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
65
AREA
1300
HEIGHT
848
20-Jul-2023
15:04
linh
pham



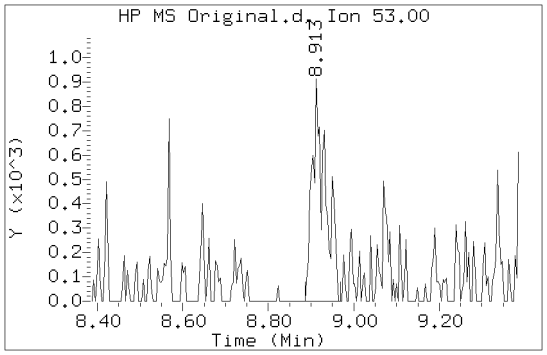
AFTER
MASS
65
AREA
1300
HEIGHT
848
20-Jul-2023
15:04
linh
pham



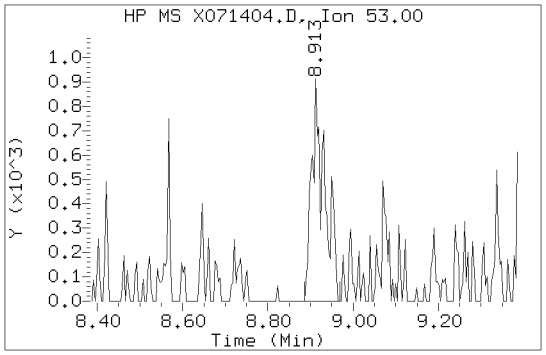
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

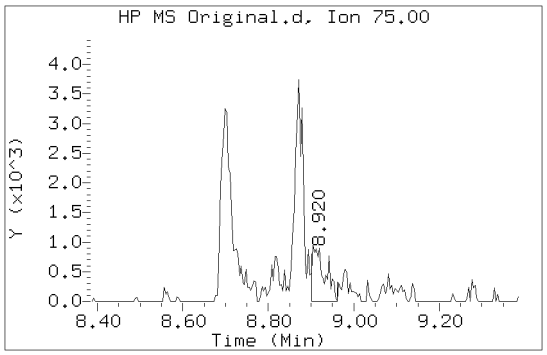
BEFORE
MASS
53
AREA
1951
HEIGHT
913
20-Jul-2023
15:04
linh
pham



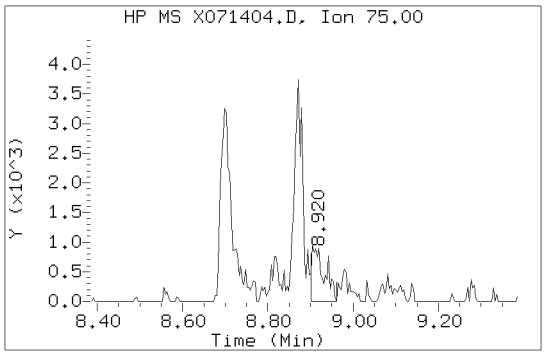
AFTER
MASS
53
AREA
1951
HEIGHT
913
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
75
AREA
1917
HEIGHT
902
20-Jul-2023
15:04
linh
pham



AFTER
MASS
75
AREA
1917
HEIGHT
902
20-Jul-2023
15:04
linh
pham



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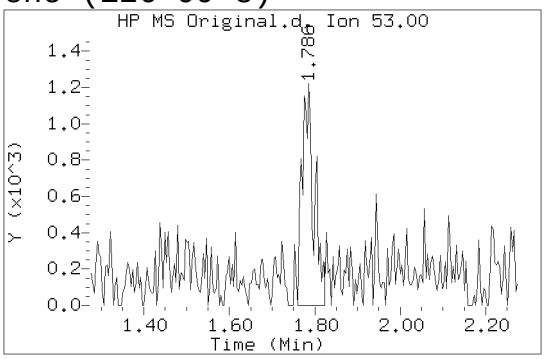
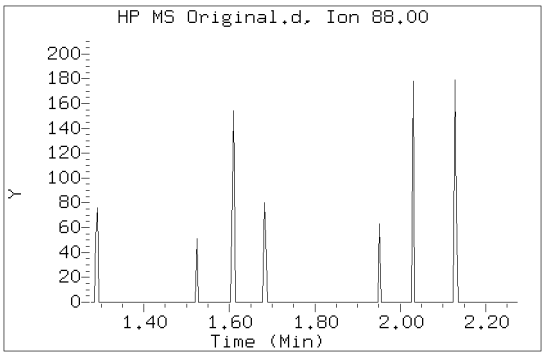
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Chloroprene (126-99-8)

BEFORE
MASS
53
AREA
2402
HEIGHT
1221
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER
MASS
53
AREA
2402
HEIGHT
1221
20-Jul-2023
15:04
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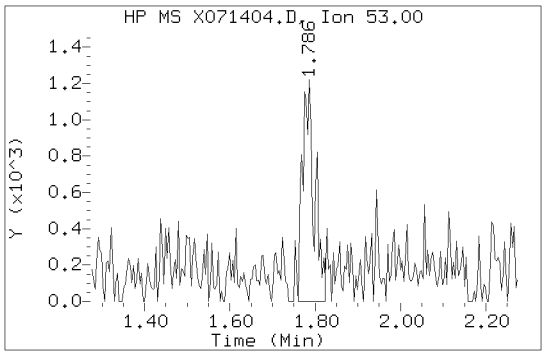

AFTER
MASS
88
AREA
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HEIGHT
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20-Jul-2023
15:04
linh
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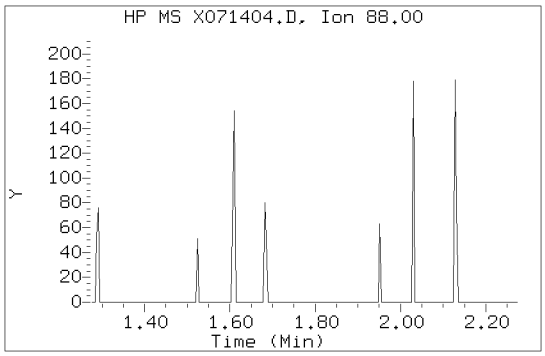
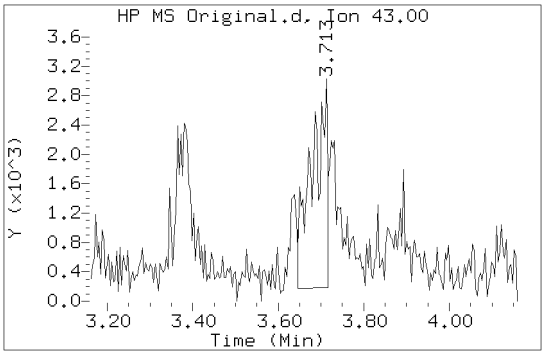


Ethyl Acetate (141-78-6)

BEFORE
MASS
43
AREA
7207
HEIGHT
2844
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
61
AREA
652
HEIGHT
462
20-Jul-2023
15:04
linh
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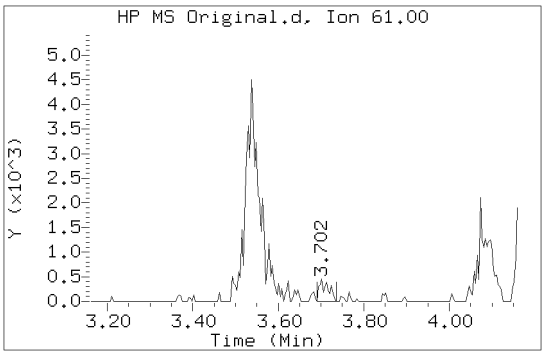
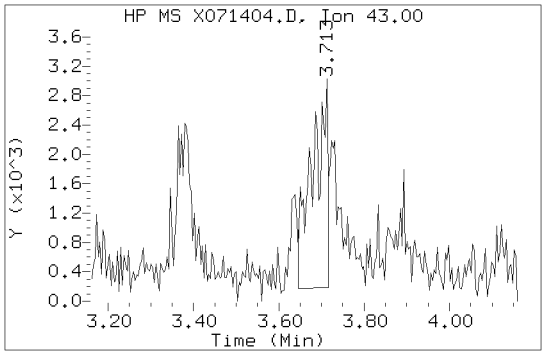
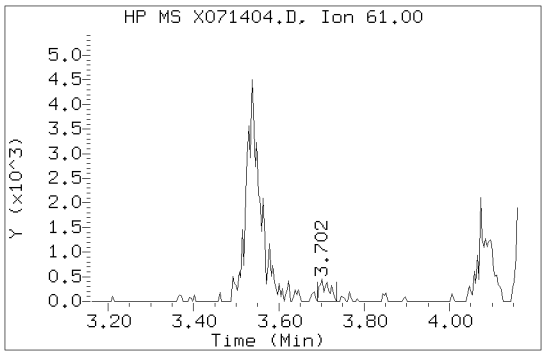


Reason Code:

AFTER
MASS
43
AREA
7207
HEIGHT
2844
20-Jul-2023
15:04
linh
pham



AFTER
MASS
61
AREA
652
HEIGHT
462
20-Jul-2023
15:04
linh
pham



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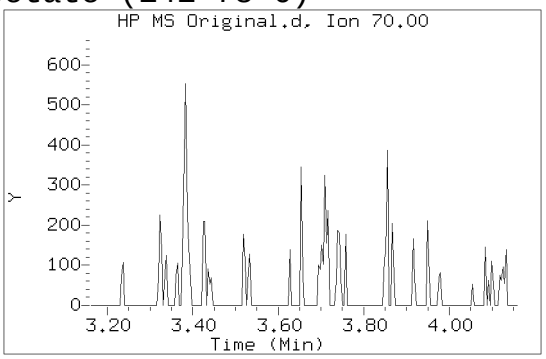
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Ethyl Acetate (141-78-6)

Reason Code:

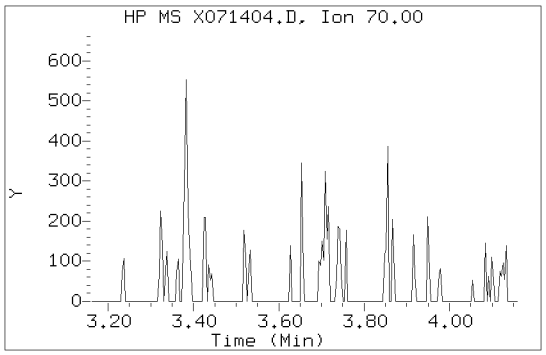
BEFORE

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

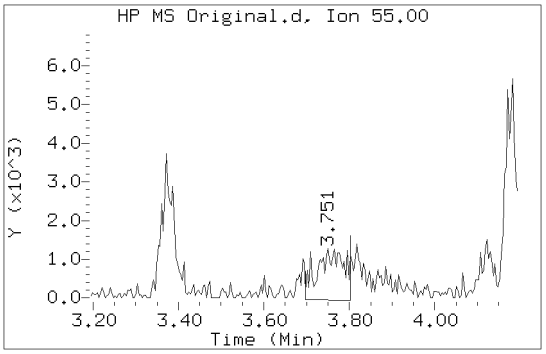


Methyl Acrylate (96-33-3)

Reason Code:

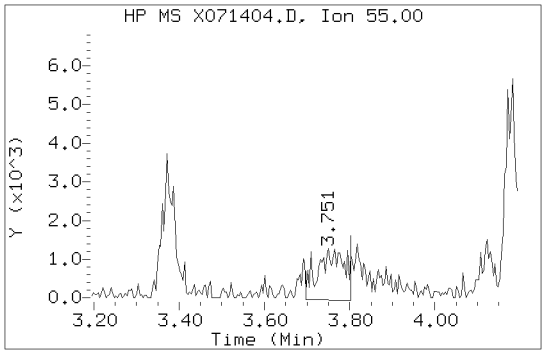
BEFORE

MASS
55
AREA
5778
HEIGHT
1338
20-Jul-2023
15:04
linh
pham



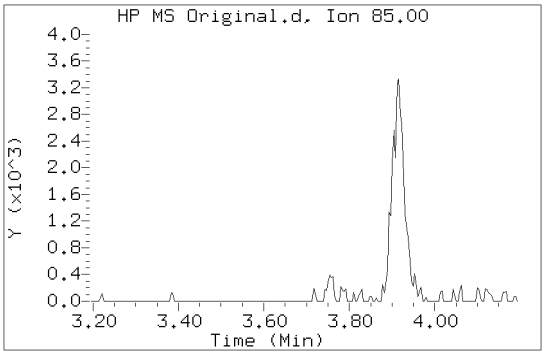
AFTER

MASS
55
AREA
5778
HEIGHT
1338
20-Jul-2023
15:04
linh
pham



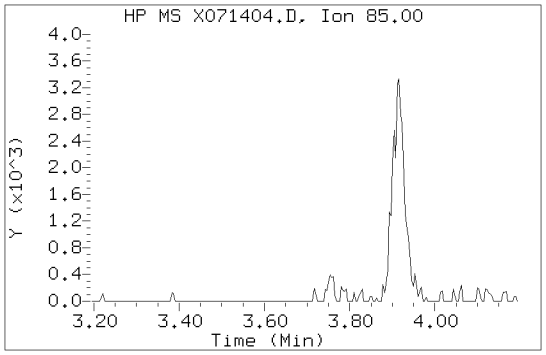
BEFORE

MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

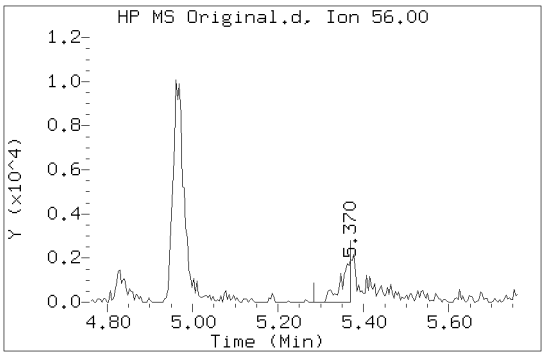


n-Butanol (71-36-3)

Reason Code:

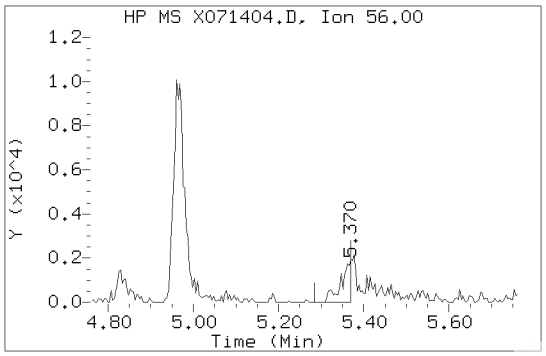
BEFORE

MASS
56
AREA
3103
HEIGHT
1929
20-Jul-2023
15:04
linh
pham



AFTER

MASS
56
AREA
3103
HEIGHT
1929
20-Jul-2023
15:04
linh
pham



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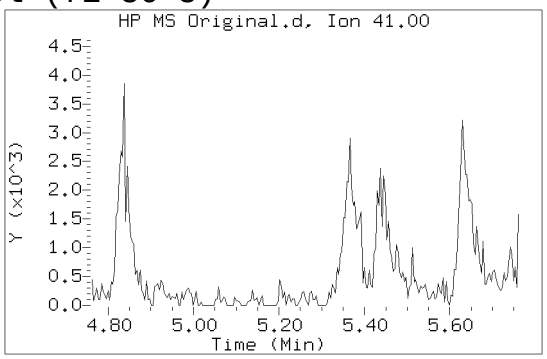
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

n-Butanol (71-36-3)

Reason Code:

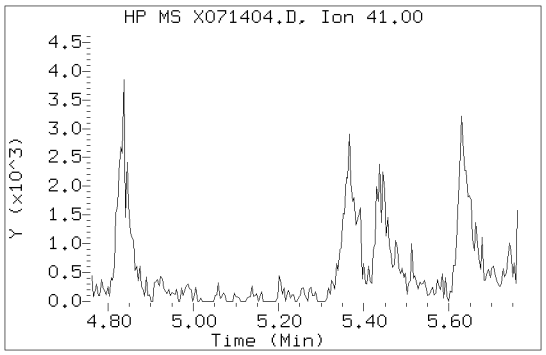
BEFORE

MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

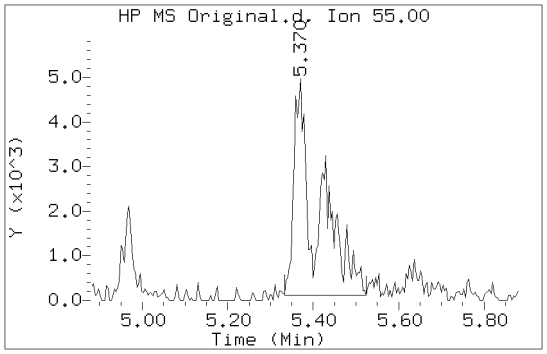


Ethyl Acrylate (140-88-5)

Reason Code:

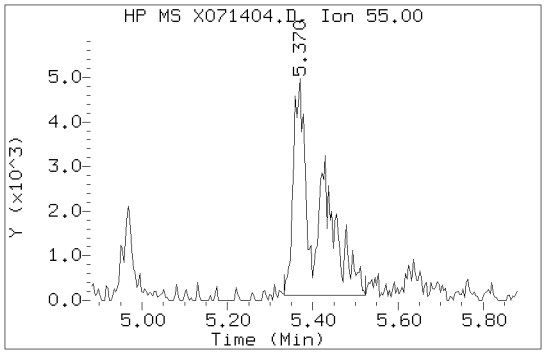
BEFORE

MASS
55
AREA
18196
HEIGHT
4857
20-Jul-2023
15:04
linh
pham



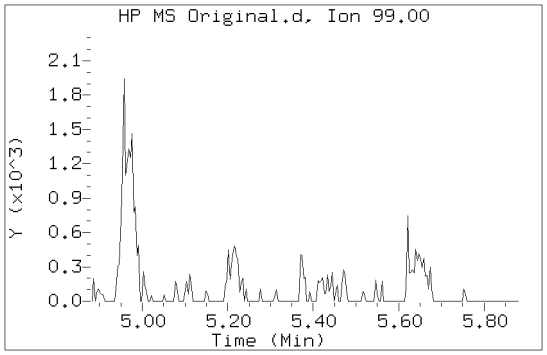
AFTER

MASS
55
AREA
18196
HEIGHT
4857
20-Jul-2023
15:04
linh
pham



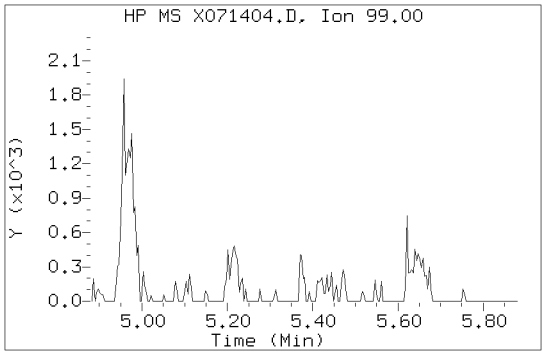
BEFORE

MASS
99
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
99
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

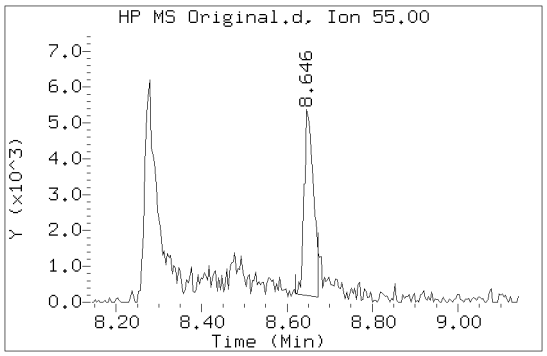


Cyclohexanone (108-94-1)

Reason Code:

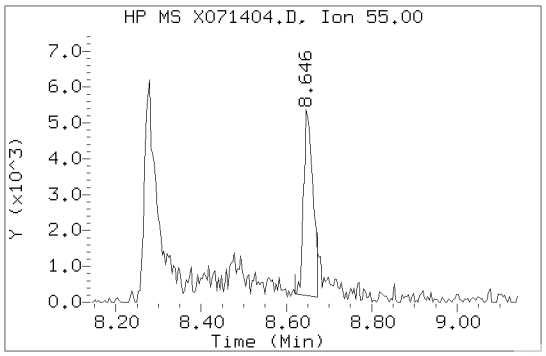
BEFORE

MASS
55
AREA
7972
HEIGHT
5194
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
7972
HEIGHT
5194
20-Jul-2023
15:04
linh
pham



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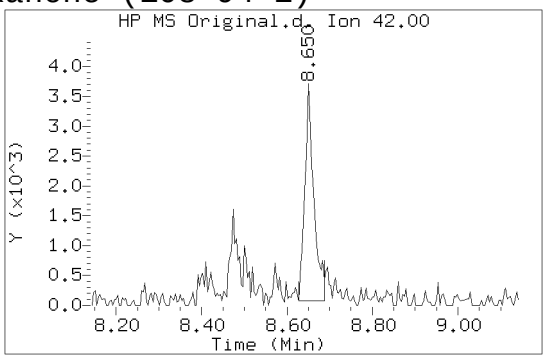
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Cyclohexanone (108-94-1)

Reason Code:

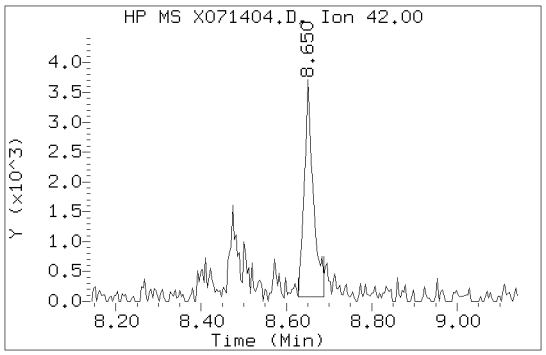
BEFORE

MASS
42
AREA
5392
HEIGHT
3640
20-Jul-2023
15:04
linh
pham



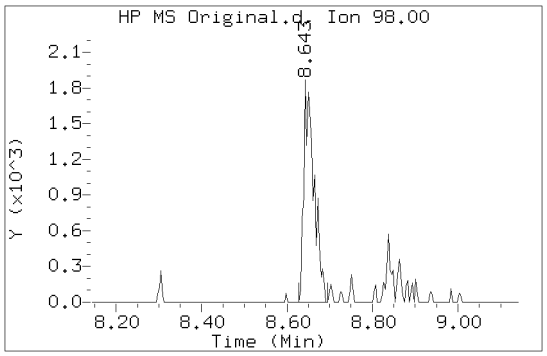
AFTER

MASS
42
AREA
5392
HEIGHT
3640
20-Jul-2023
15:04
linh
pham



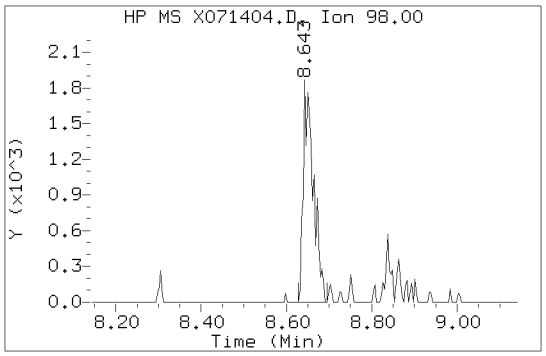
BEFORE

MASS
98
AREA
3142
HEIGHT
1869
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
AREA
3142
HEIGHT
1869
20-Jul-2023
15:04
linh
pham

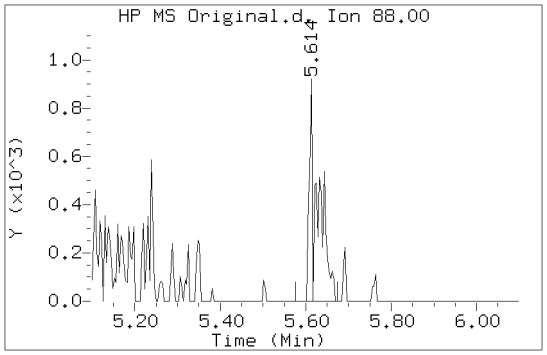


1,4-Dioxane ()

Reason Code:

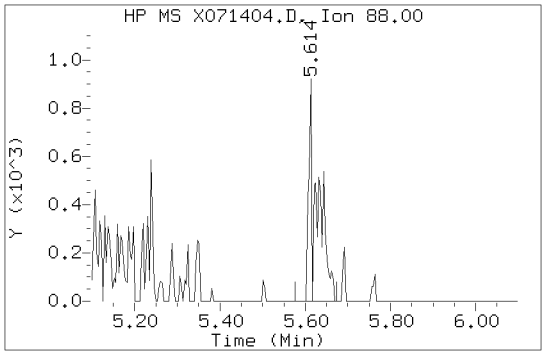
BEFORE

MASS
88
AREA
1290
HEIGHT
921
20-Jul-2023
15:04
linh
pham



AFTER

MASS
88
AREA
1290
HEIGHT
921
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
58
AREA
1310
HEIGHT
1214
20-Jul-2023
15:04
linh
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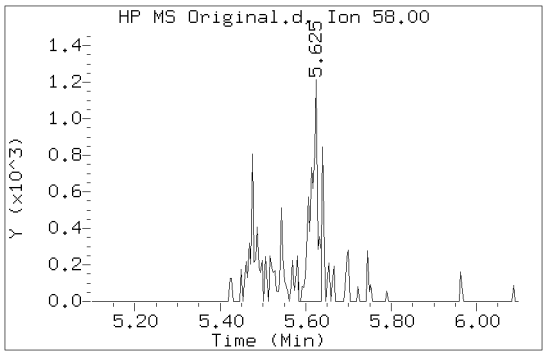
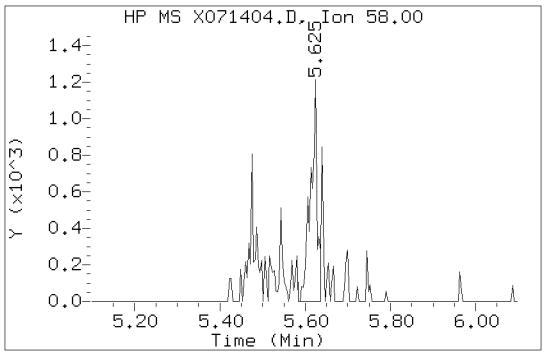


AFTER

MASS
58
AREA
1310
HEIGHT
1214
20-Jul-2023
15:04
linh
pham



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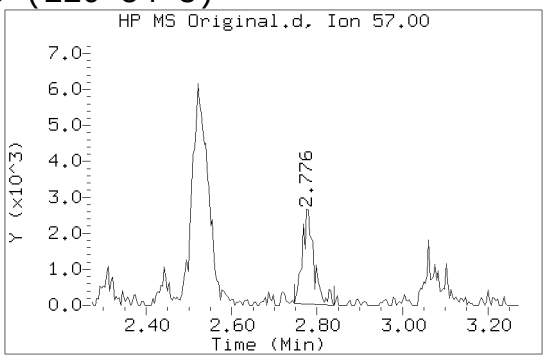
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

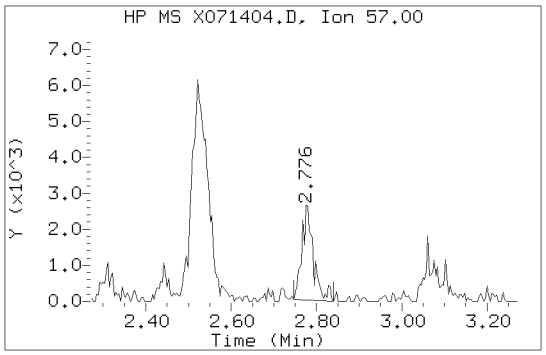
n-Hexane (110-54-3)

Reason Code:

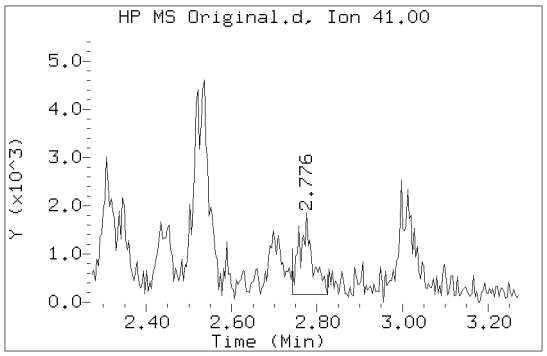
BEFORE
MASS
57
AREA
5000
HEIGHT
2629
20-Jul-2023
15:04
linh
pham



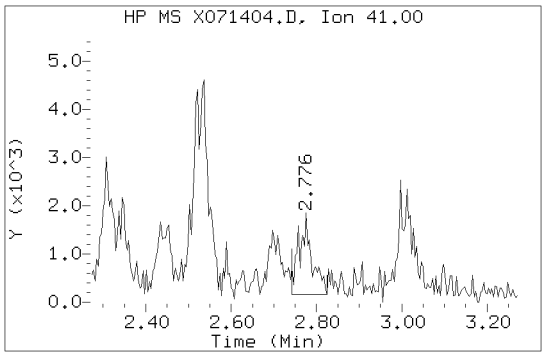
AFTER
MASS
57
AREA
5000
HEIGHT
2629
20-Jul-2023
15:04
linh
pham



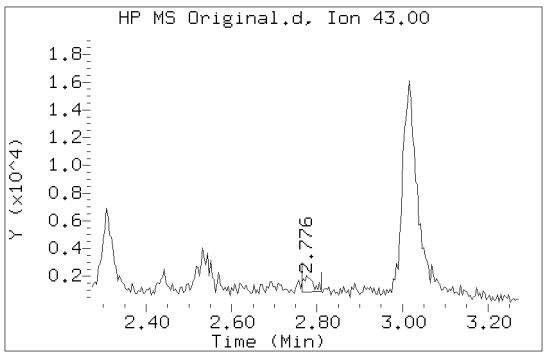
BEFORE
MASS
41
AREA
3569
HEIGHT
1692
20-Jul-2023
15:04
linh
pham



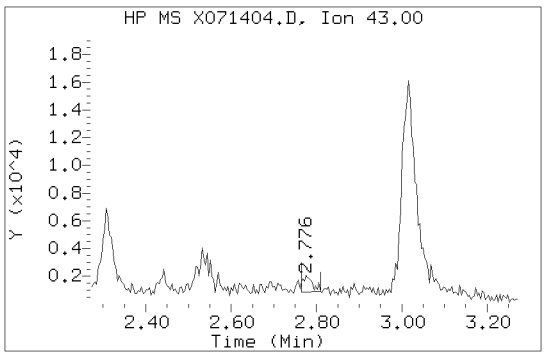
AFTER
MASS
41
AREA
3569
HEIGHT
1692
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
43
AREA
1865
HEIGHT
1174
20-Jul-2023
15:04
linh
pham



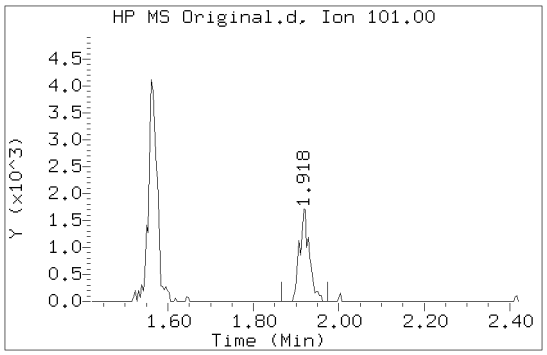
AFTER
MASS
43
AREA
1865
HEIGHT
1174
20-Jul-2023
15:04
linh
pham



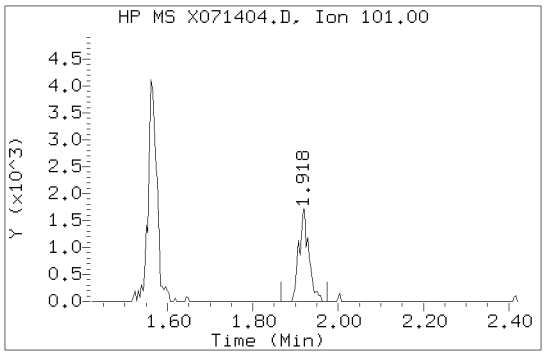
Freon TF (76-13-1)

Reason Code:

BEFORE
MASS
101
AREA
2818
HEIGHT
1714
20-Jul-2023
15:04
linh
pham



AFTER
MASS
101
AREA
2818
HEIGHT
1714
20-Jul-2023
15:04
linh
pham



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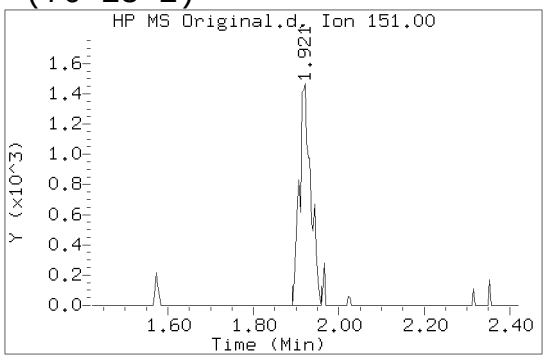
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Freon TF (76-13-1)

BEFORE

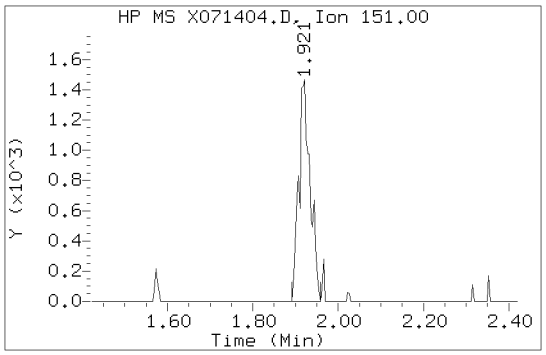
MASS
151
AREA
2770
HEIGHT
1467
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

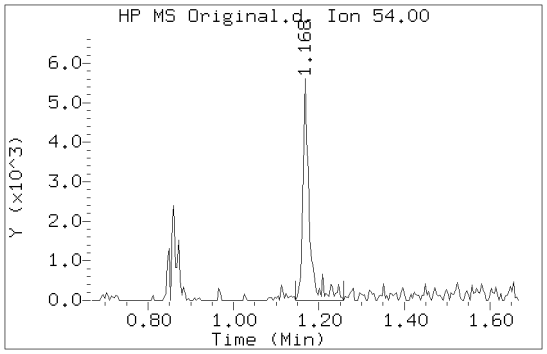
MASS
151
AREA
2770
HEIGHT
1467
20-Jul-2023
15:04
linh
pham



1,3-Butadiene (106-99-0)

BEFORE

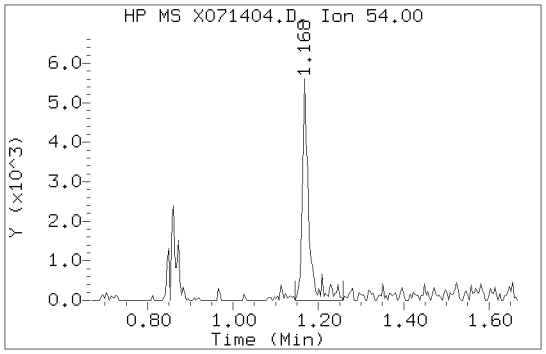
MASS
54
AREA
6040
HEIGHT
5609
20-Jul-2023
15:04
linh
pham



Reason Code:

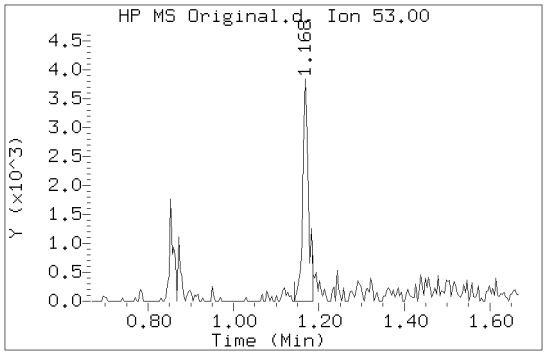
AFTER

MASS
54
AREA
6040
HEIGHT
5609
20-Jul-2023
15:04
linh
pham



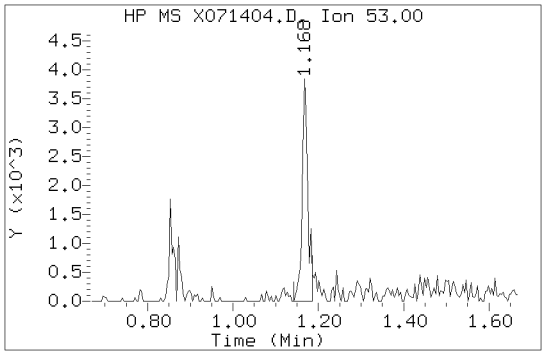
BEFORE

MASS
53
AREA
3632
HEIGHT
3843
20-Jul-2023
15:04
linh
pham



AFTER

MASS
53
AREA
3632
HEIGHT
3843
20-Jul-2023
15:04
linh
pham

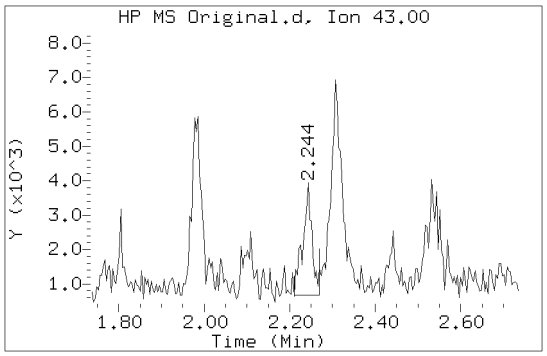


Methyl acetate (79-20-9)

Reason Code:

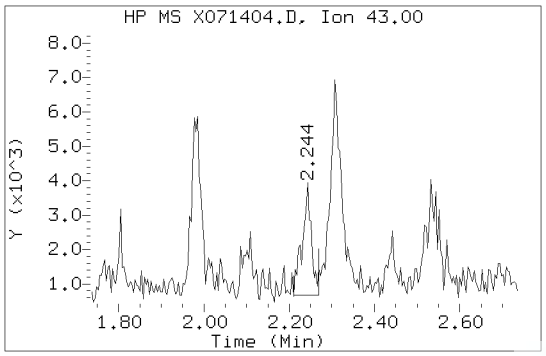
BEFORE

MASS
43
AREA
4992
HEIGHT
3260
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
4992
HEIGHT
3260
20-Jul-2023
15:04
linh
pham



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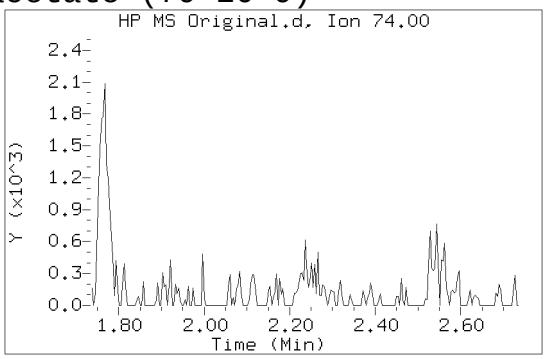
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

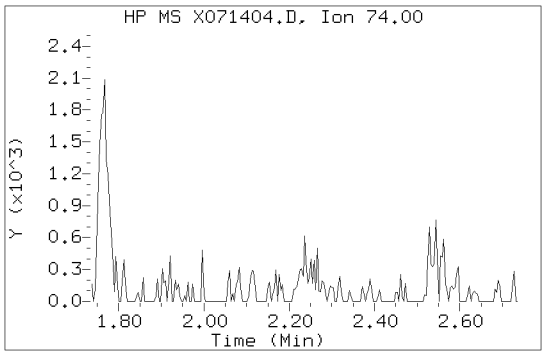
Methyl acetate (79-20-9)

Reason Code:

BEFORE
MASS
74
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



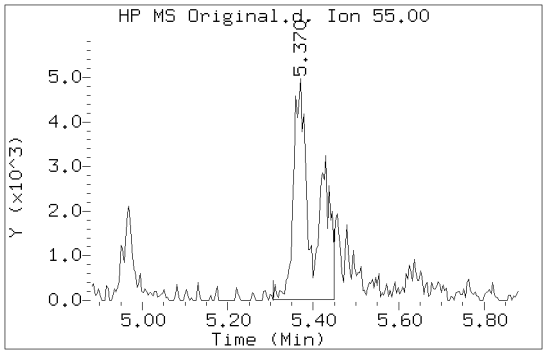
AFTER
MASS
74
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



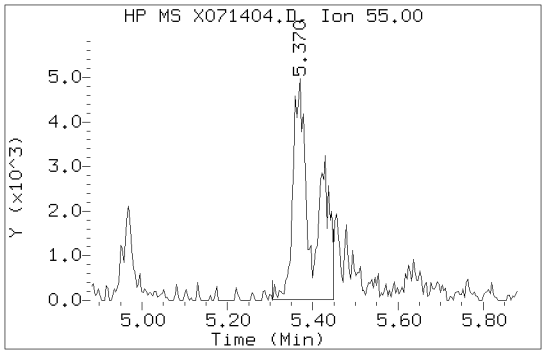
Methylcyclohexane (108-87-2)

Reason Code:

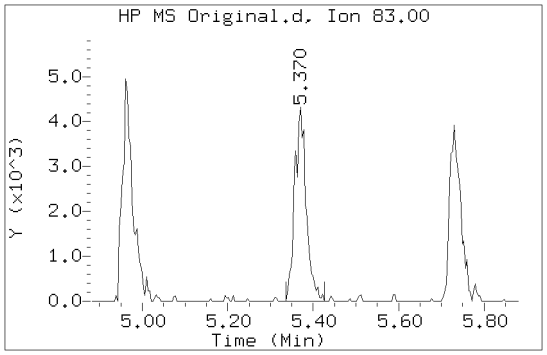
BEFORE
MASS
55
AREA
15783
HEIGHT
4958
20-Jul-2023
15:04
linh
pham



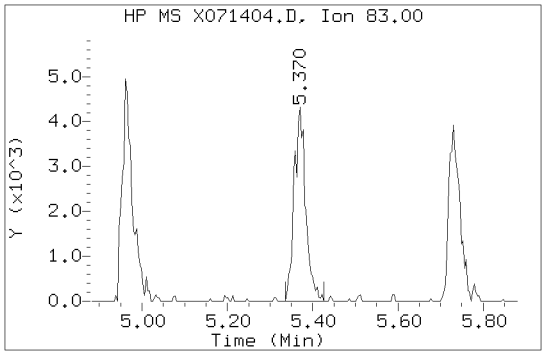
AFTER
MASS
55
AREA
15783
HEIGHT
4958
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
83
AREA
8157
HEIGHT
4322
20-Jul-2023
15:04
linh
pham



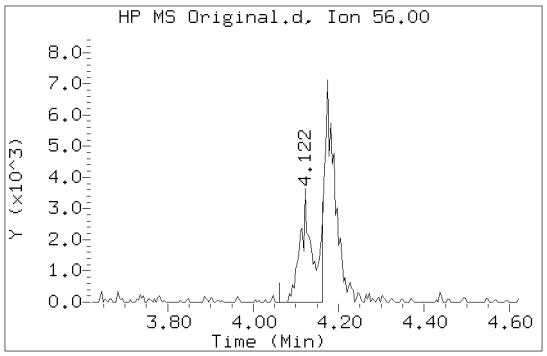
AFTER
MASS
83
AREA
8157
HEIGHT
4322
20-Jul-2023
15:04
linh
pham



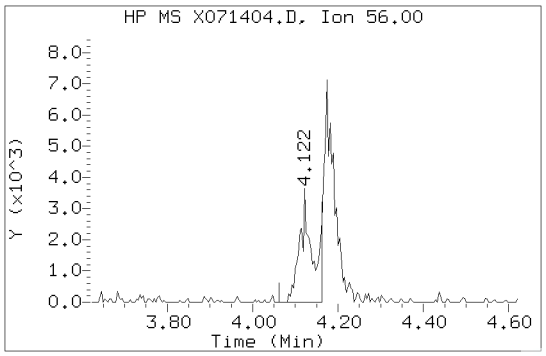
Cyclohexane (110-82-7)

Reason Code:

BEFORE
MASS
56
AREA
7673
HEIGHT
3640
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
AREA
7673
HEIGHT
3640
20-Jul-2023
15:04
linh
pham



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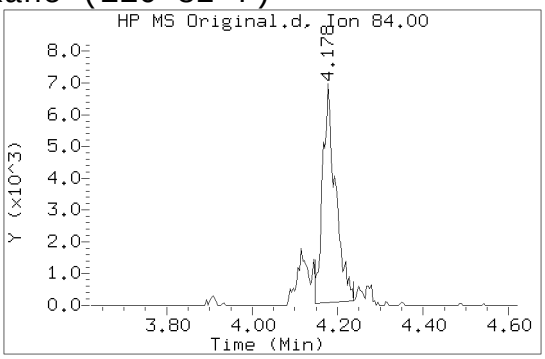
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

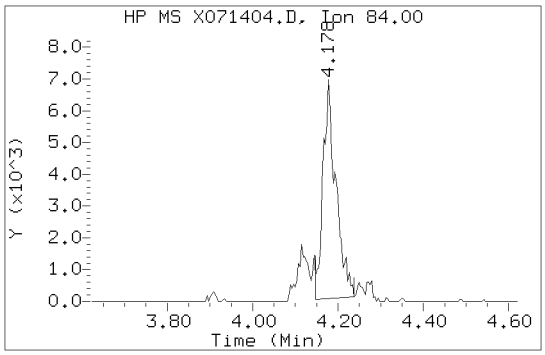
Cyclohexane (110-82-7)

Reason Code:

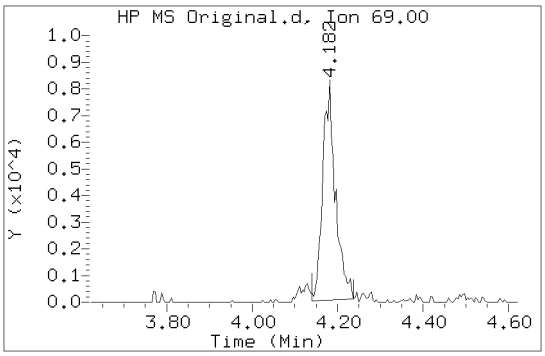
BEFORE
MASS
84
AREA
14444
HEIGHT
6891
20-Jul-2023
15:04
linh
pham



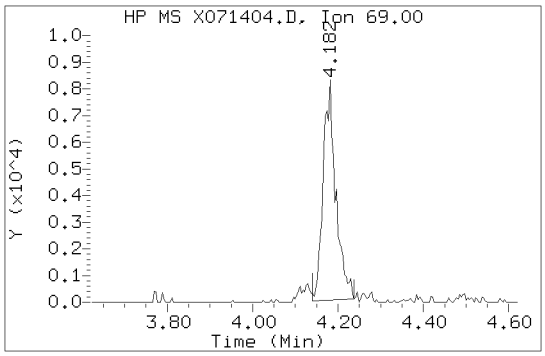
AFTER
MASS
84
AREA
14444
HEIGHT
6891
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
69
AREA
16995
HEIGHT
8270
20-Jul-2023
15:04
linh
pham



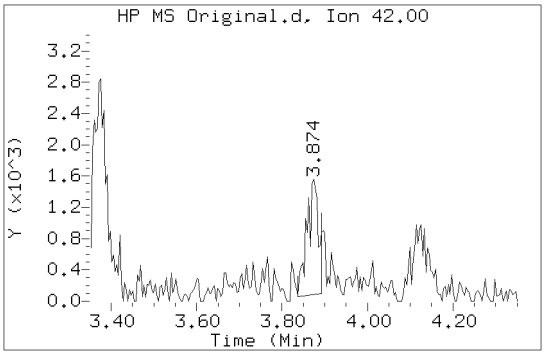
AFTER
MASS
69
AREA
16995
HEIGHT
8270
20-Jul-2023
15:04
linh
pham



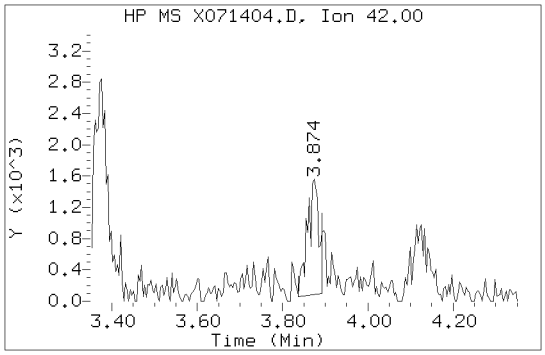
Tetrahydrofuran (109-99-9)

Reason Code:

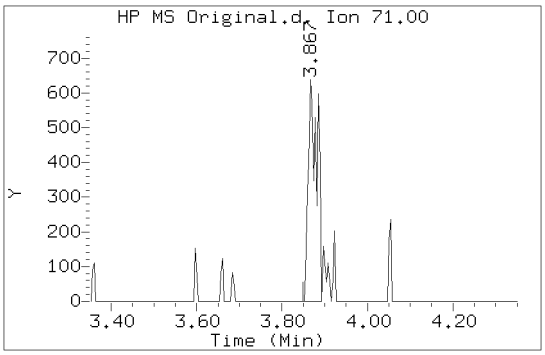
BEFORE
MASS
42
AREA
2815
HEIGHT
1476
20-Jul-2023
15:04
linh
pham



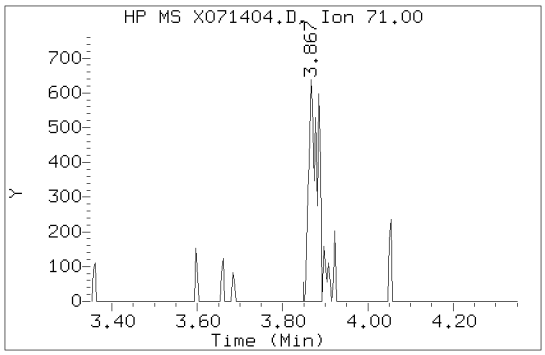
AFTER
MASS
42
AREA
2815
HEIGHT
1476
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
71
AREA
933
HEIGHT
638
20-Jul-2023
15:04
linh
pham



AFTER
MASS
71
AREA
933
HEIGHT
638
20-Jul-2023
15:04
linh
pham



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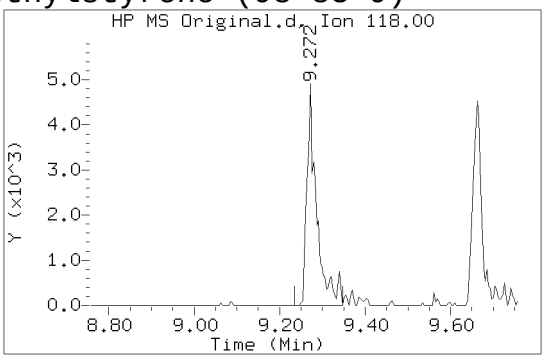
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

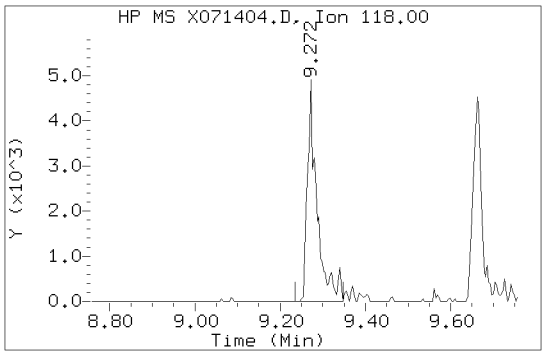
alpha-Methylstyrene (98-83-9)

Reason Code:

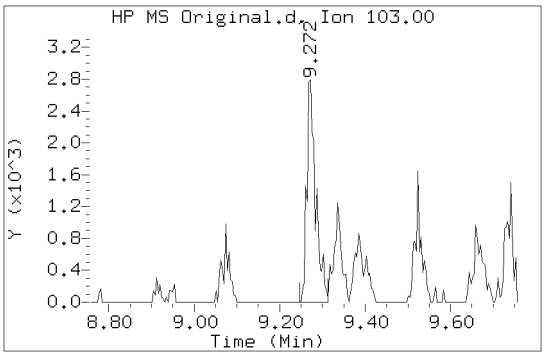
BEFORE
MASS
118
AREA
7755
HEIGHT
4913
20-Jul-2023
15:04
linh
pham



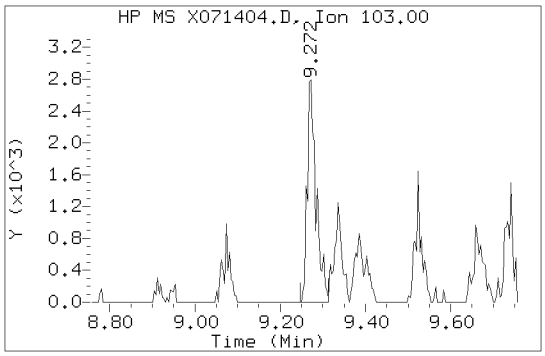
AFTER
MASS
118
AREA
7755
HEIGHT
4913
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
103
AREA
4028
HEIGHT
2790
20-Jul-2023
15:04
linh
pham



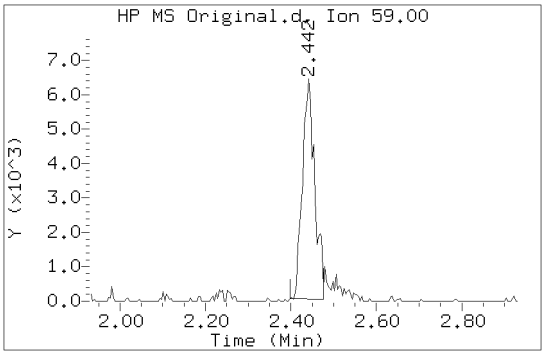
AFTER
MASS
103
AREA
4028
HEIGHT
2790
20-Jul-2023
15:04
linh
pham



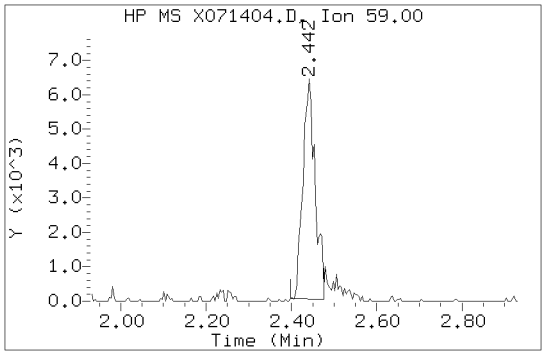
Tert-butyl alcohol (75-65-0)

Reason Code:

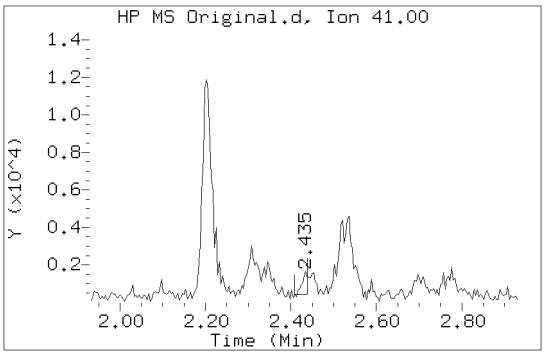
BEFORE
MASS
59
AREA
12965
HEIGHT
6400
20-Jul-2023
15:04
linh
pham



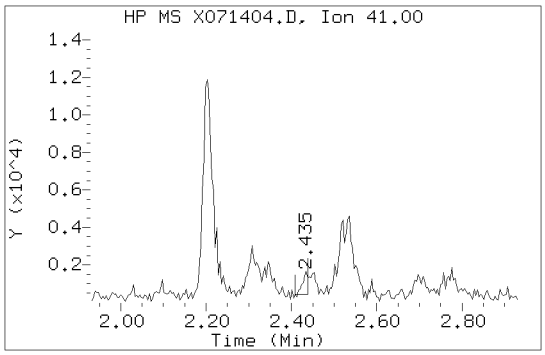
AFTER
MASS
59
AREA
12965
HEIGHT
6400
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
41
AREA
1041
HEIGHT
1246
20-Jul-2023
15:04
linh
pham



AFTER
MASS
41
AREA
1041
HEIGHT
1246
20-Jul-2023
15:04
linh
pham



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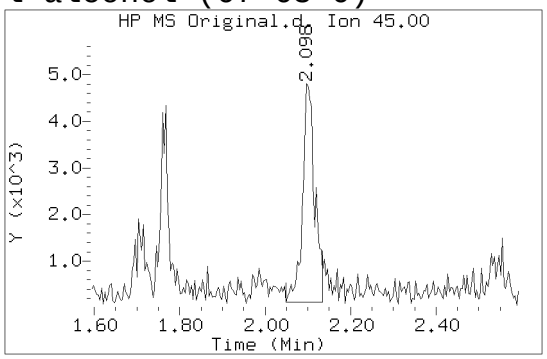
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Isopropyl alcohol (67-63-0)

Reason Code:

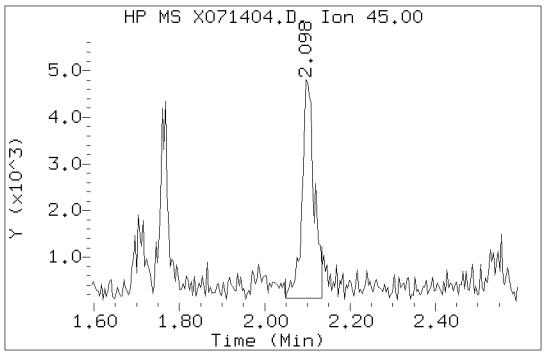
BEFORE

MASS
45
AREA
9372
HEIGHT
4685
20-Jul-2023
15:04
linh
pham



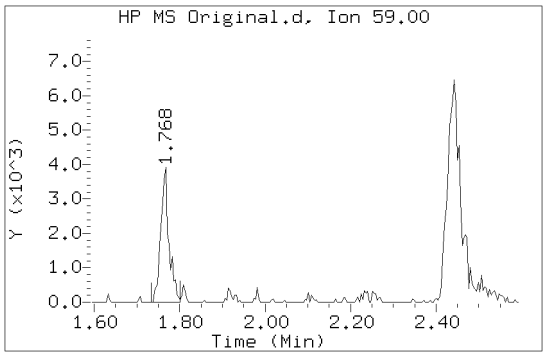
AFTER

MASS
45
AREA
9372
HEIGHT
4685
20-Jul-2023
15:04
linh
pham



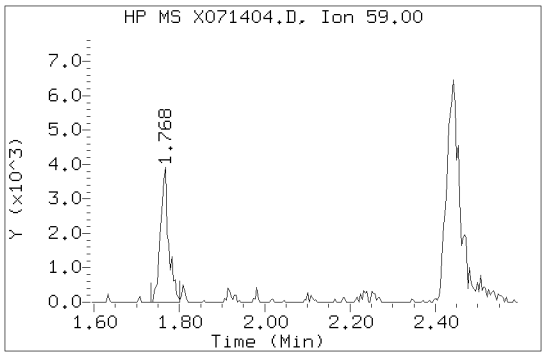
BEFORE

MASS
59
AREA
5211
HEIGHT
3930
20-Jul-2023
15:04
linh
pham



AFTER

MASS
59
AREA
5211
HEIGHT
3930
20-Jul-2023
15:04
linh
pham

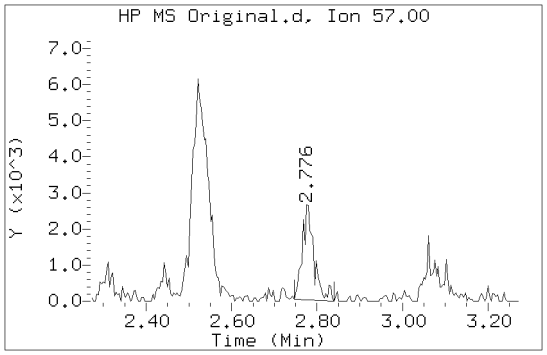


Allyl alcohol (107-18-6)

Reason Code:

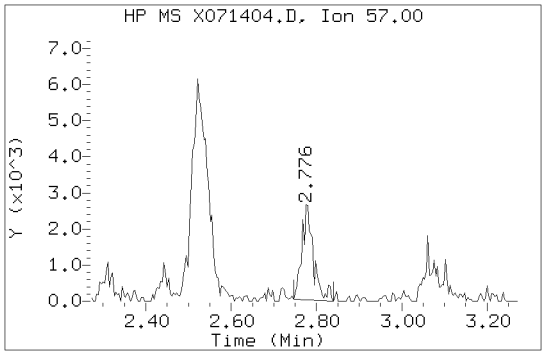
BEFORE

MASS
57
AREA
5000
HEIGHT
2629
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
5000
HEIGHT
2629
20-Jul-2023
15:04
linh
pham

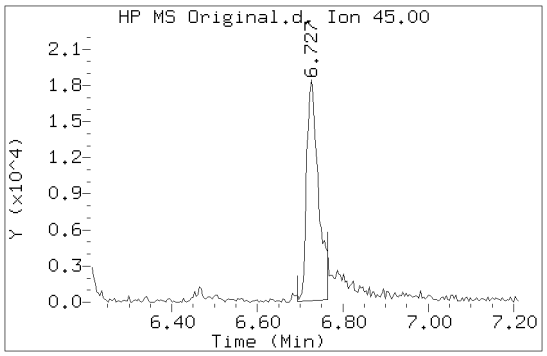


4-Methyl-2-pentanol (108-11-2)

Reason Code:

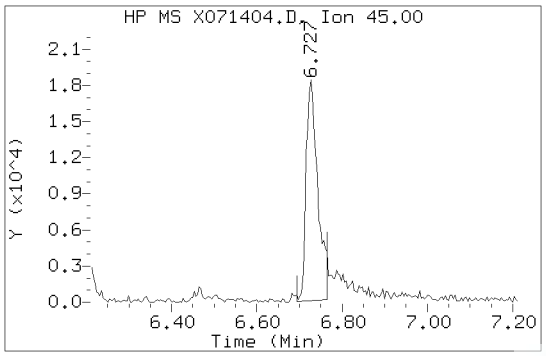
BEFORE

MASS
45
AREA
35175
HEIGHT
18341
20-Jul-2023
15:04
linh
pham



AFTER

MASS
45
AREA
35175
HEIGHT
18341
20-Jul-2023
15:04
linh
pham



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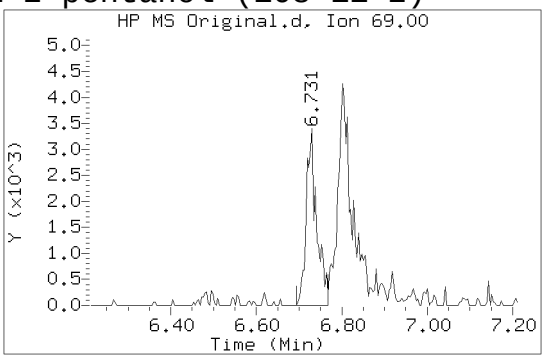
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

4-Methyl-2-pentanol (108-11-2)

Reason Code:

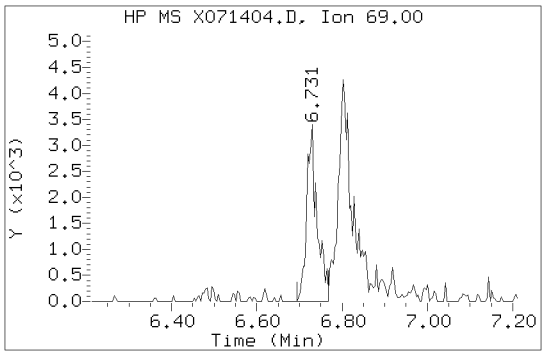
BEFORE

MASS
69
AREA
5748
HEIGHT
3399
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
5748
HEIGHT
3399
20-Jul-2023
15:04
linh
pham

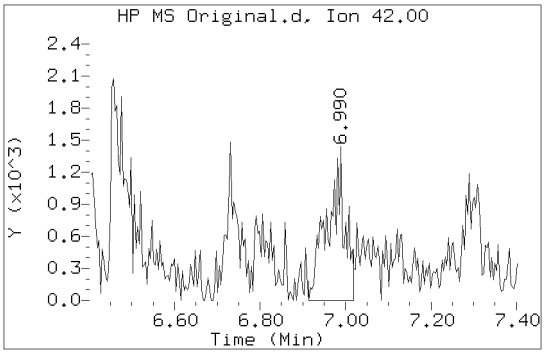


Amyl alcohol (71-41-0)

Reason Code:

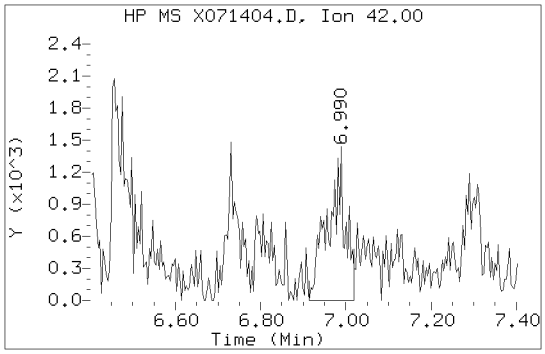
BEFORE

MASS
42
AREA
3944
HEIGHT
1442
20-Jul-2023
15:04
linh
pham



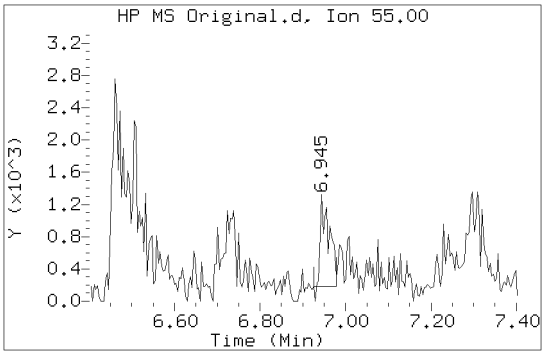
AFTER

MASS
42
AREA
3944
HEIGHT
1442
20-Jul-2023
15:04
linh
pham



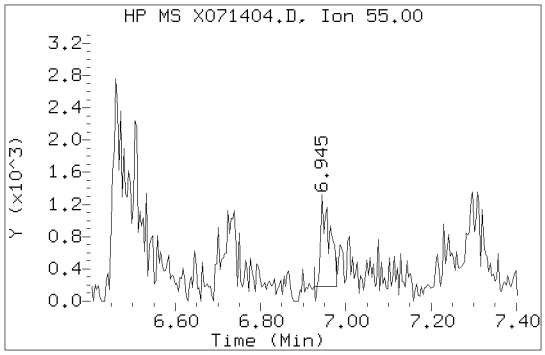
BEFORE

MASS
55
AREA
1617
HEIGHT
1137
20-Jul-2023
15:04
linh
pham



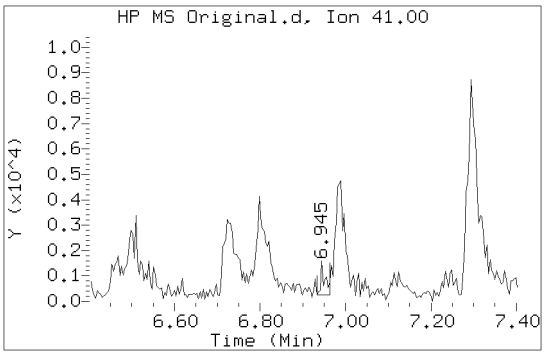
AFTER

MASS
55
AREA
1617
HEIGHT
1137
20-Jul-2023
15:04
linh
pham



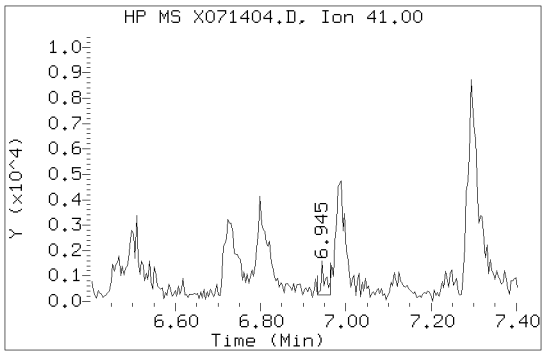
BEFORE

MASS
41
AREA
915
HEIGHT
1326
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
915
HEIGHT
1326
20-Jul-2023
15:04
linh
pham



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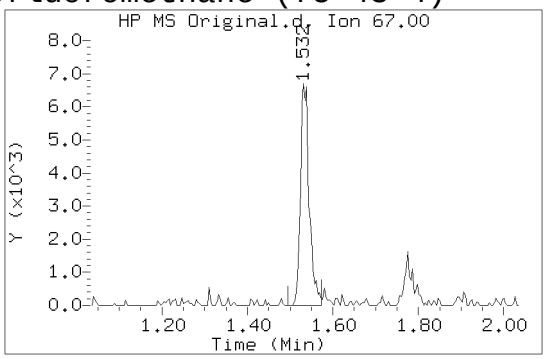
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

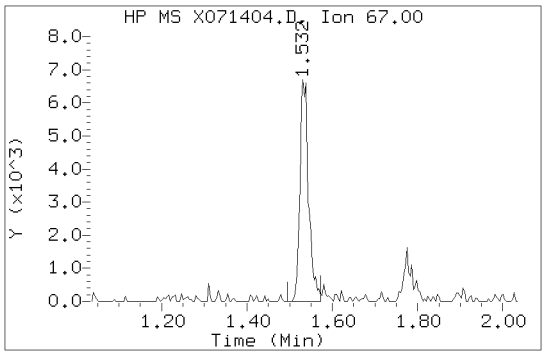
Dichlorofluoromethane (75-43-4)

Reason Code:

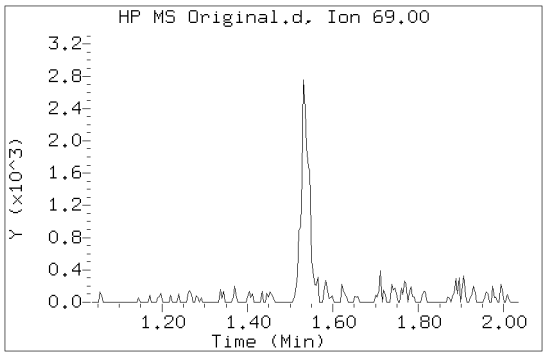
BEFORE
MASS
67
AREA
9743
HEIGHT
6701
20-Jul-2023
15:04
linh
pham



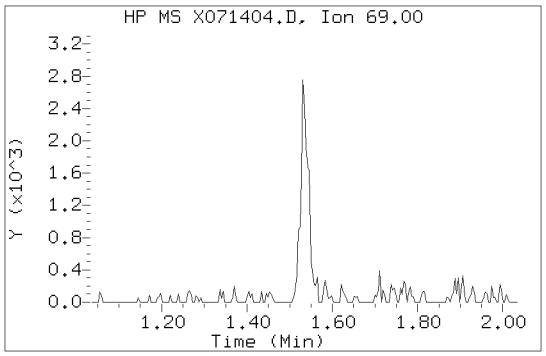
AFTER
MASS
67
AREA
9743
HEIGHT
6701
20-Jul-2023
15:04
linh
pham



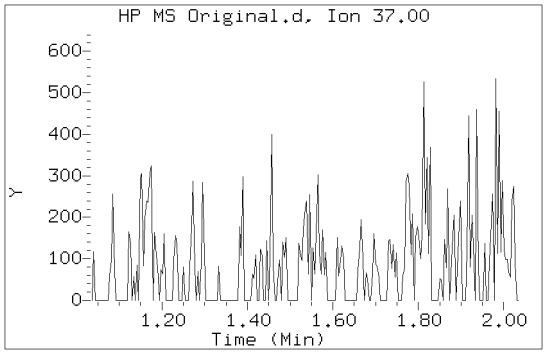
BEFORE
MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



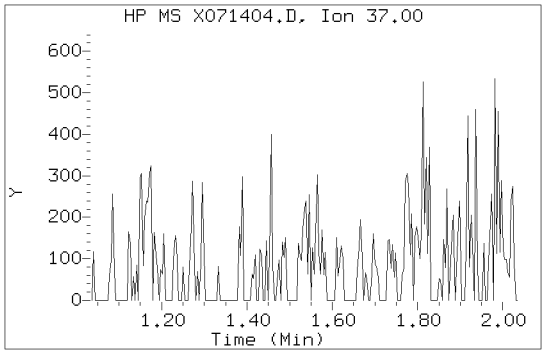
AFTER
MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
37
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



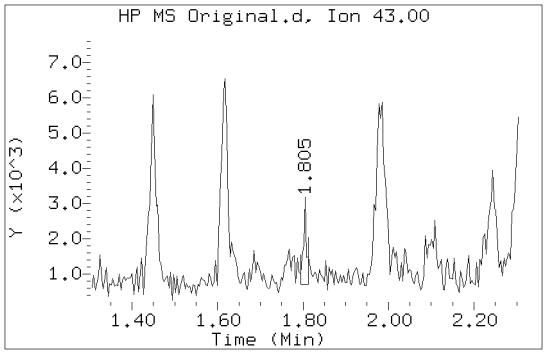
AFTER
MASS
37
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



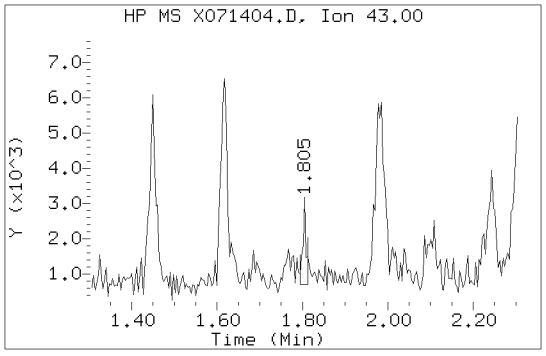
Propylene oxide ()

Reason Code:

BEFORE
MASS
43
AREA
1409
HEIGHT
2479
20-Jul-2023
15:04
linh
pham



AFTER
MASS
43
AREA
1409
HEIGHT
2479
20-Jul-2023
15:04
linh
pham



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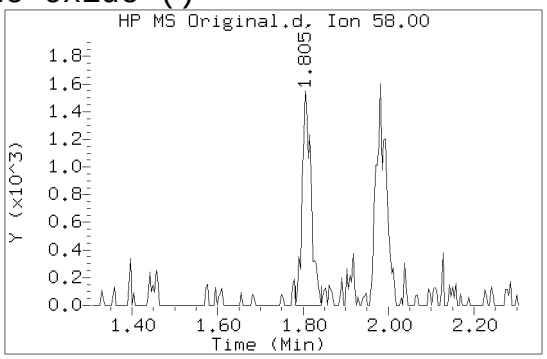
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Propylene oxide ()

Reason Code:

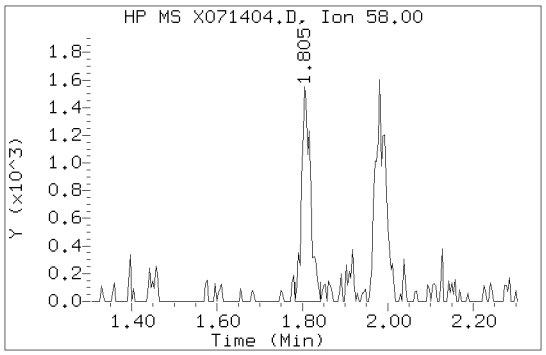
BEFORE

MASS
58
AREA
2276
HEIGHT
1552
20-Jul-2023
15:04
linh
pham



AFTER

MASS
58
AREA
2276
HEIGHT
1552
20-Jul-2023
15:04
linh
pham

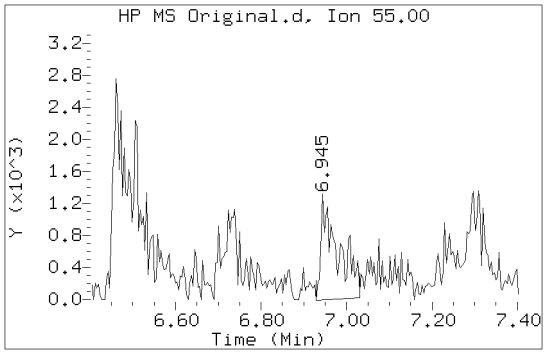


3-Methyl-1-butanol (123-51-3)

Reason Code:

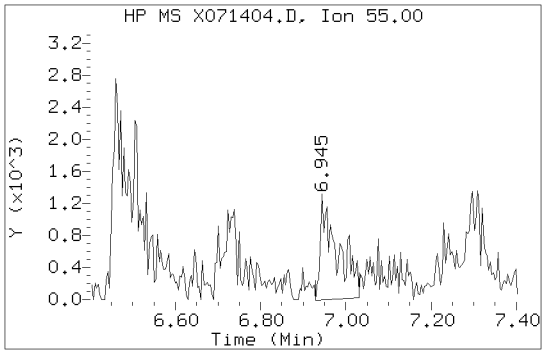
BEFORE

MASS
55
AREA
3623
HEIGHT
1323
20-Jul-2023
15:04
linh
pham



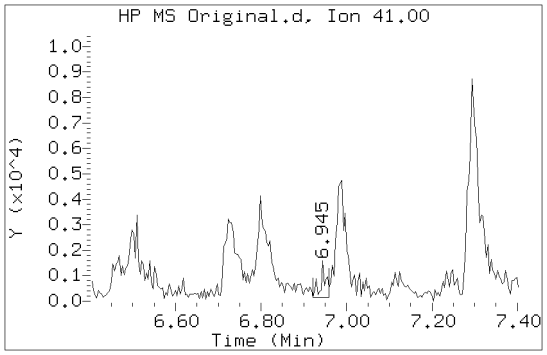
AFTER

MASS
55
AREA
3623
HEIGHT
1323
20-Jul-2023
15:04
linh
pham



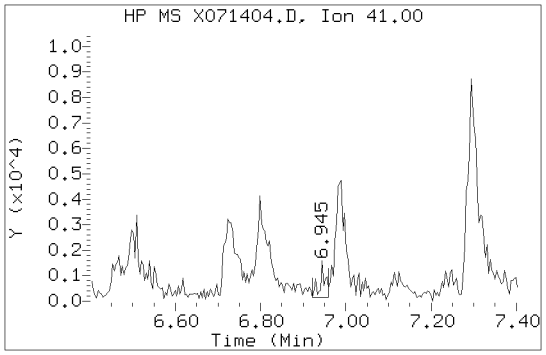
BEFORE

MASS
41
AREA
1239
HEIGHT
1440
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
1239
HEIGHT
1440
20-Jul-2023
15:04
linh
pham

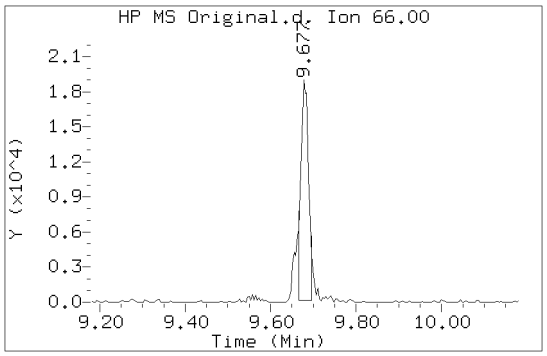


Dicyclopentadiene (77-73-6)

Reason Code:

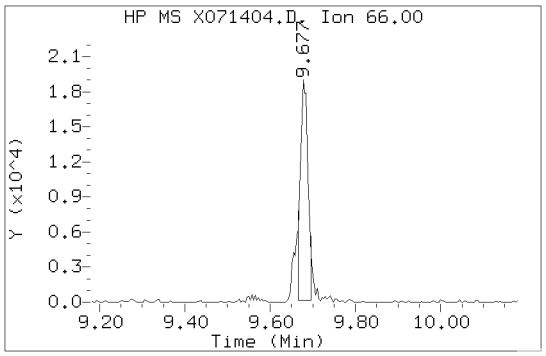
BEFORE

MASS
66
AREA
24319
HEIGHT
18861
20-Jul-2023
15:04
linh
pham



AFTER

MASS
66
AREA
24319
HEIGHT
18861
20-Jul-2023
15:04
linh
pham



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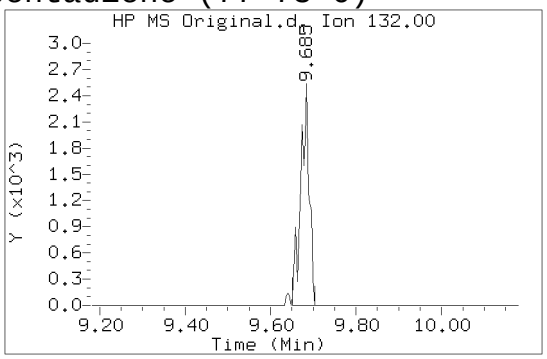
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Dicyclopentadiene (77-73-6)

Reason Code:

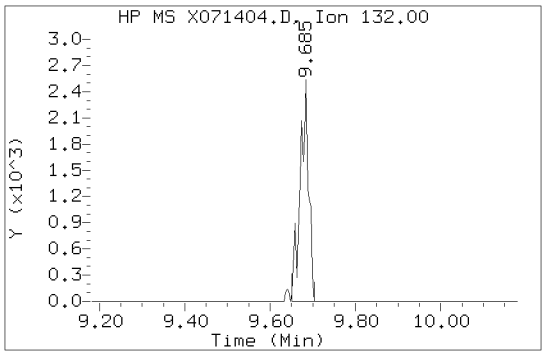
BEFORE

MASS
132
AREA
3579
HEIGHT
2538
20-Jul-2023
15:04
linh
pham



AFTER

MASS
132
AREA
3579
HEIGHT
2538
20-Jul-2023
15:04
linh
pham

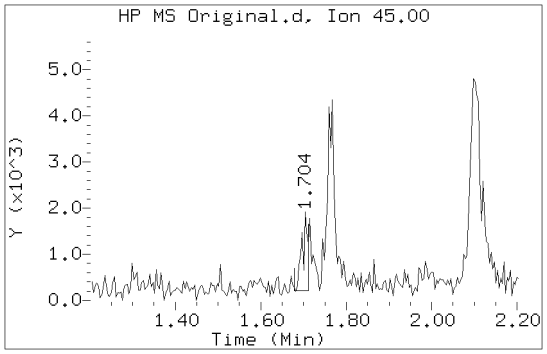


Ethanol (64-17-5)

Reason Code:

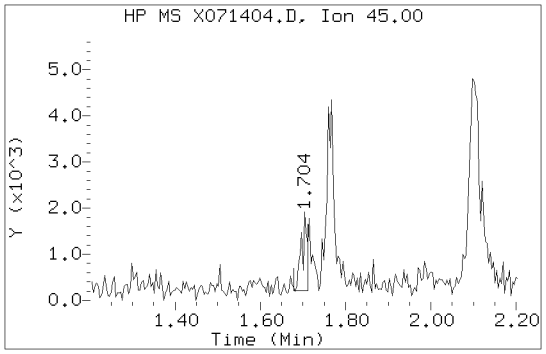
BEFORE

MASS
45
AREA
1613
HEIGHT
1703
20-Jul-2023
15:04
linh
pham



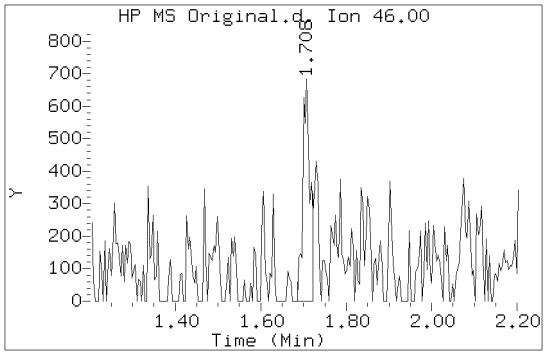
AFTER

MASS
45
AREA
1613
HEIGHT
1703
20-Jul-2023
15:04
linh
pham



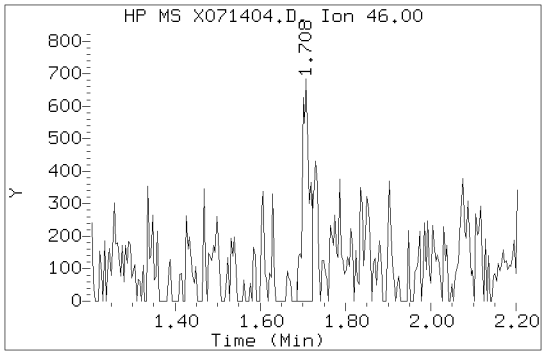
BEFORE

MASS
46
AREA
829
HEIGHT
684
20-Jul-2023
15:04
linh
pham



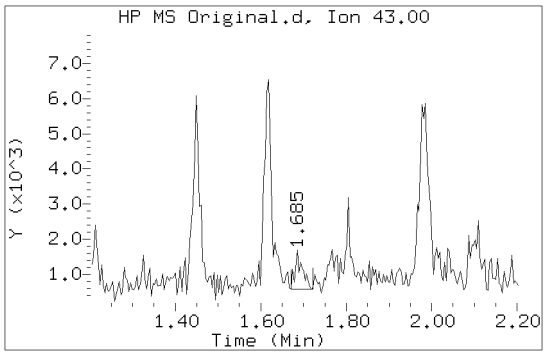
AFTER

MASS
46
AREA
829
HEIGHT
684
20-Jul-2023
15:04
linh
pham



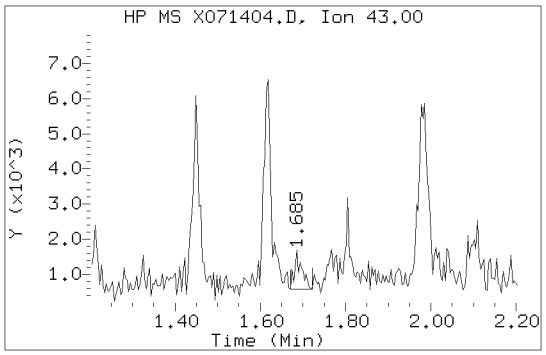
BEFORE

MASS
43
AREA
1337
HEIGHT
1114
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
1337
HEIGHT
1114
20-Jul-2023
15:04
linh
pham



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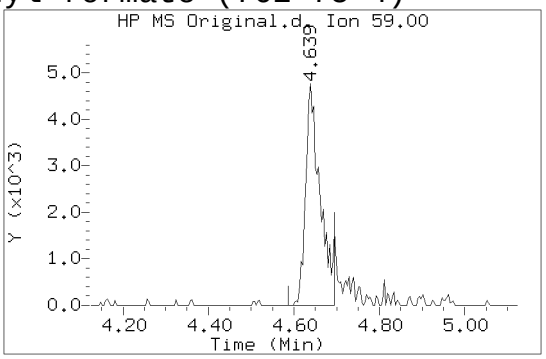
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

tert-Butyl formate (762-75-4)

Reason Code:

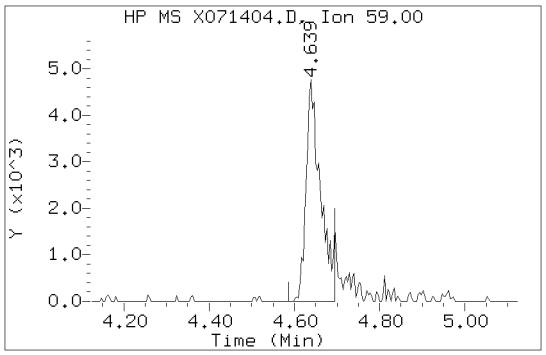
BEFORE

MASS
59
AREA
11427
HEIGHT
4768
20-Jul-2023
15:04
linh
pham



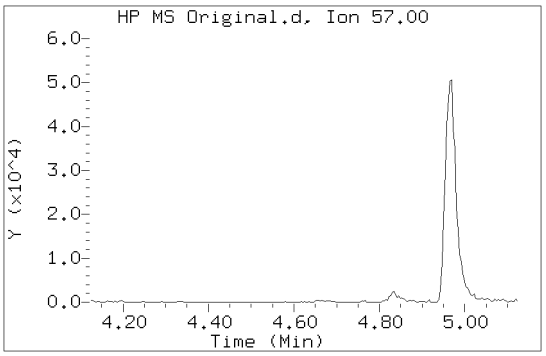
AFTER

MASS
59
AREA
11427
HEIGHT
4768
20-Jul-2023
15:04
linh
pham



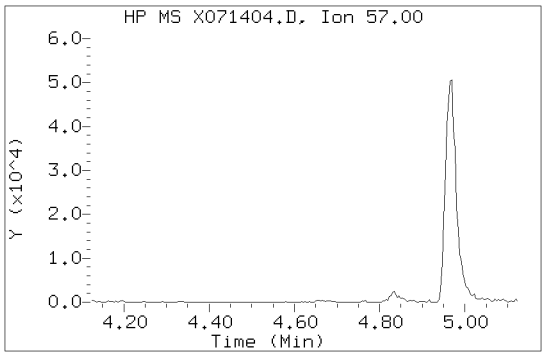
BEFORE

MASS
57
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



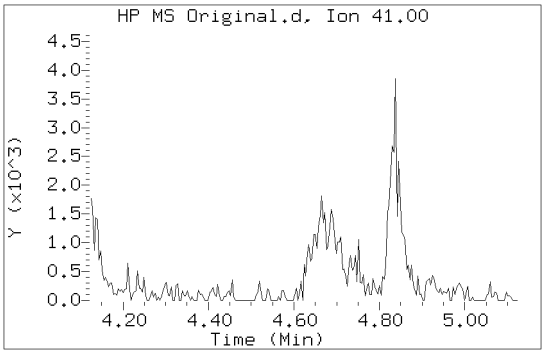
AFTER

MASS
57
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



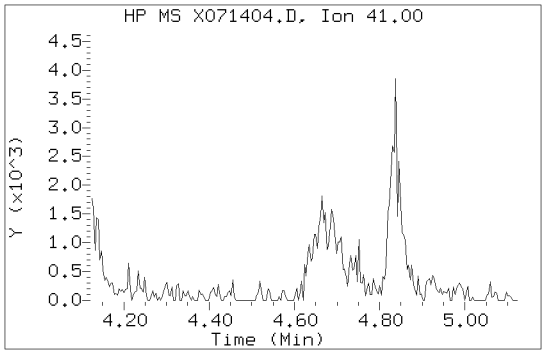
BEFORE

MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

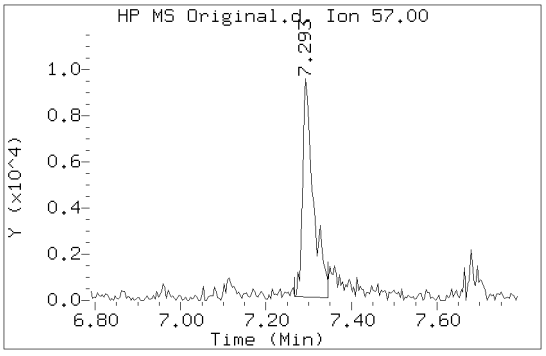


3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

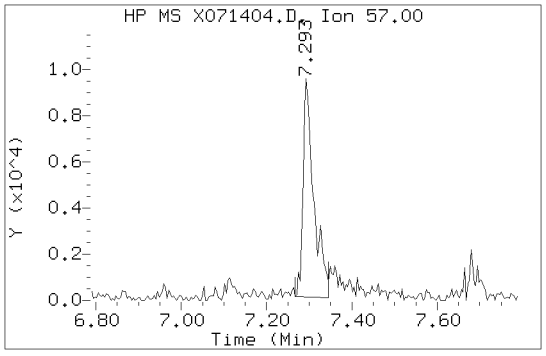
BEFORE

MASS
57
AREA
16922
HEIGHT
9467
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
16922
HEIGHT
9467
20-Jul-2023
15:04
linh
pham



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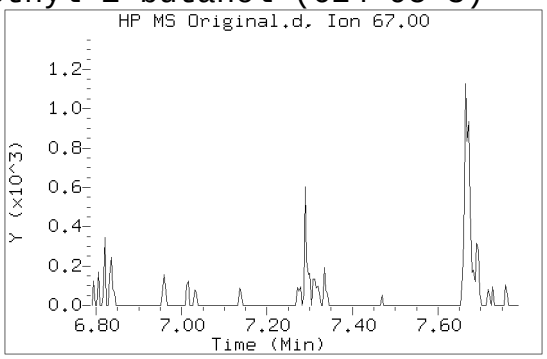
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

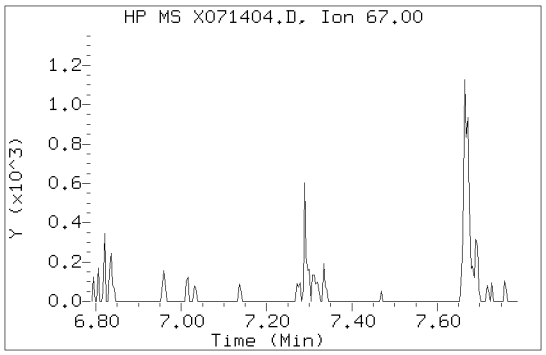
3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

BEFORE
MASS
67
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
67
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
56
AREA
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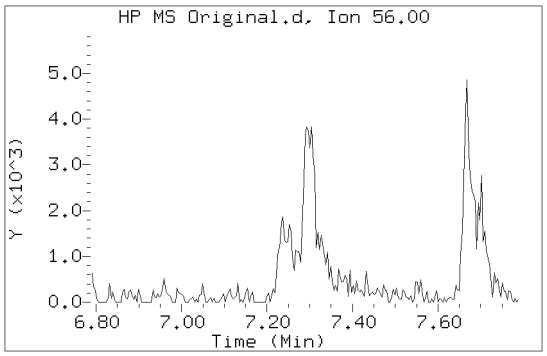
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
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HEIGHT
0
20-Jul-2023
15:04
linh
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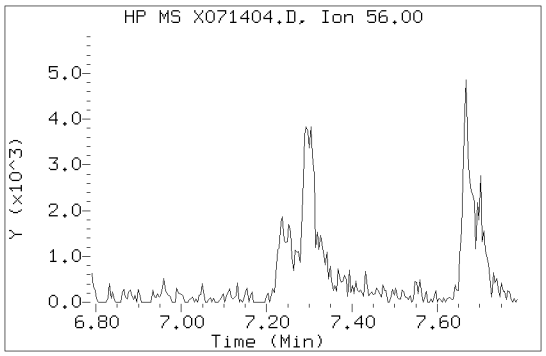
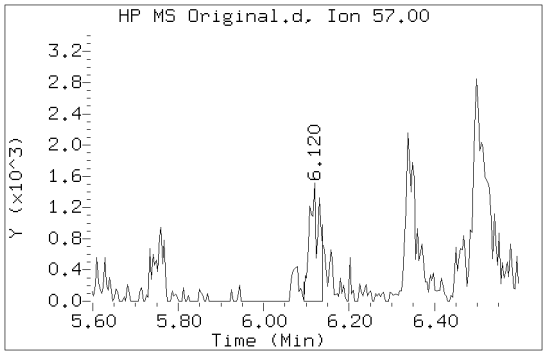


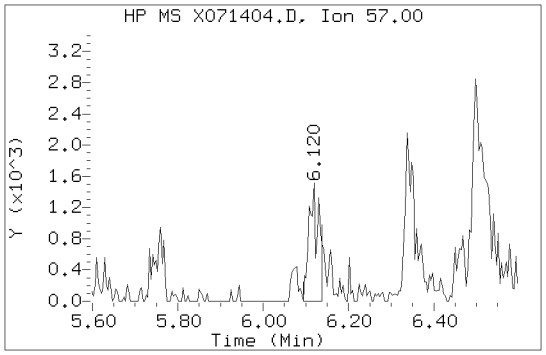
Epichlorohydrin (106-89-8)

Reason Code:

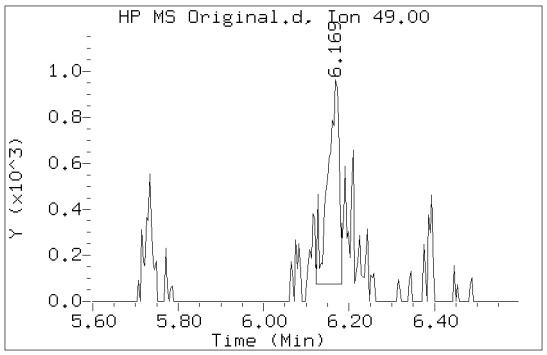
BEFORE
MASS
57
AREA
2383
HEIGHT
1514
20-Jul-2023
15:04
linh
pham



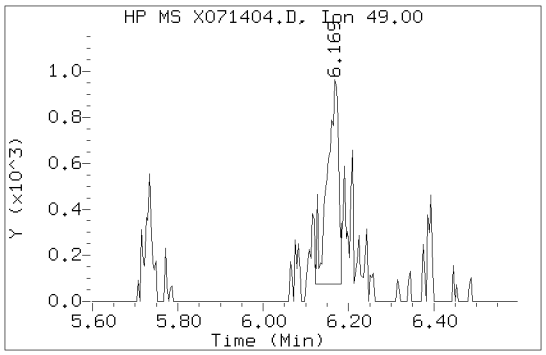
AFTER
MASS
57
AREA
2383
HEIGHT
1514
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
49
AREA
1633
HEIGHT
889
20-Jul-2023
15:04
linh
pham



AFTER
MASS
49
AREA
1633
HEIGHT
889
20-Jul-2023
15:04
linh
pham



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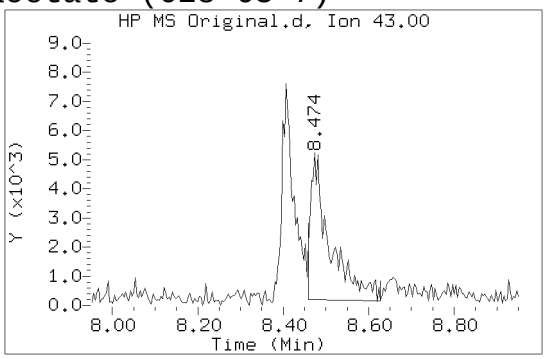
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

n-Amyl acetate (628-63-7)

Reason Code:

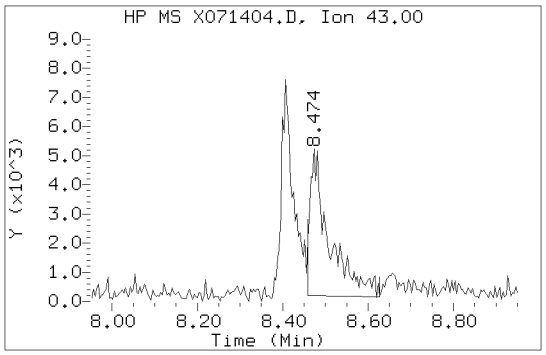
BEFORE

MASS
43
AREA
15950
HEIGHT
5045
20-Jul-2023
15:04
linh
pham



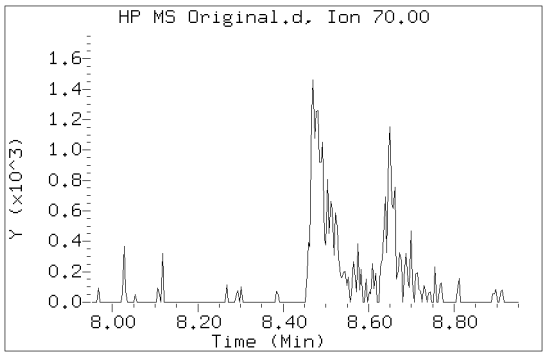
AFTER

MASS
43
AREA
15950
HEIGHT
5045
20-Jul-2023
15:04
linh
pham



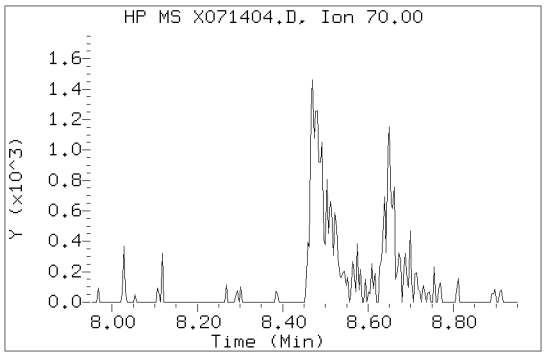
BEFORE

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



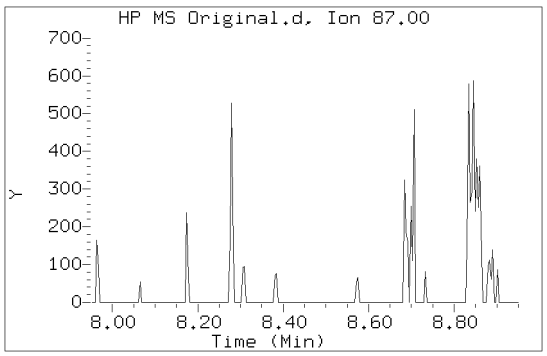
AFTER

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



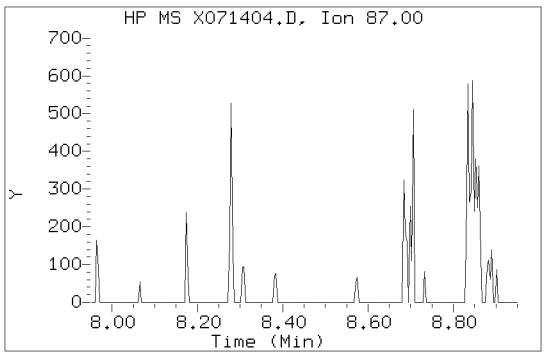
BEFORE

MASS
87
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

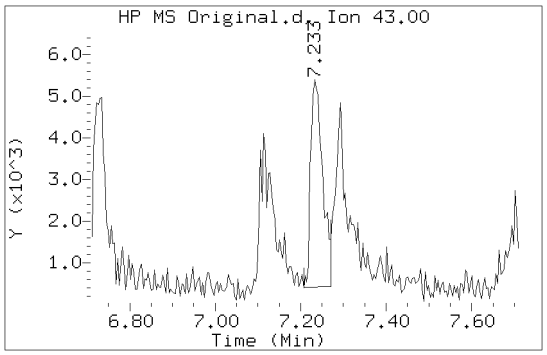


n-Butyl acetate (123-86-4)

Reason Code:

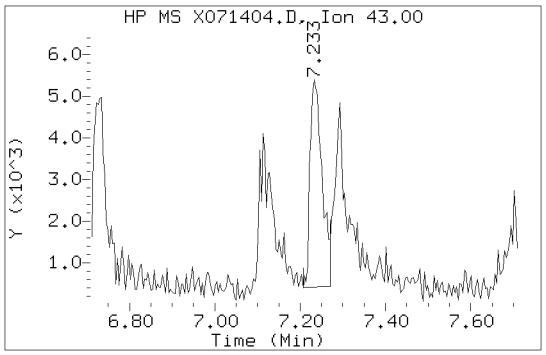
BEFORE

MASS
43
AREA
9795
HEIGHT
4977
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
9795
HEIGHT
4977
20-Jul-2023
15:04
linh
pham



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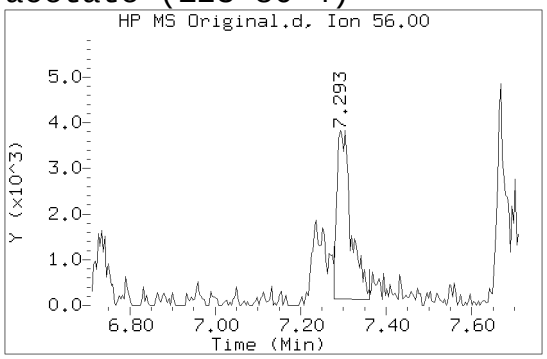
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

n-Butyl acetate (123-86-4)

Reason Code:

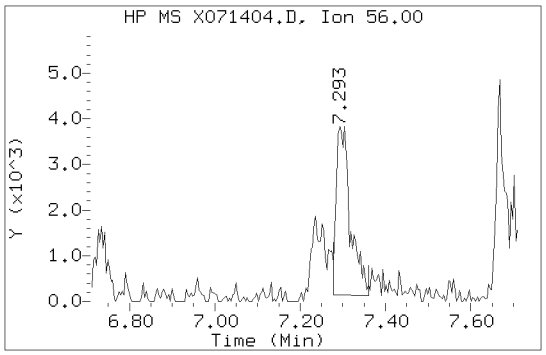
BEFORE

MASS
56
AREA
8623
HEIGHT
3689
20-Jul-2023
15:04
linh
pham



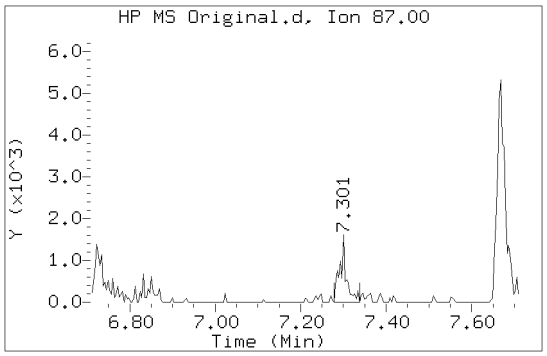
AFTER

MASS
56
AREA
8623
HEIGHT
3689
20-Jul-2023
15:04
linh
pham



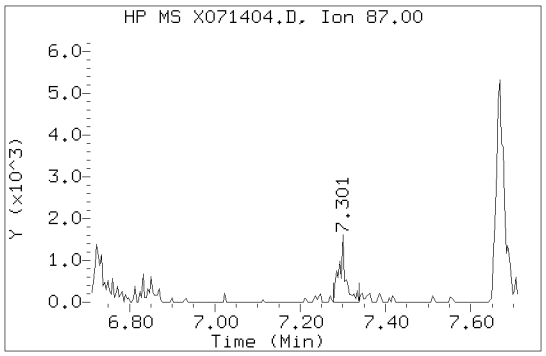
BEFORE

MASS
87
AREA
1682
HEIGHT
1613
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
1682
HEIGHT
1613
20-Jul-2023
15:04
linh
pham

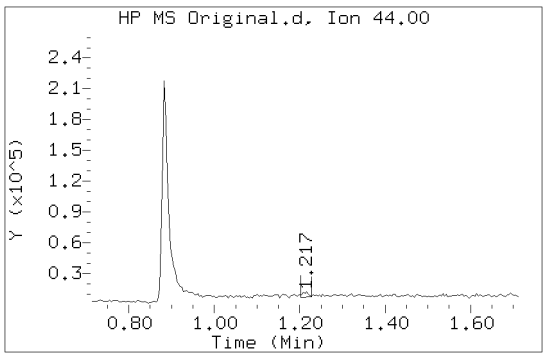


Acetaldehyde (75-07-0)

Reason Code:

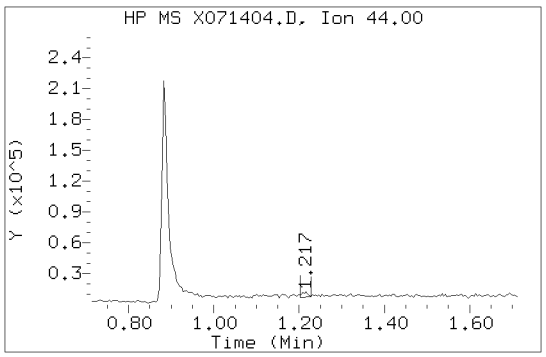
BEFORE

MASS
44
AREA
5117
HEIGHT
4908
20-Jul-2023
15:04
linh
pham



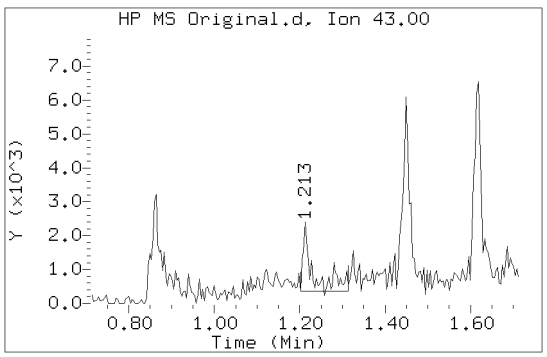
AFTER

MASS
44
AREA
5117
HEIGHT
4908
20-Jul-2023
15:04
linh
pham



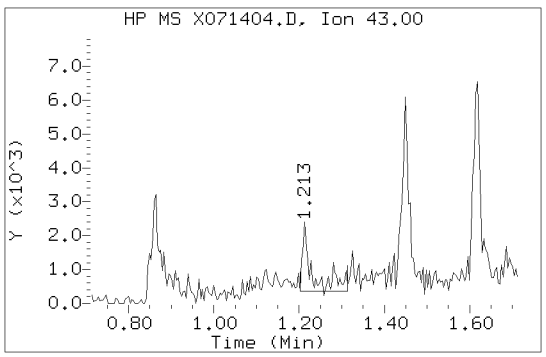
BEFORE

MASS
43
AREA
3201
HEIGHT
2038
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
3201
HEIGHT
2038
20-Jul-2023
15:04
linh
pham



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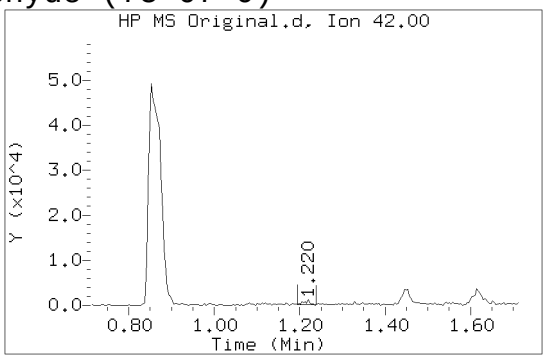
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Acetaldehyde (75-07-0)

Reason Code:

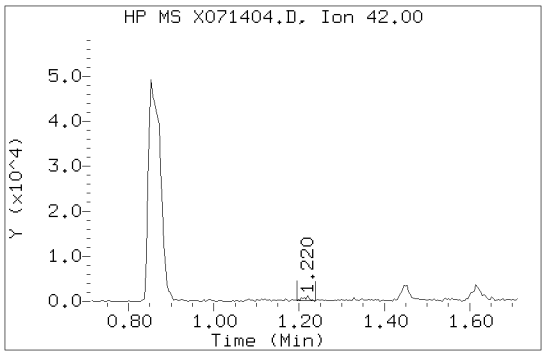
BEFORE

MASS
42
AREA
1038
HEIGHT
1152
20-Jul-2023
15:04
linh
pham



AFTER

MASS
42
AREA
1038
HEIGHT
1152
20-Jul-2023
15:04
linh
pham

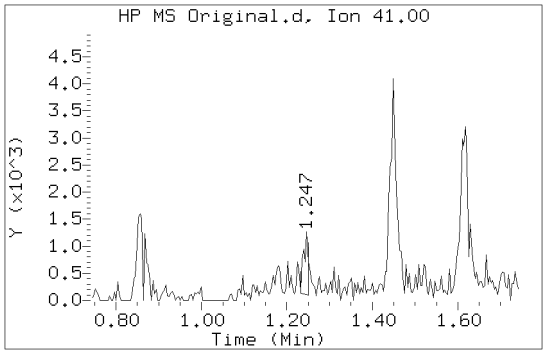


Isobutylene (115-11-7)

Reason Code:

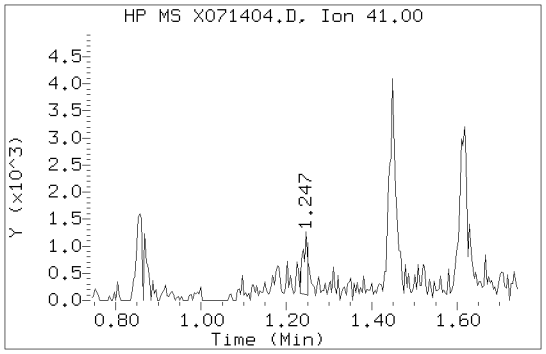
BEFORE

MASS
41
AREA
875
HEIGHT
1172
20-Jul-2023
15:04
linh
pham



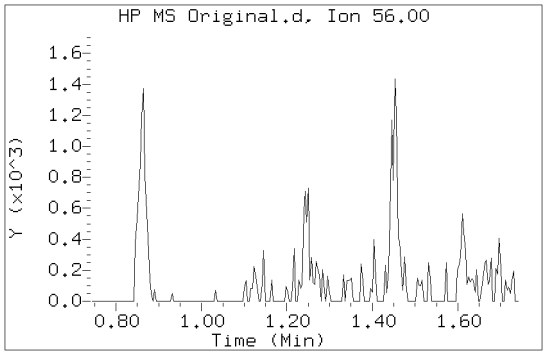
AFTER

MASS
41
AREA
875
HEIGHT
1172
20-Jul-2023
15:04
linh
pham



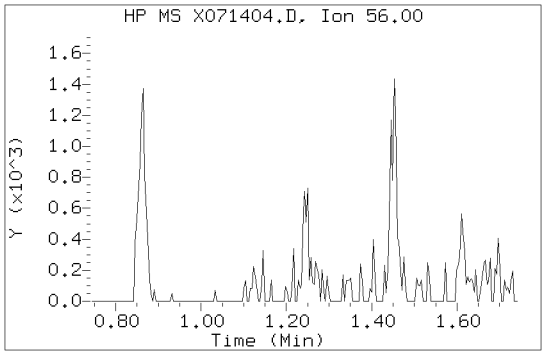
BEFORE

MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



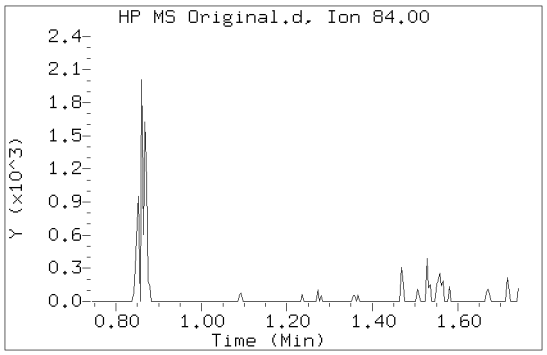
AFTER

MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



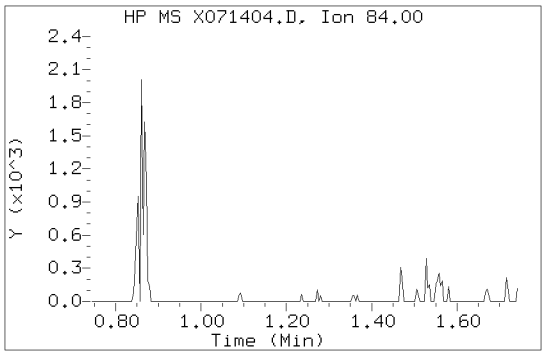
BEFORE

MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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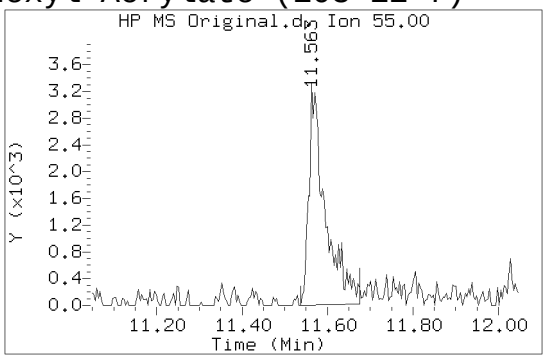
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

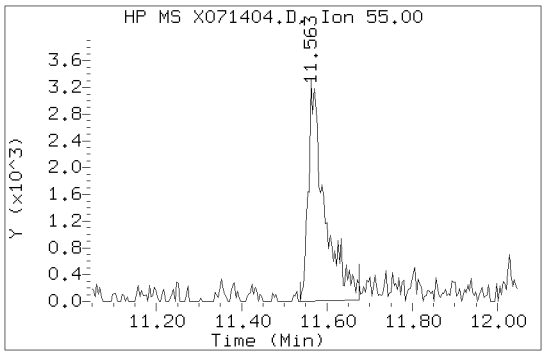
BEFORE

MASS
55
AREA
8780
HEIGHT
3308
20-Jul-2023
15:04
linh
pham



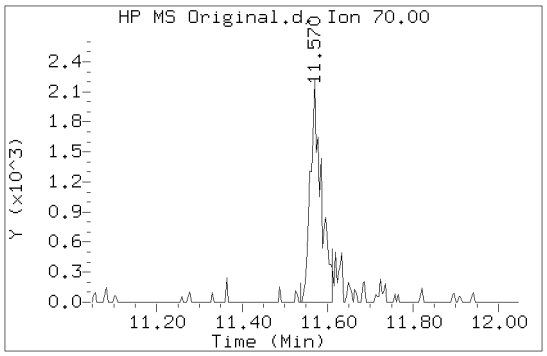
AFTER

MASS
55
AREA
8780
HEIGHT
3308
20-Jul-2023
15:04
linh
pham



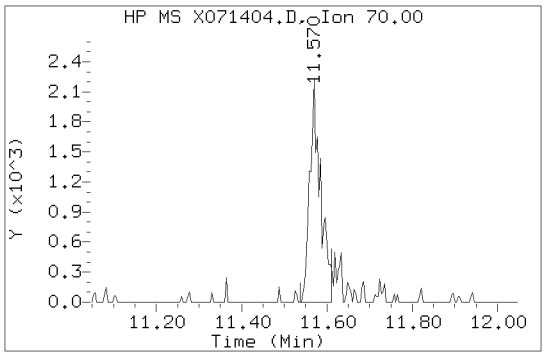
BEFORE

MASS
70
AREA
3926
HEIGHT
2219
20-Jul-2023
15:04
linh
pham



AFTER

MASS
70
AREA
3926
HEIGHT
2219
20-Jul-2023
15:04
linh
pham

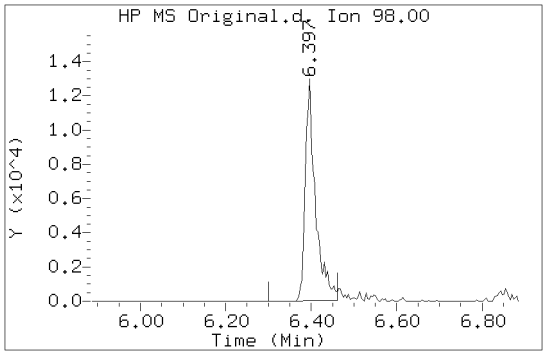


Toluene-d8 (2037-26-5)

Reason Code:

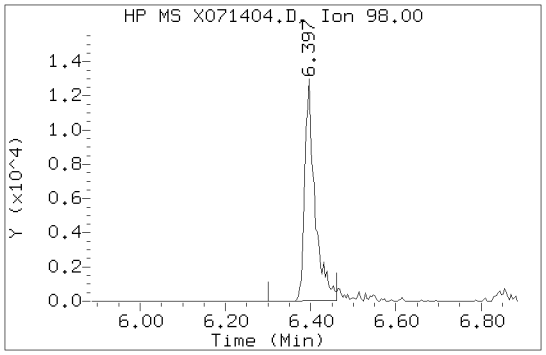
BEFORE

MASS
98
AREA
21847
HEIGHT
12976
20-Jul-2023
15:04
linh
pham



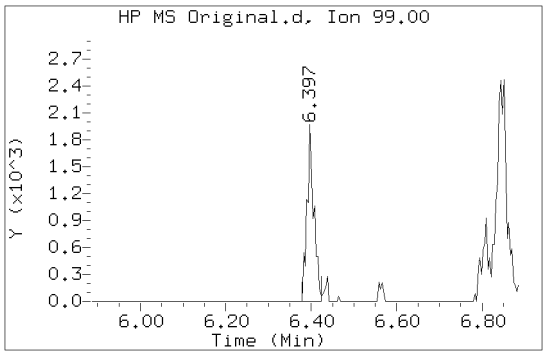
AFTER

MASS
98
AREA
21847
HEIGHT
12976
20-Jul-2023
15:04
linh
pham



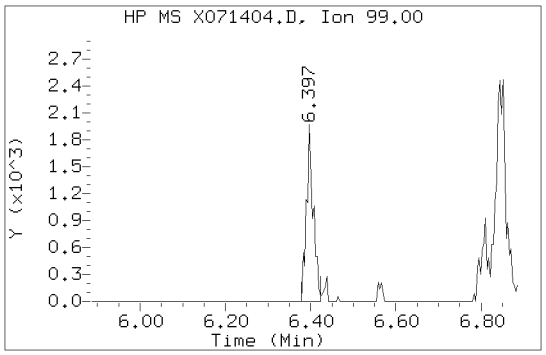
BEFORE

MASS
99
AREA
2184
HEIGHT
1968
20-Jul-2023
15:04
linh
pham



AFTER

MASS
99
AREA
2184
HEIGHT
1968
20-Jul-2023
15:04
linh
pham



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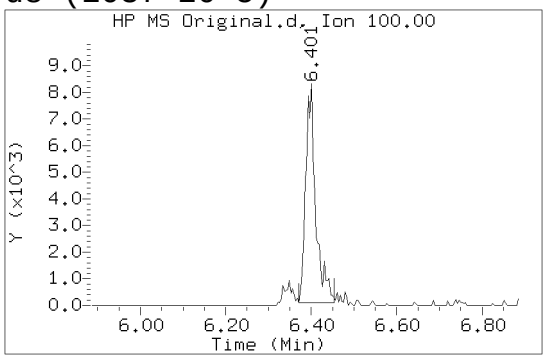
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

MASS
100
AREA
13429
HEIGHT
8225
20-Jul-2023
15:04
linh
pham



AFTER

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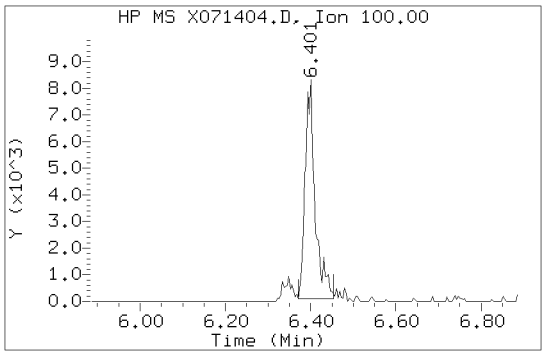

4-Bromofluorobenzene (460-00-4)

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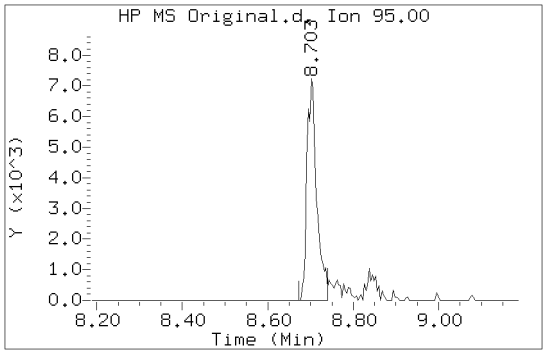

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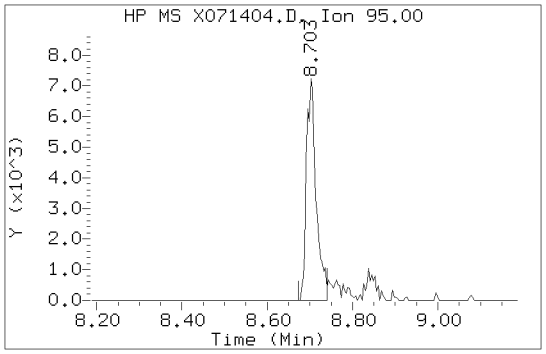

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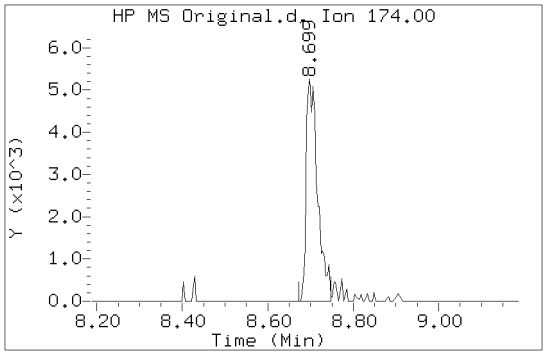

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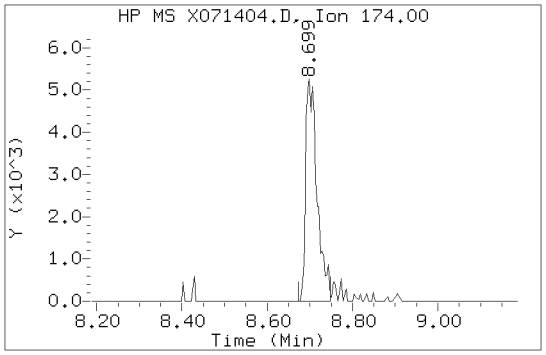

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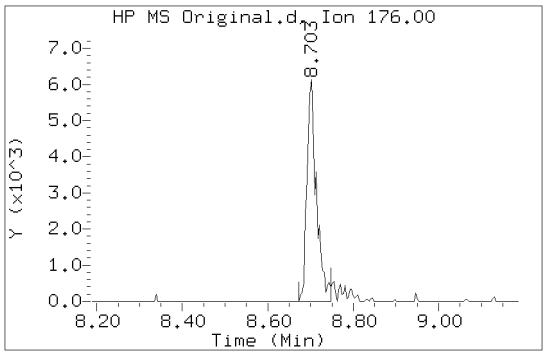

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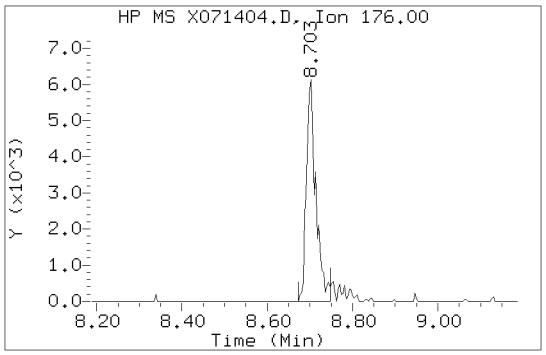

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D
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Inj Date : 14-JUL-2023 13:23
Operator : PC Inst ID: voa6.i
Smp Info : VSTD002;VSTD002;1;4;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 13:02 Cal File: X071404.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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)	523249	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	9210	2.00000	2.77(M)
3	Chloromethane	50	1.085	1.085	(0.260)	17566	2.00000	2.22
4	Propionitrile	54	3.683	3.683	(0.881)	20667	20.0000	19.93(aM)
5	Vinyl Chloride	62	1.145	1.145	(0.274)	15109	2.00000	2.23
6	Bromomethane	94	1.347	1.347	(0.322)	5769	2.00000	2.05(M)
7	Chloroethane	64	1.404	1.404	(0.336)	8482	2.00000	2.19(M)
8	Trichlorofluoromethane	101	1.561	1.561	(0.373)	15419	2.00000	2.24
9	Acrolein	56	1.861	1.861	(0.445)	917	4.00000	5.70(aMH)
10	Acetone	43	1.977	1.977	(0.473)	15631	4.00000	3.03
11	1,1-Dichloroethene	96	1.921	1.921	(0.459)	8527	2.00000	2.22
12	Isobutyl Alcohol	43	4.684	4.684	(1.120)	37832	40.0000	38.14(aM)
13	Acetonitrile	39	2.202	2.202	(0.527)	15528	20.0000	21.16(a)
14	Allyl Chloride	41	2.202	2.202	(0.527)	33926	2.00000	1.97(a)
15	Iodomethane	142	2.030	2.030	(0.485)	11682	4.00000	6.08(M)
16	Acrylonitrile	53	2.547	2.547	(0.609)	10541	4.00000	4.13
17	Methylene Chloride	84	2.303	2.303	(0.551)	11880	2.00000	1.28(M)
18	Methyl tert-butyl ether	73	2.543	2.543	(0.608)	30252	2.00000	2.12
19	Carbon Disulfide	76	2.075	2.075	(0.496)	52986	4.00000	4.39
20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	9515	2.00000	2.14

21 Vinyl Acetate	43	3.004	3.004 (0.719)	75193	4.00000	4.10
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	21647	2.00000	2.22

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.771	1.771	(0.424)	4560	2.00000	1.93(aM)
	24 2-Butanone	43	3.672	3.672	(0.878)	10454	4.00000	3.75(M)
	25 Methacrylonitrile	41	3.870	3.870	(0.926)	12946	2.00000	1.91(a)
	26 2,2-Dichloropropane	77	3.514	3.514	(0.840)	15882	2.00000	2.30
	27 cis-1,2-Dichloroethene	96	3.537	3.537	(0.846)	11533	2.00000	2.04(M)
	28 Chloroform	83	3.915	3.915	(0.936)	21885	2.00000	2.19
	29 Bromochloromethane	128	3.799	3.799	(0.909)	7550	2.00000	2.38
$	30 Dibromofluoromethane	113	4.106	4.106	(0.982)	10131	2.00000	1.38
	31 1,1,1-Trichloroethane	97	4.088	4.088	(0.978)	16000	2.00000	2.08
	32 1,1-Dichloropropene	75	4.283	4.283	(0.863)	13616	2.00000	2.05
	33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	16880	2.00000	1.89(M)
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	13047	2.00000	1.95(M)
$	35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.071)	14667	2.00000	1.85
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	811220	50.0000	
	37 Benzene	78	4.519	4.519	(0.910)	39692	2.00000	2.04
	38 Trichloroethene	130	5.208	5.208	(1.049)	12354	2.00000	2.25(a)
	39 Bromodichloromethane	83	5.733	5.733	(1.155)	14668	2.00000	1.97(a)
	40 Methyl Methacrylate	41	5.625	5.625	(1.345)	12770	2.00000	2.02(aM)
	41 2-Chloroethylvinyl ether	63	6.059	6.059	(1.220)	8400	4.00000	3.70(a)
	42 1,2-Dichloropropane	63	5.441	5.441	(1.096)	12678	2.00000	2.03(aM)
	43 2-Nitropropane	43	5.973	5.973	(1.428)	4635	2.00000	2.22(a)
	44 Dibromomethane	93	5.557	5.557	(1.119)	7713	2.00000	2.18(a)
	45 4-Methyl-2-Pentanone	43	6.333	6.333	(0.826)	29112	4.00000	3.99(a)
	46 cis-1,3-Dichloropropene	75	6.164	6.164	(1.242)	17329	2.00000	2.02(a)
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	740616	50.0000	
$	48 Toluene-d8	98	6.389	6.389	(0.833)	41058	2.00000	2.15(aM)
	49 Ethyl Methacrylate	69	6.723	6.723	(1.354)	11361	2.00000	2.13(a)
	50 Toluene	91	6.449	6.449	(0.841)	40789	2.00000	2.04(a)
	51 trans-1,3-Dichloropropene	75	6.689	6.689	(1.347)	14549	2.00000	2.02(a)
	52 2-Hexanone	43	7.105	7.105	(0.927)	19503	4.00000	4.07(a)
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	9040	2.00000	2.13(a)
	54 1,3-Dichloropropane	76	6.985	6.985	(0.911)	17344	2.00000	2.00(a)
	55 Dibromochloromethane	129	7.180	7.180	(0.936)	12160	2.00000	1.99(a)
	56 Tetrachloroethene	164	6.929	6.929	(0.904)	9711	2.00000	2.35(aM)
	57 1,2-Dibromoethane	107	7.263	7.263	(0.947)	9815	2.00000	2.03(a)
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	14217	2.00000	2.18(a)
	59 Chlorobenzene	112	7.694	7.694	(1.003)	28612	2.00000	2.05(a)
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	10835	2.00000	1.98(a)
	61 Ethylbenzene	106	7.799	7.799	(1.017)	14708	2.00000	2.10(a)
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	39231	4.00000	4.47(a)
	63 o-Xylene	106	8.245	8.245	(1.075)	17205	2.00000	2.07(a)
	64 Styrene	104	8.275	8.275	(1.079)	28504	2.00000	1.96(a)
	66 Bromoform	173	8.414	8.414	(1.097)	8672	2.00000	2.21(Ta)
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	48187	2.00000	2.25(a)
	68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	14352	2.00000	2.16(aM)
$	69 4-Bromofluorobenzene	95	8.695	8.695	(1.134)	17835	2.00000	2.01(a)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	394737	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	10578	2.00000	2.01(aM)
	72 trans-1,4-Dichloro-2-butene	53	8.901	8.901	(1.161)	4279	2.00000	1.89(aM)
	73 n-Propylbenzene	91	8.916	8.916	(0.923)	50047	2.00000	2.09(a)
	74 Bromobenzene	156	8.815	8.815	(0.912)	12961	2.00000	2.09(a)
	75 1,3,5-Trimethylbenzene	105	9.070	9.070	(0.939)	37798	2.00000	2.11(a)

76	2-Chlorotoluene	91	8.980	8.980 (0.929)	34081	2.00000	2.11(a)
77	4-Chlorotoluene	91	9.077	9.077 (0.939)	37510	2.00000	2.12(a)

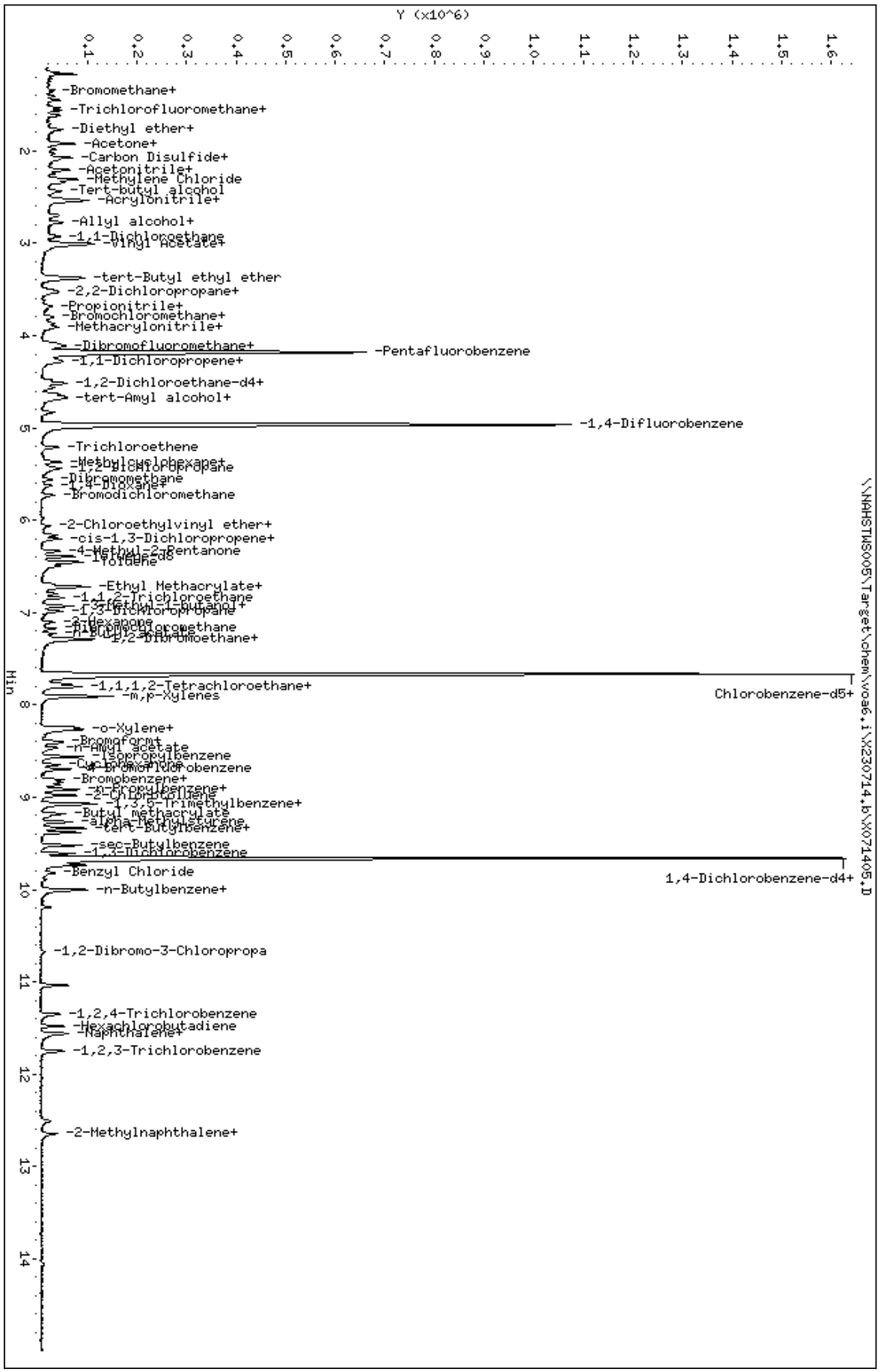
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	34859	2.00000	2.27(a)
79	1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	38346	2.00000	2.13(a)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	45694	2.00000	2.23(a)
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	39231	2.00000	2.10(a)
83	1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	22178	2.00000	2.06(a)
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	26773	2.00000	2.27(a)
86	Benzyl Chloride	91	9.823	9.823	(1.281)	17851	2.00000	3.69(aM)
87	n-Butylbenzene	91	10.003	10.003	(1.035)	31075	2.00000	1.98(a)
88	1,2-Dichlorobenzene	146	9.999	9.999	(1.035)	21840	2.00000	2.06(a)
89	1,2-Dibromo-3-Chloropropane	155	10.678	10.678	(1.105)	1953	2.00000	2.84(a)
90	1,2,4-Trichlorobenzene	180	11.360	11.360	(1.176)	14997	2.00000	2.06(a)
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	6844	2.00000	4.30(aM)
92	Naphthalene	128	11.559	11.559	(1.196)	35806	2.00000	1.99(aM)
93	1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	14737	2.00000	2.16(a)
146	Methyl acetate	43	2.247	2.247	(0.537)	9491	2.00000	2.03(aM)
138	Freon TF	101	1.917	1.917	(0.459)	7195	2.00000	1.83(aM)
141	Cyclohexane	56	4.121	4.121	(0.986)	19462	2.00000	2.14(aH)
142	Tetrahydrofuran	42	3.866	3.866	(0.925)	5657	4.00000	4.20(a)
147	Methylcyclohexane	55	5.370	5.370	(1.082)	31142	2.00000	1.81(aM)
135	1,4-Dioxane	88	5.617	5.617	(1.343)	2323	40.0000	37.36(M)
132	n-Butanol	56	5.362	5.362	(1.282)	7443	40.0000	42.73(aM)
131	Methyl Acrylate	55	3.743	3.743	(0.895)	13406	2.00000	1.88(aM)
133	Ethyl Acrylate	55	5.370	5.370	(1.284)	31450	2.00000	1.81(M)
136	n-Hexane	57	2.768	2.768	(0.662)	11984	2.00000	1.88(aM)
139	Diethyl ether	59	1.760	1.760	(0.421)	10716	2.00000	2.19(a)
148	Tert-butyl alcohol	59	2.442	2.442	(0.584)	29280	40.0000	44.33(M)
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	17366	40.0000	42.37(T)
156	Diisopropyl ether	45	3.008	3.008	(0.719)	43282	2.00000	2.00(Ta)
166	1,2,3-Trimethylbenzene	105	9.733	9.733	(1.007)	31731	2.00000	1.73(a)
167	Ethanol	45	1.711	1.711	(0.409)	3219	40.0000	26.14(M)
172	tert-Butyl formate	59	4.635	4.635	(1.108)	23857	4.00000	4.26(aM)
173	3,3-Dimethyl-1-butanol	57	7.293	7.293	(0.951)	33143	40.0000	41.61
174	tert-Amyl methyl ether	73	4.672	4.672	(1.117)	31345	2.00000	1.82(aM)
175	tert-Butyl ethyl ether	59	3.383	3.383	(0.809)	42907	2.00000	1.93(a)
176	tert-Amyl alcohol	59	4.635	4.635	(1.108)	29185	40.0000	51.05
151	4-Methyl-2-pentanol	45	6.723	6.723	(1.354)	72210	40.0000	41.53(M)
180	1-Methylnaphthalene	142	12.649	12.649	(1.309)	14828	2.00000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.279)	15351	2.00000	2.28(aM)
152	Amyl alcohol	42	6.933	6.933	(0.904)	8579	40.0000	40.28(M)
158	Dichlorofluoromethane	67	1.535	1.535	(0.367)	17587	2.00000	2.08
159	Propylene oxide	43	1.805	1.805	(0.432)	2798	4.00000	4.35(a)
161	3-Methyl-1-butanol	55	6.929	6.929	(0.904)	5263	40.0000	28.86
162	Butyl acrylate	55	8.267	8.267	(1.078)	25518	2.00000	1.81(a)
163	Butyl methacrylate	41	9.178	9.178	(0.950)	19072	2.00000	2.01(a)
164	Dicyclopentadiene	66	9.681	9.681	(1.002)	44874	2.00000	1.97(a)
182	Epichlorohydrin	57	6.112	6.112	(1.231)	4808	8.00000	7.93
M 94	1,2-Dichloroethylene (total)	96				21048	4.00000	(a)
130	Ethyl Acetate	43	3.683	3.683	(0.881)	15481	2.00000	1.99(TaM)
134	Cyclohexanone	55	8.646	8.646	(0.895)	15113	40.0000	43.00(a)
185	Isoprene	39	1.771	1.771	(0.424)	3408	2.00000	1.97(aM)
188	Isopropyl acetate	43	4.684	4.684	(0.943)	48167	2.00000	2.25(a)
187	n-Amyl acetate	43	8.462	8.462	(1.104)	26886	2.00000	1.98(aM)

189 n-Butyl acetate	43	7.225	7.225 (0.942)	20825	2.00000	1.83(aM)
150 Allyl alcohol	57	2.768	2.768 (0.662)	14314	40.0000	46.26

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
194 Acetaldehyde	44	1.212	1.212	(0.290)	8114	8.00000	(aM)
195 Methyl Amyl Ketone	43	8.391	8.391	(1.094)	28766	2.00000	1.85(a)
200 Dimethyl Disulfide	94	6.202	6.202	(0.809)	17864	2.00000	1.78(a)
202 Isobutylene	41	1.246	1.246	(0.298)	1654	2.00000	1.91(aM)
205 2-Ethylhexyl Acrylate	55	11.559	11.559	(1.196)	18101	2.00000	1.79(aM)

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: VSTD002
Sample Info: VSTD002;VSTD002;1;4;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Dichlorodifluoromethane (75-71-8)

Reason Code:

BEFORE
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AREA
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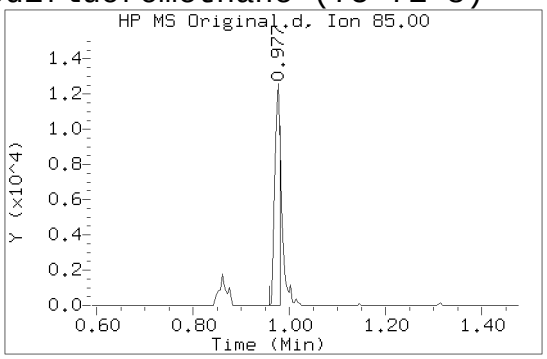
20-Jul-2023
15:04
linh
pham



AFTER
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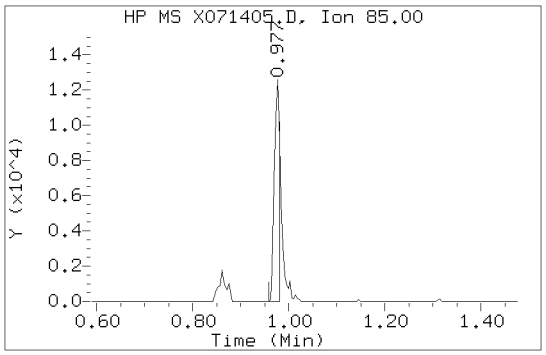
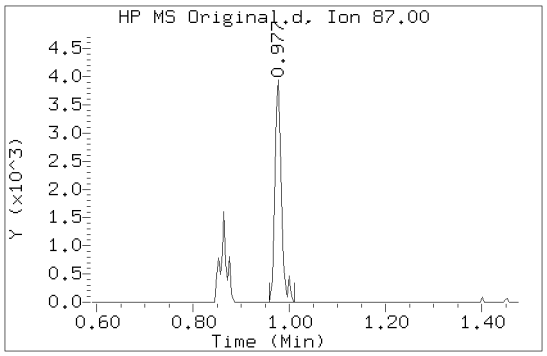
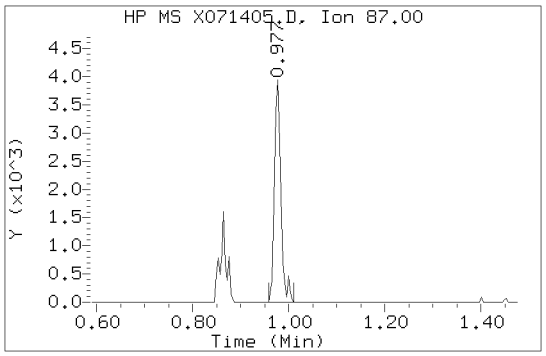
linh
pham



BEFORE
MASS
87
AREA
3671
HEIGHT
3942
20-Jul-2023
15:04
linh
pham



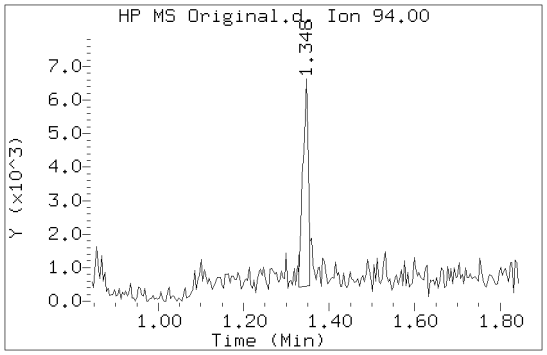
AFTER
MASS
87
AREA
3671
HEIGHT
3942
20-Jul-2023
15:04
linh
pham



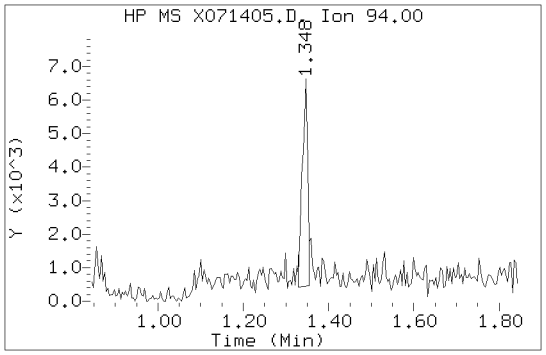
Bromomethane (74-83-9)

Reason Code:

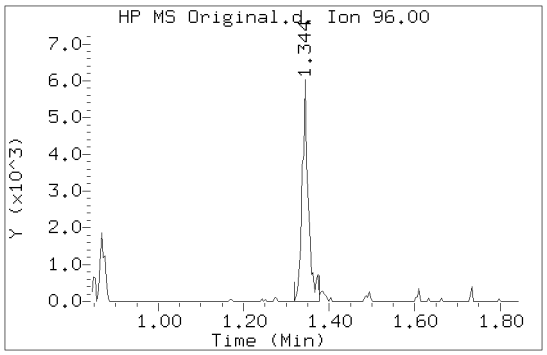
BEFORE
MASS
94
AREA
5769
HEIGHT
6185
20-Jul-2023
15:04
linh
pham



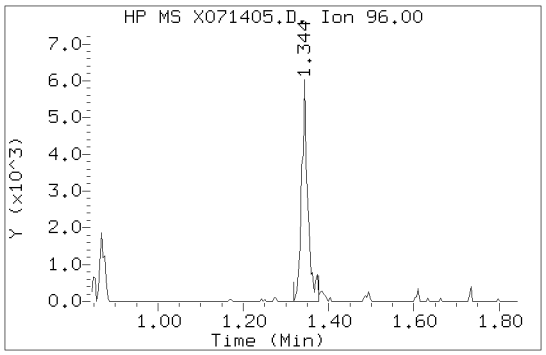
AFTER
MASS
94
AREA
5769
HEIGHT
6185
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
96
AREA
6298
HEIGHT
6030
20-Jul-2023
15:04
linh
pham



AFTER
MASS
96
AREA
6298
HEIGHT
6030
20-Jul-2023
15:04
linh
pham



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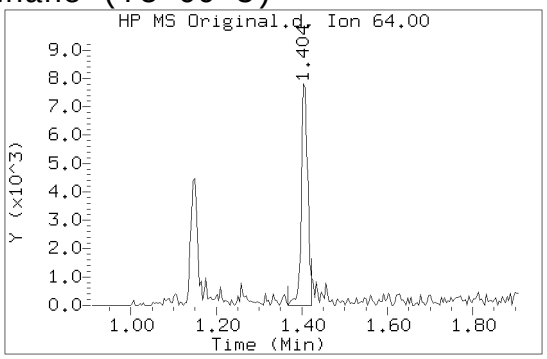
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

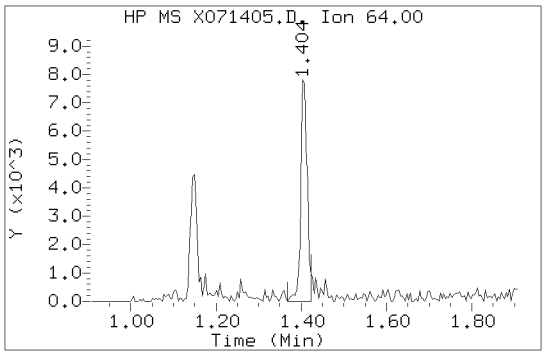
Chloroethane (75-00-3)

Reason Code:

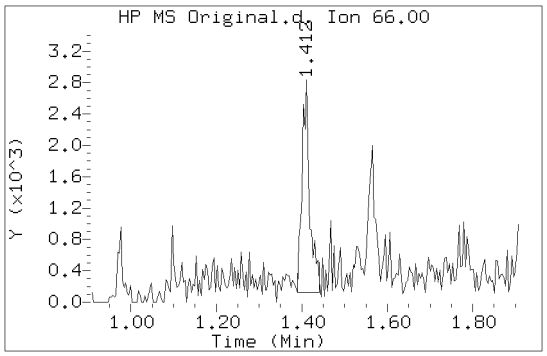
BEFORE
MASS
64
AREA
8482
HEIGHT
7815
20-Jul-2023
15:04
linh
pham



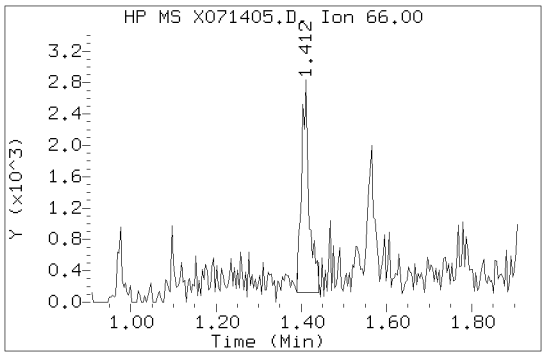
AFTER
MASS
64
AREA
8482
HEIGHT
7815
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
66
AREA
3417
HEIGHT
2715
20-Jul-2023
15:04
linh
pham



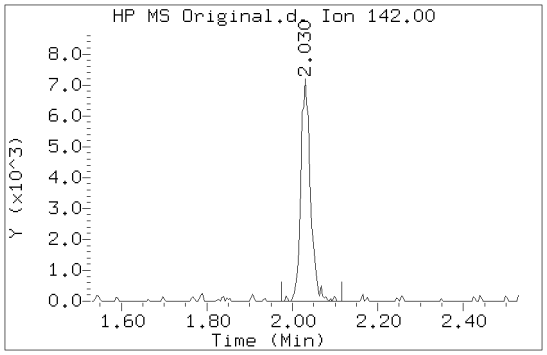
AFTER
MASS
66
AREA
3417
HEIGHT
2715
20-Jul-2023
15:04
linh
pham



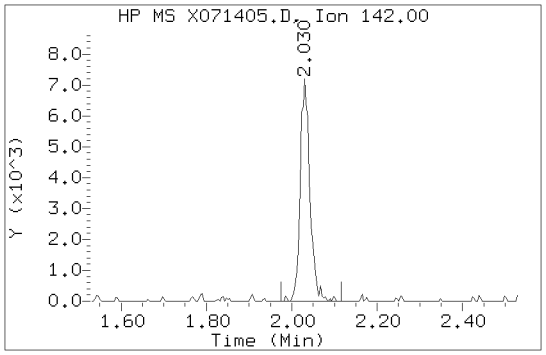
Iodomethane (74-88-4)

Reason Code:

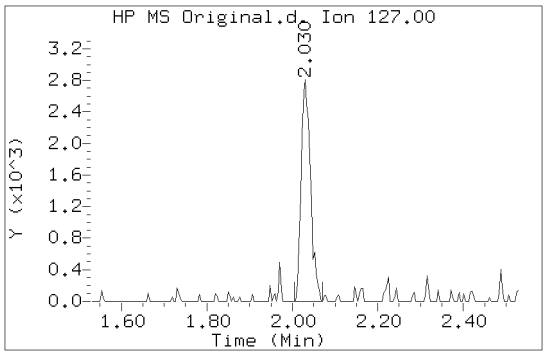
BEFORE
MASS
142
AREA
11682
HEIGHT
7198
20-Jul-2023
15:04
linh
pham



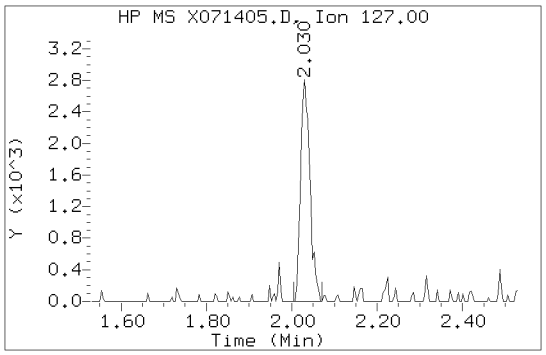
AFTER
MASS
142
AREA
11682
HEIGHT
7198
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
127
AREA
4403
HEIGHT
2808
20-Jul-2023
15:04
linh
pham



AFTER
MASS
127
AREA
4403
HEIGHT
2808
20-Jul-2023
15:04
linh
pham



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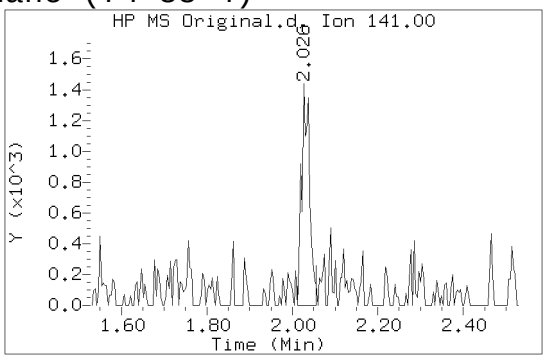
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Iodomethane (74-88-4)

Reason Code:

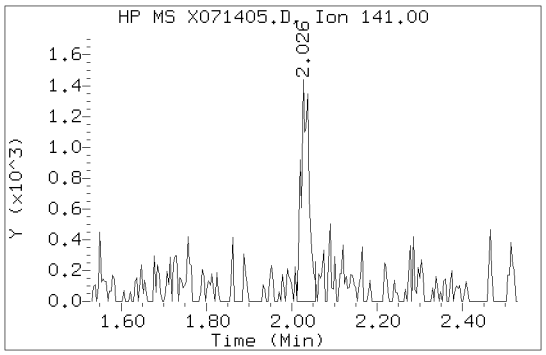
BEFORE

MASS
141
AREA
1902
HEIGHT
1439
20-Jul-2023
15:04
linh
pham



AFTER

MASS
141
AREA
1902
HEIGHT
1439
20-Jul-2023
15:04
linh
pham

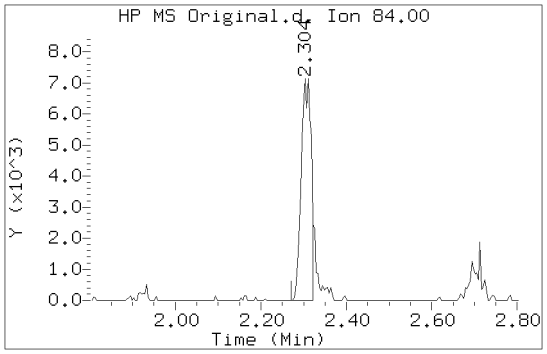


Methylene Chloride (75-09-2)

Reason Code:

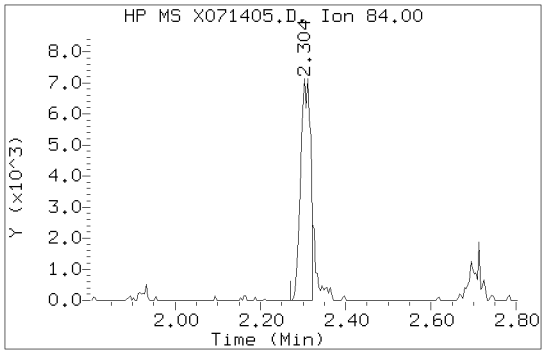
BEFORE

MASS
84
AREA
11880
HEIGHT
7134
20-Jul-2023
15:04
linh
pham



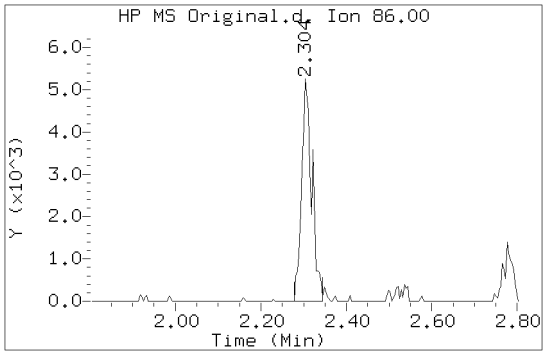
AFTER

MASS
84
AREA
11880
HEIGHT
7134
20-Jul-2023
15:04
linh
pham



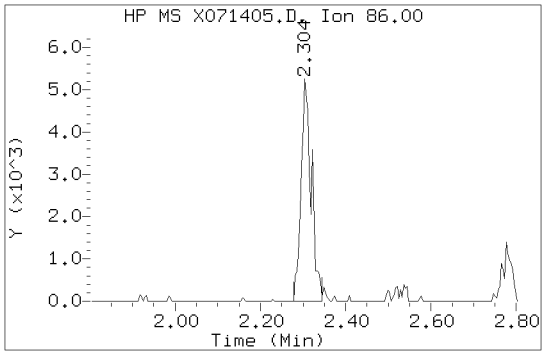
BEFORE

MASS
86
AREA
8944
HEIGHT
5254
20-Jul-2023
15:04
linh
pham



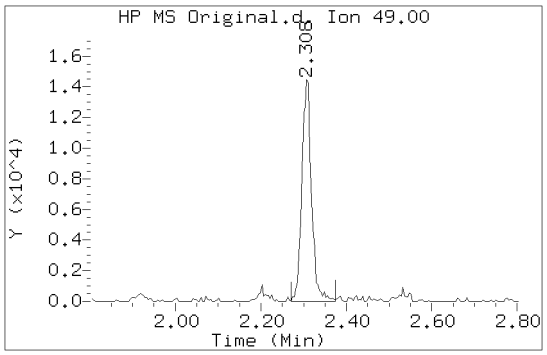
AFTER

MASS
86
AREA
8944
HEIGHT
5254
20-Jul-2023
15:04
linh
pham



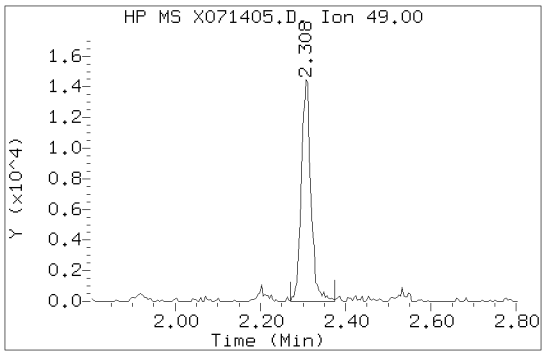
BEFORE

MASS
49
AREA
23277
HEIGHT
14471
20-Jul-2023
15:04
linh
pham



AFTER

MASS
49
AREA
23277
HEIGHT
14471
20-Jul-2023
15:04
linh
pham

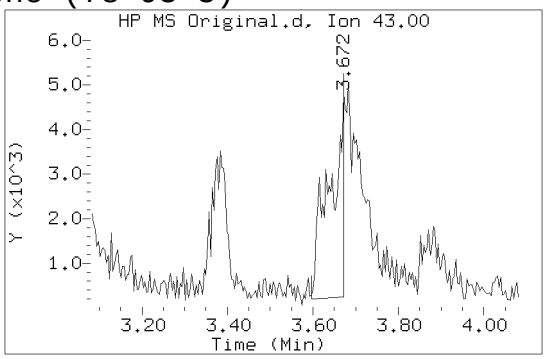


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

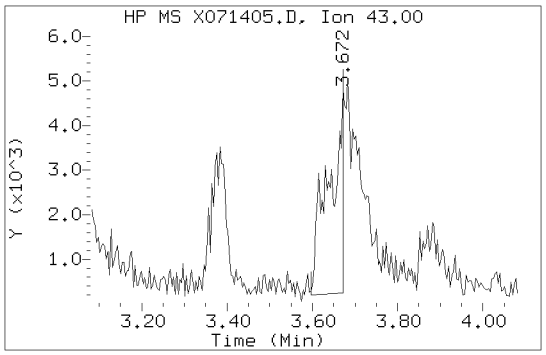
2-Butanone (78-93-3)

Reason Code:

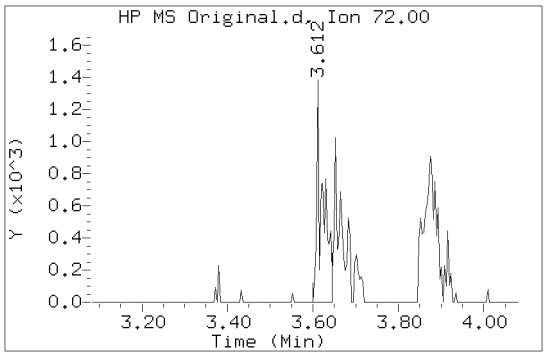
BEFORE
MASS
43
AREA
10454
HEIGHT
4589
20-Jul-2023
15:04
linh
pham



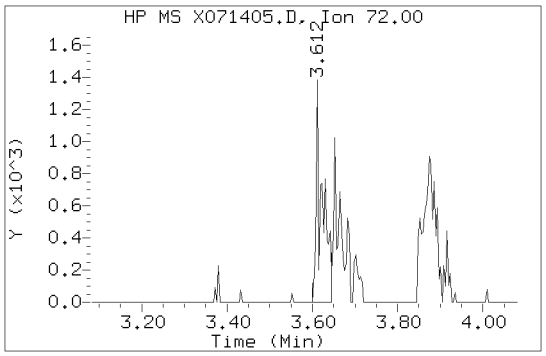
AFTER
MASS
43
AREA
10454
HEIGHT
4589
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
72
AREA
1388
HEIGHT
1384
20-Jul-2023
15:04
linh
pham



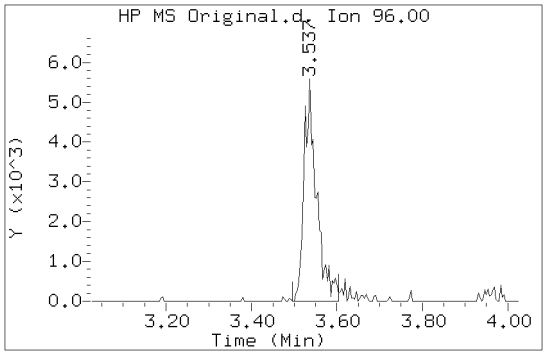
AFTER
MASS
72
AREA
1388
HEIGHT
1384
20-Jul-2023
15:04
linh
pham



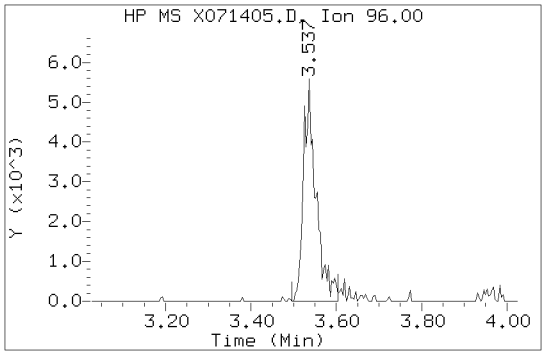
cis-1,2-Dichloroethene (156-59-2)

Reason Code:

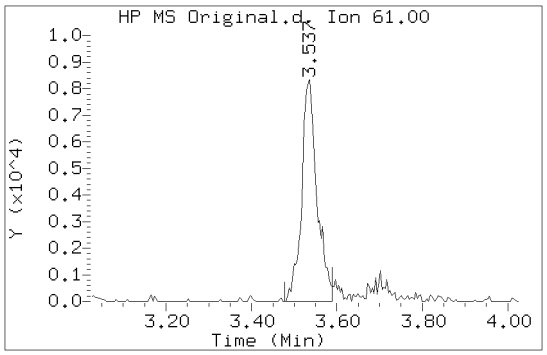
BEFORE
MASS
96
AREA
11533
HEIGHT
5587
20-Jul-2023
15:04
linh
pham



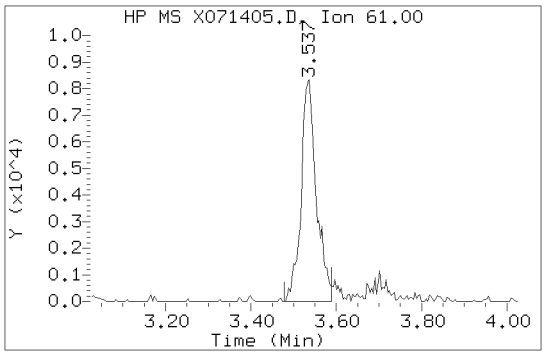
AFTER
MASS
96
AREA
11533
HEIGHT
5587
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
61
AREA
21081
HEIGHT
8339
20-Jul-2023
15:04
linh
pham



AFTER
MASS
61
AREA
21081
HEIGHT
8339
20-Jul-2023
15:04
linh
pham



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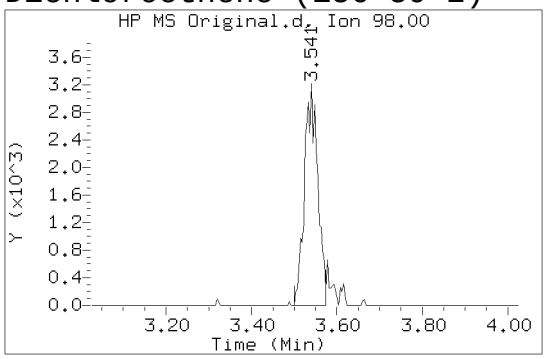
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

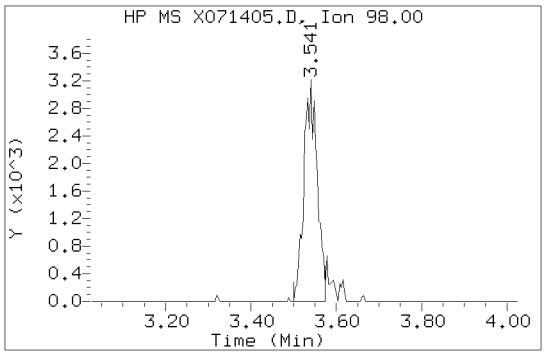
cis-1,2-Dichloroethene (156-59-2)

Reason Code:

BEFORE
MASS
98
AREA
6988
HEIGHT
3216
20-Jul-2023
15:04
linh
pham



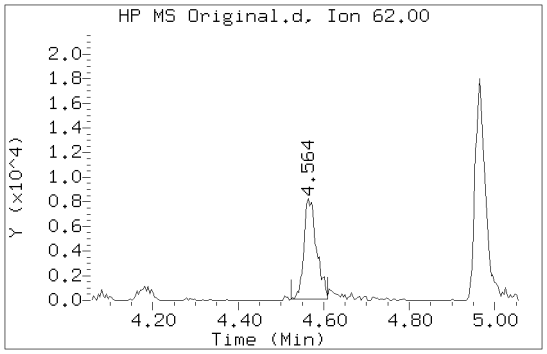
AFTER
MASS
98
AREA
6988
HEIGHT
3216
20-Jul-2023
15:04
linh
pham



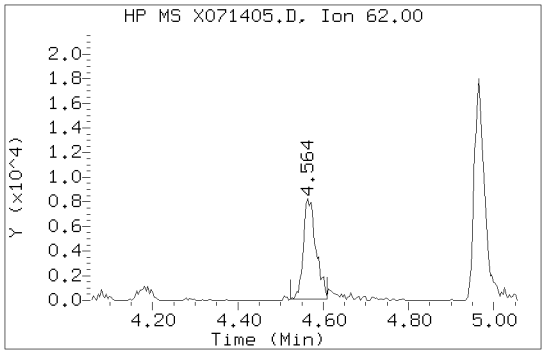
1,2-Dichloroethane (107-06-2)

Reason Code:

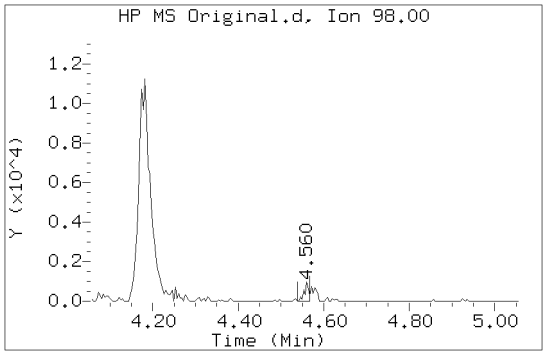
BEFORE
MASS
62
AREA
16880
HEIGHT
8150
20-Jul-2023
15:04
linh
pham



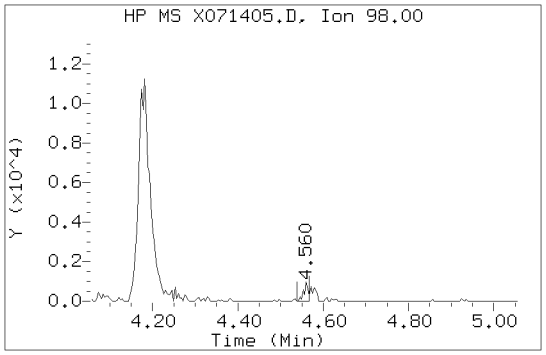
AFTER
MASS
62
AREA
16880
HEIGHT
8150
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
98
AREA
708
HEIGHT
981
20-Jul-2023
15:04
linh
pham



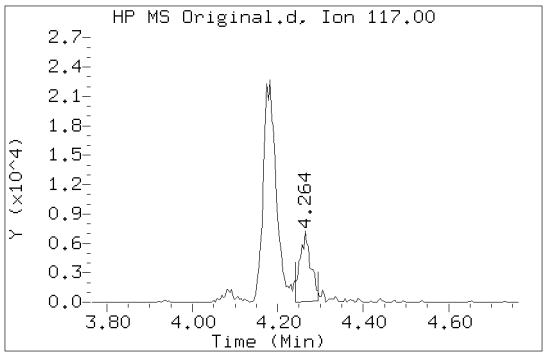
AFTER
MASS
98
AREA
708
HEIGHT
981
20-Jul-2023
15:04
linh
pham



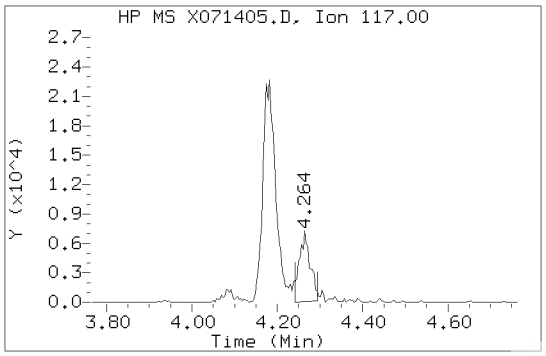
Carbon Tetrachloride (56-23-5)

Reason Code:

BEFORE
MASS
117
AREA
13047
HEIGHT
7258
20-Jul-2023
15:04
linh
pham



AFTER
MASS
117
AREA
13047
HEIGHT
7258
20-Jul-2023
15:04
linh
pham



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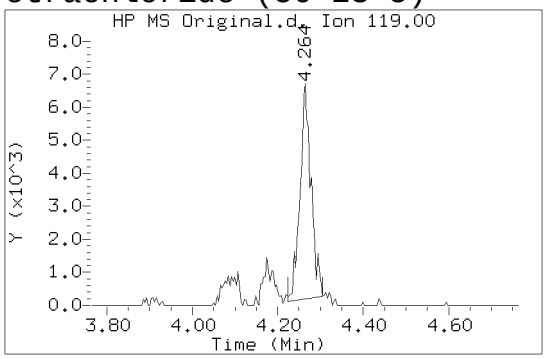
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Carbon Tetrachloride (56-23-5)

Reason Code:

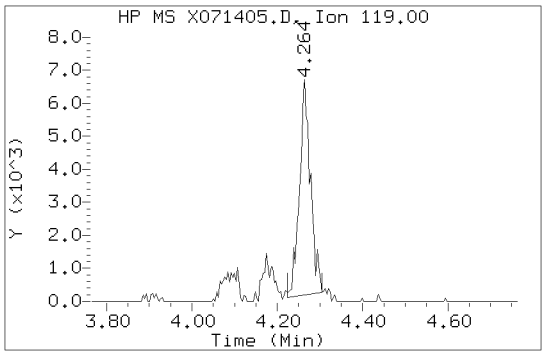
BEFORE

MASS
119
AREA
11949
HEIGHT
6520
20-Jul-2023
15:04
linh
pham



AFTER

MASS
119
AREA
11949
HEIGHT
6520
20-Jul-2023
15:04
linh
pham

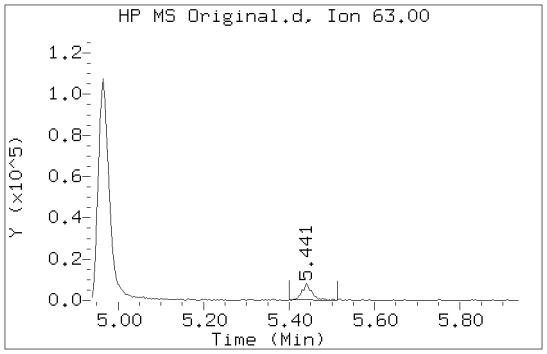


1,2-Dichloropropane (78-87-5)

Reason Code:

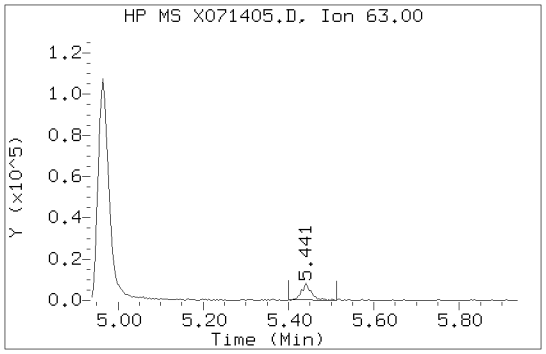
BEFORE

MASS
63
AREA
12678
HEIGHT
8183
20-Jul-2023
15:04
linh
pham



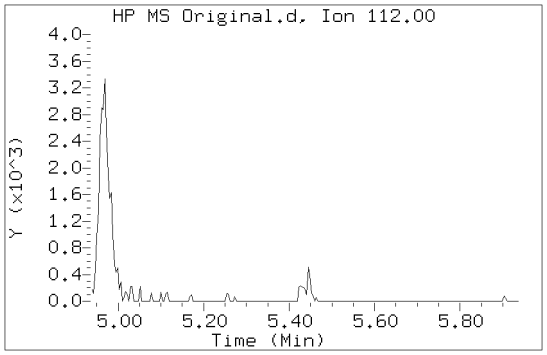
AFTER

MASS
63
AREA
12678
HEIGHT
8183
20-Jul-2023
15:04
linh
pham



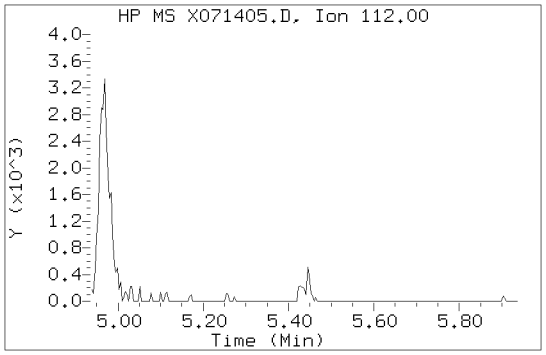
BEFORE

MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

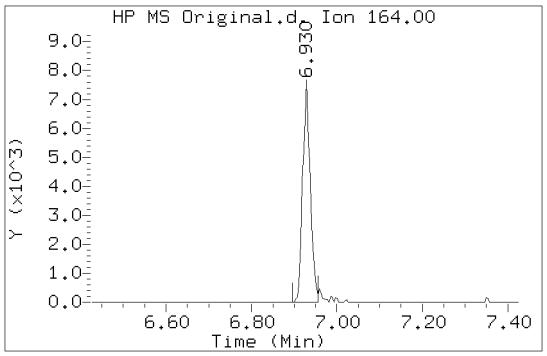


Tetrachloroethene (127-18-4)

Reason Code:

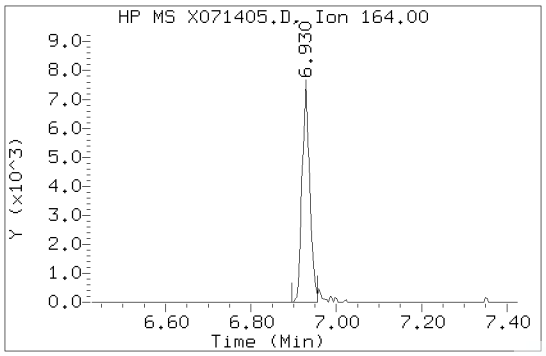
BEFORE

MASS
164
AREA
9711
HEIGHT
7674
20-Jul-2023
15:04
linh
pham



AFTER

MASS
164
AREA
9711
HEIGHT
7674
20-Jul-2023
15:04
linh
pham



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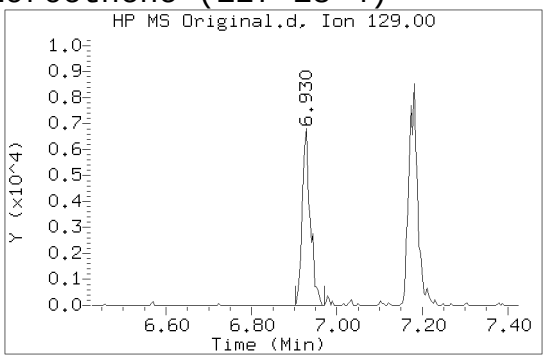
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

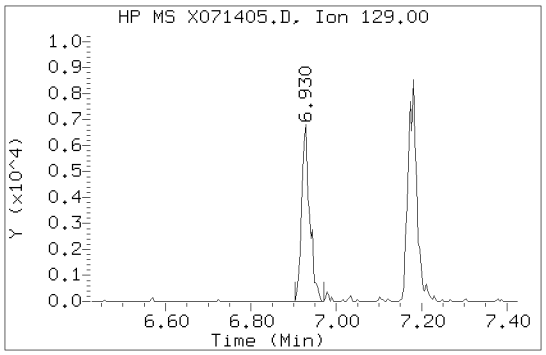
Tetrachloroethene (127-18-4)

Reason Code:

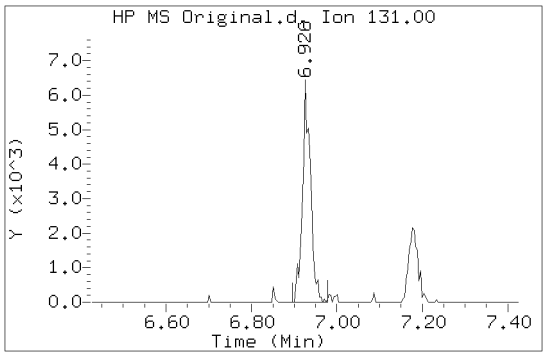
BEFORE
MASS
129
AREA
9180
HEIGHT
6806
20-Jul-2023
15:04
linh
pham



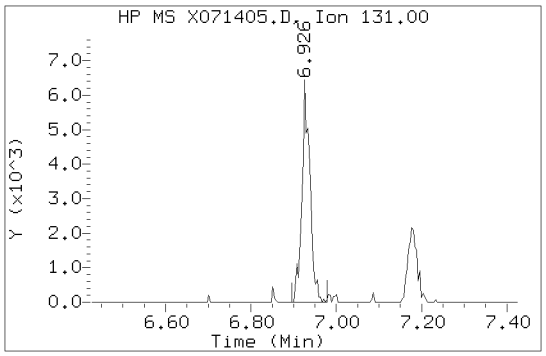
AFTER
MASS
129
AREA
9180
HEIGHT
6806
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
131
AREA
8692
HEIGHT
6442
20-Jul-2023
15:04
linh
pham



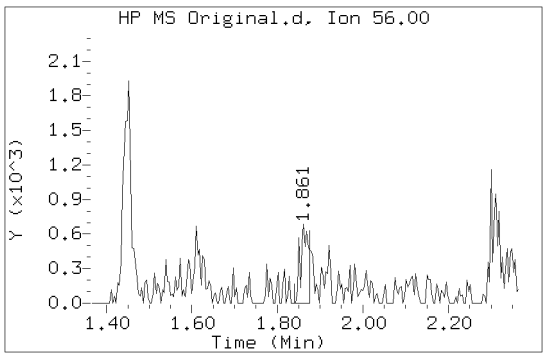
AFTER
MASS
131
AREA
8692
HEIGHT
6442
20-Jul-2023
15:04
linh
pham



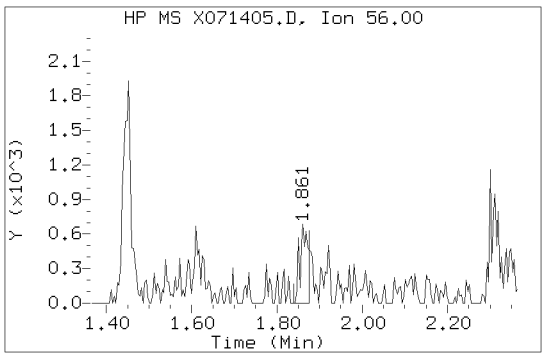
Acrolein (107-02-8)

Reason Code:

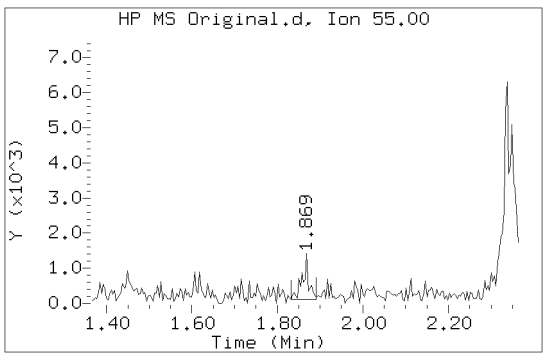
BEFORE
MASS
56
AREA
917
HEIGHT
685
20-Jul-2023
15:04
linh
pham



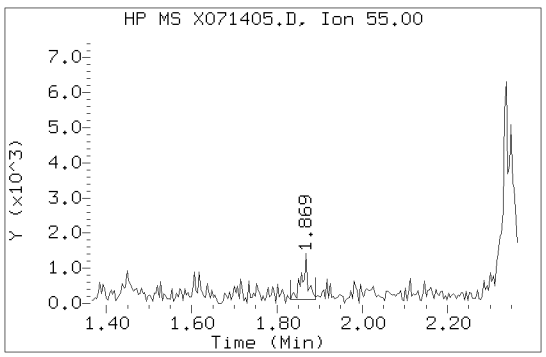
AFTER
MASS
56
AREA
917
HEIGHT
685
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
55
AREA
1362
HEIGHT
1313
20-Jul-2023
15:04
linh
pham



AFTER
MASS
55
AREA
1362
HEIGHT
1313
20-Jul-2023
15:04
linh
pham



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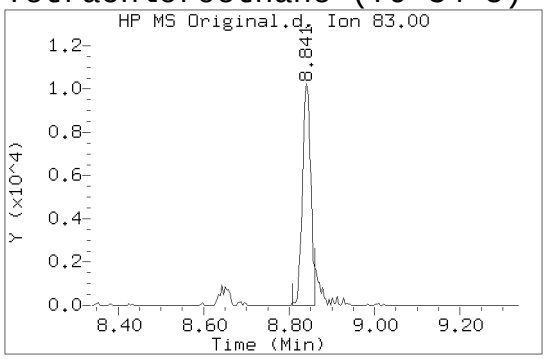
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

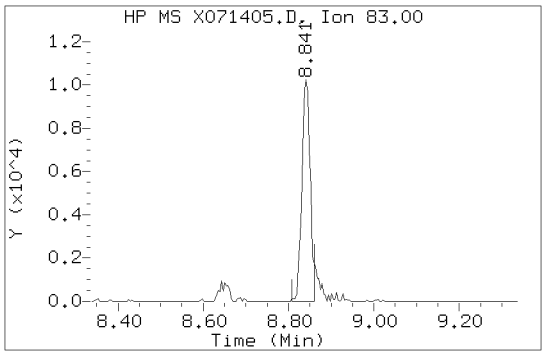
1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

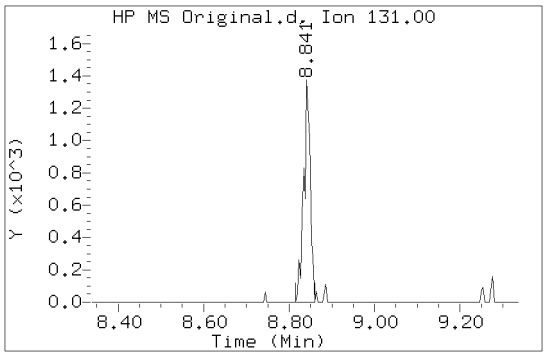
BEFORE
MASS
83
AREA
14352
HEIGHT
10244
20-Jul-2023
15:04
linh
pham



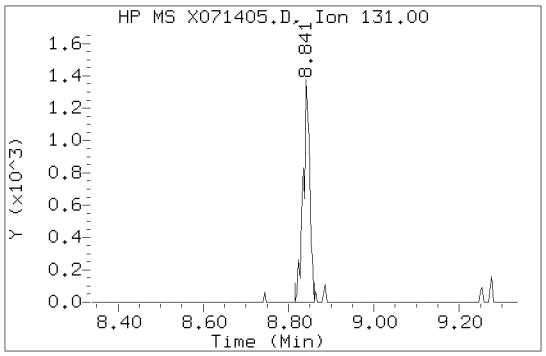
AFTER
MASS
83
AREA
14352
HEIGHT
10244
20-Jul-2023
15:04
linh
pham



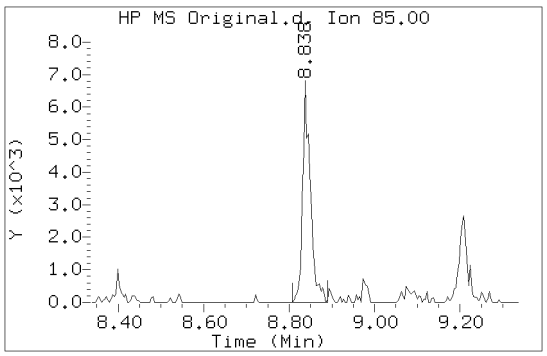
BEFORE
MASS
131
AREA
1498
HEIGHT
1375
20-Jul-2023
15:04
linh
pham



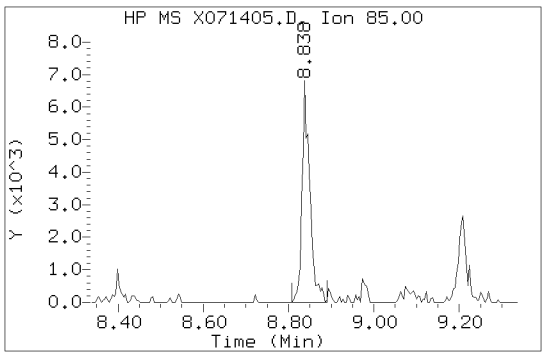
AFTER
MASS
131
AREA
1498
HEIGHT
1375
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
85
AREA
8867
HEIGHT
6812
20-Jul-2023
15:04
linh
pham



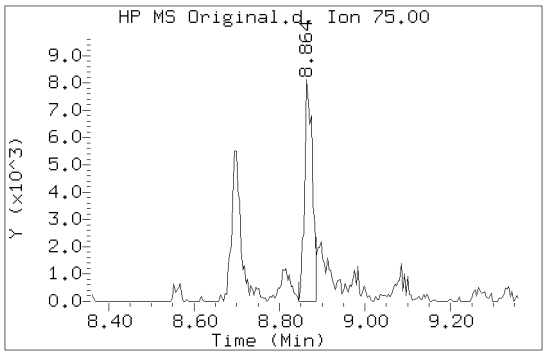
AFTER
MASS
85
AREA
8867
HEIGHT
6812
20-Jul-2023
15:04
linh
pham



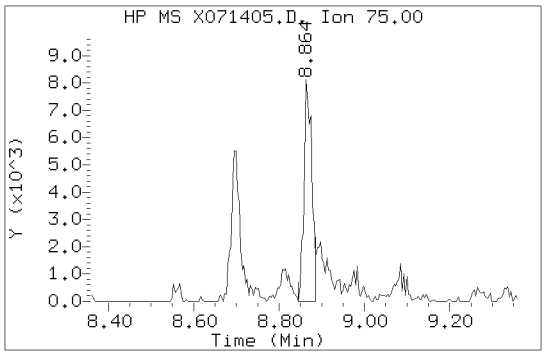
1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE
MASS
75
AREA
10578
HEIGHT
8119
20-Jul-2023
15:04
linh
pham



AFTER
MASS
75
AREA
10578
HEIGHT
8119
20-Jul-2023
15:04
linh
pham



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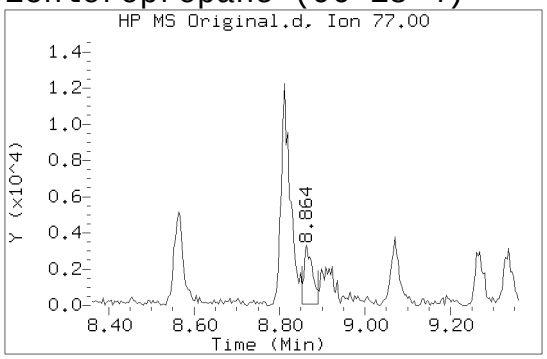
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

1,2,3-Trichloropropane (96-18-4)

Reason Code:

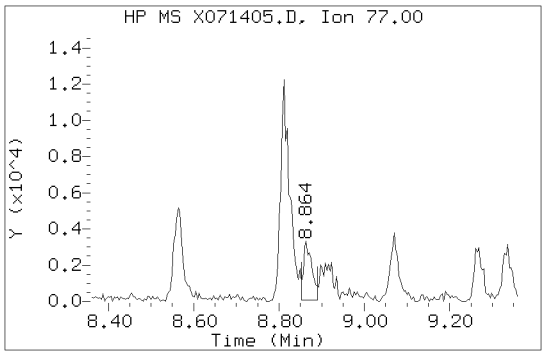
BEFORE

MASS
77
AREA
4616
HEIGHT
3271
20-Jul-2023
15:04
linh
pham



AFTER

MASS
77
AREA
4616
HEIGHT
3271
20-Jul-2023
15:04
linh
pham

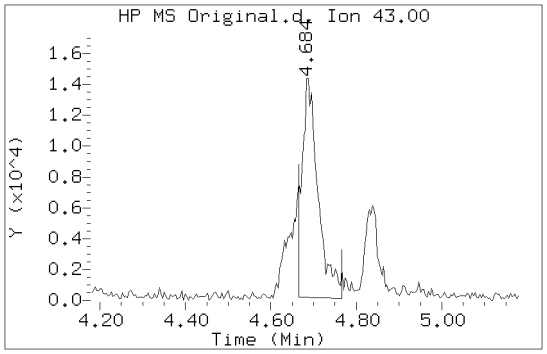


Isobutyl Alcohol (78-83-1)

Reason Code:

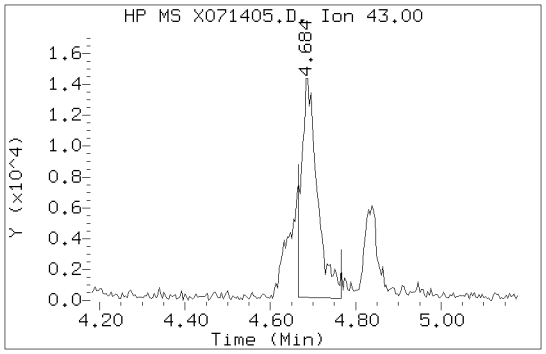
BEFORE

MASS
43
AREA
37832
HEIGHT
14170
20-Jul-2023
15:04
linh
pham



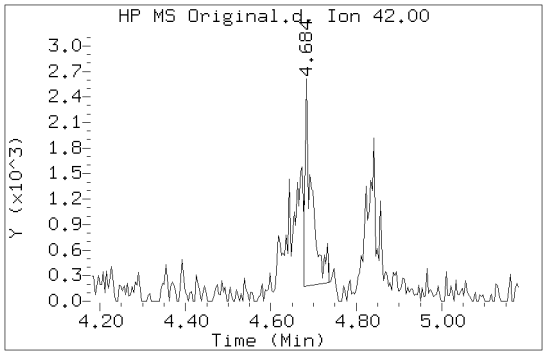
AFTER

MASS
43
AREA
37832
HEIGHT
14170
20-Jul-2023
15:04
linh
pham



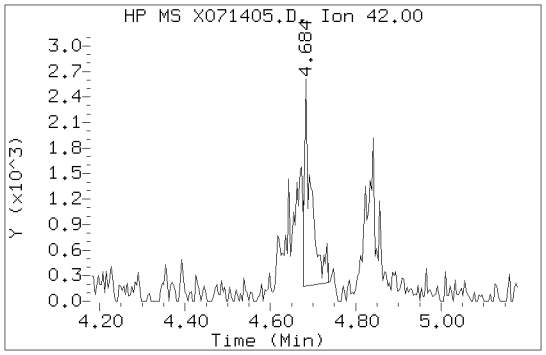
BEFORE

MASS
42
AREA
2790
HEIGHT
2433
20-Jul-2023
15:04
linh
pham



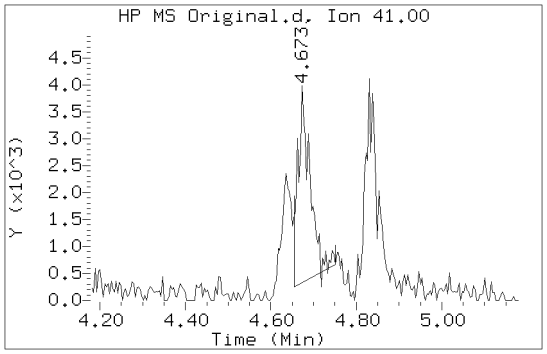
AFTER

MASS
42
AREA
2790
HEIGHT
2433
20-Jul-2023
15:04
linh
pham



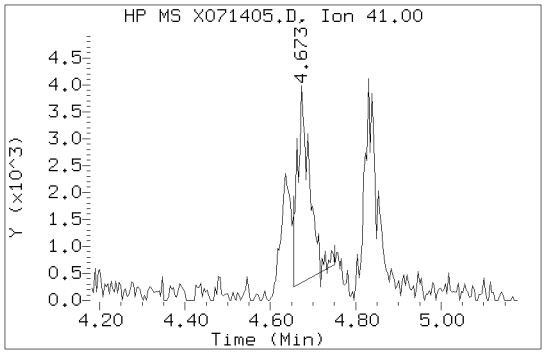
BEFORE

MASS
41
AREA
7292
HEIGHT
3653
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
7292
HEIGHT
3653
20-Jul-2023
15:04
linh
pham



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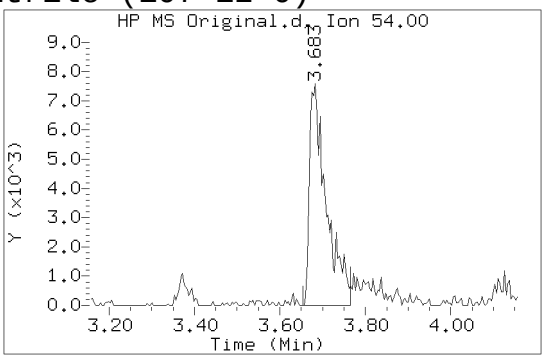
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

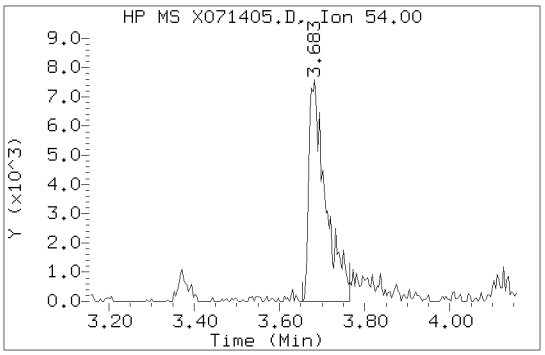
Propionitrile (107-12-0)

Reason Code:

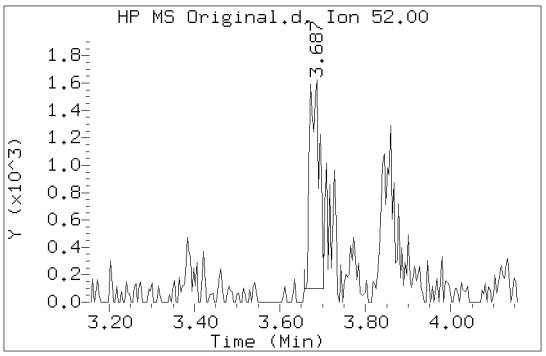
BEFORE
MASS
54
AREA
20667
HEIGHT
7586
20-Jul-2023
15:04
linh
pham



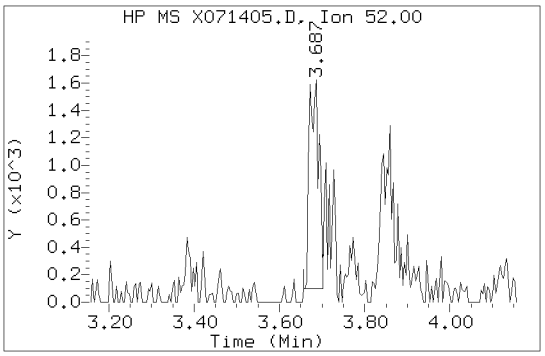
AFTER
MASS
54
AREA
20667
HEIGHT
7586
20-Jul-2023
15:04
linh
pham



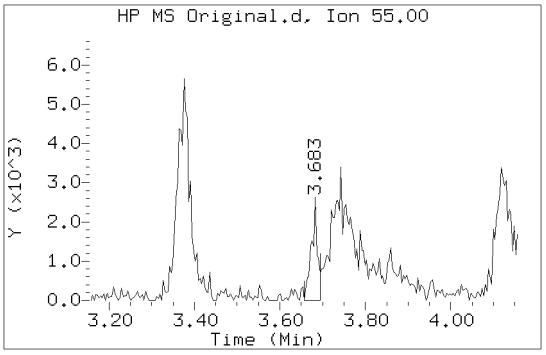
BEFORE
MASS
52
AREA
2370
HEIGHT
1524
20-Jul-2023
15:04
linh
pham



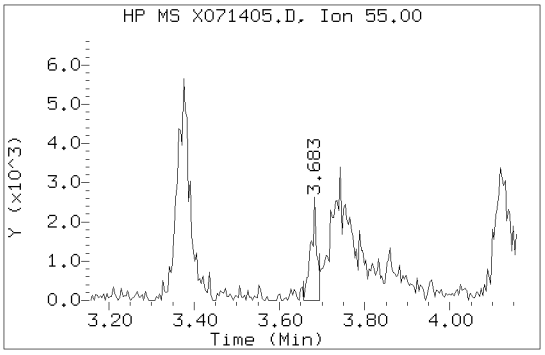
AFTER
MASS
52
AREA
2370
HEIGHT
1524
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
55
AREA
2547
HEIGHT
2627
20-Jul-2023
15:04
linh
pham



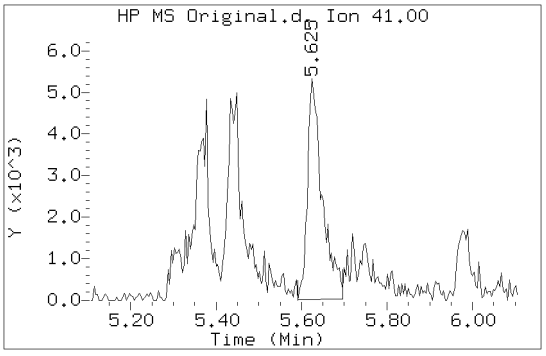
AFTER
MASS
55
AREA
2547
HEIGHT
2627
20-Jul-2023
15:04
linh
pham



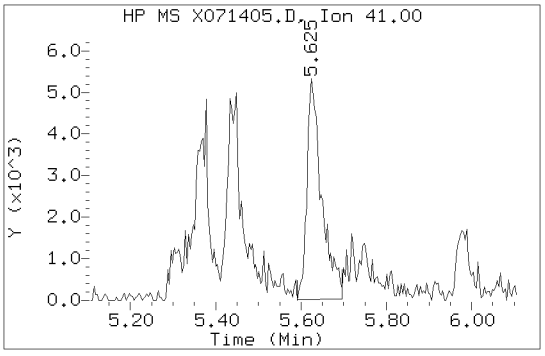
Methyl Methacrylate (80-62-6)

Reason Code:

BEFORE
MASS
41
AREA
12770
HEIGHT
5309
20-Jul-2023
15:04
linh
pham



AFTER
MASS
41
AREA
12770
HEIGHT
5309
20-Jul-2023
15:04
linh
pham



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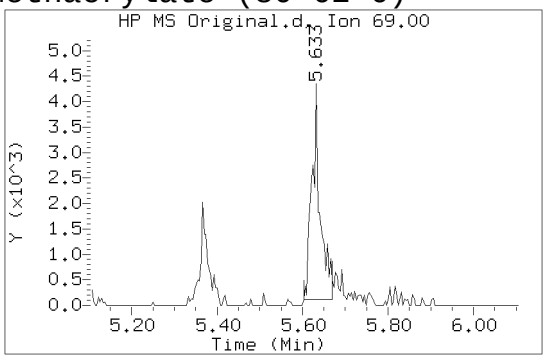
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

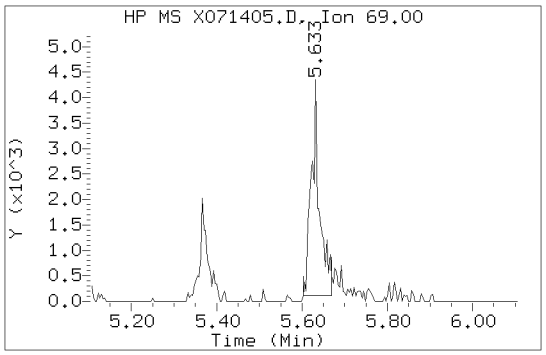
Methyl Methacrylate (80-62-6)

Reason Code:

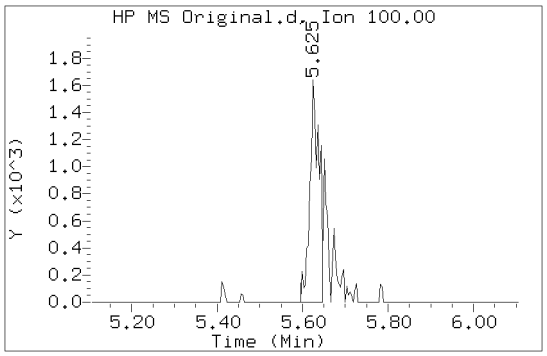
BEFORE
MASS
69
AREA
5709
HEIGHT
4235
20-Jul-2023
15:04
linh
pham



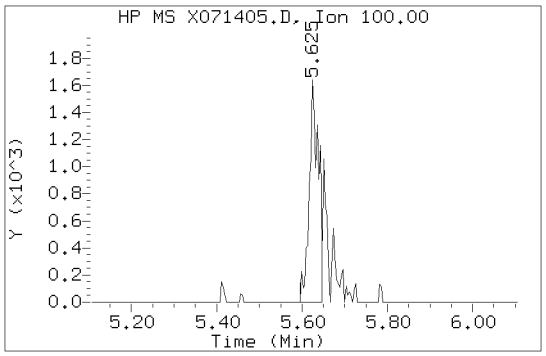
AFTER
MASS
69
AREA
5709
HEIGHT
4235
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
100
AREA
2452
HEIGHT
1641
20-Jul-2023
15:04
linh
pham



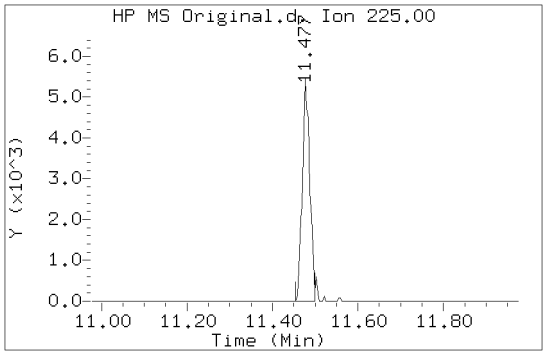
AFTER
MASS
100
AREA
2452
HEIGHT
1641
20-Jul-2023
15:04
linh
pham



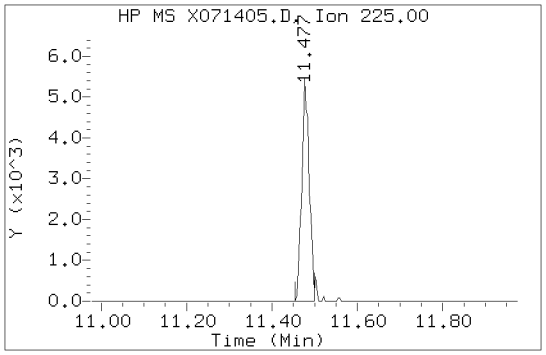
Hexachlorobutadiene (87-68-3)

Reason Code:

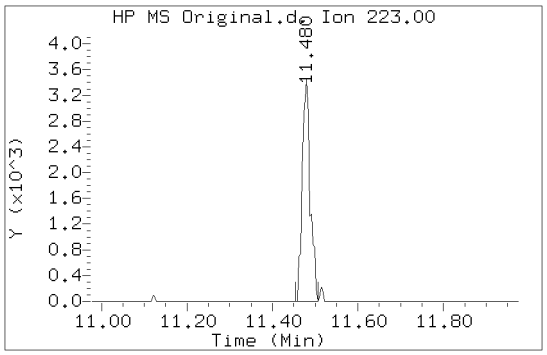
BEFORE
MASS
225
AREA
6844
HEIGHT
5446
20-Jul-2023
15:04
linh
pham



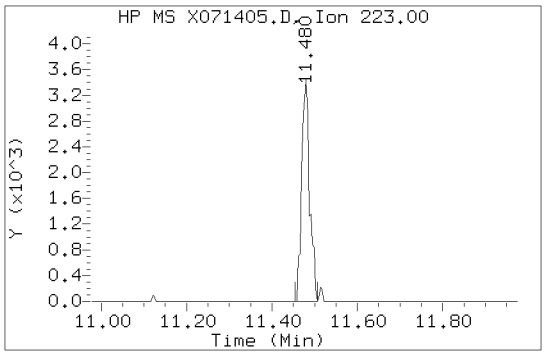
AFTER
MASS
225
AREA
6844
HEIGHT
5446
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
223
AREA
4606
HEIGHT
3443
20-Jul-2023
15:04
linh
pham



AFTER
MASS
223
AREA
4606
HEIGHT
3443
20-Jul-2023
15:04
linh
pham



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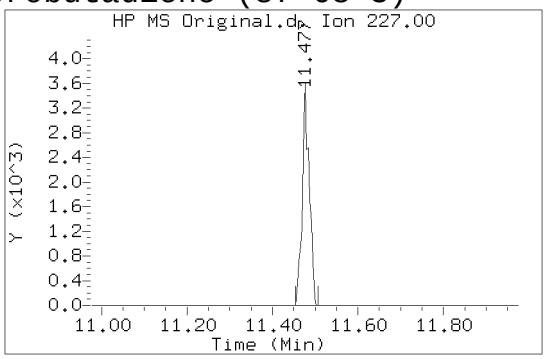
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Hexachlorobutadiene (87-68-3)

Reason Code:

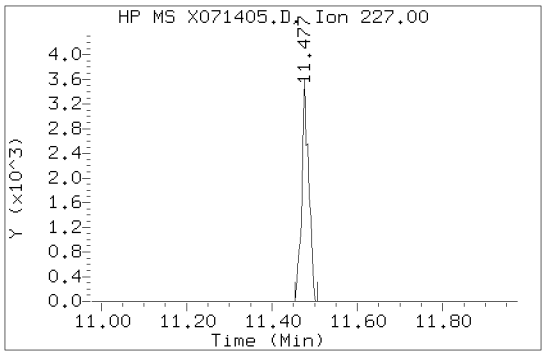
BEFORE

MASS
227
AREA
4231
HEIGHT
3595
20-Jul-2023
15:04
linh
pham



AFTER

MASS
227
AREA
4231
HEIGHT
3595
20-Jul-2023
15:04
linh
pham

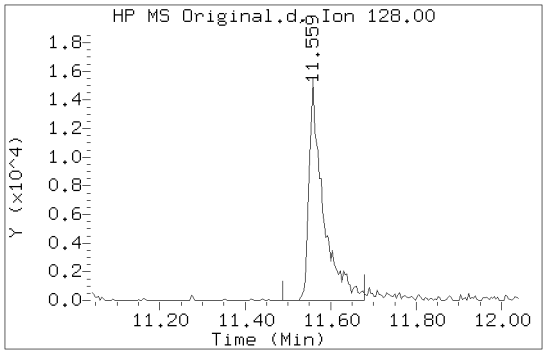


Naphthalene (91-20-3)

Reason Code:

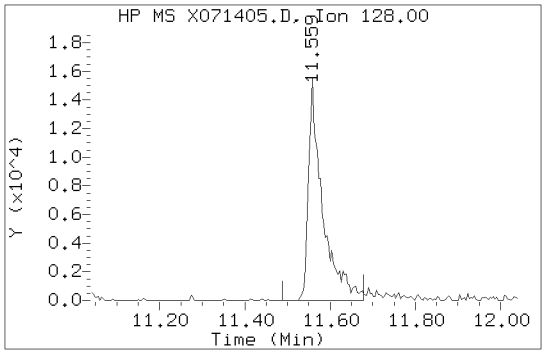
BEFORE

MASS
128
AREA
35806
HEIGHT
15488
20-Jul-2023
15:04
linh
pham



AFTER

MASS
128
AREA
35806
HEIGHT
15488
20-Jul-2023
15:04
linh
pham

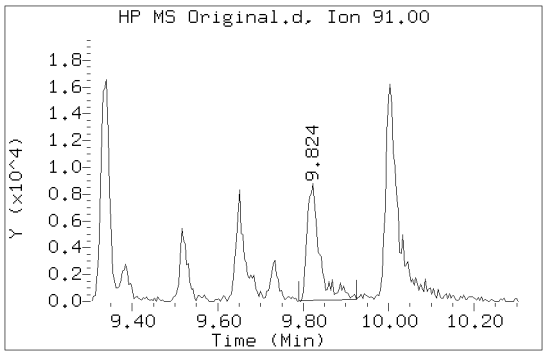


Benzyl Chloride (100-44-7)

Reason Code:

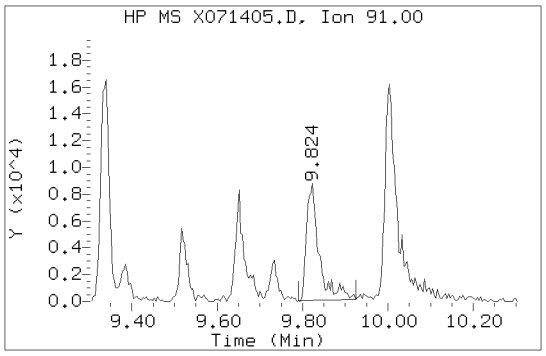
BEFORE

MASS
91
AREA
17851
HEIGHT
8726
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
17851
HEIGHT
8726
20-Jul-2023
15:04
linh
pham



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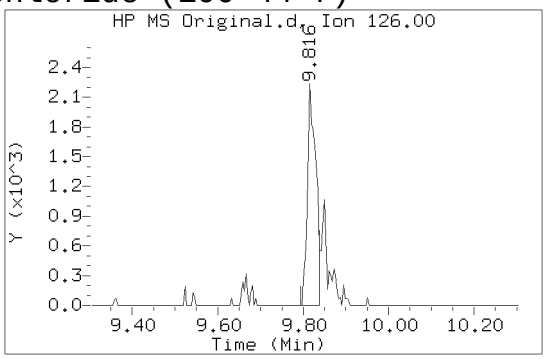
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

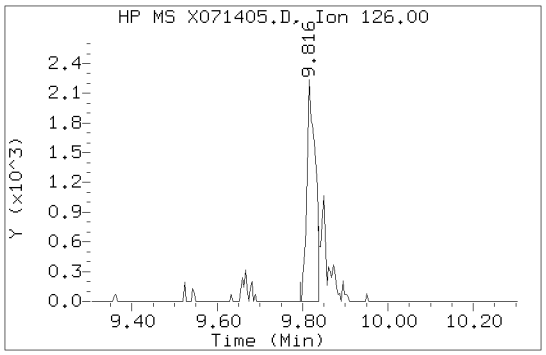
Benzyl Chloride (100-44-7)

Reason Code:

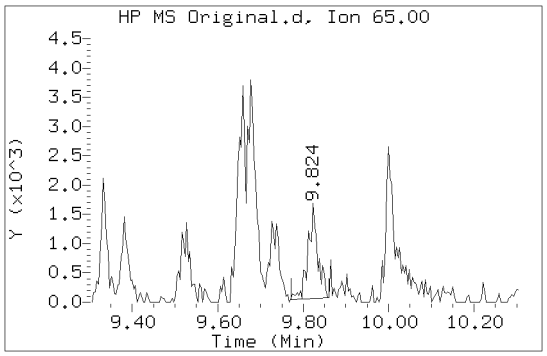
BEFORE
MASS
126
AREA
3073
HEIGHT
2237
20-Jul-2023
15:04
linh
pham



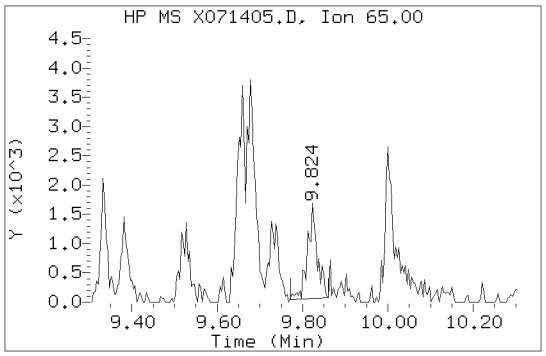
AFTER
MASS
126
AREA
3073
HEIGHT
2237
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
65
AREA
2588
HEIGHT
1635
20-Jul-2023
15:04
linh
pham



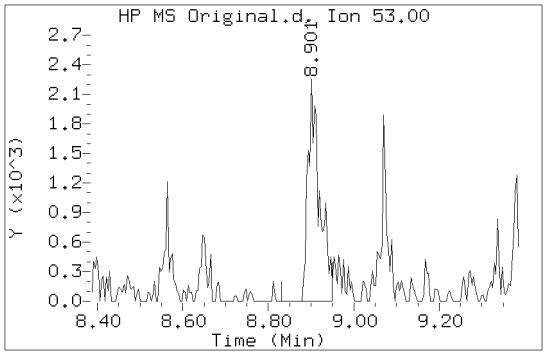
AFTER
MASS
65
AREA
2588
HEIGHT
1635
20-Jul-2023
15:04
linh
pham



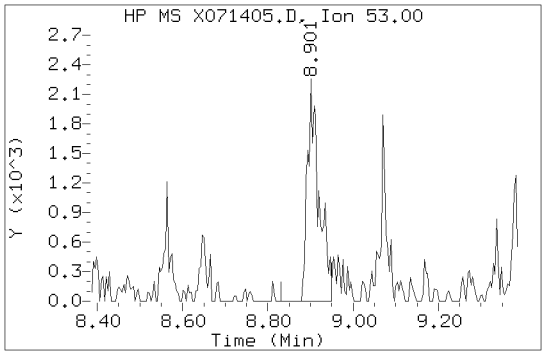
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

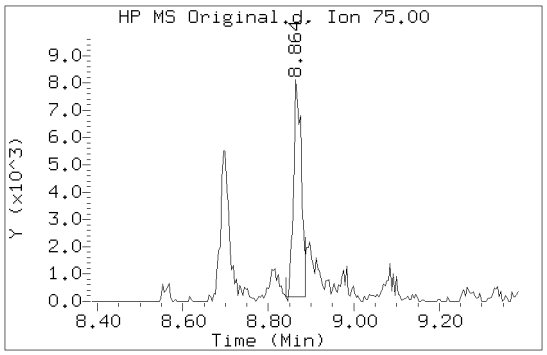
BEFORE
MASS
53
AREA
4279
HEIGHT
2257
20-Jul-2023
15:04
linh
pham



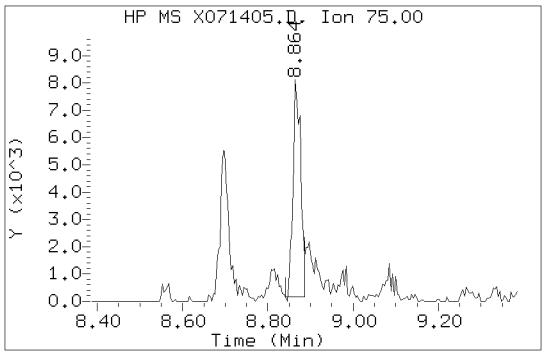
AFTER
MASS
53
AREA
4279
HEIGHT
2257
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
75
AREA
10144
HEIGHT
7958
20-Jul-2023
15:04
linh
pham



AFTER
MASS
75
AREA
10144
HEIGHT
7958
20-Jul-2023
15:04
linh
pham



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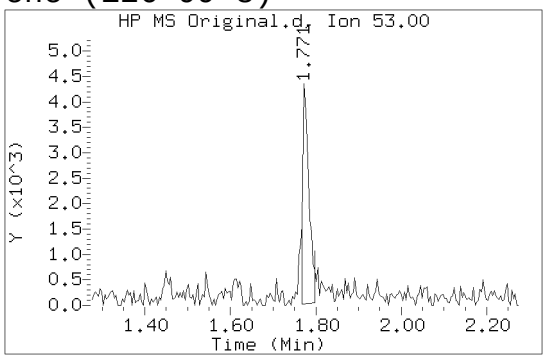
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

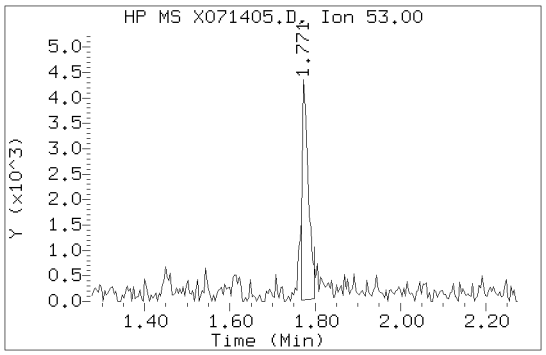
Chloroprene (126-99-8)

Reason Code:

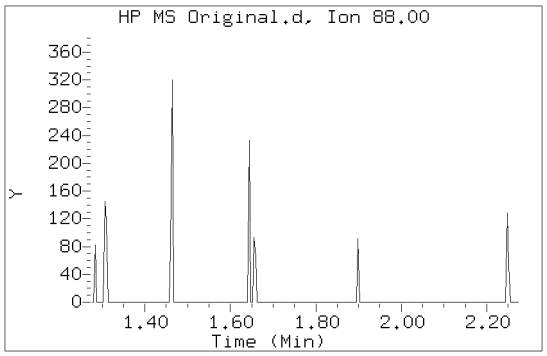
BEFORE
MASS
53
AREA
4560
HEIGHT
4328
20-Jul-2023
15:04
linh
pham



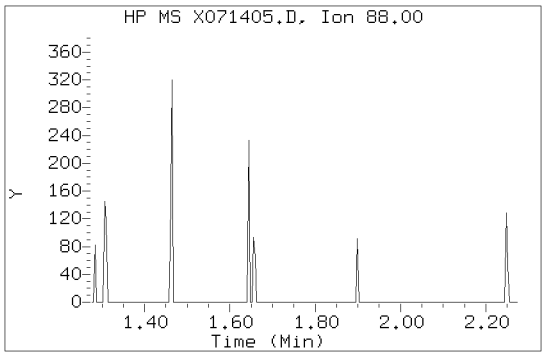
AFTER
MASS
53
AREA
4560
HEIGHT
4328
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



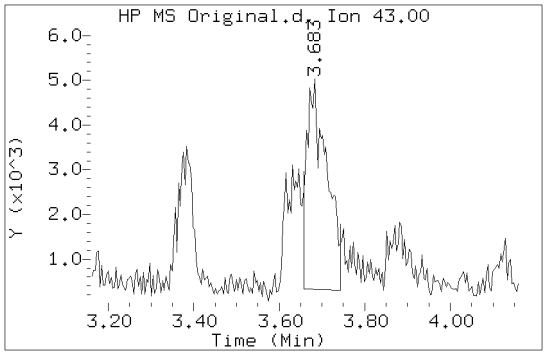
AFTER
MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



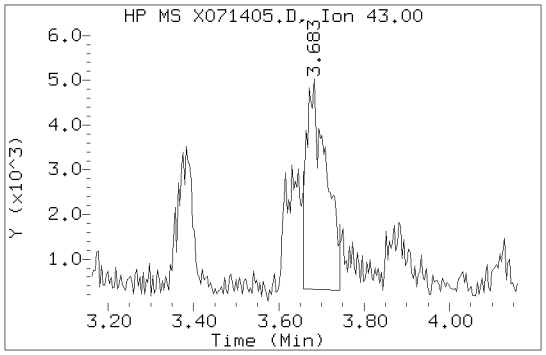
Ethyl Acetate (141-78-6)

Reason Code:

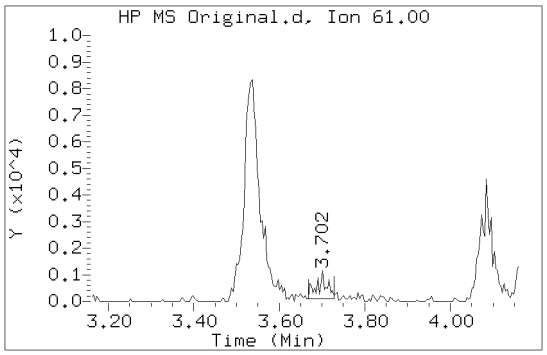
BEFORE
MASS
43
AREA
15481
HEIGHT
4704
20-Jul-2023
15:04
linh
pham



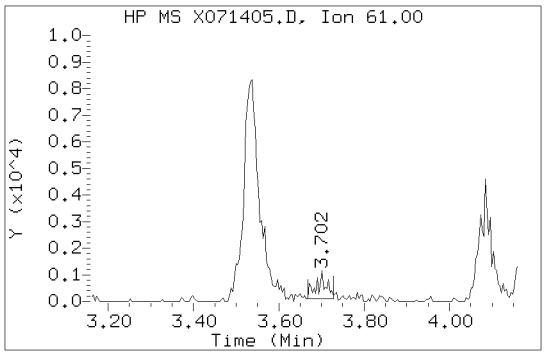
AFTER
MASS
43
AREA
15481
HEIGHT
4704
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
61
AREA
1598
HEIGHT
1061
20-Jul-2023
15:04
linh
pham



AFTER
MASS
61
AREA
1598
HEIGHT
1061
20-Jul-2023
15:04
linh
pham



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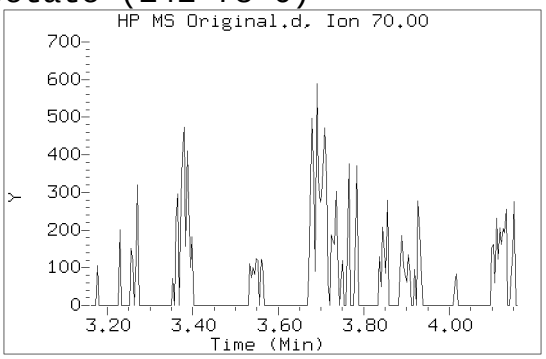
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Ethyl Acetate (141-78-6)

Reason Code:

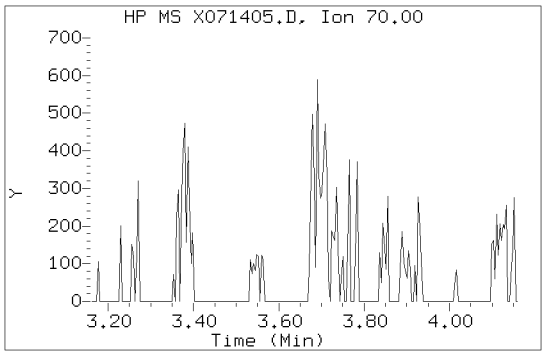
BEFORE

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

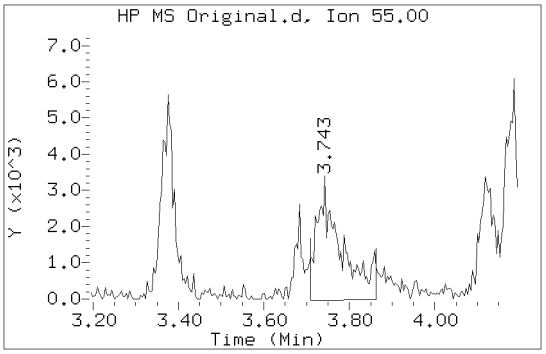


Methyl Acrylate (96-33-3)

Reason Code:

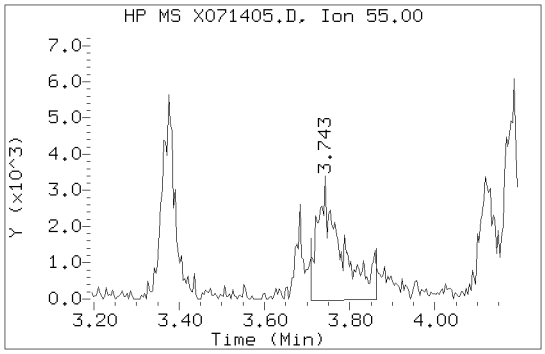
BEFORE

MASS
55
AREA
13406
HEIGHT
3436
20-Jul-2023
15:04
linh
pham



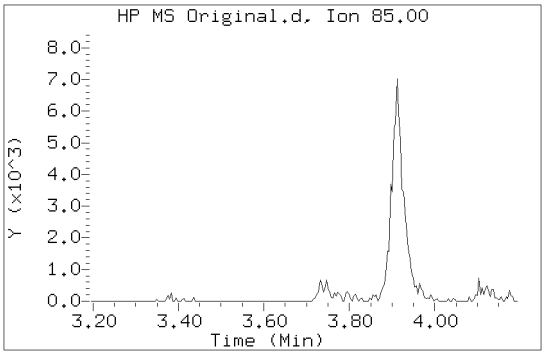
AFTER

MASS
55
AREA
13406
HEIGHT
3436
20-Jul-2023
15:04
linh
pham



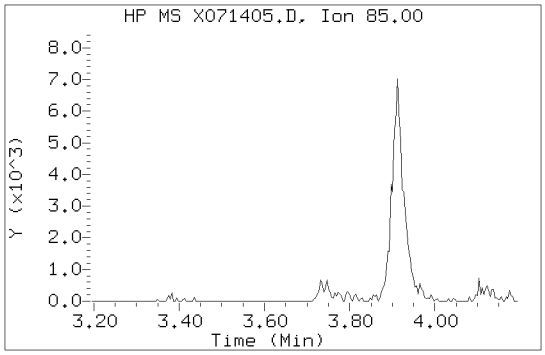
BEFORE

MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

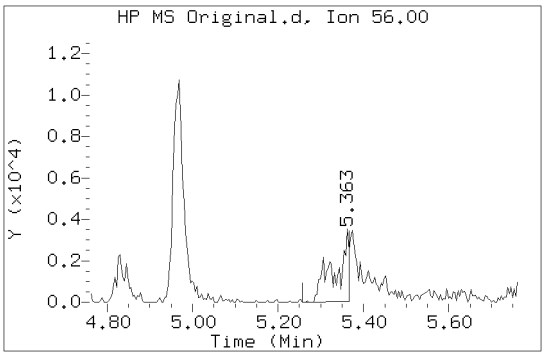


n-Butanol (71-36-3)

Reason Code:

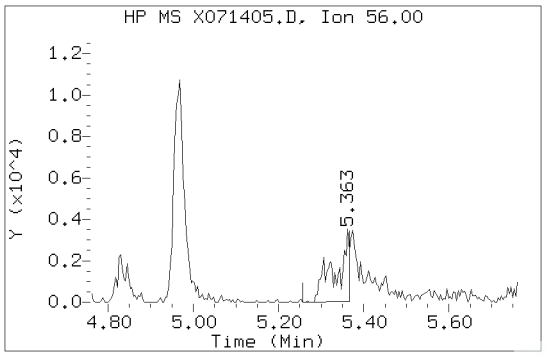
BEFORE

MASS
56
AREA
7443
HEIGHT
3529
20-Jul-2023
15:04
linh
pham



AFTER

MASS
56
AREA
7443
HEIGHT
3529
20-Jul-2023
15:04
linh
pham



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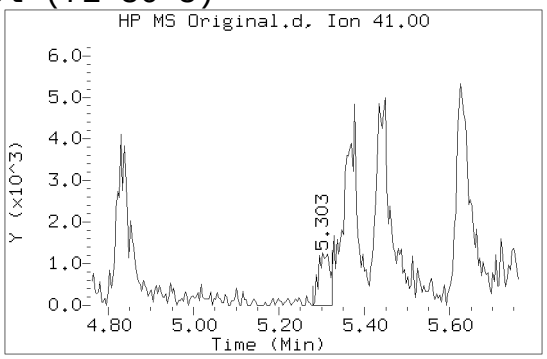
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

n-Butanol (71-36-3)

Reason Code:

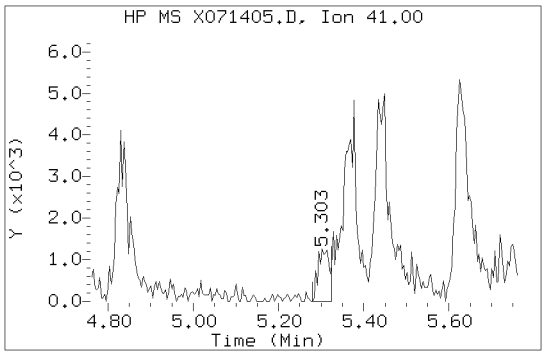
BEFORE

MASS
41
AREA
2384
HEIGHT
1261
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
2384
HEIGHT
1261
20-Jul-2023
15:04
linh
pham

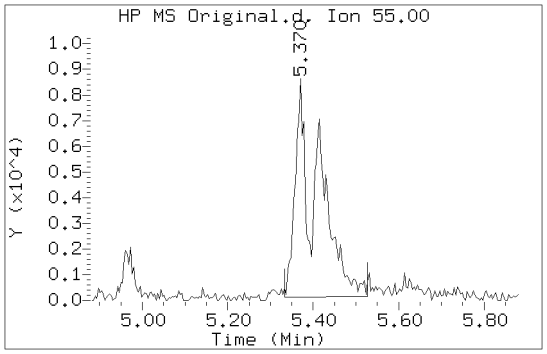


Ethyl Acrylate (140-88-5)

Reason Code:

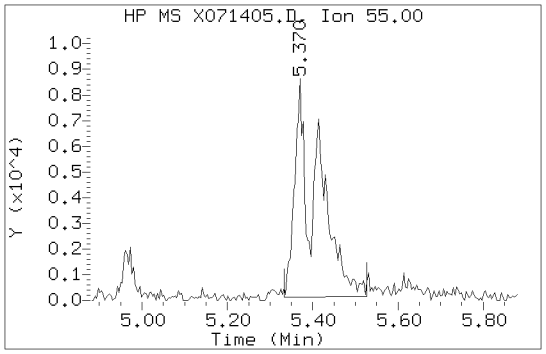
BEFORE

MASS
55
AREA
31450
HEIGHT
8507
20-Jul-2023
15:04
linh
pham



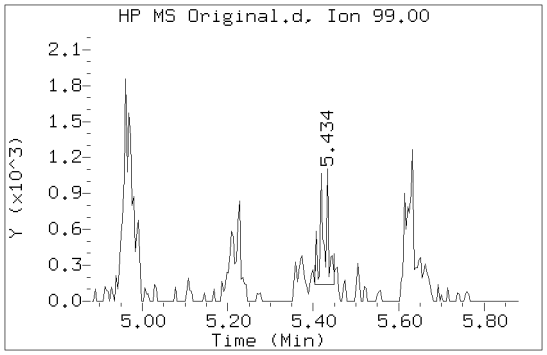
AFTER

MASS
55
AREA
31450
HEIGHT
8507
20-Jul-2023
15:04
linh
pham



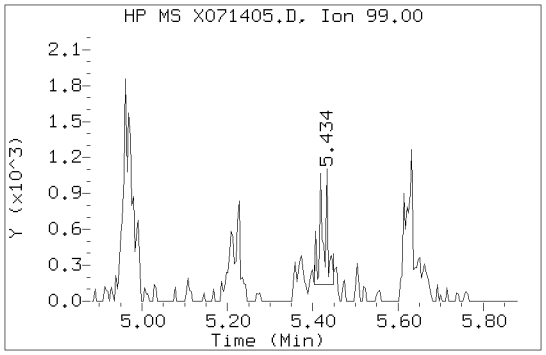
BEFORE

MASS
99
AREA
888
HEIGHT
965
20-Jul-2023
15:04
linh
pham



AFTER

MASS
99
AREA
888
HEIGHT
965
20-Jul-2023
15:04
linh
pham



1,4-Dioxane ()

Reason Code:

BEFORE

MASS
88
AREA
2323
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1407
20-Jul-2023
15:04
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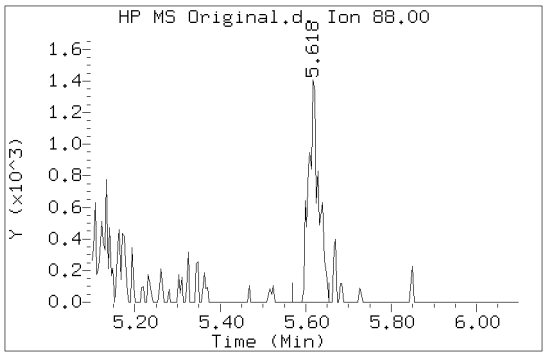
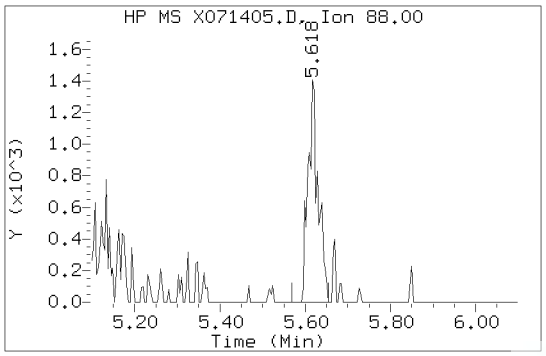
pham



AFTER

MASS
88
AREA
2323
HEIGHT
1407
20-Jul-2023
15:04
linh
pham



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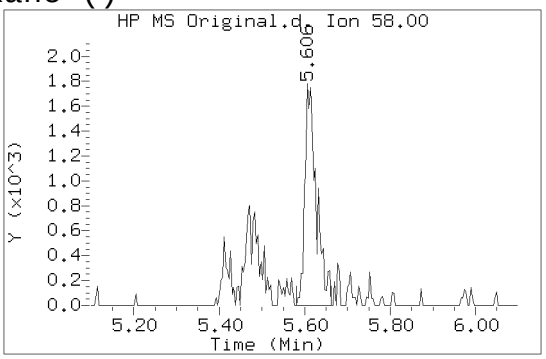
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

1,4-Dioxane ()

Reason Code:

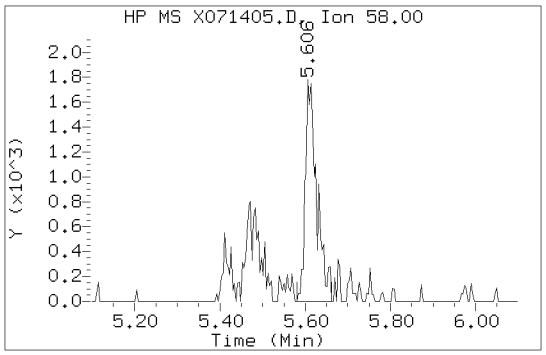
BEFORE

MASS
58
AREA
3341
HEIGHT
1781
20-Jul-2023
15:04
linh
pham



AFTER

MASS
58
AREA
3341
HEIGHT
1781
20-Jul-2023
15:04
linh
pham

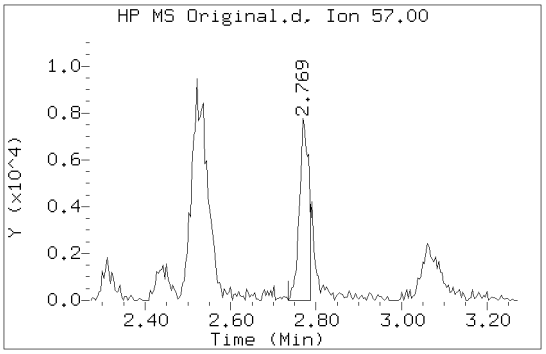


n-Hexane (110-54-3)

Reason Code:

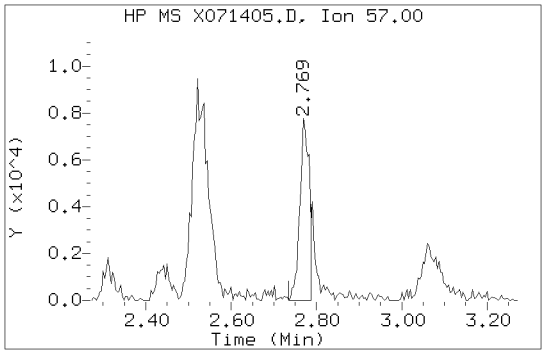
BEFORE

MASS
57
AREA
11984
HEIGHT
7776
20-Jul-2023
15:04
linh
pham



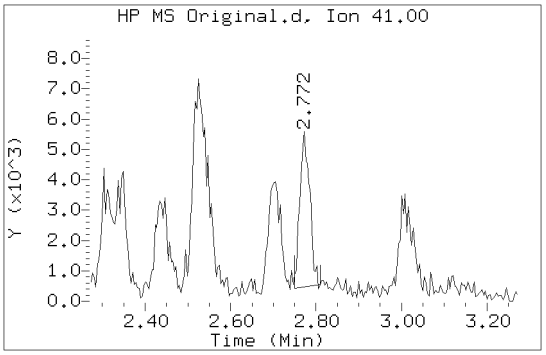
AFTER

MASS
57
AREA
11984
HEIGHT
7776
20-Jul-2023
15:04
linh
pham



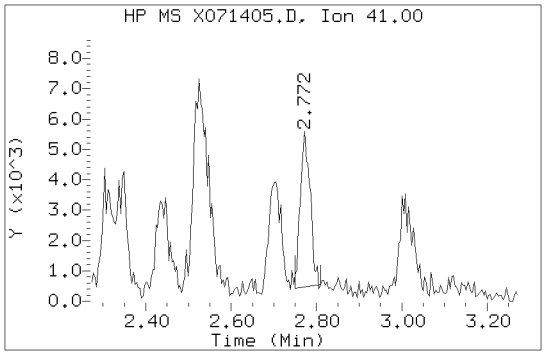
BEFORE

MASS
41
AREA
8381
HEIGHT
5113
20-Jul-2023
15:04
linh
pham



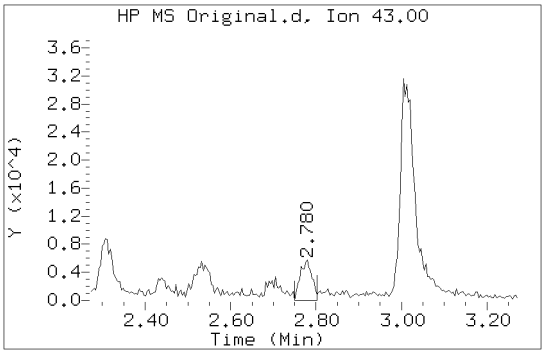
AFTER

MASS
41
AREA
8381
HEIGHT
5113
20-Jul-2023
15:04
linh
pham



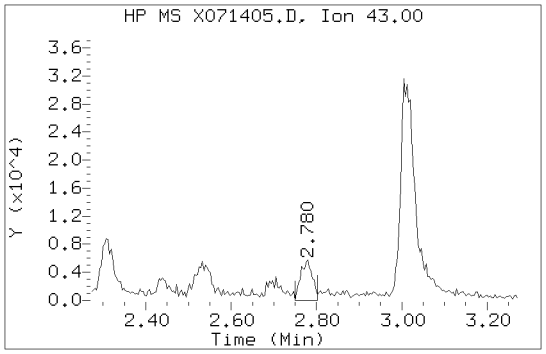
BEFORE

MASS
43
AREA
11133
HEIGHT
5721
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
11133
HEIGHT
5721
20-Jul-2023
15:04
linh
pham



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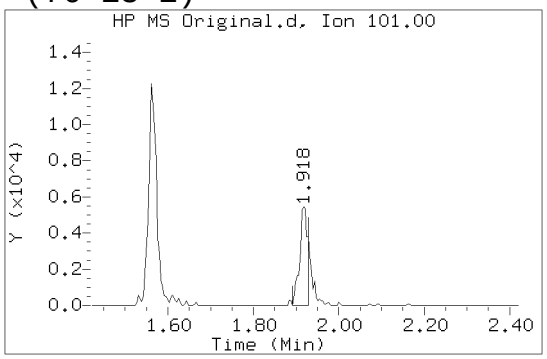
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

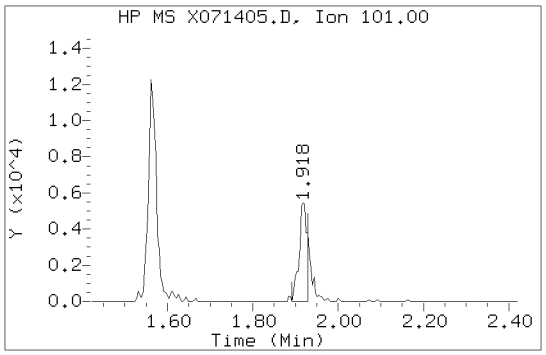
Freon TF (76-13-1)

Reason Code:

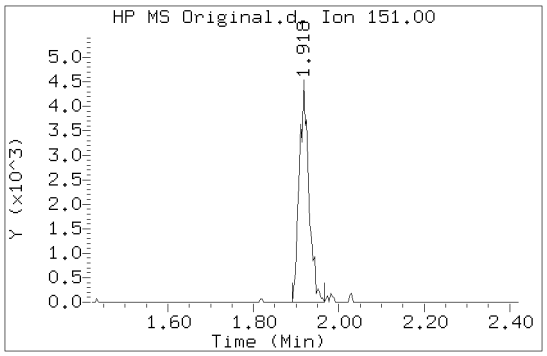
BEFORE
MASS
101
AREA
7195
HEIGHT
5473
20-Jul-2023
15:04
linh
pham



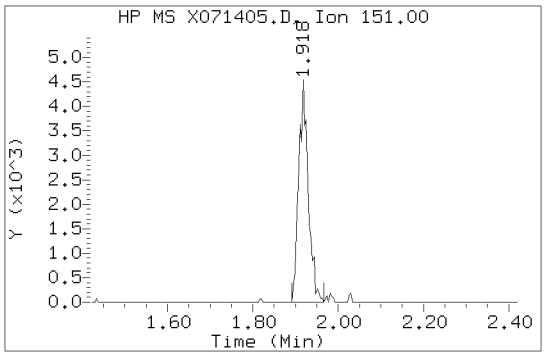
AFTER
MASS
101
AREA
7195
HEIGHT
5473
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
151
AREA
7204
HEIGHT
4541
20-Jul-2023
15:04
linh
pham



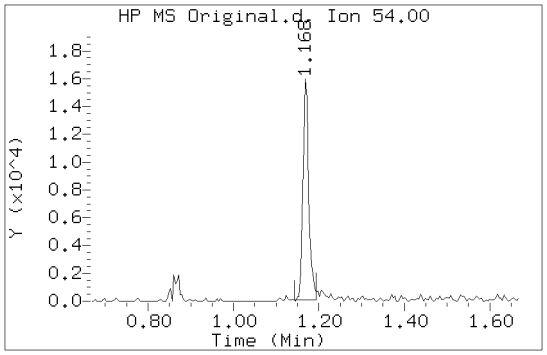
AFTER
MASS
151
AREA
7204
HEIGHT
4541
20-Jul-2023
15:04
linh
pham



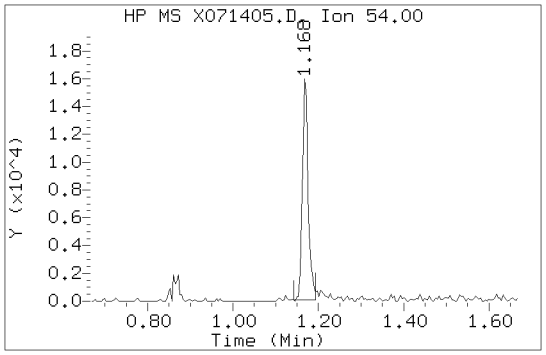
1,3-Butadiene (106-99-0)

Reason Code:

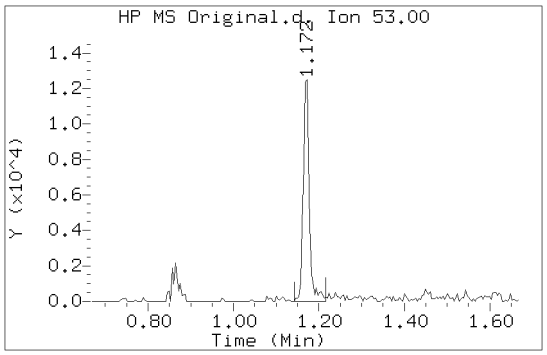
BEFORE
MASS
54
AREA
15351
HEIGHT
15893
20-Jul-2023
15:04
linh
pham



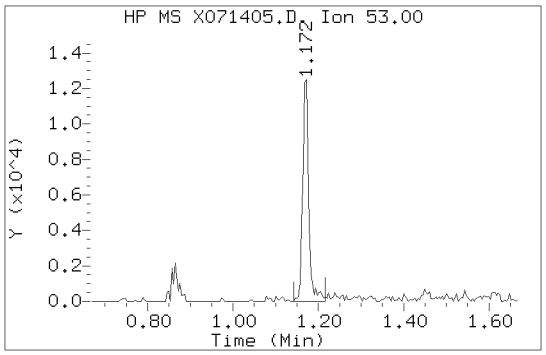
AFTER
MASS
54
AREA
15351
HEIGHT
15893
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
53
AREA
12769
HEIGHT
12495
20-Jul-2023
15:04
linh
pham



AFTER
MASS
53
AREA
12769
HEIGHT
12495
20-Jul-2023
15:04
linh
pham



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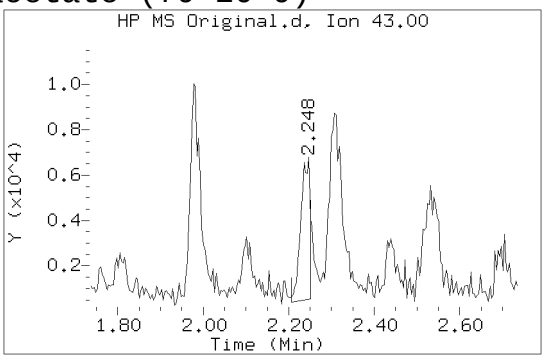
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Methyl acetate (79-20-9)

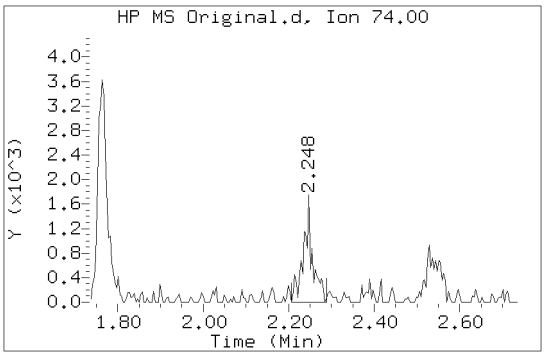
BEFORE

MASS
43
AREA
9491
HEIGHT
6252
20-Jul-2023
15:04
linh
pham



BEFORE

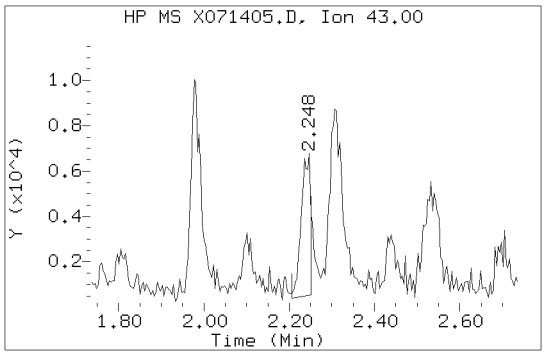
MASS
74
AREA
2612
HEIGHT
1756
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

MASS
43
AREA
9491
HEIGHT
6252
20-Jul-2023
15:04
linh
pham



AFTER

MASS
74
AREA
2612
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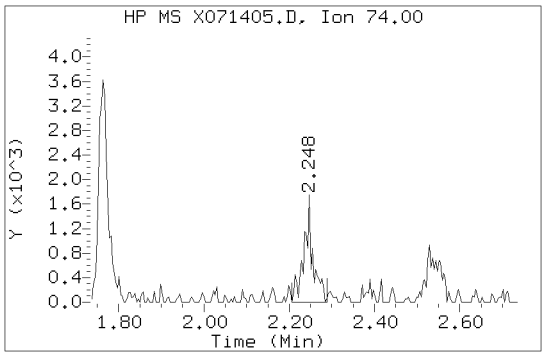
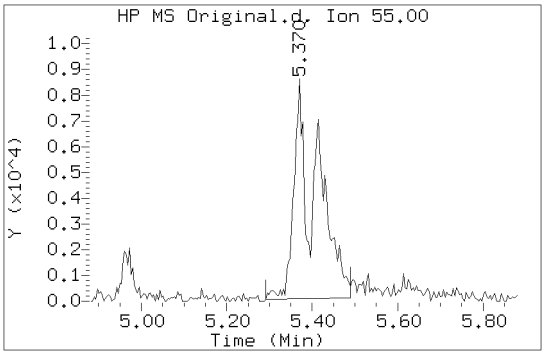
1756
20-Jul-2023
15:04
linh
pham



Methylcyclohexane (108-87-2)

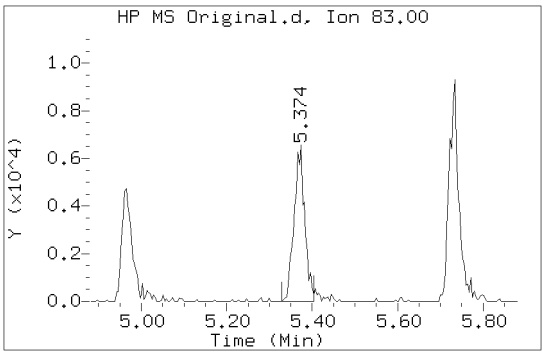
BEFORE

MASS
55
AREA
31142
HEIGHT
8535
20-Jul-2023
15:04
linh
pham



BEFORE

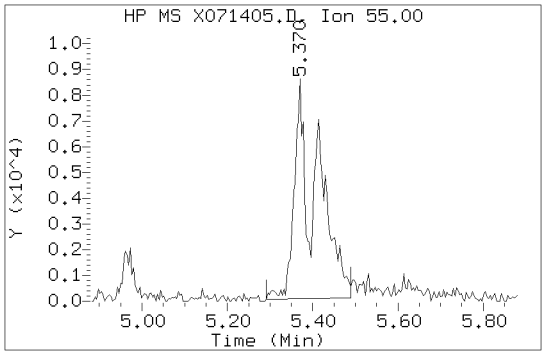
MASS
83
AREA
11484
HEIGHT
6566
20-Jul-2023
15:04
linh
pham



Reason Code:

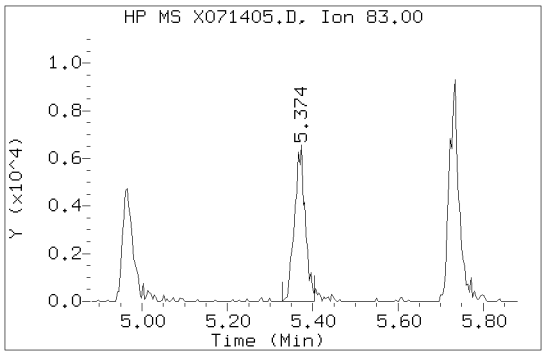
AFTER

MASS
55
AREA
31142
HEIGHT
8535
20-Jul-2023
15:04
linh
pham



AFTER

MASS
83
AREA
11484
HEIGHT
6566
20-Jul-2023
15:04
linh
pham



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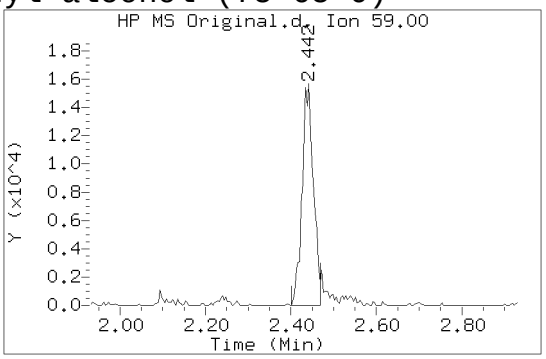
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Tert-butyl alcohol (75-65-0)

Reason Code:

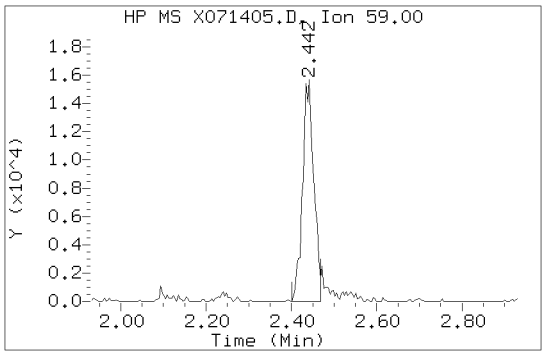
BEFORE

MASS
59
AREA
29280
HEIGHT
15681
20-Jul-2023
15:04
linh
pham



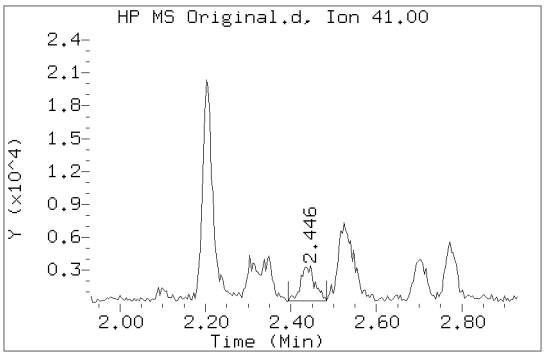
AFTER

MASS
59
AREA
29280
HEIGHT
15681
20-Jul-2023
15:04
linh
pham



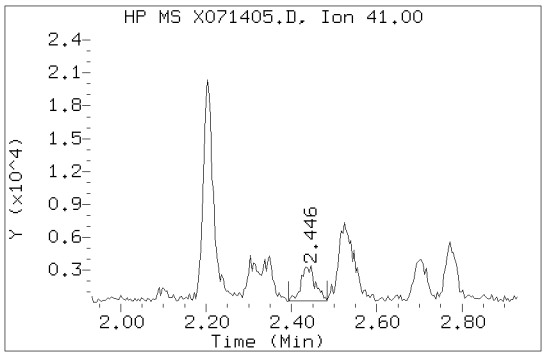
BEFORE

MASS
41
AREA
7457
HEIGHT
3224
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
7457
HEIGHT
3224
20-Jul-2023
15:04
linh
pham

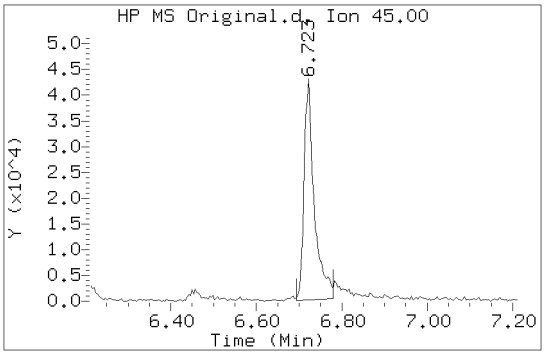


4-Methyl-2-pentanol (108-11-2)

Reason Code:

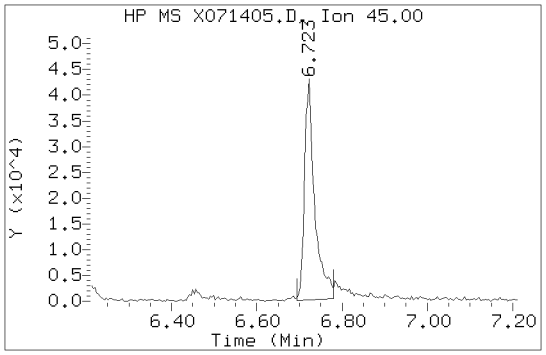
BEFORE

MASS
45
AREA
72210
HEIGHT
42882
20-Jul-2023
15:04
linh
pham



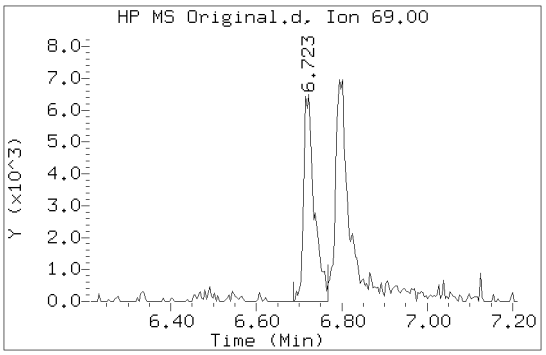
AFTER

MASS
45
AREA
72210
HEIGHT
42882
20-Jul-2023
15:04
linh
pham



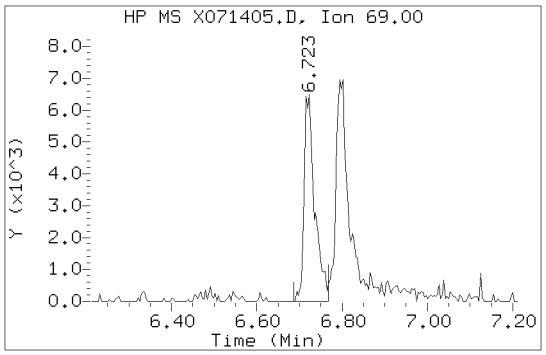
BEFORE

MASS
69
AREA
11484
HEIGHT
6492
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
11484
HEIGHT
6492
20-Jul-2023
15:04
linh
pham



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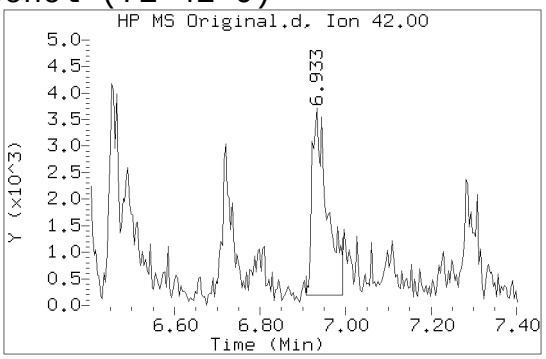
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Amyl alcohol (71-41-0)

Reason Code:

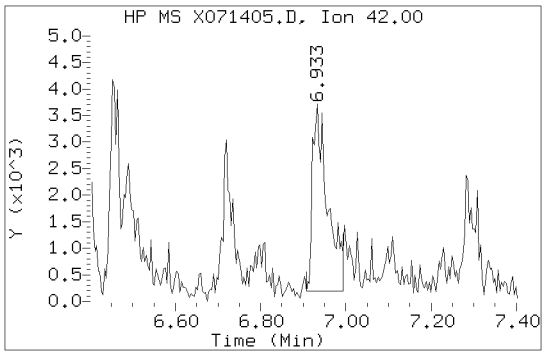
BEFORE

MASS
42
AREA
8579
HEIGHT
3524
20-Jul-2023
15:04
linh
pham



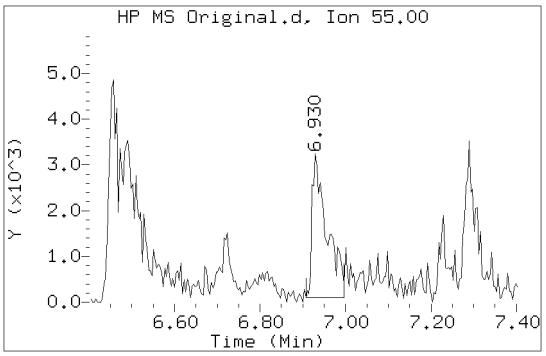
AFTER

MASS
42
AREA
8579
HEIGHT
3524
20-Jul-2023
15:04
linh
pham



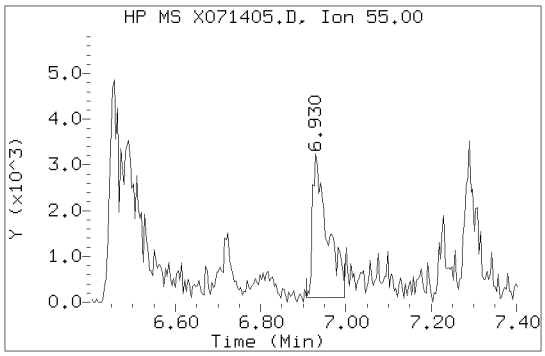
BEFORE

MASS
55
AREA
7591
HEIGHT
3153
20-Jul-2023
15:04
linh
pham



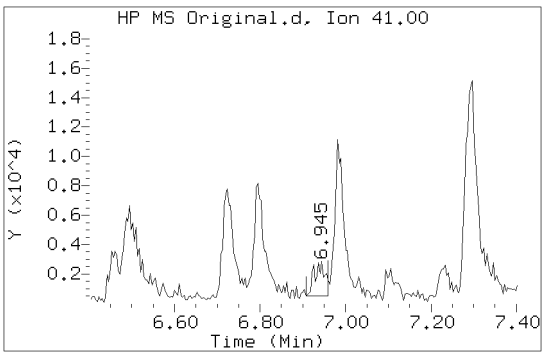
AFTER

MASS
55
AREA
7591
HEIGHT
3153
20-Jul-2023
15:04
linh
pham



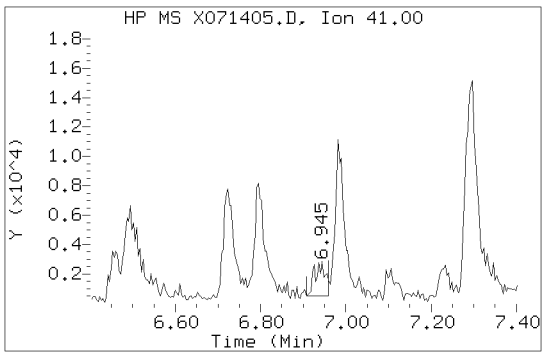
BEFORE

MASS
41
AREA
4124
HEIGHT
2354
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
4124
HEIGHT
2354
20-Jul-2023
15:04
linh
pham

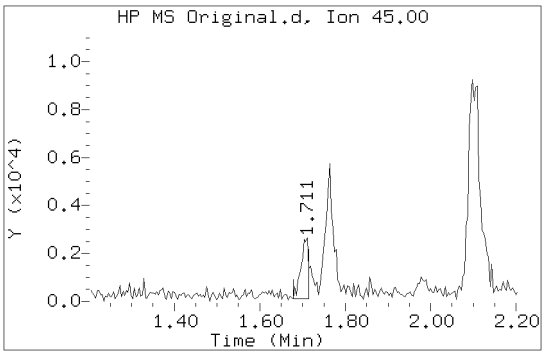


Ethanol (64-17-5)

Reason Code:

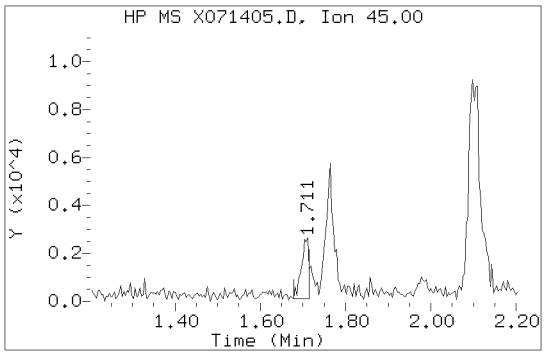
BEFORE

MASS
45
AREA
3219
HEIGHT
2559
20-Jul-2023
15:04
linh
pham



AFTER

MASS
45
AREA
3219
HEIGHT
2559
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Ethanol (64-17-5)

BEFORE

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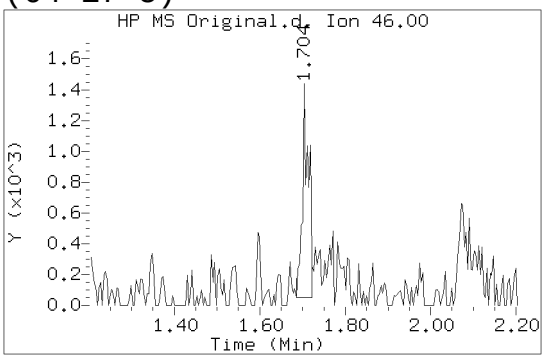
46
AREA
1433
HEIGHT
1387
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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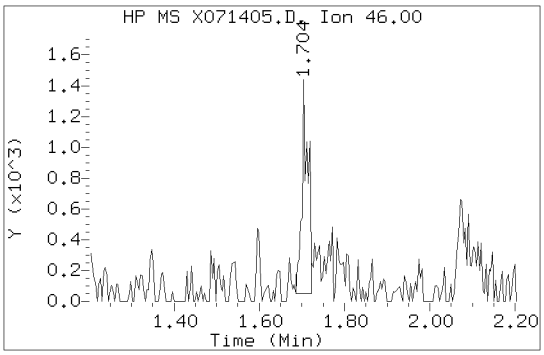
1433
HEIGHT
1387
20-Jul-2023
15:04
linh
pham



Reason Code:

BEFORE

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1290
20-Jul-2023
15:04
linh
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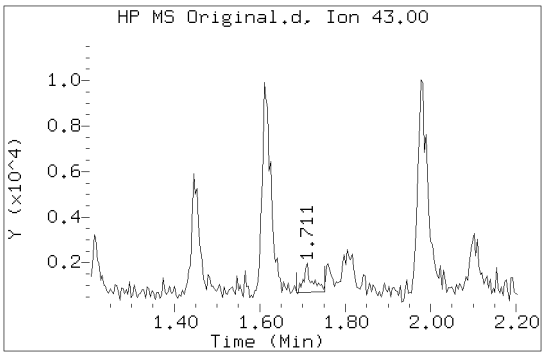

AFTER

MASS
43
AREA
1776
HEIGHT
1290
20-Jul-2023
15:04
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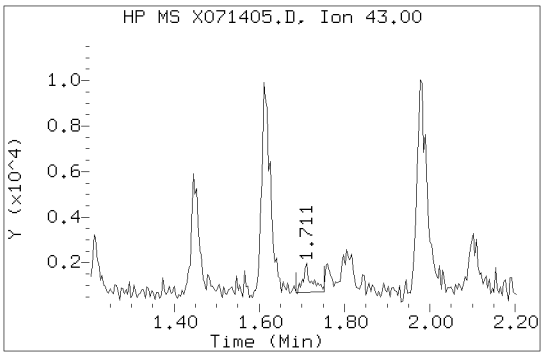
pham

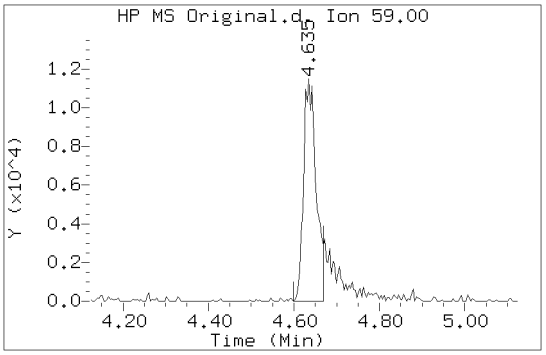


Reason Code:

tert-Butyl formate (762-75-4)

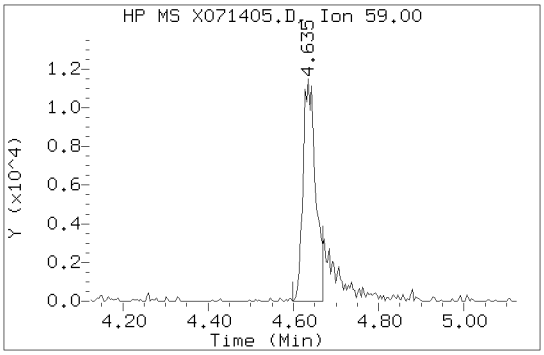
BEFORE

MASS
59
AREA
23857
HEIGHT
11486
20-Jul-2023
15:04
linh
pham



AFTER

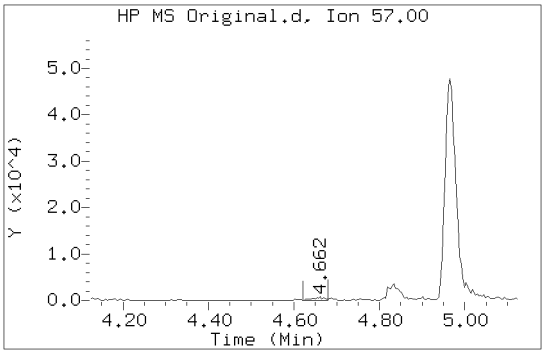
MASS
59
AREA
23857
HEIGHT
11486
20-Jul-2023
15:04
linh
pham



Reason Code:

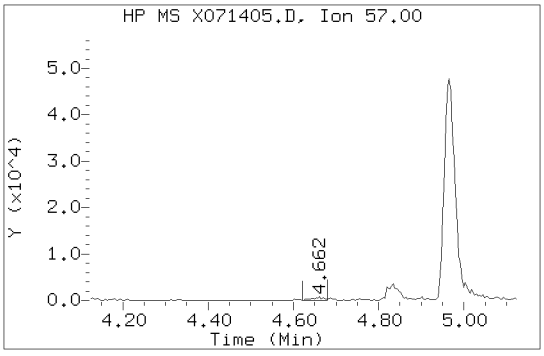
BEFORE

MASS
57
AREA
1334
HEIGHT
778
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
1334
HEIGHT
778
20-Jul-2023
15:04
linh
pham



Reason Code:

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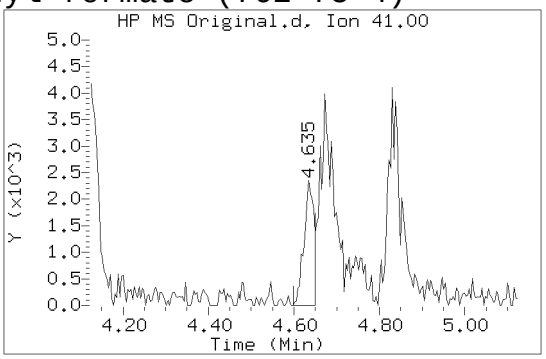
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

tert-Butyl formate (762-75-4)

Reason Code:

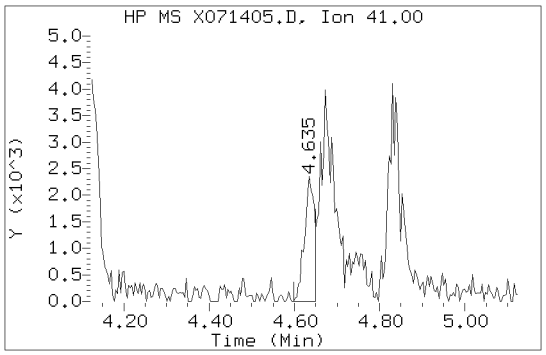
BEFORE

MASS
41
AREA
3833
HEIGHT
2355
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
3833
HEIGHT
2355
20-Jul-2023
15:04
linh
pham

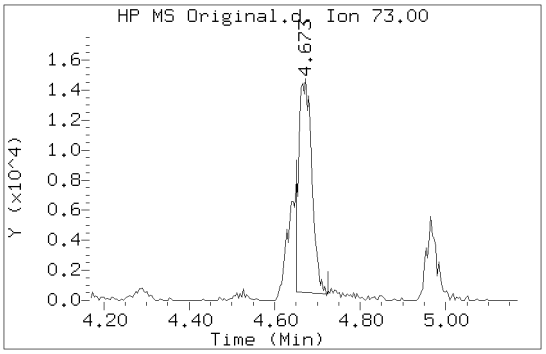


tert-Amyl methyl ether (974-05-08)

Reason Code:

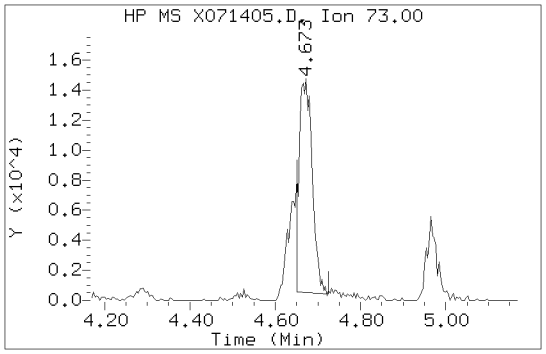
BEFORE

MASS
73
AREA
31345
HEIGHT
14253
20-Jul-2023
15:04
linh
pham



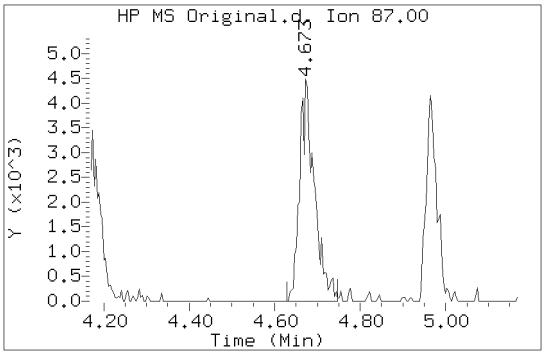
AFTER

MASS
73
AREA
31345
HEIGHT
14253
20-Jul-2023
15:04
linh
pham



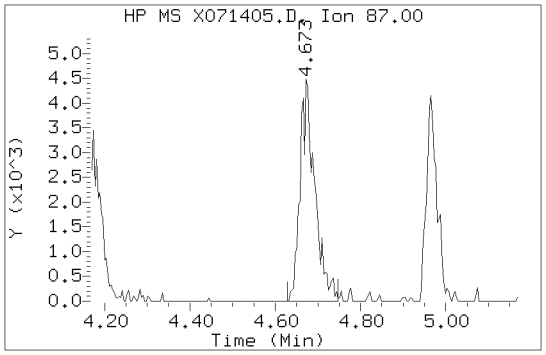
BEFORE

MASS
87
AREA
10923
HEIGHT
4489
20-Jul-2023
15:04
linh
pham



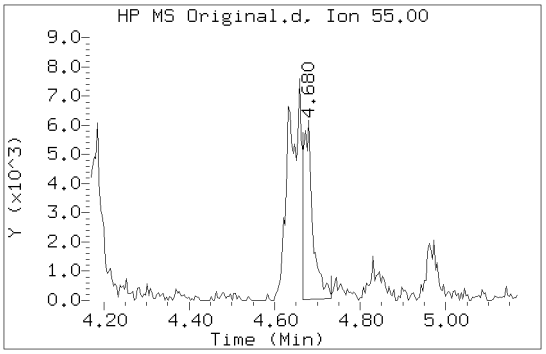
AFTER

MASS
87
AREA
10923
HEIGHT
4489
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
55
AREA
9755
HEIGHT
6135
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
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9755
HEIGHT
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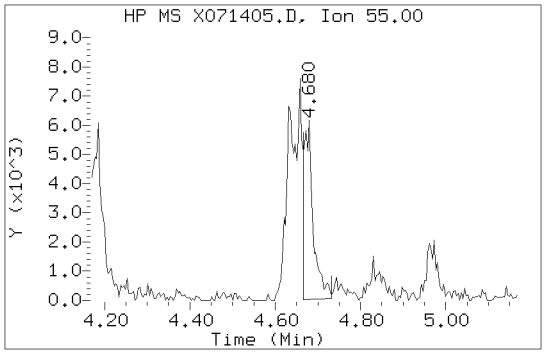
20-Jul-2023
15:04
linh
pham



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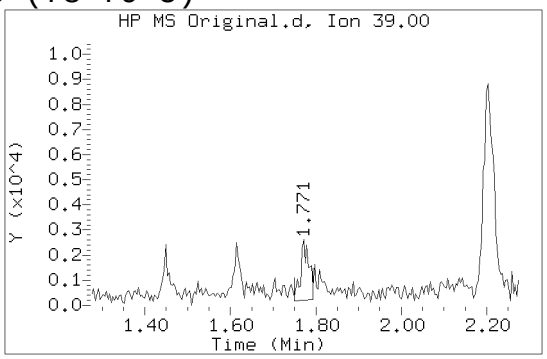
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Isoprene (78-79-5)

Reason Code:

BEFORE

MASS
39
AREA
3408
HEIGHT
2427
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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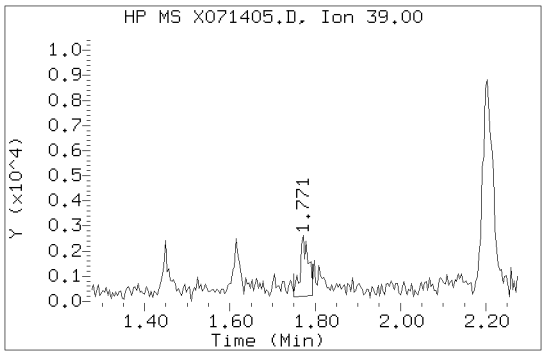
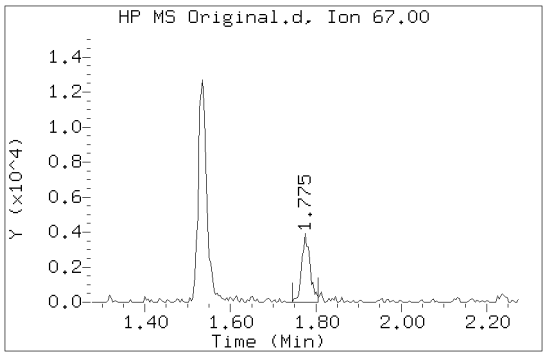
AREA
3408
HEIGHT
2427
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
67
AREA
5482
HEIGHT
3925
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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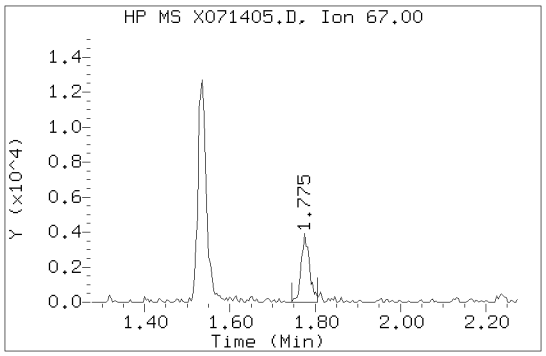
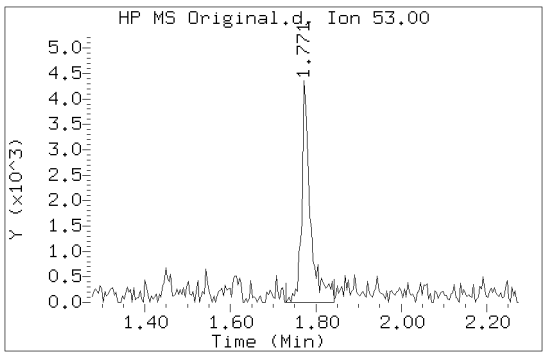
5482
HEIGHT
3925
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
53
AREA
6318
HEIGHT
4358
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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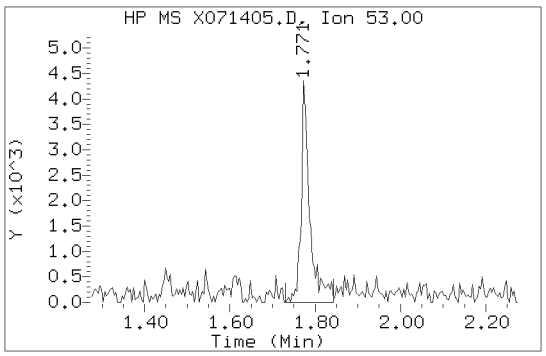
AREA
6318
HEIGHT
4358
20-Jul-2023
15:04
linh
pham



n-Amyl acetate (628-63-7)

Reason Code:

BEFORE

MASS
43
AREA
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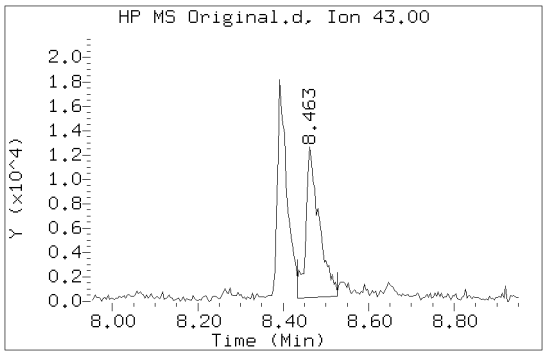
HEIGHT
12364
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
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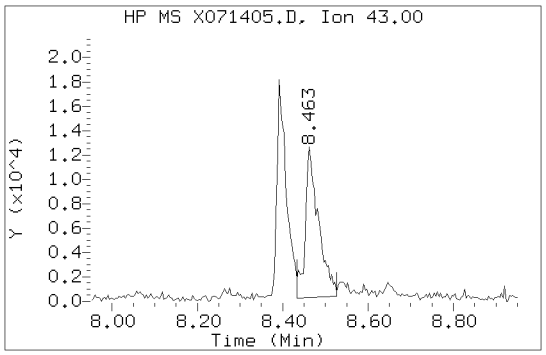
HEIGHT
12364
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

n-Amyl acetate (628-63-7)

Reason Code:

BEFORE
MASS
70
AREA
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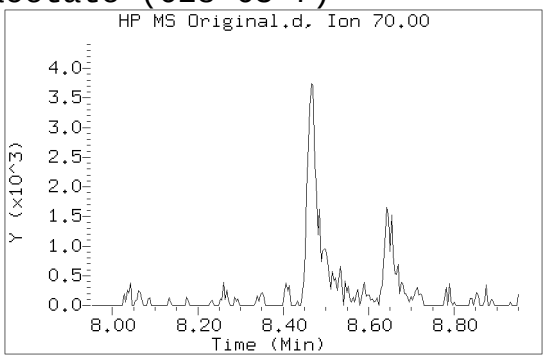
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
70
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HEIGHT
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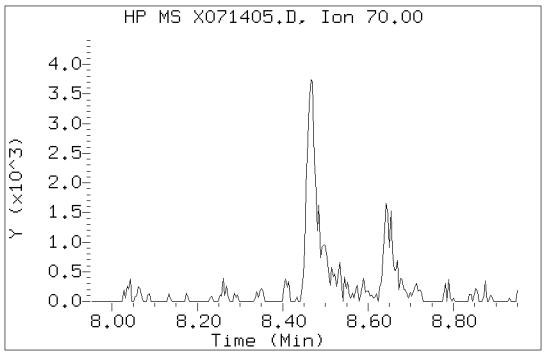
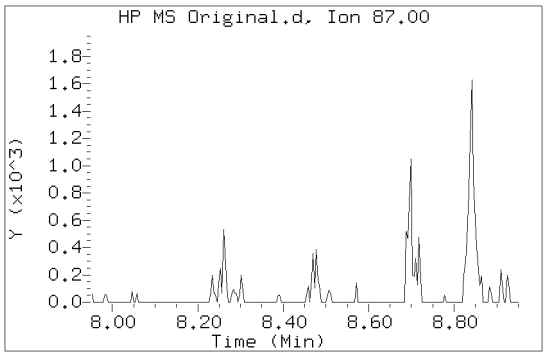
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
87
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
87
AREA
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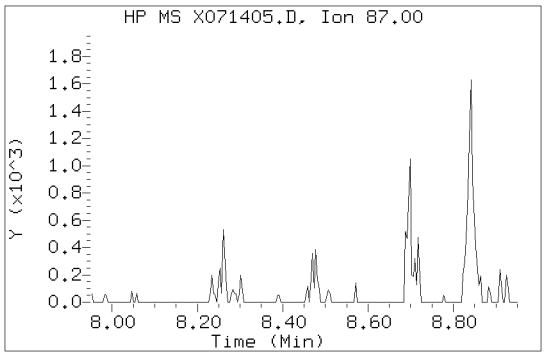
HEIGHT
0
20-Jul-2023
15:04
linh
pham



n-Butyl acetate (123-86-4)

Reason Code:

BEFORE
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AREA
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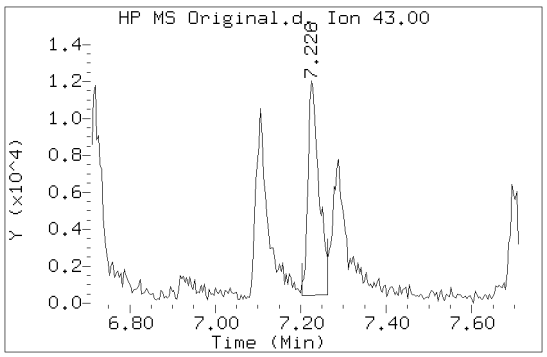
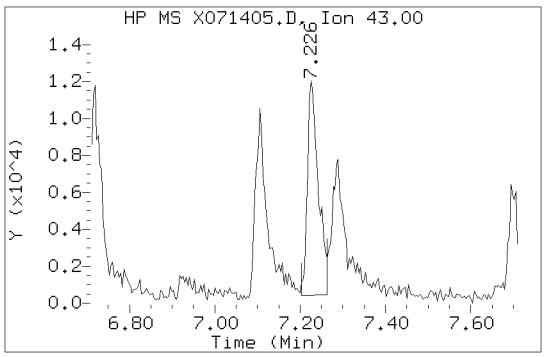
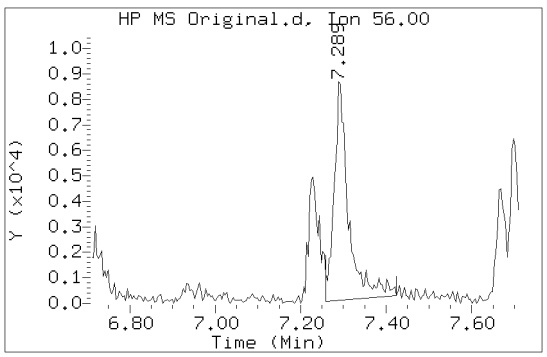
HEIGHT
11598
20-Jul-2023
15:04
linh
pham



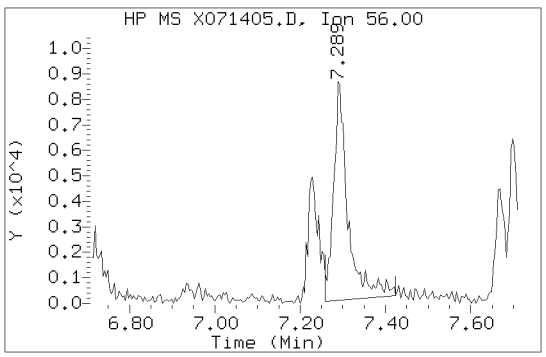
AFTER
MASS
43
AREA
20825
HEIGHT
11598
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
56
AREA
20012
HEIGHT
8570
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
AREA
20012
HEIGHT
8570
20-Jul-2023
15:04
linh
pham



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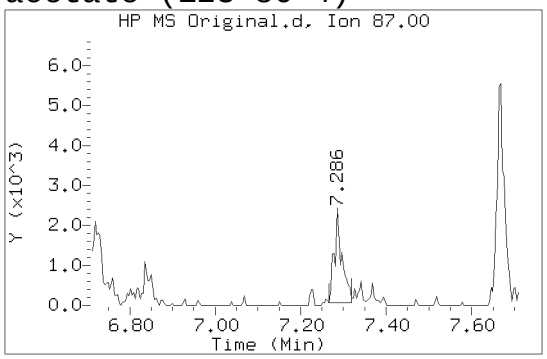
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

n-Butyl acetate (123-86-4)

Reason Code:

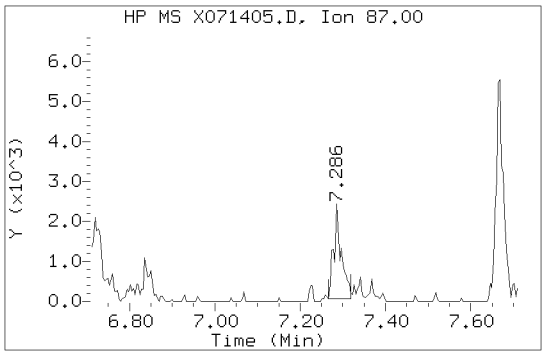
BEFORE

MASS
87
AREA
2958
HEIGHT
2373
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
2958
HEIGHT
2373
20-Jul-2023
15:04
linh
pham

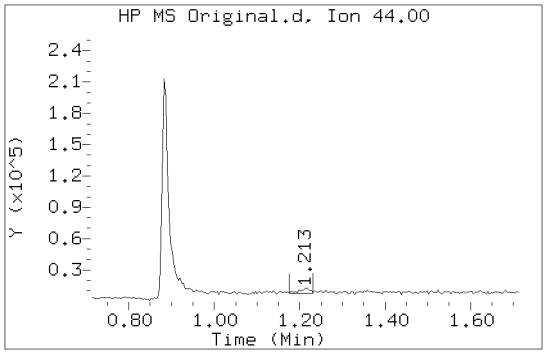


Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
44
AREA
8114
HEIGHT
5042
20-Jul-2023
15:04
linh
pham



AFTER

MASS
44
AREA
8114
HEIGHT
5042
20-Jul-2023
15:04
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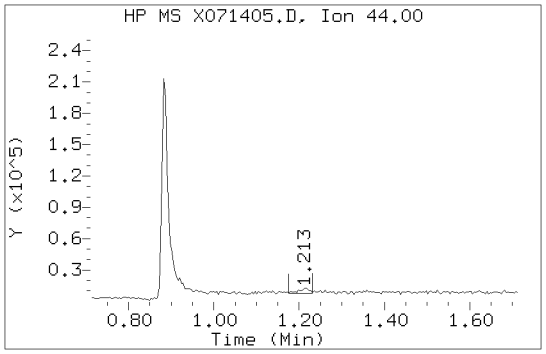

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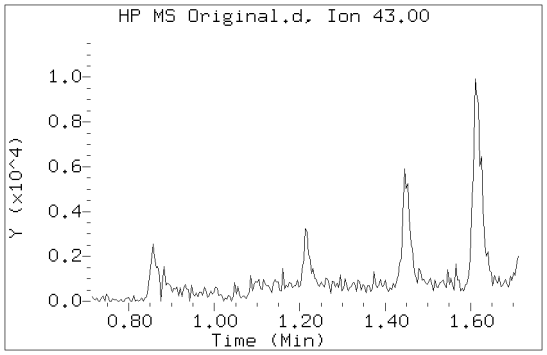

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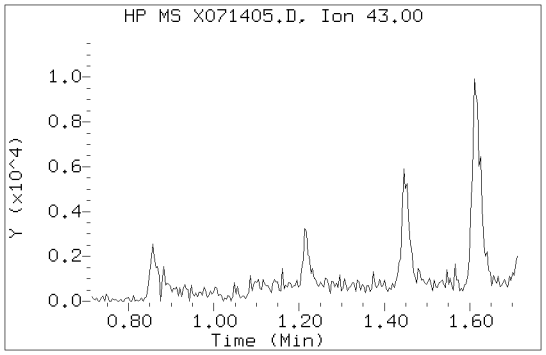

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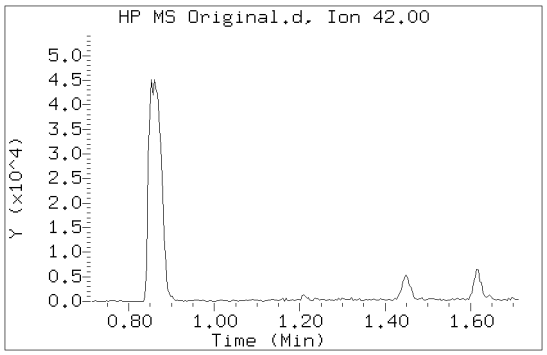

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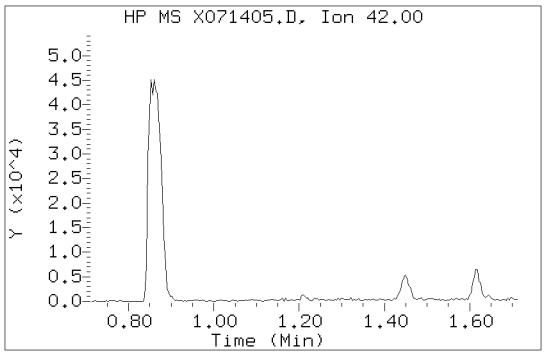

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Isobutylene (115-11-7)

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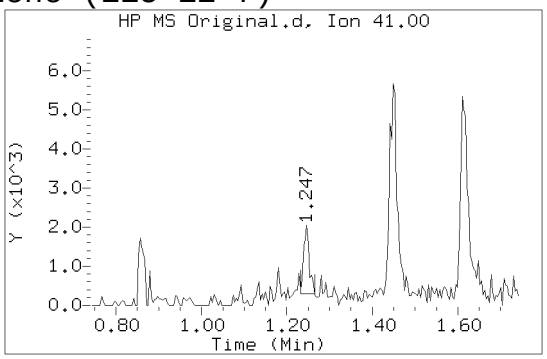

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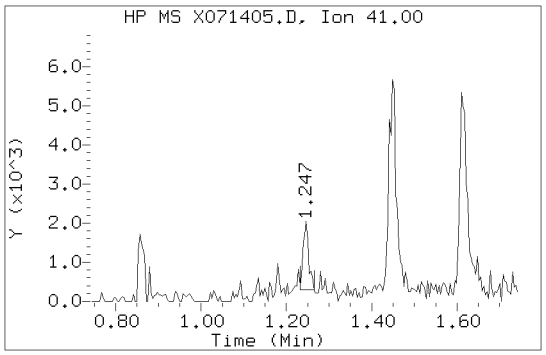

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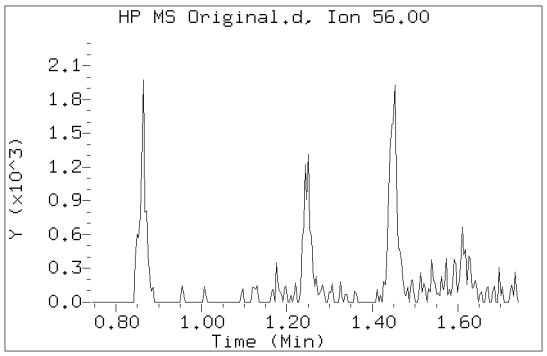

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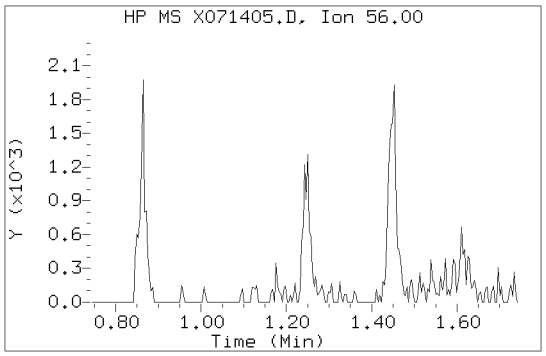

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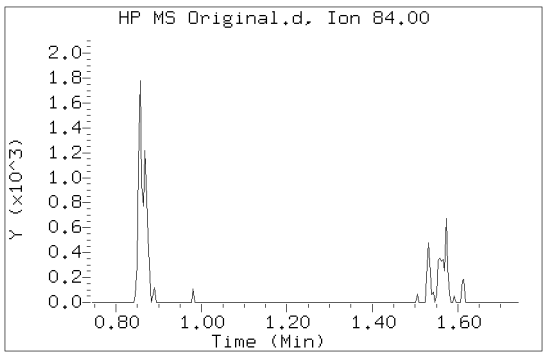

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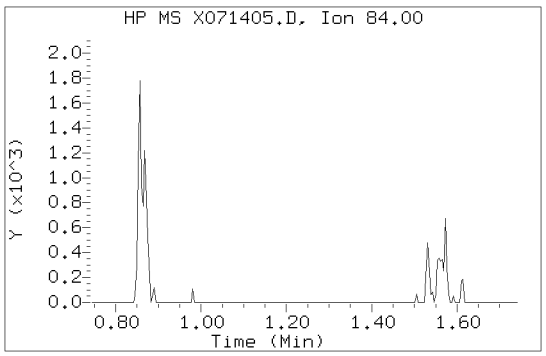

2-Ethylhexyl Acrylate (103-11-7)

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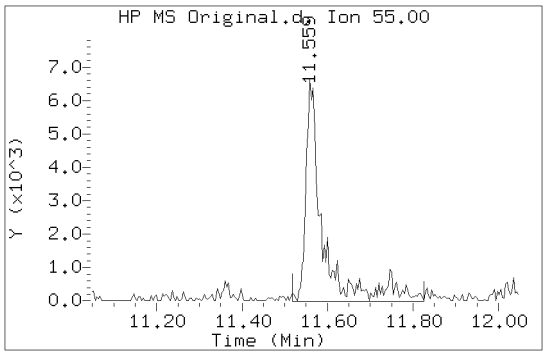

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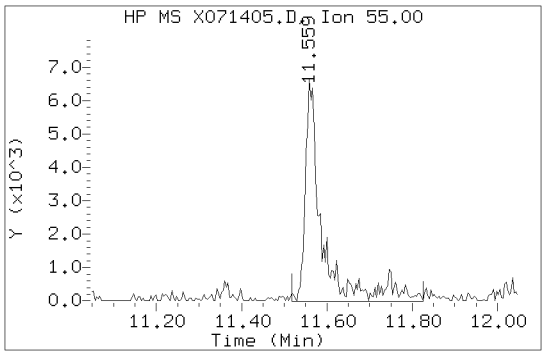

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InstruID : voa6.i
LabSampID : VSTD002

2-Ethylhexyl Acrylate (103-11-7)

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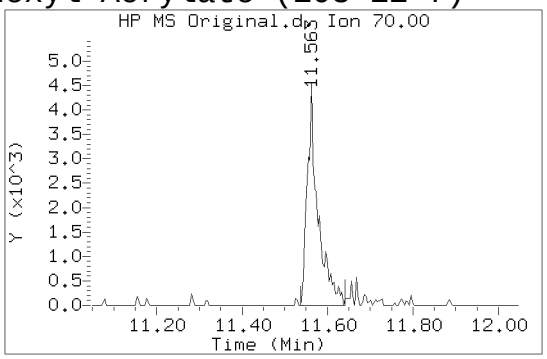

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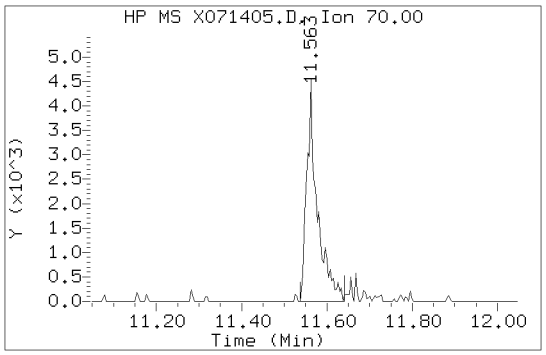

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Reason Code:

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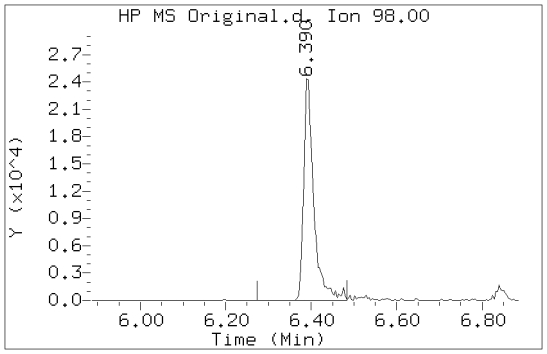

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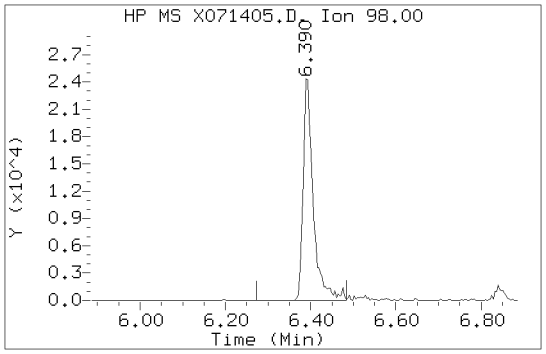

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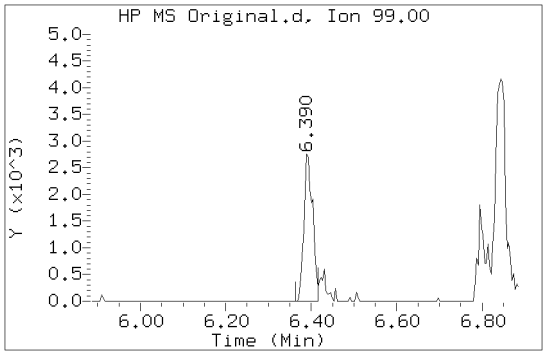

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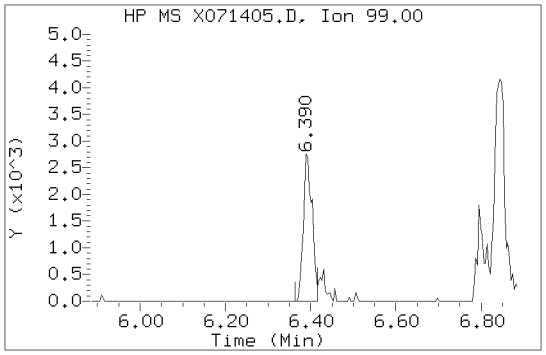

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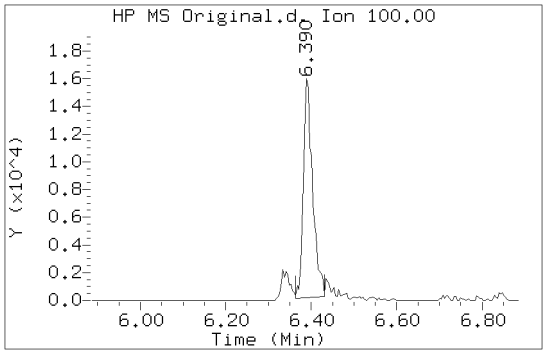

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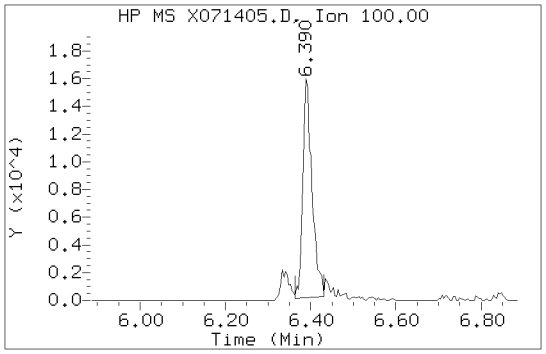

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071406.D
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Inj Date : 14-JUL-2023 13:43
Operator : PC Inst ID: voa6.i
Smp Info : VSTD005;VSTD005;1;5;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 13:23 Cal File: X071405.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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	4.177	4.177	(1.000)	515309	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	21541	5.00000	5.09
3	Chloromethane	50	1.081	1.081	(0.259)	35282	5.00000	4.53(M)
4	Propionitrile	54	3.671	3.671	(0.879)	48685	50.0000	47.69(a)
5	Vinyl Chloride	62	1.149	1.149	(0.275)	31539	5.00000	4.72
6	Bromomethane	94	1.343	1.343	(0.322)	13035	5.00000	4.72(M)
7	Chloroethane	64	1.407	1.407	(0.337)	17933	5.00000	4.71
8	Trichlorofluoromethane	101	1.565	1.565	(0.375)	30820	5.00000	4.56
9	Acrolein	56	1.868	1.868	(0.447)	2341	10.0000	12.99(aH)
10	Acetone	43	1.977	1.977	(0.473)	26152	10.0000	8.56
11	1,1-Dichloroethene	96	1.917	1.917	(0.459)	18372	5.00000	4.86
12	Isobutyl Alcohol	43	4.684	4.684	(1.121)	97691	100.000	100.01(a)
13	Acetonitrile	39	2.206	2.206	(0.528)	34072	50.0000	47.15(a)
14	Allyl Chloride	41	2.206	2.206	(0.528)	83408	5.00000	4.92(a)
15	Iodomethane	142	2.029	2.029	(0.486)	29645	10.0000	9.67(M)
16	Acrylonitrile	53	2.539	2.539	(0.608)	26399	10.0000	10.51
17	Methylene Chloride	84	2.307	2.307	(0.552)	25734	5.00000	4.52
18	Methyl tert-butyl ether	73	2.543	2.543	(0.609)	69208	5.00000	4.92
19	Carbon Disulfide	76	2.074	2.074	(0.497)	111855	10.0000	9.42
20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	22471	5.00000	5.14

21 Vinyl Acetate	43	3.008	3.008 (0.720)	178820	10.0000	9.90
22 1,1-Dichloroethane	63	2.925	2.925 (0.700)	46539	5.00000	4.85

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.778	1.778	(0.426)	11212	5.00000	4.83(aM)
	24 2-Butanone	43	3.608	3.608	(0.864)	25624	10.0000	9.33(M)
	25 Methacrylonitrile	41	3.848	3.848	(0.921)	30821	5.00000	4.63(a)
	26 2,2-Dichloropropane	77	3.506	3.506	(0.839)	34523	5.00000	4.82
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.845)	27063	5.00000	4.86
	28 Chloroform	83	3.908	3.908	(0.935)	45886	5.00000	4.67
	29 Bromochloromethane	128	3.803	3.803	(0.910)	15326	5.00000	4.91
$	30 Dibromofluoromethane	113	4.102	4.102	(0.982)	26145	5.00000	4.85
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	34806	5.00000	4.61
	32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	28199	5.00000	4.24
	33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	41945	5.00000	4.67
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	30432	5.00000	4.54
$	35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.072)	31653	5.00000	4.80
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	815041	50.0000	
	37 Benzene	78	4.515	4.515	(0.909)	91790	5.00000	4.70
	38 Trichloroethene	130	5.212	5.212	(1.050)	24824	5.00000	4.50(a)
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	35030	5.00000	4.69(a)
	40 Methyl Methacrylate	41	5.617	5.617	(1.345)	30166	5.00000	4.85(a)
	41 2-Chloroethylvinyl ether	63	6.056	6.056	(1.220)	21401	10.0000	9.38(a)
	42 1,2-Dichloropropane	63	5.437	5.437	(1.095)	30550	5.00000	4.87(a)
	43 2-Nitropropane	43	5.981	5.981	(1.432)	8304	5.00000	4.05(a)
	44 Dibromomethane	93	5.557	5.557	(1.119)	16922	5.00000	4.76(a)
	45 4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	71437	10.0000	9.87
	46 cis-1,3-Dichloropropene	75	6.160	6.160	(1.241)	38467	5.00000	4.48(a)
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	735002	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	95273	5.00000	5.03(M)
	49 Ethyl Methacrylate	69	6.715	6.715	(1.353)	26485	5.00000	4.96(a)
	50 Toluene	91	6.445	6.445	(0.841)	96792	5.00000	4.89(a)
	51 trans-1,3-Dichloropropene	75	6.685	6.685	(1.347)	33424	5.00000	4.62(a)
	52 2-Hexanone	43	7.098	7.098	(0.926)	48930	10.0000	10.29
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	20880	5.00000	4.97(a)
	54 1,3-Dichloropropane	76	6.981	6.981	(0.911)	43005	5.00000	5.01
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	28644	5.00000	4.72(a)
	56 Tetrachloroethene	164	6.929	6.929	(0.904)	19962	5.00000	4.88(a)
	57 1,2-Dibromoethane	107	7.263	7.263	(0.947)	25723	5.00000	5.36
	58 1-Chlorohexane	55	7.697	7.697	(1.550)	29679	5.00000	4.53(a)
	59 Chlorobenzene	112	7.694	7.694	(1.003)	65984	5.00000	4.77(a)
	60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	25299	5.00000	4.67(a)
	61 Ethylbenzene	106	7.799	7.799	(1.017)	32420	5.00000	4.67(a)
	62 m,p-Xylenes	106	7.907	7.907	(1.031)	79790	10.0000	9.17(a)
	63 o-Xylene	106	8.241	8.241	(1.075)	37444	5.00000	4.54(a)
	64 Styrene	104	8.267	8.267	(1.078)	65591	5.00000	4.56(a)
	66 Bromoform	173	8.413	8.413	(1.097)	17937	5.00000	4.61(a)
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	96601	5.00000	4.56(a)
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	33128	5.00000	5.01
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	40007	5.00000	5.08
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	393512	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	27801	5.00000	5.30
	72 trans-1,4-Dichloro-2-butene	53	8.893	8.893	(1.160)	9958	5.00000	4.45(aM)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	105135	5.00000	4.42(a)
	74 Bromobenzene	156	8.811	8.811	(0.912)	30146	5.00000	4.89(a)
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	77581	5.00000	4.35(a)

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	73357	5.00000	4.57(a)
77	4-Chlorotoluene	91	9.073	9.073 (0.939)	83281	5.00000	4.72(a)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071406.D Page 3
Report Date: 20-Jul-2023 15:05

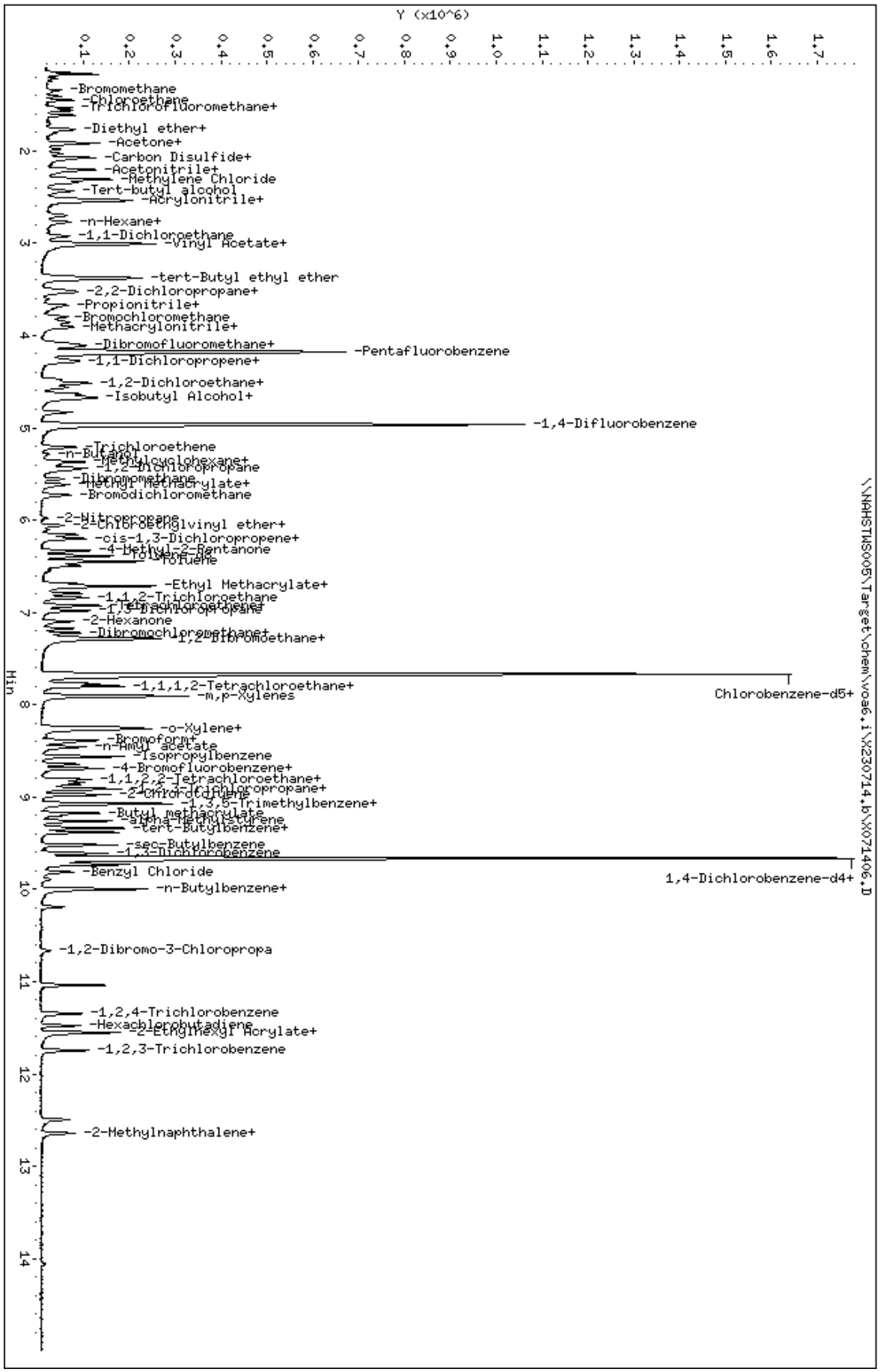
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	68497	5.00000	4.48(a)
79	1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	75897	5.00000	4.24(a)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	89261	5.00000	4.38(a)
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	80480	5.00000	4.32(a)
83	1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	48860	5.00000	4.55(a)
84	1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	56875	5.00000	4.83(a)
86	Benzyl Chloride	91	9.815	9.815	(1.280)	45616	5.00000	5.82(M)
87	n-Butylbenzene	91	9.995	9.995	(1.035)	67203	5.00000	4.31(a)
88	1,2-Dichlorobenzene	146	9.995	9.995	(1.035)	49668	5.00000	4.71(a)
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.659	(1.103)	5268	5.00000	5.83(M)
90	1,2,4-Trichlorobenzene	180	11.349	11.349	(1.175)	33646	5.00000	4.64(aM)
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	13714	5.00000	6.27
92	Naphthalene	128	11.551	11.551	(1.196)	85025	5.00000	4.74(aM)
93	1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	30270	5.00000	4.47(a)
146	Methyl acetate	43	2.236	2.236	(0.535)	23616	5.00000	5.14
138	Freon TF	101	1.921	1.921	(0.460)	16656	5.00000	5.27
141	Cyclohexane	56	4.121	4.121	(0.987)	39083	5.00000	4.37(aH)
142	Tetrahydrofuran	42	3.863	3.863	(0.925)	12650	10.0000	9.54
147	Methylcyclohexane	55	5.399	5.399	(1.088)	84656	5.00000	4.92(aM)
135	1,4-Dioxane	88	5.617	5.617	(1.345)	6551	100.000	106.98(M)
132	n-Butanol	56	5.287	5.287	(1.266)	13588	100.000	79.21(aM)
131	Methyl Acrylate	55	3.716	3.716	(0.890)	33338	5.00000	4.75(aMH)
133	Ethyl Acrylate	55	5.399	5.399	(1.293)	82574	5.00000	4.83(M)
136	n-Hexane	57	2.775	2.775	(0.664)	26276	5.00000	5.21
139	Diethyl ether	59	1.763	1.763	(0.422)	23219	5.00000	4.83(a)
148	Tert-butyl alcohol	59	2.434	2.434	(0.583)	63493	100.000	97.62
149	Isopropyl alcohol	45	2.101	2.101	(0.503)	37998	100.000	94.15
156	Diisopropyl ether	45	3.008	3.008	(0.720)	98591	5.00000	4.64(Ta)
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	83294	5.00000	4.57(a)
167	Ethanol	45	1.703	1.703	(0.408)	7997	100.000	94.37
172	tert-Butyl formate	59	4.627	4.627	(1.108)	54968	10.0000	9.98
173	3,3-Dimethyl-1-butanol	57	7.289	7.289	(0.951)	78844	100.000	99.74
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	83517	5.00000	4.92(aM)
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	109587	5.00000	5.02
176	tert-Amyl alcohol	59	4.627	4.627	(1.108)	54968	100.000	97.64
151	4-Methyl-2-pentanol	45	6.715	6.715	(1.353)	183123	100.000	104.84(M)
180	1-Methylnaphthalene	142	12.642	12.642	(1.308)	33519	5.00000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	30818	5.00000	4.65(a)
152	Amyl alcohol	42	6.921	6.921	(0.903)	21498	100.000	101.70(M)
158	Dichlorofluoromethane	67	1.535	1.535	(0.367)	38837	5.00000	4.67
159	Propylene oxide	43	1.808	1.808	(0.433)	7637	10.0000	12.08
161	3-Methyl-1-butanol	55	6.921	6.921	(0.903)	17029	100.000	94.10(M)
162	Butyl acrylate	55	8.256	8.256	(1.077)	63254	5.00000	4.52(a)
163	Butyl methacrylate	41	9.178	9.178	(0.950)	44524	5.00000	4.72(a)
164	Dicyclopentadiene	66	9.680	9.680	(1.002)	101741	5.00000	4.48(a)
182	Epichlorohydrin	57	6.104	6.104	(1.230)	11661	20.0000	19.15
M 94	1,2-Dichloroethylene (total)	96				49534	10.0000	(a)
130	Ethyl Acetate	43	3.679	3.679	(0.881)	39438	5.00000	5.15(M)
134	Cyclohexanone	55	8.646	8.646	(0.895)	36410	100.000	103.93(a)
185	Isoprene	39	1.775	1.775	(0.425)	9011	5.00000	5.30
188	Isopropyl acetate	43	4.684	4.684	(0.943)	98768	5.00000	4.59(a)
187	n-Amyl acetate	43	8.458	8.458	(1.103)	62876	5.00000	4.66(a)

189 n-Butyl acetate	43	7.221	7.221 (0.942)	54777	5.00000	4.86(aH)
150 Allyl alcohol	57	2.775	2.775 (0.664)	26276	100.000	102.36

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
194 Acetaldehyde	44	1.212	1.212	(0.290)	20987	20.0000	27.87(M)
195 Methyl Amyl Ketone	43	8.387	8.387	(1.094)	76515	5.00000	4.98(aH)
200 Dimethyl Disulfide	94	6.202	6.202	(0.809)	44165	5.00000	4.45(a)
202 Isobutylene	41	1.246	1.246	(0.298)	4070	5.00000	4.77(aM)
205 2-Ethylhexyl Acrylate	55	11.551	11.551	(1.196)	41733	5.00000	4.15(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: VSTD005
Sample Info: VSTD005;VSTD005;1;5;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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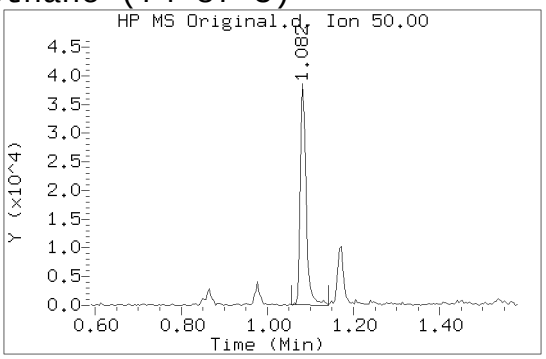
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071406.D
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

Chloromethane (74-87-3)

Reason Code:

BEFORE

MASS
50
AREA
35282
HEIGHT
38561
20-Jul-2023
15:04
linh
pham



AFTER

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20-Jul-2023
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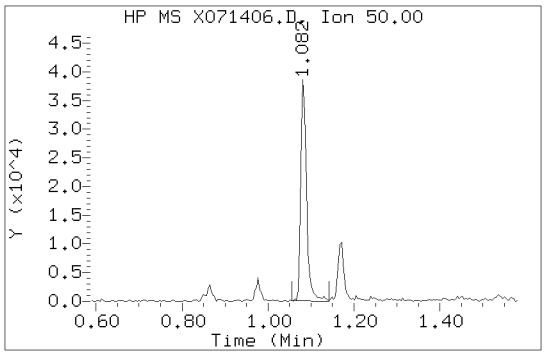

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20-Jul-2023
15:04
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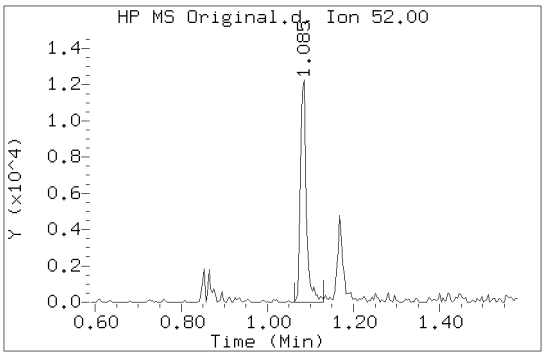

AFTER

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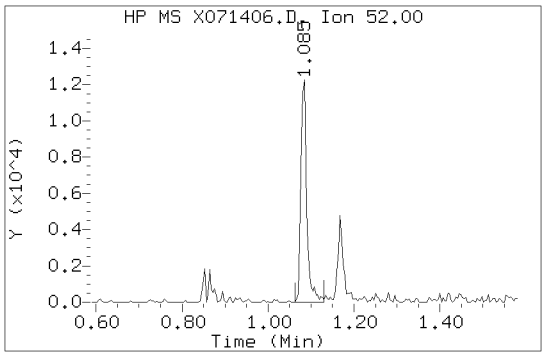

Bromomethane (74-83-9)

Reason Code:

BEFORE

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AREA
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HEIGHT
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20-Jul-2023
15:04
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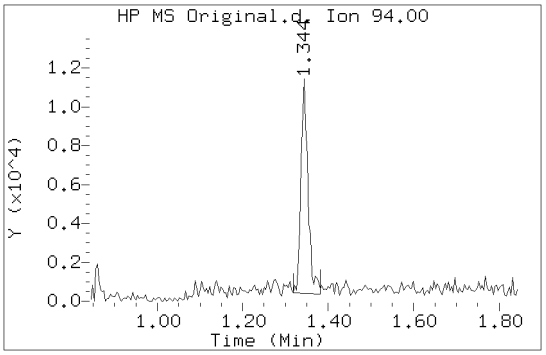

AFTER

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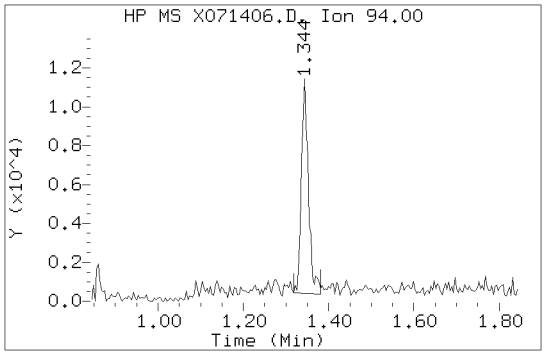

BEFORE

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AREA
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20-Jul-2023
15:04
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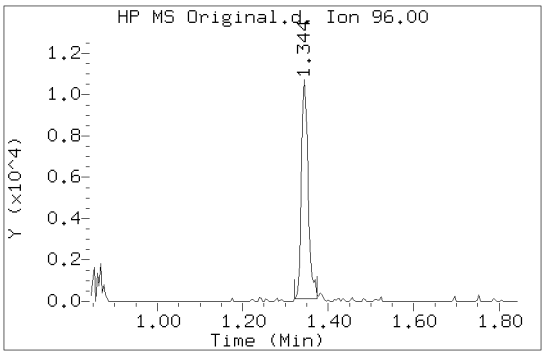

AFTER

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20-Jul-2023
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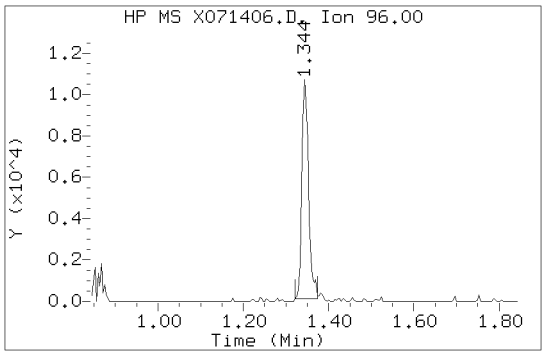

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InstruID : voa6.i
LabSampID : VSTD005

Iodomethane (74-88-4)

Reason Code:

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HEIGHT
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20-Jul-2023
15:04
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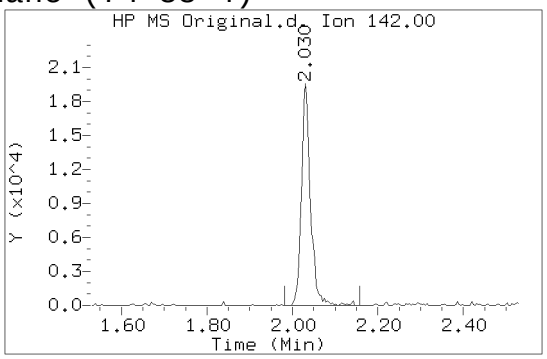

AFTER

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20-Jul-2023
15:04
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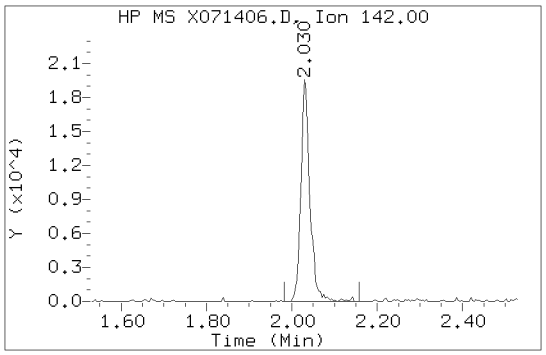

BEFORE

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AREA
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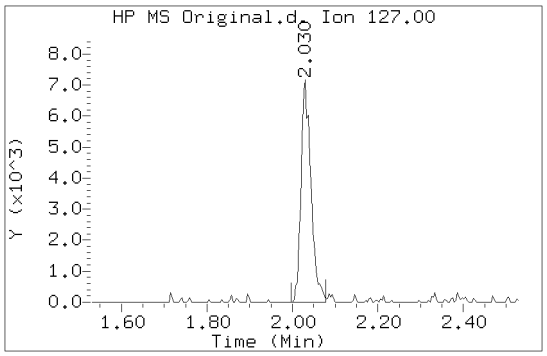
HEIGHT
7165
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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HEIGHT
7165
20-Jul-2023
15:04
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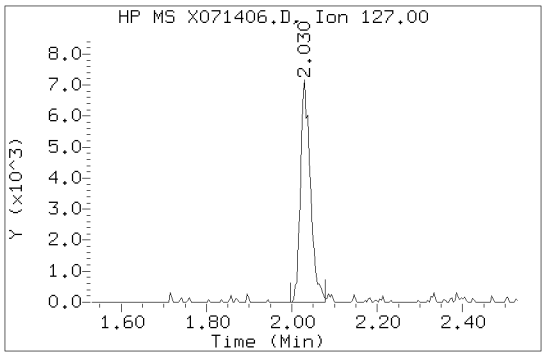

BEFORE

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2994
20-Jul-2023
15:04
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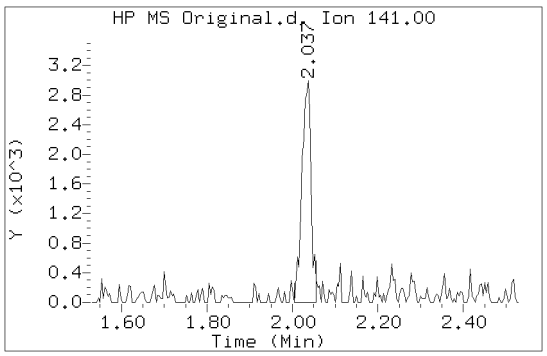

AFTER

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20-Jul-2023
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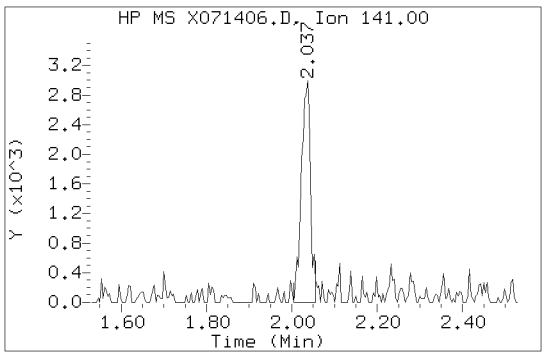

2-Butanone (78-93-3)

Reason Code:

BEFORE

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AREA
25624
HEIGHT
9920
20-Jul-2023
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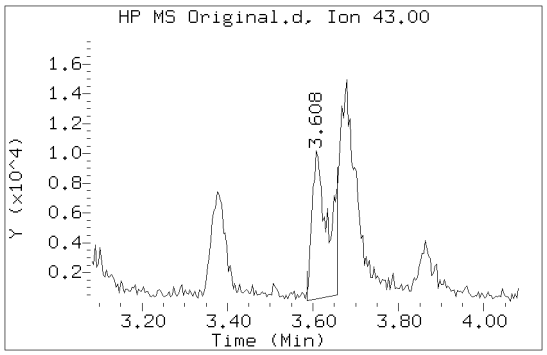

AFTER

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20-Jul-2023
15:04
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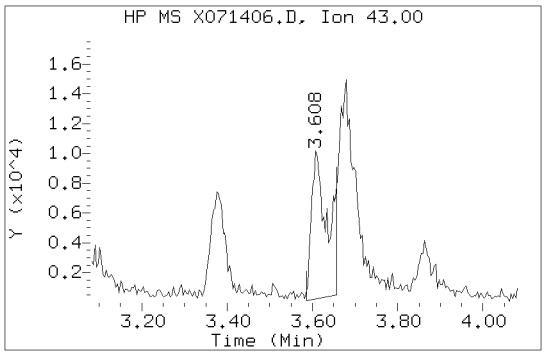

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Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

2-Butanone (78-93-3)

Reason Code:

BEFORE

MASS
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AREA
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HEIGHT
1873
20-Jul-2023
15:04
linh
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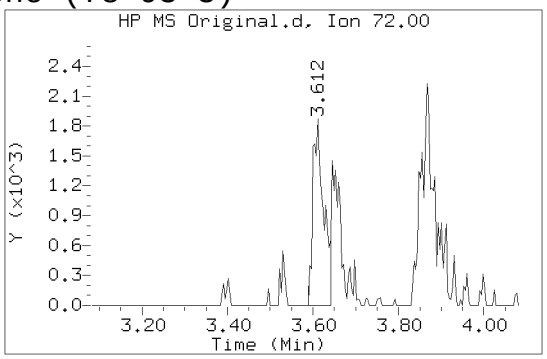

AFTER

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20-Jul-2023
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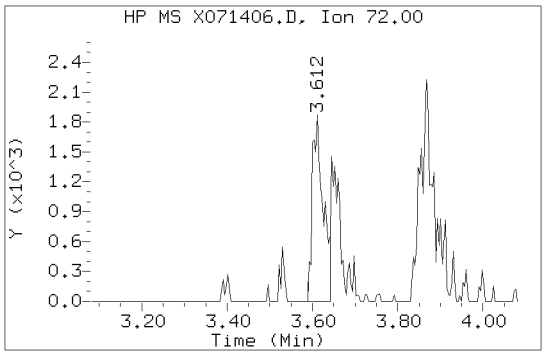

1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

BEFORE

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20-Jul-2023
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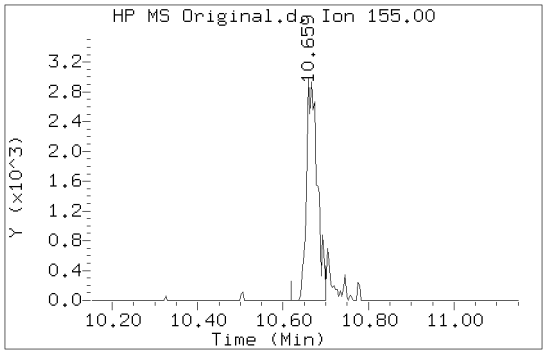

AFTER

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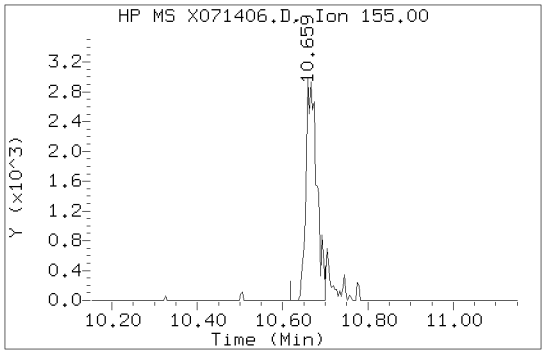

BEFORE

MASS
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6914
HEIGHT
3477
20-Jul-2023
15:04
linh
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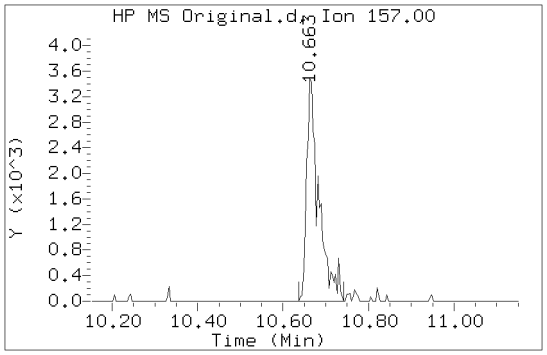

AFTER

MASS
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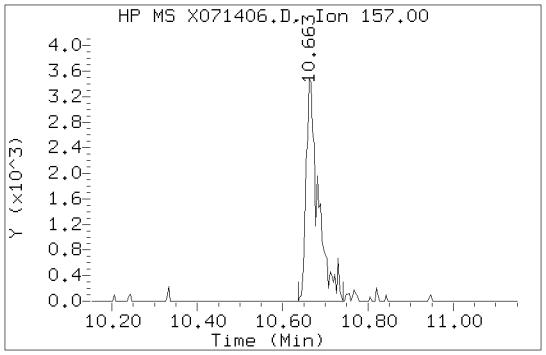

BEFORE

MASS
75
AREA
5387
HEIGHT
3348
20-Jul-2023
15:04
linh
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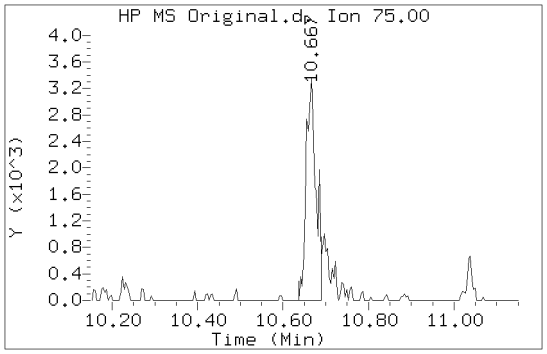

AFTER

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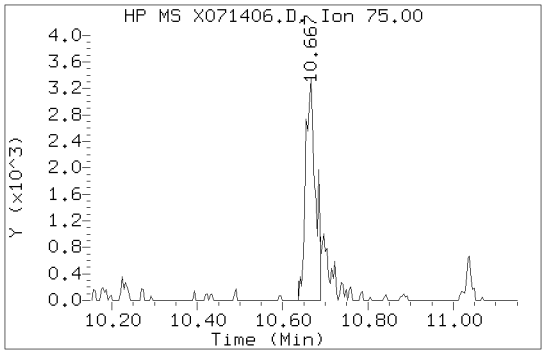

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LabSampID : VSTD005

1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

BEFORE

MASS
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AREA
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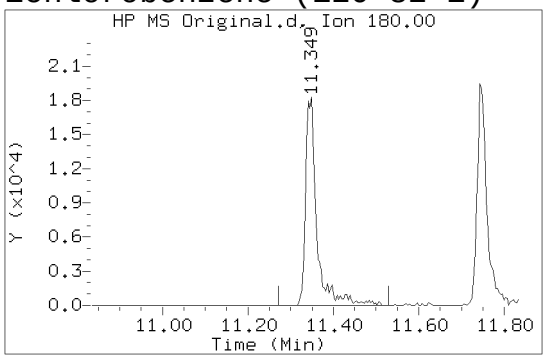
HEIGHT
18264
20-Jul-2023
15:04
linh
pham



AFTER

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20-Jul-2023
15:04
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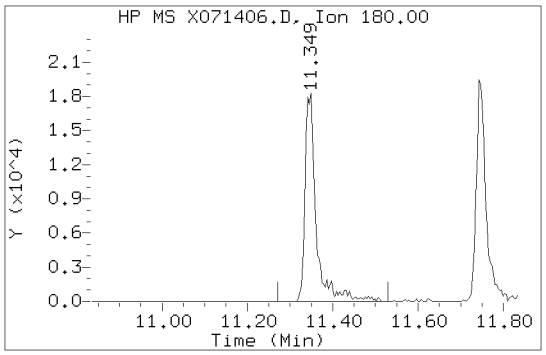

BEFORE

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HEIGHT
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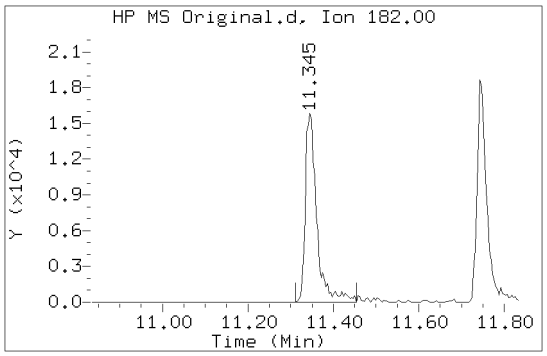
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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15861
20-Jul-2023
15:04
linh
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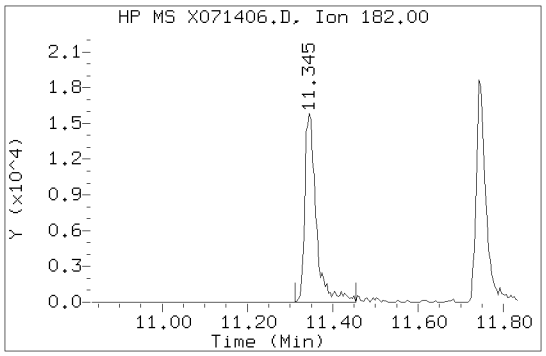

BEFORE

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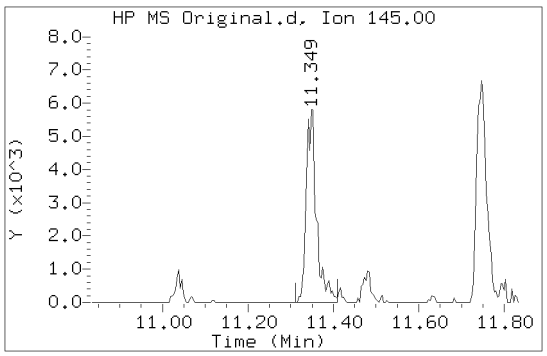
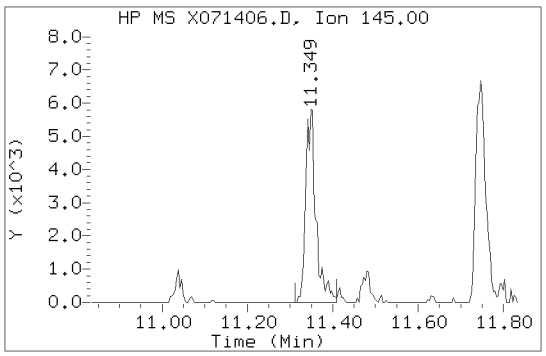
HEIGHT
5817
20-Jul-2023
15:04
linh
pham



AFTER

MASS
145
AREA
9753
HEIGHT
5817
20-Jul-2023
15:04
linh
pham

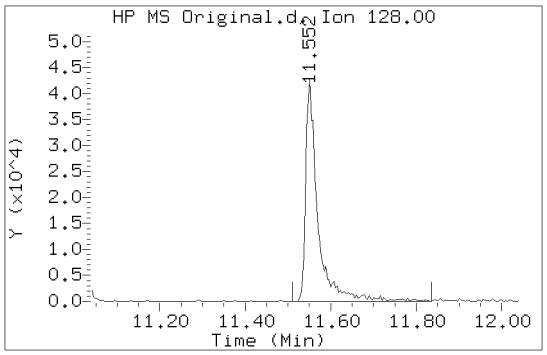


Naphthalene (91-20-3)

Reason Code:

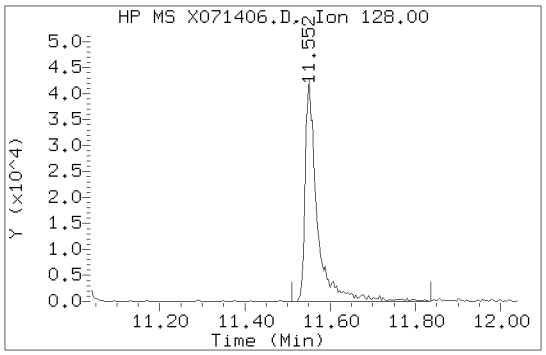
BEFORE

MASS
128
AREA
85025
HEIGHT
42672
20-Jul-2023
15:04
linh
pham



AFTER

MASS
128
AREA
85025
HEIGHT
42672
20-Jul-2023
15:04
linh
pham



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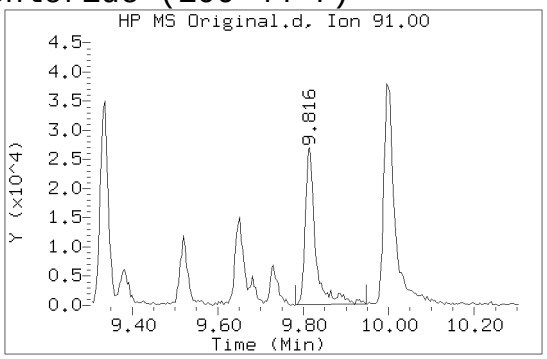
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

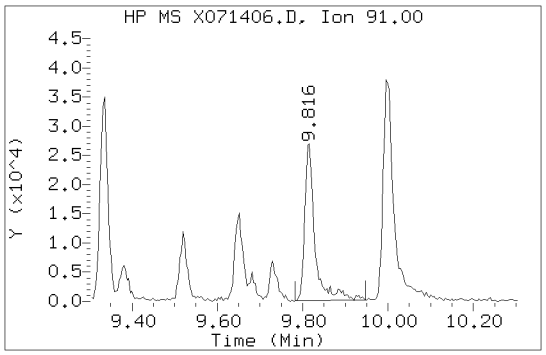
Benzyl Chloride (100-44-7)

Reason Code:

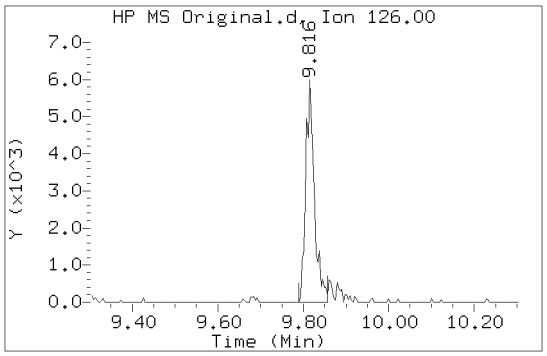
BEFORE
MASS
91
AREA
45616
HEIGHT
26893
20-Jul-2023
15:04
linh
pham



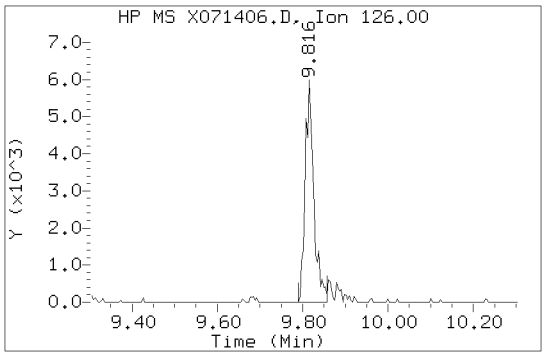
AFTER
MASS
91
AREA
45616
HEIGHT
26893
20-Jul-2023
15:04
linh
pham



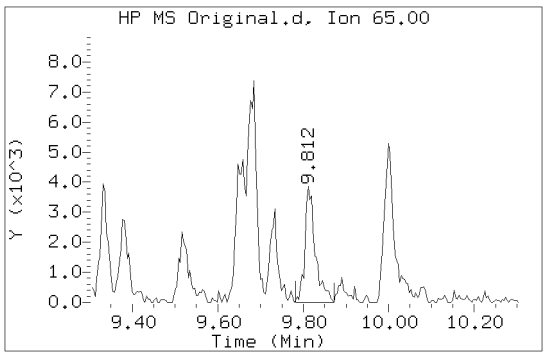
BEFORE
MASS
126
AREA
8499
HEIGHT
5989
20-Jul-2023
15:04
linh
pham



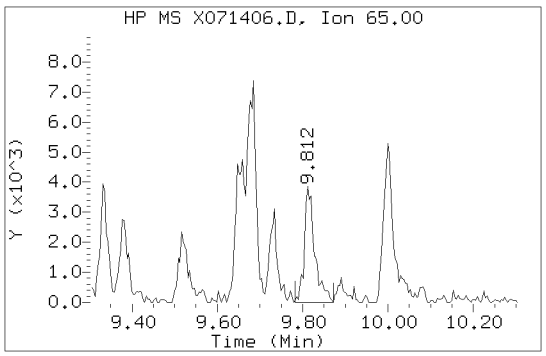
AFTER
MASS
126
AREA
8499
HEIGHT
5989
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
65
AREA
6591
HEIGHT
3852
20-Jul-2023
15:04
linh
pham



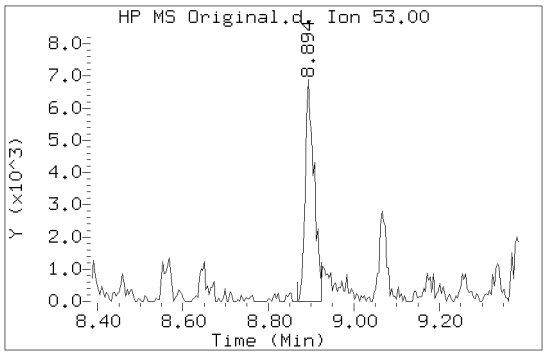
AFTER
MASS
65
AREA
6591
HEIGHT
3852
20-Jul-2023
15:04
linh
pham



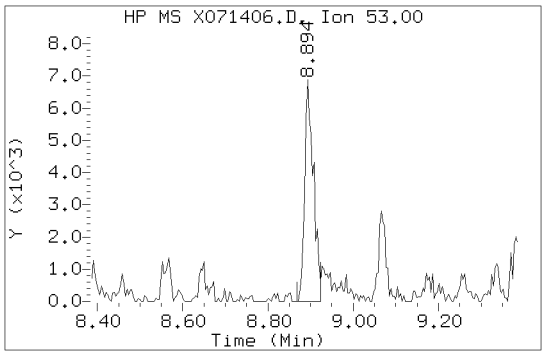
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

BEFORE
MASS
53
AREA
9958
HEIGHT
6886
20-Jul-2023
15:04
linh
pham



AFTER
MASS
53
AREA
9958
HEIGHT
6886
20-Jul-2023
15:04
linh
pham



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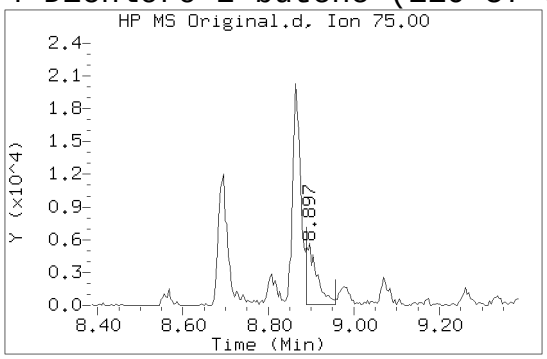
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

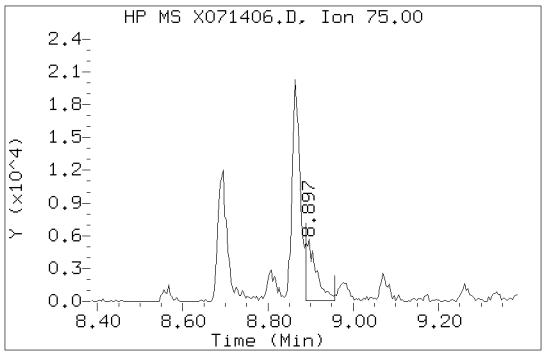
BEFORE

MASS
75
AREA
9615
HEIGHT
5621
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
9615
HEIGHT
5621
20-Jul-2023
15:04
linh
pham

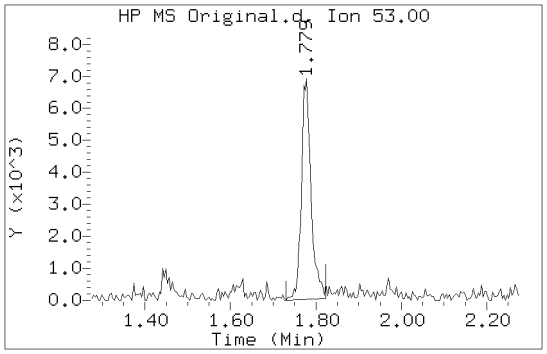


Chloroprene (126-99-8)

Reason Code:

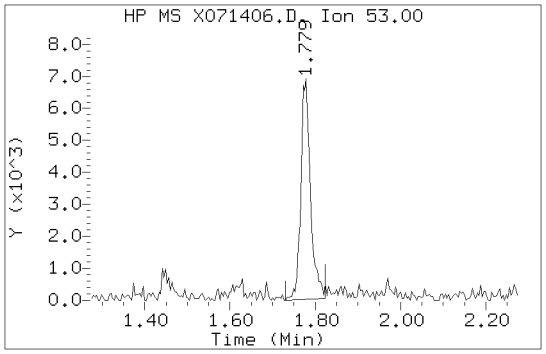
BEFORE

MASS
53
AREA
11212
HEIGHT
6900
20-Jul-2023
15:04
linh
pham



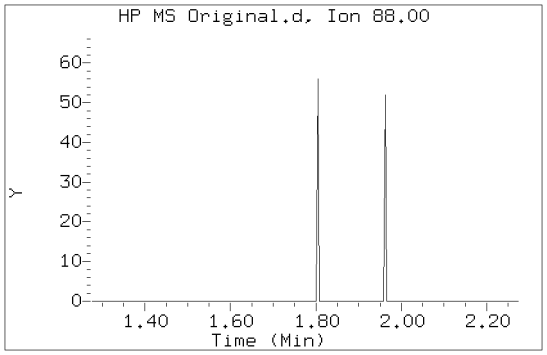
AFTER

MASS
53
AREA
11212
HEIGHT
6900
20-Jul-2023
15:04
linh
pham



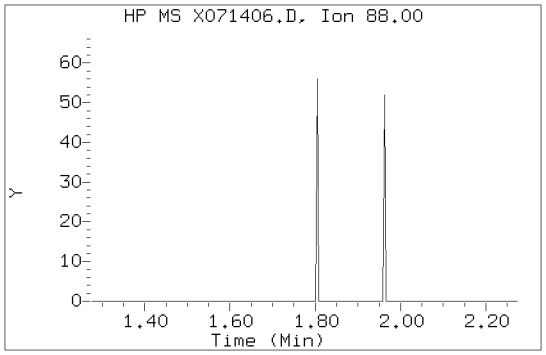
BEFORE

MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

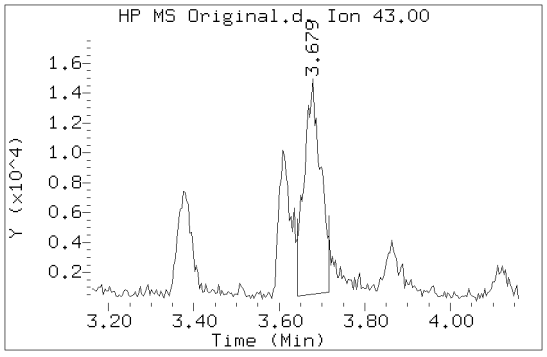


Ethyl Acetate (141-78-6)

Reason Code:

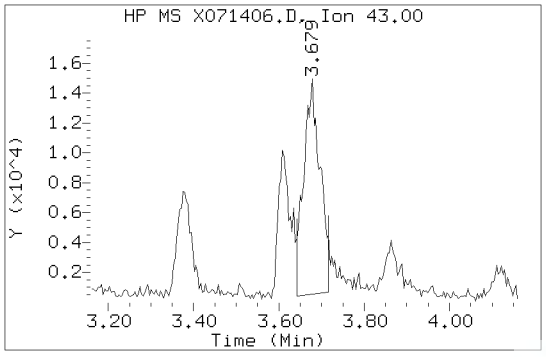
BEFORE

MASS
43
AREA
39438
HEIGHT
14396
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
39438
HEIGHT
14396
20-Jul-2023
15:04
linh
pham



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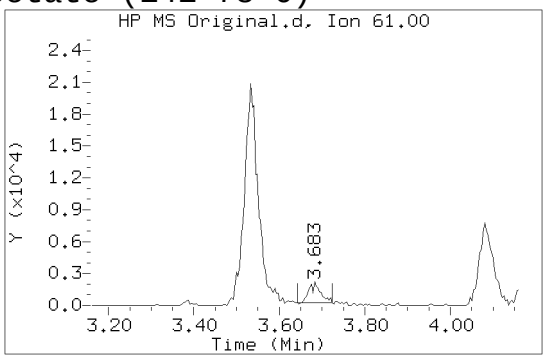
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

Ethyl Acetate (141-78-6)

Reason Code:

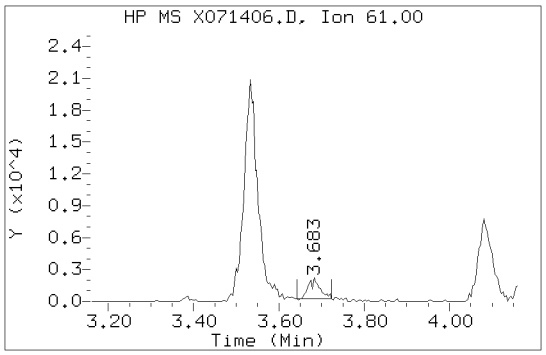
BEFORE

MASS
61
AREA
3702
HEIGHT
2000
20-Jul-2023
15:04
linh
pham



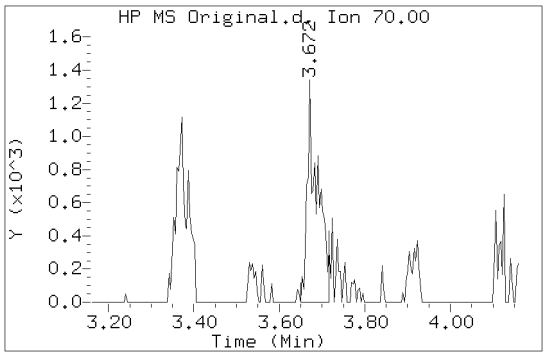
AFTER

MASS
61
AREA
3702
HEIGHT
2000
20-Jul-2023
15:04
linh
pham



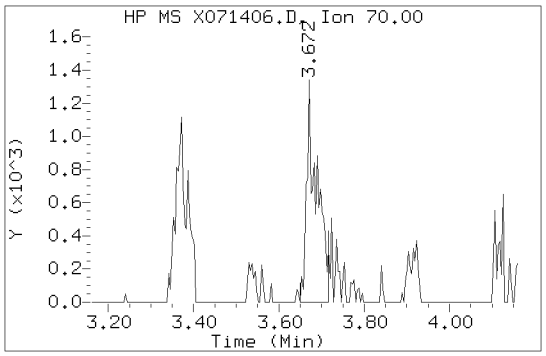
BEFORE

MASS
70
AREA
2283
HEIGHT
1341
20-Jul-2023
15:04
linh
pham



AFTER

MASS
70
AREA
2283
HEIGHT
1341
20-Jul-2023
15:04
linh
pham

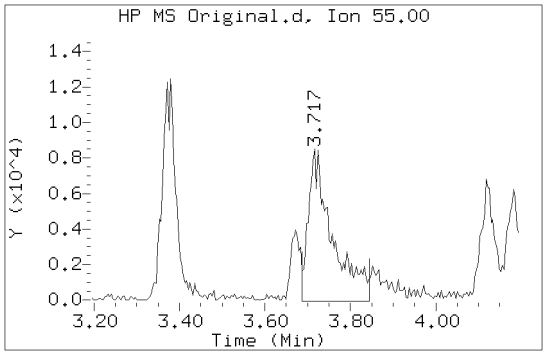


Methyl Acrylate (96-33-3)

Reason Code:

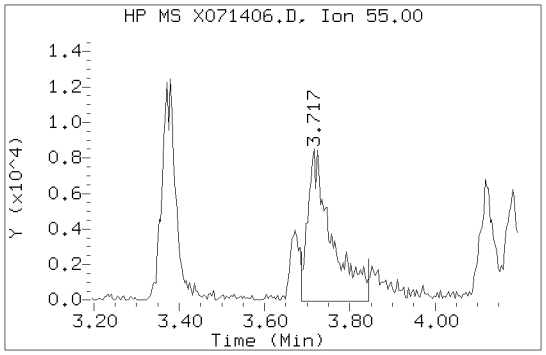
BEFORE

MASS
55
AREA
33338
HEIGHT
8583
20-Jul-2023
15:04
linh
pham



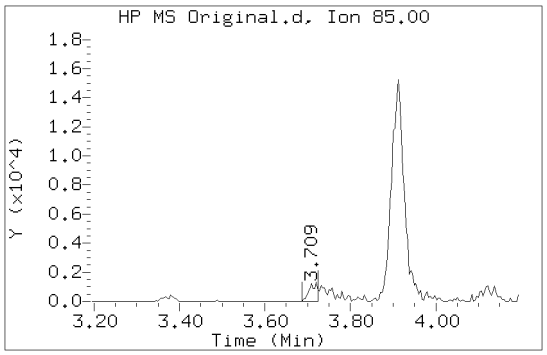
AFTER

MASS
55
AREA
33338
HEIGHT
8583
20-Jul-2023
15:04
linh
pham



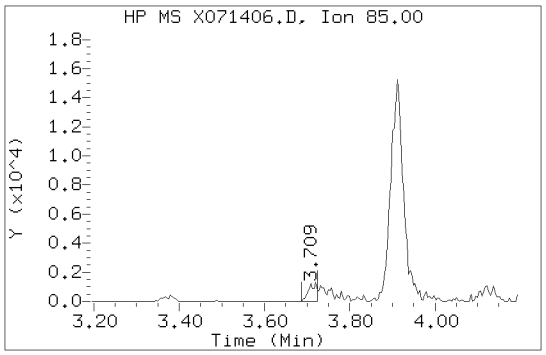
BEFORE

MASS
85
AREA
1657
HEIGHT
1216
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
1657
HEIGHT
1216
20-Jul-2023
15:04
linh
pham



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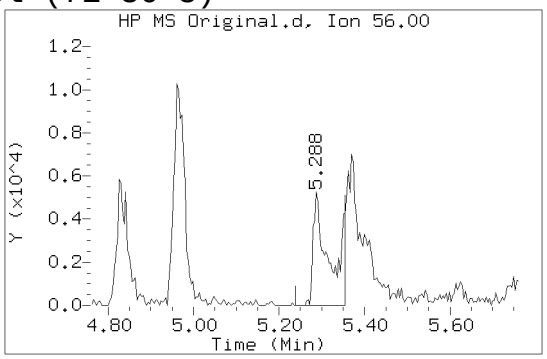
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

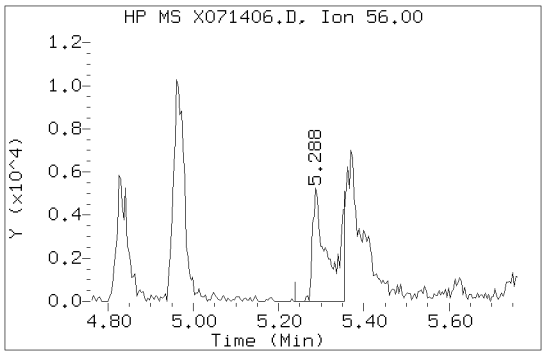
n-Butanol (71-36-3)

Reason Code:

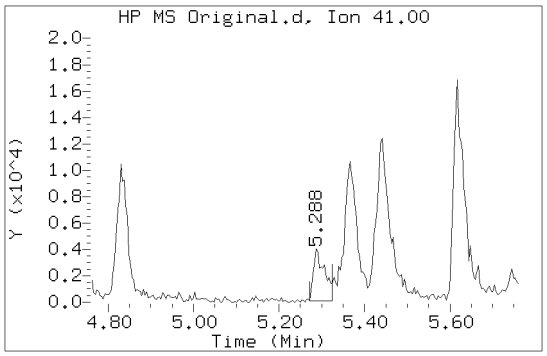
BEFORE
MASS
56
AREA
13588
HEIGHT
5250
20-Jul-2023
15:04
linh
pham



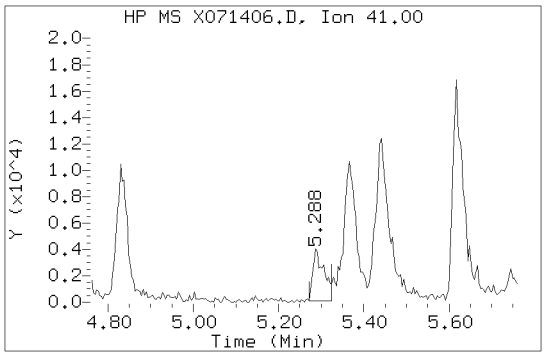
AFTER
MASS
56
AREA
13588
HEIGHT
5250
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
41
AREA
7179
HEIGHT
3942
20-Jul-2023
15:04
linh
pham



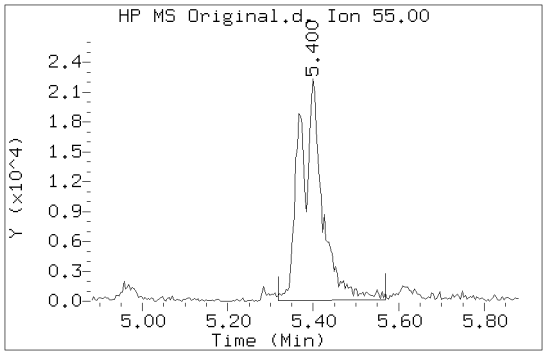
AFTER
MASS
41
AREA
7179
HEIGHT
3942
20-Jul-2023
15:04
linh
pham



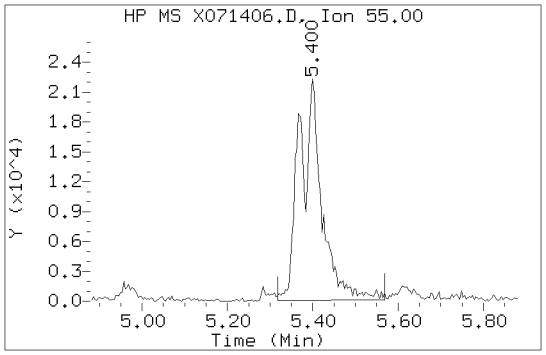
Ethyl Acrylate (140-88-5)

Reason Code:

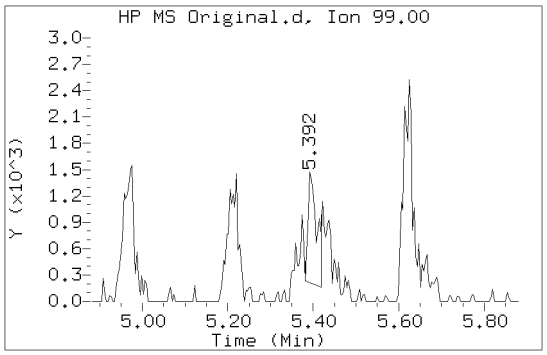
BEFORE
MASS
55
AREA
82574
HEIGHT
22225
20-Jul-2023
15:04
linh
pham



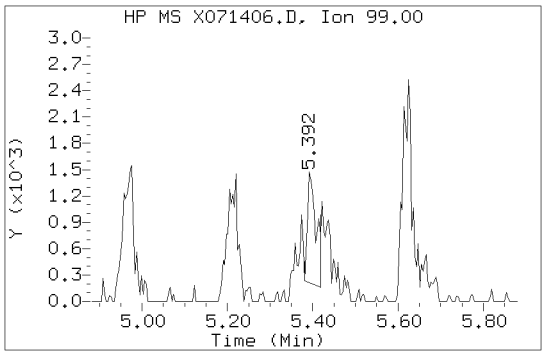
AFTER
MASS
55
AREA
82574
HEIGHT
22225
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
99
AREA
1773
HEIGHT
1256
20-Jul-2023
15:04
linh
pham



AFTER
MASS
99
AREA
1773
HEIGHT
1256
20-Jul-2023
15:04
linh
pham



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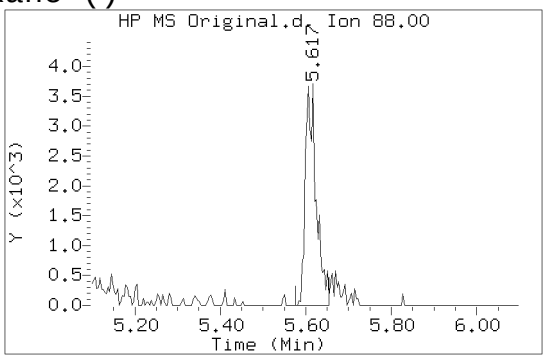
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

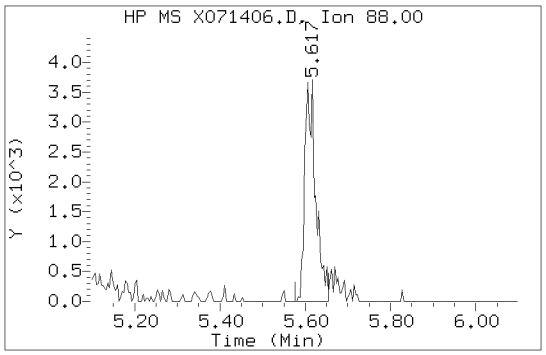
1,4-Dioxane ()

Reason Code:

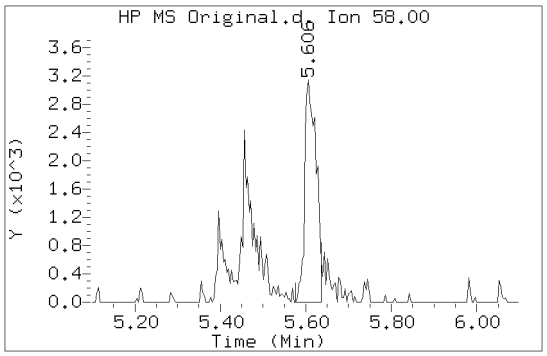
BEFORE
MASS
88
AREA
6551
HEIGHT
3709
20-Jul-2023
15:04
linh
pham



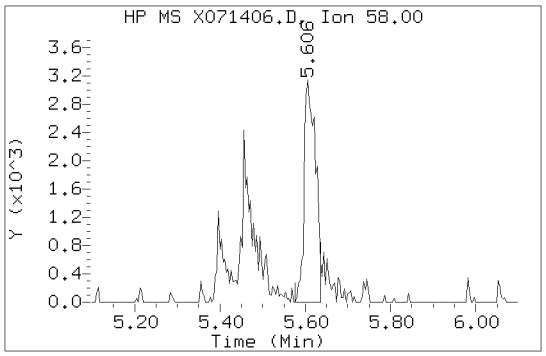
AFTER
MASS
88
AREA
6551
HEIGHT
3709
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
58
AREA
5961
HEIGHT
3144
20-Jul-2023
15:04
linh
pham



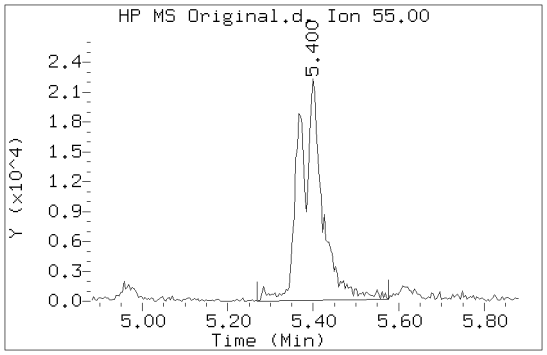
AFTER
MASS
58
AREA
5961
HEIGHT
3144
20-Jul-2023
15:04
linh
pham



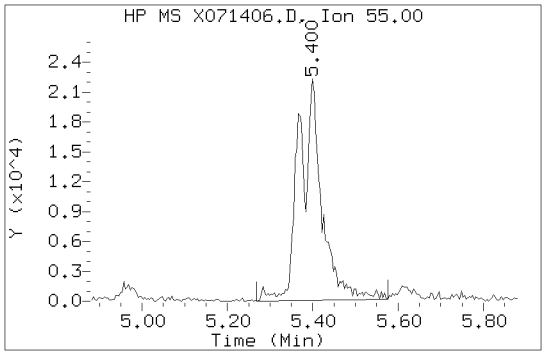
Methylcyclohexane (108-87-2)

Reason Code:

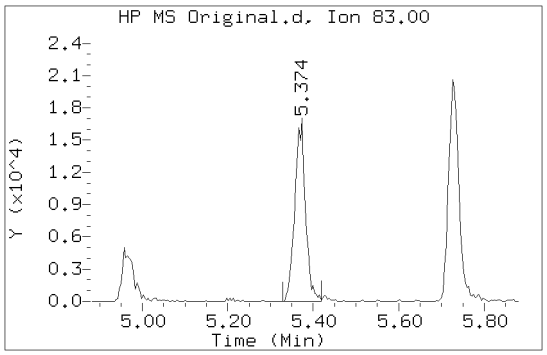
BEFORE
MASS
55
AREA
84656
HEIGHT
22257
20-Jul-2023
15:04
linh
pham



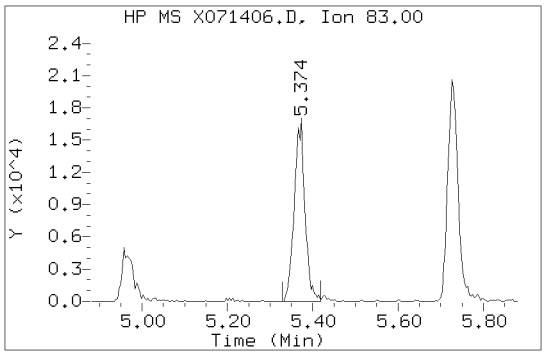
AFTER
MASS
55
AREA
84656
HEIGHT
22257
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
83
AREA
30014
HEIGHT
17040
20-Jul-2023
15:04
linh
pham



AFTER
MASS
83
AREA
30014
HEIGHT
17040
20-Jul-2023
15:04
linh
pham



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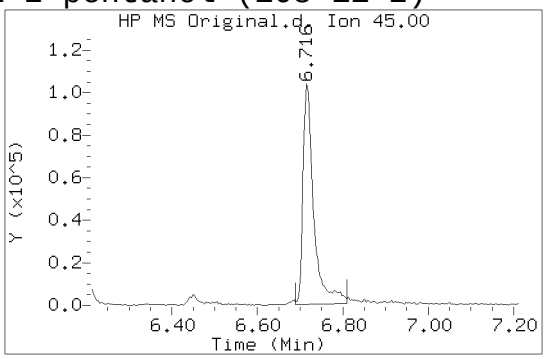
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

4-Methyl-2-pentanol (108-11-2)

Reason Code:

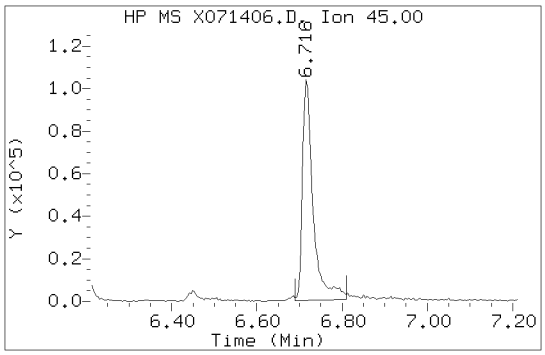
BEFORE

MASS
45
AREA
183123
HEIGHT
103764
20-Jul-2023
15:04
linh
pham



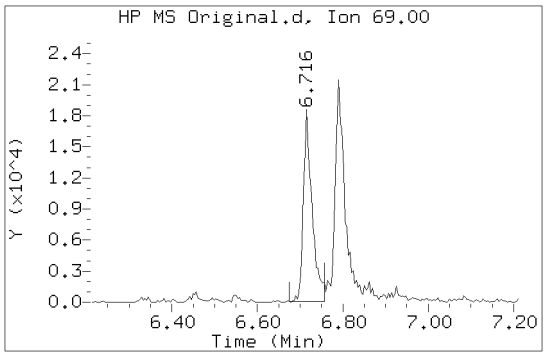
AFTER

MASS
45
AREA
183123
HEIGHT
103764
20-Jul-2023
15:04
linh
pham



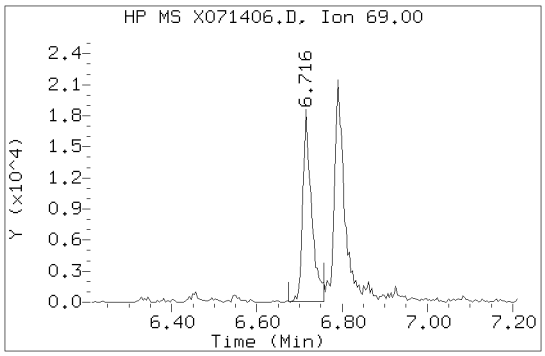
BEFORE

MASS
69
AREA
26485
HEIGHT
18576
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
26485
HEIGHT
18576
20-Jul-2023
15:04
linh
pham

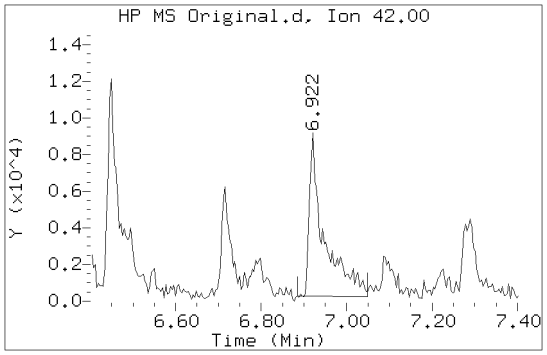


Amyl alcohol (71-41-0)

Reason Code:

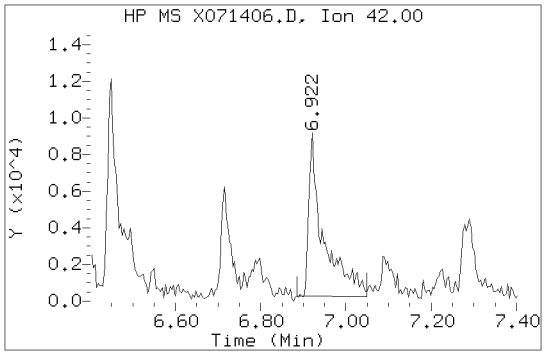
BEFORE

MASS
42
AREA
21498
HEIGHT
8913
20-Jul-2023
15:04
linh
pham



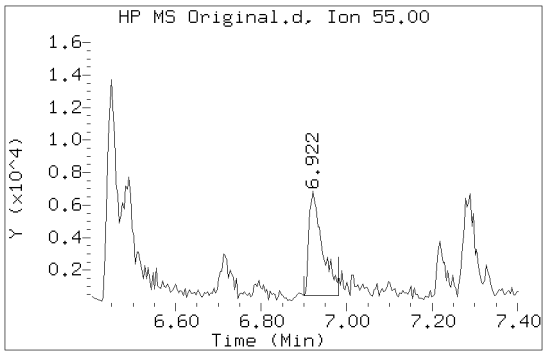
AFTER

MASS
42
AREA
21498
HEIGHT
8913
20-Jul-2023
15:04
linh
pham



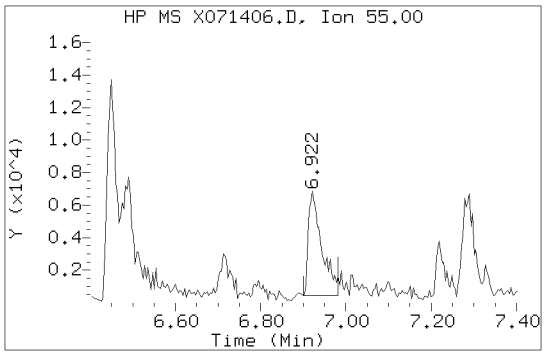
BEFORE

MASS
55
AREA
14214
HEIGHT
6435
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
14214
HEIGHT
6435
20-Jul-2023
15:04
linh
pham



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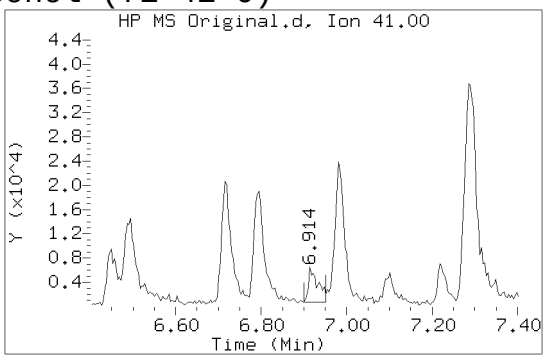
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

Amyl alcohol (71-41-0)

Reason Code:

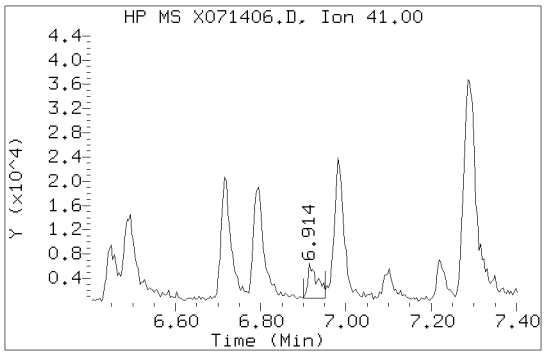
BEFORE

MASS
41
AREA
8850
HEIGHT
5781
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
8850
HEIGHT
5781
20-Jul-2023
15:04
linh
pham

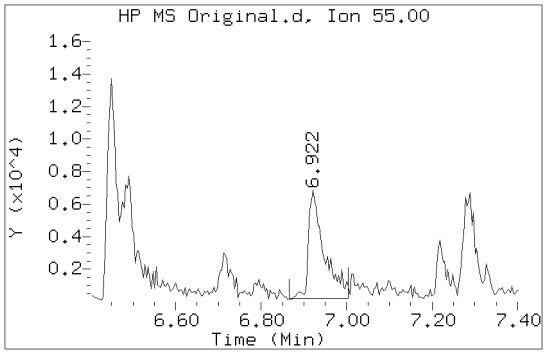


3-Methyl-1-butanol (123-51-3)

Reason Code:

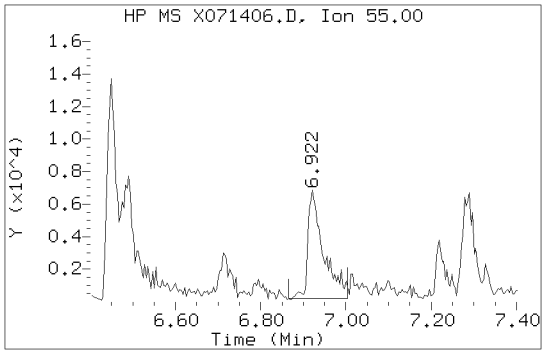
BEFORE

MASS
55
AREA
17029
HEIGHT
6664
20-Jul-2023
15:04
linh
pham



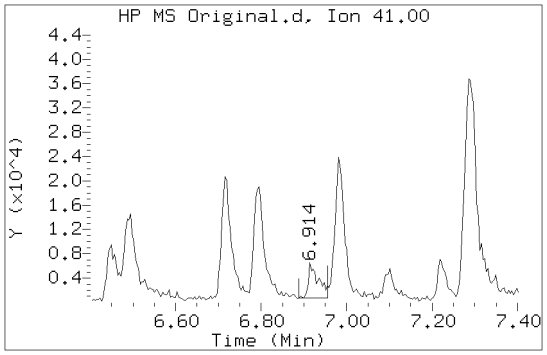
AFTER

MASS
55
AREA
17029
HEIGHT
6664
20-Jul-2023
15:04
linh
pham



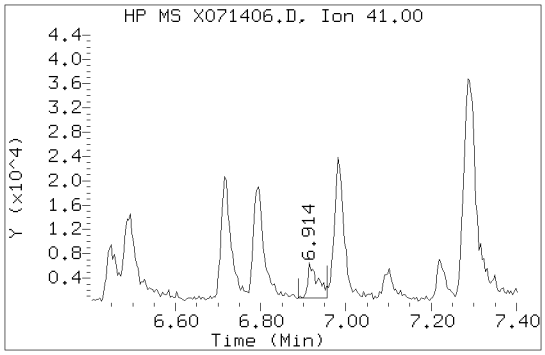
BEFORE

MASS
41
AREA
9490
HEIGHT
5807
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
9490
HEIGHT
5807
20-Jul-2023
15:04
linh
pham

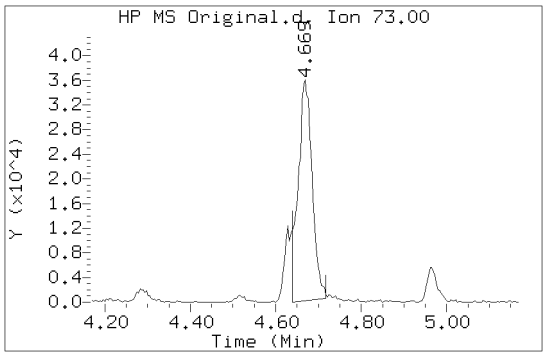


tert-Amyl methyl ether (974-05-08)

Reason Code:

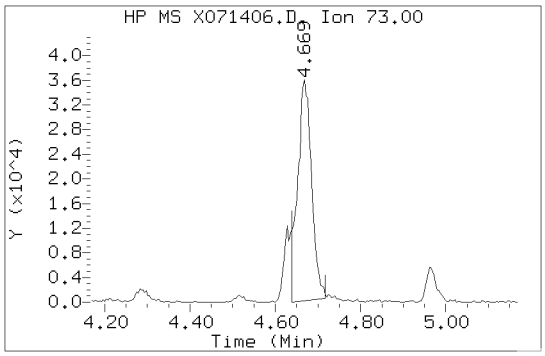
BEFORE

MASS
73
AREA
83517
HEIGHT
35784
20-Jul-2023
15:04
linh
pham



AFTER

MASS
73
AREA
83517
HEIGHT
35784
20-Jul-2023
15:04
linh
pham



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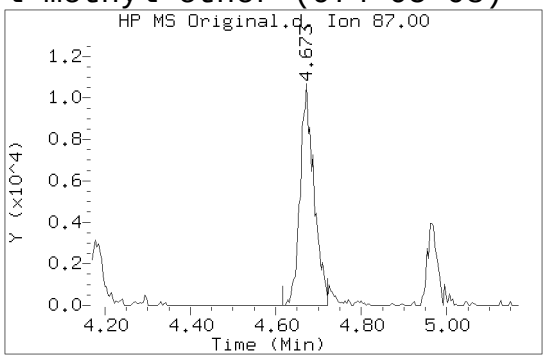
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

tert-Amyl methyl ether (974-05-08)

Reason Code:

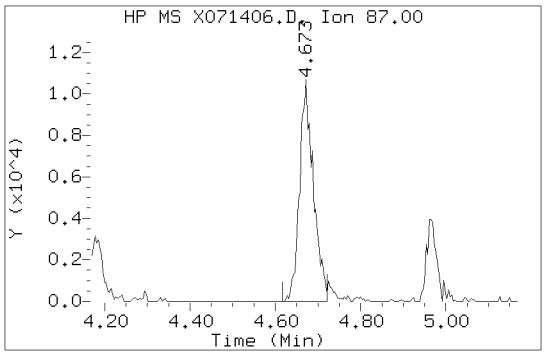
BEFORE

MASS
87
AREA
24319
HEIGHT
10688
20-Jul-2023
15:04
linh
pham



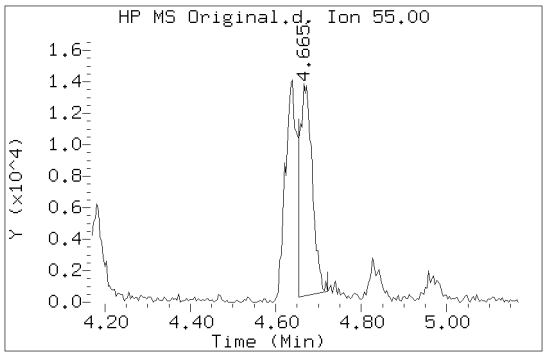
AFTER

MASS
87
AREA
24319
HEIGHT
10688
20-Jul-2023
15:04
linh
pham



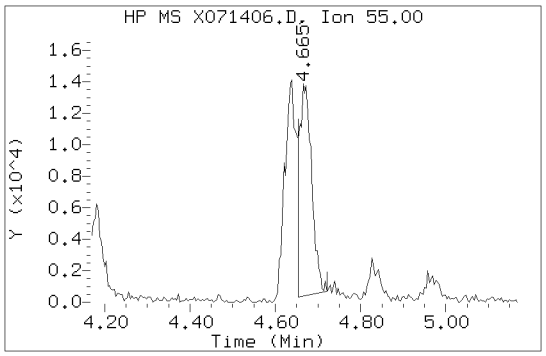
BEFORE

MASS
55
AREA
27476
HEIGHT
13484
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
27476
HEIGHT
13484
20-Jul-2023
15:04
linh
pham

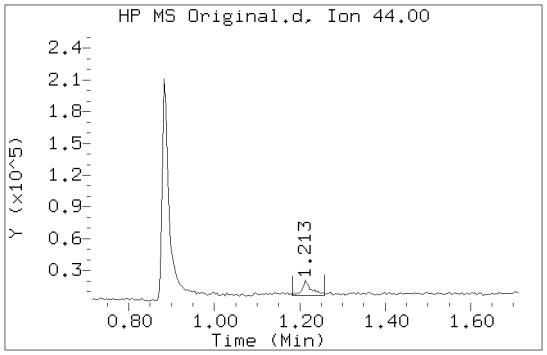


Acetaldehyde (75-07-0)

Reason Code:

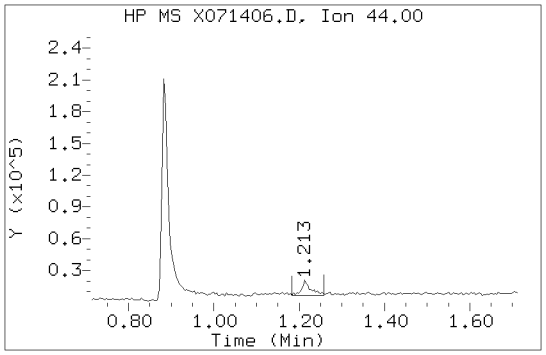
BEFORE

MASS
44
AREA
20987
HEIGHT
14166
20-Jul-2023
15:04
linh
pham



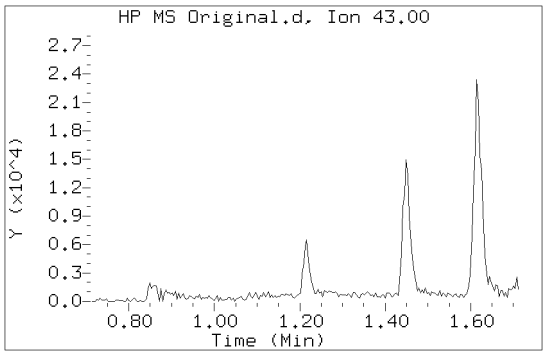
AFTER

MASS
44
AREA
20987
HEIGHT
14166
20-Jul-2023
15:04
linh
pham



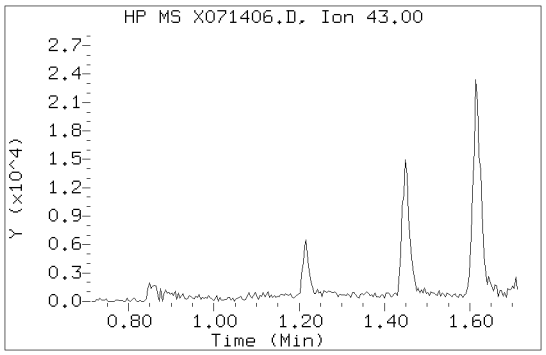
BEFORE

MASS
43
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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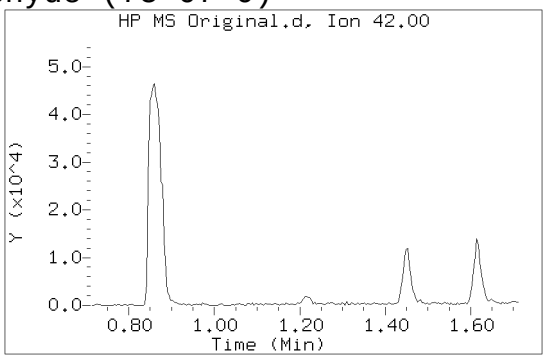
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

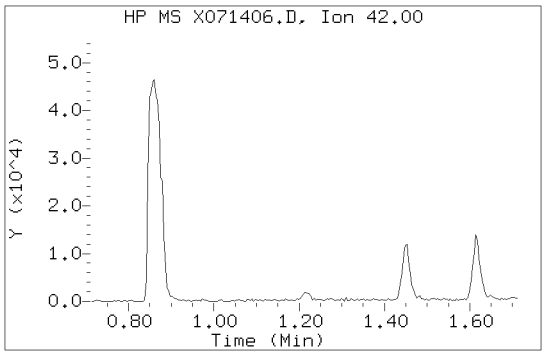
Acetaldehyde (75-07-0)

Reason Code:

BEFORE
MASS
42
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



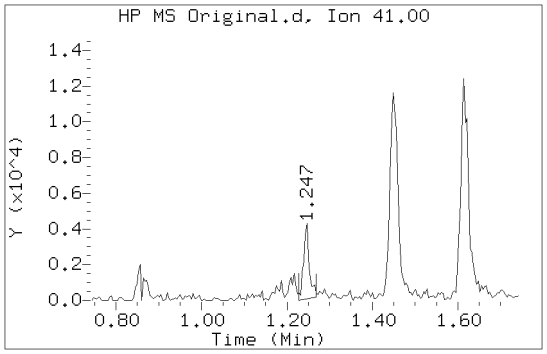
AFTER
MASS
42
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



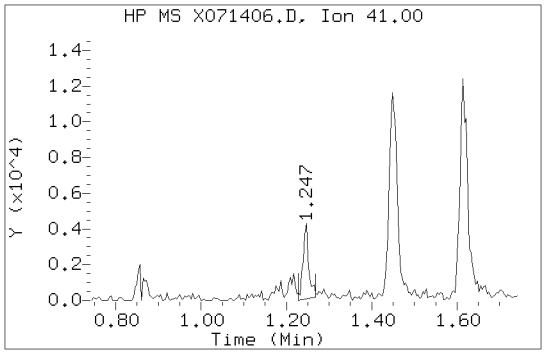
Isobutylene (115-11-7)

Reason Code:

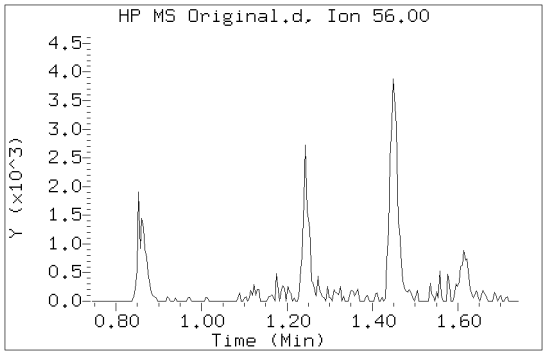
BEFORE
MASS
41
AREA
4070
HEIGHT
4236
20-Jul-2023
15:04
linh
pham



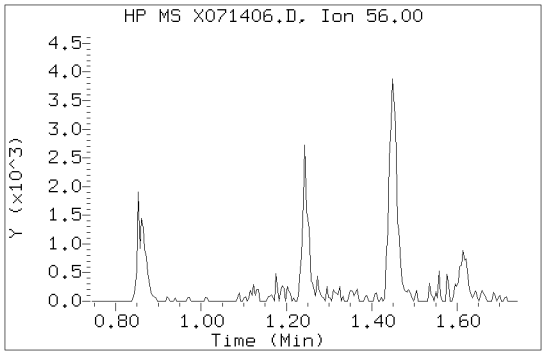
AFTER
MASS
41
AREA
4070
HEIGHT
4236
20-Jul-2023
15:04
linh
pham



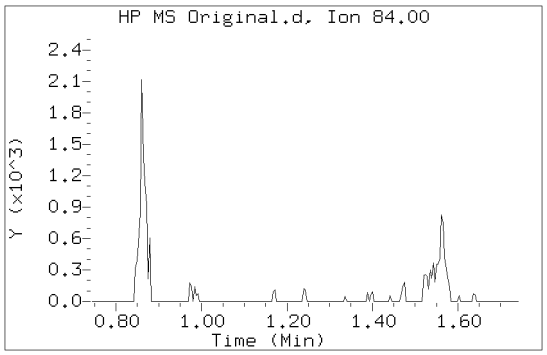
BEFORE
MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



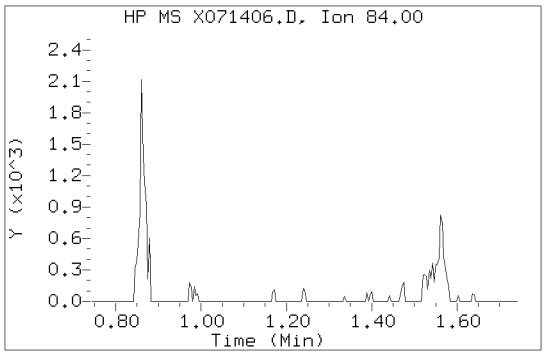
AFTER
MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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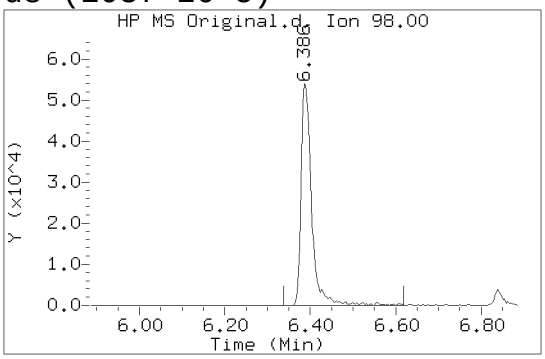
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

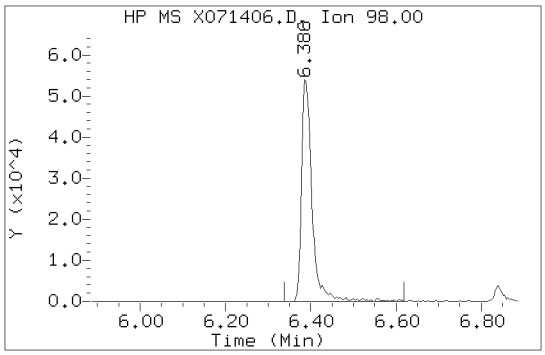
Toluene-d8 (2037-26-5)

Reason Code:

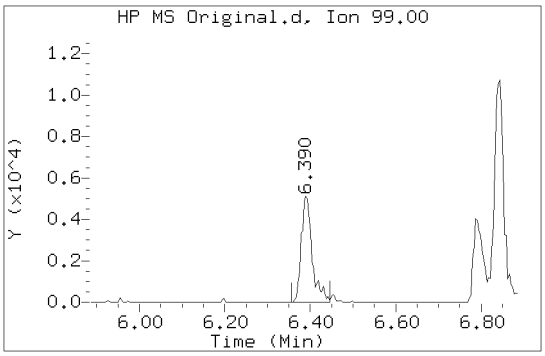
BEFORE
MASS
98
AREA
95273
HEIGHT
53976
20-Jul-2023
15:04
linh
pham



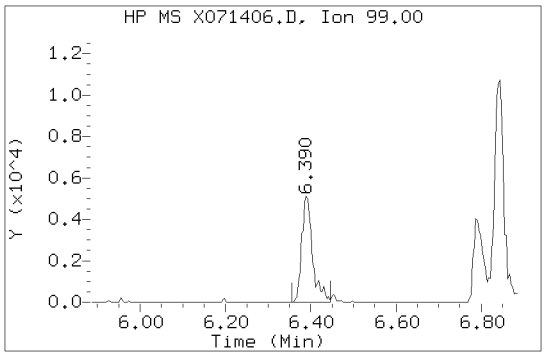
AFTER
MASS
98
AREA
95273
HEIGHT
53976
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
99
AREA
9222
HEIGHT
5118
20-Jul-2023
15:04
linh
pham



AFTER
MASS
99
AREA
9222
HEIGHT
5118
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
100
AREA
60371
HEIGHT
38037
20-Jul-2023
15:04
linh
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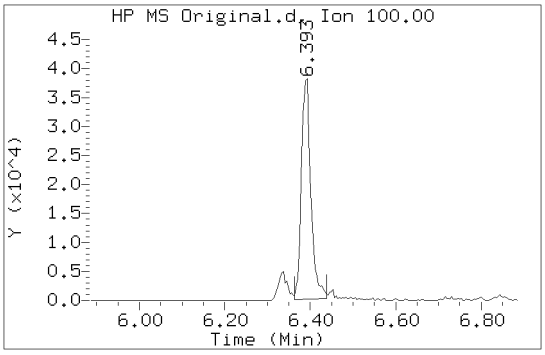

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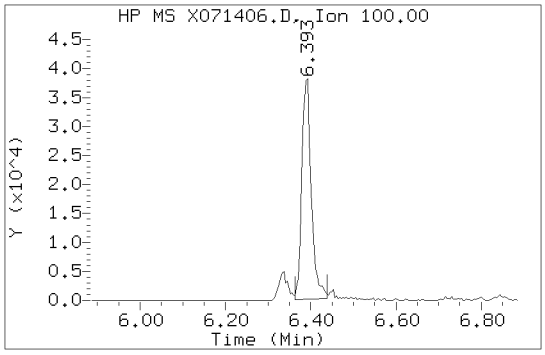

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071407.D
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Inj Date : 14-JUL-2023 14:04
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 : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 13:43 Cal File: X071406.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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	4.178	4.178	(1.000)	507763	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	94710	20.0000	18.92
3	Chloromethane	50	1.081	1.081	(0.259)	133501	20.0000	17.40
4	Propionitrile	54	3.660	3.660	(0.876)	205441	200.000	204.24(a)
5	Vinyl Chloride	62	1.145	1.145	(0.274)	126856	20.0000	19.30
6	Bromomethane	94	1.344	1.344	(0.322)	48177	20.0000	17.71
7	Chloroethane	64	1.407	1.407	(0.337)	72133	20.0000	19.23
8	Trichlorofluoromethane	101	1.561	1.561	(0.374)	132138	20.0000	19.84
9	Acrolein	56	1.865	1.865	(0.446)	6957	40.0000	36.90(H)
10	Acetone	43	1.977	1.977	(0.473)	92232	40.0000	43.26
11	1,1-Dichloroethene	96	1.917	1.917	(0.459)	72938	20.0000	19.60
12	Isobutyl Alcohol	43	4.680	4.680	(1.120)	401784	400.000	417.43(a)
13	Acetonitrile	39	2.198	2.198	(0.526)	138938	200.000	195.13(a)
14	Allyl Chloride	41	2.198	2.198	(0.526)	321229	20.0000	19.26(a)
15	Iodomethane	142	2.030	2.030	(0.486)	147770	40.0000	33.32
16	Acrylonitrile	53	2.539	2.539	(0.608)	96410	40.0000	38.96
17	Methylene Chloride	84	2.303	2.303	(0.551)	93705	20.0000	20.53
18	Methyl tert-butyl ether	73	2.539	2.539	(0.608)	272881	20.0000	19.72
19	Carbon Disulfide	76	2.075	2.075	(0.497)	443798	40.0000	37.95
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	83048	20.0000	19.30

21 Vinyl Acetate	43	3.004	3.004 (0.719)	716288	40.0000	40.25
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	180478	20.0000	19.11

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.775	1.775	(0.425)	42093	20.0000	18.43(M)
	24 2-Butanone	43	3.593	3.593	(0.860)	103083	40.0000	38.12
	25 Methacrylonitrile	41	3.833	3.833	(0.917)	134358	20.0000	20.49(a)
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	136770	20.0000	18.78
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	106626	20.0000	19.45
	28 Chloroform	83	3.904	3.904	(0.935)	185575	20.0000	19.20
	29 Bromochloromethane	128	3.799	3.799	(0.909)	58138	20.0000	18.92
$	30 Dibromofluoromethane	113	4.103	4.103	(0.982)	100577	20.0000	21.17
	31 1,1,1-Trichloroethane	97	4.084	4.084	(0.978)	145149	20.0000	19.51
	32 1,1-Dichloropropene	75	4.283	4.283	(0.863)	122898	20.0000	18.90
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	173705	20.0000	19.79
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	124542	20.0000	19.01
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	125030	20.0000	21.12
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	797093	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	377488	20.0000	19.79
	38 Trichloroethene	130	5.208	5.208	(1.049)	104832	20.0000	19.43
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	141699	20.0000	19.40
	40 Methyl Methacrylate	41	5.610	5.610	(1.343)	116657	20.0000	19.03(a)
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	89929	40.0000	40.33
	42 1,2-Dichloropropane	63	5.437	5.437	(1.095)	123713	20.0000	20.17
	43 2-Nitropropane	43	5.969	5.969	(1.429)	38152	20.0000	18.91
	44 Dibromomethane	93	5.553	5.553	(1.119)	68138	20.0000	19.63
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	285574	40.0000	39.47
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	165788	20.0000	19.76
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	735188	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	356461	20.0000	18.83(M)
	49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	101772	20.0000	19.49(a)
	50 Toluene	91	6.446	6.446	(0.841)	392472	20.0000	19.83
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	139738	20.0000	19.76
	52 2-Hexanone	43	7.090	7.090	(0.925)	197105	40.0000	41.47
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	84947	20.0000	20.23
	54 1,3-Dichloropropane	76	6.982	6.982	(0.911)	170222	20.0000	19.84
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	118768	20.0000	19.59
	56 Tetrachloroethene	164	6.922	6.922	(0.903)	79779	20.0000	19.51
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	99972	20.0000	20.83
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	123726	20.0000	19.32
	59 Chlorobenzene	112	7.694	7.694	(1.003)	270232	20.0000	19.53
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	107430	20.0000	19.83
	61 Ethylbenzene	106	7.795	7.795	(1.017)	131122	20.0000	18.90
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	341700	40.0000	39.26
	63 o-Xylene	106	8.237	8.237	(1.074)	162342	20.0000	19.69
	64 Styrene	104	8.260	8.260	(1.077)	282779	20.0000	19.67
	66 Bromoform	173	8.406	8.406	(1.096)	75861	20.0000	19.50
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	405778	20.0000	19.15
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	127719	20.0000	19.39
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	153161	20.0000	20.67
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	392137	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	106108	20.0000	20.30(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	44727	20.0000	20.00(a)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	471016	20.0000	19.87
	74 Bromobenzene	156	8.803	8.803	(0.911)	121594	20.0000	19.82
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	331762	20.0000	18.68

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	320833	20.0000	20.07
77	4-Chlorotoluene	91	9.070	9.070 (0.939)	358181	20.0000	20.39

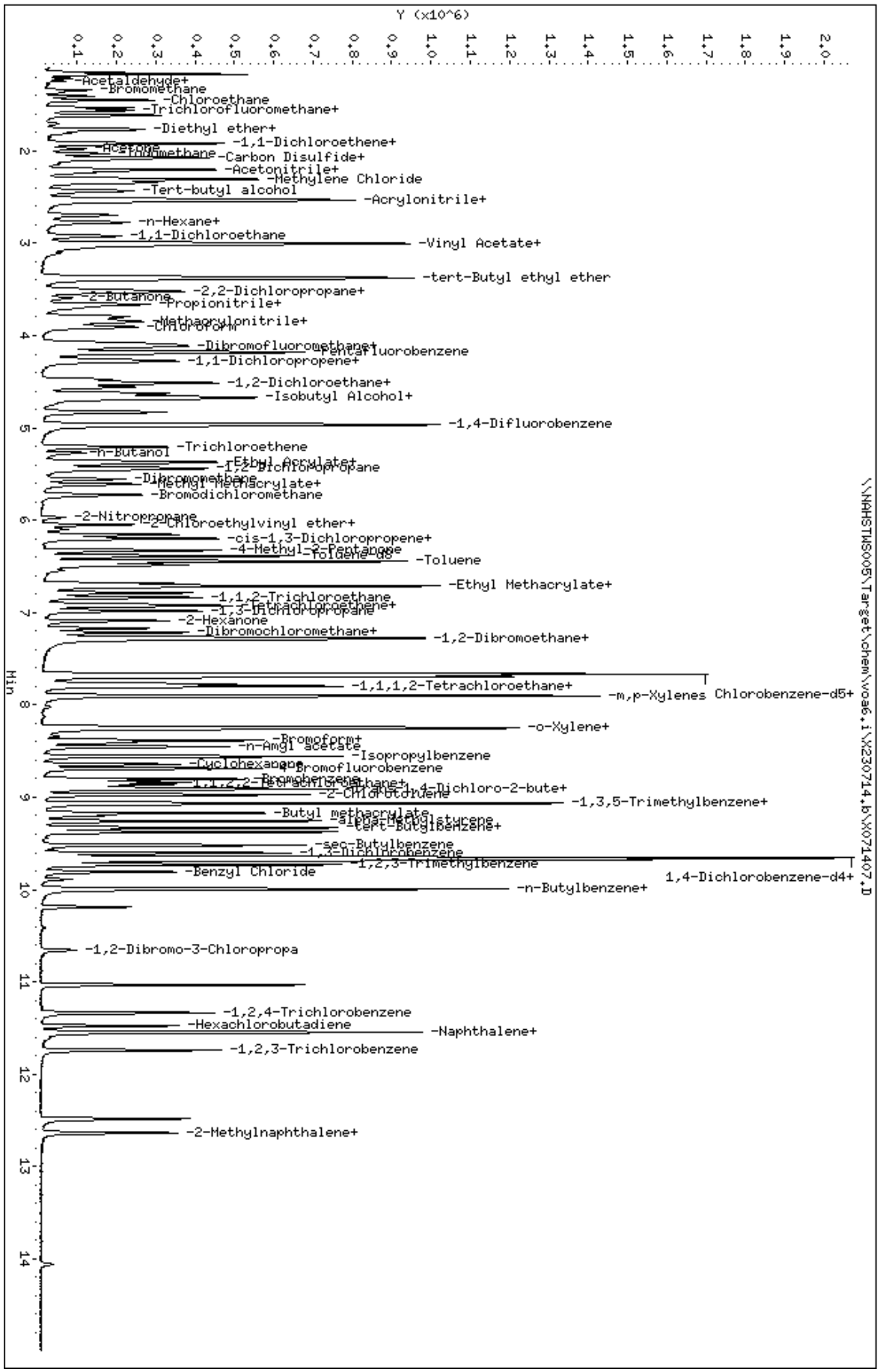
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	287767	20.0000	18.90
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	336741	20.0000	18.91
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	394513	20.0000	19.44
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	346253	20.0000	18.67
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	208939	20.0000	19.55
84	1,4-Dichlorobenzene	146	9.677	9.677	(1.002)	230542	20.0000	19.68
86	Benzyl Chloride	91	9.808	9.808	(1.279)	196200	20.0000	17.29
87	n-Butylbenzene	91	9.992	9.992	(1.034)	282220	20.0000	18.17
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	209204	20.0000	19.91
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.659	(1.103)	19568	20.0000	18.76
90	1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	123442	20.0000	17.11
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	52647	20.0000	17.44
92	Naphthalene	128	11.540	11.540	(1.194)	325767	20.0000	18.24
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	122392	20.0000	18.14
146	Methyl acetate	43	2.232	2.232	(0.534)	91399	20.0000	20.22
138	Freon TF	101	1.917	1.917	(0.459)	67796	20.0000	23.07(M)
141	Cyclohexane	56	4.121	4.121	(0.987)	165922	20.0000	18.85(H)
142	Tetrahydrofuran	42	3.851	3.851	(0.922)	53361	40.0000	40.84
147	Methylcyclohexane	55	5.388	5.388	(1.085)	328269	20.0000	19.51(M)
135	1,4-Dioxane	88	5.606	5.606	(1.342)	23823	400.000	394.82
132	n-Butanol	56	5.265	5.265	(1.260)	60771	400.000	359.52(a)
131	Methyl Acrylate	55	3.702	3.702	(0.886)	135453	20.0000	19.62(H)
133	Ethyl Acrylate	55	5.388	5.388	(1.290)	335022	20.0000	19.90
136	n-Hexane	57	2.772	2.772	(0.664)	106667	20.0000	23.04
139	Diethyl ether	59	1.763	1.763	(0.422)	93008	20.0000	19.64
148	Tert-butyl alcohol	59	2.434	2.434	(0.583)	251621	400.000	392.62
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	157344	400.000	395.67
156	Diisopropyl ether	45	3.008	3.008	(0.720)	419096	20.0000	20.02
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	351806	20.0000	19.40
167	Ethanol	45	1.703	1.703	(0.408)	30252	400.000	415.32
172	tert-Butyl formate	59	4.627	4.627	(1.108)	202938	40.0000	37.41(M)
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	307235	400.000	388.58
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	318193	20.0000	19.04
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	413607	20.0000	19.24
176	tert-Amyl alcohol	59	4.627	4.627	(1.108)	206505	400.000	372.28(M)
151	4-Methyl-2-pentanol	45	6.712	6.712	(1.352)	666674	400.000	390.27(M)
180	1-Methylnaphthalene	142	12.635	12.635	(1.308)	150919	20.0000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	123783	20.0000	18.97
152	Amyl alcohol	42	6.907	6.907	(0.901)	79891	400.000	377.87(M)
158	Dichlorofluoromethane	67	1.535	1.535	(0.367)	158942	20.0000	19.42
159	Propylene oxide	43	1.808	1.808	(0.433)	26882	40.0000	43.15
161	3-Methyl-1-butanol	55	6.907	6.907	(0.901)	65296	400.000	360.74
162	Butyl acrylate	55	8.252	8.252	(1.076)	278950	20.0000	19.94
163	Butyl methacrylate	41	9.167	9.167	(0.949)	181860	20.0000	19.36
164	Dicyclopentadiene	66	9.681	9.681	(1.002)	449218	20.0000	19.88
182	Epichlorohydrin	57	6.101	6.101	(1.229)	46921	80.0000	78.80
M 94	1,2-Dichloroethylene (total)	96				189674	40.0000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	161241	20.0000	18.84
130	Ethyl Acetate	43	3.660	3.660	(0.876)	156852	20.0000	20.79
134	Cyclohexanone	55	8.642	8.642	(0.894)	143296	400.000	410.46(a)
185	Isoprene	39	1.771	1.771	(0.424)	34997	20.0000	20.90
188	Isopropyl acetate	43	4.680	4.680	(0.943)	402950	20.0000	19.17

187 n-Amyl acetate	43	8.451	8.451 (1.102)	257831	20.0000	19.13
189 n-Butyl acetate	43	7.214	7.214 (0.941)	233185	20.0000	20.69(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.772	2.772	(0.664)	106667	400.000	460.03
194 Acetaldehyde	44	1.212	1.212	(0.290)	39093	80.0000	72.86(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	308846	20.0000	20.09(H)
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	200098	20.0000	20.17
202 Isobutylene	41	1.242	1.242	(0.297)	17453	20.0000	20.78(M)
205 2-Ethylhexyl Acrylate	55	11.547	11.547	(1.195)	205728	20.0000	20.54

QC Flag Legend

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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Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

1,2,3-Trichloropropane (96-18-4)

Reason Code:

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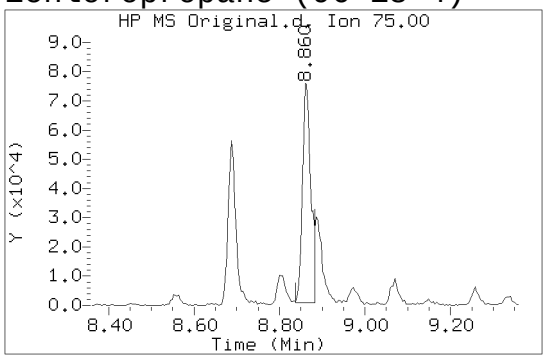

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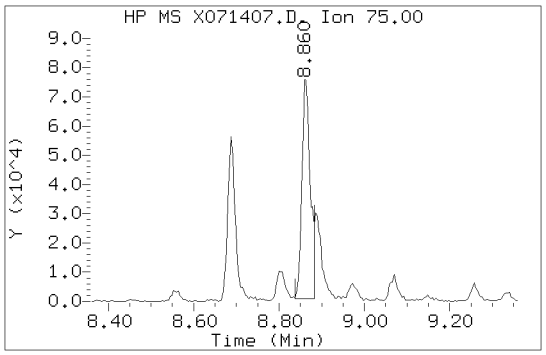

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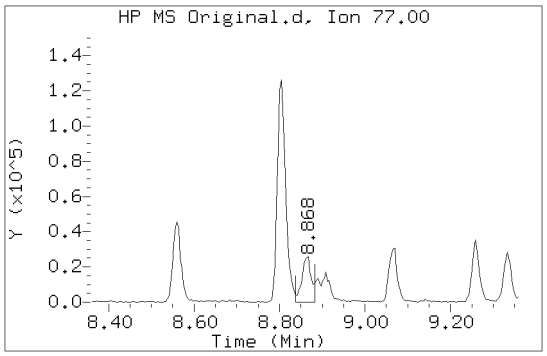

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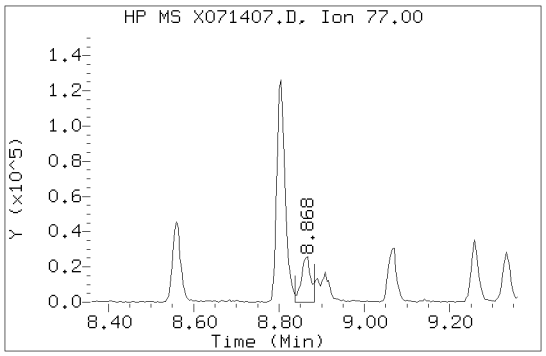

Chloroprene (126-99-8)

Reason Code:

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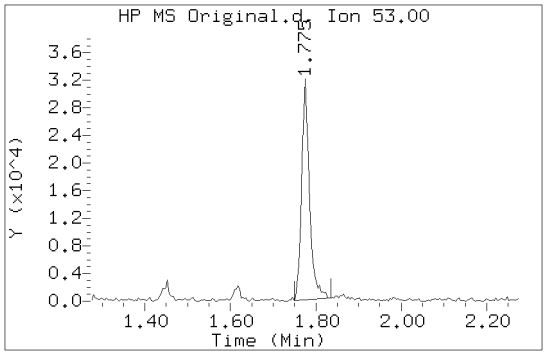

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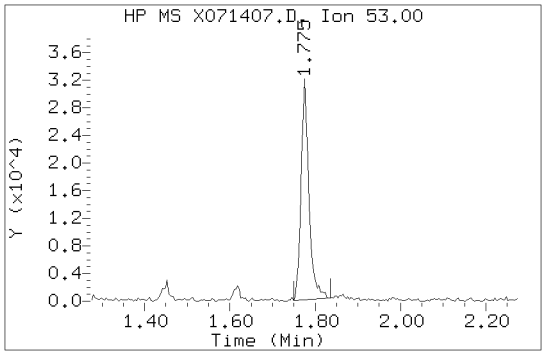

BEFORE

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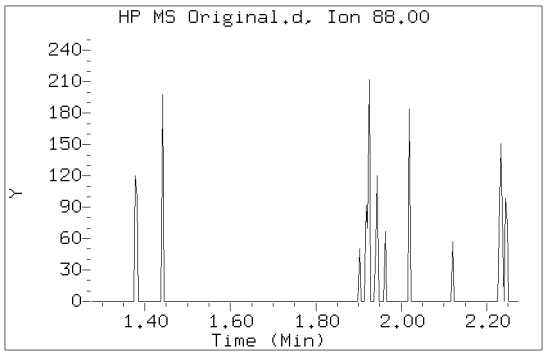

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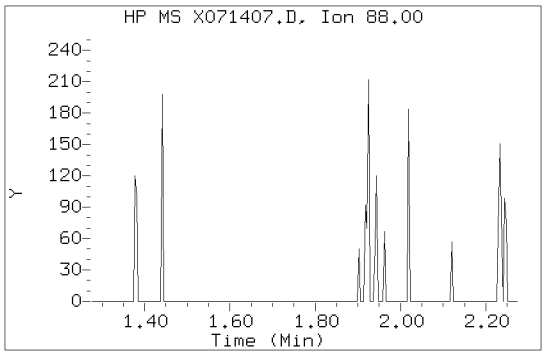

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Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

Freon TF (76-13-1)

Reason Code:

BEFORE

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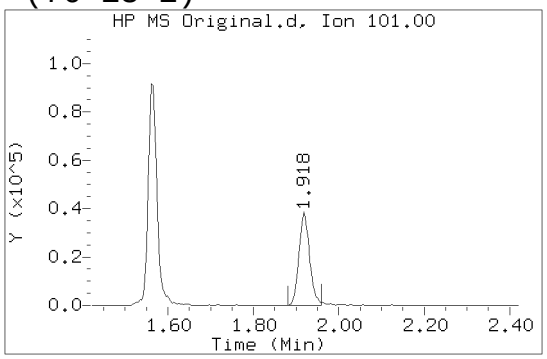
AREA
67796
HEIGHT
38600
20-Jul-2023
15:04
linh
pham



AFTER

MASS
101
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67796
HEIGHT
38600
20-Jul-2023
15:04
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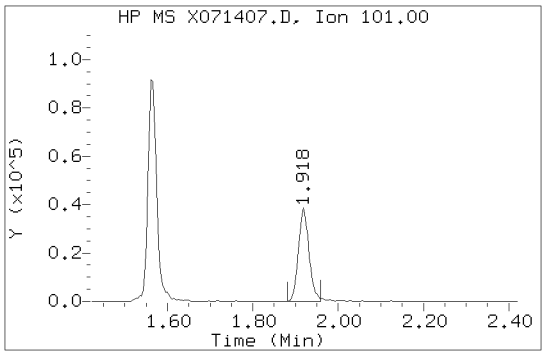

BEFORE

MASS
151
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57051
HEIGHT
32248
20-Jul-2023
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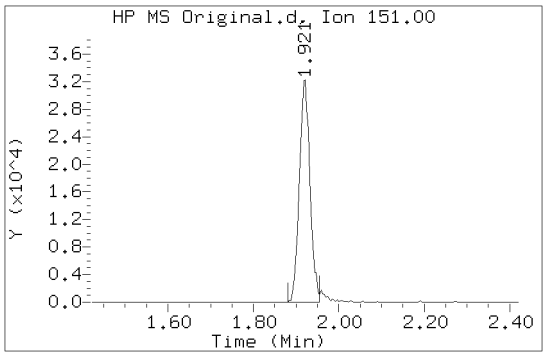

AFTER

MASS
151
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57051
HEIGHT
32248
20-Jul-2023
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linh
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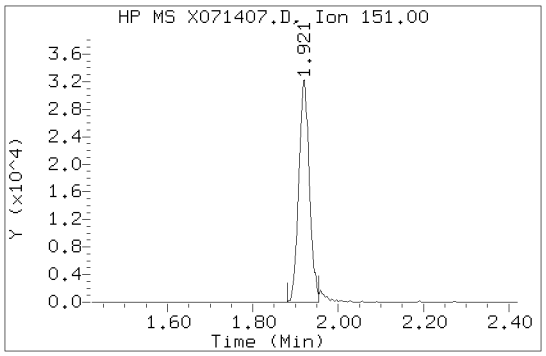
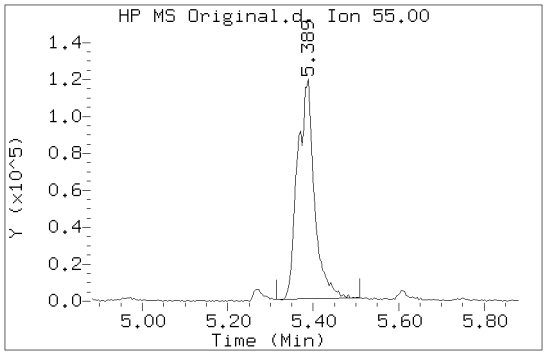


Methylcyclohexane (108-87-2)

Reason Code:

BEFORE

MASS
55
AREA
328269
HEIGHT
118927
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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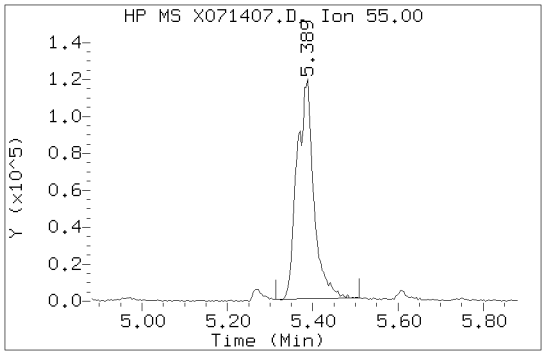
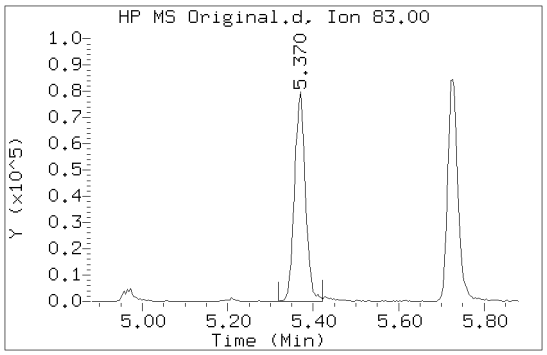
HEIGHT
118927
20-Jul-2023
15:04
linh
pham



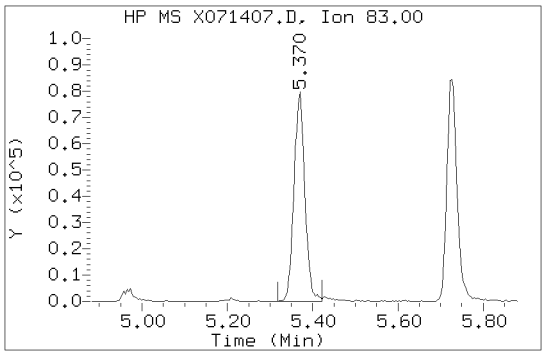
BEFORE

MASS
83
AREA
142887
HEIGHT
79744
20-Jul-2023
15:04
linh
pham



AFTER

MASS
83
AREA
142887
HEIGHT
79744
20-Jul-2023
15:04
linh
pham



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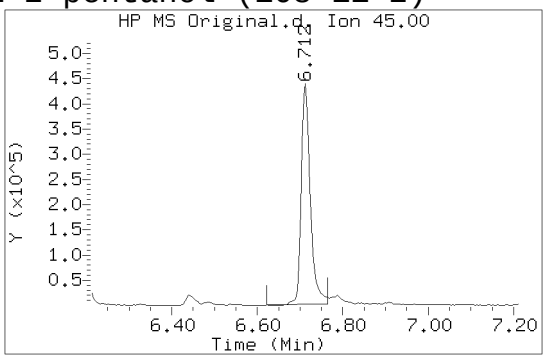
Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

4-Methyl-2-pentanol (108-11-2)

Reason Code:

BEFORE

MASS
45
AREA
666674
HEIGHT
437957
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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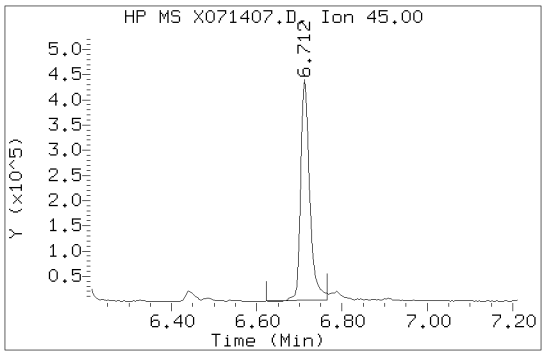
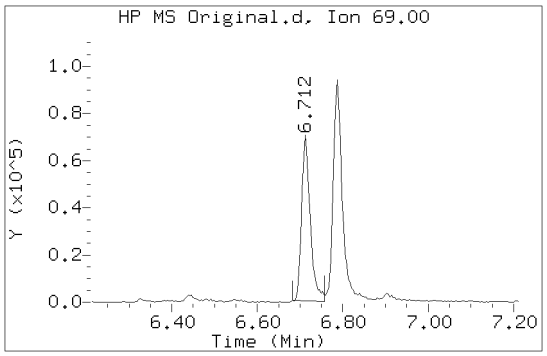
AREA
666674
HEIGHT
437957
20-Jul-2023
15:04
linh
pham



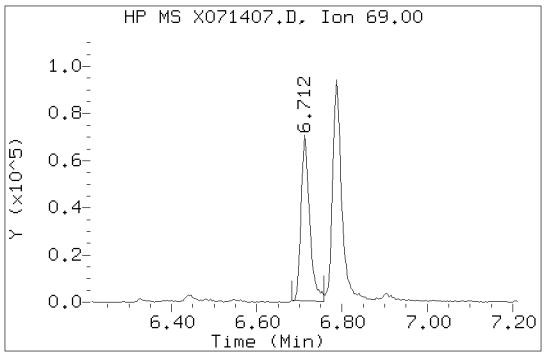
BEFORE

MASS
69
AREA
101772
HEIGHT
70395
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
101772
HEIGHT
70395
20-Jul-2023
15:04
linh
pham

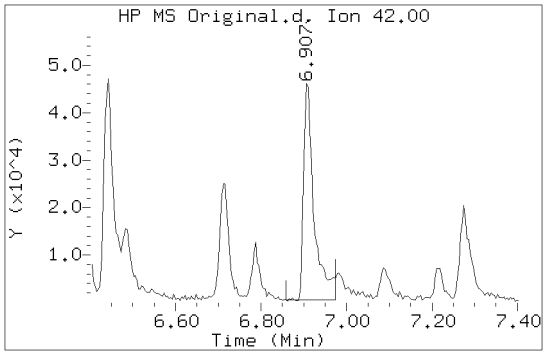


Amyl alcohol (71-41-0)

Reason Code:

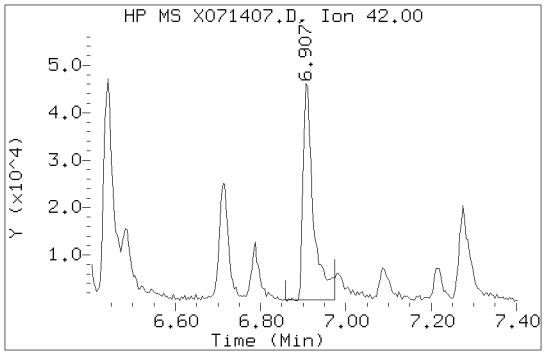
BEFORE

MASS
42
AREA
79891
HEIGHT
45629
20-Jul-2023
15:04
linh
pham



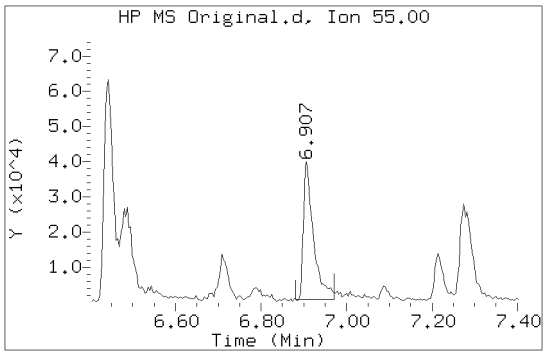
AFTER

MASS
42
AREA
79891
HEIGHT
45629
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
55
AREA
65296
HEIGHT
39055
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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HEIGHT
39055
20-Jul-2023
15:04
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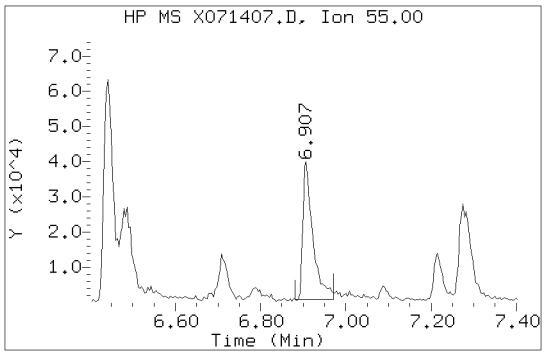

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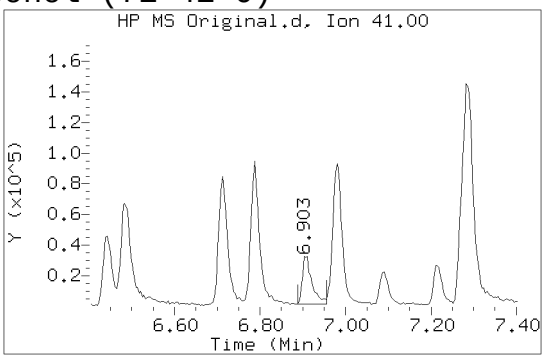
Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

Amyl alcohol (71-41-0)

Reason Code:

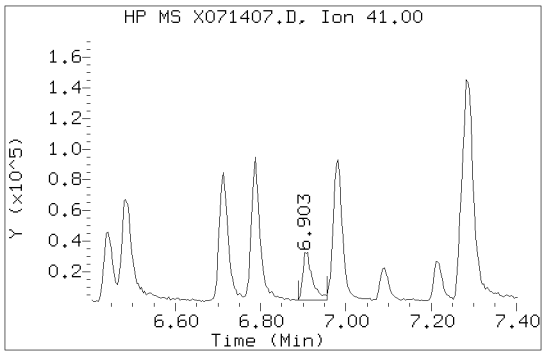
BEFORE

MASS
41
AREA
49579
HEIGHT
30812
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
49579
HEIGHT
30812
20-Jul-2023
15:04
linh
pham

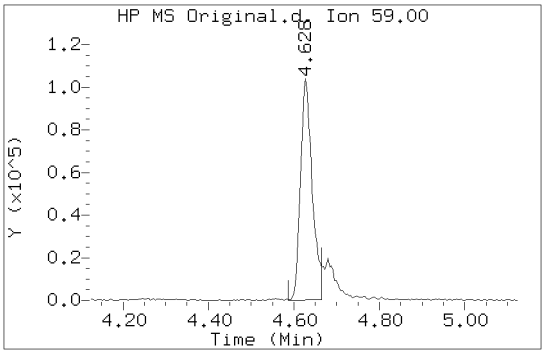


tert-Butyl formate (762-75-4)

Reason Code:

BEFORE

MASS
59
AREA
202938
HEIGHT
103862
20-Jul-2023
15:04
linh
pham



AFTER

MASS
59
AREA
202938
HEIGHT
103862
20-Jul-2023
15:04
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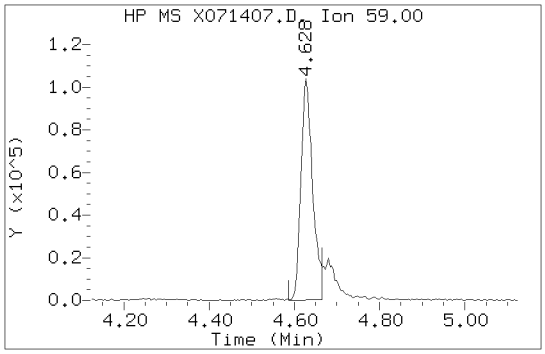
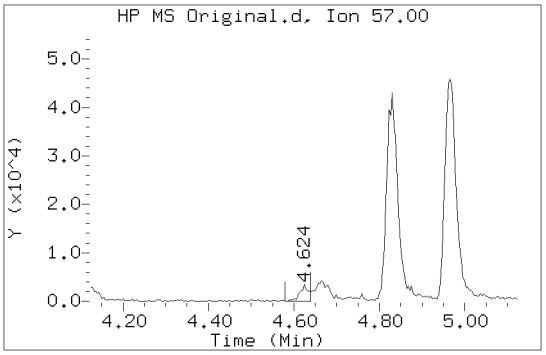
pham



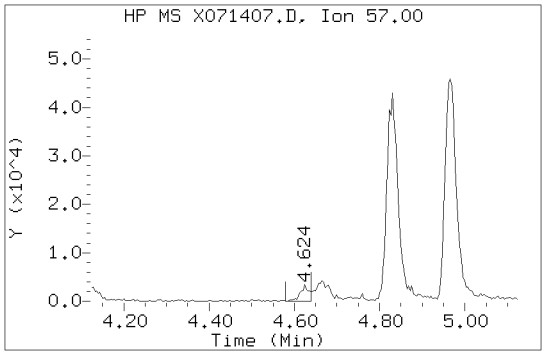
BEFORE

MASS
57
AREA
4882
HEIGHT
3421
20-Jul-2023
15:04
linh
pham



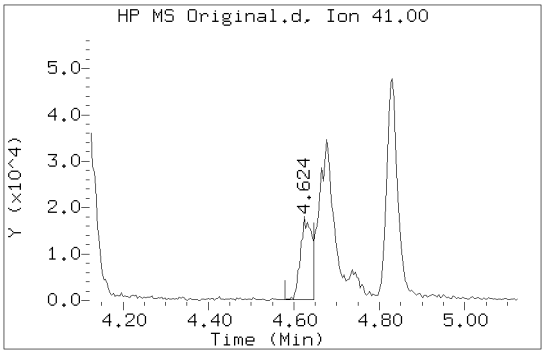
AFTER

MASS
57
AREA
4882
HEIGHT
3421
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
41
AREA
34265
HEIGHT
18036
20-Jul-2023
15:04
linh
pham



AFTER

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AREA
34265
HEIGHT
18036
20-Jul-2023
15:04
linh
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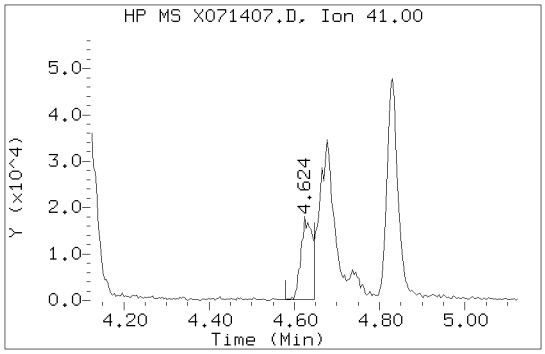

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InstruID : voa6.i
LabSampID : VSTD020

tert-Amyl alcohol (75-85-4)

Reason Code:

BEFORE

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59
AREA
206505
HEIGHT
103862
20-Jul-2023
15:04
linh
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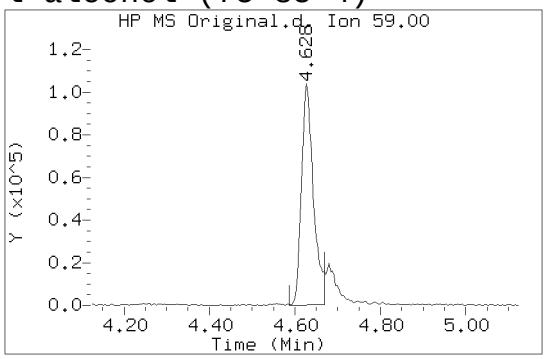

AFTER

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103862
20-Jul-2023
15:04
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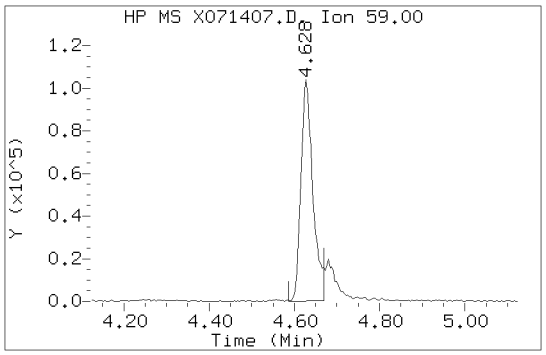
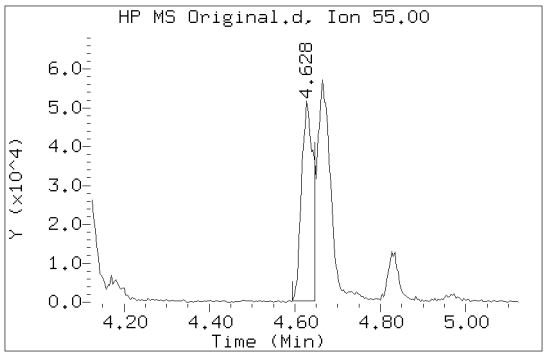


BEFORE

MASS
55
AREA
96489
HEIGHT
51399
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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HEIGHT
51399
20-Jul-2023
15:04
linh
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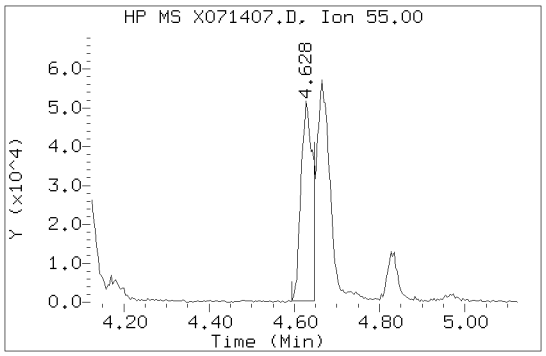
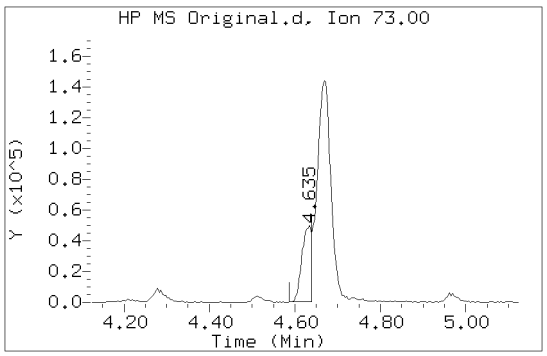


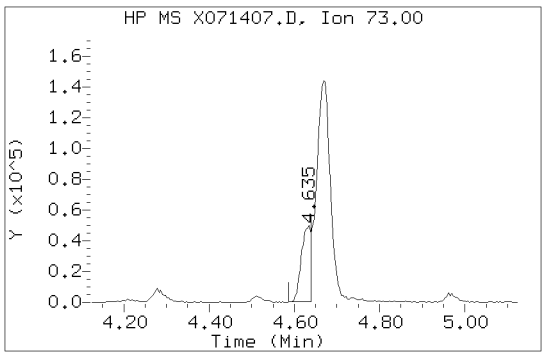
BEFORE

MASS
73
AREA
78871
HEIGHT
49677
20-Jul-2023
15:04
linh
pham



AFTER

MASS
73
AREA
78871
HEIGHT
49677
20-Jul-2023
15:04
linh
pham

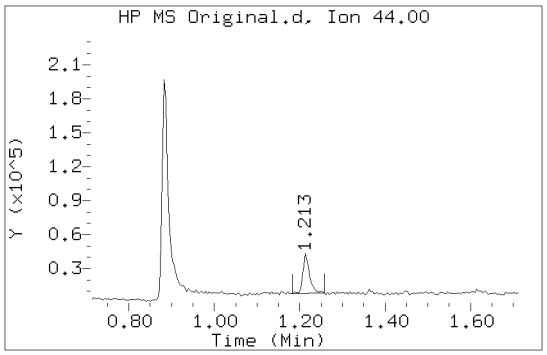


Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
44
AREA
39093
HEIGHT
35571
20-Jul-2023
15:04
linh
pham



AFTER

MASS
44
AREA
39093
HEIGHT
35571
20-Jul-2023
15:04
linh
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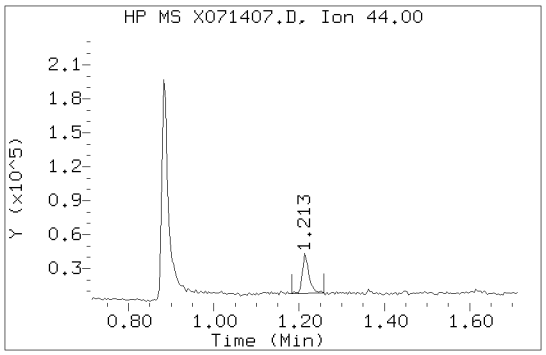

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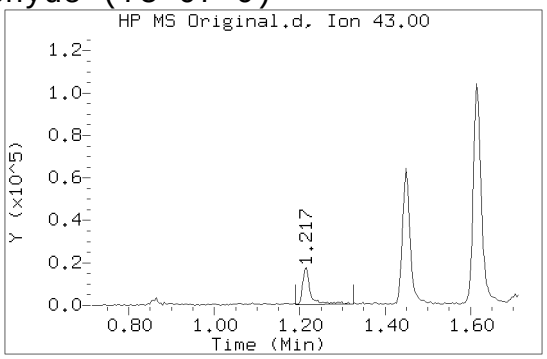
Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

Acetaldehyde (75-07-0)

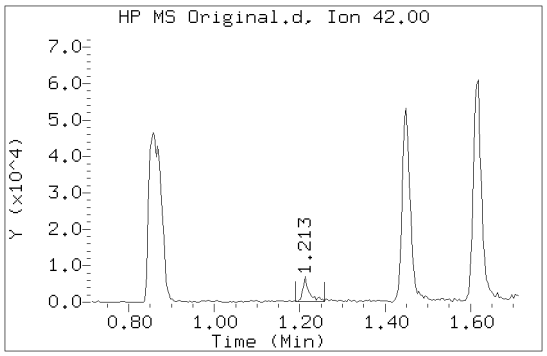
BEFORE

MASS
43
AREA
22978
HEIGHT
17443
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
42
AREA
7214
HEIGHT
6800
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

MASS
43
AREA
22978
HEIGHT
17443
20-Jul-2023
15:04
linh
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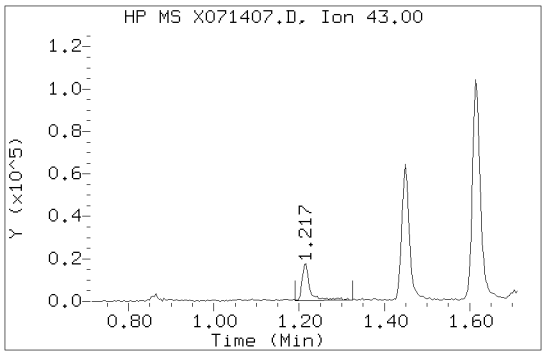

AFTER

MASS
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AREA
7214
HEIGHT
6800
20-Jul-2023
15:04
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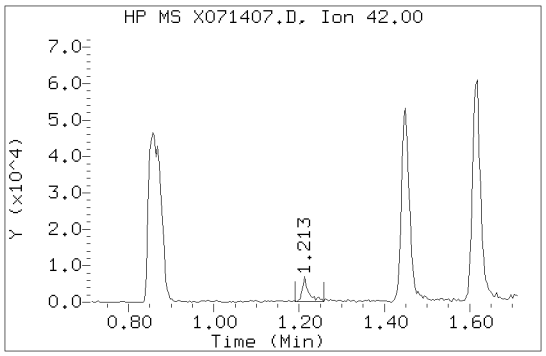
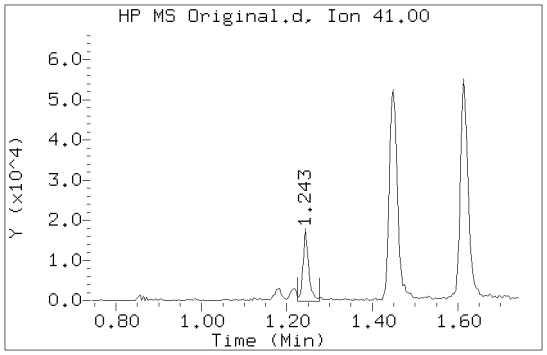


Isobutylene (115-11-7)

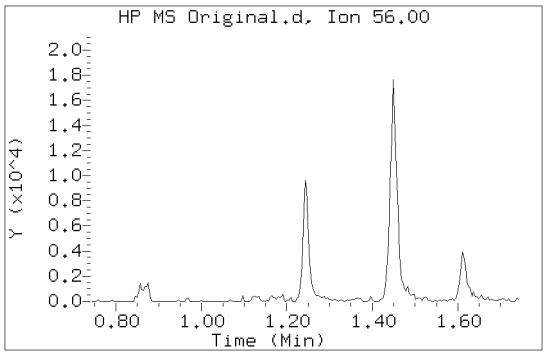
BEFORE

MASS
41
AREA
17453
HEIGHT
18052
20-Jul-2023
15:04
linh
pham



BEFORE

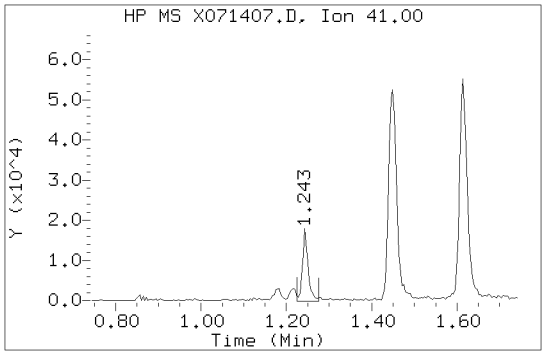
MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

MASS
41
AREA
17453
HEIGHT
18052
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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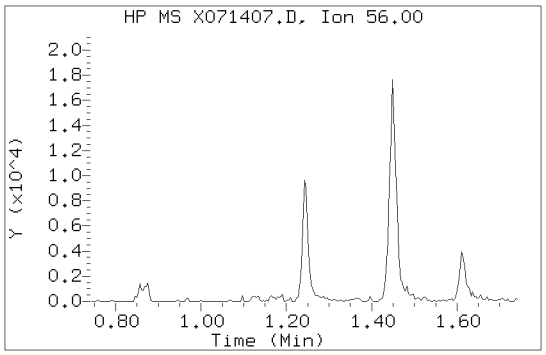
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

Isobutylene (115-11-7)

Reason Code:

BEFORE

MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
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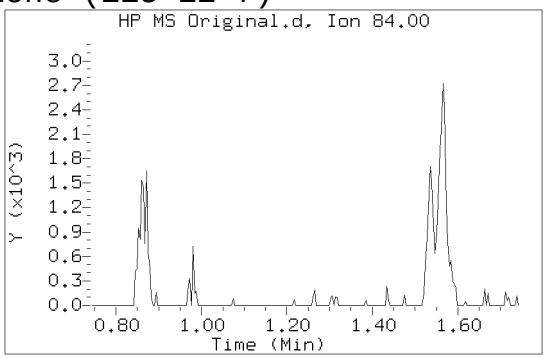

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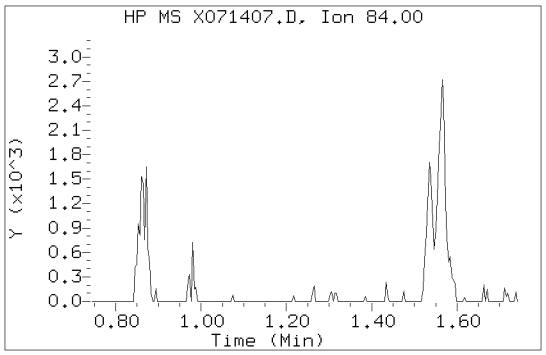

Toluene-d8 (2037-26-5)

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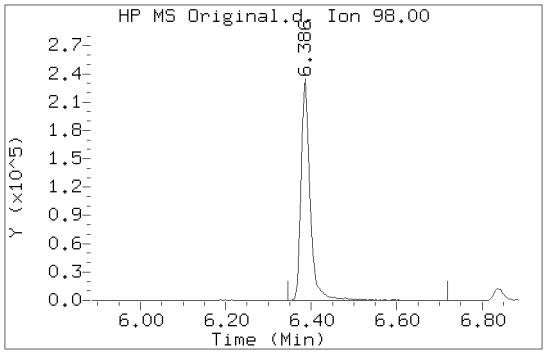

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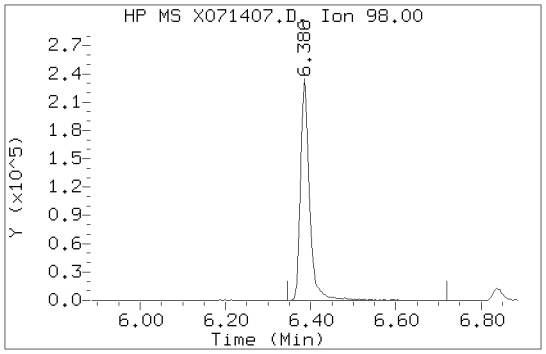

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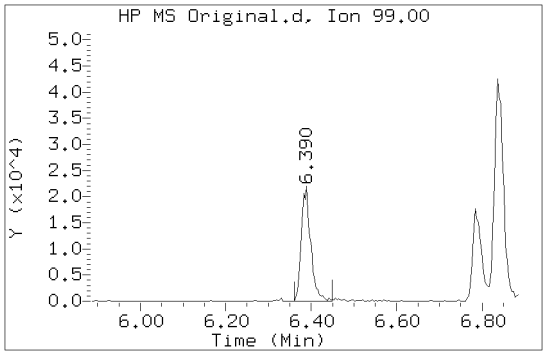

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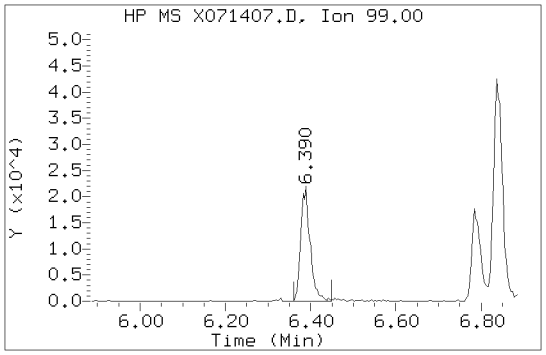

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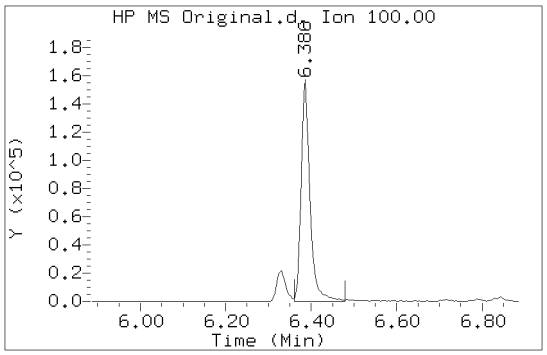

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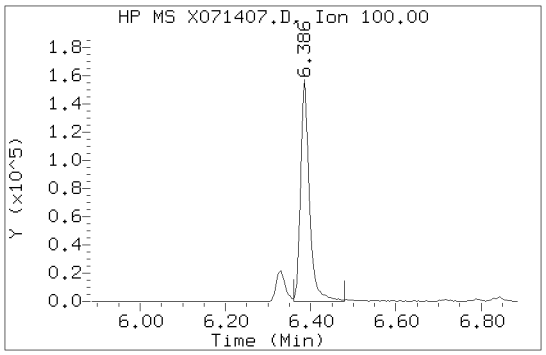

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071408.D
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Inj Date : 14-JUL-2023 14:24
Operator : PC Inst ID: voa6.i
Smp Info : VSTD050;VSTD050;1;7;
Misc Info : V6;WATER;0;1;
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Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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	4.178	4.178	(1.000)	523013	50.0000	
	2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	235300	50.0000	44.11
	3 Chloromethane	50	1.081	1.081	(0.259)	354356	50.0000	44.85
	4 Propionitrile	54	3.656	3.656	(0.875)	492839	500.000	475.69
	5 Vinyl Chloride	62	1.145	1.145	(0.274)	318113	50.0000	47.00
	6 Bromomethane	94	1.344	1.344	(0.322)	131891	50.0000	47.09
	7 Chloroethane	64	1.407	1.407	(0.337)	180308	50.0000	46.66
	8 Trichlorofluoromethane	101	1.561	1.561	(0.374)	315333	50.0000	45.97
	9 Acrolein	56	1.861	1.861	(0.446)	19251	100.000	97.23(H)
	10 Acetone	43	1.973	1.973	(0.472)	210033	100.000	101.57
	11 1,1-Dichloroethene	96	1.913	1.913	(0.458)	183746	50.0000	47.95
	12 Isobutyl Alcohol	43	4.680	4.680	(1.120)	992232	1000.00	1000.83
	13 Acetonitrile	39	2.198	2.198	(0.526)	357196	500.000	487.03
	14 Allyl Chloride	41	2.198	2.198	(0.526)	798138	50.0000	46.48
	15 Iodomethane	142	2.030	2.030	(0.486)	473625	100.000	94.10
	16 Acrylonitrile	53	2.532	2.532	(0.606)	235726	100.000	92.49
	17 Methylene Chloride	84	2.307	2.307	(0.552)	228969	50.0000	50.65
	18 Methyl tert-butyl ether	73	2.539	2.539	(0.608)	669525	50.0000	46.98
	19 Carbon Disulfide	76	2.071	2.071	(0.496)	1141643	100.000	94.78
	20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	211279	50.0000	47.66

21 Vinyl Acetate	43	2.997	2.997 (0.717)	1752870	100.000	95.62
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	470383	50.0000	48.36

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.775	1.775	(0.425)	101850	50.0000	43.31(M)
	24 2-Butanone	43	3.582	3.582	(0.857)	268410	100.000	96.36
	25 Methacrylonitrile	41	3.821	3.821	(0.915)	328284	50.0000	48.62(a)
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	357279	50.0000	47.33
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	274899	50.0000	48.68
	28 Chloroform	83	3.904	3.904	(0.935)	470821	50.0000	47.31
	29 Bromochloromethane	128	3.791	3.791	(0.908)	149658	50.0000	47.29
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	227290	50.0000	47.37
	31 1,1,1-Trichloroethane	97	4.084	4.084	(0.978)	366818	50.0000	47.88
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	311339	50.0000	45.93
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	432993	50.0000	47.34
	34 Carbon Tetrachloride	117	4.268	4.268	(0.860)	295641	50.0000	43.30
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	282994	50.0000	47.17
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	830857	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	951794	50.0000	47.89
	38 Trichloroethene	130	5.205	5.205	(1.048)	268578	50.0000	47.77
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	359212	50.0000	47.18
	40 Methyl Methacrylate	41	5.606	5.606	(1.342)	290569	50.0000	46.03
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	231938	100.000	99.79
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	313347	50.0000	49.03
	43 2-Nitropropane	43	5.969	5.969	(1.429)	96529	50.0000	46.45
	44 Dibromomethane	93	5.550	5.550	(1.118)	168989	50.0000	46.71
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	688236	100.000	93.62
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	425194	50.0000	48.63
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	747052	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	806003	50.0000	41.90(M)
	49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	223750	50.0000	41.11
	50 Toluene	91	6.445	6.445	(0.841)	1011174	50.0000	50.28
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	351933	50.0000	47.75
	52 2-Hexanone	43	7.086	7.086	(0.924)	449229	100.000	93.02
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	205411	50.0000	48.15
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	420354	50.0000	48.23
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	303363	50.0000	49.25
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	200679	50.0000	48.30
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	231339	50.0000	47.45
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	276645	50.0000	41.44
	59 Chlorobenzene	112	7.690	7.690	(1.003)	673755	50.0000	47.92
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	270349	50.0000	49.12
	61 Ethylbenzene	106	7.795	7.795	(1.017)	339019	50.0000	48.09
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	871877	100.000	98.59
	63 o-Xylene	106	8.237	8.237	(1.074)	410767	50.0000	49.05
	64 Styrene	104	8.256	8.256	(1.077)	730009	50.0000	49.97
	66 Bromoform	173	8.406	8.406	(1.096)	197185	50.0000	49.90
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1023144	50.0000	47.53
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	323110	50.0000	46.71
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	355682	50.0000	47.79
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	411751	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	256294	50.0000	46.70(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	113164	50.0000	49.80
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	1199683	50.0000	48.21
	74 Bromobenzene	156	8.803	8.803	(0.912)	304391	50.0000	47.26
	75 1,3,5-Trimethylbenzene	105	9.062	9.062	(0.938)	873751	50.0000	46.87

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	787863	50.0000	46.93
77	4-Chlorotoluene	91	9.066	9.066 (0.939)	904673	50.0000	49.04

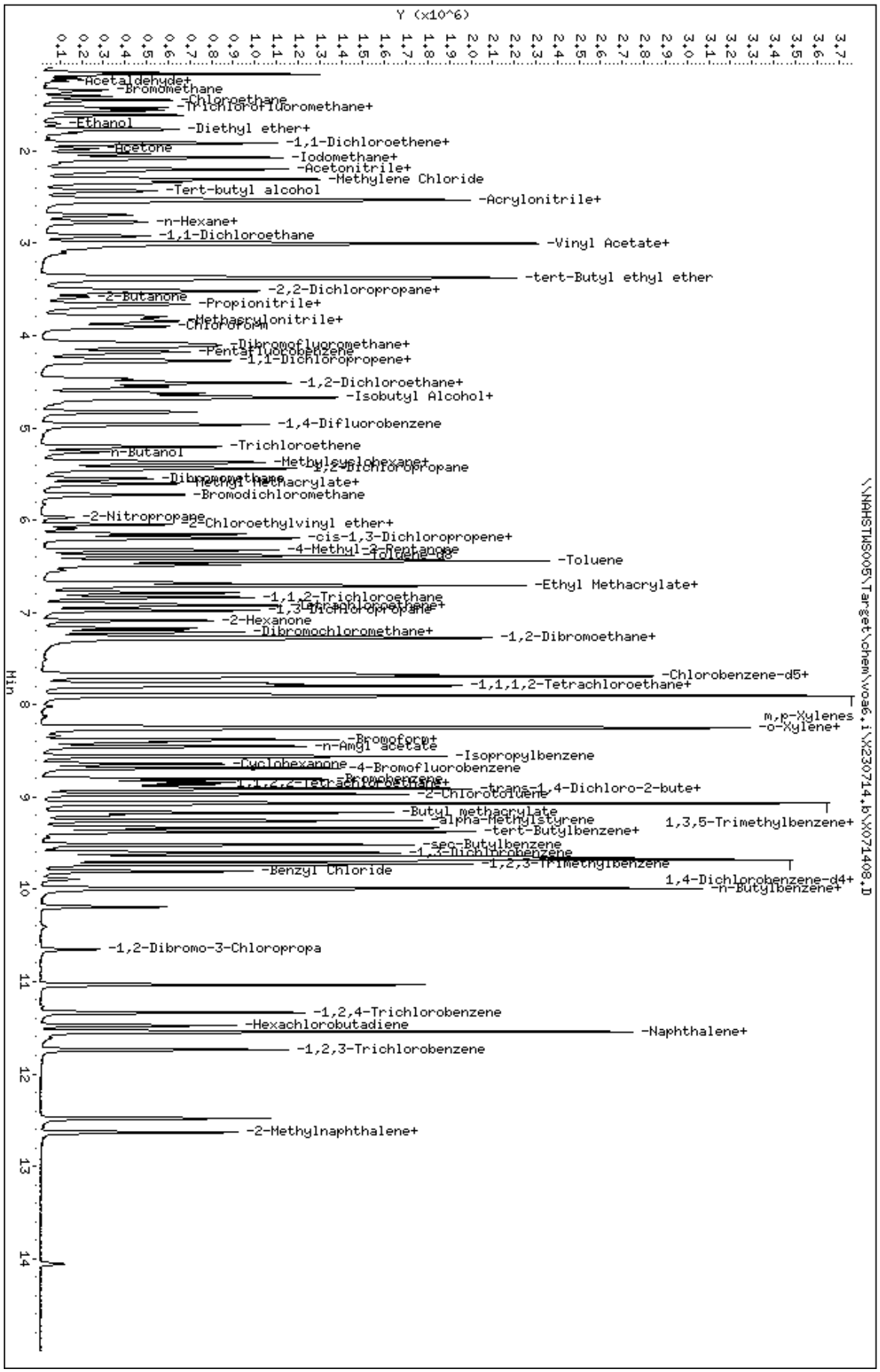
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
78	tert-Butylbenzene	119	9.336	9.336	(0.967)	722967	50.0000	45.22	
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	872776	50.0000	46.69	
81	sec-Butylbenzene	105	9.519	9.519	(0.986)	982642	50.0000	46.11	
82	p-Isopropyltoluene	119	9.647	9.647	(0.999)	896333	50.0000	46.05	
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	530593	50.0000	47.29	
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	570511	50.0000	46.38	
86	Benzyl Chloride	91	9.804	9.804	(1.279)	558112	50.0000	44.19	
87	n-Butylbenzene	91	9.992	9.992	(1.035)	755707	50.0000	46.35	
88	1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	524864	50.0000	47.58	
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.103)	51434	50.0000	45.34	
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	331560	50.0000	43.77	
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	139894	50.0000	40.54	
92	Naphthalene	128	11.540	11.540	(1.195)	833003	50.0000	44.42	
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	307966	50.0000	43.47	
146	Methyl acetate	43	2.232	2.232	(0.534)	220729	50.0000	47.42	
138	Freon TF	101	1.917	1.917	(0.459)	154547	50.0000	48.17	
141	Cyclohexane	56	4.125	4.125	(0.987)	384719	50.0000	42.43	
142	Tetrahydrofuran	42	3.851	3.851	(0.922)	127806	100.000	94.98	
147	Methylcyclohexane	55	5.381	5.381	(1.084)	820341	50.0000	46.77	
135	1,4-Dioxane	88	5.602	5.602	(1.341)	56497	1000.00	909.04	
132	n-Butanol	56	5.261	5.261	(1.259)	163155	1000.00	937.09	
131	Methyl Acrylate	55	3.690	3.690	(0.883)	324862	50.0000	45.69	
133	Ethyl Acrylate	55	5.381	5.381	(1.288)	820341	50.0000	47.32	
136	n-Hexane	57	2.772	2.772	(0.664)	244351	50.0000	48.23	
139	Diethyl ether	59	1.760	1.760	(0.421)	229645	50.0000	47.08	
148	Tert-butyl alcohol	59	2.434	2.434	(0.583)	589524	1000.00	893.06	
149	Isopropyl alcohol	45	2.093	2.093	(0.501)	369866	1000.00	902.98	
156	Diisopropyl ether	45	3.004	3.004	(0.719)	1023782	50.0000	47.49	
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	931868	50.0000	48.95	
167	Ethanol	45	1.703	1.703	(0.408)	72445	1000.00	990.30	
172	tert-Butyl formate	59	4.627	4.627	(1.108)	483988	100.000	86.62	
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	654787	1000.00	815.00	
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	841588	50.0000	48.91	
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	1034229	50.0000	46.70	
176	tert-Amyl alcohol	59	4.627	4.627	(1.108)	483988	1000.00	847.08	
151	4-Methyl-2-pentanol	45	6.712	6.712	(1.352)	1443508	1000.00	810.70	
180	1-Methylnaphthalene	142	12.634	12.634	(1.308)	377609	50.0000		(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	306107	50.0000	45.54	
152	Amyl alcohol	42	6.903	6.903	(0.900)	190741	1000.00	887.85	
158	Dichlorofluoromethane	67	1.535	1.535	(0.367)	398292	50.0000	47.26	
159	Propylene oxide	43	1.805	1.805	(0.432)	59535	100.000	92.78	
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	178568	1000.00	970.88	
162	Butyl acrylate	55	8.249	8.249	(1.076)	713652	50.0000	50.21	
163	Butyl methacrylate	41	9.167	9.167	(0.949)	474324	50.0000	48.09	
164	Dicyclopentadiene	66	9.681	9.681	(1.002)	1133352	50.0000	47.78	
182	Epichlorohydrin	57	6.093	6.093	(1.227)	118291	200.000	190.60	
M 94	1,2-Dichloroethylene (total)	96				486178	100.000		(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	421857	50.0000	46.96	
130	Ethyl Acetate	43	3.660	3.660	(0.876)	368212	50.0000	47.39	
134	Cyclohexanone	55	8.642	8.642	(0.895)	325236	1000.00	887.25	
185	Isoprene	39	1.775	1.775	(0.425)	78291	50.0000	45.41	
188	Isopropyl acetate	43	4.680	4.680	(0.943)	992232	50.0000	45.29	

187 n-Amyl acetate	43	8.451	8.451 (1.102)	605401	50.0000	44.21
189 n-Butyl acetate	43	7.210	7.210 (0.940)	548658	50.0000	47.91(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.772	2.772	(0.664)	244351	1000.00	964.89
194 Acetaldehyde	44	1.212	1.212	(0.290)	101552	200.000	218.25(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	719543	50.0000	46.08
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	522090	50.0000	51.81
202 Isobutylene	41	1.242	1.242	(0.297)	36655	50.0000	42.38(M)
205 2-Ethylhexyl Acrylate	55	11.547	11.547	(1.196)	561357	50.0000	53.37

QC Flag Legend

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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Purge Volume: 5.0
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Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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Inj Date : 14-JUL-2023 14:24
InstruID : voa6.i
LabSampID : VSTD050

1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

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20-Jul-2023
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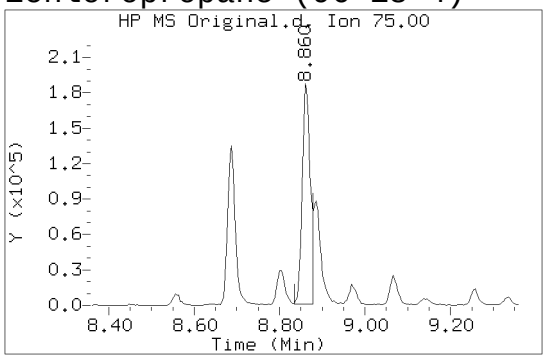

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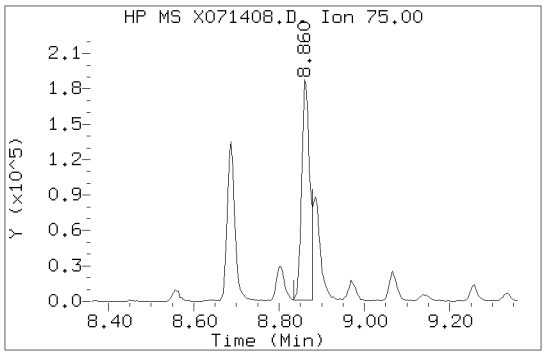

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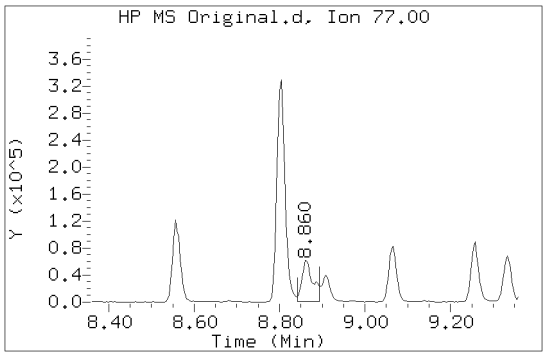

AFTER

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60865
20-Jul-2023
15:04
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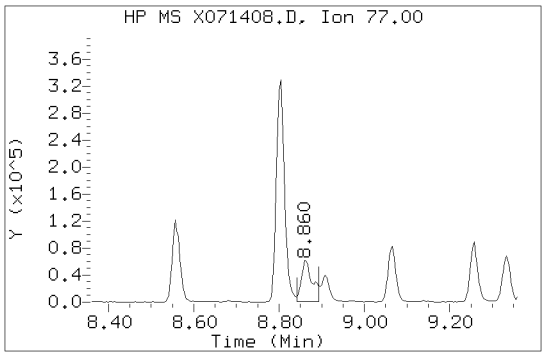

Chloroprene (126-99-8)

Reason Code:

BEFORE

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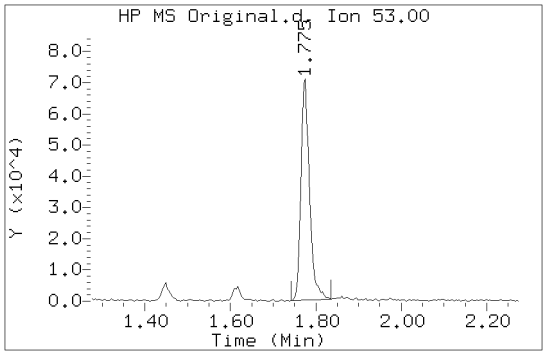

AFTER

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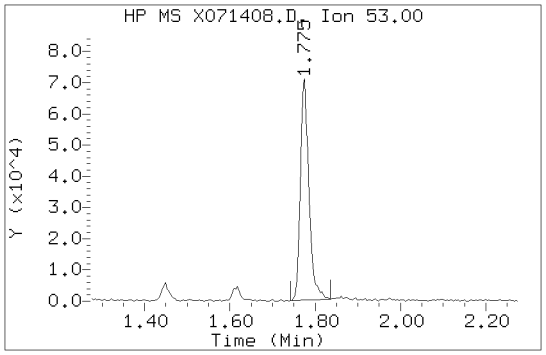

BEFORE

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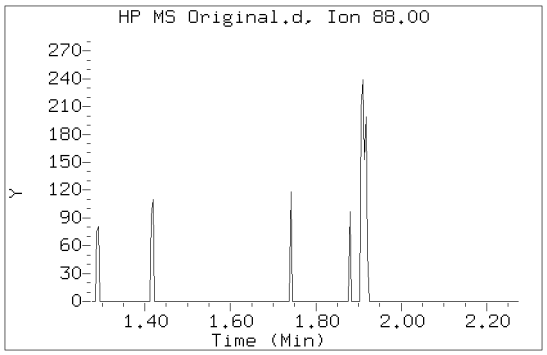

AFTER

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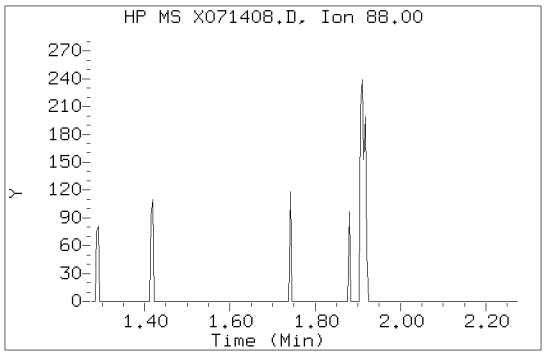

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Inj Date : 14-JUL-2023 14:24
InstruID : voa6.i
LabSampID : VSTD050

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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20-Jul-2023
15:04
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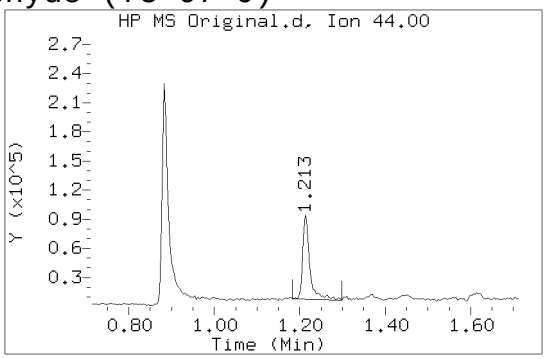
pham



AFTER

MASS
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20-Jul-2023
15:04
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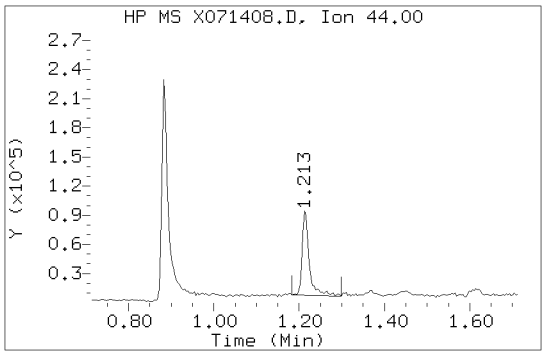

BEFORE

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48775
20-Jul-2023
15:04
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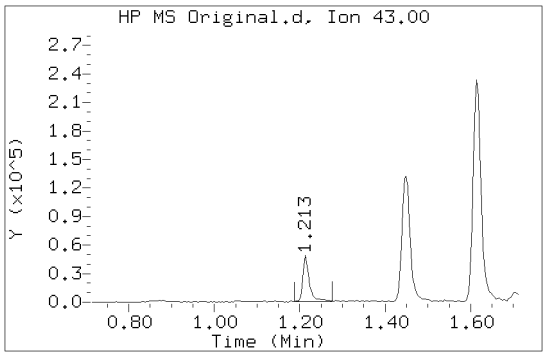

AFTER

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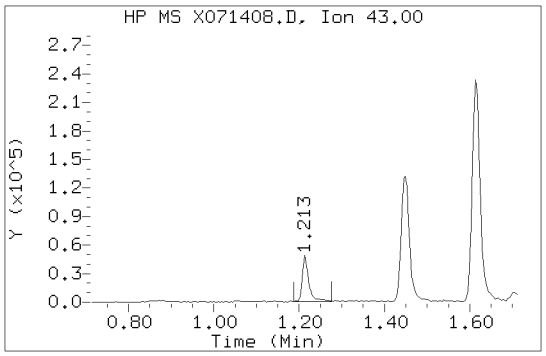

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20-Jul-2023
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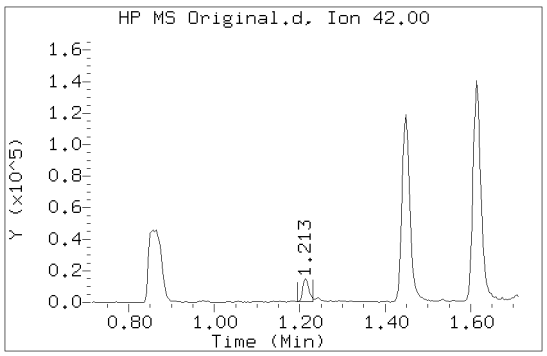

AFTER

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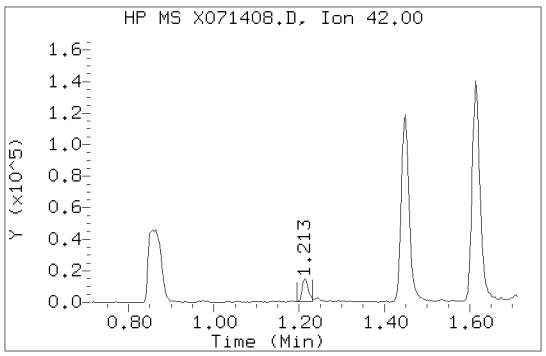

Isobutylene (115-11-7)

Reason Code:

BEFORE

MASS
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AREA
36655
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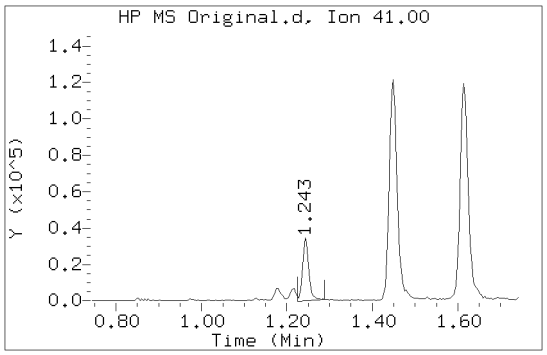
34446
20-Jul-2023
15:04
linh
pham



AFTER

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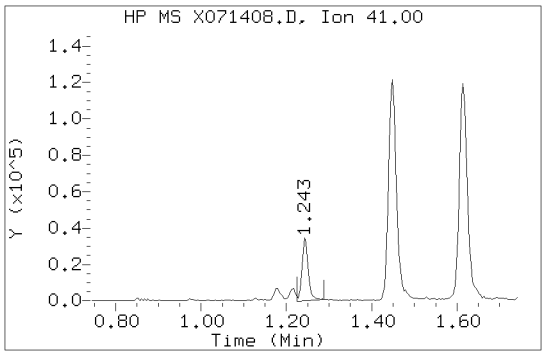

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InstruID : voa6.i
LabSampID : VSTD050

Isobutylene (115-11-7)

Reason Code:

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20-Jul-2023
15:04
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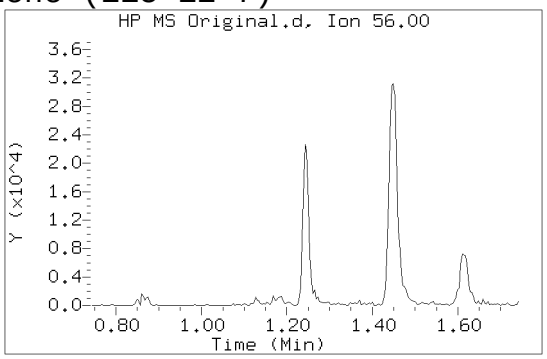

AFTER
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20-Jul-2023
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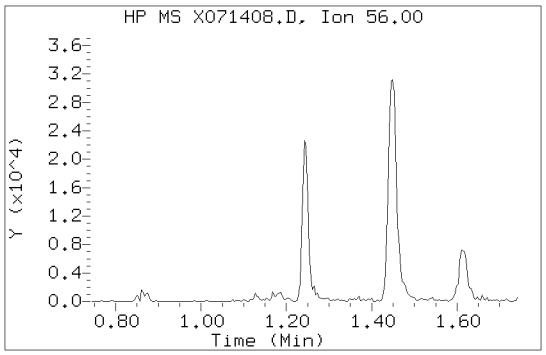

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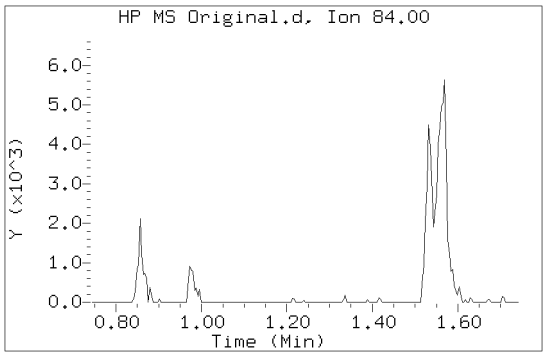

AFTER
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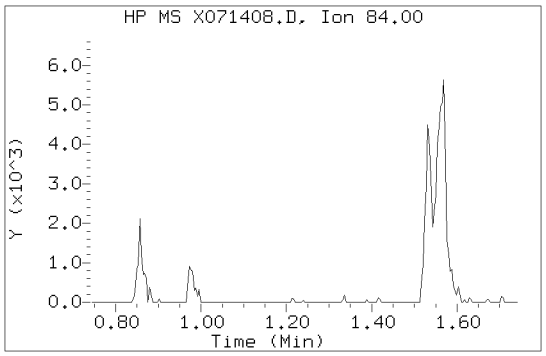

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE
MASS
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AREA
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521771
20-Jul-2023
15:04
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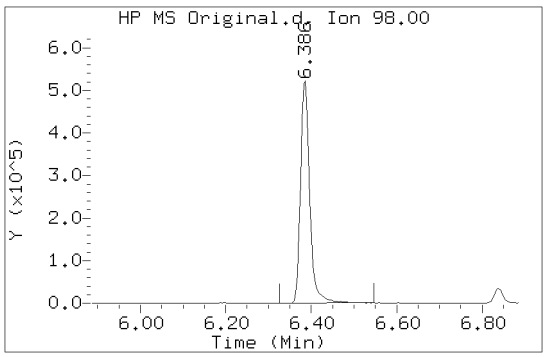

AFTER
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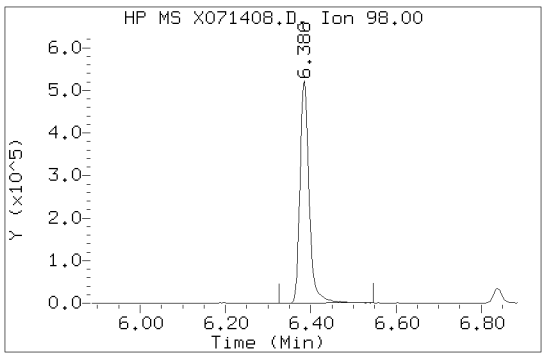

BEFORE
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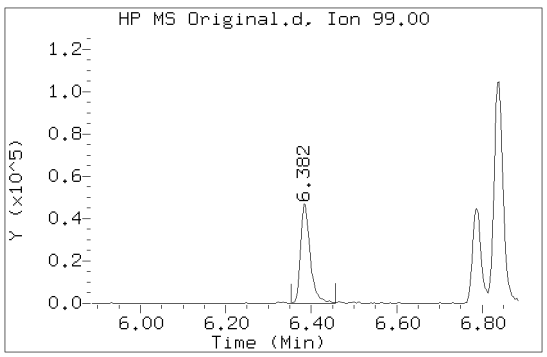

AFTER
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15:04
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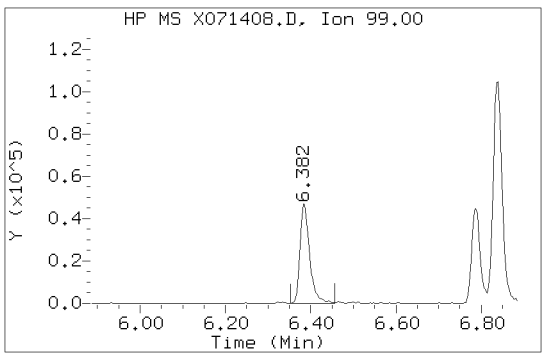

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Inj Date : 14-JUL-2023 14:24
InstruID : voa6.i
LabSampID : VSTD050

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

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20-Jul-2023
15:04
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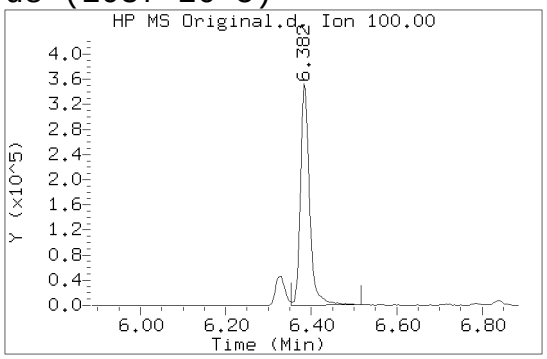

AFTER

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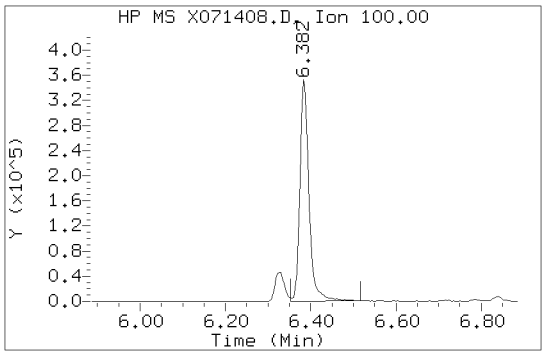


Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071409.D Page 1
Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071409.D
Lab Smp Id: VSTD100 Client Smp ID: VSTD100
Inj Date : 14-JUL-2023 14:44
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\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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	4.178	4.178	(1.000)	523083	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	576963	100.000	106.55
3	Chloromethane	50	1.081	1.081	(0.259)	835087	100.000	105.69
4	Propionitrile	54	3.657	3.657	(0.875)	1047975	1000.00	1011.37
5	Vinyl Chloride	62	1.145	1.145	(0.274)	734431	100.000	108.50
6	Bromomethane	94	1.340	1.340	(0.321)	298512	100.000	106.56
7	Chloroethane	64	1.404	1.404	(0.336)	388839	100.000	100.62
8	Trichlorofluoromethane	101	1.561	1.561	(0.374)	784790	100.000	114.40
9	Acrolein	56	1.861	1.861	(0.446)	38657	200.000	194.08(H)
10	Acetone	43	1.973	1.973	(0.472)	413238	200.000	204.54
11	1,1-Dichloroethene	96	1.917	1.917	(0.459)	418161	100.000	109.11
12	Isobutyl Alcohol	43	4.676	4.676	(1.119)	2105793	2000.00	2123.76
13	Acetonitrile	39	2.198	2.198	(0.526)	728143	1000.00	992.69
14	Allyl Chloride	41	2.198	2.198	(0.526)	1634102	100.000	95.15
15	Iodomethane	142	2.030	2.030	(0.486)	1101288	200.000	206.62
16	Acrylonitrile	53	2.532	2.532	(0.606)	485413	200.000	190.43
17	Methylene Chloride	84	2.303	2.303	(0.551)	461890	100.000	103.61
18	Methyl tert-butyl ether	73	2.539	2.539	(0.608)	1386267	100.000	97.26
19	Carbon Disulfide	76	2.071	2.071	(0.496)	2567979	200.000	213.18
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	450376	100.000	101.60

21 Vinyl Acetate	43	3.001	3.001 (0.718)	3697154	200.000	201.67
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	974667	100.000	100.19

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.775	1.775	(0.425)	247316	100.000	105.15(M)
	24 2-Butanone	43	3.582	3.582	(0.857)	596777	200.000	214.23
	25 Methacrylonitrile	41	3.821	3.821	(0.915)	700145	100.000	103.69(a)
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	797830	100.000	105.42
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	578093	100.000	102.37
	28 Chloroform	83	3.904	3.904	(0.935)	984765	100.000	98.94
	29 Bromochloromethane	128	3.795	3.795	(0.908)	308539	100.000	97.49
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	502644	100.000	105.68
	31 1,1,1-Trichloroethane	97	4.084	4.084	(0.978)	846403	100.000	110.47
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	731563	100.000	110.92
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	901009	100.000	101.23
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	726709	100.000	109.37
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	615043	100.000	103.24
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	808530	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	2032676	100.000	105.10
	38 Trichloroethene	130	5.201	5.201	(1.048)	584538	100.000	106.85
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	741977	100.000	100.16
	40 Methyl Methacrylate	41	5.606	5.606	(1.342)	628263	100.000	99.51
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	497113	200.000	219.79
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	653249	100.000	105.04
	43 2-Nitropropane	43	5.969	5.969	(1.429)	203991	100.000	98.16
	44 Dibromomethane	93	5.550	5.550	(1.118)	353228	100.000	100.34
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	1478418	200.000	198.78
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	899164	100.000	105.68
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	755792	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	1813180	100.000	93.17(M)
	49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	499748	100.000	94.37
	50 Toluene	91	6.442	6.442	(0.840)	2182793	100.000	107.28
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	755710	100.000	105.36
	52 2-Hexanone	43	7.087	7.087	(0.924)	970744	200.000	198.69
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	424795	100.000	98.42
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	873450	100.000	99.06
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	655964	100.000	105.28
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	469739	100.000	111.75
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	477019	100.000	96.72
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	692334	100.000	106.58
	59 Chlorobenzene	112	7.690	7.690	(1.003)	1451842	100.000	102.08
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	582430	100.000	104.61
	61 Ethylbenzene	106	7.795	7.795	(1.017)	757084	100.000	106.16
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	1920317	200.000	214.63
	63 o-Xylene	106	8.237	8.237	(1.074)	894211	100.000	105.54
	64 Styrene	104	8.256	8.256	(1.077)	1543196	100.000	104.42
	66 Bromoform	173	8.410	8.410	(1.097)	423146	100.000	105.85
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	2408268	100.000	110.58
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	686871	100.000	97.37
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	767493	100.000	102.43
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	419955	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	550885	100.000	98.41(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	253486	100.000	110.27
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	2861434	100.000	112.75
	74 Bromobenzene	156	8.803	8.803	(0.911)	667827	100.000	101.67
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	2103222	100.000	110.62

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	1748246	100.000	102.12
77	4-Chlorotoluene	91	9.066	9.066 (0.938)	2018059	100.000	107.27

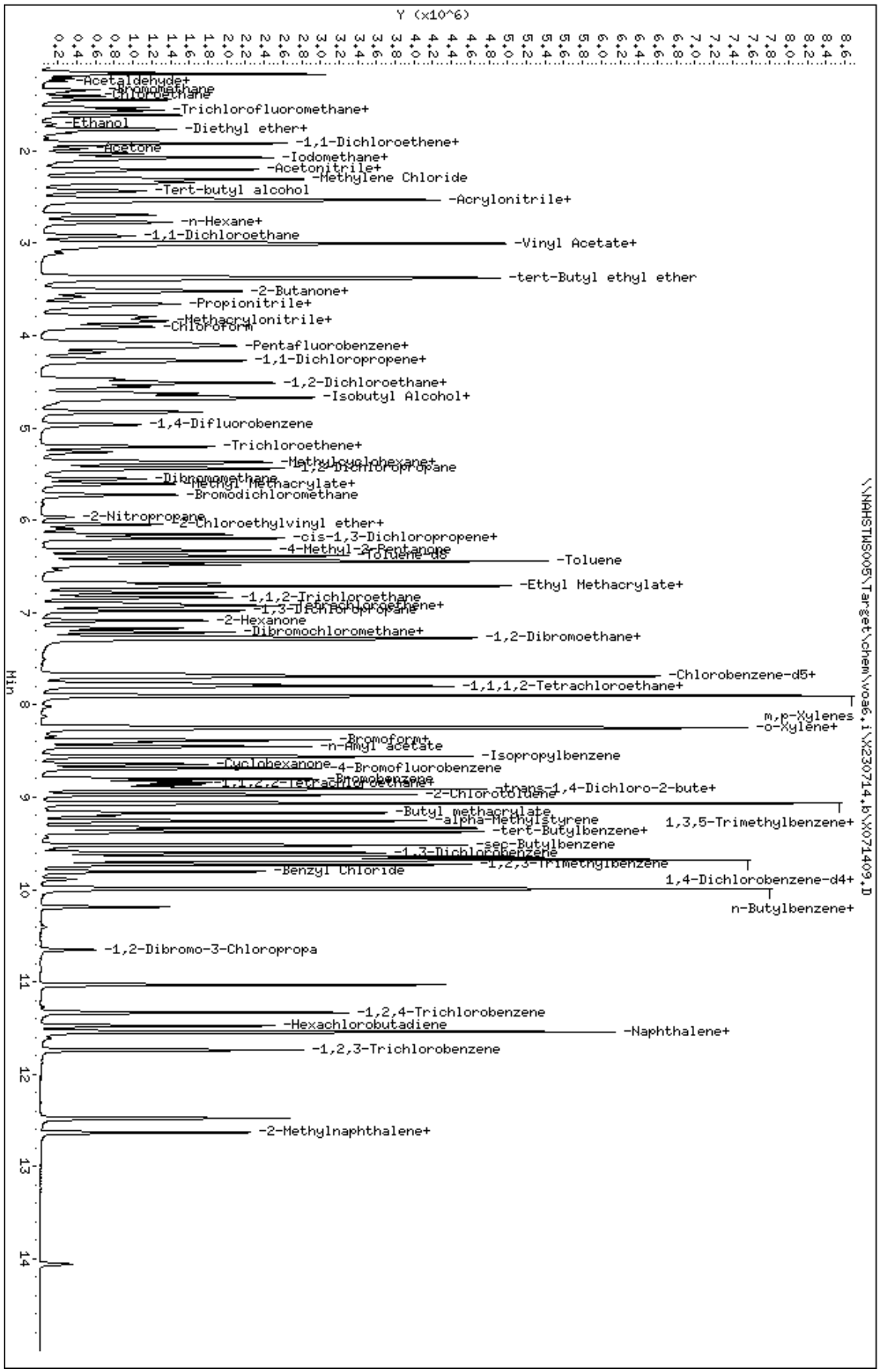
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	1780796	100.000	109.22
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	2073163	100.000	108.74
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	2510459	100.000	115.52
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	2265107	100.000	114.10
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	1217703	100.000	106.42
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	1289815	100.000	102.81
86	Benzyl Chloride	91	9.804	9.804	(1.279)	1321247	100.000	100.26
87	n-Butylbenzene	91	9.992	9.992	(1.034)	1995906	100.000	120.04
88	1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	1197079	100.000	106.41
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	119154	100.000	101.61
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	818711	100.000	105.96
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	382401	100.000	104.71
92	Naphthalene	128	11.540	11.540	(1.194)	1978675	100.000	103.47
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	745369	100.000	103.15
146	Methyl acetate	43	2.228	2.228	(0.533)	452160	100.000	97.12
138	Freon TF	101	1.917	1.917	(0.459)	422615	100.000	100.16
141	Cyclohexane	56	4.118	4.118	(0.986)	1080112	100.000	119.12
142	Tetrahydrofuran	42	3.848	3.848	(0.921)	261433	200.000	194.26
147	Methylcyclohexane	55	5.381	5.381	(1.084)	1785418	100.000	104.61(A)
135	1,4-Dioxane	88	5.598	5.598	(1.340)	124490	2000.00	2002.78
132	n-Butanol	56	5.261	5.261	(1.259)	380486	2000.00	2185.06
131	Methyl Acrylate	55	3.690	3.690	(0.883)	811825	100.000	114.17
133	Ethyl Acrylate	55	5.381	5.381	(1.288)	1785418	100.000	102.98
136	n-Hexane	57	2.772	2.772	(0.664)	700280	100.000	100.13
139	Diethyl ether	59	1.760	1.760	(0.421)	469212	100.000	96.19
148	Tert-butyl alcohol	59	2.434	2.434	(0.583)	1247600	2000.00	1889.72
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	761231	2000.00	1858.21
156	Diisopropyl ether	45	3.004	3.004	(0.719)	2133149	100.000	98.94
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	2052311	100.000	105.71
167	Ethanol	45	1.703	1.703	(0.408)	150451	2000.00	2076.45
172	tert-Butyl formate	59	4.627	4.627	(1.108)	1076721	200.000	192.69
173	3,3-Dimethyl-1-butanol	57	7.289	7.289	(0.951)	1478367	2000.00	1818.81
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	1654411	100.000	96.14
175	tert-Butyl ethyl ether	59	3.383	3.383	(0.810)	2142435	100.000	96.74
176	tert-Amyl alcohol	59	4.627	4.627	(1.108)	1076721	2000.00	1884.24
151	4-Methyl-2-pentanol	45	6.712	6.712	(1.352)	3281154	2000.00	1893.64
180	1-Methylnaphthalene	142	12.635	12.635	(1.308)	878613	100.000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	742885	100.000	110.52
152	Amyl alcohol	42	6.903	6.903	(0.900)	457453	2000.00	2104.71
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	823584	100.000	97.72
159	Propylene oxide	43	1.805	1.805	(0.432)	116784	200.000	181.98
161	3-Methyl-1-butanol	55	6.899	6.899	(0.900)	421402	2000.00	2264.68
162	Butyl acrylate	55	8.249	8.249	(1.076)	1549632	100.000	107.77
163	Butyl methacrylate	41	9.167	9.167	(0.949)	1085490	100.000	107.91
164	Dicyclopentadiene	66	9.681	9.681	(1.002)	2485958	100.000	102.76
182	Epichlorohydrin	57	6.093	6.093	(1.227)	253170	400.000	419.20
M 94	1,2-Dichloroethylene (total)	96				1028469	200.000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	977451	100.000	106.68
130	Ethyl Acetate	43	3.660	3.660	(0.876)	772631	100.000	99.44
134	Cyclohexanone	55	8.642	8.642	(0.894)	668441	2000.00	1787.90
185	Isoprene	39	1.771	1.771	(0.424)	186523	100.000	108.17
188	Isopropyl acetate	43	4.676	4.676	(0.942)	2105793	100.000	98.77

187 n-Amyl acetate	43	8.451	8.451 (1.102)	1369941	100.000	98.90
189 n-Butyl acetate	43	7.210	7.210 (0.940)	1203586	100.000	103.89(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.772	2.772	(0.664)	700280	2000.00	2002.79
194 Acetaldehyde	44	1.212	1.212	(0.290)	189053	400.000	425.78(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	1583303	100.000	100.22
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	1112805	100.000	109.15
202 Isobutylene	41	1.242	1.242	(0.297)	90557	100.000	104.71(M)
205 2-Ethylhexyl Acrylate	55	11.544	11.544	(1.195)	1235080	100.000	115.14

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.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Client ID: VSTD100
Sample Info: VSTD100;VSTD100;1;8;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6,i
Operator: PC
Column diameter: 0.18

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Inj Date : 14-JUL-2023 14:44
InstruID : voa6.i
LabSampID : VSTD100

1,2,3-Trichloropropane (96-18-4)

Reason Code:

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20-Jul-2023
15:04
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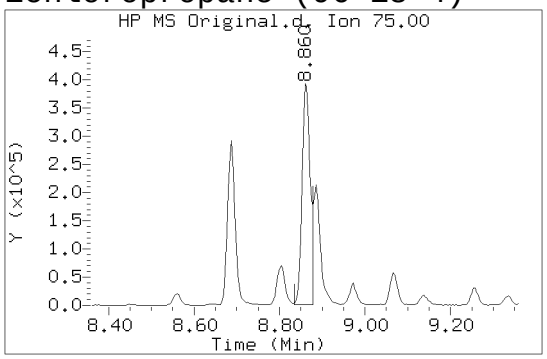

AFTER

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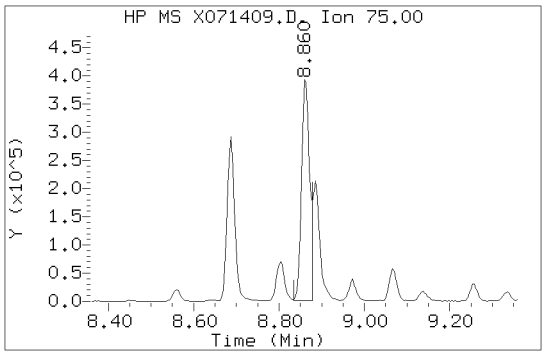

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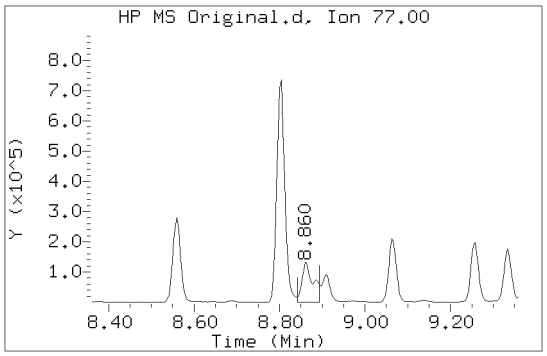

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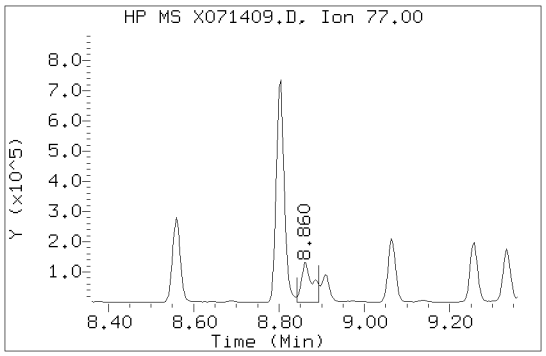

Chloroprene (126-99-8)

Reason Code:

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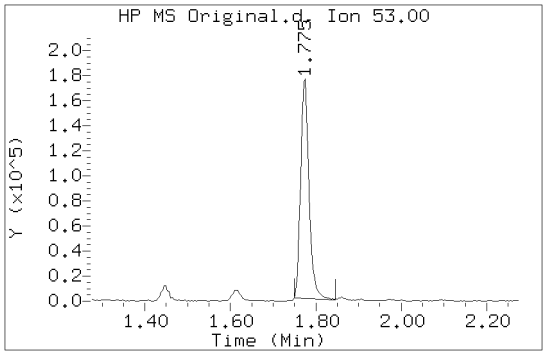

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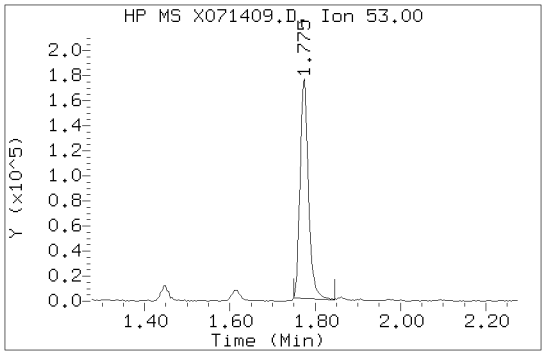

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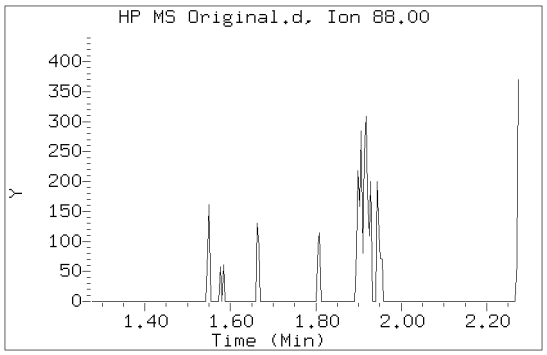

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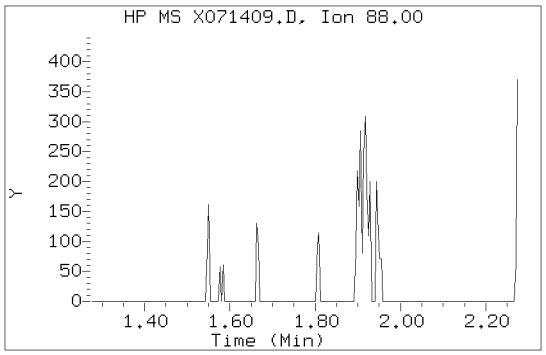

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InstruID : voa6.i
LabSampID : VSTD100

Acetaldehyde (75-07-0)

Reason Code:

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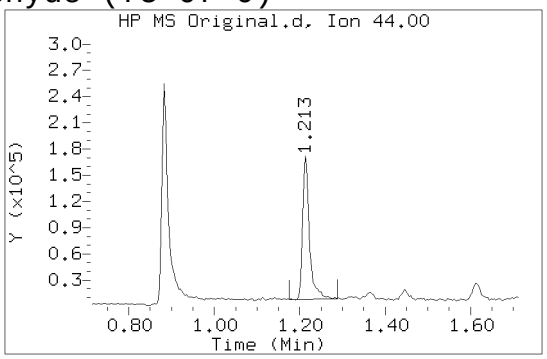

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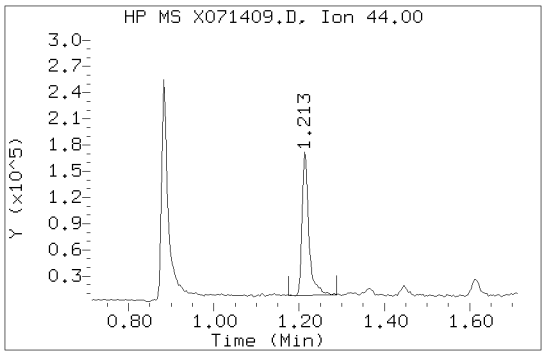

BEFORE

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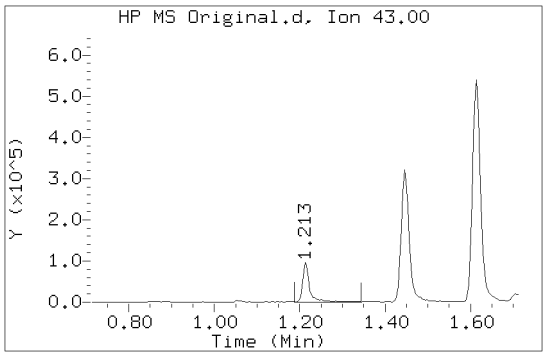

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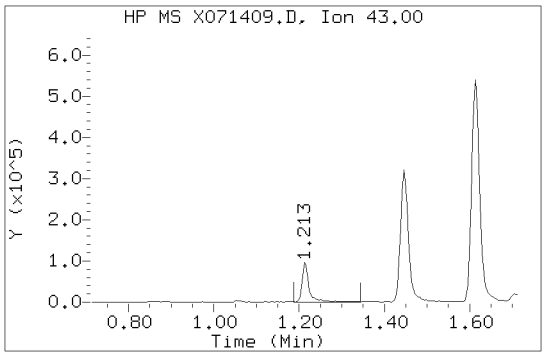

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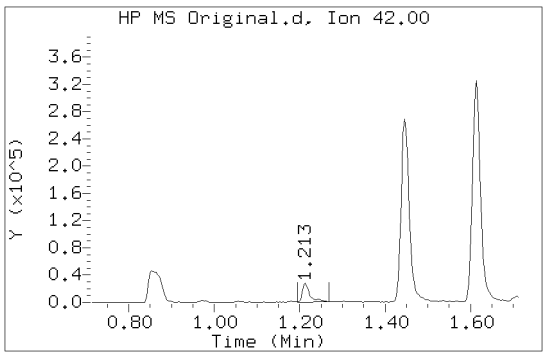

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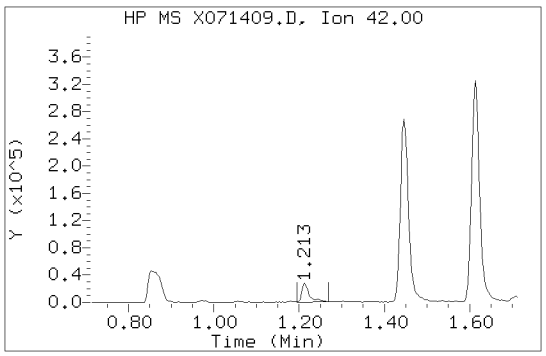

Isobutylene (115-11-7)

Reason Code:

BEFORE

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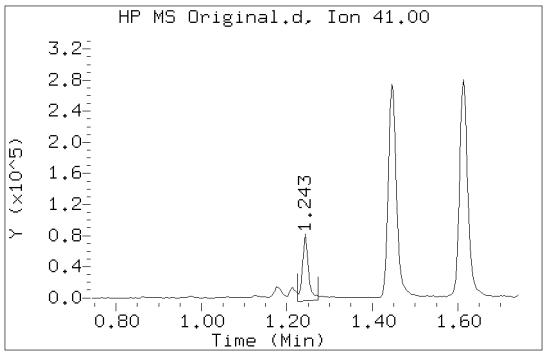

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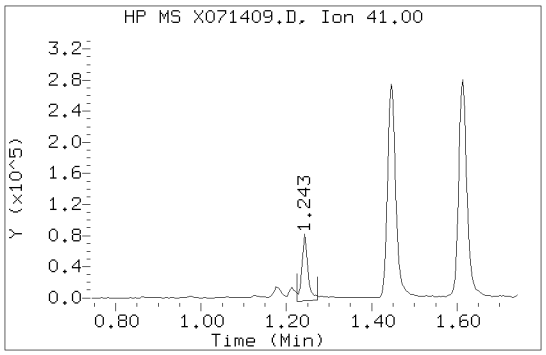

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InstruID : voa6.i
LabSampID : VSTD100

Isobutylene (115-11-7)

Reason Code:

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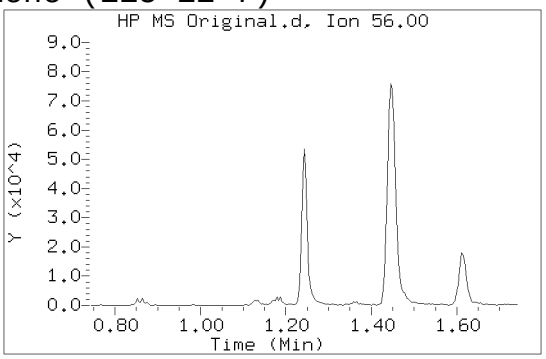

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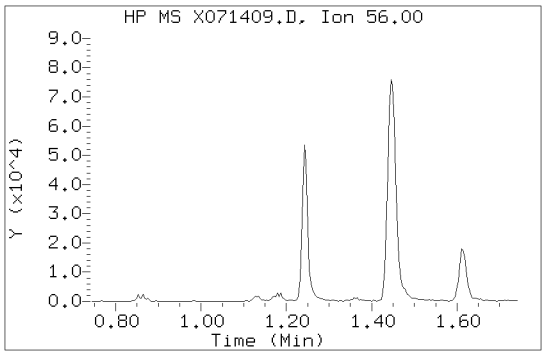

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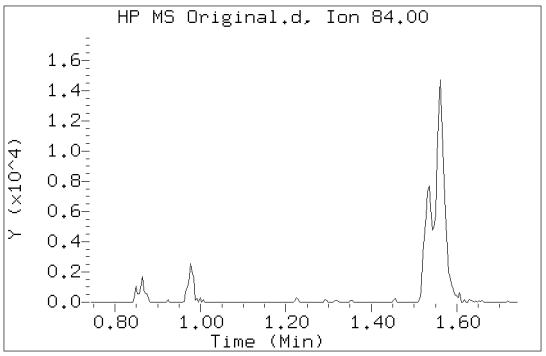

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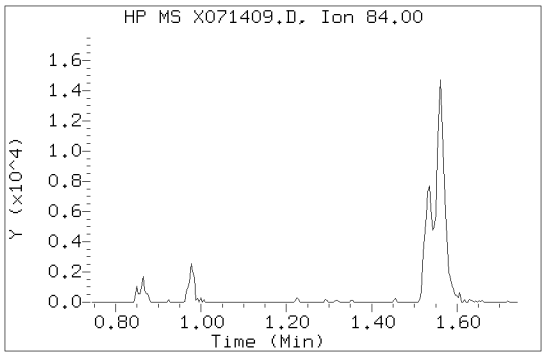

Toluene-d8 (2037-26-5)

Reason Code:

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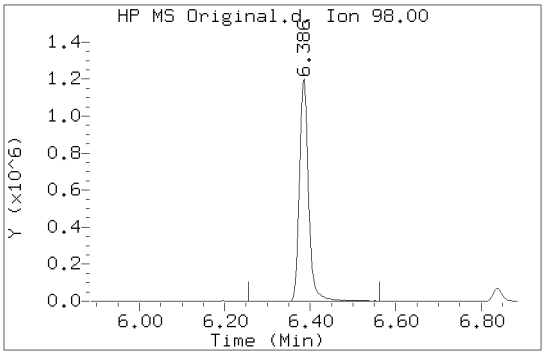

AFTER
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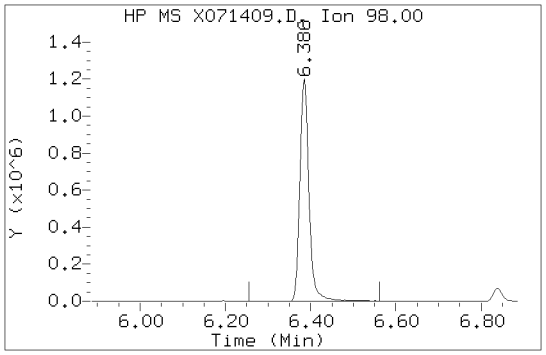

BEFORE
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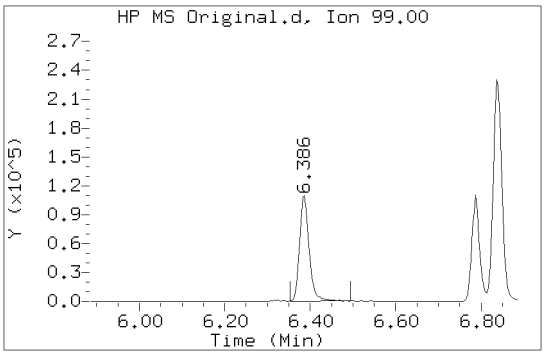

AFTER
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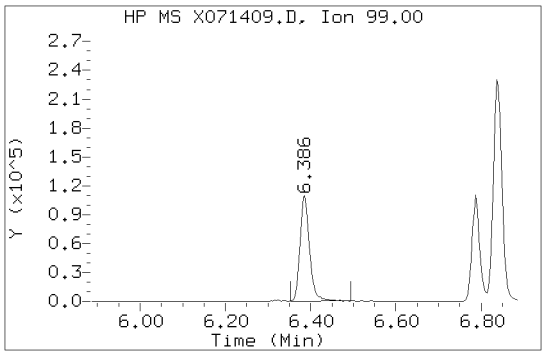

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InstruID : voa6.i
LabSampID : VSTD100

Toluene-d8 (2037-26-5)

Reason Code:

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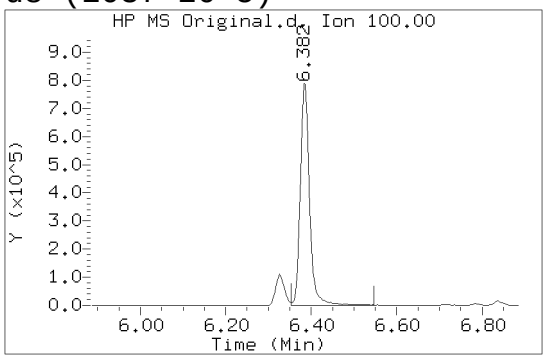

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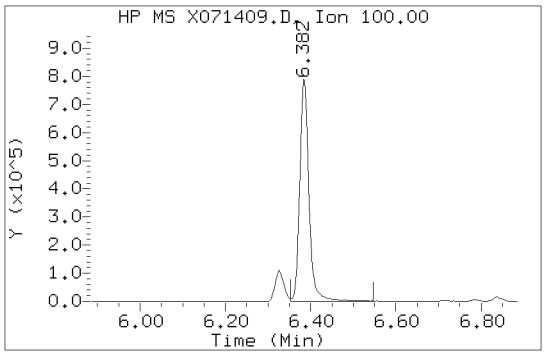

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071410.D
Lab Smp Id: VSTD150 Client Smp ID: VSTD150
Inj Date : 14-JUL-2023 15:05
Operator : PC Inst ID: voa6.i
Smp Info : VSTD150;VSTD150;1;9;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:44 Cal File: X071409.D
Als bottle: 11 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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	4.178	4.178	(1.000)	527810	50.0000	
	2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	822037	150.000	150.00
	3 Chloromethane	50	1.081	1.081	(0.259)	1286174	150.000	161.33
	4 Propionitrile	54	3.656	3.656	(0.875)	1601430	1500.00	1531.66
	5 Vinyl Chloride	62	1.145	1.145	(0.274)	1063794	150.000	155.75
	6 Bromomethane	94	1.336	1.336	(0.320)	469612	150.000	166.14
	7 Chloroethane	64	1.404	1.404	(0.336)	574620	150.000	147.37
	8 Trichlorofluoromethane	101	1.561	1.561	(0.374)	1133831	150.000	163.80
	9 Acrolein	56	1.861	1.861	(0.446)	60619	300.000	301.00(M)
	10 Acetone	43	1.973	1.973	(0.472)	616513	300.000	304.76
	11 1,1-Dichloroethene	96	1.913	1.913	(0.458)	592973	150.000	153.35
	12 Isobutyl Alcohol	43	4.676	4.676	(1.119)	3143464	3000.00	3141.89
	13 Acetonitrile	39	2.198	2.198	(0.526)	1116521	1500.00	1508.54
	14 Allyl Chloride	41	2.198	2.198	(0.526)	2479475	150.000	143.08
	15 Iodomethane	142	2.030	2.030	(0.486)	1666204	300.000	298.54
	16 Acrylonitrile	53	2.532	2.532	(0.606)	742882	300.000	288.83
	17 Methylene Chloride	84	2.303	2.303	(0.551)	679924	150.000	151.80
	18 Methyl tert-butyl ether	73	2.539	2.539	(0.608)	2090757	150.000	145.38
	19 Carbon Disulfide	76	2.071	2.071	(0.496)	3776842	300.000	310.72
	20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	652435	150.000	145.86

21 Vinyl Acetate	43	3.000	3.000 (0.718)	5593666	300.000	302.39
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	1431683	150.000	145.86

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.771	1.771	(0.424)	369436	150.000	155.66
	24 2-Butanone	43	3.581	3.581	(0.857)	878521	300.000	312.55
	25 Methacrylonitrile	41	3.821	3.821	(0.915)	1065216	150.000	156.35(aM)
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	1150093	150.000	150.52
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	837160	150.000	146.92
	28 Chloroform	83	3.904	3.904	(0.935)	1446796	150.000	144.05
	29 Bromochloromethane	128	3.791	3.791	(0.908)	457063	150.000	143.13
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	719790	150.000	150.30
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	1235806	150.000	159.84
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	1058110	150.000	156.11
	33 1,2-Dichloroethane	62	4.552	4.552	(0.917)	1349536	150.000	147.53
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	1056698	150.000	154.75(H)
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	911155	150.000	151.87
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	830945	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	2966123	150.000	149.23
	38 Trichloroethene	130	5.205	5.205	(1.048)	855874	150.000	152.23
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	1126828	150.000	148.01
	40 Methyl Methacrylate	41	5.606	5.606	(1.342)	952441	150.000	149.51
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	736745	300.000	316.95
	42 1,2-Dichloropropane	63	5.437	5.437	(1.095)	965373	150.000	151.04
	43 2-Nitropropane	43	5.969	5.969	(1.429)	327090	150.000	155.99
	44 Dibromomethane	93	5.550	5.550	(1.118)	514778	150.000	142.29
	45 4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	2236545	300.000	293.85
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	1331094	150.000	152.22
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	773431	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	2609088	150.000	131.02(M)
	49 Ethyl Methacrylate	69	6.715	6.715	(1.353)	829910	150.000	152.50
	50 Toluene	91	6.442	6.442	(0.840)	3226930	150.000	154.99
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	1129301	150.000	153.20
	52 2-Hexanone	43	7.086	7.086	(0.924)	1502232	300.000	300.46
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	629049	150.000	142.43
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	1287243	150.000	142.66
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	978359	150.000	153.44
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	682053	150.000	158.57
	57 1,2-Dibromoethane	107	7.255	7.255	(0.946)	707106	150.000	140.10
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	1016479	150.000	152.26
	59 Chlorobenzene	112	7.690	7.690	(1.003)	2169037	150.000	149.03
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	874873	150.000	153.55
	61 Ethylbenzene	106	7.795	7.795	(1.017)	1121097	150.000	153.61
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	2832546	300.000	309.38
	63 o-Xylene	106	8.237	8.237	(1.074)	1332457	150.000	153.68
	64 Styrene	104	8.256	8.256	(1.077)	2314702	150.000	153.05
	66 Bromoform	173	8.406	8.406	(1.096)	644372	150.000	157.51
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	3517587	150.000	157.83
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	1039682	150.000	143.99
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	1135204	150.000	148.24
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	429875	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	832853	150.000	145.35(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	389558	150.000	165.60
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	4183180	150.000	161.03
	74 Bromobenzene	156	8.803	8.803	(0.911)	988462	150.000	147.02
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	3151476	150.000	161.94

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	2593717	150.000	148.01
77	4-Chlorotoluene	91	9.066	9.066 (0.938)	3011546	150.000	156.39

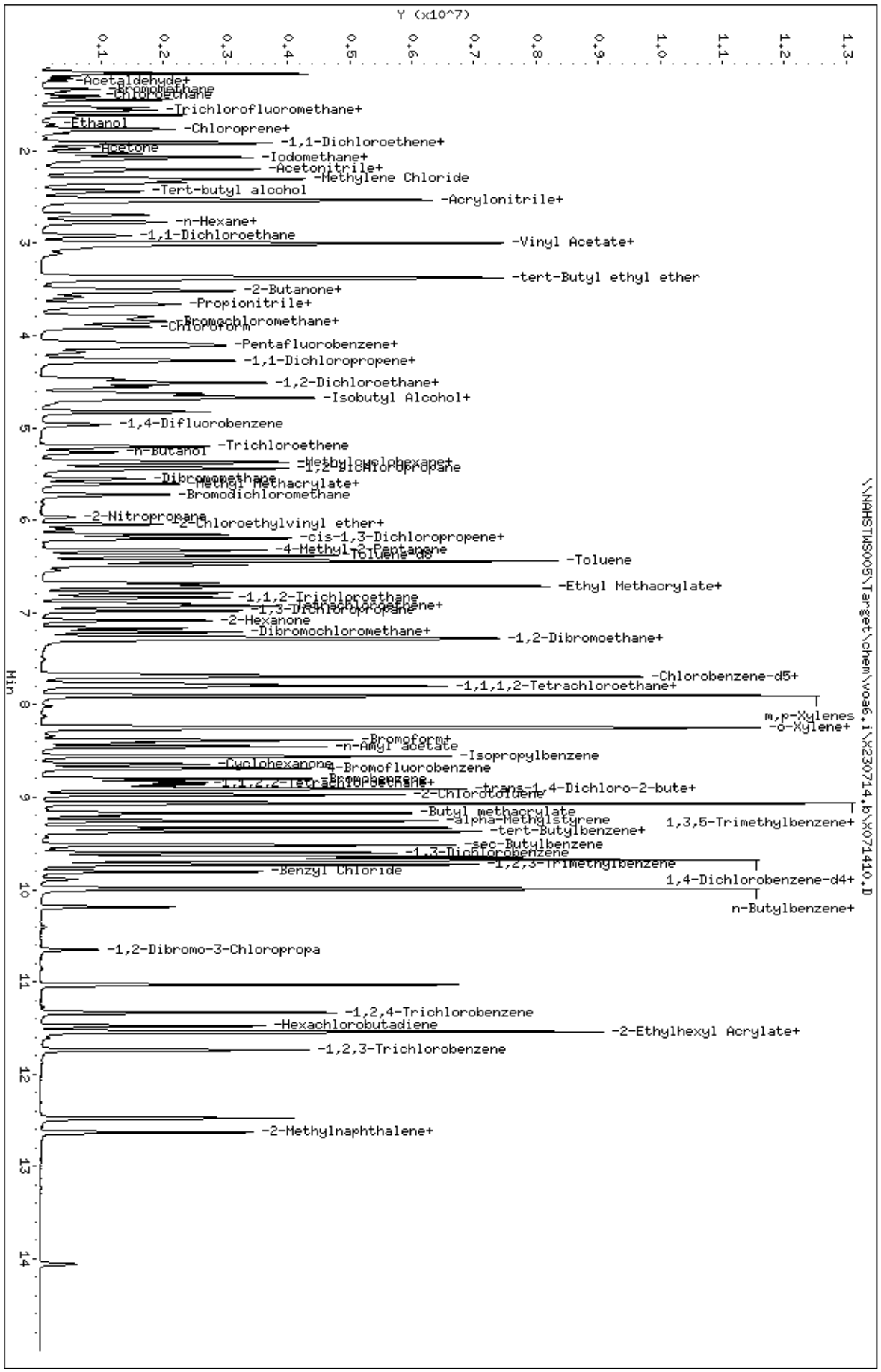
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	2639400	150.000	158.15
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	3108890	150.000	159.30
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	3705100	150.000	166.56
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	3332963	150.000	164.02
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	1820441	150.000	155.43
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	1873658	150.000	145.90
86	Benzyl Chloride	91	9.804	9.804	(1.279)	2041719	150.000	150.20
87	n-Butylbenzene	91	9.992	9.992	(1.034)	2930740	150.000	172.20
88	1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	1771825	150.000	153.87
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	181917	150.000	151.02
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	1234851	150.000	156.14
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	564457	150.000	149.95
92	Naphthalene	128	11.536	11.536	(1.194)	2932468	150.000	149.81(H)
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	1112132	150.000	150.36
146	Methyl acetate	43	2.228	2.228	(0.533)	681317	150.000	145.04
138	Freon TF	101	1.917	1.917	(0.459)	606555	150.000	111.66
141	Cyclohexane	56	4.118	4.118	(0.986)	1542802	150.000	168.63
142	Tetrahydrofuran	42	3.851	3.851	(0.922)	399301	300.000	294.06
147	Methylcyclohexane	55	5.377	5.377	(1.083)	2810624	150.000	160.25(A)
135	1,4-Dioxane	88	5.602	5.602	(1.341)	190045	3000.00	3030.04
132	n-Butanol	56	5.261	5.261	(1.259)	615802	3000.00	3504.76
131	Methyl Acrylate	55	3.690	3.690	(0.883)	1248423	150.000	174.00
133	Ethyl Acrylate	55	5.377	5.377	(1.287)	2810624	150.000	160.67
136	n-Hexane	57	2.772	2.772	(0.664)	1037045	150.000	105.54
139	Diethyl ether	59	1.756	1.756	(0.420)	707615	150.000	143.77
148	Tert-butyl alcohol	59	2.438	2.438	(0.584)	1892876	3000.00	2841.43
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	1176234	3000.00	2845.54
156	Diisopropyl ether	45	3.004	3.004	(0.719)	3254817	150.000	149.61
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	3200479	150.000	161.06
167	Ethanol	45	1.711	1.711	(0.410)	220615	3000.00	3026.01
172	tert-Butyl formate	59	4.631	4.631	(1.109)	1704396	300.000	302.29(A)
173	3,3-Dimethyl-1-butanol	57	7.289	7.289	(0.951)	2433401	3000.00	2925.50
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	2611847	150.000	150.42(M)
175	tert-Butyl ethyl ether	59	3.383	3.383	(0.810)	3273017	150.000	146.47
176	tert-Amyl alcohol	59	4.631	4.631	(1.109)	1704396	3000.00	2955.95
151	4-Methyl-2-pentanol	45	6.715	6.715	(1.353)	5221709	3000.00	2932.29
180	1-Methylnaphthalene	142	12.631	12.631	(1.307)	1346422	150.000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	1064415	150.000	156.94
152	Amyl alcohol	42	6.903	6.903	(0.900)	729736	3000.00	3280.90
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	1246213	150.000	146.54
159	Propylene oxide	43	1.805	1.805	(0.432)	172752	300.000	266.78
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	658666	3000.00	3459.04
162	Butyl acrylate	55	8.249	8.249	(1.076)	2429512	150.000	165.11
163	Butyl methacrylate	41	9.167	9.167	(0.949)	1571014	150.000	152.57
164	Dicyclopentadiene	66	9.684	9.684	(1.002)	3894938	150.000	157.29(H)
182	Epichlorohydrin	57	6.093	6.093	(1.227)	380786	600.000	613.50
M 94	1,2-Dichloroethylene (total)	96				1489595	300.000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	1478505	150.000	157.64
130	Ethyl Acetate	43	3.660	3.660	(0.876)	1137763	150.000	145.13
134	Cyclohexanone	55	8.642	8.642	(0.894)	1027116	3000.00	2683.87
185	Isoprene	39	1.771	1.771	(0.424)	269460	150.000	154.87
188	Isopropyl acetate	43	4.676	4.676	(0.942)	3143464	150.000	143.47

187 n-Amyl acetate	43	8.451	8.451 (1.102)	2118647	150.000	149.46
189 n-Butyl acetate	43	7.210	7.210 (0.940)	1862306	150.000	157.09(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.772	2.772	(0.664)	1037045	3000.00	2106.54
194 Acetaldehyde	44	1.212	1.212	(0.290)	265471	600.000	601.40(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	2526261	150.000	156.27
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	1709034	150.000	163.81
202 Isobutylene	41	1.242	1.242	(0.297)	129814	150.000	148.75(M)
205 2-Ethylhexyl Acrylate	55	11.544	11.544	(1.195)	1882332	150.000	171.43

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.
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

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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Inj Date : 14-JUL-2023 15:05
InstruID : voa6.i
LabSampID : VSTD150

Acrolein (107-02-8)

Reason Code:

BEFORE
MASS
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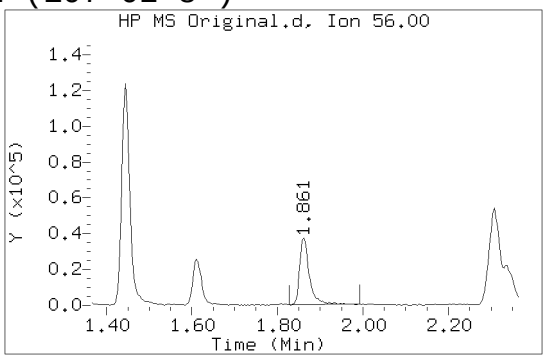
AREA
60619
HEIGHT
37327
20-Jul-2023
15:04
linh
pham



AFTER
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60619
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20-Jul-2023
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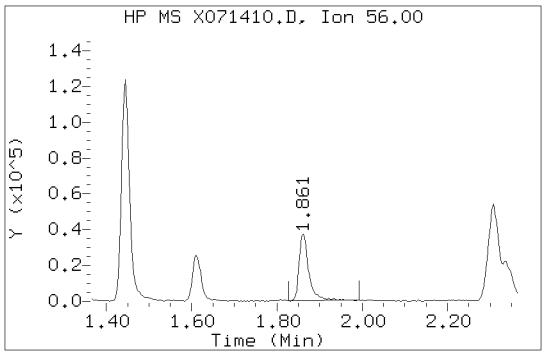

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20-Jul-2023
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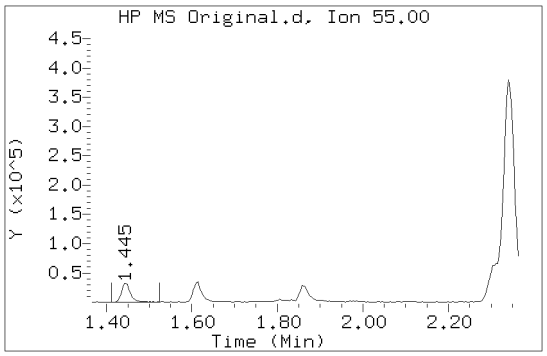

AFTER
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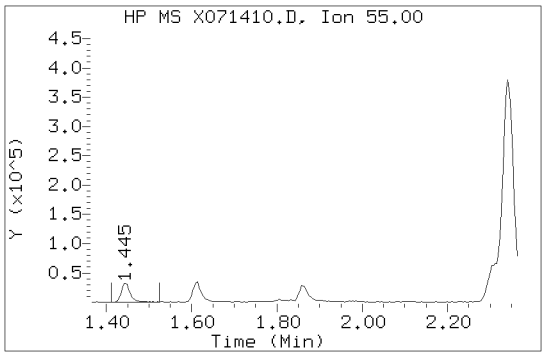

Methacrylonitrile (126-98-7)

Reason Code:

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15:04
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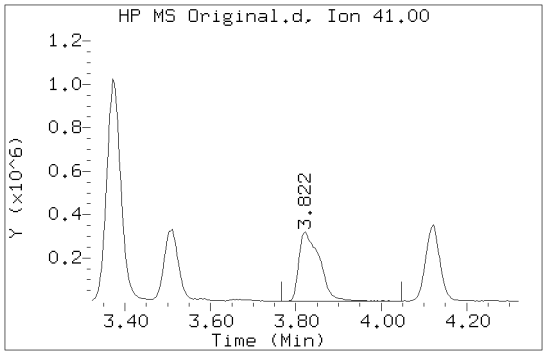

AFTER
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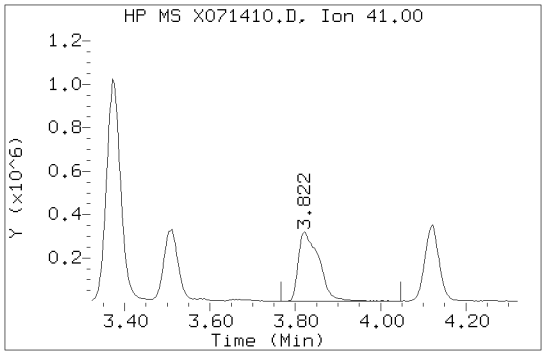

BEFORE
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20-Jul-2023
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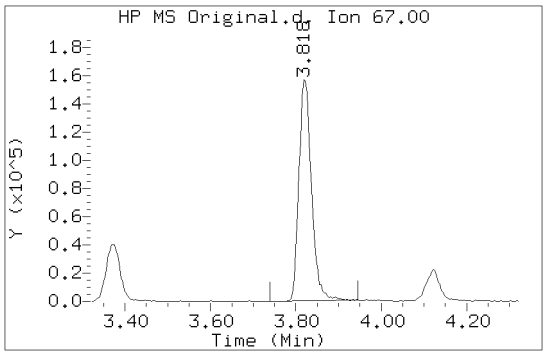

AFTER
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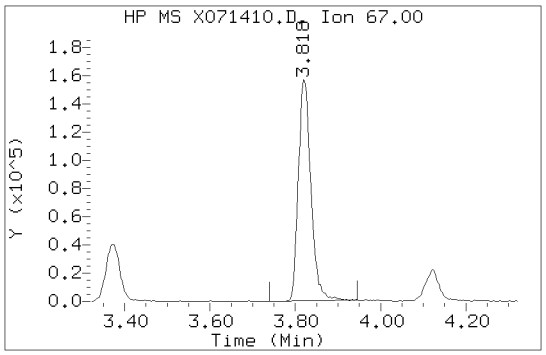
HEIGHT
157063
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 15:05
InstruID : voa6.i
LabSampID : VSTD150

Methacrylonitrile (126-98-7)

Reason Code:

BEFORE

MASS
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AREA
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HEIGHT
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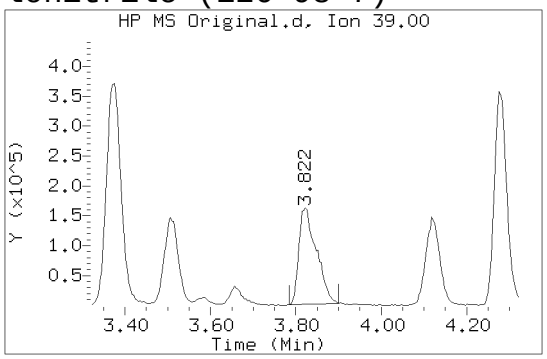
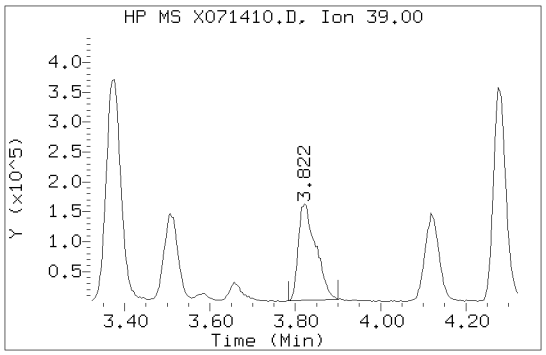
20-Jul-2023
15:04
linh
pham



AFTER

MASS
39
AREA
462715
HEIGHT
161606
20-Jul-2023
15:04
linh
pham



1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

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75
AREA
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HEIGHT
603944
20-Jul-2023
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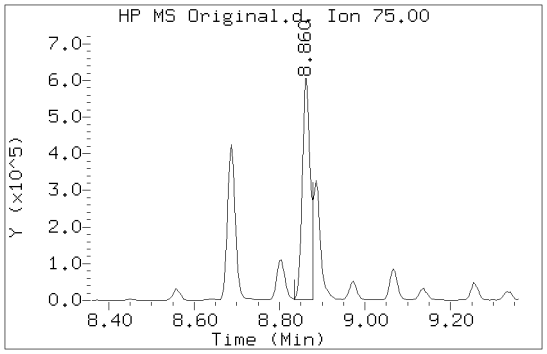
pham



AFTER

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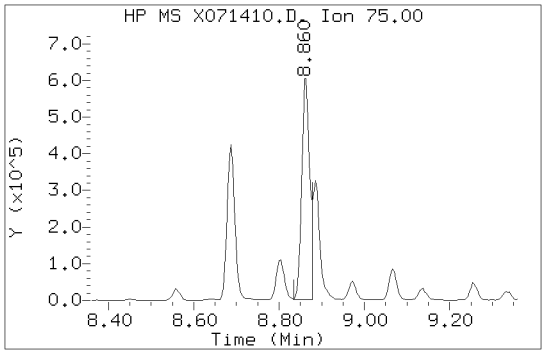

BEFORE

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15:04
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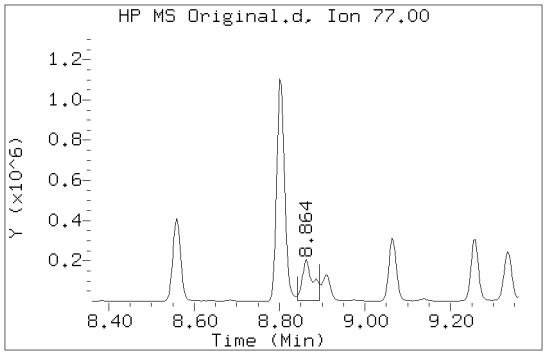
pham



AFTER

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20-Jul-2023
15:04
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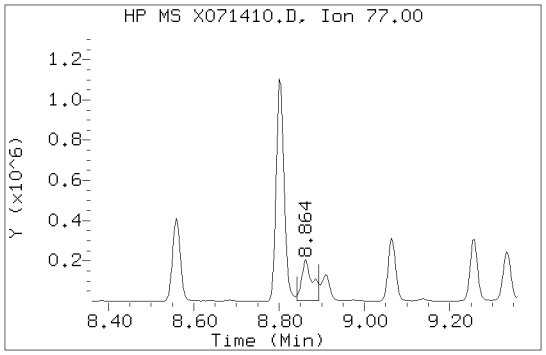

tert-Amyl methyl ether (974-05-08)

Reason Code:

BEFORE

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73
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1100641
20-Jul-2023
15:04
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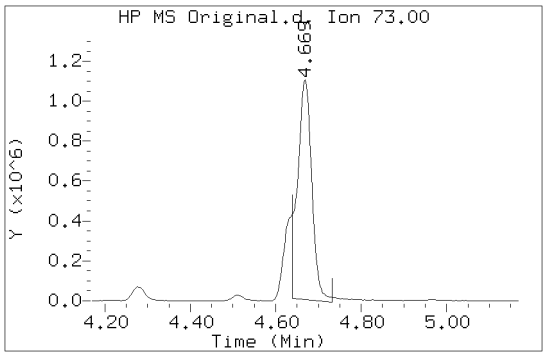

AFTER

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20-Jul-2023
15:04
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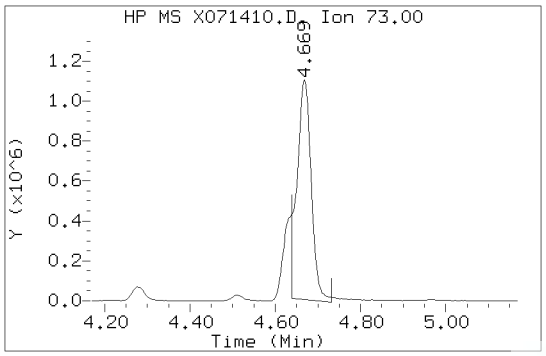

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Inj Date : 14-JUL-2023 15:05
InstruID : voa6.i
LabSampID : VSTD150

tert-Amyl methyl ether (974-05-08)

Reason Code:

BEFORE

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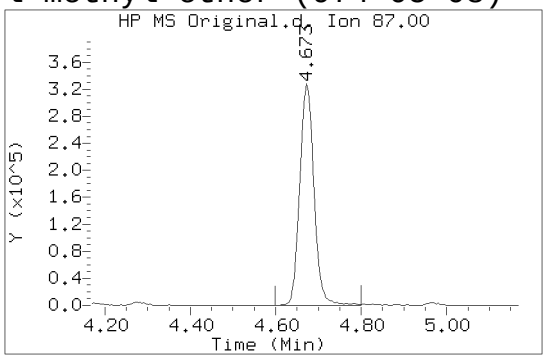
HEIGHT
328192
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
775395
HEIGHT
328192
20-Jul-2023
15:04
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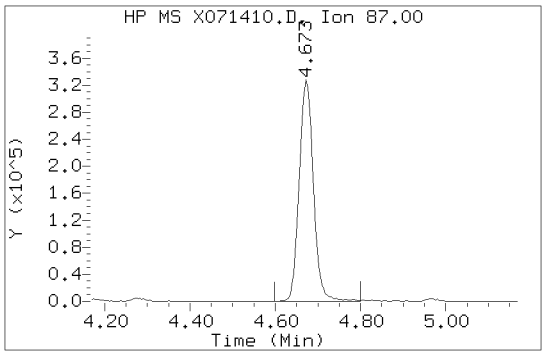

BEFORE

MASS
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20-Jul-2023
15:04
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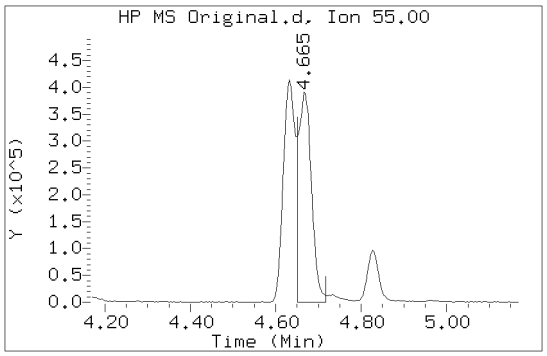
pham



AFTER

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20-Jul-2023
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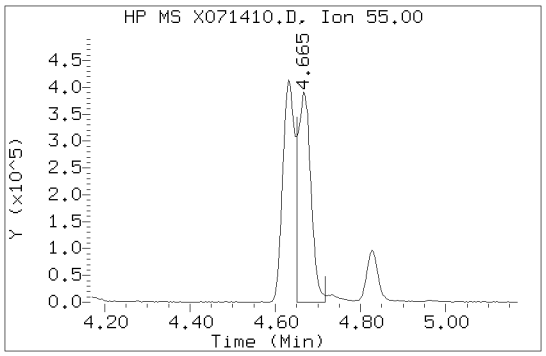

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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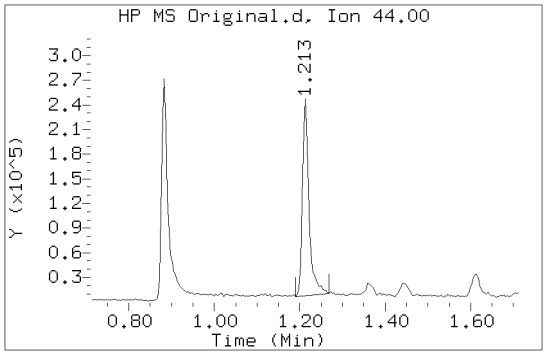
HEIGHT
240024
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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265471
HEIGHT
240024
20-Jul-2023
15:04
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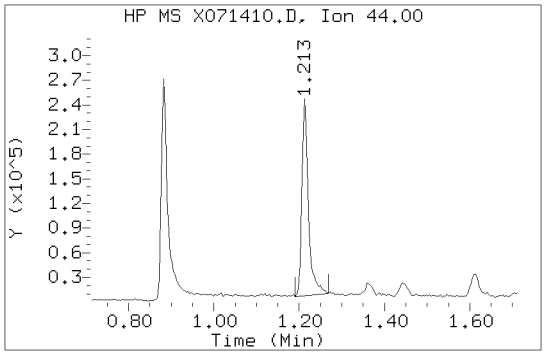

BEFORE

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43
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140408
20-Jul-2023
15:04
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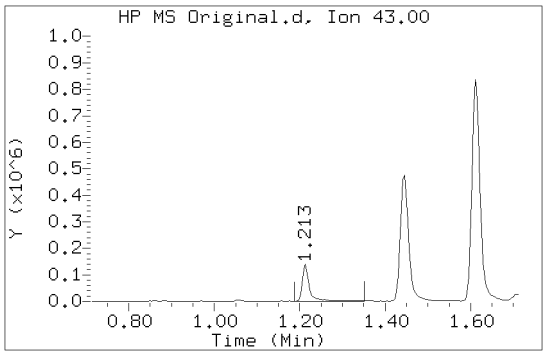
pham



AFTER

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162116
HEIGHT
140408
20-Jul-2023
15:04
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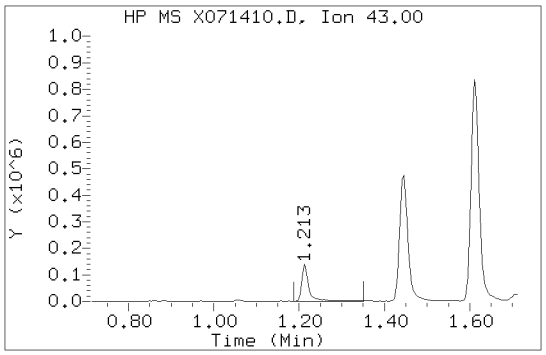

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Inj Date : 14-JUL-2023 15:05
InstruID : voa6.i
LabSampID : VSTD150

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
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HEIGHT
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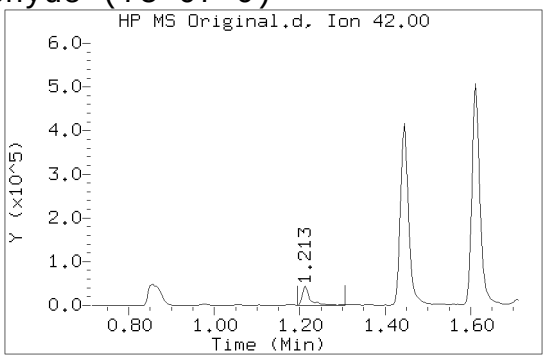
20-Jul-2023
15:04
linh
pham



AFTER

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20-Jul-2023
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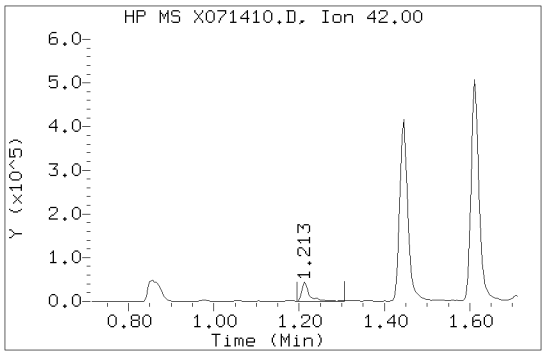

Isobutylene (115-11-7)

Reason Code:

BEFORE

MASS
41
AREA
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HEIGHT
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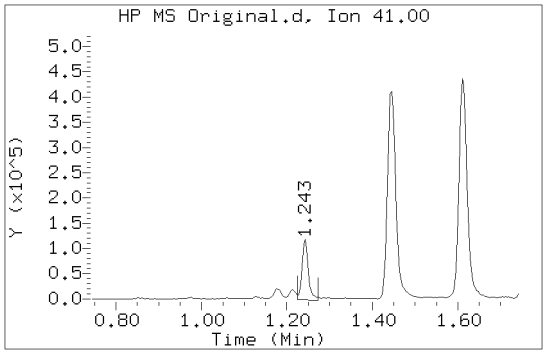
20-Jul-2023
15:04
linh
pham



AFTER

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15:04
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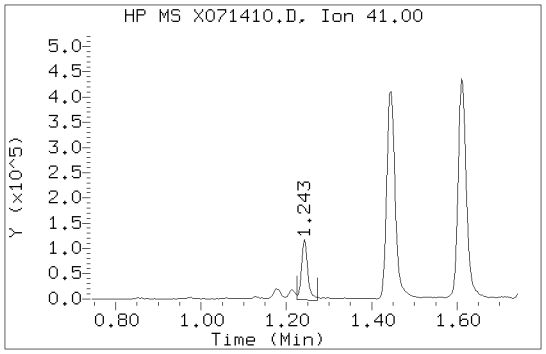

BEFORE

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HEIGHT
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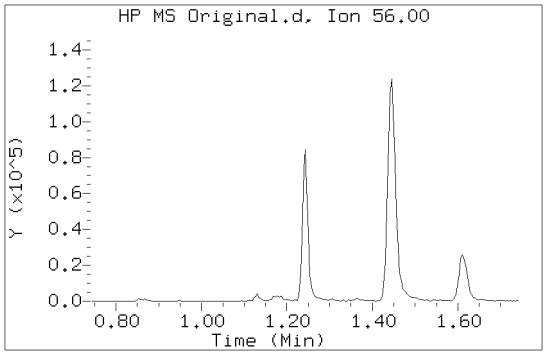

AFTER

MASS
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AREA
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HEIGHT
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20-Jul-2023
15:04
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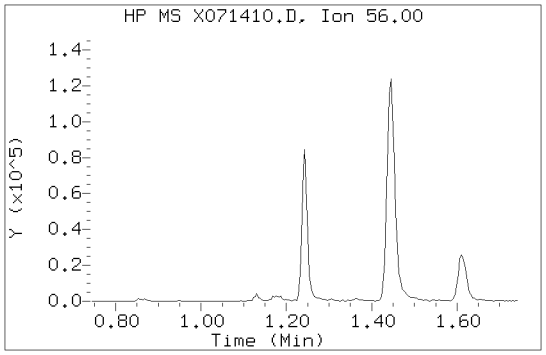

BEFORE

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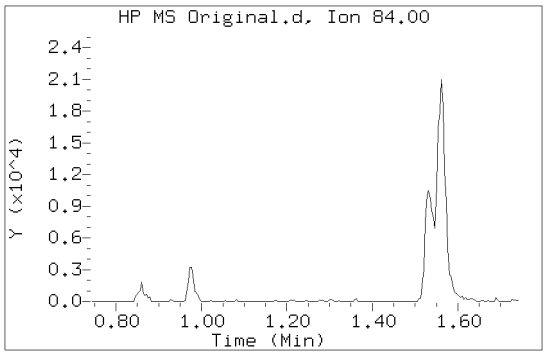

AFTER

MASS
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AREA
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HEIGHT
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20-Jul-2023
15:04
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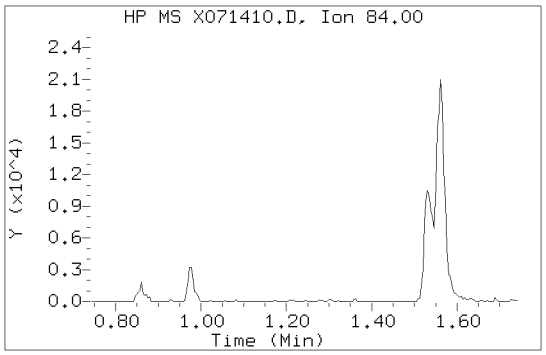

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Inj Date : 14-JUL-2023 15:05
InstruID : voa6.i
LabSampID : VSTD150

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE
MASS
98
AREA
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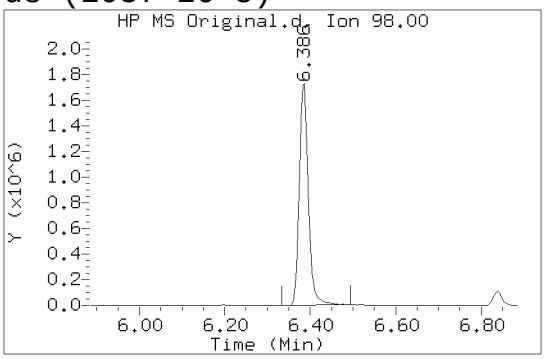
HEIGHT
1726183
20-Jul-2023
15:04
linh
pham



AFTER
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20-Jul-2023
15:04
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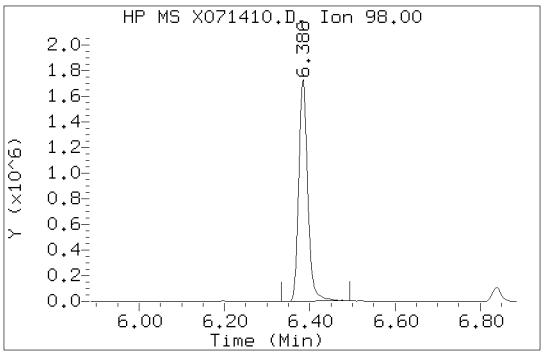

BEFORE
MASS
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AREA
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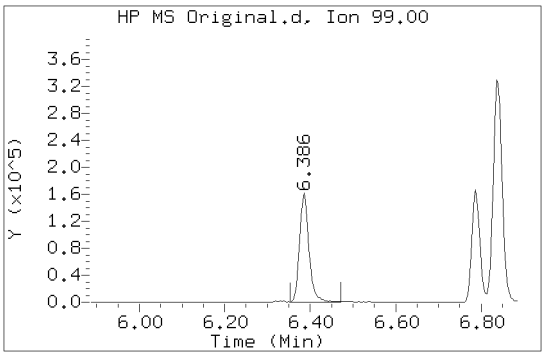
HEIGHT
162240
20-Jul-2023
15:04
linh
pham



AFTER
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20-Jul-2023
15:04
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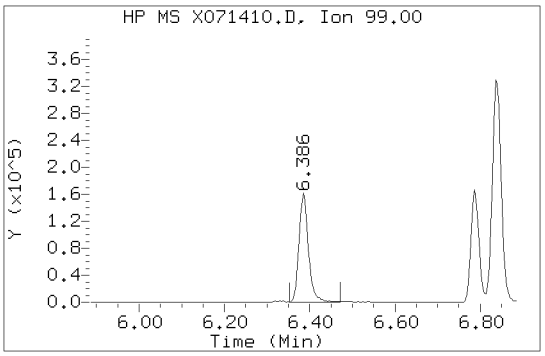

BEFORE
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20-Jul-2023
15:04
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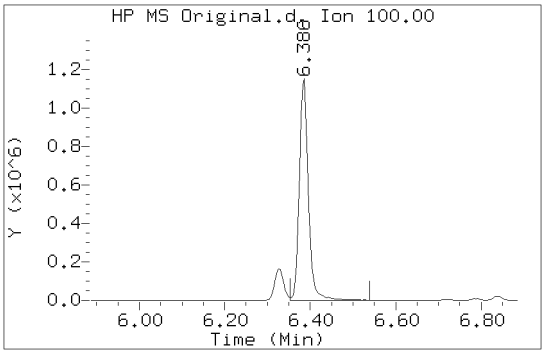

AFTER
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HEIGHT
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20-Jul-2023
15:04
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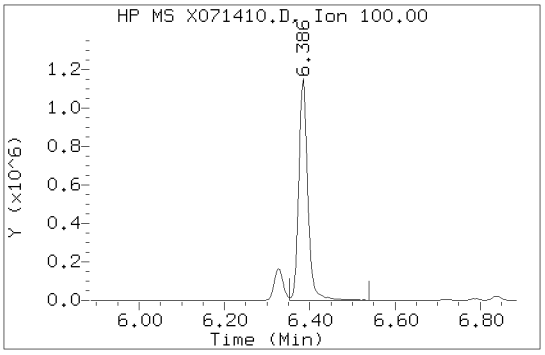

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071411.D
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Inj Date : 14-JUL-2023 15:25
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\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 15:05 Cal File: X071410.D
Als bottle: 12 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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)	537032	50.0000	
	2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	1105119	200.000	197.85
	3 Chloromethane	50	1.081	1.081	(0.259)	1771073	200.000	218.34(A)
	4 Propionitrile	54	3.660	3.660	(0.875)	2109183	2000.00	1982.65
	5 Vinyl Chloride	62	1.145	1.145	(0.274)	1416013	200.000	203.75(A)
	6 Bromomethane	94	1.332	1.332	(0.319)	617046	200.000	214.56(A)
	7 Chloroethane	64	1.400	1.400	(0.335)	747413	200.000	188.39
	8 Trichlorofluoromethane	101	1.561	1.561	(0.373)	1509581	200.000	214.34(A)
	9 Acrolein	56	1.857	1.857	(0.444)	82636	400.000	402.90(AM)
	10 Acetone	43	1.973	1.973	(0.472)	806431	400.000	393.20
	11 1,1-Dichloroethene	96	1.913	1.913	(0.458)	797906	200.000	202.80(A)
	12 Isobutyl Alcohol	43	4.680	4.680	(1.119)	4072757	4000.00	4000.82(A)
	13 Acetonitrile	39	2.198	2.198	(0.526)	1461877	2000.00	1941.23
	14 Allyl Chloride	41	2.198	2.198	(0.526)	3258545	200.000	184.81
	15 Iodomethane	142	2.029	2.029	(0.485)	2365259	400.000	399.51
	16 Acrylonitrile	53	2.535	2.535	(0.606)	973671	400.000	372.06
	17 Methylene Chloride	84	2.303	2.303	(0.551)	893552	200.000	196.48
	18 Methyl tert-butyl ether	73	2.535	2.535	(0.606)	2728667	200.000	186.48
	19 Carbon Disulfide	76	2.071	2.071	(0.495)	5098731	400.000	412.27(A)
	20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	885590	200.000	194.59

21 Vinyl Acetate	43	3.000	3.000 (0.718)	7496591	400.000	398.30
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	1905438	200.000	190.79

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.771	1.771	(0.424)	498457	200.000	206.42(A)
	24 2-Butanone	43	3.581	3.581	(0.857)	1209313	400.000	422.85(A)
	25 Methacrylonitrile	41	3.818	3.818	(0.913)	1405724	200.000	202.79(aA)
	26 2,2-Dichloropropane	77	3.506	3.506	(0.839)	1535535	200.000	197.45
	27 cis-1,2-Dichloroethene	96	3.521	3.521	(0.842)	1110625	200.000	191.56
	28 Chloroform	83	3.904	3.904	(0.934)	1909053	200.000	186.82
	29 Bromochloromethane	128	3.791	3.791	(0.907)	607870	200.000	187.09
$	30 Dibromofluoromethane	113	4.099	4.099	(0.980)	959895	200.000	197.23
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	1657906	200.000	210.76(A)
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	1408668	200.000	209.46(A)
	33 1,2-Dichloroethane	62	4.552	4.552	(0.917)	1793850	200.000	197.64
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	1394099	200.000	205.76(AH)
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.069)	1203985	200.000	197.42
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	824484	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	3956301	200.000	200.61(A)
	38 Trichloroethene	130	5.205	5.205	(1.048)	1148728	200.000	205.93(A)
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	1517659	200.000	200.91(A)
	40 Methyl Methacrylate	41	5.606	5.606	(1.341)	1251379	200.000	193.06
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	991998	400.000	430.11(A)
	42 1,2-Dichloropropane	63	5.437	5.437	(1.095)	1286655	200.000	202.89(A)
	43 2-Nitropropane	43	5.969	5.969	(1.428)	436967	200.000	204.81(A)
	44 Dibromomethane	93	5.549	5.549	(1.118)	688009	200.000	191.66
	45 4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	3017637	400.000	395.46
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	1783083	200.000	205.51(A)
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	775428	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	3447548	200.000	172.68(M)
	49 Ethyl Methacrylate	69	6.719	6.719	(1.353)	1128954	200.000	209.07
	50 Toluene	91	6.445	6.445	(0.841)	4312229	200.000	206.58(A)
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	1544556	200.000	211.18(A)
	52 2-Hexanone	43	7.086	7.086	(0.924)	2017738	400.000	402.53(A)
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	846183	200.000	191.10
	54 1,3-Dichloropropane	76	6.981	6.981	(0.911)	1733058	200.000	191.57
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	1320761	200.000	206.61(A)
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	902535	200.000	209.29(A)
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	964928	200.000	190.69
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	1371878	200.000	207.11(A)
	59 Chlorobenzene	112	7.690	7.690	(1.003)	2926240	200.000	200.54(A)
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	1173596	200.000	205.45(A)
	61 Ethylbenzene	106	7.799	7.799	(1.017)	1505552	200.000	205.76(A)
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	3831125	400.000	417.37(A)
	63 o-Xylene	106	8.241	8.241	(1.075)	1805494	200.000	207.70(A)
	64 Styrene	104	8.256	8.256	(1.077)	3136788	200.000	206.88(A)
	66 Bromoform	173	8.406	8.406	(1.096)	880696	200.000	214.73(A)
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	4823863	200.000	215.89(A)
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	1401164	200.000	192.48
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	1538168	200.000	200.50(A)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	433375	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	1119387	200.000	193.78(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	524884	200.000	222.56(A)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	5714404	200.000	218.20(A)
	74 Bromobenzene	156	8.803	8.803	(0.911)	1365207	200.000	201.42(A)
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	4273312	200.000	217.81(A)

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	3520653	200.000	199.28
77	4-Chlorotoluene	91	9.069	9.069 (0.939)	4116709	200.000	212.06(A)

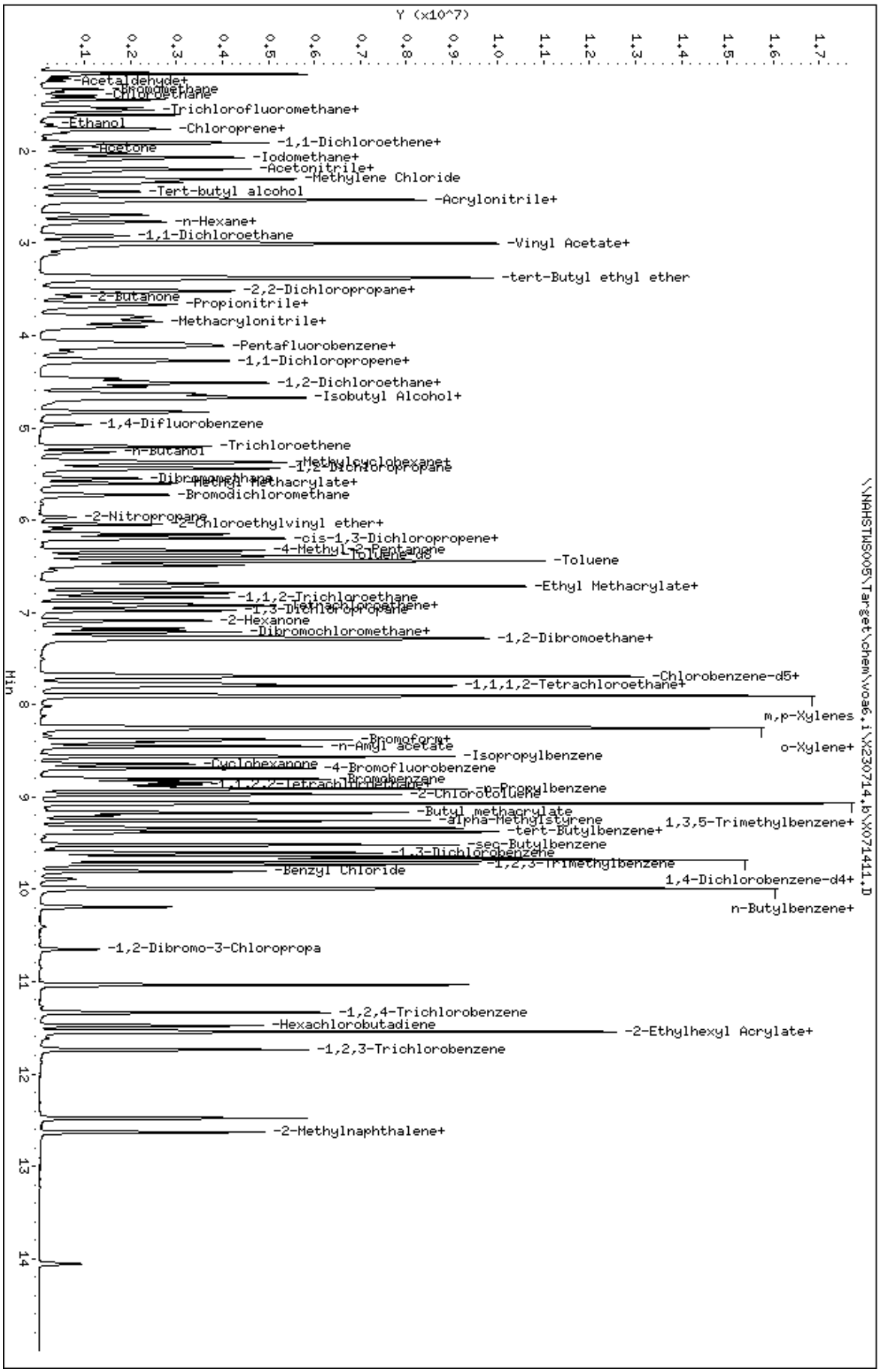
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	3564918	200.000	211.88(A)
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	4248690	200.000	215.95(A)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	4998963	200.000	222.91(A)
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	4531097	200.000	221.18(A)
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	2443663	200.000	206.95(A)
84	1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	2568367	200.000	198.39
86	Benzyl Chloride	91	9.804	9.804	(1.279)	2751633	200.000	201.10(A)
87	n-Butylbenzene	91	9.992	9.992	(1.034)	3988441	200.000	232.46(A)
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	2403758	200.000	207.07(A)
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	242707	200.000	199.51
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	1693827	200.000	212.44(A)
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	760294	200.000	199.55
92	Naphthalene	128	11.536	11.536	(1.194)	4036891	200.000	204.57(AH)
93	1,2,3-Trichlorobenzene	180	11.738	11.738	(1.215)	1513592	200.000	202.99(A)
146	Methyl acetate	43	2.228	2.228	(0.533)	902568	200.000	188.84
138	Freon TF	101	1.917	1.917	(0.459)	815067	200.000	103.34
141	Cyclohexane	56	4.117	4.117	(0.985)	2078176	200.000	223.25(A)
142	Tetrahydrofuran	42	3.851	3.851	(0.921)	520211	400.000	376.52
147	Methylcyclohexane	55	5.381	5.381	(1.084)	3760283	200.000	216.07(A)
135	1,4-Dioxane	88	5.602	5.602	(1.340)	258483	4000.00	4050.44(A)
132	n-Butanol	56	5.261	5.261	(1.258)	850812	4000.00	4759.14(A)
131	Methyl Acrylate	55	3.686	3.686	(0.882)	1635344	200.000	224.02(A)
133	Ethyl Acrylate	55	5.381	5.381	(1.287)	3760283	200.000	211.27(A)
136	n-Hexane	57	2.768	2.768	(0.662)	1402092	200.000	83.16
139	Diethyl ether	59	1.760	1.760	(0.421)	924117	200.000	184.53
148	Tert-butyl alcohol	59	2.442	2.442	(0.584)	2546793	4000.00	3757.39
149	Isopropyl alcohol	45	2.101	2.101	(0.502)	1585037	4000.00	3768.67
156	Diisopropyl ether	45	3.008	3.008	(0.719)	4204307	200.000	189.94
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	4285563	200.000	213.92(A)
167	Ethanol	45	1.711	1.711	(0.409)	291912	4000.00	3940.79
172	tert-Butyl formate	59	4.635	4.635	(1.108)	2334112	400.000	406.87(AM)
173	3,3-Dimethyl-1-butanol	57	7.293	7.293	(0.951)	3164338	4000.00	3794.46
174	tert-Amyl methyl ether	73	4.668	4.668	(1.117)	3325871	200.000	188.25(M)
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.808)	4320968	200.000	190.05
176	tert-Amyl alcohol	59	4.635	4.635	(1.108)	2334112	4000.00	3978.56(M)
151	4-Methyl-2-pentanol	45	6.715	6.715	(1.353)	7205996	4000.00	4078.30(A)
180	1-Methylnaphthalene	142	12.631	12.631	(1.307)	1852094	200.000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.279)	1429438	200.000	207.14(A)
152	Amyl alcohol	42	6.903	6.903	(0.900)	980159	4000.00	4395.46(A)
158	Dichlorofluoromethane	67	1.531	1.531	(0.366)	1636710	200.000	189.15
159	Propylene oxide	43	1.805	1.805	(0.432)	214178	400.000	325.08
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	873259	4000.00	4574.19(A)
162	Butyl acrylate	55	8.248	8.248	(1.076)	3266024	200.000	221.39(A)
163	Butyl methacrylate	41	9.171	9.171	(0.949)	2061719	200.000	198.61
164	Dicyclopentadiene	66	9.684	9.684	(1.002)	5152004	200.000	206.38(A)
182	Epichlorohydrin	57	6.093	6.093	(1.227)	509575	800.000	827.43(A)
M 94	1,2-Dichloroethylene (total)	96				1996215	400.000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	1984425	200.000	209.88(A)
130	Ethyl Acetate	43	3.660	3.660	(0.875)	1526148	200.000	191.33
134	Cyclohexanone	55	8.642	8.642	(0.894)	1269424	4000.00	3290.23
185	Isoprene	39	1.771	1.771	(0.424)	352780	200.000	199.28
188	Isopropyl acetate	43	4.680	4.680	(0.943)	4112016	200.000	189.15

187 n-Amyl acetate	43	8.451	8.451 (1.102)	2862687	200.000	201.43(A)
189 n-Butyl acetate	43	7.210	7.210 (0.940)	2520952	200.000	212.11(AH)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.768	2.768	(0.662)	1402092	4000.00	1651.10
194 Acetaldehyde	44	1.212	1.212	(0.290)	347350	800.000	779.86(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	3390972	200.000	209.22
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	2283547	200.000	218.32(A)
202 Isobutylene	41	1.242	1.242	(0.297)	170200	200.000	191.69(M)
205 2-Ethylhexyl Acrylate	55	11.547	11.547	(1.195)	2531204	200.000	228.67(A)

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.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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LabSampID : VSTD200

Acrolein (107-02-8)

Reason Code:

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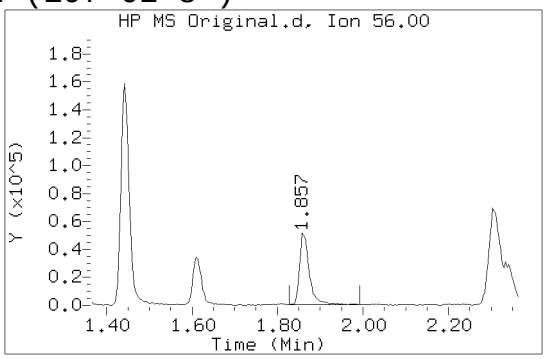

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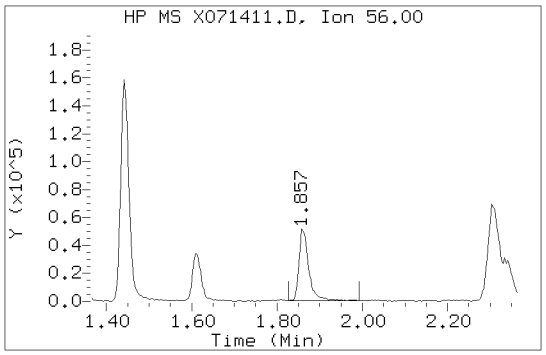

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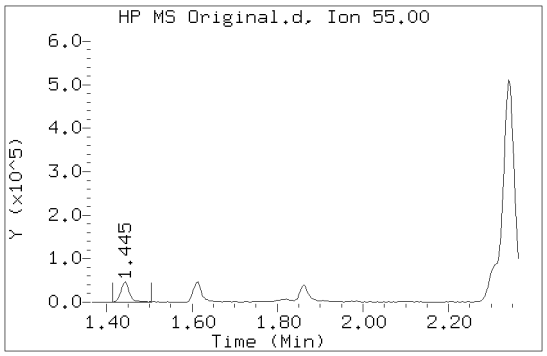

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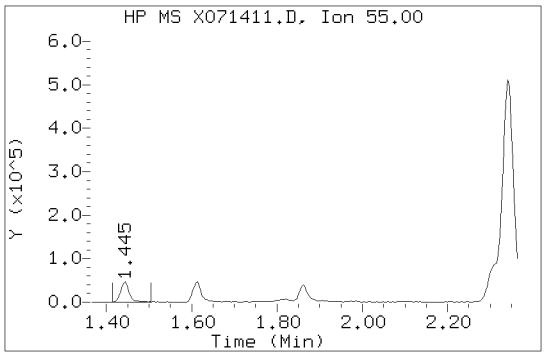

1,2,3-Trichloropropane (96-18-4)

Reason Code:

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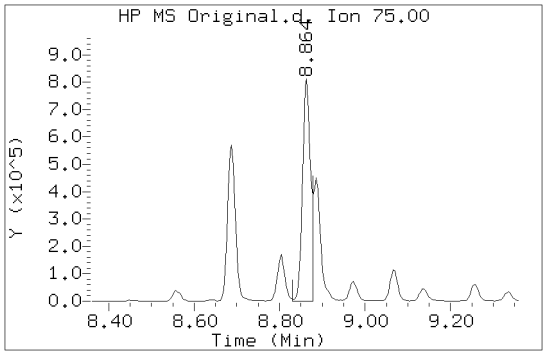

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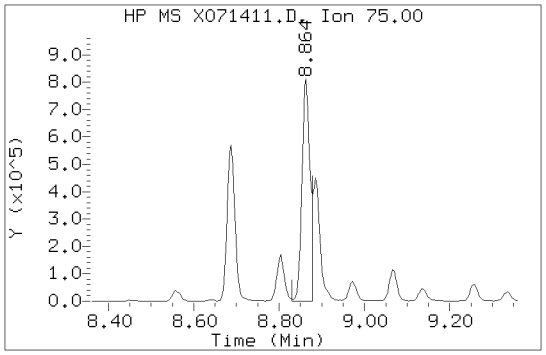

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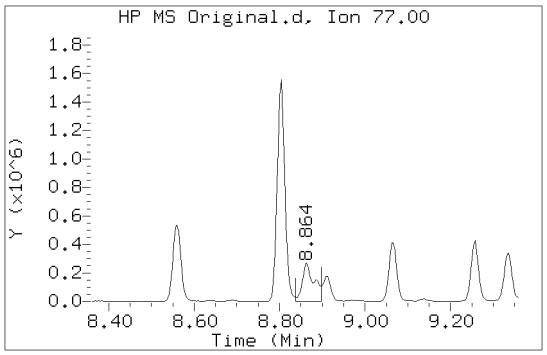

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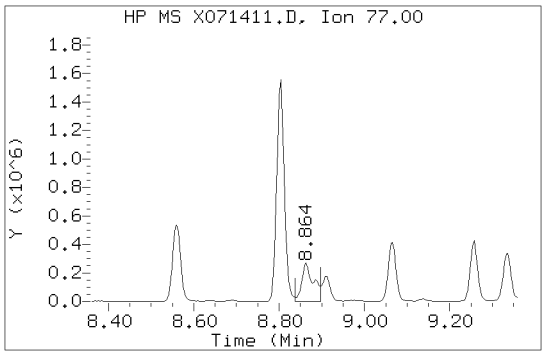

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InstruID : voa6.i
LabSampID : VSTD200

tert-Butyl formate (762-75-4)

Reason Code:

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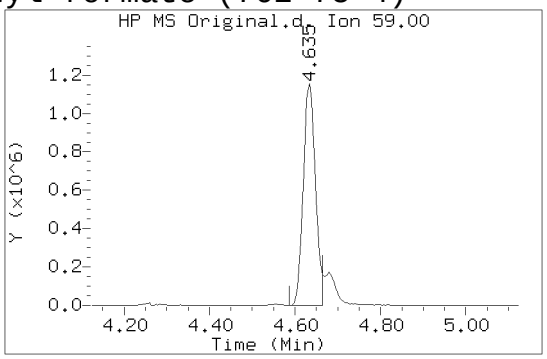

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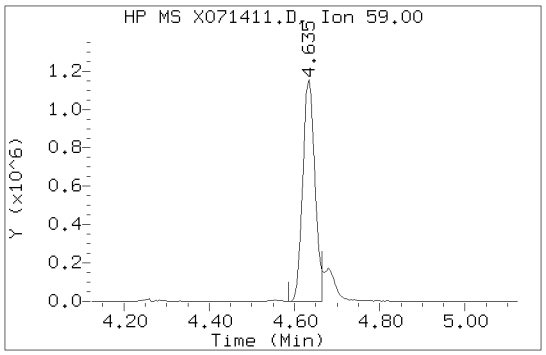

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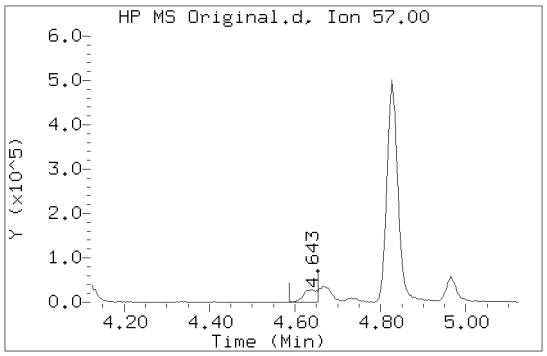

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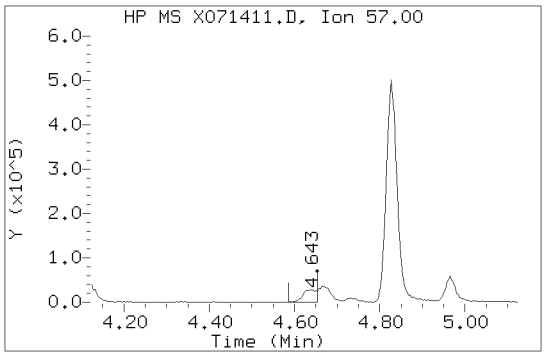

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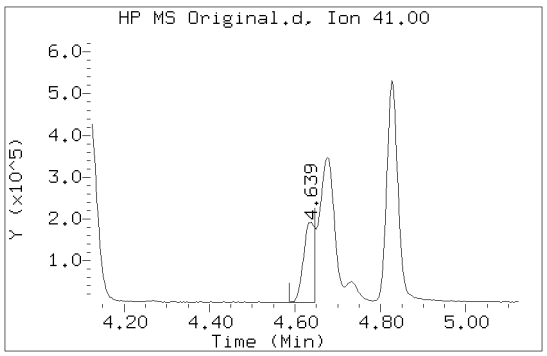

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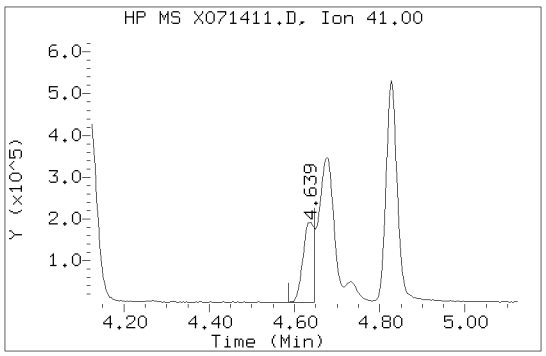

tert-Amyl methyl ether (974-05-08)

Reason Code:

BEFORE

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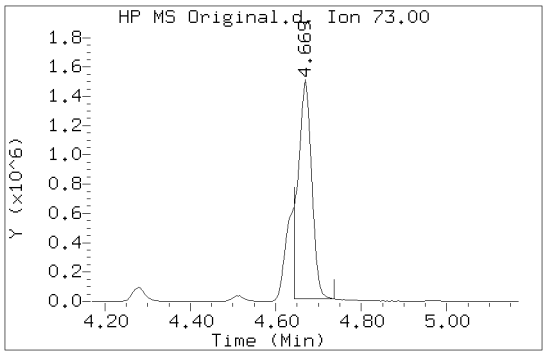

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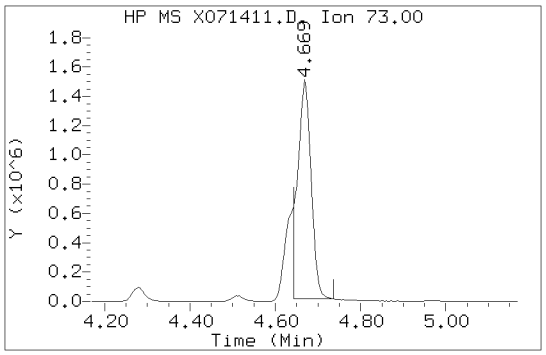

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InstruID : voa6.i
LabSampID : VSTD200

tert-Amyl methyl ether (974-05-08)

Reason Code:

BEFORE

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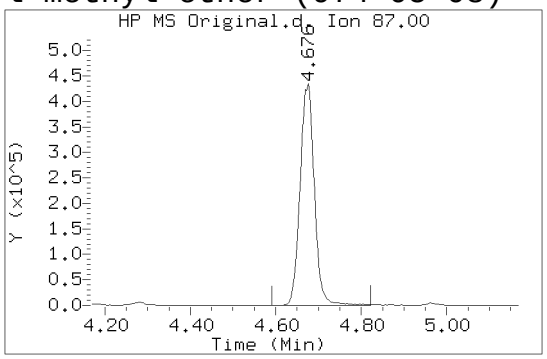

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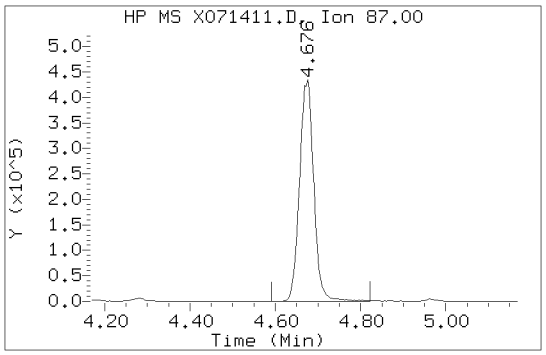

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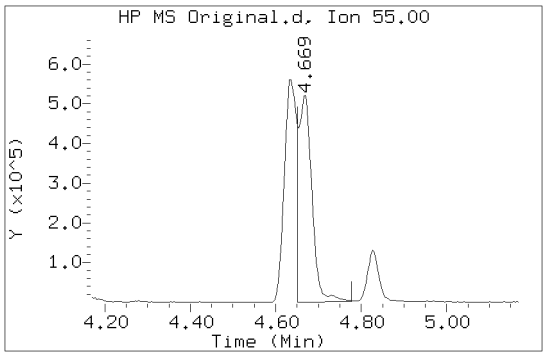

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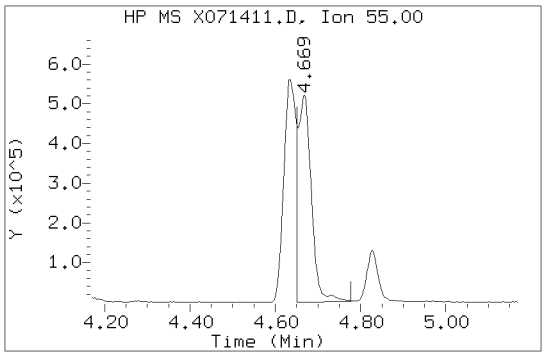

tert-Amyl alcohol (75-85-4)

Reason Code:

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HEIGHT
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20-Jul-2023
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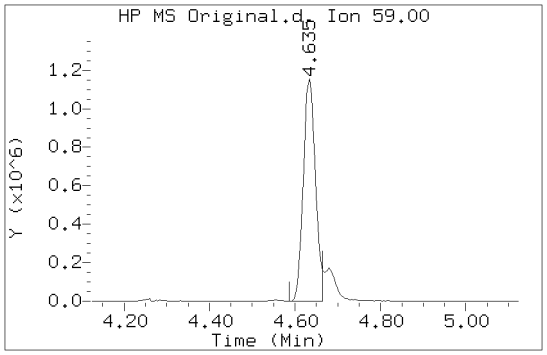

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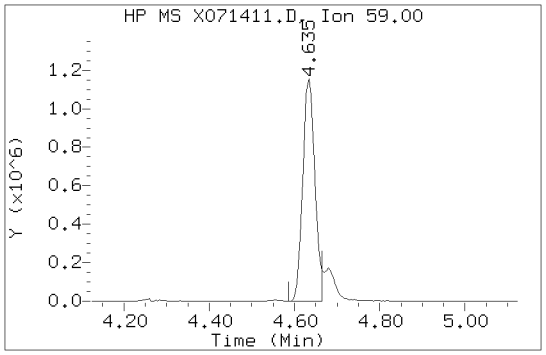

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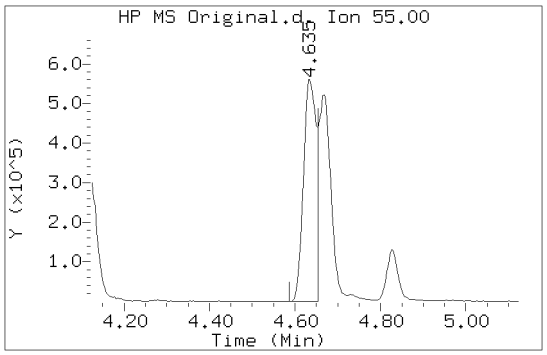

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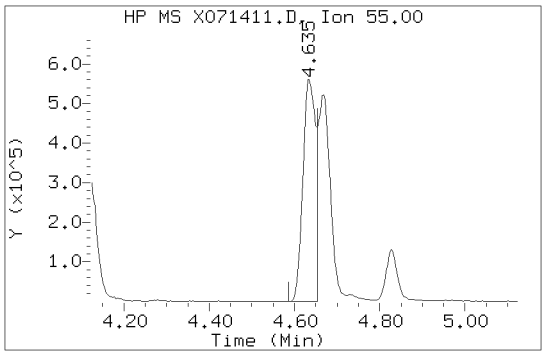

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InstruID : voa6.i
LabSampID : VSTD200

tert-Amyl alcohol (75-85-4)

Reason Code:

BEFORE

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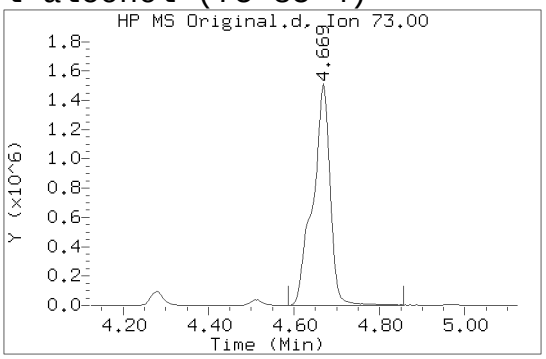

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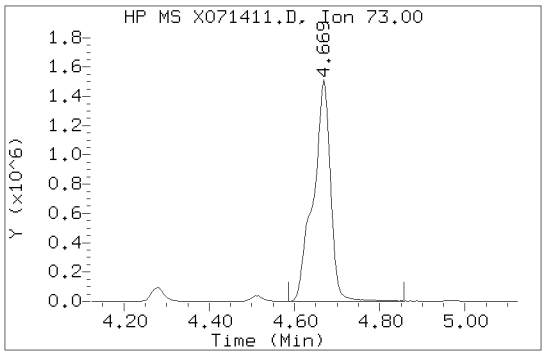

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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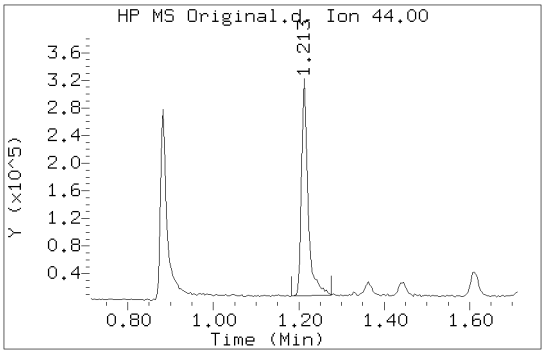

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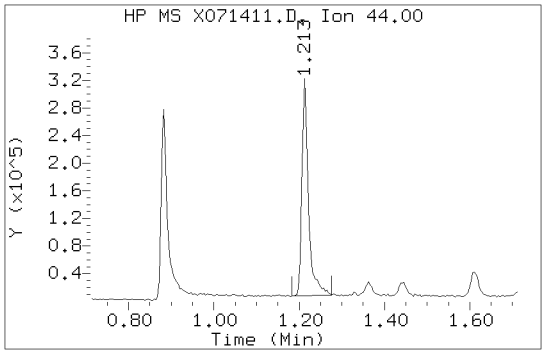

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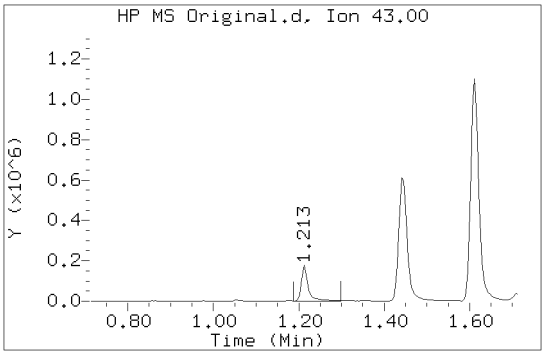

AFTER

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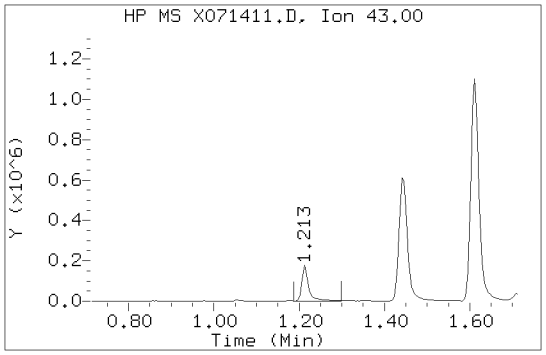

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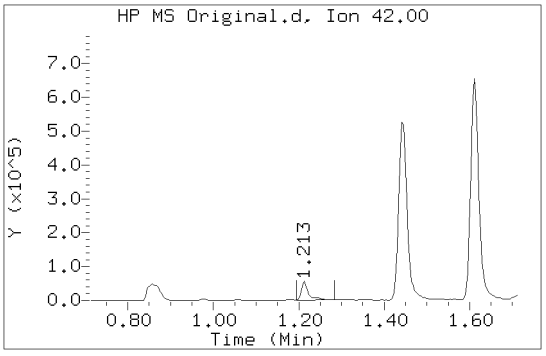

AFTER

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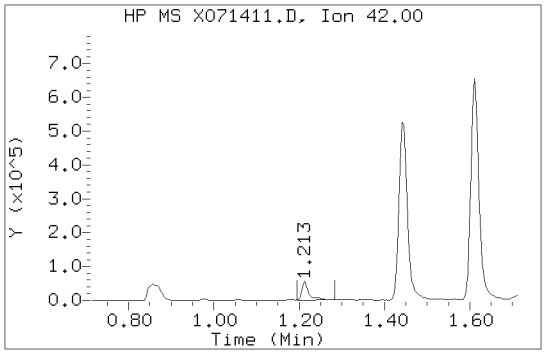

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Inj Date : 14-JUL-2023 15:25
InstruID : voa6.i
LabSampID : VSTD200

Isobutylene (115-11-7)

Reason Code:

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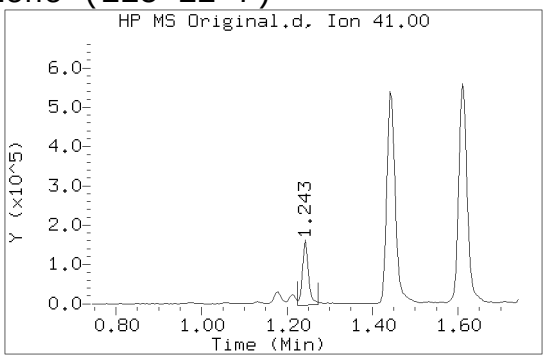

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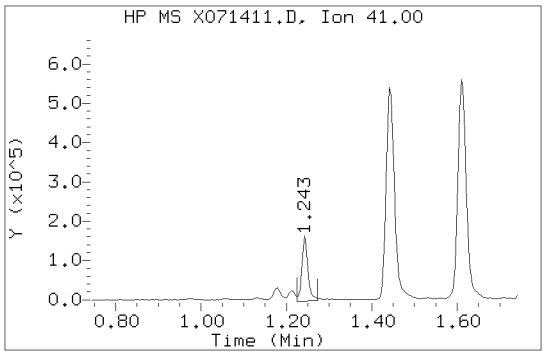

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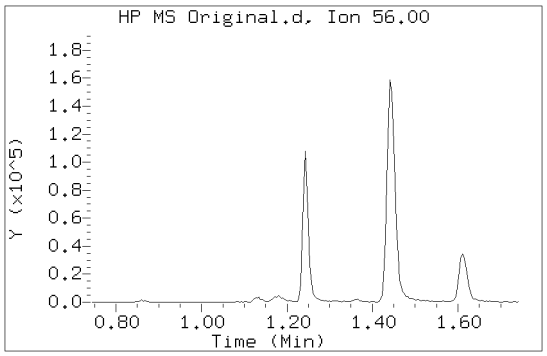

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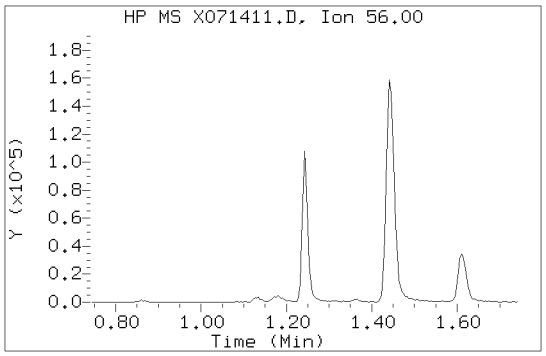

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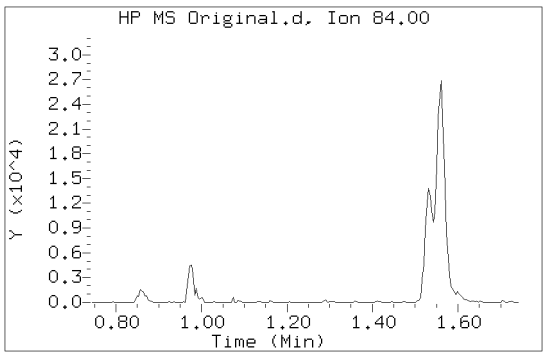

AFTER
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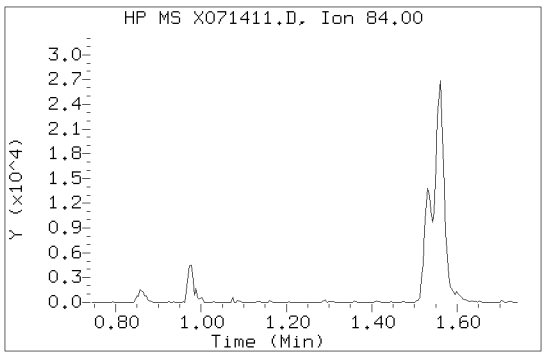

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE
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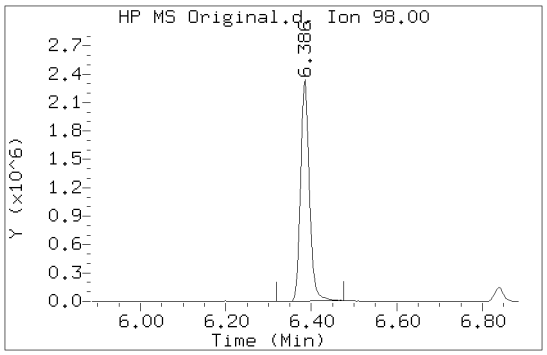

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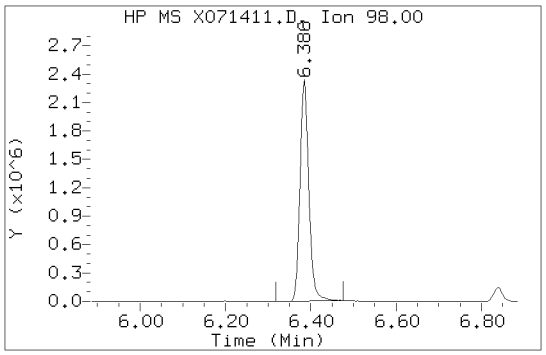

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Inj Date : 14-JUL-2023 15:25
InstruID : voa6.i
LabSampID : VSTD200

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

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20-Jul-2023
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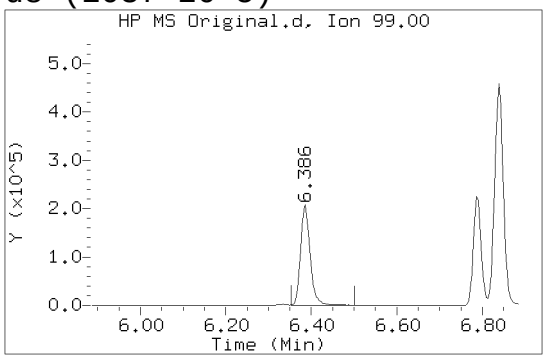

AFTER

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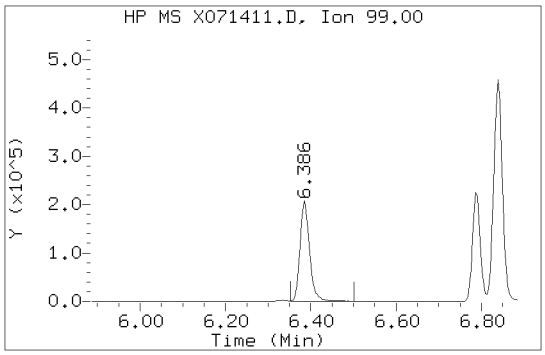

BEFORE

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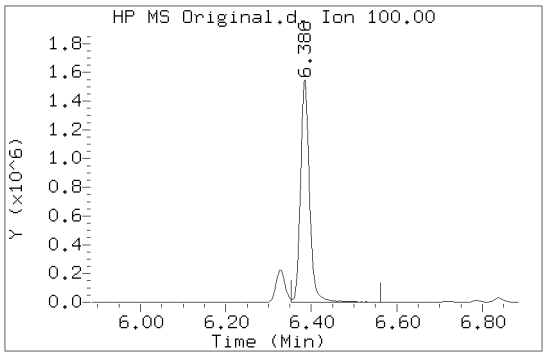

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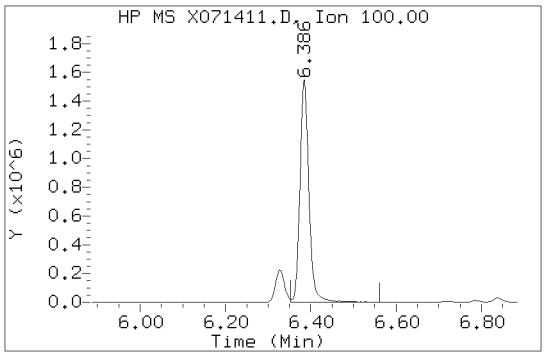

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071413.D Page 1
Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071413.D
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Inj Date : 14-JUL-2023 16:06
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\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 15:25 Cal File: X071411.D
Als bottle: 14 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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)	523560	50.0000	
2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	235700	44.1394	44.13
3 Chloromethane	50	1.081	1.081	(0.259)	369706	46.7515	46.75
4 Propionitrile	54	3.656	3.660	(0.875)	514137	495.730	495.72
5 Vinyl Chloride	62	1.145	1.145	(0.274)	314786	46.4622	46.46
6 Bromomethane	94	1.344	1.332	(0.322)	147749	52.6978	52.69
7 Chloroethane	64	1.404	1.400	(0.336)	174555	45.1318	45.13
8 Trichlorofluoromethane	101	1.561	1.561	(0.374)	321870	46.8787	46.87
9 Acrolein	56	1.857	1.857	(0.445)	18891	95.3394	95.33
10 Acetone	43	1.973	1.973	(0.472)	226282	109.688	109.68
11 1,1-Dichloroethene	96	1.913	1.913	(0.458)	173630	45.2674	45.26
12 Isobutyl Alcohol	43	4.680	4.680	(1.120)	1029947	1037.79	1037.79
13 Acetonitrile	39	2.202	2.198	(0.527)	350837	477.867	477.86
14 Allyl Chloride	41	2.198	2.198	(0.526)	795160	46.2587	46.25
15 Iodomethane	142	2.030	2.029	(0.486)	426627	85.2702	85.27
16 Acrylonitrile	53	2.536	2.535	(0.607)	247354	96.9514	96.95
17 Methylene Chloride	84	2.303	2.303	(0.551)	221542	48.9173	48.91
18 Methyl tert-butyl ether	73	2.539	2.535	(0.608)	686179	48.1012	48.10
19 Carbon Disulfide	76	2.071	2.071	(0.496)	1115788	92.5432	92.54
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	201576	45.4331	45.43

21 Vinyl Acetate	43	3.000	3.000 (0.718)	1840684	100.315	100.31
22 1,1-Dichloroethane	63	2.918	2.922 (0.699)	455953	46.8308	46.83

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071413.D Page 2
Report Date: 20-Jul-2023 15:05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
23	Chloroprene	53	1.771	1.771	(0.424)	106109	45.0742	45.07(M)
24	2-Butanone	43	3.582	3.581	(0.857)	292924	105.060	105.06
25	Methacrylonitrile	41	3.825	3.818	(0.916)	346558	51.2815	51.28(a)
26	2,2-Dichloropropane	77	3.510	3.506	(0.840)	355659	47.0700	47.06
27	cis-1,2-Dichloroethene	96	3.522	3.521	(0.843)	269347	47.6547	47.65
28	Chloroform	83	3.904	3.904	(0.935)	458057	45.9797	45.97
29	Bromochloromethane	128	3.795	3.791	(0.908)	150697	47.5755	47.57
$ 30	Dibromofluoromethane	113	4.099	4.099	(0.981)	251919	52.5379	52.53
31	1,1,1-Trichloroethane	97	4.076	4.080	(0.976)	356334	46.4653	46.46
32	1,1-Dichloropropene	75	4.279	4.279	(0.862)	303929	45.5996	45.59
33	1,2-Dichloroethane	62	4.552	4.552	(0.917)	426885	47.4578	47.45
34	Carbon Tetrachloride	117	4.264	4.260	(0.859)	294766	43.8978	43.89
$ 35	1,2-Dichloroethane-d4	65	4.474	4.470	(1.071)	312436	52.0928	52.09
* 36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	817135	50.0000	
37	Benzene	78	4.511	4.511	(0.909)	922063	47.1756	47.17
38	Trichloroethene	130	5.205	5.205	(1.048)	257816	46.6338	46.63
39	Bromodichloromethane	83	5.722	5.722	(1.153)	352205	47.0449	47.04
40	Methyl Methacrylate	41	5.606	5.606	(1.342)	307355	48.6390	48.63
41	2-Chloroethylvinyl ether	63	6.044	6.048	(1.217)	236549	103.486	103.48
42	1,2-Dichloropropane	63	5.433	5.437	(1.094)	308027	49.0106	49.01
43	2-Nitropropane	43	5.966	5.969	(1.428)	100815	48.4694	48.46
44	Dibromomethane	93	5.550	5.549	(1.118)	168843	47.4595	47.45
45	4-Methyl-2-Pentanone	43	6.326	6.325	(0.825)	705887	96.7791	96.77
46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	426551	49.6054	49.60
* 47	Chlorobenzene-d5	117	7.668	7.667	(1.000)	741203	50.0000	
$ 48	Toluene-d8	98	6.382	6.385	(0.832)	919255	48.1696	48.16
49	Ethyl Methacrylate	69	6.712	6.719	(1.352)	227813	42.5696	42.56
50	Toluene	91	6.442	6.445	(0.840)	975883	48.9113	48.91
51	trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	355856	49.0932	49.09
52	2-Hexanone	43	7.086	7.086	(0.924)	481140	100.419	100.41
53	1,1,2-Trichloroethane	83	6.835	6.839	(0.891)	205333	48.5132	48.51
54	1,3-Dichloropropane	76	6.982	6.981	(0.911)	419059	48.4632	48.46
55	Dibromochloromethane	129	7.173	7.173	(0.935)	311577	50.9926	50.99
56	Tetrachloroethene	164	6.925	6.925	(0.903)	194514	47.1890	47.18
57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	231451	47.8539	47.85
58	1-Chlorohexane	55	7.694	7.694	(1.550)	263762	40.1795	40.17
59	Chlorobenzene	112	7.690	7.690	(1.003)	668608	47.9390	47.93
60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	267606	49.0109	49.01
61	Ethylbenzene	106	7.795	7.799	(1.017)	323263	46.2211	46.22
62	m,p-Xylenes	106	7.900	7.900	(1.030)	828056	94.3758	94.37
63	o-Xylene	106	8.237	8.241	(1.074)	397534	47.8450	47.84
64	Styrene	104	8.256	8.256	(1.077)	710304	49.0101	49.01
66	Bromoform	173	8.406	8.406	(1.096)	197925	50.4868	50.48
67	Isopropylbenzene	105	8.560	8.560	(1.116)	956821	44.8008	44.80
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	331151	48.2326	48.23
$ 69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	388935	52.7245	52.72
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	408757	50.0000	
71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	262052	48.0990	48.09(M)
72	trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	119855	53.1678	53.16
73	n-Propylbenzene	91	8.908	8.912	(0.922)	1109886	44.9330	44.93
74	Bromobenzene	156	8.803	8.803	(0.911)	301361	47.1405	47.14
75	1,3,5-Trimethylbenzene	105	9.062	9.066	(0.938)	826279	44.6531	44.65

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	751134	45.0789	45.07
77	4-Chlorotoluene	91	9.070	9.069 (0.939)	862507	47.1055	47.10

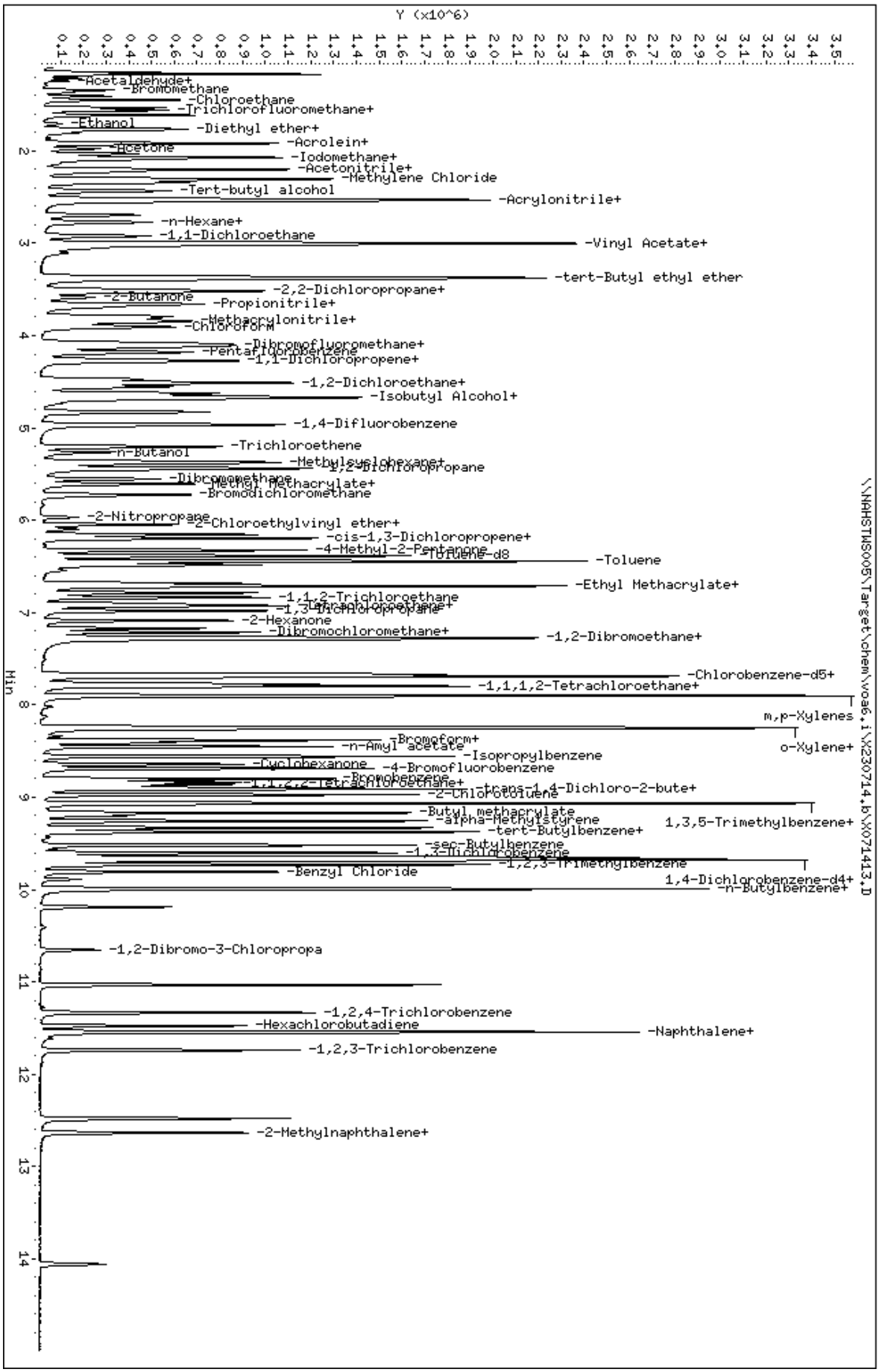
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	
78	tert-Butylbenzene	119	9.332	9.336	(0.966)	675255	42.5524	42.55	
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	830881	44.7762	44.77	
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	905955	42.8308	42.83	
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	820416	42.4603	42.46	
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	517212	46.4420	46.44	
84	1,4-Dichlorobenzene	146	9.681	9.680	(1.002)	560136	45.8733	45.87	
86	Benzyl Chloride	91	9.808	9.804	(1.279)	615356	48.8480	48.84	
87	n-Butylbenzene	91	9.992	9.992	(1.034)	697021	43.0724	43.07	
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	522905	47.7589	47.75	
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	54433	48.2708	48.27	
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	326047	43.3575	43.35	
91	Hexachlorobutadiene	225	11.476	11.480	(1.188)	139858	40.8152	40.81	
92	Naphthalene	128	11.540	11.536	(1.194)	838509	45.0509	45.05	
93	1,2,3-Trichlorobenzene	180	11.739	11.738	(1.215)	302822	43.0586	43.05	
146	Methyl acetate	43	2.232	2.228	(0.534)	226459	48.6009	48.60	
138	Freon TF	101	1.917	1.917	(0.459)	164256	50.7362	50.73	
141	Cyclohexane	56	4.121	4.117	(0.987)	392805	43.2834	43.28	
142	Tetrahydrofuran	42	3.848	3.851	(0.921)	129569	96.1946	96.19	
147	Methylcyclohexane	55	5.381	5.381	(1.084)	818352	47.4476	47.44	
135	1,4-Dioxane	88	5.602	5.602	(1.341)	61482	988.216	988.21	
132	n-Butanol	56	5.261	5.261	(1.259)	170908	980.599	980.59	
131	Methyl Acrylate	55	3.690	3.686	(0.883)	366966	51.5629	51.56	
133	Ethyl Acrylate	55	5.381	5.381	(1.288)	818352	47.1623	47.16	
136	n-Hexane	57	2.772	2.768	(0.664)	239027	47.2779	47.27	
139	Diethyl ether	59	1.760	1.760	(0.421)	234998	48.1340	48.13	
148	Tert-butyl alcohol	59	2.434	2.442	(0.583)	626708	948.402	948.40	
149	Isopropyl alcohol	45	2.093	2.101	(0.501)	377497	920.653	920.65	
156	Diisopropyl ether	45	3.004	3.008	(0.719)	1037147	48.0634	48.06	
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	913282	48.3344	48.33	
167	Ethanol	45	1.703	1.711	(0.408)	74613	1019.42	1019.41	
172	tert-Butyl formate	59	4.627	4.635	(1.108)	507413	90.7266	90.72	
173	3,3-Dimethyl-1-butanol	57	7.285	7.293	(0.950)	688113	863.240	863.23	
174	tert-Amyl methyl ether	73	4.669	4.668	(1.118)	862678	50.0877	50.08	
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	1050302	47.3858	47.38	
176	tert-Amyl alcohol	59	4.627	4.635	(1.108)	507413	887.155	887.15	
151	4-Methyl-2-pentanol	45	6.712	6.715	(1.352)	1515654	865.514	865.51	
180	1-Methylnaphthalene	142	12.634	12.631	(1.308)	384606			(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	301891	44.8739	44.87	
152	Amyl alcohol	42	6.903	6.903	(0.900)	195847	918.818	918.81	
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	380825	45.1447	45.14	
159	Propylene oxide	43	1.805	1.805	(0.432)	61412	95.6112	95.61	
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	186846	1023.91	1023.90	
162	Butyl acrylate	55	8.249	8.248	(1.076)	731306	51.8619	51.86	
163	Butyl methacrylate	41	9.167	9.171	(0.949)	489010	49.9457	49.94	
164	Dicyclopentadiene	66	9.681	9.684	(1.002)	1106669	47.0024	47.00	
182	Epichlorohydrin	57	6.093	6.093	(1.227)	124324	203.690	203.69	
M 94	1,2-Dichloroethylene (total)	96				470923	93.0878	93.08	
M 95	Xylenes (total)	106				1225590	142.221	142.22	
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	409265	45.8929	45.89	
130	Ethyl Acetate	43	3.660	3.660	(0.876)	382709	49.2142	49.21	
134	Cyclohexanone	55	8.642	8.642	(0.894)	353883	972.476	972.47	
185	Isoprene	39	1.771	1.771	(0.424)	82361	47.7228	47.72	

188 Isopropyl acetate	43	4.680	4.680 (0.943)	1029947	47.8043	47.80
187 n-Amyl acetate	43	8.451	8.451 (1.102)	635386	46.7743	46.77

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
189 n-Butyl acetate	43	7.214	7.210	(0.941)	567096	49.9183	49.91(H)
150 Allyl alcohol	57	2.772	2.768	(0.664)	239027	945.764	945.76
194 Acetaldehyde	44	1.212	1.212	(0.290)	96727	206.571	206.57
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	761129	49.1308	49.13
200 Dimethyl Disulfide	94	6.194	6.198	(0.808)	522553	52.2664	52.26
202 Isobutylene	41	1.242	1.242	(0.297)	41486	47.9266	47.92(M)
205 2-Ethylhexyl Acrylate	55	11.547	11.547	(1.195)	553935	53.0575	53.05

QC Flag Legend

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: ICV
Sample Info: CCV;CCV;2;;ICV
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071413.D
Inj Date : 14-JUL-2023 16:06
InstruID : voa6.i
LabSampID : ICV

1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

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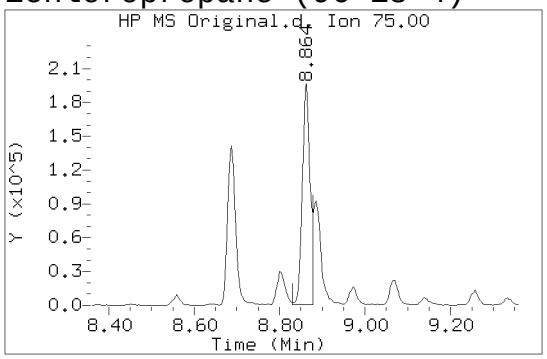
195933
20-Jul-2023
15:04
linh
pham



AFTER

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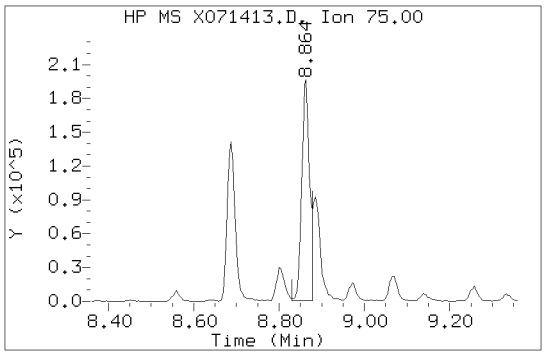

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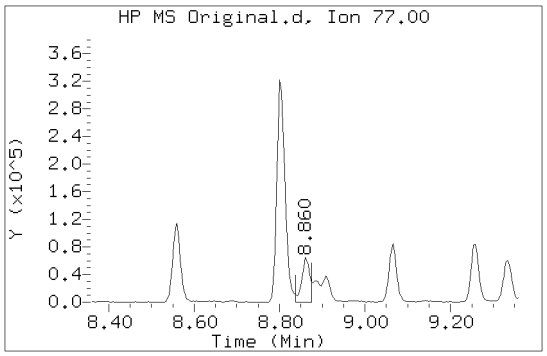

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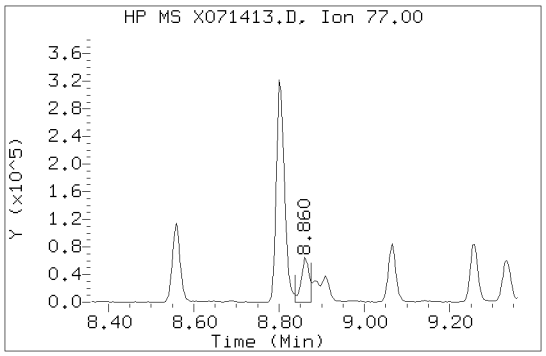

Chloroprene (126-99-8)

Reason Code:

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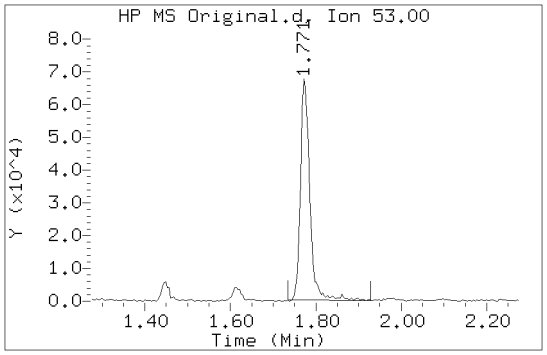
pham



AFTER

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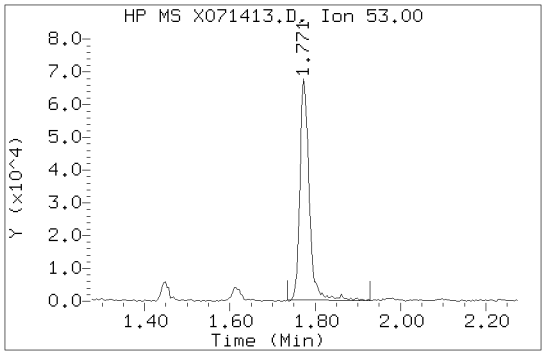

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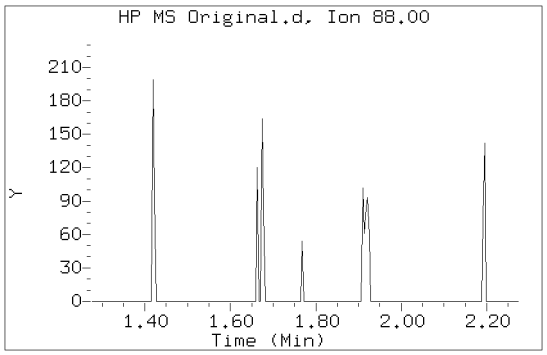

AFTER

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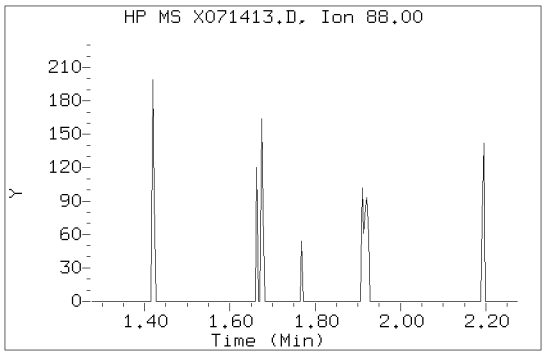

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Inj Date : 14-JUL-2023 16:06
InstruID : voa6.i
LabSampID : ICV

Isobutylene (115-11-7)

Reason Code:

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20-Jul-2023
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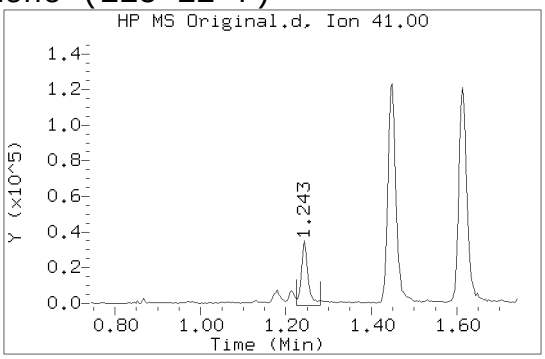

AFTER
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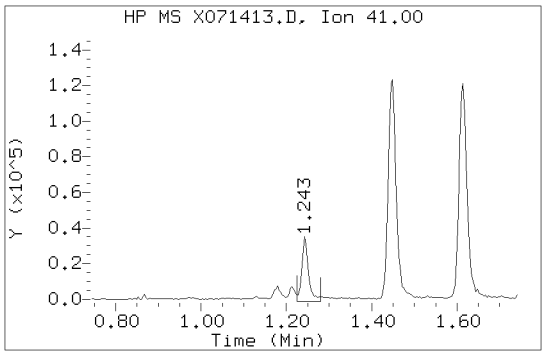

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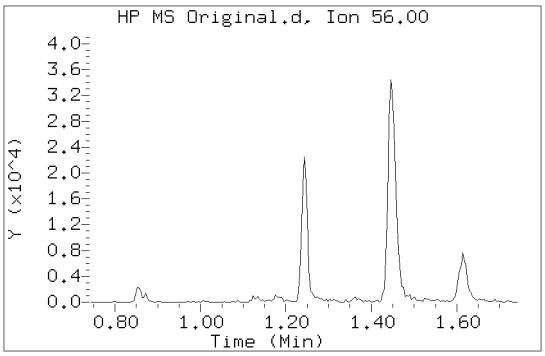

AFTER
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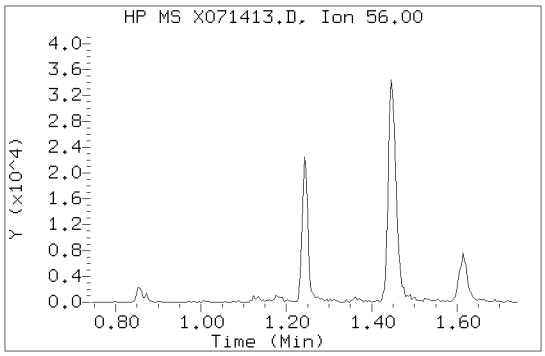

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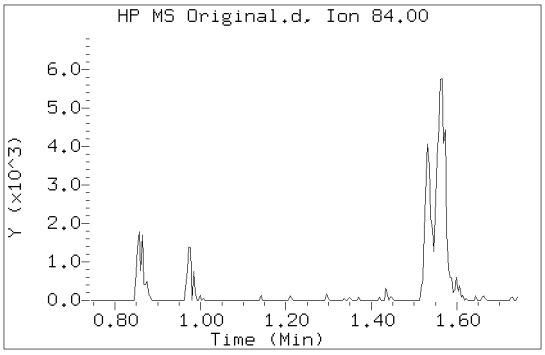

AFTER
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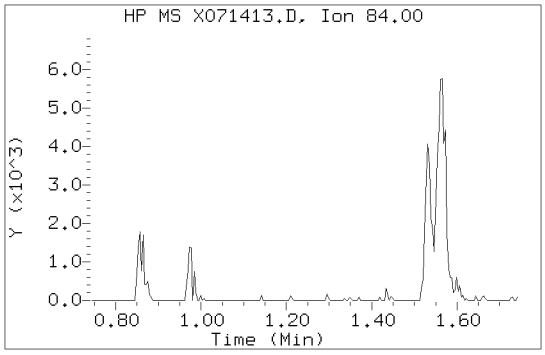

01323490

right solutions.
right partner.

Raw Data VOA6 442149

Volatiles by EPA 8260

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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\voa6.i\X230724.b\X072401.D Page 1
Report Date: 24-Jul-2023 21:32

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072401.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 24-JUL-2023 10:55
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\X230724.b\bfb.m
Meth Date : 14-Mar-2023 15:45 Linh.Pham 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	53200			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	13159			15.00- 40.00	24.73
8.687	8.889	(0.000)	75	25256			30.00- 60.00	47.47
8.687	8.889	(0.000)	96	3502			5.00- 9.00	6.58
8.687	8.889	(0.000)	173	629			0.00- 2.00	1.44
8.687	8.889	(0.000)	174	43624			50.00- 0.00	82.00
8.687	8.889	(0.000)	175	3862			5.00- 9.00	8.85
8.687	8.889	(0.000)	176	43128			95.00- 101.00	98.86
8.687	8.889	(0.000)	177	2927			5.00- 9.00	6.79

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	24.73
75	30.00 - 60.00% of mass 95	47.47
96	5.00 - 9.00% of mass 95	6.58
173	Less than 2.00% of mass 174	1.18 (1.44)
174	Greater than 50.00% of mass 95	82.00
175	5.00 - 9.00% of mass 174	7.26 (8.85)
176	95.00 - 101.00% of mass 174	81.07 (98.86)
177	5.00 - 9.00% of mass 176	5.50 (6.79)

Data File: X072401.D
Spectrum: Avg. Scans 2159-2163 (8.69)
Location of Maximum: 95.00
Number of points: 132

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36.00	812	70.00	929	105.00	264	153.00	73
37.00	3241	71.00	289	106.00	131	154.00	31
38.00	3167	72.00	417	107.00	421	155.00	297
39.00	2541	73.00	1921	109.00	387	157.00	120
40.00	3138	74.00	7367	110.00	95	159.00	170
41.00	2052	75.00	25256	112.00	49	161.00	48
42.00	2526	76.00	2253	113.00	95	168.00	23
43.00	1877	77.00	700	114.00	10	169.00	53
44.00	2729	78.00	306	115.00	200	170.00	51
45.00	987	79.00	1408	116.00	120	171.00	39
46.00	117	80.00	771	117.00	492	172.00	201
47.00	1100	81.00	1326	118.00	266	173.00	629
48.00	490	82.00	365	119.00	374	174.00	43624
49.00	2622	83.00	203	121.00	28	175.00	3862
50.00	13159	84.00	53	122.00	51	176.00	43128
51.00	4444	85.00	318	126.00	77	177.00	2927
52.00	243	86.00	113	127.00	170	178.00	160
53.00	457	87.00	2610	128.00	449	184.00	80
54.00	364	88.00	2057	129.00	205	186.00	188
55.00	4743	89.00	45	130.00	199	187.00	49
56.00	1773	90.00	10	131.00	133	194.00	31
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58.00	477	92.00	1514	136.00	11	202.00	19
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60.00	506	94.00	6561	139.00	172	234.00	91
61.00	2760	95.00	53200	141.00	624	235.00	29
62.00	3028	96.00	3502	142.00	128	236.00	22
63.00	2313	97.00	169	143.00	567	246.00	14
64.00	329	98.00	948	146.00	151	257.00	27
65.00	277	99.00	96	147.00	151	278.00	42
66.00	91	100.00	13	148.00	74		
67.00	328	101.00	26	149.00	159		
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Data File: \\nahstws005\target\chem\voa6.i\x230724.b\x072401.d Page 1

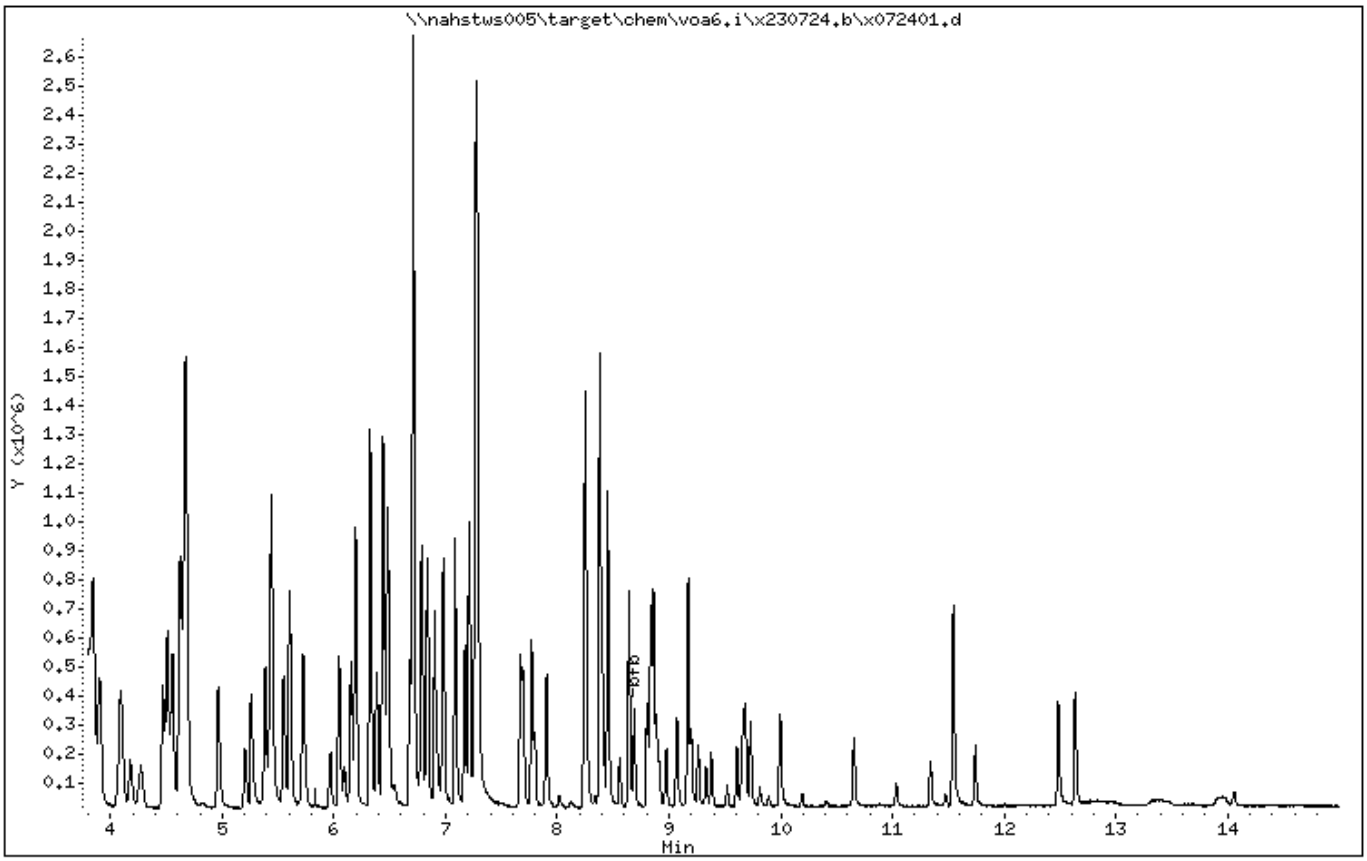
Date : 24-JUL-2023 10:55

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



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Inj Date : 24-JUL-2023 10:55
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072403.D Page 1
Report Date: 27-Jul-2023 13:08

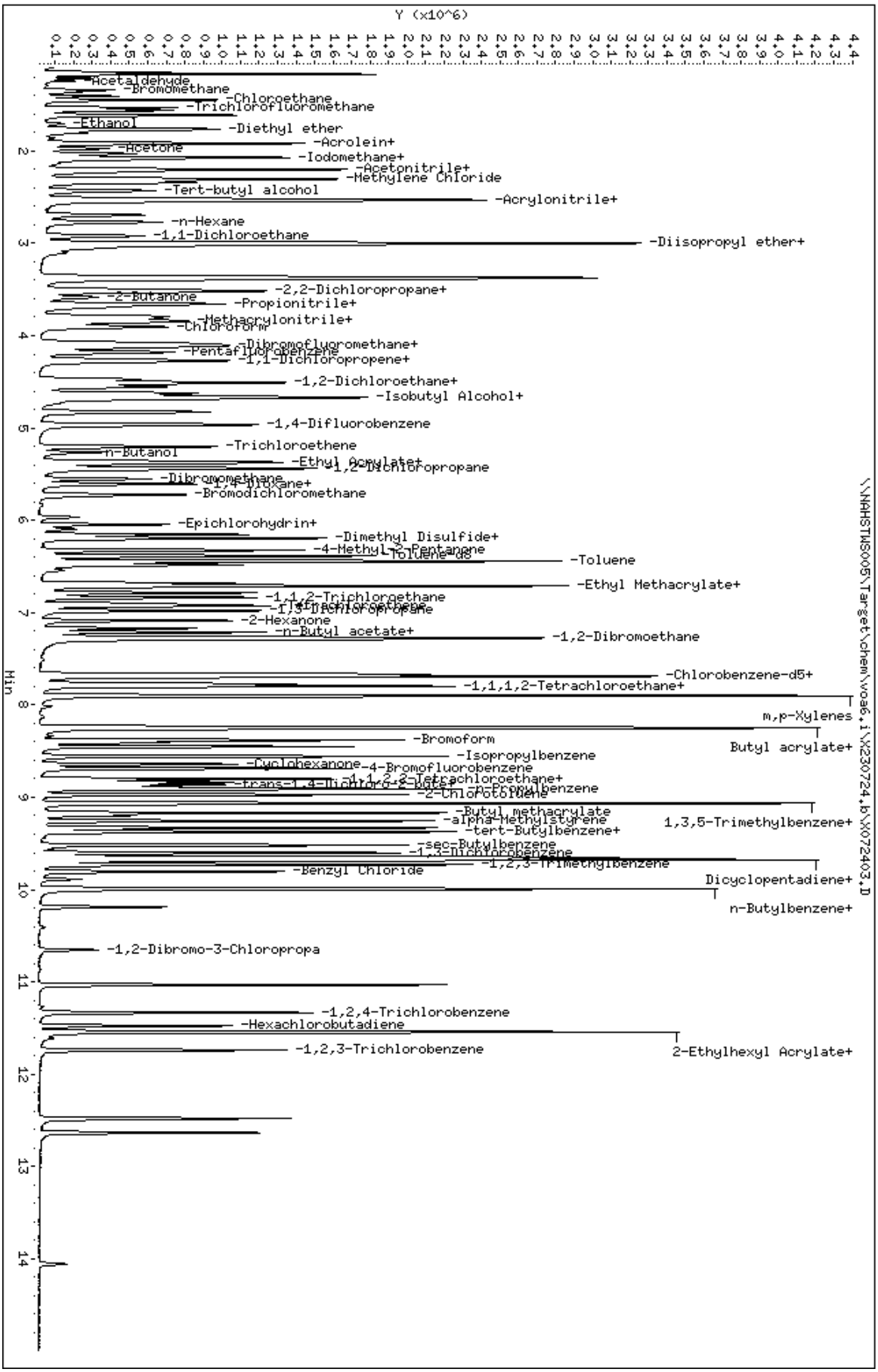
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072403.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 24-JUL-2023 11:36
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.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	4.174	4.174	(1.000)	569251	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	278655	50.0000	53.46
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.071)	344510	50.0000	52.83
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	922855	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	843367	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1019276	50.0000	46.94
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	446857	50.0000	53.24
* 70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	457779	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	421356	50.0000	57.19
11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	224078	50.0000	53.73
17 Methylene Chloride	84	2.303	2.303	(0.552)	239509	50.0000	48.63
27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.845)	323298	50.0000	52.60
33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	501080	50.0000	49.32
38 Trichloroethene	130	5.205	5.205	(1.048)	297324	50.0000	47.61
53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	242878	50.0000	50.43
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.606)	218936	50.0000	45.38



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Date : 24-JUL-2023 11:36
Client ID: CCV
Sample Info: CCV,CCV,2,,
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072403.D
Inj Date : 24-JUL-2023 11:36
InstruID : voa6.i
LabSampID : CCV

NO MANUAL INTEGRATIONS

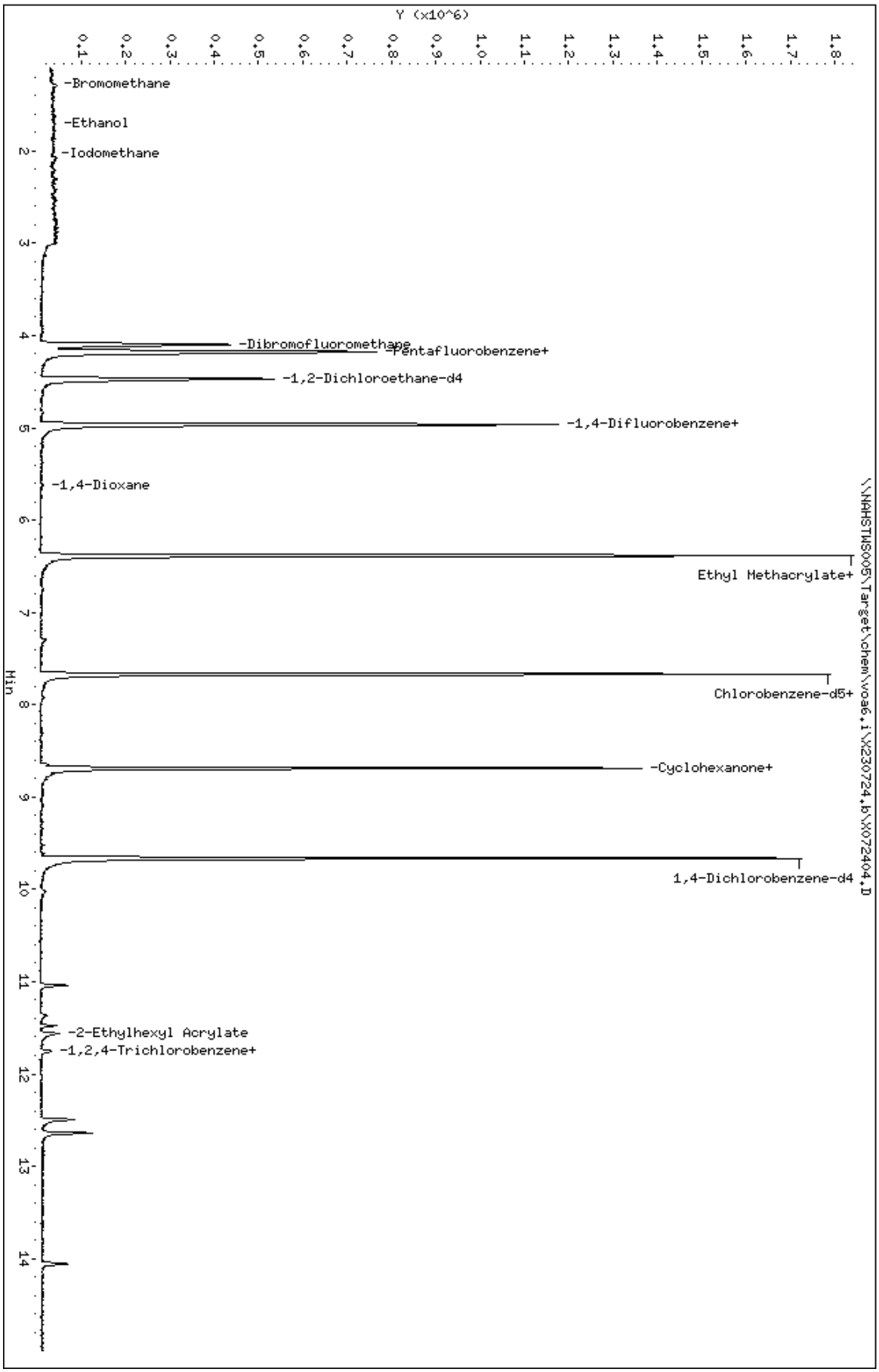
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072404.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 24-JUL-2023 11:56
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.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	4.177	4.174	(1.000)	585631	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	288549	53.8173	53.81
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	352961	52.6183	52.61
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	901702	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	815353	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1038085	49.4495	49.44
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	387804	47.7502	47.75
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	412447	50.0000	



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Date : 24-JUL-2023 11:56
Client ID: CCB
Sample Info: CCB;CCB;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072404.D
Inj Date : 24-JUL-2023 11:56
InstruID : voa6.i
LabSampID : CCB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072407.D Page 1
Report Date: 27-Jul-2023 13:08

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Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072407.D
Lab Smp Id: VBLKW-230724 Client Smp ID: VBLKW-230724
Inj Date : 24-JUL-2023 12:58
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-230724;VBLKW-230724;3;;BLANK
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.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	4.181	4.174	(1.000)	590206	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.980)	289540	53.5802	53.58
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.069)	358806	53.0804	53.08
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	901388	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	800368	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1043294	50.6281	50.62
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	387622	48.6292	48.62
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	428640	50.0000	

01323503

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072407.D

Page 1

Date : 24-JUL-2023 12:58

Client ID: VBLKW-230724

Instrument: voa6.i

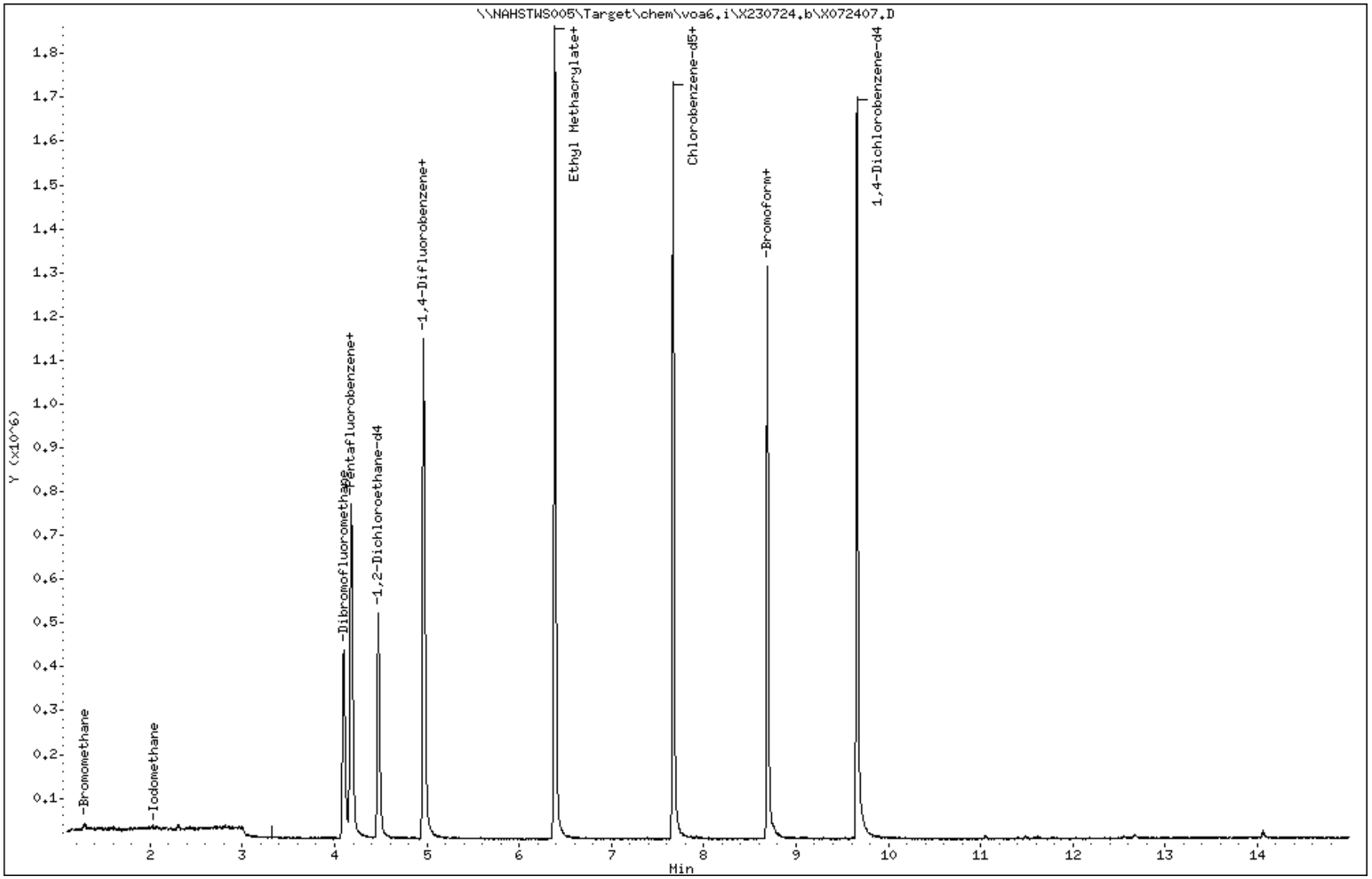
Sample Info: VBLKW-230724;VBLKW-230724;3;;BLANK

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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InstruID : voa6.i
LabSampID : VBLKW-230724

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072410.D Page 1
Report Date: 27-Jul-2023 13:08

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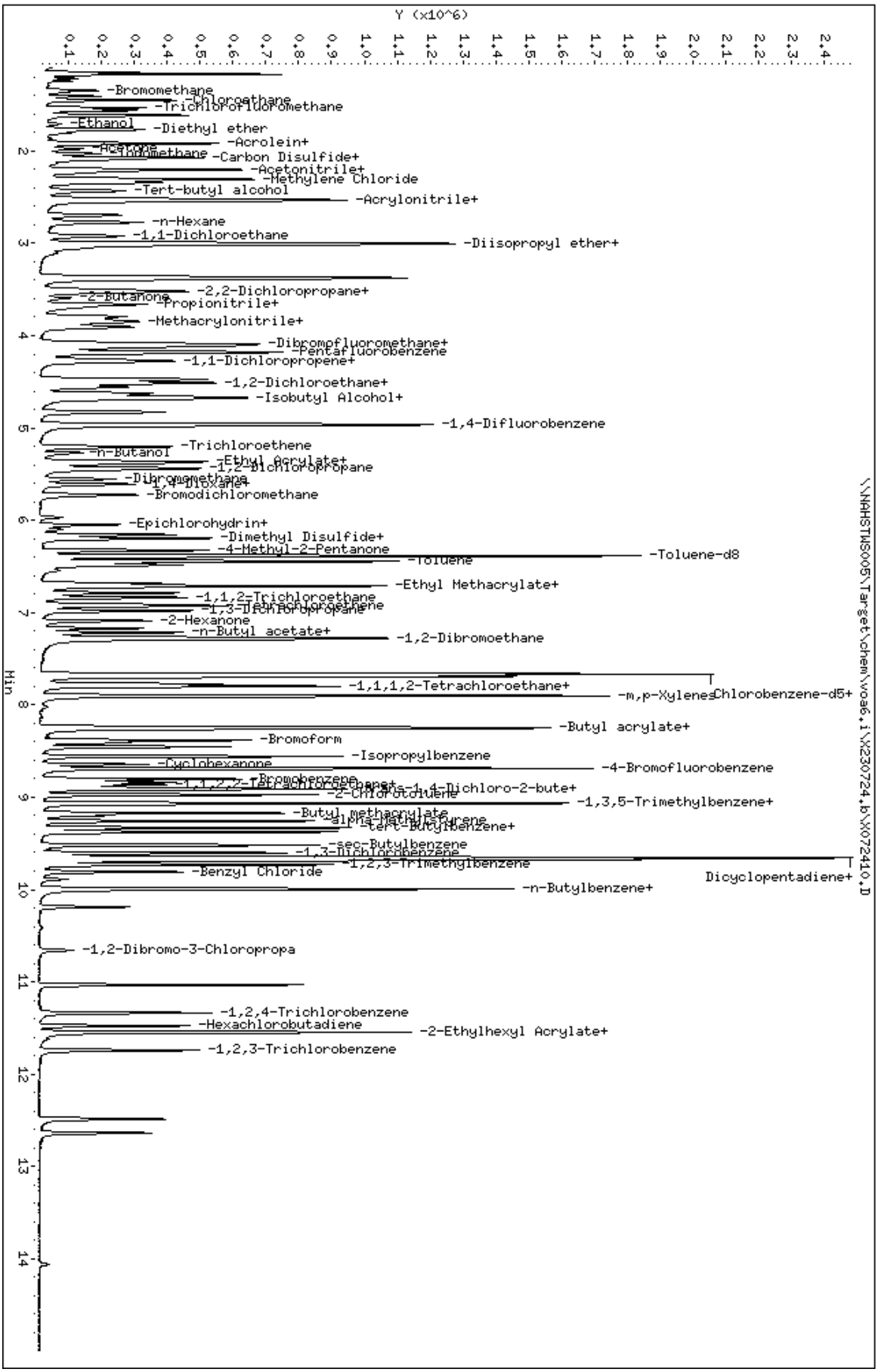
Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072410.D
Lab Smp Id: VLCSW-230724 Client Smp ID: VLCSW-230724
Inj Date : 24-JUL-2023 13:59
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-230724;VLCSW-230724;3;;LCS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.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	4.174	(1.000)	576980	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	286479	54.2382	54.23
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	354070	53.5864	53.58
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	921440	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	863162	50.0000	
$ 48 Toluene-d8	98	6.382	6.386	(0.832)	1029612	46.3293	46.32
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	453196	52.7556	52.75
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	466768	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	174942	23.4306	23.43
11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	82928	19.6186	19.61
17 Methylene Chloride	84	2.303	2.303	(0.551)	95632	18.3027	18.30
27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	127333	20.4428	20.44
33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	192562	18.9843	18.98
38 Trichloroethene	130	5.205	5.205	(1.048)	131854	21.1500	21.15
53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	97167	19.7136	19.71
20 trans-1,2-Dichloroethene	96	2.532	2.528	(0.606)	92351	18.8878	18.88



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Date : 24-JUL-2023 13:59
Client ID: VLCSW-230724
Sample Info: VLCSW-230724;VLCSW-230724;3;;LCS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072410.D
Inj Date : 24-JUL-2023 13:59
InstruID : voa6.i
LabSampID : VLCSW-230724

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072411.D Page 1
Report Date: 27-Jul-2023 13:08

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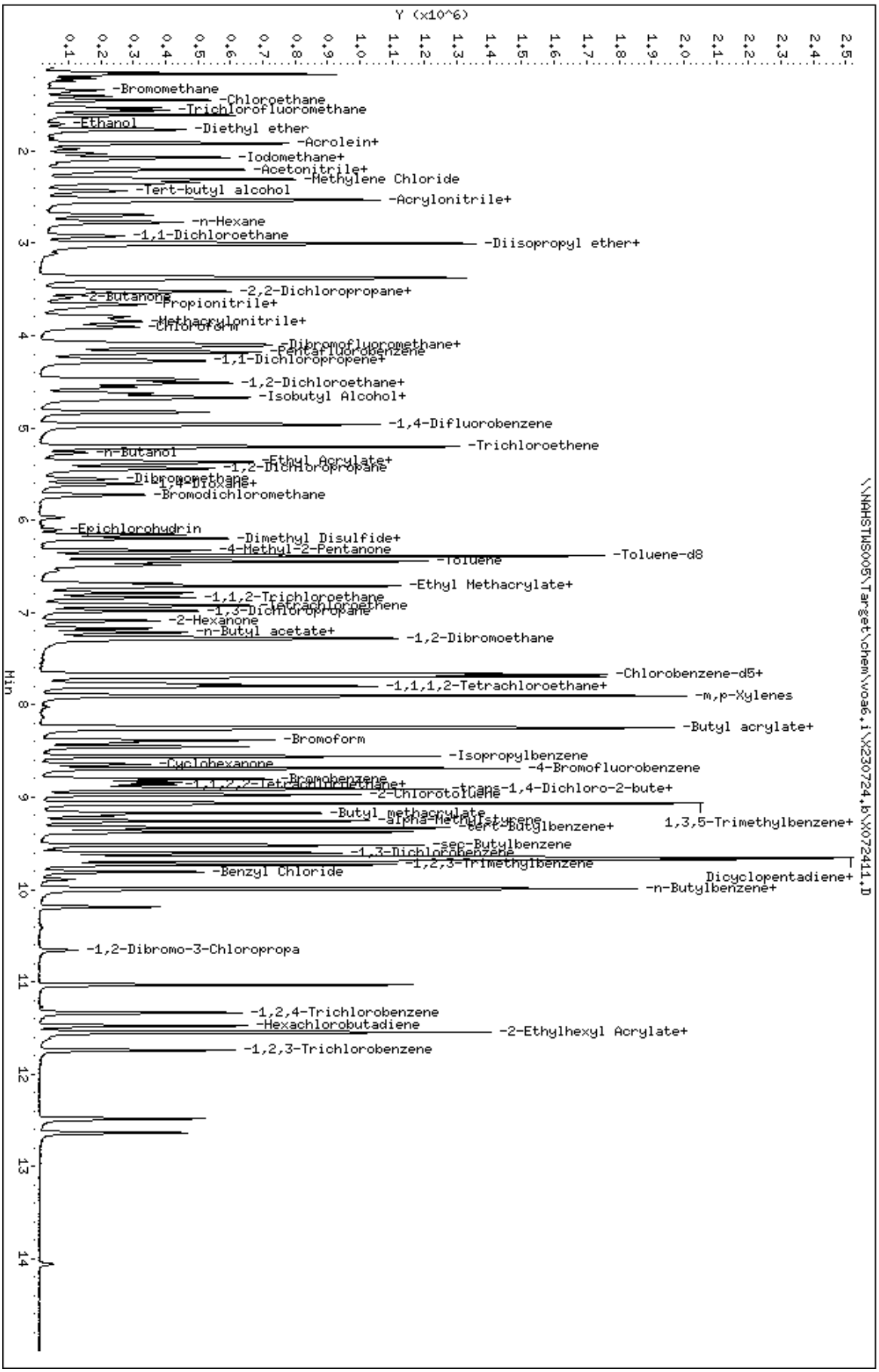
Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072411.D
Lab Smp Id: HS23071113-02MS Client Smp ID: HS23071113-02MS
Inj Date : 24-JUL-2023 14:20
Operator : PC Inst ID: voa6.i
Smp Info : HS23071113-02MS;HS23071113-02MS;3;;MS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 10 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.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	4.181	4.174	(1.000)	520372	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.979)	268033	56.2947	56.29
$ 35 1,2-Dichloroethane-d4	65	4.473	4.470	(1.070)	339642	57.0342	57.03
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	816921	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	729742	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	930979	49.5501	49.55
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	399903	55.0818	55.08
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	440108	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	210415	31.2474	31.24
11 1,1-Dichloroethene	96	1.913	1.917	(0.458)	109672	28.7680	28.76
17 Methylene Chloride	84	2.307	2.303	(0.552)	103591	22.2664	22.26
27 cis-1,2-Dichloroethene	96	3.529	3.525	(0.844)	166556	29.6488	29.64
33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	207397	23.0628	23.06
38 Trichloroethene	130	5.204	5.205	(1.048)	407782	73.7791	73.77
53 1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	94282	22.6255	22.62
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	101998	23.1301	23.13



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Date : 24-JUL-2023 14:20
Client ID: HS230711I3-02MS
Sample Info: HS230711I3-02MS;HS230711I3-02MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072411.D
Inj Date : 24-JUL-2023 14:20
InstruID : voa6.i
LabSampID : HS23071113-02MS

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072412.D Page 1
Report Date: 27-Jul-2023 13:08

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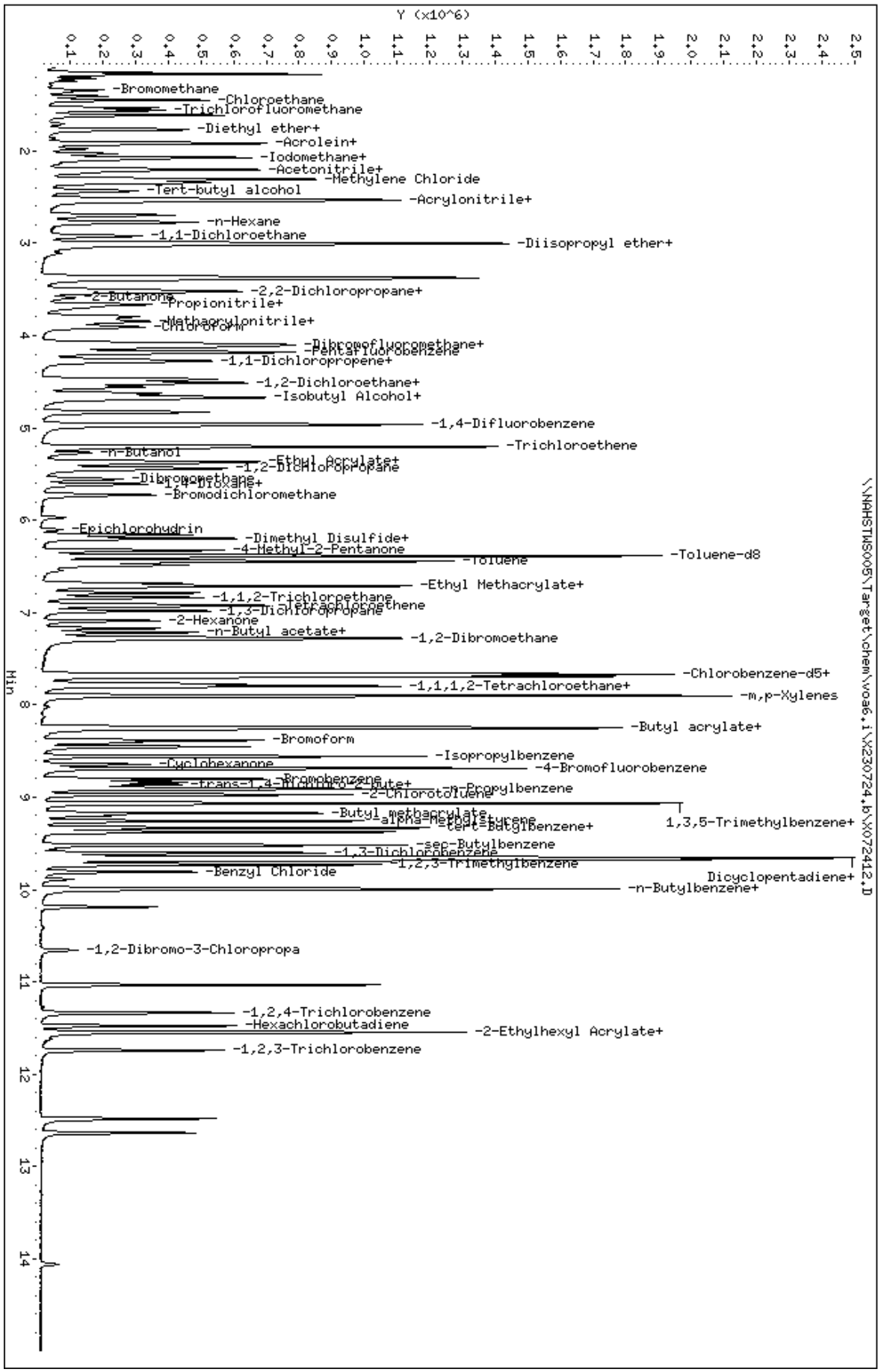
Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072412.D
Lab Smp Id: HS23071113-02MSD Client Smp ID: HS23071113-02MSD
Inj Date : 24-JUL-2023 14:40
Operator : PC Inst ID: voa6.i
Smp Info : HS23071113-02MSD;HS23071113-02MSD;3;;MSD
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 10 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.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	4.177	4.174	(1.000)	595747	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	291535	53.4457	53.44
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	359425	52.6727	52.67
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	922152	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	819904	50.0000	
$ 48 Toluene-d8	98	6.382	6.386	(0.832)	1064986	50.4493	50.44
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	400305	49.0272	49.02
* 70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	447257	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	195663	25.3803	25.38
11 1,1-Dichloroethene	96	1.913	1.917	(0.458)	104672	23.9826	23.98
17 Methylene Chloride	84	2.307	2.303	(0.552)	118482	22.2436	22.24
27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	177538	27.6051	27.60
33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	224947	22.1599	22.15
38 Trichloroethene	130	5.205	5.205	(1.048)	444755	71.2859	71.28
53 1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	104056	22.2250	22.22
20 trans-1,2-Dichloroethene	96	2.532	2.528	(0.606)	111234	22.0331	22.03



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Date : 24-JUL-2023 14:40
Client ID: HS23071113-02HSD
Sample Info: HS23071113-02HSD;HS23071113-02MSD;3;;HSD
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072412.D
Inj Date : 24-JUL-2023 14:40
InstruID : voa6.i
LabSampID : HS23071113-02MSD

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072419.D Page 1
Report Date: 27-Jul-2023 13:09

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072419.D
Lab Smp Id: HS23071165-02 Client Smp ID: HS23071165-02
Inj Date : 24-JUL-2023 17:04
Operator : PC Inst ID: voa6.i
Smp Info : HS23071165-02;HS23071165-02;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.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	4.181	4.174	(1.000)	611672	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.095	(0.981)	304858	54.4472	54.44
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.069)	387073	55.2781	55.27
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	956365	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	793162	50.0000	
$ 48 Toluene-d8	98	6.382	6.386	(0.832)	1040360	50.9444	50.94
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	381799	48.3312	48.33
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	416524	50.0000	
27 cis-1,2-Dichloroethene	96	3.533	3.525	(0.845)	39832	6.03217	6.03
38 Trichloroethene	130	5.212	5.205	(1.050)	8722	1.34796	1.34(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

01323515

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072419.D

Date : 24-JUL-2023 17:04

Client ID: HS23071165-02

Instrument: voa6.i

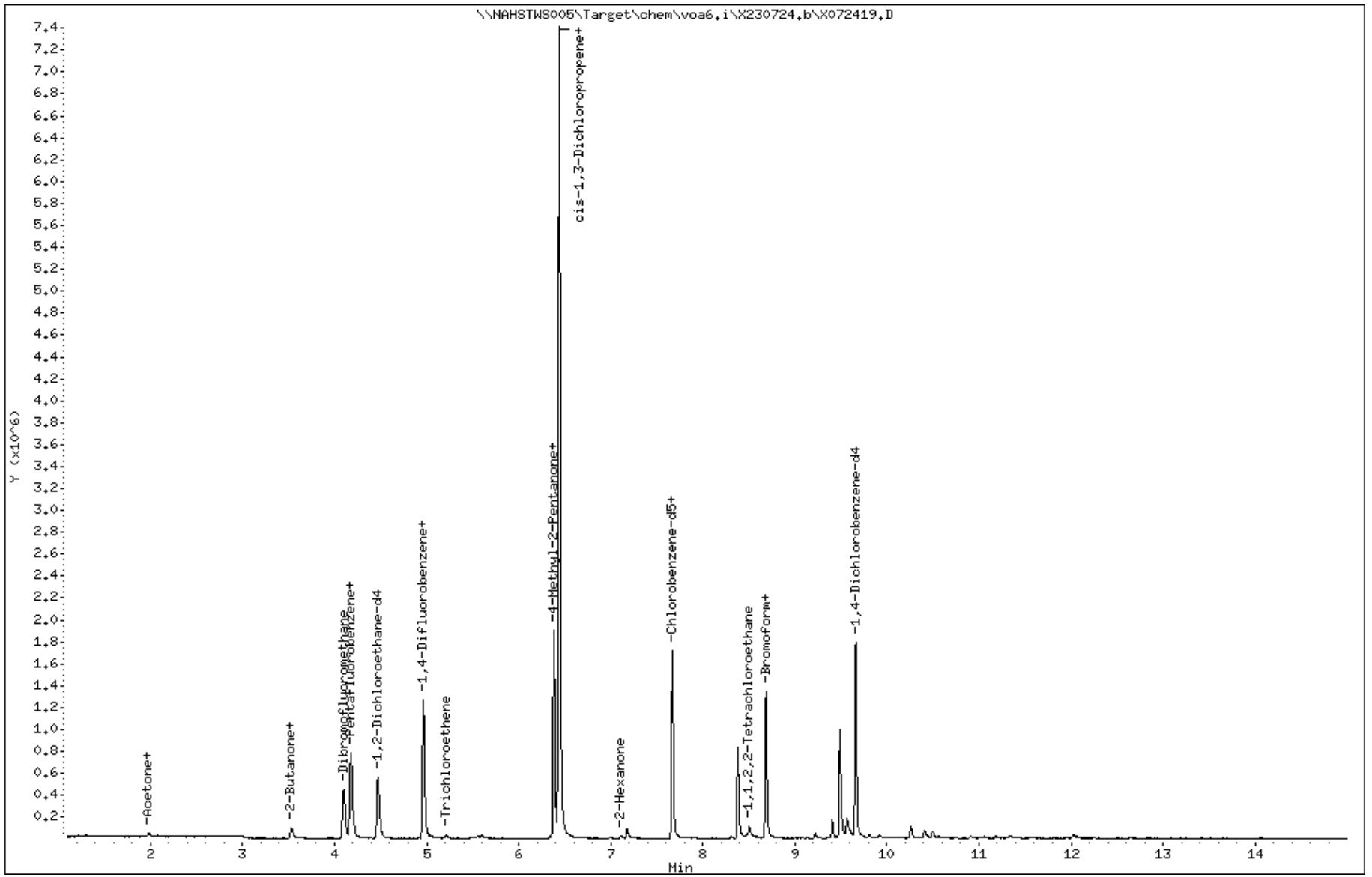
Sample Info: HS23071165-02;HS23071165-02;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072419.D Page 2

Date : 24-JUL-2023 17:04

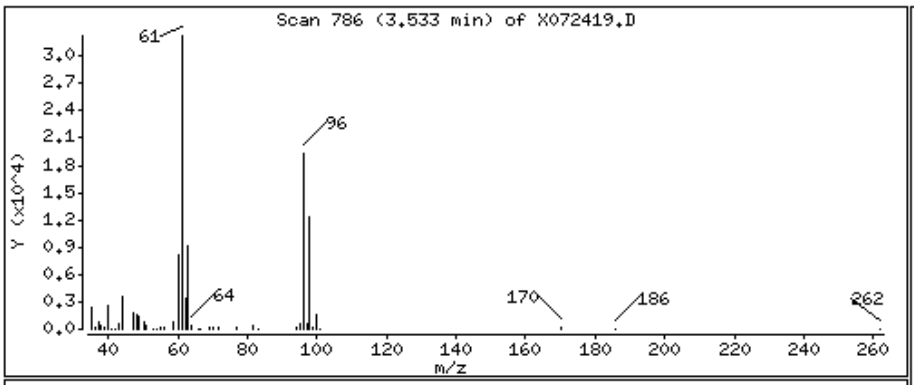
Client ID: HS23071165-02 Instrument: voa6.i

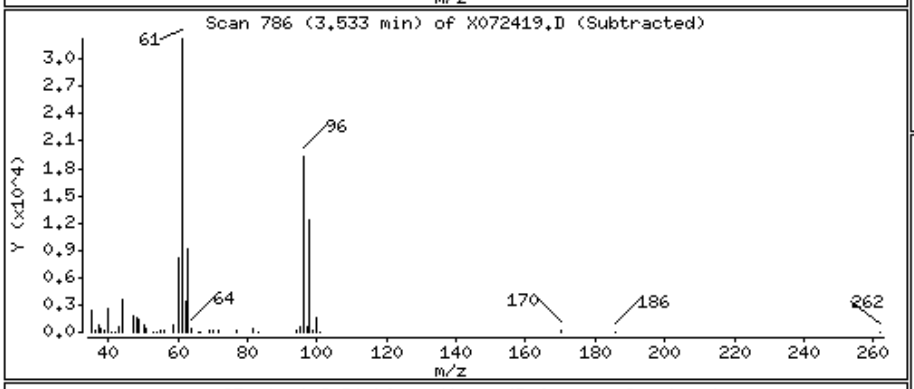
Sample Info: HS23071165-02;HS23071165-02;;;

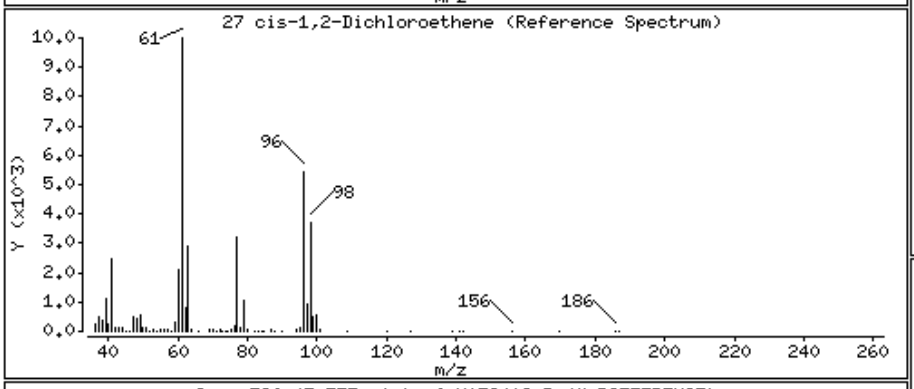
Purge Volume: 5.0 Operator: PC

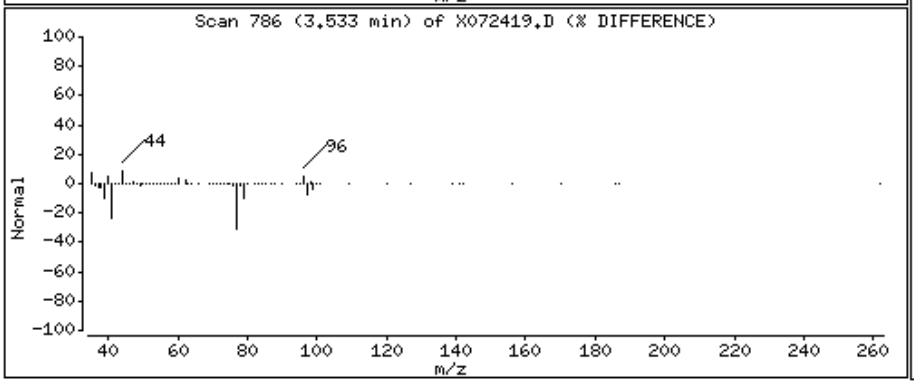
Column phase: DB624 Column diameter: 0.18

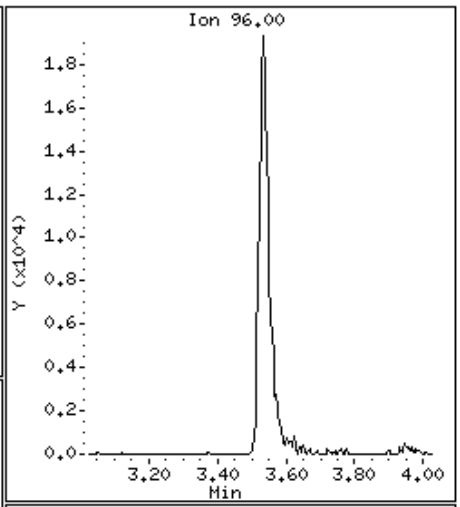
27 cis-1,2-Dichloroethene Concentration: 6.03 ug/l

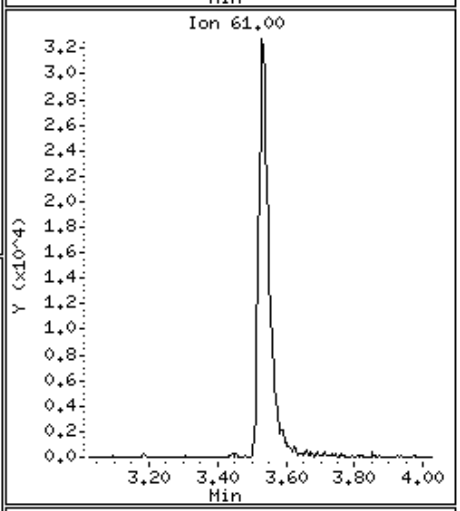


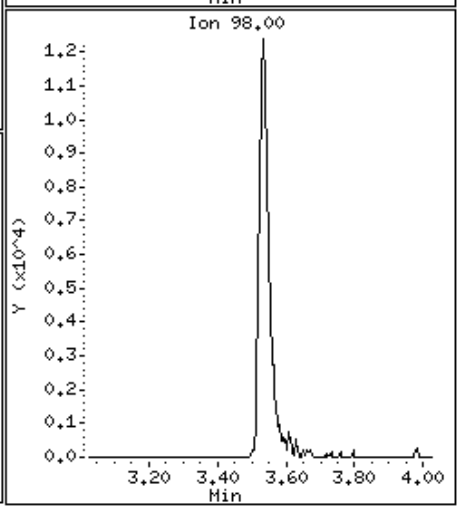












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072419.D Page 3

Date : 24-JUL-2023 17:04

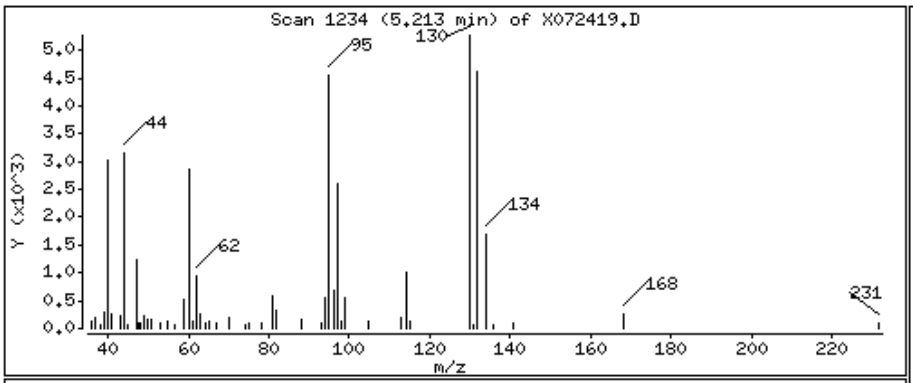
Client ID: HS23071165-02 Instrument: voa6.i

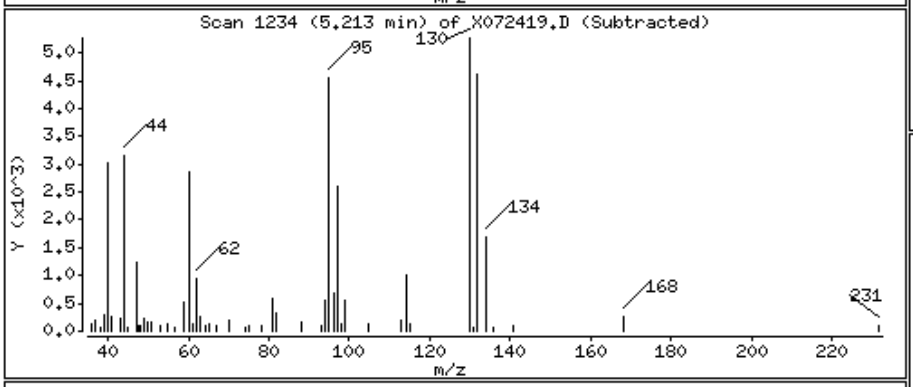
Sample Info: HS23071165-02;HS23071165-02;;;

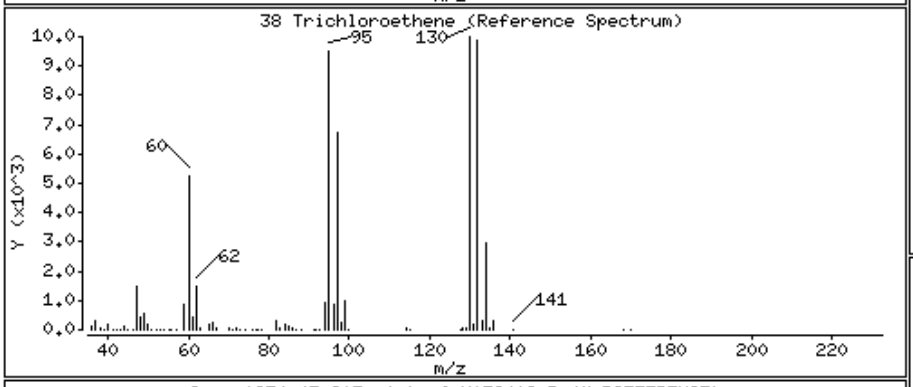
Purge Volume: 5.0 Operator: PC

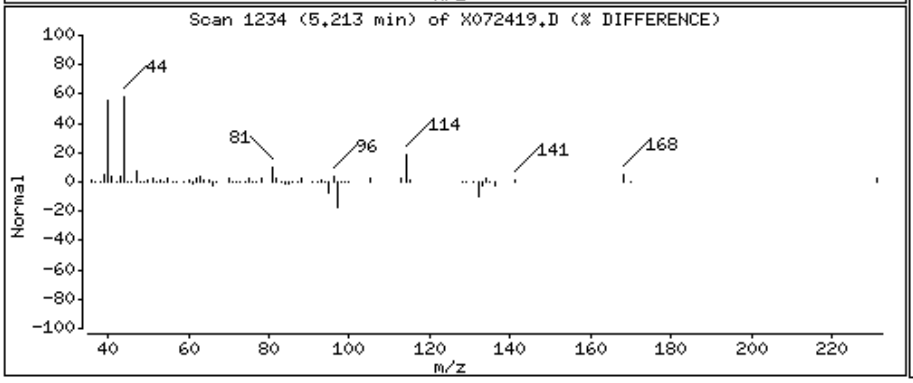
Column phase: DB624 Column diameter: 0.18

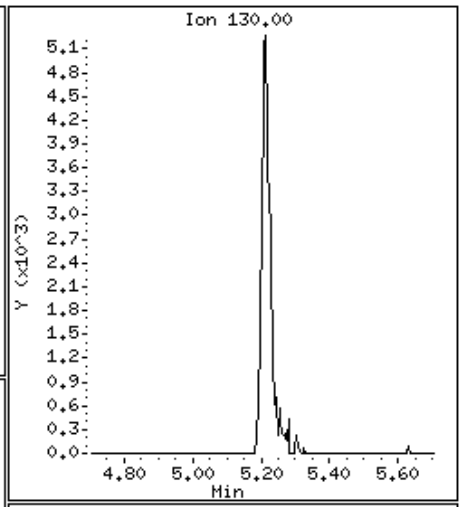
38 Trichloroethene Concentration: 1.34 ug/l

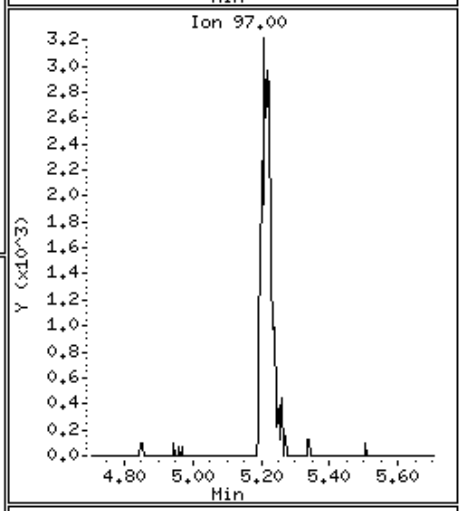


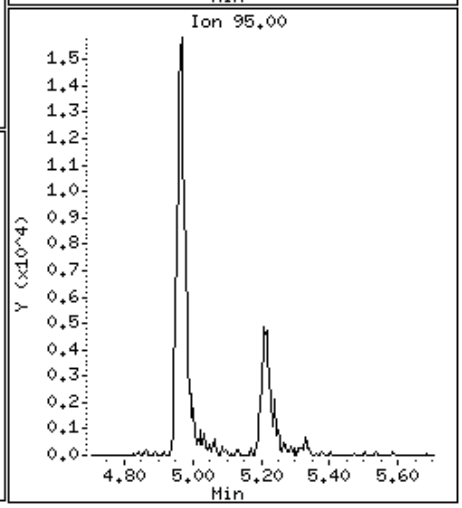












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072419.D
Inj Date : 24-JUL-2023 17:04
InstruID : voa6.i
LabSampID : HS23071165-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072420.D Page 1
Report Date: 27-Jul-2023 13:09

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072420.D
Lab Smp Id: HS23071165-05 Client Smp ID: HS23071165-05
Inj Date : 24-JUL-2023 17:24
Operator : PC Inst ID: voa6.i
Smp Info : HS23071165-05;HS23071165-05;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.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	4.181	4.174	(1.000)	582200	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.980)	282390	52.9671	52.96
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.069)	349837	52.4581	52.45
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	878623	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	789876	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1020290	50.1694	50.16
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	375177	47.6848	47.68
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	398341	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	5462	0.72499	0.72(a)
27 cis-1,2-Dichloroethene	96	3.540	3.525	(0.847)	8382	1.33363	1.33(a)
38 Trichloroethene	130	5.212	5.205	(1.050)	9065	1.52493	1.52(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

01323520

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072420.D

Date : 24-JUL-2023 17:24

Client ID: HS23071165-05

Instrument: voa6.i

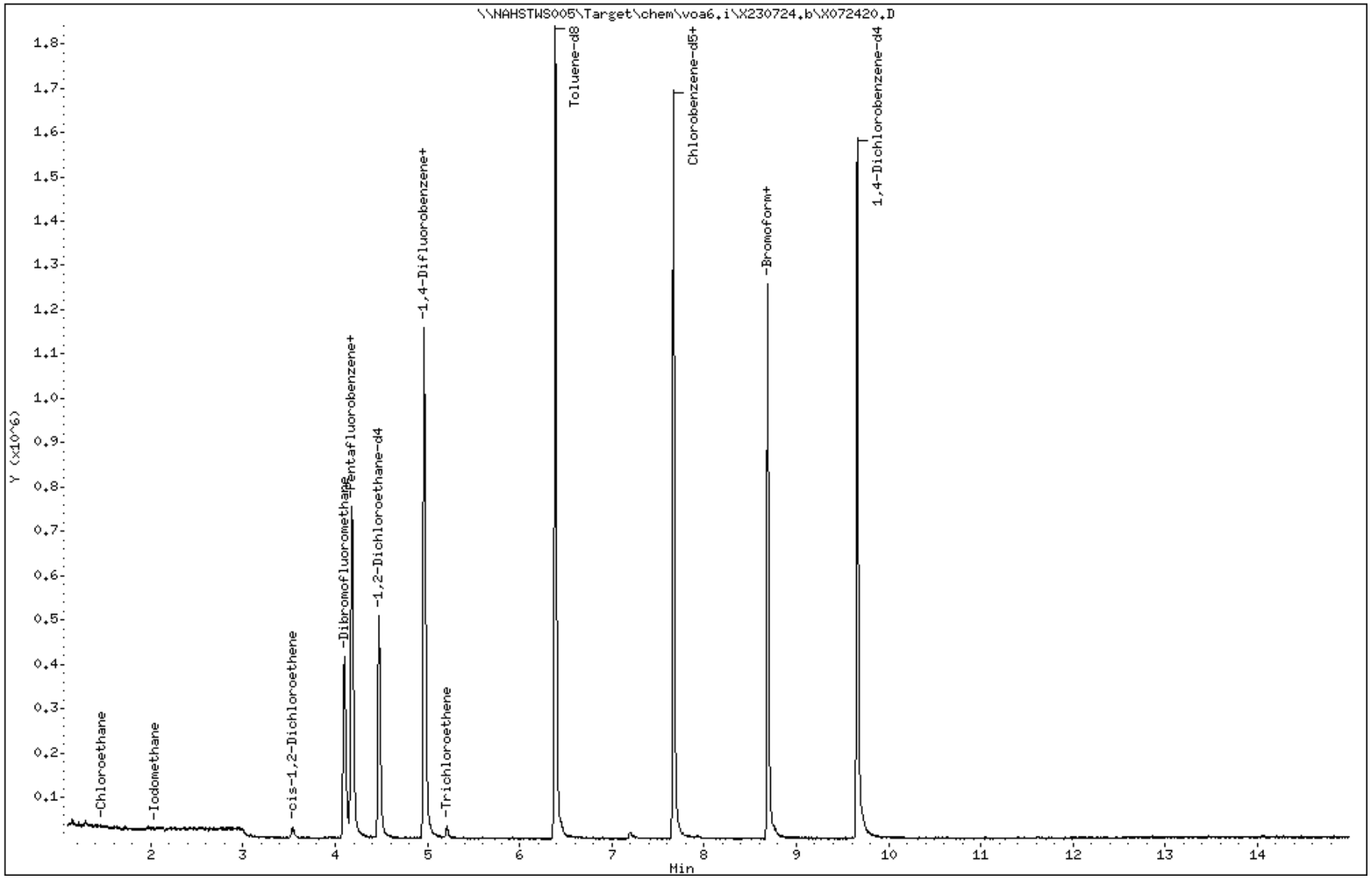
Sample Info: HS23071165-05;HS23071165-05;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Date : 24-JUL-2023 17:24

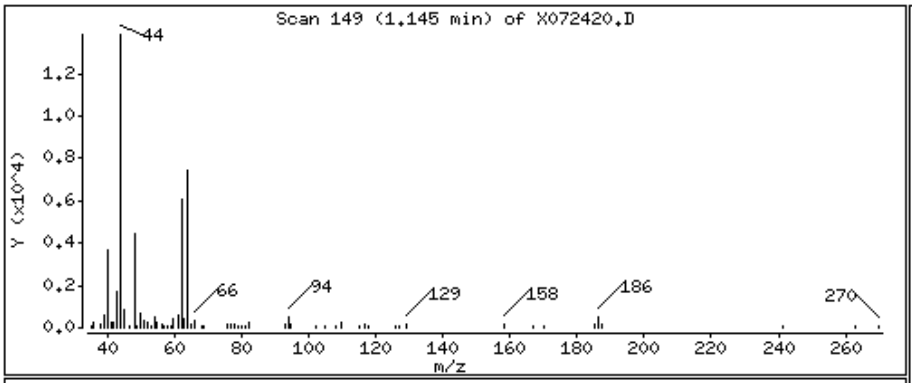
Client ID: HS23071165-05 Instrument: voa6.i

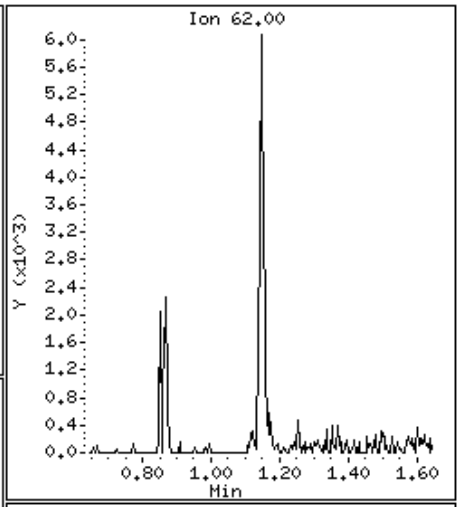
Sample Info: HS23071165-05;HS23071165-05;;;

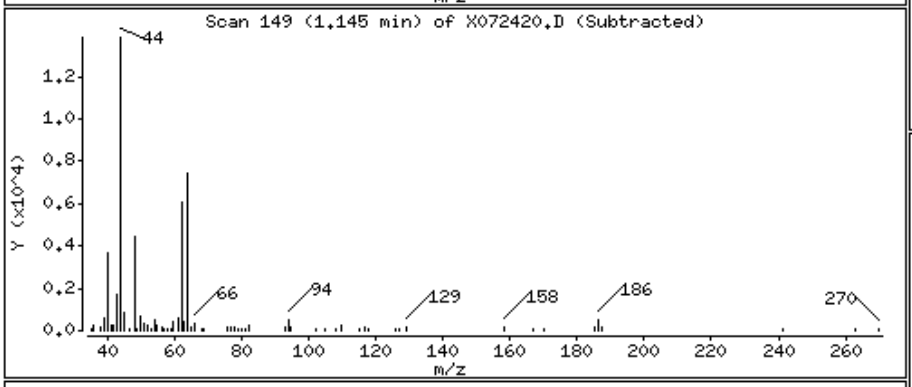
Purge Volume: 5.0 Operator: PC

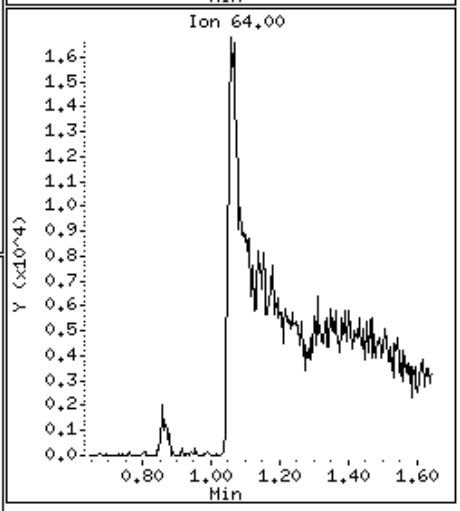
Column phase: DB624 Column diameter: 0.18

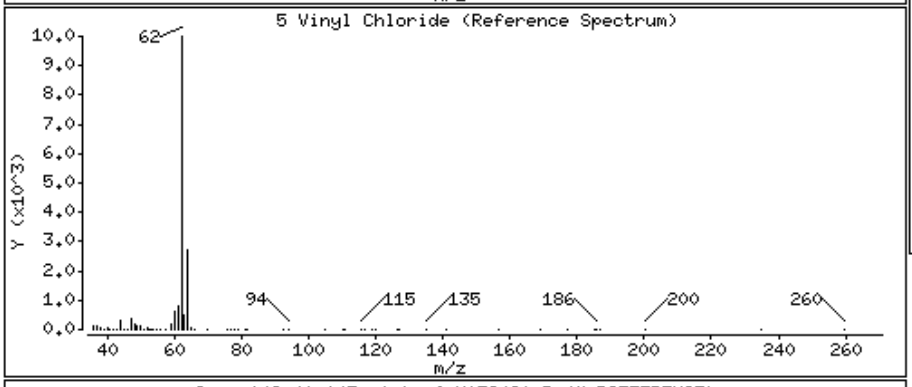
5 Vinyl Chloride Concentration: 0.72 ug/l

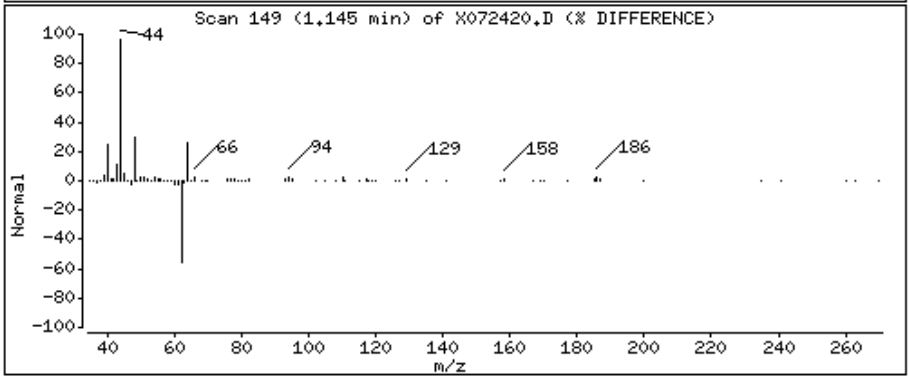












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072420.D Page 3

Date : 24-JUL-2023 17:24

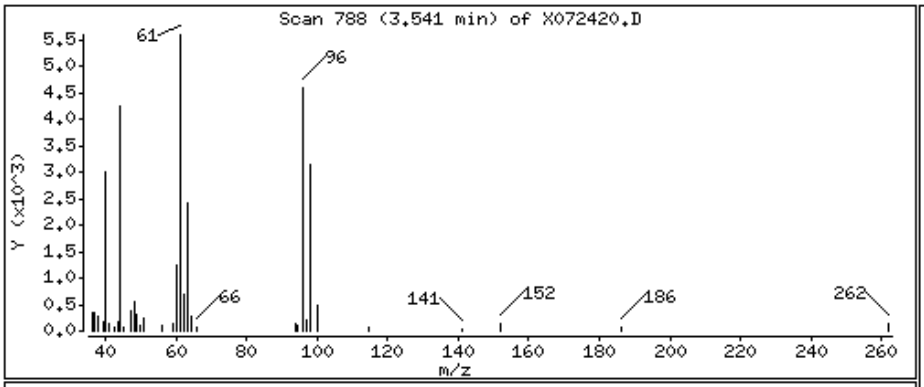
Client ID: HS23071165-05 Instrument: voa6.i

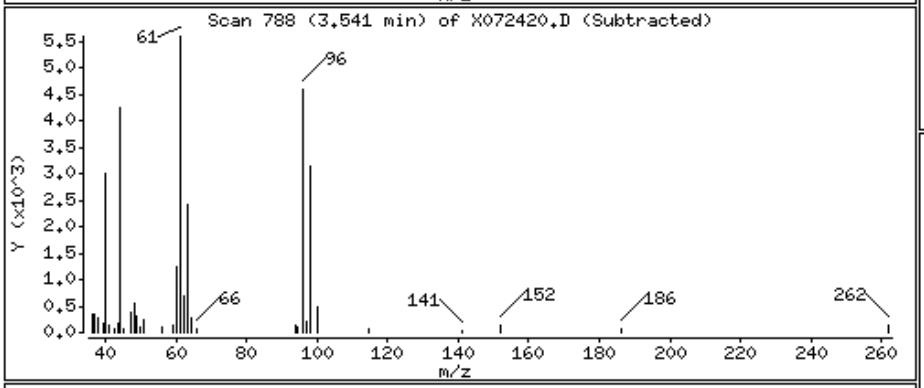
Sample Info: HS23071165-05;HS23071165-05;;;

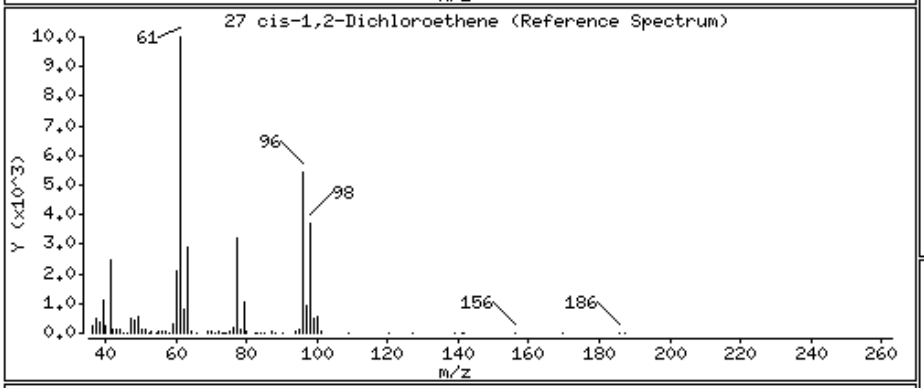
Purge Volume: 5.0 Operator: PC

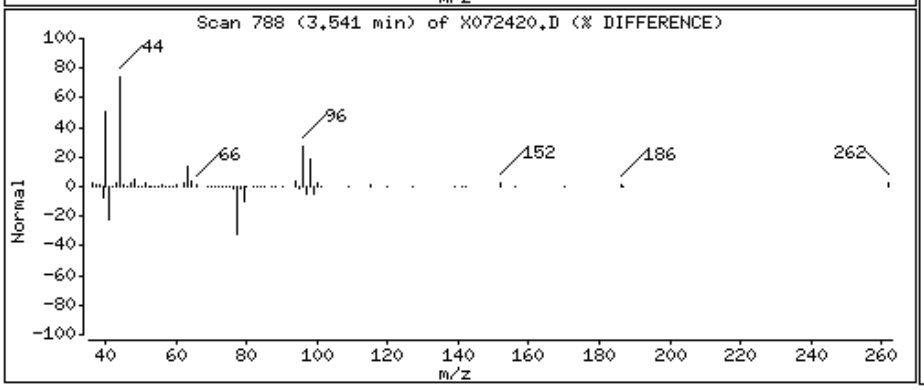
Column phase: DB624 Column diameter: 0.18

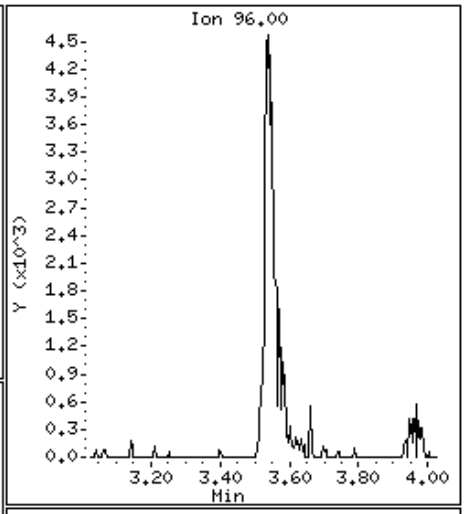
27 cis-1,2-Dichloroethene Concentration: 1.33 ug/l

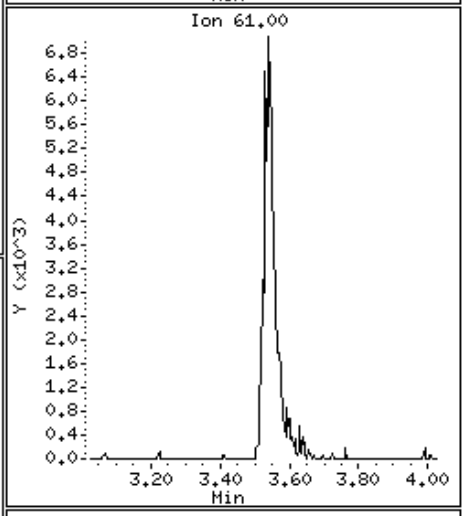


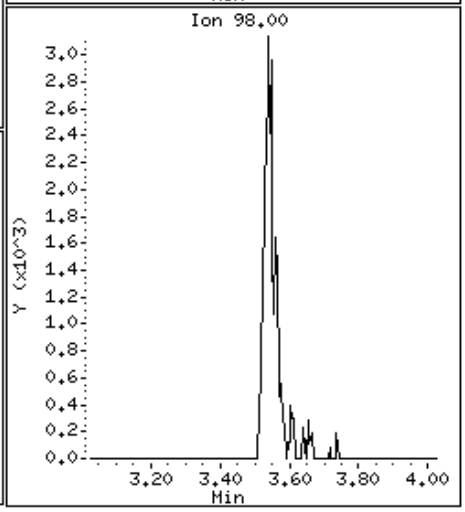












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072420.D Page 4

Date : 24-JUL-2023 17:24

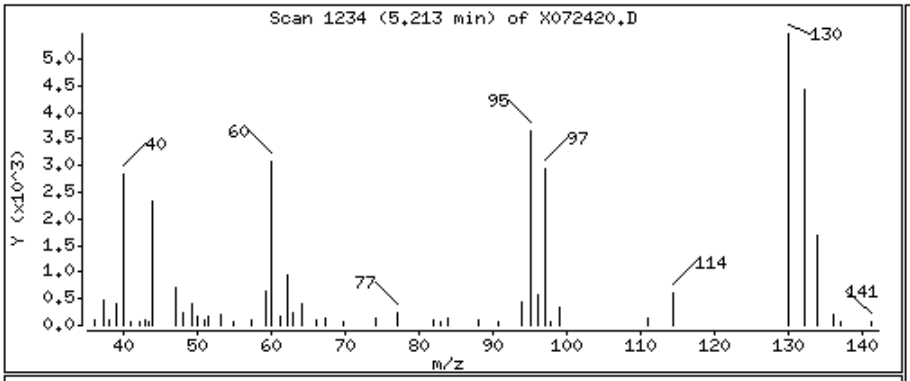
Client ID: HS23071165-05 Instrument: voa6.i

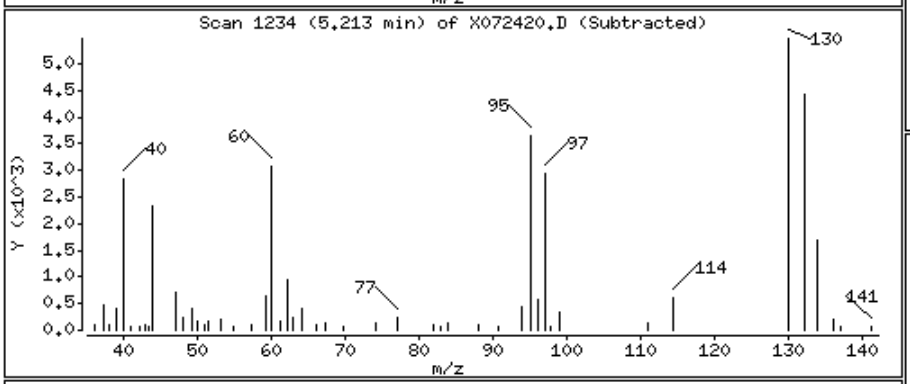
Sample Info: HS23071165-05;HS23071165-05;;;

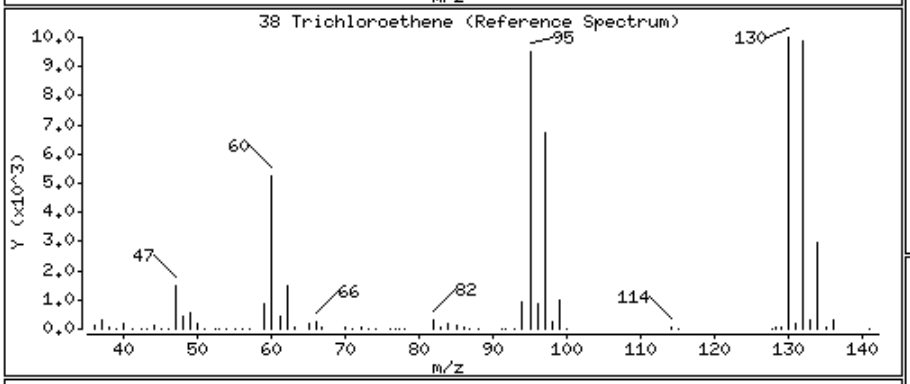
Purge Volume: 5.0 Operator: PC

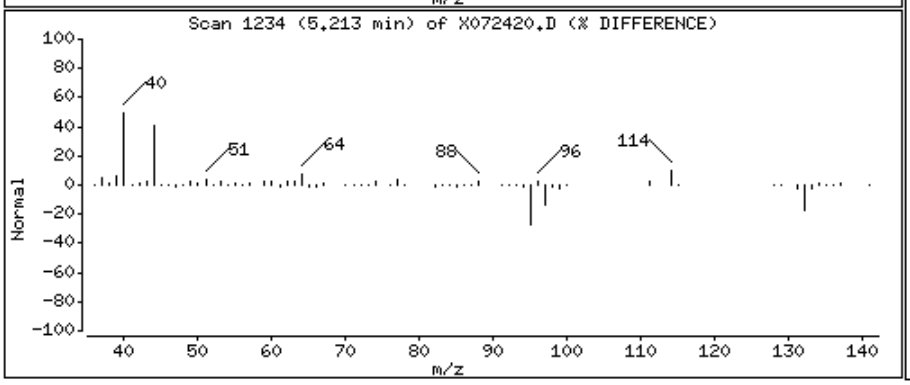
Column phase: DB624 Column diameter: 0.18

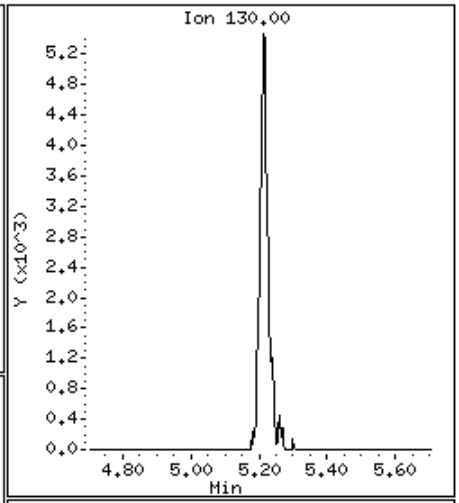
38 Trichloroethene Concentration: 1.52 ug/l

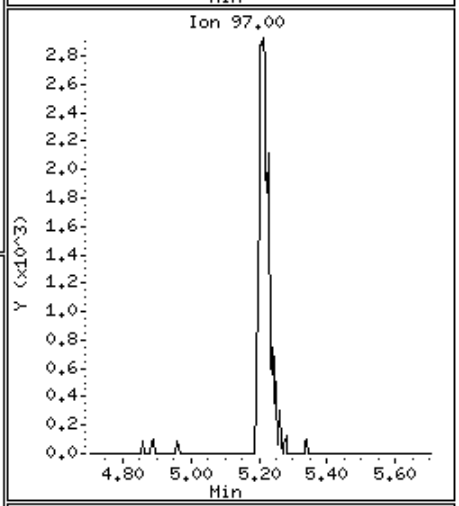


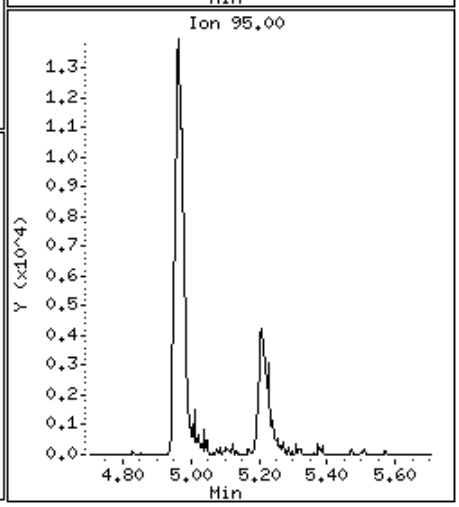












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Inj Date : 24-JUL-2023 17:24
InstruID : voa6.i
LabSampID : HS23071165-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072421.D Page 1
Report Date: 27-Jul-2023 13:09

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072421.D
Lab Smp Id: HS23071165-07 Client Smp ID: HS23071165-07
Inj Date : 24-JUL-2023 17:45
Operator : PC Inst ID: voa6.i
Smp Info : HS23071165-07;HS23071165-07;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.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	4.174	(1.000)	576269	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	284262	53.8799	53.87
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	357149	54.1253	54.12
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	883872	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	788256	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1020648	50.2902	50.29
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	377401	48.0695	48.06
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	408933	50.0000	
38 Trichloroethene	130	5.208	5.205	(1.049)	24480	4.09362	4.09(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

01323526

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072421.D

Date : 24-JUL-2023 17:45

Client ID: HS23071165-07

Instrument: voa6.i

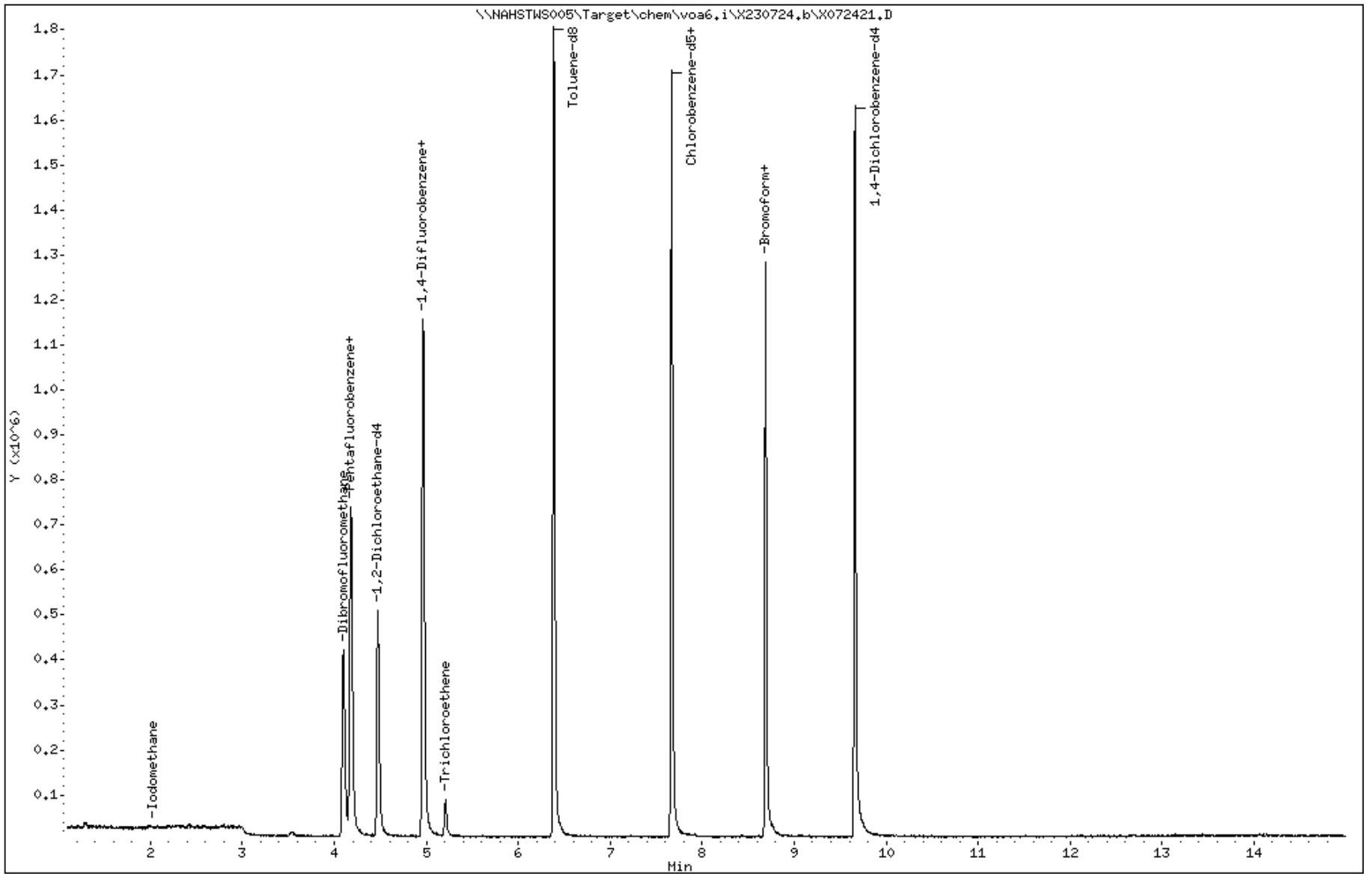
Sample Info: HS23071165-07;HS23071165-07;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072421.D

Date : 24-JUL-2023 17:45

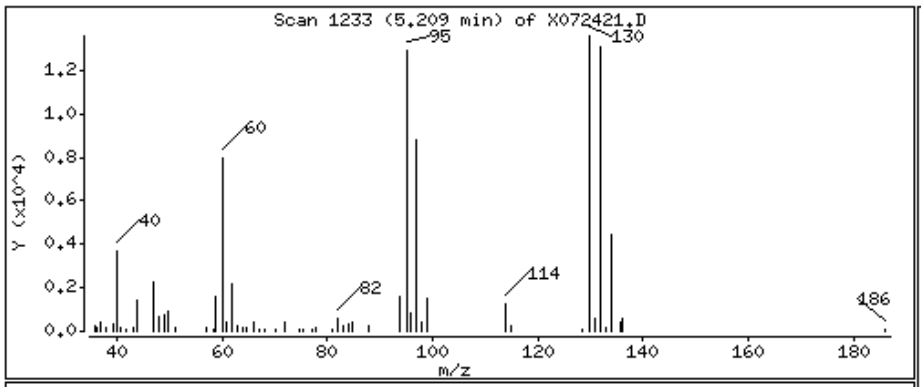
Client ID: HS23071165-07 Instrument: voa6.i

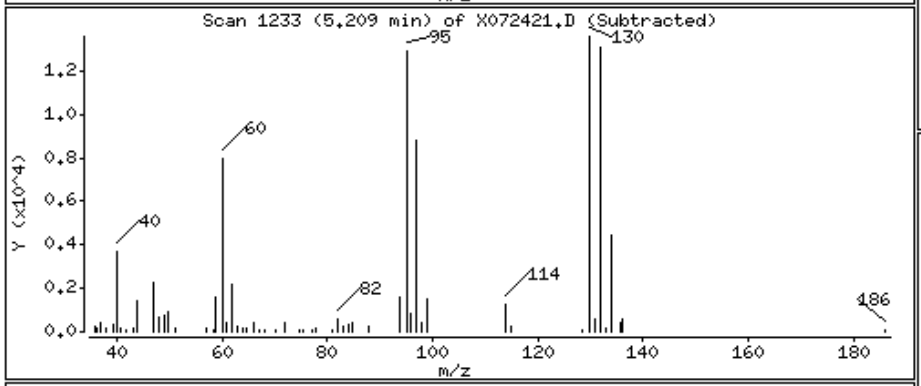
Sample Info: HS23071165-07;HS23071165-07;;;

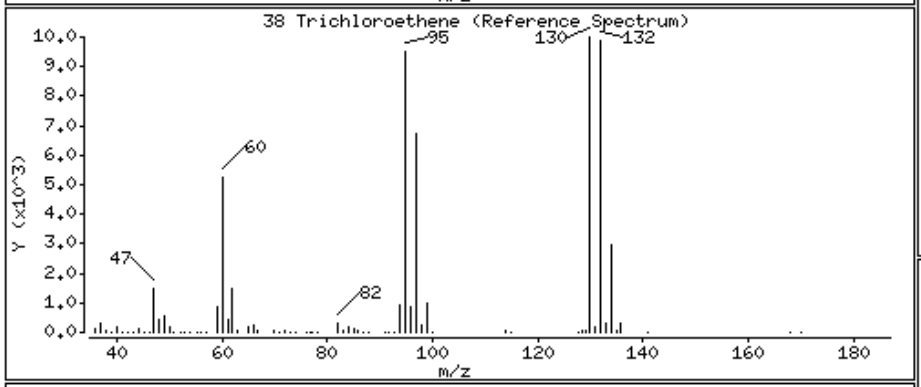
Purge Volume: 5.0 Operator: PC

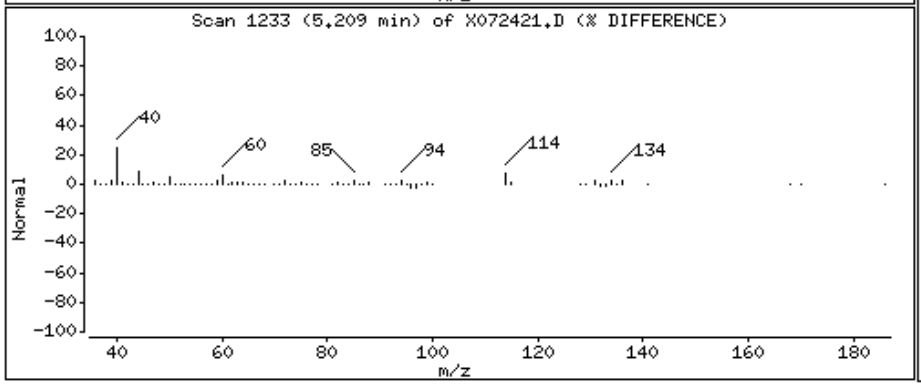
Column phase: DB624 Column diameter: 0.18

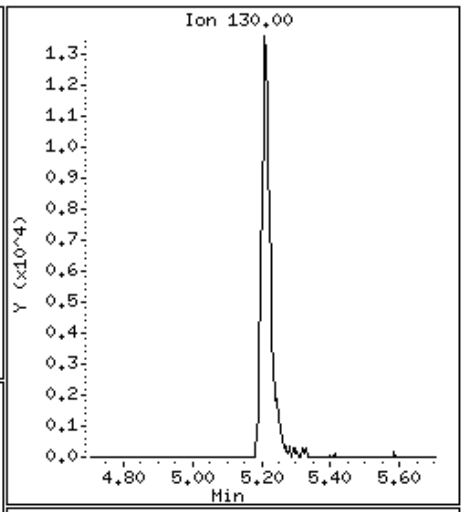
38 Trichloroethene Concentration: 4.09 ug/l

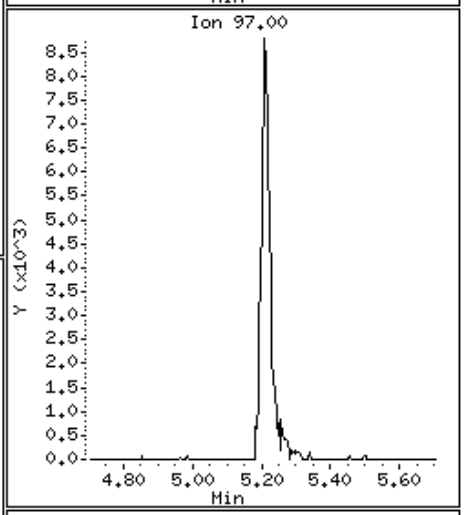


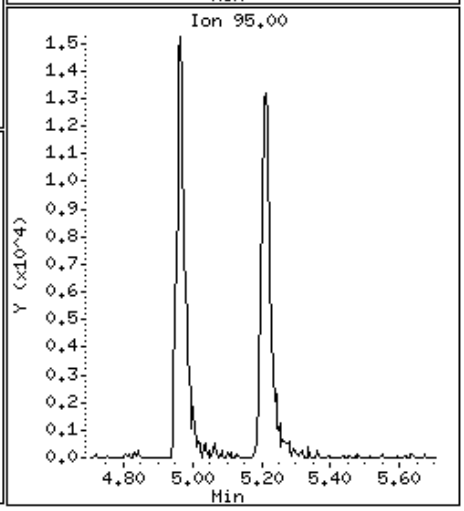












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072421.D
Inj Date : 24-JUL-2023 17:45
InstruID : voa6.i
LabSampID : HS23071165-07

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072422.D Page 1
Report Date: 27-Jul-2023 13:09

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072422.D
Lab Smp Id: HS23071165-08 Client Smp ID: HS23071165-08
Inj Date : 24-JUL-2023 18:05
Operator : PC Inst ID: voa6.i
Smp Info : HS23071165-08;HS23071165-08;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.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	4.177	4.174	(1.000)	508733	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	264747	56.8846	56.88
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.071)	339661	58.3566	58.35
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	798305	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	653411	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	835558	49.6666	49.66
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	304803	46.8236	46.82
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	337446	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	68175	10.3559	10.35
11 1,1-Dichloroethene	96	1.921	1.917	(0.460)	3314	0.88918	0.88(a)
27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	234749	42.7439	42.74
38 Trichloroethene	130	5.205	5.205	(1.048)	428604	79.3547	79.35

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

01323530

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072422.D

Date : 24-JUL-2023 18:05

Client ID: HS23071165-08

Instrument: voa6.i

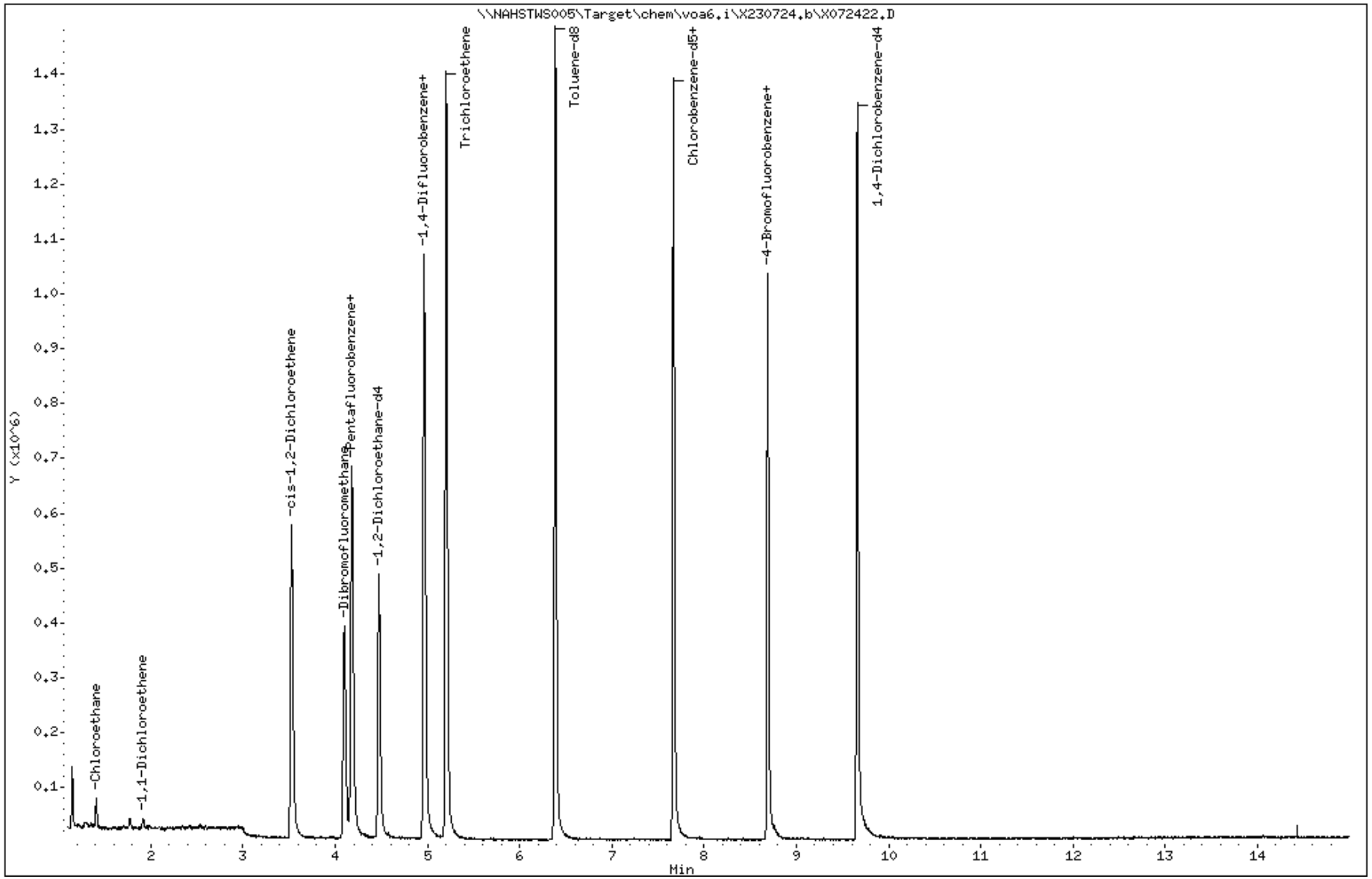
Sample Info: HS23071165-08;HS23071165-08;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072422.D

Date : 24-JUL-2023 18:05

Client ID: HS23071165-08

Instrument: voa6.i

Sample Info: HS23071165-08;HS23071165-08;;;

Purge Volume: 5.0

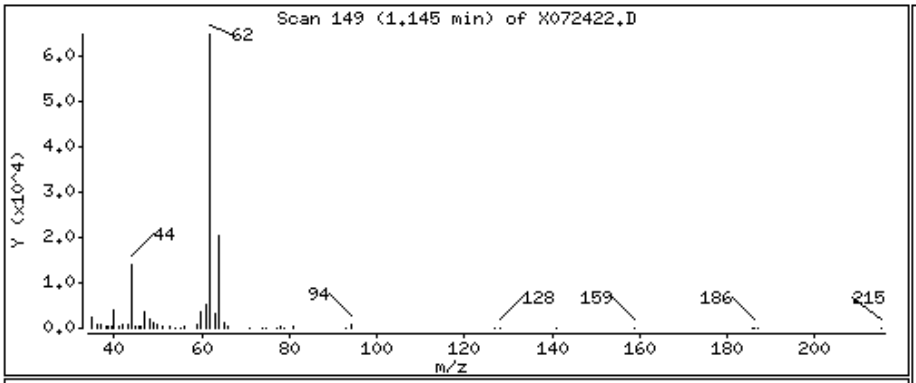
Operator: PC

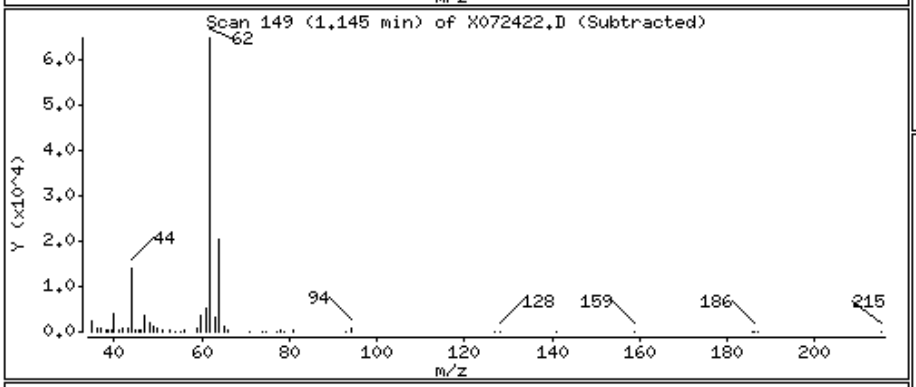
Column phase: DB624

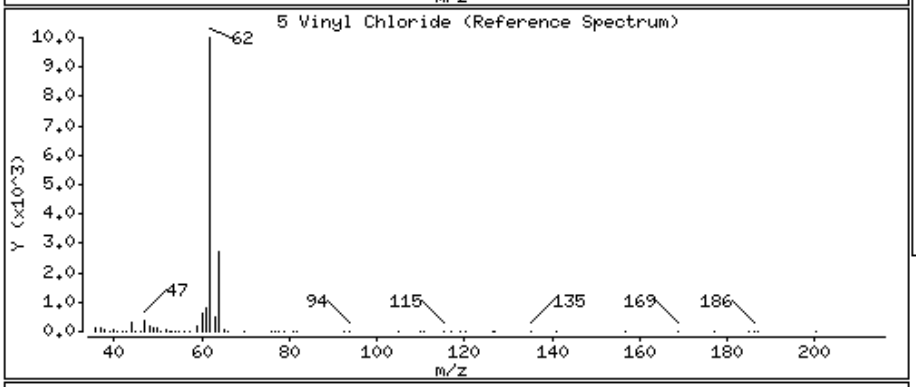
Column diameter: 0.18

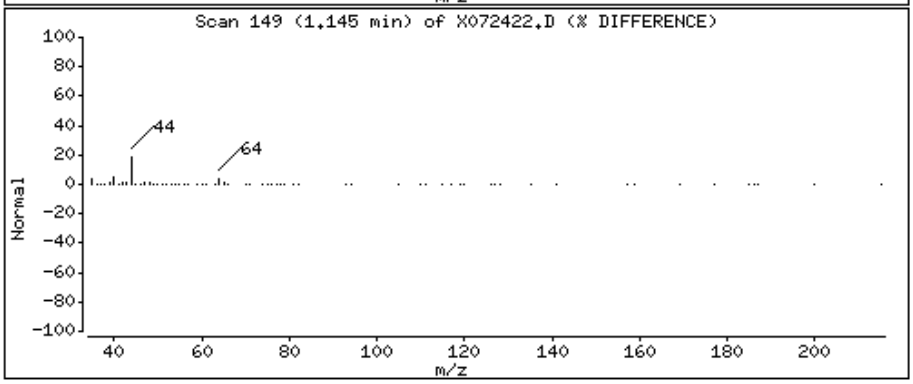
5 Vinyl Chloride

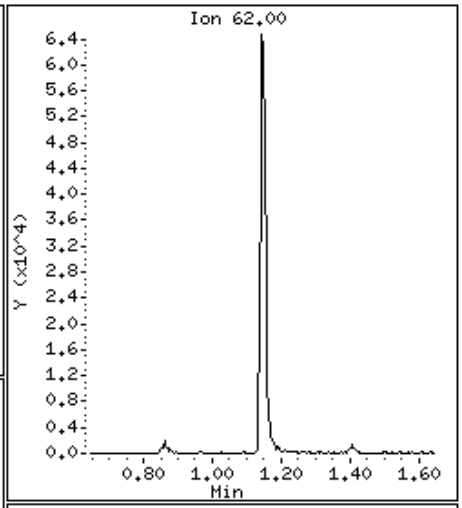
Concentration: 10.35 ug/l

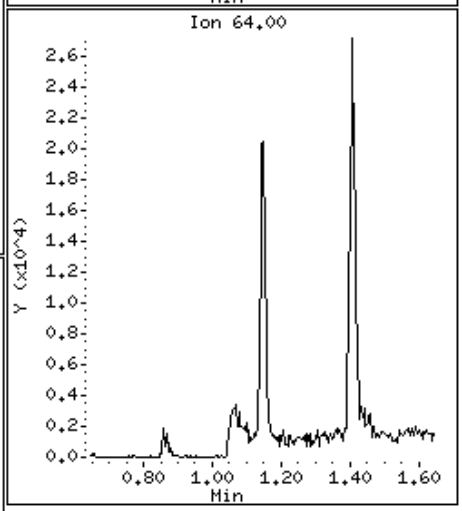












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072422.D

Date : 24-JUL-2023 18:05

Client ID: HS23071165-08

Instrument: voa6.i

Sample Info: HS23071165-08;HS23071165-08;;;

Purge Volume: 5.0

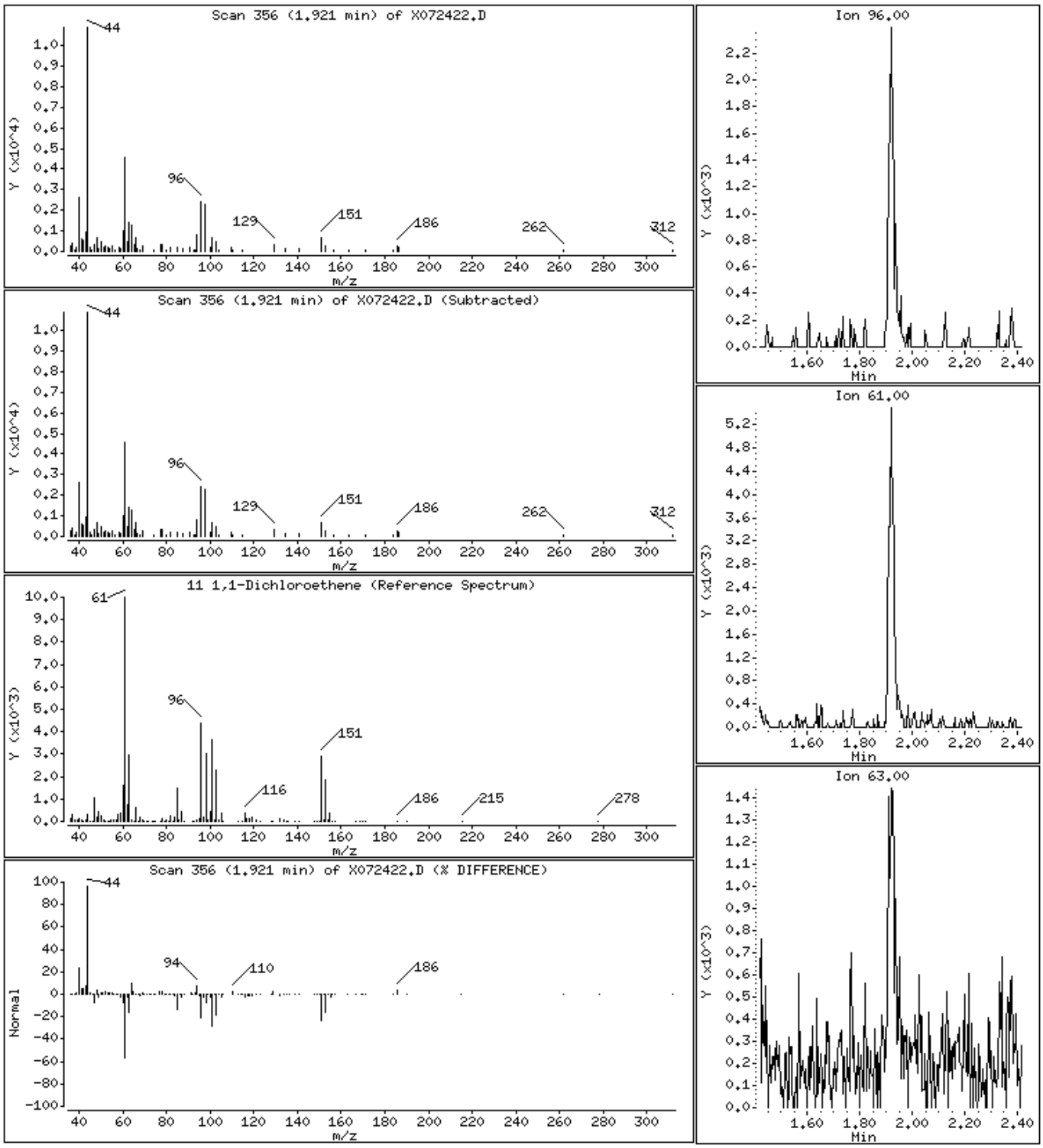
Operator: PC

Column phase: DB624

Column diameter: 0.18

11 1,1-Dichloroethene

Concentration: 0.88 ug/l



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072422.D

Date : 24-JUL-2023 18:05

Client ID: HS23071165-08

Instrument: voa6.i

Sample Info: HS23071165-08;HS23071165-08;;;

Purge Volume: 5.0

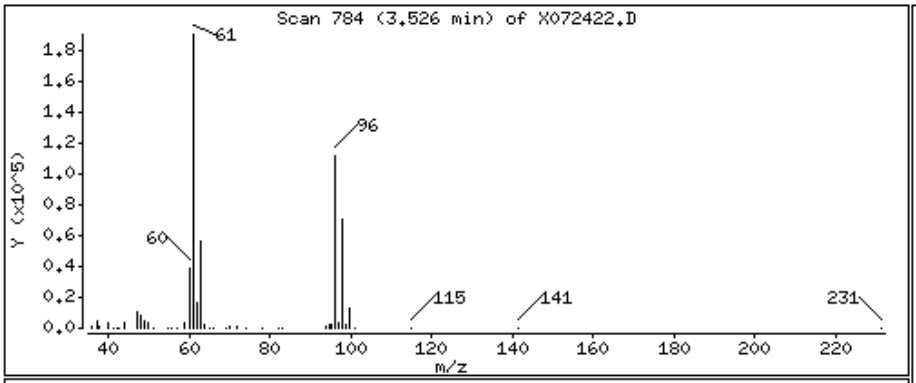
Operator: PC

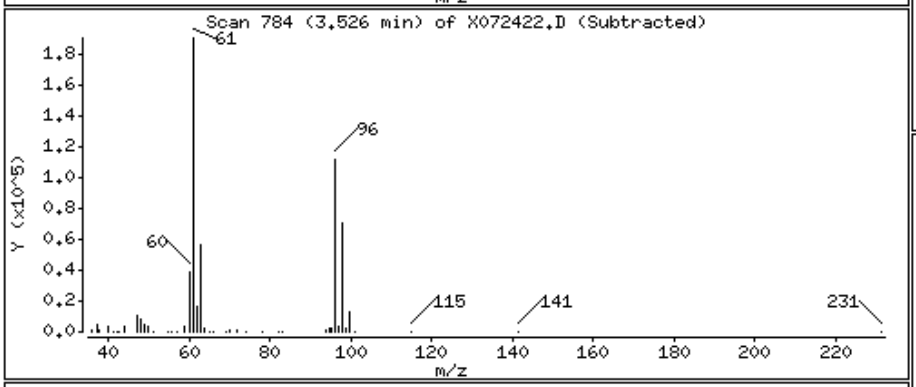
Column phase: DB624

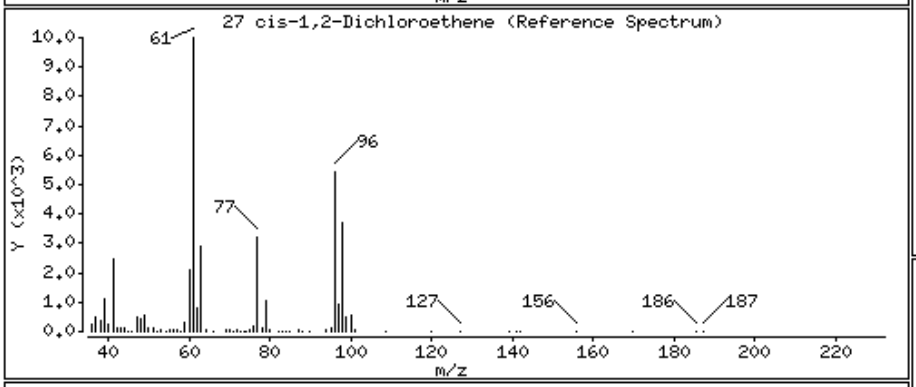
Column diameter: 0.18

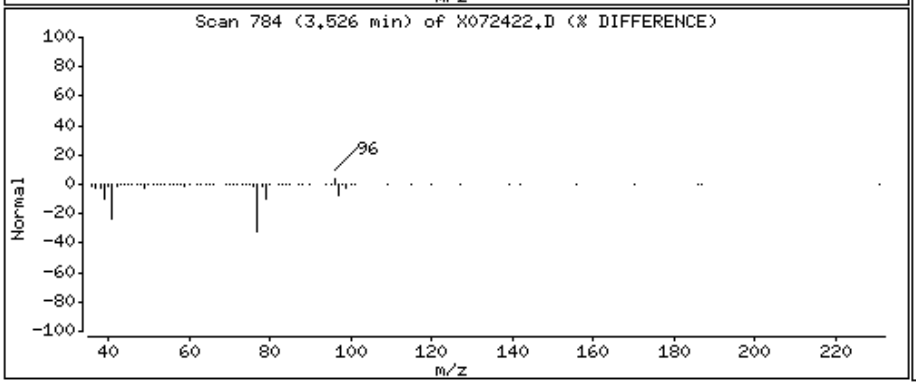
27 cis-1,2-Dichloroethene

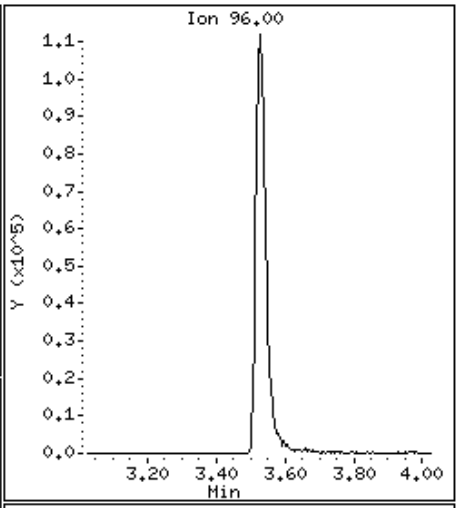
Concentration: 42.74 ug/l

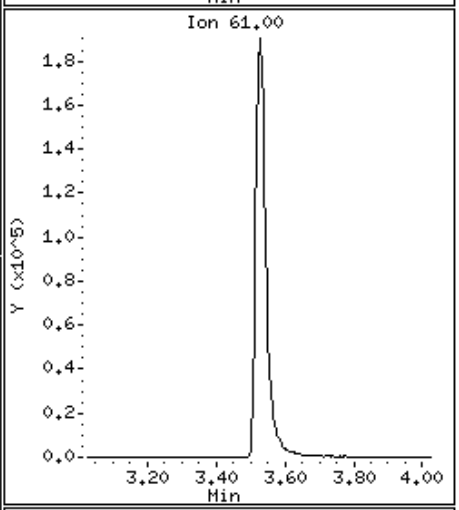


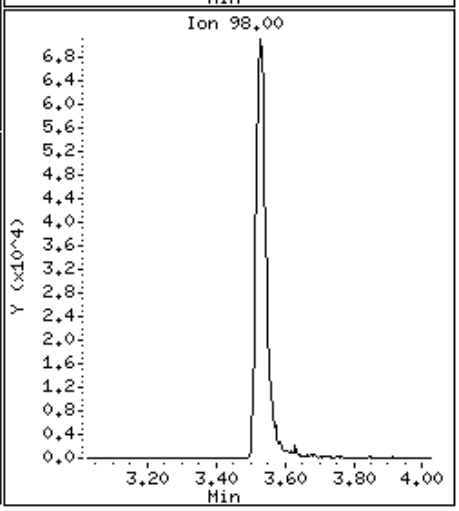












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072422.D Page 5

Date : 24-JUL-2023 18:05

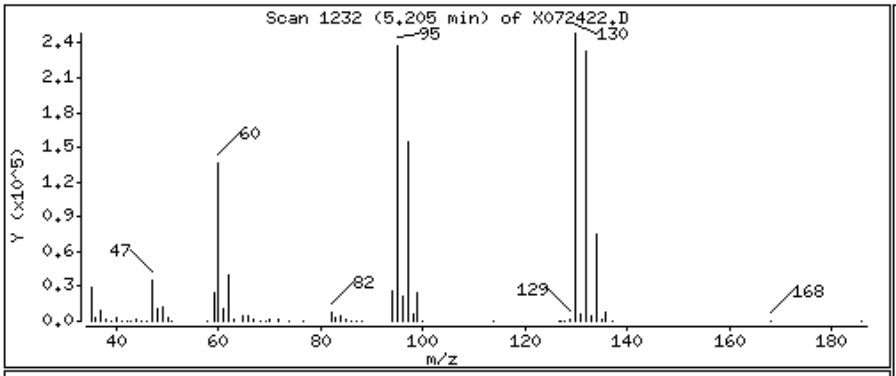
Client ID: HS23071165-08 Instrument: voa6.i

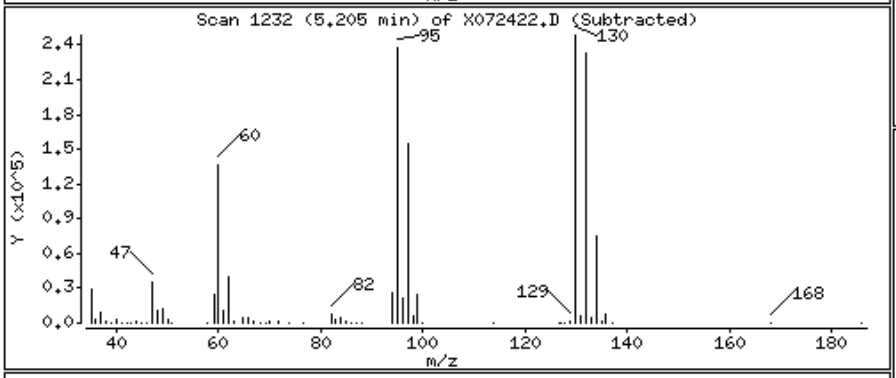
Sample Info: HS23071165-08;HS23071165-08;;;

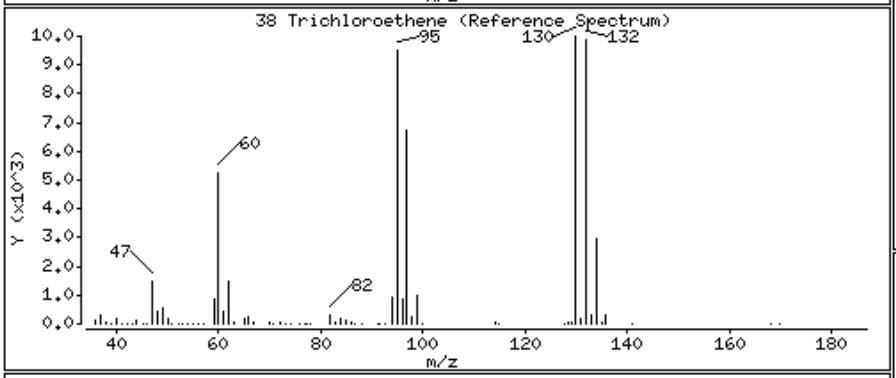
Purge Volume: 5.0 Operator: PC

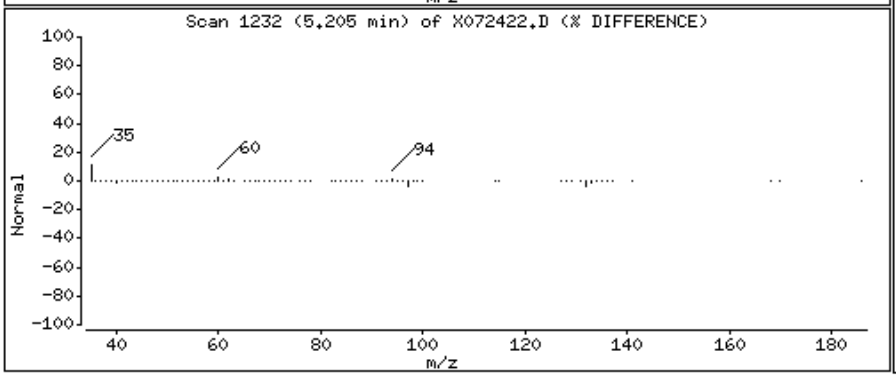
Column phase: DB624 Column diameter: 0.18

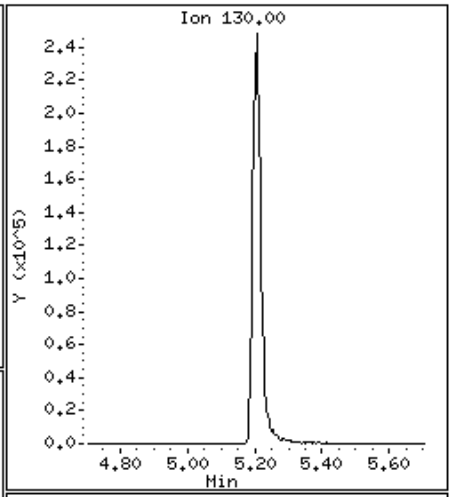
38 Trichloroethene Concentration: 79.35 ug/l

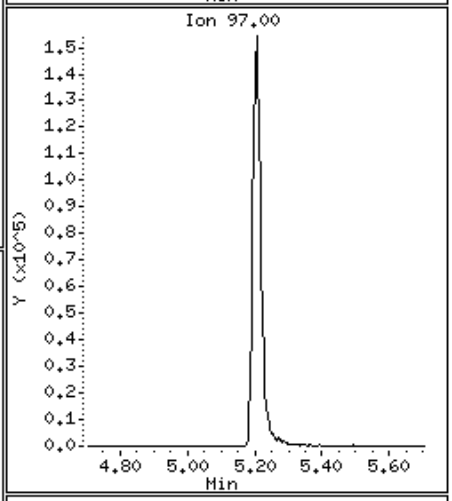


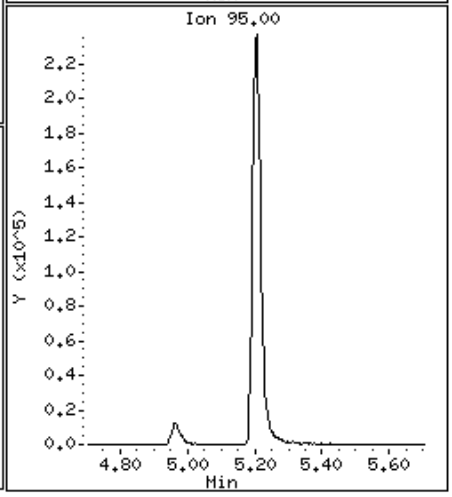












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072422.D
Inj Date : 24-JUL-2023 18:05
InstruID : voa6.i
LabSampID : HS23071165-08

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072424.D Page 1
Report Date: 27-Jul-2023 13:09

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072424.D
Lab Smp Id: HS23071165-04 Client Smp ID: HS23071165-04
Inj Date : 24-JUL-2023 18:46
Operator : PC Inst ID: voa6.i
Smp Info : HS23071165-04;HS23071165-04;;;
Misc Info : V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 22
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	5.000	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	4.174	(1.000)	610819	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.980)	307811	55.0598	55.05
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.070)	391721	56.0284	56.02
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	954129	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	783899	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1086522	53.8335	53.83
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	371891	47.6271	47.62
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	419658	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	14059	1.77866	8.89(a)
11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	3578	0.79957	3.99(a)
27 cis-1,2-Dichloroethene	96	3.529	3.525	(0.844)	243557	36.9359	184.67
38 Trichloroethene	130	5.205	5.205	(1.048)	4423249	685.203	3426.01(A)

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.

01323537

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072424.D

Date : 24-JUL-2023 18:46

Client ID: HS23071165-04

Instrument: voa6.i

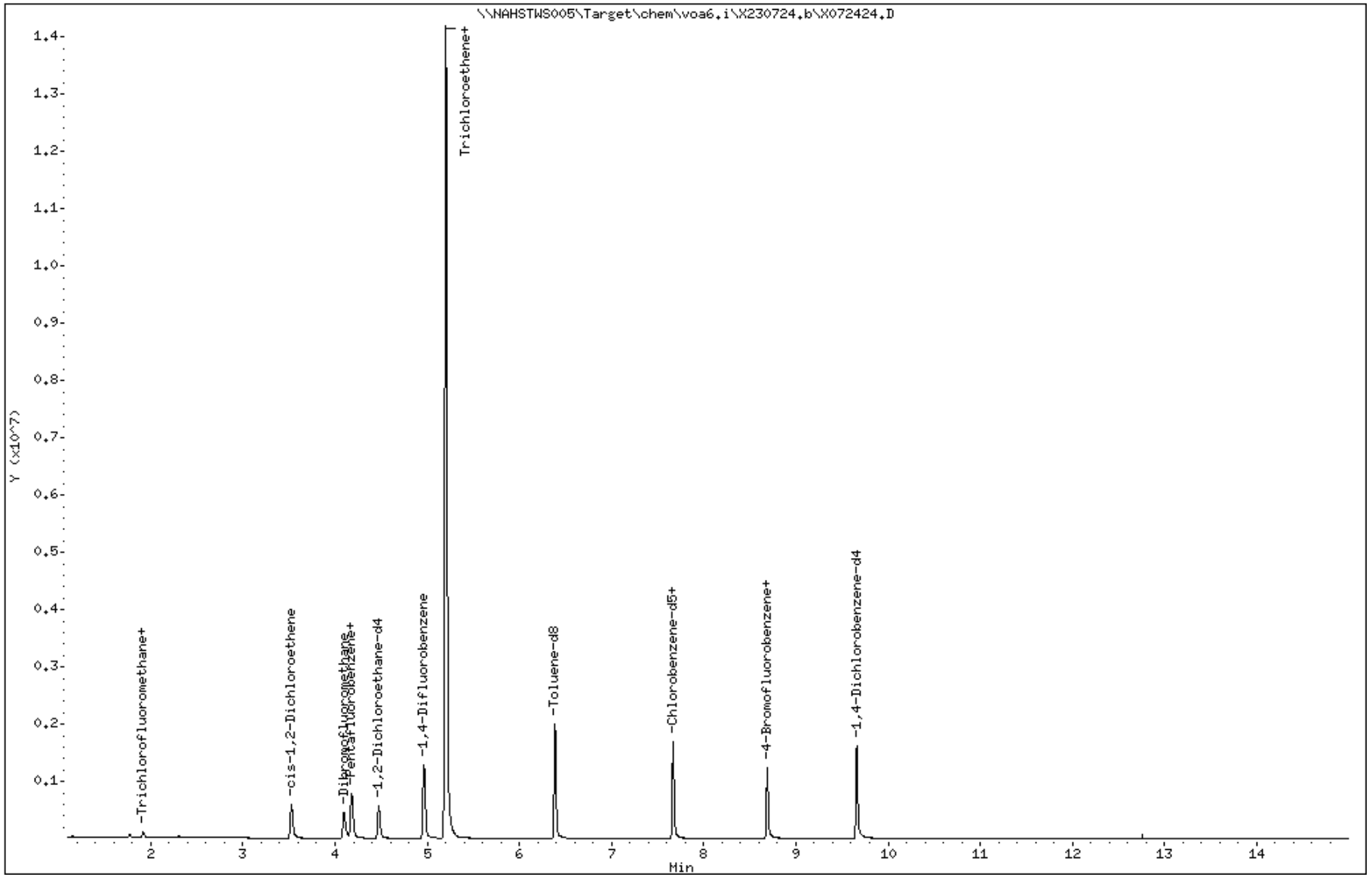
Sample Info: HS23071165-04;HS23071165-04;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Date : 24-JUL-2023 18:46

Client ID: HS23071165-04

Instrument: voa6.i

Sample Info: HS23071165-04;HS23071165-04;;;

Purge Volume: 5.0

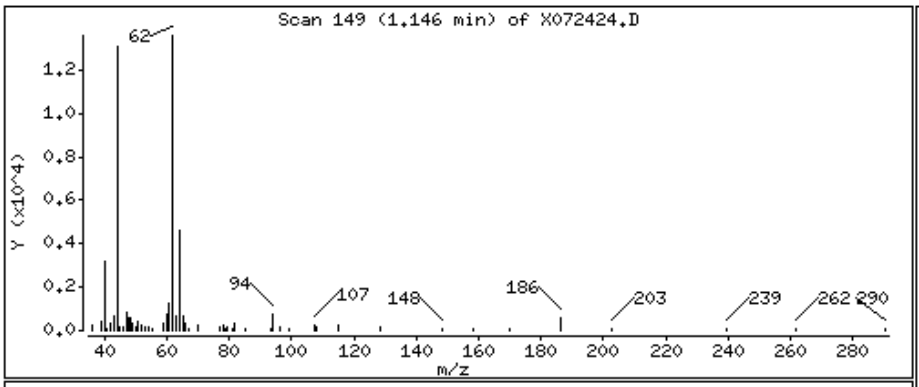
Operator: PC

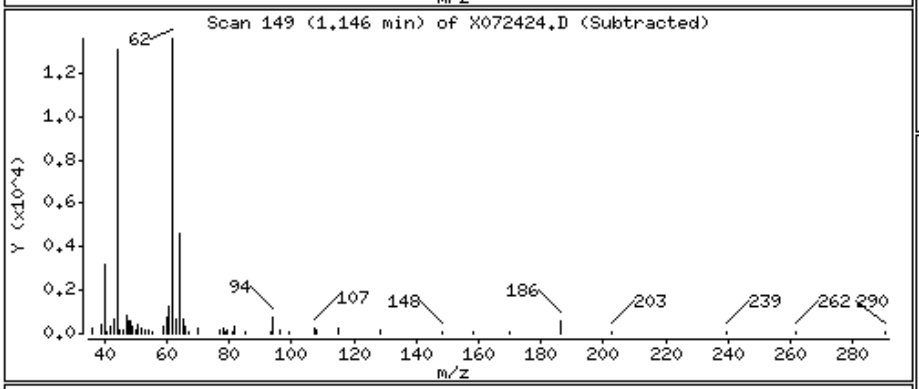
Column phase: DB624

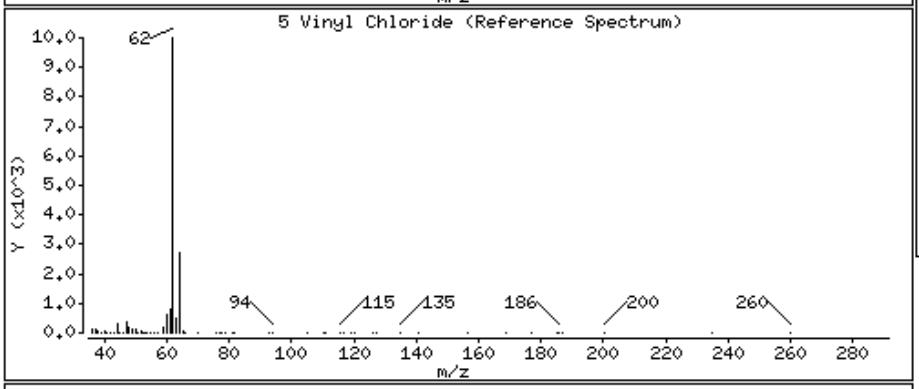
Column diameter: 0.18

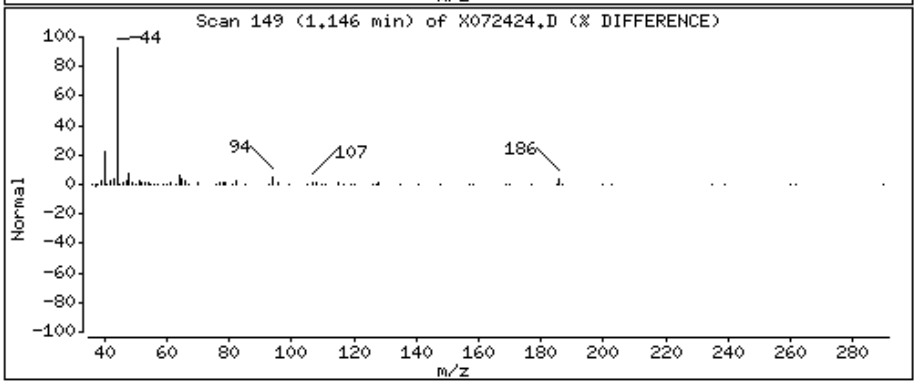
5 Vinyl Chloride

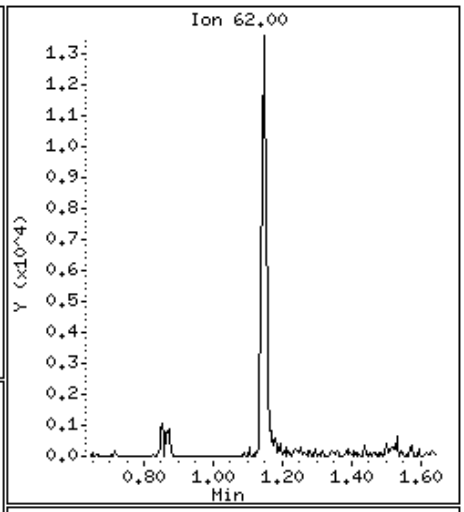
Concentration: 8.89 ug/l

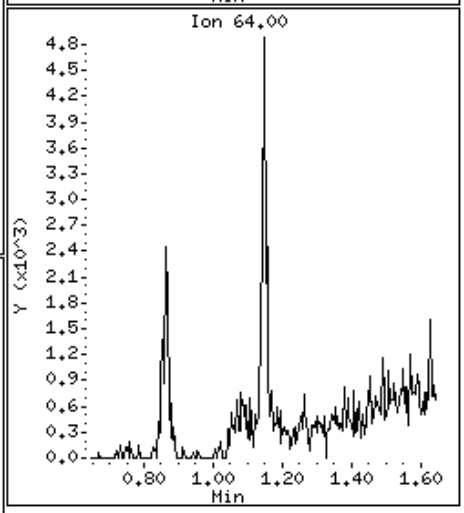












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072424.D Page 3

Date : 24-JUL-2023 18:46

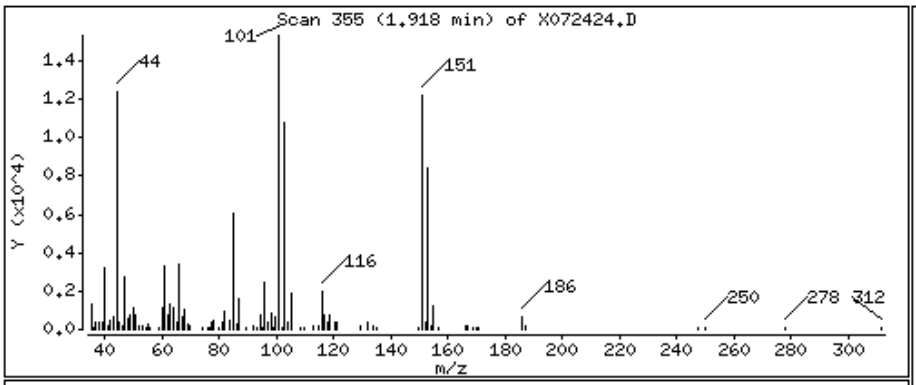
Client ID: HS23071165-04 Instrument: voa6.i

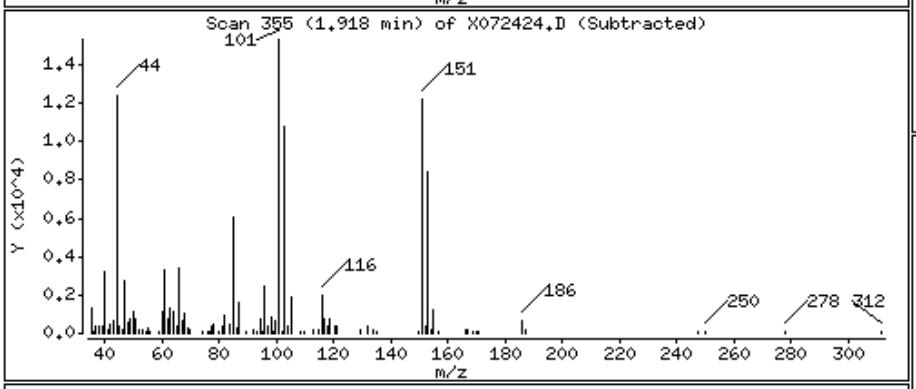
Sample Info: HS23071165-04;HS23071165-04;;;

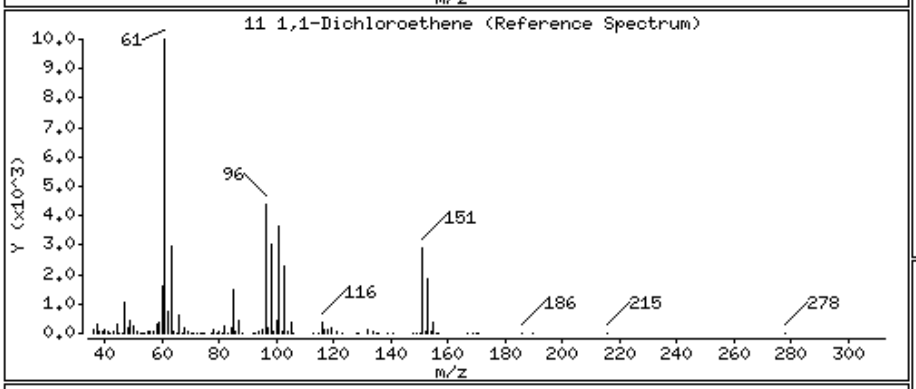
Purge Volume: 5.0 Operator: PC

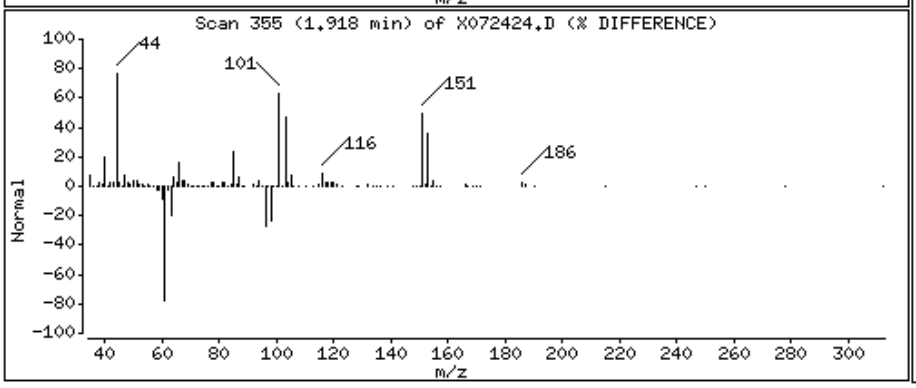
Column phase: DB624 Column diameter: 0.18

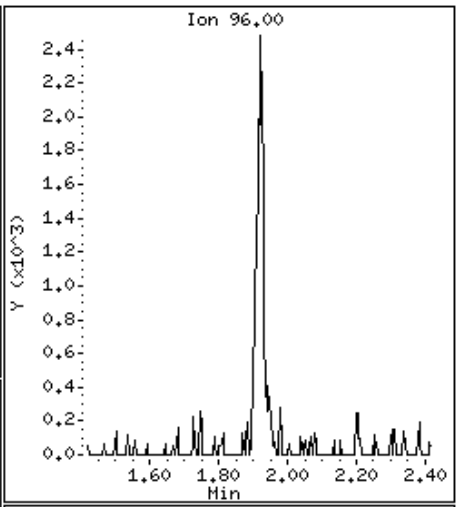
11 1,1-Dichloroethene Concentration: 3.99 ug/l

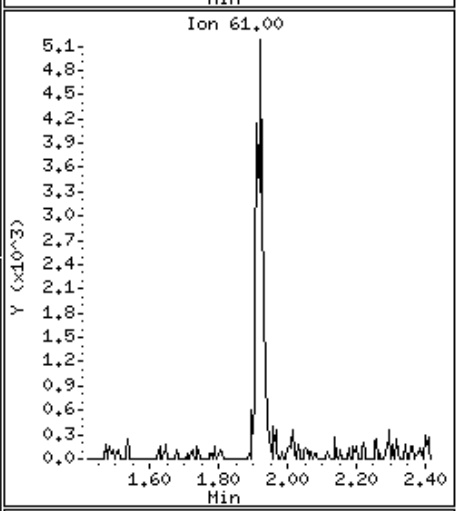


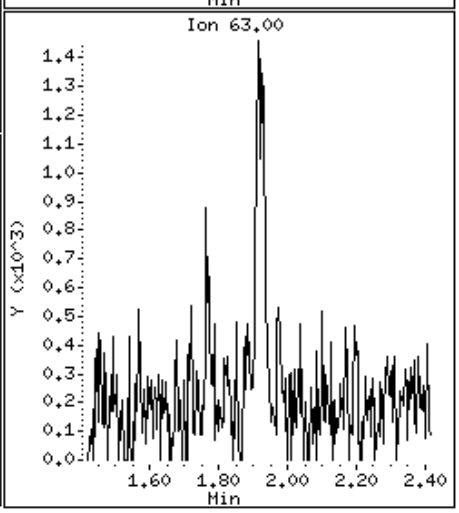












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072424.D Page 4

Date : 24-JUL-2023 18:46

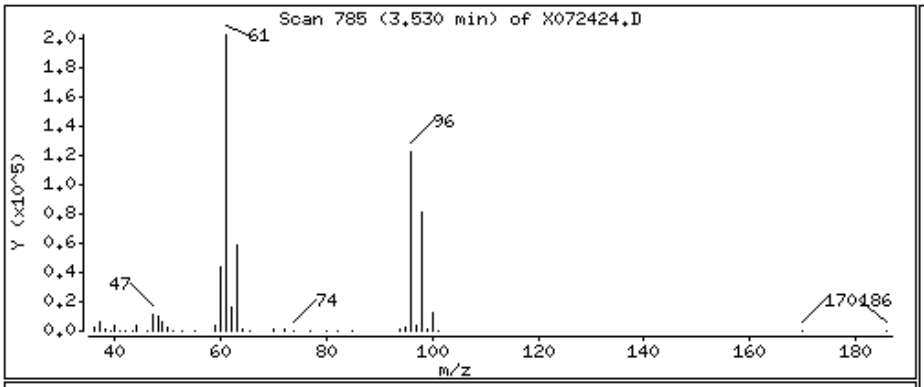
Client ID: HS23071165-04 Instrument: voa6.i

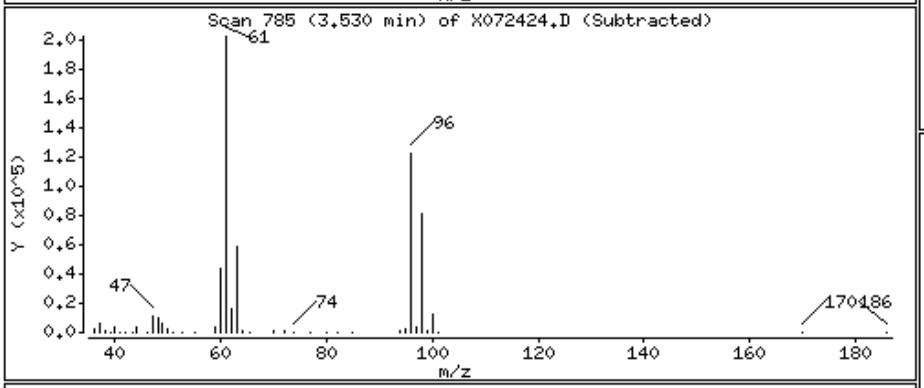
Sample Info: HS23071165-04;HS23071165-04;;;

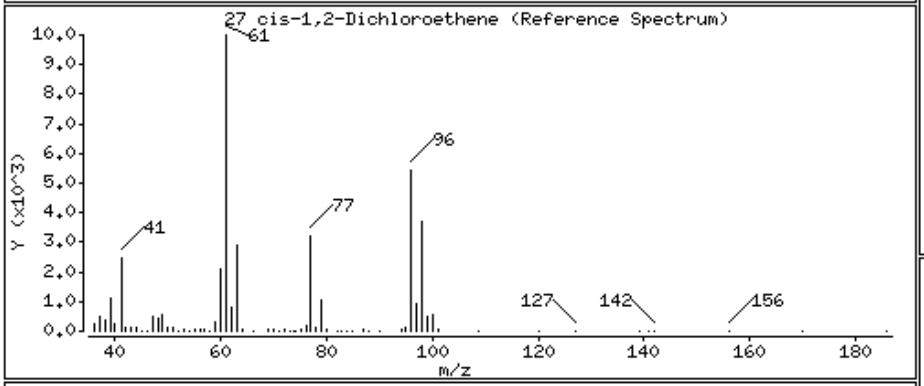
Purge Volume: 5.0 Operator: PC

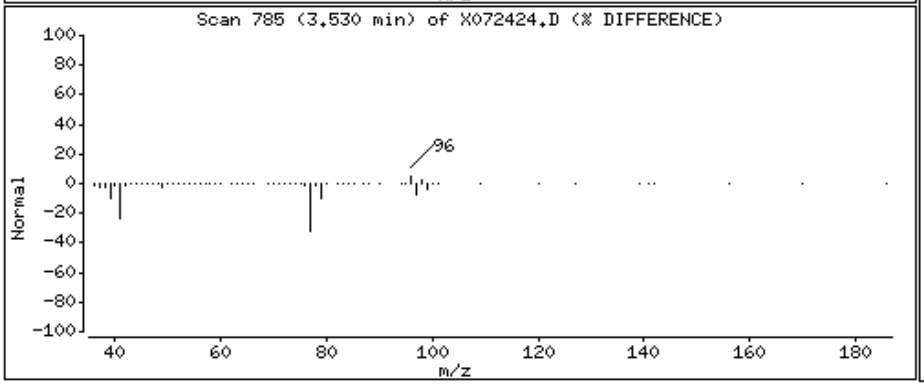
Column phase: DB624 Column diameter: 0.18

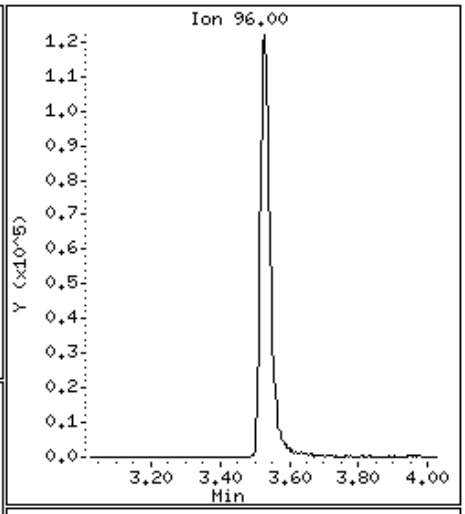
27 cis-1,2-Dichloroethene Concentration: 184.67 ug/l

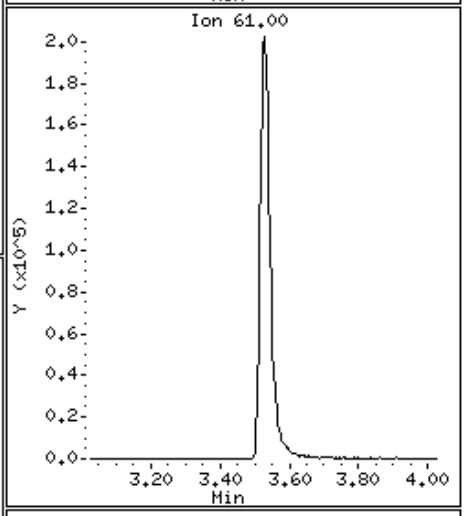


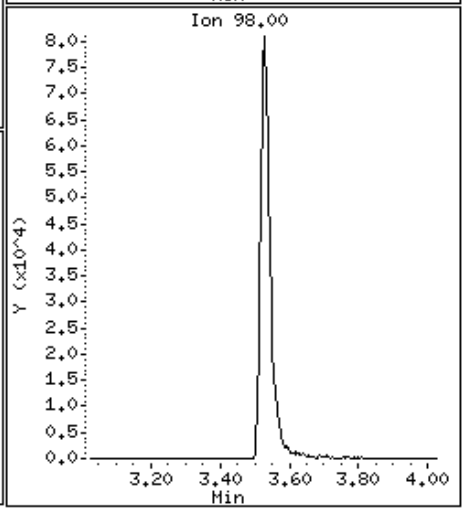












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072424.D Page 5

Date : 24-JUL-2023 18:46

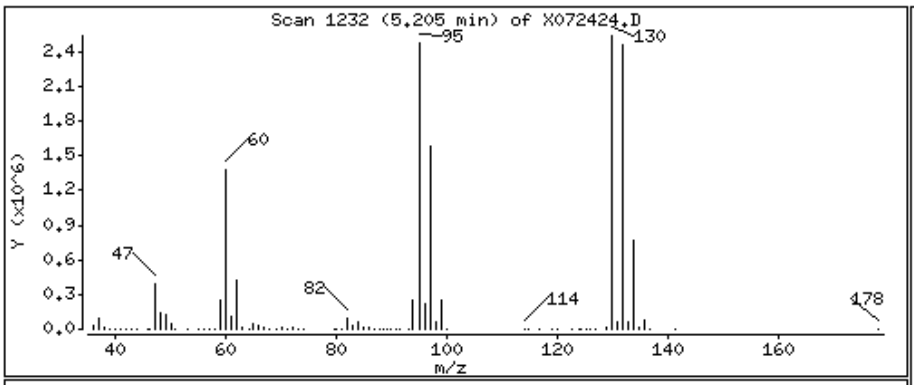
Client ID: HS23071165-04 Instrument: voa6.i

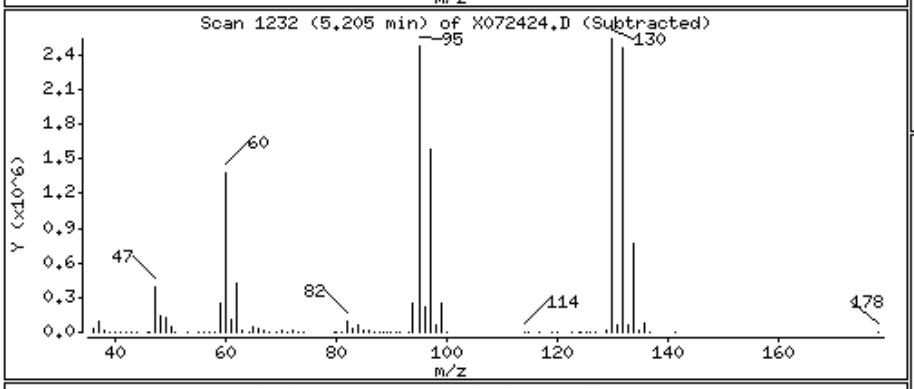
Sample Info: HS23071165-04;HS23071165-04;;;

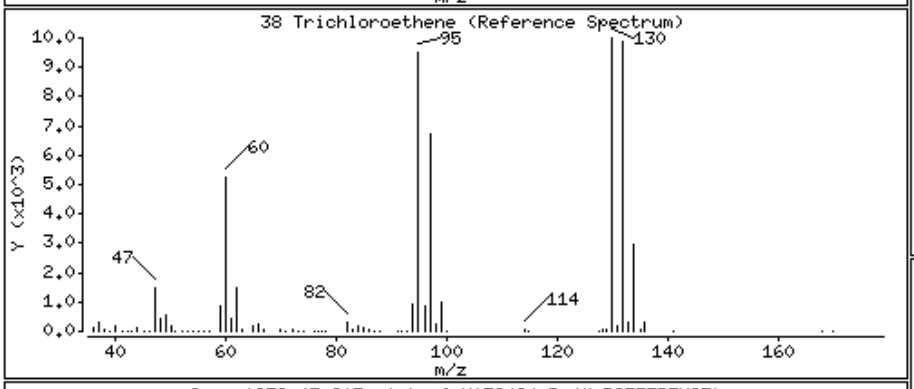
Purge Volume: 5.0 Operator: PC

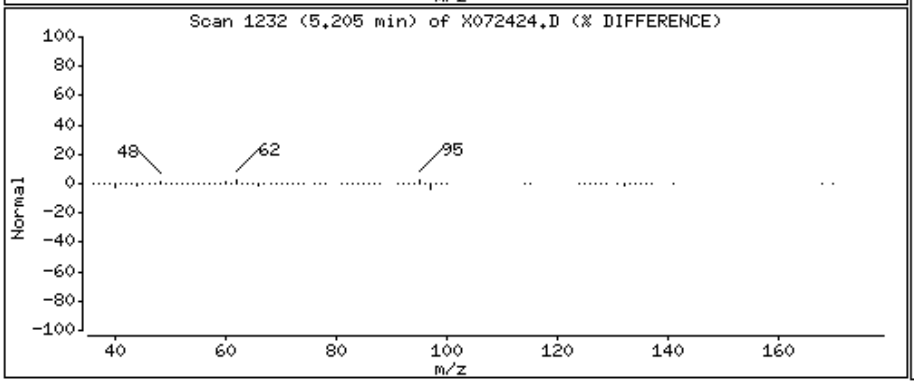
Column phase: DB624 Column diameter: 0.18

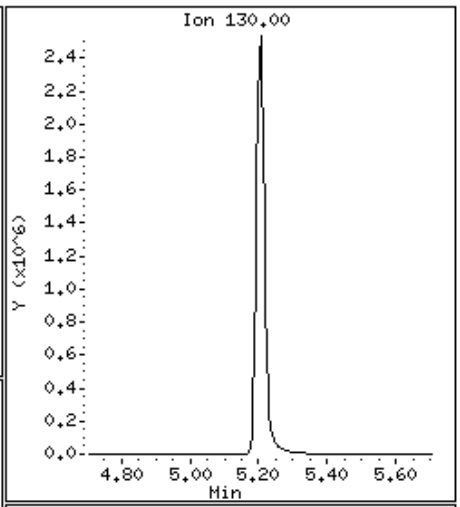
38 Trichloroethene Concentration: 3426.01 ug/l

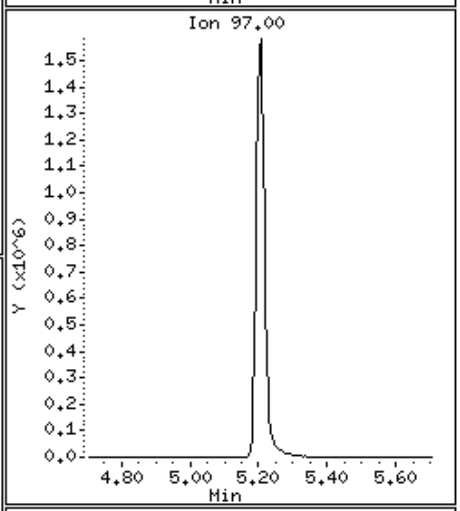


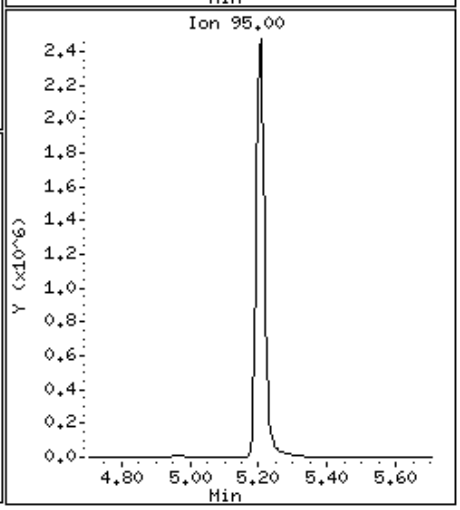












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072424.D
Inj Date : 24-JUL-2023 18:46
InstruID : voa6.i
LabSampID : HS23071165-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072425.D Page 1
Report Date: 27-Jul-2023 13:09

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072425.D
Lab Smp Id: HS23071165-04 Client Smp ID: HS23071165-04
Inj Date : 24-JUL-2023 19:07
Operator : PC Inst ID: voa6.i
Smp Info : HS23071165-04;HS23071165-04;;;
Misc Info : V6;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 23
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	50.000	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	4.177	4.174	(1.000)	562879	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	284298	55.1868	55.18
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	357563	55.4926	55.49
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	862165	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	747114	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1001418	52.0599	52.05
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	355267	47.7392	47.73
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	381316	50.0000	
27 cis-1,2-Dichloroethene	96	3.540	3.525	(0.847)	21814	3.58988	179.49(a)
38 Trichloroethene	130	5.205	5.205	(1.048)	390208	66.8946	3344.72

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

01323544

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072425.D

Date : 24-JUL-2023 19:07

Client ID: HS23071165-04

Instrument: voa6.i

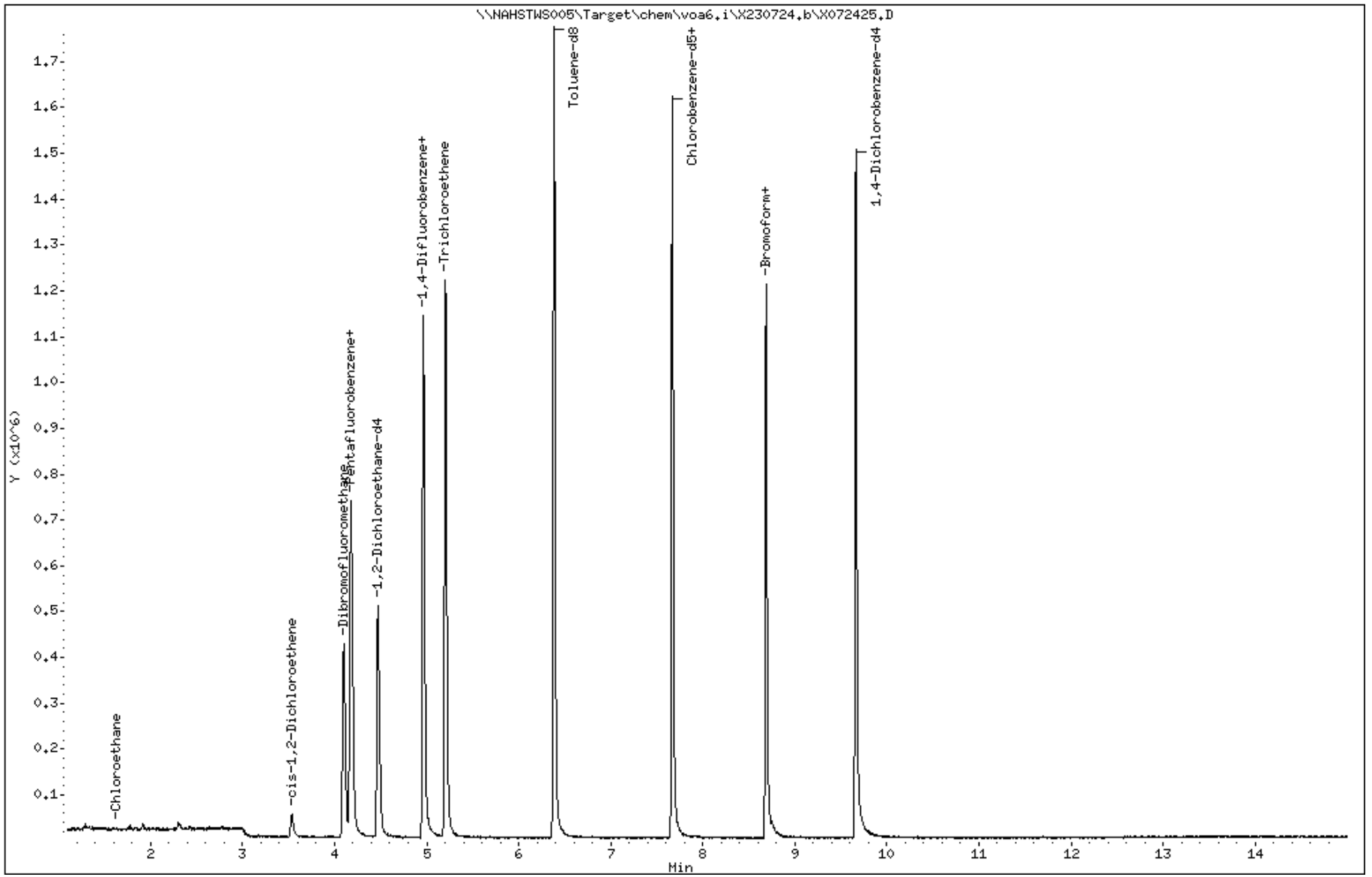
Sample Info: HS23071165-04;HS23071165-04;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072425.D Page 2

Date : 24-JUL-2023 19:07

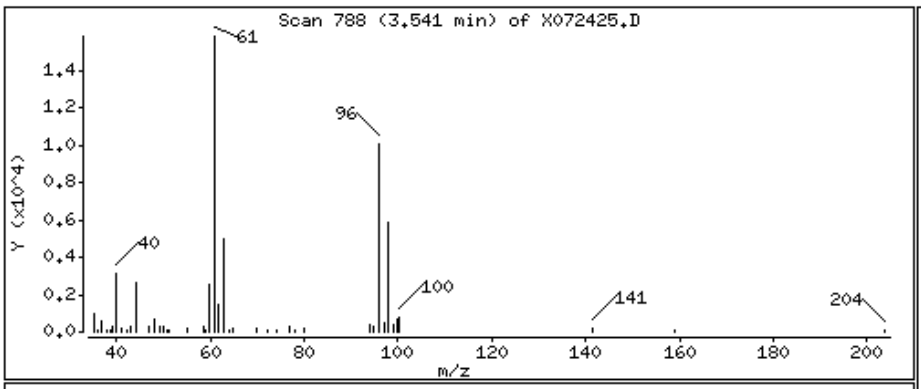
Client ID: HS23071165-04 Instrument: voa6.i

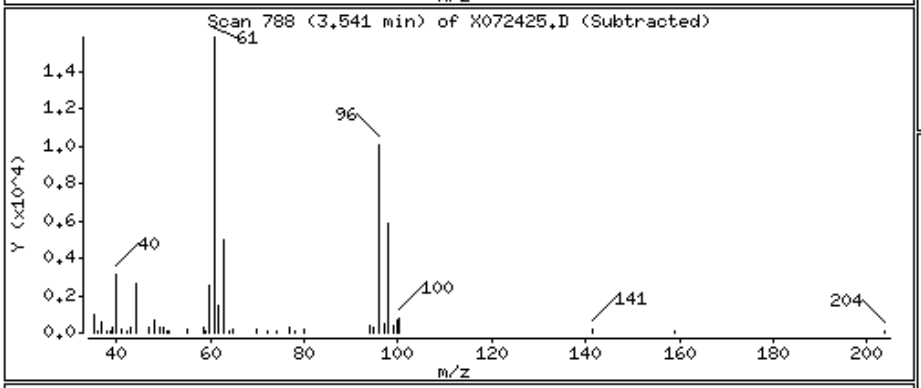
Sample Info: HS23071165-04;HS23071165-04;;;

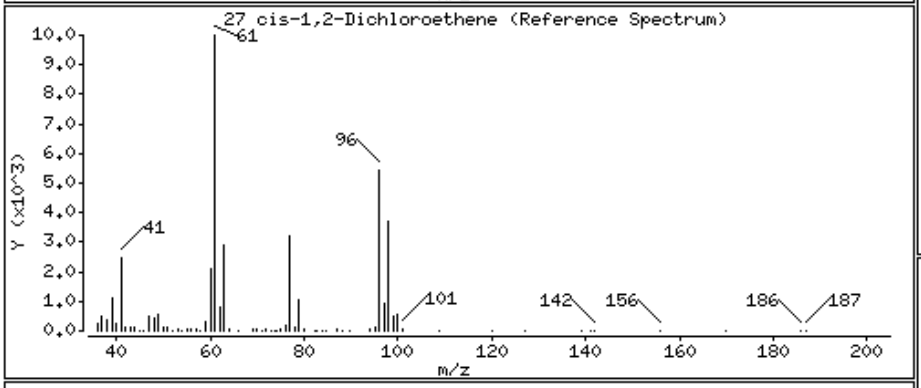
Purge Volume: 5.0 Operator: PC

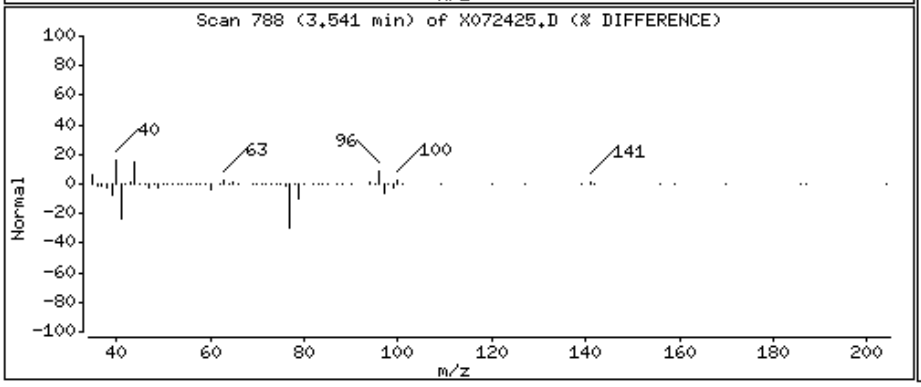
Column phase: DB624 Column diameter: 0.18

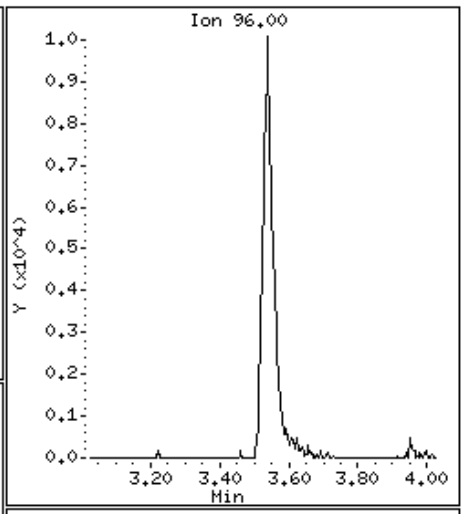
27 cis-1,2-Dichloroethene Concentration: 179.49 ug/l

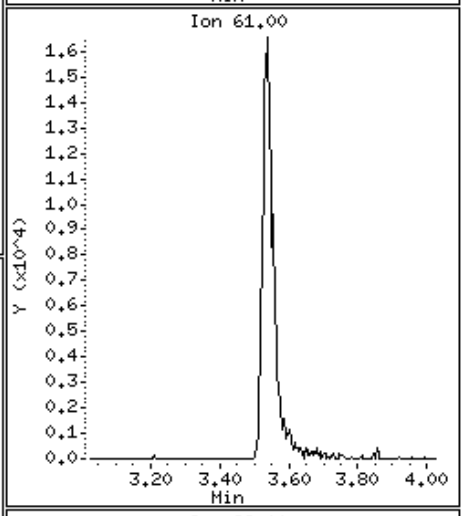


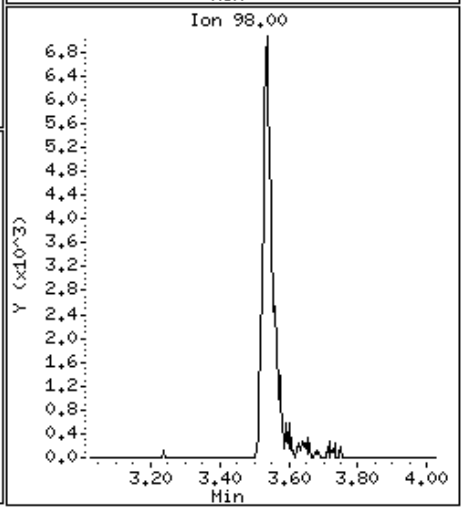












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072425.D Page 3

Date : 24-JUL-2023 19:07

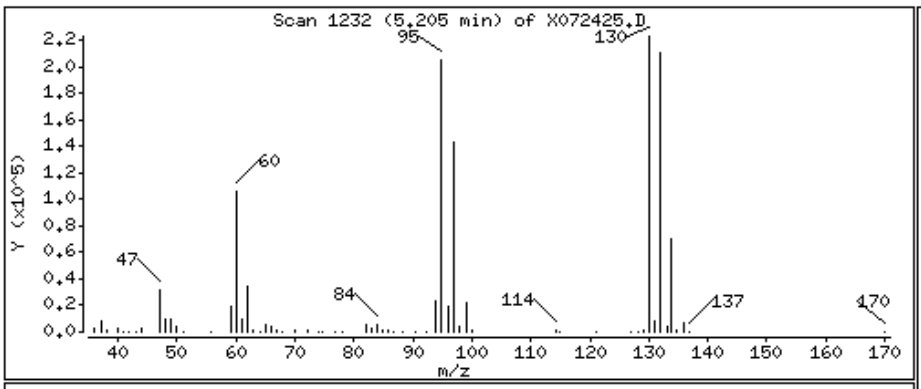
Client ID: HS23071165-04 Instrument: voa6.i

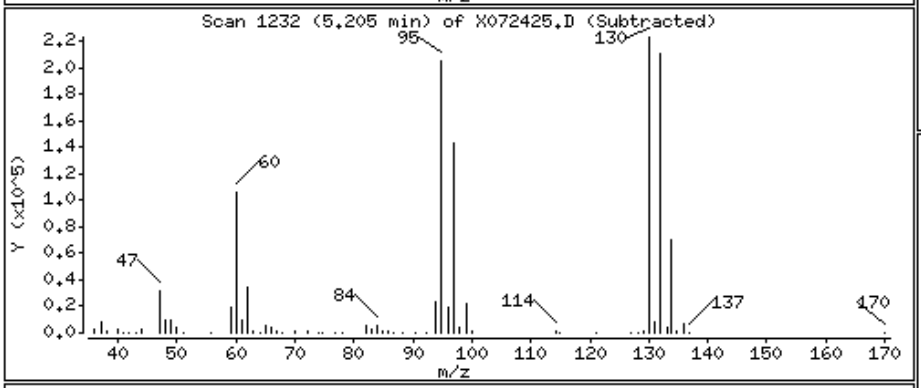
Sample Info: HS23071165-04;HS23071165-04;;;

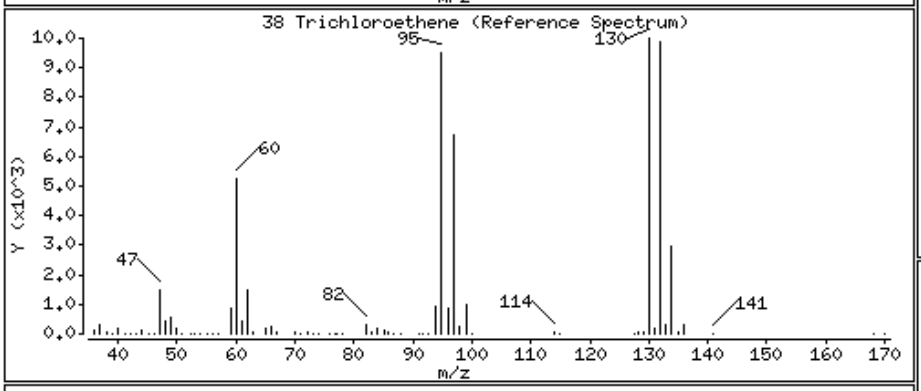
Purge Volume: 5.0 Operator: PC

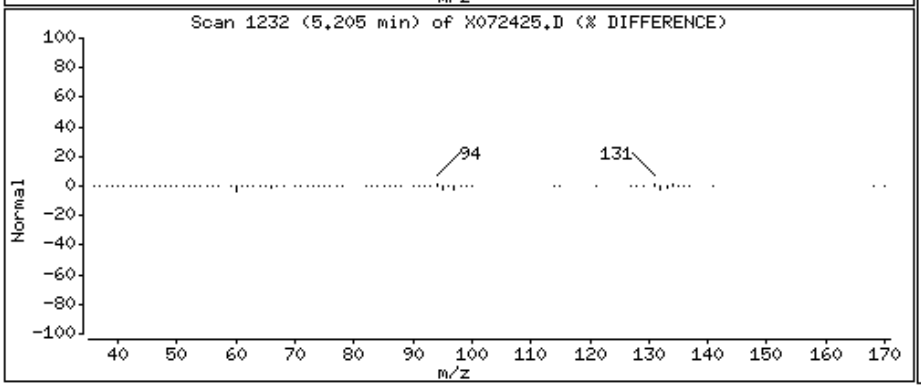
Column phase: DB624 Column diameter: 0.18

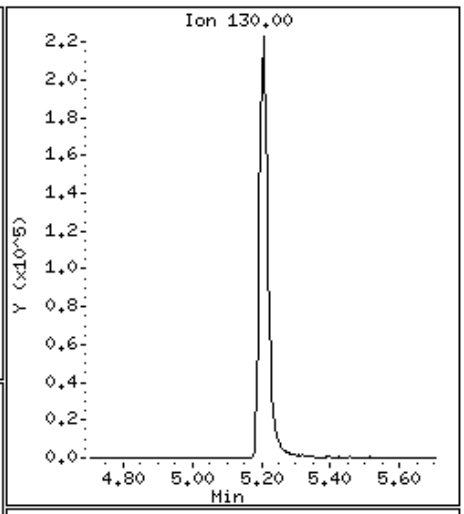
38 Trichloroethene Concentration: 3344.72 ug/l

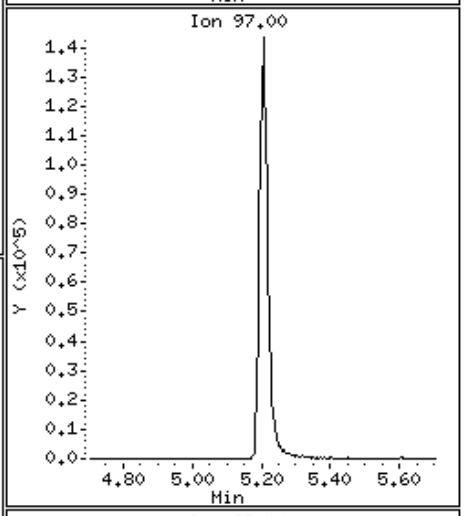


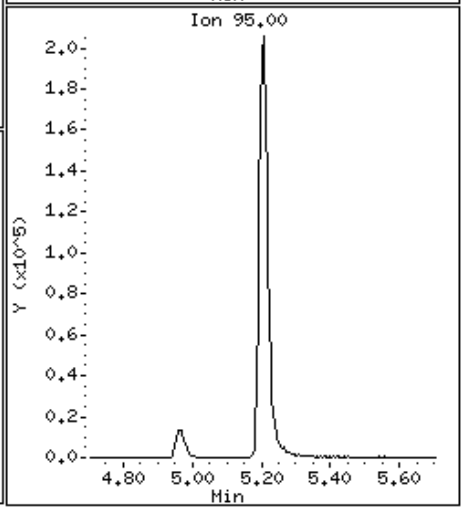












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072425.D
Inj Date : 24-JUL-2023 19:07
InstruID : voa6.i
LabSampID : HS23071165-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072426.D Page 1
Report Date: 27-Jul-2023 13:09

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072426.D
Lab Smp Id: HS23071165-06 Client Smp ID: HS23071165-06
Inj Date : 24-JUL-2023 19:27
Operator : PC Inst ID: voa6.i
Smp Info : HS23071165-06;HS23071165-06;;;
Misc Info : V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 24
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	5.000	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	4.174	(1.000)	535561	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.980)	265168	54.0839	54.08
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.070)	351044	57.2797	57.27
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	837336	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	799037	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1035826	50.3494	50.34
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	394058	49.5268	49.52
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	429731	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	5911	0.85291	4.26(a)
27 cis-1,2-Dichloroethene	96	3.529	3.525	(0.844)	102207	17.6779	88.38
38 Trichloroethene	130	5.205	5.205	(1.048)	2583595	456.047	2280.23(A)

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.

01323549

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072426.D

Date : 24-JUL-2023 19:27

Client ID: HS23071165-06

Instrument: voa6.i

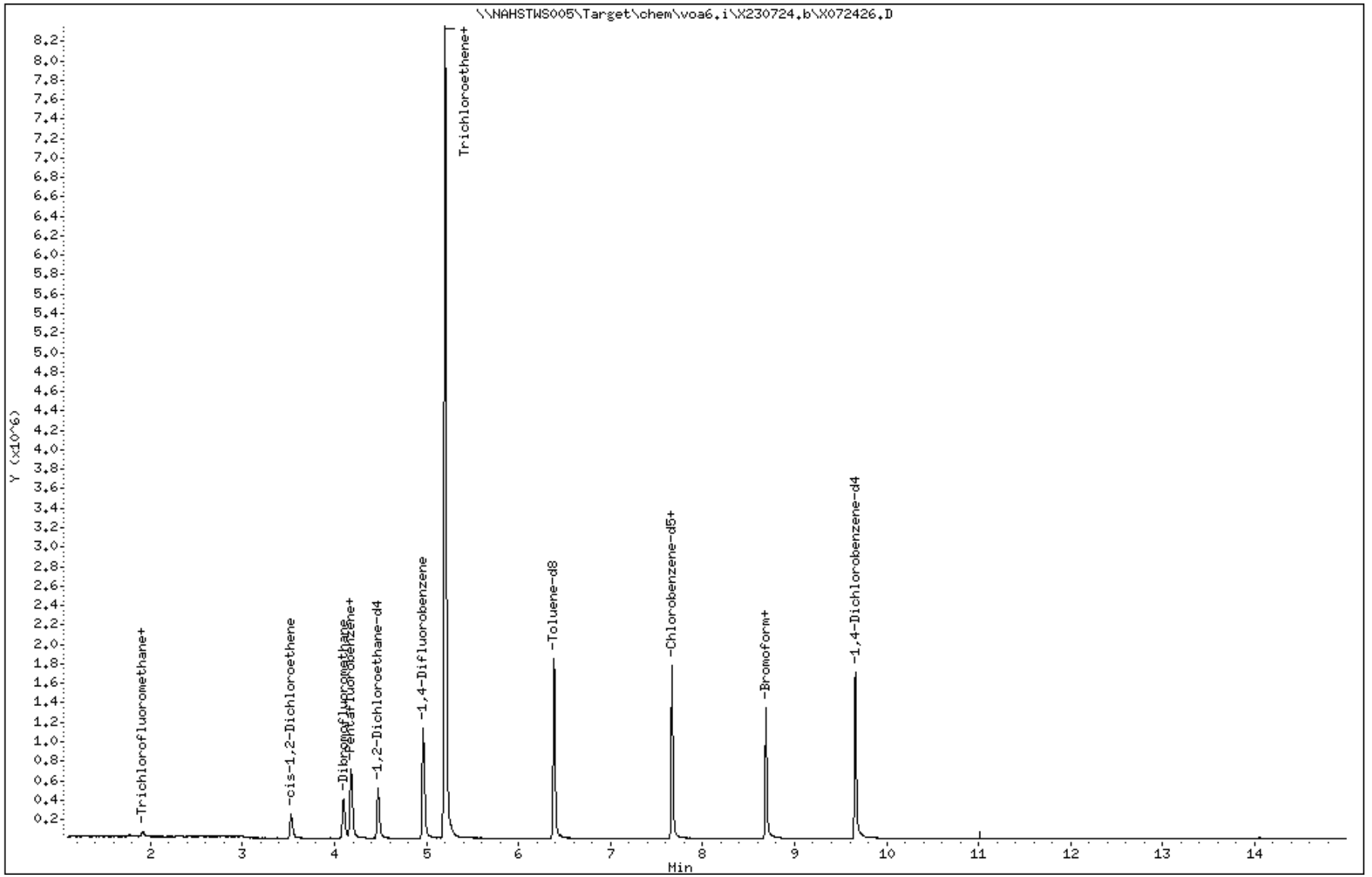
Sample Info: HS23071165-06;HS23071165-06;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072426.D Page 2

Date : 24-JUL-2023 19:27

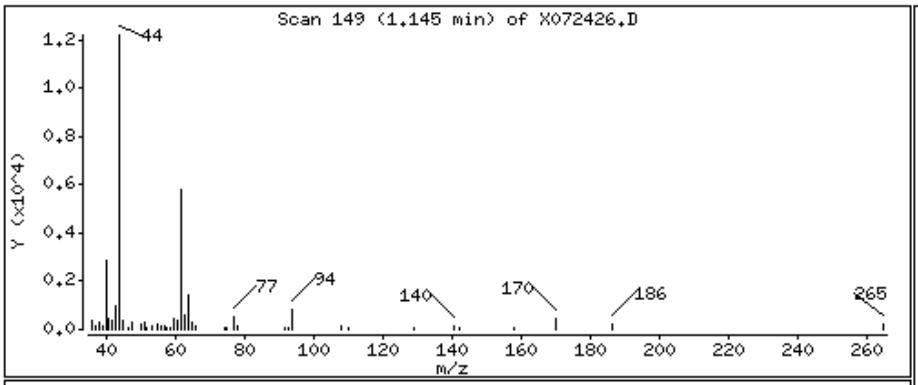
Client ID: HS23071165-06 Instrument: voa6.i

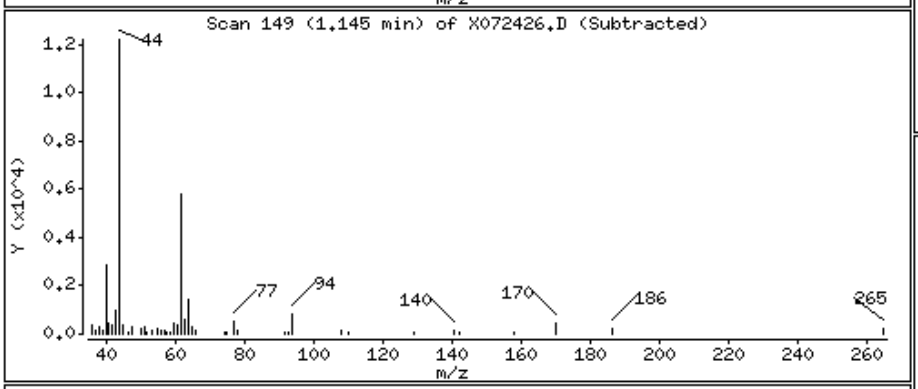
Sample Info: HS23071165-06;HS23071165-06;;;

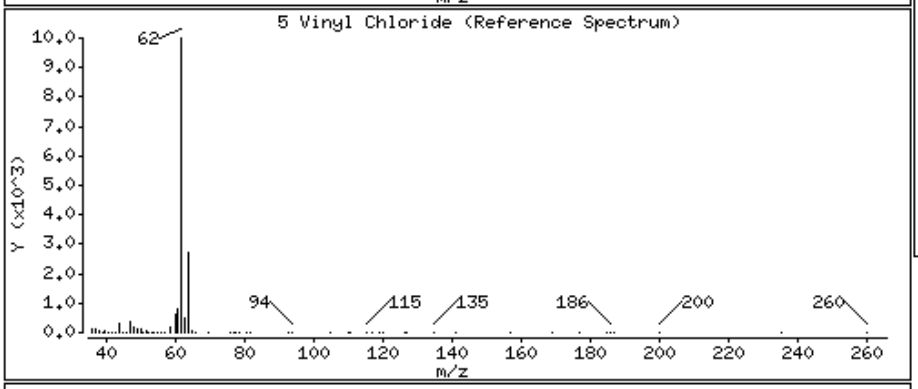
Purge Volume: 5.0 Operator: PC

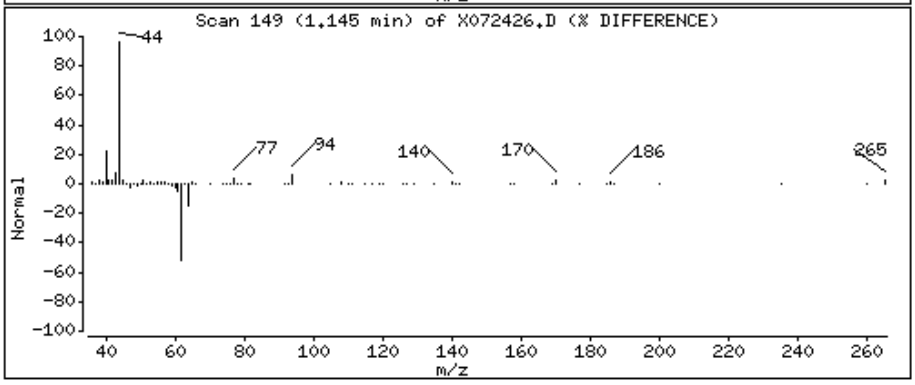
Column phase: DB624 Column diameter: 0.18

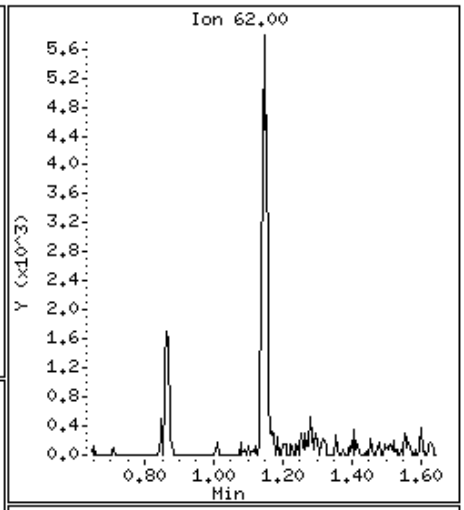
5 Vinyl Chloride Concentration: 4.26 ug/l

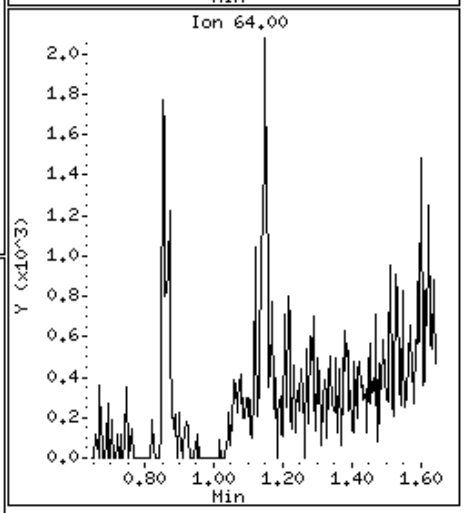












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072426.D

Date : 24-JUL-2023 19:27

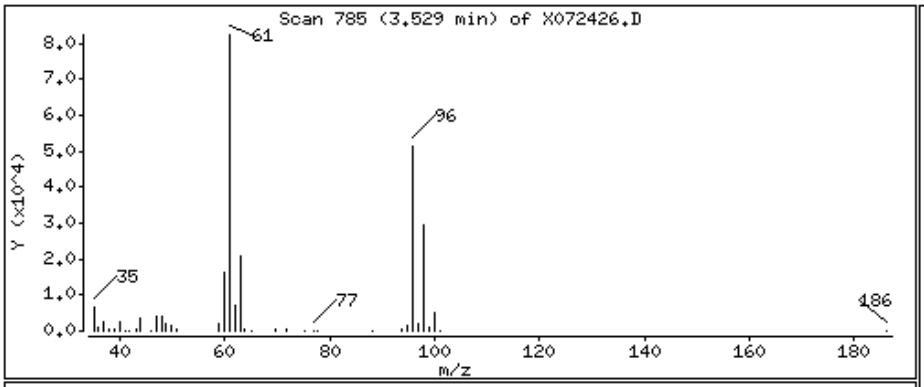
Client ID: HS23071165-06 Instrument: voa6.i

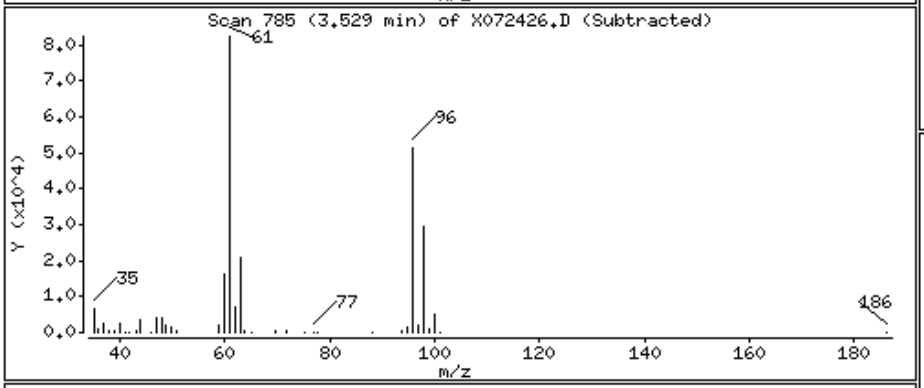
Sample Info: HS23071165-06;HS23071165-06;;;

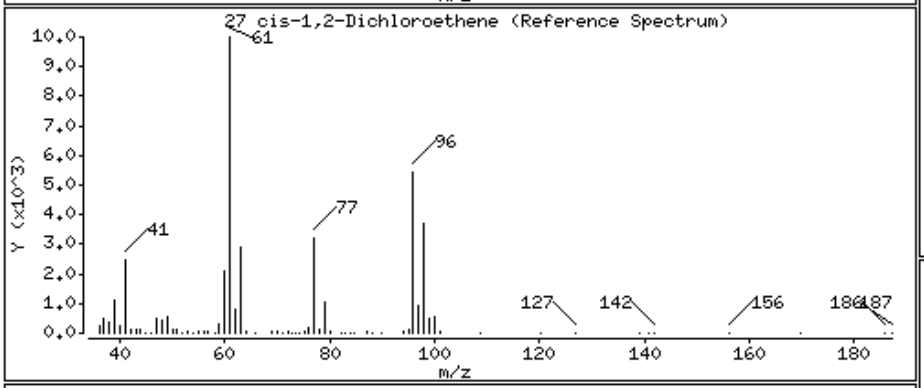
Purge Volume: 5.0 Operator: PC

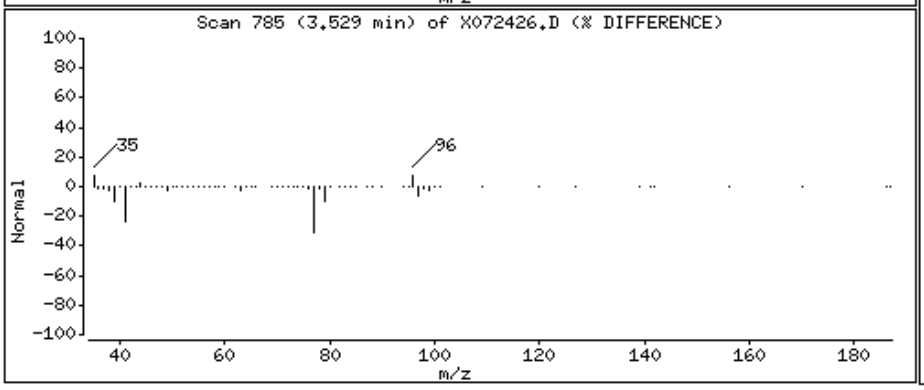
Column phase: DB624 Column diameter: 0.18

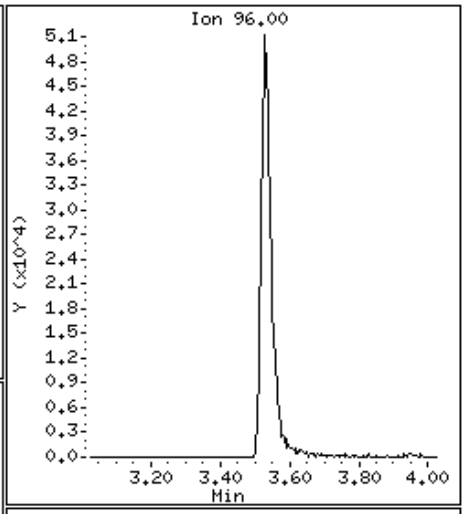
27 cis-1,2-Dichloroethene Concentration: 88.38 ug/l

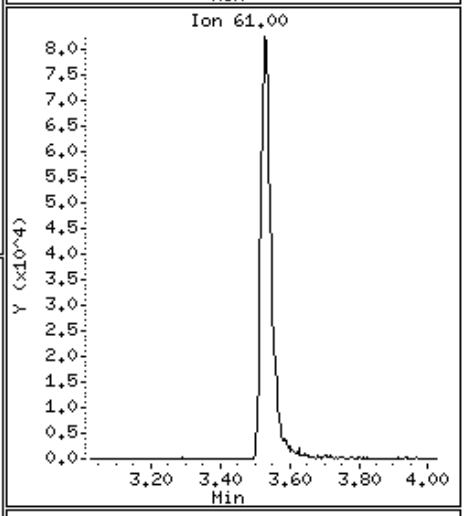


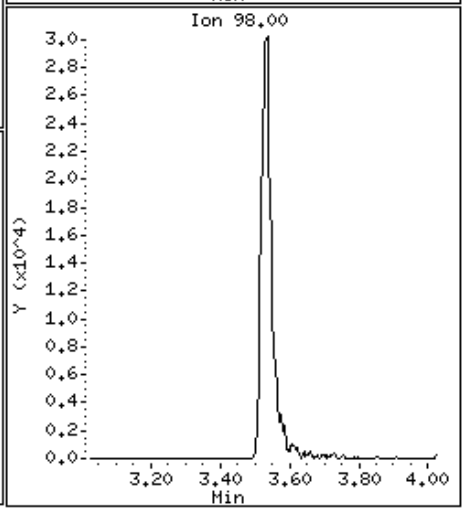












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072426.D Page 4

Date : 24-JUL-2023 19:27

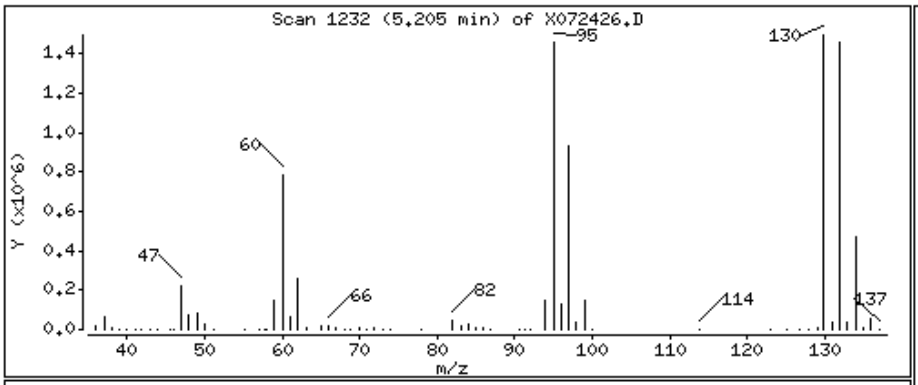
Client ID: HS23071165-06 Instrument: voa6.i

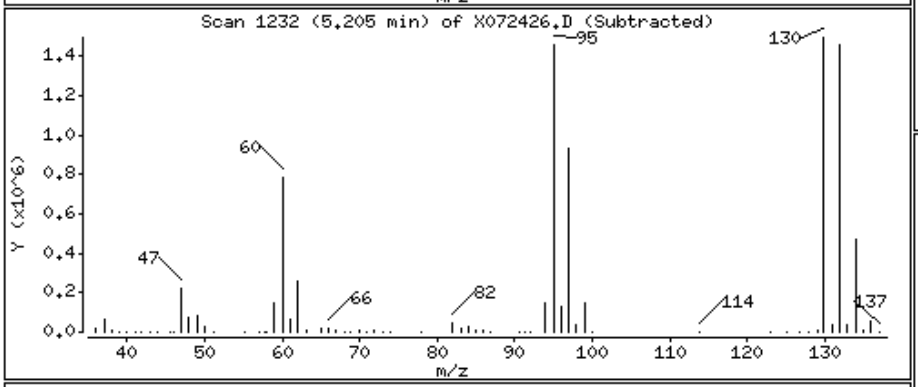
Sample Info: HS23071165-06;HS23071165-06;;;

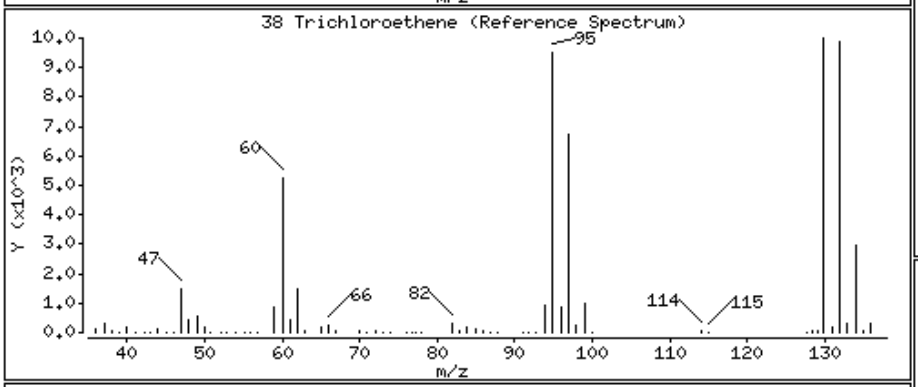
Purge Volume: 5.0 Operator: PC

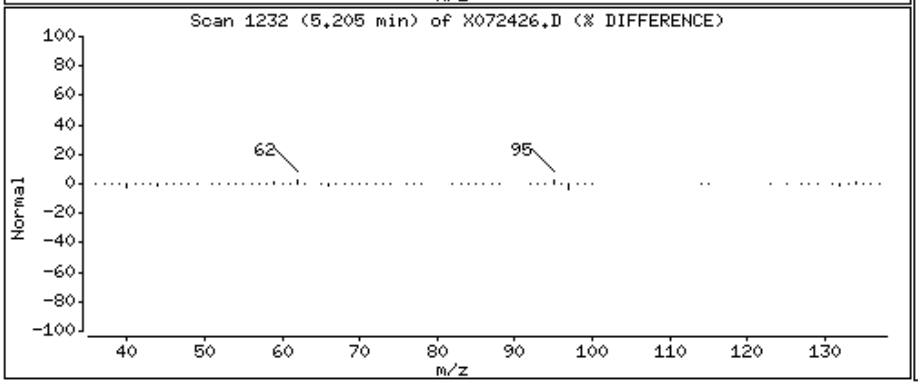
Column phase: DB624 Column diameter: 0.18

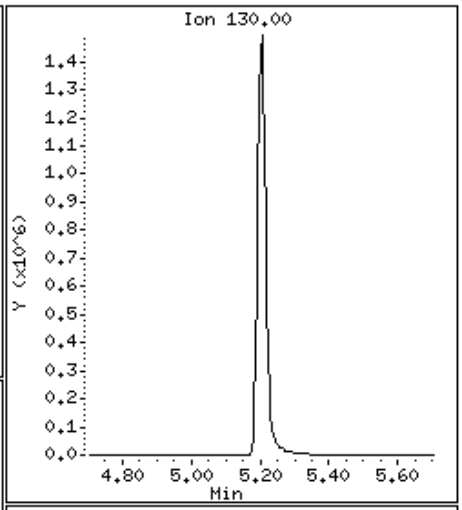
38 Trichloroethene Concentration: 2280.23 ug/l

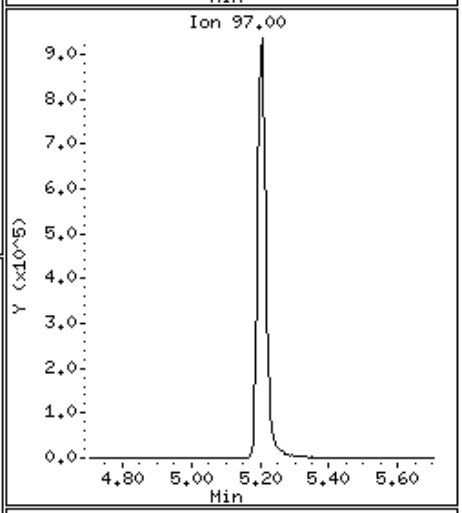


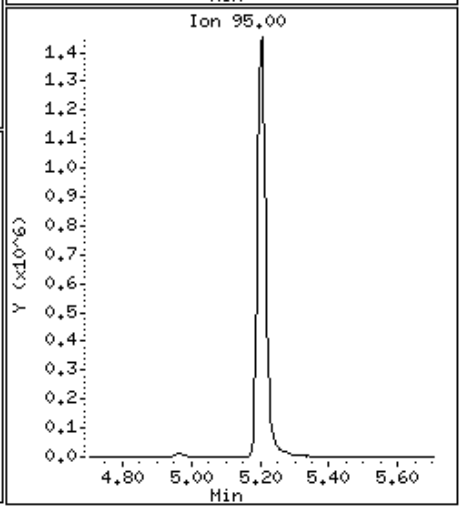












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072426.D
Inj Date : 24-JUL-2023 19:27
InstruID : voa6.i
LabSampID : HS23071165-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072427.D Page 1
Report Date: 27-Jul-2023 13:09

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072427.D
Lab Smp Id: HS23071165-06 Client Smp ID: HS23071165-06
Inj Date : 24-JUL-2023 19:48
Operator : PC Inst ID: voa6.i
Smp Info : HS23071165-06;HS23071165-06;;;
Misc Info : V6;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 25
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	50.000	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	4.174	(1.000)	553681	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.980)	276718	54.5998	54.59
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.070)	348668	55.0057	55.00
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	859447	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	753406	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	992588	51.1699	51.16
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	358689	47.7970	47.79
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	385442	50.0000	
27 cis-1,2-Dichloroethene	96	3.533	3.525	(0.845)	10253	1.71534	85.76(a)
38 Trichloroethene	130	5.205	5.205	(1.048)	248061	42.6604	2133.01

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

01323555

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072427.D

Date : 24-JUL-2023 19:48

Client ID: HS23071165-06

Instrument: voa6.i

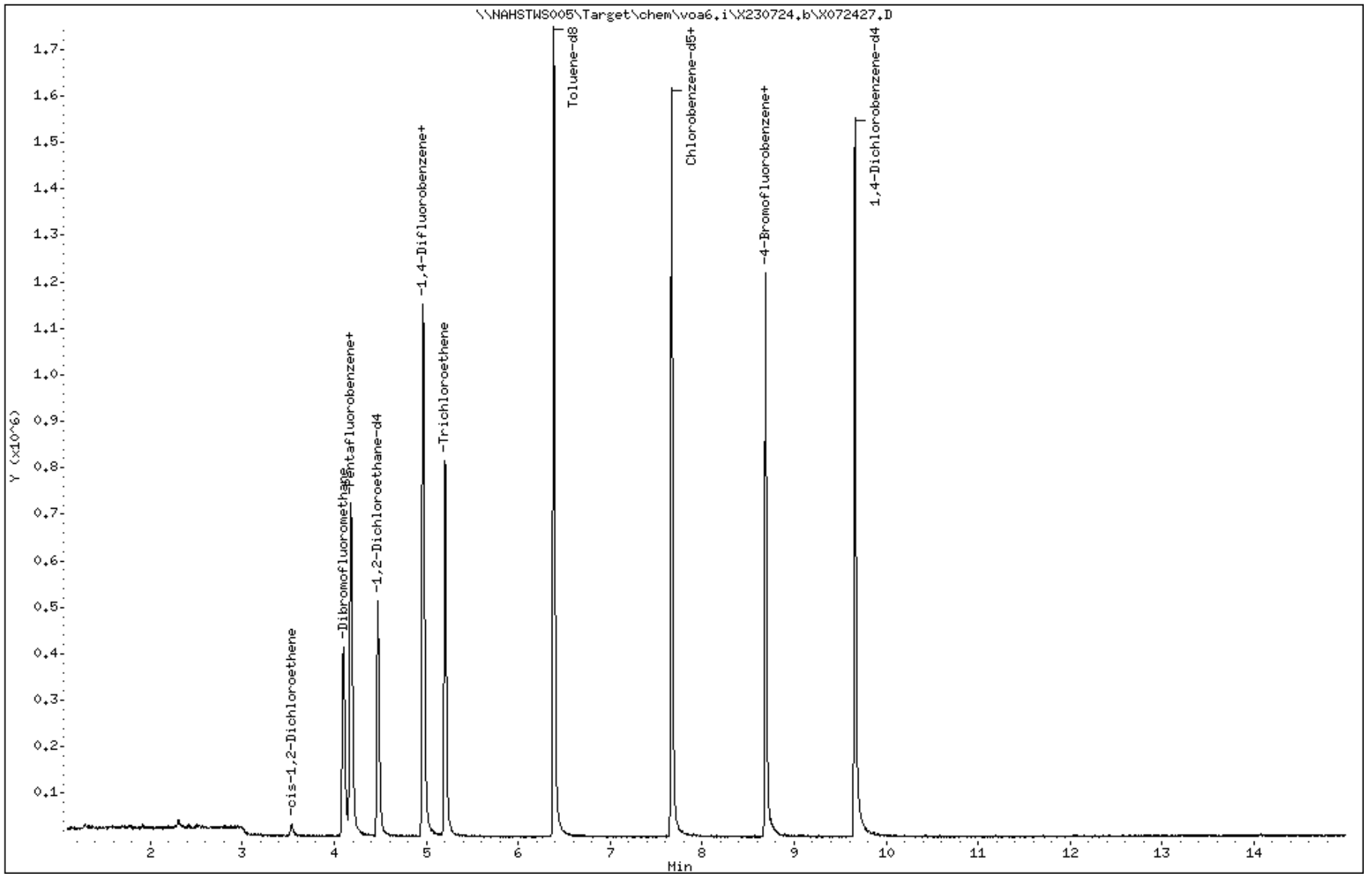
Sample Info: HS23071165-06;HS23071165-06;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072427.D Page 2

Date : 24-JUL-2023 19:48

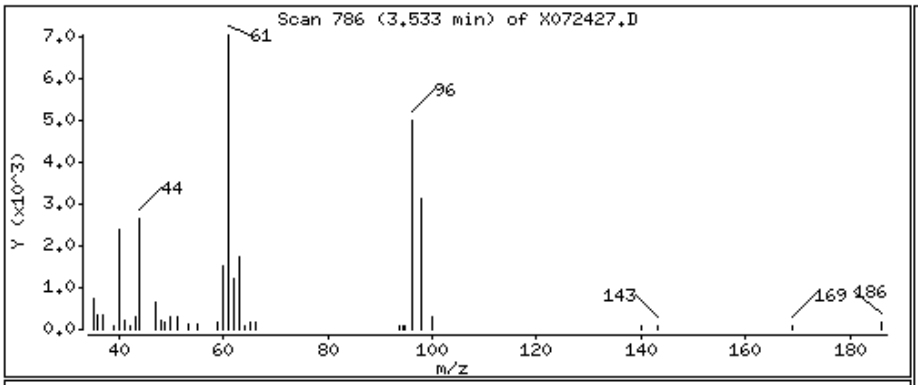
Client ID: HS23071165-06 Instrument: voa6.i

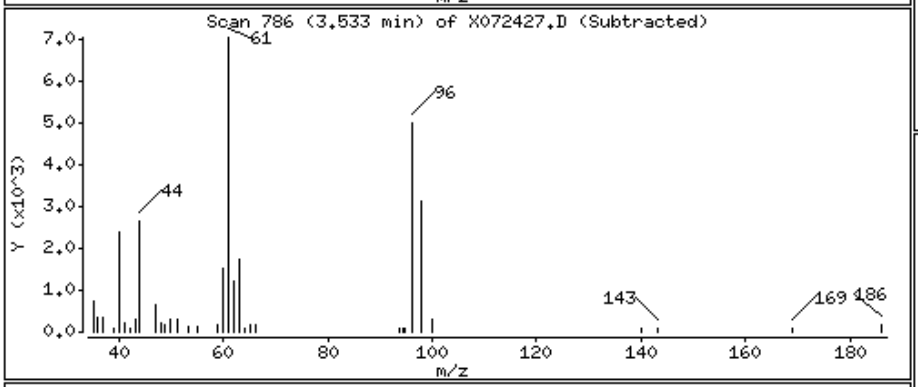
Sample Info: HS23071165-06;HS23071165-06;;;

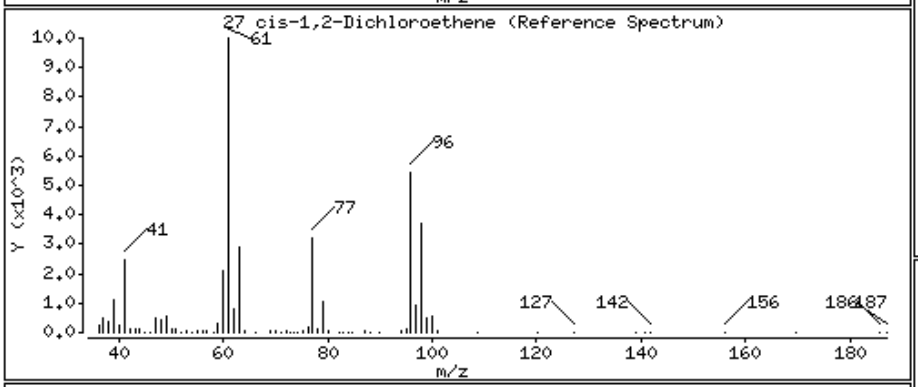
Purge Volume: 5.0 Operator: PC

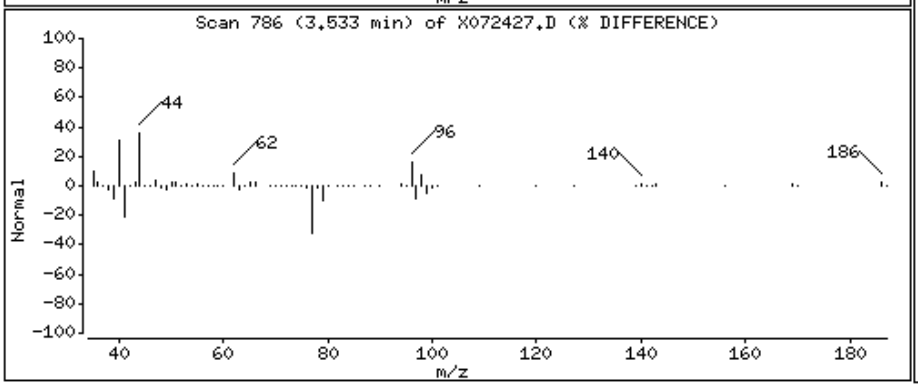
Column phase: DB624 Column diameter: 0.18

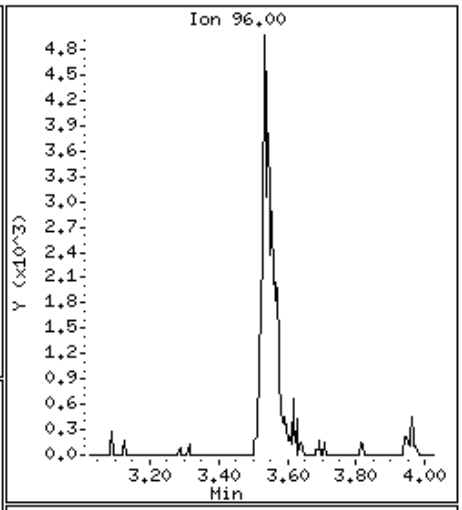
27 cis-1,2-Dichloroethene Concentration: 85.76 ug/l

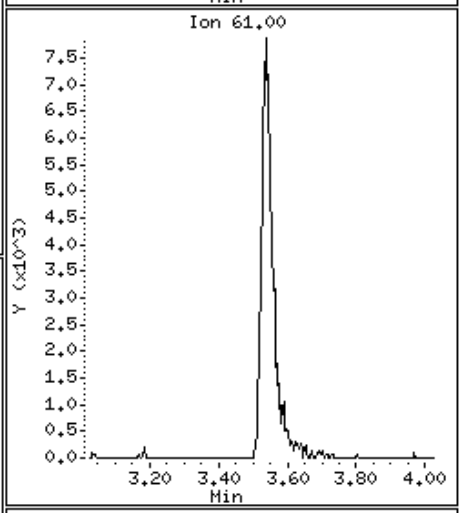


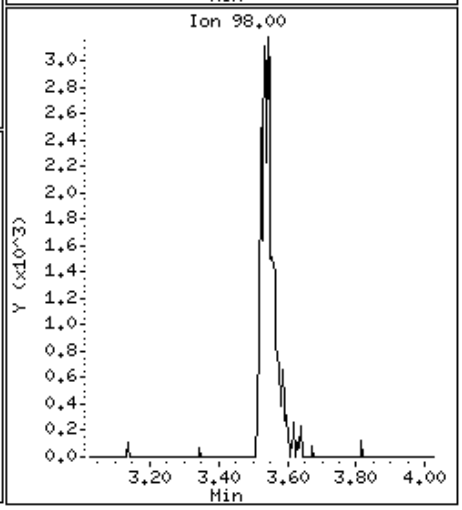












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072427.D Page 3

Date : 24-JUL-2023 19:48

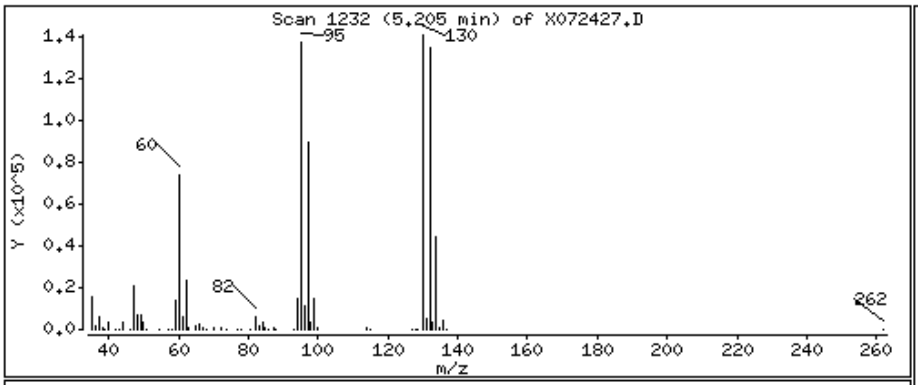
Client ID: HS23071165-06 Instrument: voa6.i

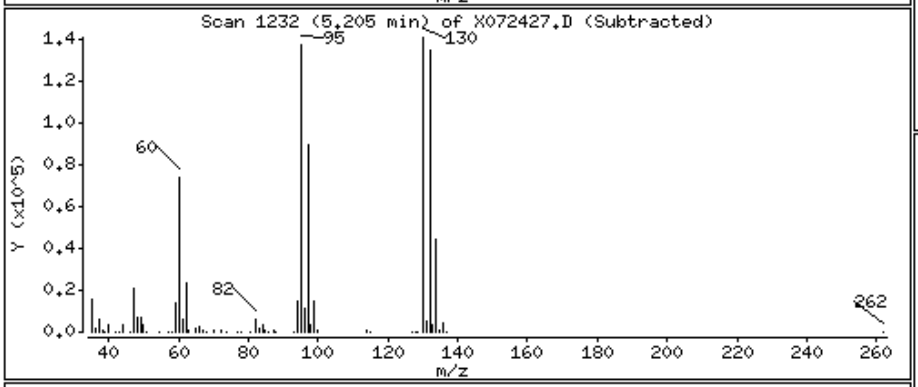
Sample Info: HS23071165-06;HS23071165-06;;;

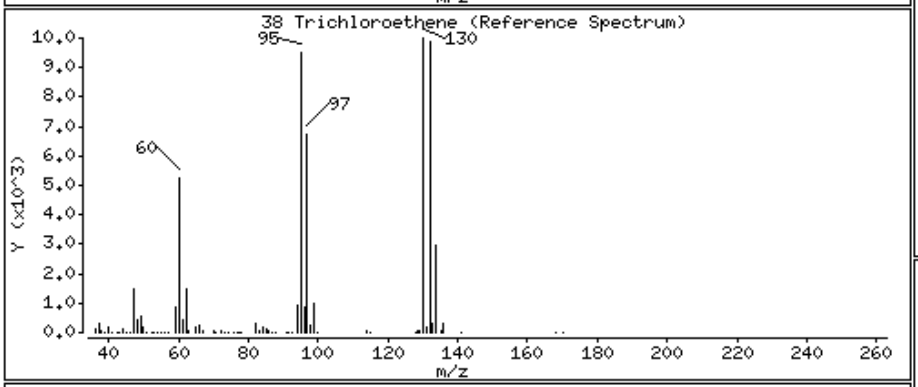
Purge Volume: 5.0 Operator: PC

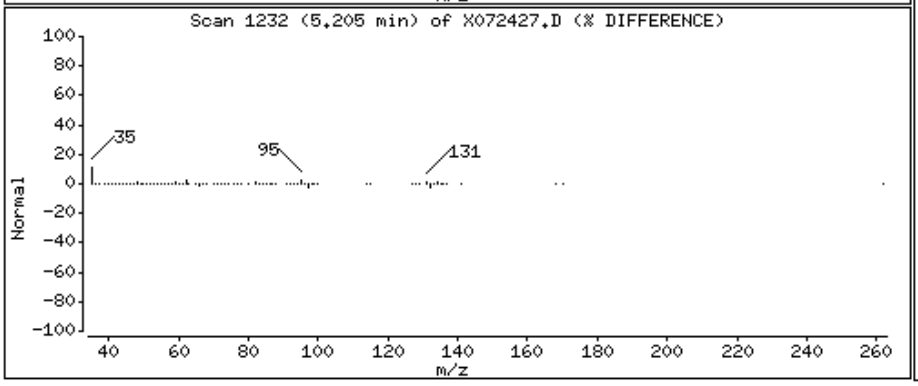
Column phase: DB624 Column diameter: 0.18

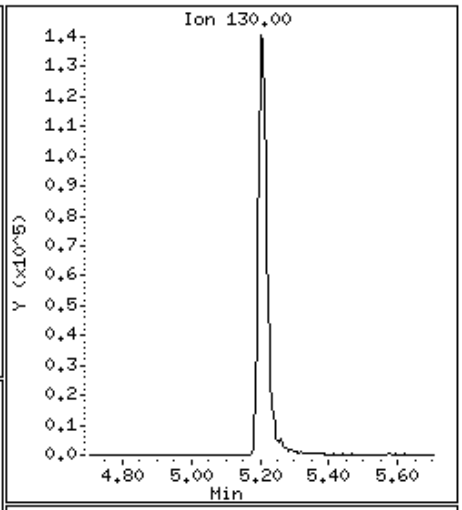
38 Trichloroethene Concentration: 2133.01 ug/l

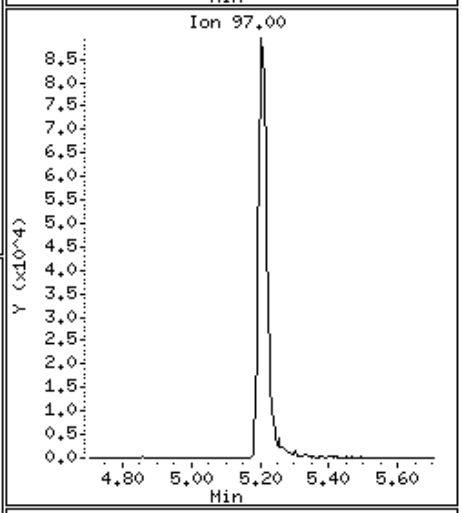


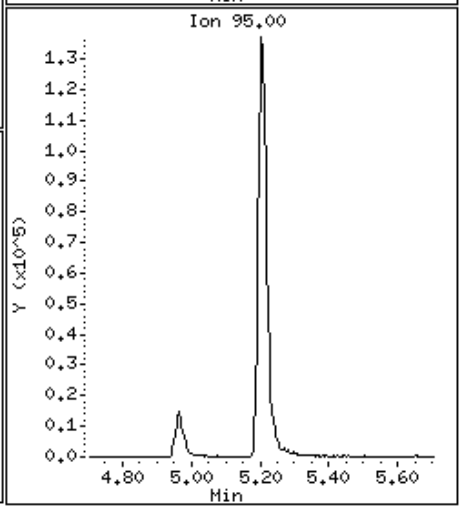












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072427.D
Inj Date : 24-JUL-2023 19:48
InstruID : voa6.i
LabSampID : HS23071165-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072428.D Page 1
Report Date: 27-Jul-2023 13:09

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072428.D
Lab Smp Id: HS23071165-01 Client Smp ID: HS23071165-01
Inj Date : 24-JUL-2023 20:08
Operator : PC Inst ID: voa6.i
Smp Info : HS23071165-01;HS23071165-01;;;
Misc Info : V6;WATER;0;10;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 26
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	10.000	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	4.174	(1.000)	570334	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	283433	54.2875	54.28
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.071)	360047	55.1438	55.14
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	878420	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	780217	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1004462	50.0026	50.00
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	355556	45.7331	45.73
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	390323	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	1021540	138.413	1384.12
11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	14312	3.42530	34.25(a)
27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	6552091	1064.17	10641.69(A)
33 1,2-Dichloroethane	62	4.560	4.556	(0.918)	16915	1.74928	17.49(a)
38 Trichloroethene	130	5.205	5.205	(1.048)	2992460	503.514	5035.13(A)
20 trans-1,2-Dichloroethene	96	2.536	2.528	(0.607)	11710	2.42286	24.22(a)

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.

01323561

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072428.D

Date : 24-JUL-2023 20:08

Client ID: HS23071165-01

Instrument: voa6.i

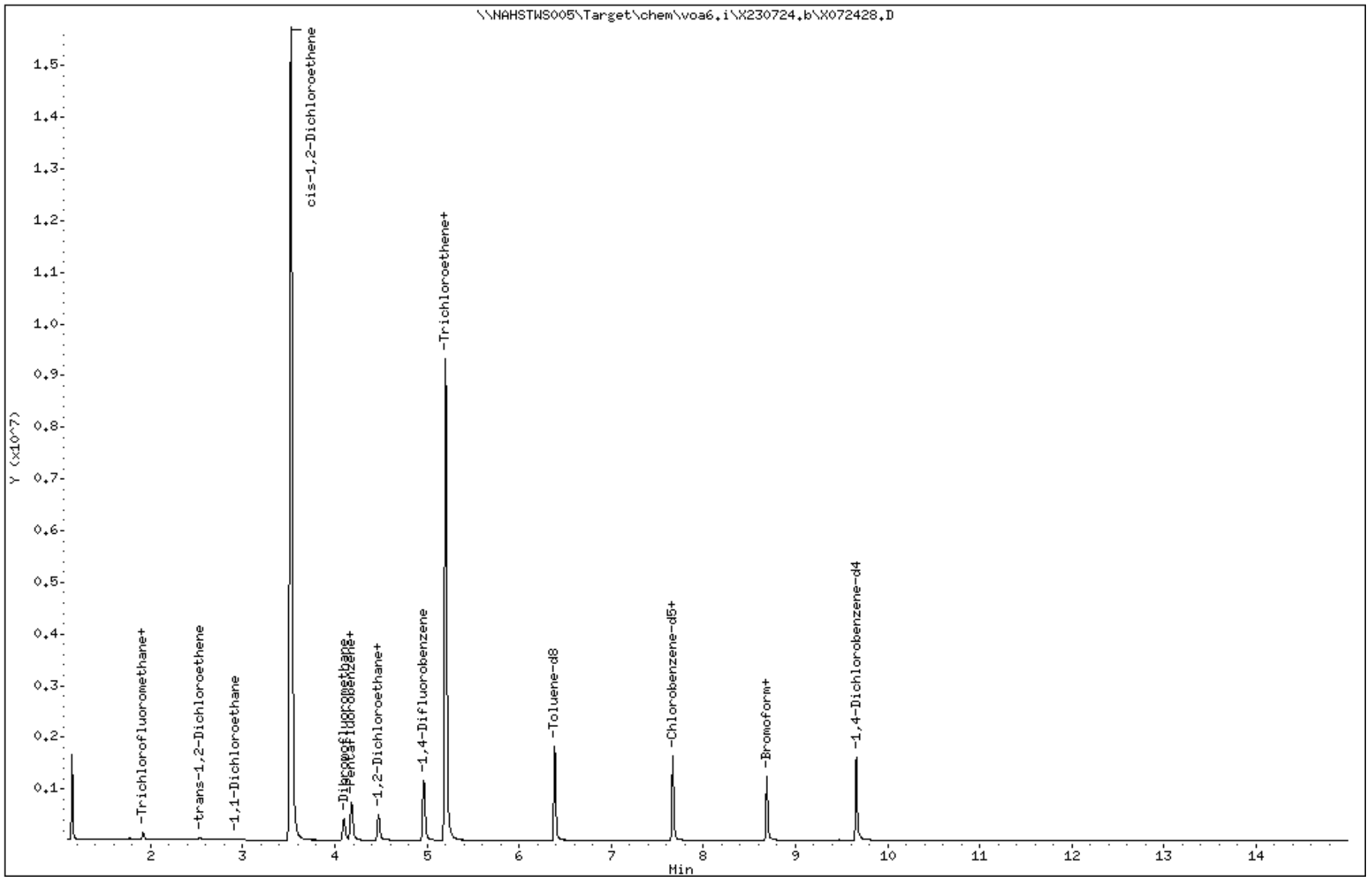
Sample Info: HS23071165-01;HS23071165-01;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072428.D

Date : 24-JUL-2023 20:08

Client ID: HS23071165-01

Instrument: voa6.i

Sample Info: HS23071165-01;HS23071165-01;;;

Purge Volume: 5.0

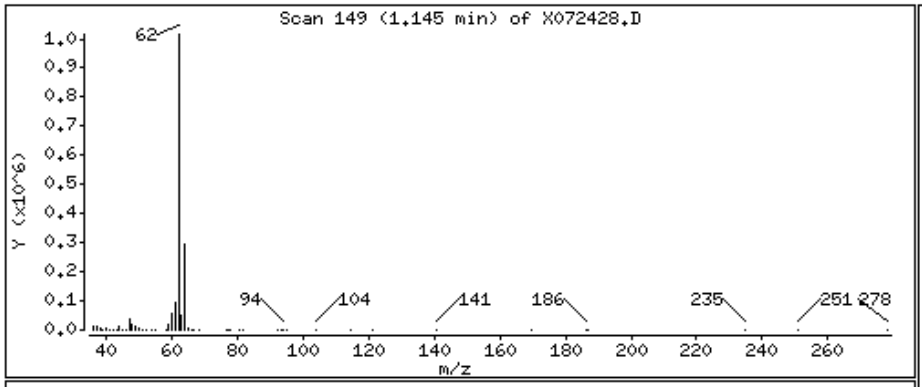
Operator: PC

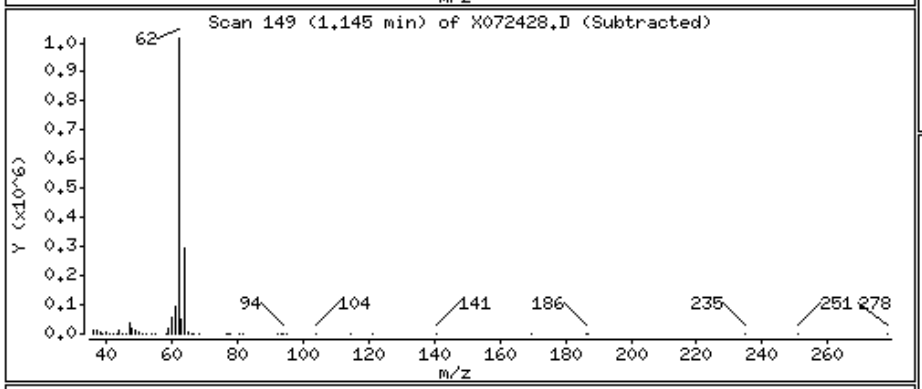
Column phase: DB624

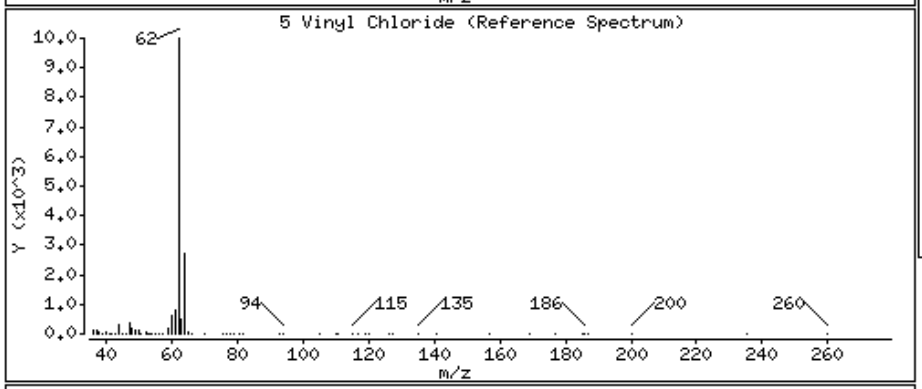
Column diameter: 0.18

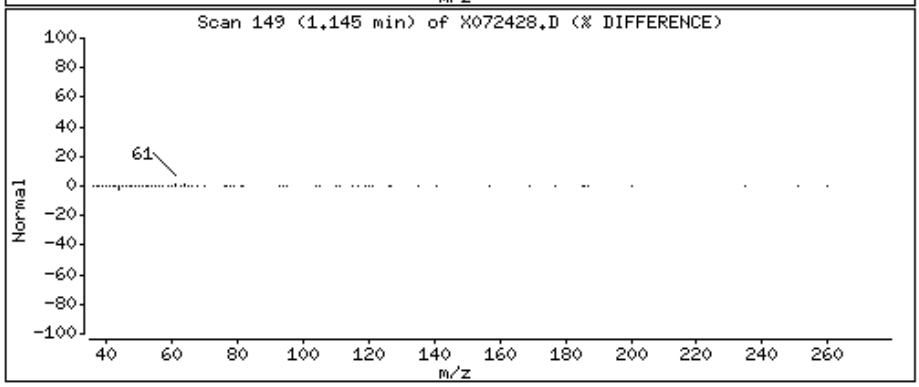
5 Vinyl Chloride

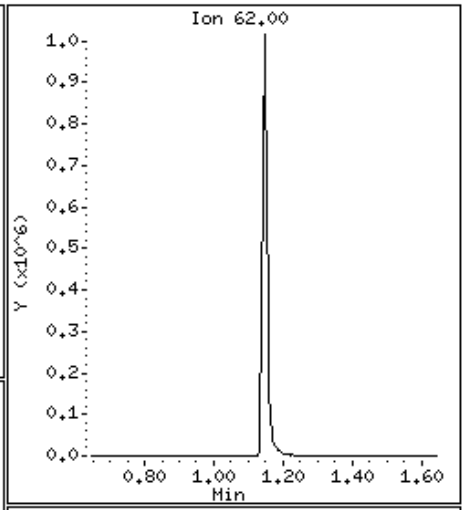
Concentration: 1384.12 ug/l

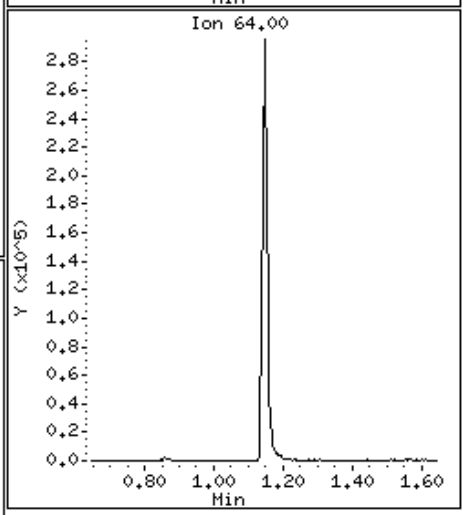












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072428.D Page 3

Date : 24-JUL-2023 20:08

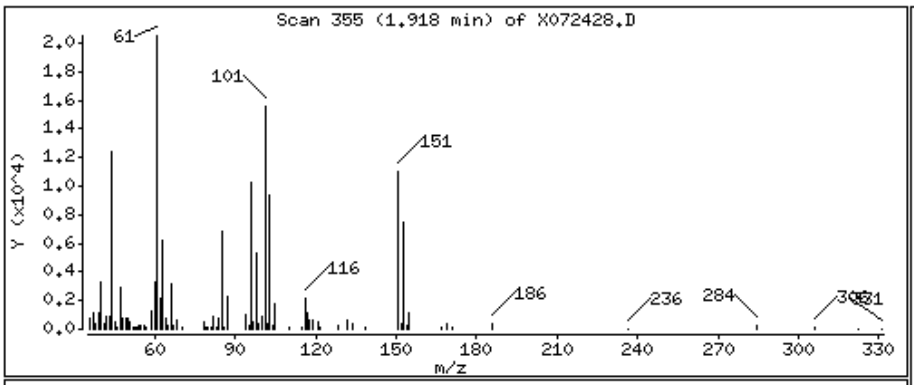
Client ID: HS23071165-01 Instrument: voa6.i

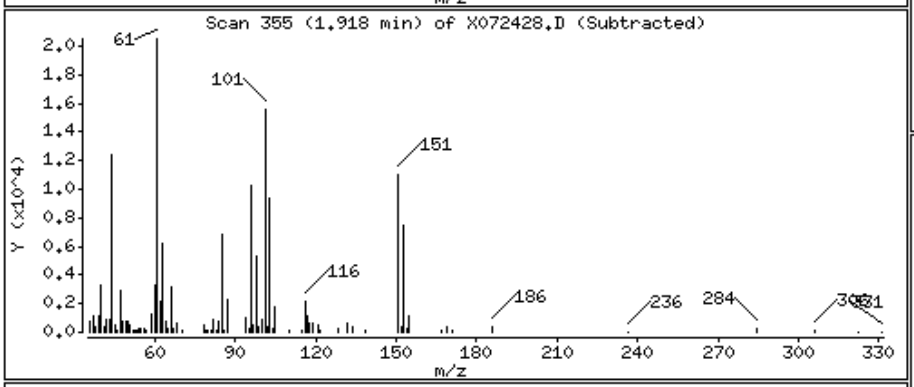
Sample Info: HS23071165-01;HS23071165-01;;;

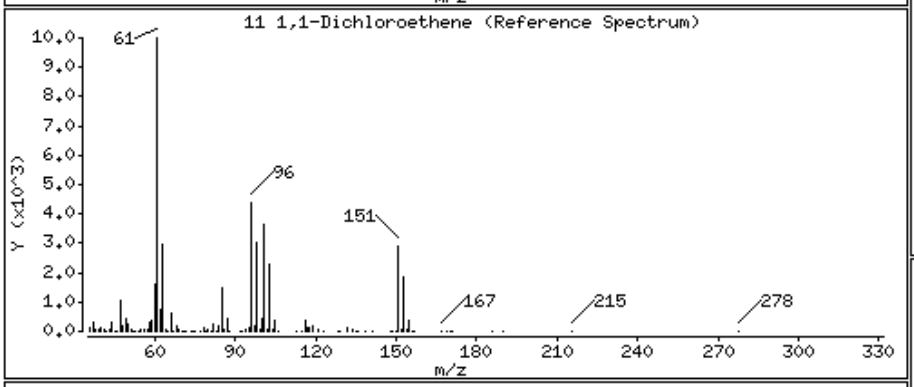
Purge Volume: 5.0 Operator: PC

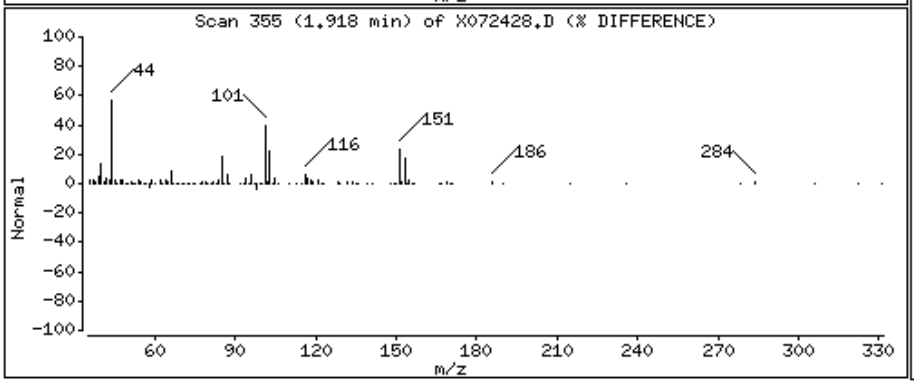
Column phase: DB624 Column diameter: 0.18

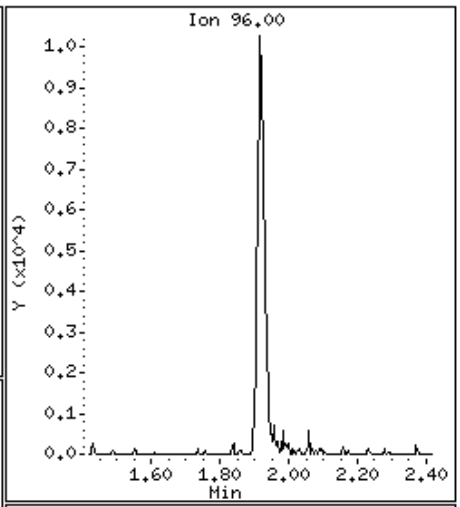
11 1,1-Dichloroethene Concentration: 34.25 ug/l

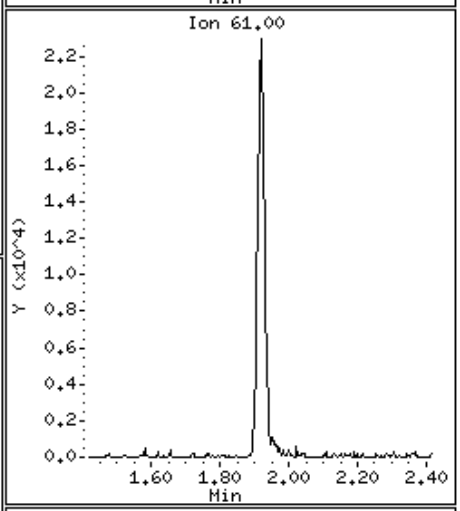


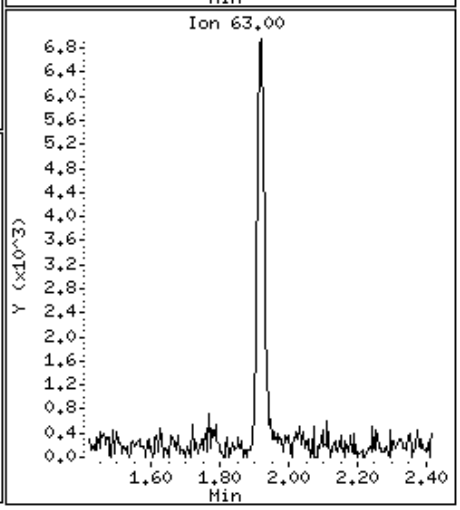












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072428.D Page 4

Date : 24-JUL-2023 20:08

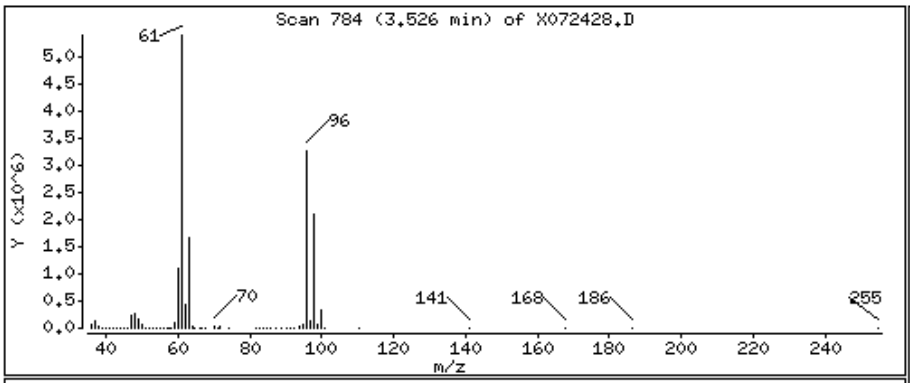
Client ID: HS23071165-01 Instrument: voa6.i

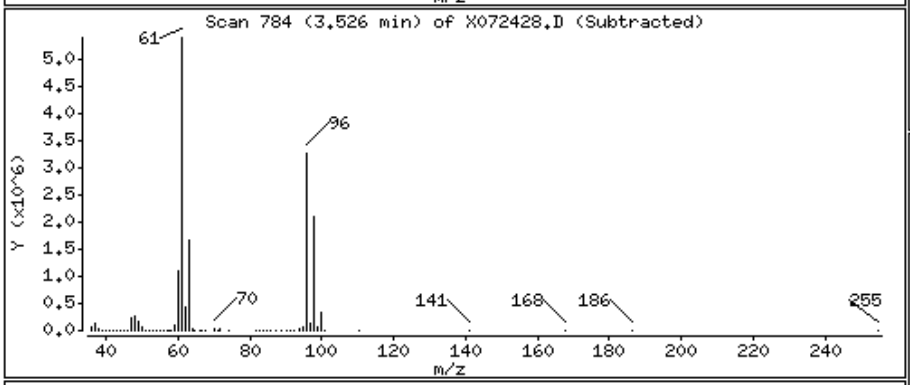
Sample Info: HS23071165-01;HS23071165-01;;;

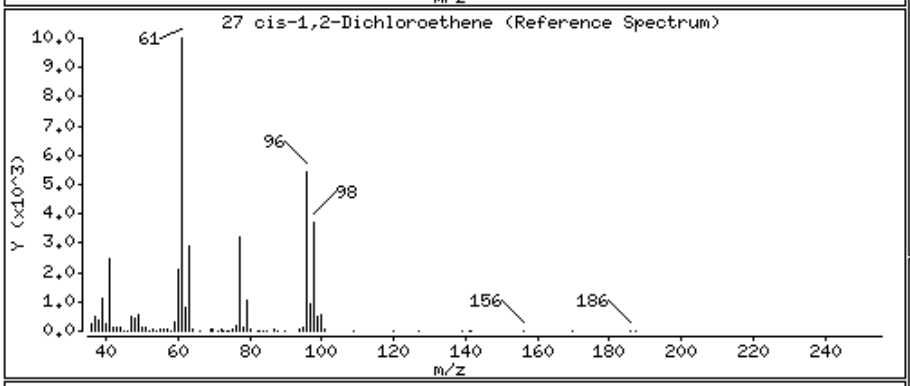
Purge Volume: 5.0 Operator: PC

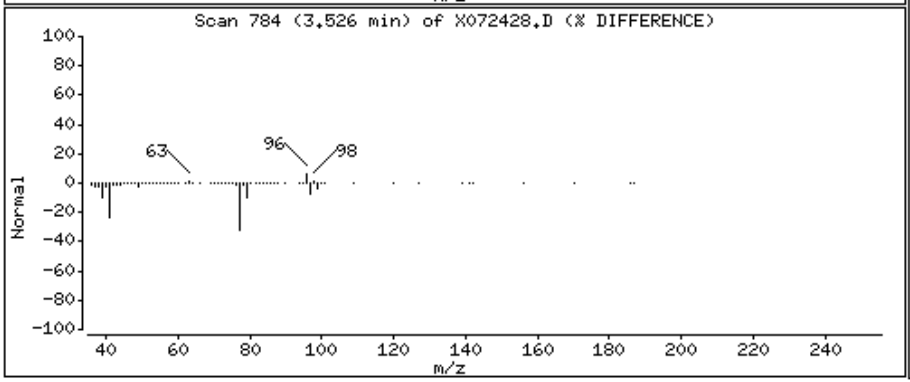
Column phase: DB624 Column diameter: 0.18

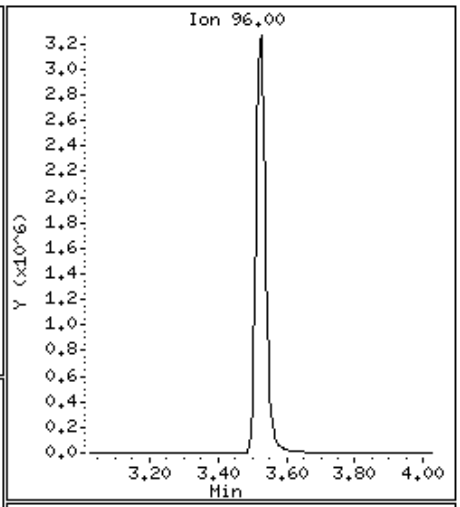
27 cis-1,2-Dichloroethene Concentration: 10641.69 ug/l

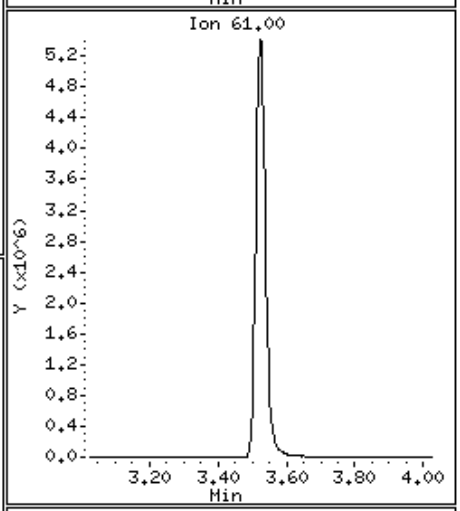


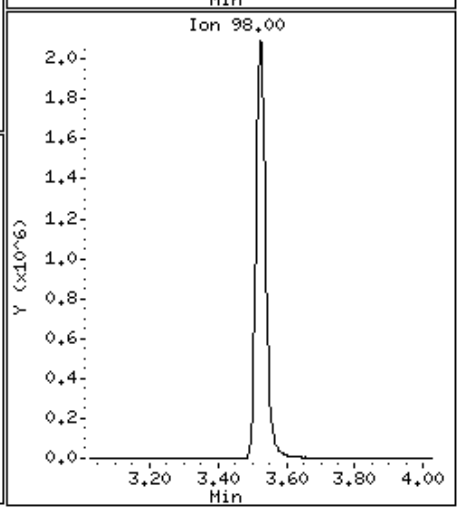












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072428.D Page 5

Date : 24-JUL-2023 20:08

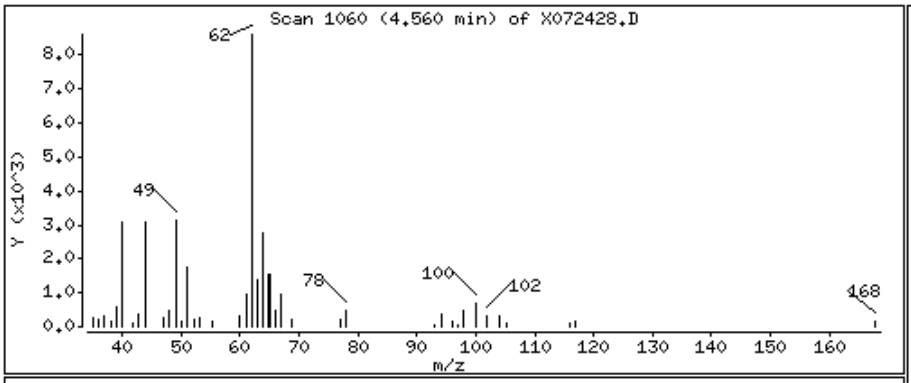
Client ID: HS23071165-01 Instrument: voa6.i

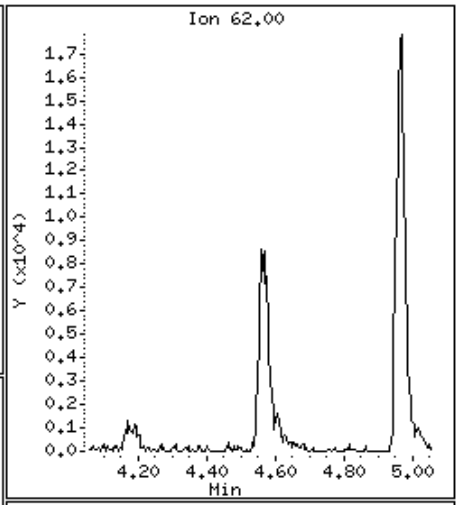
Sample Info: HS23071165-01;HS23071165-01;;;

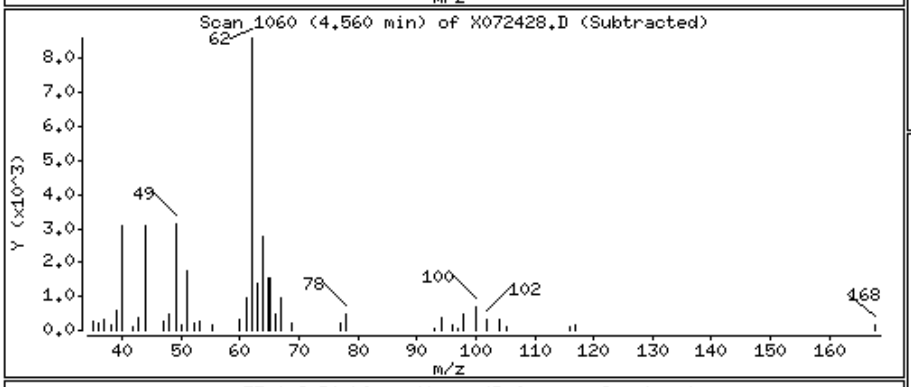
Purge Volume: 5.0 Operator: PC

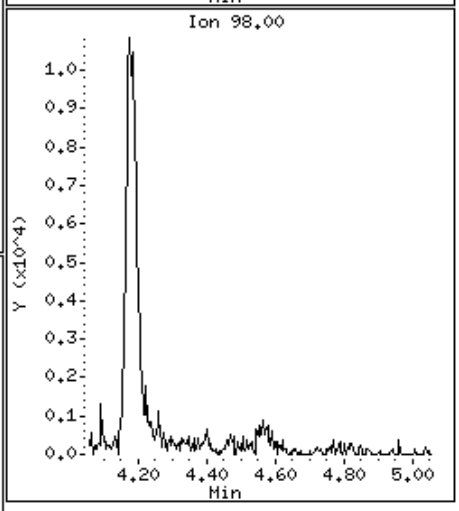
Column phase: DB624 Column diameter: 0.18

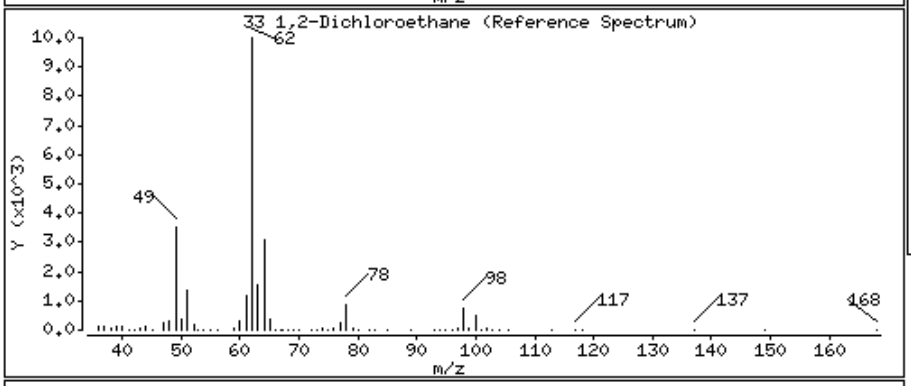
33 1,2-Dichloroethane Concentration: 17.49 ug/l

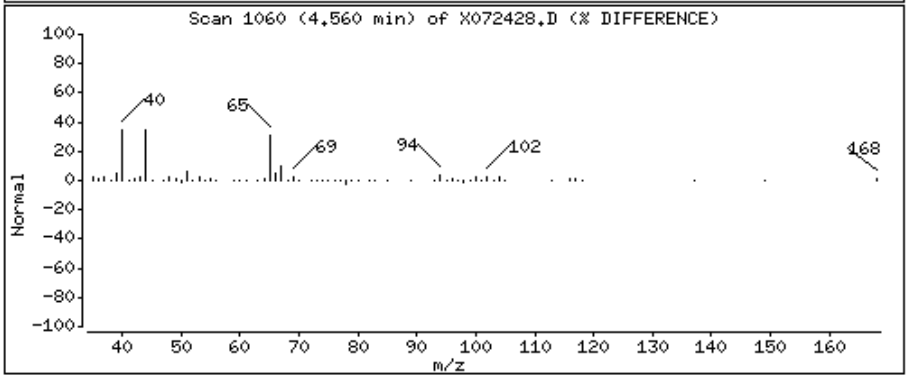












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072428.D Page 6

Date : 24-JUL-2023 20:08

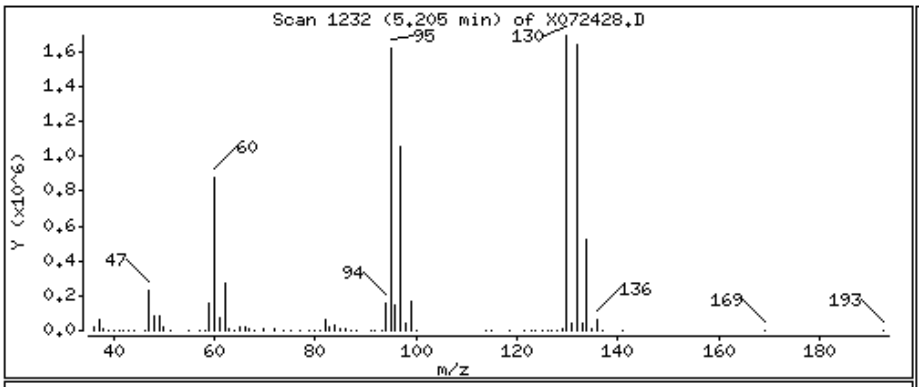
Client ID: HS23071165-01 Instrument: voa6.i

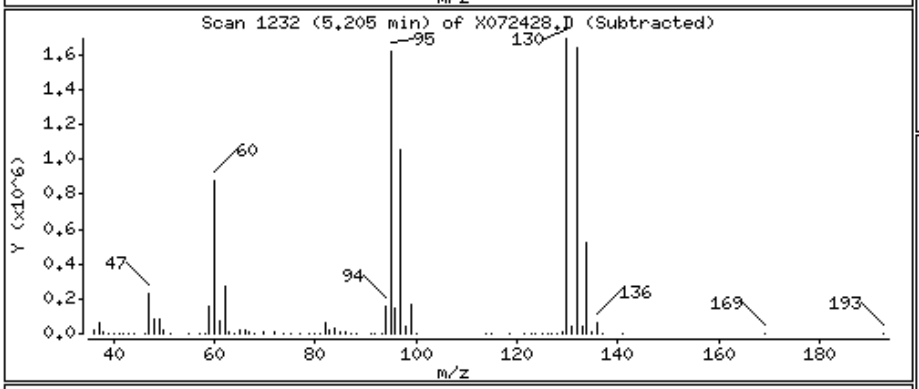
Sample Info: HS23071165-01;HS23071165-01;;;

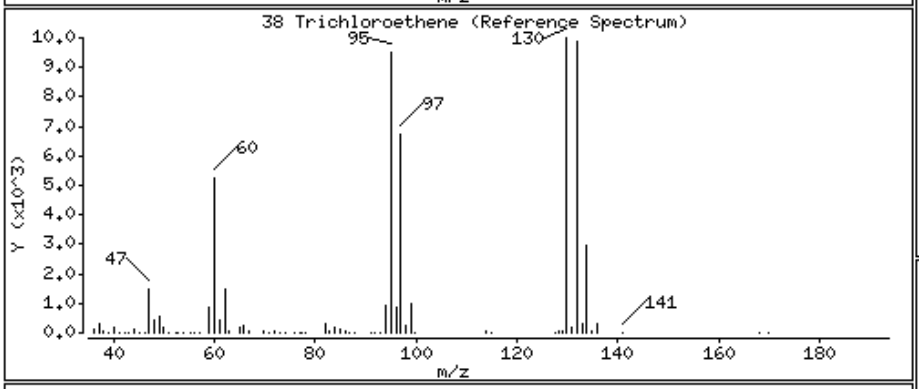
Purge Volume: 5.0 Operator: PC

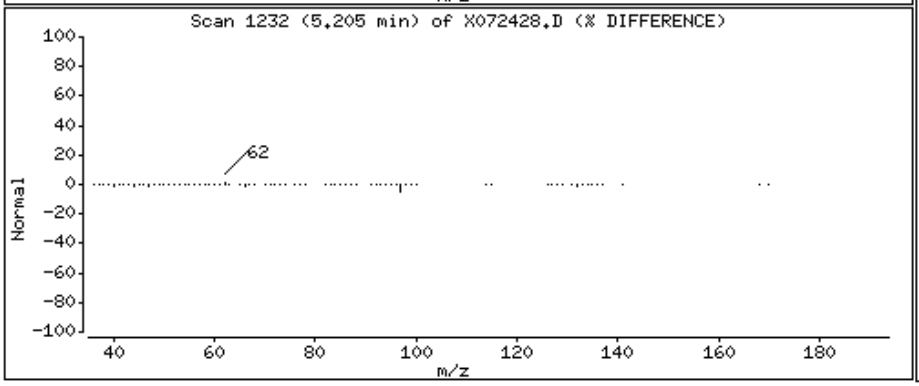
Column phase: DB624 Column diameter: 0.18

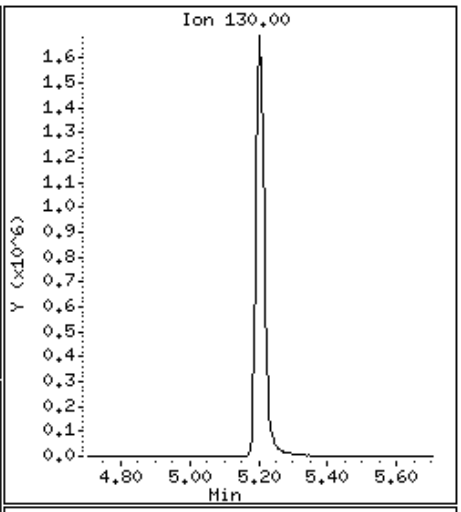
38 Trichloroethene Concentration: 5035.13 ug/l

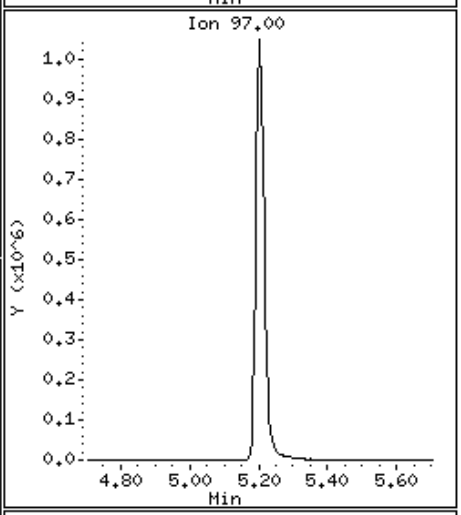


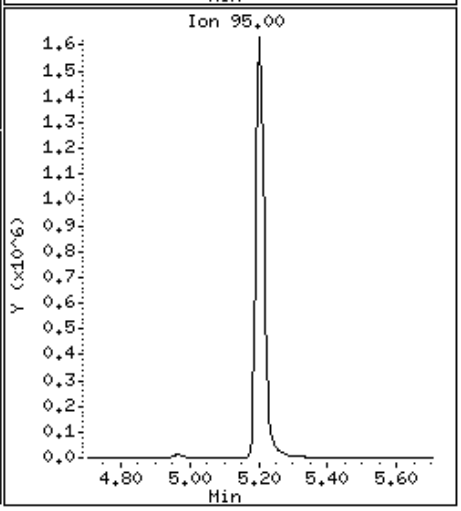












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072428.D Page 7

Date : 24-JUL-2023 20:08

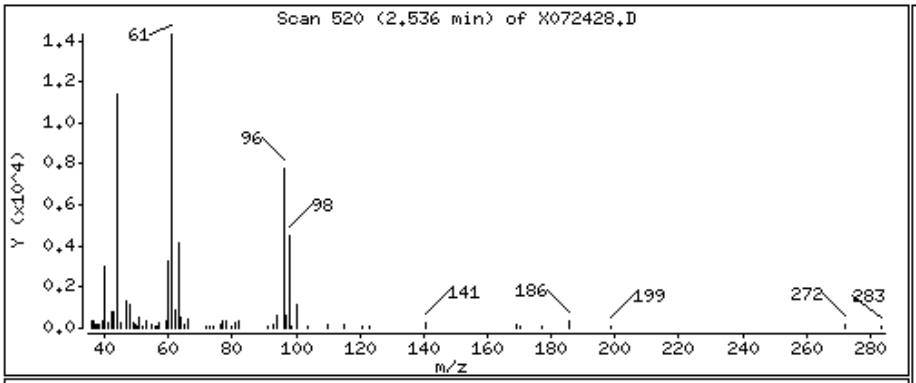
Client ID: HS23071165-01 Instrument: voa6.i

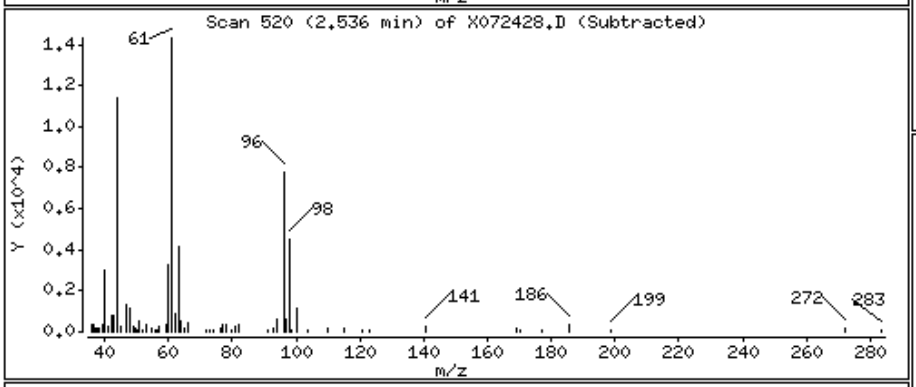
Sample Info: HS23071165-01;HS23071165-01;;;

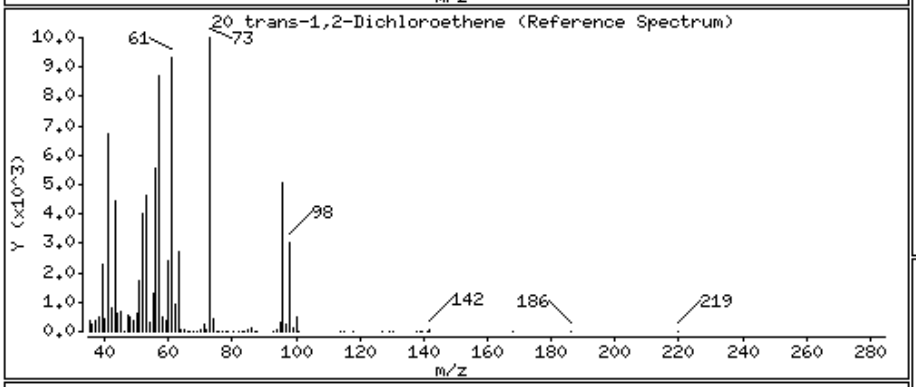
Purge Volume: 5.0 Operator: PC

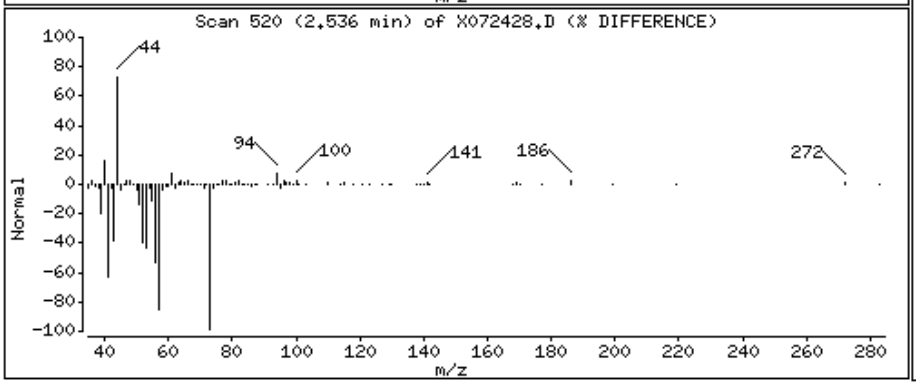
Column phase: DB624 Column diameter: 0.18

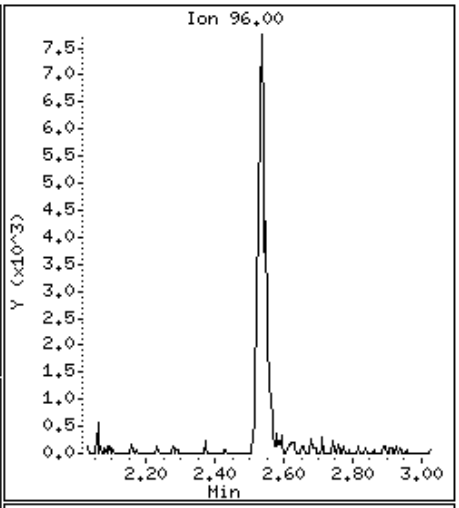
20 trans-1,2-Dichloroethene Concentration: 24.22 ug/l

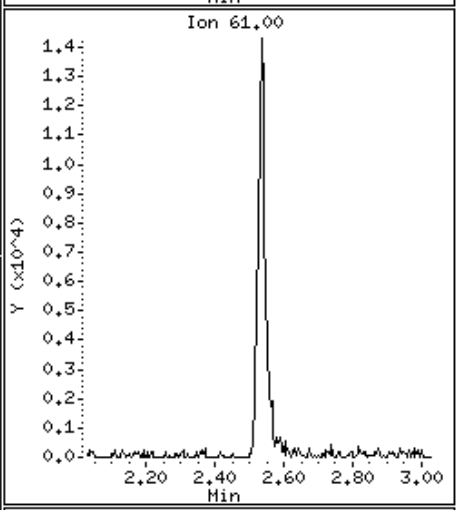


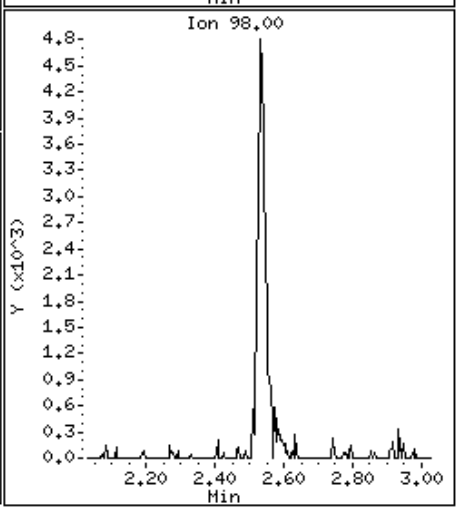












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072428.D
Inj Date : 24-JUL-2023 20:08
InstruID : voa6.i
LabSampID : HS23071165-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072429.D Page 1
Report Date: 27-Jul-2023 13:09

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072429.D
Lab Smp Id: HS23071165-01 Client Smp ID: HS23071165-01
Inj Date : 24-JUL-2023 20:29
Operator : PC Inst ID: voa6.i
Smp Info : HS23071165-01;HS23071165-01;;;
Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 27
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	100.000	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	4.174	(1.000)	570458	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.095	(0.981)	283375	54.2643	54.26
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.070)	352749	54.0016	54.00
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	867808	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	770734	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	998659	50.3254	50.32
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	353716	46.0592	46.05
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	381003	50.0000	
5 Vinyl Chloride	62	1.149	1.145	(0.275)	97668	13.2306	1323.05
27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.843)	566325	91.9607	9196.06
38 Trichloroethene	130	5.205	5.205	(1.048)	289080	49.2356	4923.56

01323570

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072429.D

Page 1

Date : 24-JUL-2023 20:29

Client ID: HS23071165-01

Instrument: voa6.i

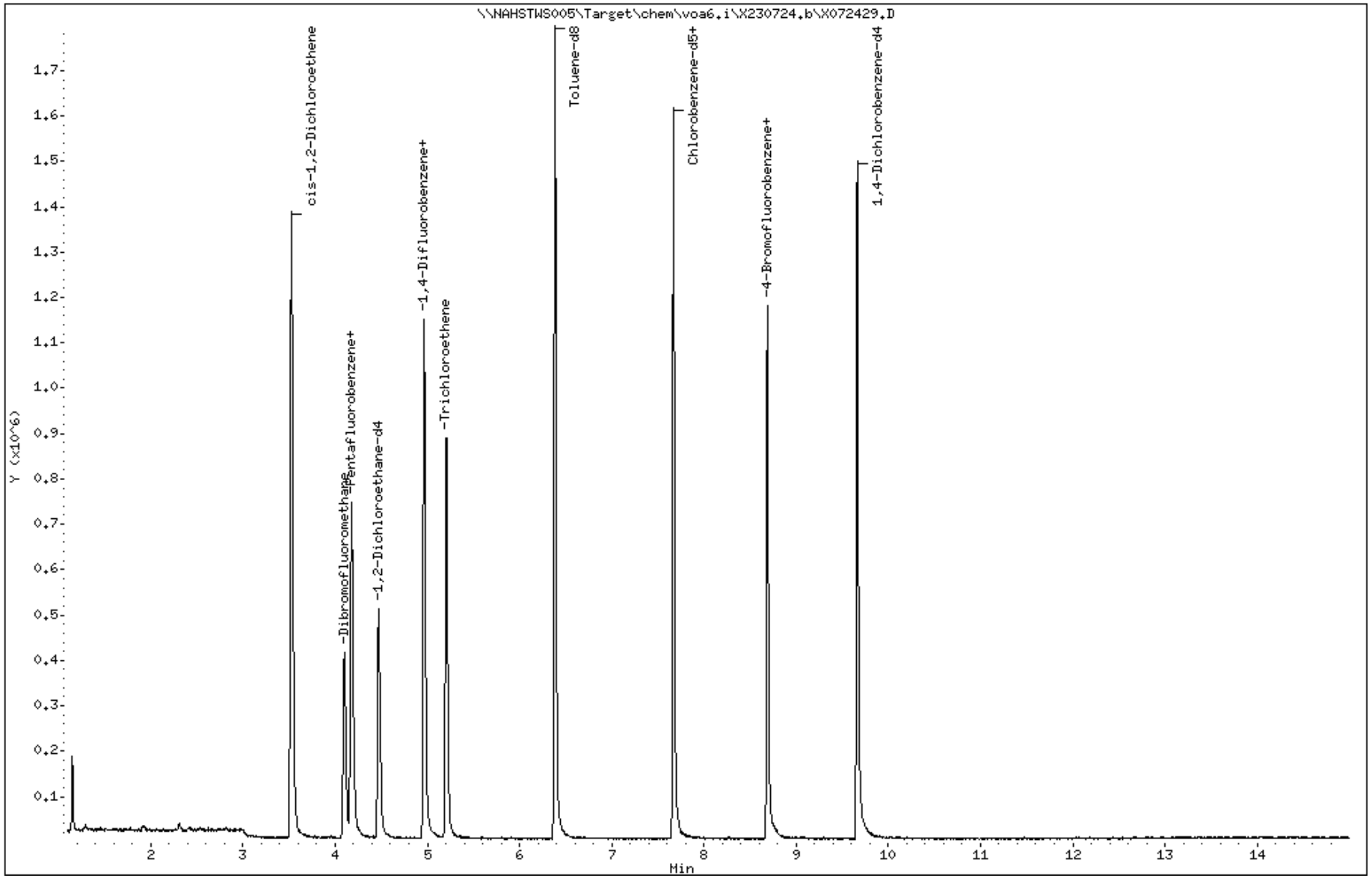
Sample Info: HS23071165-01;HS23071165-01;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072429.D

Date : 24-JUL-2023 20:29

Client ID: HS23071165-01

Instrument: voa6.i

Sample Info: HS23071165-01;HS23071165-01;;;

Purge Volume: 5.0

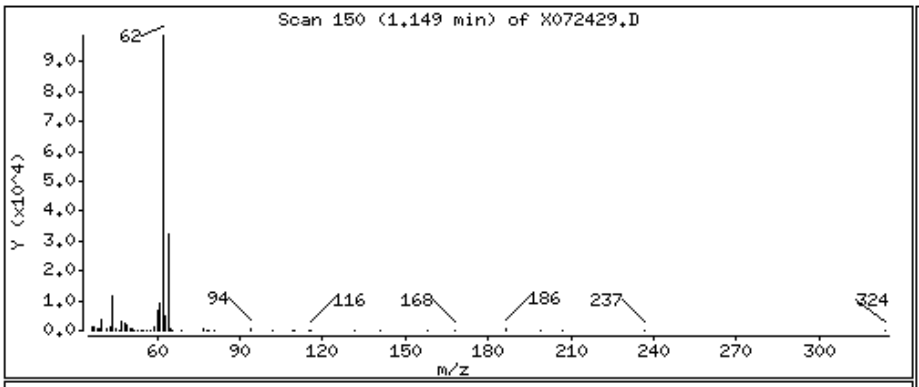
Operator: PC

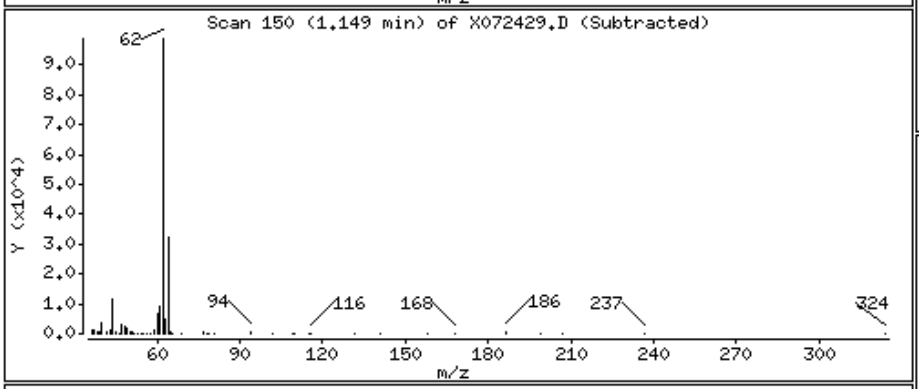
Column phase: DB624

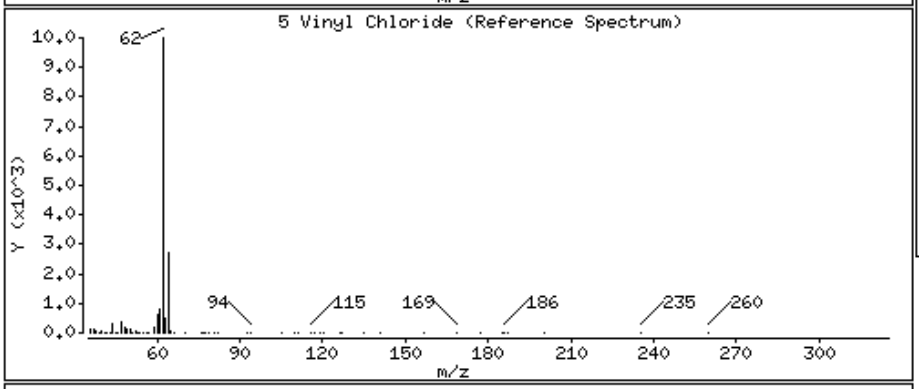
Column diameter: 0.18

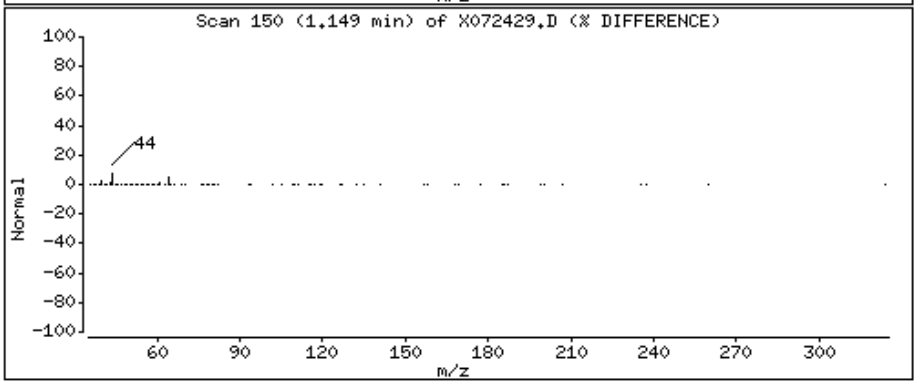
5 Vinyl Chloride

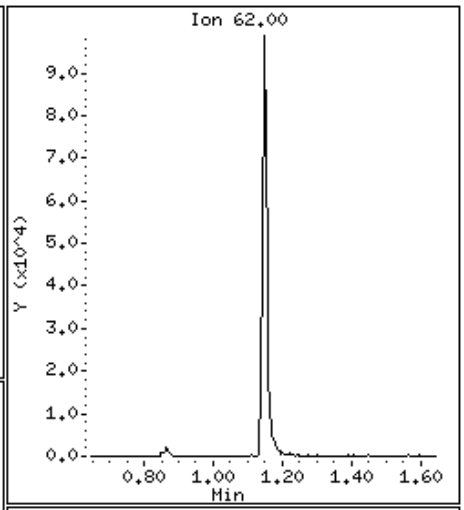
Concentration: 1323.05 ug/l

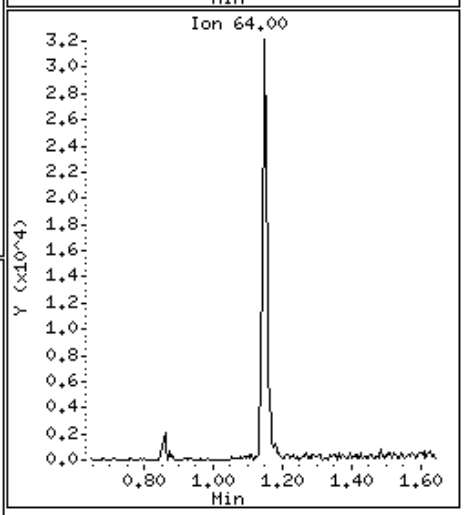












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072429.D Page 3

Date : 24-JUL-2023 20:29

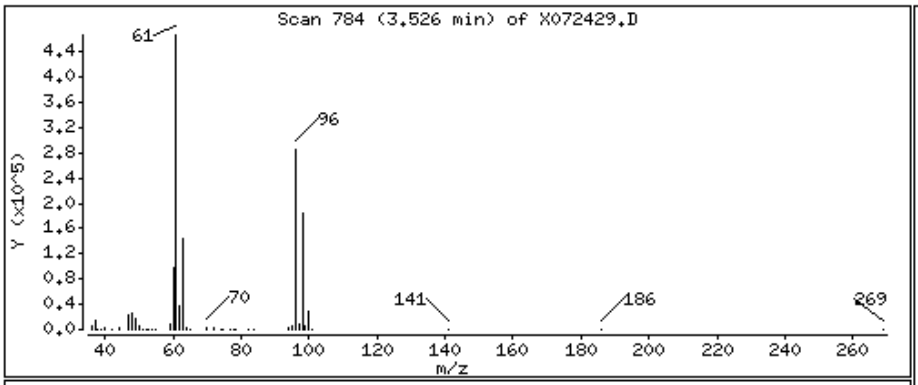
Client ID: HS23071165-01 Instrument: voa6.i

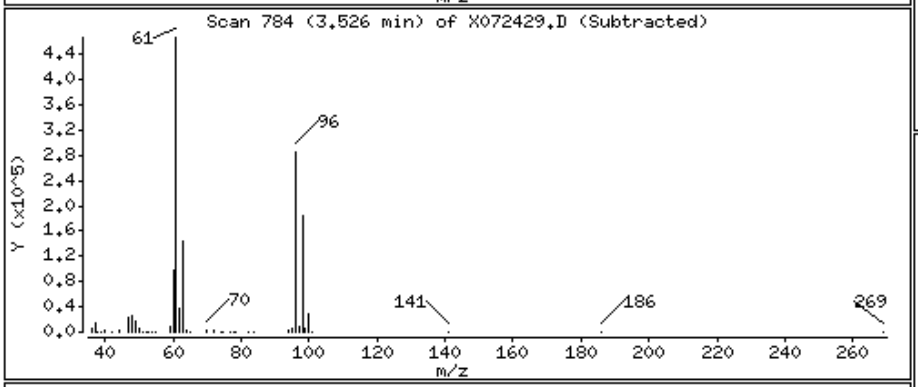
Sample Info: HS23071165-01;HS23071165-01;;;

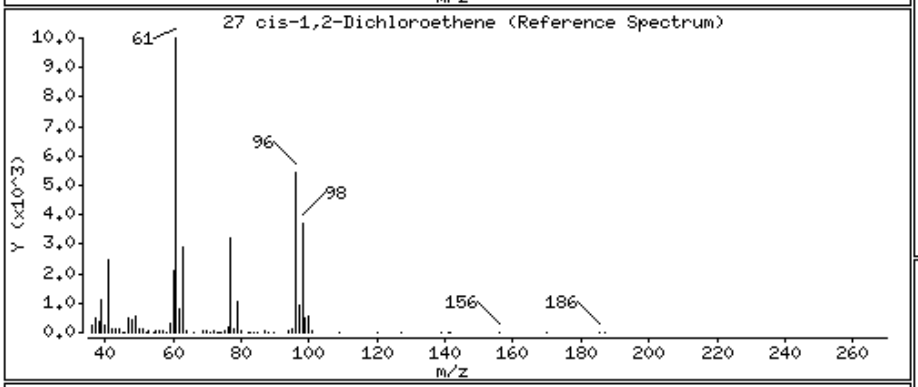
Purge Volume: 5.0 Operator: PC

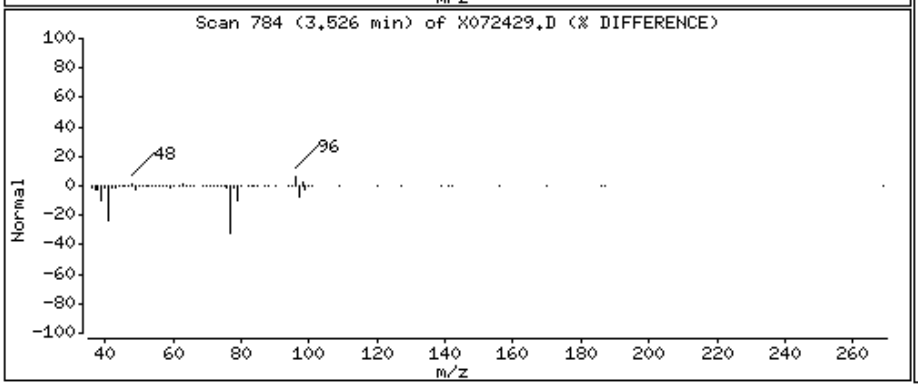
Column phase: DB624 Column diameter: 0.18

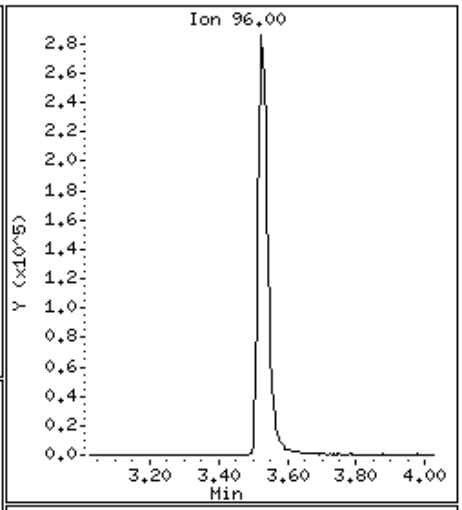
27 cis-1,2-Dichloroethene Concentration: 9196.06 ug/l

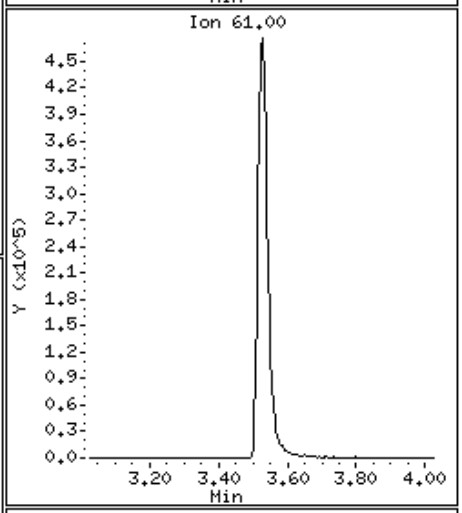


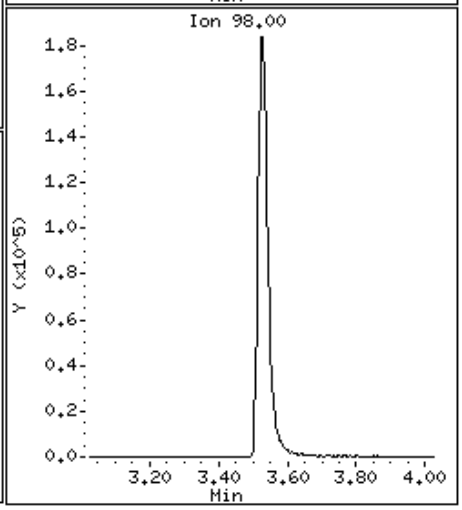












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072429.D Page 4

Date : 24-JUL-2023 20:29

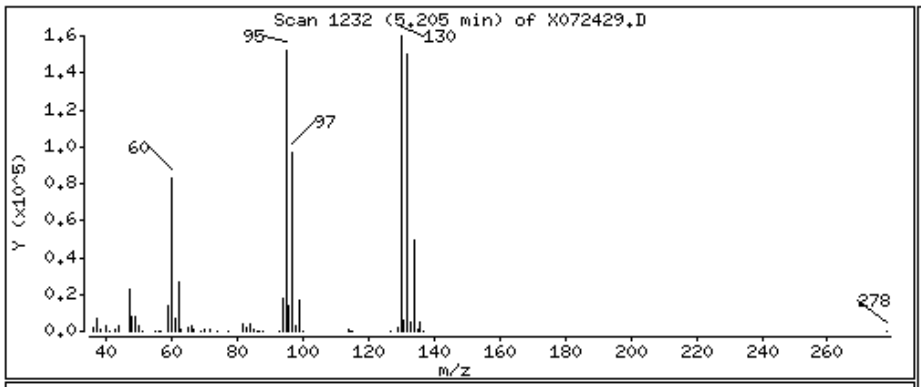
Client ID: HS23071165-01 Instrument: voa6.i

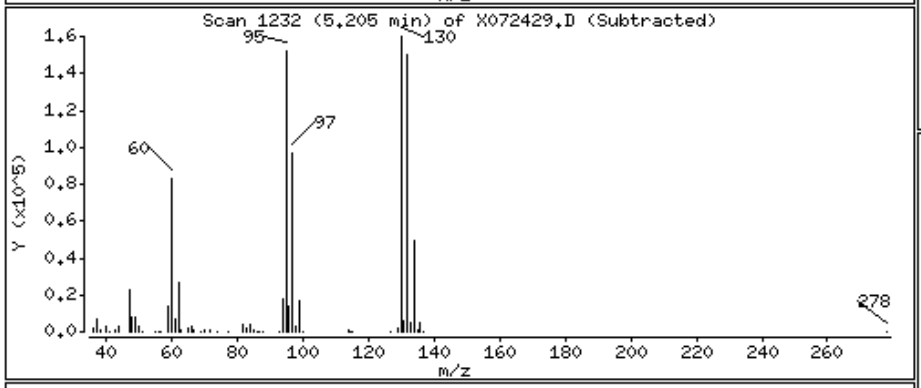
Sample Info: HS23071165-01;HS23071165-01;;;

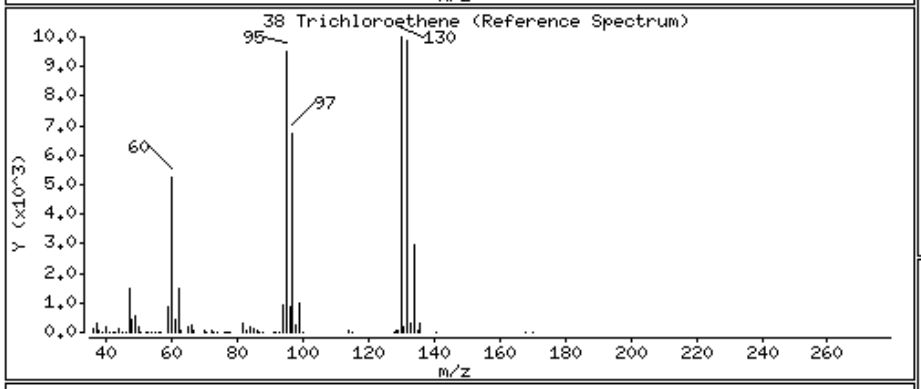
Purge Volume: 5.0 Operator: PC

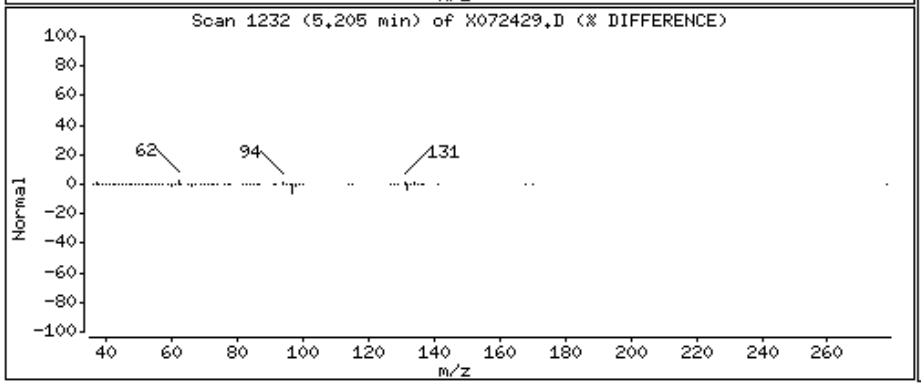
Column phase: DB624 Column diameter: 0.18

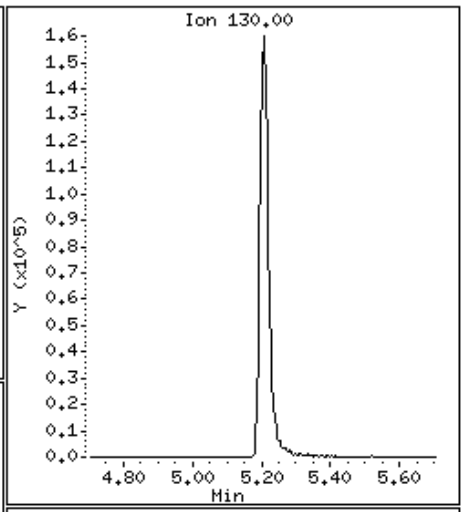
38 Trichloroethene Concentration: 4923.56 ug/l

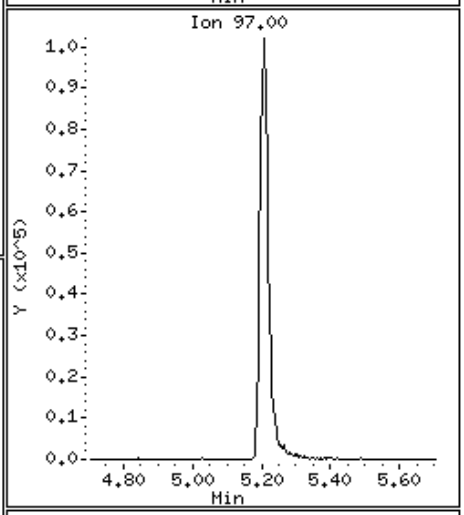


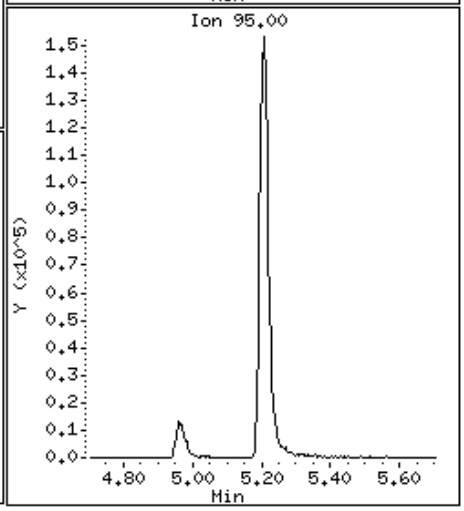












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072429.D
Inj Date : 24-JUL-2023 20:29
InstruID : voa6.i
LabSampID : HS23071165-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072430.D Page 1
Report Date: 27-Jul-2023 13:09

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072430.D
Lab Smp Id: HS23071165-03 Client Smp ID: HS23071165-03
Inj Date : 24-JUL-2023 20:49
Operator : PC Inst ID: voa6.i
Smp Info : HS23071165-03;HS23071165-03;;;
Misc Info : V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 28
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	100.000	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	4.174	(1.000)	585622	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.095	(0.981)	280431	52.2825	52.28
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.070)	365412	54.4973	54.49
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	894590	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	796254	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1033486	50.4112	50.41
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	377235	47.5612	47.56
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	420685	50.0000	
5 Vinyl Chloride	62	1.149	1.145	(0.275)	8648	1.14117	114.11(a)
27 cis-1,2-Dichloroethene	96	3.529	3.525	(0.844)	243507	38.5172	3851.71
38 Trichloroethene	130	5.205	5.205	(1.048)	492906	81.4376	8143.76

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

01323576

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072430.D

Date : 24-JUL-2023 20:49

Client ID: HS23071165-03

Instrument: voa6.i

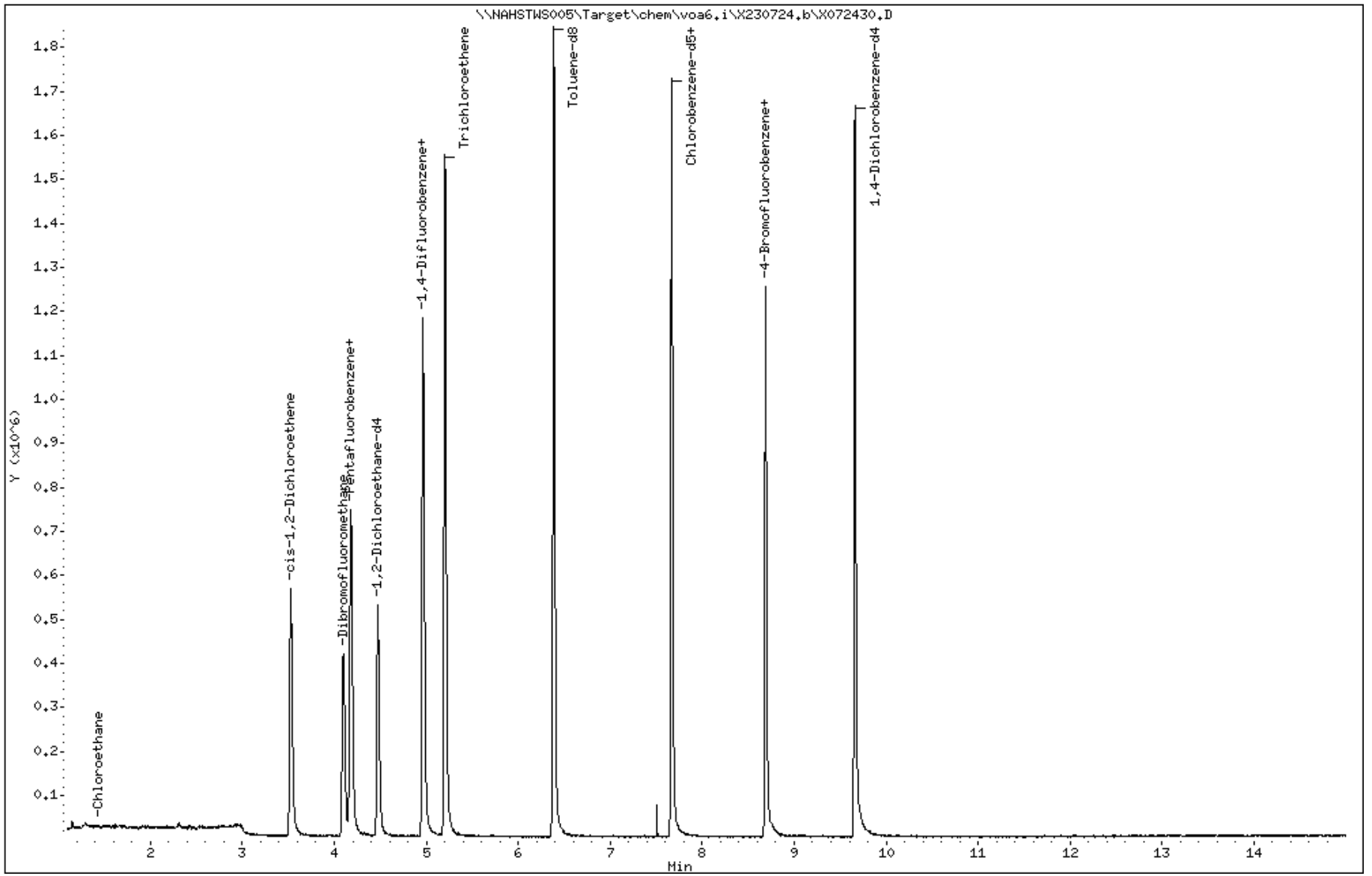
Sample Info: HS23071165-03;HS23071165-03;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072430.D

Date : 24-JUL-2023 20:49

Client ID: HS23071165-03

Instrument: voa6.i

Sample Info: HS23071165-03;HS23071165-03;;;

Purge Volume: 5.0

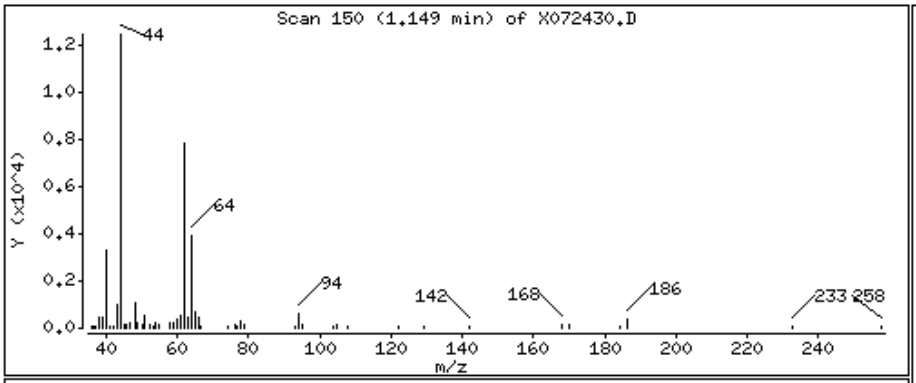
Operator: PC

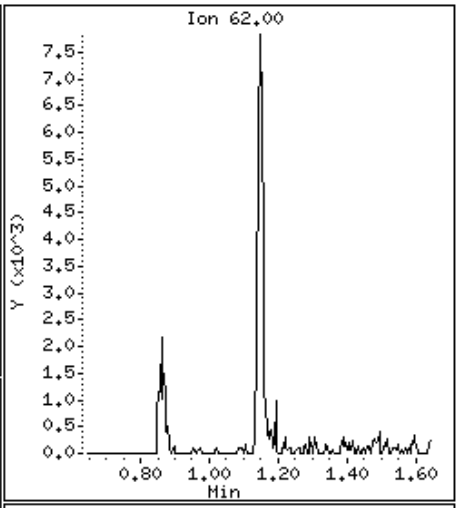
Column phase: DB624

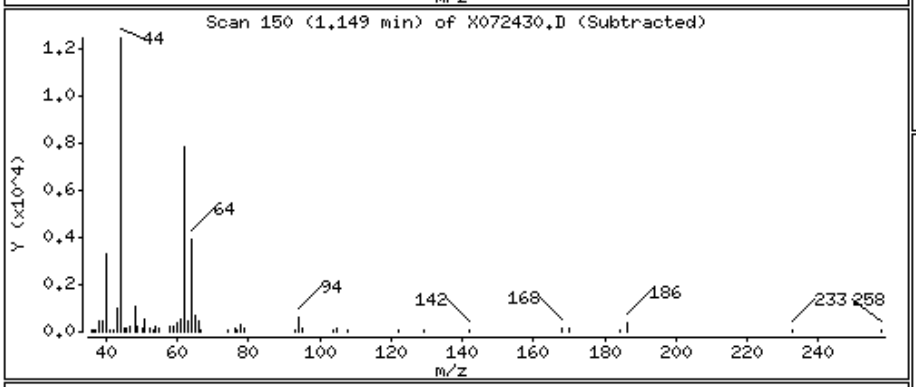
Column diameter: 0.18

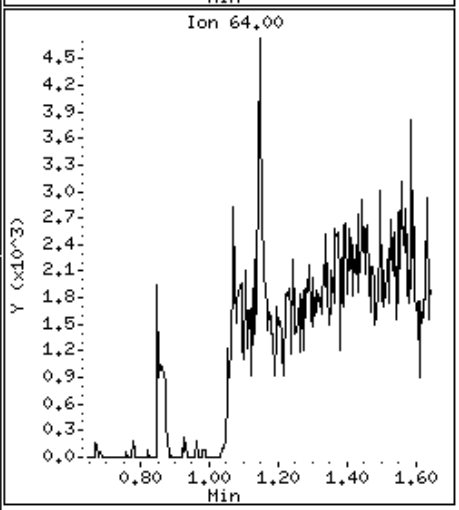
5 Vinyl Chloride

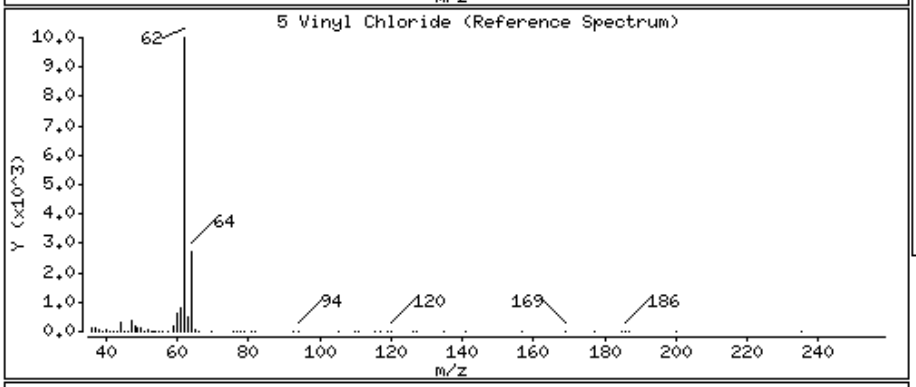
Concentration: 114.11 ug/l

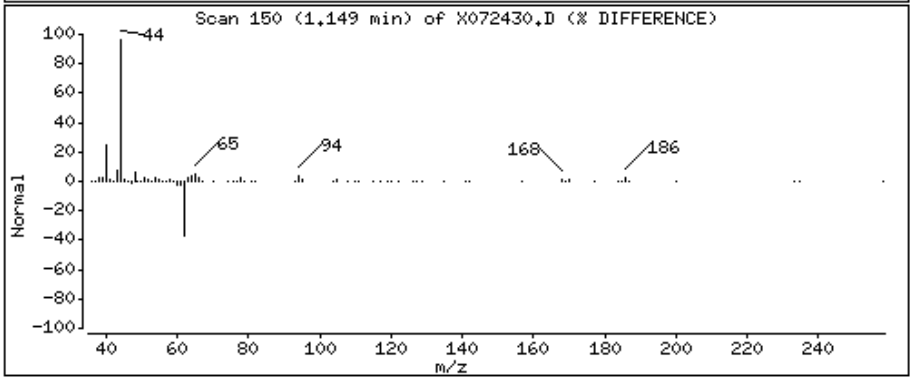












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072430.D

Date : 24-JUL-2023 20:49

Client ID: HS23071165-03

Instrument: voa6.i

Sample Info: HS23071165-03;HS23071165-03;;;

Purge Volume: 5.0

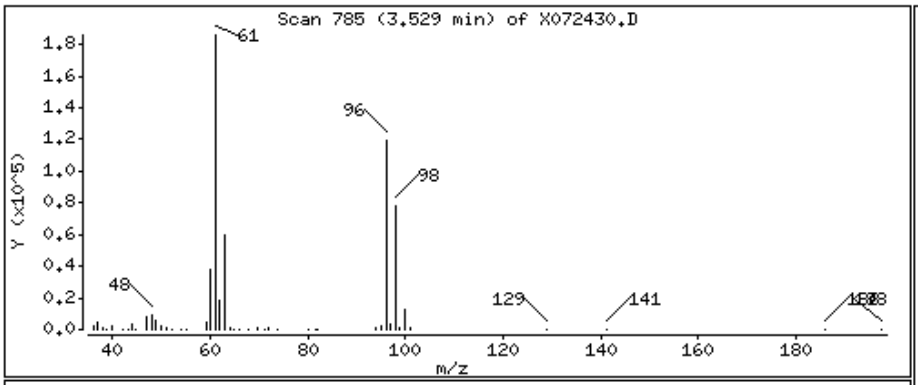
Operator: PC

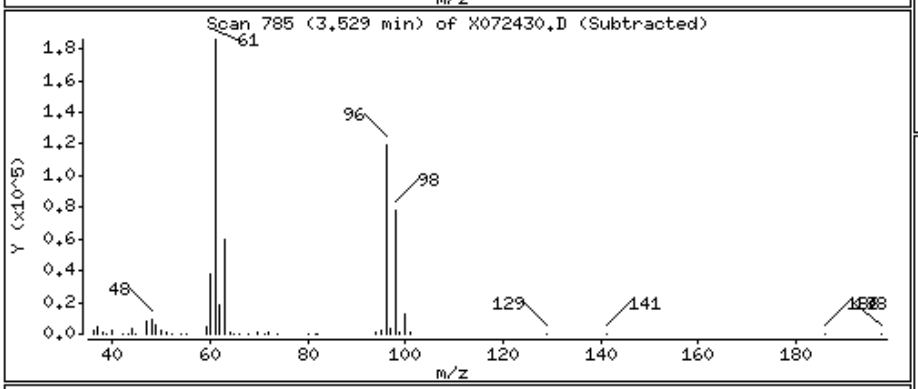
Column phase: DB624

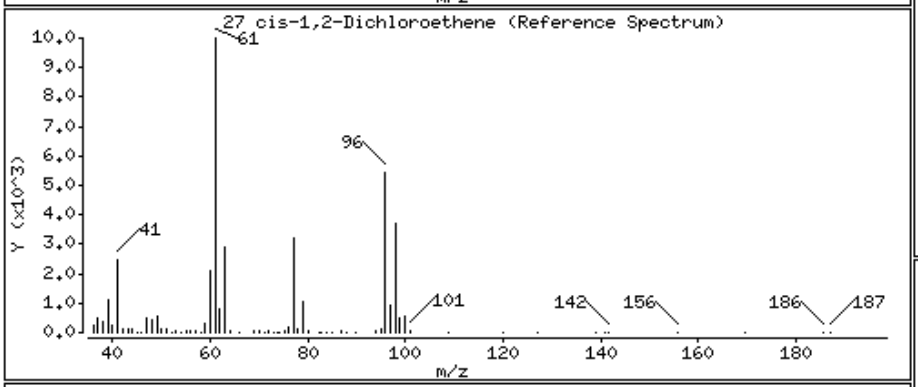
Column diameter: 0.18

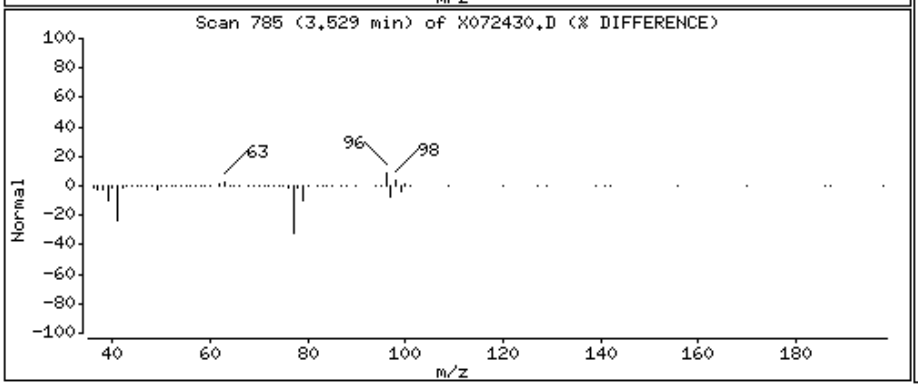
27 cis-1,2-Dichloroethene

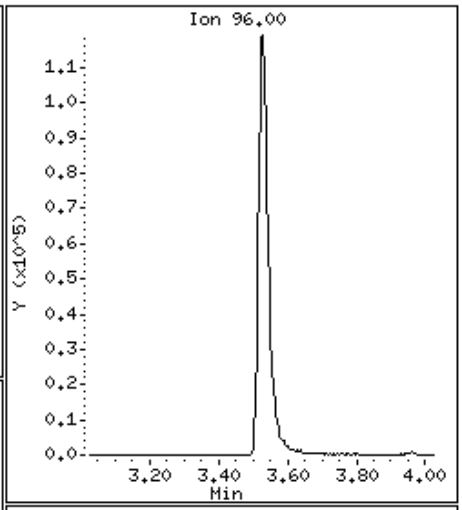
Concentration: 3851.71 ug/l

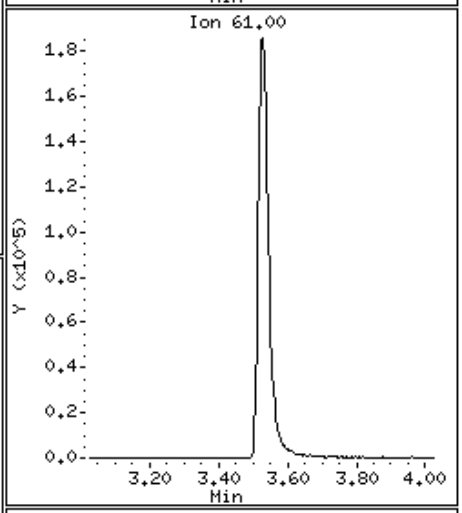


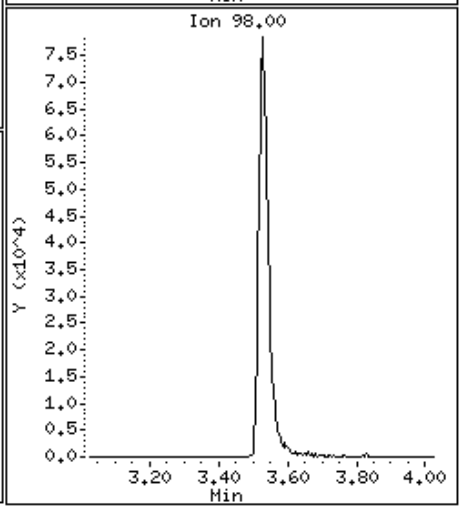












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072430.D

Date : 24-JUL-2023 20:49

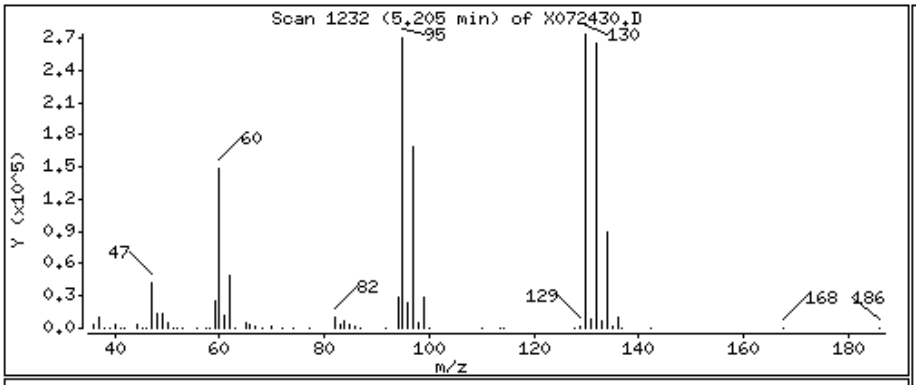
Client ID: HS23071165-03 Instrument: voa6.i

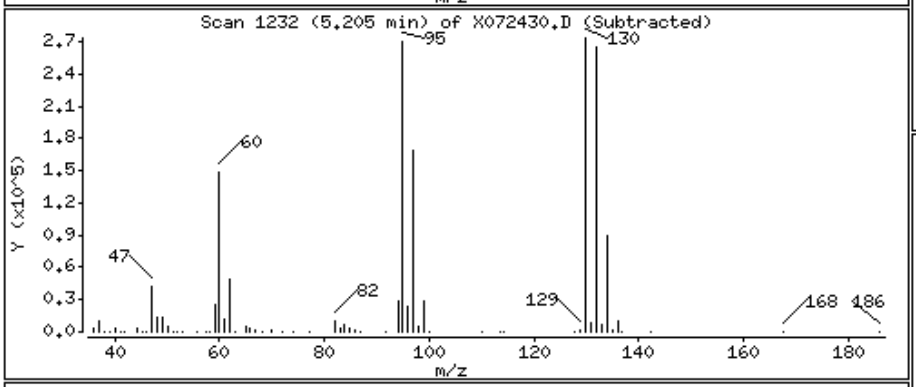
Sample Info: HS23071165-03;HS23071165-03;;;

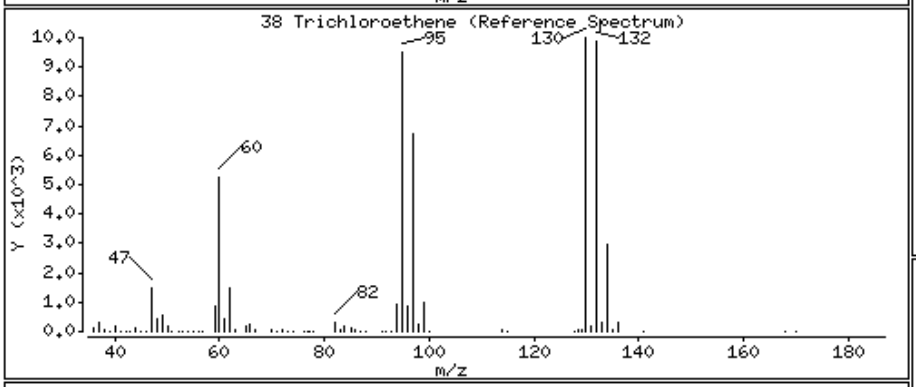
Purge Volume: 5.0 Operator: PC

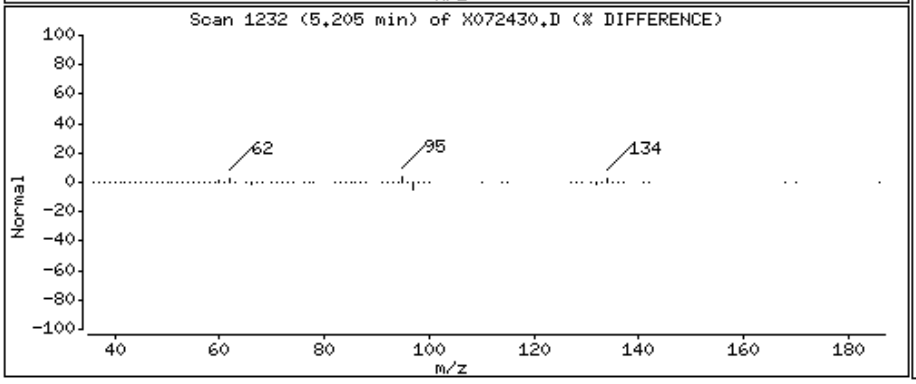
Column phase: DB624 Column diameter: 0.18

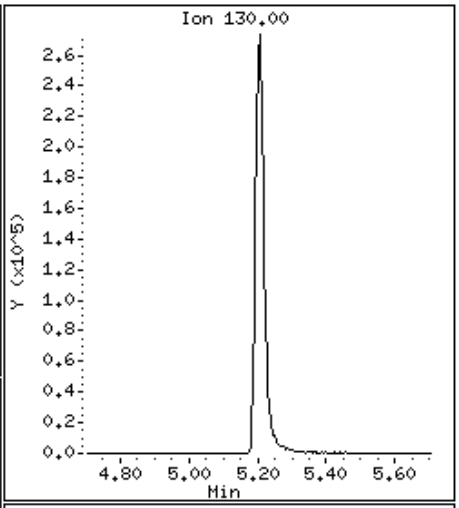
38 Trichloroethene Concentration: 8143.76 ug/l

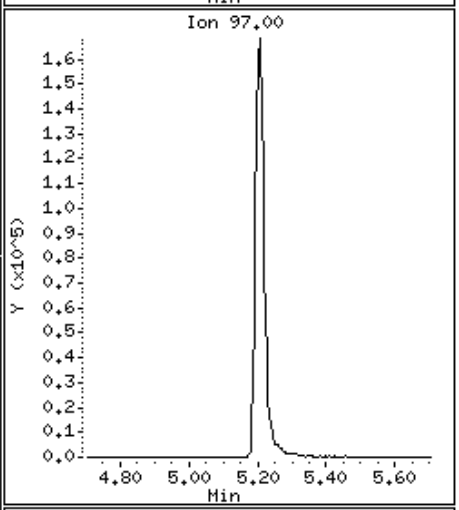


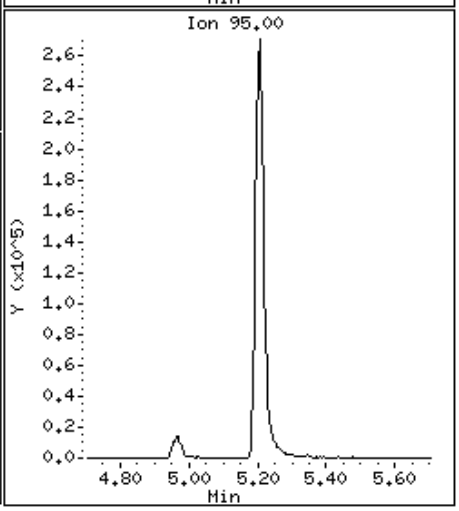












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072430.D
Inj Date : 24-JUL-2023 20:49
InstruID : voa6.i
LabSampID : HS23071165-03

NO MANUAL INTEGRATIONS

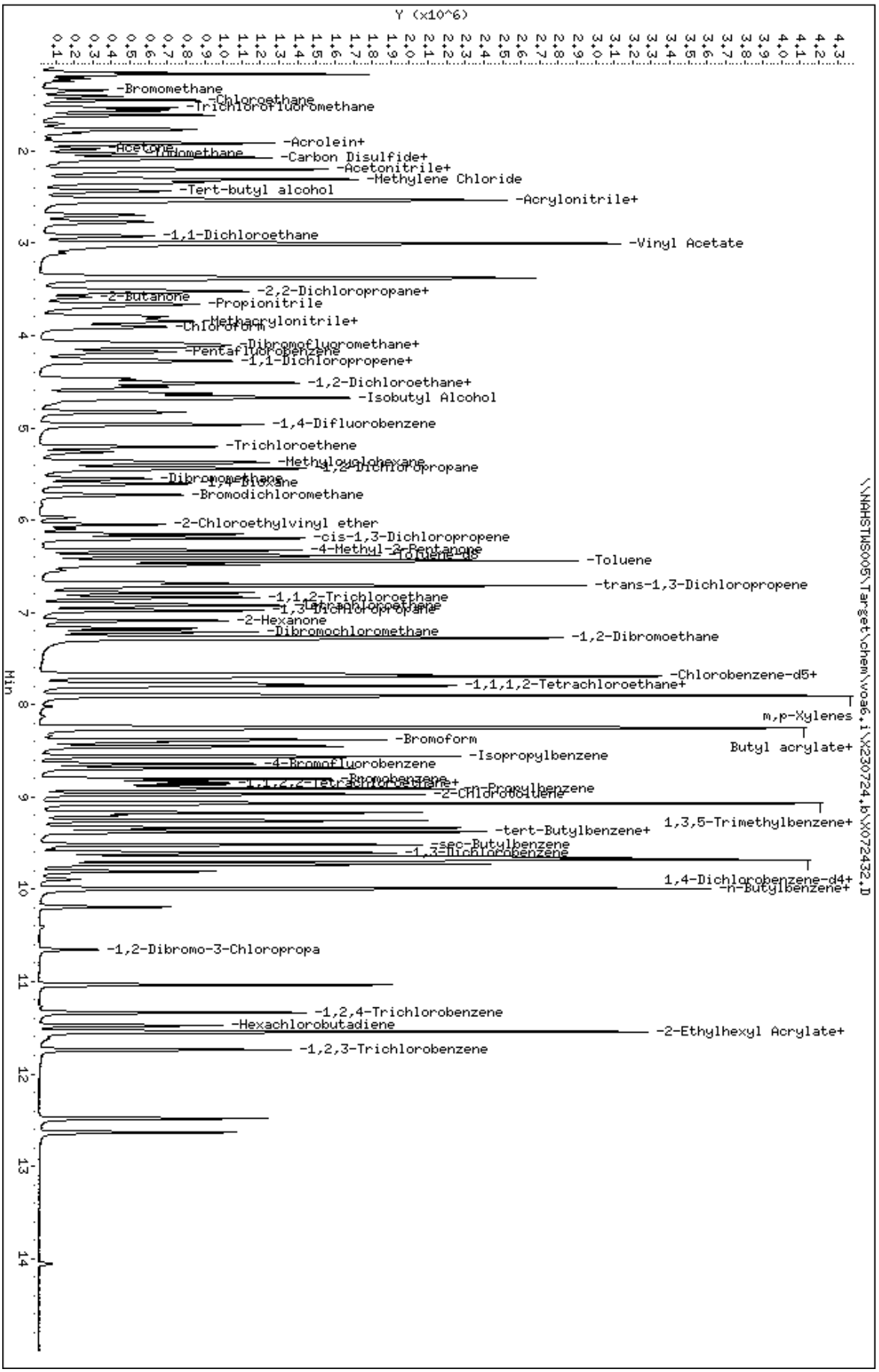
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072432.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 24-JUL-2023 21:30
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:09 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 30 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.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)	560014	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.980)	276454	50.0000	53.92
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	345467	50.0000	53.87
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	925139	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	855466	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1029981	50.0000	46.76
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	447627	50.0000	52.57
* 70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	467326	50.0000	
5 Vinyl Chloride	62	1.149	1.149	(0.275)	426394	50.0000	58.83
11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	200476	50.0000	48.86
17 Methylene Chloride	84	2.307	2.307	(0.552)	280941	50.0000	58.25
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.844)	312388	50.0000	51.67
33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	501390	50.0000	49.23
38 Trichloroethene	130	5.205	5.205	(1.048)	306052	50.0000	48.89
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	244243	50.0000	49.99
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	251469	50.0000	52.98



Data File: \\NAHSTMS005\Target\chem\voa6.i\X230724.b\X072432.D
Date : 24-JUL-2023 21:30
Client ID: CCV
Sample Info: CCV,CCV,2,,
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072432.D
Inj Date : 24-JUL-2023 21:30
InstruID : voa6.i
LabSampID : CCV

NO MANUAL INTEGRATIONS

01323584

right solutions.
right partner.

Raw Data VOA6 442290

Volatiles by EPA 8260

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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\voa6.i\X230725.b\X072501.D Page 1
Report Date: 25-Jul-2023 20:34

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072501.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 25-JUL-2023 10:08
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\X230725.b\bfb.m
Meth Date : 14-Mar-2023 15:45 Linh.Pham 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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.687	8.889	(0.000)	95	170112			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	49440			15.00- 40.00	29.06
8.687	8.889	(0.000)	75	80264			30.00- 60.00	47.18
8.687	8.889	(0.000)	96	13068			5.00- 9.00	7.68
8.687	8.889	(0.000)	173	1046			0.00- 2.00	0.86
8.687	8.889	(0.000)	174	121632			50.00- 0.00	71.50
8.687	8.889	(0.000)	175	10246			5.00- 9.00	8.42
8.687	8.889	(0.000)	176	116144			95.00- 101.00	95.49
8.687	8.889	(0.000)	177	8032			5.00- 9.00	6.92

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	29.06
75	30.00 - 60.00% of mass 95	47.18
96	5.00 - 9.00% of mass 95	7.68
173	Less than 2.00% of mass 174	0.61 (0.86)
174	Greater than 50.00% of mass 95	71.50
175	5.00 - 9.00% of mass 174	6.02 (8.42)
176	95.00 - 101.00% of mass 174	68.28 (95.49)
177	5.00 - 9.00% of mass 176	4.72 (6.92)

Data File: X072501.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 110

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2997	64.10	567	94.00	19480	138.70	119
37.10	12548	65.00	169	95.00	170112	139.50	75
38.10	9542	66.80	360	96.00	13068	140.90	1887
39.10	7098	68.00	17352	96.90	517	143.00	1534
40.10	4370	69.00	19208	98.10	1424	143.80	170
41.10	3024	70.10	1289	98.90	83	145.10	74
42.10	4165	71.00	351	103.10	150	145.90	388
43.10	2875	72.00	635	103.80	737	147.70	567
44.00	4668	73.00	5995	104.70	593	148.80	174
44.90	2333	74.10	28016	105.70	825	149.60	151
45.90	274	75.00	80264	106.90	1037	150.10	144
47.00	3512	76.10	7416	108.80	1120	152.90	315
48.00	1417	76.90	597	109.90	182	154.00	136
49.00	8792	78.20	797	111.90	146	154.90	484
50.10	49440	78.90	3752	113.30	131	156.80	341
51.00	14627	79.90	2029	113.70	120	158.80	249
52.00	764	81.00	4300	115.00	158	160.90	179
52.90	467	81.80	1184	115.70	615	171.00	131
54.00	424	82.80	407	116.70	798	172.80	1046
55.10	7082	83.10	376	118.00	418	174.00	121632
56.00	4103	85.10	520	118.90	962	174.90	10246
57.00	6554	86.10	204	126.90	221	175.90	116144
58.10	614	87.00	6575	128.00	611	177.00	8032
58.80	76	87.90	6495	128.90	345	177.90	266
59.90	2731	88.70	293	130.00	698	233.80	196
61.00	10342	90.80	613	131.00	173	235.80	148
62.00	6914	92.00	4116	134.80	240		
63.00	6530	92.90	6217	137.00	271		

Data File: \\nahstws005\target\chem\voa6.i\x230725.b\x072501.d Page 1

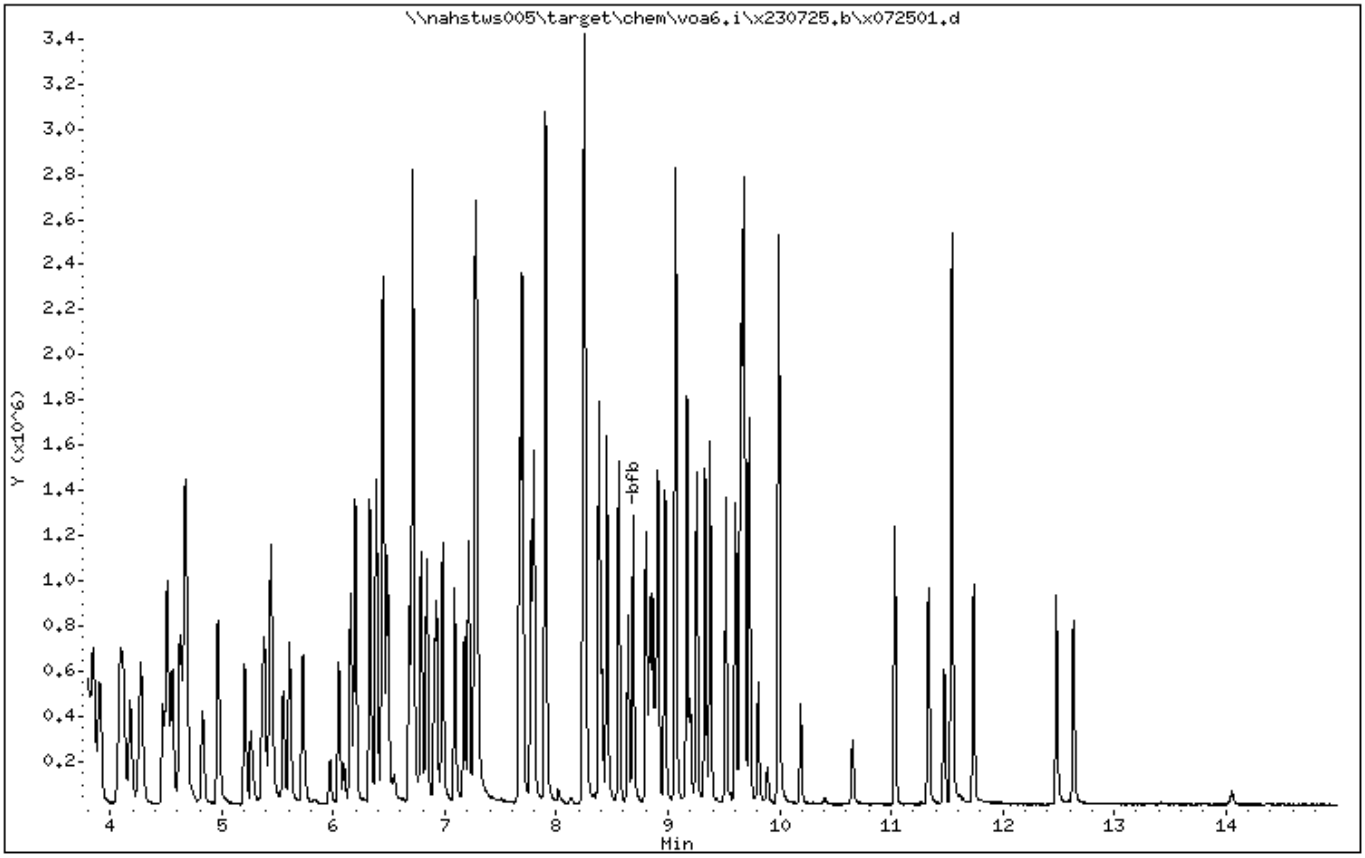
Date : 25-JUL-2023 10:08

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\x230725.b\x072501.d
Inj Date : 25-JUL-2023 10:08
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072502.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072502.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 25-JUL-2023 10:28
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.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)	575260	50.0000	
135 1,4-Dioxane	88	5.602	5.602	(1.340)	68501	1000.00	1002.08
140 1,3-Butadiene	54	1.171	1.171	(0.280)	429408	50.0000	58.09
25 Methacrylonitrile	41	3.821	3.821	(0.914)	487190	50.0000	65.61
12 Isobutyl Alcohol	43	4.680	4.680	(1.119)	1392841	1000.00	1277.31
13 Acetonitrile	39	2.202	2.202	(0.527)	487523	500.000	604.36
14 Allyl Chloride	41	2.202	2.202	(0.527)	1183127	50.0000	62.64
4 Propionitrile	54	3.656	3.656	(0.875)	672947	500.000	590.54
2 Dichlorodifluoromethane	85	0.980	0.980	(0.234)	252381	50.0000	43.04
3 Chloromethane	50	1.085	1.085	(0.260)	387693	50.0000	44.62
5 Vinyl Chloride	62	1.149	1.149	(0.275)	382136	50.0000	51.33
6 Bromomethane	94	1.344	1.344	(0.321)	123517	50.0000	40.09
7 Chloroethane	64	1.407	1.407	(0.337)	253127	50.0000	59.56
8 Trichlorofluoromethane	101	1.565	1.565	(0.374)	392898	50.0000	52.08
9 Acrolein	56	1.865	1.865	(0.446)	34201	100.000	156.36
10 Acetone	43	1.977	1.977	(0.473)	287659	100.000	127.67
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	214667	50.0000	50.93
15 Iodomethane	142	2.030	2.030	(0.485)	482696	100.000	87.63
16 Acrylonitrile	53	2.536	2.536	(0.606)	309145	100.000	110.28
17 Methylene Chloride	84	2.307	2.307	(0.552)	251567	50.0000	50.60

18	Methyl tert-butyl ether	73	2.539	2.539 (0.607)	744093	50.0000	47.47
19	Carbon Disulfide	76	2.075	2.075 (0.496)	1378741	100.000	104.07

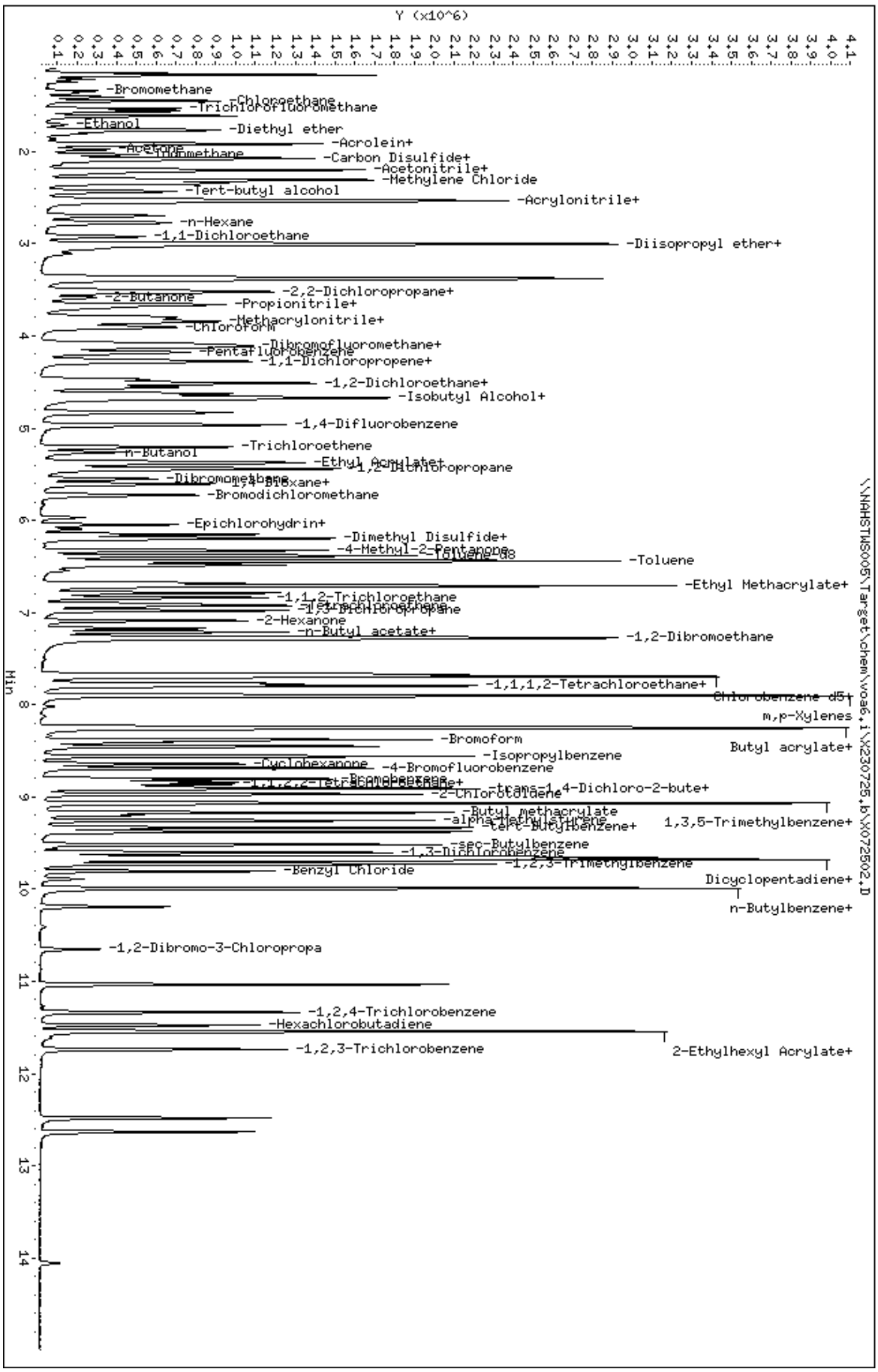
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	20 trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	213350	50.0000	43.76
	21 Vinyl Acetate	43	3.000	3.000	(0.718)	2316293	100.000	114.88
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	501109	50.0000	46.84
	24 2-Butanone	43	3.585	3.585	(0.857)	351224	100.000	114.64
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	411712	50.0000	49.58
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.844)	310147	50.0000	49.94
	28 Chloroform	83	3.908	3.908	(0.935)	519022	50.0000	47.41
	29 Bromochloromethane	128	3.795	3.795	(0.908)	162897	50.0000	46.80
$	30 Dibromofluoromethane	113	4.099	4.099	(0.980)	278162	50.0000	52.80
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	410960	50.0000	48.77
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	354488	50.0000	46.38
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	515833	50.0000	50.01
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	344118	50.0000	44.69
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	357202	50.0000	54.22
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	936985	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	1113809	50.0000	49.69
	38 Trichloroethene	130	5.208	5.208	(1.049)	296632	50.0000	46.79
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	407766	50.0000	47.49
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	248843	100.000	94.93
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	387989	50.0000	53.83
	44 Dibromomethane	93	5.553	5.553	(1.119)	193746	50.0000	47.49
	45 4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	954082	100.000	114.36
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	476954	50.0000	48.37
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	847733	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	1013985	50.0000	46.45
	50 Toluene	91	6.445	6.445	(0.841)	1119903	50.0000	49.07
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	394965	50.0000	47.51
	52 2-Hexanone	43	7.086	7.086	(0.924)	634187	100.000	115.72
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	232527	50.0000	48.03
	54 1,3-Dichloropropane	76	6.981	6.981	(0.911)	484561	50.0000	48.99
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	333514	50.0000	47.72
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	208903	50.0000	44.31
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	265372	50.0000	47.97
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	352180	50.0000	46.78
	59 Chlorobenzene	112	7.694	7.694	(1.003)	754964	50.0000	47.32
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	291042	50.0000	46.60
	61 Ethylbenzene	106	7.795	7.795	(1.017)	374825	50.0000	46.85
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	937266	100.000	93.39
	63 o-Xylene	106	8.237	8.237	(1.074)	450627	50.0000	47.41
	64 Styrene	104	8.256	8.256	(1.077)	803584	50.0000	48.47
	66 Bromoform	173	8.410	8.410	(1.097)	209469	50.0000	46.71
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1119211	50.0000	45.81
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	383373	50.0000	48.97
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	437075	50.0000	51.79
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	466038	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	300358	50.0000	48.35(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	1330831	50.0000	47.25
	74 Bromobenzene	156	8.803	8.803	(0.911)	330775	50.0000	45.38
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	918688	50.0000	43.54
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	846725	50.0000	44.56
	77 4-Chlorotoluene	91	9.066	9.066	(0.938)	972941	50.0000	46.60
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	790685	50.0000	43.70

79 1,2,4-Trimethylbenzene	105	9.377	9.377 (0.971)	934995	50.0000	44.19
81 sec-Butylbenzene	105	9.519	9.519 (0.985)	1116421	50.0000	46.29

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	979219	50.0000	44.45
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	566172	50.0000	44.58
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	602604	50.0000	43.28
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	874689	50.0000	47.40
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	564663	50.0000	45.23
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	55342	50.0000	43.16
	90 1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	344768	50.0000	40.21
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	160844	50.0000	41.14
	92 Naphthalene	128	11.540	11.540	(1.194)	906661	50.0000	42.72
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	323262	50.0000	40.31(M)
M	94 1,2-Dichloroethylene (total)	96				523497	100.000	(a)
	141 Cyclohexane	56	4.121	4.121	(0.986)	533634	50.0000	53.51
	138 Freon TF	101	1.917	1.917	(0.459)	201828	50.0000	55.79
	147 Methylcyclohexane	55	5.381	5.381	(1.084)	1070768	50.0000	54.14
	146 Methyl Acetate	43	2.232	2.232	(0.534)	325454	50.0000	63.56
	148 Tert-Butyl alcohol	59	2.434	2.434	(0.582)	715798	1000.00	985.87
	149 Isopropyl Alcohol	45	2.097	2.097	(0.502)	549491	1000.00	1219.67

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072502.D
Date : 25-JUL-2023 10:28
Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

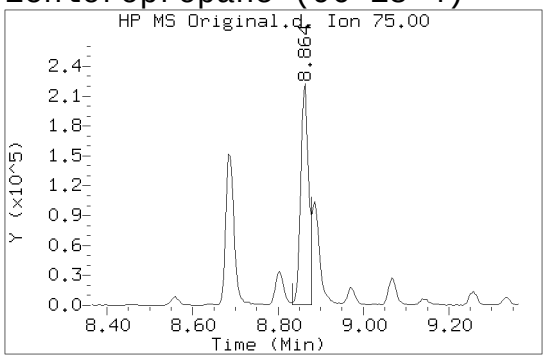
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072502.D
Inj Date : 25-JUL-2023 10:28
InstruID : voa6.i
LabSampID : CCV

1,2,3-Trichloropropane (96-18-4)

Reason Code:

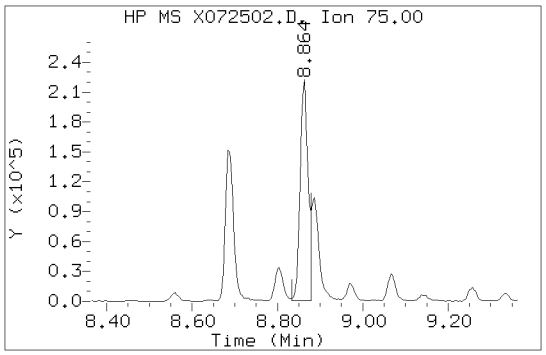
BEFORE

MASS
75
AREA
300358
HEIGHT
222013
27-Jul-2023
13:09
linh
pham



AFTER

MASS
75
AREA
300358
HEIGHT
222013
27-Jul-2023
13:09
linh
pham



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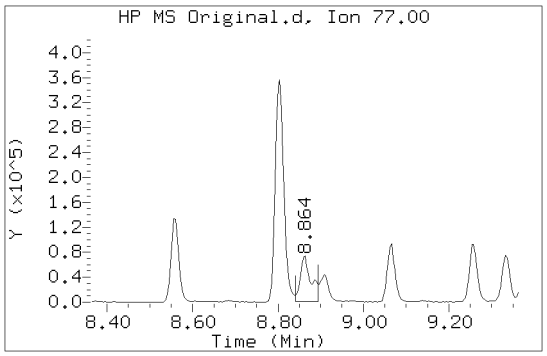

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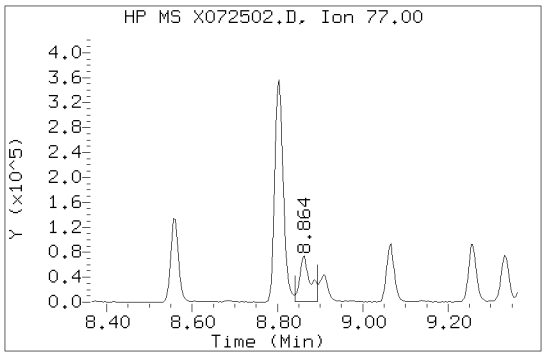

1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

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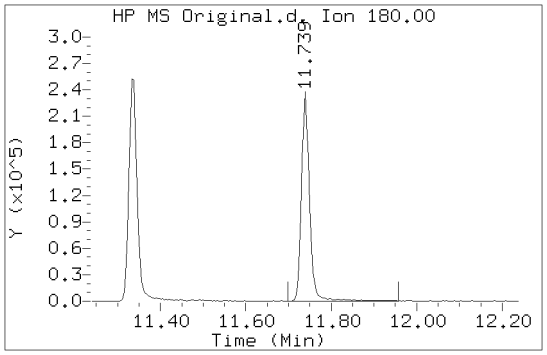

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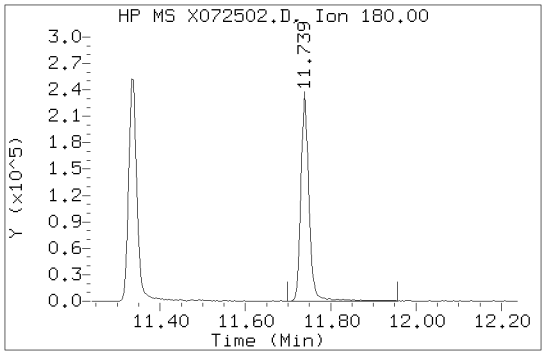

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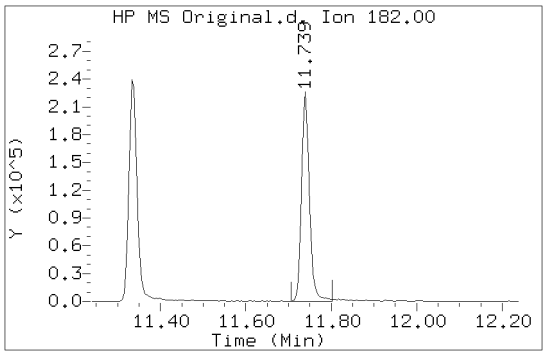

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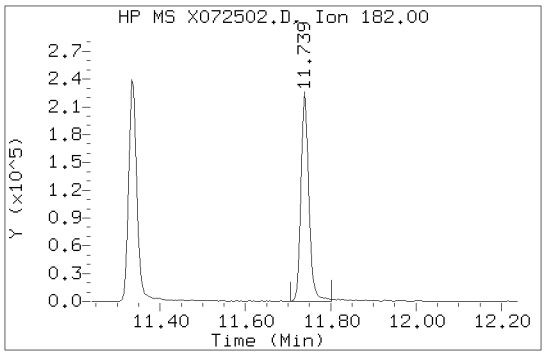

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Inj Date : 25-JUL-2023 10:28
InstruID : voa6.i
LabSampID : CCV

1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

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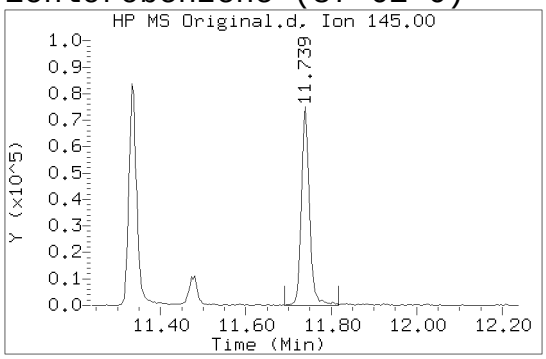

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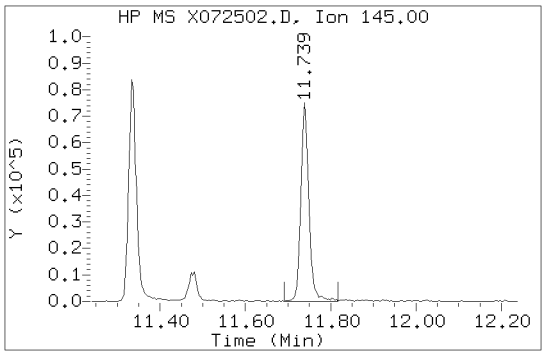

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072504.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072504.D
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Inj Date : 25-JUL-2023 11:09
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.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	4.181	4.181	(1.000)	570751	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.980)	284848	54.5219	54.52
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	371688	56.9048	56.90
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	885705	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	745492	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1000257	52.1126	52.11
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	360479	48.5522	48.55
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	369968	50.0000	

01323599

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072504.D

Date : 25-JUL-2023 11:09

Client ID: CCB

Instrument: voa6.i

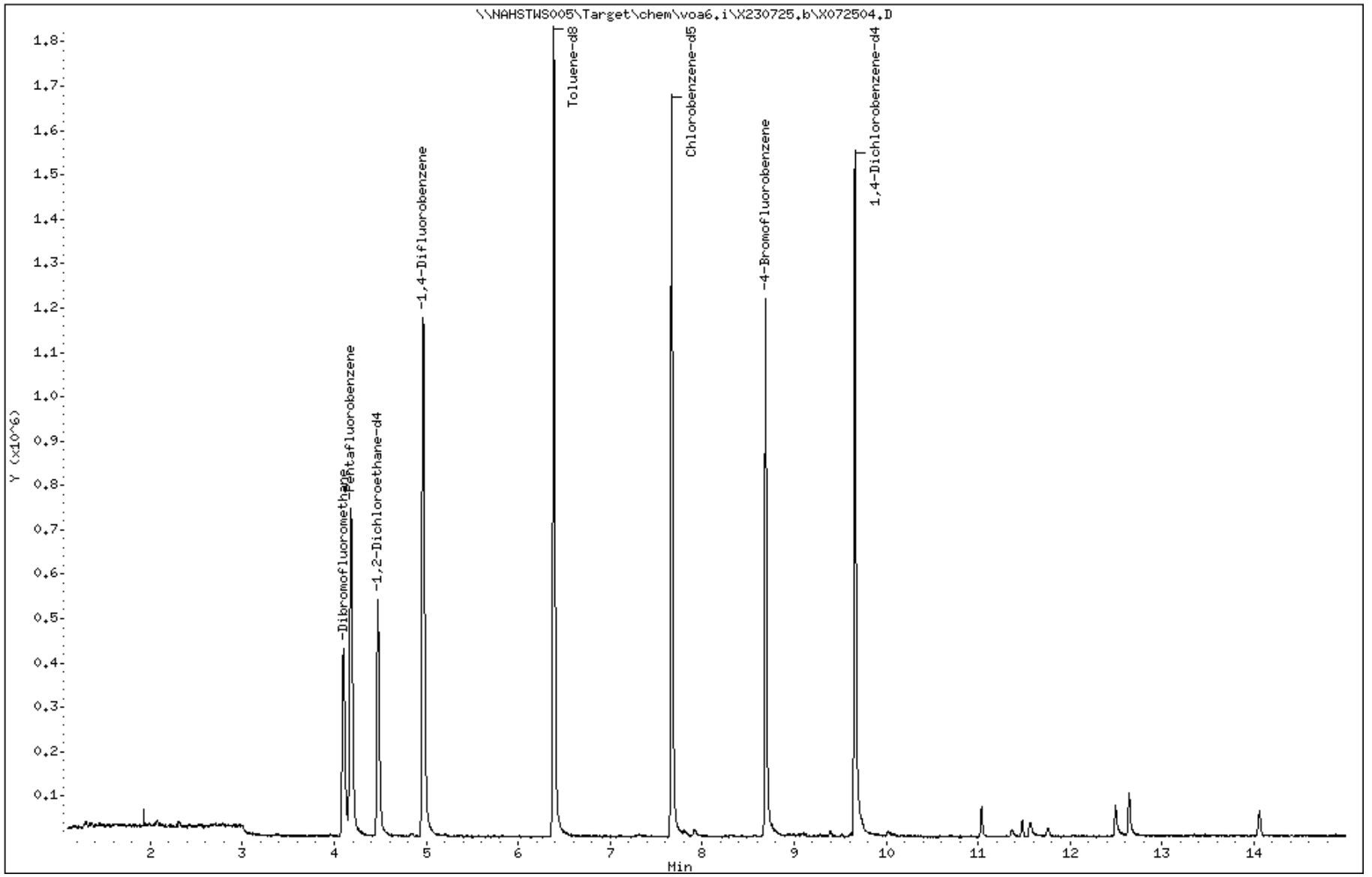
Sample Info: CCB;CCB;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Inj Date : 25-JUL-2023 11:09
InstruID : voa6.i
LabSampID : CCB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072505.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072505.D
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Inj Date : 25-JUL-2023 11:30
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-230725;VLCSW-230725;3;;LCS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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: 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	4.181	4.181	(1.000)	567256	50.0000	
135 1,4-Dioxane	88	5.606	5.602	(1.341)	26556	393.962	393.96(a)
140 1,3-Butadiene	54	1.167	1.171	(0.279)	196833	27.0040	27.00
25 Methacrylonitrile	41	3.837	3.821	(0.918)	192819	26.3343	26.33
12 Isobutyl Alcohol	43	4.680	4.680	(1.119)	520435	484.004	484.00
13 Acetonitrile	39	2.202	2.202	(0.527)	179039	225.080	225.07
14 Allyl Chloride	41	2.202	2.202	(0.527)	438566	23.5484	23.54
4 Propionitrile	54	3.664	3.656	(0.876)	269936	240.223	240.22(a)
2 Dichlorodifluoromethane	85	0.976	0.980	(0.234)	116772	20.7780	20.77
3 Chloromethane	50	1.085	1.085	(0.260)	187763	21.9148	21.91
5 Vinyl Chloride	62	1.149	1.149	(0.275)	176368	24.0265	24.02
6 Bromomethane	94	1.344	1.344	(0.321)	62997	20.7384	20.73
7 Chloroethane	64	1.407	1.407	(0.337)	104157	24.8557	24.85
8 Trichlorofluoromethane	101	1.565	1.565	(0.374)	179486	24.1276	24.12
9 Acrolein	56	1.865	1.865	(0.446)	11775	55.3279	55.32
10 Acetone	43	1.981	1.977	(0.474)	104794	44.0857	44.08
11 1,1-Dichloroethene	96	1.917	1.921	(0.459)	91691	22.0635	22.06
15 Iodomethane	142	2.033	2.030	(0.486)	148173	30.3257	30.32
16 Acrylonitrile	53	2.539	2.536	(0.607)	132348	47.8784	47.87
17 Methylene Chloride	84	2.307	2.307	(0.552)	105219	20.6508	20.65

18 Methyl tert-butyl ether	73	2.539	2.539 (0.607)	309248	20.0084	20.00
19 Carbon Disulfide	76	2.075	2.075 (0.496)	550591	42.1482	42.14

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072505.D Page 2
Report Date: 27-Jul-2023 13:10

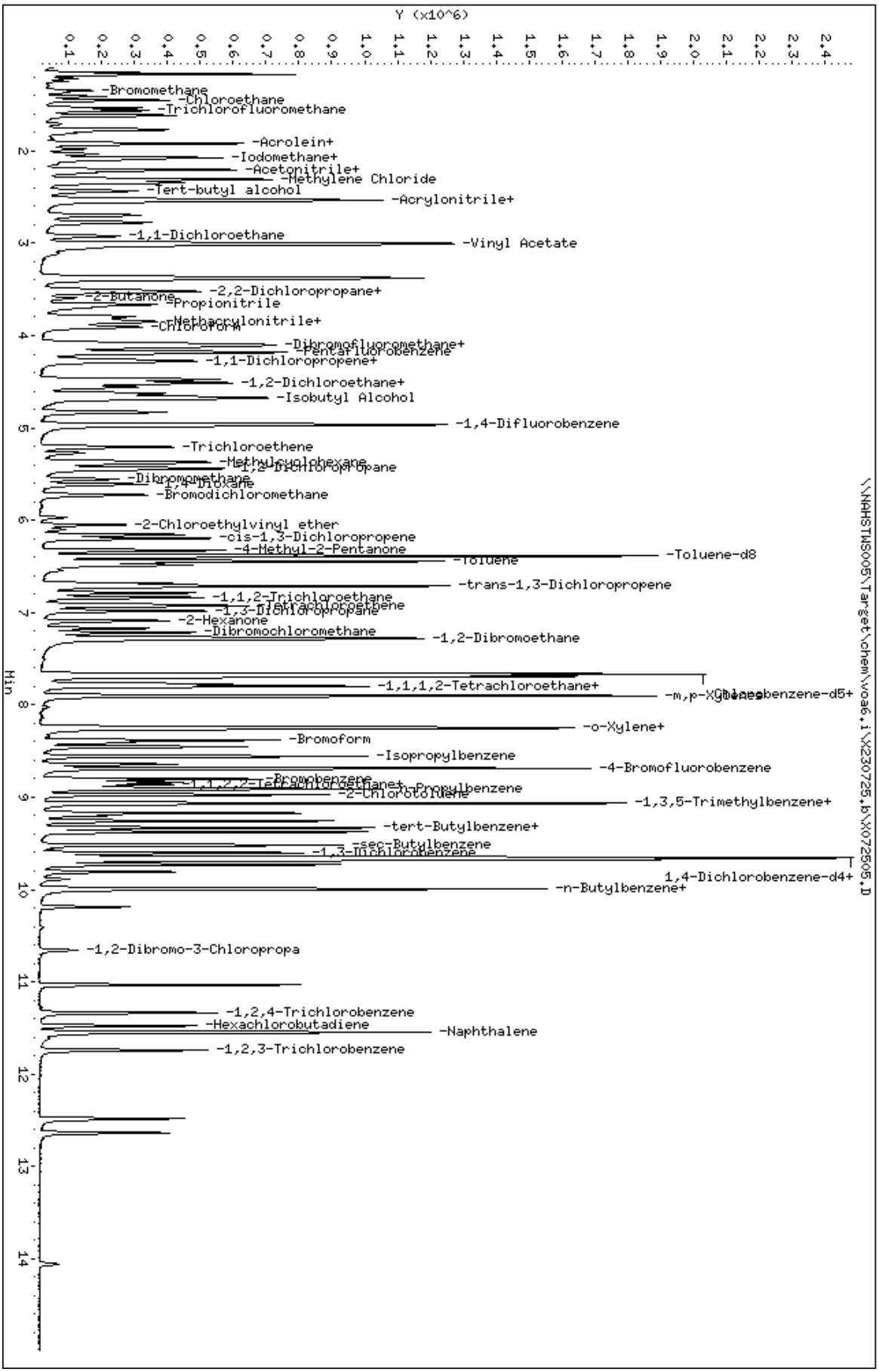
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	20 trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	98095	20.4065	20.40
	21 Vinyl Acetate	43	3.001	3.000	(0.718)	990674	49.8314	49.83
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	223840	21.2196	21.21
	24 2-Butanone	43	3.589	3.585	(0.858)	127523	42.2142	42.21
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	178207	21.8800	21.88
	27 cis-1,2-Dichloroethene	96	3.525	3.529	(0.843)	135098	22.0612	22.06
	28 Chloroform	83	3.908	3.908	(0.935)	222720	20.6345	20.63
	29 Bromochloromethane	128	3.795	3.795	(0.908)	69916	20.3724	20.37
$	30 Dibromofluoromethane	113	4.099	4.099	(0.980)	284136	54.7235	54.72
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	185478	22.3229	22.32
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	157733	20.5093	20.50
	33 1,2-Dichloroethane	62	4.560	4.556	(0.918)	213814	20.6002	20.60
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	157272	20.2982	20.29
$	35 1,2-Dichloroethane-d4	65	4.470	4.474	(1.069)	373109	57.4806	57.48
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	942875	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	473030	20.9742	20.97
	38 Trichloroethene	130	5.209	5.208	(1.049)	128336	20.1178	20.11
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	168213	19.4723	19.47
	41 2-Chloroethylvinyl ether	63	6.052	6.048	(1.219)	105016	39.8159	39.81
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	159725	22.0249	22.02
	44 Dibromomethane	93	5.553	5.553	(1.119)	81033	19.7398	19.73
	45 4-Methyl-2-Pentanone	43	6.326	6.325	(0.825)	384968	46.2041	46.20
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	188100	18.9577	18.95
*	47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	846696	50.0000	
$	48 Toluene-d8	98	6.386	6.385	(0.833)	1039336	47.6763	47.67
	50 Toluene	91	6.446	6.445	(0.841)	492710	21.6178	21.61
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	157532	18.8346	18.83
	52 2-Hexanone	43	7.087	7.086	(0.924)	258150	47.1659	47.16
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	100511	20.7886	20.78
	54 1,3-Dichloropropane	76	6.982	6.981	(0.911)	200750	20.3237	20.32
	55 Dibromochloromethane	129	7.177	7.173	(0.936)	134118	19.2149	19.21
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	101462	21.5478	21.54
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	109614	19.8397	19.83
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	165269	21.8184	21.81
	59 Chlorobenzene	112	7.690	7.694	(1.003)	331637	20.8156	20.81
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.772	(1.014)	124609	19.9782	19.97
	61 Ethylbenzene	106	7.795	7.795	(1.017)	168987	21.1518	21.15
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	437548	43.6552	43.65
	63 o-Xylene	106	8.241	8.237	(1.075)	202596	21.3453	21.34
	64 Styrene	104	8.260	8.256	(1.077)	344877	20.8312	20.83
	66 Bromoform	173	8.410	8.410	(1.097)	86989	19.4246	19.42
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	524252	21.4885	21.48
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	157404	20.5532	20.55
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	454714	53.9715	53.97
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.662	(1.000)	455950	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.918)	118161	19.4433	19.44(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	614984	22.3202	22.32
	74 Bromobenzene	156	8.803	8.803	(0.912)	142700	20.0115	20.01
	75 1,3,5-Trimethylbenzene	105	9.062	9.066	(0.938)	423745	20.5295	20.52
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	390343	21.0015	21.00
	77 4-Chlorotoluene	91	9.070	9.066	(0.939)	444742	21.7753	21.77
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	379352	21.4312	21.43

79 1,2,4-Trimethylbenzene	105	9.377	9.377 (0.971)	423171	20.4443	20.44
81 sec-Butylbenzene	105	9.519	9.519 (0.986)	529091	22.4248	22.42

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	82 p-Isopropyltoluene	119	9.647	9.647	(0.999)	450554	20.9047	20.90
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	250025	20.1267	20.12
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	274431	20.1487	20.14
	87 n-Butylbenzene	91	9.992	9.992	(1.035)	389445	21.5749	21.57
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.035)	254576	20.8448	20.84
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	23868	19.6355	19.63
	90 1,2,4-Trichlorobenzene	180	11.338	11.334	(1.174)	146953	17.5191	17.51
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	73088	20.3732	20.37
	92 Naphthalene	128	11.544	11.540	(1.195)	368997	17.7732	17.77
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.216)	136514	17.4019	17.40
M	94 1,2-Dichloroethylene (total)	96				233193	42.4677	42.46
M	95 Xylenes (total)	106				640144	65.0006	65.00
	141 Cyclohexane	56	4.118	4.121	(0.985)	272440	27.7078	27.70
	138 Freon TF	101	1.917	1.917	(0.459)	93338	28.2011	28.20
	147 Methylcyclohexane	55	5.388	5.381	(1.085)	423363	21.2729	21.27
	146 Methyl Acetate	43	2.236	2.232	(0.535)	123223	24.4081	24.40
	148 Tert-Butyl alcohol	59	2.435	2.434	(0.582)	295014	412.057	412.05
	149 Isopropyl Alcohol	45	2.093	2.097	(0.501)	207183	466.363	466.36

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



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Purge Volume: 5.0
Column phase: DB624

Instrument: voa6,i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072505.D
Inj Date : 25-JUL-2023 11:30
InstruID : voa6.i
LabSampID : VLCSW-230725

1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

MASS
75
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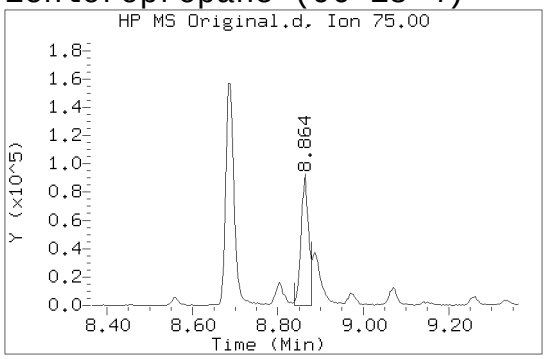
HEIGHT
92554
27-Jul-2023
13:09
linh
pham



AFTER

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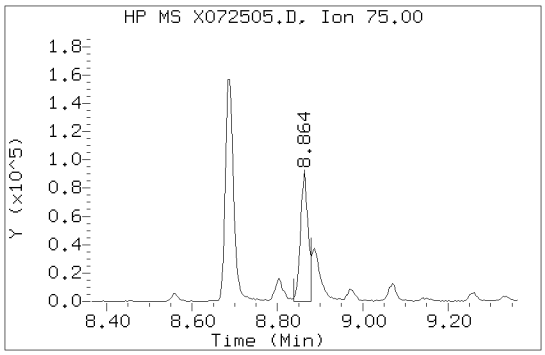

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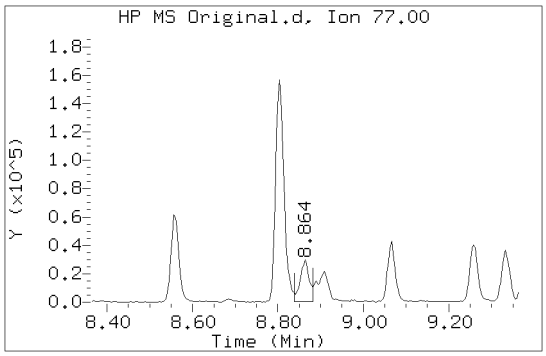

AFTER

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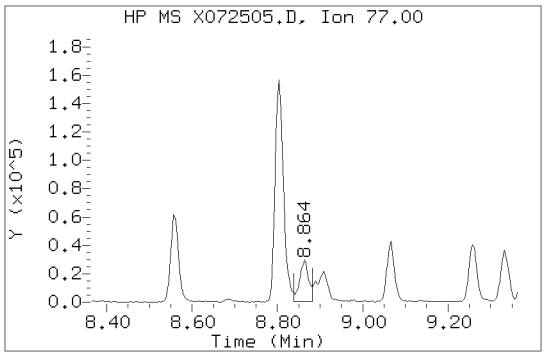

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072507.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072507.D
Lab Smp Id: VBLKW-230725 Client Smp ID: VBLKW-230725
Inj Date : 25-JUL-2023 12:11
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-230725;VBLKW-230725;3;;BLANK
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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: 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	4.181	4.181	(1.000)	585803	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.099	(0.981)	292572	54.5620	54.56
$ 35 1,2-Dichloroethane-d4	65	4.470	4.474	(1.069)	378446	56.4458	56.44
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	919826	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	787286	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1039232	51.2689	51.26
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	381759	48.6900	48.68
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	400742	50.0000	

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Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072507.D

Date : 25-JUL-2023 12:11

Client ID: VBLKW-230725

Instrument: voa6.i

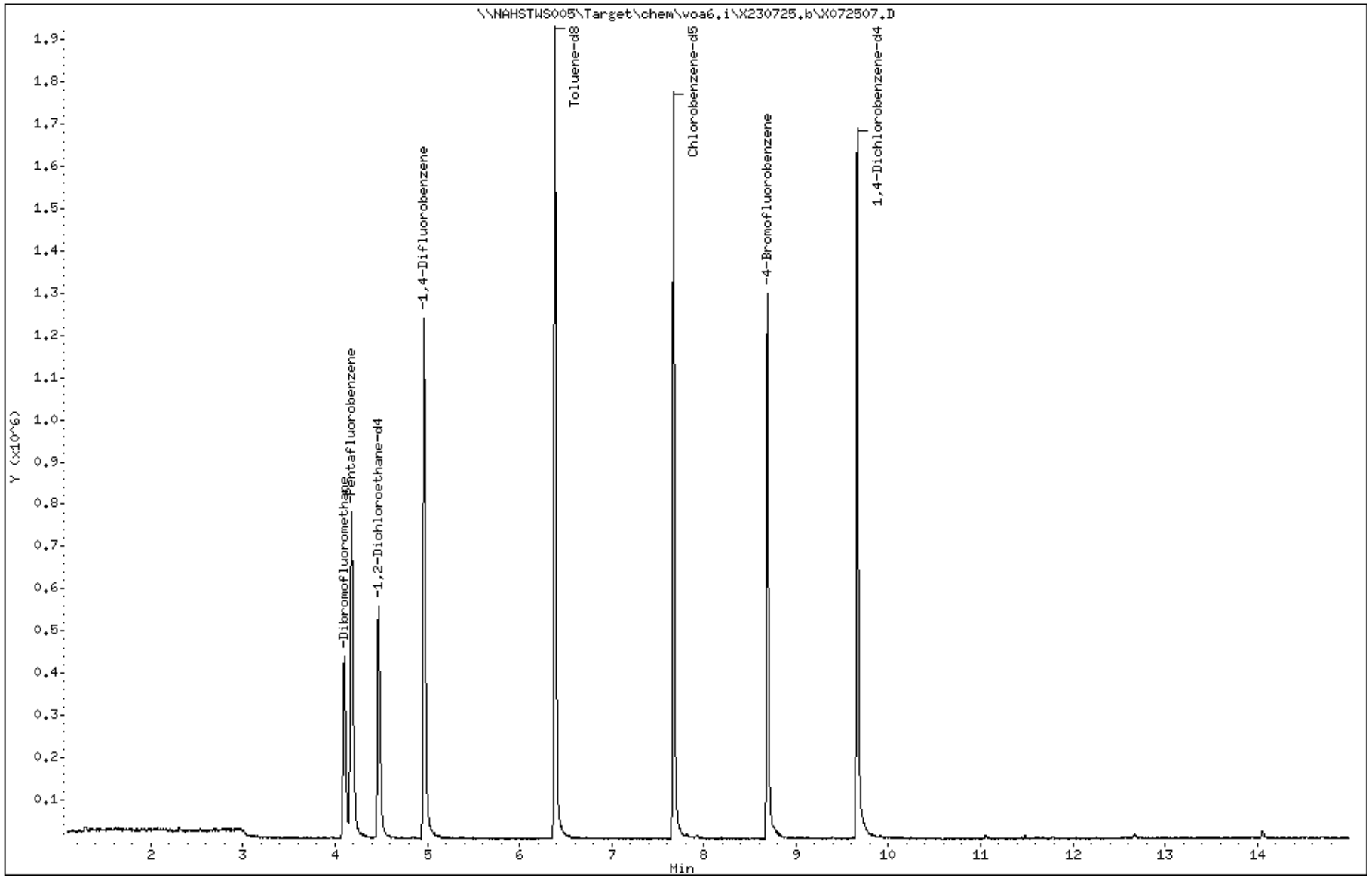
Sample Info: VBLKW-230725;VBLKW-230725;3;;BLANK

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Inj Date : 25-JUL-2023 12:11
InstruID : voa6.i
LabSampID : VBLKW-230725

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072513.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072513.D
Lab Smp Id: HS23071289-11MS Client Smp ID: HS23071289-11MS
Inj Date : 25-JUL-2023 14:14
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-11MS;HS23071289-11MS;3;;MS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 12 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.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	4.181	4.181	(1.000)	565124	50.0000	
135 1,4-Dioxane	88	5.598	5.602	(1.339)	29006	431.931	431.93(a)
140 1,3-Butadiene	54	1.167	1.171	(0.279)	203521	28.0269	28.02
25 Methacrylonitrile	41	3.833	3.821	(0.917)	201777	27.6617	27.66
12 Isobutyl Alcohol	43	4.680	4.680	(1.119)	602257	562.211	562.21
13 Acetonitrile	39	2.202	2.202	(0.527)	222729	281.061	281.06
14 Allyl Chloride	41	2.202	2.202	(0.527)	505409	27.2398	27.23
4 Propionitrile	54	3.660	3.656	(0.875)	262759	234.718	234.71(a)
2 Dichlorodifluoromethane	85	0.976	0.980	(0.234)	103907	18.6756	18.67
3 Chloromethane	50	1.081	1.085	(0.259)	188155	22.0434	22.04
5 Vinyl Chloride	62	1.145	1.149	(0.274)	189342	25.8913	25.89
6 Bromomethane	94	1.340	1.344	(0.320)	68919	22.7735	22.77
7 Chloroethane	64	1.407	1.407	(0.337)	112293	26.8984	26.89
8 Trichlorofluoromethane	101	1.561	1.565	(0.373)	217116	29.2961	29.29
9 Acrolein	56	1.861	1.865	(0.445)	15148	71.1166	71.11
10 Acetone	43	1.977	1.977	(0.473)	105852	44.7668	44.76
11 1,1-Dichloroethene	96	1.917	1.921	(0.459)	107104	25.8696	25.86
15 Iodomethane	142	2.029	2.030	(0.485)	154047	31.4725	31.47
16 Acrylonitrile	53	2.536	2.536	(0.606)	117628	42.7139	42.71
17 Methylene Chloride	84	2.307	2.307	(0.552)	117306	23.2779	23.27

18 Methyl tert-butyl ether	73	2.539	2.539 (0.607)	287473	18.6697	18.66
19 Carbon Disulfide	76	2.071	2.075 (0.495)	656525	50.4472	50.44

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072513.D Page 2
Report Date: 27-Jul-2023 13:10

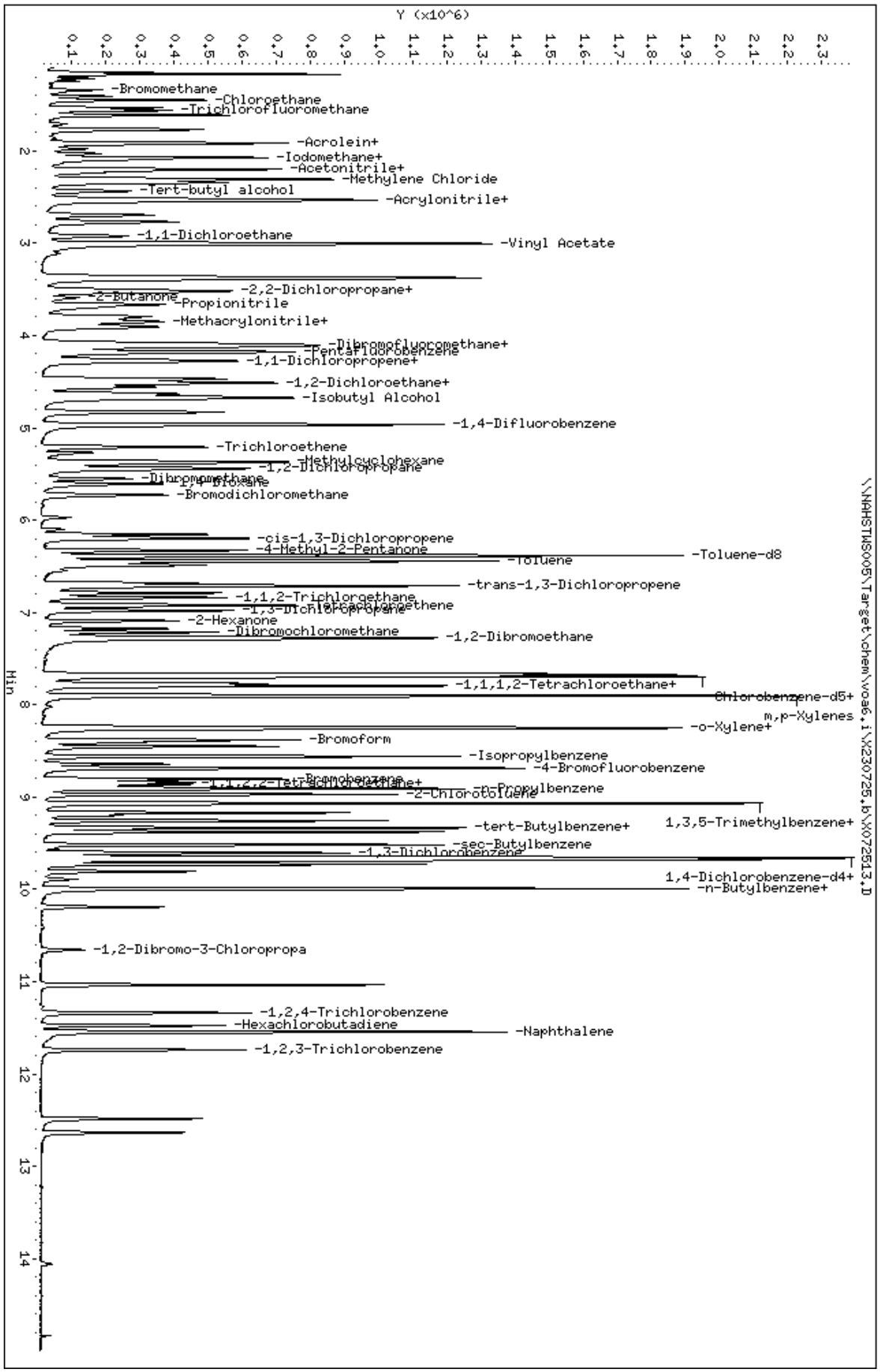
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	20 trans-1,2-Dichloroethene	96	2.528	2.532	(0.605)	97636	20.3876	20.38
	21 Vinyl Acetate	43	3.004	3.000	(0.719)	960002	48.4707	48.47
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	236225	22.4781	22.47
	24 2-Butanone	43	3.589	3.585	(0.858)	141067	46.8739	46.87
	26 2,2-Dichloropropane	77	3.514	3.510	(0.840)	213733	26.2984	26.29
	27 cis-1,2-Dichloroethene	96	3.525	3.529	(0.843)	150024	24.5911	24.59
	28 Chloroform	83	3.908	3.908	(0.935)	254283	23.6476	23.64
	29 Bromochloromethane	128	3.791	3.795	(0.907)	77977	22.8070	22.80
$	30 Dibromofluoromethane	113	4.099	4.099	(0.980)	288458	55.7800	55.78
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	222340	26.8604	26.86
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	193871	26.5765	26.57
	33 1,2-Dichloroethane	62	4.560	4.556	(0.918)	240996	24.4795	24.47
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	197384	26.8580	26.85
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	373162	57.7080	57.70
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	894329	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	544238	25.4414	25.44
	38 Trichloroethene	130	5.208	5.208	(1.049)	155331	25.6712	25.67
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	191278	23.3442	23.34
	42 1,2-Dichloropropane	63	5.437	5.433	(1.095)	178935	26.0132	26.01
	44 Dibromomethane	93	5.549	5.553	(1.118)	90329	23.1987	23.19
	45 4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	403224	53.2017	53.20
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	212314	22.5597	22.55
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	770201	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	1028182	51.8490	51.84
	50 Toluene	91	6.445	6.445	(0.841)	567745	27.3840	27.38
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	174964	22.0542	22.05
	52 2-Hexanone	43	7.086	7.086	(0.924)	263503	52.9255	52.92
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	111844	25.4300	25.43
	54 1,3-Dichloropropane	76	6.981	6.981	(0.911)	222174	24.7265	24.72
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	151820	23.9114	23.91
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	121240	28.3054	28.30
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	121436	24.1624	24.16
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	226274	31.4937	31.49
	59 Chlorobenzene	112	7.690	7.694	(1.003)	379420	26.1800	26.18
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	140401	24.7457	24.74
	61 Ethylbenzene	106	7.795	7.795	(1.017)	195465	26.8959	26.89
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	498093	54.6317	54.63
	63 o-Xylene	106	8.241	8.237	(1.075)	237379	27.4940	27.49
	64 Styrene	104	8.256	8.256	(1.077)	400362	26.5844	26.58
	66 Bromoform	173	8.406	8.410	(1.096)	94250	23.1362	23.13
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	636256	28.6695	28.66
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	169226	24.9457	24.94
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	378329	49.3284	49.32
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	403879	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	130975	24.3305	24.33(M)
	73 n-Propylbenzene	91	8.912	8.908	(0.922)	744127	30.4893	30.48
	74 Bromobenzene	156	8.803	8.803	(0.911)	162844	25.7806	25.78
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	510588	27.9261	27.92
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	458429	27.8446	27.84
	77 4-Chlorotoluene	91	9.069	9.066	(0.939)	517807	28.6214	28.62
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	463179	29.5406	29.54
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	504130	27.4957	27.49

81 sec-Butylbenzene	105	9.519	9.519 (0.985)	656250	31.4002	31.40
82 p-Isopropyltoluene	119	9.647	9.647 (0.998)	547965	28.7022	28.70

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	83 1,3-Dichlorobenzene	146	9.605	9.602	(0.994)	296578	26.9523	26.95
	84 1,4-Dichlorobenzene	146	9.680	9.681	(1.002)	302198	25.0479	25.04
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	486431	30.4221	30.42
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	284392	26.2883	26.28
	89 1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	25611	23.5559	23.55
	90 1,2,4-Trichlorobenzene	180	11.337	11.334	(1.173)	170160	22.9011	22.90
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	83673	25.6423	25.64
	92 Naphthalene	128	11.540	11.540	(1.194)	401247	21.8183	21.81
	93 1,2,3-Trichlorobenzene	180	11.738	11.739	(1.215)	149312	21.4872	21.48
M	94 1,2-Dichloroethylene (total)	96				247660	44.9787	44.97
M	95 Xylenes (total)	106				735472	82.1257	82.12
	141 Cyclohexane	56	4.117	4.121	(0.985)	344462	35.1648	35.16
	138 Freon TF	101	1.921	1.917	(0.459)	114821	34.3760	34.37
	147 Methylcyclohexane	55	5.385	5.381	(1.085)	526650	27.8993	27.89
	146 Methyl Acetate	43	2.232	2.232	(0.534)	133771	26.5974	26.59
	148 Tert-Butyl alcohol	59	2.438	2.434	(0.583)	269325	377.596	377.59
	149 Isopropyl Alcohol	45	2.097	2.097	(0.502)	214328	484.266	484.26

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



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Client ID: HS23071289-11MS
Sample Info: HS23071289-11MS;HS23071289-11MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072513.D
Inj Date : 25-JUL-2023 14:14
InstruID : voa6.i
LabSampID : HS23071289-11MS

1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

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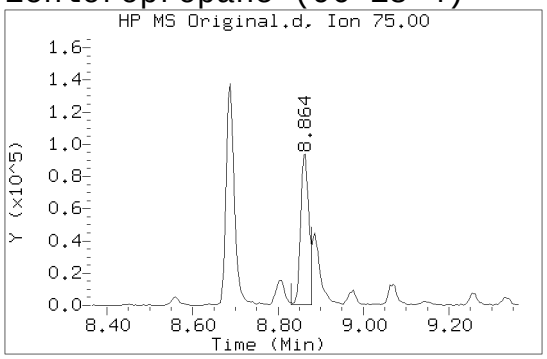
130975
HEIGHT
93726
27-Jul-2023
13:09
linh
pham



AFTER

MASS
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HEIGHT
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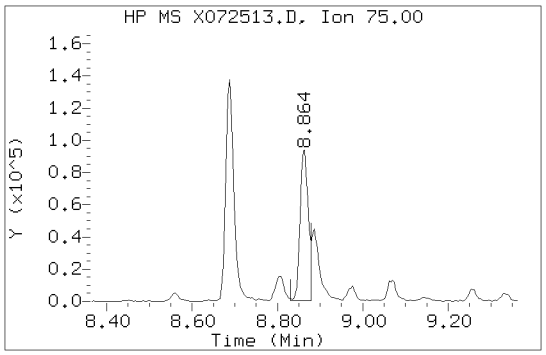

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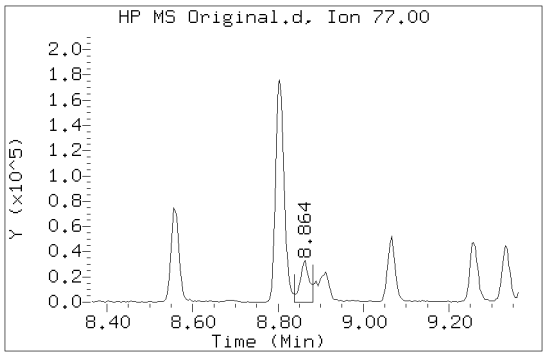

AFTER

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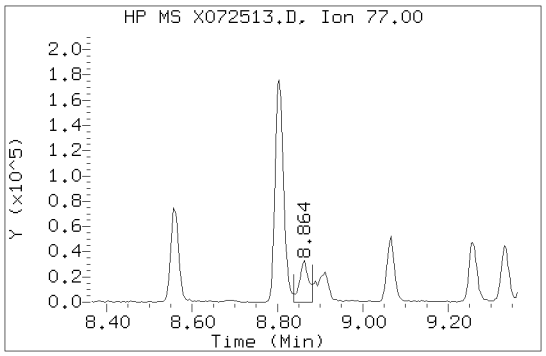

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Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072514.D
Lab Smp Id: HS23071289-11MSD Client Smp ID: HS23071289-11MSD
Inj Date : 25-JUL-2023 14:34
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-11MSD;HS23071289-11MSD;3;;MSD
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 12 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.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)	565484	50.0000	
135 1,4-Dioxane	88	5.598	5.602	(1.340)	31971	475.780	475.78(a)
140 1,3-Butadiene	54	1.167	1.171	(0.280)	194437	26.7589	26.75
25 Methacrylonitrile	41	3.833	3.821	(0.917)	196260	26.8882	26.88
12 Isobutyl Alcohol	43	4.680	4.680	(1.120)	590821	551.184	551.18
13 Acetonitrile	39	2.202	2.202	(0.527)	216859	273.480	273.47
14 Allyl Chloride	41	2.202	2.202	(0.527)	503802	27.1359	27.13
4 Propionitrile	54	3.660	3.656	(0.876)	268547	239.736	239.73(a)
2 Dichlorodifluoromethane	85	0.976	0.980	(0.234)	98274	17.7120	17.71
3 Chloromethane	50	1.085	1.085	(0.260)	189014	22.1299	22.12
5 Vinyl Chloride	62	1.149	1.149	(0.275)	186158	25.4397	25.43
6 Bromomethane	94	1.344	1.344	(0.322)	69626	22.9925	22.99
7 Chloroethane	64	1.407	1.407	(0.337)	111360	26.6579	26.65
8 Trichlorofluoromethane	101	1.565	1.565	(0.375)	205406	27.6984	27.69
9 Acrolein	56	1.861	1.865	(0.446)	13826	64.9679	64.96
10 Acetone	43	1.977	1.977	(0.473)	107938	45.7131	45.71
11 1,1-Dichloroethene	96	1.917	1.921	(0.459)	97615	23.5626	23.56
15 Iodomethane	142	2.030	2.030	(0.486)	179681	36.0159	36.01
16 Acrylonitrile	53	2.539	2.536	(0.608)	126430	45.8809	45.88
17 Methylene Chloride	84	2.307	2.307	(0.552)	113957	22.5578	22.55

18 Methyl tert-butyl ether	73	2.543	2.539 (0.609)	306766	19.9100	19.91
19 Carbon Disulfide	76	2.075	2.075 (0.497)	637197	48.9309	48.93

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072514.D Page 2
Report Date: 27-Jul-2023 13:10

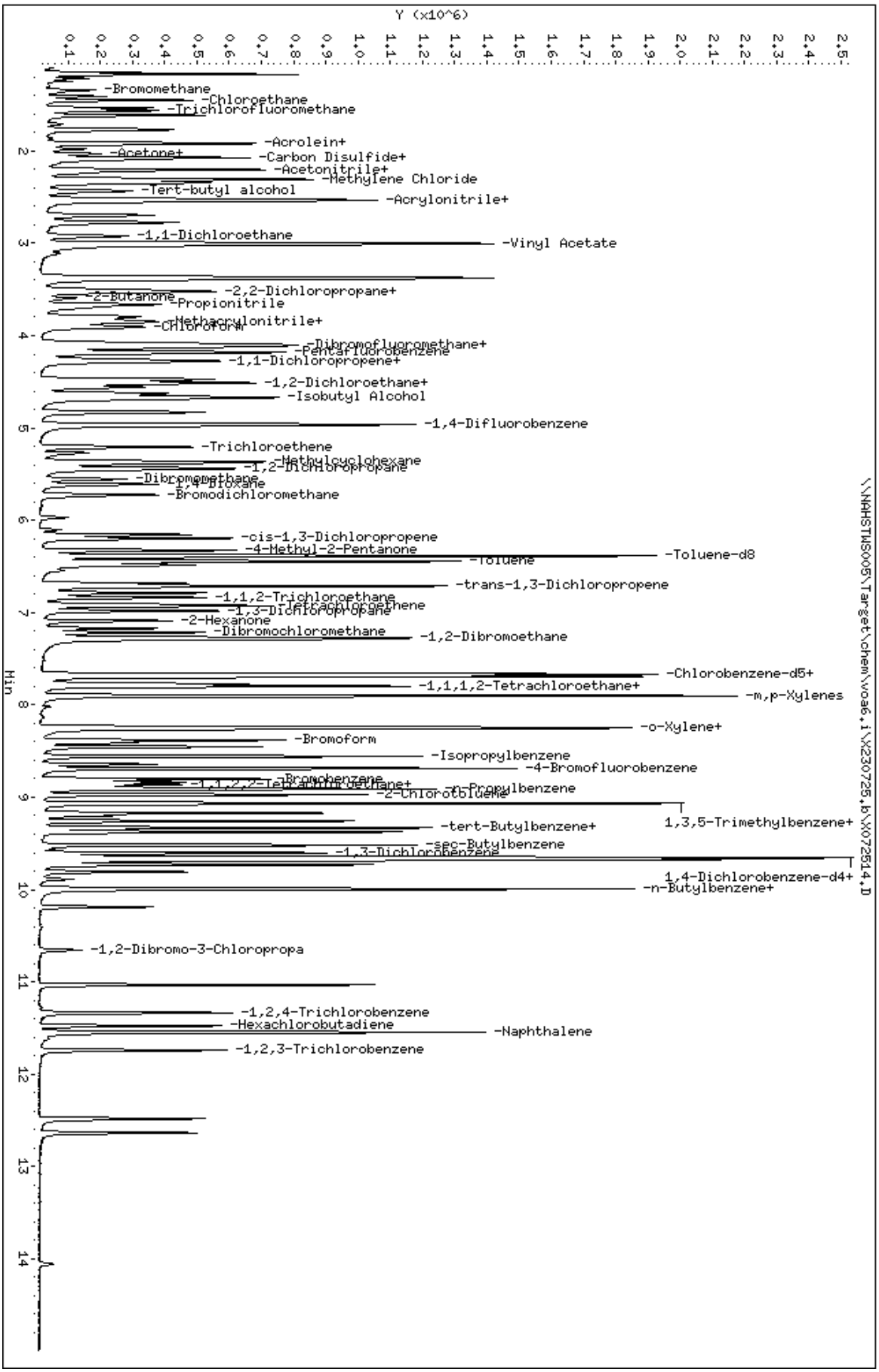
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	20 trans-1,2-Dichloroethene	96	2.536	2.532	(0.607)	103557	21.6102	21.61
	21 Vinyl Acetate	43	3.004	3.000	(0.719)	1066562	53.8167	53.81
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	255046	24.2536	24.25
	24 2-Butanone	43	3.589	3.585	(0.859)	132453	43.9836	43.98
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	204386	25.1416	25.14
	27 cis-1,2-Dichloroethene	96	3.525	3.529	(0.844)	147897	24.2270	24.22
	28 Chloroform	83	3.908	3.908	(0.935)	244699	22.7418	22.74
	29 Bromochloromethane	128	3.795	3.795	(0.908)	75449	22.0535	22.05
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	288576	55.7671	55.76
	31 1,1,1-Trichloroethane	97	4.084	4.080	(0.978)	213425	25.7670	25.76
	32 1,1-Dichloropropene	75	4.279	4.279	(0.861)	185710	25.4448	25.44
	33 1,2-Dichloroethane	62	4.556	4.556	(0.917)	233558	23.7119	23.71
	34 Carbon Tetrachloride	117	4.267	4.264	(0.859)	180707	24.5763	24.57
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.071)	363721	56.1961	56.19
*	36 1,4-Difluorobenzene	114	4.968	4.965	(1.000)	894784	50.0000	
	37 Benzene	78	4.511	4.511	(0.908)	519871	24.2900	24.29
	38 Trichloroethene	130	5.208	5.208	(1.048)	147346	24.3391	24.33
	39 Bromodichloromethane	83	5.726	5.726	(1.152)	184120	22.4592	22.45
	42 1,2-Dichloropropane	63	5.437	5.433	(1.094)	175909	25.5603	25.56
	44 Dibromomethane	93	5.553	5.553	(1.118)	87223	22.3896	22.38
	45 4-Methyl-2-Pentanone	43	6.329	6.325	(0.825)	404737	51.5329	51.53
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.238)	213362	22.6595	22.65
*	47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	798127	50.0000	
$	48 Toluene-d8	98	6.382	6.385	(0.832)	1036266	50.4282	50.42
	50 Toluene	91	6.445	6.445	(0.841)	546859	25.4537	25.45
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.345)	172489	21.7312	21.73
	52 2-Hexanone	43	7.090	7.086	(0.925)	268940	52.1275	52.12
	53 1,1,2-Trichloroethane	83	6.835	6.839	(0.891)	107412	23.5678	23.56
	54 1,3-Dichloropropane	76	6.982	6.981	(0.911)	221834	23.8248	23.82
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	147563	22.4277	22.42
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	118093	26.6060	26.60
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	118834	22.8173	22.81
	58 1-Chlorohexane	55	7.694	7.694	(1.548)	216235	30.0811	30.08
	59 Chlorobenzene	112	7.690	7.694	(1.003)	361954	24.1010	24.10
	60 1,1,1,2-Tetrachloroethane	131	7.769	7.772	(1.013)	138082	23.4855	23.48
	61 Ethylbenzene	106	7.795	7.795	(1.017)	191240	25.3938	25.39
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	492804	52.1603	52.16
	63 o-Xylene	106	8.241	8.237	(1.075)	231875	25.9168	25.91
	64 Styrene	104	8.256	8.256	(1.077)	390603	25.0289	25.02
	66 Bromoform	173	8.410	8.410	(1.097)	93554	22.1618	22.16
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	622097	27.0507	27.05
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	171552	23.6728	23.67
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	395084	49.7139	49.71
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.662	(1.000)	431446	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.918)	127664	22.2001	22.20(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	736135	28.2347	28.23
	74 Bromobenzene	156	8.803	8.803	(0.912)	161275	23.9008	23.90
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.939)	486201	24.8931	24.89
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	443883	25.2385	25.23
	77 4-Chlorotoluene	91	9.069	9.066	(0.939)	497269	25.7299	25.72
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	451987	26.9849	26.98
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	488650	24.9485	24.94

81 sec-Butylbenzene	105	9.519	9.519 (0.986)	638222	28.5864	28.58
82 p-Isopropyltoluene	119	9.647	9.647 (0.999)	547426	26.8419	26.84

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	289430	24.6221	24.62
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	308529	23.9387	23.93
	87 n-Butylbenzene	91	9.992	9.992	(1.035)	477519	27.9565	27.95
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.035)	279202	24.1596	24.15
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	25874	22.3363	22.33
	90 1,2,4-Trichlorobenzene	180	11.337	11.334	(1.174)	164239	20.6919	20.69
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	85919	24.7395	24.73
	92 Naphthalene	128	11.540	11.540	(1.195)	394657	20.0888	20.08
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.216)	153885	20.7304	20.73
M	94 1,2-Dichloroethylene (total)	96				251454	45.8372	45.83
M	95 Xylenes (total)	106				724679	78.0771	78.07
	141 Cyclohexane	56	4.121	4.121	(0.987)	333862	34.0610	34.06
	138 Freon TF	101	1.921	1.917	(0.460)	103523	31.1917	31.19
	147 Methylcyclohexane	55	5.385	5.381	(1.084)	513973	27.2139	27.21
	146 Methyl Acetate	43	2.236	2.232	(0.535)	137296	27.2809	27.28
	148 Tert-Butyl alcohol	59	2.434	2.434	(0.583)	295617	414.193	414.19
	149 Isopropyl Alcohol	45	2.097	2.097	(0.502)	216922	489.815	489.81

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



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Client ID: HS230712B9-11HSD
Sample Info: HS230712B9-11HSD;HS230712B9-11HSD;3;;HSD
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6,i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072514.D
Inj Date : 25-JUL-2023 14:34
InstruID : voa6.i
LabSampID : HS23071289-11MSD

1,2,3-Trichloropropane (96-18-4)

Reason Code:

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27-Jul-2023
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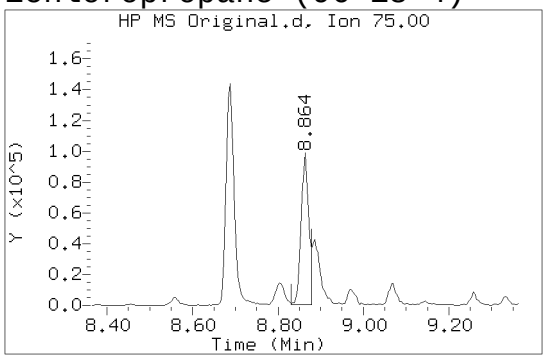

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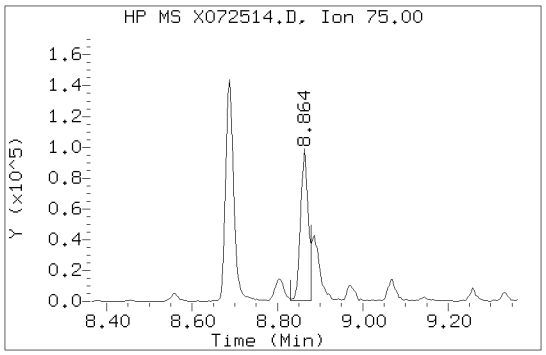

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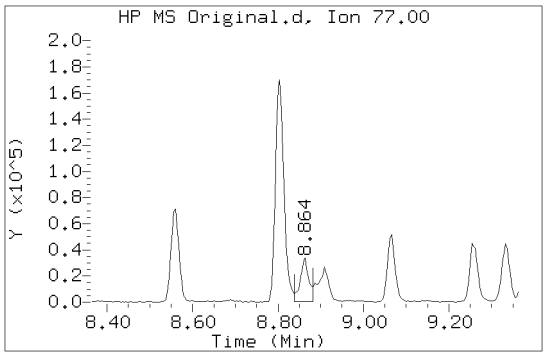

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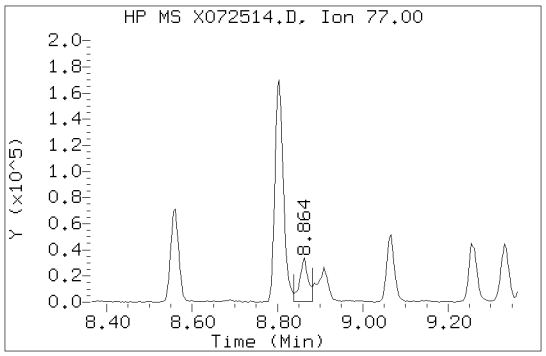

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Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072517.D
Lab Smp Id: HS23071165-09 Client Smp ID: HS23071165-09
Inj Date : 25-JUL-2023 15:35
Operator : PC Inst ID: voa6.i
Smp Info : HS23071165-09;HS23071165-09;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.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	4.181	4.181	(1.000)	544751	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.099	(0.981)	271235	54.3924	54.39
$ 35 1,2-Dichloroethane-d4	65	4.470	4.474	(1.069)	359944	57.7461	57.74
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	833051	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	723805	50.0000	
$ 48 Toluene-d8	98	6.386	6.385	(0.833)	959847	51.5056	51.50
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	346619	48.0801	48.08
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	359617	50.0000	

01323626

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072517.D

Date : 25-JUL-2023 15:35

Client ID: HS23071165-09

Instrument: voa6.i

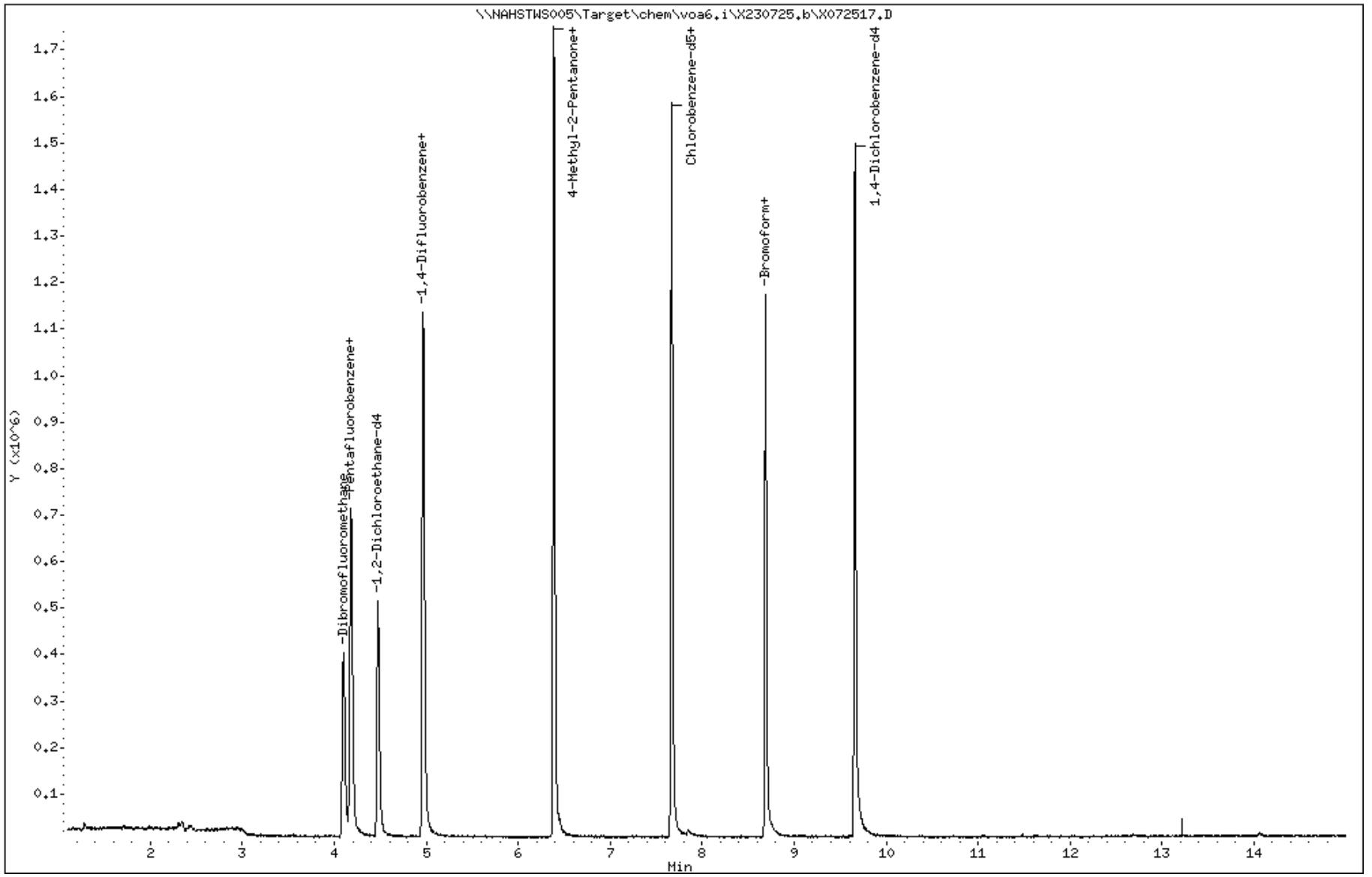
Sample Info: HS23071165-09;HS23071165-09;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Inj Date : 25-JUL-2023 15:35
InstruID : voa6.i
LabSampID : HS23071165-09

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072530.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072530.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 25-JUL-2023 20:02
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 28 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.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)	528964	50.0000	
135 1,4-Dioxane	88	5.602	5.602	(1.340)	64229	1000.00	1021.82
140 1,3-Butadiene	54	1.171	1.171	(0.280)	435050	50.0000	64.00
25 Methacrylonitrile	41	3.829	3.829	(0.916)	435680	50.0000	63.81
12 Isobutyl Alcohol	43	4.680	4.680	(1.119)	1259821	1000.00	1256.44
13 Acetonitrile	39	2.202	2.202	(0.527)	320554	500.000	432.15
14 Allyl Chloride	41	2.202	2.202	(0.527)	767937	50.0000	44.21
4 Propionitrile	54	3.656	3.656	(0.874)	619179	500.000	590.91
2 Dichlorodifluoromethane	85	0.980	0.980	(0.234)	258448	50.0000	47.81
3 Chloromethane	50	1.085	1.085	(0.260)	421845	50.0000	52.79
5 Vinyl Chloride	62	1.149	1.149	(0.275)	406548	50.0000	59.39
6 Bromomethane	94	1.343	1.343	(0.321)	145389	50.0000	51.32
7 Chloroethane	64	1.407	1.407	(0.337)	226372	50.0000	57.93
8 Trichlorofluoromethane	101	1.565	1.565	(0.374)	397807	50.0000	57.34
9 Acrolein	56	1.868	1.868	(0.447)	24355	100.000	121.34
10 Acetone	43	1.977	1.977	(0.473)	224618	100.000	107.68
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	174913	50.0000	45.13
15 Iodomethane	142	2.033	2.033	(0.486)	386383	100.000	77.00
16 Acrylonitrile	53	2.539	2.539	(0.607)	233003	100.000	90.39
17 Methylene Chloride	84	2.307	2.307	(0.552)	182566	50.0000	39.63

18 Methyl tert-butyl ether	73	2.543	2.543 (0.608)	565838	50.0000	39.26
19 Carbon Disulfide	76	2.074	2.074 (0.496)	942948	100.000	77.40

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	176939	50.0000	39.47
21	Vinyl Acetate	43	3.000	3.000	(0.718)	2311271	100.000	124.67
22	1,1-Dichloroethane	63	2.922	2.922	(0.699)	523983	50.0000	53.26
24	2-Butanone	43	3.585	3.585	(0.857)	327572	100.000	116.28
26	2,2-Dichloropropane	77	3.510	3.510	(0.840)	377766	50.0000	49.47
27	cis-1,2-Dichloroethene	96	3.529	3.529	(0.844)	300700	50.0000	52.65
28	Chloroform	83	3.908	3.908	(0.935)	502338	50.0000	49.90
29	Bromochloromethane	128	3.799	3.799	(0.909)	157669	50.0000	49.26
$ 30	Dibromofluoromethane	113	4.099	4.099	(0.980)	262359	50.0000	54.17
31	1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	426660	50.0000	55.06
32	1,1-Dichloropropene	75	4.279	4.279	(0.861)	365624	50.0000	50.67
33	1,2-Dichloroethane	62	4.556	4.556	(0.917)	506879	50.0000	52.05
34	Carbon Tetrachloride	117	4.260	4.260	(0.857)	350041	50.0000	48.15
$ 35	1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	333890	50.0000	55.13
* 36	1,4-Difluorobenzene	114	4.968	4.968	(1.000)	884527	50.0000	
37	Benzene	78	4.511	4.511	(0.908)	1066510	50.0000	50.40
38	Trichloroethene	130	5.205	5.205	(1.048)	306541	50.0000	51.22
39	Bromodichloromethane	83	5.726	5.726	(1.152)	388801	50.0000	47.97
41	2-Chloroethylvinyl ether	63	6.048	6.048	(1.217)	236783	100.000	95.69
42	1,2-Dichloropropane	63	5.437	5.437	(1.094)	366915	50.0000	53.93
44	Dibromomethane	93	5.549	5.549	(1.117)	185013	50.0000	48.04
45	4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	865673	100.000	108.35
46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.238)	453729	50.0000	48.74
* 47	Chlorobenzene-d5	117	7.667	7.667	(1.000)	811867	50.0000	
$ 48	Toluene-d8	98	6.385	6.385	(0.833)	967820	50.0000	46.30
50	Toluene	91	6.445	6.445	(0.841)	1117096	50.0000	51.11
51	trans-1,3-Dichloropropene	75	6.678	6.678	(1.344)	373874	50.0000	47.64
52	2-Hexanone	43	7.086	7.086	(0.924)	585776	100.000	111.61
53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	221830	50.0000	47.84
54	1,3-Dichloropropane	76	6.978	6.978	(0.910)	458538	50.0000	48.41
55	Dibromochloromethane	129	7.173	7.173	(0.935)	322238	50.0000	48.14
56	Tetrachloroethene	164	6.925	6.925	(0.903)	226677	50.0000	50.20
57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	251476	50.0000	47.46
58	1-Chlorohexane	55	7.694	7.694	(1.548)	374676	50.0000	52.72
59	Chlorobenzene	112	7.690	7.690	(1.003)	761274	50.0000	49.83
60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	286881	50.0000	47.96
61	Ethylbenzene	106	7.795	7.795	(1.017)	381712	50.0000	49.82
62	m,p-Xylenes	106	7.900	7.900	(1.030)	980209	100.000	101.99
63	o-Xylene	106	8.237	8.237	(1.074)	470983	50.0000	51.75
64	Styrene	104	8.256	8.256	(1.077)	807765	50.0000	50.88
66	Bromoform	173	8.406	8.406	(1.096)	201657	50.0000	46.96
67	Isopropylbenzene	105	8.560	8.560	(1.116)	1204951	50.0000	51.50
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	357150	50.0000	48.76
$ 69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	415614	50.0000	51.42
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	436075	50.0000	
71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	260193	50.0000	44.76
73	n-Propylbenzene	91	8.908	8.908	(0.922)	1410266	50.0000	53.51
74	Bromobenzene	156	8.803	8.803	(0.911)	337678	50.0000	49.51
75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	997269	50.0000	50.51
76	2-Chlorotoluene	91	8.972	8.972	(0.929)	892280	50.0000	50.19
77	4-Chlorotoluene	91	9.069	9.069	(0.939)	1017300	50.0000	52.07
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	881146	50.0000	52.04

79 1,2,4-Trimethylbenzene	105	9.377	9.377 (0.971)	993762	50.0000	50.19
81 sec-Butylbenzene	105	9.519	9.519 (0.985)	1221220	50.0000	54.11

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	1045311	50.0000	50.71	
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	590766	50.0000	49.72	
84	1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	621266	50.0000	47.69	
87	n-Butylbenzene	91	9.992	9.992	(1.034)	909481	50.0000	52.68	
88	1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	592661	50.0000	50.73	
89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	54655	50.0000	45.49	
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	346289	50.0000	43.16	
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	161123	50.0000	43.88	
92	Naphthalene	128	11.540	11.540	(1.194)	894201	50.0000	45.03	
93	1,2,3-Trichlorobenzene	180	11.738	11.738	(1.215)	324752	50.0000	43.28	
M 94	1,2-Dichloroethylene (total)	96				477639	100.000	(a)	
141	Cyclohexane	56	4.121	4.121	(0.986)	574097	50.0000	62.61	
138	Freon TF	101	1.921	1.921	(0.459)	175448	50.0000	53.21	
147	Methylcyclohexane	55	5.384	5.384	(1.084)	902556	50.0000	48.34	
146	Methyl Acetate	43	2.236	2.236	(0.535)	224519	50.0000	47.69	
148	Tert-Butyl alcohol	59	2.438	2.438	(0.583)	527595	1000.00	790.25	
149	Isopropyl Alcohol	45	2.097	2.097	(0.502)	353784	1000.00	854.00	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

01323633

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072530.D

Date : 25-JUL-2023 20:02

Client ID: CCV-END

Instrument: voa6.i

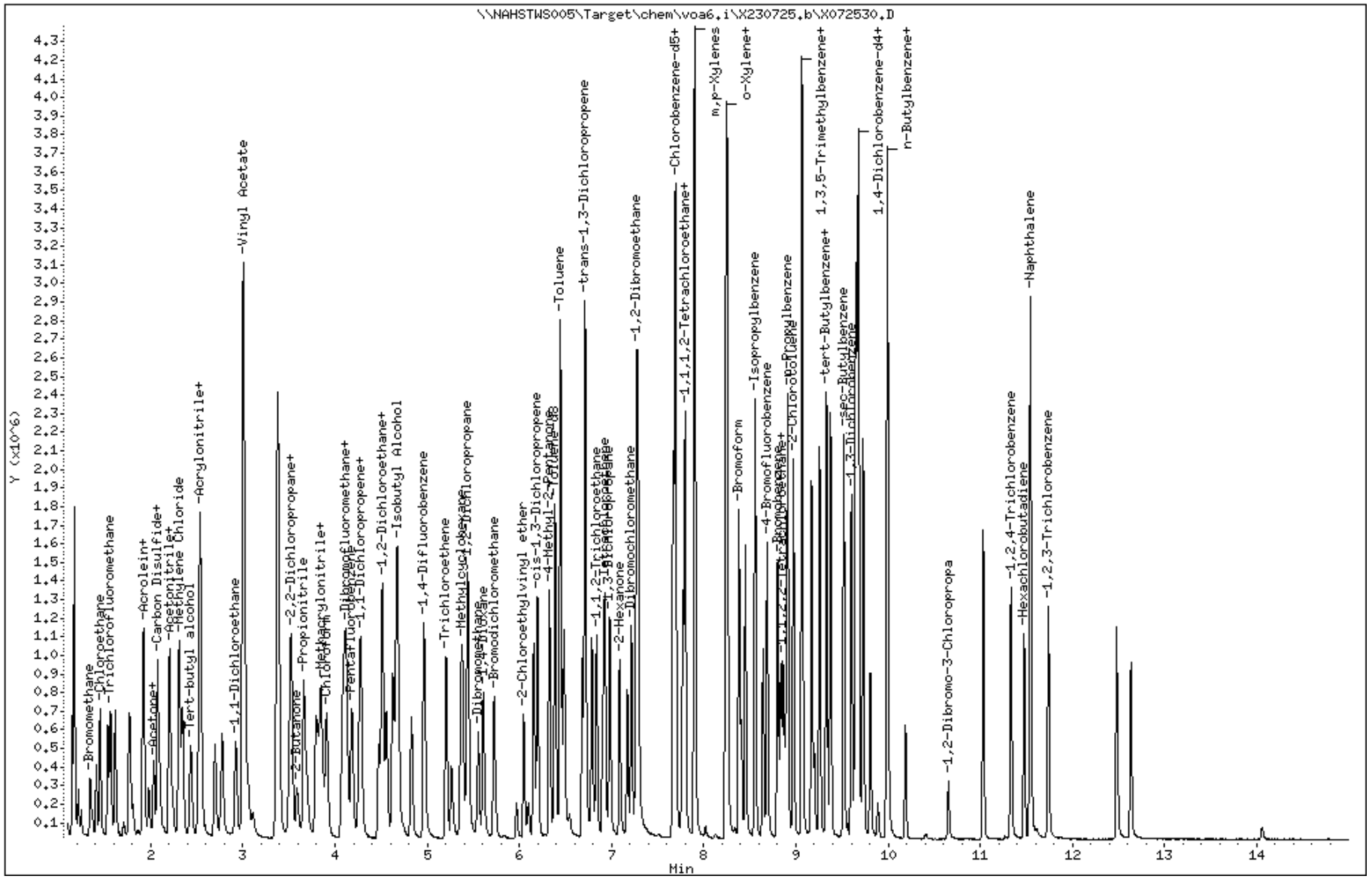
Sample Info: CCV-END;CCV-END;2;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072530.D
Inj Date : 25-JUL-2023 20:02
InstruID : voa6.i
LabSampID : CCV-END

NO MANUAL INTEGRATIONS

HS23071165-GCSEMI-RSK-175

ALS WO# HS23071165

01323636

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Form 1

Organic Analysis Data Sheet

Dissolved Gasses by RSK-175

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

Dissolved Gasses by RSK-175

HS23071165-04

16RW04-230717

Collected	Received	Matrix	Basis
07/17/23 09:20	07/18/23 09:25	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00555		0.000144	0.00100	0.00100	1	07/21/23 18:44	FID-4_442303	059.D
Ethene	mg/L	0.00422		0.000234	0.00100	0.00100	1	07/21/23 18:44	FID-4_442303	059.D
Methane	mg/L	0.352		0.00214	0.0100	0.0100	20	07/21/23 19:10	FID-4_442303	061.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

Dissolved Gasses by RSK-175

HS23071165-05

16RW05-230717

Collected	Received	Matrix	Basis
07/17/23 10:05	07/18/23 09:25	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.000144	0.00100	0.00100	1	07/21/23 18:59	FID-4_442303	060.D
Ethene	mg/L	0.00100	U	0.000234	0.00100	0.00100	1	07/21/23 18:59	FID-4_442303	060.D
Methane	mg/L	5.93		0.0214	0.100	0.100	200	07/21/23 19:19	FID-4_442303	062.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

Dissolved Gasses by RSK-175

MBLK-230721

MBLK-230721

Collected	Received	Matrix	Basis
NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.000144	0.00100	0.00100	1	07/21/23 14:22	FID-4_442303	035.D
Ethene	mg/L	0.00100	U	0.000234	0.00100	0.00100	1	07/21/23 14:22	FID-4_442303	035.D
Methane	mg/L	0.000500	U	0.000107	0.000500	0.000500	1	07/21/23 14:22	FID-4_442303	035.D

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Form 4

Method Blank Summary

Dissolved Gasses by RSK-175

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071165

Dissolved Gasses by RSK-175

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	MBLK-230721	035.D	07/21/23 14:22	FID-4_442303
LCS-230721	LCS	LCS-230721	036.D	07/21/23 14:32	FID-4_442303
LCSD-230721	LCSD	LCSD-230721	037.D	07/21/23 14:47	FID-4_442303
16RW04-230717	SAMP	HS23071165-04	059.D	07/21/23 18:44	FID-4_442303
16RW05-230717	SAMP	HS23071165-05	060.D	07/21/23 18:59	FID-4_442303
16RW04-230717	SAMP	HS23071165-04	061.D	07/21/23 19:10	FID-4_442303
16RW05-230717	SAMP	HS23071165-05	062.D	07/21/23 19:19	FID-4_442303
BatchQC	DUP	HS23071069-04DUP	063.D	07/21/23 19:32	FID-4_442303

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Form 6

Initial Calibration Data

Dissolved Gasses by RSK-175

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071165

RunID FID-4_322102

Dissolved Gasses by RSK-175

ICAL Start Date 24-JAN-2017 0906

ICAL End Date 24-JAN-2017 1113

Calibration Files

Calibration file names

Level 1..target\chem\fid-4.i\170124.b\001.d
Level 2..target\chem\fid-4.i\170124.b\002.d
Level 3..target\chem\fid-4.i\170124.b\003.d
Level 4..target\chem\fid-4.i\170124.b\004.d
Level 5..target\chem\fid-4.i\170124.b\005.d
Level 6..target\chem\fid-4.i\170124.b\006.d
Level 7..target\chem\fid-4.i\170124.b\007.d

Compound	10.00 Level 1	25.00 Level 2	50.00 Level 3	100.00 Level 4	250.00 Level 5	500.00 Level 6	1000.00 Level 7	Curve	b	m1	m2	%RSD or R2	Q
Methane	969 1082	978	1020	881	961	931		AVRG		974		6.55041	
Ethene	536 829	567	565	516	665	426		AVRG		586		21.93197	
Ethane	602 999	670	659	597	809	818		AVRG		736		19.88517	
Propane	500 96509	1279	2602	4785	18294	38286		QUAD	0.97987	0.00153	-4.583e-00	0.99914	
N-Butane	438 114164	936	2034	3864	18446	42817		QUAD	2.46870	0.00183	-5.537e-00	0.99808	
Pentane	115 488	3945	2080	950	501	412		AVRG		1213		112	*
Hexane	NE NE	NE	NE	NE	NE	NE		AVRG		0.000e+000		0.000e+000	

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)

Dissolved Gasses by RSK-175

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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	Aptim Environmental & Infrastucture, Inc.	**Workorder**	
Project	LHAAP 16 January 2023	**HS23071165**	

RunID

Dissolved Gasses by RSK-175

FID-4_322102

Sample Matrix	LIQUID	**Fraction**	GASES
Lab Smp Id	ICV	**Client Smp ID**	ICV
Level	LOW	**Operator**	MA

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
Methane	9.647	9.597	99.49	75-125	
Ethene	16.800	19.090	113.63	75-125	
Ethane	18.043	19.657	108.95	75-125	
Propane	26.463	27.238	102.93	75-125	
N-Butane	34.955	36.010	103.02	75-125	

01323646

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Form 7

Continuing Calibration Verification (CCV)

Dissolved Gasses by RSK-175

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071165

RunID FID-4_442303

Dissolved Gasses by RSK-175

Instrument ID FID-4.I
Lab File ID 033.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date :00
ICAL Date(s) 24-JAN-2017 24-JAN-2017
ICAL Times :06 11:13
Quant Type ESTD

Compound	___ RRF / Conc	RF250	CCV RRF250	Min RRF	%D/ %D / %DRIFT	Max %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	800	800	0.010	17.94382	20.0	Averaged	
Ethene	586	630	630	0.010	-7.61836	20.0	Averaged	
Ethane	719	816	816	0.010	-13.45926	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071165

RunID FID-4_442303

Dissolved Gasses by RSK-175

Instrument ID FID-4.I
Lab File ID 044.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date :10
ICAL Date(s) 24-JAN-2017 24-JAN-2017
ICAL Times :06 11:13
Quant Type ESTD

Compound	___ RRF / Conc	RF250	CCV RRF250	Min RRF	%D/ %D / %DRIFT	Max %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	786	786	0.010	19.37911	20.0	Averaged	
Ethene	586	624	624	0.010	-6.55453	20.0	Averaged	
Ethane	719	789	789	0.010	-9.62311	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071165

RunID FID-4_442303

Dissolved Gasses by RSK-175

Instrument ID FID-4.I
Lab File ID 055.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date :15
ICAL Date(s) 24-JAN-2017 24-JAN-2017
ICAL Times :06 11:13
Quant Type ESTD

Compound	___ RRF / Conc	RF250	CCV RRF250	Min RRF	%D/ %D / %DRIFT	Max %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	816	816	0.010	16.33842	20.0	Averaged	
Ethene	586	642	642	0.010	-9.68521	20.0	Averaged	
Ethane	719	828	828	0.010	-15.03070	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071165

RunID FID-4_442303

Dissolved Gasses by RSK-175

Instrument ID FID-4.I
Lab File ID 064.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date :54
ICAL Date(s) 24-JAN-2017 24-JAN-2017
ICAL Times :06 11:13
Quant Type ESTD

Compound	___ RRF / Conc	RF250	CCV RRF250	Min RRF	%D/ %D / %DRIFT	Max %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	813	813	0.010	16.61485	20.0	Averaged	
Ethene	586	627	627	0.010	-7.03072	20.0	Averaged	
Ethane	719	796	796	0.010	-10.65532	20.0	Averaged	

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Analysis Run Log

Dissolved Gasses by RSK-175

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071165

RunID
FID-4-322102

Dissolved Gasses by RSK-175

Run ID FID-4_322102 **Start Date** 01/24/17 **EndDate** 01/24/17

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
09:06	ICAL1	ICAL1	ICAL1	001.D	01/24/17	1
09:30	ICAL2	ICAL2	ICAL2	002.D	01/24/17	1
09:59	ICAL3	ICAL3	ICAL3	003.D	01/24/17	1
10:15	ICAL4	ICAL4	ICAL4	004.D	01/24/17	1
10:39	ICAL5	ICAL5	ICAL5	005.D	01/24/17	1
10:57	ICAL6	ICAL6	ICAL6	006.D	01/24/17	1
11:13	ICAL7	ICAL7	ICAL7	007.D	01/24/17	1
12:05	ICV	ICV	ICV	008.D	01/24/17	1

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

RunID FID-4-442303

Dissolved Gasses by RSK-175

Run ID FID-4_442303 **Start Date** 07/21/23 **EndDate** 07/21/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
14:00	RSK-CCV	CCV	RSK-CCV	033.D	07/21/23	1
14:22	MBLK-230721	MBLK	MBLK-230721	035.D	07/21/23	1
14:32	LCS-230721	LCS	LCS-230721	036.D	07/21/23	1
14:47	LCSD-230721	LCSD	LCSD-230721	037.D	07/21/23	1
14:56	HS23070993-09	SAMP	ZZZZZZZZZZ	038.D	07/21/23	1
15:16	HS23070993-09	SAMP	ZZZZZZZZZZ	039.D	07/21/23	20
15:26	HS23071061-06	SAMP	ZZZZZZZZZZ	040.D	07/21/23	1
15:39	HS23071061-06	SAMP	ZZZZZZZZZZ	041.D	07/21/23	2
15:51	HS23071069-01	SAMP	ZZZZZZZZZZ	042.D	07/21/23	1
16:00	HS23071069-02	SAMP	ZZZZZZZZZZ	043.D	07/21/23	1
16:10	RSK-CCV	CCV	RSK-CCV	044.D	07/21/23	1
16:35	HS23071069-03	SAMP	ZZZZZZZZZZ	045.D	07/21/23	1
16:46	HS23071069-04	SAMP	ZZZZZZZZZZ	046.D	07/21/23	1
16:59	HS23071069-05	SAMP	ZZZZZZZZZZ	047.D	07/21/23	1
17:07	HS23071069-02	SAMP	ZZZZZZZZZZ	048.D	07/21/23	5
17:16	HS23071069-03	SAMP	ZZZZZZZZZZ	049.D	07/21/23	50
17:25	HS23071029-06	SAMP	ZZZZZZZZZZ	050.D	07/21/23	1
17:33	HS23071029-07	SAMP	ZZZZZZZZZZ	051.D	07/21/23	1
17:49	HS23071029-08	SAMP	ZZZZZZZZZZ	052.D	07/21/23	1
17:57	HS23071029-09	SAMP	ZZZZZZZZZZ	053.D	07/21/23	1
18:07	HS23071029-06	SAMP	ZZZZZZZZZZ	054.D	07/21/23	2
18:15	RSK-CCV	CCV	RSK-CCV	055.D	07/21/23	1
18:27	HS23071029-08	SAMP	ZZZZZZZZZZ	056.D	07/21/23	50
18:35	HS23071029-09	SAMP	ZZZZZZZZZZ	057.D	07/21/23	50
18:44	HS23071165-04	SAMP	16RW04-230717	059.D	07/21/23	1
18:59	HS23071165-05	SAMP	16RW05-230717	060.D	07/21/23	1
19:10	HS23071165-04	SAMP	16RW04-230717	061.D	07/21/23	20
19:19	HS23071165-05	SAMP	16RW05-230717	062.D	07/21/23	200
19:32	HS23071069-04DUP	DUP	ZZZZZZDUP	063.D	07/21/23	1
19:54	RSK-CCV	CCV	RSK-CCV	064.D	07/21/23	1

01323654

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Raw Data FID 4 322102

Dissolved Gasses by RSK-175

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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\FID-4.i\170124.b\001.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D
Lab Smp Id: ICAL1 Client Smp ID: ICAL1
Inj Date : 24-JAN-2017 09:06
Operator : JA Inst ID: FID-4.i
Smp Info : ICAL1;ICAL1;;;
Misc Info :
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	374	0.38600	0.383(a)
2 Ethene	1.553	1.553	0.000	361	0.67400	0.615(a)
3 Ethane	1.716	1.716	0.000	435	0.72200	0.590(a)
4 Propane	4.073	4.073	0.000	500	1.05900	1.743
5 N-Butane	7.640	7.640	0.000	438	1.39800	3.271

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

01323656

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D

Date : 24-JAN-2017 09:06

Client ID: ICAL1

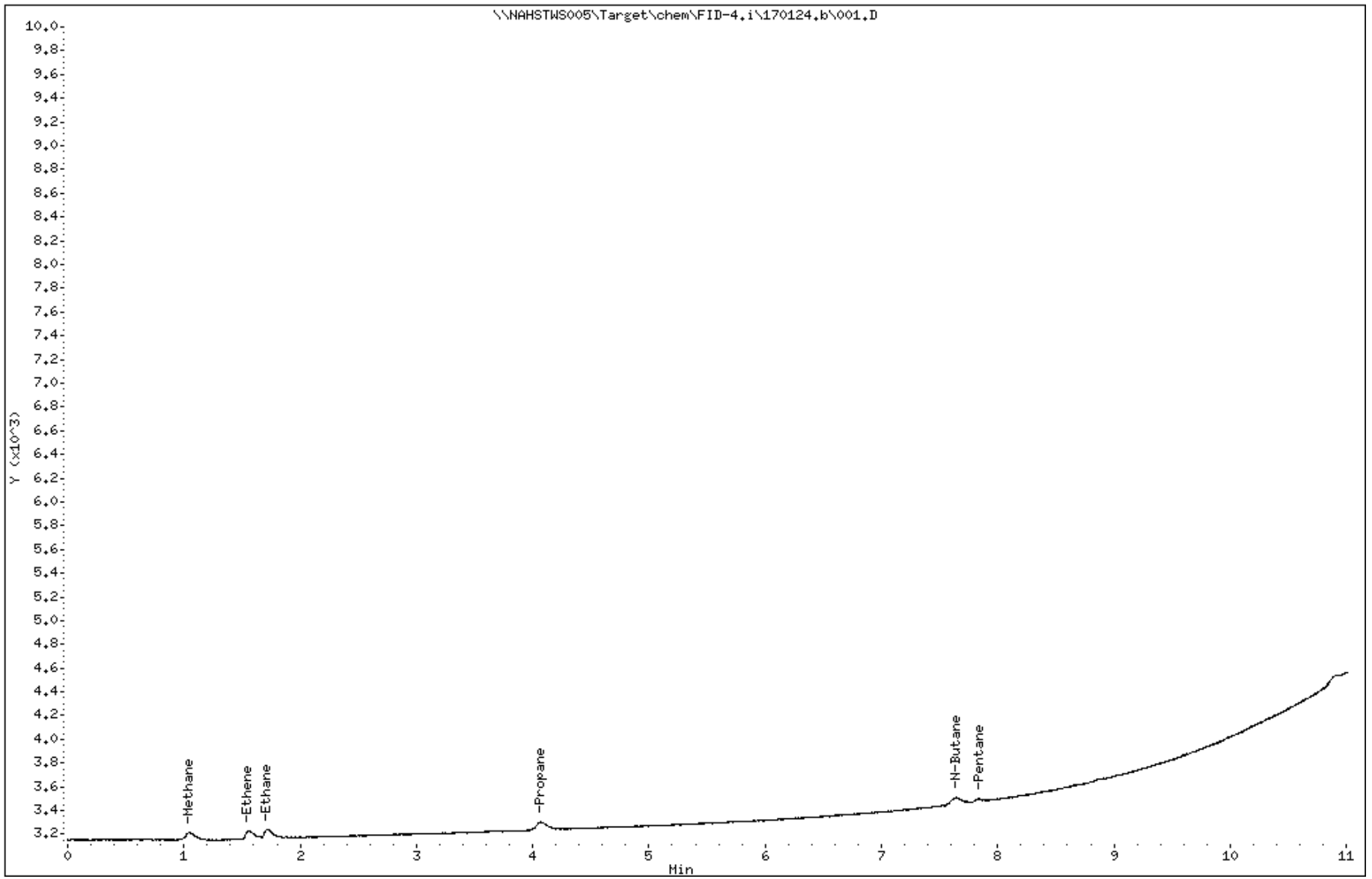
Instrument: FID-4.i

Sample Info: ICAL1;ICAL1;;;

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D
Inj Date : 24-JAN-2017 09:06
InstruID : FID-4.i
LabSampID : ICAL1

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D
Lab Smp Id: ICAL2 Client Smp ID: ICAL2
Inj Date : 24-JAN-2017 09:30
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL2;ICAL2;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:06 Cal File: 001.D
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.023	1.023	0.000	944	0.96500	0.968
2 Ethene	1.560	1.560	0.000	956	1.68500	1.630
3 Ethane	1.723	1.723	0.000	1209	1.80400	1.641
4 Propane	4.123	4.123	0.000	1279	2.64600	2.927
5 N-Butane	7.716	7.716	0.000	936	3.49600	4.180

01323659

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D

Date : 24-JAN-2017 09:30

Client ID: ICAL2

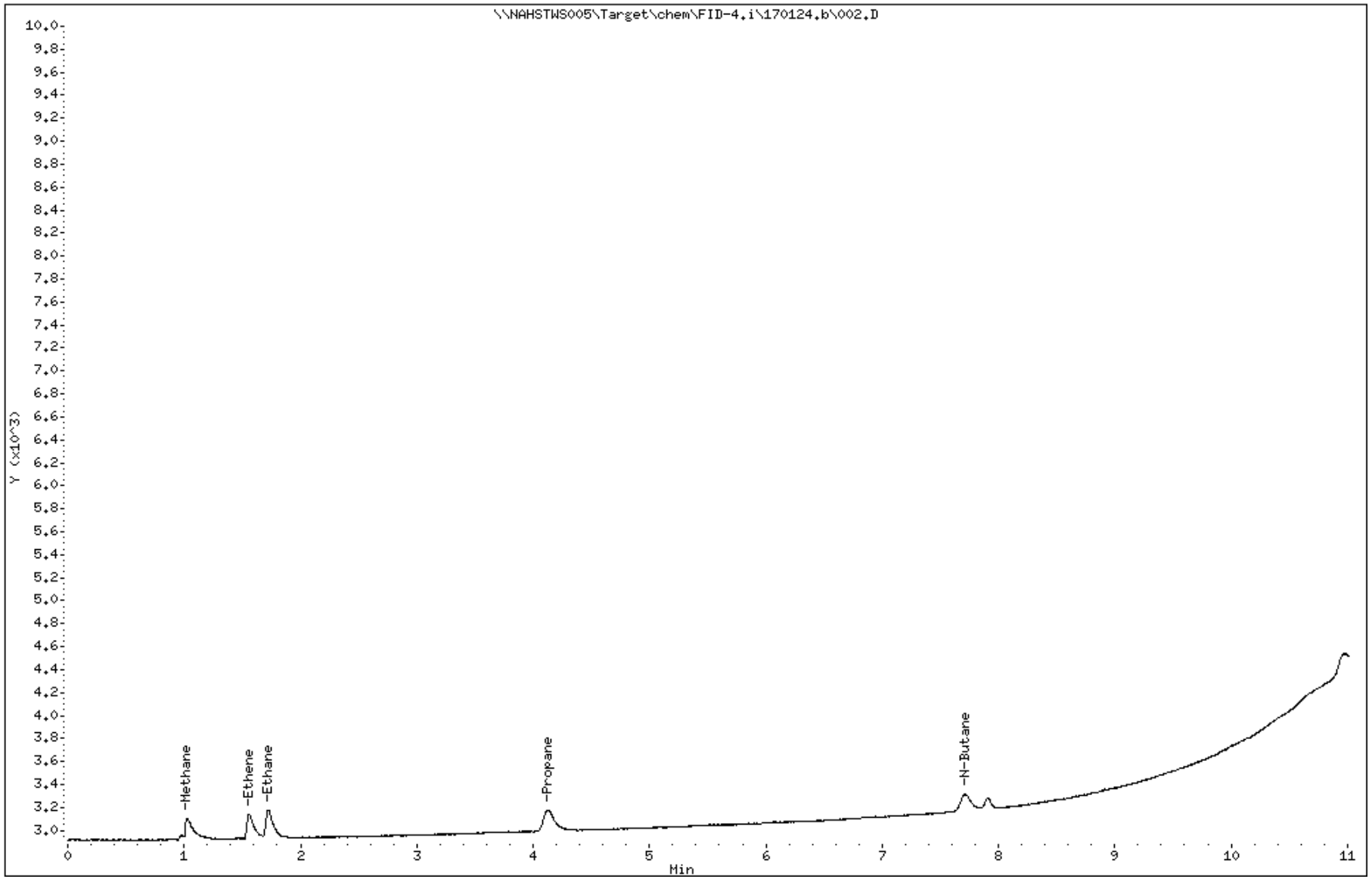
Instrument: FID-4.i

Sample Info: ICAL2;ICAL2;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D
Inj Date : 24-JAN-2017 09:30
InstruID : FID-4.i
LabSampID : ICAL2

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D
Lab Smp Id: ICAL3 Client Smp ID: ICAL3
Inj Date : 24-JAN-2017 09:59
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL3;ICAL3;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:30 Cal File: 002.D
Als bottle: 3 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	1967	1.92900	2.018
2 Ethene	1.570	1.570	0.000	1904	3.37000	3.247
3 Ethane	1.736	1.736	0.000	2378	3.60900	3.229
4 Propane	4.123	4.123	0.000	2602	5.29300	4.926
5 N-Butane	7.703	7.703	0.000	2034	6.99100	6.176

01323662

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D

Date : 24-JAN-2017 09:59

Client ID: ICAL3

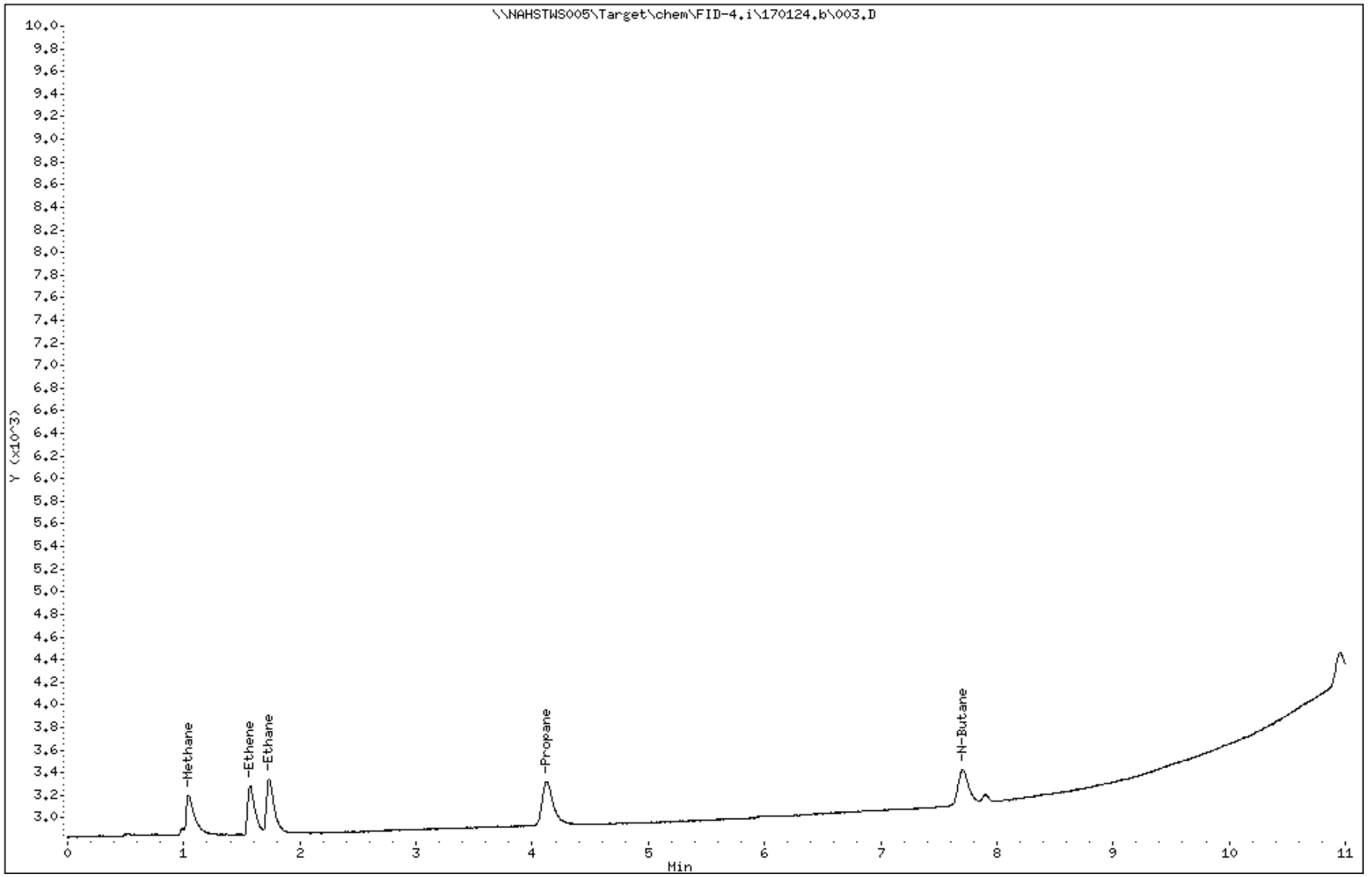
Instrument: FID-4.i

Sample Info: ICAL3;ICAL3;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D
Inj Date : 24-JAN-2017 09:59
InstruID : FID-4.i
LabSampID : ICAL3

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D Page 1
Report Date: 28-Sep-2022 10:02

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Lab Smp Id: ICAL4 Client Smp ID: ICAL4
Inj Date : 24-JAN-2017 10:15
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL4;ICAL4;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:02 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 4 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.033	1.033	0.000	3399	3.85900	3.488
2 Ethene	1.563	1.563	0.000	3478	6.74000	5.932
3 Ethane	1.726	1.726	0.000	4310	7.21700	5.853
4 Propane	4.120	4.120	0.000	4785	10.5850	8.190
5 N-Butane	7.703	7.703	0.000	3864	13.9820	9.473(M)

QC Flag Legend

M - Compound response manually integrated.

01323665

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D

Date : 24-JAN-2017 10:15

Client ID: ICAL4

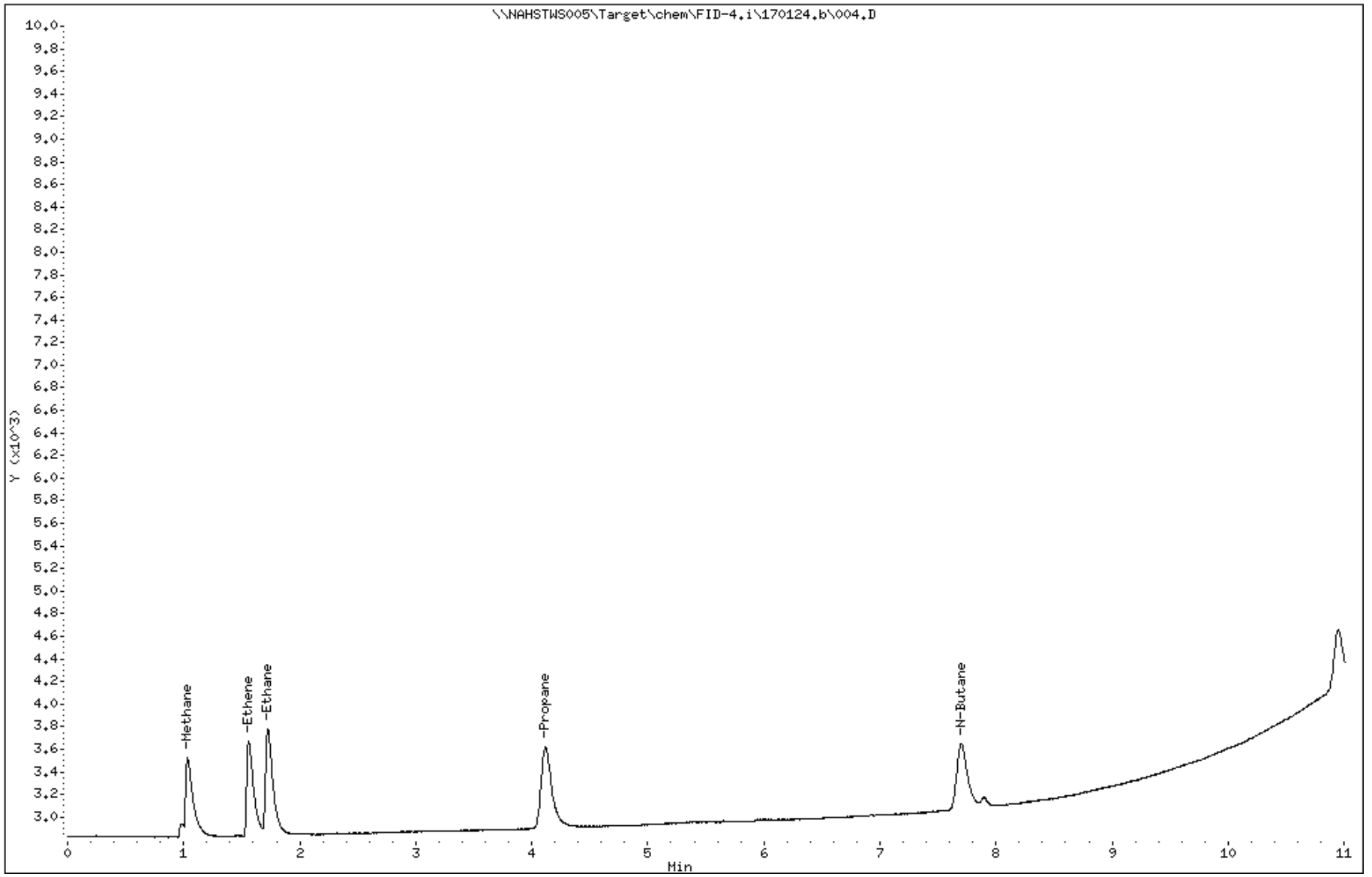
Instrument: FID-4.i

Sample Info: ICAL4;ICAL4;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



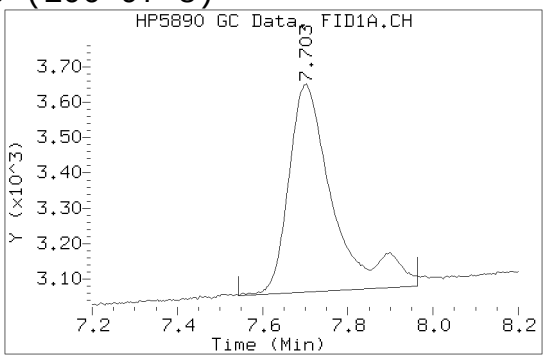
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Inj Date : 24-JAN-2017 10:15
InstruID : FID-4.i
LabSampID : ICAL4

N-Butane (106-97-8)

Reason Code:

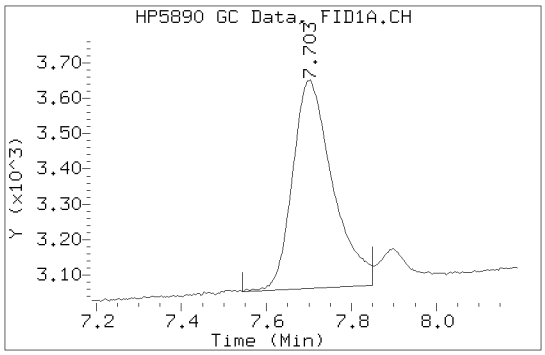
BEFORE

MASS
100
AREA
4292
HEIGHT
591
28-Sep-2022
10:02
linh
pham



AFTER

MASS
100
AREA
3864
HEIGHT
591
28-Sep-2022
10:02
linh
pham



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Lab Smp Id: ICAL5 Client Smp ID: ICAL5
Inj Date : 24-JAN-2017 10:39
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL5;ICAL5;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:02 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	9268	9.64700	9.511
2 Ethene	1.570	1.570	0.000	11210	16.8500	19.121
3 Ethane	1.733	1.733	0.000	14588	18.0430	19.811
4 Propane	4.120	4.120	0.000	18294	26.4630	27.415
5 N-Butane	7.700	7.700	0.000	18446	34.9550	34.419(M)

QC Flag Legend

M - Compound response manually integrated.

01323668

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D

Date : 24-JAN-2017 10:39

Client ID: ICAL5

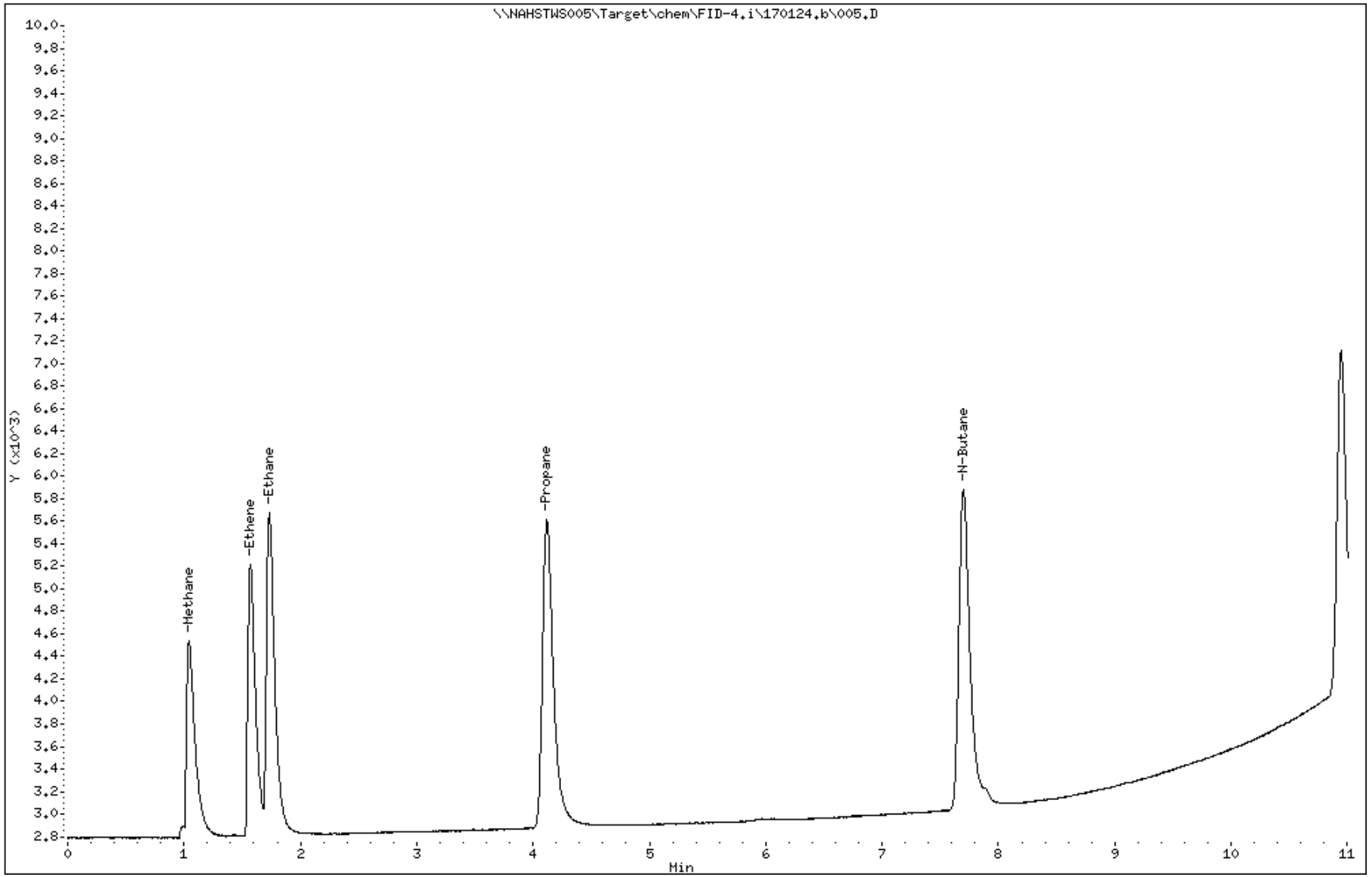
Instrument: FID-4.i

Sample Info: ICAL5;ICAL5;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



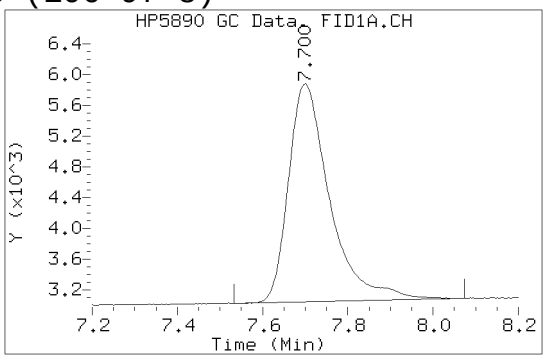
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Inj Date : 24-JAN-2017 10:39
InstruID : FID-4.i
LabSampID : ICAL5

N-Butane (106-97-8)

Reason Code:

BEFORE

MASS
100
AREA
19142
HEIGHT
2839
28-Sep-2022
10:02
linh
pham



AFTER

MASS
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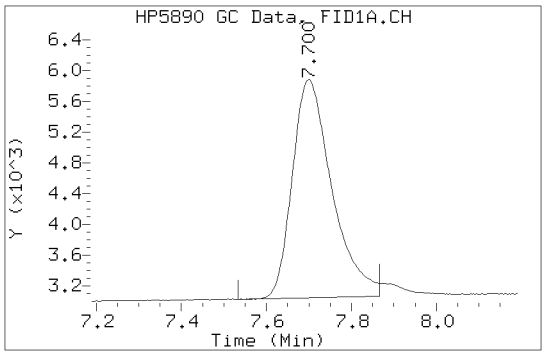
AREA
18446
HEIGHT
2838
28-Sep-2022
10:02
linh
pham



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D
Lab Smp Id: ICAL6 Client Smp ID: ICAL6
Inj Date : 24-JAN-2017 10:57
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL6;ICAL6;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:39 Cal File: 005.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.023	1.023	0.000	17957	19.2940	18.429
2 Ethene	1.550	1.550	0.000	22910	53.8200	39.078
3 Ethane	1.716	1.716	0.000	29505	36.0860	40.070
4 Propane	4.110	4.110	0.000	38286	52.9260	52.796
5 N-Butane	7.696	7.696	0.000	42817	69.9110	70.855

01323671

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D

Date : 24-JAN-2017 10:57

Client ID: ICAL6

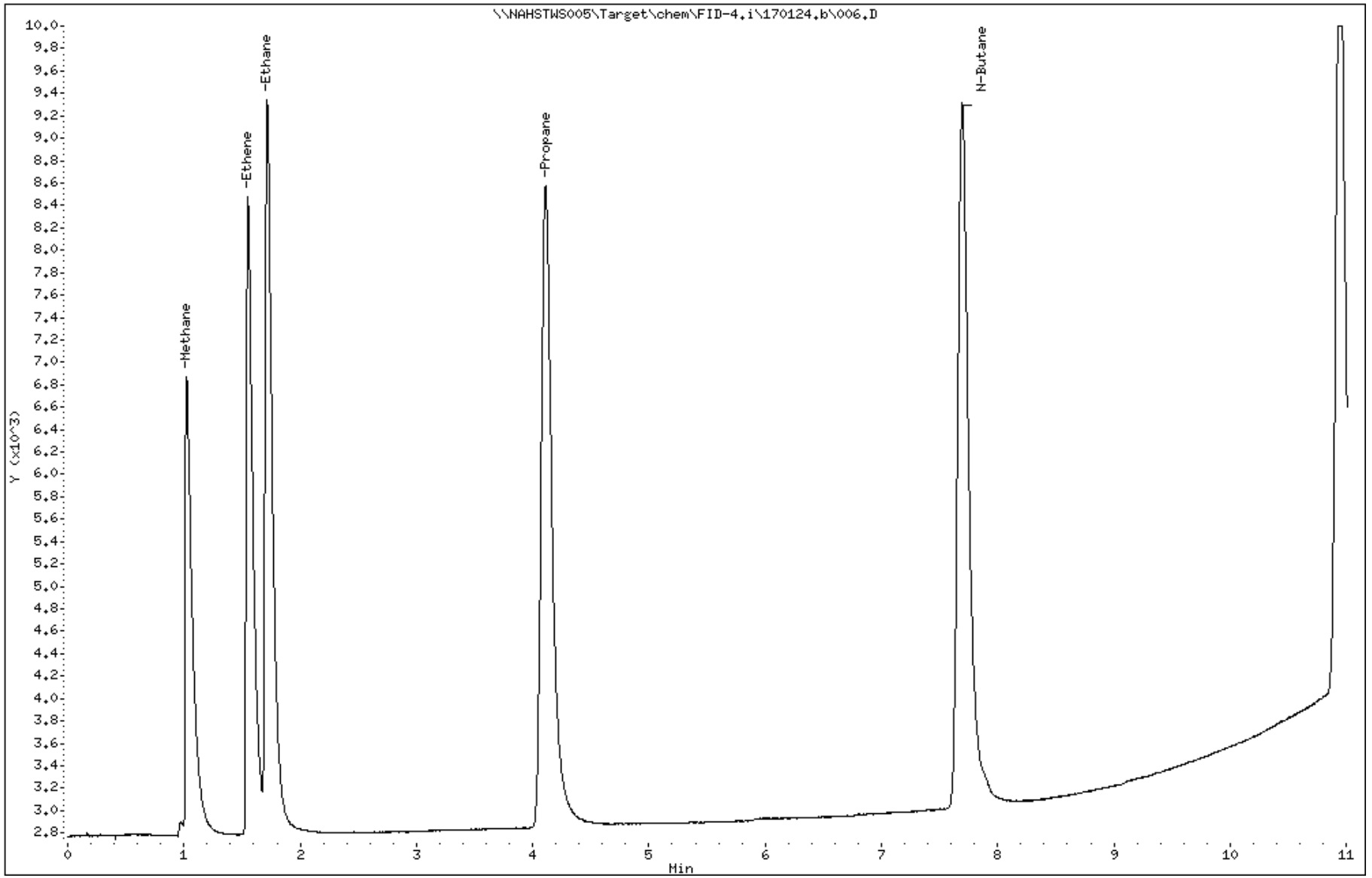
Instrument: FID-4.i

Sample Info: ICAL6;ICAL6;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D
Inj Date : 24-JAN-2017 10:57
InstruID : FID-4.i
LabSampID : ICAL6

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D
Lab Smp Id: ICAL7 Client Smp ID: ICAL7
Inj Date : 24-JAN-2017 11:13
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL7;ICAL7;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:57 Cal File: 006.D
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.030	1.030	0.000	41736	38.5880	42.833(A)
2 Ethene	1.556	1.556	0.000	55865	67.4000	95.291(A)
3 Ethane	1.723	1.723	0.000	72124	72.1720	97.951(A)
4 Propane	4.113	4.113	0.000	96509	105.852	105.844
5 N-Butane	7.690	7.690	0.000	114164	139.821	139.707

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

01323674

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D

Page 1

Date : 24-JAN-2017 11:13

Client ID: ICAL7

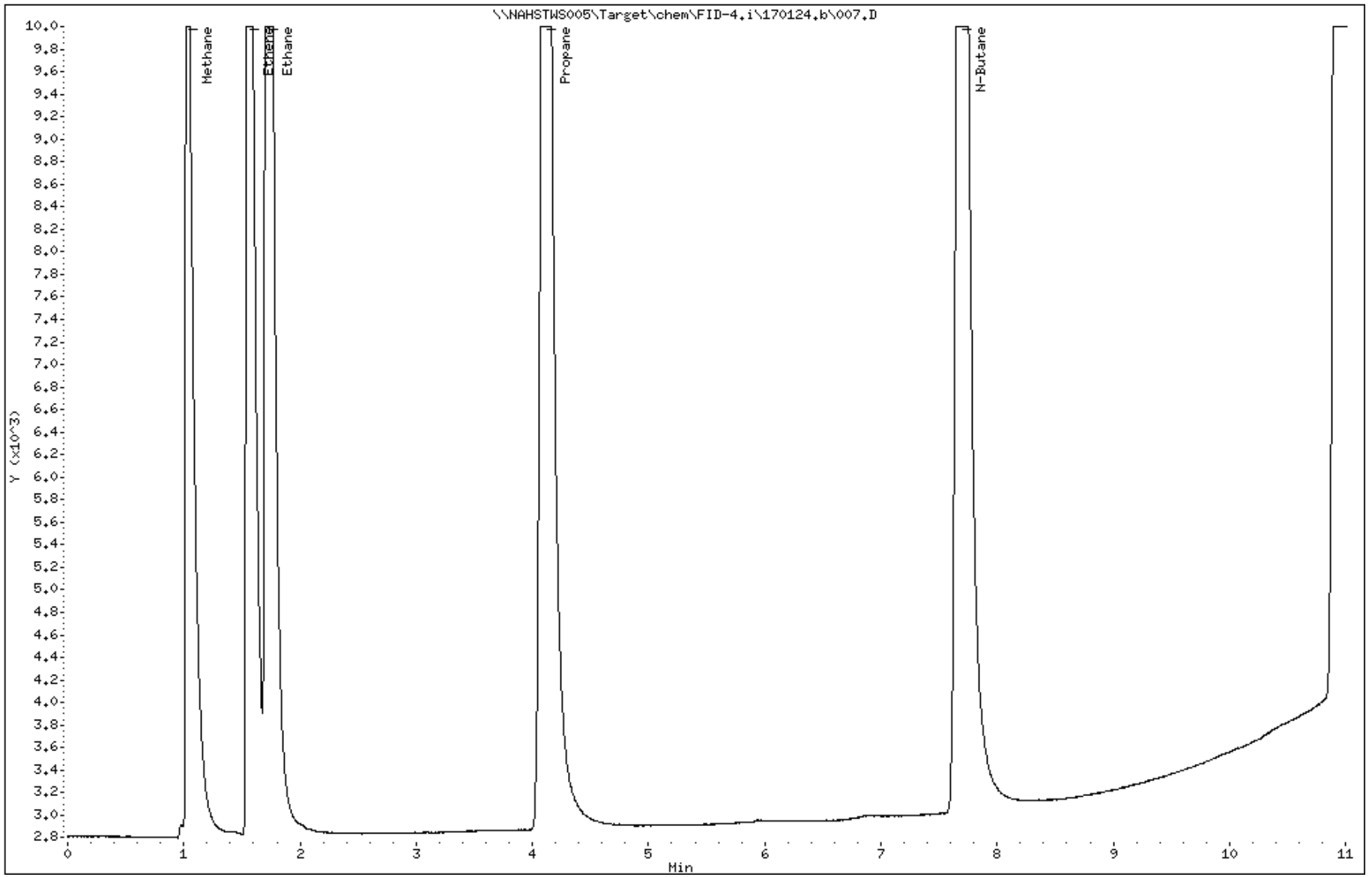
Instrument: FID-4.i

Sample Info: ICAL7;ICAL7;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



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Inj Date : 24-JAN-2017 11:13
InstruID : FID-4.i
LabSampID : ICAL7

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 24-JAN-2017 12:05
Operator : MA Inst ID: FID-4.i
Smp Info : ICV;ICV;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 8 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	1.046	1.030	0.016	9352	9.59792	9.597
2 Ethene	1.573	1.556	0.017	11192	19.0906	19.090
3 Ethane	1.736	1.723	0.013	14474	19.6571	19.657
4 Propane	4.116	4.113	0.003	18164	27.2381	27.238
5 N-Butane	7.696	7.690	0.006	19425	36.0103	36.010

01323677

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D

Date : 24-JAN-2017 12:05

Client ID: ICV

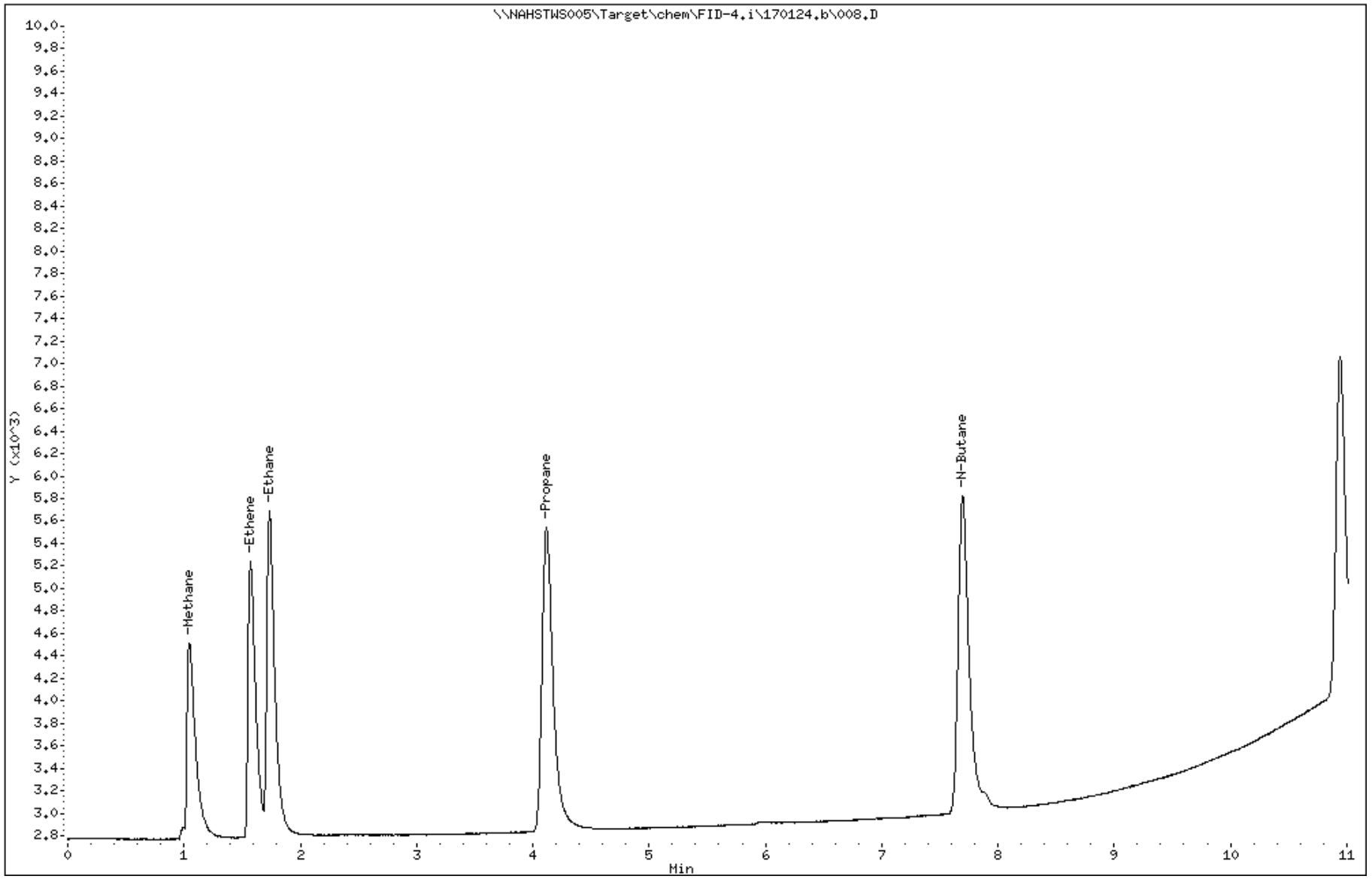
Instrument: FID-4.i

Sample Info: ICV;ICV;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D
Inj Date : 24-JAN-2017 12:05
InstruID : FID-4.i
LabSampID : ICV

NO MANUAL INTEGRATIONS

01323679

right solutions.
right partner.

Raw Data FID 4 442303

Dissolved Gasses by RSK-175

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\033.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 21-JUL-2023 14:00
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 14:08 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	0.426	0.426	0.000	7718	9.64700	7.915
2 Ethene	0.640	0.640	0.000	10622	16.8500	18.133
3 Ethane	0.706	0.706	0.000	14729	18.0430	20.471

01323681

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\033.D

Date : 21-JUL-2023 14:00

Client ID: RSK-CCV

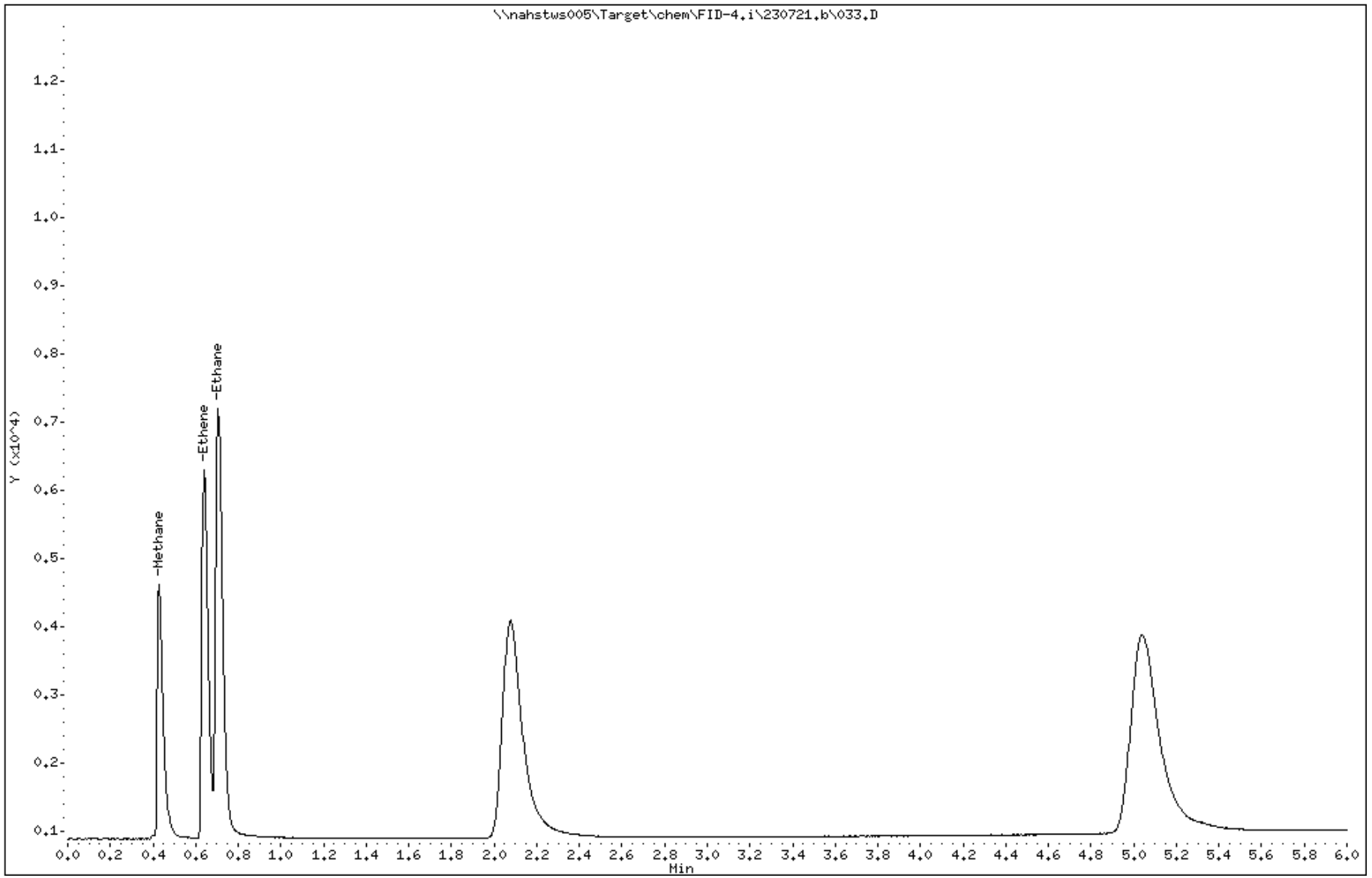
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230721.b\033.D
Inj Date : 21-JUL-2023 14:00
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\035.D Page 1
Report Date: 21-Jul-2023 16:53

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\035.D
Lab Smp Id: MBLK-230721 Client Smp ID: MBLK-230721
Inj Date : 21-JUL-2023 14:22
Operator : PL Inst ID: FID-4.i
Smp Info : MBLK-230721;MBLK-230721;3;;BLANK
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 16:34 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 35 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)

01323684

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\035.D

Date : 21-JUL-2023 14:22

Client ID: MBLK-230721

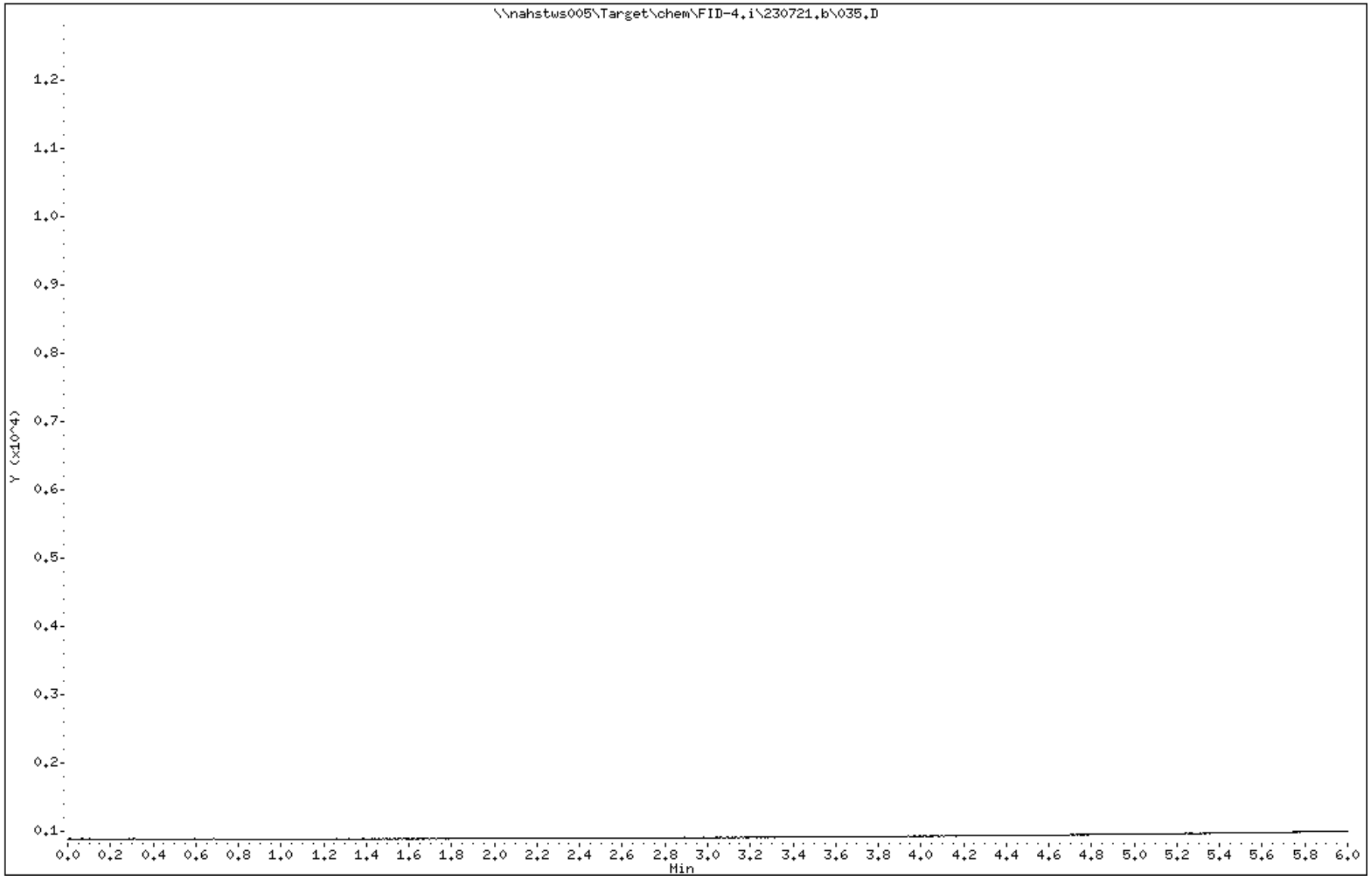
Instrument: FID-4.i

Sample Info: MBLK-230721;MBLK-230721;3;;BLANK

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230721.b\035.D
Inj Date : 21-JUL-2023 14:22
InstruID : FID-4.i
LabSampID : MBLK-230721

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\036.D Page 1
Report Date: 21-Jul-2023 16:53

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\036.D
Lab Smp Id: LCS-230721 Client Smp ID: LCS-230721
Inj Date : 21-JUL-2023 14:32
Operator : PL Inst ID: FID-4.i
Smp Info : LCS-230721;LCS-230721;3;;LCS
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 16:34 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 36 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.423	0.423	0.000	7663	7.85955	7.859
2 Ethene	0.636	0.633	0.003	10600	18.0961	18.096
3 Ethane	0.703	0.703	0.000	14683	20.4075	20.407

01323687

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\036.D

Date : 21-JUL-2023 14:32

Client ID: LCS-230721

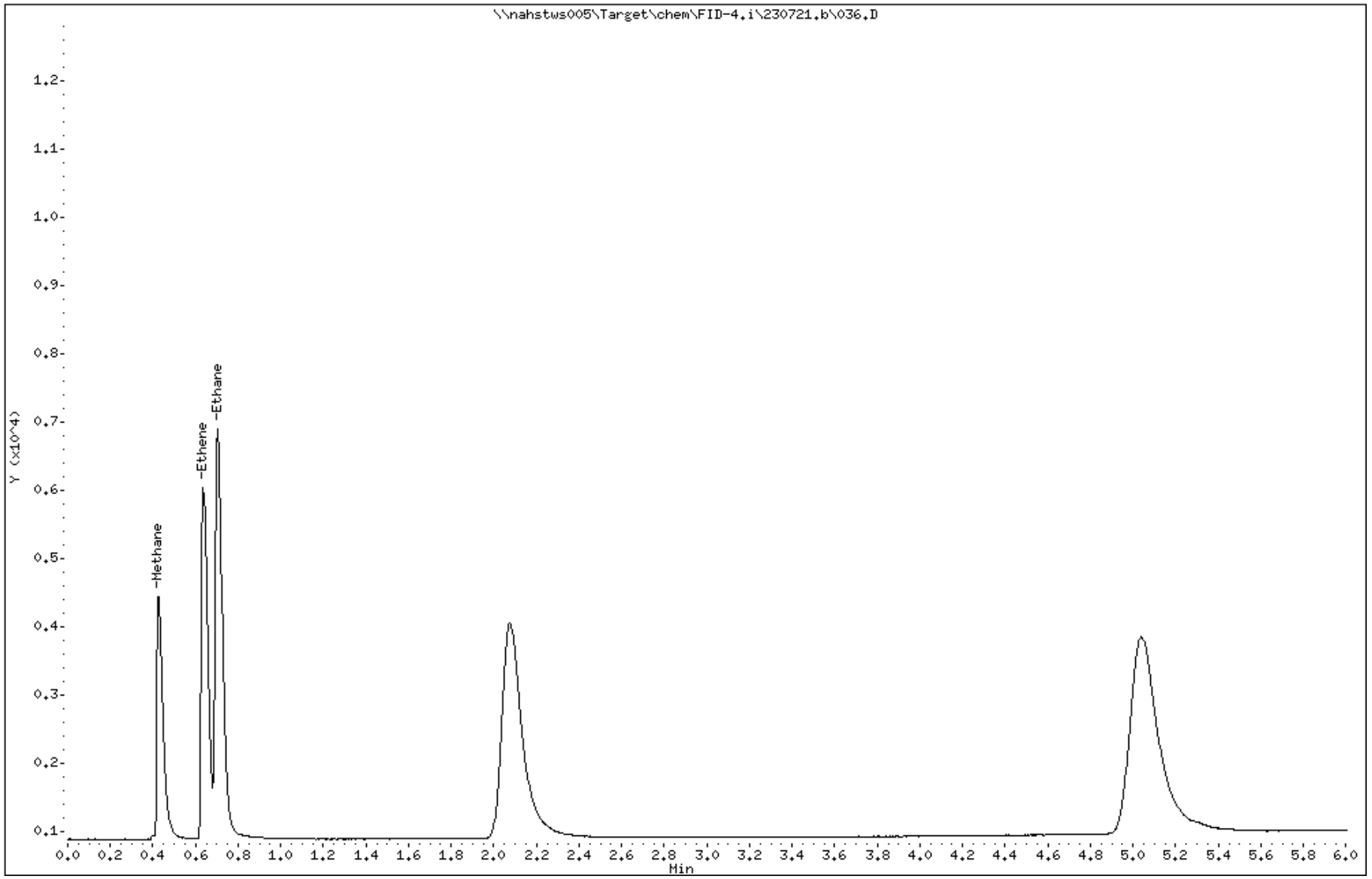
Instrument: FID-4.i

Sample Info: LCS-230721;LCS-230721;3;;LCS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230721.b\036.D
Inj Date : 21-JUL-2023 14:32
InstruID : FID-4.i
LabSampID : LCS-230721

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\037.D Page 1
Report Date: 21-Jul-2023 16:53

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\037.D
Lab Smp Id: LCSD-230721 Client Smp ID: LCSD-230721
Inj Date : 21-JUL-2023 14:47
Operator : PL Inst ID: FID-4.i
Smp Info : LCSD-230721;LCSD-230721;3;;LCSD
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 16:34 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 37 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.430	0.423	0.007	7855	8.05647	8.056
2 Ethene	0.640	0.633	0.007	10834	18.4956	18.495
3 Ethane	0.706	0.703	0.003	14719	20.4576	20.457

01323690

Data File: \\nahstws005\target\chem\fid-4.i\230721.b\037.d

Page 1

Date : 21-JUL-2023 14:47

Client ID: LCSD-230721

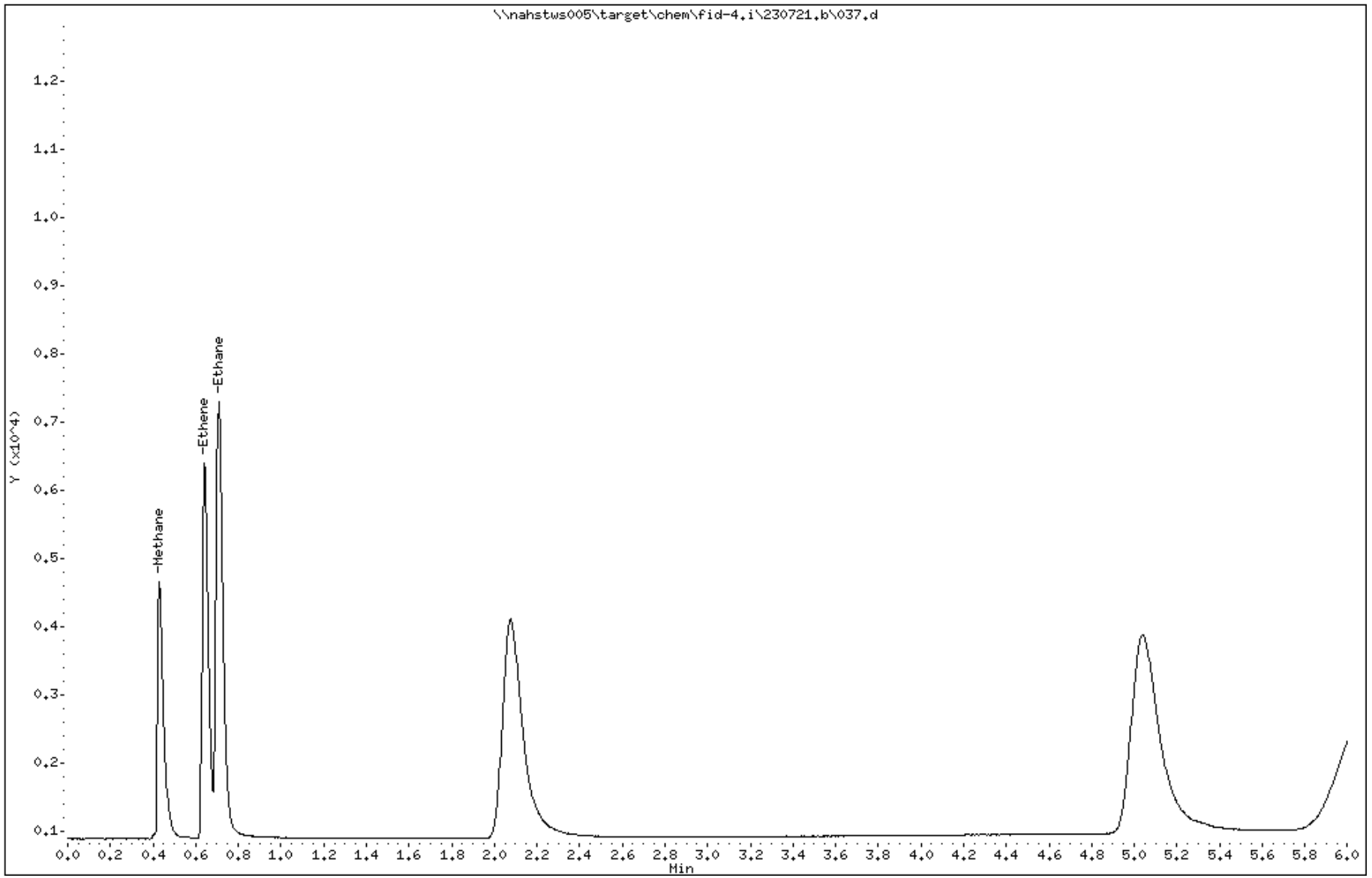
Instrument: FID-4.i

Sample Info: LCSD-230721;LCSD-230721;3;;LCSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\target\chem\fid-4.i\230721.b\037.d
Inj Date : 21-JUL-2023 14:47
InstruID : FID-4.i
LabSampID : LCSD-230721

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\044.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 21-JUL-2023 16:10
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 16:34 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 44 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	0.423	0.423	0.000	7583	9.64700	7.777
2 Ethene	0.633	0.633	0.000	10517	16.8500	17.954
3 Ethane	0.703	0.703	0.000	14231	18.0430	19.779

01323693

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\044.D

Page 1

Date : 21-JUL-2023 16:10

Client ID: RSK-CCV

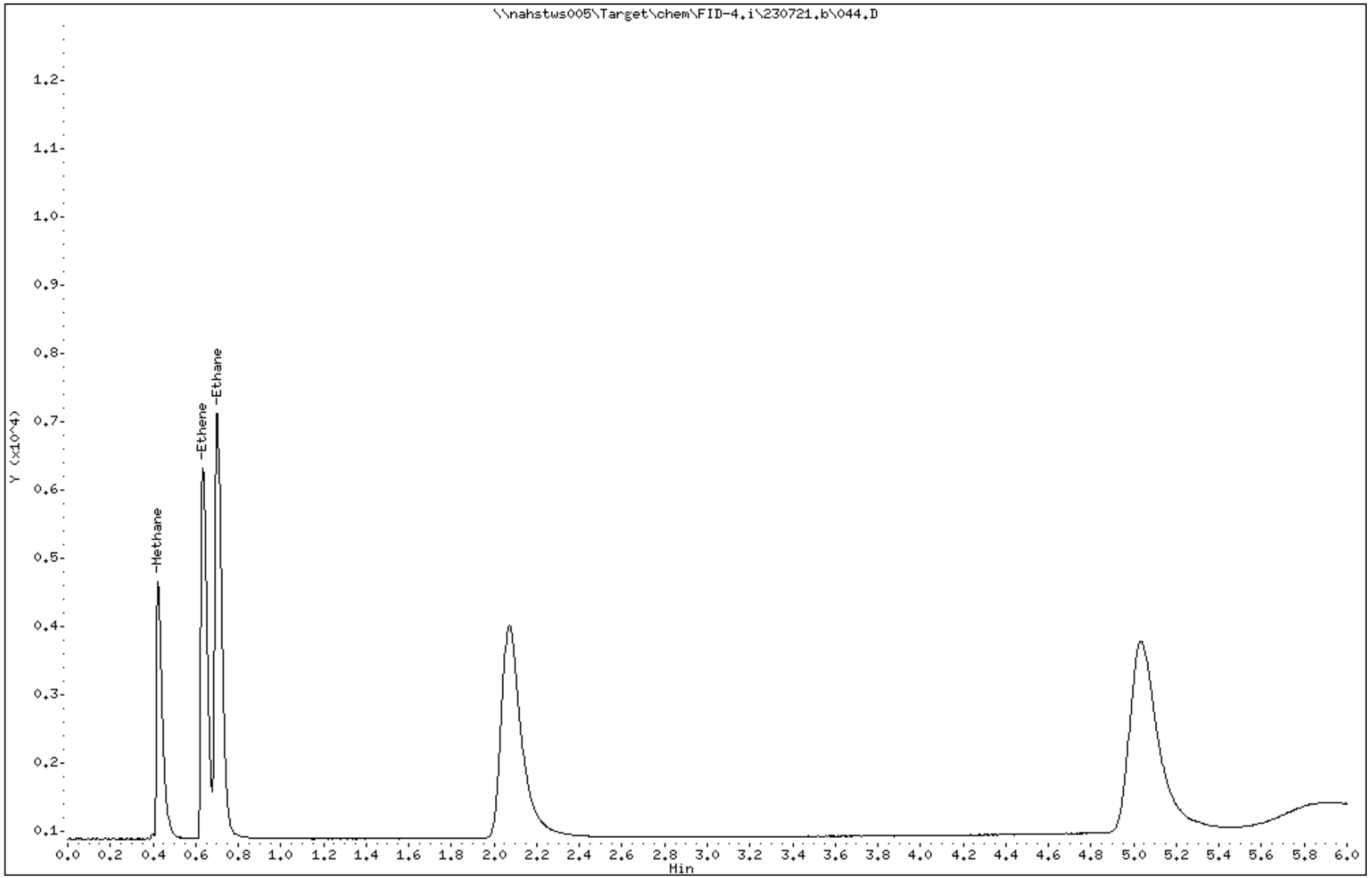
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230721.b\044.D
Inj Date : 21-JUL-2023 16:10
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\055.D Page 1
Report Date: 21-Jul-2023 18:26

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\055.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 21-JUL-2023 18:15
Operator : JA Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info :
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 18:26 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 55 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.426	0.426	0.000	7869	9.64700	8.070
2 Ethene	0.640	0.640	0.000	10826	16.8500	18.481
3 Ethane	0.706	0.706	0.000	14933	18.0430	20.754

01323696

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\055.D

Page 1

Date : 21-JUL-2023 18:15

Client ID: RSK-CCV

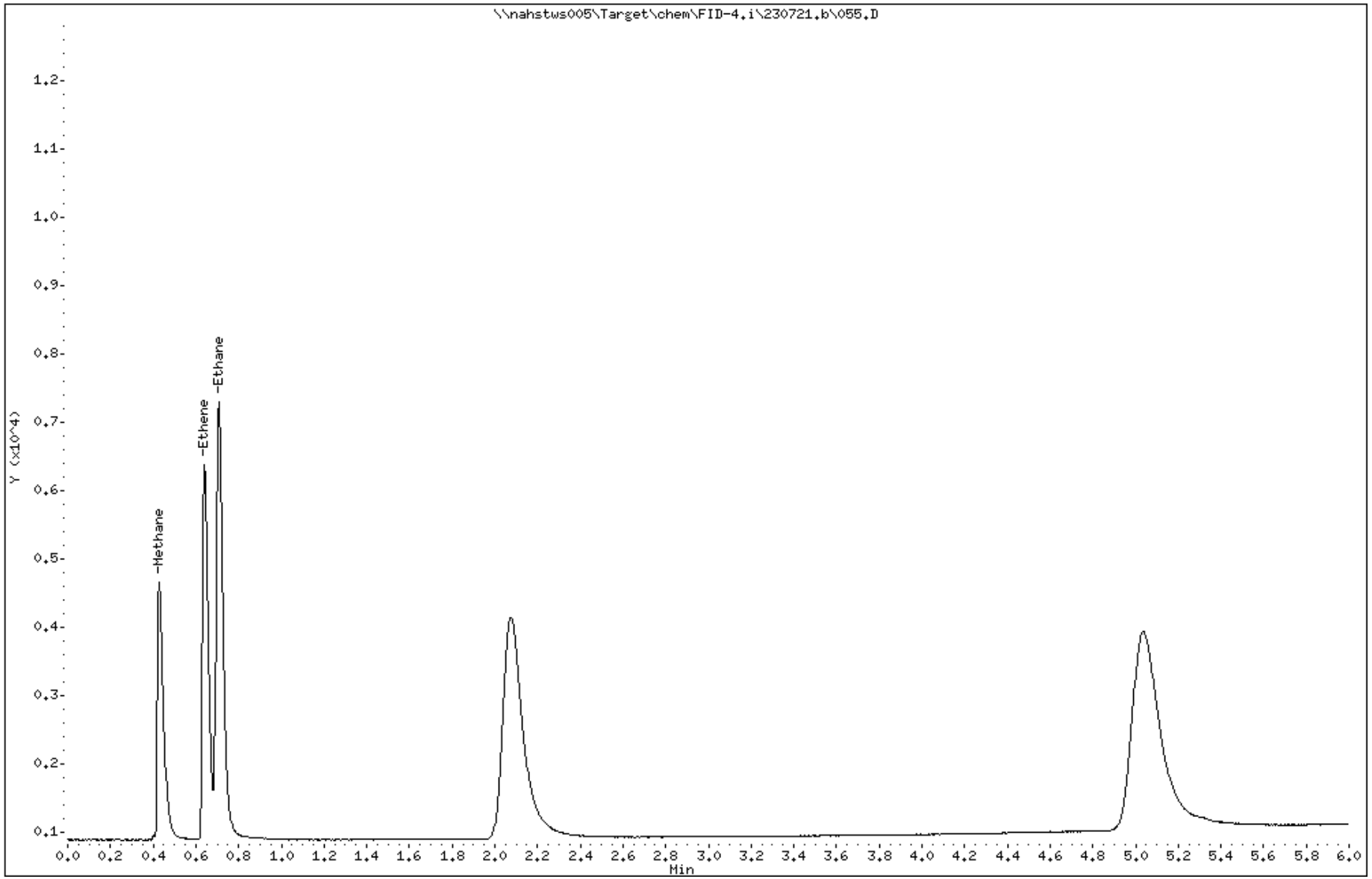
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230721.b\055.D
Inj Date : 21-JUL-2023 18:15
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\059.D Page 1
Report Date: 21-Jul-2023 19:10

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\059.D
Lab Smp Id: HS23071165-04 Client Smp ID: HS23071165-04
Inj Date : 21-JUL-2023 18:44
Operator : PL Inst ID: FID-4.i
Smp Info : HS23071165-04;HS23071165-04
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 18:26 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 59
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.430	0.426	0.004	364280	373.623	373.623(A)
2 Ethene	0.636	0.640	-0.004	2469	4.21503	4.215(M)
3 Ethane	0.680	0.706	-0.026	3996	5.55394	5.553(M)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

01323699

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\059.D

Page 1

Date : 21-JUL-2023 18:44

Client ID: HS23071165-04

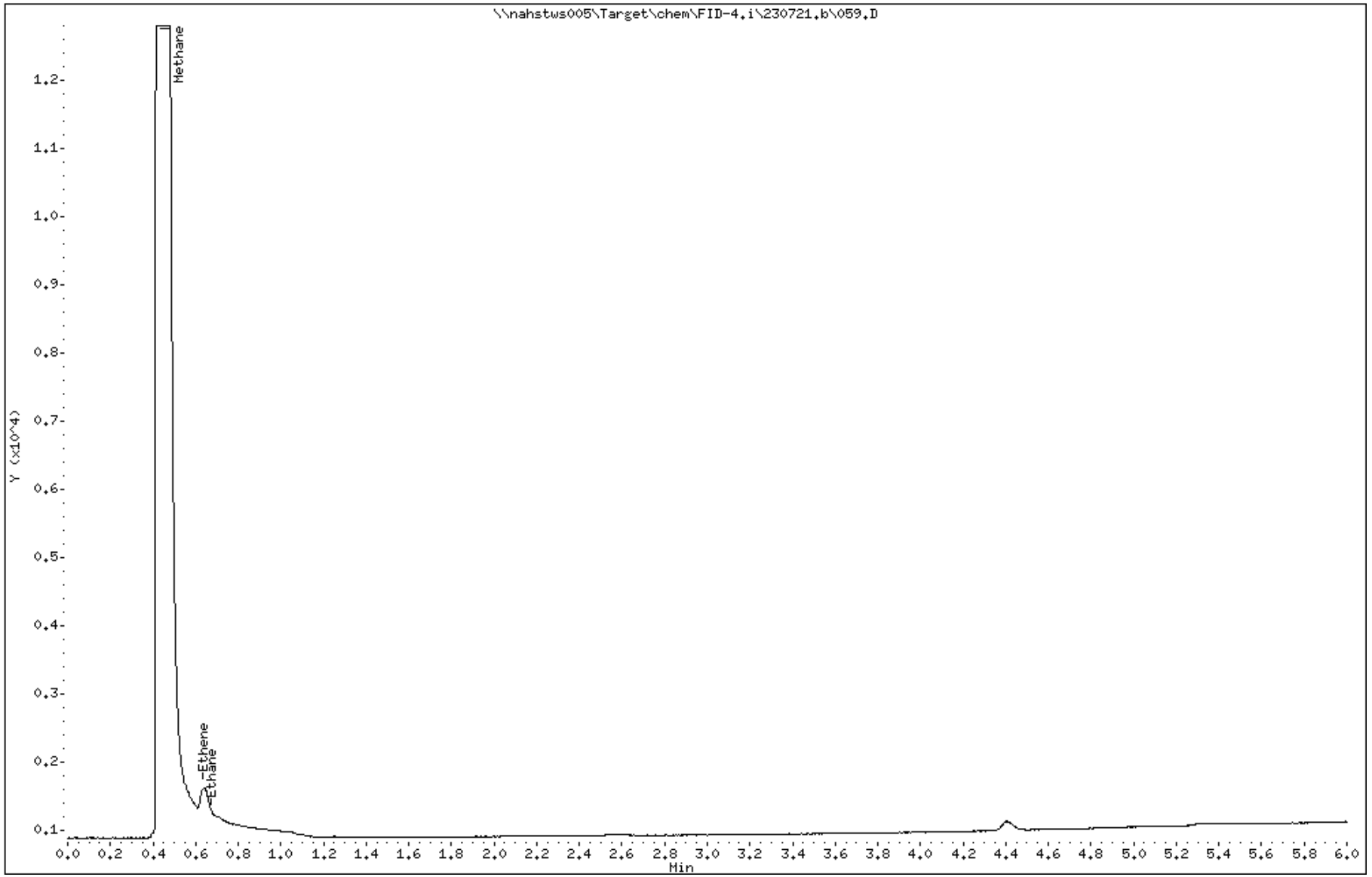
Instrument: FID-4.i

Sample Info: HS23071165-04;HS23071165-04

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



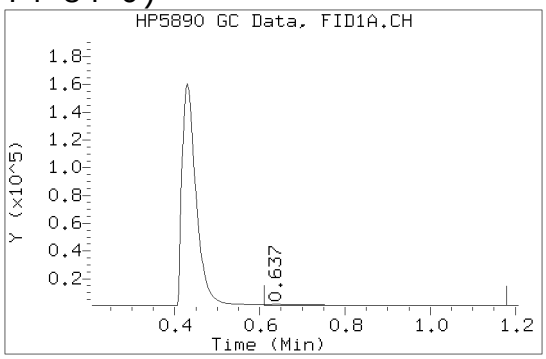
Data File : \\nahstws005\Target\chem\FID-4.i\230721.b\059.D
Inj Date : 21-JUL-2023 18:44
InstruID : FID-4.i
LabSampID : HS23071165-04

Ethane (74-84-0)

Reason Code:

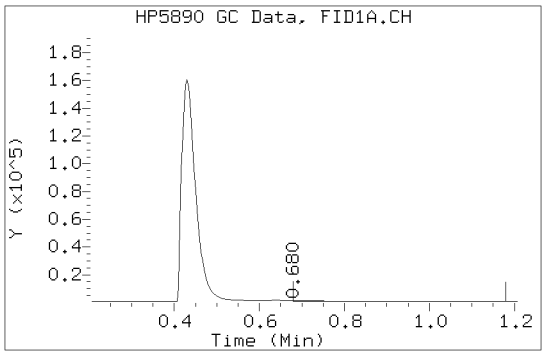
BEFORE

MASS
44
AREA
6345
HEIGHT
735
21-Jul-2023
18:51
ALSHS
Server



AFTER

MASS
44
AREA
3996
HEIGHT
358
21-Jul-2023
19:10
ALSHS
Ser

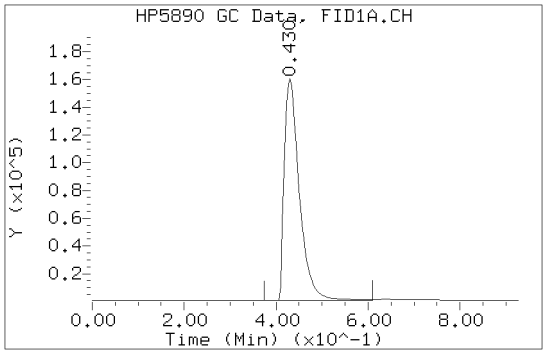


Ethene (74-85-1)

Reason Code:

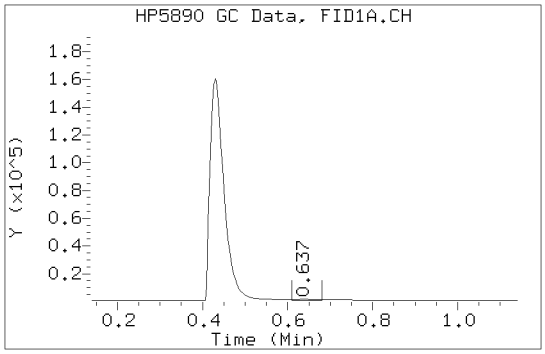
BEFORE

MASS
100
AREA
0
HEIGHT
0
21-Jul-2023
18:51
ALSHS
Server



AFTER

MASS
100
AREA
2469
HEIGHT
735
21-Jul-2023
19:10
ALSHS
Ser



Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\060.D Page 1
Report Date: 21-Jul-2023 19:37

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\060.D
Lab Smp Id: HS23071165-05 Client Smp ID: HS23071165-05
Inj Date : 21-JUL-2023 18:59
Operator : PL Inst ID: FID-4.i
Smp Info : HS23071165-05;HS23071165-05
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 18:26 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 60
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.436	0.426	0.010	6160811	6318.83	6318.830(AM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

01323702

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\060.D

Page 1

Date : 21-JUL-2023 18:59

Client ID: HS23071165-05

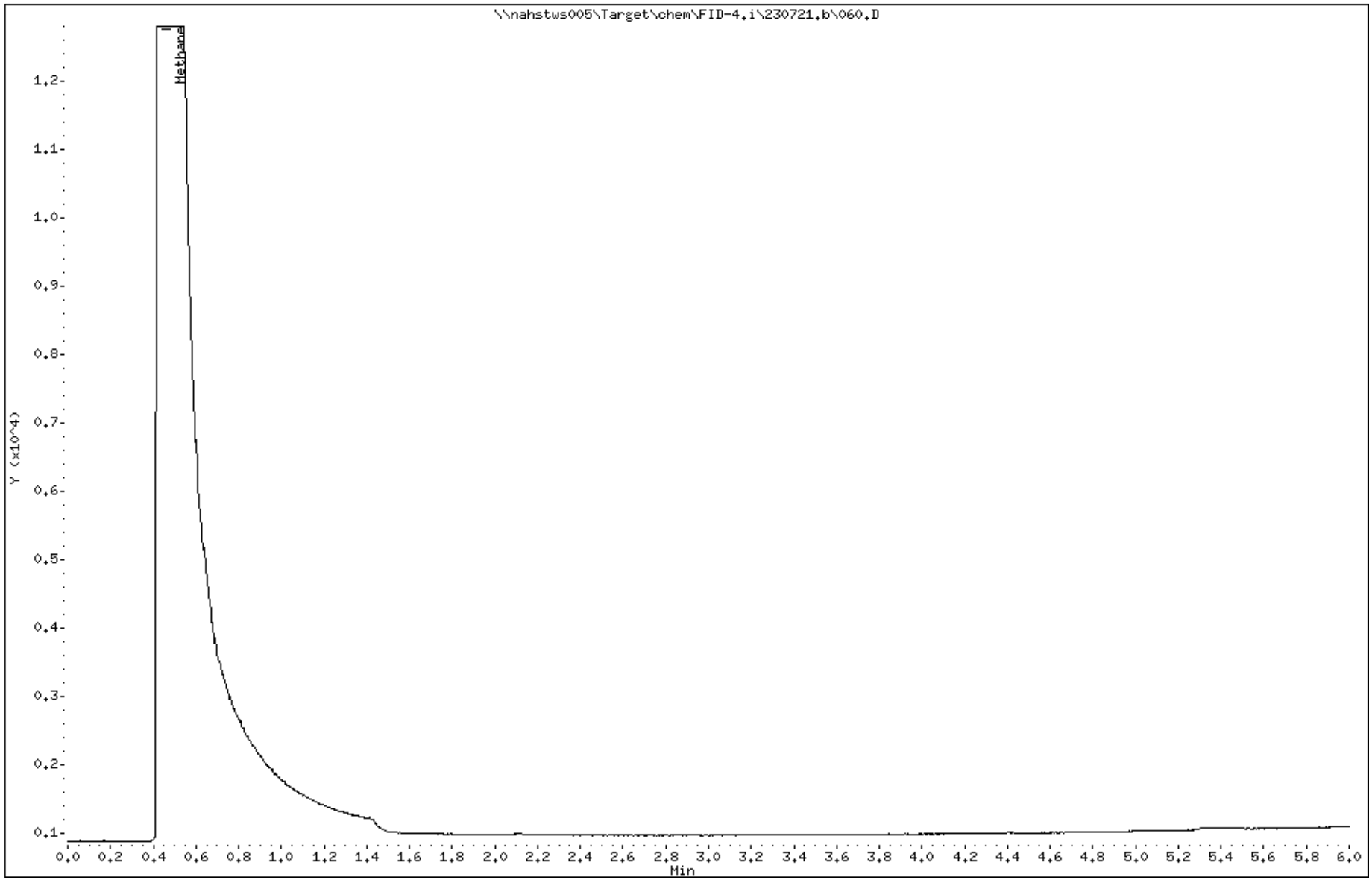
Instrument: FID-4.i

Sample Info: HS23071165-05;HS23071165-05

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



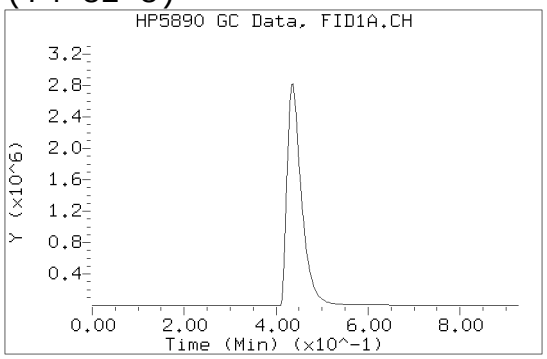
Data File : \\nahstws005\Target\chem\FID-4.i\230721.b\060.D
Inj Date : 21-JUL-2023 18:59
InstruID : FID-4.i
LabSampID : HS23071165-05

Methane (74-82-8)

Reason Code:

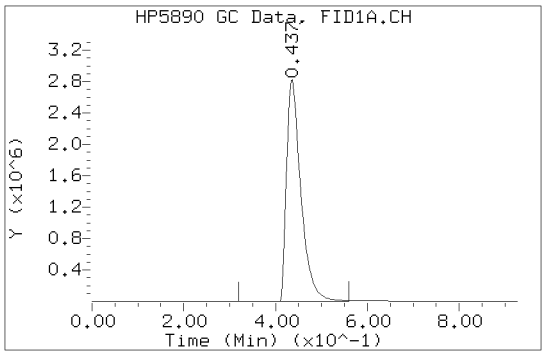
BEFORE

MASS
100
AREA
0
HEIGHT
0
21-Jul-2023
19:07
ALSHS
Server



AFTER

MASS
100
AREA
6160811
HEIGHT
2823889
21-Jul-2023
19:37
ALSHS
Ser



Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\061.D Page 1
Report Date: 21-Jul-2023 19:35

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\061.D
Lab Smp Id: HS23071165-04 Client Smp ID: HS23071165-04
Inj Date : 21-JUL-2023 19:10
Operator : PL Inst ID: FID-4.i
Smp Info : HS23071165-04;HS23071165-04
Misc Info : ;1;0;20
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 18:26 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 61
Dil Factor: 20.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.446	0.426	0.020	17163	17.6032	352.064(M)

QC Flag Legend

M - Compound response manually integrated.

01323705

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\061.D

Date : 21-JUL-2023 19:10

Client ID: HS23071165-04

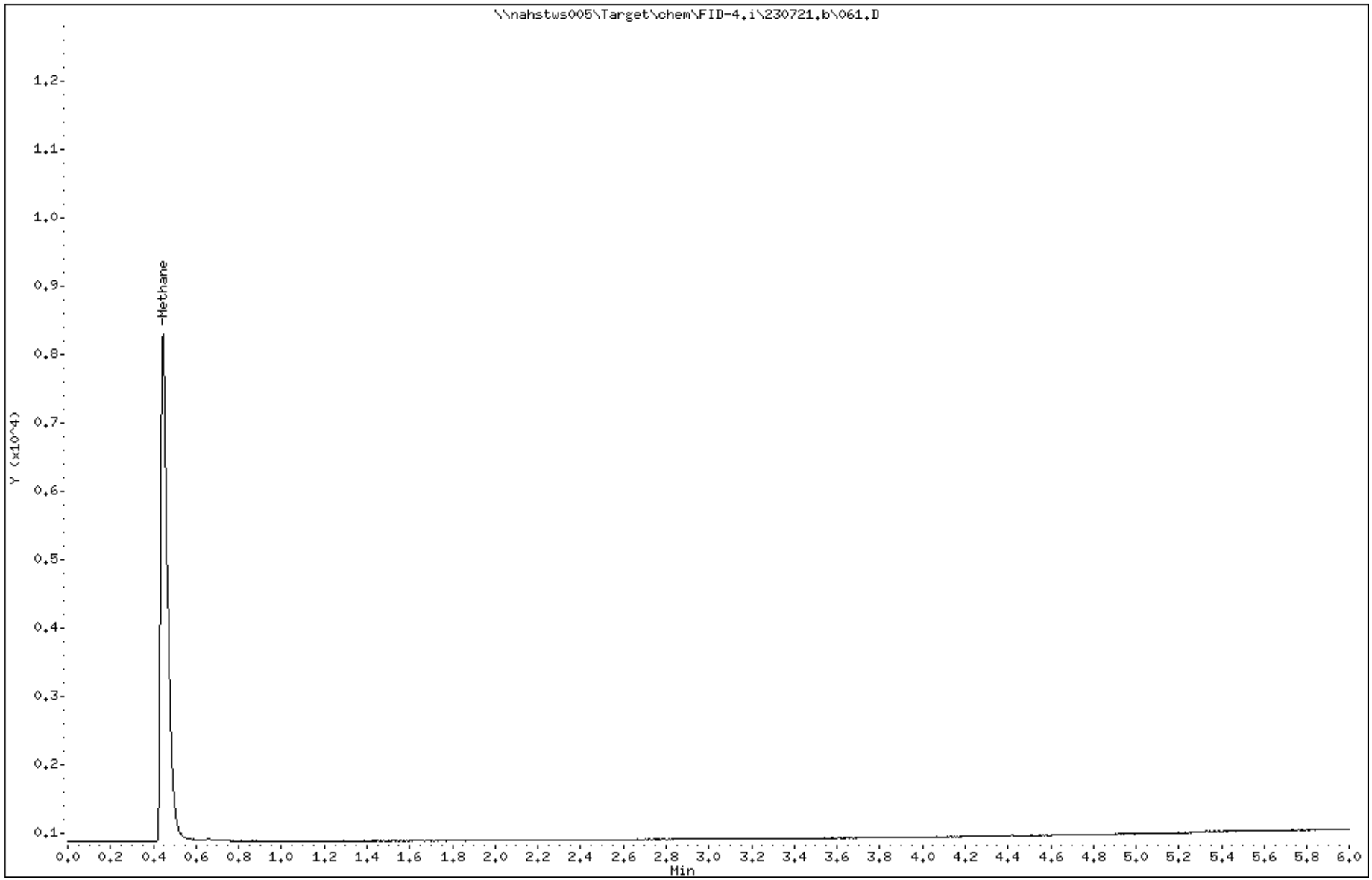
Instrument: FID-4.i

Sample Info: HS23071165-04;HS23071165-04

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



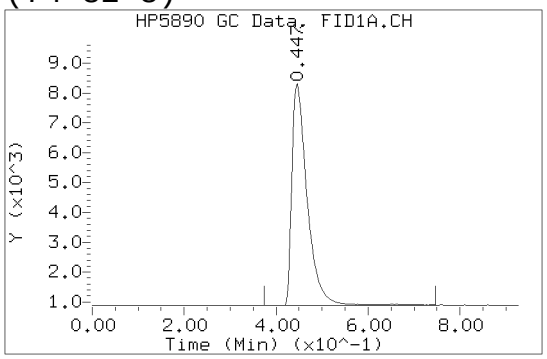
Data File : \\nahstws005\Target\chem\FID-4.i\230721.b\061.D
Inj Date : 21-JUL-2023 19:10
InstruID : FID-4.i
LabSampID : HS23071165-04

Methane (74-82-8)

Reason Code:

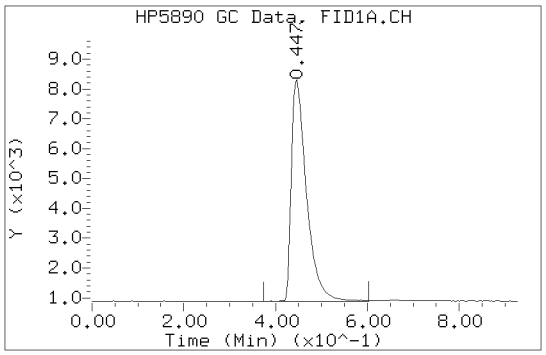
BEFORE

MASS
100
AREA
0
HEIGHT
0
21-Jul-2023
19:18
ALSHS
Server



AFTER

MASS
100
AREA
17163
HEIGHT
7424
21-Jul-2023
19:35
ALSHS
Ser



Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\062.D Page 1
Report Date: 21-Jul-2023 19:36

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\062.D
Lab Smp Id: HS23071165-05 Client Smp ID: HS23071165-05
Inj Date : 21-JUL-2023 19:19
Operator : PL Inst ID: FID-4.i
Smp Info : HS23071165-05;HS23071165-05
Misc Info : ;1;0;200
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 18:26 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 62
Dil Factor: 200.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.446	0.426	0.020	28907	29.6484	5929.687(M)

QC Flag Legend

M - Compound response manually integrated.

01323708

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\062.D

Date : 21-JUL-2023 19:19

Client ID: HS23071165-05

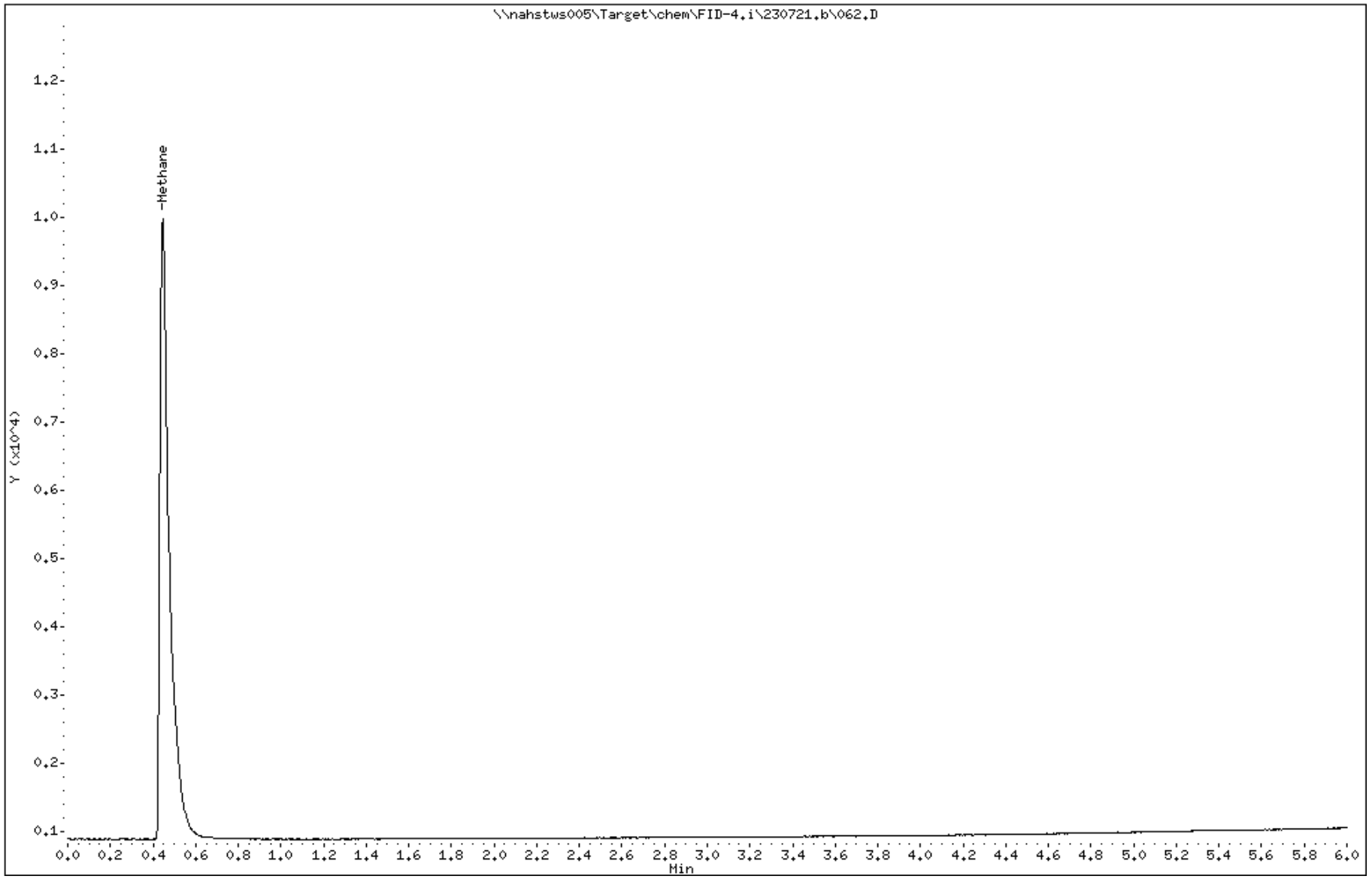
Instrument: FID-4.i

Sample Info: HS23071165-05;HS23071165-05

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



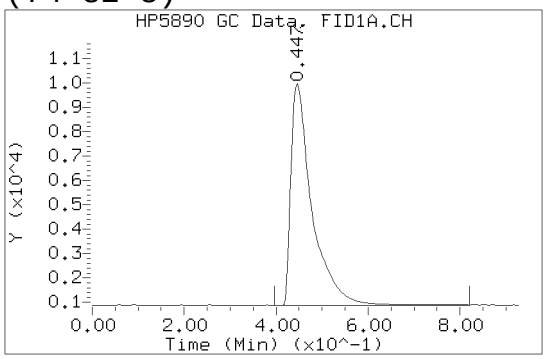
Data File : \\nahstws005\Target\chem\FID-4.i\230721.b\062.D
Inj Date : 21-JUL-2023 19:19
InstruID : FID-4.i
LabSampID : HS23071165-05

Methane (74-82-8)

Reason Code:

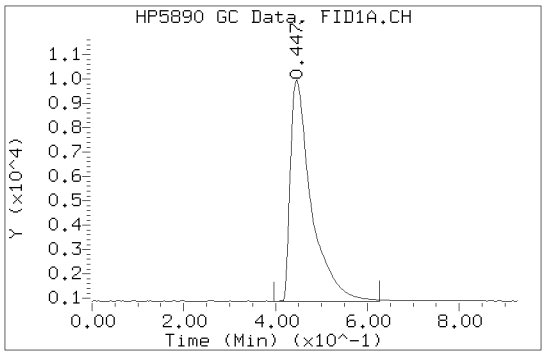
BEFORE

MASS
100
AREA
0
HEIGHT
0
21-Jul-2023
19:28
ALSHS
Server



AFTER

MASS
100
AREA
28907
HEIGHT
9093
21-Jul-2023
19:36
ALSHS
Ser



Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\063.D Page 1
Report Date: 21-Jul-2023 19:58

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\063.D
Lab Smp Id: HS23071069-04DUP Client Smp ID: HS23071069-04DUP
Inj Date : 21-JUL-2023 19:32
Operator : PL Inst ID: FID-4.i
Smp Info : HS23071069-04DUP;HS23071069-04DUP
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 18:26 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 63
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.426	0.426	0.000	15380	15.7745	15.774
3 Ethane	0.706	0.706	0.000	402	0.55873	0.558(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

01323711

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\063.D

Page 1

Date : 21-JUL-2023 19:32

Client ID: HS23071069-04DUP

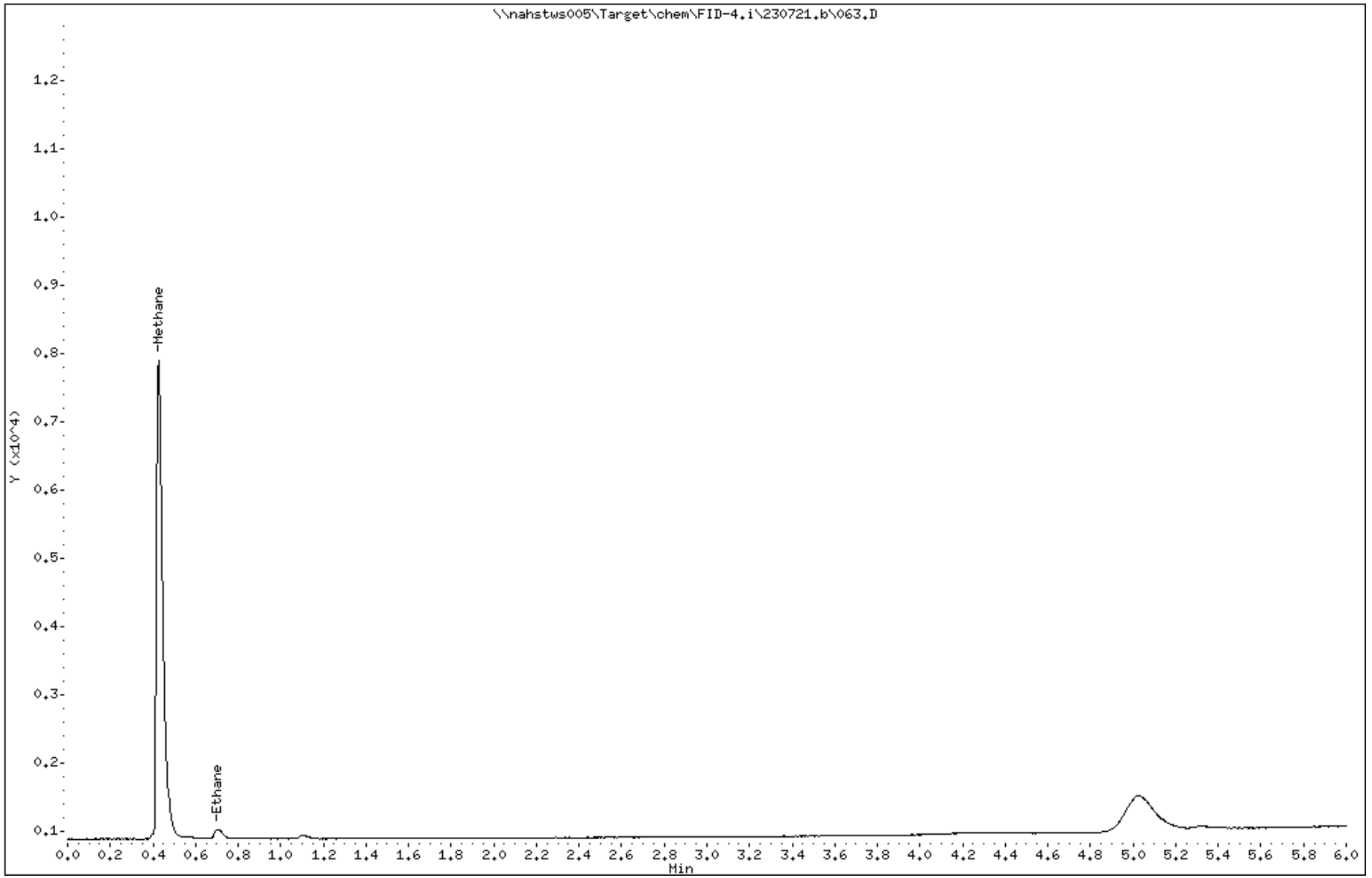
Instrument: FID-4.i

Sample Info: HS23071069-04DUP;HS23071069-04DUP

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230721.b\063.D
Inj Date : 21-JUL-2023 19:32
InstruID : FID-4.i
LabSampID : HS23071069-04DUP

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\064.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 21-JUL-2023 19:54
Operator : JA Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info :
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 20:03 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 64 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.426	0.426	0.000	7843	9.64700	8.044
2 Ethene	0.636	0.636	0.000	10564	16.8500	18.034
3 Ethane	0.703	0.703	0.000	14365	18.0430	19.965

01323714

Data File: \\nahstws005\target\chem\fid-4.i\230721.b\064.d

Date : 21-JUL-2023 19:54

Client ID: RSK-CCV

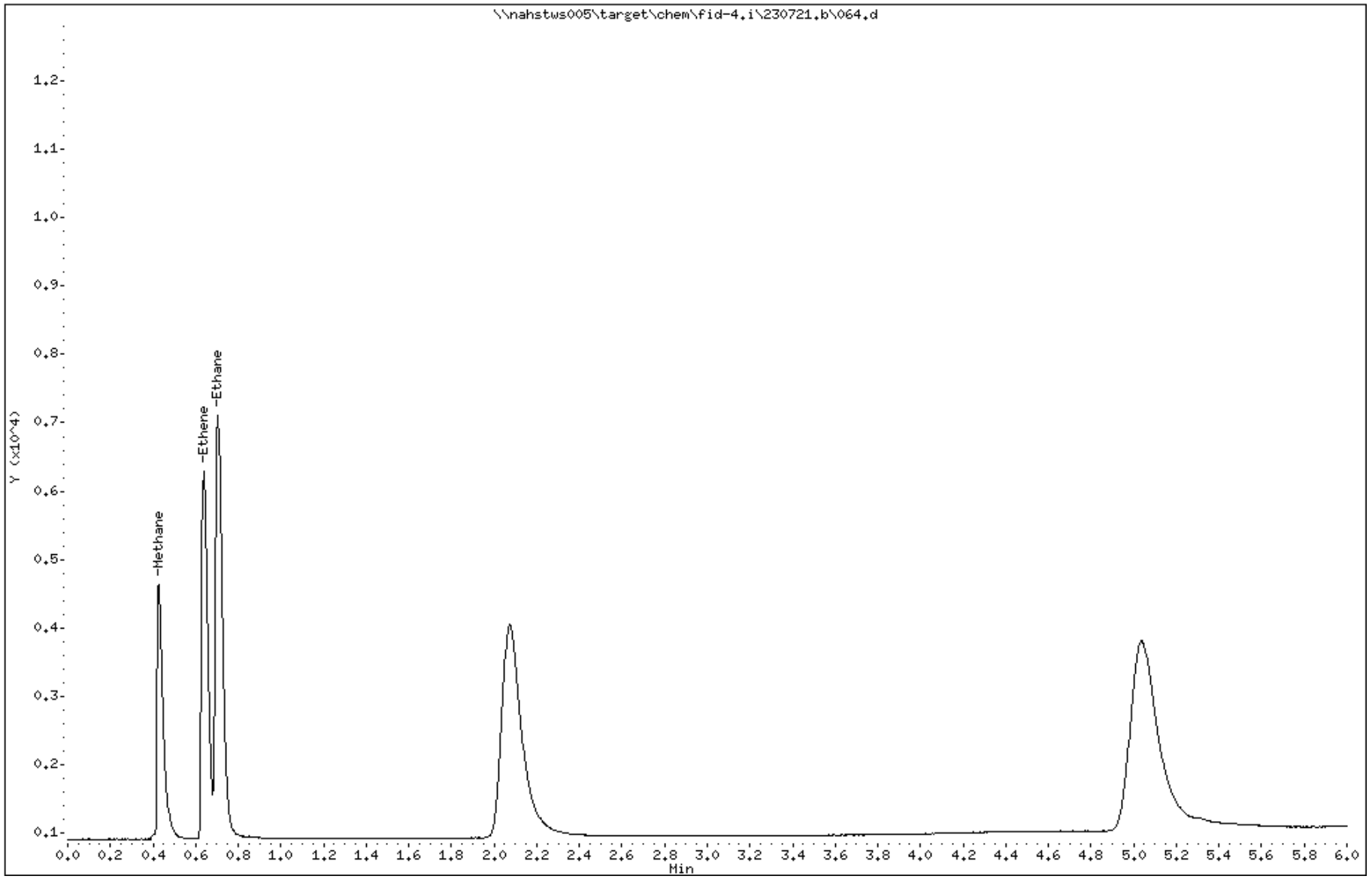
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\target\chem\fid-4.i\230721.b\064.d
Inj Date : 21-JUL-2023 19:54
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

HS23071165 Wetchem TOC_W 5310B

ALS WO# HS23071165

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

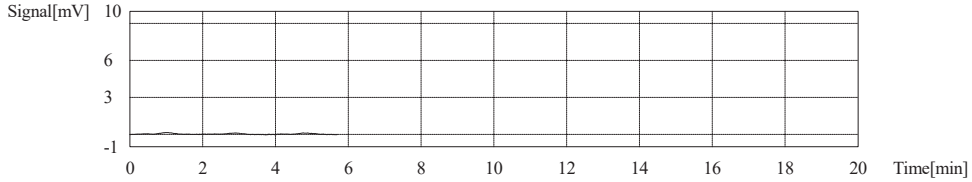
Sample Name:	CALIBRATION
Sample ID:	
Cal. Curve:	06.21.2023.2023_06_21_17_09_26.cal
Status	Completed

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

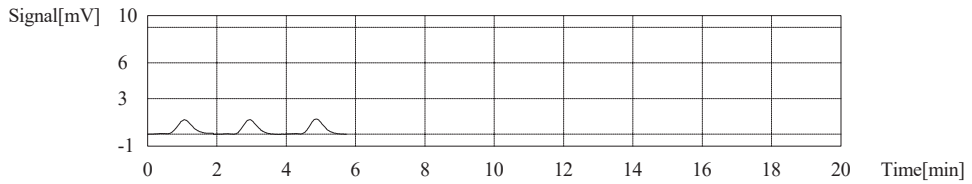
Acid Add.	0.000%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	0.2442



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

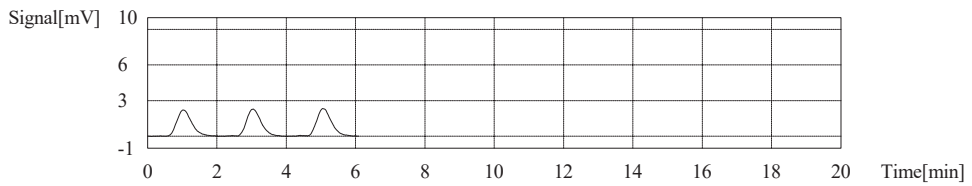
Acid Add.	0.000%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	3.423



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



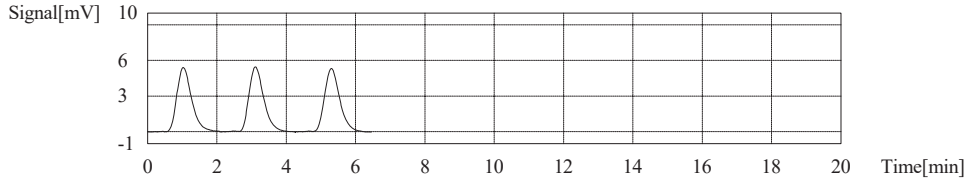
TOC-Control L Report

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

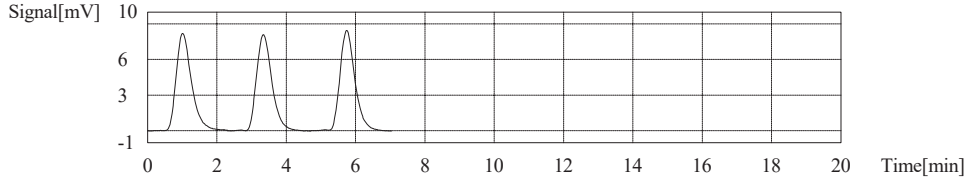
Acid Add. 0.000%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 15.93



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

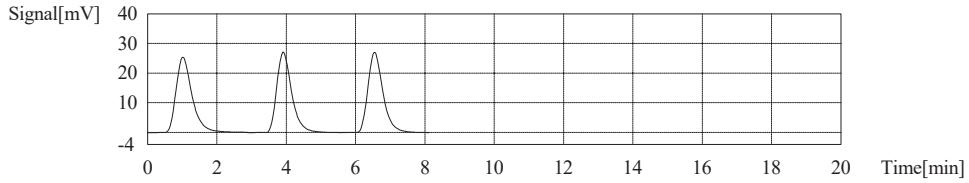
Acid Add. 0.000%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 24.91



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

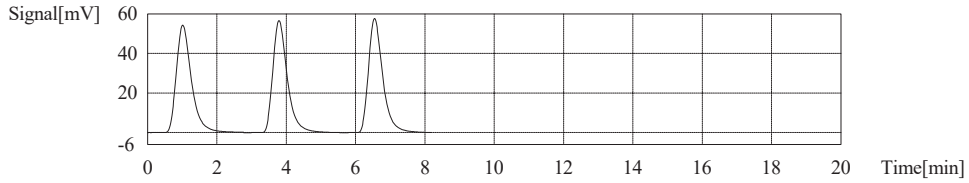
Acid Add. 0.000%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 81.11



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

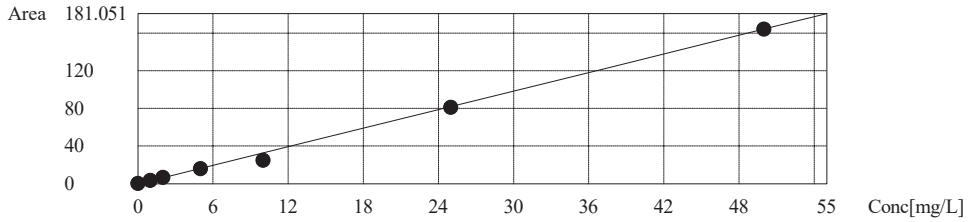
Acid Add. 0.000%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 164.3



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	

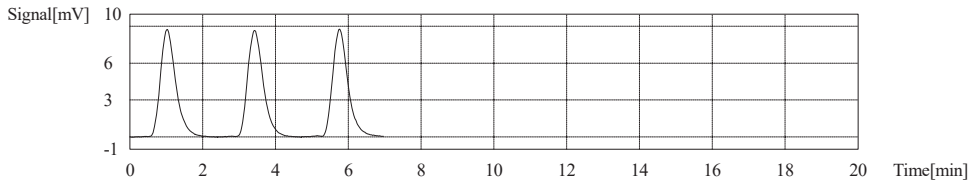
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.778mg/L

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

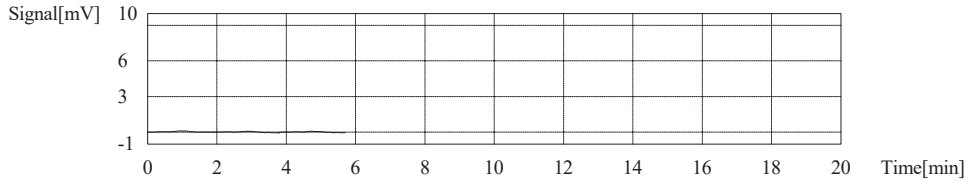
Anal.: NPOC

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_07_31_001.tlx

	Sample Name	Sample ID	Result	Notes	Status	Date / Time	Vial
1	CCV		NPOC:23.5		Completed	7/31/2023 10:53:	1
2	CCB		NPOC:0.11		Completed	7/31/2023 11:05:	2
3	MBLK-07312023		NPOC:0.01		Completed	7/31/2023 11:17:	3
4	LCS-07312023		NPOC:9.70		Completed	7/31/2023 4:56:3	4
5	LCSD-07312023		NPOC:9.51		Completed	7/31/2023 5:10:1	5
6	HS23071289-01DF20	TOC_W 5310B	NPOC:0.18		Completed	7/31/2023 12:17:	6
7	HS23071289-02DF20		NPOC:0.17		Completed	7/31/2023 12:29:	7
8	HS23071289-04		NPOC:8.98		Completed	7/31/2023 12:43:	8
9	HS23071529-01		NPOC:0.52		Completed	7/31/2023 12:55:	9
10	HS23071529-01MS		NPOC:9.99		Completed	7/31/2023 1:42:2	10
11	HS23071529-02		NPOC:2.41		Completed	7/31/2023 1:54:5	11
12	HS23071529-03		NPOC:0.96		Completed	7/31/2023 2:07:1	12
13	CCV		NPOC:24.8		Completed	7/31/2023 2:21:5	1
14	CCB		NPOC:0.09		Completed	7/31/2023 2:33:5	2
15	HS23071529-04		NPOC:0.53		Completed	7/31/2023 2:46:0	13
16	HS23071529-05		NPOC:1.06		Completed	7/31/2023 2:58:1	14
17	HS23071529-06		NPOC:0.57		Completed	7/31/2023 3:10:1	15
18	HS23071634-01		NPOC:28.4		Completed	7/31/2023 3:24:0	16
19	CCV		NPOC:25.5		Completed	7/31/2023 3:37:5	20
20	CCB		NPOC:0.08		Completed	7/31/2023 3:49:5	21
21	MBLK-07312023		NPOC:0.06		Completed	7/31/2023 4:01:5	3
22	LCS-07312023		NPOC:9.44		Completed	7/31/2023 5:24:1	4
23	LCSD-07312023		NPOC:9.36		Completed	7/31/2023 5:37:4	5
24	HS23071165-01	TOC_W 5310B	NPOC:18.6		Completed	7/31/2023 5:51:4	17
25	HS23071165-01MS		NPOC:30.6		Completed	7/31/2023 6:05:3	18
26	HS23071330-04		NPOC:1.65		Completed	7/31/2023 6:17:4	19
27	CCV		NPOC:24.6		Completed	7/31/2023 6:31:3	20
28	CCB		NPOC:0.19		Completed	7/31/2023 6:43:2	21

TOC-Control L Report

Instr.Information

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

Sample

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

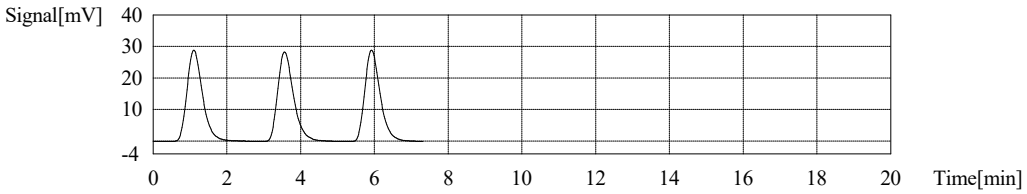
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.55mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.85	25.59mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 3:32:31 PM
2	83.84	25.59mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 3:35:07 PM
3	83.45	25.47mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 3:37:50 PM

Mean Area 83.71
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:0.08208mg/L

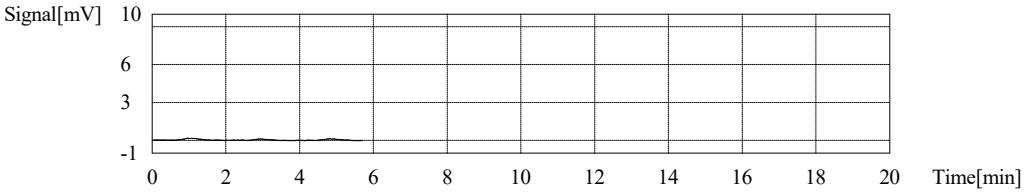
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3629	0.1108mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 3:45:34 PM
2	0.1769	0.05400mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 3:47:41 PM
3	0.2669	0.08147mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 3:49:50 PM

TOC-Control L Report

Mean Area 0.2689
Mean Conc. 0.08208mg/L



Sample

Sample Name: MBLK-07312023
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

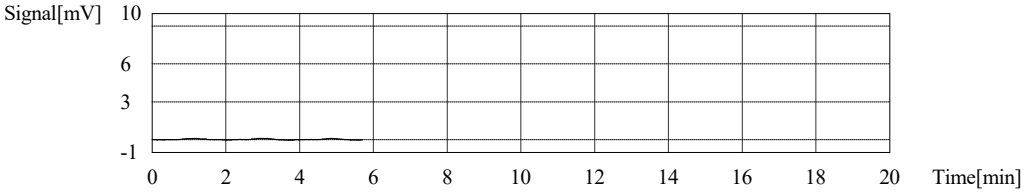
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06594mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2144	0.06544mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 3:57:38 PM
2	0.2664	0.08131mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 3:59:46 PM
3	0.1673	0.05107mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 4:01:53 PM

Mean Area 0.2160
Mean Conc. 0.06594mg/L



Sample

Sample Name: LCS-07312023
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.447mg/L

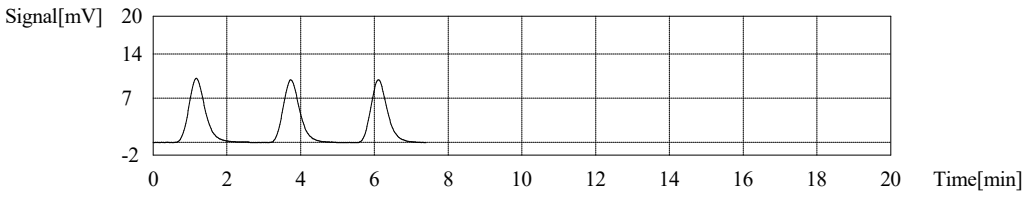
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	31.18	9.517mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 5:18:56 PM
2	30.74	9.383mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 5:21:34 PM
3	30.93	9.441mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 5:24:13 PM

TOC-Control L Report

Mean Area 30.95
Mean Conc. 9.447mg/L



Sample

Sample Name: LCSD-07312023
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

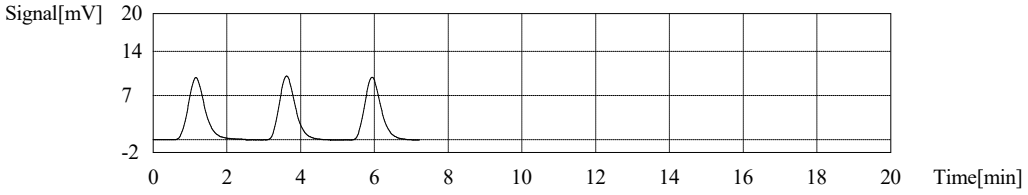
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.361mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	30.71	9.374mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 5:32:34 PM
2	30.66	9.358mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 5:35:08 PM
3	30.64	9.352mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 5:37:45 PM

Mean Area 30.67
Mean Conc. 9.361mg/L



Sample

Sample Name: HS23071165-01
Sample ID: TOC_W 5310B
Origin: 06.21.2023.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:18.67mg/L

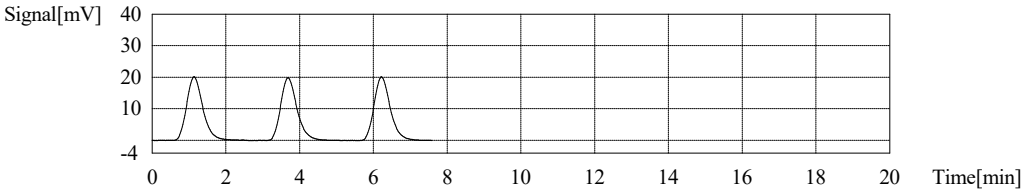
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	61.16	18.67mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 5:46:17 PM
2	60.96	18.61mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 5:49:02 PM
3	61.35	18.73mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 5:51:46 PM

TOC-Control L Report

Mean Area 61.16
Mean Conc. 18.67mg/L



Sample

Sample Name: HS23071165-01MS
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

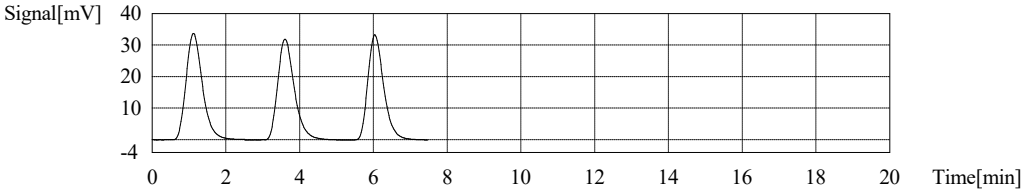
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.67mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	103.4	31.56mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 6:00:07 PM
2	99.16	30.27mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 6:02:47 PM
3	98.89	30.18mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 6:05:32 PM

Mean Area 100.5
Mean Conc. 30.67mg/L



Sample

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

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.64mg/L

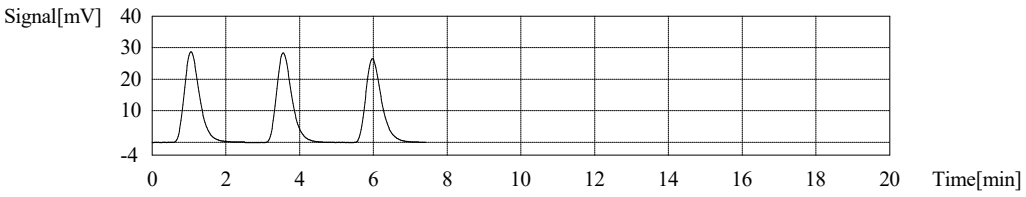
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.15	25.07mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 6:26:09 PM
2	81.35	24.83mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 6:28:50 PM
3	78.70	24.02mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 6:31:31 PM

TOC-Control L Report

Mean Area 80.73
Mean Conc. 24.64mg/L



Sample

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

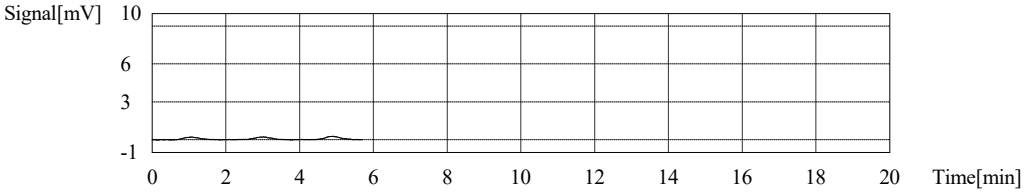
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1900mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6138	0.1874mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 6:39:15 PM
2	0.5439	0.1660mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 6:41:22 PM
3	0.7098	0.2167mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 6:43:29 PM

Mean Area 0.6225
Mean Conc. 0.1900mg/L



HS23071165 Perch Sub Data E2300685-IV

ALS WO# HS23071165

July 27, 2023 Service Request No:E2300685

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

Laboratory Results for: HS23071165

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory July 24, 2023
For your reference, these analyses have been assigned our service request number **E2300685.**

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.:**	E2300685
Project:	HS23071165	**Date Received:**	07/24/2023
Sample Matrix:	GroundWater		

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

Eight samples were received for analysis at ALS Environmental in Houston on 07/24/2023.

The sample 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:

EQ2300358: 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:**E2300685
Project: HS23071165

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300685-001	16EW01-230717	7/17/2023	0720
E2300685-002	16EW08-230717	7/17/2023	0800
E2300685-003	16EW04-230717	7/17/2023	0840
E2300685-004	16RW04-230717	7/17/2023	0920
E2300685-005	16RW05-230717	7/17/2023	1005
E2300685-006	16RW01-230717	7/17/2023	1045
E2300685-007	16WW22-230717	7/17/2023	1130
E2300685-008	16RW12-230717	7/17/2023	1210

Service Request Summary

Folder #: **E2300685**
Client Name: ALS Environmental - US
Project Name: HS23071165
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: 07/24/23
Internal Due Date: 8/1/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23071165
EDD: BASIC_WQC_CASNo_LOD

8 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300685-001	16EW01-230717	Ground Water	07/17/23 0720	**IV**
E2300685-002	16EW08-230717	Ground Water	07/17/23 0800	**IV**
E2300685-003	16EW04-230717	Ground Water	07/17/23 0840	**IV**
E2300685-004	16RW04-230717	Ground Water	07/17/23 0920	**IV**
E2300685-005	16RW05-230717	Ground Water	07/17/23 1005	**IV**
E2300685-006	16RW01-230717	Ground Water	07/17/23 1045	**IV**
E2300685-007	16WW22-230717	Ground Water	07/17/23 1130	**IV**
E2300685-008	16RW12-230717	Ground Water	07/17/23 1210	**IV**

Service Request Summary

Folder #: **E2300685**
Client Name: ALS Environmental - US
Project Name: HS23071165
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: 07/24/23
Internal Due Date: 8/1/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23071165
EDD: BASIC_WQC_CASNo_LOD

8 120 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 2022-2023	7/31/2023
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	7/31/2023
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 Department of Conservation and Natural Resources	TX026932023-1	7/31/2023
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
Utah Department of Health Environmental Laboratory Certification	TX026932022-13	7/31/2023
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

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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:** 22451

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:	HS23071165
TSR:	Holly Tignac

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23071165-01**	**16EW01-230717**	**Groundwater**	**17 Jul 2023 07:20**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			01 Aug 2023
2.	**HS23071165-02**	**16EW08-230717**	**Groundwater**	**17 Jul 2023 08:00**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			01 Aug 2023
3.	**HS23071165-03**	**16EW04-230717**	**Groundwater**	**17 Jul 2023 08:40**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			01 Aug 2023
4.	**HS23071165-04**	**16RW04-230717**	**Groundwater**	**17 Jul 2023 09:20**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			01 Aug 2023
5.	**HS23071165-05**	**16RW05-230717**	**Groundwater**	**17 Jul 2023 10:05**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			01 Aug 2023
6.	**HS23071165-06**	**16RW01-230717**	**Groundwater**	**17 Jul 2023 10:45**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			01 Aug 2023
7.	**HS23071165-07**	**16WW22-230717**	**Groundwater**	**17 Jul 2023 11:30**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			01 Aug 2023
8.	**HS23071165-08**	**16RW12-230717**	**Groundwater**	**17 Jul 2023 12:10**

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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#: 423609 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 7/25/23 10:47

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300684-001	16RW09-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
2	E2300684-002	16RW09-230718-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
3	E2300684-003	16RW10-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2300684-004	16WW40-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
5	E2300684-005	16WW12-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300684-006	16WW34-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300684-007	16WW49-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300684-008	16SW01-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300684-009	16SW01-230718-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300684-010	16SW02-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300684-011	16SW03-230718	.02	6850/ClO4 DOD			Ground Water	10mL	
12	E2300685-001	16EW01-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2300685-002	16EW08-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
14	E2300685-003	16EW04-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
15	E2300685-004	16RW04-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
16	E2300685-005	16RW05-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
17	E2300685-006	16RW01-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
18	E2300685-007	16WW22-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
19	E2300685-008	16RW12-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
20	EQ2300358-01	MB		6850/ClO4			Liquid	10mL	
21	EQ2300358-02	LCS		6850/ClO4			Liquid	10mL	
22	EQ2300358-03	DLCS		6850/ClO4			Liquid	10mL	
23	EQ2300358-04	16SW03-230718 MS	.02	6850/ClO4 DOD			Liquid	10mL	
24	EQ2300358-05	16SW03-230718 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
25	R2306302-005	2307111341Y 700-E-458	.01	6850/ClO4			Water	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 227236 Logbook Ref: Perchlorate (1st Source) Expires On: 07/31/2023

EQ2300358-02	1.00µL	EQ2300358-02	1.00µL	EQ2300358-03	1.00µL	EQ2300358-03	1.00µL	EQ2300358-04	1.00µL	EQ2300358-05	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 227244 Logbook Ref: Perchlorate Internal Standard Expires On: 07/31/2023

E2300684-001	100.00µL	E2300684-002	100.00µL	E2300684-003	100.00µL	E2300684-004	100.00µL	E2300684-005	100.00µL	E2300684-006	100.00µL
E2300684-007	100.00µL	E2300684-008	100.00µL	E2300684-009	100.00µL	E2300684-010	100.00µL	E2300684-011	100.00µL	E2300685-001	100.00µL
E2300685-002	100.00µL	E2300685-003	100.00µL	E2300685-004	100.00µL	E2300685-005	100.00µL	E2300685-006	100.00µL	E2300685-007	100.00µL

Preparation Information Benchsheet

Prep Run#: 423609 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 7/25/23 10:47

E2300685-008	100.00µL	EQ2300358-01	100.00µL	EQ2300358-01	100.00µL	EQ2300358-02	100.00µL	EQ2300358-02	100.00µL	EQ2300358-03	100.00µL
EQ2300358-03	100.00µL	EQ2300358-04	100.00µL	EQ2300358-05	100.00µL	R2306302-005	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: 7/25/23 10:47
Finished: 7/25/23 15:50
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:**	E2300685
Project:	HS23071165	**Date Collected:**	7/17/23 0720
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16EW01-230717	**Units:**	µg/L
Lab Code:	E2300685-001	**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	**49.1**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 11:57	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Collected:**	7/17/23 0800
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16EW08-230717	**Units:**	µg/L
Lab Code:	E2300685-002	**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	**0.168**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 12:02	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Collected:**	7/17/23 0840
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16EW04-230717	**Units:**	µg/L
Lab Code:	E2300685-003	**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	**0.159**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 12:08	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Collected:**	7/17/23 0920
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16RW04-230717	**Units:**	µg/L
Lab Code:	E2300685-004	**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	**0.207**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 12:13	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Collected:**	7/17/23 1005
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16RW05-230717	**Units:**	µg/L
Lab Code:	E2300685-005	**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	**0.212**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 12:25	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Collected:**	7/17/23 1045
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16RW01-230717	**Units:**	µg/L
Lab Code:	E2300685-006	**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	**0.163**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 12:30	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Collected:**	7/17/23 1130
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16WW22-230717	**Units:**	µg/L
Lab Code:	E2300685-007	**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	**0.247**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 12:36	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Collected:**	7/17/23 1210
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16RW12-230717	**Units:**	µg/L
Lab Code:	E2300685-008	**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	**0.587**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 12:41	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300358-01	**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	7/25/23	7/26/23 10:34	423609	811888	

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: HS23071165
Sample Matrix: Ground Water

Service Request: E2300685
Date Analyzed: 7/26/23

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: 423609

	Lab Control Sample EQ2300358-02			Duplicate Lab Control Sample EQ2300358-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0931	0.100	93	0.0854	0.100	85	84 - 119	9	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:**	E2300685
Project:	HS23071165	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300358-02	**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	**0.0931**	J	0.100	0.0500	0.0250	1	7/25/23	7/26/23 10:23	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300358-03	**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	**0.0854**	J	0.100	0.0500	0.0250	1	7/25/23	7/26/23 10:28	423609	811888	

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

20230629-809329

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 06/29/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 32103046 **B:**Acetonitrile 226552

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	PERCHLORATE1		20230629-001	Perchlorate6850c.lcm	1x	227245	6/29/2023 12:59
2	PERCHLORATE2		20230629-002	Perchlorate6850c.lcm	1x	227246	6/29/2023 13:05
3	PERCHLORATE3		20230629-003	Perchlorate6850c.lcm	1x	227247	6/29/2023 13:10
4	PERCHLORATE4		20230629-004	Perchlorate6850c.lcm	1x	227248	6/29/2023 13:16
5	PERCHLORATE5		20230629-005	Perchlorate6850c.lcm	1x	227249	6/29/2023 13:21
6	PERCHLORATE6		20230629-006	Perchlorate6850c.lcm	1x	227250	6/29/2023 13:27
7	PERCHLORATE7		20230629-007	Perchlorate6850c.lcm	1x	227251	6/29/2023 13:32
8	PERCHLORATE8		20230629-008	Perchlorate6850c.lcm	1x	227252	6/29/2023 13:38
9	PERCHLORATE9		20230629-009	Perchlorate6850c.lcm	1x	227253	6/29/2023 13:43
10	PERCHLORATE10		20230629-010	Perchlorate6850c.lcm	1x	227254	6/29/2023 13:49
11	PERCHLORATEICV		20230629-011	Perchlorate6850c.lcm	1x	227256	6/29/2023 13:55
12	IB		20230629-012	Perchlorate6850c.lcm	1x		6/29/2023 14:00
13	LODV		20230629-013	Perchlorate6850c.lcm	1x	227501	6/29/2023 14:06
14	ICS		20230629-014	Perchlorate6850c.lcm	1x	32103024	6/29/2023 14:11
15	CCV		20230629-015	Perchlorate6850c.lcm	1x	227251	6/29/2023 14:17
16	EQ2300312-01		20230629-016	Perchlorate6850c.lcm	1x		6/29/2023 14:22
17	EQ2300312-02		20230629-017	Perchlorate6850c.lcm	1x	DNU-RR	6/29/2023 14:28
18	EQ2300312-03		20230629-018	Perchlorate6850c.lcm	1x		6/29/2023 14:33
19	E2300606-001		20230629-019	Perchlorate6850c.lcm	10x		6/29/2023 14:39
20	EQ2300312-04		20230629-020	Perchlorate6850c.lcm	1x		6/29/2023 14:44
21	EQ2300312-05		20230629-021	Perchlorate6850c.lcm	1x		6/29/2023 14:50
22	E2300606-002		20230629-022	Perchlorate6850c.lcm	5x		6/29/2023 14:55
23	E2300606-003		20230629-023	Perchlorate6850c.lcm	10x		6/29/2023 15:01
24	E2300606-004		20230629-024	Perchlorate6850c.lcm	10x		6/29/2023 15:06
25	E2300606-005		20230629-025	Perchlorate6850c.lcm	1x		6/29/2023 15:12
26	CCV		20230629-026	Perchlorate6850c.lcm	1x	227251	6/29/2023 15:17
27	E2300606-006		20230629-027	Perchlorate6850c.lcm	1x		6/29/2023 15:23
28	E2300606-007		20230629-028	Perchlorate6850c.lcm	500x		6/29/2023 15:28
29	E2300606-008		20230629-029	Perchlorate6850c.lcm	100x		6/29/2023 15:34
30	EQ2300312-06		20230629-030	Perchlorate6850c.lcm	100x		6/29/2023 15:40
31	EQ2300312-07		20230629-031	Perchlorate6850c.lcm	100x		6/29/2023 15:45
32	E2300606-009		20230629-032	Perchlorate6850c.lcm	1x		6/29/2023 15:53
33	E2300610-001		20230629-033	Perchlorate6850c.lcm	10000x		6/29/2023 15:58
34	E2300610-002		20230629-034	Perchlorate6850c.lcm	1x		6/29/2023 16:04
35	E2300610-003		20230629-035	Perchlorate6850c.lcm	1x		6/29/2023 16:09
36	E2300610-004		20230629-036	Perchlorate6850c.lcm	1x		6/29/2023 16:15
37	CCV		20230629-037	Perchlorate6850c.lcm	1x	227251	6/29/2023 16:21

20230629-809329

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 06/29/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 32103046 **B:**Acetonitrile 226552

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
38	E2300610-005		20230629-038	Perchlorate6850c.lcm	1x		6/29/2023 16:26
39	E2300610-006		20230629-039	Perchlorate6850c.lcm	1x		6/29/2023 16:32
40	E2300610-007		20230629-040	Perchlorate6850c.lcm	1x		6/29/2023 16:37
41	E2300610-008		20230629-041	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 16:43
42	EQ2300312-08		20230629-042	Perchlorate6850c.lcm	1x		6/29/2023 16:48
43	EQ2300312-09		20230629-043	Perchlorate6850c.lcm	1x		6/29/2023 16:54
44	E2300611-001		20230629-044	Perchlorate6850c.lcm	1x		6/29/2023 16:59
45	E2300611-002		20230629-045	Perchlorate6850c.lcm	1x		6/29/2023 17:05
46	E2300611-003		20230629-046	Perchlorate6850c.lcm	1x		6/29/2023 17:10
47	E2300611-004		20230629-047	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:16
48	CCV		20230629-048	Perchlorate6850c.lcm	1x	227251	6/29/2023 17:21
49	E2300611-005		20230629-049	Perchlorate6850c.lcm	1x		6/29/2023 17:27
50	E2300611-006		20230629-050	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:32
51	E2300611-007		20230629-051	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:38
52	E2300611-008		20230629-052	Perchlorate6850c.lcm	1x		6/29/2023 17:43
53	E2300611-009		20230629-053	Perchlorate6850c.lcm	1x		6/29/2023 17:49
54	E2300611-010		20230629-054	Perchlorate6850c.lcm	1x		6/29/2023 17:55
55	CCV		20230629-055	Perchlorate6850c.lcm	1x	227251	6/29/2023 18:06

Initial Calibration - Detailed Report

Calibration ID: EC2300011 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2300011-01	PERCHLORATE1	20230629-001	06/29/2023 12:59
02	EC2300011-02	PERCHLORATE2	20230629-002	06/29/2023 13:05
03	EC2300011-03	PERCHLORATE3	20230629-003	06/29/2023 13:10
04	EC2300011-04	PERCHLORATE4	20230629-004	06/29/2023 13:16
05	EC2300011-05	PERCHLORATE5	20230629-005	06/29/2023 13:21
06	EC2300011-06	PERCHLORATE6	20230629-006	06/29/2023 13:27
07	EC2300011-07	PERCHLORATE7	20230629-007	06/29/2023 13:32
08	EC2300011-08	PERCHLORATE8	20230629-008	06/29/2023 13:38
09	EC2300011-09	PERCHLORATE9	20230629-009	06/29/2023 13:43
10	EC2300011-10	PERCHLORATE10	20230629-010	06/29/2023 13:49

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

Perchlorate **Average RF** **RSD = 2.809** **Average RF = 0.1625**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.1678	02	0.5000	0.1574	03	0.7000	0.1599	04	1.0000	0.1567
05	2.0000	0.1596	06	5.0000	0.1641	07	10.0000	0.1704	08	20.0000	0.1667
09	30.0000	0.1608	10	50.0000	0.1619						

Analyte

Perchlorate RSE = 2.81

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.103	3.2	02	0.5000	0.484	-3.1	03	0.7000	0.689	-1.6
04	1.0000	0.964	-3.6	05	2.0000	1.96	-1.8	06	5.0000	5.05	1.0
07	10.0000	10.5	4.8	08	20.0000	20.5	2.6	09	30.0000	29.7	-1.1
10	50.0000	49.8	-0.4								

Initial Calibration Verification Summary Report

Calibration ID:	EC2300011	**Instrument ID:**	E-LCMS-01
Datafile ID:	20230629-011	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2300011-11	T	Average RF	10	9.913	ng/mL	-0.9	<= 15

Insight Report

Printed at 6/29/2023 2:17:05 PM

Method File: I:\LCMS01\DATA\20230628\06282023.lcm
Project File: I:\LCMS01\DATA\20230628\06282023.damlp

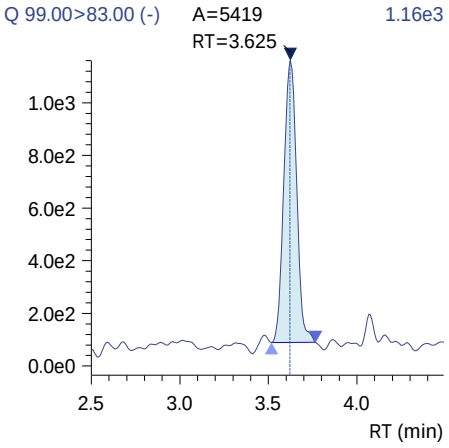
PERCHLORATE1

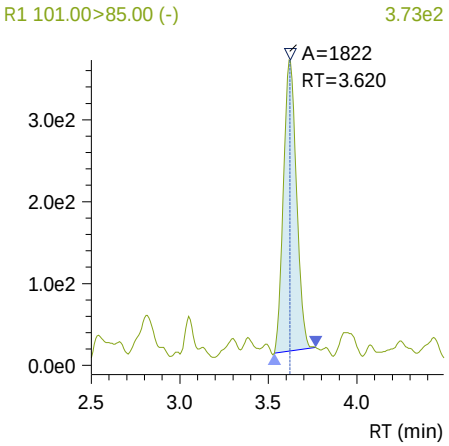
Sample ID: PERCHLORATE1
Date Acquired: 6/29/2023 12:59:40 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-001.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.625	5419	323018	0.1032	ng/mL	101.00 >85.00	33.63	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	323018	323018	1.0000	ng/mL	----	----	

Perchlorate

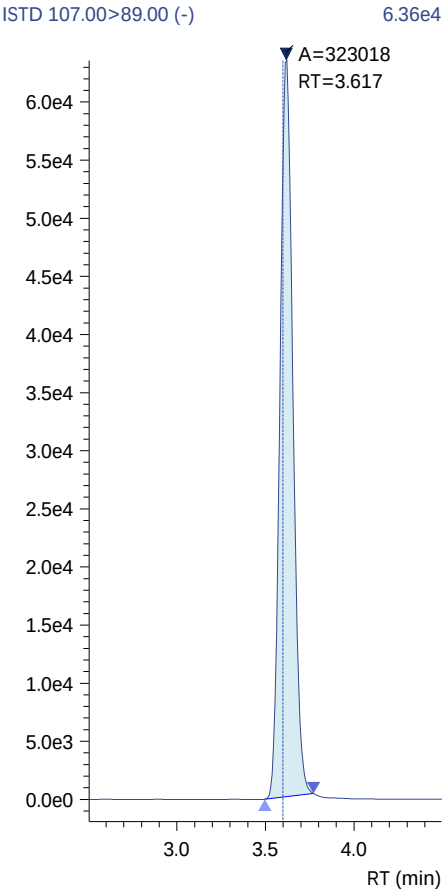
Conc 0.1032
R#1 33.63 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

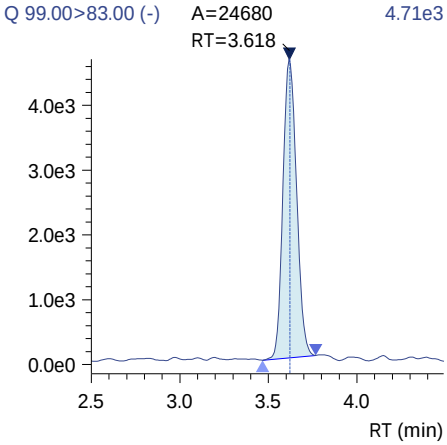
PERCHLORATE2

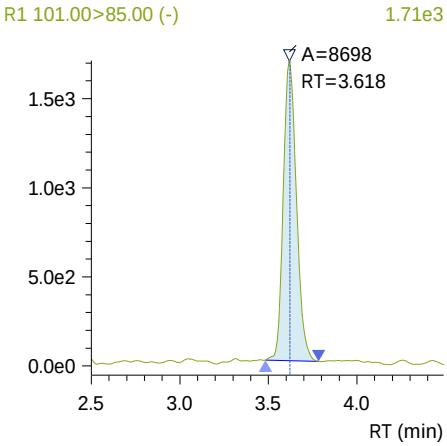
Sample ID: PERCHLORATE2
Date Acquired: 6/29/2023 1:05:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-002.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.618	24680	313519	0.4844	ng/mL	101.00 >85.00	35.24	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	313519	313519	1.0000	ng/mL	----	----	

Perchlorate

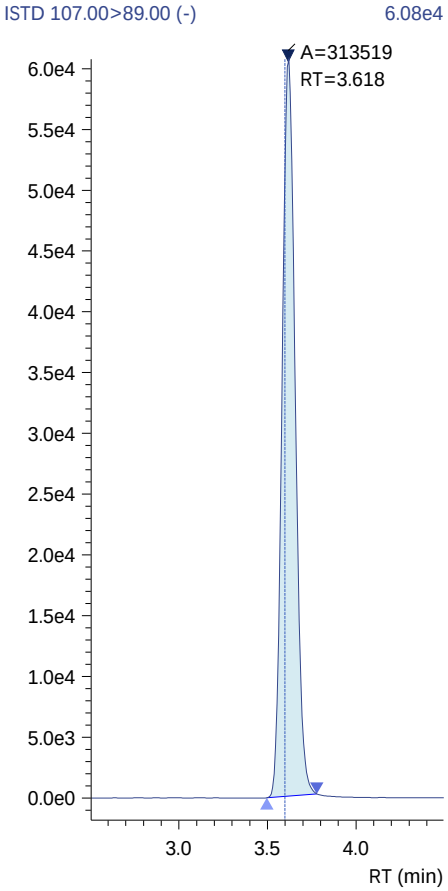
Conc 0.4844
R#1 35.24 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

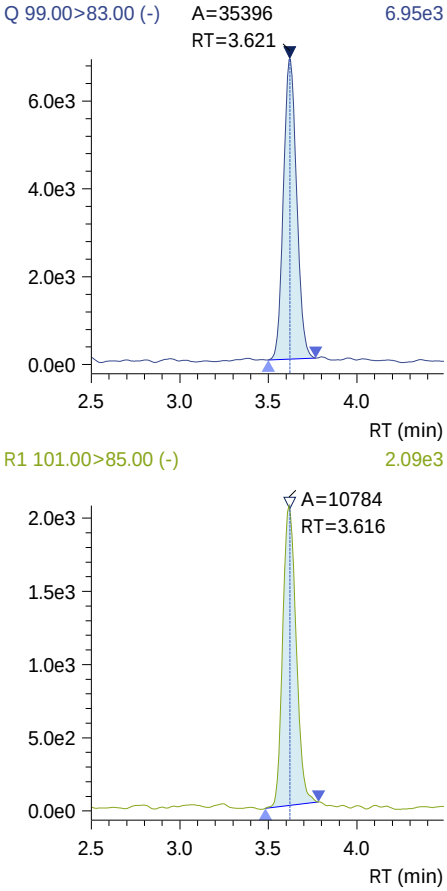
PERCHLORATE3

Sample ID: PERCHLORATE3
Date Acquired: 6/29/2023 1:10:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-003.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	35396	316311	0.6886	ng/mL	101.00 >85.00	30.47	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	316311	316311	1.0000	ng/mL	----	----	

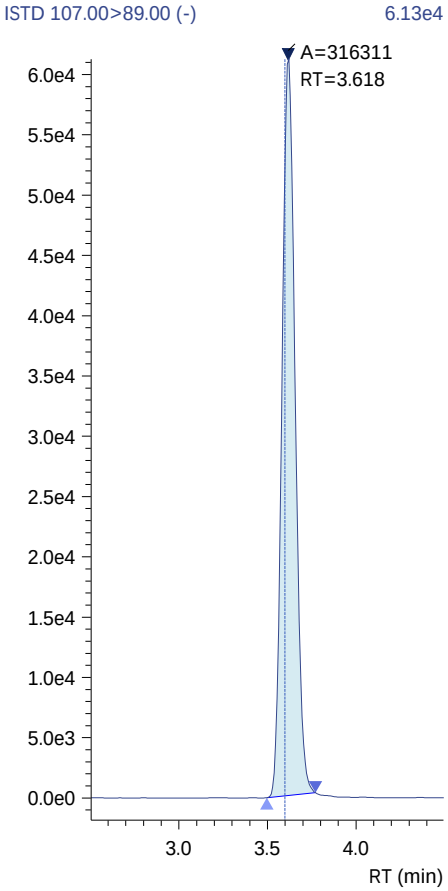
Perchlorate

Conc 0.6886
R#1 30.47 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

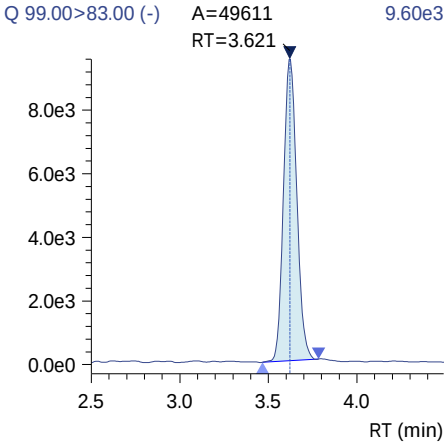
PERCHLORATE4

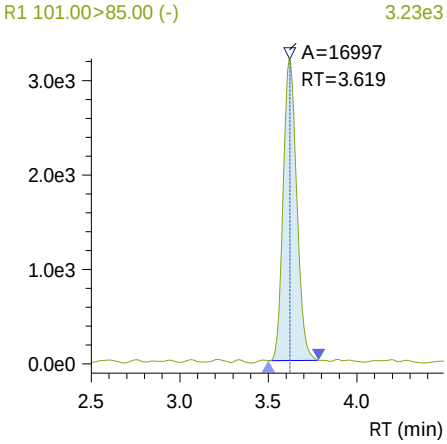
Sample ID: PERCHLORATE4
Date Acquired: 6/29/2023 1:16:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-004.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	49611	316580	0.9643	ng/mL	101.00 >85.00	34.26	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	316580	316580	1.0000	ng/mL	----	----	

Perchlorate

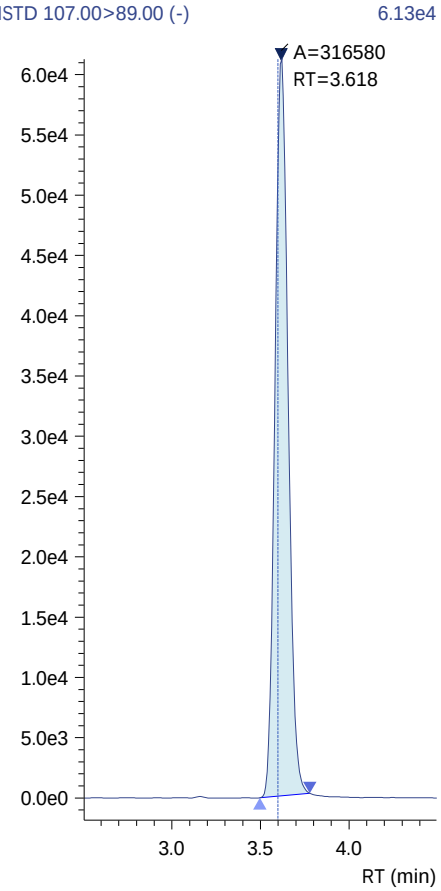
Conc 0.9643
R#1 34.26 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

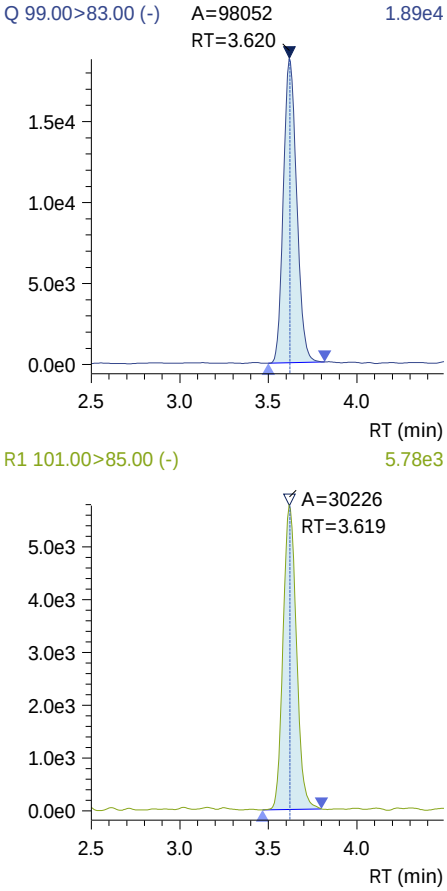
PERCHLORATE5

Sample ID: PERCHLORATE5
Date Acquired: 6/29/2023 1:21:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-005.lcd
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	98052	307162	1.9642	ng/mL	101.00 >85.00	30.83	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	307162	307162	1.0000	ng/mL	----	----	

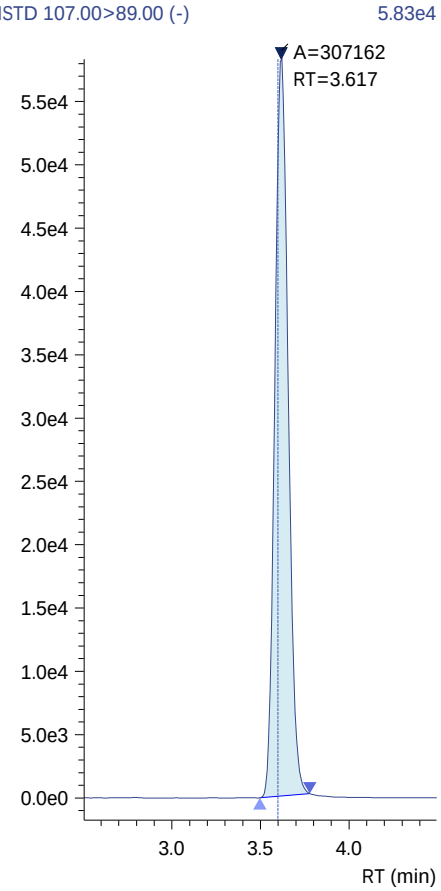
Perchlorate

Conc 1.9642
R#1 30.83 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE6

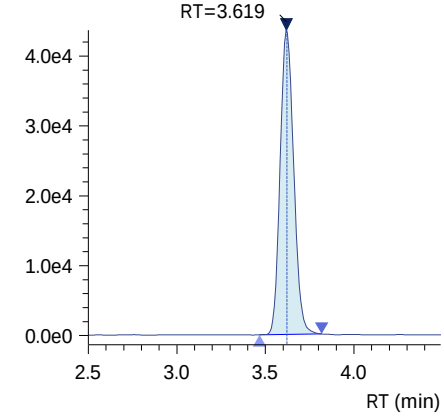
Sample ID: PERCHLORATE6
Date Acquired: 6/29/2023 1:27:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-006.lcd
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.619	232011	282827	5.0477	ng/mL	101.00 >85.00	31.17	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	282827	282827	1.0000	ng/mL	----	----	

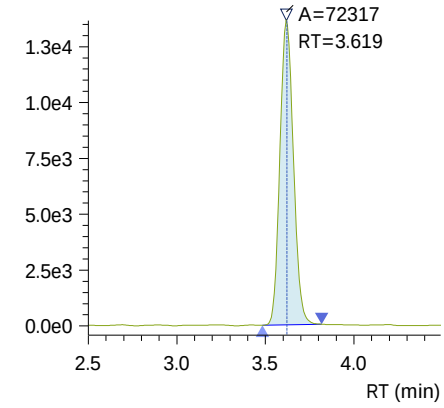
Perchlorate

Conc 5.0477
R#1 31.17 (32.02)

Q 99.00>83.00 (-) A=232011 RT=3.619 4.37e4



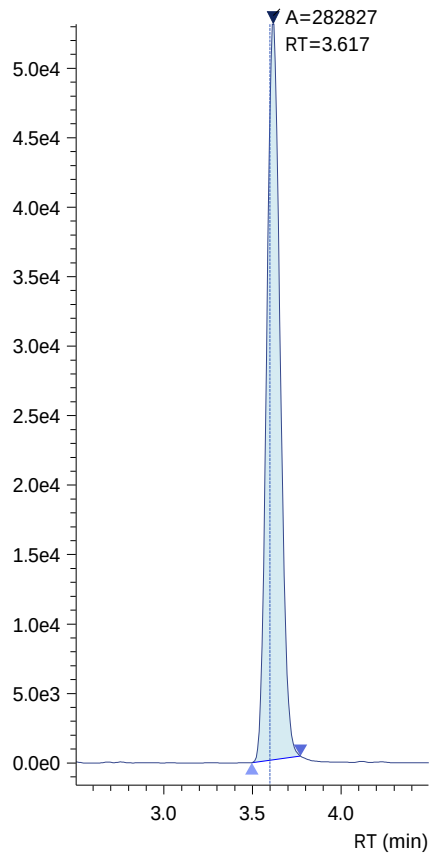
R1 101.00>85.00 (-) 1.37e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.32e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

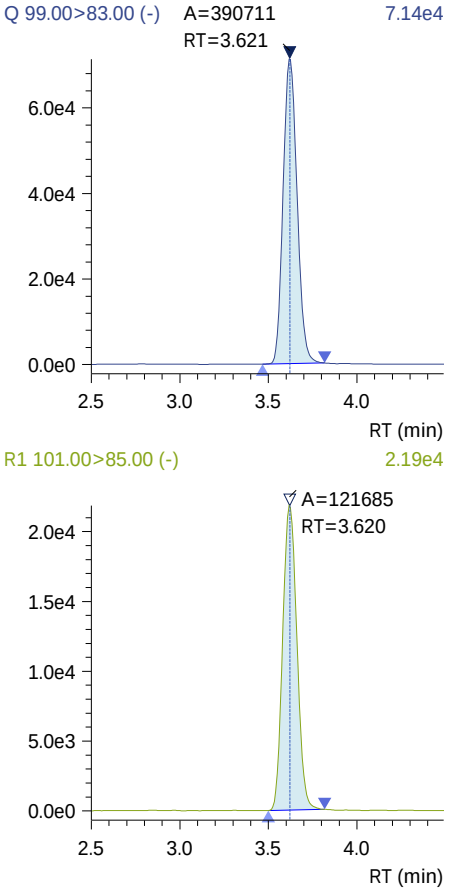
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 6/29/2023 1:32:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-007.lcd
Vial: 3 | 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	3.621	390711	229327	10.48 35	ng/mL	101.00 >85.00	31.14	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.616	229327	229327	1.0000	ng/mL	----	----	

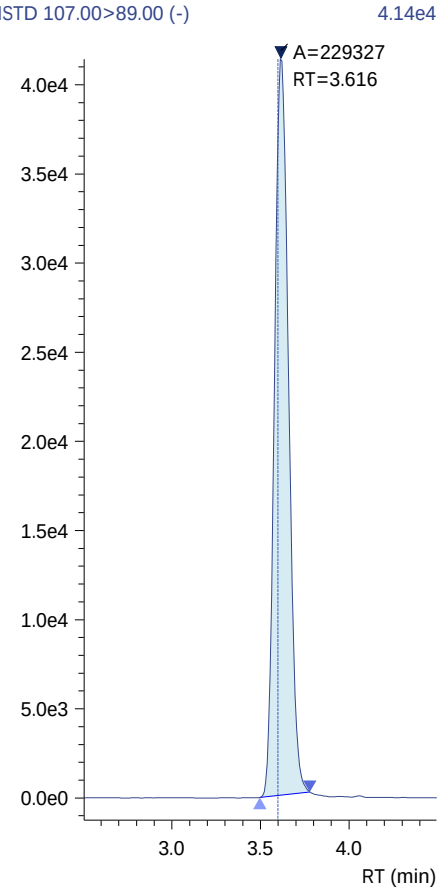
Perchlorate

Conc 10.4835
R#1 31.14 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

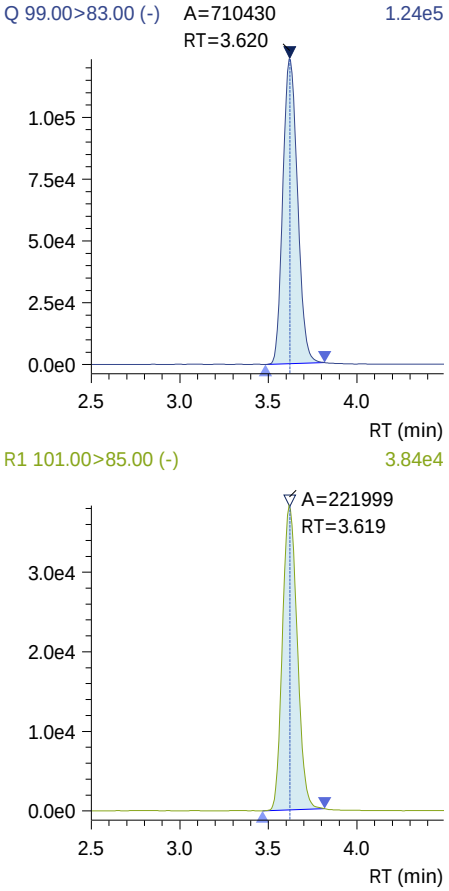
PERCHLORATE8

Sample ID: PERCHLORATE8
Date Acquired: 6/29/2023 1:38:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-008.lcd
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	710430	213093	20.5144	ng/mL	101.00 >85.00	31.25	22.41-41.62
Sodium Perchlorate-18O4_IS	Auto	3.615	213093	213093	1.0000	ng/mL	----	----	

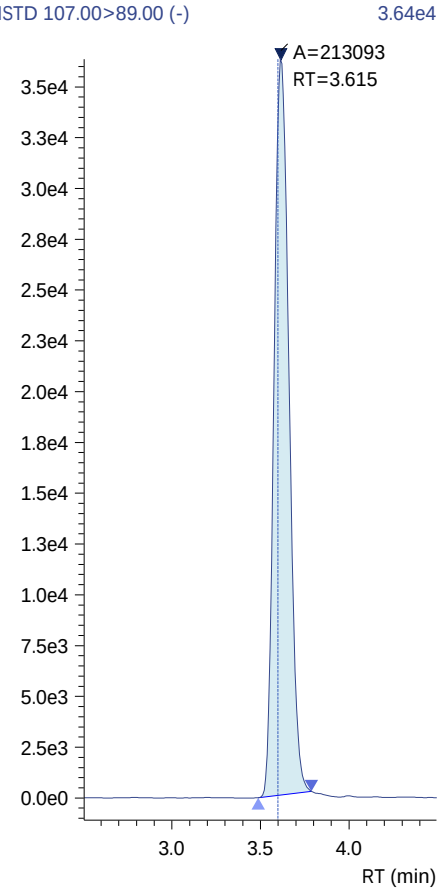
Perchlorate

Conc 20.5144
R#1 31.25 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE9

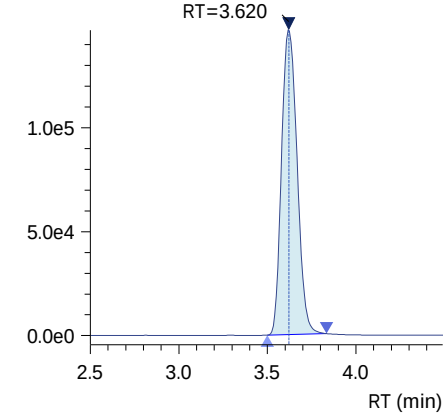
Sample ID: PERCHLORATE9
Date Acquired: 6/29/2023 1:43:53 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-009.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	896468	185851	29.6808	ng/mL	101.00 >85.00	31.06	22.41-41.62
Sodium Perchlorate-18O4_IS	Auto	3.614	185851	185851	1.0000	ng/mL	----	----	

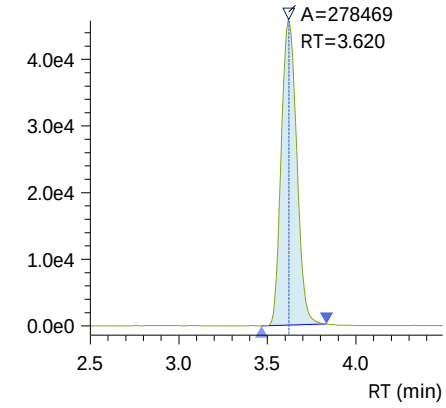
Perchlorate

Conc 29.6808
R#1 31.06 (32.02)

Q 99.00>83.00 (-) A=896468 1.47e5



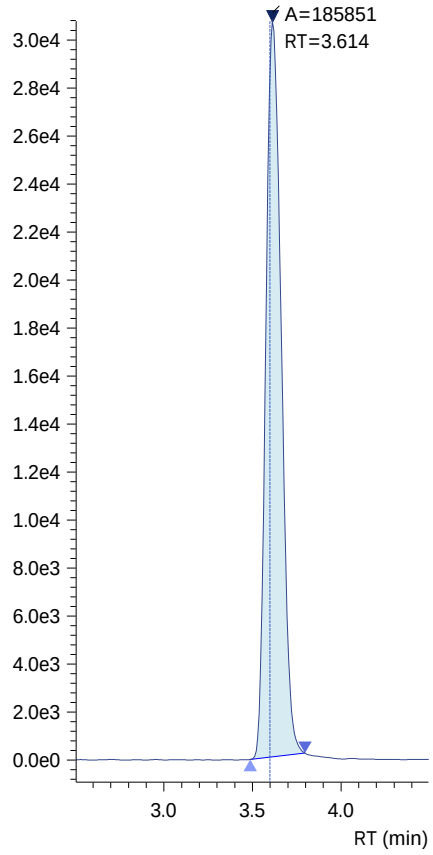
R1 101.00>85.00 (-) 4.58e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.08e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE10

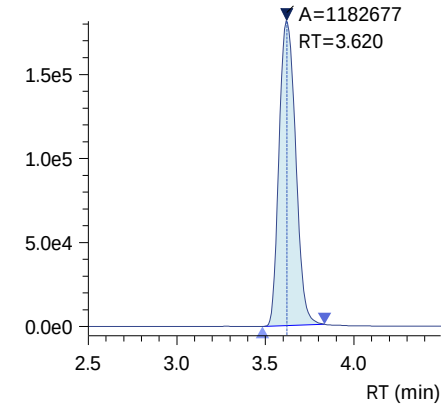
Sample ID: PERCHLORATE10
Date Acquired: 6/29/2023 1:49:27 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-010.lcd
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	1182677	146135	49.79 86	ng/mL	101.00 >85.00	30.89	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.614	146135	146135	1.0000	ng/mL	----	----	

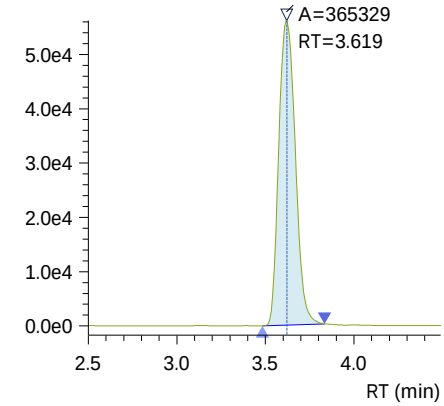
Perchlorate

Conc 49.7986
R#1 30.89 (32.02)

Q 99.00>83.00 (-) 1.82e5



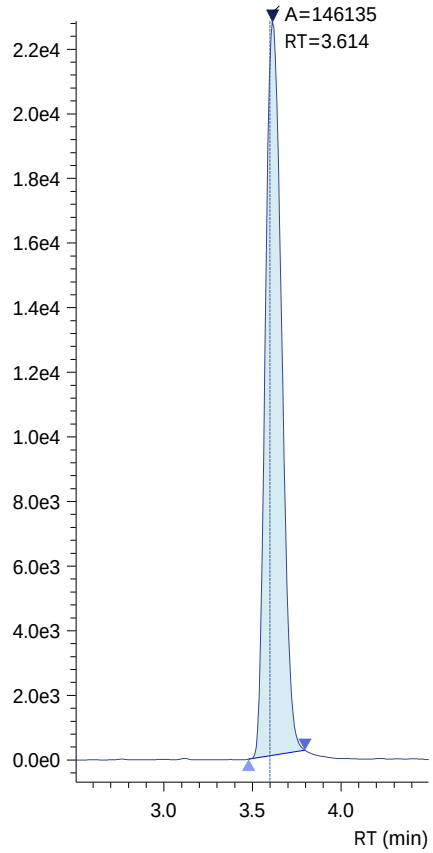
R1 101.00>85.00 (-) 5.62e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.29e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

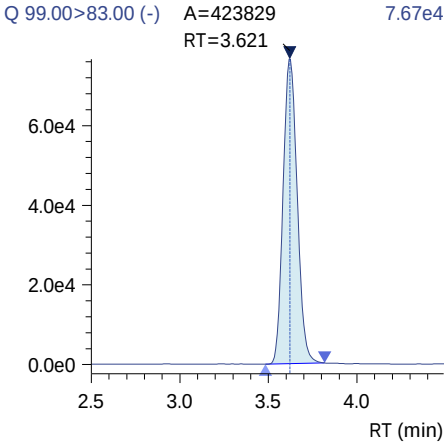
PERCHLORATEICV

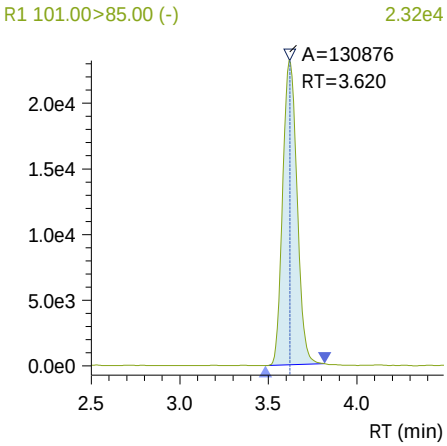
Sample ID: PERCHLORATEICV
Date Acquired: 6/29/2023 1:55:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-011.lcd
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	423829	263091	9.9127	ng/mL	101.00 >85.00	30.88	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	263091	263091	1.0000	ng/mL	----	----	

Perchlorate

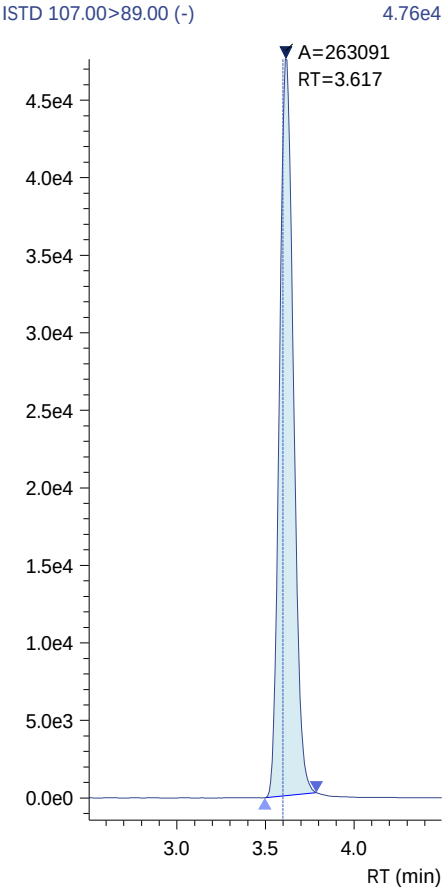
Conc 9.9127
R#1 30.88 (32.02)





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

20230726-811888

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300011

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

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	IB		20230726-001	Perchlorate6850c.lcm	1x		7/26/2023 8:54
2	LODV		20230726-002	Perchlorate6850c.lcm	1x	230386	7/26/2023 9:00
3	ICS		20230726-003	Perchlorate6850c.lcm	1x	32103024	7/26/2023 9:05
4	CCV		20230726-004	Perchlorate6850c.lcm	1x	227251	7/26/2023 9:44
5	EQ2300358-02		20230726-005	Perchlorate6850c.lcm	1x		7/26/2023 10:23
6	EQ2300358-03		20230726-006	Perchlorate6850c.lcm	1x		7/26/2023 10:28
7	EQ2300358-01		20230726-007	Perchlorate6850c.lcm	1x		7/26/2023 10:34
8	E2300684-001		20230726-008	Perchlorate6850c.lcm	1x		7/26/2023 10:39
9	E2300684-002		20230726-009	Perchlorate6850c.lcm	1x		7/26/2023 10:45
10	E2300684-003		20230726-010	Perchlorate6850c.lcm	1x		7/26/2023 10:50
11	E2300684-004		20230726-011	Perchlorate6850c.lcm	1x		7/26/2023 10:56
12	E2300684-005		20230726-012	Perchlorate6850c.lcm	5x		7/26/2023 11:01
13	E2300684-006		20230726-013	Perchlorate6850c.lcm	1x		7/26/2023 11:07
14	E2300684-007		20230726-014	Perchlorate6850c.lcm	1x		7/26/2023 11:13
15	CCV		20230726-015	Perchlorate6850c.lcm	1x	227251	7/26/2023 11:18
16	E2300684-008		20230726-016	Perchlorate6850c.lcm	1x		7/26/2023 11:24
17	E2300684-009		20230726-017	Perchlorate6850c.lcm	1x		7/26/2023 11:29
18	E2300684-010		20230726-018	Perchlorate6850c.lcm	1x		7/26/2023 11:35
19	E2300684-011		20230726-019	Perchlorate6850c.lcm	1x	DNU-CONFIRM HEAD	7/26/2023 11:40
20	EQ2300358-04		20230726-020	Perchlorate6850c.lcm	1x		7/26/2023 11:46
21	EQ2300358-05		20230726-021	Perchlorate6850c.lcm	1x		7/26/2023 11:51
22	E2300685-001		20230726-022	Perchlorate6850c.lcm	1x		7/26/2023 11:57
23	E2300685-002		20230726-023	Perchlorate6850c.lcm	1x		7/26/2023 12:02
24	E2300685-003		20230726-024	Perchlorate6850c.lcm	1x		7/26/2023 12:08
25	E2300685-004		20230726-025	Perchlorate6850c.lcm	1x		7/26/2023 12:13
26	CCV		20230726-026	Perchlorate6850c.lcm	1x	227251	7/26/2023 12:19
27	E2300685-005		20230726-027	Perchlorate6850c.lcm	1x		7/26/2023 12:25
28	E2300685-006		20230726-028	Perchlorate6850c.lcm	1x		7/26/2023 12:30
29	E2300685-007		20230726-029	Perchlorate6850c.lcm	1x		7/26/2023 12:36
30	E2300685-008		20230726-030	Perchlorate6850c.lcm	1x		7/26/2023 12:41
31	R2306302-005		20230726-031	Perchlorate6850c.lcm	1x		7/26/2023 12:47
32	EQ2300363-01		20230726-032	Perchlorate6850c.lcm	1x		7/26/2023 12:52
33	EQ2300363-02		20230726-033	Perchlorate6850c.lcm	1x	DNU-RR	7/26/2023 12:58
34	EQ2300363-03		20230726-034	Perchlorate6850c.lcm	1x		7/26/2023 13:03
35	E2300677-001		20230726-035	Perchlorate6850c.lcm	1x		7/26/2023 13:09
36	E2300677-002		20230726-036	Perchlorate6850c.lcm	1x		7/26/2023 13:26
37	CCV		20230726-037	Perchlorate6850c.lcm	1x	227251	7/26/2023 13:32

20230726-811888

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300011

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

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
38	E2300677-003		20230726-038	Perchlorate6850c.lcm	10x		7/26/2023 13:37
39	E2300677-004		20230726-039	Perchlorate6850c.lcm	5x		7/26/2023 13:43
40	E2300677-005		20230726-040	Perchlorate6850c.lcm	100x		7/26/2023 13:48
41	E2300677-006		20230726-041	Perchlorate6850c.lcm	1x		7/26/2023 13:54
42	E2300689-001		20230726-042	Perchlorate6850c.lcm	1x		7/26/2023 13:59
43	E2300690-001		20230726-043	Perchlorate6850c.lcm	100x		7/26/2023 14:05
44	K2308280-001		20230726-044	Perchlorate6850c.lcm	1x		7/26/2023 14:10
45	K2308280-002		20230726-045	Perchlorate6850c.lcm	1x		7/26/2023 14:16
46	K2308280-003		20230726-046	Perchlorate6850c.lcm	1x		7/26/2023 14:22
47	K2308280-004		20230726-047	Perchlorate6850c.lcm	1x		7/26/2023 14:27
48	CCV		20230726-048	Perchlorate6850c.lcm	1x	227251	7/26/2023 14:33
49	E2300684-011		20230726-049	Perchlorate6850c.lcm	1x		7/26/2023 14:49
50	EQ2300363-02		20230726-050	Perchlorate6850c.lcm	1x		7/26/2023 14:55
51	CCV		20230726-051	Perchlorate6850c.lcm	1x	227251	7/26/2023 15:02

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Analyzed:**	7/26/23 09:44

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230726\20230726-004	**Lab Code:**	EQ2300366-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811888
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300366-01	238,907	3.57
Lab Control Sample	EQ2300358-02	320,562	3.55
Duplicate Lab Control Sample	EQ2300358-03	314,182	3.57
Method Blank	EQ2300358-01	313,626	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:**	E2300685
Project:	HS23071165	**Date Analyzed:**	7/26/23 11:18

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230726\20230726-015	**Lab Code:**	EQ2300366-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811888
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300366-02	222,322	3.57
16EW01-230717	E2300685-001	173,374	3.57
16EW08-230717	E2300685-002	311,508	3.57
16EW04-230717	E2300685-003	317,974	3.57
16RW04-230717	E2300685-004	301,685	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: HS23071165

Service Request: E2300685
Date Analyzed: 7/26/23 12:19

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

File ID: I:\LCMS01\DATA\20230726\20230726-026
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300366-03
Analysis Lot: 811888
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300366-03	220,036	3.57
16RW05-230717	E2300685-005	325,803	3.57
16RW01-230717	E2300685-006	299,598	3.57
16WW22-230717	E2300685-007	268,200	3.57
16RW12-230717	E2300685-008	310,657	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:**	E2300685
Project:	HS23071165	**Date Analyzed:**	7/26/23 13:32

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230726\20230726-037	**Lab Code:**	EQ2300366-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811888
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300366-04	210,109	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:**	E2300685
Project:	HS23071165	**Date Analyzed:**	7/26/23 14:33

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230726\20230726-048	**Lab Code:**	EQ2300366-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811888
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300366-05	212,868	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:**	E2300685
Project:	HS23071165	**Date Analyzed:**	7/26/23 15:02

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230726\20230726-051	**Lab Code:**	EQ2300366-06
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811888
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300366-06	209,864	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: HS23071165

Service Request: E2300685
Date Analyzed: 7/26/23

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\20230726\20230726-004

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811888
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1625	0.1633	0.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071165

Service Request: E2300685
Date Analyzed: 7/26/23

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\20230726\20230726-015

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811888
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1647	1.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071165

Service Request: E2300685
Date Analyzed: 7/26/23

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\20230726\20230726-026

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811888
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1639	0.8	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071165

Service Request: E2300685
Date Analyzed: 7/26/23

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\20230726\20230726-037

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811888
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.96	0.1625	0.1618	-0.4	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071165

Service Request: E2300685
Date Analyzed: 7/26/23

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\20230726\20230726-048

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811888
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1625	0.1630	0.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071165

Service Request: E2300685
Date Analyzed: 7/26/23

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\20230726\20230726-051

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811888
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.3	0.1625	0.1669	2.7	NA	± 15 %	Average RF

Insight Report

Printed at 7/26/2023 3:21:43 PM

Method File: I:\LCMS01\DATA\20230726\20230726.lcm
Project File: I:\LCMS01\DATA\20230726\20230726.damlp

IB

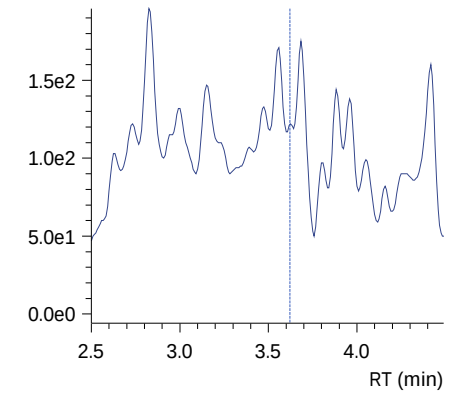
Sample ID: IB
Date Acquired: 7/26/2023 8:54:47 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-001.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	360915	----	ng/mL	101.00 >85.00	0.00	19.41-36.05
Sodium Perchlorate-18O4_IS	Auto	3.575	360915	360915	1.0000	ng/mL	----	----	

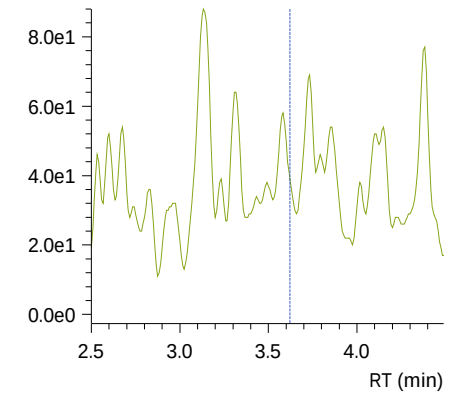
Perchlorate

Conc ----
R#1 0.00 (27.73)

Q 99.00>83.00 (-) 1.96e2



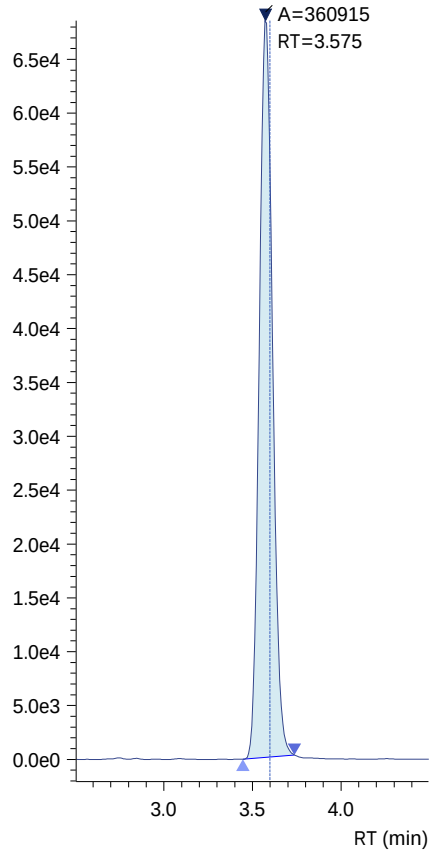
R1 101.00>85.00 (-) 8.80e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.86e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

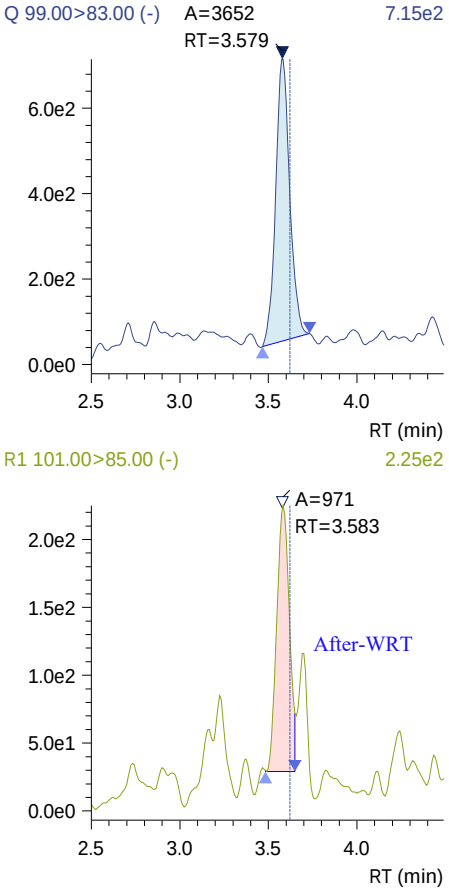
LODV

Sample ID: LODV
Date Acquired: 7/26/2023 9:00:17 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-002.lcd
Vial: 1 | 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	MI R1	3.579	3652	361755	0.0621	ng/mL	101.00 >85.00	26.59	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.577	361755	361755	1.0000	ng/mL	----	----	

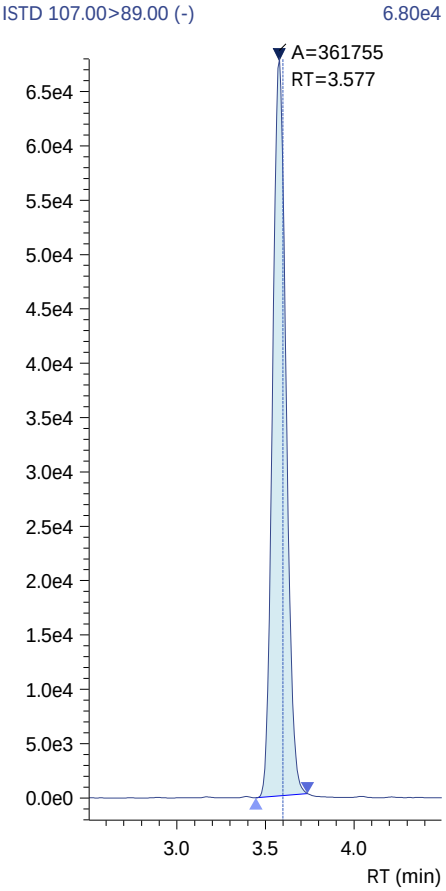
Perchlorate

Conc 0.0621
R#1 26.59 (27.73)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Method File: I:\LCMS01\DATA\20230726\20230726.lcm
Project File: I:\LCMS01\DATA\20230726\20230726.damlp

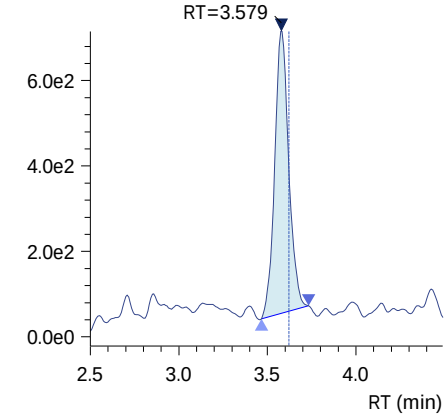
LODV

Sample ID: LODV
Date Acquired: 7/26/2023 9:00:17 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-002.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

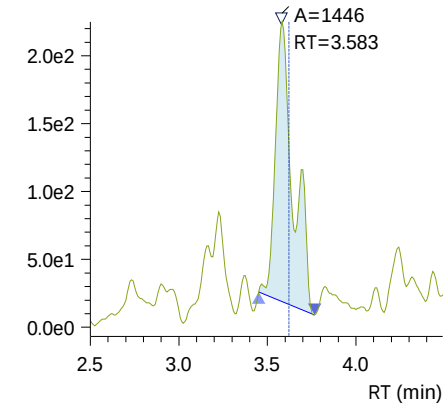
Perchlorate

Conc 0.0621
R#1 39.59 (27.73)

Q 99.00>83.00 (-) A=3652 RT=3.579 7.15e2



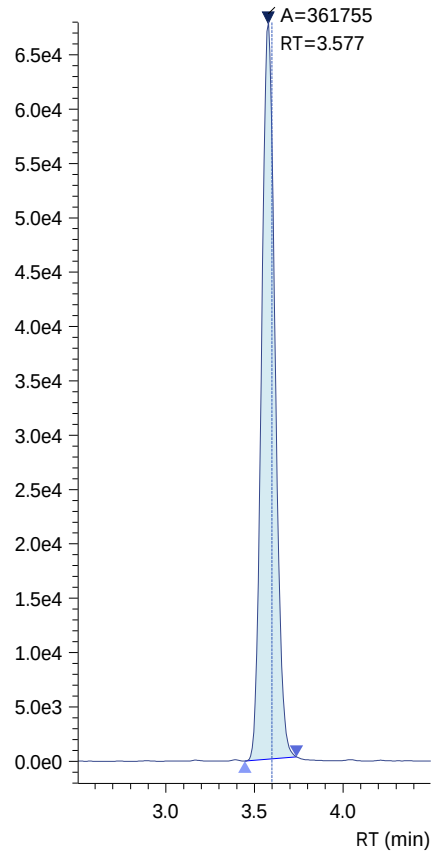
R1 101.00>85.00 (-) 2.25e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.80e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

ICS

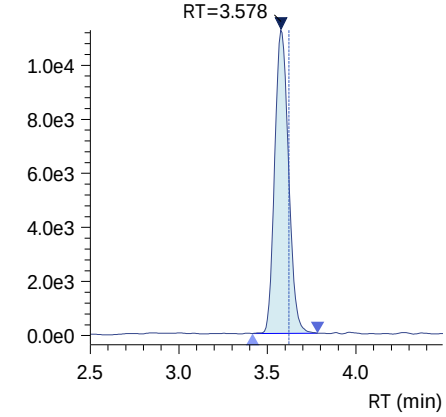
Sample ID: ICS
Date Acquired: 7/26/2023 9:05:46 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-003.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	61181	370783	1.0153	ng/mL	101.00 >85.00	30.81	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.575	370783	370783	1.0000	ng/mL	----	----	

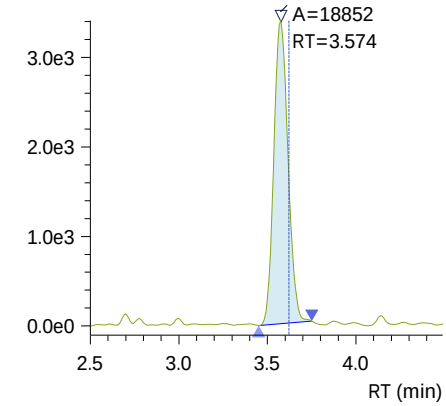
Perchlorate

Conc 1.0153
R#1 30.81 (27.73)

Q 99.00>83.00 (-) A=61181 1.13e4



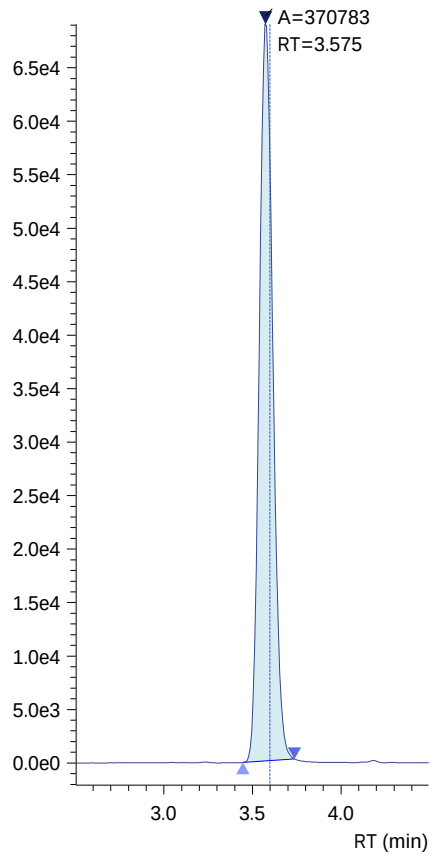
R1 101.00>85.00 (-) 3.41e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.91e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

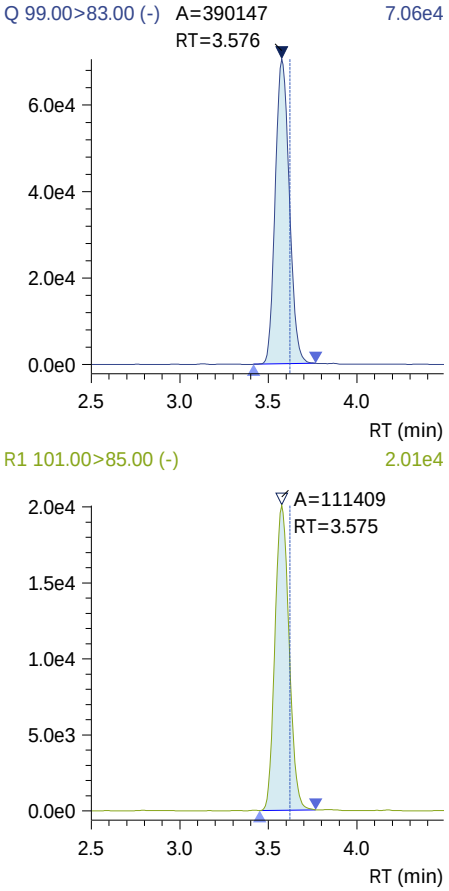
CCV

Sample ID: CCV
Date Acquired: 7/26/2023 9:44:27 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-004.lcd
Vial: 3 | 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	3.576	390147	238907	10.0486	ng/mL	101.00 >85.00	28.56	19.41-36.05
Sodium Perchlorate-18O4_IS	Auto	3.573	238907	238907	1.0000	ng/mL	----	----	

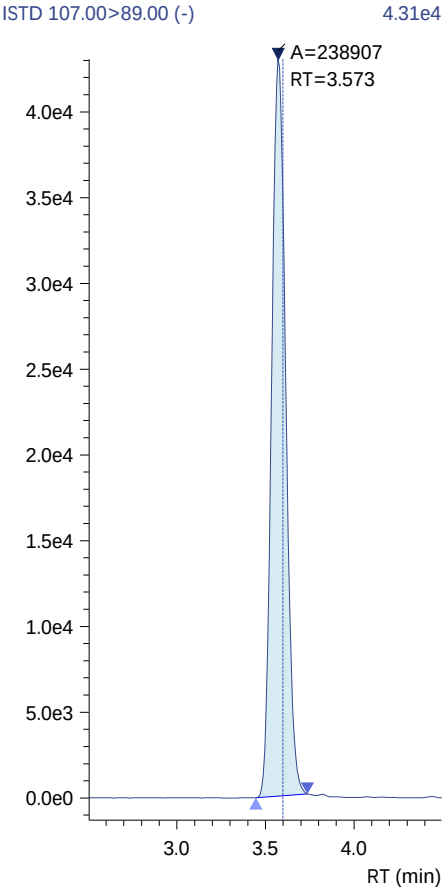
Perchlorate

Conc 10.0486
R#1 28.56 (27.73)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

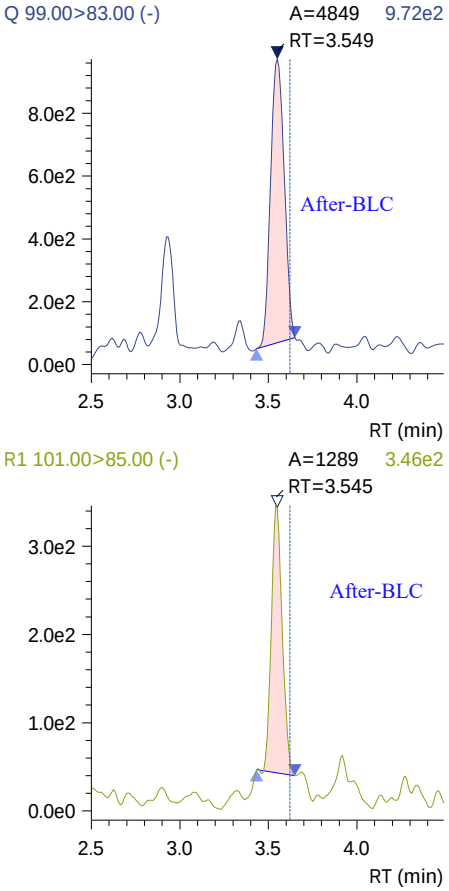
EQ2300358-02

Sample ID: EQ2300358-02
Date Acquired: 7/26/2023 10:23:03 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-005.lcd
Vial: 15 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	3.549	4849	320562	0.0931	ng/mL	101.00 >85.00	26.59	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.546	320562	320562	1.0000	ng/mL	----	----	

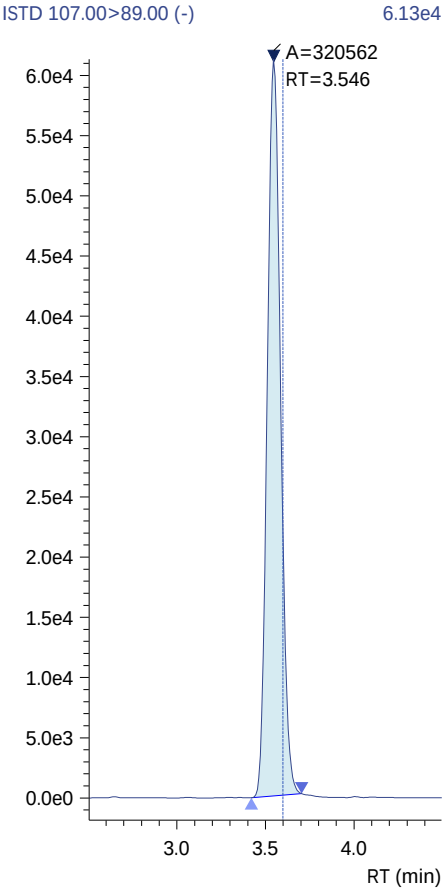
Perchlorate

Conc 0.0931
R#1 26.59 (27.73)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:23:16 PM

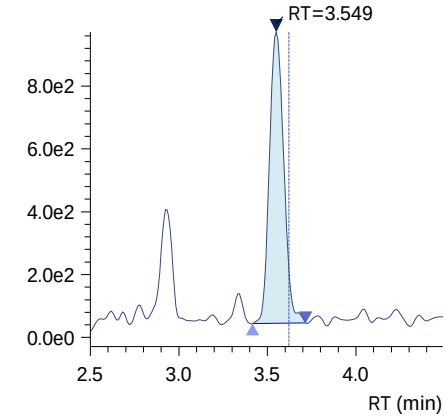
EQ2300358-02

Sample ID: EQ2300358-02
Date Acquired: 7/26/2023 10:23:03 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-005.lcd
Vial: 15 | Inj. Volume: 10.0000uL | Tray: 4

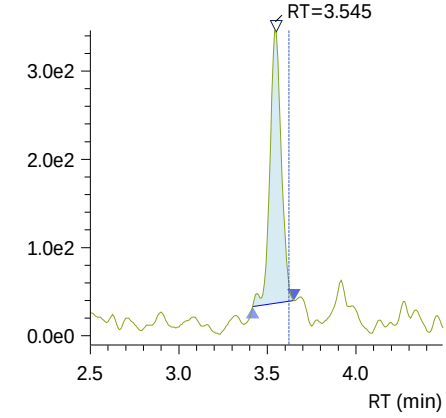
Perchlorate

Conc 0.1008
R#1 26.37 (27.73)

Q 99.00>83.00 (-) A=5250 9.72e2



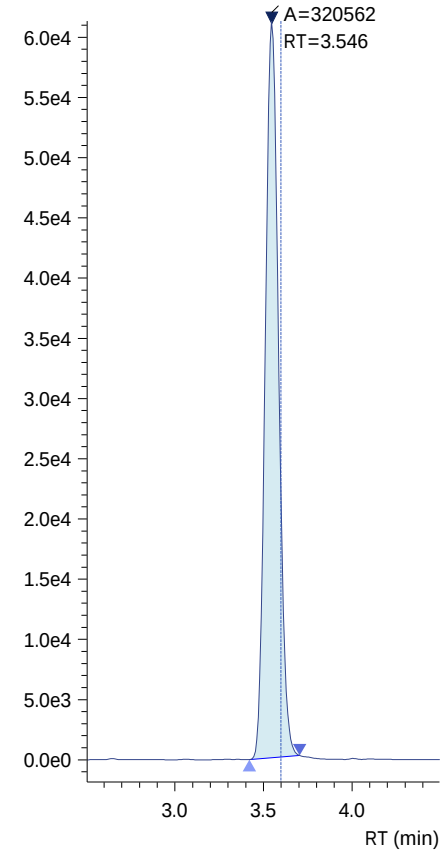
R1 101.00>85.00 (-) A=1384 3.46e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.13e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

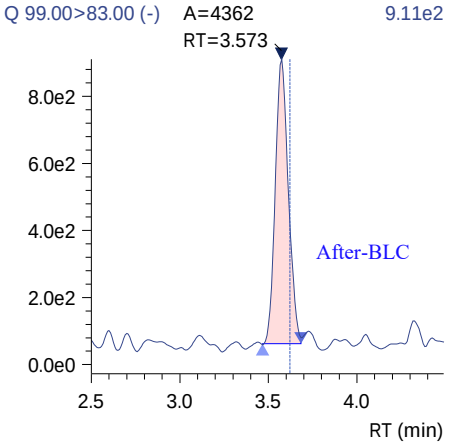
EQ2300358-03

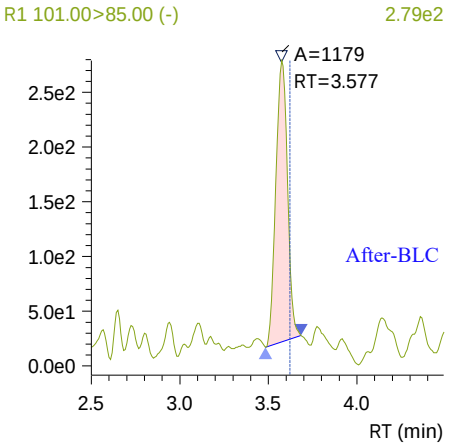
Sample ID: EQ2300358-03
Date Acquired: 7/26/2023 10:28:35 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-006.lcd
Vial: 16 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	3.573	4362	314182	0.0854	ng/mL	101.00 >85.00	27.02	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.571	314182	314182	1.0000	ng/mL	----	----	

Perchlorate

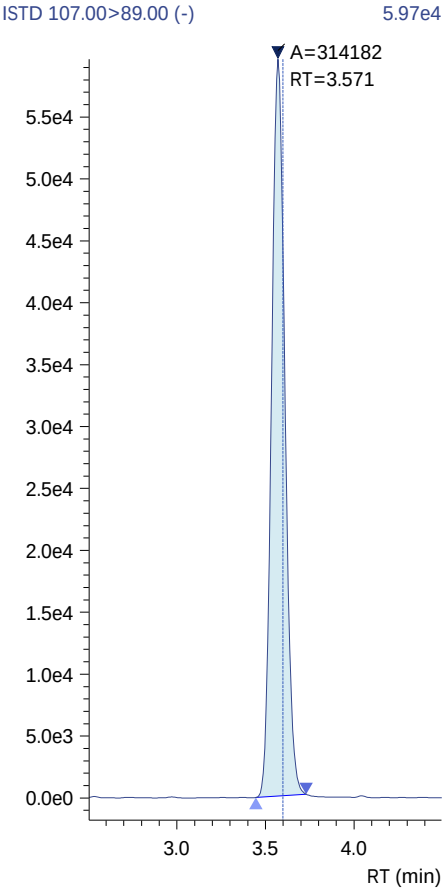
Conc 0.0854
R#1 27.02 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

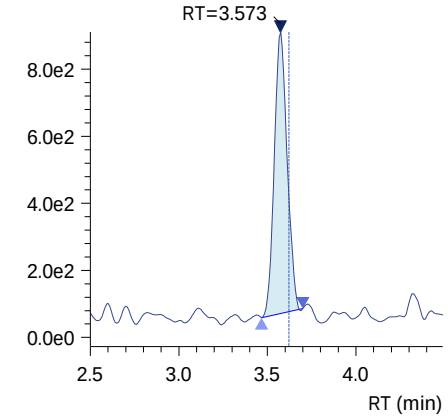
EQ2300358-03

Sample ID: EQ2300358-03
Date Acquired: 7/26/2023 10:28:35 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-006.lcd
Vial: 16 | Inj. Volume: 10.0000uL | Tray: 4

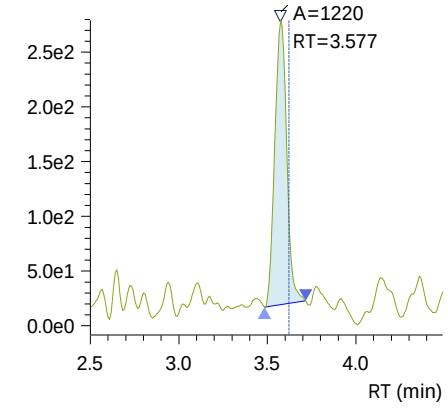
Perchlorate

Conc 0.0829
R#1 28.81 (27.73)

Q 99.00>83.00 (-) A=4235 9.11e2



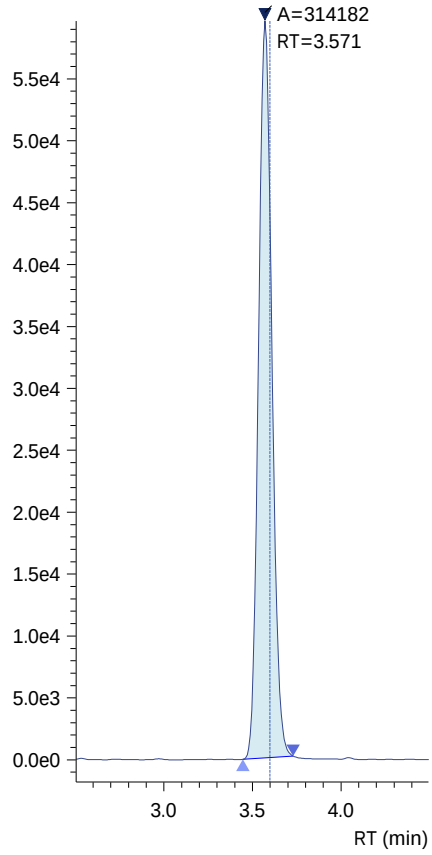
R1 101.00>85.00 (-) 2.79e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.97e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

EQ2300358-01

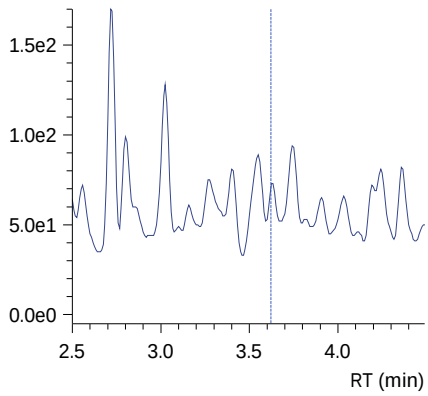
Sample ID: EQ2300358-01
Date Acquired: 7/26/2023 10:34:08 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-007.lcd
Vial: 14 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	313626	----	ng/mL	101.00 >85.00	0.00	19.41-36.05
Sodium Perchlorate-18O4_IS	Auto	3.575	313626	313626	1.0000	ng/mL	----	----	

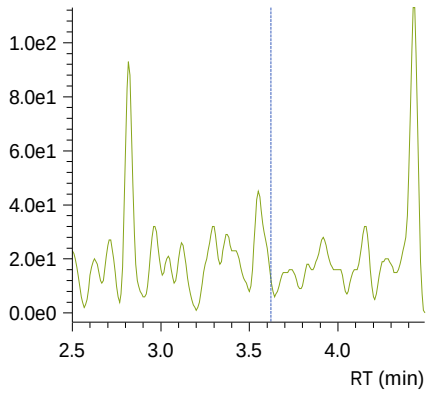
Perchlorate

Conc ----
R#1 0.00 (27.73)

Q 99.00>83.00 (-) 1.70e2



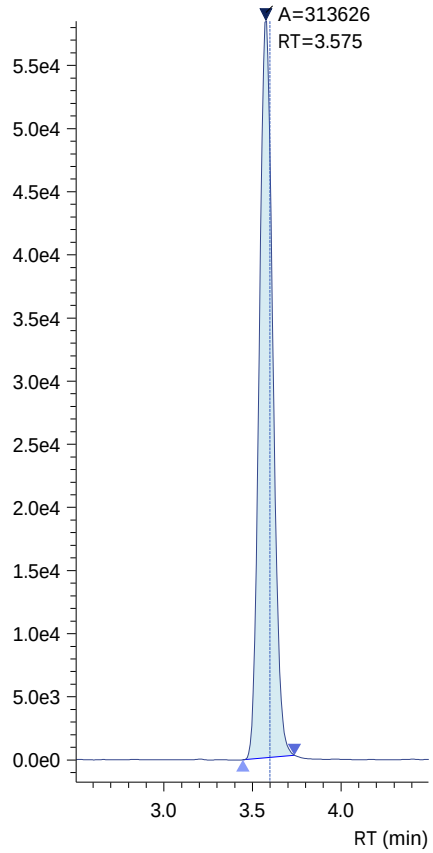
R1 101.00>85.00 (-) 1.13e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.85e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

CCV

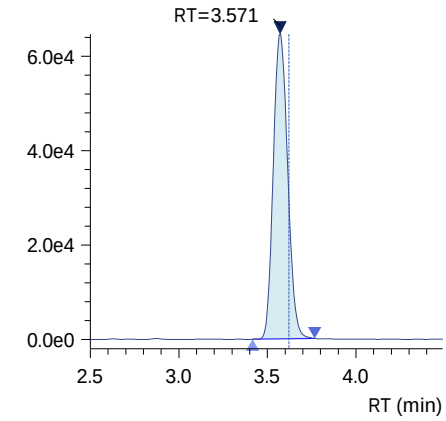
Sample ID: CCV
Date Acquired: 7/26/2023 11:18:36 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-015.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.571	366119	222322	10.13 32	ng/mL	101.00 >85.00	27.95	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.568	222322	222322	1.0000	ng/mL	----	----	

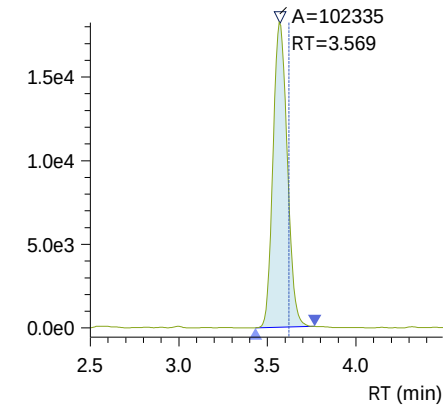
Perchlorate

Conc 10.1332
R#1 27.95 (27.73)

Q 99.00>83.00 (-) A=366119 6.47e4



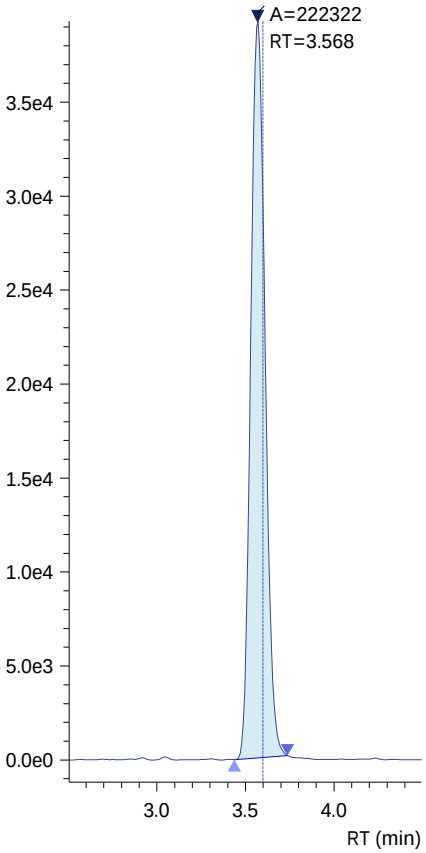
R1 101.00>85.00 (-) 1.83e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.93e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

E2300685-001

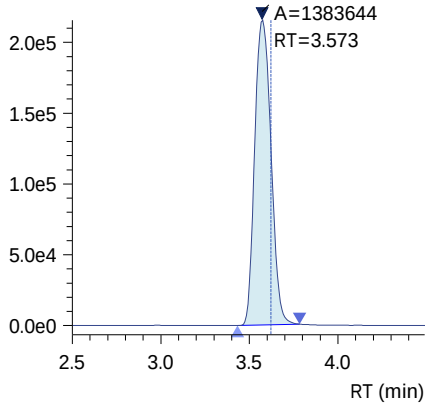
Sample ID: E2300685-001
Date Acquired: 7/26/2023 11:57:19 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-022.lcd
Vial: 44 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	1383644	173374	49.10 73	ng/mL	101.00 >85.00	28.06	19.41-36.05
Sodium Perchlorate-18O4_IS	Auto	3.567	173374	173374	1.0000	ng/mL	----	----	

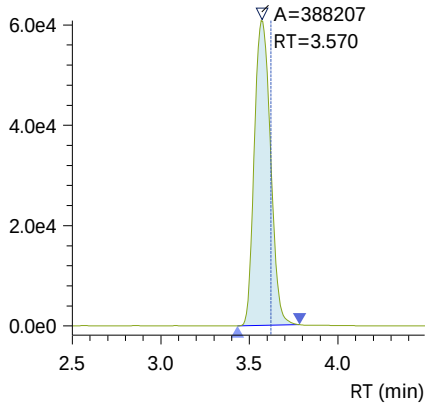
Perchlorate

Conc 49.1073
R#1 28.06 (27.73)

Q 99.00>83.00 (-) 2.16e5



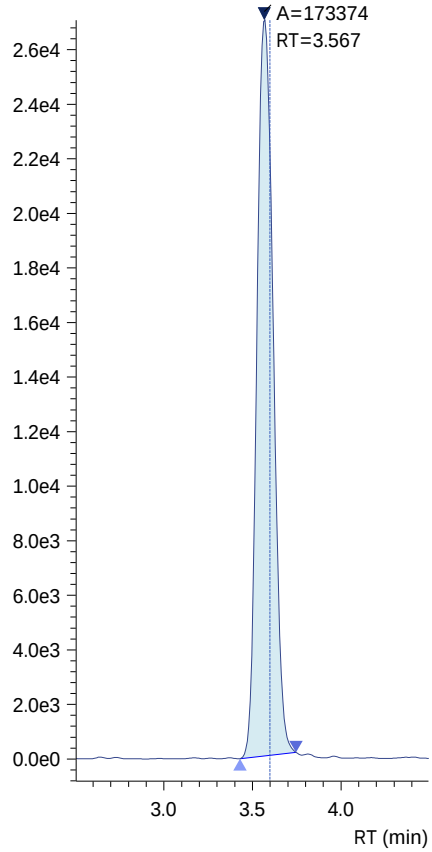
R1 101.00>85.00 (-) 6.09e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.71e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

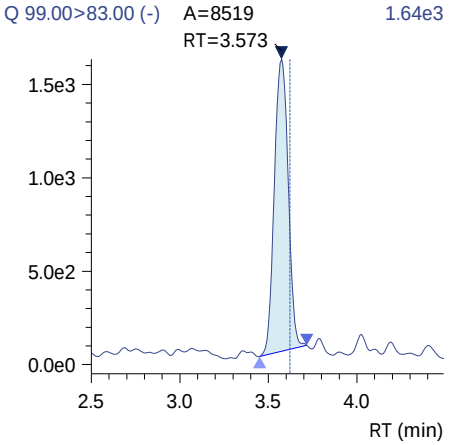
E2300685-002

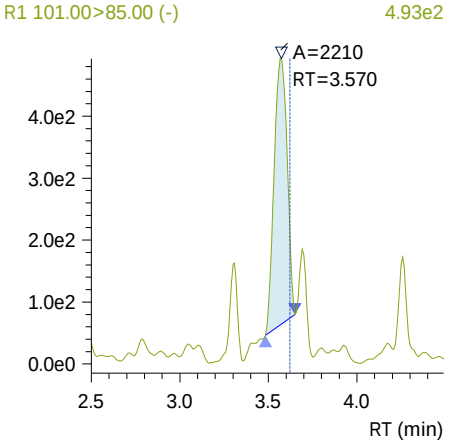
Sample ID: E2300685-002
Date Acquired: 7/26/2023 12:02:53 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-023.lcd
Vial: 45 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	8519	311508	0.1683	ng/mL	101.00 >85.00	25.94	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.566	311508	311508	1.0000	ng/mL	----	----	

Perchlorate

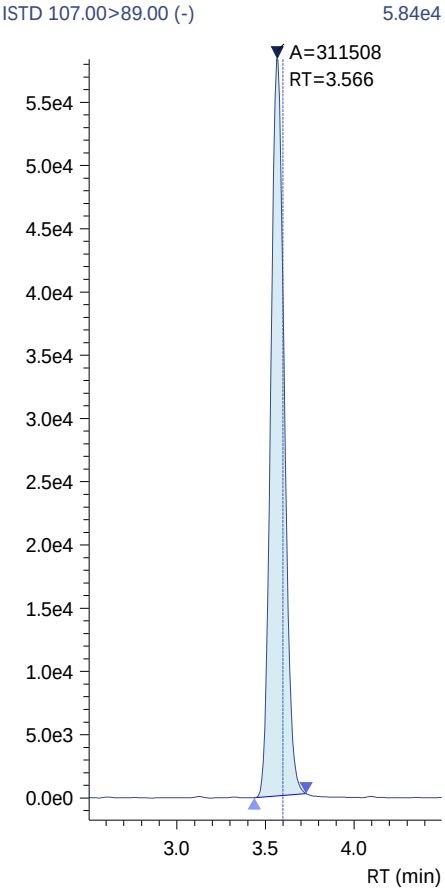
Conc 0.1683
R#1 25.94 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

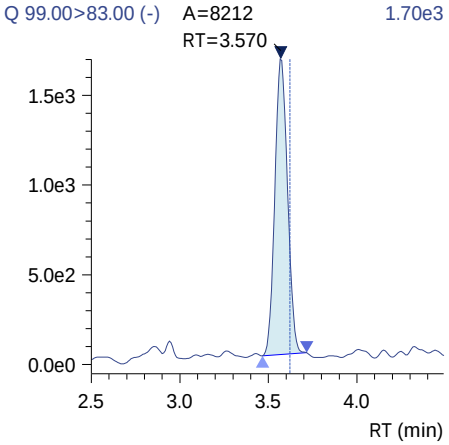
E2300685-003

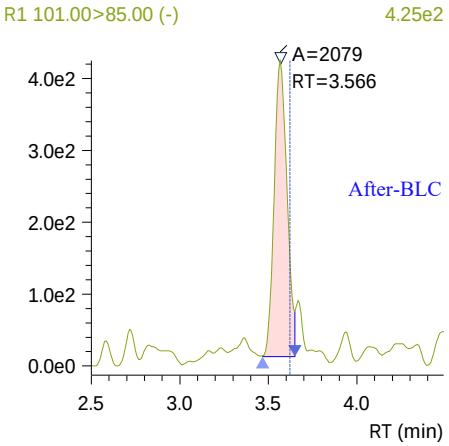
Sample ID: E2300685-003
Date Acquired: 7/26/2023 12:08:24 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-024.lcd
Vial: 46 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.570	8212	317974	0.1589	ng/mL	101.00 >85.00	25.32	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.567	317974	317974	1.0000	ng/mL	----	----	

Perchlorate

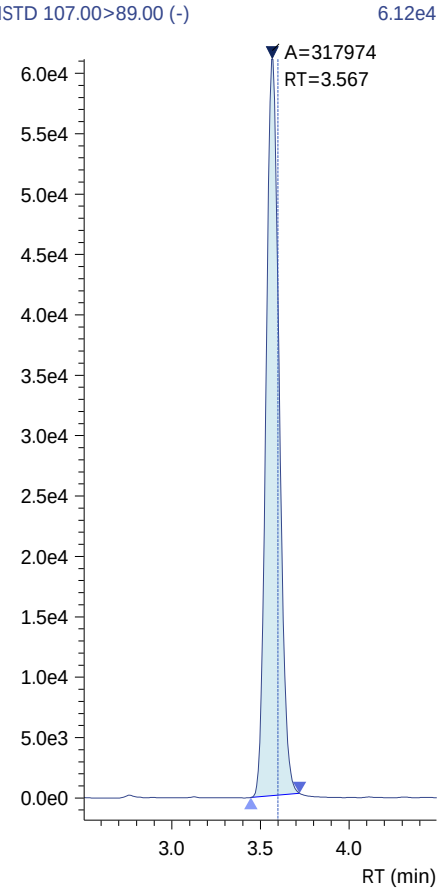
Conc 0.1589
R#1 25.32 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:23:16 PM

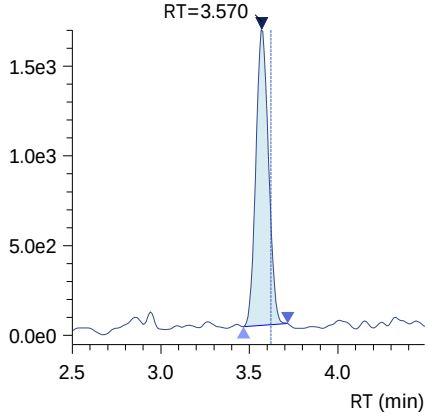
E2300685-003

Sample ID: E2300685-003
Date Acquired: 7/26/2023 12:08:24 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-024.lcd
Vial: 46 | Inj. Volume: 10.0000uL | Tray: 3

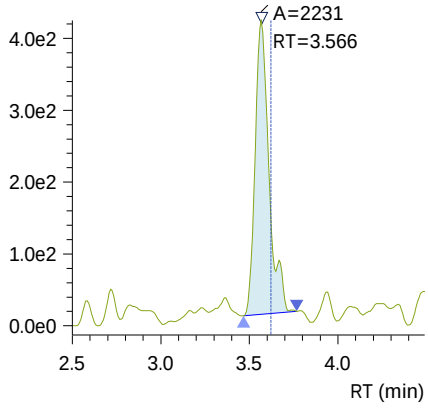
Perchlorate

Conc 0.1589
R#1 27.16 (27.73)

Q 99.00>83.00 (-) A=8212 1.70e3



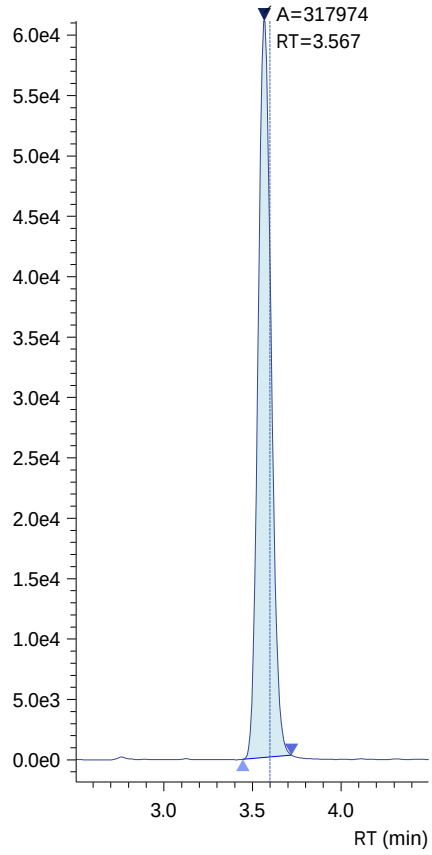
R1 101.00>85.00 (-) 4.25e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.12e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

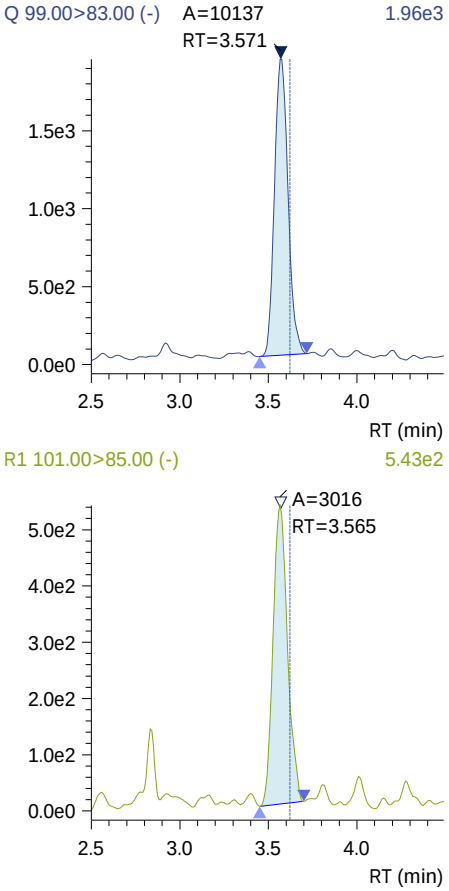
E2300685-004

Sample ID: E2300685-004
Date Acquired: 7/26/2023 12:13:58 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-025.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	3.571	10137	301685	0.2068	ng/mL	101.00 >85.00	29.76	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.566	301685	301685	1.0000	ng/mL	----	----	

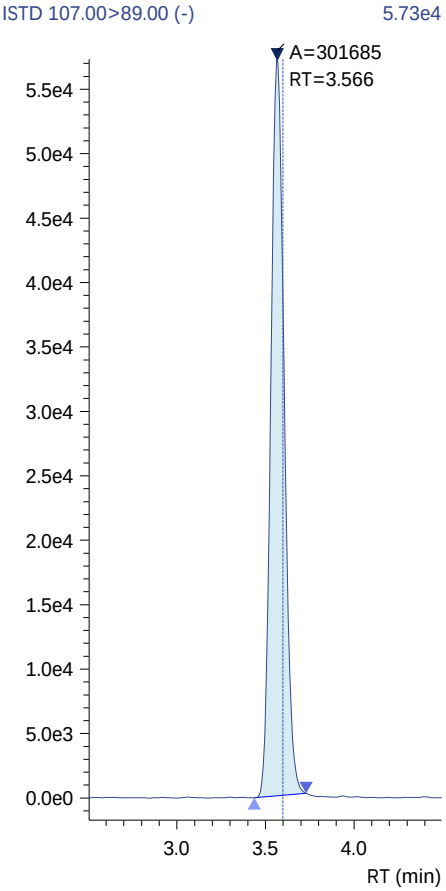
Perchlorate

Conc 0.2068
R#1 29.76 (27.73)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

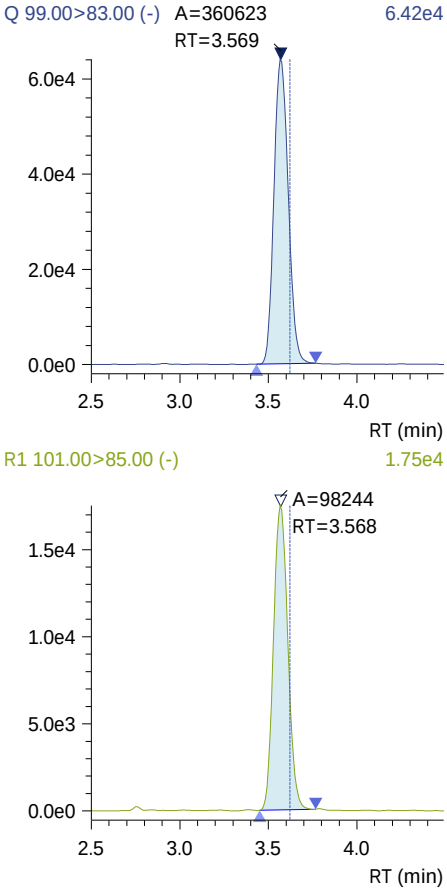
CCV

Sample ID: CCV
Date Acquired: 7/26/2023 12:19:30 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-026.lcd
Vial: 3 | 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	3.569	360623	220036	10.0848	ng/mL	101.00 >85.00	27.24	19.41-36.05
Sodium Perchlorate-18O4_IS	Auto	3.566	220036	220036	1.0000	ng/mL	----	----	

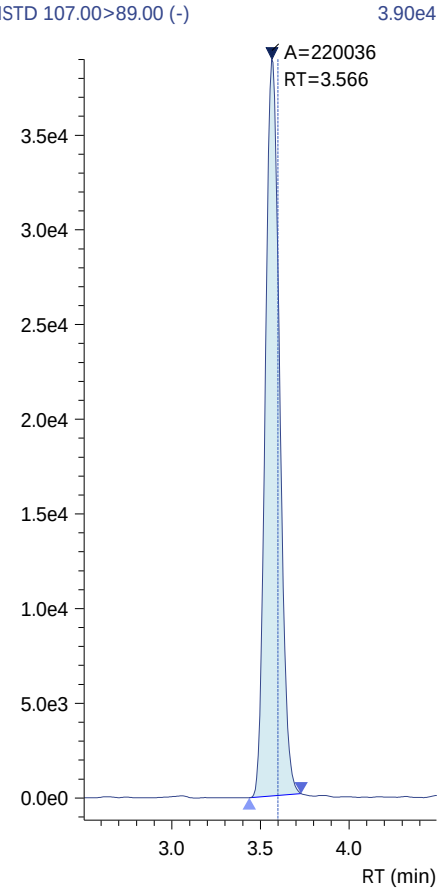
Perchlorate

Conc 10.0848
R#1 27.24 (27.73)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

E2300685-005

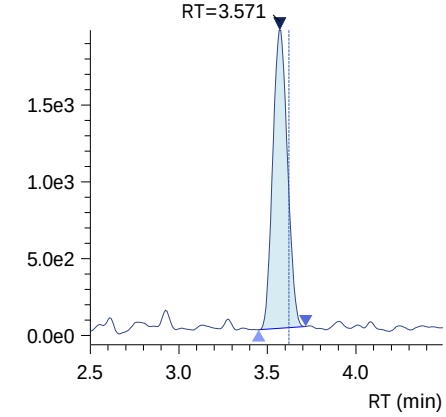
Sample ID: E2300685-005
Date Acquired: 7/26/2023 12:25:03 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-027.lcd
Vial: 48 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.571	11240	325803	0.2123	ng/mL	101.00 >85.00	26.48	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.567	325803	325803	1.0000	ng/mL	----	----	

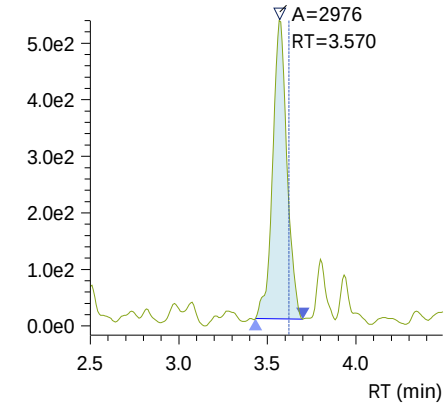
Perchlorate

Conc 0.2123
R#1 26.48 (27.73)

Q 99.00>83.00 (-) A=11240 1.99e3



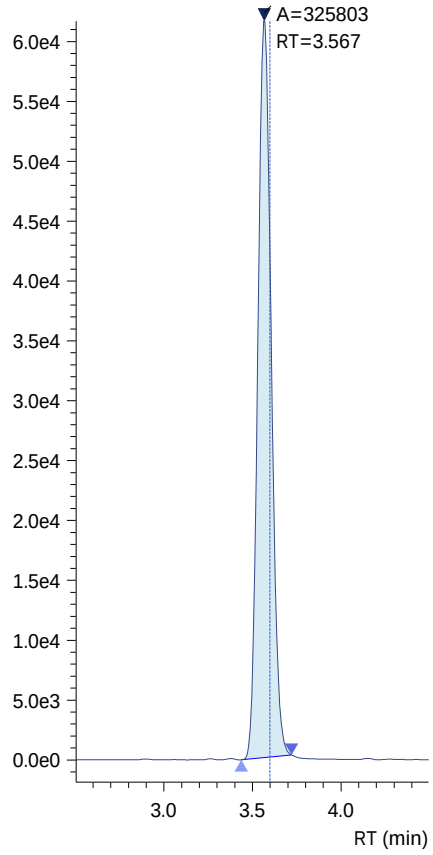
R1 101.00>85.00 (-) 5.40e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.17e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

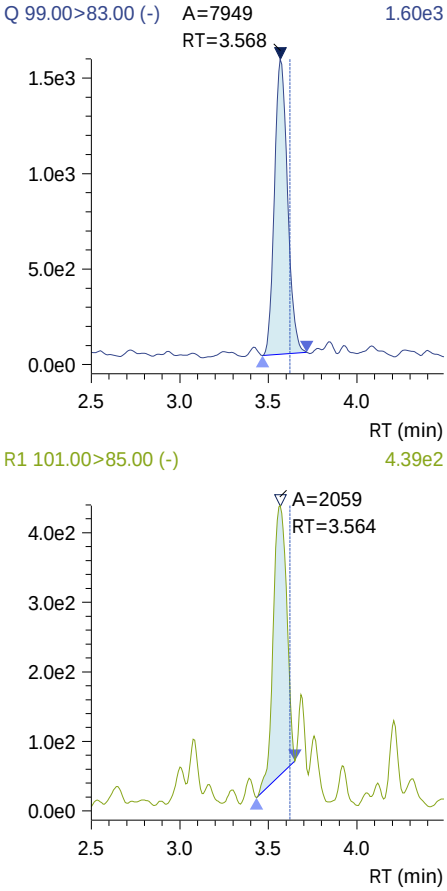
E2300685-006

Sample ID: E2300685-006
Date Acquired: 7/26/2023 12:30:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-028.lcd
Vial: 49 | 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	3.568	7949	299598	0.1633	ng/mL	101.00 >85.00	25.91	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.567	299598	299598	1.0000	ng/mL	----	----	

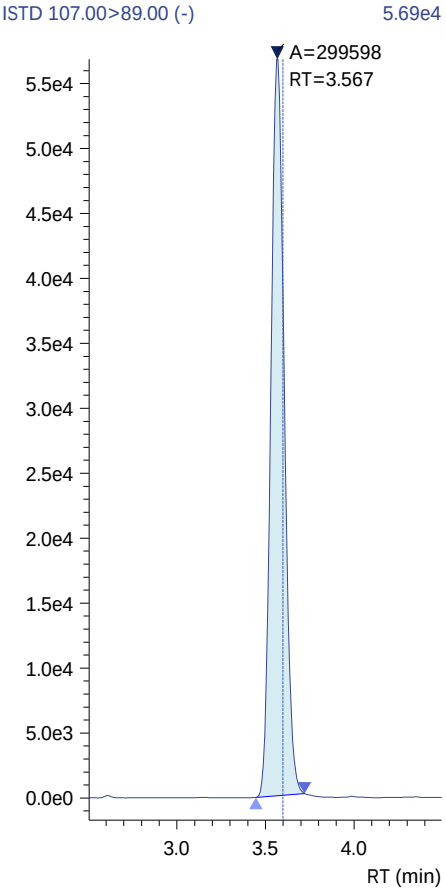
Perchlorate

Conc 0.1633
R#1 25.91 (27.73)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

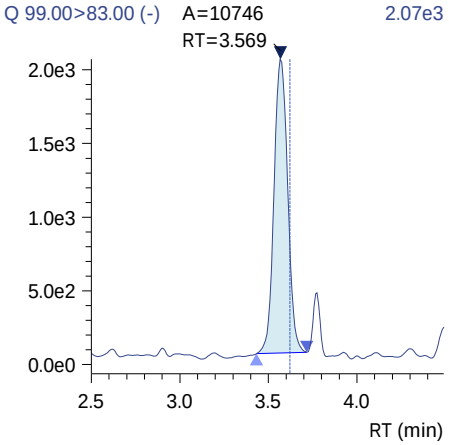
E2300685-007

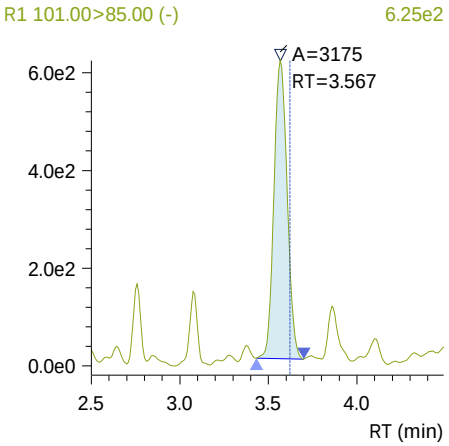
Sample ID: E2300685-007
Date Acquired: 7/26/2023 12:36:03 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-029.lcd
Vial: 50 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.569	10746	268200	0.2465	ng/mL	101.00 >85.00	29.55	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.566	268200	268200	1.0000	ng/mL	----	----	

Perchlorate

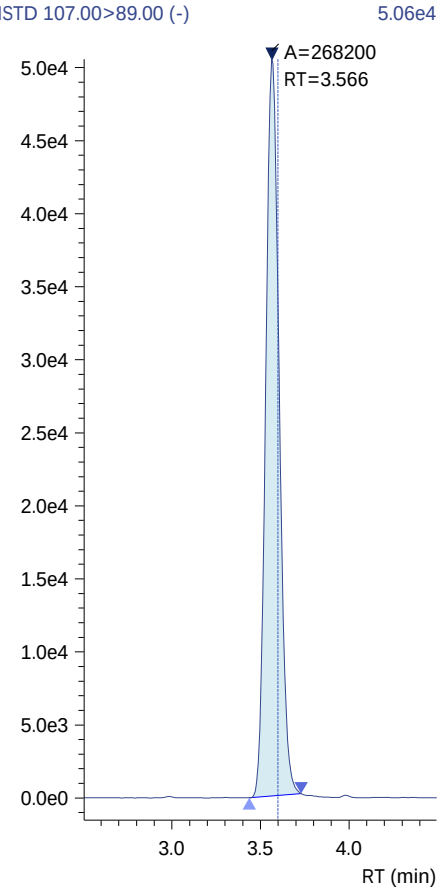
Conc 0.2465
R#1 29.55 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

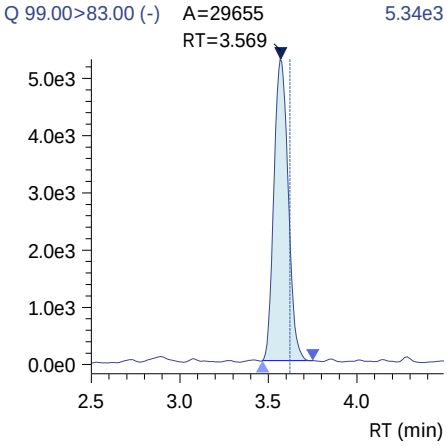
E2300685-008

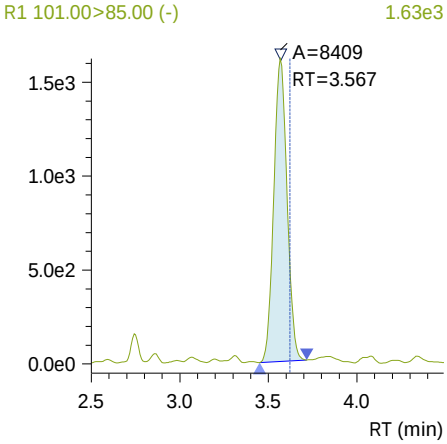
Sample ID: E2300685-008
Date Acquired: 7/26/2023 12:41:34 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-030.lcd
Vial: 51 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.569	29655	310657	0.5874	ng/mL	101.00 >85.00	28.36	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.566	310657	310657	1.0000	ng/mL	----	----	

Perchlorate

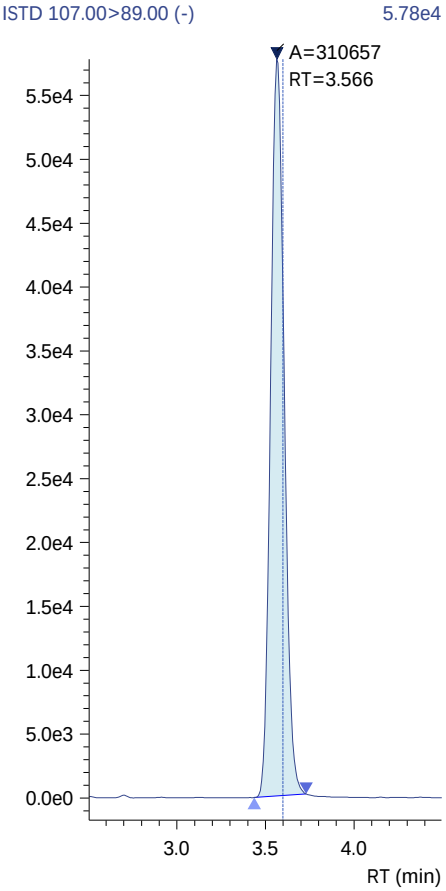
Conc 0.5874
R#1 28.36 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

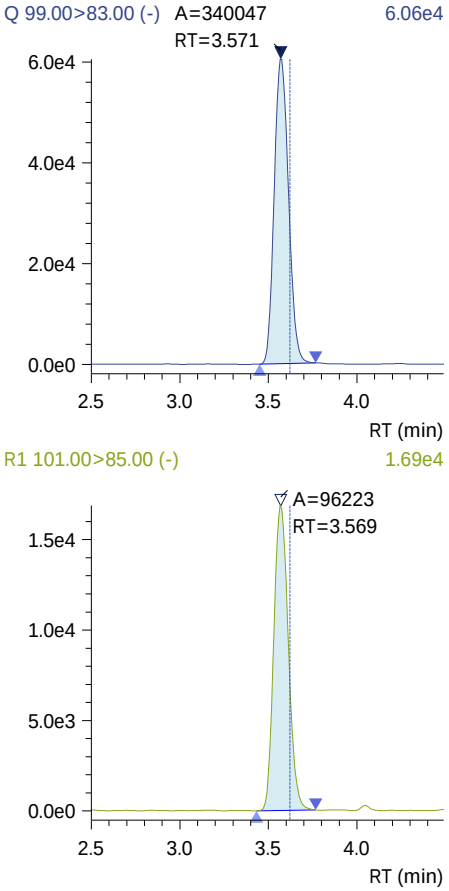
CCV

Sample ID: CCV
Date Acquired: 7/26/2023 1:32:10 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-037.lcd
Vial: 3 | 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	3.571	340047	210109	9.9586	ng/mL	101.00 >85.00	28.30	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.568	210109	210109	1.0000	ng/mL	----	----	

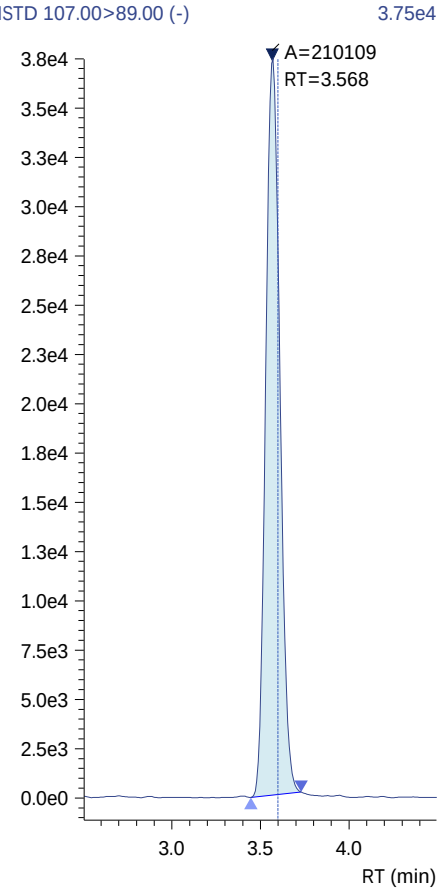
Perchlorate

Conc 9.9586
R#1 28.30 (27.73)



Sodium Perchlorate-18O4_IS

Conc 1.0000



HS23071289 LHAAP 16 January 2023 Cover Page

ALS WO# HS23071289

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Table of Contents

HS23071289 LHAAP 16 January 2023 Cover Page
- CoverPage
- HS23071289 LHAAP 16 January 2023 Final
  - CoverLetter
  - Sample Summary
  - CaseNarrative
  - 16RW09-230718
  - 16RW09-230718-FD
  - 16RW10-230718
  - 16WW40-230718
  - 16WW12-230718
  - 16WW39-230718
  - 16WW49-230718
  - 16SW01-230718
  - 16SW01-230718-FD
  - 16SW02-230718
  - 16SW03-230718
  - Trip Blank-230718
  - Weight/Volume Log
  - Dates Report
  - QC
  - Acronyms

Table of Contents (continued)

Certifications
SampleReceiptCheckList
COC
HS23071289 Perch Sub Data E2300684-II
HS23071289-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
Form 6I - ICV
Form 7 - CCV
Form 8 - ISTD
Run Log
Raw Data VOA6 441456
Raw Data VOA6 442290
HS23071289-GCSEMI-RSK-175
Form 1 - Sample Results
Form 4 - MB Assoc
Form 6 - ICAL
Form 6I - ICV
Form 7 - CCV
Run Log
Raw Data FID 4 322102
Raw Data FID 4 442732
HS23071289 - ME - ICP_W_DOD
Form 11 - ICPMS06 Internal Standard Association
Form 13 - ICPMS06_442949 Run Log
Form 2 - ICPMS06_442949 CCV
Form 3 - ICPMS06_442949 CCB
Form 4 - ICPMS06_442949 ICSA
Form 5A - ICPMS06_442949 MS
Form 5B - ICPMS06_442949 PDS

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right solutions.
right partner.

WorkOrder: HS23071289

LHAAP 16 January 2023

Aptim Environmental & Infrastucture, Inc.

Vicki Graves
10333 Richmond Ave Ste 1030
Houston TX 77042

08-Aug-2023

HS23071289 LHAAP 16 January 2023 Final

ALS WO# HS23071289

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August 02, 2023

Vicki Graves
Aptim Environmental & Infrastucture, Inc.
10333 Richmond Ave
Ste 1030
Houston, TX 77042

Work Order: **HS23071289**

Laboratory Results for: **LHAAP 16 January 2023**

Dear Vicki Graves ,

ALS Environmental received 12 sample(s) on Jul 19, 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: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Work Order: HS23071289

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23071289-01	16RW09-230718	Groundwater		18-Jul-2023 07:05	19-Jul-2023 13:25	☐
HS23071289-02	16RW09-230718-FD	Groundwater		18-Jul-2023 07:05	19-Jul-2023 13:25	☐
HS23071289-03	16RW10-230718	Groundwater		18-Jul-2023 07:50	19-Jul-2023 13:25	☐
HS23071289-04	16WW40-230718	Groundwater		18-Jul-2023 08:30	19-Jul-2023 13:25	☐
HS23071289-05	16WW12-230718	Groundwater		18-Jul-2023 09:15	19-Jul-2023 13:25	☐
HS23071289-06	16WW39-230718	Groundwater		18-Jul-2023 10:10	19-Jul-2023 13:25	☐
HS23071289-07	16WW49-230718	Groundwater		18-Jul-2023 10:50	19-Jul-2023 13:25	☐
HS23071289-08	16SW01-230718	Groundwater		18-Jul-2023 11:00	19-Jul-2023 13:25	☐
HS23071289-09	16SW01-230718-FD	Groundwater		18-Jul-2023 11:00	19-Jul-2023 13:25	☐
HS23071289-10	16SW02-230718	Groundwater		18-Jul-2023 11:20	19-Jul-2023 13:25	☐
HS23071289-11	16SW03-230718	Groundwater		18-Jul-2023 11:35	19-Jul-2023 13:25	☐
HS23071289-12	Trip Blank-230718	Water	CG 061323 -47	18-Jul-2023 00:00	19-Jul-2023 13:25	☐

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc. **CASE NARRATIVE**
Project: LHAAP 16 January 2023
Work Order: HS23071289

Work Order Comments

- The analysis for Perchlorate was performed by ALS Houston Specialty Lab. The final report is appended.

GC Semivolatiles by Method RSK-175

Batch ID: R442732

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

GCMS Volatiles by Method SW8260

Batch ID: R442290

Sample ID: 16SW03-230718 (HS23071289-11MS)

- MS failed QC limit : 1,1,2-Trichloroethane, Trichloroethene

Batch ID: R442557

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

Metals by Method SW6020A

Batch ID: 198377

Sample ID: 16SW03-230718 (HS23071289-11MS)

- The recovery of the Matrix Spike (MS) and or the Matrix Spike Duplicate (MSD)associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The recovery of the MS /MSD may be due to sample matrix interference. Arsenic, Manganese.

Sample ID: HS23071697-01MS

- MS and MSD are for an unrelated sample

WetChemistry by Method SM5310B

Batch ID: R442837

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

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16RW09-230718
Collection Date: 18-Jul-2023 07:05

ANALYTICAL REPORT
WorkOrder:HS23071289
Lab ID:HS23071289-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	25-Jul-2023 19:21
1,1-Dichloroethene	**15**		**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jul-2023 19:21
1,2-Dichloroethane	5.0	U	1.0	5.0	5.0	ug/L	5	25-Jul-2023 19:21
cis-1,2-Dichloroethene	**240**		**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jul-2023 19:21
Methylene chloride	5.0	U	2.0	5.0	10	ug/L	5	25-Jul-2023 19:21
Trichloroethene	**2,600**		**5.0**	**25**	**25**	**ug/L**	25	27-Jul-2023 14:51
Vinyl chloride	**140**		**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jul-2023 19:21
Surr: 1,2-Dichloroethane-d4	*114*			**0**	*81-118*	*%REC*	*5*	*25-Jul-2023 19:21*
Surr: 1,2-Dichloroethane-d4	*112*			**0**	*81-118*	*%REC*	*25*	*27-Jul-2023 14:51*
Surr: 4-Bromofluorobenzene	*100*			**0**	*85-114*	*%REC*	*5*	*25-Jul-2023 19:21*
Surr: 4-Bromofluorobenzene	*96.6*			**0**	*85-114*	*%REC*	*25*	*27-Jul-2023 14:51*
Surr: Dibromofluoromethane	*109*			**0**	*80-119*	*%REC*	*5*	*25-Jul-2023 19:21*
Surr: Dibromofluoromethane	*106*			**0**	*80-119*	*%REC*	*25*	*27-Jul-2023 14:51*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*5*	*25-Jul-2023 19:21*
Surr: Toluene-d8	*100*			**0**	*89-112*	*%REC*	*25*	*27-Jul-2023 14:51*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: SAM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	28-Jul-2023 09:19
Ethene	**0.0413**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	28-Jul-2023 09:19
Methane	**1.42**		**0.00535**	**0.0250**	**0.0250**	**mg/L**	50	28-Jul-2023 10:37
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	20.0	U	10.0	20.0	20.0	mg/L	20	31-Jul-2023 12:17
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16RW09-230718-FD
Collection Date: 18-Jul-2023 07:05

ANALYTICAL REPORT
WorkOrder:HS23071289
Lab ID:HS23071289-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	25-Jul-2023 19:41
1,1-Dichloroethene	**15**		**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jul-2023 19:41
1,2-Dichloroethane	5.0	U	1.0	5.0	5.0	ug/L	5	25-Jul-2023 19:41
cis-1,2-Dichloroethene	**250**		**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jul-2023 19:41
Methylene chloride	5.0	U	2.0	5.0	10	ug/L	5	25-Jul-2023 19:41
Trichloroethene	**2,600**		**5.0**	**25**	**25**	**ug/L**	25	27-Jul-2023 15:11
Vinyl chloride	**150**		**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jul-2023 19:41
Surr: 1,2-Dichloroethane-d4	*114*			**0**	*81-118*	*%REC*	*5*	*25-Jul-2023 19:41*
Surr: 1,2-Dichloroethane-d4	*113*			**0**	*81-118*	*%REC*	*25*	*27-Jul-2023 15:11*
Surr: 4-Bromofluorobenzene	*96.4*			**0**	*85-114*	*%REC*	*5*	*25-Jul-2023 19:41*
Surr: 4-Bromofluorobenzene	*96.1*			**0**	*85-114*	*%REC*	*25*	*27-Jul-2023 15:11*
Surr: Dibromofluoromethane	*109*			**0**	*80-119*	*%REC*	*5*	*25-Jul-2023 19:41*
Surr: Dibromofluoromethane	*105*			**0**	*80-119*	*%REC*	*25*	*27-Jul-2023 15:11*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*5*	*25-Jul-2023 19:41*
Surr: Toluene-d8	*101*			**0**	*89-112*	*%REC*	*25*	*27-Jul-2023 15:11*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: SAM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	28-Jul-2023 09:34
Ethene	**0.0422**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	28-Jul-2023 09:34
Methane	**1.42**		**0.00535**	**0.0250**	**0.0250**	**mg/L**	50	28-Jul-2023 10:50
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	20.0	U	10.0	20.0	20.0	mg/L	20	31-Jul-2023 12:29
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16RW10-230718
Collection Date: 18-Jul-2023 07:50

ANALYTICAL REPORT
WorkOrder:HS23071289
Lab ID:HS23071289-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	25-Jul-2023 17:59
1,1-Dichloroethene	**31**		**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jul-2023 17:59
1,2-Dichloroethane	**5.8**		**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jul-2023 17:59
cis-1,2-Dichloroethene	**410**		**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jul-2023 17:59
Methylene chloride	5.0	U	2.0	5.0	10	ug/L	5	25-Jul-2023 17:59
Trichloroethene	**1,300**		**5.0**	**25**	**25**	**ug/L**	25	25-Jul-2023 18:19
Vinyl chloride	**250**		**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jul-2023 17:59
Surr: 1,2-Dichloroethane-d4	*114*			**0**	*81-118*	*%REC*	*5*	*25-Jul-2023 17:59*
Surr: 1,2-Dichloroethane-d4	*118*			**0**	*81-118*	*%REC*	*25*	*25-Jul-2023 18:19*
Surr: 4-Bromofluorobenzene	*97.8*			**0**	*85-114*	*%REC*	*5*	*25-Jul-2023 17:59*
Surr: 4-Bromofluorobenzene	*95.7*			**0**	*85-114*	*%REC*	*25*	*25-Jul-2023 18:19*
Surr: Dibromofluoromethane	*110*			**0**	*80-119*	*%REC*	*5*	*25-Jul-2023 17:59*
Surr: Dibromofluoromethane	*110*			**0**	*80-119*	*%REC*	*25*	*25-Jul-2023 18:19*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*5*	*25-Jul-2023 17:59*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*25*	*25-Jul-2023 18:19*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: SAM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	28-Jul-2023 09:52
Ethene	**0.0156**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	28-Jul-2023 09:52
Methane	**1.44**		**0.00535**	**0.0250**	**0.0250**	**mg/L**	50	28-Jul-2023 11:08
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW40-230718
Collection Date: 18-Jul-2023 08:30

ANALYTICAL REPORT
WorkOrder:HS23071289
Lab ID:HS23071289-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	27-Jul-2023 13:29
1,1-Dichloroethene	**7.6**		**1.0**	**5.0**	**5.0**	**ug/L**	5	27-Jul-2023 13:29
1,2-Dichloroethane	**9.7**		**1.0**	**5.0**	**5.0**	**ug/L**	5	27-Jul-2023 13:29
cis-1,2-Dichloroethene	**160**		**1.0**	**5.0**	**5.0**	**ug/L**	5	27-Jul-2023 13:29
Methylene chloride	5.0	U	2.0	5.0	10	ug/L	5	27-Jul-2023 13:29
Trichloroethene	**2,300**		**5.0**	**25**	**25**	**ug/L**	25	27-Jul-2023 14:30
Vinyl chloride	**12**		**1.0**	**5.0**	**5.0**	**ug/L**	5	27-Jul-2023 13:29
Surr: 1,2-Dichloroethane-d4	*114*			**0**	*81-118*	*%REC*	*5*	*27-Jul-2023 13:29*
Surr: 1,2-Dichloroethane-d4	*115*			**0**	*81-118*	*%REC*	*25*	*27-Jul-2023 14:30*
Surr: 4-Bromofluorobenzene	*95.7*			**0**	*85-114*	*%REC*	*25*	*27-Jul-2023 14:30*
Surr: 4-Bromofluorobenzene	*98.3*			**0**	*85-114*	*%REC*	*5*	*27-Jul-2023 13:29*
Surr: Dibromofluoromethane	*107*			**0**	*80-119*	*%REC*	*5*	*27-Jul-2023 13:29*
Surr: Dibromofluoromethane	*105*			**0**	*80-119*	*%REC*	*25*	*27-Jul-2023 14:30*
Surr: Toluene-d8	*99.9*			**0**	*89-112*	*%REC*	*5*	*27-Jul-2023 13:29*
Surr: Toluene-d8	*99.3*			**0**	*89-112*	*%REC*	*25*	*27-Jul-2023 14:30*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: SAM
Ethane	**0.00226**		**0.000144**	**0.000500**	**0.00100**	**mg/L**	1	28-Jul-2023 10:29
Ethene	**0.00556**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	28-Jul-2023 10:29
Methane	**0.960**		**0.00535**	**0.0250**	**0.0250**	**mg/L**	50	28-Jul-2023 11:44
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**8.99**		**0.500**	**1.00**	**1.00**	**mg/L**	1	31-Jul-2023 12:43
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US

Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.

ANALYTICAL REPORT

Project: LHAAP 16 January 2023

WorkOrder:HS23071289

Sample ID: 16WW12-230718

Lab ID:HS23071289-05

Collection Date: 18-Jul-2023 09:15

Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	25-Jul-2023 18:40
1,1-Dichloroethene	**6.0**		**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jul-2023 18:40
1,2-Dichloroethane	**6.4**		**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jul-2023 18:40
cis-1,2-Dichloroethene	**210**		**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jul-2023 18:40
Methylene chloride	5.0	U	2.0	5.0	10	ug/L	5	25-Jul-2023 18:40
Trichloroethene	**2,200**		**5.0**	**25**	**25**	**ug/L**	25	25-Jul-2023 19:00
Vinyl chloride	**20**		**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jul-2023 18:40
Surr: 1,2-Dichloroethane-d4	*113*			**0**	*81-118*	*%REC*	*5*	*25-Jul-2023 18:40*
Surr: 1,2-Dichloroethane-d4	*117*			**0**	*81-118*	*%REC*	*25*	*25-Jul-2023 19:00*
Surr: 4-Bromofluorobenzene	*92.0*			**0**	*85-114*	*%REC*	*5*	*25-Jul-2023 18:40*
Surr: 4-Bromofluorobenzene	*94.4*			**0**	*85-114*	*%REC*	*25*	*25-Jul-2023 19:00*
Surr: Dibromofluoromethane	*111*			**0**	*80-119*	*%REC*	*5*	*25-Jul-2023 18:40*
Surr: Dibromofluoromethane	*109*			**0**	*80-119*	*%REC*	*25*	*25-Jul-2023 19:00*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*5*	*25-Jul-2023 18:40*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*25*	*25-Jul-2023 19:00*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW39-230718
Collection Date: 18-Jul-2023 10:10

ANALYTICAL REPORT
WorkOrder:HS23071289
Lab ID:HS23071289-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	25-Jul-2023 17:18
1,1-Dichloroethene	**1.2**		**0.20**	**1.0**	**1.0**	**ug/L**	1	25-Jul-2023 17:18
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 17:18
cis-1,2-Dichloroethene	**32**		**0.20**	**1.0**	**1.0**	**ug/L**	1	25-Jul-2023 17:18
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	25-Jul-2023 17:18
Trichloroethene	**230**		**1.0**	**5.0**	**5.0**	**ug/L**	5	27-Jul-2023 15:32
Vinyl chloride	**0.97**	J	**0.20**	**1.0**	**1.0**	**ug/L**	1	25-Jul-2023 17:18
Surr: 1,2-Dichloroethane-d4	*114*			**0**	*81-118*	*%REC*	*1*	*25-Jul-2023 17:18*
Surr: 1,2-Dichloroethane-d4	*116*			**0**	*81-118*	*%REC*	*5*	*27-Jul-2023 15:32*
Surr: 4-Bromofluorobenzene	*96.2*			**0**	*85-114*	*%REC*	*1*	*25-Jul-2023 17:18*
Surr: 4-Bromofluorobenzene	*98.0*			**0**	*85-114*	*%REC*	*5*	*27-Jul-2023 15:32*
Surr: Dibromofluoromethane	*110*			**0**	*80-119*	*%REC*	*1*	*25-Jul-2023 17:18*
Surr: Dibromofluoromethane	*108*			**0**	*80-119*	*%REC*	*5*	*27-Jul-2023 15:32*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*1*	*25-Jul-2023 17:18*
Surr: Toluene-d8	*99.7*			**0**	*89-112*	*%REC*	*5*	*27-Jul-2023 15:32*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US

Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.

ANALYTICAL REPORT

Project: LHAAP 16 January 2023

WorkOrder:HS23071289

Sample ID: 16WW49-230718

Lab ID:HS23071289-07

Collection Date: 18-Jul-2023 10:50

Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	25-Jul-2023 17:38
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 17:38
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 17:38
cis-1,2-Dichloroethene	**33**		**0.20**	**1.0**	**1.0**	**ug/L**	1	25-Jul-2023 17:38
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	25-Jul-2023 17:38
Trichloroethene	**51**		**0.20**	**1.0**	**1.0**	**ug/L**	1	25-Jul-2023 17:38
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 17:38
Surr: 1,2-Dichloroethane-d4	*113*			**0**	*81-118*	*%REC*	*1*	*25-Jul-2023 17:38*
Surr: 4-Bromofluorobenzene	*95.8*			**0**	*85-114*	*%REC*	*1*	*25-Jul-2023 17:38*
Surr: Dibromofluoromethane	*110*			**0**	*80-119*	*%REC*	*1*	*25-Jul-2023 17:38*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*1*	*25-Jul-2023 17:38*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16SW01-230718
Collection Date: 18-Jul-2023 11:00

ANALYTICAL REPORT
WorkOrder:HS23071289
Lab ID:HS23071289-08
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	25-Jul-2023 16:16
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 16:16
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 16:16
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 16:16
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	25-Jul-2023 16:16
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 16:16
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 16:16
Surr: 1,2-Dichloroethane-d4	*111*			**0**	*81-118*	*%REC*	*1*	*25-Jul-2023 16:16*
Surr: 4-Bromofluorobenzene	*98.7*			**0**	*85-114*	*%REC*	*1*	*25-Jul-2023 16:16*
Surr: Dibromofluoromethane	*109*			**0**	*80-119*	*%REC*	*1*	*25-Jul-2023 16:16*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*1*	*25-Jul-2023 16:16*
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 01-Aug-2023		Analyst: JC
Arsenic	**0.000897**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	02-Aug-2023 11:58
Chromium	**0.00105**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	02-Aug-2023 11:58
Manganese	**0.120**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	02-Aug-2023 11:58
Nickel	**0.00338**	J	**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	02-Aug-2023 11:58
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	02-Aug-2023 11:58
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16SW01-230718-FD
Collection Date: 18-Jul-2023 11:00

ANALYTICAL REPORT
WorkOrder:HS23071289
Lab ID:HS23071289-09
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	25-Jul-2023 16:37
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 16:37
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 16:37
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 16:37
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	25-Jul-2023 16:37
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 16:37
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 16:37
Surr: 1,2-Dichloroethane-d4	*114*			**0**	*81-118*	*%REC*	*1*	*25-Jul-2023 16:37*
Surr: 4-Bromofluorobenzene	*94.8*			**0**	*85-114*	*%REC*	*1*	*25-Jul-2023 16:37*
Surr: Dibromofluoromethane	*109*			**0**	*80-119*	*%REC*	*1*	*25-Jul-2023 16:37*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*1*	*25-Jul-2023 16:37*
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 01-Aug-2023		Analyst: JC
Arsenic	**0.000926**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	02-Aug-2023 12:01
Chromium	**0.000884**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	02-Aug-2023 12:01
Manganese	**0.127**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	02-Aug-2023 12:01
Nickel	**0.00479**	J	**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	02-Aug-2023 12:01
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	02-Aug-2023 12:01
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16SW02-230718
Collection Date: 18-Jul-2023 11:20

ANALYTICAL REPORT
WorkOrder:HS23071289
Lab ID:HS23071289-10
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	25-Jul-2023 16:57
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 16:57
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 16:57
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 16:57
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	25-Jul-2023 16:57
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 16:57
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 16:57
Surr: 1,2-Dichloroethane-d4	*116*			**0**	*81-118*	*%REC*	*1*	*25-Jul-2023 16:57*
Surr: 4-Bromofluorobenzene	*97.5*			**0**	*85-114*	*%REC*	*1*	*25-Jul-2023 16:57*
Surr: Dibromofluoromethane	*108*			**0**	*80-119*	*%REC*	*1*	*25-Jul-2023 16:57*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*1*	*25-Jul-2023 16:57*
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 01-Aug-2023		Analyst: JC
Arsenic	**0.00108**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	02-Aug-2023 12:02
Chromium	**0.00304**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	02-Aug-2023 12:02
Manganese	**0.114**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	02-Aug-2023 12:02
Nickel	**0.00399**	J	**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	02-Aug-2023 12:02
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	02-Aug-2023 12:02
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16SW03-230718
Collection Date: 18-Jul-2023 11:35

ANALYTICAL REPORT
WorkOrder:HS23071289
Lab ID:HS23071289-11
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	25-Jul-2023 13:33
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 13:33
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 13:33
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 13:33
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	25-Jul-2023 13:33
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 13:33
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 13:33
Surr: 1,2-Dichloroethane-d4	*118*			**0**	*81-118*	*%REC*	*1*	*25-Jul-2023 13:33*
Surr: 4-Bromofluorobenzene	*98.9*			**0**	*85-114*	*%REC*	*1*	*25-Jul-2023 13:33*
Surr: Dibromofluoromethane	*108*			**0**	*80-119*	*%REC*	*1*	*25-Jul-2023 13:33*
Surr: Toluene-d8	*101*			**0**	*89-112*	*%REC*	*1*	*25-Jul-2023 13:33*
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 01-Aug-2023		Analyst: JC
Arsenic	**0.000916**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	02-Aug-2023 11:31
Chromium	**0.000476**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	02-Aug-2023 11:31
Manganese	**0.120**		**0.00350**	**0.0125**	**0.0250**	**mg/L**	5	02-Aug-2023 13:06
Nickel	**0.00338**	J	**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	02-Aug-2023 11:31
Thallium	**0.000772**	J	**0.000200**	**0.000500**	**0.00200**	**mg/L**	1	02-Aug-2023 11:31
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US

Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.

ANALYTICAL REPORT

Project: LHAAP 16 January 2023

WorkOrder:HS23071289

Sample ID: Trip Blank-230718

Lab ID:HS23071289-12

Collection Date: 18-Jul-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
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	25-Jul-2023 15:56
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 15:56
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 15:56
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 15:56
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	25-Jul-2023 15:56
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 15:56
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 15:56
Surr: 1,2-Dichloroethane-d4	*112*			**0**	*81-118*	*%REC*	*1*	*25-Jul-2023 15:56*
Surr: 4-Bromofluorobenzene	*97.1*			**0**	*85-114*	*%REC*	*1*	*25-Jul-2023 15:56*
Surr: Dibromofluoromethane	*108*			**0**	*80-119*	*%REC*	*1*	*25-Jul-2023 15:56*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*1*	*25-Jul-2023 15:56*

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

ALS Houston, US Date: 02-Aug-23

Weight / Prep Log

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

Batch ID: 198377 **Start Date:** 01 Aug 2023 12:00 **End Date:** 01 Aug 2023 12:00
Method: WATER - SW3010A **Prep Code:** 3010A

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23071289-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23071289-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23071289-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS23071289-11		10 (mL)	10 (mL)	1	120 plastic HNO3

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 198377 (0)	**Test Name :** METALS BY ICPMS BY SW6020A				**Matrix:** Groundwater	
HS23071289-08	16SW01-230718	18 Jul 2023 11:00		01 Aug 2023 12:00	02 Aug 2023 11:58	1
HS23071289-09	16SW01-230718-FD	18 Jul 2023 11:00		01 Aug 2023 12:00	02 Aug 2023 12:01	1
HS23071289-10	16SW02-230718	18 Jul 2023 11:20		01 Aug 2023 12:00	02 Aug 2023 12:02	1
HS23071289-11	16SW03-230718	18 Jul 2023 11:35		01 Aug 2023 12:00	02 Aug 2023 13:06	5
HS23071289-11	16SW03-230718	18 Jul 2023 11:35		01 Aug 2023 12:00	02 Aug 2023 11:31	1
Batch ID: R442290 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS23071289-12	Trip Blank-230718	18 Jul 2023 00:00			25 Jul 2023 15:56	1
Batch ID: R442290 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS23071289-01	16RW09-230718	18 Jul 2023 07:05			25 Jul 2023 19:21	5
HS23071289-02	16RW09-230718-FD	18 Jul 2023 07:05			25 Jul 2023 19:41	5
HS23071289-03	16RW10-230718	18 Jul 2023 07:50			25 Jul 2023 18:19	25
HS23071289-03	16RW10-230718	18 Jul 2023 07:50			25 Jul 2023 17:59	5
HS23071289-05	16WW12-230718	18 Jul 2023 09:15			25 Jul 2023 19:00	25
HS23071289-05	16WW12-230718	18 Jul 2023 09:15			25 Jul 2023 18:40	5
HS23071289-06	16WW39-230718	18 Jul 2023 10:10			25 Jul 2023 17:18	1
HS23071289-07	16WW49-230718	18 Jul 2023 10:50			25 Jul 2023 17:38	1
HS23071289-08	16SW01-230718	18 Jul 2023 11:00			25 Jul 2023 16:16	1
HS23071289-09	16SW01-230718-FD	18 Jul 2023 11:00			25 Jul 2023 16:37	1
HS23071289-10	16SW02-230718	18 Jul 2023 11:20			25 Jul 2023 16:57	1
HS23071289-11	16SW03-230718	18 Jul 2023 11:35			25 Jul 2023 13:33	1
Batch ID: R442554 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Groundwater	
HS23071289-01	16RW09-230718	18 Jul 2023 07:05			27 Jul 2023 20:10	1
HS23071289-02	16RW09-230718-FD	18 Jul 2023 07:05			27 Jul 2023 20:10	1
HS23071289-03	16RW10-230718	18 Jul 2023 07:50			27 Jul 2023 20:10	1
HS23071289-04	16WW40-230718	18 Jul 2023 08:30			27 Jul 2023 20:10	1
HS23071289-05	16WW12-230718	18 Jul 2023 09:15			27 Jul 2023 20:10	1
HS23071289-06	16WW39-230718	18 Jul 2023 10:10			27 Jul 2023 20:10	1
HS23071289-07	16WW49-230718	18 Jul 2023 10:50			27 Jul 2023 20:10	1
HS23071289-08	16SW01-230718	18 Jul 2023 11:00			27 Jul 2023 20:10	1
HS23071289-09	16SW01-230718-FD	18 Jul 2023 11:00			27 Jul 2023 20:10	1
HS23071289-10	16SW02-230718	18 Jul 2023 11:20			27 Jul 2023 20:10	1
HS23071289-11	16SW03-230718	18 Jul 2023 11:35			27 Jul 2023 20:10	1

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R442557 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS23071289-01	16RW09-230718	18 Jul 2023 07:05			27 Jul 2023 14:51	25
HS23071289-02	16RW09-230718-FD	18 Jul 2023 07:05			27 Jul 2023 15:11	25
HS23071289-04	16WW40-230718	18 Jul 2023 08:30			27 Jul 2023 14:30	25
HS23071289-04	16WW40-230718	18 Jul 2023 08:30			27 Jul 2023 13:29	5
HS23071289-06	16WW39-230718	18 Jul 2023 10:10			27 Jul 2023 15:32	5
Batch ID: R442732 (0)	**Test Name :** DISSOLVED GASES BY RSK-175				**Matrix:** Groundwater	
HS23071289-01	16RW09-230718	18 Jul 2023 07:05			28 Jul 2023 10:37	50
HS23071289-01	16RW09-230718	18 Jul 2023 07:05			28 Jul 2023 09:19	1
HS23071289-02	16RW09-230718-FD	18 Jul 2023 07:05			28 Jul 2023 10:50	50
HS23071289-02	16RW09-230718-FD	18 Jul 2023 07:05			28 Jul 2023 09:34	1
HS23071289-03	16RW10-230718	18 Jul 2023 07:50			28 Jul 2023 11:08	50
HS23071289-03	16RW10-230718	18 Jul 2023 07:50			28 Jul 2023 09:52	1
HS23071289-04	16WW40-230718	18 Jul 2023 08:30			28 Jul 2023 11:44	50
HS23071289-04	16WW40-230718	18 Jul 2023 08:30			28 Jul 2023 10:29	1
Batch ID: R442837 (0)	**Test Name :** TOTAL ORGANIC CARBON - SM5310B-2011				**Matrix:** Groundwater	
HS23071289-01	16RW09-230718	18 Jul 2023 07:05			31 Jul 2023 12:17	20
HS23071289-02	16RW09-230718-FD	18 Jul 2023 07:05			31 Jul 2023 12:29	20
HS23071289-04	16WW40-230718	18 Jul 2023 08:30			31 Jul 2023 12:43	1

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

QC BATCH REPORT

Batch ID: R442732 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MBLK Sample ID: **MBLK-230728** Units: **mg/L** Analysis Date: **28-Jul-2023 08:00**
Client ID: Run ID: **FID-4_442732** SeqNo: **7460972** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.000500	0.00100								U
Ethene	0.000500	0.00100								U
Methane	0.000500	0.000500								U

LCS Sample ID: **LCS-230728** Units: **mg/L** Analysis Date: **28-Jul-2023 08:09**
Client ID: Run ID: **FID-4_442732** SeqNo: **7460973** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0202	0.00100	0.01804	0	112	75 - 125				
Ethene	0.0181	0.00100	0.0168	0	108	75 - 125				
Methane	0.00795	0.000500	0.009647	0	82.4	75 - 125				

LCSD Sample ID: **LCSD-230728** Units: **mg/L** Analysis Date: **28-Jul-2023 08:18**
Client ID: Run ID: **FID-4_442732** SeqNo: **7460974** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0206	0.00100	0.01804	0	114	75 - 125	0.02019	1.92	30	
Ethene	0.0183	0.00100	0.0168	0	109	75 - 125	0.01808	1.34	30	
Methane	0.00801	0.000500	0.009647	0	83.0	75 - 125	0.007953	0.72	30	

The following samples were analyzed in this batch: HS23071289-01 HS23071289-02 HS23071289-03 HS23071289-04

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

QC BATCH REPORT

Batch ID: 198377 (0) **Instrument: ICPMS06** **Method: METALS BY ICPMS BY SW6020A**

MBLK Sample ID: **MBLK-198377** Units: **mg/L** Analysis Date: **02-Aug-2023 11:27**
Client ID: Run ID: **ICPMS06_442949** SeqNo: **7466396** PrepDate: **01-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.00125	0.00500								U
Chromium	0.00125	0.00500								U
Manganese	0.00250	0.00500								U
Nickel	0.00125	0.00500								U
Thallium	0.000500	0.00200								U

LCS Sample ID: **LCS-198377** Units: **mg/L** Analysis Date: **02-Aug-2023 11:41**
Client ID: Run ID: **ICPMS06_442949** SeqNo: **7466403** PrepDate: **01-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.04936	0.00500	0.05	0	98.7	84 - 116				
Chromium	0.05244	0.00500	0.05	0	105	85 - 116				
Manganese	0.05185	0.00500	0.05	0	104	87 - 115				
Nickel	0.05329	0.00500	0.05	0	107	85 - 117				
Thallium	0.04588	0.00200	0.05	0	91.8	82 - 116				

MS Sample ID: **HS23071697-01MS** Units: **mg/L** Analysis Date: **02-Aug-2023 11:51**
Client ID: Run ID: **ICPMS06_442949** SeqNo: **7466408** PrepDate: **01-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.04718	0.00500	0.05	0.001828	90.7	84 - 116				
Chromium	0.04998	0.00500	0.05	0.001984	96.0	85 - 116				
Manganese	0.05371	0.00500	0.05	0.00433	98.8	87 - 115				
Nickel	0.04893	0.00500	0.05	0.001442	95.0	85 - 117				
Thallium	0.03781	0.00200	0.05	0.000021	75.6	82 - 116				S

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

QC BATCH REPORT

Batch ID: 198377 (0) **Instrument: ICPMS06** **Method: METALS BY ICPMS BY SW6020A**

MS Sample ID: **HS23071289-11MS** Units: **mg/L** Analysis Date: **02-Aug-2023 11:35**
Client ID: **16SW03-230718** Run ID: **ICPMS06_442949** SeqNo: **7466400** PrepDate: **01-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.04268	0.00500	0.05	0.000916	83.5	84 - 116				S
Chromium	0.04463	0.00500	0.05	0.000476	88.3	85 - 116				
Manganese	0.161	0.00500	0.05	0.1201	81.7	87 - 115				S
Nickel	0.04842	0.00500	0.05	0.003375	90.1	85 - 117				
Thallium	0.043	0.00200	0.05	0.000772	84.5	82 - 116				

MSD Sample ID: **HS23071697-01MSD** Units: **mg/L** Analysis Date: **02-Aug-2023 11:54**
Client ID: Run ID: **ICPMS06_442949** SeqNo: **7466409** PrepDate: **01-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.04747	0.00500	0.05	0.001828	91.3	84 - 116	0.04718	0.617	20	
Chromium	0.04992	0.00500	0.05	0.001984	95.9	85 - 116	0.04998	0.13	20	
Manganese	0.05355	0.00500	0.05	0.00433	98.4	87 - 115	0.05371	0.295	20	
Nickel	0.04857	0.00500	0.05	0.001442	94.2	85 - 117	0.04893	0.749	20	
Thallium	0.03935	0.00200	0.05	0.000021	78.7	82 - 116	0.03781	3.99	20	S

MSD Sample ID: **HS23071289-11MSD** Units: **mg/L** Analysis Date: **02-Aug-2023 11:37**
Client ID: **16SW03-230718** Run ID: **ICPMS06_442949** SeqNo: **7466401** PrepDate: **01-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.04238	0.00500	0.05	0.000916	82.9	84 - 116	0.04268	0.705	20	S
Chromium	0.04397	0.00500	0.05	0.000476	87.0	85 - 116	0.04463	1.49	20	
Manganese	0.1609	0.00500	0.05	0.1201	81.6	87 - 115	0.161	0.0404	20	S
Nickel	0.04765	0.00500	0.05	0.003375	88.6	85 - 117	0.04842	1.58	20	
Thallium	0.04313	0.00200	0.05	0.000772	84.7	82 - 116	0.043	0.295	20	

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

QC BATCH REPORT

Batch ID: 198377 (0) **Instrument: ICPMS06** **Method: METALS BY ICPMS BY SW6020A**

PDS Sample ID: **HS23071697-01PDS** Units: **mg/L** Analysis Date: **02-Aug-2023 11:55**
Client ID: Run ID: **ICPMS06_442949** SeqNo: **7466410** PrepDate: **01-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.09337	0.00500	0.1	0.001828	91.5	80 - 120				
Chromium	0.09594	0.00500	0.1	0.001984	94.0	80 - 120				
Manganese	0.09886	0.00500	0.1	0.00433	94.5	80 - 120				
Nickel	0.09407	0.00500	0.1	0.001442	92.6	80 - 120				
Thallium	0.09829	0.00200	0.1	0.000021	98.3	80 - 120				

PDS Sample ID: **HS23071289-11PDS** Units: **mg/L** Analysis Date: **02-Aug-2023 11:39**
Client ID: **16SW03-230718** Run ID: **ICPMS06_442949** SeqNo: **7466402** PrepDate: **01-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.08434	0.00500	0.1	0.000916	83.4	80 - 120				
Chromium	0.08964	0.00500	0.1	0.000476	89.2	80 - 120				
Nickel	0.09299	0.00500	0.1	0.003375	89.6	80 - 120				
Thallium	0.08893	0.00200	0.1	0.000772	88.2	80 - 120				

PDS Sample ID: **HS23071289-11PDS** Units: **mg/L** Analysis Date: **02-Aug-2023 13:10**
Client ID: **16SW03-230718** Run ID: **ICPMS06_442949** SeqNo: **7466598** PrepDate: **01-Aug-2023** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Manganese	0.5839	0.0250	0.5	0.1204	92.7	80 - 120				

SD Sample ID: **HS23071697-01SD** Units: **mg/L** Analysis Date: **02-Aug-2023 11:49**
Client ID: Run ID: **ICPMS06_442949** SeqNo: **7466407** PrepDate: **01-Aug-2023** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Arsenic	0.00625	0.0250					0.001828	0	10	U
Chromium	0.002862	0.0250					0.001984	0	10	J
Manganese	0.00444	0.0250					0.00433	0	10	J
Nickel	0.00625	0.0250					0.001442	0	10	U
Thallium	0.00250	0.0100					0.000021	0	10	U

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

QC BATCH REPORT

Batch ID: 198377 (0) **Instrument:** ICPMS06 **Method:** METALS BY ICPMS BY SW6020A

SD Sample ID: **HS23071289-11SD** Units: **mg/L** Analysis Date: **02-Aug-2023 11:33**
Client ID: **16SW03-230718** Run ID: **ICPMS06_442949** SeqNo: **7466399** PrepDate: **01-Aug-2023** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Arsenic	0.00625	0.0250					0.000916	0	10	U
Chromium	0.00625	0.0250					0.000476	0	10	U
Nickel	0.003193	0.0250					0.003375	0	10	J
Thallium	0.00250	0.0100					0.000772	0	10	U

SD Sample ID: **HS23071289-11SD** Units: **mg/L** Analysis Date: **02-Aug-2023 13:08**
Client ID: **16SW03-230718** Run ID: **ICPMS06_442949** SeqNo: **7466597** PrepDate: **01-Aug-2023** DF: **25**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Manganese	0.1181	0.125					0.1204	0	10	J

The following samples were analyzed in this batch: HS23071289-08 HS23071289-09 HS23071289-10 HS23071289-11

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

QC BATCH REPORT

Batch ID: R442290 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-230725** Units: **ug/L** Analysis Date: **25-Jul-2023 12:11**
Client ID: Run ID: **VOA6_442290** SeqNo: **7450220** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1.0	1.0								U
1,1-Dichloroethene	1.0	1.0								U
1,2-Dichloroethane	1.0	1.0								U
cis-1,2-Dichloroethene	1.0	1.0								U
Methylene chloride	1.0	2.0								U
Trichloroethene	1.0	1.0								U
Vinyl chloride	1.0	1.0								U
Surr: 1,2-Dichloroethane-d4	*56.45*	*1.0*	*50*	*0*	*113*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*48.69*	*1.0*	*50*	*0*	*97.4*	*85 - 114*				
Surr: Dibromofluoromethane	*54.56*	*1.0*	*50*	*0*	*109*	*80 - 119*				
Surr: Toluene-d8	*51.27*	*1.0*	*50*	*0*	*103*	*89 - 112*				

LCS Sample ID: **VLCSW-230725** Units: **ug/L** Analysis Date: **25-Jul-2023 11:30**
Client ID: Run ID: **VOA6_442290** SeqNo: **7450219** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	20.79	1.0	20	0	104	80 - 119				
1,1-Dichloroethene	22.06	1.0	20	0	110	71 - 131				
1,2-Dichloroethane	20.6	1.0	20	0	103	73 - 128				
cis-1,2-Dichloroethene	22.06	1.0	20	0	110	78 - 123				
Methylene chloride	20.65	2.0	20	0	103	74 - 124				
Trichloroethene	20.12	1.0	20	0	101	79 - 123				
Vinyl chloride	24.03	1.0	20	0	120	58 - 137				
Surr: 1,2-Dichloroethane-d4	*57.48*	*1.0*	*50*	*0*	*115*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*53.97*	*1.0*	*50*	*0*	*108*	*85 - 114*				
Surr: Dibromofluoromethane	*54.72*	*1.0*	*50*	*0*	*109*	*80 - 119*				
Surr: Toluene-d8	*47.68*	*1.0*	*50*	*0*	*95.4*	*89 - 112*				

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

QC BATCH REPORT

Batch ID: R442290 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS23071289-11MS** Units: **ug/L** Analysis Date: **25-Jul-2023 14:14**
Client ID: **16SW03-230718** Run ID: **VOA6_442290** SeqNo: **7450225** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	25.43	1.0	20	0	127	80 - 119				S
1,1-Dichloroethene	25.87	1.0	20	0	129	71 - 131				
1,2-Dichloroethane	24.48	1.0	20	0	122	73 - 128				
cis-1,2-Dichloroethene	24.59	1.0	20	0	123	78 - 123				
Methylene chloride	23.28	2.0	20	0	116	74 - 124				
Trichloroethene	25.67	1.0	20	0	128	79 - 123				S
Vinyl chloride	25.89	1.0	20	0	129	58 - 137				
Surr: 1,2-Dichloroethane-d4	*57.71*	*1.0*	*50*	*0*	*115*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*49.33*	*1.0*	*50*	*0*	*98.7*	*85 - 114*				
Surr: Dibromofluoromethane	*55.78*	*1.0*	*50*	*0*	*112*	*80 - 119*				
Surr: Toluene-d8	*51.85*	*1.0*	*50*	*0*	*104*	*89 - 112*				

MSD Sample ID: **HS23071289-11MSD** Units: **ug/L** Analysis Date: **25-Jul-2023 14:34**
Client ID: **16SW03-230718** Run ID: **VOA6_442290** SeqNo: **7450226** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	23.57	1.0	20	0	118	80 - 119	25.43	7.6	20	
1,1-Dichloroethene	23.56	1.0	20	0	118	71 - 131	25.87	9.33	20	
1,2-Dichloroethane	23.71	1.0	20	0	119	73 - 128	24.48	3.19	20	
cis-1,2-Dichloroethene	24.23	1.0	20	0	121	78 - 123	24.59	1.49	20	
Methylene chloride	22.56	2.0	20	0	113	74 - 124	23.28	3.14	20	
Trichloroethene	24.34	1.0	20	0	122	79 - 123	25.67	5.33	20	
Vinyl chloride	25.44	1.0	20	0	127	58 - 137	25.89	1.76	20	
Surr: 1,2-Dichloroethane-d4	*56.2*	*1.0*	*50*	*0*	*112*	*81 - 118*	*57.71*	*2.65*	*20*	
Surr: 4-Bromofluorobenzene	*49.71*	*1.0*	*50*	*0*	*99.4*	*85 - 114*	*49.33*	*0.778*	*20*	
Surr: Dibromofluoromethane	*55.77*	*1.0*	*50*	*0*	*112*	*80 - 119*	*55.78*	*0.0231*	*20*	
Surr: Toluene-d8	*50.43*	*1.0*	*50*	*0*	*101*	*89 - 112*	*51.85*	*2.78*	*20*	

The following samples were analyzed in this batch:

HS23071289-01	HS23071289-02	HS23071289-03	HS23071289-05
HS23071289-06	HS23071289-07	HS23071289-08	HS23071289-09
HS23071289-10	HS23071289-11	HS23071289-12	

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

QC BATCH REPORT

Batch ID: R442557 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-230727** Units: **ug/L** Analysis Date: **27-Jul-2023 12:27**
Client ID: Run ID: **VOA6_442557** SeqNo: **7456724** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1.0	1.0								U
1,1-Dichloroethene	1.0	1.0								U
1,2-Dichloroethane	1.0	1.0								U
cis-1,2-Dichloroethene	1.0	1.0								U
Methylene chloride	1.0	2.0								U
Trichloroethene	1.0	1.0								U
Vinyl chloride	1.0	1.0								U
Surr: 1,2-Dichloroethane-d4	*57.32*	*1.0*	*50*	*0*	*115*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*47.83*	*1.0*	*50*	*0*	*95.7*	*85 - 114*				
Surr: Dibromofluoromethane	*54.81*	*1.0*	*50*	*0*	*110*	*80 - 119*				
Surr: Toluene-d8	*50.44*	*1.0*	*50*	*0*	*101*	*89 - 112*				

LCS Sample ID: **VLCSW-230727** Units: **ug/L** Analysis Date: **27-Jul-2023 11:46**
Client ID: Run ID: **VOA6_442557** SeqNo: **7456723** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	18.68	1.0	20	0	93.4	80 - 119				
1,1-Dichloroethene	20.67	1.0	20	0	103	71 - 131				
1,2-Dichloroethane	20.9	1.0	20	0	105	73 - 128				
cis-1,2-Dichloroethene	19.5	1.0	20	0	97.5	78 - 123				
Methylene chloride	17.58	2.0	20	0	87.9	74 - 124				
Trichloroethene	19.55	1.0	20	0	97.7	79 - 123				
Vinyl chloride	21.3	1.0	20	0	107	58 - 137				
Surr: 1,2-Dichloroethane-d4	*54.86*	*1.0*	*50*	*0*	*110*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.85*	*1.0*	*50*	*0*	*104*	*85 - 114*				
Surr: Dibromofluoromethane	*53.59*	*1.0*	*50*	*0*	*107*	*80 - 119*				
Surr: Toluene-d8	*45.67*	*1.0*	*50*	*0*	*91.3*	*89 - 112*				

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

QC BATCH REPORT

Batch ID: R442557 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS23071293-04MS** Units: **ug/L** Analysis Date: **27-Jul-2023 13:49**
Client ID: Run ID: **VOA6_442557** SeqNo: **7456728** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	21.38	1.0	20	0	107	80 - 119				
1,1-Dichloroethene	24.81	1.0	20	0	124	71 - 131				
1,2-Dichloroethane	22.98	1.0	20	0	115	73 - 128				
cis-1,2-Dichloroethene	22.35	1.0	20	0	112	78 - 123				
Methylene chloride	20.74	2.0	20	0	104	74 - 124				
Trichloroethene	24.26	1.0	20	0	121	79 - 123				
Vinyl chloride	23.75	1.0	20	0	119	58 - 137				
Surr: 1,2-Dichloroethane-d4	*56.95*	*1.0*	*50*	*0*	*114*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.34*	*1.0*	*50*	*0*	*101*	*85 - 114*				
Surr: Dibromofluoromethane	*54.05*	*1.0*	*50*	*0*	*108*	*80 - 119*				
Surr: Toluene-d8	*50.19*	*1.0*	*50*	*0*	*100*	*89 - 112*				

MSD Sample ID: **HS23071293-04MSD** Units: **ug/L** Analysis Date: **27-Jul-2023 14:10**
Client ID: Run ID: **VOA6_442557** SeqNo: **7456729** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	21.88	1.0	20	0	109	80 - 119	21.38	2.32	20	
1,1-Dichloroethene	23.48	1.0	20	0	117	71 - 131	24.81	5.51	20	
1,2-Dichloroethane	22.28	1.0	20	0	111	73 - 128	22.98	3.12	20	
cis-1,2-Dichloroethene	20.87	1.0	20	0	104	78 - 123	22.35	6.87	20	
Methylene chloride	18.77	2.0	20	0	93.8	74 - 124	20.74	10	20	
Trichloroethene	22.41	1.0	20	0	112	79 - 123	24.26	7.93	20	
Vinyl chloride	22.59	1.0	20	0	113	58 - 137	23.75	5	20	
Surr: 1,2-Dichloroethane-d4	*56.42*	*1.0*	*50*	*0*	*113*	*81 - 118*	*56.95*	*0.937*	*20*	
Surr: 4-Bromofluorobenzene	*50.98*	*1.0*	*50*	*0*	*102*	*85 - 114*	*50.34*	*1.25*	*20*	
Surr: Dibromofluoromethane	*53.6*	*1.0*	*50*	*0*	*107*	*80 - 119*	*54.05*	*0.848*	*20*	
Surr: Toluene-d8	*50.62*	*1.0*	*50*	*0*	*101*	*89 - 112*	*50.19*	*0.843*	*20*	

The following samples were analyzed in this batch: HS23071289-01 HS23071289-02 HS23071289-04 HS23071289-06

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

QC BATCH REPORT

Batch ID: R442837 (0) **Instrument:** TOC_04 **Method:** TOTAL ORGANIC CARBON - SM5310B-2011

MBLK Sample ID: **MBLK-07312023** Units: **mg/L** Analysis Date: **31-Jul-2023 11:17**
Client ID: Run ID: **TOC_04_442837** SeqNo: **7463478** 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-07312023** Units: **mg/L** Analysis Date: **31-Jul-2023 11:34**
Client ID: Run ID: **TOC_04_442837** SeqNo: **7463494** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.702	1.00	10	0	97.0	85 - 115				

LCSD Sample ID: **LCSD-07312023** Units: **mg/L** Analysis Date: **31-Jul-2023 11:51**
Client ID: Run ID: **TOC_04_442837** SeqNo: **7463495** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.514	1.00	10	0	95.1	85 - 115	9.702	1.96	20	

MS Sample ID: **HS23071529-01MS** Units: **mg/L** Analysis Date: **31-Jul-2023 13:42**
Client ID: Run ID: **TOC_04_442837** SeqNo: **7463483** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.996	1.00	10	0.5296	94.7	80 - 120				

The following samples were analyzed in this batch: HS23071289-01 HS23071289-02 HS23071289-04

ALS Houston, US Date: 02-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: **HS23071289**

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

ALS Houston, US Date: 02-Aug-23

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

01323848

ALS Houston, US Date: 02-Aug-23

Sample Receipt Checklist

Work Order ID: HS23071289 **Date/Time Received:** 19-Jul-2023 13:25

Client Name: CBI-Houston **Received by:** Ragen Giga

Completed By: /S/ Jared R. Makan (eSignature) 22-Jul-2023 12:12 (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 ☐	
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):	3.8°C/3.7°C UC/C	IR31
Cooler(s)/Kit(s):	50450	
Date/Time sample(s) sent to storage:	07/22/2023 12:15	

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:

bhate

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205

Page: ____ of ____

Project/Phase

No: JVPCIBH.0001

COC Number(1):

LIMS Number:

Chain of Custody and Analytical Request

Facility/Base I.D.: LHAAP

Project/Site Name: LHAAP / Site 16

Client Name:

Collected by: Scott Beesinger

Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	VOC	Dissolved Gases	TOC	Carbon Dioxide	Anions	Perchlorate	Metals				Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
16RW09-230718	18Jul2023	0705	-	N		WG	9	X	X	X			X								
16RW09-230718-FD	18Jul2023	0705	-	FD		WG	9	X	X	X			X								
16RW10-230718	18Jul2023	0750	-	N		WG	7	X	X				X								
16WW40-230718	18Jul2023	0930		N		WG	9	X	X	X			X								
16WW12-230718	18Jul2023	0915		N		WG	4	X					X								
16WW34-230718	18Jul2023	1010	-	N		WG	4	X					X								
16WW49-230718	18Jul2023	1050	-	N		WG	4	X					X								
16SW01-230718	18Jul2023	1100	-	N		WG	5	X					X	X							
16SW01-230718-FD	18Jul2023	1100	-	FD		WG	5	X					X	X							
16SW02-230718	18Jul2023	1120	-	N		WG	5	X					X	X							
16SW03-230718	18Jul2023	1135	-	N		WG	5	X					X	X							

Sample Analysis Requested (5) | Quality Assurance Samples (6)

COMMENTS: STANDARD TAT

HS23071289

Bhate Environmental Associates, Inc.
LHAAP Site 16

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1.	Scott Beesinger	7/18/23	1330	R Craig	7/19/23	13:25
2.				TRIP BLANK		
3.				TR Bl cooler		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: ____ Shipped ____ No.:

Method of Shipment: ____

Fed ____ Ex ____ Airbill ____ Number:

Analytical Lab: ALS 10450 Stanolind Rd. Suite 210 Houston, TX 77099 (281) 530-5656

ATTN: Dane Wagasey Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sa[illegible] again on 10/10/99 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Bl[illegible]Sa[illegible]es (trip, equipment, ambient, etc), SQ = Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

01323850

bhate

Page: _____ of _____

Project/Phase

No: JVPCIBH.0001

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205

COC Number(1):

LIMS Number: _____

Chain of Custody and Analytical Request

Facility/Base I.D.: LHAAP

Project/Site Name: LHAAP / Site 16

Client Name:

Collected by: Scott Beesinger

Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	VOC	Dissolved Gases	TOC	Carbon Dioxide	Anions	Perchlorate	mcTRLs				Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
165WG03-230718-MS	18-Jul-2023	1135	-	MS		WG	5	X					X	X							
165WG03-230718-MSD	18-Jul-2023	1135	-	SD		WG	5	X					X	X							
TRIPBLANK-230718	18-Jul-2023		-	TB		WG	2	X													

HS23071289

Bhate Environmental Associates, Inc.
LHAAP Site 16

COMMENTS: STANDARD TAT

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1.	Scott Beesinger	7/18/23	1338	R Gage	7/19/23	13:25
2.						
3.						

TEMP 3.8°C
IR 31 cf-0.1c

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: _____ Shipped No.:

Method of Shipment: _____

_____ Fed Ex _____ Airbill Number:

Analytical Lab: ALS 10450 Stanciff Rd. Suite 210 Houston, TX 77099 (281) 530-5656

ATTN: Dane Wacasey Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

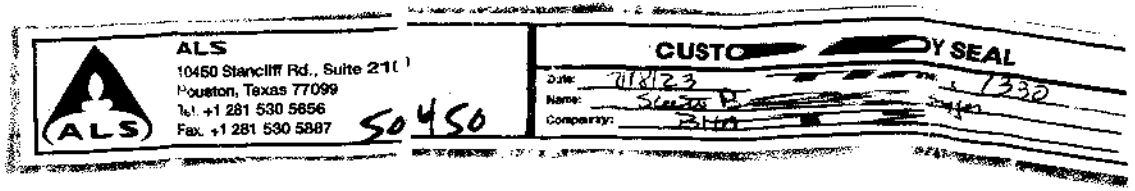
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

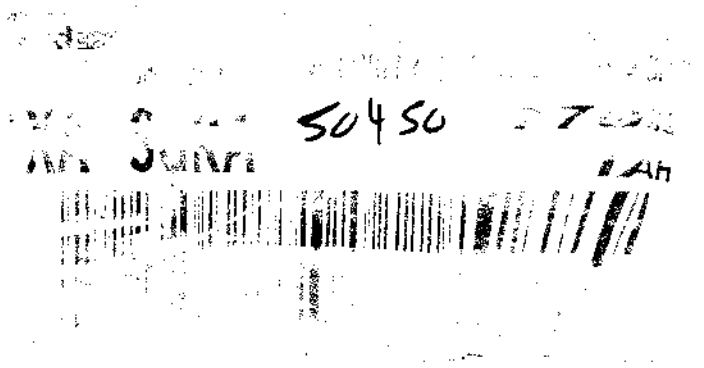
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

ALS


ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887
50450
CUSTODY SEAL
Date: 7/18/23
Name:
Company:
BHH


50450

July 27, 2023 Service Request No:E2300684

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

Laboratory Results for: HS23071289

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory July 24, 2023
For your reference, these analyses have been assigned our service request number **E2300684.**

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.:**	E2300684
Project:	HS23071289	**Date Received:**	07/24/2023
Sample Matrix:	GroundWater		

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

Eleven samples were received for analysis at ALS Environmental in Houston on 07/24/2023.

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:

EQ2300358: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in addition to MS/MSD for this extraction batch.

The batch precision (MS/DMS) measurements were determined on an unrelated sample in the extraction batch. The MS/DMS results are not included in this report.

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:**E2300684
Project: HS23071289

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300684-001	16RW09-230718	7/18/2023	0705
E2300684-002	16RW09-230718-FD	7/18/2023	0705
E2300684-003	16RW10-230718	7/18/2023	0750
E2300684-004	16WW40-230718	7/18/2023	0830
E2300684-005	16WW12-230718	7/18/2023	0915
E2300684-006	16WW39-230718	7/18/2023	1010
E2300684-007	16WW49-230718	7/18/2023	1050
E2300684-008	16SW01-230718	7/18/2023	1110
E2300684-009	16SW01-230718-FD	7/18/2023	1100
E2300684-010	16SW02-230718	7/18/2023	1120
E2300684-011	16SW03-230718	7/18/2023	1135

Service Request Summary

Folder #: **E2300684**
Client Name: ALS Environmental - US
Project Name: HS23071289
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: 07/24/23
Internal Due Date: 8/2/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23071289
EDD: BASIC_WQC_CASNo_LOD

13 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300684-001	16RW09-230718	Ground Water	07/18/23 0705	**IV**
E2300684-002	16RW09-230718-FD	Ground Water	07/18/23 0705	**IV**
E2300684-003	16RW10-230718	Ground Water	07/18/23 0750	**IV**
E2300684-004	16WW40-230718	Ground Water	07/18/23 0830	**IV**
E2300684-005	16WW12-230718	Ground Water	07/18/23 0915	**IV**
E2300684-006	16WW39-230718	Ground Water	07/18/23 1010	**IV**
E2300684-007	16WW49-230718	Ground Water	07/18/23 1050	**IV**
E2300684-008	16SW01-230718	Ground Water	07/18/23 1110	**IV**
E2300684-009	16SW01-230718-FD	Ground Water	07/18/23 1100	**IV**
E2300684-010	16SW02-230718	Ground Water	07/18/23 1120	**IV**
E2300684-011	16SW03-230718	Ground Water	07/18/23 1135	**IV**

Service Request Summary

Folder #: **E2300684**
Client Name: ALS Environmental - US
Project Name: HS23071289
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: 07/24/23
Internal Due Date: 8/2/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23071289
EDD: BASIC_WQC_CASNo_LOD

13 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Test Comments:

Group	Test/Method	Samples	Comments
Semivoa GCMS	ClO4 DOD/6850	1	ms/msd

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 2022-2023	7/31/2023
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	7/31/2023
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 Department of Conservation and Natural Resources	TX026932023-1	7/31/2023
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
Utah Department of Health Environmental Laboratory Certification	TX026932022-13	7/31/2023
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:** 22466

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:	HS23071289
TSR:	Holly Tignac

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23071289-01**	**16RW09-230718**	**Groundwater**	**18 Jul 2023 07:05**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
2.	**HS23071289-02**	**16RW09-230718-FD**	**Groundwater**	**18 Jul 2023 07:05**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
3.	**HS23071289-03**	**16RW10-230718**	**Groundwater**	**18 Jul 2023 07:50**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
4.	**HS23071289-04**	**16WW40-230718**	**Groundwater**	**18 Jul 2023 08:30**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
5.	**HS23071289-05**	**16WW12-230718**	**Groundwater**	**18 Jul 2023 09:15**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
6.	**HS23071289-06**	**16WW34-230718**	**Groundwater**	**18 Jul 2023 10:10**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
7.	**HS23071289-07**	**16WW49-230718**	**Groundwater**	**18 Jul 2023 10:50**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
8.	**HS23071289-08**	**16SW01-230718**	**Groundwater**	**18 Jul 2023 11:00**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 22466**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
9.	**HS23071289-09**	**16SW01-230718-FD**	**Groundwater**	**18 Jul 2023 11:00**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
10.	**HS23071289-10**	**16SW02-230718**	**Groundwater**	**18 Jul 2023 11:20**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
11.	**HS23071289-11**	**16SW03-230718**	**Groundwater**	**18 Jul 2023 11:35**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 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: 7-24-23 1117

Cooler ID(s): Temperature(s):

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#: 423609 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 7/25/23 10:47

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300684-001	16RW09-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
2	E2300684-002	16RW09-230718-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
3	E2300684-003	16RW10-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2300684-004	16WW40-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
5	E2300684-005	16WW12-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300684-006	16WW39-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300684-007	16WW49-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300684-008	16SW01-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300684-009	16SW01-230718-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300684-010	16SW02-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300684-011	16SW03-230718	.02	6850/ClO4 DOD			Ground Water	10mL	
12	E2300685-001	16EW01-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2300685-002	16EW08-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
14	E2300685-003	16EW04-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
15	E2300685-004	16RW04-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
16	E2300685-005	16RW05-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
17	E2300685-006	16RW01-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
18	E2300685-007	16WW22-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
19	E2300685-008	16RW12-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
20	EQ2300358-01	MB		6850/ClO4			Liquid	10mL	
21	EQ2300358-02	LCS		6850/ClO4			Liquid	10mL	
22	EQ2300358-03	DLCS		6850/ClO4			Liquid	10mL	
23	EQ2300358-04	16SW03-230718 MS	.02	6850/ClO4 DOD			Liquid	10mL	
24	EQ2300358-05	16SW03-230718 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
25	R2306302-005	2307111341Y 700-E-458	.01	6850/ClO4			Water	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 227236 Logbook Ref: Perchlorate (1st Source) Expires On: 07/31/2023

EQ2300358-02	1.00µL	EQ2300358-02	1.00µL	EQ2300358-03	1.00µL	EQ2300358-03	1.00µL	EQ2300358-04	1.00µL	EQ2300358-05	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 227244 Logbook Ref: Perchlorate Internal Standard Expires On: 07/31/2023

E2300684-001	100.00µL	E2300684-002	100.00µL	E2300684-003	100.00µL	E2300684-004	100.00µL	E2300684-005	100.00µL	E2300684-006	100.00µL
E2300684-007	100.00µL	E2300684-008	100.00µL	E2300684-009	100.00µL	E2300684-010	100.00µL	E2300684-011	100.00µL	E2300685-001	100.00µL
E2300685-002	100.00µL	E2300685-003	100.00µL	E2300685-004	100.00µL	E2300685-005	100.00µL	E2300685-006	100.00µL	E2300685-007	100.00µL

Preparation Information Benchsheet

Prep Run#: 423609 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 7/25/23 10:47

E2300685-008	100.00µL	EQ2300358-01	100.00µL	EQ2300358-01	100.00µL	EQ2300358-02	100.00µL	EQ2300358-02	100.00µL	EQ2300358-03	100.00µL
EQ2300358-03	100.00µL	EQ2300358-04	100.00µL	EQ2300358-05	100.00µL	R2306302-005	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: 7/25/23 10:47
Finished: 7/25/23 15:50
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:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 0705
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16RW09-230718	**Units:**	µg/L
Lab Code:	E2300684-001	**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	**0.137**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 10:39	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 0705
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16RW09-230718-FD	**Units:**	µg/L
Lab Code:	E2300684-002	**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	**0.0657**	J	0.100	0.0500	0.0250	1	7/25/23	7/26/23 10:45	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 0750
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16RW10-230718	**Units:**	µg/L
Lab Code:	E2300684-003	**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	**3.11**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 10:50	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 0830
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16WW40-230718	**Units:**	µg/L
Lab Code:	E2300684-004	**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	**0.257**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 10:56	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 0915
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16WW12-230718	**Units:**	µg/L
Lab Code:	E2300684-005	**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	**89.6**		0.500	0.250	0.125	5	7/25/23	7/26/23 11:01	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 1010
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16WW39-230718	**Units:**	µg/L
Lab Code:	E2300684-006	**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	**4.43**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 11:07	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 1050
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16WW49-230718	**Units:**	µg/L
Lab Code:	E2300684-007	**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	**0.184**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 11:13	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 1110
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16SW01-230718	**Units:**	µg/L
Lab Code:	E2300684-008	**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	**0.0840**	J	0.100	0.0500	0.0250	1	7/25/23	7/26/23 11:24	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 1100
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16SW01-230718-FD	**Units:**	µg/L
Lab Code:	E2300684-009	**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	**0.0776**	J	0.100	0.0500	0.0250	1	7/25/23	7/26/23 11:29	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 1120
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16SW02-230718	**Units:**	µg/L
Lab Code:	E2300684-010	**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	**0.162**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 11:35	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 1135
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16SW03-230718	**Units:**	µg/L
Lab Code:	E2300684-011	**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	**0.0306**	J	0.100	0.0500	0.0250	1	7/25/23	7/26/23 14:49	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300358-01	**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	7/25/23	7/26/23 10:34	423609	811888	

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: HS23071289
Sample Matrix: Ground Water

Service Request: E2300684
Date Analyzed: 7/26/23

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: 423609

	Lab Control Sample EQ2300358-02			Duplicate Lab Control Sample EQ2300358-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0931	0.100	93	0.0854	0.100	85	84 - 119	9	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:**	E2300684
Project:	HS23071289	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300358-02	**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	**0.0931**	J	0.100	0.0500	0.0250	1	7/25/23	7/26/23 10:23	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300358-03	**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	**0.0854**	J	0.100	0.0500	0.0250	1	7/25/23	7/26/23 10:28	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
		Date Analyzed:	7/26/23

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

Sample Name:	16SW03-230718	**Units:**	µg/L
Lab Code:	E2300684-011	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16SW03-230718MS				16SW03-230718DMS					
		Matrix Spike				**Duplicate Matrix Spike**					
		EQ2300358-04				EQ2300358-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0306	0.125	0.100	94		0.126	0.100	95	84 - 119	<1	15

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

Results flagged with a pound (#) indicate the control criteria is not applicable.

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:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 1135
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16SW03-230718	**Units:**	µg/L
Lab Code:	EQ2300358-04	**Basis:**	NA
Run Type:	Matrix Spike		

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	**0.125**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 11:46	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 1135
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16SW03-230718	**Units:**	µg/L
Lab Code:	EQ2300358-05	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

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	**0.126**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 11:51	423609	811888	

HS23071289-MSVOA-SW8260

ALS WO# HS23071289

01323890

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Form 1

Organic Analysis Data Sheet

Volatiles by EPA 8260

Workorder

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

ALS Environmental–Houston Laboratory
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Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Volatiles by EPA 8260

HS23071289-01

16RW09-230718

Collected	Received	Matrix	Basis
07/18/23 07:05	07/19/23 13:25	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	5.0	U	1.5	5.0	5.0	5	07/25/23 19:21	VOA6_442290	X072528.D
1,1-Dichloroethene	ug/L	15		1.0	5.0	5.0	5	07/25/23 19:21	VOA6_442290	X072528.D
1,2-Dichloroethane	ug/L	5.0	U	1.0	5.0	5.0	5	07/25/23 19:21	VOA6_442290	X072528.D
cis-1,2-Dichloroethene	ug/L	240		1.0	5.0	5.0	5	07/25/23 19:21	VOA6_442290	X072528.D
Methylene chloride	ug/L	10	U	2.0	10	10	5	07/25/23 19:21	VOA6_442290	X072528.D
Vinyl chloride	ug/L	140		1.0	5.0	5.0	5	07/25/23 19:21	VOA6_442290	X072528.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Volatiles by EPA 8260

HS23071289-02

16RW09-230718-FD

Collected	Received	Matrix	Basis
07/18/23 07:05	07/19/23 13:25	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	5.0	U	1.5	5.0	5.0	5	07/25/23 19:41	VOA6_442290	X072529.D
1,1-Dichloroethene	ug/L	15		1.0	5.0	5.0	5	07/25/23 19:41	VOA6_442290	X072529.D
1,2-Dichloroethane	ug/L	5.0	U	1.0	5.0	5.0	5	07/25/23 19:41	VOA6_442290	X072529.D
cis-1,2-Dichloroethene	ug/L	250		1.0	5.0	5.0	5	07/25/23 19:41	VOA6_442290	X072529.D
Methylene chloride	ug/L	10	U	2.0	10	10	5	07/25/23 19:41	VOA6_442290	X072529.D
Vinyl chloride	ug/L	150		1.0	5.0	5.0	5	07/25/23 19:41	VOA6_442290	X072529.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Volatiles by EPA 8260

HS23071289-03

16RW10-230718

Collected	Received	Matrix	Basis
07/18/23 07:50	07/19/23 13:25	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	5.0	U	1.5	5.0	5.0	5	07/25/23 17:59	VOA6_442290	X072524.D
1,1-Dichloroethene	ug/L	31		1.0	5.0	5.0	5	07/25/23 17:59	VOA6_442290	X072524.D
1,2-Dichloroethane	ug/L	5.8		1.0	5.0	5.0	5	07/25/23 17:59	VOA6_442290	X072524.D
cis-1,2-Dichloroethene	ug/L	410		1.0	5.0	5.0	5	07/25/23 17:59	VOA6_442290	X072524.D
Methylene chloride	ug/L	10	U	2.0	10	10	5	07/25/23 17:59	VOA6_442290	X072524.D
Trichloroethene	ug/L	1,300		5.0	25	25	25	07/25/23 18:19	VOA6_442290	X072525.D
Vinyl chloride	ug/L	250		1.0	5.0	5.0	5	07/25/23 17:59	VOA6_442290	X072524.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Volatiles by EPA 8260

HS23071289-05

16WW12-230718

Collected	Received	Matrix	Basis
07/18/23 09:15	07/19/23 13:25	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	5.0	U	1.5	5.0	5.0	5	07/25/23 18:40	VOA6_442290	X072526.D
1,1-Dichloroethene	ug/L	6.0		1.0	5.0	5.0	5	07/25/23 18:40	VOA6_442290	X072526.D
1,2-Dichloroethane	ug/L	6.4		1.0	5.0	5.0	5	07/25/23 18:40	VOA6_442290	X072526.D
cis-1,2-Dichloroethene	ug/L	210		1.0	5.0	5.0	5	07/25/23 18:40	VOA6_442290	X072526.D
Methylene chloride	ug/L	10	U	2.0	10	10	5	07/25/23 18:40	VOA6_442290	X072526.D
Trichloroethene	ug/L	2,200		5.0	25	25	25	07/25/23 19:00	VOA6_442290	X072527.D
Vinyl chloride	ug/L	20		1.0	5.0	5.0	5	07/25/23 18:40	VOA6_442290	X072526.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Volatiles by EPA 8260

HS23071289-06

16WW39-230718

Collected	Received	Matrix	Basis
07/18/23 10:10	07/19/23 13:25	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/25/23 17:18	VOA6_442290	X072522.D
1,1-Dichloroethene	ug/L	1.2		0.20	1.0	1.0	1	07/25/23 17:18	VOA6_442290	X072522.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 17:18	VOA6_442290	X072522.D
cis-1,2-Dichloroethene	ug/L	32		0.20	1.0	1.0	1	07/25/23 17:18	VOA6_442290	X072522.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/25/23 17:18	VOA6_442290	X072522.D
Vinyl chloride	ug/L	0.97	J	0.20	1.0	1.0	1	07/25/23 17:18	VOA6_442290	X072522.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Volatiles by EPA 8260

HS23071289-07

16WW49-230718

Collected	Received	Matrix	Basis
07/18/23 10:50	07/19/23 13:25	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/25/23 17:38	VOA6_442290	X072523.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 17:38	VOA6_442290	X072523.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 17:38	VOA6_442290	X072523.D
cis-1,2-Dichloroethene	ug/L	33		0.20	1.0	1.0	1	07/25/23 17:38	VOA6_442290	X072523.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/25/23 17:38	VOA6_442290	X072523.D
Trichloroethene	ug/L	51		0.20	1.0	1.0	1	07/25/23 17:38	VOA6_442290	X072523.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 17:38	VOA6_442290	X072523.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Volatiles by EPA 8260

HS23071289-08

16SW01-230718

Collected	Received	Matrix	Basis
07/18/23 11:00	07/19/23 13:25	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/25/23 16:16	VOA6_442290	X072519.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 16:16	VOA6_442290	X072519.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 16:16	VOA6_442290	X072519.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 16:16	VOA6_442290	X072519.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/25/23 16:16	VOA6_442290	X072519.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 16:16	VOA6_442290	X072519.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 16:16	VOA6_442290	X072519.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Volatiles by EPA 8260

HS23071289-09

16SW01-230718-FD

Collected	Received	Matrix	Basis
07/18/23 11:00	07/19/23 13:25	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/25/23 16:37	VOA6_442290	X072520.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 16:37	VOA6_442290	X072520.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 16:37	VOA6_442290	X072520.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 16:37	VOA6_442290	X072520.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/25/23 16:37	VOA6_442290	X072520.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 16:37	VOA6_442290	X072520.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 16:37	VOA6_442290	X072520.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Volatiles by EPA 8260

HS23071289-10

16SW02-230718

Collected	Received	Matrix	Basis
07/18/23 11:20	07/19/23 13:25	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/25/23 16:57	VOA6_442290	X072521.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 16:57	VOA6_442290	X072521.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 16:57	VOA6_442290	X072521.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 16:57	VOA6_442290	X072521.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/25/23 16:57	VOA6_442290	X072521.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 16:57	VOA6_442290	X072521.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 16:57	VOA6_442290	X072521.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Volatiles by EPA 8260

HS23071289-11

16SW03-230718

Collected	Received	Matrix	Basis
07/18/23 11:35	07/19/23 13:25	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/25/23 13:33	VOA6_442290	X072511.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 13:33	VOA6_442290	X072511.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 13:33	VOA6_442290	X072511.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 13:33	VOA6_442290	X072511.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/25/23 13:33	VOA6_442290	X072511.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 13:33	VOA6_442290	X072511.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 13:33	VOA6_442290	X072511.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Volatiles by EPA 8260

HS23071289-12

Trip Blank-230718

Collected	Received	Matrix	Basis
07/18/23 00:00	07/19/23 13:25	Water	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/25/23 15:56	VOA6_442290	X072518.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 15:56	VOA6_442290	X072518.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 15:56	VOA6_442290	X072518.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 15:56	VOA6_442290	X072518.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/25/23 15:56	VOA6_442290	X072518.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 15:56	VOA6_442290	X072518.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 15:56	VOA6_442290	X072518.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Volatiles by EPA 8260

VBLKW-230725	Collected	Received	Matrix	Basis
VBLKW-230725	NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/25/23 12:11	VOA6_442290	X072507.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 12:11	VOA6_442290	X072507.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 12:11	VOA6_442290	X072507.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 12:11	VOA6_442290	X072507.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/25/23 12:11	VOA6_442290	X072507.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 12:11	VOA6_442290	X072507.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 12:11	VOA6_442290	X072507.D

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Form 2

System Monitoring Compound Recovery

Volatiles by EPA 8260

Workorder

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

Workorder: HS23071289

RunID: VOA6-442290

Volatiles by EPA 8260

CCB-CCB	Analyzed	Conc Units	Dilution
CCB	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56.9	50	114		80-120
4-Bromofluorobenzene	48.55	50	97.1		80-120
Dibromofluoromethane	54.52	50	109		80-120
Toluene-d8	52.11	50	104		80-120

CCV-CCV	Analyzed	Conc Units	Dilution
CCV	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	54.23	50	108		80-120
4-Bromofluorobenzene	51.8	50	104		80-120
Dibromofluoromethane	52.8	50	106		80-120
Toluene-d8	46.46	50	92.9		80-120

HS23071289-01	Analyzed	Conc Units	Dilution
16RW09-230718	07/25/23	%REC	5

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	290	250	114		81-118
4-Bromofluorobenzene	250	250	100		85-114
Dibromofluoromethane	270	250	109		80-119
Toluene-d8	260	250	103		89-112

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

RunID VOA6-442290

Volatiles by EPA 8260

HS23071289-02	Analyzed	Conc Units	Dilution
16RW09-230718-FD	07/25/23	%REC	5

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	280	250	114		81-118
4-Bromofluorobenzene	240	250	96.4		85-114
Dibromofluoromethane	270	250	109		80-119
Toluene-d8	260	250	103		89-112

HS23071289-03	Analyzed	Conc Units	Dilution
16RW10-230718	07/25/23	%REC	5

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	280	250	114		81-118
4-Bromofluorobenzene	240	250	97.8		85-114
Dibromofluoromethane	280	250	110		80-119
Toluene-d8	260	250	102		89-112
1,2-Dichloroethane-d4	1500	1250	118		81-118
4-Bromofluorobenzene	1200	1250	95.7		85-114
Dibromofluoromethane	1400	1250	110		80-119
Toluene-d8	1300	1250	102		89-112

Form 2 - System Monitoring Compound Recovery

Client: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

Workorder: HS23071289

RunID: VOA6-442290

Volatiles by EPA 8260

HS23071289-05	Analyzed	Conc Units	Dilution
16WW12-230718	07/25/23	%REC	5

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	280	250	113		81-118
4-Bromofluorobenzene	230	250	92.0		85-114
Dibromofluoromethane	280	250	111		80-119
Toluene-d8	250	250	102		89-112
1,2-Dichloroethane-d4	1500	1250	117		81-118
4-Bromofluorobenzene	1200	1250	94.4		85-114
Dibromofluoromethane	1400	1250	109		80-119
Toluene-d8	1300	1250	102		89-112

HS23071289-06	Analyzed	Conc Units	Dilution
16WW39-230718	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	57	50	114		81-118
4-Bromofluorobenzene	48	50	96.2		85-114
Dibromofluoromethane	55	50	110		80-119
Toluene-d8	51	50	103		89-112

HS23071289-07	Analyzed	Conc Units	Dilution
16WW49-230718	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56	50	113		81-118
4-Bromofluorobenzene	48	50	95.8		85-114
Dibromofluoromethane	55	50	110		80-119
Toluene-d8	51	50	102		89-112

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6-442290

Volatiles by EPA 8260

HS23071289-08	Analyzed	Conc Units	Dilution
16SW01-230718	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	55	50	111		81-118
4-Bromofluorobenzene	49	50	98.7		85-114
Dibromofluoromethane	54	50	109		80-119
Toluene-d8	51	50	102		89-112

HS23071289-09	Analyzed	Conc Units	Dilution
16SW01-230718-FD	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	57	50	114		81-118
4-Bromofluorobenzene	47	50	94.8		85-114
Dibromofluoromethane	55	50	109		80-119
Toluene-d8	51	50	103		89-112

HS23071289-10	Analyzed	Conc Units	Dilution
16SW02-230718	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	58	50	116		81-118
4-Bromofluorobenzene	49	50	97.5		85-114
Dibromofluoromethane	54	50	108		80-119
Toluene-d8	51	50	103		89-112

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6-442290

Volatiles by EPA 8260

HS23071289-11	Analyzed	Conc Units	Dilution
16SW03-230718	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	59	50	118		81-118
4-Bromofluorobenzene	49	50	98.9		85-114
Dibromofluoromethane	54	50	108		80-119
Toluene-d8	50	50	101		89-112

HS23071289-11MS	Analyzed	Conc Units	Dilution
16SW03-230718	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	57.71	50	115		81-118
4-Bromofluorobenzene	49.33	50	98.7		85-114
Dibromofluoromethane	55.78	50	112		80-119
Toluene-d8	51.85	50	104		89-112

HS23071289-11MSD	Analyzed	Conc Units	Dilution
16SW03-230718	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56.2	50	112		81-118
4-Bromofluorobenzene	49.71	50	99.4		85-114
Dibromofluoromethane	55.77	50	112		80-119
Toluene-d8	50.43	50	101		89-112

Form 2 - System Monitoring Compound Recovery

Client: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

Workorder: HS23071289

RunID: VOA6-442290

Volatiles by EPA 8260

HS23071289-12	Analyzed	Conc Units	Dilution
Trip Blank-230718	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56	50	112		81-118
4-Bromofluorobenzene	49	50	97.1		85-114
Dibromofluoromethane	54	50	108		80-119
Toluene-d8	52	50	105		89-112

VBLKW-230725	Analyzed	Conc Units	Dilution
VBLKW-230725	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56.45	50	113		81-118
4-Bromofluorobenzene	48.69	50	97.4		85-114
Dibromofluoromethane	54.56	50	109		80-119
Toluene-d8	51.27	50	103		89-112

VLCSW-230725	Analyzed	Conc Units	Dilution
VLCSW-230725	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	57.48	50	115		81-118
4-Bromofluorobenzene	53.97	50	108		85-114
Dibromofluoromethane	54.72	50	109		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

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

RunID VOA6-442290

Volatiles by EPA 8260

16SW03-230718 (HS23071289-11)				HS23071289-11MS				HS23071289-11MSD						
Sample Matrix Aqueous			**Run Date**	07/25/23				07/25/23						
Result Units ug/L			**Run Time**	14:14				14:34						
			Data File	X072513.D				X072514.D						
Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
1,1,2-Trichloroethane	80-119	1	0	25.43	20	127		23.57	20	118		20	7.6	
1,1-Dichloroethene	71-131	1	0	25.87	20	129		23.56	20	118		20	9.33	
1,2-Dichloroethane	73-128	1	0	24.48	20	122		23.71	20	119		20	3.19	
cis-1,2-Dichloroethene	78-123	1	0	24.59	20	123		24.23	20	121		20	1.49	
Methylene chloride	74-124	1	0	23.28	20	116		22.56	20	113		20	3.14	
Trichloroethene	79-123	1	0	25.67	20	128		24.34	20	122		20	5.33	
Vinyl chloride	58-137	1	0	25.89	20	129		25.44	20	127		20	1.76	

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

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071289

SAMPLENUM
VLCSW-230725

Volatiles by EPA 8260

VOA6_442290			VLCSW-230725			
Spike Matrix Aqueous		**Run Date**	07/25/23			
Result Units ug/L		**Run Time**	11:30			
		Data File	X072505.D			
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q	
1,1,2-Trichloroethane	80-119	20	20.79	104		
1,1-Dichloroethene	71-131	20	22.06	110		
1,2-Dichloroethane	73-128	20	20.6	103		
cis-1,2-Dichloroethene	78-123	20	22.06	110		
Methylene chloride	74-124	20	20.65	103		
Trichloroethene	79-123	20	20.12	101		
Vinyl chloride	58-137	20	24.03	120		

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

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	VBLKW-230725	X072507.D	07/25/23 12:11	VOA6_442290
VLCSW-230725	LCS	VLCSW-230725	X072505.D	07/25/23 11:30	VOA6_442290
16SW03-230718	SAMP	HS23071289-11	X072511.D	07/25/23 13:33	VOA6_442290
16SW03-230718	MS	HS23071289-11MS	X072513.D	07/25/23 14:14	VOA6_442290
16SW03-230718	MSD	HS23071289-11MSD	X072514.D	07/25/23 14:34	VOA6_442290
Trip Blank-230718	SAMP	HS23071289-12	X072518.D	07/25/23 15:56	VOA6_442290
16SW01-230718	SAMP	HS23071289-08	X072519.D	07/25/23 16:16	VOA6_442290
16SW01-230718-FD	SAMP	HS23071289-09	X072520.D	07/25/23 16:37	VOA6_442290
16SW02-230718	SAMP	HS23071289-10	X072521.D	07/25/23 16:57	VOA6_442290
16WW39-230718	SAMP	HS23071289-06	X072522.D	07/25/23 17:18	VOA6_442290
16WW49-230718	SAMP	HS23071289-07	X072523.D	07/25/23 17:38	VOA6_442290
16RW10-230718	SAMP	HS23071289-03	X072524.D	07/25/23 17:59	VOA6_442290
16RW10-230718	SAMP	HS23071289-03	X072525.D	07/25/23 18:19	VOA6_442290
16WW12-230718	SAMP	HS23071289-05	X072526.D	07/25/23 18:40	VOA6_442290
16WW12-230718	SAMP	HS23071289-05	X072527.D	07/25/23 19:00	VOA6_442290
16RW09-230718	SAMP	HS23071289-01	X072528.D	07/25/23 19:21	VOA6_442290
16RW09-230718-FD	SAMP	HS23071289-02	X072529.D	07/25/23 19:41	VOA6_442290

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Form 5

Instrument Performance Check

Volatiles by EPA 8260

Workorder

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

RunID VOA6-441456

Volatiles by EPA 8260

Tune File X071401.D 07/14/23 7/14/2023

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	25.9 (25.9)
75	30.0 - 60.0% of mass 95	52 (52)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	5.6 (5.63)
173	Less than 2.0% of mass 174	0.8 (0.926) 1
174	50.0 - 120.0% of mass 95	82.2 (82.2)
175	4.0 - 9.0% of mass 174	5.4 (6.56) 1
176	93.0 - 101.0% of mass 174	79.3 (96.5) 1
177	5.0 - 9.0% of mass 176	4.5 (5.64) 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	7/14/2023	X071402	VSTD000.25
2	VSTD000.5	ICAL2	7/14/2023	X071403	VSTD000.5
3	VSTD001	ICAL3	7/14/2023	X071404	VSTD001
4	VSTD002	ICAL4	7/14/2023	X071405	VSTD002
5	VSTD005	ICAL5	7/14/2023	X071406	VSTD005
6	VSTD020	ICAL6	7/14/2023	X071407	VSTD020
7	VSTD050	ICAL7	7/14/2023	X071408	VSTD050
8	VSTD100	ICAL8	7/14/2023	X071409	VSTD100
9	VSTD150	ICAL9	7/14/2023	X071410	VSTD150
10	VSTD200	ICAL	7/14/2023	X071411	VSTD200
11	CCV	ICV	7/14/2023	X071413	CCV

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

RunID VOA6-442290

Volatiles by EPA 8260

Tune File X072501.D 07/25/23 7/25/2023

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	29.1 (29.1)
75	30.0 - 60.0% of mass 95	47.2 (47.2)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	7.7 (7.68)
173	Less than 2.0% of mass 174	0.6 (0.86) 1
174	50.0 - 120.0% of mass 95	71.5 (71.5)
175	4.0 - 9.0% of mass 174	6 (8.42) 1
176	93.0 - 101.0% of mass 174	68.3 (95.5) 1
177	5.0 - 9.0% of mass 176	4.7 (6.92) 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	7/25/2023	X072502	CCV
2	CCB	CCB	7/25/2023	X072504	CCB
3	VLCSW-	LCS	7/25/2023	X072505	VLCSW-230725
4	VBLKW-	MBLK	7/25/2023	X072507	VBLKW-230725
5	HS23071289-	SAMP	7/25/2023	X072511	16SW03-230718
6	HS23071289-	MS	7/25/2023	X072513	HS23071289-11MS
7	HS23071289-	MSD	7/25/2023	X072514	HS23071289-11MSD
8	HS23071289-	SAMP	7/25/2023	X072518	Trip Blank-230718
9	HS23071289-	SAMP	7/25/2023	X072519	16SW01-230718
10	HS23071289-	SAMP	7/25/2023	X072520	16SW01-230718-FD
11	HS23071289-	SAMP	7/25/2023	X072521	16SW02-230718
12	HS23071289-	SAMP	7/25/2023	X072522	16WW39-230718
13	HS23071289-	SAMP	7/25/2023	X072523	16WW49-230718
14	HS23071289-	SAMP	7/25/2023	X072524	16RW10-230718
15	HS23071289-	SAMP	7/25/2023	X072525	16RW10-230718
16	HS23071289-	SAMP	7/25/2023	X072526	16WW12-230718
17	HS23071289-	SAMP	7/25/2023	X072527	16WW12-230718
18	HS23071289-	SAMP	7/25/2023	X072528	16RW09-230718
19	HS23071289-	SAMP	7/25/2023	X072529	16RW09-230718-FD
20	CCV-END	CCV_EN	7/25/2023	X072530	CCV-END

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Form 6

Initial Calibration Data

Volatiles by EPA 8260

Workorder

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6_441456

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 235300	1663 576963	3668 822037	9210 1105119	21541	94710	LINR	0.02191	0.52294		0.99807	
Chloromethane	NE 0.67753	0.84001 0.79824	0.66306 0.81227	0.83928 0.82447	0.68468	0.65730	AVRG		0.75520		10.80318	
Propionitrile	NE 0.09423	0.10390 0.10017	0.09941 0.10114	0.09874 0.09819	0.09448	0.10115	AVRG		0.09905		3.16658	
Vinyl Chloride	NE 0.60823	0.69203 0.70202	0.53140 0.67183	0.72188 0.65918	0.61204	0.62458	AVRG		0.64702		9.14675	
Bromomethane	NE 0.25218	0.27789 0.28534	0.24476 0.29658	0.27563 0.28725	0.25296	0.23720	AVRG		0.26775		7.93201	
Chloroethane	NE 0.34475	0.43063 0.37168	0.35796 0.36290	0.40526 0.34794	0.34800	0.35515	AVRG		0.36936		7.97570	
Trichlorofluoromethane	NE 0.60292	0.58636 0.75016	0.55773 0.71606	0.73670 0.70274	0.59809	0.65059	AVRG		0.65570		11.03396	
Acrolein	NE 19251	268 38657	510 60619	917 82636	2341	6957	LINR	0.02257	0.01915		0.99956	
Acetone	NE 210033	7150 413238	8098 616513	15631 806431	26152	92232	LINR	-0.09778	0.18861		0.99933	
1,1-Dichloroethene	NE 0.35132	0.34284 0.39971	0.33390 0.37449	0.40741 0.37144	0.35652	0.35911	AVRG		0.36630		6.73637	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6_441456

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 0.09486	0.09915 0.10064	0.08022 0.09926	0.09038 0.09480	0.09479	0.09891	AVRG		0.09478		6.69321	
Acetonitrile	NE 0.06830	0.07163 0.06960	0.07422 0.07051	0.07419 0.06805	0.06612	0.06841	AVRG		0.07011		3.98876	
Allyl Chloride	NE 1.52604	1.95513 1.56199	1.82721 1.56589	1.62093 1.51692	1.61860	1.58159	AVRG		1.64159		9.09372	
Iodomethane	NE 473625	2897 1101288	4792 1666204	11682 2365259	29645	147770	QUAD	0.07604	2.04557	-0.05646	0.99916	
Acrylonitrile	NE 0.22535	0.30341 0.23200	0.22558 0.23458	0.25182 0.22663	0.25615	0.23734	AVRG		0.24365		10.26343	
Methylene Chloride	NE 228969	3115 461890	7389 679924	11880 893552	25734	93705	LINR	-0.02821	0.42039		0.99928	
Methyl tert-butyl ether	NE 1.28013	1.42757 1.32509	1.50562 1.32040	1.44539 1.27025	1.34304	1.34355	AVRG		1.36234		5.84889	
Carbon Disulfide	NE 1.09141	1.19715 1.22733	1.02400 1.19261	1.26579 1.18678	1.08532	1.09253	AVRG		1.15144		6.97191	
trans-1,2-Dichloroethene	NE 0.40397	0.50790 0.43050	0.34716 0.41204	0.45461 0.41226	0.43607	0.40889	AVRG		0.42371		10.21222	
Vinyl Acetate	NE 1.67574	1.80993 1.76700	1.71245 1.76631	1.79630 1.74491	1.73508	1.76334	AVRG		1.75234		2.35224	
1,1-Dichloroethane	NE 0.89937	1.04282 0.93166	0.87723 0.90417	1.03426 0.88702	0.90313	0.88859	AVRG		0.92980		6.83106	
Chloroprene	NE 0.19474	0.25663 0.23640	0.22753 0.23331	0.21787 0.23204	0.21758	0.20725	AVRG		0.22482		8.00705	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6_441456

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 0.25660	0.28077 0.28522	0.26281 0.27741	0.24974 0.28148	0.24863	0.25377	AVRG		0.26627		5.58805	
Methacrylonitrile	NE 0.62768	0.71944 0.66925	0.58681 0.67273	0.61854 0.65439	0.59811	0.66152	AVRG		0.64539		6.44560	
2,2-Dichloropropane	NE 357279	3703 797830	7001 1150093	15882 1535535	34523	136770	LINR	0.00416	0.72480		0.99899	
cis-1,2-Dichloroethene	NE 0.52561	0.58080 0.55258	0.55205 0.52870	0.55103 0.51702	0.52518	0.52498	AVRG		0.53977		3.81784	
Chloroform	NE 0.90021	1.12088 0.94131	0.94789 0.91371	1.04563 0.88871	0.89046	0.91369	AVRG		0.95139		8.37790	
Bromochloromethane	NE 0.28615	0.34105 0.29492	0.28436 0.28865	0.36073 0.28298	0.29741	0.28625	AVRG		0.30250		9.34540	
1,1,1-Trichloroethane	NE 0.70136	0.76811 0.80905	0.60604 0.78046	0.76445 0.77179	0.67544	0.71465	AVRG		0.73237		8.70697	
1,1-Dichloropropene	NE 0.37472	0.46667 0.45240	0.37410 0.42446	0.41961 0.42714	0.34598	0.38546	AVRG		0.40784		9.80634	
1,2-Dichloroethane	NE 0.52114	0.65388 0.55719	0.55646 0.54137	0.52020 0.54393	0.51464	0.54481	AVRG		0.55040		7.59848	
Carbon Tetrachloride	NE 0.35583	0.45034 0.44940	0.42963 0.42389	0.40208 0.42272	0.37338	0.39061	AVRG		0.41088		7.99245	
Benzene	NE 1.14556	1.30726 1.25702	1.13102 1.18986	1.22322 1.19963	1.12620	1.18395	AVRG		1.19597		5.00630	
Trichloroethene	NE 0.32325	0.36259 0.36148	0.29151 0.34333	0.38072 0.34832	0.30457	0.32879	AVRG		0.33829		8.55214	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6_441456

Volatiles by EPA 8260

ICAL Summary Page 4 / 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
Bromodichloromethane	NE 0.43234	0.56576 0.45884	0.42748 0.45203	0.45204 0.46018	0.42979	0.44442	AVRG		0.45810		9.21563	
Methyl Methacrylate	NE 0.55557	0.64774 0.60054	0.67348 0.60150	0.61013 0.58254	0.58540	0.57437	AVRG		0.60347		6.09532	
2-Chloroethylvinyl ether	NE 0.13958	0.13748 0.15371	0.12812 0.14777	0.12943 0.15040	0.13129	0.14103	AVRG		0.13987		6.65248	
1,2-Dichloropropane	NE 0.37714	0.43289 0.40397	0.31618 0.38726	0.39071 0.39014	0.37483	0.38801	AVRG		0.38457		8.02856	
2-Nitropropane	NE 0.18456	0.23319 0.19499	0.19456 0.20657	0.22145 0.20342	0.16115	0.18784	AVRG		0.19864		10.60581	
Dibromomethane	NE 0.20339	0.24779 0.21844	0.21543 0.20650	0.23770 0.20862	0.20762	0.21371	AVRG		0.21769		6.96902	
4-Methyl-2-Pentanone	NE 0.46063	0.58655 0.48903	0.46075 0.48195	0.49135 0.48645	0.48596	0.48555	AVRG		0.49202		7.57687	
cis-1,3-Dichloropropene	NE 0.51175	0.61537 0.55605	0.45166 0.53397	0.53404 0.54067	0.47196	0.51998	AVRG		0.52616		8.99460	
Ethyl Methacrylate	NE 0.26930	0.34651 0.30905	0.35275 0.33292	0.35012 0.34232	0.32495	0.31920	AVRG		0.32746		8.05273	
Toluene	NE 1.35355	1.36539 1.44404	1.14100 1.39074	1.37686 1.39027	1.31689	1.33460	AVRG		1.34593		6.32428	
trans-1,3-Dichloropropene	NE 0.42358	0.49608 0.46734	0.38674 0.45302	0.44837 0.46834	0.41009	0.43827	AVRG		0.44354		7.48885	
2-Hexanone	NE 0.30067	0.30395 0.32110	0.33705 0.32372	0.32917 0.32526	0.33286	0.33513	AVRG		0.32321		4.01955	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6_441456

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 0.27496	0.30232 0.28103	0.28933 0.27111	0.30515 0.27281	0.28408	0.28886	AVRG		0.28552		4.28271	
1,3-Dichloropropane	NE 0.56268	0.68555 0.57784	0.56076 0.55478	0.58546 0.55874	0.58510	0.57884	AVRG		0.58331		6.87413	
Dibromochloromethane	NE 0.40608	0.42594 0.43396	0.39216 0.42165	0.41047 0.42582	0.38971	0.40387	AVRG		0.41218		3.79175	
Tetrachloroethene	NE 0.26863	0.24343 0.31076	0.22414 0.29395	0.32780 0.29098	0.27159	0.27129	AVRG		0.27806		11.54647	
1,2-Dibromoethane	NE 0.30967	0.35535 0.31558	0.31873 0.30475	0.33131 0.31110	0.34997	0.33995	AVRG		0.32627		5.69357	
1-Chlorohexane	NE 0.33296	0.43114 0.42814	0.40883 0.40776	0.43814 0.41598	0.36414	0.38805	AVRG		0.40168		8.58201	
Chlorobenzene	NE 0.90189	1.07531 0.96048	0.86917 0.93481	0.96582 0.94343	0.89774	0.91892	AVRG		0.94084		6.30233	
1,1,1,2-Tetrachloroethane	NE 0.36189	0.40907 0.38531	0.32801 0.37705	0.36574 0.37837	0.34420	0.36531	AVRG		0.36833		6.36041	
Ethylbenzene	NE 0.45381	0.53160 0.50085	0.40783 0.48317	0.49648 0.48539	0.44109	0.44588	AVRG		0.47179		7.99221	
m,p-Xylenes	NE 0.58355	0.58138 0.63520	0.51291 0.61039	0.66213 0.61758	0.54279	0.58097	AVRG		0.59188		7.73323	
o-Xylene	NE 0.54985	0.60028 0.59157	0.50413 0.57426	0.58077 0.58210	0.50944	0.55204	AVRG		0.56049		6.17548	
Styrene	NE 0.97719	1.10605 1.02091	0.86982 0.99759	0.96217 1.01131	0.89239	0.96159	AVRG		0.97767		7.16726	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6_441456

Volatiles by EPA 8260

ICAL Summary Page 6 / 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
Bromoform	NE 0.26395	0.26832 0.27994	0.21153 0.27771	0.29273 0.28394	0.24404	0.25796	AVRG		0.26446		9.32941	
Isopropylbenzene	NE 1.36958	1.45474 1.59321	1.15694 1.51601	1.62659 1.55523	1.31430	1.37984	AVRG		1.44071		10.47090	
1,1,2,2-Tetrachloroethane	NE 0.78472	0.94445 0.81779	0.83194 0.80619	0.90896 0.80829	0.84185	0.81425	AVRG		0.83983		6.25761	
1,2,3-Trichloropropane	NE 0.62245	0.70743 0.65589	0.66768 0.64581	0.66994 0.64574	0.70648	0.67647	AVRG		0.66643		4.21060	
trans-1,4-Dichloro-2-butene	NE 0.15148	0.15286 0.16770	0.12745 0.16789	0.14444 0.16922	0.13548	0.15209	AVRG		0.15207		9.66771	
n-Propylbenzene	NE 2.91361	2.94838 3.40683	2.53997 3.24372	3.16964 3.29645	2.67171	3.00288	AVRG		3.02147		9.55626	
Bromobenzene	NE 0.73926	0.82736 0.79512	0.75995 0.76647	0.82086 0.78754	0.76608	0.77520	AVRG		0.78198		3.67998	
1,3,5-Trimethylbenzene	NE 2.12204	2.47615 2.50410	1.87986 2.44372	2.39387 2.46514	1.97150	2.11509	AVRG		2.26350		10.68239	
2-Chlorotoluene	NE 1.91345	2.19364 2.08147	2.04515 2.01122	2.15846 2.03095	1.86416	2.04541	AVRG		2.03821		5.12320	
4-Chlorotoluene	NE 2.19714	2.25128 2.40271	1.82096 2.33521	2.37563 2.37480	2.11635	2.28352	AVRG		2.23973		8.15437	
tert-Butylbenzene	NE 1.75584	2.09594 2.12022	1.61179 2.04664	2.20774 2.05649	1.74066	1.83461	AVRG		1.94110		10.71222	
1,2,4-Trimethylbenzene	NE 2.11967	2.62916 2.46832	1.84573 2.41069	2.42858 2.45093	1.92871	2.14683	AVRG		2.26985		11.86510	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6_441456

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 2.38650	2.39008 2.98896	2.08647 2.87301	2.89395 2.88374	2.26832	2.51515	AVRG		2.58735		12.68595	
p-Isopropyltoluene	NE 2.17688	2.52552 2.69684	1.93671 2.58444	2.48463 2.61384	2.04517	2.20747	AVRG		2.36350		11.64663	
1,3-Dichlorobenzene	NE 1.28863	1.54565 1.44980	1.17676 1.41160	1.40461 1.40967	1.24164	1.33205	AVRG		1.36227		8.33210	
1,4-Dichlorobenzene	NE 1.38557	1.65292 1.53566	1.32318 1.45287	1.69562 1.48161	1.44532	1.46978	AVRG		1.49361		7.97047	
Benzyl Chloride	NE 558112	6245 1321247	10259 2041719	17851 2751633	45616	196200	LINR	0.04694	0.89268		0.99874	
n-Butylbenzene	NE 1.83535	1.84574 2.37633	1.70944 2.27255	1.96808 2.30080	1.70778	1.79924	AVRG		1.97948		13.42128	
1,2-Dichlorobenzene	NE 1.27471	1.35749 1.42525	1.25645 1.37391	1.38320 1.38665	1.26217	1.33374	AVRG		1.33929		4.58000	
1,2-Dibromo-3-Chloropropane	NE 51434	675 119154	831 181917	1953 242707	5268	19568	LINR	0.02176	0.14112		0.99931	
1,2,4-Trichlorobenzene	NE 0.80524	1.05947 0.97476	0.91279 0.95753	0.94981 0.97711	0.85502	0.78698	AVRG		0.91986		9.65852	
Hexachlorobutadiene	NE 139894	1357 382401	2109 564457	6844 760294	13714	52647	LINR	0.04709	0.44481		0.99698	
Naphthalene	NE 2.02307	2.67698 2.35582	2.32669 2.27389	2.26771 2.32875	2.16067	2.07687	AVRG		2.27672		8.35550	
1,2,3-Trichlorobenzene	NE 0.74794	0.99382 0.88744	0.89482 0.86237	0.93334 0.87314	0.76923	0.78029	AVRG		0.86027		9.42402	

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Initial Calibration Data

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Project LHAAP 16 January 2023

Workorder HS23071289

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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 0.70402	0.85233 0.73854	0.68267 0.71854	0.73966 0.71045	0.76533	0.77227	AVRG		0.74265		6.75864	
Methyl Acrylate	NE 0.62114	0.66840 0.77600	0.54731 0.78843	0.64052 0.76129	0.64695	0.66691	AVRG		0.67966		11.81743	
n-Butanol	NE 0.01560	0.01615 0.01818	0.01470 0.01945	0.01778 0.01980	0.01318	0.01496	AVRG		0.01664		13.67270	
Ethyl Acrylate	NE 1.56849	1.63514 1.70663	1.72358 1.77502	1.50263 1.75049	1.60242	1.64950	AVRG		1.65710		5.42882	
Cyclohexanone	NE 0.03949	0.05394 0.03979	0.05115 0.03982	0.04786 0.03661	0.04626	0.04568	AVRG		0.04451		13.30149	
1,4-Dioxane	0.00529 0.00540	0.00687 0.00595	0.00611 0.00600	0.00555 0.00602	0.00636	0.00586	AVRG		0.00594		7.82889	
n-Hexane	NE 244351	2320 700280	5000 NE	11984 NE	26276	106667	QUAD	-0.01727	2.41947	-0.68015	0.99837	
Freon TF	NE 154547	1274 422615	2818 NE	7195 NE	16656	67796	QUAD	-0.01499	3.77998	-1.58677	0.99832	
Methyl Acetate	NE 0.42203	0.46559 0.43221	0.47286 0.43028	0.45346 0.42016	0.45829	0.45001	AVRG		0.44499		4.35037	
Methylcyclohexane	NE 0.98734	1.14273 1.10411	0.96842 1.12748	0.95973 1.14019	1.03867	1.02958	AVRG		1.05536		7.08148	
Isopropyl alcohol	NE 0.03536	0.04517 0.03638	0.04439 0.03714	0.04149 0.03689	0.03687	0.03873	AVRG		0.03916		9.28018	
Amyl alcohol	NE 0.01277	0.01442 0.01513	0.01288 0.01573	0.01448 0.01580	0.01462	0.01358	AVRG		0.01438		7.75370	

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Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6_441456

Volatiles by EPA 8260

ICAL Summary Page 9 / 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
Allyl alcohol	NE 244351	2068 700280	5000 NE	14314 NE	26276	106667	QUAD	-0.39232	48.54112	-13.69022	0.99834	
4-Methyl-2-pentanol	NE 0.08687	0.12600 0.10145	0.10791 0.10473	0.11127 0.10925	0.11234	0.10455	AVRG		0.10715		9.67860	
Tert-butyl alcohol	NE 0.05636	0.07802 0.05963	0.06140 0.05977	0.06995 0.05928	0.06161	0.06194	AVRG		0.06311		10.61812	
Diethyl ether	NE 0.43908	0.51744 0.44851	0.49360 0.44689	0.51199 0.43020	0.45058	0.45793	AVRG		0.46625		6.99240	
1,3-Butadiene	NE 0.58528	0.63622 0.71010	0.57213 0.67222	0.73345 0.66543	0.59805	0.60945	AVRG		0.64248		8.80211	
Cyclohexane	NE 0.73558	0.85829 1.03245	0.72681 0.97434	0.92986 0.96744	0.75844	0.81693	AVRG		0.86668		13.16994	
Tetrahydrofuran	NE 0.12218	0.14083 0.12495	0.13332 0.12609	0.13514 0.12108	0.12274	0.13136	AVRG		0.12863		5.31484	
alpha-Methylstyrene	NE 1.02454	1.23006 1.16376	0.99517 1.14646	1.09377 1.14475	0.99115	1.02796	AVRG		1.09085		7.81543	
Diisopropyl ether	NE 1.95747	2.14800 2.03902	2.34506 2.05555	2.06794 1.95720	1.91324	2.06344	AVRG		2.06077		6.23686	
Dichlorofluoromethane	NE 0.76153	0.85332 0.78724	0.92289 0.78703	0.84028 0.76192	0.75366	0.78256	AVRG		0.80560		6.93852	
Propylene oxide	NE 0.05692	0.06108 0.05582	0.06673 0.05455	0.06684 0.04985	0.07410	0.06618	AVRG		0.06134		12.54653	
3-Methyl-1-butanol	NE 0.01195	0.01323 0.01394	0.01183 0.01419	0.00888 0.01408	0.01158	0.01110	AVRG		0.01231		14.14320	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6_441456

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
Butyl acrylate	NE 0.95529	0.92245 1.02517	0.88753 1.04707	0.86138 1.05297	0.86060	0.94857	AVRG		0.95123		7.98920	
Butyl methacrylate	NE 1.15197	1.22102 1.29239	1.20704 1.21819	1.20789 1.18934	1.13145	1.15942	AVRG		1.19763		3.97564	
Dicyclopentadiene	NE 2.75252	2.80389 2.95979	3.12078 3.02021	2.84202 2.97202	2.58546	2.86391	AVRG		2.88007		5.53053	
1,2,3-Trimethylbenzene	NE 2.26318	2.33141 2.44349	2.44039 2.48171	2.00963 2.47220	2.11668	2.24288	AVRG		2.31129		7.26158	
Ethanol	NE 72445	1082 150451	1613 220615	3219 291912	7997	30252	LINR	-0.37330	0.00686		0.99938	
tert-Butyl formate	NE 0.46269	0.60414 0.51460	0.54120 0.53820	0.56992 0.54329	0.53335	0.49959	AVRG		0.53411		7.55066	
3,3-Dimethyl-1-butanol	NE 0.04382	0.07070 0.04890	0.05527 0.05244	0.05594 0.05101	0.05364	0.05224	AVRG		0.05377		13.60012	
tert-Amyl methyl ether	NE 1.60911	1.86257 1.58140	1.86766 1.64949	1.49761 1.54826	1.62072	1.56664	AVRG		1.64483		8.04479	
tert-Butyl ethyl ether	NE 1.97744	2.48449 2.04789	2.24930 2.06704	2.05003 2.01150	2.12663	2.03642	AVRG		2.11675		7.49756	
tert-Amyl alcohol	NE 0.04627	0.06041 0.05146	0.05141 0.05382	0.06972 0.05433	0.05333	0.05084	AVRG		0.05462		12.42201	
Epichlorohydrin	NE 0.03559	0.03842 0.03914	0.03655 0.03819	0.03704 0.03863	0.03577	0.03679	AVRG		0.03735		3.45493	
Isoprene	NE 0.14969	0.16745 0.17829	0.14351 0.17017	0.16283 0.16423	0.17487	0.17231	AVRG		0.16482		6.98920	

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Initial Calibration Data

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Project LHAAP 16 January 2023

Workorder HS23071289

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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-Amyl acetate	NE 0.81039	1.01275 0.90629	1.04196 0.91309	0.90756 0.92294	0.85545	0.87675	AVRG		0.91635		7.88906	
Isopropyl acetate	NE 1.19423	1.44350 1.30224	1.45714 1.26100	1.48440 1.24685	1.21182	1.26381	AVRG		1.31833		8.51827	
n-Butyl acetate	NE 0.73443	0.87010 0.79624	0.63987 0.80262	0.70296 0.81276	0.74526	0.79294	AVRG		0.76635		8.91130	
Acetaldehyde	NE 101552	NE 189053	5117 265471	8114 347350	20987	39093	LINR	-0.45320	0.04030		0.99713	
Methyl Amyl Ketone	NE 0.96318	1.20532 1.04745	0.94521 1.08877	0.97102 1.09326	1.04102	1.05023	AVRG		1.04505		7.72385	
Dimethyl Disulfide	NE 0.69887	0.66624 0.73618	0.61152 0.73656	0.60301 0.73622	0.60088	0.68043	AVRG		0.67444		8.55931	
Isobutylene	NE 0.07008	0.09932 0.08656	0.08288 0.08198	0.07903 0.07923	0.07898	0.08593	AVRG		0.08267		9.56800	
2-Ethylhexyl Acrylate	NE 1.36334	1.09488 1.47049	1.12671 1.45960	1.14640 1.46017	1.06053	1.31158	AVRG		1.27708		13.35344	
94 1,2-Dichloroethylene (total)	NE 0.46479	0.54435 0.49154	0.44960 0.47037	0.50282 0.46464	0.48062	0.46694	AVRG		0.48174		5.88171	
95 Xylenes (total)	NE 0.51459	0.53863 0.58017	0.47900 0.55693	0.57974 0.56971	0.47946	0.52696	AVRG		0.53613		7.35273	
30 Dibromofluoromethane	NE 227290	3536 502644	5859 719790	10131 959895	26145	100577	LINR	-0.01526	0.45137		0.99889	
35 1,2-Dichloroethane-d4	NE 282994	5342 615043	7805 911155	14667 1203985	31653	125030	LINR	-0.01246	0.56601		0.99932	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6_441456

Volatiles by EPA 8260

ICAL Summary Page 12 / 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
48 Toluene-d8	NE 1.07891	1.41149 1.19952	1.42719 NE	1.38594 NE	1.29623	1.21214	AVRG		1.28735		10.10735	
69 4-Bromofluorobenzene	NE 355682	7819 767493	11517 1135204	17835 1538168	40007	153161	LINR	-0.00857	0.49361		0.99967	

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Form 6I

Initial Calibration Verification (ICV)

Volatiles by EPA 8260

Workorder

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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 Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6_441456

Volatiles by EPA 8260

Sample Matrix LIQUID
Lab Smp Id ICV
Level LOW
Fraction VOA
Client Smp ID ICV
Operator PC

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
1,1,1,2-Tetrachloroethane	50.00	49.01	98.02	80-120	
1,1,1-Trichloroethane	50.00	46.46	92.93	80-120	
1,1,2,2-Tetrachloroethane	50.00	48.23	96.47	80-120	
Freon TF	50.00	50.73	101.47	80-120	
Methyl acetate	50.00	48.60	97.20	80-120	
Cyclohexane	50.00	43.28	86.57	80-120	
Methylcyclohexane	50.00	47.44	94.90	80-120	
Carbon Disulfide	100.00	92.54	92.54	80-120	
2-Hexanone	100.00	100.41	100.42	80-120	
1,1,2-Trichloroethane	50.00	48.51	97.03	80-120	
1,1-Dichloroethane	50.00	46.83	93.66	80-120	
1,1-Dichloroethene	50.00	45.26	90.53	80-120	
1,1-Dichloropropene	50.00	45.59	91.20	80-120	
1,2,3-Trichlorobenzene	50.00	43.05	86.12	80-120	
1,2,3-Trichloropropane	50.00	48.09	96.20	80-120	
1,2,4-Trichlorobenzene	50.00	43.35	86.72	80-120	
1,2,4-Trimethylbenzene	50.00	44.77	89.55	80-120	
1,2-Dibromo-3-Chloropropane	50.00	48.27	96.54	80-120	
1,2-Dibromoethane	50.00	47.85	95.71	80-120	
Acrolein	100.00	95.33	95.34	80-120	
Acrylonitrile	100.00	96.95	96.95	80-120	
1,2-Dichlorobenzene	50.00	47.75	95.52	80-120	
1,2-Dichloroethane	50.00	47.45	94.92	80-120	
1,2-Dichloropropane	50.00	49.01	98.02	80-120	
1,3,5-Trimethylbenzene	50.00	44.65	89.31	80-120	
1,3-Dichlorobenzene	50.00	46.44	92.88	80-120	
1,3-Dichloropropane	50.00	48.46	96.93	80-120	
1,4-Dichlorobenzene	50.00	45.87	91.75	80-120	
1-Chlorohexane	50.00	40.17	80.36	80-120	
2,2-Dichloropropane	50.00	47.06	94.14	80-120	
2-Butanone	100.00	105.06	105.06	80-120	
2-Chloroethylvinyl ether	100.00	103.48	103.49	80-120	
2-Chlorotoluene	50.00	45.07	90.16	80-120	
4-Chlorotoluene	50.00	47.10	94.21	80-120	

Initial Calibration Verification (ICV)

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Workorder HS23071289

RunID VOA6_441456

Volatiles by EPA 8260

Sample Matrix LIQUID
Lab Smp Id ICV
Level LOW
Fraction VOA
Client Smp ID ICV
Operator PC

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
p-Isopropyltoluene	50.00	42.46	84.92	80-120	
4-Methyl-2-Pentanone	100.00	96.77	96.78	80-120	
Acetone	100.00	109.68	109.69	80-120	
Acetonitrile	500.00	477.86	95.57	80-120	
Allyl Chloride	50.00	46.25	92.52	80-120	
Benzene	50.00	47.17	94.35	80-120	
Bromobenzene	50.00	47.14	94.28	80-120	
Bromochloromethane	50.00	47.57	95.15	80-120	
Bromodichloromethane	50.00	47.04	94.09	80-120	
Bromoform	50.00	50.48	100.97	80-120	
Bromomethane	50.00	52.69	105.40	80-120	
Carbon Tetrachloride	50.00	43.89	87.80	80-120	
Chlorobenzene	50.00	47.93	95.88	80-120	
Chloroethane	50.00	45.13	90.26	80-120	
Chloroform	50.00	45.97	91.96	80-120	
Chloromethane	50.00	46.75	93.50	80-120	
Chloroprene	50.00	45.07	90.15	80-120	
cis-1,2-Dichloroethene	50.00	47.65	95.31	80-120	
cis-1,3-Dichloropropene	50.00	49.60	99.21	80-120	
Dibromochloromethane	50.00	50.99	101.99	80-120	
Dibromomethane	50.00	47.45	94.92	80-120	
Dichlorodifluoromethane	50.00	44.13	88.28	80-120	
Ethylbenzene	50.00	46.22	92.44	80-120	
Ethyl Methacrylate	50.00	42.56	85.14	80-120	
Iodomethane	100.00	85.27	85.27	80-120	
Isobutyl Alcohol	1000.00	1037.79	103.78	70-130	
Propionitrile	500.00	495.72	99.15	70-130	
Hexachlorobutadiene	50.00	40.81	81.63	80-120	
Isopropylbenzene	50.00	44.80	89.60	80-120	
m,p-Xylenes	100.00	94.37	94.38	80-120	
Methyl tert-butyl ether	50.00	48.10	96.20	80-120	
Methylene Chloride	50.00	48.91	97.83	80-120	
Methacrylonitrile	50.00	51.28	102.56	80-120	
Methyl Methacrylate	50.00	48.63	97.28	80-120	

Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6_441456

Volatiles by EPA 8260

Sample Matrix LIQUID
Lab Smp Id ICV
Level LOW
Fraction VOA
Client Smp ID ICV
Operator PC

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
n-Butylbenzene	50.00	43.07	86.14	80-120	
n-Propylbenzene	50.00	44.93	89.87	80-120	
Naphthalene	50.00	45.05	90.10	80-120	
o-Xylene	50.00	47.84	95.69	80-120	
sec-Butylbenzene	50.00	42.83	85.66	80-120	
Styrene	50.00	49.01	98.02	80-120	
tert-Butylbenzene	50.00	42.55	85.10	80-120	
Tetrachloroethene	50.00	47.18	94.38	80-120	
Toluene	50.00	48.91	97.82	80-120	
trans-1,2-Dichloroethene	50.00	45.43	90.87	80-120	
trans-1,3-Dichloropropene	50.00	49.09	98.19	80-120	
trans-1,4-Dichloro-2-butene	50.00	53.16	106.34	80-120	
Trichloroethene	50.00	46.63	93.27	80-120	
Trichlorofluoromethane	50.00	46.87	93.76	80-120	
Vinyl Acetate	100.00	100.31	100.31	80-120	
Vinyl Chloride	50.00	46.46	92.92	80-120	
1,2-Dichloroethylene (total)	100.00	93.08	93.09	80-120	
Xylenes (total)	150.00	142.22	94.81	80-120	
1,4-Dioxane	1000.00	988.21	98.82	80-120	
Dibromofluoromethane	50.00	52.53	105.08	71-125	
1,2-Dichloroethane-d4	50.00	52.09	104.19	70-125	
Toluene-d8	50.00	48.16	96.34	75-125	

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Form 7

Continuing Calibration Verification (CCV)

Volatiles by EPA 8260

Workorder

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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 Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6_442290

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072502.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :28
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,4-Dioxane	0.00594	0.00595	0.00595	0.001	-0.20818	20.0	Averaged	
1,3-Butadiene	0.64248	0.74646	0.74646	0.100	-16.18386	20.0	Averaged	
Methacrylonitrile	0.64539	0.84690	0.84690	0.100	-31.22453	20.0	Averaged	*
Isobutyl Alcohol	0.09478	0.12106	0.12106	0.005	-27.73166	20.0	Averaged	*
Acetonitrile	0.07011	0.08475	0.08475	0.005	-20.87285	20.0	Averaged	*
Allyl Chloride	1.64159	2.05668	2.05668	0.100	-25.28603	20.0	Averaged	*
Propionitrile	0.09905	0.11698	0.11698	0.010	-18.10803	20.0	Averaged	
Dichlorodifluoromethane	50.0	43.04350	0.43873	0.100	13.91300	20.0	Linear	
Chloromethane	0.75520	0.67394	0.67394	0.100	10.76000	20.0	Averaged	
Vinyl Chloride	0.64702	0.66428	0.66428	0.100	-2.66781	20.0	Averaged	
Bromomethane	0.26775	0.21472	0.21472	0.100	19.80872	20.0	Averaged	
Chloroethane	0.36936	0.44002	0.44002	0.100	-19.12997	20.0	Averaged	
Trichlorofluoromethane	0.65570	0.68299	0.68299	0.100	-4.16157	20.0	Averaged	
Acrolein	100	156	0.02973	0.010	-56.36252	20.0	Linear	*
Acetone	100	128	0.25003	0.100	-27.67607	20.0	Linear	*
1,1-Dichloroethene	0.36630	0.37317	0.37317	0.100	-1.87291	20.0	Averaged	
Iodomethane	100	87.63567	0.41955	0.100	12.36433	20.0	Quadratic	
Acrylonitrile	0.24365	0.26870	0.26870	0.050	-10.28078	20.0	Averaged	
Methylene Chloride	50.0	50.60200	0.43731	0.100	-1.20400	20.0	Linear	
Methyl tert-butyl ether	1.36234	1.29349	1.29349	0.100	5.05367	20.0	Averaged	
Carbon Disulfide	1.15144	1.19836	1.19836	0.100	-4.07538	20.0	Averaged	
trans-1,2-Dichloroethene	0.42371	0.37088	0.37088	0.100	12.46967	20.0	Averaged	
Vinyl Acetate	1.75234	2.01326	2.01326	0.010	-14.88956	20.0	Averaged	
1,1-Dichloroethane	0.92980	0.87110	0.87110	0.200	6.31369	20.0	Averaged	
2-Butanone	0.26627	0.30527	0.30527	0.100	-14.64880	20.0	Averaged	
2,2-Dichloropropane	50.0	49.58021	0.71570	0.100	0.83958	20.0	Linear	
cis-1,2-Dichloroethene	0.53977	0.53914	0.53914	0.100	0.11655	20.0	Averaged	
Chloroform	0.95139	0.90224	0.90224	0.200	5.16593	20.0	Averaged	
Bromochloromethane	0.30250	0.28317	0.28317	0.100	6.38959	20.0	Averaged	
30 Dibromofluoromethane	50.0	52.80110	0.48354	0.100	-5.60219	20.0	Linear	
1,1,1-Trichloroethane	0.73237	0.71439	0.71439	0.100	2.45536	20.0	Averaged	
1,1-Dichloropropene	0.40784	0.37833	0.37833	0.100	7.23563	20.0	Averaged	
1,2-Dichloroethane	0.55040	0.55052	0.55052	0.100	-0.02229	20.0	Averaged	
Carbon Tetrachloride	0.41088	0.36726	0.36726	0.100	10.61508	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6_442290

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072502.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :28
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
35 1,2-Dichloroethane-d4	50.0	54.22942	0.62094	0.100	-8.45884	20.0	Linear	
Benzene	1.19597	1.18872	1.18872	0.500	0.60643	20.0	Averaged	
Trichloroethene	0.33829	0.31658	0.31658	0.200	6.41624	20.0	Averaged	
Bromodichloromethane	0.45810	0.43519	0.43519	0.200	5.00094	20.0	Averaged	
2-Chloroethylvinyl ether	0.13987	0.13279	0.13279	0.001	5.06036	20.0	Averaged	
1,2-Dichloropropane	0.38457	0.41408	0.41408	0.100	-7.67431	20.0	Averaged	
Dibromomethane	0.21769	0.20678	0.20678	0.100	5.01298	20.0	Averaged	
4-Methyl-2-Pentanone	0.49202	0.56273	0.56273	0.100	-14.36950	20.0	Averaged	
cis-1,3-Dichloropropene	0.52616	0.50903	0.50903	0.200	3.25561	20.0	Averaged	
48 Toluene-d8	1.28735	1.19611	1.19611	0.100	7.08692	20.0	Averaged	
Toluene	1.34593	1.32106	1.32106	0.400	1.84790	20.0	Averaged	
trans-1,3-Dichloropropene	0.44354	0.42153	0.42153	0.100	4.96213	20.0	Averaged	
2-Hexanone	0.32321	0.37405	0.37405	0.100	-15.72892	20.0	Averaged	
1,1,2-Trichloroethane	0.28552	0.27429	0.27429	0.100	3.93109	20.0	Averaged	
1,3-Dichloropropane	0.58331	0.57160	0.57160	0.100	2.00743	20.0	Averaged	
Dibromochloromethane	0.41218	0.39342	0.39342	0.100	4.55255	20.0	Averaged	
Tetrachloroethene	0.27806	0.24643	0.24643	0.200	11.37776	20.0	Averaged	
1,2-Dibromoethane	0.32627	0.31304	0.31304	0.100	4.05511	20.0	Averaged	
1-Chlorohexane	0.40168	0.37587	0.37587	0.100	6.42756	20.0	Averaged	
Chlorobenzene	0.94084	0.89057	0.89057	0.500	5.34332	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36833	0.34332	0.34332	0.100	6.79038	20.0	Averaged	
Ethylbenzene	0.47179	0.44215	0.44215	0.100	6.28253	20.0	Averaged	
m,p-Xylenes	0.59188	0.55281	0.55281	0.100	6.60110	20.0	Averaged	
o-Xylene	0.56049	0.53157	0.53157	0.300	5.16081	20.0	Averaged	
Styrene	0.97767	0.94792	0.94792	0.300	3.04274	20.0	Averaged	
Bromoform	0.26446	0.24709	0.24709	0.100	6.56598	20.0	Averaged	
Isopropylbenzene	1.44071	1.32024	1.32024	0.100	8.36204	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.83983	0.82262	0.82262	0.300	2.04873	20.0	Averaged	
1,2,3-Trichloropropane	0.66643	0.64449	0.64449	0.100	3.29226	20.0	Averaged	
n-Propylbenzene	3.02147	2.85563	2.85563	0.100	5.48869	20.0	Averaged	
Bromobenzene	0.78198	0.70976	0.70976	0.100	9.23595	20.0	Averaged	
1,3,5-Trimethylbenzene	2.26350	1.97127	1.97127	0.100	12.91027	20.0	Averaged	
2-Chlorotoluene	2.03821	1.81686	1.81686	0.100	10.86019	20.0	Averaged	
4-Chlorotoluene	2.23973	2.08769	2.08769	0.100	6.78861	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6_442290

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072502.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :28
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
tert-Butylbenzene	1.94110	1.69661	1.69661	0.100	12.59546	20.0	Averaged	
1,2,4-Trimethylbenzene	2.26985	2.00626	2.00626	0.100	11.61238	20.0	Averaged	
sec-Butylbenzene	2.58735	2.39556	2.39556	0.100	7.41275	20.0	Averaged	
p-Isopropyltoluene	2.36350	2.10116	2.10116	0.100	11.09983	20.0	Averaged	
1,3-Dichlorobenzene	1.36227	1.21486	1.21486	0.600	10.82062	20.0	Averaged	
1,4-Dichlorobenzene	1.49361	1.29304	1.29304	0.400	13.42904	20.0	Averaged	
n-Butylbenzene	1.97948	1.87686	1.87686	0.500	5.18409	20.0	Averaged	
1,2-Dichlorobenzene	1.33929	1.21162	1.21162	0.400	9.53202	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	43.16261	0.11875	0.040	13.67478	20.0	Linear	
1,2,4-Trichlorobenzene	0.91986	0.73979	0.73979	0.100	19.57610	20.0	Averaged	
Hexachlorobutadiene	50.0	41.14980	0.34513	0.100	17.70039	20.0	Linear	
Naphthalene	2.27672	1.94547	1.94547	0.200	14.54956	20.0	Averaged	
1,2,3-Trichlorobenzene	0.86027	0.69364	0.69364	0.010	19.36927	20.0	Averaged	
94 1,2-Dichloroethylene (total	0.48174	0.45501	0.45501	0.200	5.54909	20.0	Averaged	
95 Xylenes (total)	0.53613	0.49374	0.49374	0.100	7.90636	20.0	Averaged	
Cyclohexane	0.86668	0.92764	0.92764	0.100	-7.03350	20.0	Averaged	
Freon TF	50.0	55.79428	0.35085	0.100	-11.58857	20.0	Quadratic	
Methylcyclohexane	1.05536	1.14278	1.14278	0.100	-8.28320	20.0	Averaged	
Methyl Acetate	0.44499	0.56575	0.56575	0.100	-27.13837	20.0	Averaged	*
Tert-butyl alcohol	0.06311	0.06222	0.06222	0.005	1.41287	20.0	Averaged	
Isopropyl alcohol	0.03916	0.04776	0.04776	0.005	-21.96786	20.0	Averaged	*

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6_442290

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072530.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :02
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,4-Dioxane	0.00594	0.00607	0.00607	0.001	-2.18226	50.0	Averaged	
1,3-Butadiene	0.64248	0.82246	0.82246	0.100	-28.01265	50.0	Averaged	
Methacrylonitrile	0.64539	0.82365	0.82365	0.100	-27.62106	50.0	Averaged	
Isobutyl Alcohol	0.09478	0.11908	0.11908	0.005	-25.64462	50.0	Averaged	
Acetonitrile	0.07011	0.06060	0.06060	0.005	13.56833	50.0	Averaged	
Allyl Chloride	1.64159	1.45178	1.45178	0.100	11.56281	50.0	Averaged	
Propionitrile	0.09905	0.11706	0.11706	0.010	-18.18241	50.0	Averaged	
Dichlorodifluoromethane	50.0	47.81151	0.48859	0.100	4.37699	50.0	Linear	
Chloromethane	0.75520	0.79749	0.79749	0.100	-5.59967	50.0	Averaged	
Vinyl Chloride	0.64702	0.76857	0.76857	0.100	-18.78627	50.0	Averaged	
Bromomethane	0.26775	0.27486	0.27486	0.100	-2.65261	50.0	Averaged	
Chloroethane	0.36936	0.42795	0.42795	0.100	-15.86262	50.0	Averaged	
Trichlorofluoromethane	0.65570	0.75205	0.75205	0.100	-14.69333	50.0	Averaged	
Acrolein	100	121	0.02302	0.010	-21.34786	50.0	Linear	
Acetone	100	108	0.21232	0.100	-7.68385	50.0	Linear	
1,1-Dichloroethene	0.36630	0.33067	0.33067	0.100	9.72789	50.0	Averaged	
Iodomethane	100	77.00553	0.36523	0.100	22.99447	50.0	Quadratic	
Acrylonitrile	0.24365	0.22024	0.22024	0.050	9.60651	50.0	Averaged	
Methylene Chloride	50.0	39.63934	0.34514	0.100	20.72131	50.0	Linear	
Methyl tert-butyl ether	1.36234	1.06971	1.06971	0.100	21.47985	50.0	Averaged	
Carbon Disulfide	1.15144	0.89132	0.89132	0.100	22.59106	50.0	Averaged	
trans-1,2-Dichloroethene	0.42371	0.33450	0.33450	0.100	21.05447	50.0	Averaged	
Vinyl Acetate	1.75234	2.18471	2.18471	0.010	-24.67403	50.0	Averaged	
1,1-Dichloroethane	0.92980	0.99058	0.99058	0.200	-6.53669	50.0	Averaged	
2-Butanone	0.26627	0.30964	0.30964	0.100	-16.28673	50.0	Averaged	
2,2-Dichloropropane	50.0	49.47430	0.71416	0.100	1.05140	50.0	Linear	
cis-1,2-Dichloroethene	0.53977	0.56847	0.56847	0.100	-5.31675	50.0	Averaged	
Chloroform	0.95139	0.94966	0.94966	0.200	0.18111	50.0	Averaged	
Bromochloromethane	0.30250	0.29807	0.29807	0.100	1.46388	50.0	Averaged	
30 Dibromofluoromethane	50.0	54.17970	0.49599	0.100	-8.35940	50.0	Linear	
1,1,1-Trichloroethane	0.73237	0.80660	0.80660	0.100	-10.13462	50.0	Averaged	
1,1-Dichloropropene	0.40784	0.41336	0.41336	0.100	-1.35284	50.0	Averaged	
1,2-Dichloroethane	0.55040	0.57305	0.57305	0.100	-4.11505	50.0	Averaged	
Carbon Tetrachloride	0.41088	0.39574	0.39574	0.100	3.68425	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6_442290

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072530.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :02
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
35 1,2-Dichloroethane-d4	50.0	55.13708	0.63121	0.100	-10.27416	50.0	Linear	
Benzene	1.19597	1.20574	1.20574	0.500	-0.81706	50.0	Averaged	
Trichloroethene	0.33829	0.34656	0.34656	0.200	-2.44544	50.0	Averaged	
Bromodichloromethane	0.45810	0.43956	0.43956	0.200	4.04729	50.0	Averaged	
2-Chloroethylvinyl ether	0.13987	0.13385	0.13385	0.001	4.30391	50.0	Averaged	
1,2-Dichloropropane	0.38457	0.41481	0.41481	0.100	-7.86479	50.0	Averaged	
Dibromomethane	0.21769	0.20917	0.20917	0.100	3.91506	50.0	Averaged	
4-Methyl-2-Pentanone	0.49202	0.53314	0.53314	0.100	-8.35590	50.0	Averaged	
cis-1,3-Dichloropropene	0.52616	0.51296	0.51296	0.200	2.50836	50.0	Averaged	
48 Toluene-d8	1.28735	1.19209	1.19209	0.100	7.39933	50.0	Averaged	
Toluene	1.34593	1.37596	1.37596	0.400	-2.23130	50.0	Averaged	
trans-1,3-Dichloropropene	0.44354	0.42268	0.42268	0.100	4.70175	50.0	Averaged	
2-Hexanone	0.32321	0.36076	0.36076	0.100	-11.61699	50.0	Averaged	
1,1,2-Trichloroethane	0.28552	0.27323	0.27323	0.100	4.30176	50.0	Averaged	
1,3-Dichloropropane	0.58331	0.56479	0.56479	0.100	3.17350	50.0	Averaged	
Dibromochloromethane	0.41218	0.39691	0.39691	0.100	3.70556	50.0	Averaged	
Tetrachloroethene	0.27806	0.27920	0.27920	0.200	-0.41063	50.0	Averaged	
1,2-Dibromoethane	0.32627	0.30975	0.30975	0.100	5.06256	50.0	Averaged	
1-Chlorohexane	0.40168	0.42359	0.42359	0.100	-5.45343	50.0	Averaged	
Chlorobenzene	0.94084	0.93768	0.93768	0.500	0.33556	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36833	0.35336	0.35336	0.100	4.06412	50.0	Averaged	
Ethylbenzene	0.47179	0.47017	0.47017	0.100	0.34432	50.0	Averaged	
m,p-Xylenes	0.59188	0.60368	0.60368	0.100	-1.99334	50.0	Averaged	
o-Xylene	0.56049	0.58012	0.58012	0.300	-3.50231	50.0	Averaged	
Styrene	0.97767	0.99495	0.99495	0.300	-1.76731	50.0	Averaged	
Bromoform	0.26446	0.24839	0.24839	0.100	6.07683	50.0	Averaged	
Isopropylbenzene	1.44071	1.48417	1.48417	0.100	-3.01655	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.83983	0.81901	0.81901	0.300	2.47873	50.0	Averaged	
1,2,3-Trichloropropane	0.66643	0.59667	0.59667	0.100	10.46810	50.0	Averaged	
n-Propylbenzene	3.02147	3.23400	3.23400	0.100	-7.03407	50.0	Averaged	
Bromobenzene	0.78198	0.77436	0.77436	0.100	0.97517	50.0	Averaged	
1,3,5-Trimethylbenzene	2.26350	2.28692	2.28692	0.100	-1.03488	50.0	Averaged	
2-Chlorotoluene	2.03821	2.04616	2.04616	0.100	-0.39004	50.0	Averaged	
4-Chlorotoluene	2.23973	2.33286	2.33286	0.100	-4.15777	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071289

RunID VOA6_442290

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072530.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :02
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
tert-Butylbenzene	1.94110	2.02063	2.02063	0.100	-4.09707	50.0	Averaged	
1,2,4-Trimethylbenzene	2.26985	2.27888	2.27888	0.100	-0.39791	50.0	Averaged	
sec-Butylbenzene	2.58735	2.80048	2.80048	0.100	-8.23737	50.0	Averaged	
p-Isopropyltoluene	2.36350	2.39709	2.39709	0.100	-1.42112	50.0	Averaged	
1,3-Dichlorobenzene	1.36227	1.35473	1.35473	0.600	0.55300	50.0	Averaged	
1,4-Dichlorobenzene	1.49361	1.42468	1.42468	0.400	4.61547	50.0	Averaged	
n-Butylbenzene	1.97948	2.08561	2.08561	0.500	-5.36135	50.0	Averaged	
1,2-Dichlorobenzene	1.33929	1.35908	1.35908	0.400	-1.47804	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	45.49540	0.12533	0.040	9.00921	50.0	Linear	
1,2,4-Trichlorobenzene	0.91986	0.79410	0.79410	0.100	13.67094	50.0	Averaged	
Hexachlorobutadiene	50.0	43.88737	0.36948	0.100	12.22525	50.0	Linear	
Naphthalene	2.27672	2.05057	2.05057	0.200	9.93322	50.0	Averaged	
1,2,3-Trichlorobenzene	0.86027	0.74472	0.74472	0.010	13.43190	50.0	Averaged	
94 1,2-Dichloroethylene (total	0.48174	0.45149	0.45149	0.200	6.28053	50.0	Averaged	
95 Xylenes (total)	0.53613	0.54688	0.54688	0.100	-2.00467	50.0	Averaged	
Cyclohexane	0.86668	1.08532	1.08532	0.100	-25.22746	50.0	Averaged	
Freon TF	50.0	53.21002	0.33168	0.100	-6.42004	50.0	Quadratic	
Methylcyclohexane	1.05536	1.02038	1.02038	0.100	3.31449	50.0	Averaged	
Methyl Acetate	0.44499	0.42445	0.42445	0.100	4.61541	50.0	Averaged	
Tert-butyl alcohol	0.06311	0.04987	0.04987	0.005	20.97428	50.0	Averaged	
Isopropyl alcohol	0.03916	0.03344	0.03344	0.005	14.59937	50.0	Averaged	

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Form 8

Internal Standard Area and RT Summary

Volatiles by EPA 8260

Workorder

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Volatiles by EPA 8260

VOA6_442290		Pentafluorobenzene				1,4-Difluorobenzene				Chlorobenzene				1,4-Dichlorobenze			
Sample ID	File ID	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12-HOUR STD (CCV)	X072502.D	575260	#	4.18	#	936985	#	4.97	#	847733	#	7.67	#	466038	#	9.66	#
HS23071289-01	X072528.D	576985		4.18		884032		4.97		764632		7.67		399709		9.66	
HS23071289-02	X072529.D	548257		4.18		838923		4.97		729438		7.67		364601		9.66	
HS23071289-03	X072525.D	531497		4.18		843748		4.97		728305		7.67		358957		9.66	
HS23071289-03	X072524.D	533788		4.18		839683		4.97		728098		7.67		378436		9.66	
HS23071289-05	X072527.D	442048		4.18		668455		4.97		746128		7.67		374403		9.66	
HS23071289-05	X072526.D	550024		4.18		848640		4.97		748272		7.67		391508		9.66	
HS23071289-06	X072522.D	557073		4.18		866233		4.97		761553		7.67		398141		9.66	
HS23071289-07	X072523.D	547361		4.18		848568		4.97		743574		7.67		375907		9.66	
HS23071289-08	X072519.D	559613		4.18		861195		4.97		753377		7.67		400091		9.66	
HS23071289-09	X072520.D	557822		4.18		858776		4.97		758380		7.67		393919		9.66	
HS23071289-10	X072521.D	451507		4.18		697086		4.97		736342		7.67		377524		9.66	
HS23071289-11	X072511.D	507585		4.18		881696		4.97		785787		7.67		421429		9.66	
HS23071289-11MS	X072513.D	565124		4.18		894329		4.97		770201		7.67		403879		9.66	
HS23071289-11MSD	X072514.D	565484		4.18		894784		4.97		798127		7.67		431446		9.66	
HS23071289-12	X072518.D	553186		4.18		839277		4.97		727182		7.67		352104		9.66	
VBLKW-230725	X072507.D	585803		4.18		919826		4.97		787286		7.67		400742		9.66	
VLCSW-230725	X072505.D	567256		4.18		942875		4.97		846696		7.67		455950		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

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071289

RunID
VOA6-441456

Volatiles by EPA 8260

Run ID VOA6_441456 **Start Date** 07/14/23 **EndDate** 07/14/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
11:20	BFB	TUNE	BFB	X071401.D	07/14/23	1
12:01	VSTD000.25	ICAL1	VSTD000.25	X071402.D	07/14/23	1
12:22	VSTD000.5	ICAL2	VSTD000.5	X071403.D	07/14/23	1
13:02	VSTD001	ICAL3	VSTD001	X071404.D	07/14/23	1
13:23	VSTD002	ICAL4	VSTD002	X071405.D	07/14/23	1
13:43	VSTD005	ICAL5	VSTD005	X071406.D	07/14/23	1
14:04	VSTD020	ICAL6	VSTD020	X071407.D	07/14/23	1
14:24	VSTD050	ICAL7	VSTD050	X071408.D	07/14/23	1
14:44	VSTD100	ICAL8	VSTD100	X071409.D	07/14/23	1
15:05	VSTD150	ICAL9	VSTD150	X071410.D	07/14/23	1
15:25	VSTD200	ICAL	VSTD200	X071411.D	07/14/23	1
16:06	CCV	ICV	CCV	X071413.D	07/14/23	1

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071289

RunID
VOA6-442290

Volatiles by EPA 8260

Run ID VOA6_442290 **Start Date** 07/25/23 **EndDate** 07/25/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
10:08	BFB	TUNE	BFB	X072501.D	07/25/23	1
10:28	CCV	CCV	CCV	X072502.D	07/25/23	1
11:09	CCB	CCB	CCB	X072504.D	07/25/23	1
11:30	VLCSW-230725	LCS	VLCSW-230725	X072505.D	07/25/23	1
12:11	VBLKW-230725	MBLK	VBLKW-230725	X072507.D	07/25/23	1
12:31	HS23071293-01	SAMP	ZZZZZZZZZZ	X072508.D	07/25/23	1
12:52	HS23071293-02	SAMP	ZZZZZZZZZZ	X072509.D	07/25/23	1
13:12	HS23071293-03	SAMP	ZZZZZZZZZZ	X072510.D	07/25/23	1
13:33	HS23071289-11	SAMP	16SW03-230718	X072511.D	07/25/23	1
14:14	HS23071289-11MS	MS	HS23071289-11MS	X072513.D	07/25/23	1
14:34	HS23071289-11MSD	MSD	HS23071289-11MSD	X072514.D	07/25/23	1
14:54	HS23071113-04	SAMP	ZZZZZZZZZZ	X072515.D	07/25/23	25
15:15	HS23071113-05	SAMP	ZZZZZZZZZZ	X072516.D	07/25/23	5
15:35	HS23071165-09	SAMP	ZZZZZZZZZZ	X072517.D	07/25/23	1
15:56	HS23071289-12	SAMP	Trip Blank-230718	X072518.D	07/25/23	1
16:16	HS23071289-08	SAMP	16SW01-230718	X072519.D	07/25/23	1
16:37	HS23071289-09	SAMP	16SW01-230718-FD	X072520.D	07/25/23	1
16:57	HS23071289-10	SAMP	16SW02-230718	X072521.D	07/25/23	1
17:18	HS23071289-06	SAMP	16WW39-230718	X072522.D	07/25/23	1
17:38	HS23071289-07	SAMP	16WW49-230718	X072523.D	07/25/23	1
17:59	HS23071289-03	SAMP	16RW10-230718	X072524.D	07/25/23	5
18:19	HS23071289-03	SAMP	16RW10-230718	X072525.D	07/25/23	25
18:40	HS23071289-05	SAMP	16WW12-230718	X072526.D	07/25/23	5
19:00	HS23071289-05	SAMP	16WW12-230718	X072527.D	07/25/23	25
19:21	HS23071289-01	SAMP	16RW09-230718	X072528.D	07/25/23	5
19:41	HS23071289-02	SAMP	16RW09-230718-FD	X072529.D	07/25/23	5
20:02	CCV-END	CCV_END	CCV-END	X072530.D	07/25/23	1

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Raw Data VOA6 441456

Volatiles by EPA 8260

Workorder

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071401.D Page 1
Report Date: 14-Jul-2023 12:16

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071401.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 14-JUL-2023 11:20
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\X230714.b\bfb.m
Meth Date : 14-Mar-2023 15:45 Linh.Pham 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	75584			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	19544			15.00- 40.00	25.86
8.687	8.889	(0.000)	75	39336			30.00- 60.00	52.04
8.687	8.889	(0.000)	96	4254			5.00- 9.00	5.63
8.687	8.889	(0.000)	173	575			0.00- 2.00	0.93
8.687	8.889	(0.000)	174	62120			50.00- 0.00	82.19
8.687	8.889	(0.000)	175	4074			5.00- 9.00	6.56
8.687	8.889	(0.000)	176	59920			95.00- 101.00	96.46
8.687	8.889	(0.000)	177	3382			5.00- 9.00	5.64

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	25.86
75	30.00 - 60.00% of mass 95	52.04
96	5.00 - 9.00% of mass 95	5.63
173	Less than 2.00% of mass 174	0.76 (0.93)
174	Greater than 50.00% of mass 95	82.19
175	5.00 - 9.00% of mass 174	5.39 (6.56)
176	95.00 - 101.00% of mass 174	79.28 (96.46)
177	5.00 - 9.00% of mass 176	4.47 (5.64)

Data File: X071401.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.10
Number of points: 86

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1001	59.90	684	88.00	3732	134.80	342
37.00	4000	61.00	4199	91.20	205	137.00	155
38.10	3490	62.10	4176	92.00	2613	140.00	79
39.20	1334	63.00	2135	93.00	3158	140.80	1031
39.90	3559	64.10	319	94.00	8834	142.20	140
40.70	64	67.00	413	95.10	75584	142.90	753
42.00	125	68.10	6971	96.00	4254	145.70	149
43.00	148	69.10	7538	97.30	71	147.80	317
44.10	2032	70.10	1203	104.00	361	148.70	68
45.10	1709	72.20	463	105.00	140	155.00	115
46.10	218	73.20	3048	105.90	261	156.90	305
47.00	2031	74.00	11989	107.00	78	158.60	77
47.80	299	75.00	39336	114.80	122	167.70	60
48.30	315	76.10	3185	115.70	131	169.70	59
49.00	4410	76.90	966	116.70	450	172.20	197
50.00	19544	78.10	384	118.00	134	173.00	575
51.00	6014	78.90	2349	118.90	176	174.00	62120
52.20	624	79.90	148	127.80	434	175.00	4074
55.10	243	80.80	1499	128.50	116	176.00	59920
55.90	1173	82.00	347	129.50	194	177.00	3382
57.00	2234	85.90	194	129.90	123		
57.80	62	87.00	3285	131.00	91		

Data File: \\nahstws005\target\chem\voa6.i\x230714.b\x071401.d Page 1

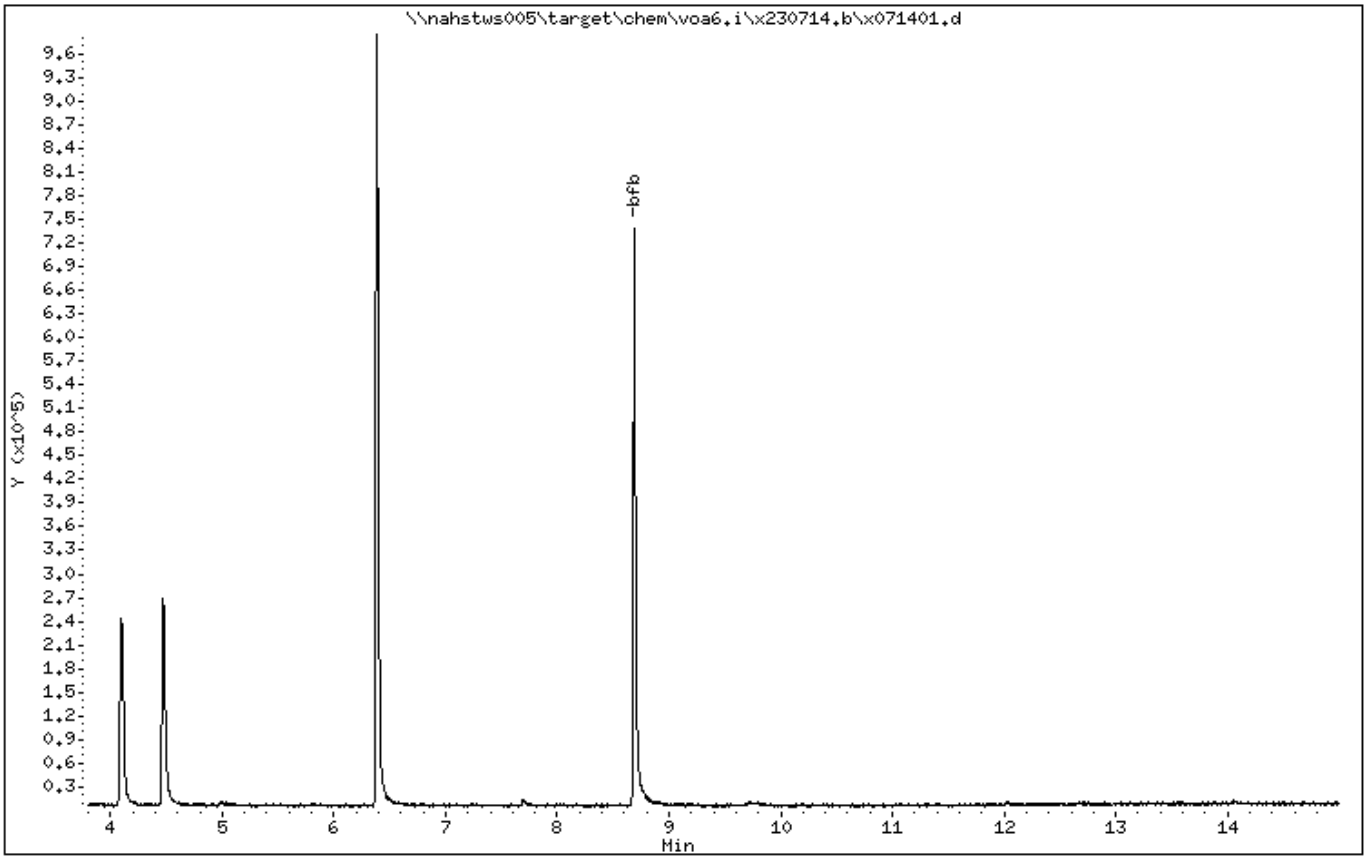
Date : 14-JUL-2023 11:20

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\x230714.b\x071401.d
Inj Date : 14-JUL-2023 11:20
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071402.D
Lab Smp Id: VSTD000.25 Client Smp ID: VSTD000.25
Inj Date : 14-JUL-2023 12:01
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\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:04 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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

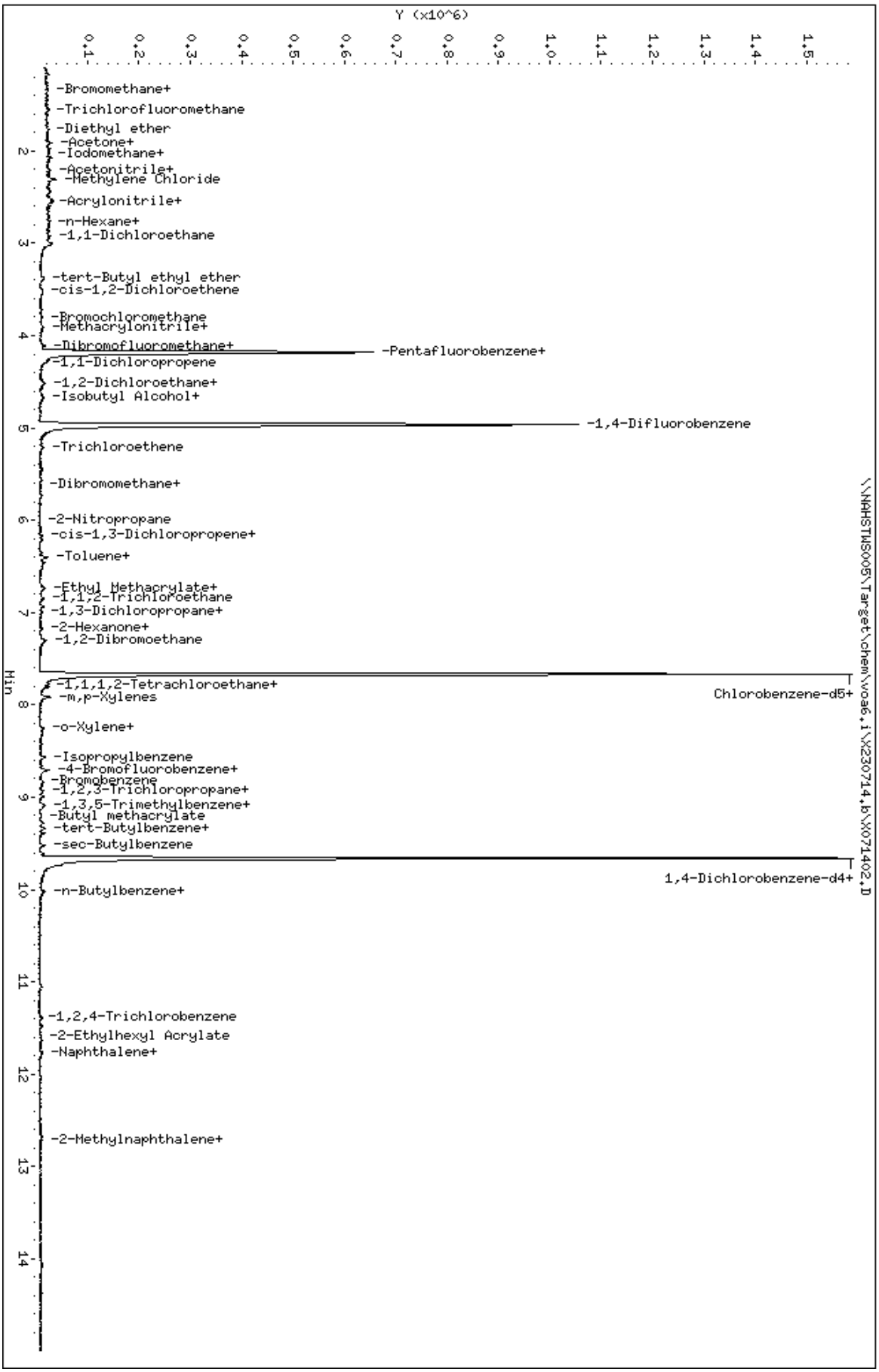
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.177	4.177	(1.000)	513772	50.0000	
	2 Dichlorodifluoromethane	85	0.972	0.972	(0.233)	1327	0.25000	1.34
	6 Bromomethane	94	1.344	1.344	(0.322)	1426	0.25000	0.51
	7 Chloroethane	64	1.404	1.404	(0.336)	2235	0.25000	0.58
	13 Acetonitrile	39	2.206	2.206	(0.528)	1743	2.50000	2.41(a)
	15 Iodomethane	142	2.026	2.026	(0.485)	1361	0.50000	4.07(T)
	34 Carbon Tetrachloride	117	4.177	4.177	(0.841)	45277	0.25000	6.79
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	810653	50.0000	
	43 2-Nitropropane	43	5.992	5.992	(1.434)	882	0.25000	0.43(a)
	44 Dibromomethane	93	5.557	5.557	(1.119)	982	0.25000	0.27(a)
	46 cis-1,3-Dichloropropene	75	6.164	6.164	(1.242)	2135	0.25000	0.25(a)
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	750028	50.0000	
$	48 Toluene-d8	98	6.400	6.400	(0.835)	9790	0.25000	0.50(aM)
	49 Ethyl Methacrylate	69	6.738	6.738	(1.357)	1122	0.25000	0.21(a)
	50 Toluene	91	6.457	6.457	(0.842)	5493	0.25000	0.27(a)
	53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	800	0.25000	0.18(a)
	54 1,3-Dichloropropane	76	6.993	6.993	(0.912)	2465	0.25000	0.28(a)
	55 Dibromochloromethane	129	7.180	7.180	(0.936)	1520	0.25000	0.24(a)
	56 Tetrachloroethene	164	6.940	6.940	(0.905)	1306	0.25000	0.31(a)
	57 1,2-Dibromoethane	107	7.285	7.285	(0.950)	1533	0.25000	0.31(a)

58 1-Chlorohexane	55	7.667	7.667 (1.544)	8221	0.25000	1.26(a)
59 Chlorobenzene	112	7.694	7.694 (1.003)	4381	0.25000	0.31(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	60 1,1,1,2-Tetrachloroethane	131	7.780	7.780	(1.015)	1432	0.25000	0.25(a)
	61 Ethylbenzene	106	7.810	7.810	(1.019)	1916	0.25000	0.27(a)
	62 m,p-Xylenes	106	7.915	7.915	(1.032)	4768	0.50000	0.53(a)
	63 o-Xylene	106	8.252	8.252	(1.076)	2524	0.25000	0.30(a)
	64 Styrene	104	8.316	8.316	(1.085)	2747	0.25000	0.18(a)
	67 Isopropylbenzene	105	8.567	8.567	(1.117)	5899	0.25000	0.27(a)
$	69 4-Bromofluorobenzene	95	8.710	8.710	(1.136)	5758	0.25000	0.34(a)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	386421	50.0000	
	71 1,2,3-Trichloropropane	75	8.871	8.871	(0.918)	2014	0.25000	0.39(a)
	73 n-Propylbenzene	91	8.927	8.927	(0.924)	5784	0.25000	0.24(a)
	74 Bromobenzene	156	8.818	8.818	(0.913)	1741	0.25000	0.28(a)
	75 1,3,5-Trimethylbenzene	105	9.081	9.081	(0.940)	5918	0.25000	0.33(a)
	76 2-Chlorotoluene	91	8.991	8.991	(0.931)	3339	0.25000	0.21(a)
	77 4-Chlorotoluene	91	9.114	9.114	(0.943)	4046	0.25000	0.23(a)
	78 tert-Butylbenzene	119	9.339	9.339	(0.967)	4275	0.25000	0.28(a)
	79 1,2,4-Trimethylbenzene	105	9.392	9.392	(0.972)	5781	0.25000	0.32(a)
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	5830	0.25000	0.29(a)
	82 p-Isopropyltoluene	119	9.654	9.654	(0.999)	5470	0.25000	0.29(a)
	83 1,3-Dichlorobenzene	146	9.624	9.624	(0.996)	3790	0.25000	0.35(a)
	84 1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	4376	0.25000	0.37(a)
	88 1,2-Dichlorobenzene	146	10.018	10.018	(1.037)	2842	0.25000	0.27(a)
	93 1,2,3-Trichlorobenzene	180	11.780	11.780	(1.219)	1828	0.25000	0.27(a)
	141 Cyclohexane	56	4.174	4.174	(0.999)	9736	0.25000	1.09(a)
	135 1,4-Dioxane	88	5.621	5.621	(1.345)	272	5.00000	4.45(aM)
	136 n-Hexane	57	2.772	2.772	(0.664)	1827	0.25000	(a)
	139 Diethyl ether	59	1.760	1.760	(0.421)	1325	0.25000	0.27(a)
	149 Isopropyl alcohol	45	2.097	2.097	(0.502)	2990	5.00000	7.43(T)
	166 1,2,3-Trimethylbenzene	105	9.737	9.737	(1.008)	3283	0.25000	0.18(a)
	174 tert-Amyl methyl ether	73	4.665	4.665	(1.117)	5098	0.25000	0.30(Ta)
	175 tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	5067	0.25000	0.23(a)
	176 tert-Amyl alcohol	59	4.646	4.646	(1.112)	1684	5.00000	3.00(a)
	151 4-Methyl-2-pentanol	45	6.734	6.734	(1.356)	10871	5.00000	6.25
	180 1-Methylnaphthalene	142	12.672	12.672	(1.312)	2289	0.25000	(a)
	140 1,3-Butadiene	54	1.171	1.171	(0.280)	1955	0.25000	0.29(a)
M	94 1,2-Dichloroethylene (total)	96				3006	0.50000	(a)
	134 Cyclohexanone	55	8.653	8.653	(0.896)	2370	5.00000	6.88(a)
	150 Allyl alcohol	57	2.772	2.772	(0.664)	1827	5.00000	(a)
	200 Dimethyl Disulfide	94	6.202	6.202	(0.809)	2328	0.25000	0.23(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.



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Sample Info: VSTD000,25;VSTD000,25;1;1;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6,i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071402.D
Inj Date : 14-JUL-2023 12:01
InstruID : voa6.i
LabSampID : VSTD000.25

1,4-Dioxane ()

Reason Code:

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259
20-Jul-2023
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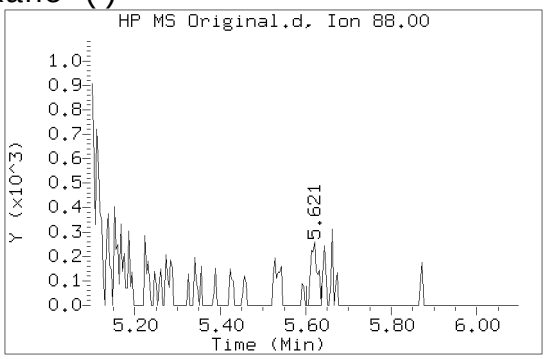

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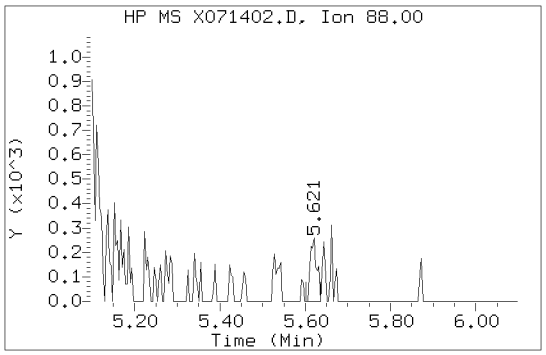

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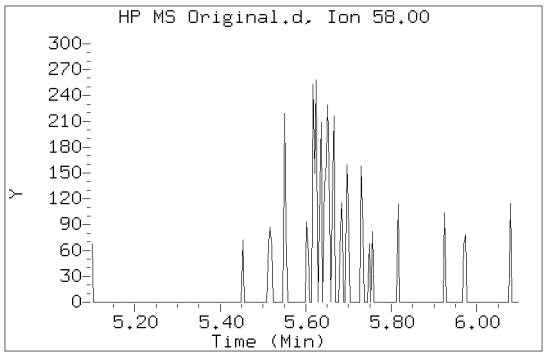

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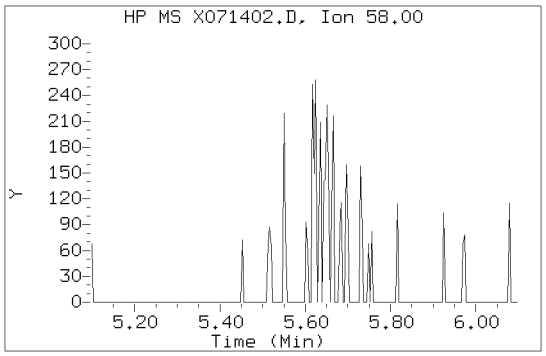

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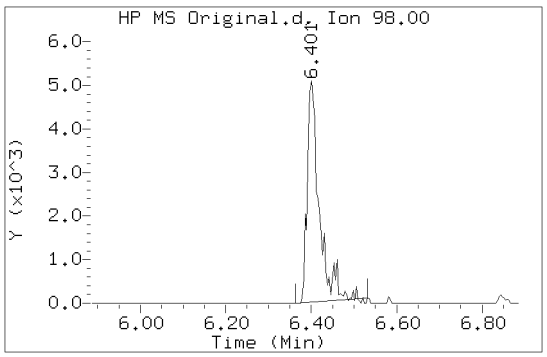

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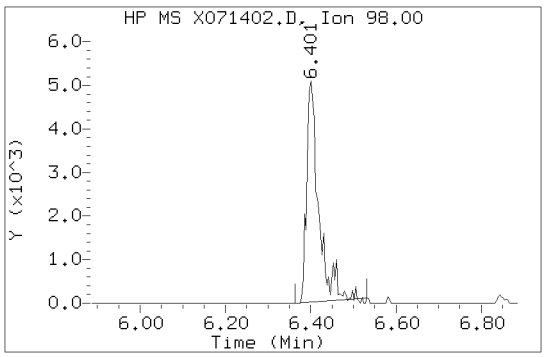

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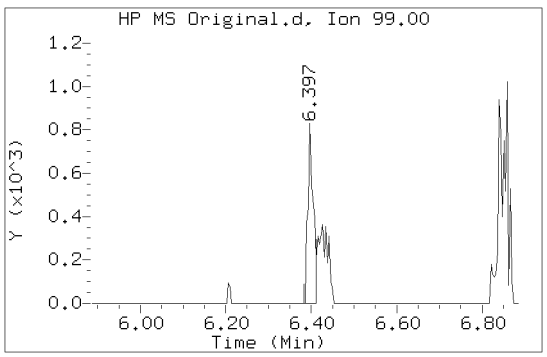

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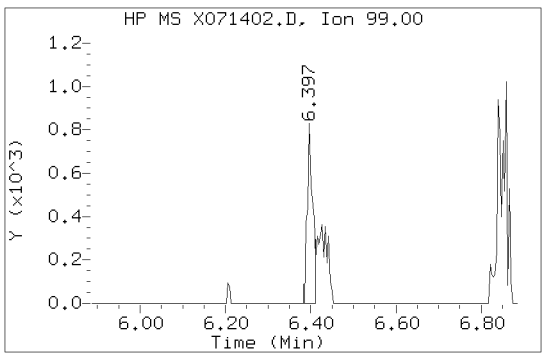

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InstruID : voa6.i
LabSampID : VSTD000.25

Toluene-d8 (2037-26-5)

Reason Code:

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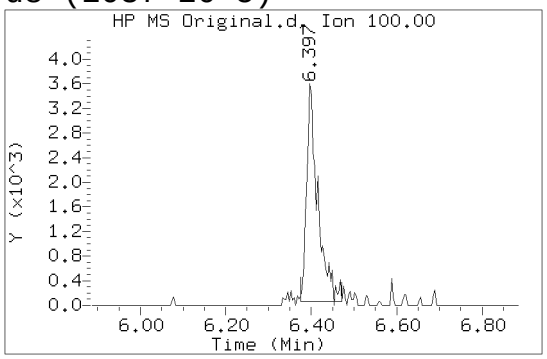

AFTER

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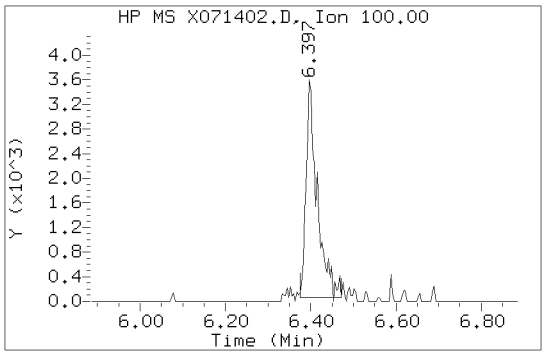

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D Page 1
Report Date: 20-Jul-2023 15:04

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
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Inj Date : 14-JUL-2023 12:22
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.5;VSTD000.5;1;2;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:04 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 12:01 Cal File: X071402.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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)	503444	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	1663	0.50000	1.41
3	Chloromethane	50	1.081	1.081	(0.259)	4229	0.50000	0.55
4	Propionitrile	54	3.701	3.701	(0.885)	5231	5.00000	5.24(aM)
5	Vinyl Chloride	62	1.145	1.145	(0.274)	3484	0.50000	0.53
6	Bromomethane	94	1.340	1.340	(0.321)	1399	0.50000	0.51(M)
7	Chloroethane	64	1.407	1.407	(0.337)	2168	0.50000	0.58(M)
9	Acrolein	56	1.868	1.868	(0.447)	268	1.00000	2.51(aM)
12	Isobutyl Alcohol	43	4.695	4.695	(1.123)	9983	10.0000	10.46(a)
13	Acetonitrile	39	2.213	2.213	(0.529)	3606	5.00000	5.10(aM)
14	Allyl Chloride	41	2.202	2.202	(0.527)	9843	0.50000	0.59(a)
15	Iodomethane	142	2.026	2.026	(0.485)	2897	1.00000	4.39(TM)
16	Acrylonitrile	53	2.539	2.539	(0.607)	3055	1.00000	1.24(M)
18	Methyl tert-butyl ether	73	2.539	2.539	(0.607)	7187	0.50000	0.52(M)
19	Carbon Disulfide	76	2.078	2.078	(0.497)	12054	1.00000	1.03
20	trans-1,2-Dichloroethene	96	2.543	2.543	(0.608)	2557	0.50000	0.59
21	Vinyl Acetate	43	3.019	3.019	(0.722)	18224	1.00000	1.03(M)
22	1,1-Dichloroethane	63	2.929	2.929	(0.701)	5250	0.50000	0.56(TM)
23	Chloroprene	53	1.786	1.786	(0.427)	1292	0.50000	0.57(aM)
24	2-Butanone	43	3.675	3.675	(0.879)	2827	1.00000	1.05(M)

25 Methacrylonitrile	41	3.893	3.893 (0.931)	3622	0.50000	0.55(aM)
26 2,2-Dichloropropane	77	3.506	3.506 (0.839)	3703	0.50000	0.71(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
27	cis-1,2-Dichloroethene	96	3.540	3.540	(0.847)	2924	0.50000	0.53(M)
28	Chloroform	83	3.911	3.911	(0.935)	5643	0.50000	0.58(M)
29	Bromochloromethane	128	3.810	3.810	(0.911)	1717	0.50000	0.56(M)
31	1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	3867	0.50000	0.52
32	1,1-Dichloropropene	75	4.286	4.286	(0.863)	3744	0.50000	0.57(M)
33	1,2-Dichloroethane	62	4.564	4.564	(0.919)	5246	0.50000	0.59(M)
34	Carbon Tetrachloride	117	4.256	4.256	(0.857)	3613	0.50000	0.54(M)
* 36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	802287	50.0000	
37	Benzene	78	4.526	4.526	(0.912)	10488	0.50000	0.54
38	Trichloroethene	130	5.216	5.216	(1.051)	2909	0.50000	0.53(a)
39	Bromodichloromethane	83	5.737	5.737	(1.156)	4539	0.50000	0.61(aM)
40	Methyl Methacrylate	41	5.636	5.636	(1.348)	3261	0.50000	0.53(aM)
41	2-Chloroethylvinyl ether	63	6.082	6.082	(1.225)	2206	1.00000	0.98(aM)
42	1,2-Dichloropropane	63	5.448	5.448	(1.097)	3473	0.50000	0.56(aM)
43	2-Nitropropane	43	5.984	5.984	(1.431)	1174	0.50000	0.58(aM)
44	Dibromomethane	93	5.568	5.568	(1.122)	1988	0.50000	0.56(a)
45	4-Methyl-2-Pentanone	43	6.348	6.348	(0.828)	8626	1.00000	1.19(a)
46	cis-1,3-Dichloropropene	75	6.168	6.168	(1.242)	4937	0.50000	0.58(a)
* 47	Chlorobenzene-d5	117	7.667	7.667	(1.000)	735322	50.0000	
$ 48	Toluene-d8	98	6.400	6.400	(0.835)	10379	0.50000	0.54(aM)
49	Ethyl Methacrylate	69	6.727	6.727	(1.355)	2780	0.50000	0.52(aM)
50	Toluene	91	6.453	6.453	(0.842)	10040	0.50000	0.50(a)
51	trans-1,3-Dichloropropene	75	6.700	6.700	(1.350)	3980	0.50000	0.55(a)
52	2-Hexanone	43	7.113	7.113	(0.928)	4470	1.00000	0.94(aM)
53	1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	2223	0.50000	0.52(aM)
54	1,3-Dichloropropane	76	6.993	6.993	(0.912)	5041	0.50000	0.58(a)
55	Dibromochloromethane	129	7.184	7.184	(0.937)	3132	0.50000	0.51(aM)
56	Tetrachloroethene	164	6.933	6.933	(0.904)	1790	0.50000	0.43(a)
57	1,2-Dibromoethane	107	7.270	7.270	(0.948)	2613	0.50000	0.54(a)
58	1-Chlorohexane	55	7.701	7.701	(1.551)	3459	0.50000	0.53(aM)
59	Chlorobenzene	112	7.694	7.694	(1.003)	7907	0.50000	0.57(aM)
60	1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	3008	0.50000	0.55(aM)
61	Ethylbenzene	106	7.802	7.802	(1.018)	3909	0.50000	0.56(aM)
62	m,p-Xylenes	106	7.907	7.907	(1.031)	8550	1.00000	0.98(a)
63	o-Xylene	106	8.256	8.256	(1.077)	4414	0.50000	0.53(aM)
64	Styrene	104	8.290	8.290	(1.081)	8133	0.50000	0.56(aM)
66	Bromoform	173	8.417	8.417	(1.098)	1973	0.50000	0.50(Ta)
67	Isopropylbenzene	105	8.563	8.563	(1.117)	10697	0.50000	0.50(a)
68	1,1,2,2-Tetrachloroethane	83	8.848	8.848	(0.916)	3654	0.50000	0.56(aM)
$ 69	4-Bromofluorobenzene	95	8.702	8.702	(1.135)	7819	0.50000	0.64(aM)
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	386891	50.0000	
71	1,2,3-Trichloropropane	75	8.871	8.871	(0.918)	2737	0.50000	0.53(aM)
72	trans-1,4-Dichloro-2-butene	53	8.927	8.927	(1.164)	1124	0.50000	0.50(aM)
73	n-Propylbenzene	91	8.927	8.927	(0.924)	11407	0.50000	0.48(a)
74	Bromobenzene	156	8.818	8.818	(0.913)	3201	0.50000	0.52(aM)
75	1,3,5-Trimethylbenzene	105	9.077	9.077	(0.939)	9580	0.50000	0.54(a)
76	2-Chlorotoluene	91	8.983	8.983	(0.930)	8487	0.50000	0.53(aM)
77	4-Chlorotoluene	91	9.088	9.088	(0.941)	8710	0.50000	0.50(a)
78	tert-Butylbenzene	119	9.339	9.339	(0.967)	8109	0.50000	0.53(a)
79	1,2,4-Trimethylbenzene	105	9.392	9.392	(0.972)	10172	0.50000	0.57(aM)
81	sec-Butylbenzene	105	9.523	9.523	(0.986)	9247	0.50000	0.46(aM)
82	p-Isopropyltoluene	119	9.651	9.651	(0.999)	9771	0.50000	0.53(aM)

83 1,3-Dichlorobenzene	146	9.609	9.609 (0.995)	5980	0.50000	0.56(a)
84 1,4-Dichlorobenzene	146	9.681	9.681 (1.002)	6395	0.50000	0.55(a)

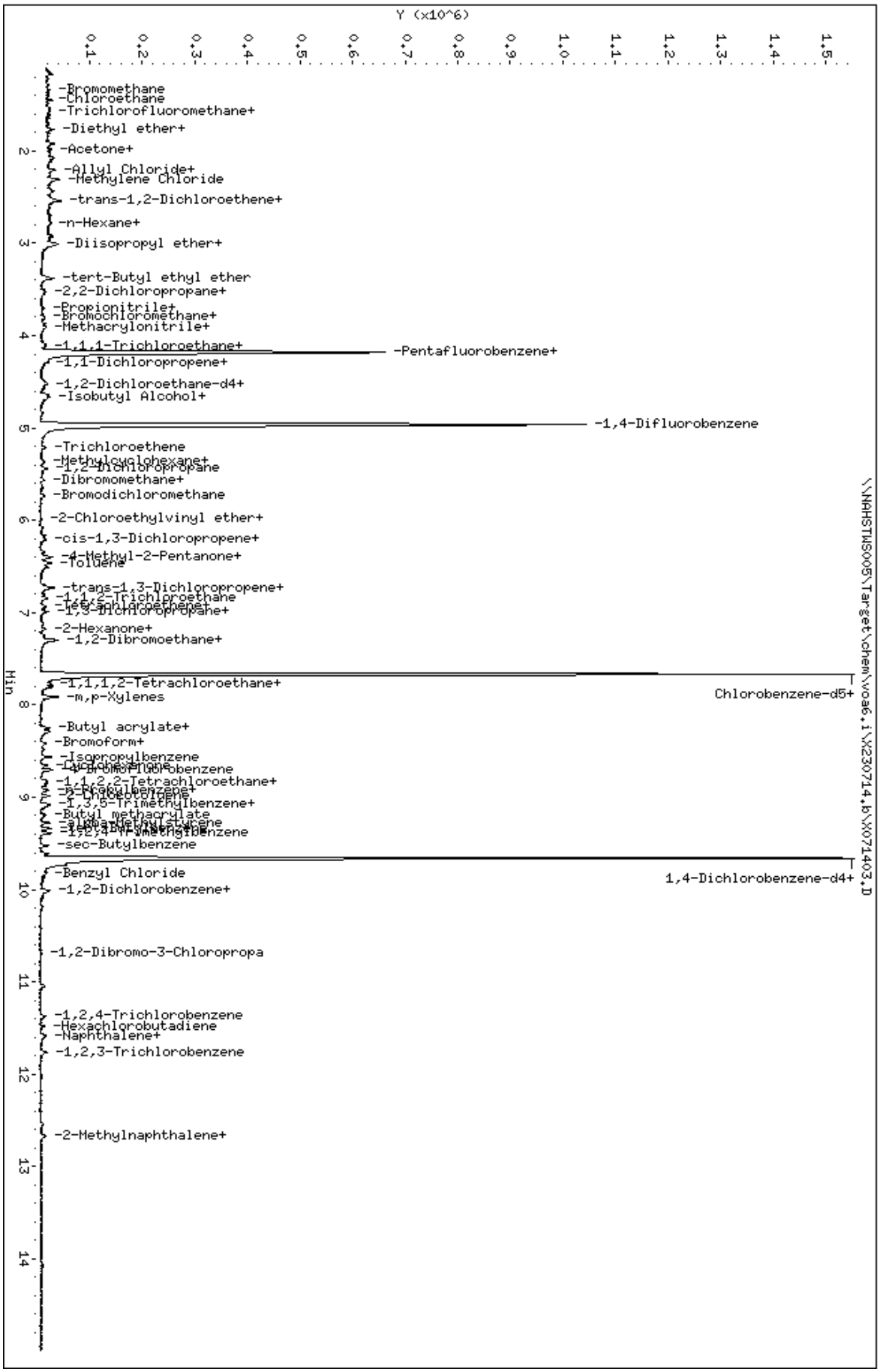
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
86	Benzyl Chloride	91	9.827	9.827	(1.282)	6245	0.50000	2.82(aM)
87	n-Butylbenzene	91	10.014	10.014	(1.036)	7141	0.50000	0.46(aM)
88	1,2-Dichlorobenzene	146	10.010	10.010	(1.036)	5252	0.50000	0.50(a)
89	1,2-Dibromo-3-Chloropropane	155	10.681	10.681	(1.106)	675	0.50000	1.70(aM)
90	1,2,4-Trichlorobenzene	180	11.371	11.371	(1.177)	4099	0.50000	0.57(aM)
91	Hexachlorobutadiene	225	11.484	11.484	(1.189)	1357	0.50000	2.74(aM)
92	Naphthalene	128	11.574	11.574	(1.198)	10357	0.50000	0.58(aM)
93	1,2,3-Trichlorobenzene	180	11.761	11.761	(1.217)	3845	0.50000	0.57(aM)
146	Methyl acetate	43	2.232	2.232	(0.534)	2344	0.50000	0.52(aM)
141	Cyclohexane	56	4.163	4.163	(0.996)	4321	0.50000	0.49(aM)
142	Tetrahydrofuran	42	3.870	3.870	(0.926)	1418	1.00000	1.09(aM)
147	Methylcyclohexane	55	5.366	5.366	(1.081)	9168	0.50000	0.54(aM)
135	1,4-Dioxane	88	5.624	5.624	(1.345)	692	10.0000	11.56(aM)
132	n-Butanol	56	5.355	5.355	(1.281)	1626	10.0000	9.70(aM)
131	Methyl Acrylate	55	3.750	3.750	(0.897)	3365	0.50000	0.49(aM)
133	Ethyl Acrylate	55	5.366	5.366	(1.283)	8232	0.50000	0.49(aM)
136	n-Hexane	57	2.787	2.787	(0.667)	2320	0.50000	(aM)
139	Diethyl ether	59	1.767	1.767	(0.423)	2605	0.50000	0.55(a)
148	Tert-butyl alcohol	59	2.442	2.442	(0.584)	7856	10.0000	12.36(M)
149	Isopropyl alcohol	45	2.105	2.105	(0.503)	4548	10.0000	11.53(T)
156	Diisopropyl ether	45	3.008	3.008	(0.719)	10814	0.50000	0.52(Ta)
166	1,2,3-Trimethylbenzene	105	9.737	9.737	(1.008)	9020	0.50000	0.50(a)
167	Ethanol	45	1.696	1.696	(0.406)	1082	10.0000	(aM)
172	tert-Butyl formate	59	4.646	4.646	(1.111)	6083	1.00000	1.13(aM)
173	3,3-Dimethyl-1-butanol	57	7.296	7.296	(0.952)	10397	10.0000	13.14(M)
174	tert-Amyl methyl ether	73	4.669	4.669	(1.117)	9377	0.50000	0.56(TaM)
175	tert-Butyl ethyl ether	59	3.390	3.390	(0.811)	12508	0.50000	0.58(a)
176	tert-Amyl alcohol	59	4.646	4.646	(1.111)	6083	10.0000	11.06(M)
151	4-Methyl-2-pentanol	45	6.723	6.723	(1.354)	20217	10.0000	11.75(M)
180	1-Methylnaphthalene	142	12.672	12.672	(1.312)	3667	0.50000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.279)	3203	0.50000	0.49(a)
152	Amyl alcohol	42	6.970	6.970	(0.909)	2120	10.0000	10.02(M)
158	Dichlorofluoromethane	67	1.538	1.538	(0.368)	4296	0.50000	0.52(M)
159	Propylene oxide	43	1.801	1.801	(0.431)	615	1.00000	0.99(aM)
161	3-Methyl-1-butanol	55	6.948	6.948	(0.906)	1945	10.0000	10.74(M)
162	Butyl acrylate	55	8.286	8.286	(1.081)	6783	0.50000	0.48(a)
163	Butyl methacrylate	41	9.182	9.182	(0.950)	4724	0.50000	0.50(aM)
182	Epichlorohydrin	57	6.127	6.127	(1.234)	1233	2.00000	2.05(aM)
M 94	1,2-Dichloroethylene (total)	96				5481	1.00000	(a)
130	Ethyl Acetate	43	3.690	3.690	(0.883)	4291	0.50000	0.57(aM)
134	Cyclohexanone	55	8.653	8.653	(0.896)	4174	10.0000	12.11(aM)
185	Isoprene	39	1.756	1.756	(0.420)	843	0.50000	0.50(aM)
188	Isopropyl acetate	43	4.695	4.695	(0.946)	11581	0.50000	0.54(a)
187	n-Amyl acetate	43	8.477	8.477	(1.106)	7447	0.50000	0.55(aM)
189	n-Butyl acetate	43	7.248	7.248	(0.945)	6398	0.50000	0.56(aM)
150	Allyl alcohol	57	2.787	2.787	(0.667)	2068	10.0000	(aM)
194	Acetaldehyde	44	1.212	1.212	(0.290)	32460	2.00000	57.33
195	Methyl Amyl Ketone	43	8.413	8.413	(1.097)	8863	0.50000	0.57(a)
200	Dimethyl Disulfide	94	6.213	6.213	(0.810)	4899	0.50000	0.49(a)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Date : 14-JUL-2023 12:22
Client ID: VSTD000.5
Sample Info: VSTD000.5;VSTD000.5;1;2;
Purge Volume: 5.0
Column phase: DB624

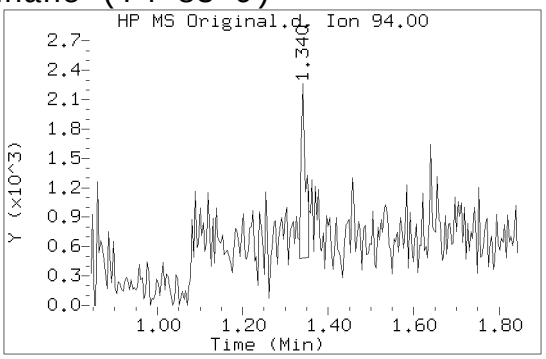
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

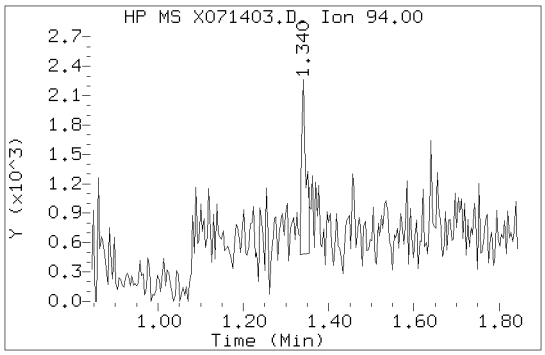
Bromomethane (74-83-9)

Reason Code:

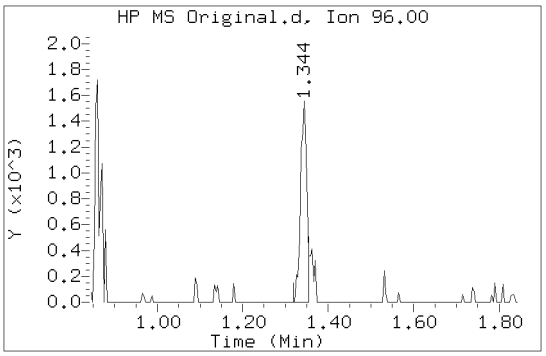
BEFORE
MASS
94
AREA
1399
HEIGHT
1780
20-Jul-2023
15:04
linh
pham



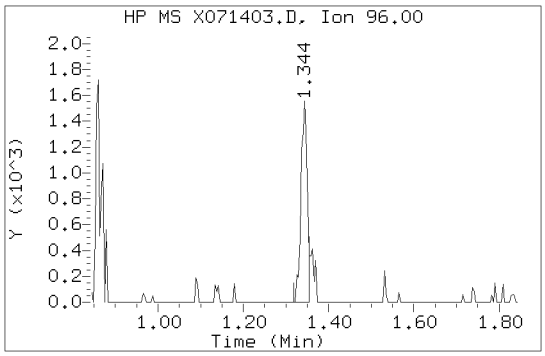
AFTER
MASS
94
AREA
1399
HEIGHT
1780
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
96
AREA
1662
HEIGHT
1558
20-Jul-2023
15:04
linh
pham



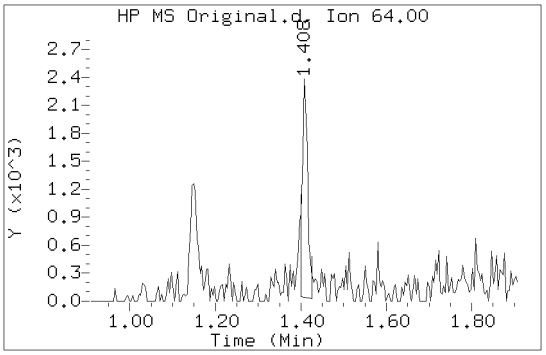
AFTER
MASS
96
AREA
1662
HEIGHT
1558
20-Jul-2023
15:04
linh
pham



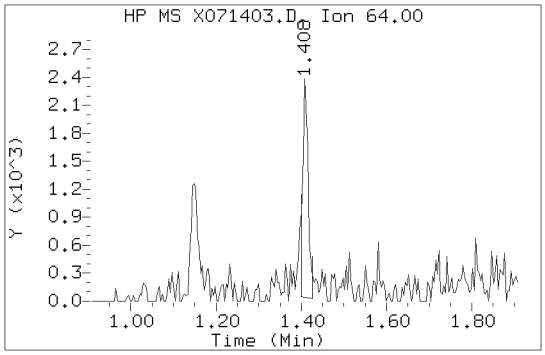
Chloroethane (75-00-3)

Reason Code:

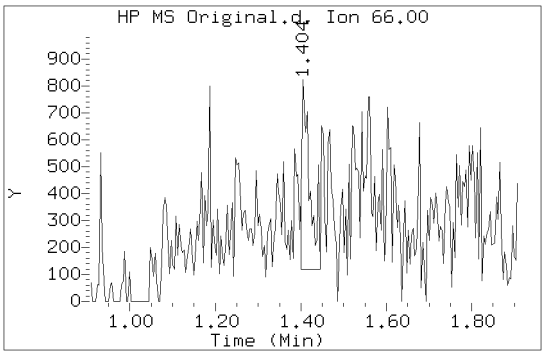
BEFORE
MASS
64
AREA
2168
HEIGHT
2339
20-Jul-2023
15:04
linh
pham



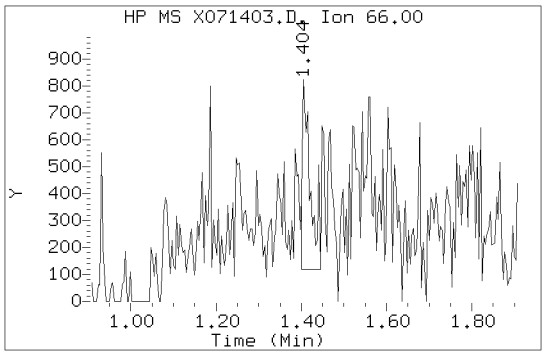
AFTER
MASS
64
AREA
2168
HEIGHT
2339
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
66
AREA
934
HEIGHT
704
20-Jul-2023
15:04
linh
pham



AFTER
MASS
66
AREA
934
HEIGHT
704
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Iodomethane (74-88-4)

Reason Code:

BEFORE
MASS
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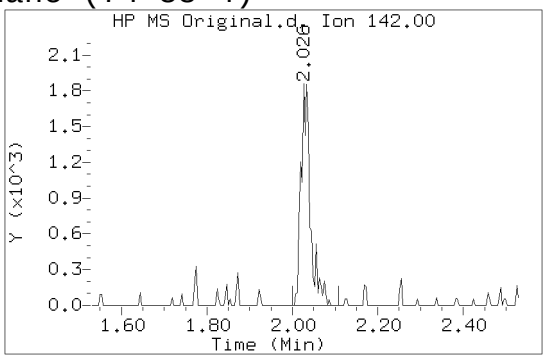
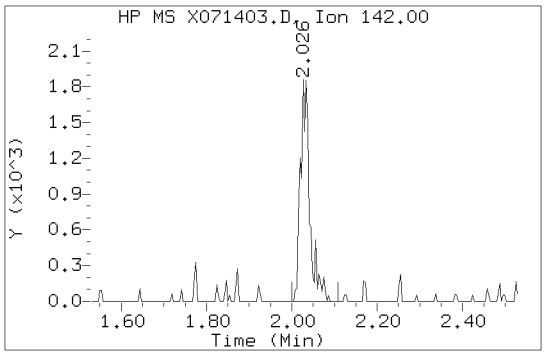
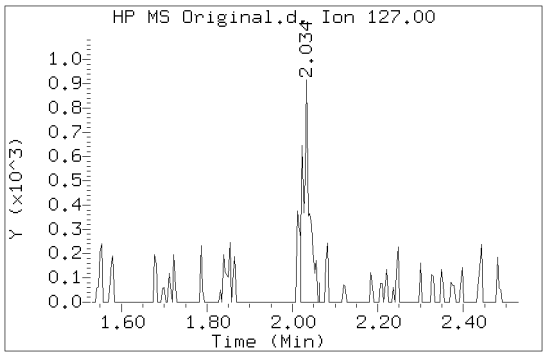
AREA
2897
HEIGHT
1860
20-Jul-2023
15:04
linh
pham



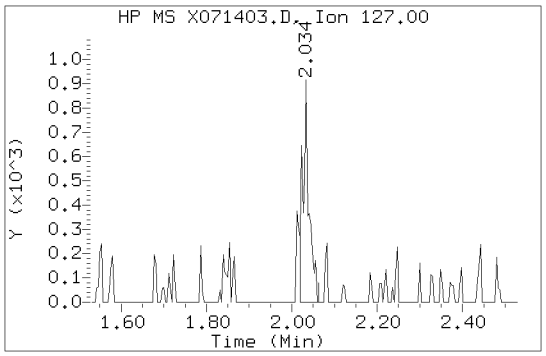
AFTER
MASS
142
AREA
2897
HEIGHT
1860
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
127
AREA
955
HEIGHT
916
20-Jul-2023
15:04
linh
pham



AFTER
MASS
127
AREA
955
HEIGHT
916
20-Jul-2023
15:04
linh
pham



BEFORE
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141
AREA
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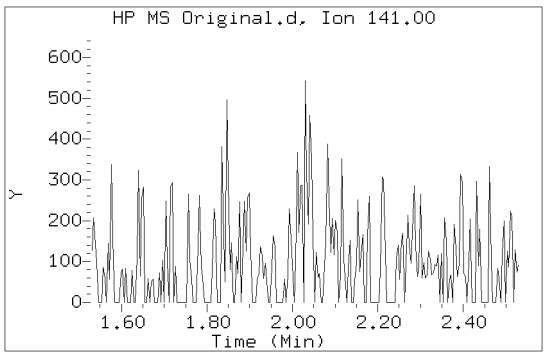
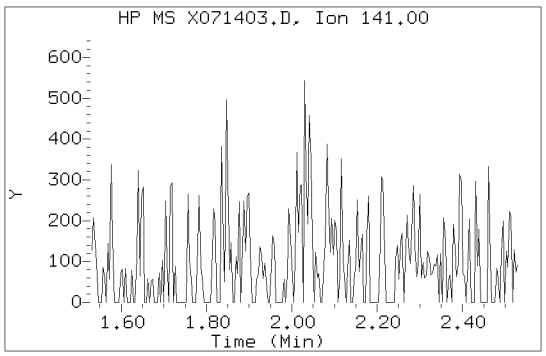
HEIGHT
0
20-Jul-2023
15:04
linh
pham



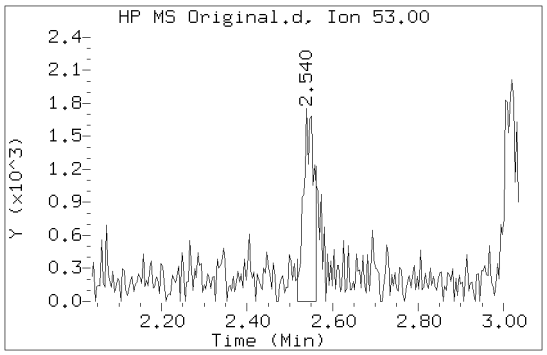
AFTER
MASS
141
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



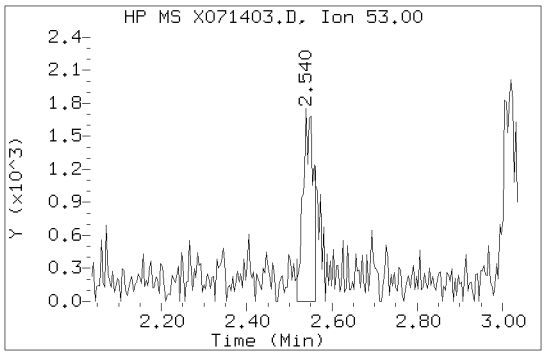
Acrylonitrile (107-13-1)

Reason Code:

BEFORE
MASS
53
AREA
3055
HEIGHT
1753
20-Jul-2023
15:04
linh
pham



AFTER
MASS
53
AREA
3055
HEIGHT
1753
20-Jul-2023
15:04
linh
pham



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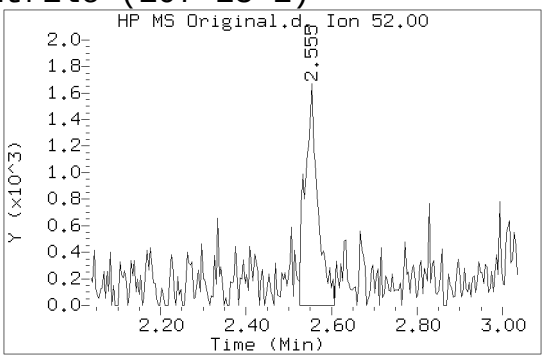
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Acrylonitrile (107-13-1)

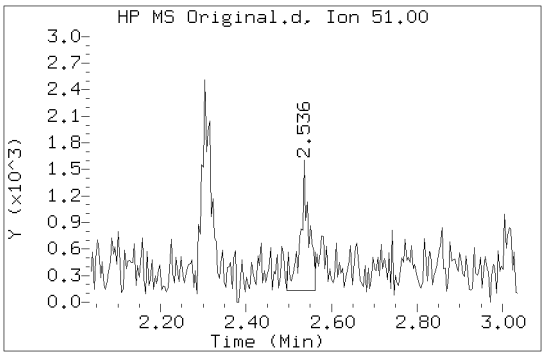
BEFORE

MASS
52
AREA
3501
HEIGHT
1670
20-Jul-2023
15:04
linh
pham



BEFORE

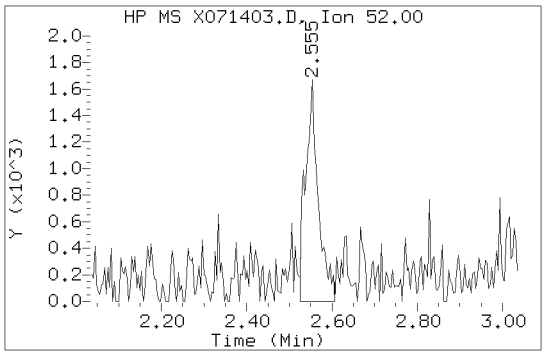
MASS
51
AREA
2140
HEIGHT
1479
20-Jul-2023
15:04
linh
pham



Reason Code:

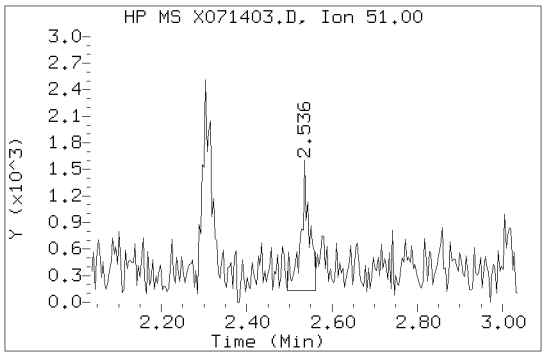
AFTER

MASS
52
AREA
3501
HEIGHT
1670
20-Jul-2023
15:04
linh
pham



AFTER

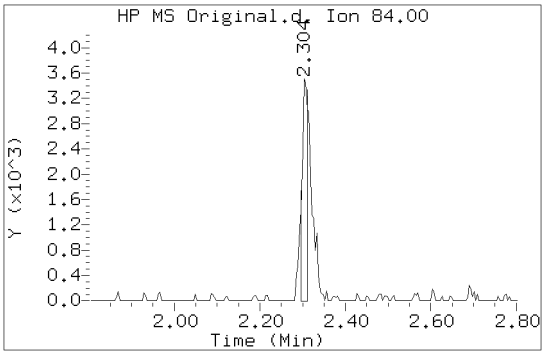
MASS
51
AREA
2140
HEIGHT
1479
20-Jul-2023
15:04
linh
pham



Methylene Chloride (75-09-2)

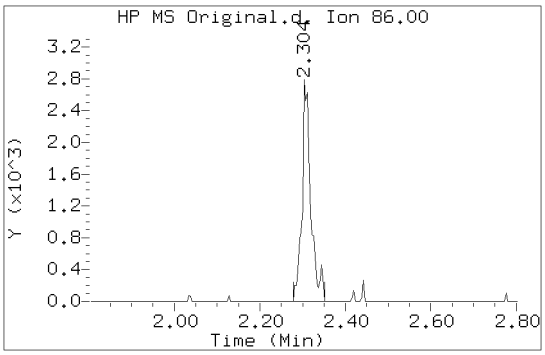
BEFORE

MASS
84
AREA
3115
HEIGHT
3513
20-Jul-2023
15:04
linh
pham



BEFORE

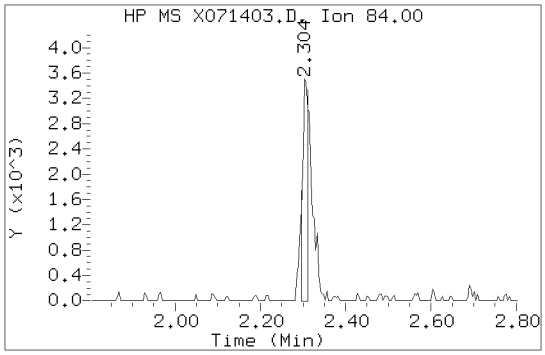
MASS
86
AREA
4061
HEIGHT
2789
20-Jul-2023
15:04
linh
pham



Reason Code:

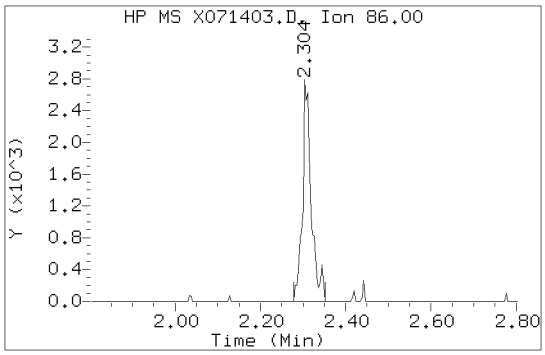
AFTER

MASS
84
AREA
3115
HEIGHT
3513
20-Jul-2023
15:04
linh
pham



AFTER

MASS
86
AREA
4061
HEIGHT
2789
20-Jul-2023
15:04
linh
pham



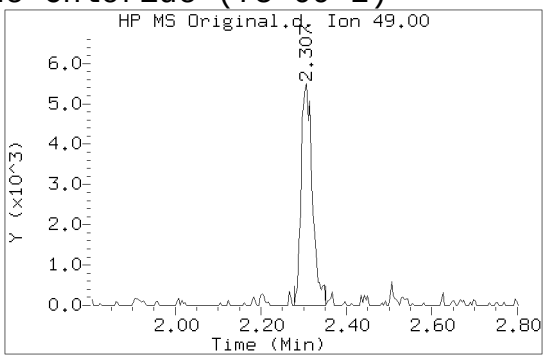
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Methylene Chloride (75-09-2)

Reason Code:

BEFORE

MASS
49
AREA
10268
HEIGHT
5500
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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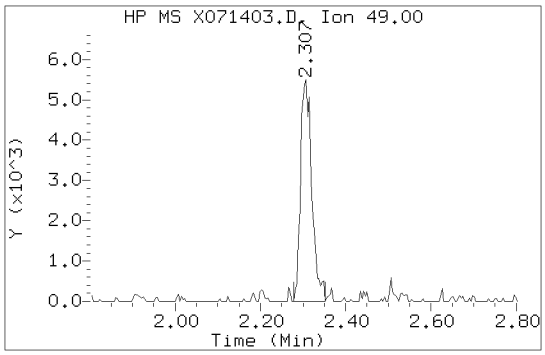
AREA
10268
HEIGHT
5500
20-Jul-2023
15:04
linh
pham

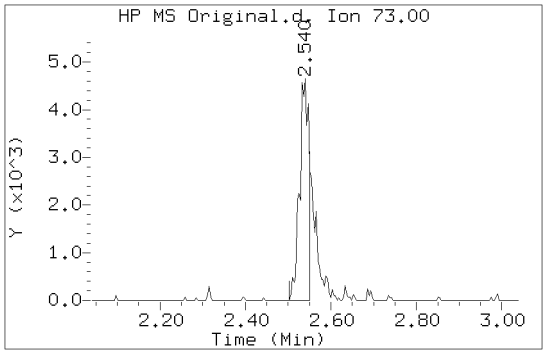


Methyl tert-butyl ether (1634-04-4)

Reason Code:

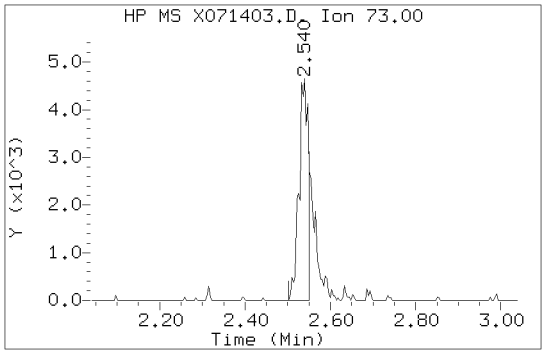
BEFORE

MASS
73
AREA
7187
HEIGHT
4650
20-Jul-2023
15:04
linh
pham



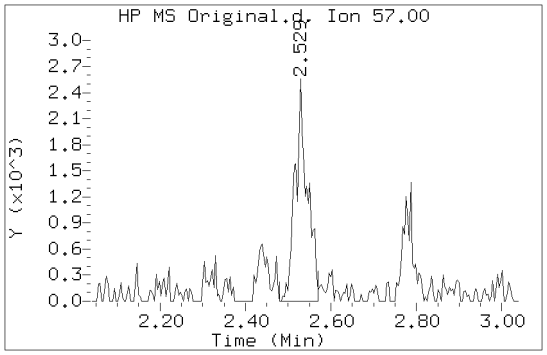
AFTER

MASS
73
AREA
7187
HEIGHT
4650
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
57
AREA
5084
HEIGHT
2558
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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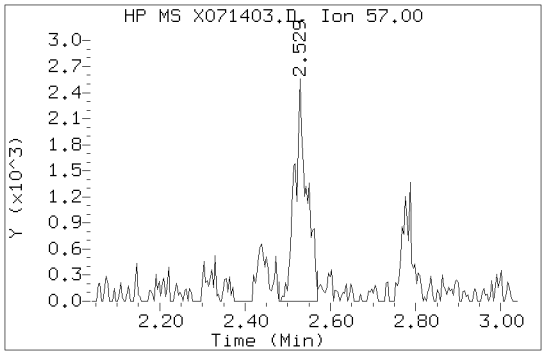
AREA
5084
HEIGHT
2558
20-Jul-2023
15:04
linh
pham

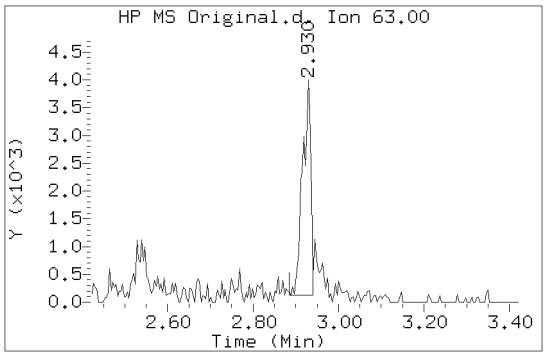


1,1-Dichloroethane (75-34-3)

Reason Code:

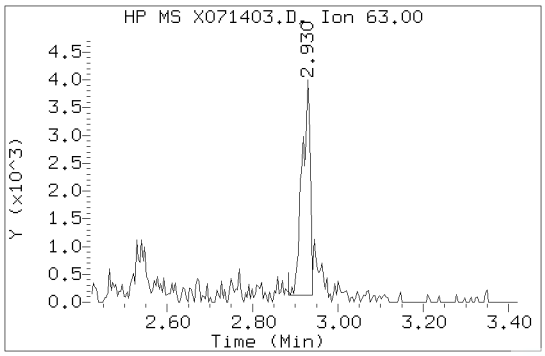
BEFORE

MASS
63
AREA
5250
HEIGHT
3871
20-Jul-2023
15:04
linh
pham



AFTER

MASS
63
AREA
5250
HEIGHT
3871
20-Jul-2023
15:04
linh
pham



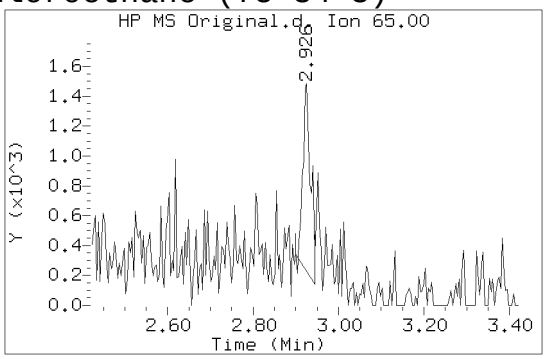
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1,1-Dichloroethane (75-34-3)

Reason Code:

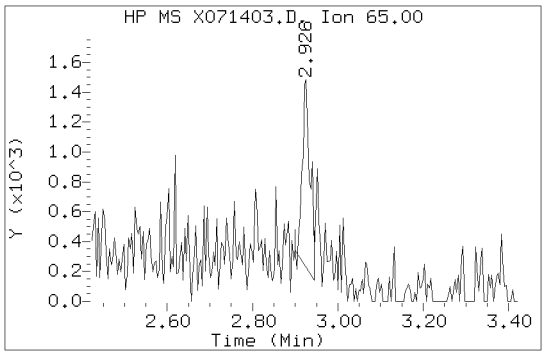
BEFORE

MASS
65
AREA
1602
HEIGHT
1258
20-Jul-2023
15:04
linh
pham



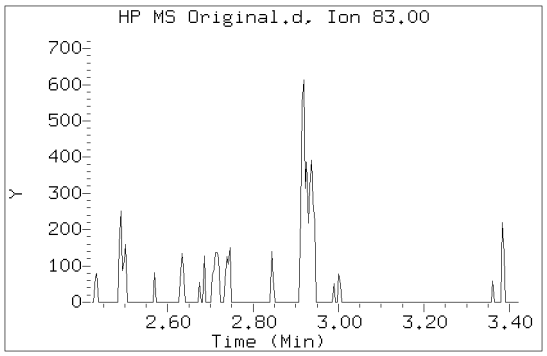
AFTER

MASS
65
AREA
1602
HEIGHT
1258
20-Jul-2023
15:04
linh
pham



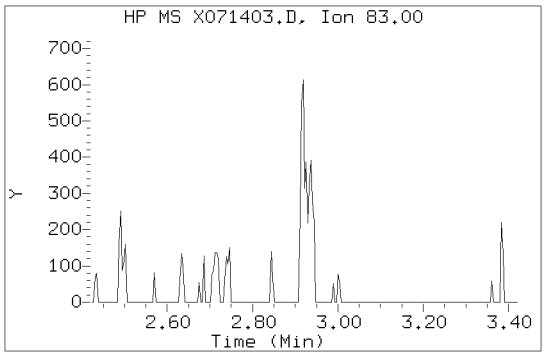
BEFORE

MASS
83
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
83
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

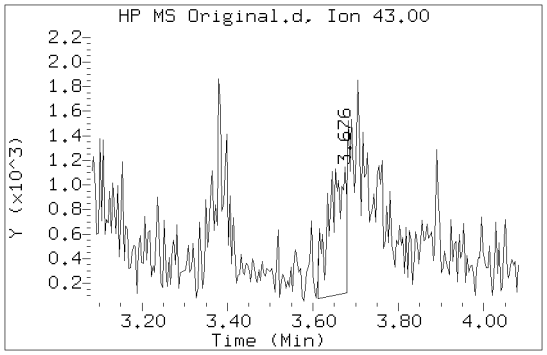


2-Butanone (78-93-3)

Reason Code:

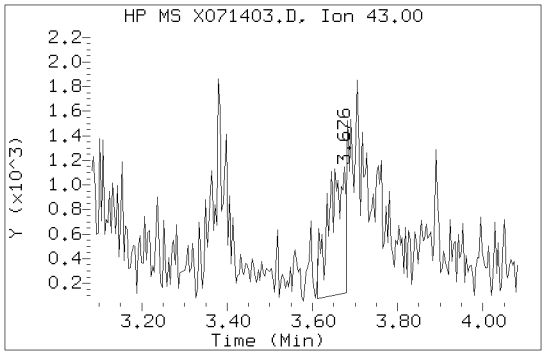
BEFORE

MASS
43
AREA
2827
HEIGHT
1024
20-Jul-2023
15:04
linh
pham



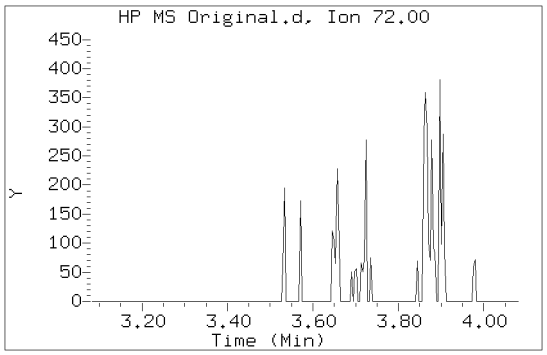
AFTER

MASS
43
AREA
2827
HEIGHT
1024
20-Jul-2023
15:04
linh
pham



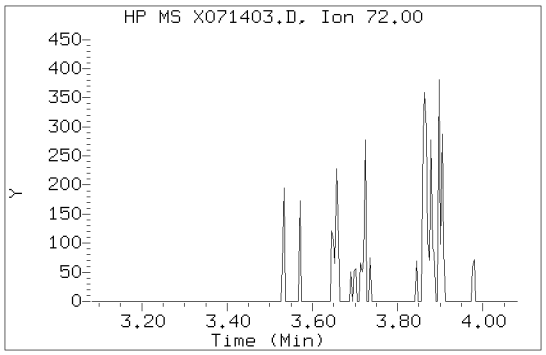
BEFORE

MASS
72
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
72
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

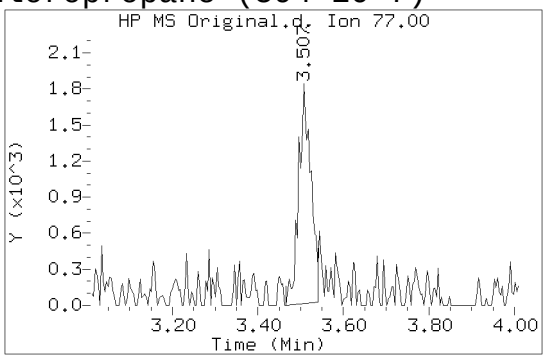


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

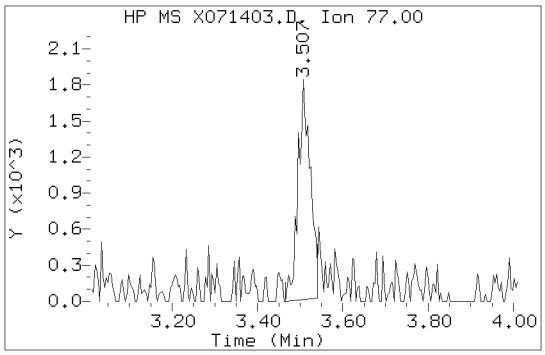
2,2-Dichloropropane (594-20-7)

Reason Code:

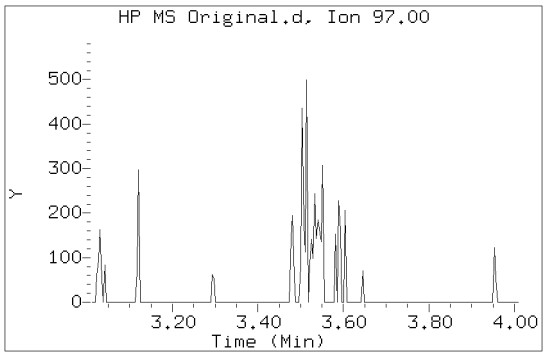
BEFORE
MASS
77
AREA
3703
HEIGHT
1829
20-Jul-2023
15:04
linh
pham



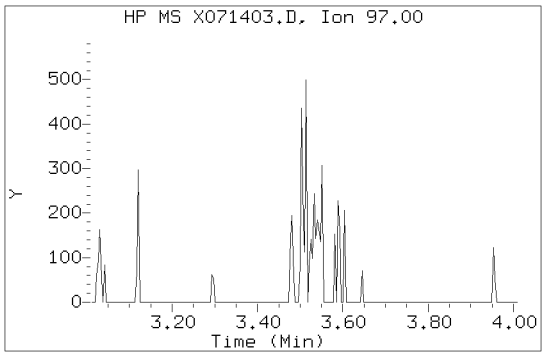
AFTER
MASS
77
AREA
3703
HEIGHT
1829
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
97
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



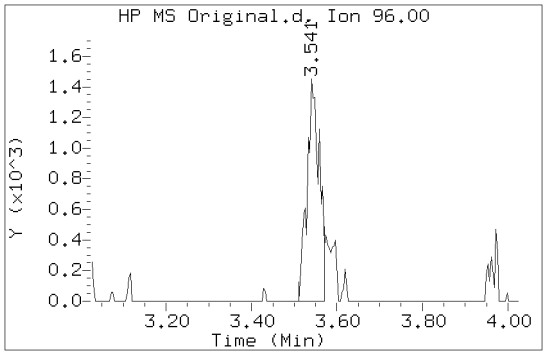
AFTER
MASS
97
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



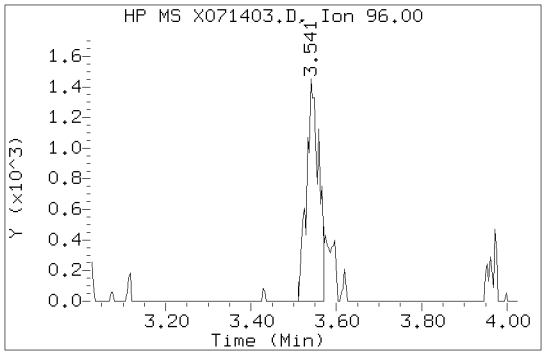
cis-1,2-Dichloroethene (156-59-2)

Reason Code:

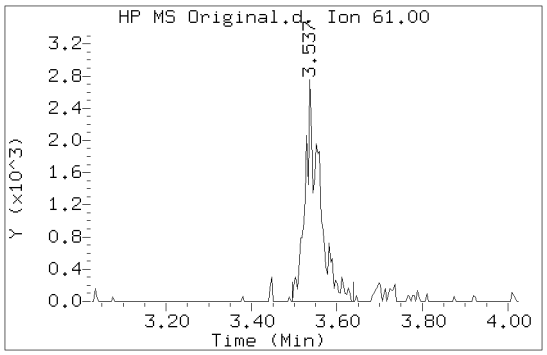
BEFORE
MASS
96
AREA
2924
HEIGHT
1452
20-Jul-2023
15:04
linh
pham



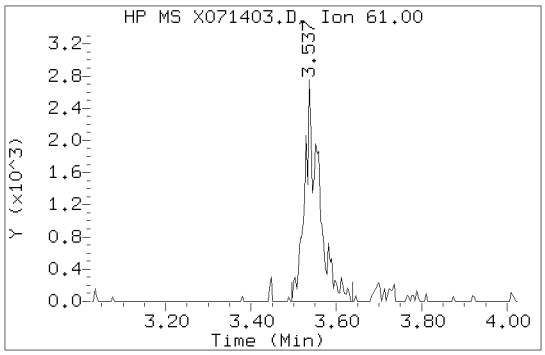
AFTER
MASS
96
AREA
2924
HEIGHT
1452
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
61
AREA
6464
HEIGHT
2755
20-Jul-2023
15:04
linh
pham



AFTER
MASS
61
AREA
6464
HEIGHT
2755
20-Jul-2023
15:04
linh
pham



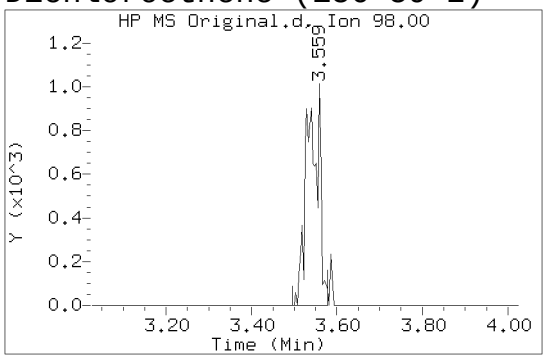
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

cis-1,2-Dichloroethene (156-59-2)

Reason Code:

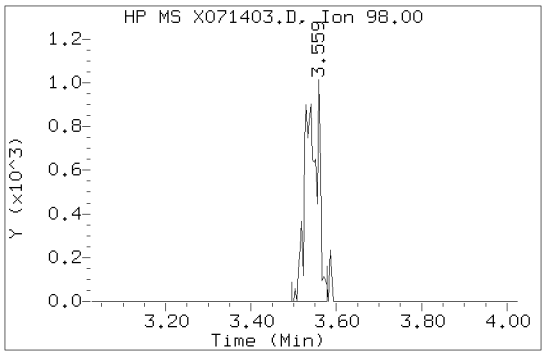
BEFORE

MASS
98
AREA
2118
HEIGHT
1014
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
AREA
2118
HEIGHT
1014
20-Jul-2023
15:04
linh
pham

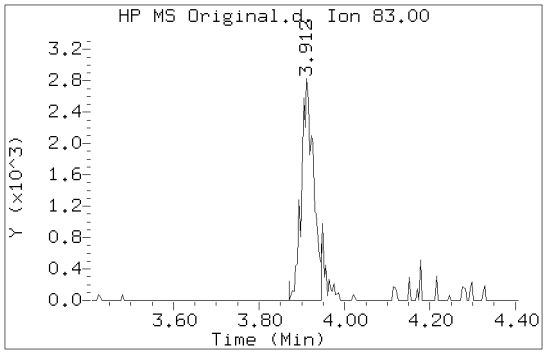


Chloroform (67-66-3)

Reason Code:

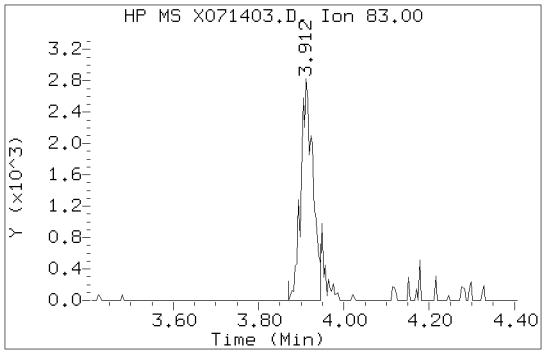
BEFORE

MASS
83
AREA
5643
HEIGHT
2826
20-Jul-2023
15:04
linh
pham



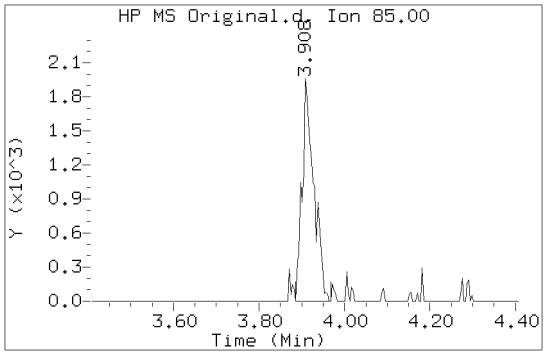
AFTER

MASS
83
AREA
5643
HEIGHT
2826
20-Jul-2023
15:04
linh
pham



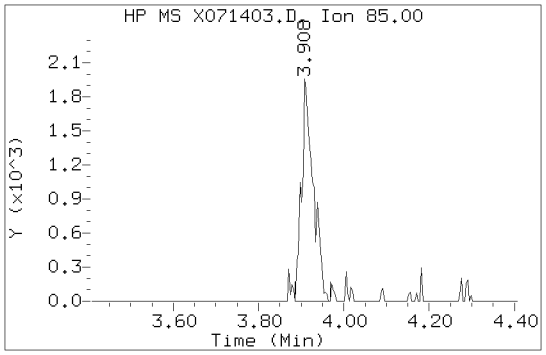
BEFORE

MASS
85
AREA
3815
HEIGHT
1958
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
3815
HEIGHT
1958
20-Jul-2023
15:04
linh
pham

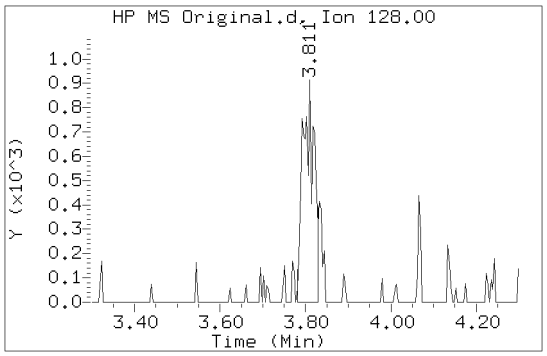


Bromochloromethane (74-97-5)

Reason Code:

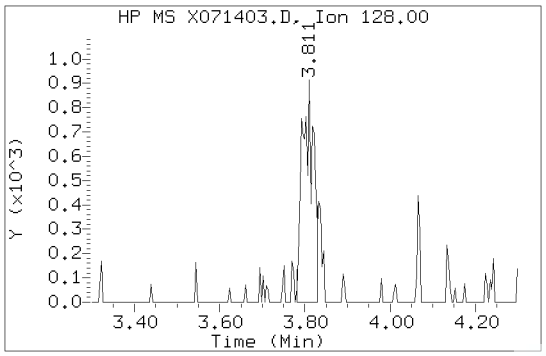
BEFORE

MASS
128
AREA
1717
HEIGHT
914
20-Jul-2023
15:04
linh
pham



AFTER

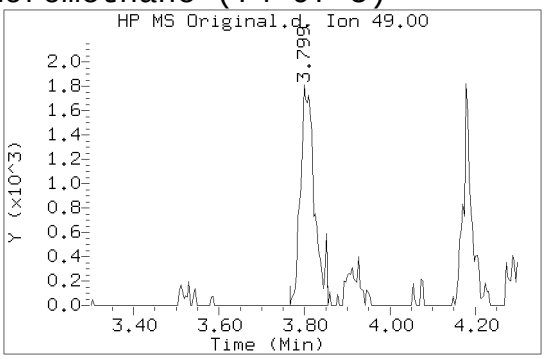
MASS
128
AREA
1717
HEIGHT
914
20-Jul-2023
15:04
linh
pham



Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

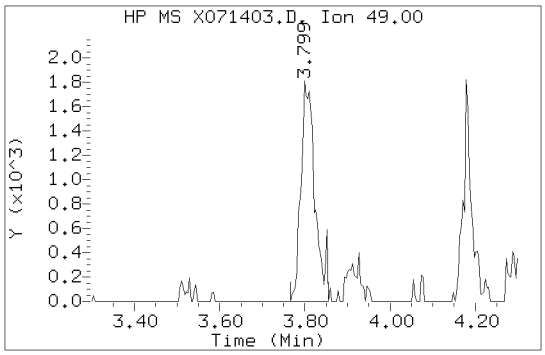
Bromochloromethane (74-97-5)

BEFORE
MASS
49
AREA
4173
HEIGHT
1811
20-Jul-2023
15:04
linh
pham

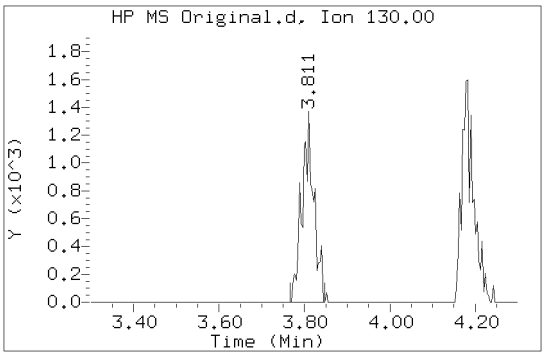


Reason Code:

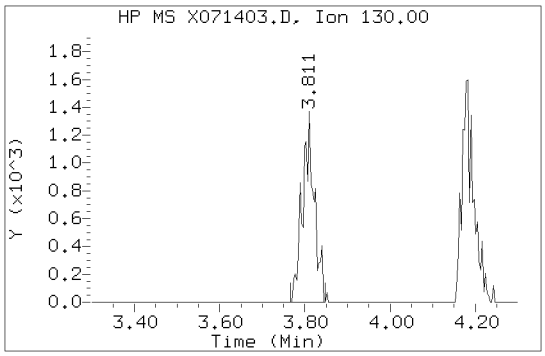
AFTER
MASS
49
AREA
4173
HEIGHT
1811
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
130
AREA
2643
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



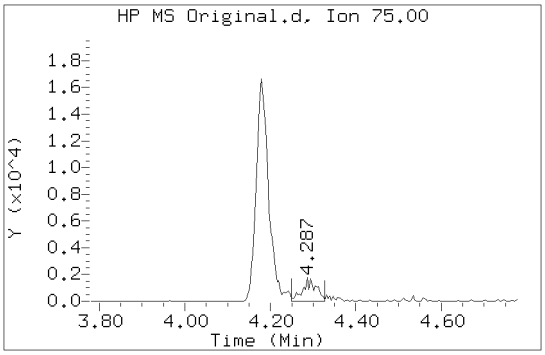
AFTER
MASS
130
AREA
2643
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



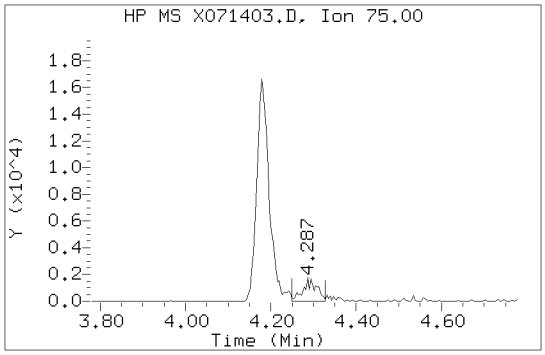
1,1-Dichloropropene (563-58-6)

Reason Code:

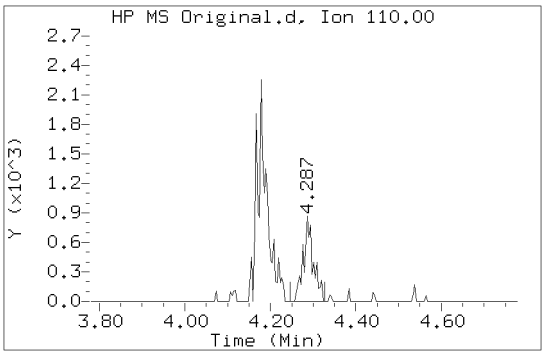
BEFORE
MASS
75
AREA
3744
HEIGHT
1770
20-Jul-2023
15:04
linh
pham



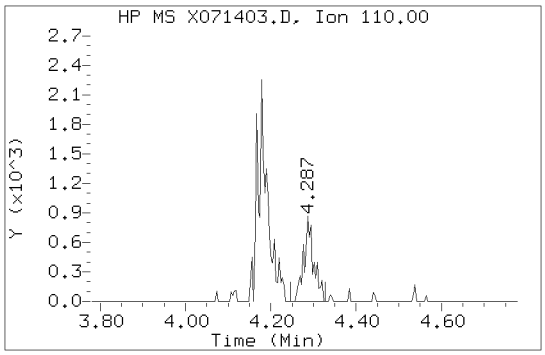
AFTER
MASS
75
AREA
3744
HEIGHT
1770
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
110
AREA
1389
HEIGHT
866
20-Jul-2023
15:04
linh
pham



AFTER
MASS
110
AREA
1389
HEIGHT
866
20-Jul-2023
15:04
linh
pham

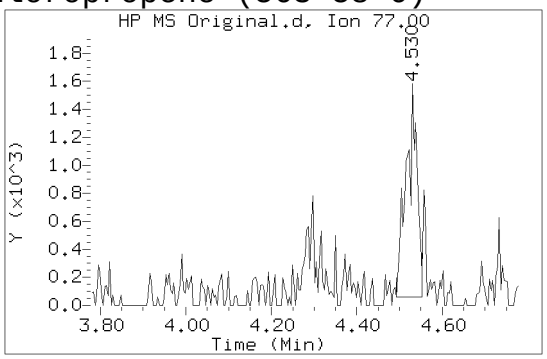


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

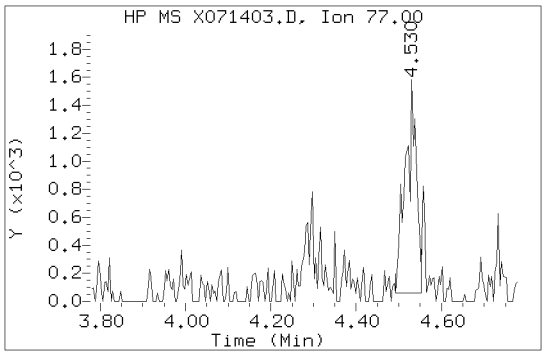
1,1-Dichloropropene (563-58-6)

Reason Code:

BEFORE
MASS
77
AREA
2714
HEIGHT
1524
20-Jul-2023
15:04
linh
pham



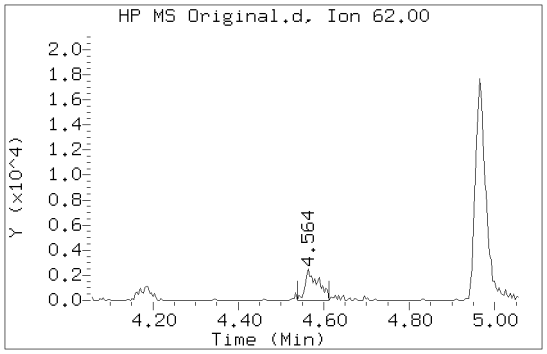
AFTER
MASS
77
AREA
2714
HEIGHT
1524
20-Jul-2023
15:04
linh
pham



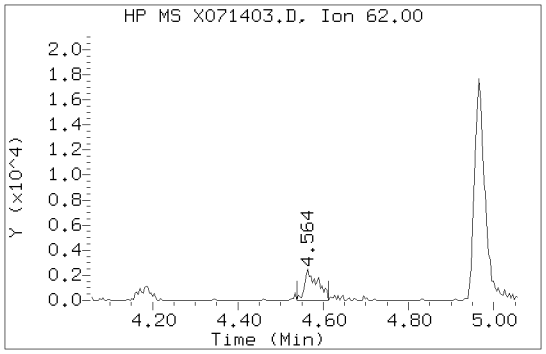
1,2-Dichloroethane (107-06-2)

Reason Code:

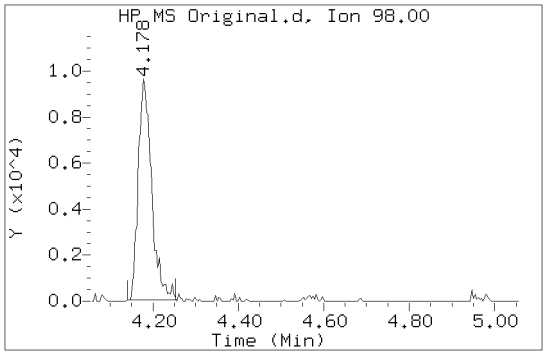
BEFORE
MASS
62
AREA
5246
HEIGHT
2498
20-Jul-2023
15:04
linh
pham



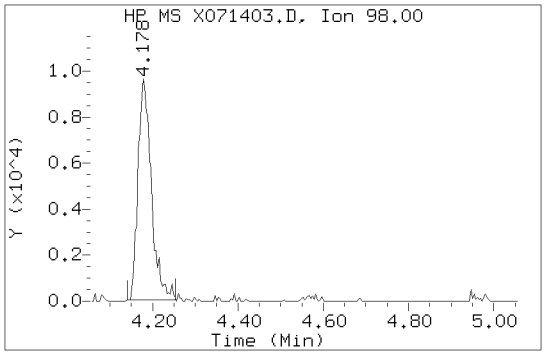
AFTER
MASS
62
AREA
5246
HEIGHT
2498
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
98
AREA
20890
HEIGHT
9608
20-Jul-2023
15:04
linh
pham



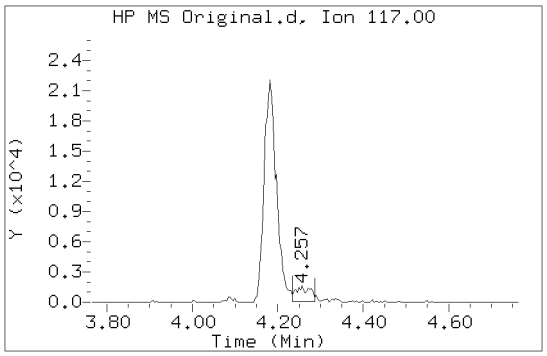
AFTER
MASS
98
AREA
20890
HEIGHT
9608
20-Jul-2023
15:04
linh
pham



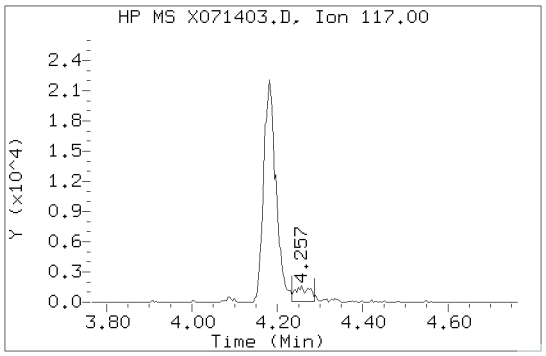
Carbon Tetrachloride (56-23-5)

Reason Code:

BEFORE
MASS
117
AREA
3613
HEIGHT
1577
20-Jul-2023
15:04
linh
pham



AFTER
MASS
117
AREA
3613
HEIGHT
1577
20-Jul-2023
15:04
linh
pham



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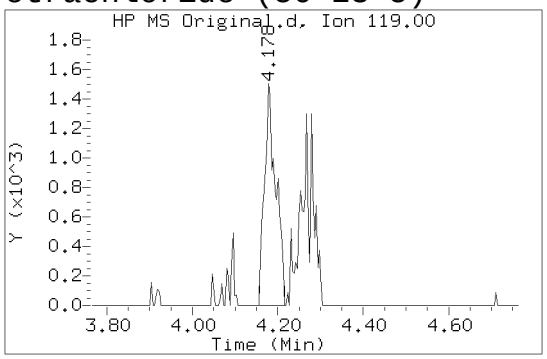
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Carbon Tetrachloride (56-23-5)

Reason Code:

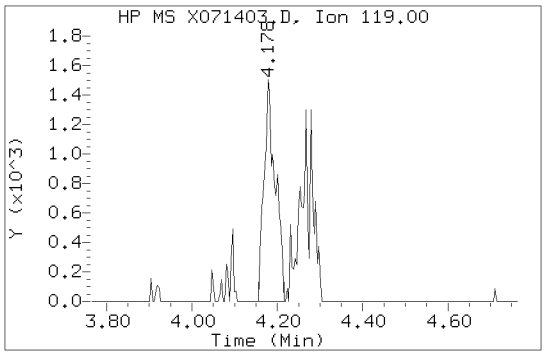
BEFORE

MASS
119
AREA
2769
HEIGHT
1504
20-Jul-2023
15:04
linh
pham



AFTER

MASS
119
AREA
2769
HEIGHT
1504
20-Jul-2023
15:04
linh
pham

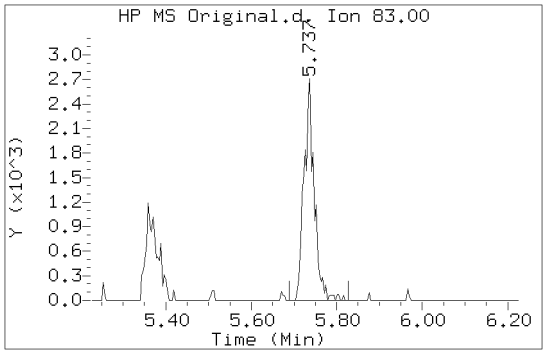


Bromodichloromethane (75-27-4)

Reason Code:

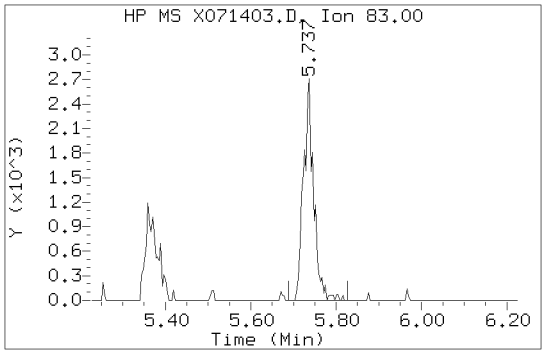
BEFORE

MASS
83
AREA
4539
HEIGHT
2709
20-Jul-2023
15:04
linh
pham



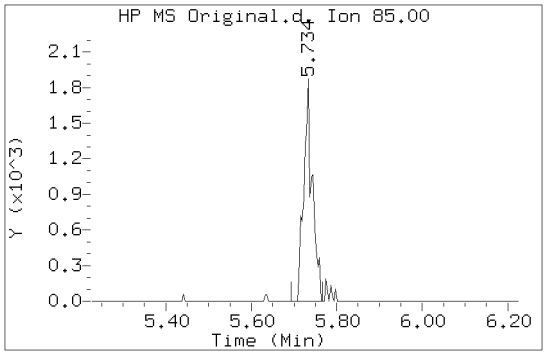
AFTER

MASS
83
AREA
4539
HEIGHT
2709
20-Jul-2023
15:04
linh
pham



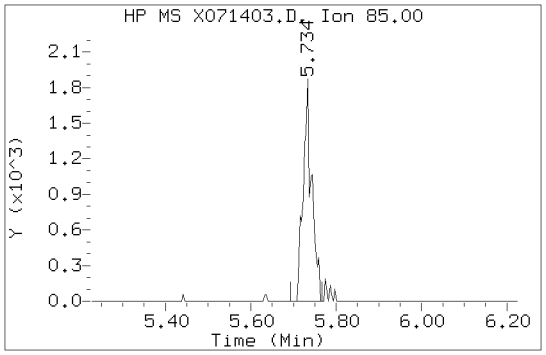
BEFORE

MASS
85
AREA
2648
HEIGHT
1873
20-Jul-2023
15:04
linh
pham



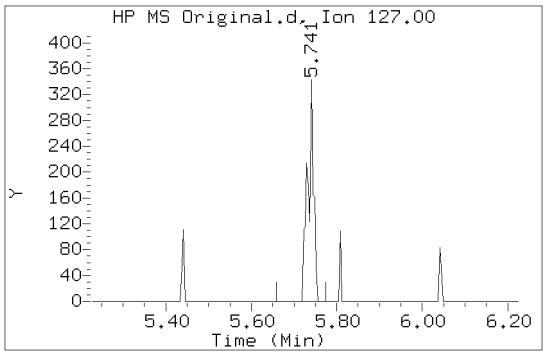
AFTER

MASS
85
AREA
2648
HEIGHT
1873
20-Jul-2023
15:04
linh
pham



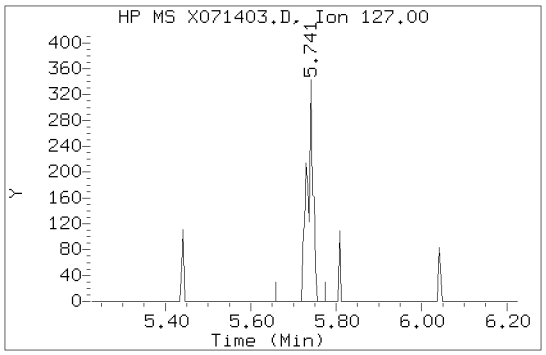
BEFORE

MASS
127
AREA
328
HEIGHT
343
20-Jul-2023
15:04
linh
pham



AFTER

MASS
127
AREA
328
HEIGHT
343
20-Jul-2023
15:04
linh
pham



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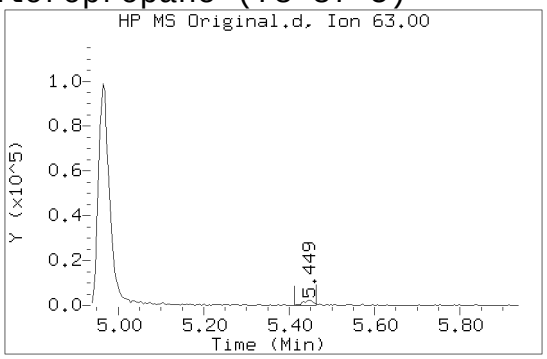
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

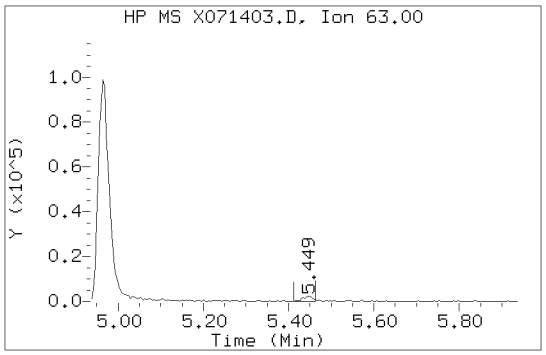
1,2-Dichloropropane (78-87-5)

Reason Code:

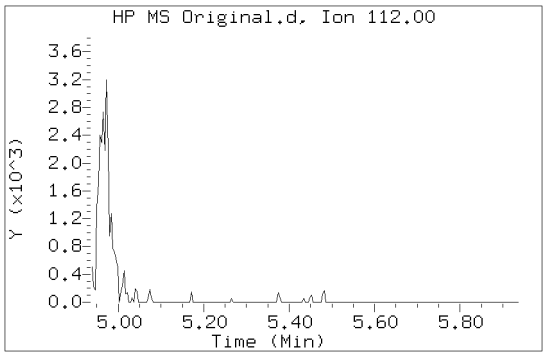
BEFORE
MASS
63
AREA
3473
HEIGHT
2209
20-Jul-2023
15:04
linh
pham



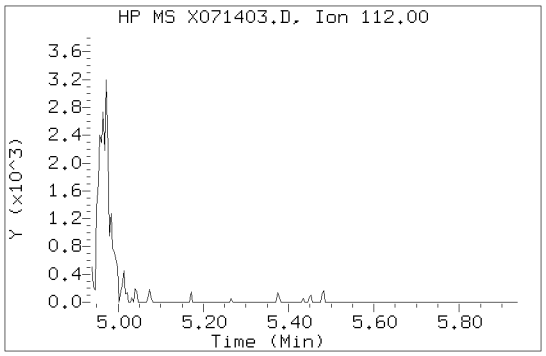
AFTER
MASS
63
AREA
3473
HEIGHT
2209
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



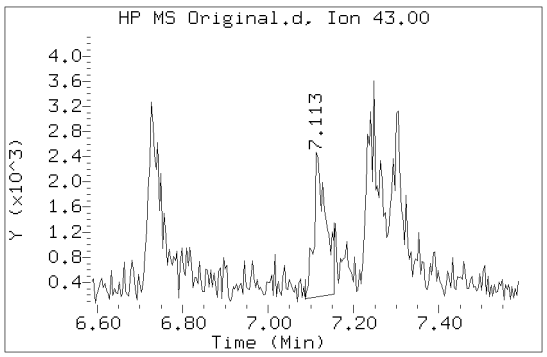
AFTER
MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



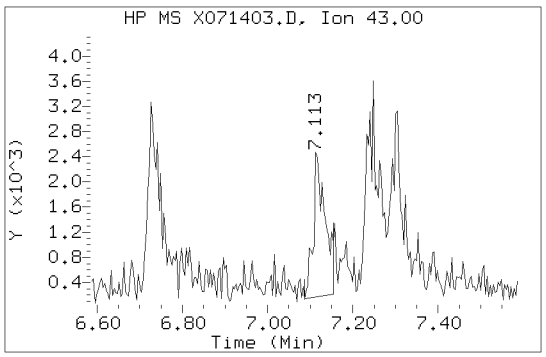
2-Hexanone (591-78-6)

Reason Code:

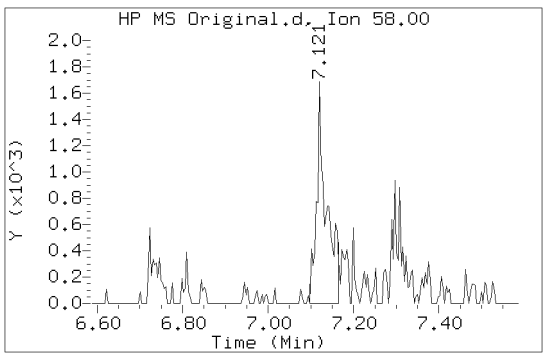
BEFORE
MASS
43
AREA
4470
HEIGHT
2301
20-Jul-2023
15:04
linh
pham



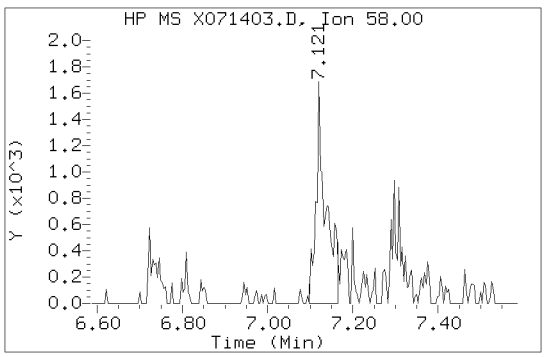
AFTER
MASS
43
AREA
4470
HEIGHT
2301
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
58
AREA
2664
HEIGHT
1687
20-Jul-2023
15:04
linh
pham



AFTER
MASS
58
AREA
2664
HEIGHT
1687
20-Jul-2023
15:04
linh
pham



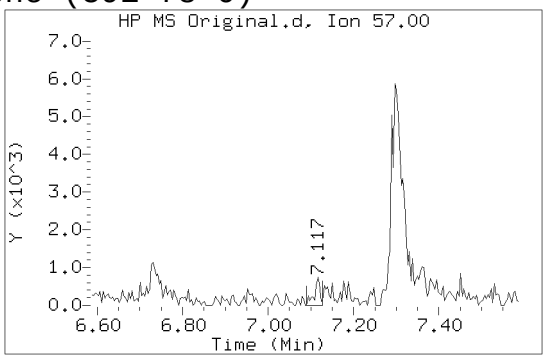
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

2-Hexanone (591-78-6)

Reason Code:

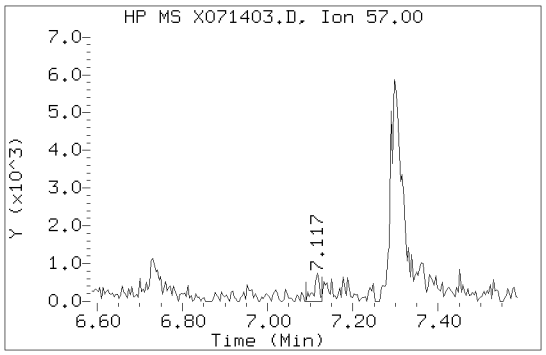
BEFORE

MASS
57
AREA
683
HEIGHT
740
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
683
HEIGHT
740
20-Jul-2023
15:04
linh
pham

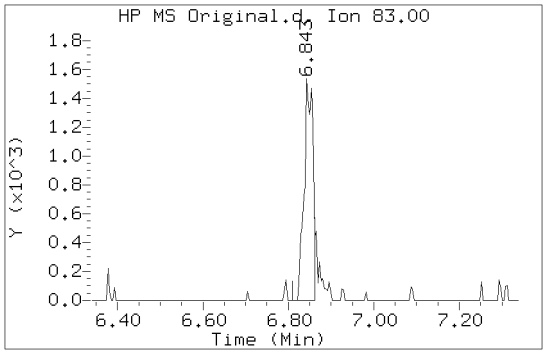


1,1,2-Trichloroethane (79-00-5)

Reason Code:

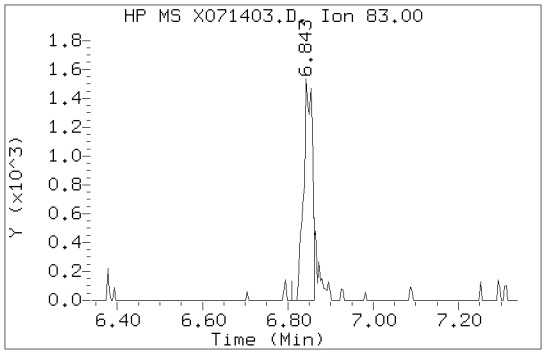
BEFORE

MASS
83
AREA
2223
HEIGHT
1536
20-Jul-2023
15:04
linh
pham



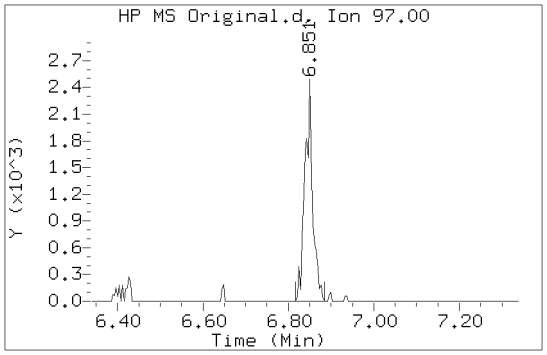
AFTER

MASS
83
AREA
2223
HEIGHT
1536
20-Jul-2023
15:04
linh
pham



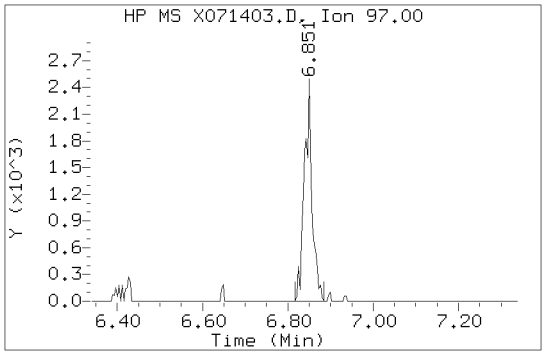
BEFORE

MASS
97
AREA
3209
HEIGHT
2495
20-Jul-2023
15:04
linh
pham



AFTER

MASS
97
AREA
3209
HEIGHT
2495
20-Jul-2023
15:04
linh
pham

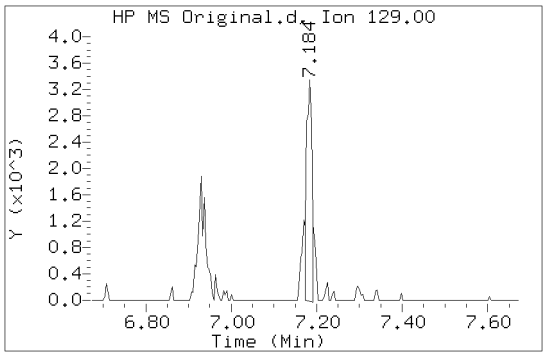


Dibromochloromethane (124-48-1)

Reason Code:

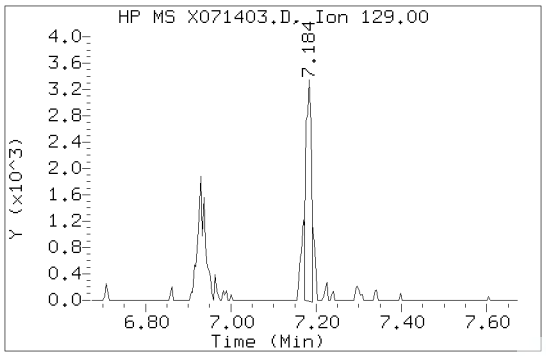
BEFORE

MASS
129
AREA
3132
HEIGHT
3366
20-Jul-2023
15:04
linh
pham



AFTER

MASS
129
AREA
3132
HEIGHT
3366
20-Jul-2023
15:04
linh
pham



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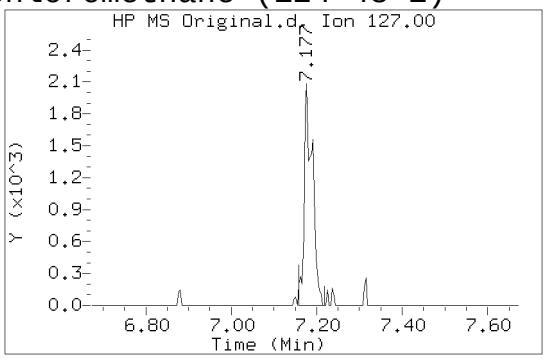
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

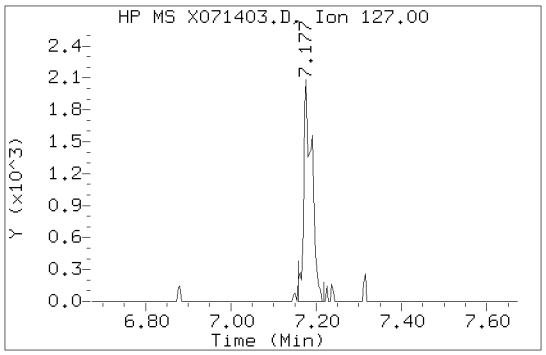
Dibromochloromethane (124-48-1)

Reason Code:

BEFORE
MASS
127
AREA
2854
HEIGHT
2083
20-Jul-2023
15:04
linh
pham



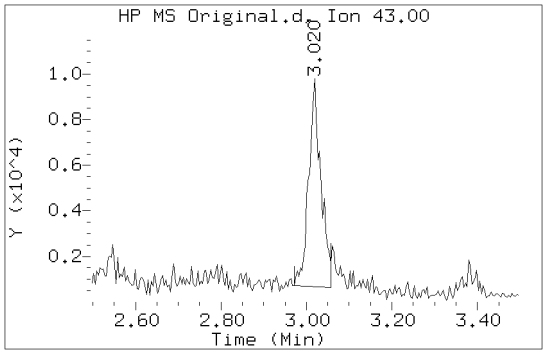
AFTER
MASS
127
AREA
2854
HEIGHT
2083
20-Jul-2023
15:04
linh
pham



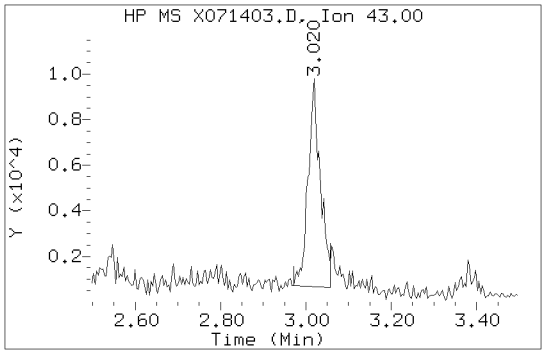
Vinyl Acetate (108-05-4)

Reason Code:

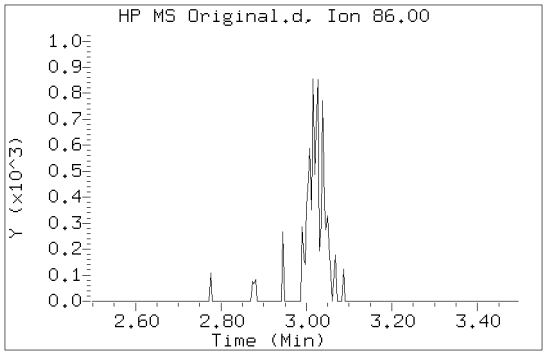
BEFORE
MASS
43
AREA
18224
HEIGHT
9126
20-Jul-2023
15:04
linh
pham



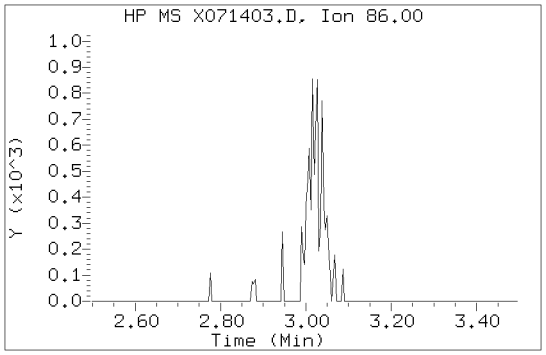
AFTER
MASS
43
AREA
18224
HEIGHT
9126
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
86
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



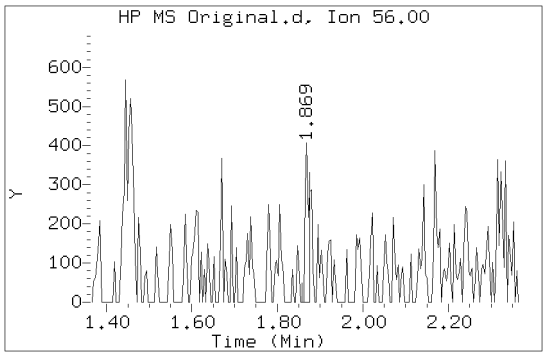
AFTER
MASS
86
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



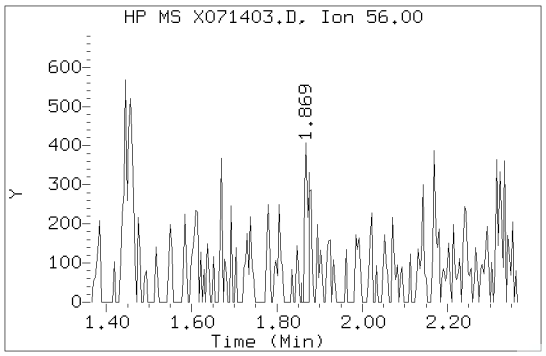
Acrolein (107-02-8)

Reason Code:

BEFORE
MASS
56
AREA
268
HEIGHT
407
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
AREA
268
HEIGHT
407
20-Jul-2023
15:04
linh
pham



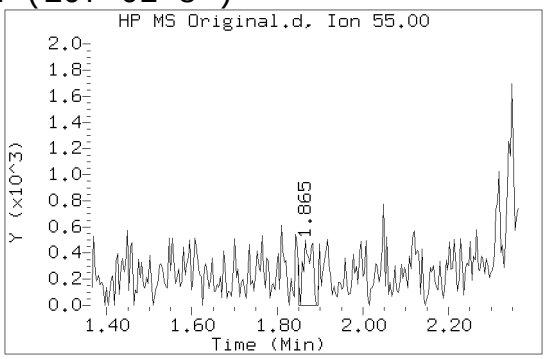
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Acrolein (107-02-8)

Reason Code:

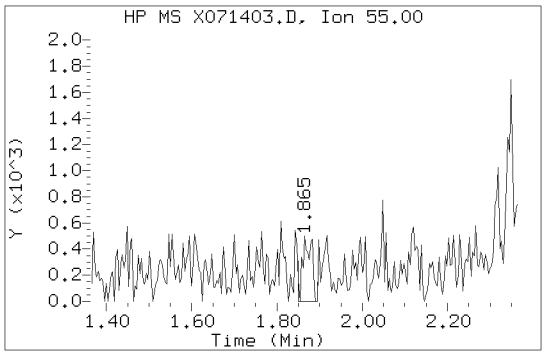
BEFORE

MASS
55
AREA
759
HEIGHT
500
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
759
HEIGHT
500
20-Jul-2023
15:04
linh
pham

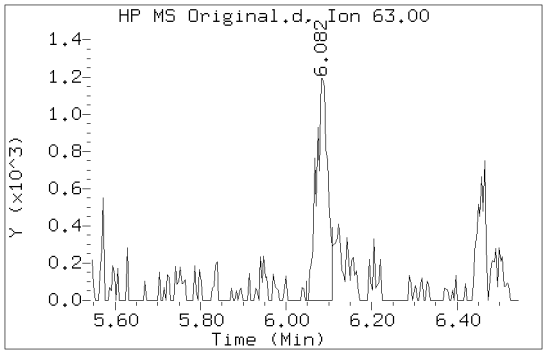


2-Chloroethylvinyl ether (110-75-8)

Reason Code:

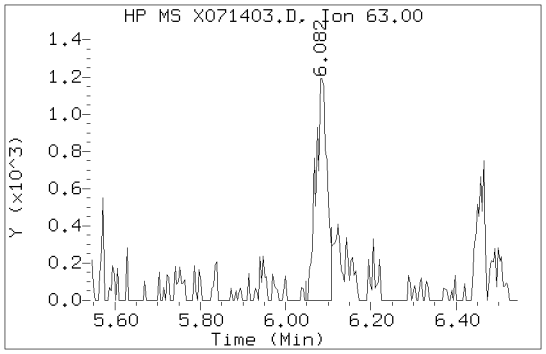
BEFORE

MASS
63
AREA
2206
HEIGHT
1191
20-Jul-2023
15:04
linh
pham



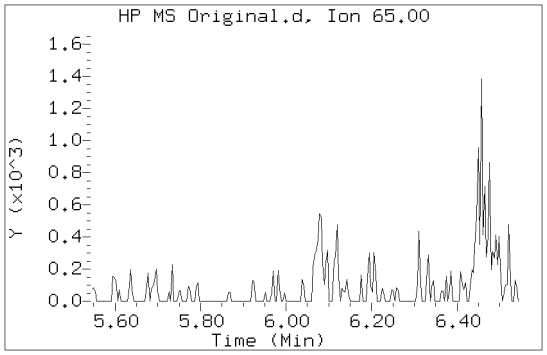
AFTER

MASS
63
AREA
2206
HEIGHT
1191
20-Jul-2023
15:04
linh
pham



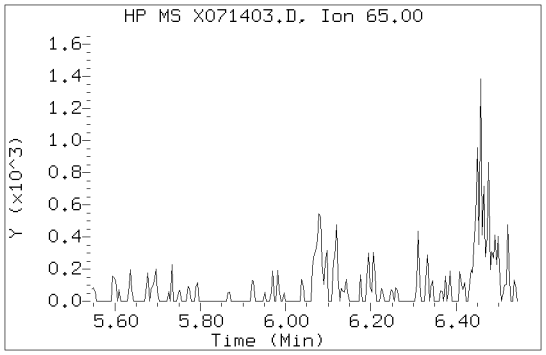
BEFORE

MASS
65
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



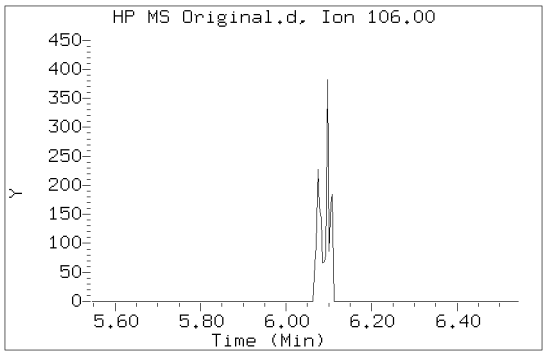
AFTER

MASS
65
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



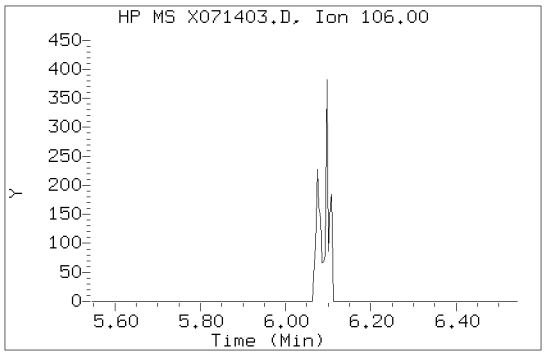
BEFORE

MASS
106
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
106
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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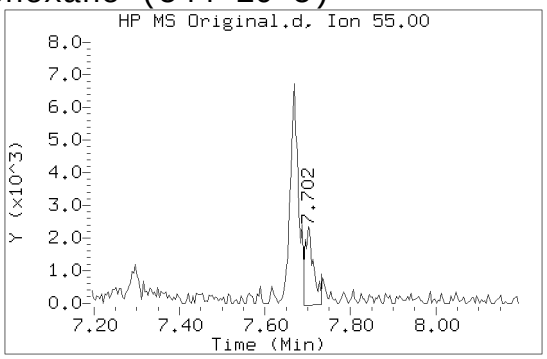
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1-Chlorohexane (544-10-5)

Reason Code:

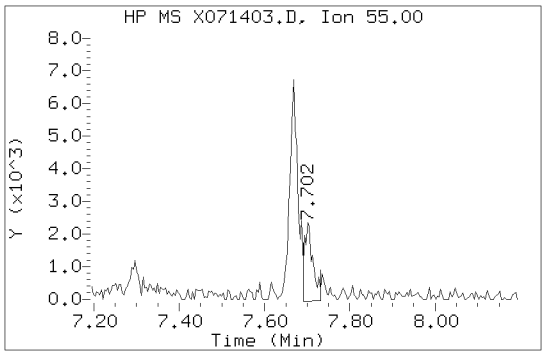
BEFORE

MASS
55
AREA
3459
HEIGHT
2414
20-Jul-2023
15:04
linh
pham



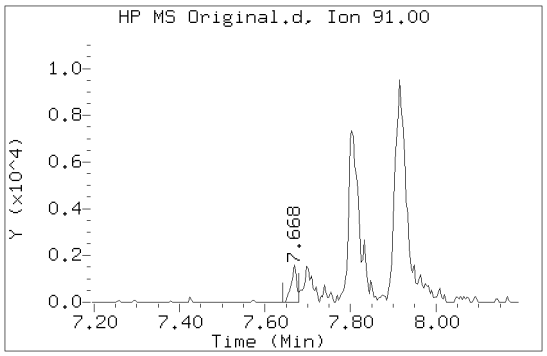
AFTER

MASS
55
AREA
3459
HEIGHT
2414
20-Jul-2023
15:04
linh
pham



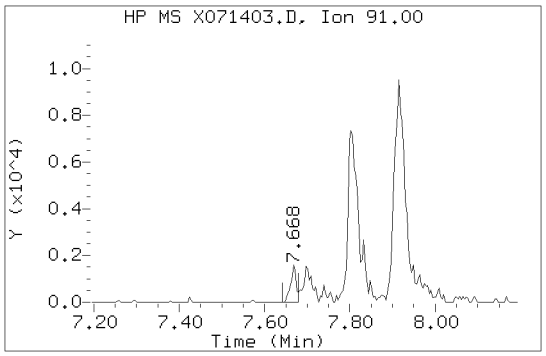
BEFORE

MASS
91
AREA
1435
HEIGHT
1592
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
1435
HEIGHT
1592
20-Jul-2023
15:04
linh
pham

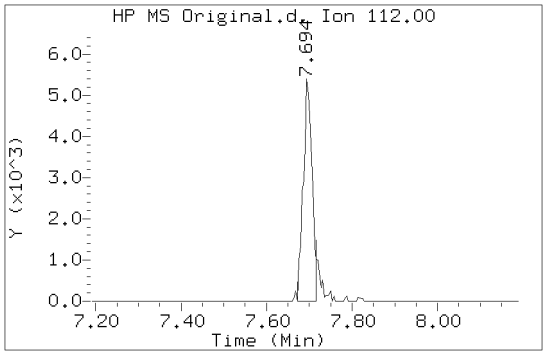


Chlorobenzene (108-90-7)

Reason Code:

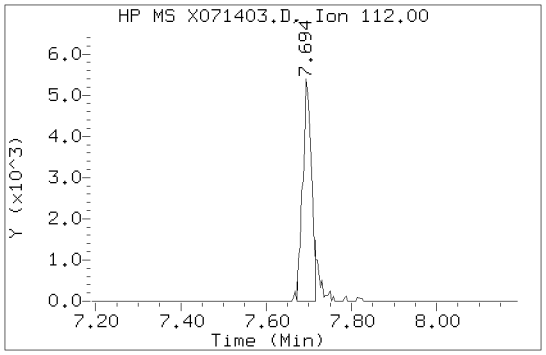
BEFORE

MASS
112
AREA
7907
HEIGHT
5398
20-Jul-2023
15:04
linh
pham



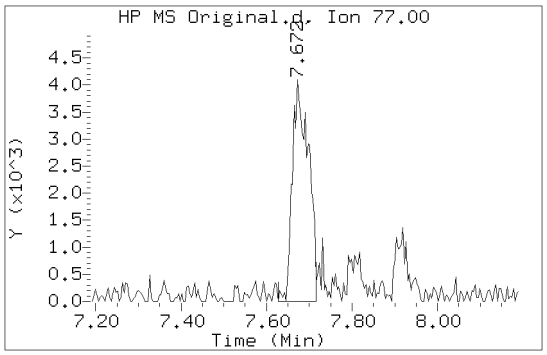
AFTER

MASS
112
AREA
7907
HEIGHT
5398
20-Jul-2023
15:04
linh
pham



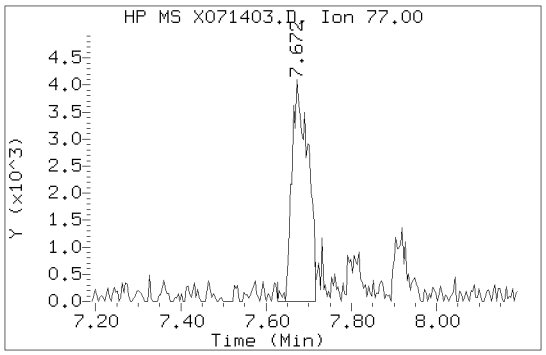
BEFORE

MASS
77
AREA
10872
HEIGHT
4098
20-Jul-2023
15:04
linh
pham



AFTER

MASS
77
AREA
10872
HEIGHT
4098
20-Jul-2023
15:04
linh
pham



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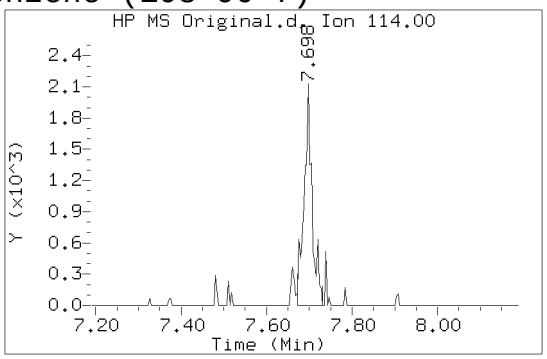
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Chlorobenzene (108-90-7)

Reason Code:

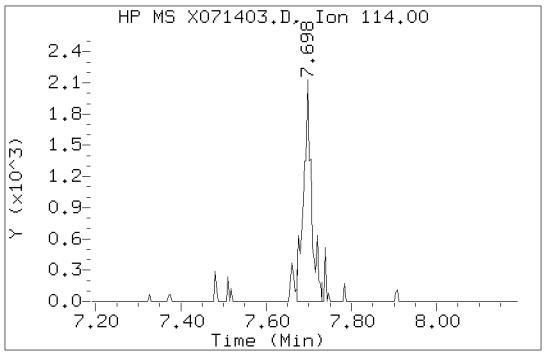
BEFORE

MASS
114
AREA
2819
HEIGHT
2130
20-Jul-2023
15:04
linh
pham



AFTER

MASS
114
AREA
2819
HEIGHT
2130
20-Jul-2023
15:04
linh
pham

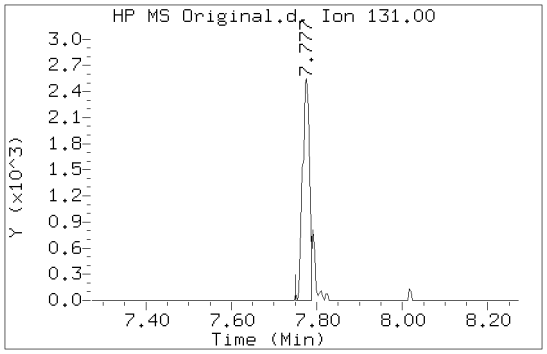


1,1,1,2-Tetrachloroethane (630-20-6)

Reason Code:

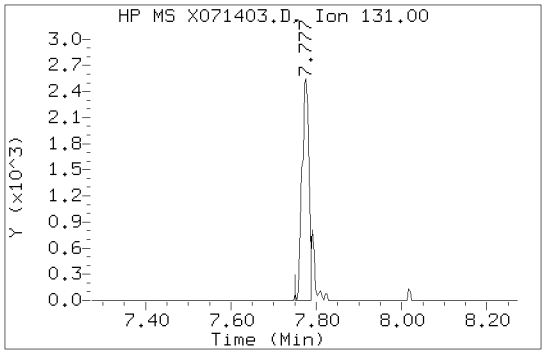
BEFORE

MASS
131
AREA
3008
HEIGHT
2547
20-Jul-2023
15:04
linh
pham



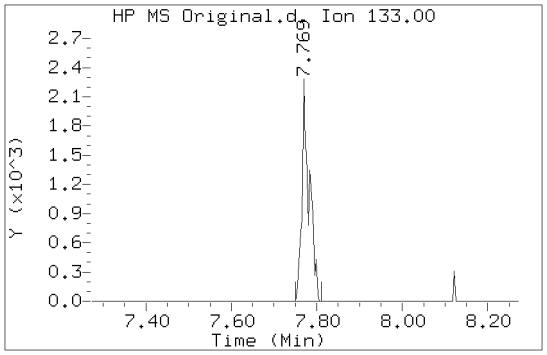
AFTER

MASS
131
AREA
3008
HEIGHT
2547
20-Jul-2023
15:04
linh
pham



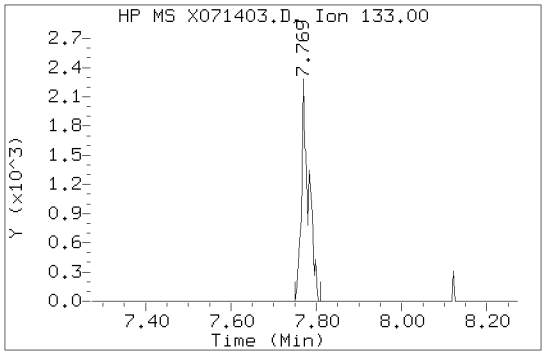
BEFORE

MASS
133
AREA
2774
HEIGHT
2284
20-Jul-2023
15:04
linh
pham



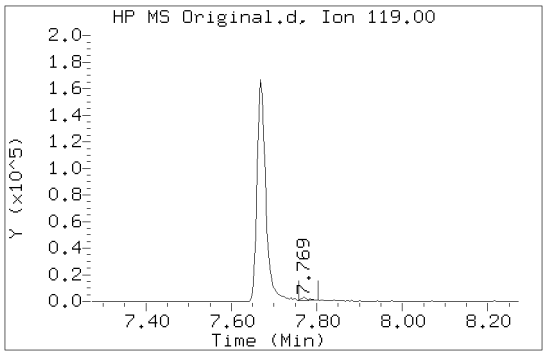
AFTER

MASS
133
AREA
2774
HEIGHT
2284
20-Jul-2023
15:04
linh
pham



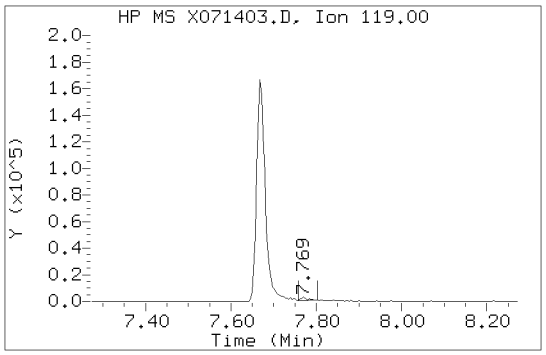
BEFORE

MASS
119
AREA
2799
HEIGHT
2519
20-Jul-2023
15:04
linh
pham



AFTER

MASS
119
AREA
2799
HEIGHT
2519
20-Jul-2023
15:04
linh
pham



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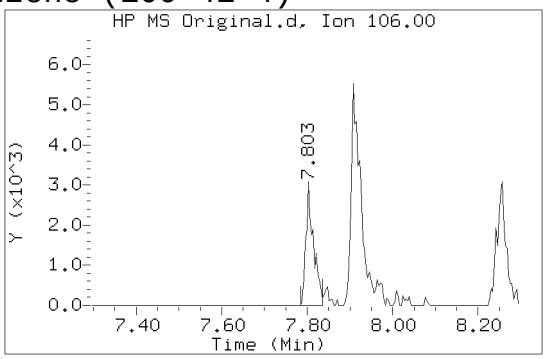
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Ethylbenzene (100-41-4)

Reason Code:

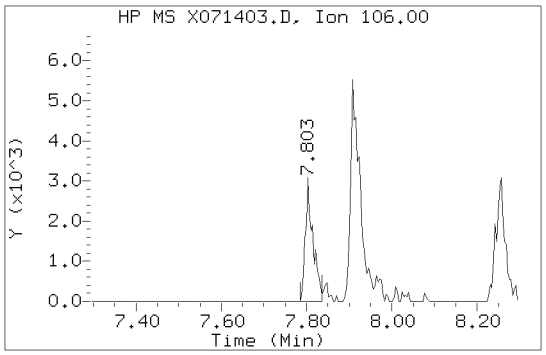
BEFORE

MASS
106
AREA
3909
HEIGHT
3078
20-Jul-2023
15:04
linh
pham



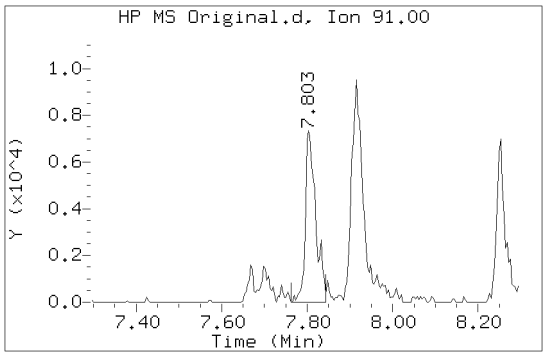
AFTER

MASS
106
AREA
3909
HEIGHT
3078
20-Jul-2023
15:04
linh
pham



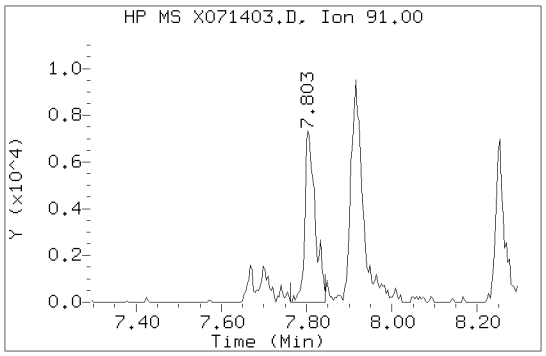
BEFORE

MASS
91
AREA
12659
HEIGHT
7347
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
12659
HEIGHT
7347
20-Jul-2023
15:04
linh
pham

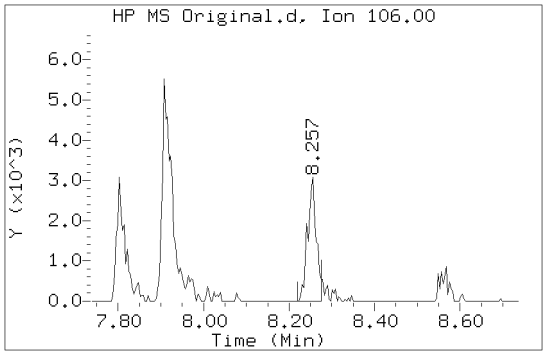


o-Xylene (95-47-6)

Reason Code:

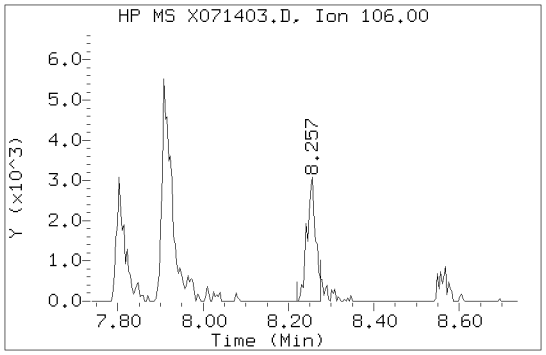
BEFORE

MASS
106
AREA
4414
HEIGHT
3089
20-Jul-2023
15:04
linh
pham



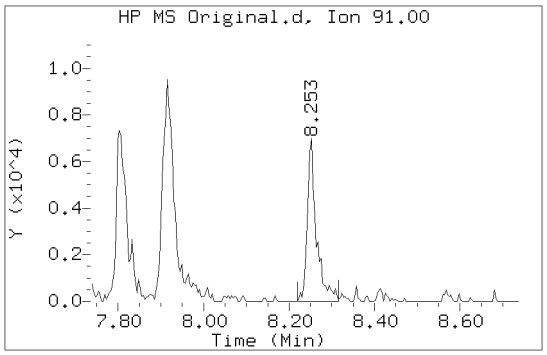
AFTER

MASS
106
AREA
4414
HEIGHT
3089
20-Jul-2023
15:04
linh
pham



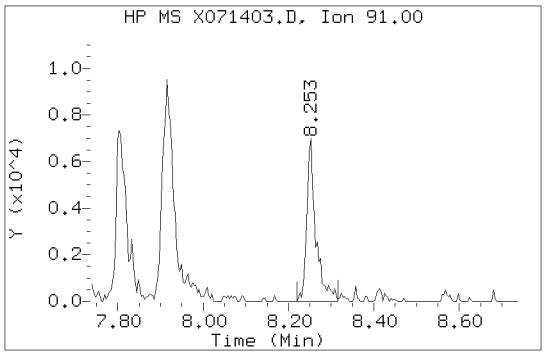
BEFORE

MASS
91
AREA
10415
HEIGHT
7000
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
10415
HEIGHT
7000
20-Jul-2023
15:04
linh
pham

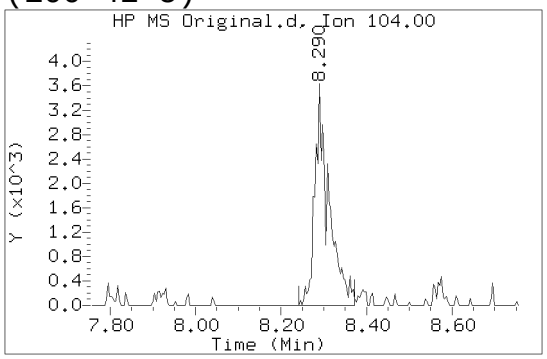


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

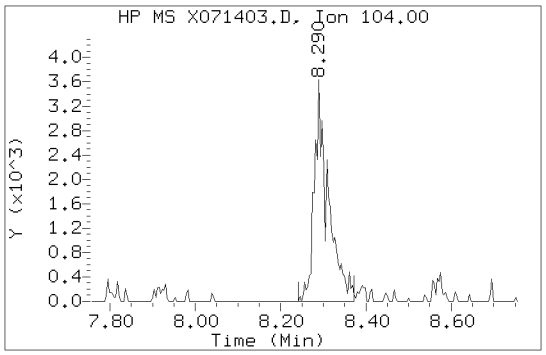
Styrene (100-42-5)

Reason Code:

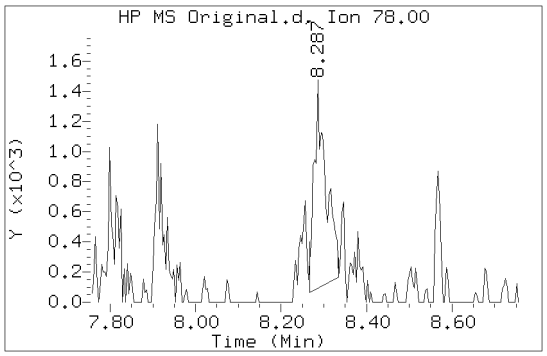
BEFORE
MASS
104
AREA
8133
HEIGHT
3635
20-Jul-2023
15:04
linh
pham



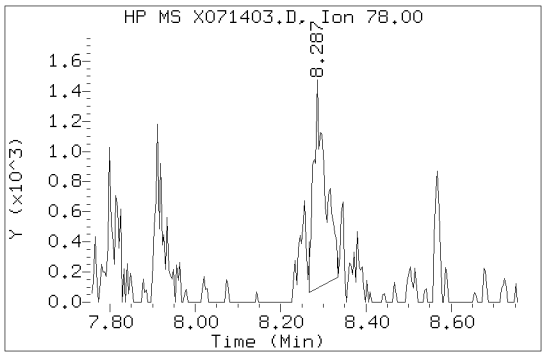
AFTER
MASS
104
AREA
8133
HEIGHT
3635
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
78
AREA
2633
HEIGHT
1381
20-Jul-2023
15:04
linh
pham



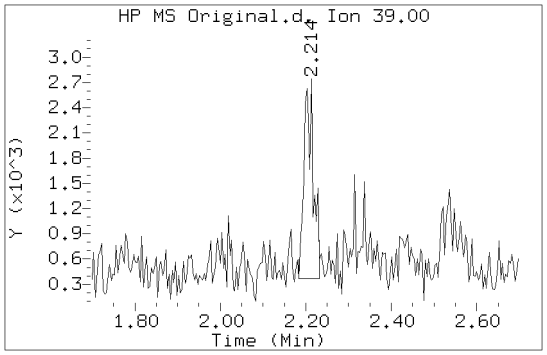
AFTER
MASS
78
AREA
2633
HEIGHT
1381
20-Jul-2023
15:04
linh
pham



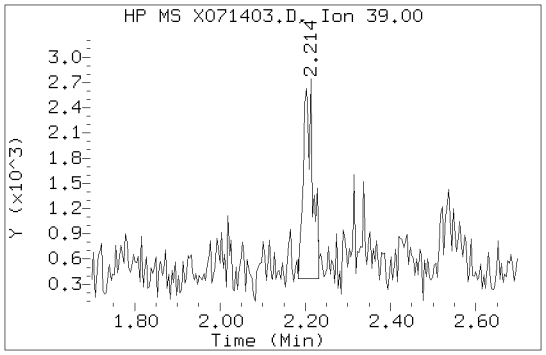
Acetonitrile (75-05-8)

Reason Code:

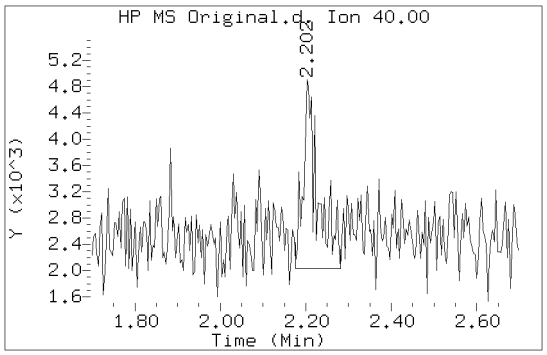
BEFORE
MASS
39
AREA
3606
HEIGHT
2378
20-Jul-2023
15:04
linh
pham



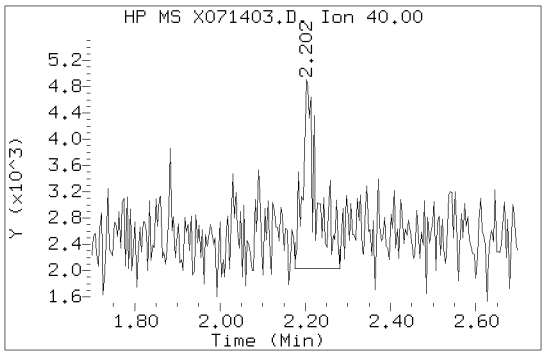
AFTER
MASS
39
AREA
3606
HEIGHT
2378
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
40
AREA
6842
HEIGHT
2874
20-Jul-2023
15:04
linh
pham



AFTER
MASS
40
AREA
6842
HEIGHT
2874
20-Jul-2023
15:04
linh
pham



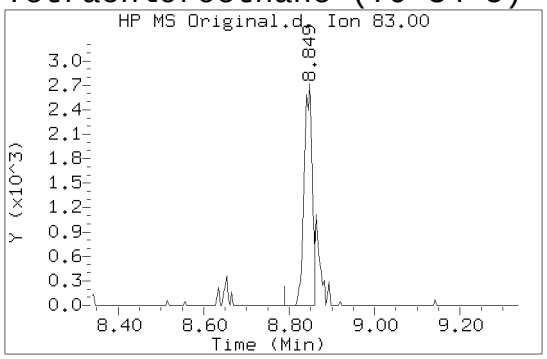
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

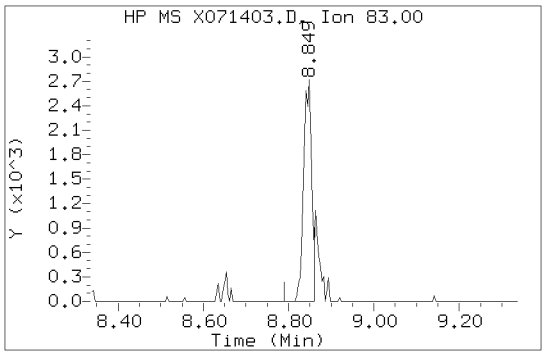
BEFORE

MASS
83
AREA
3654
HEIGHT
2720
20-Jul-2023
15:04
linh
pham



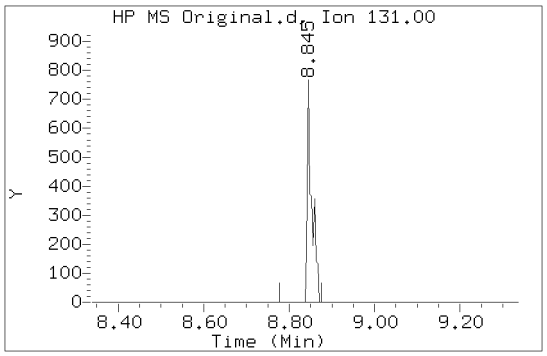
AFTER

MASS
83
AREA
3654
HEIGHT
2720
20-Jul-2023
15:04
linh
pham



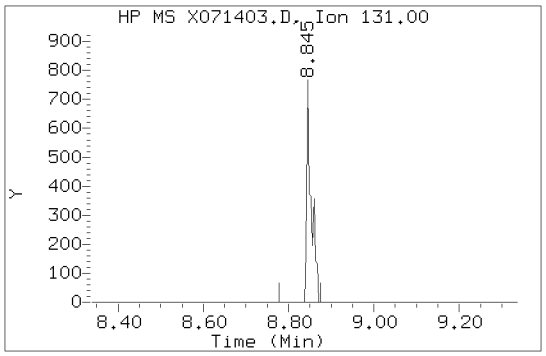
BEFORE

MASS
131
AREA
565
HEIGHT
767
20-Jul-2023
15:04
linh
pham



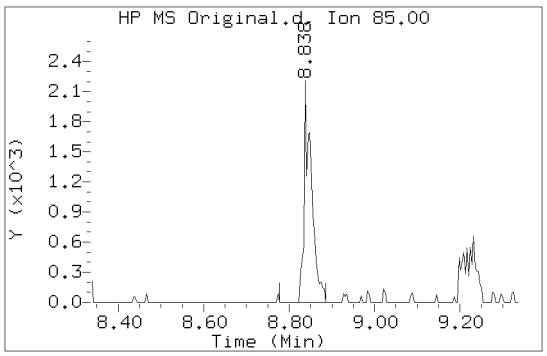
AFTER

MASS
131
AREA
565
HEIGHT
767
20-Jul-2023
15:04
linh
pham



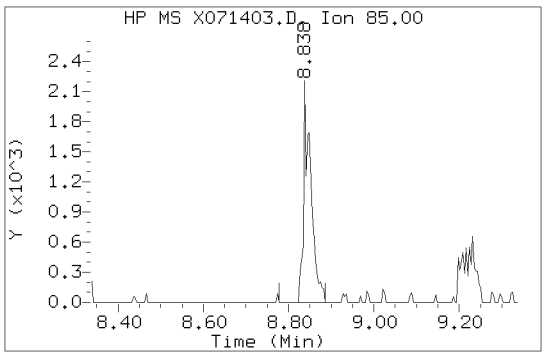
BEFORE

MASS
85
AREA
2735
HEIGHT
2209
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
2735
HEIGHT
2209
20-Jul-2023
15:04
linh
pham

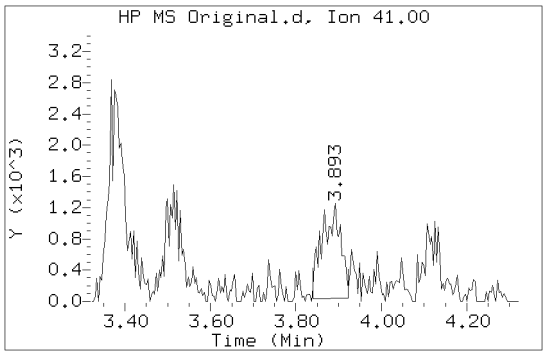


Methacrylonitrile (126-98-7)

Reason Code:

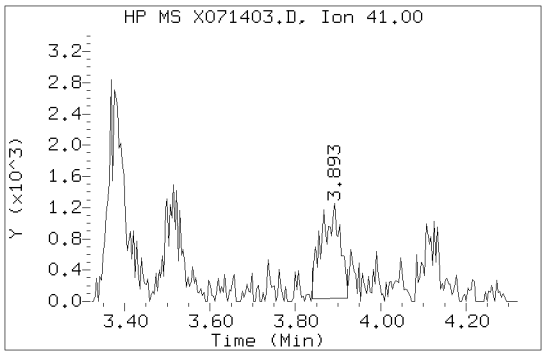
BEFORE

MASS
41
AREA
3622
HEIGHT
1212
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
3622
HEIGHT
1212
20-Jul-2023
15:04
linh
pham



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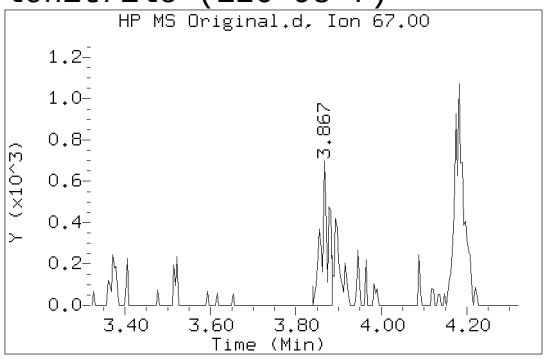
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

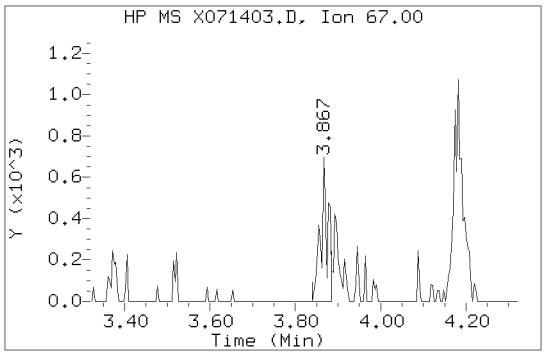
Methacrylonitrile (126-98-7)

Reason Code:

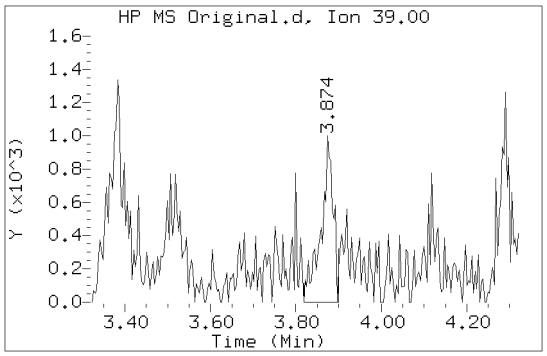
BEFORE
MASS
67
AREA
806
HEIGHT
697
20-Jul-2023
15:04
linh
pham



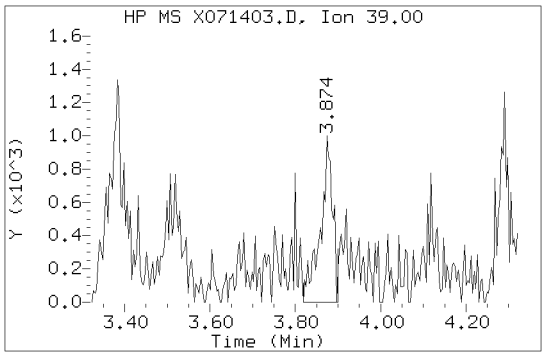
AFTER
MASS
67
AREA
806
HEIGHT
697
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
39
AREA
1986
HEIGHT
1000
20-Jul-2023
15:04
linh
pham



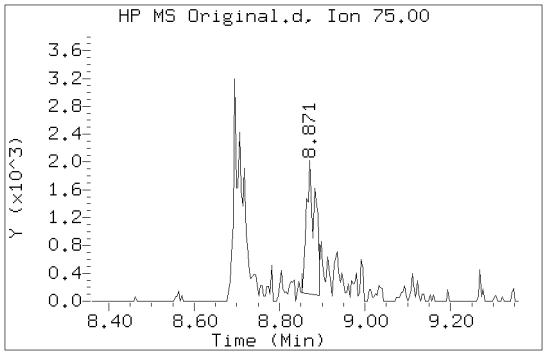
AFTER
MASS
39
AREA
1986
HEIGHT
1000
20-Jul-2023
15:04
linh
pham



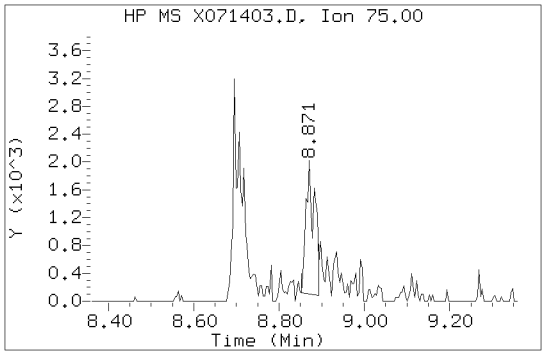
1,2,3-Trichloropropane (96-18-4)

Reason Code:

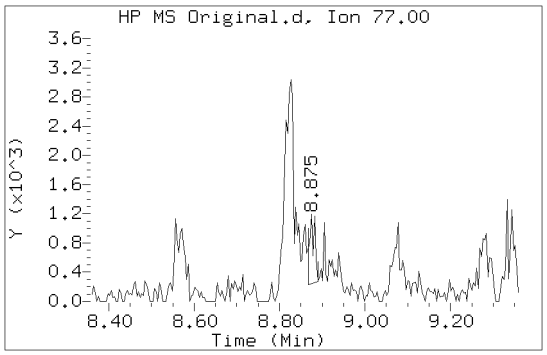
BEFORE
MASS
75
AREA
2737
HEIGHT
1922
20-Jul-2023
15:04
linh
pham



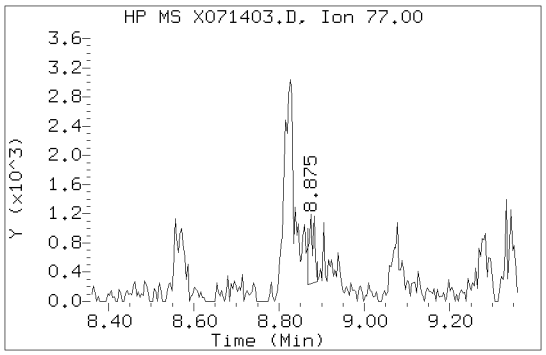
AFTER
MASS
75
AREA
2737
HEIGHT
1922
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
77
AREA
813
HEIGHT
948
20-Jul-2023
15:04
linh
pham



AFTER
MASS
77
AREA
813
HEIGHT
948
20-Jul-2023
15:04
linh
pham



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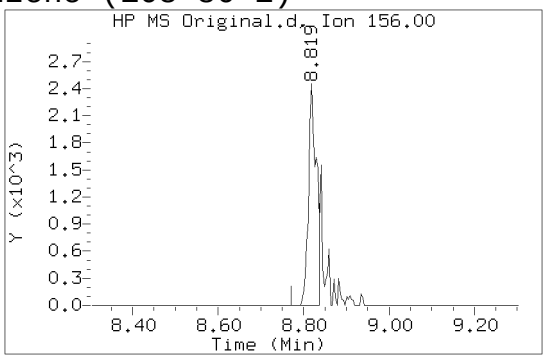
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

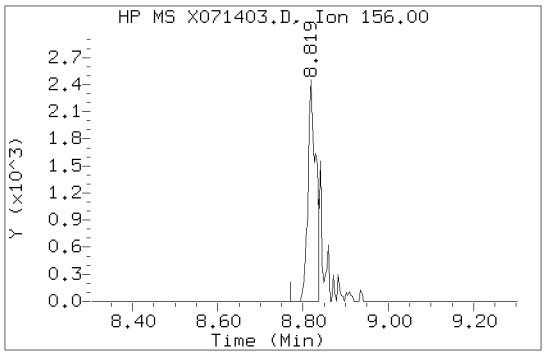
Bromobenzene (108-86-1)

Reason Code:

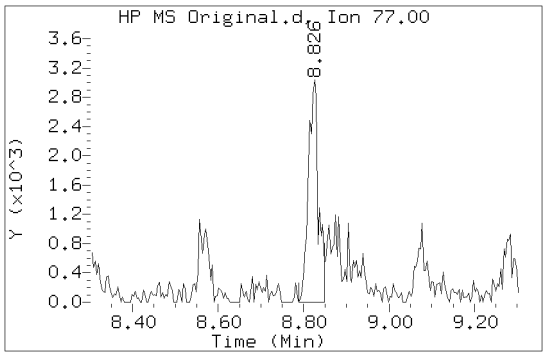
BEFORE
MASS
156
AREA
3201
HEIGHT
2455
20-Jul-2023
15:04
linh
pham



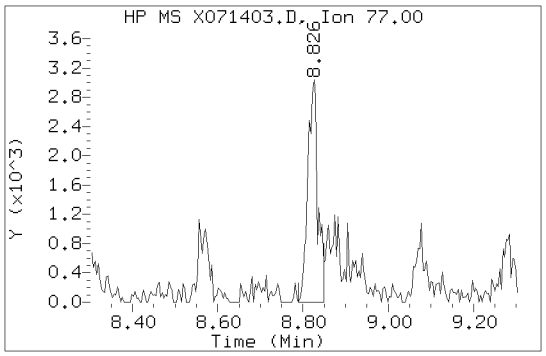
AFTER
MASS
156
AREA
3201
HEIGHT
2455
20-Jul-2023
15:04
linh
pham



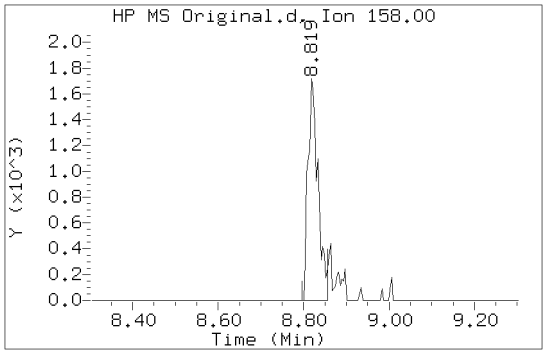
BEFORE
MASS
77
AREA
5003
HEIGHT
3037
20-Jul-2023
15:04
linh
pham



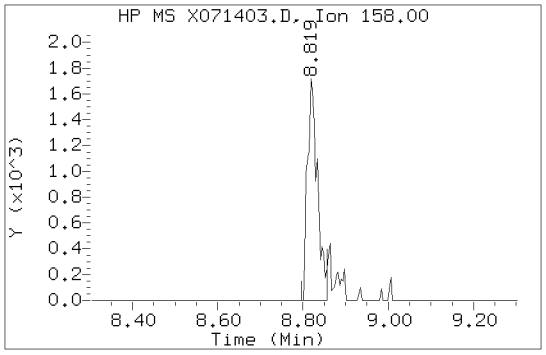
AFTER
MASS
77
AREA
5003
HEIGHT
3037
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
158
AREA
2823
HEIGHT
1718
20-Jul-2023
15:04
linh
pham



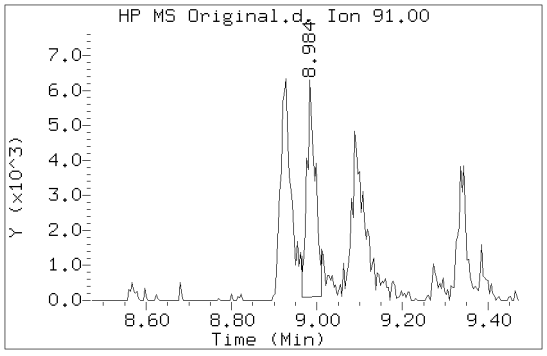
AFTER
MASS
158
AREA
2823
HEIGHT
1718
20-Jul-2023
15:04
linh
pham



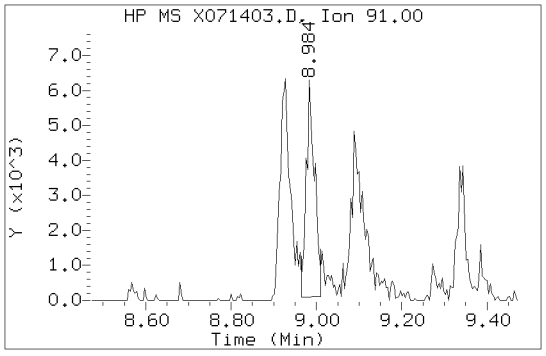
2-Chlorotoluene (95-49-8)

Reason Code:

BEFORE
MASS
91
AREA
8487
HEIGHT
6195
20-Jul-2023
15:04
linh
pham



AFTER
MASS
91
AREA
8487
HEIGHT
6195
20-Jul-2023
15:04
linh
pham



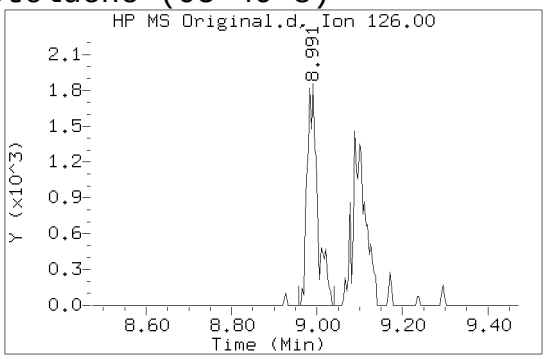
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

2-Chlorotoluene (95-49-8)

Reason Code:

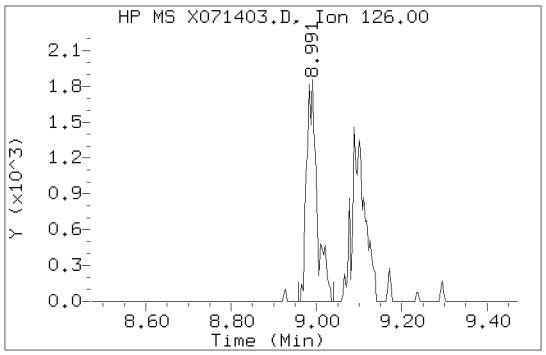
BEFORE

MASS
126
AREA
3192
HEIGHT
1856
20-Jul-2023
15:04
linh
pham



AFTER

MASS
126
AREA
3192
HEIGHT
1856
20-Jul-2023
15:04
linh
pham

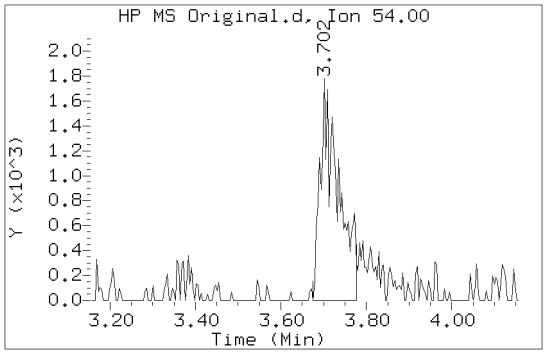


Propionitrile (107-12-0)

Reason Code:

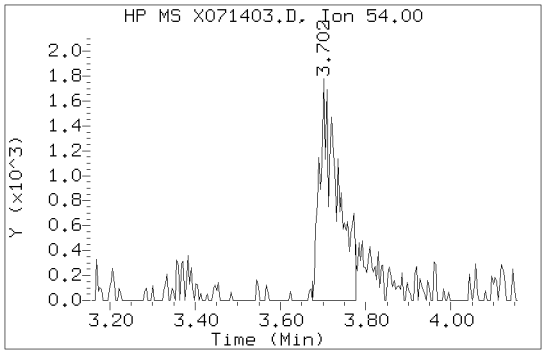
BEFORE

MASS
54
AREA
5231
HEIGHT
1779
20-Jul-2023
15:04
linh
pham



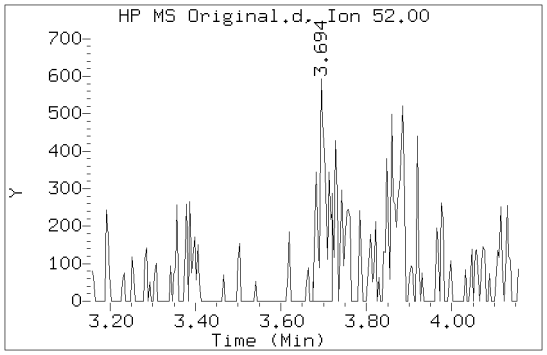
AFTER

MASS
54
AREA
5231
HEIGHT
1779
20-Jul-2023
15:04
linh
pham



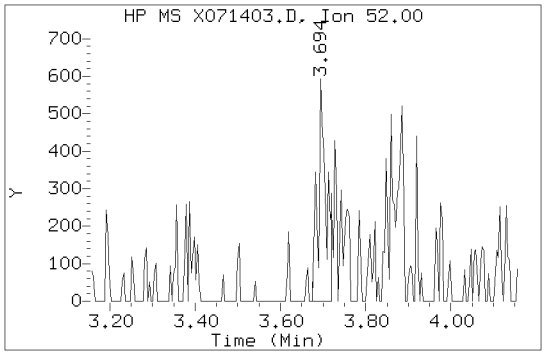
BEFORE

MASS
52
AREA
779
HEIGHT
593
20-Jul-2023
15:04
linh
pham



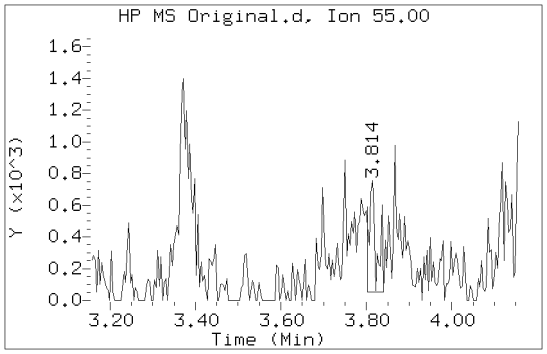
AFTER

MASS
52
AREA
779
HEIGHT
593
20-Jul-2023
15:04
linh
pham



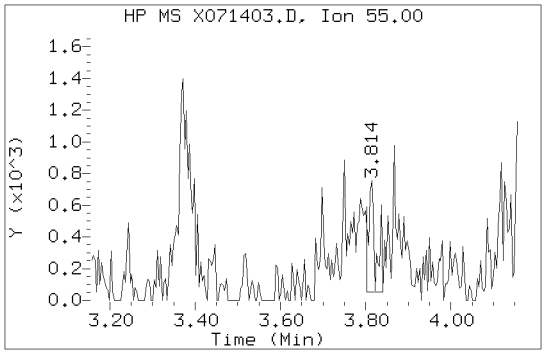
BEFORE

MASS
55
AREA
826
HEIGHT
704
20-Jul-2023
15:04
linh
pham



AFTER

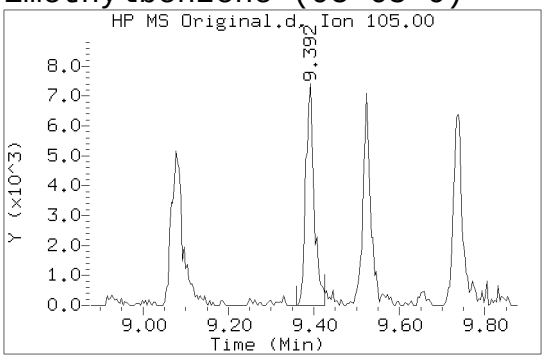
MASS
55
AREA
826
HEIGHT
704
20-Jul-2023
15:04
linh
pham



Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

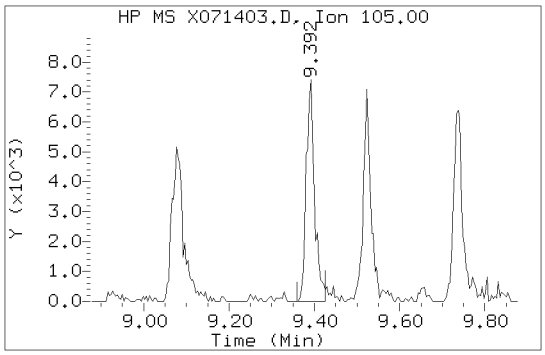
1,2,4-Trimethylbenzene (95-63-6)

BEFORE
MASS
105
AREA
10172
HEIGHT
7414
20-Jul-2023
15:04
linh
pham

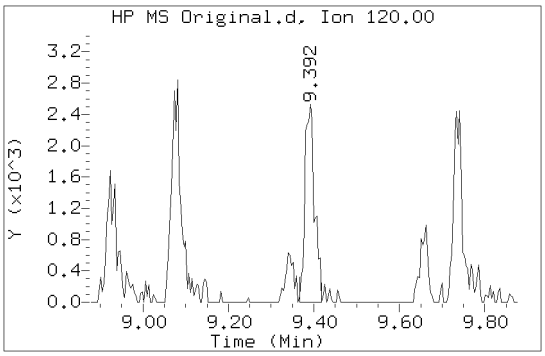


Reason Code:

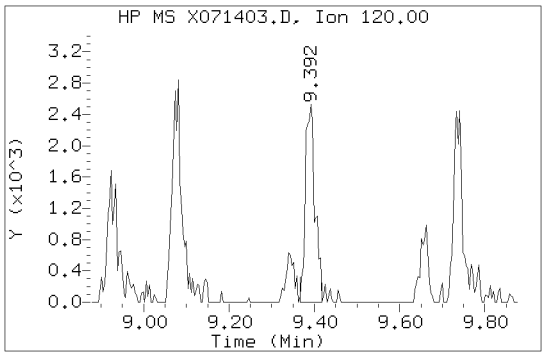
AFTER
MASS
105
AREA
10172
HEIGHT
7414
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
120
AREA
3980
HEIGHT
2527
20-Jul-2023
15:04
linh
pham

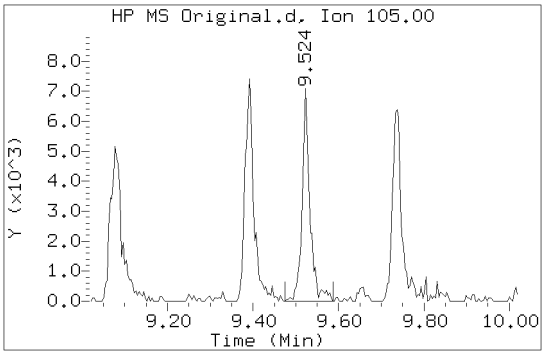


AFTER
MASS
120
AREA
3980
HEIGHT
2527
20-Jul-2023
15:04
linh
pham



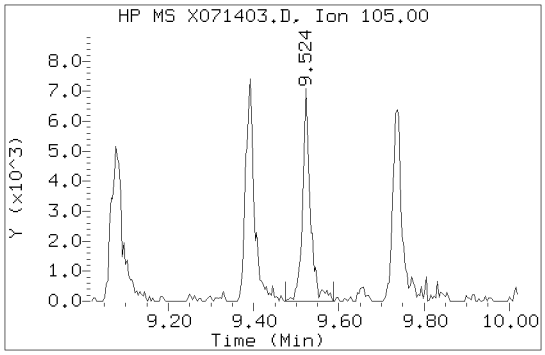
sec-Butylbenzene (135-98-8)

BEFORE
MASS
105
AREA
9247
HEIGHT
7103
20-Jul-2023
15:04
linh
pham

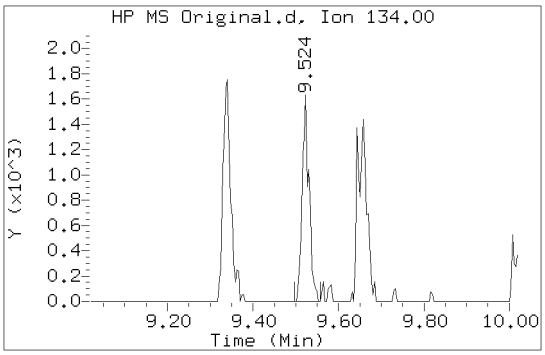


Reason Code:

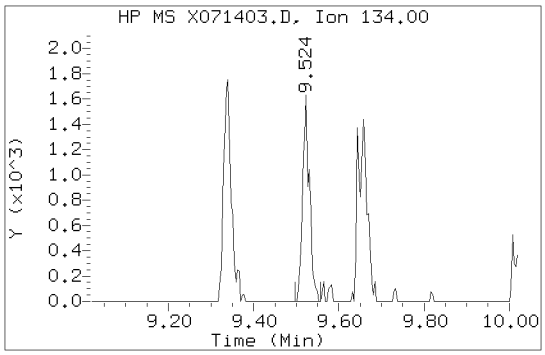
AFTER
MASS
105
AREA
9247
HEIGHT
7103
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
134
AREA
1861
HEIGHT
1631
20-Jul-2023
15:04
linh
pham



AFTER
MASS
134
AREA
1861
HEIGHT
1631
20-Jul-2023
15:04
linh
pham

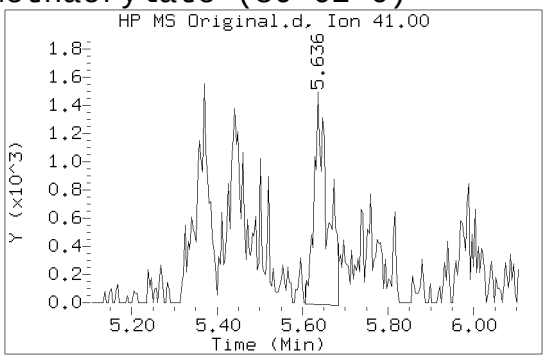


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

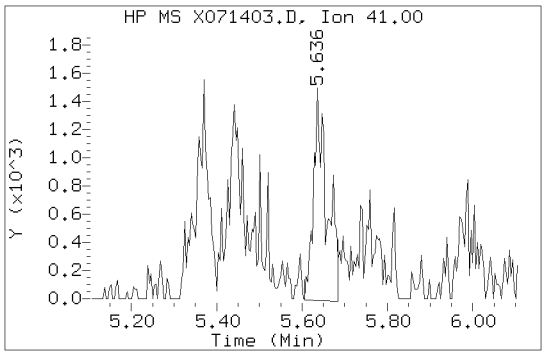
Methyl Methacrylate (80-62-6)

Reason Code:

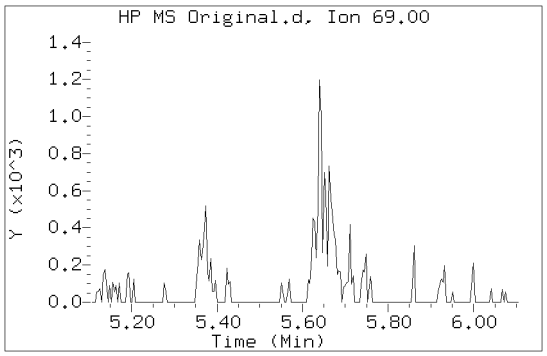
BEFORE
MASS
41
AREA
3261
HEIGHT
1505
20-Jul-2023
15:04
linh
pham



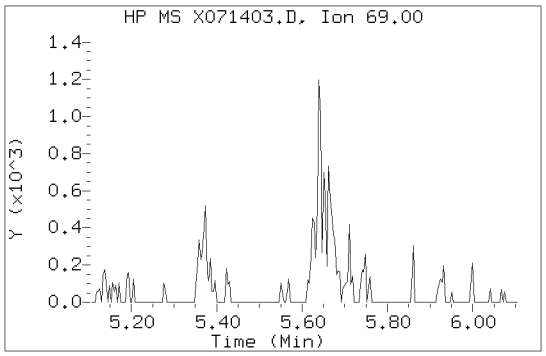
AFTER
MASS
41
AREA
3261
HEIGHT
1505
20-Jul-2023
15:04
linh
pham



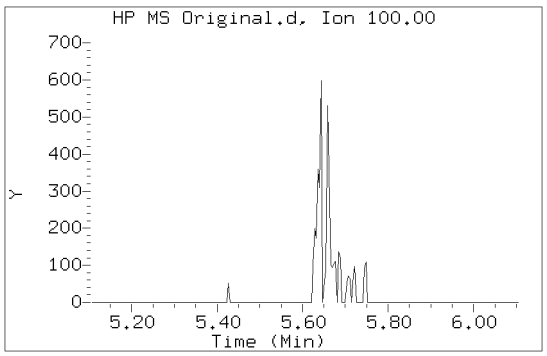
BEFORE
MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



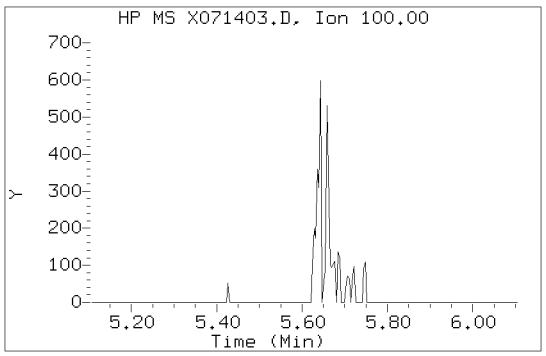
AFTER
MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
100
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



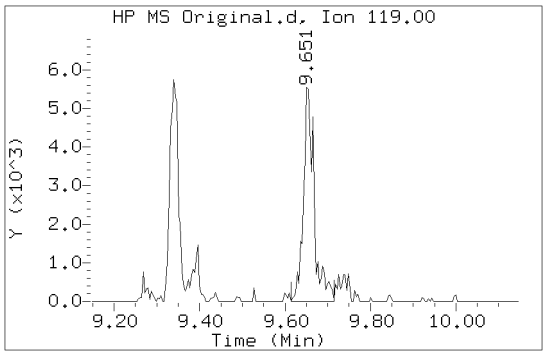
AFTER
MASS
100
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



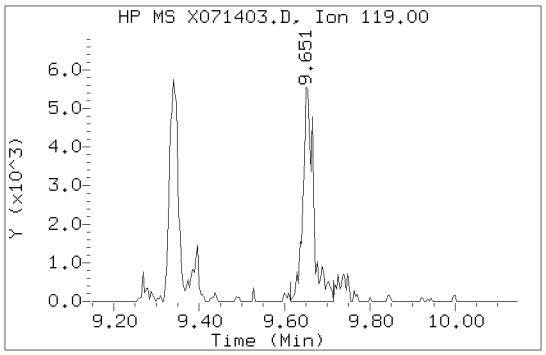
p-Isopropyltoluene (99-87-6)

Reason Code:

BEFORE
MASS
119
AREA
9771
HEIGHT
5556
20-Jul-2023
15:04
linh
pham



AFTER
MASS
119
AREA
9771
HEIGHT
5556
20-Jul-2023
15:04
linh
pham



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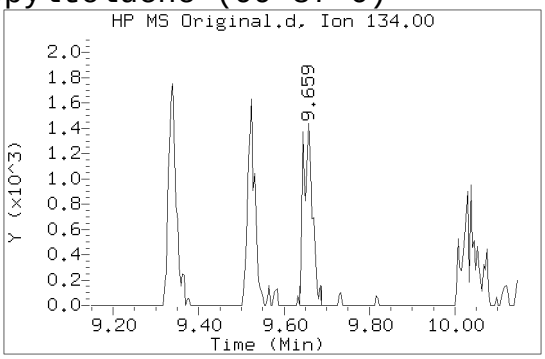
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

p-Isopropyltoluene (99-87-6)

BEFORE
MASS
134
AREA
2131
HEIGHT
1438
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER
MASS
134
AREA
2131
HEIGHT
1438
20-Jul-2023
15:04
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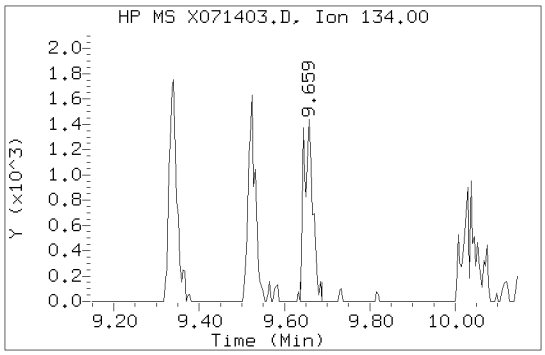
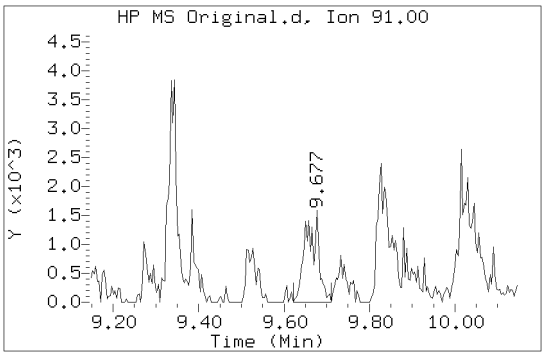
pham



BEFORE
MASS
91
AREA
3352
HEIGHT
1591
20-Jul-2023
15:04
linh
pham



AFTER
MASS
91
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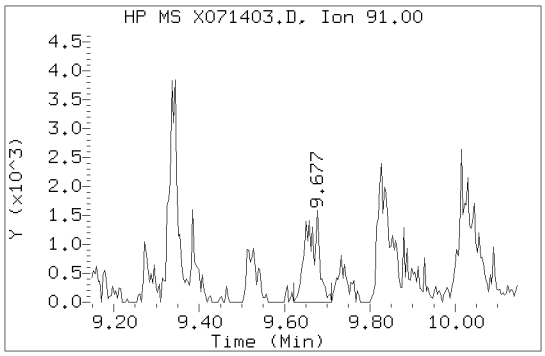
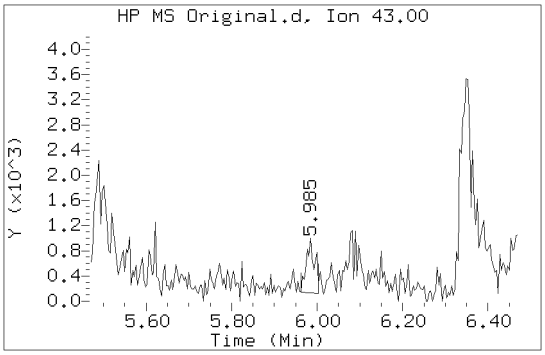
3352
HEIGHT
1591
20-Jul-2023
15:04
linh
pham



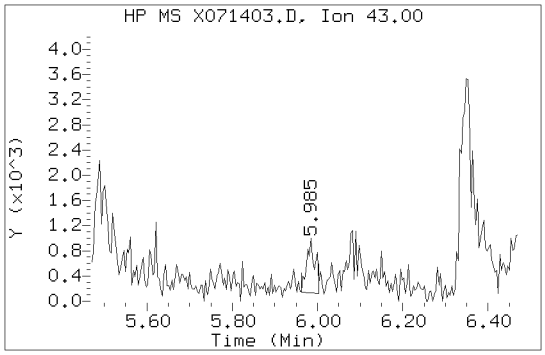
2-Nitropropane (79-46-9)

BEFORE
MASS
43
AREA
1174
HEIGHT
872
20-Jul-2023
15:04
linh
pham

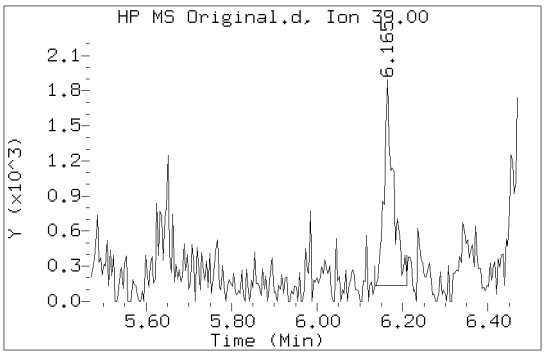


Reason Code:

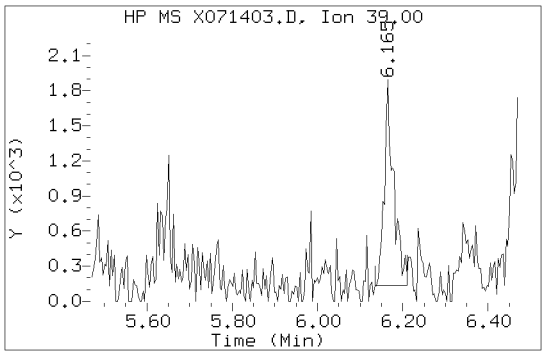
AFTER
MASS
43
AREA
1174
HEIGHT
872
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
39
AREA
2649
HEIGHT
1759
20-Jul-2023
15:04
linh
pham



AFTER
MASS
39
AREA
2649
HEIGHT
1759
20-Jul-2023
15:04
linh
pham



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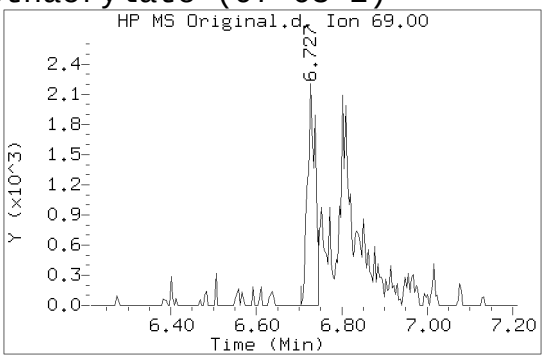
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Ethyl Methacrylate (97-63-2)

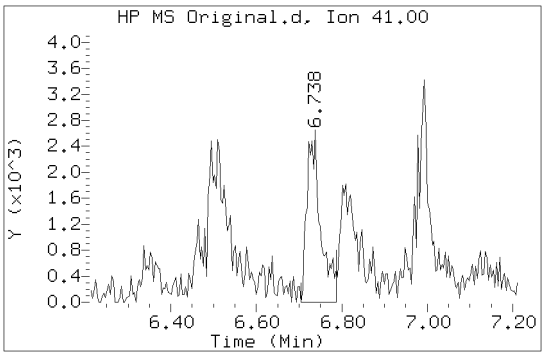
BEFORE

MASS
69
AREA
2780
HEIGHT
2206
20-Jul-2023
15:04
linh
pham



BEFORE

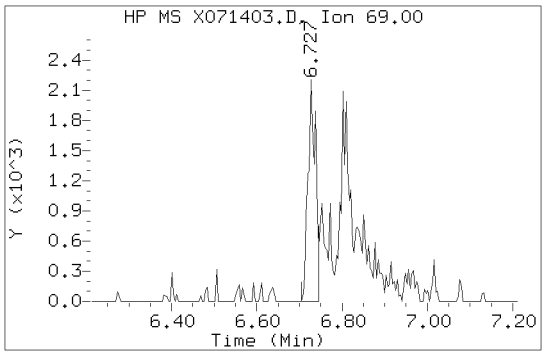
MASS
41
AREA
5900
HEIGHT
2651
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

MASS
69
AREA
2780
HEIGHT
2206
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
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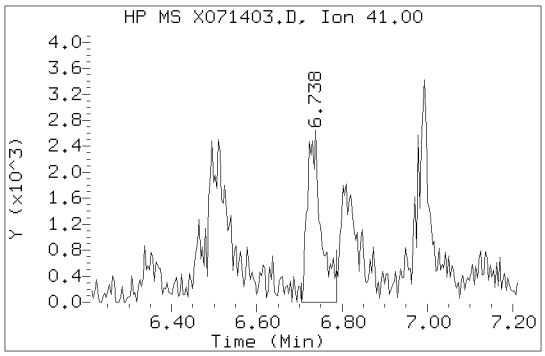
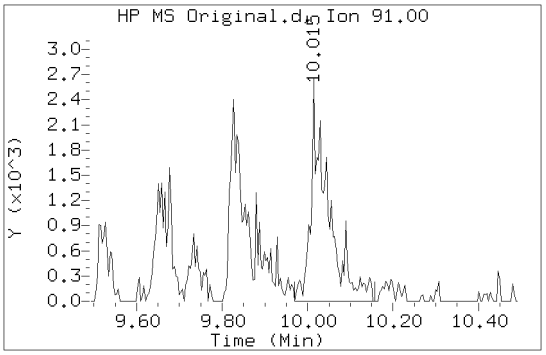
5900
HEIGHT
2651
20-Jul-2023
15:04
linh
pham



n-Butylbenzene (104-51-8)

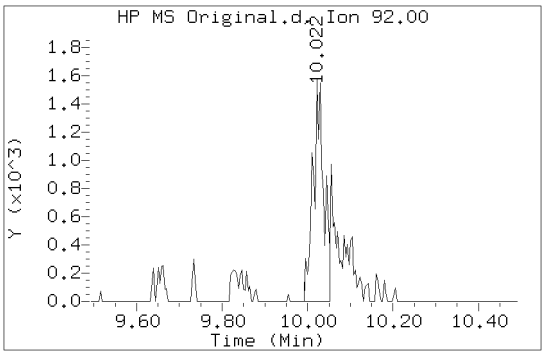
BEFORE

MASS
91
AREA
7141
HEIGHT
2647
20-Jul-2023
15:04
linh
pham



BEFORE

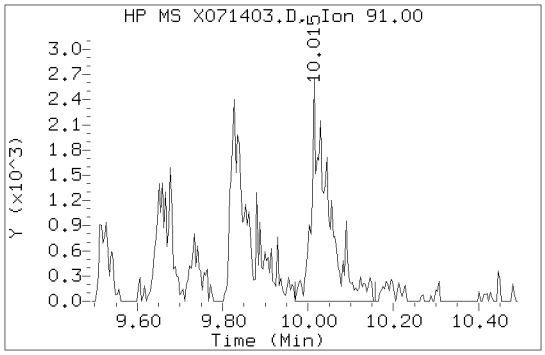
MASS
92
AREA
2733
HEIGHT
1571
20-Jul-2023
15:04
linh
pham



Reason Code:

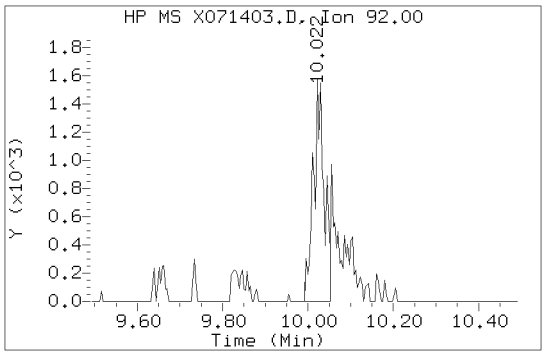
AFTER

MASS
91
AREA
7141
HEIGHT
2647
20-Jul-2023
15:04
linh
pham



AFTER

MASS
92
AREA
2733
HEIGHT
1571
20-Jul-2023
15:04
linh
pham



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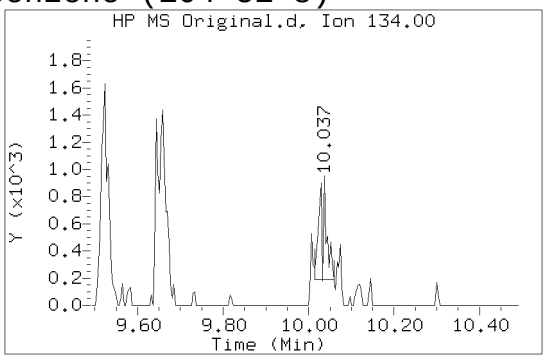
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

n-Butylbenzene (104-51-8)

Reason Code:

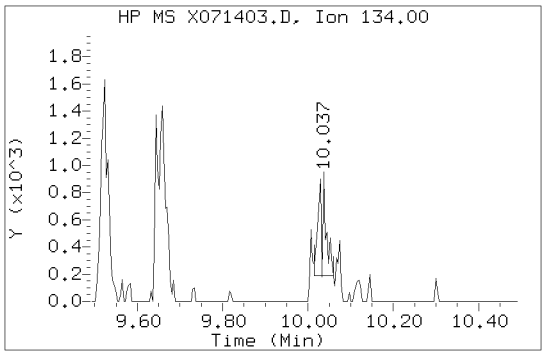
BEFORE

MASS
134
AREA
825
HEIGHT
766
20-Jul-2023
15:04
linh
pham



AFTER

MASS
134
AREA
825
HEIGHT
766
20-Jul-2023
15:04
linh
pham

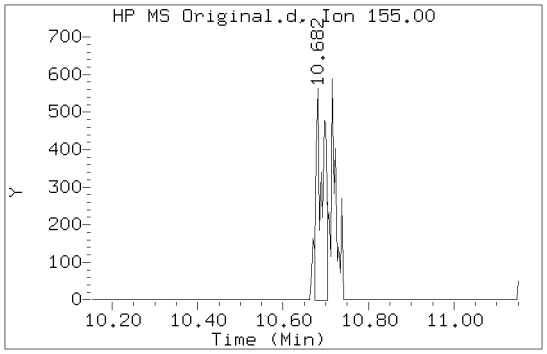


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

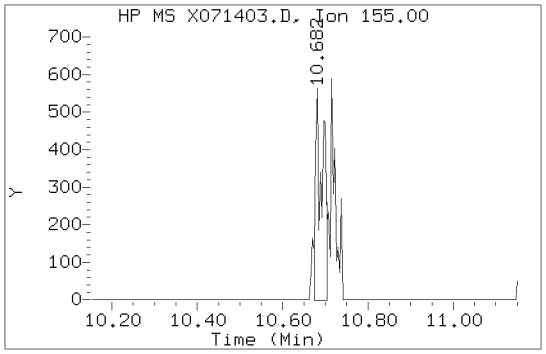
BEFORE

MASS
155
AREA
675
HEIGHT
564
20-Jul-2023
15:04
linh
pham



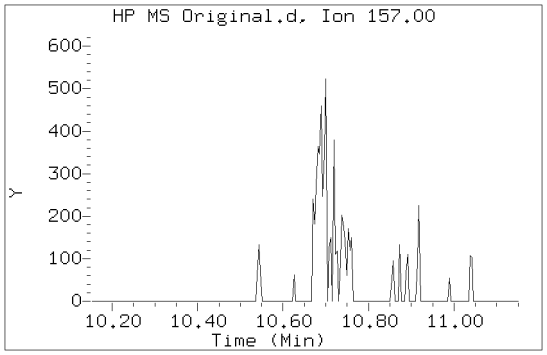
AFTER

MASS
155
AREA
675
HEIGHT
564
20-Jul-2023
15:04
linh
pham



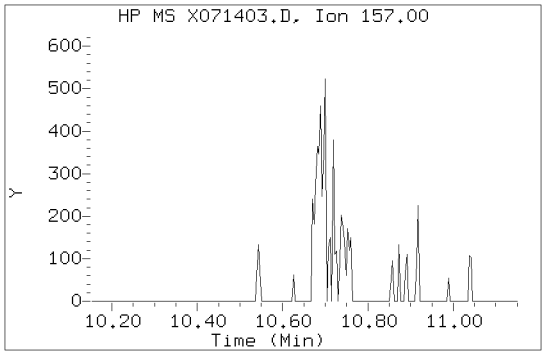
BEFORE

MASS
157
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



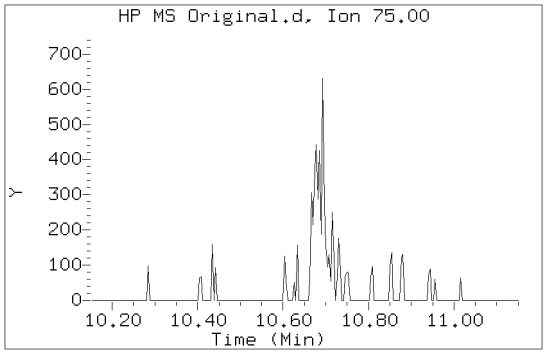
AFTER

MASS
157
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



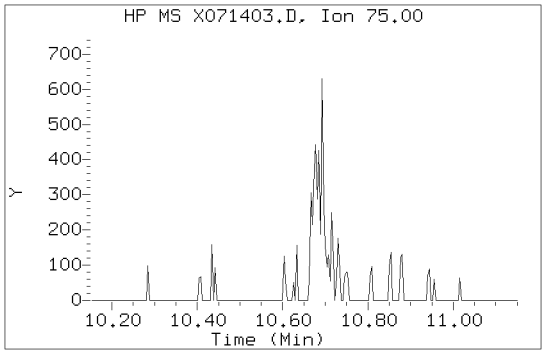
BEFORE

MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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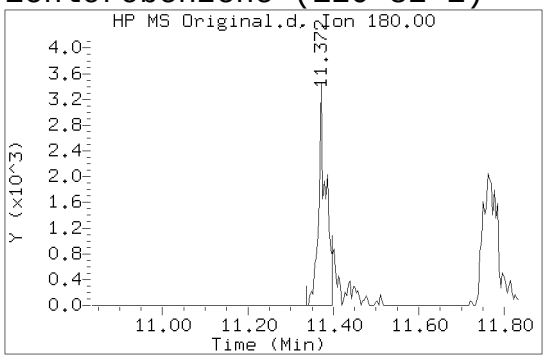
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

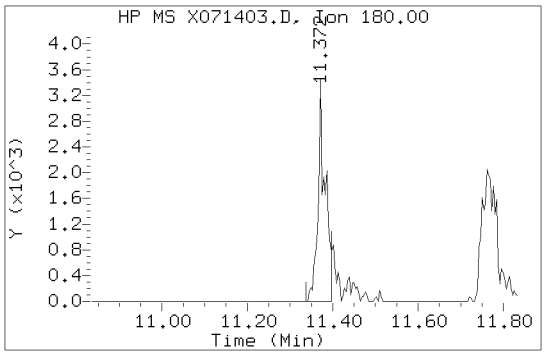
BEFORE

MASS
180
AREA
4099
HEIGHT
3445
20-Jul-2023
15:04
linh
pham



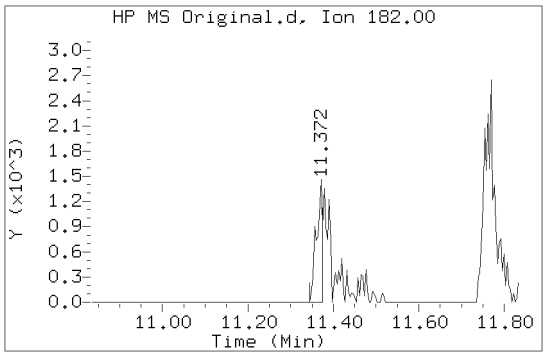
AFTER

MASS
180
AREA
4099
HEIGHT
3445
20-Jul-2023
15:04
linh
pham



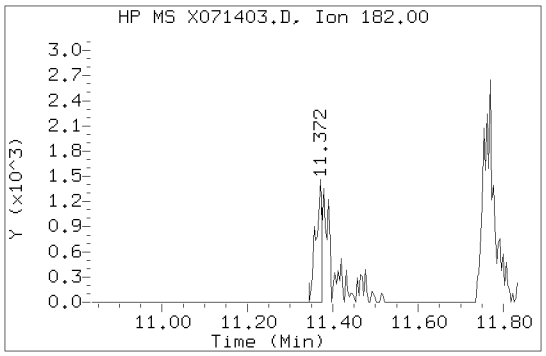
BEFORE

MASS
182
AREA
1413
HEIGHT
1466
20-Jul-2023
15:04
linh
pham



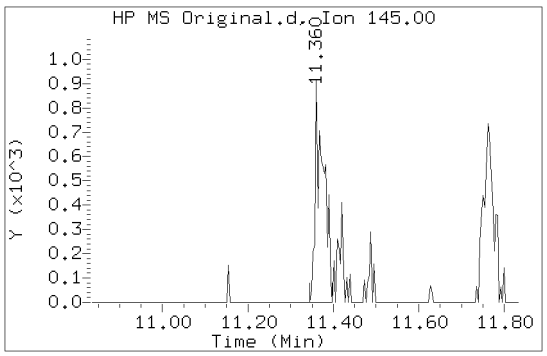
AFTER

MASS
182
AREA
1413
HEIGHT
1466
20-Jul-2023
15:04
linh
pham



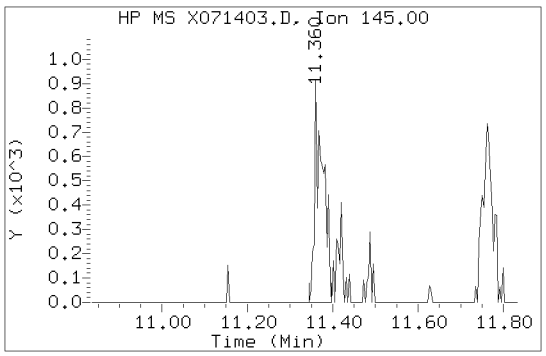
BEFORE

MASS
145
AREA
1239
HEIGHT
912
20-Jul-2023
15:04
linh
pham



AFTER

MASS
145
AREA
1239
HEIGHT
912
20-Jul-2023
15:04
linh
pham

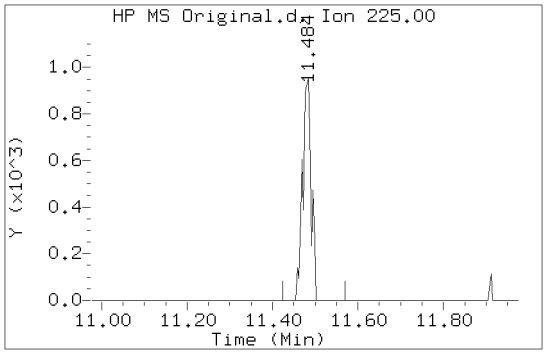


Hexachlorobutadiene (87-68-3)

Reason Code:

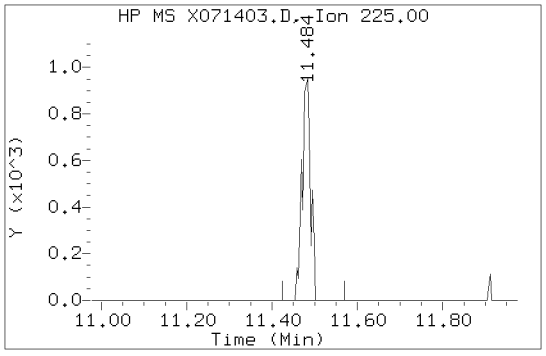
BEFORE

MASS
225
AREA
1357
HEIGHT
951
20-Jul-2023
15:04
linh
pham



AFTER

MASS
225
AREA
1357
HEIGHT
951
20-Jul-2023
15:04
linh
pham



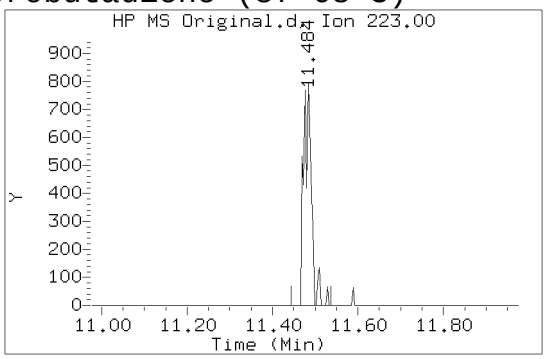
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Hexachlorobutadiene (87-68-3)

Reason Code:

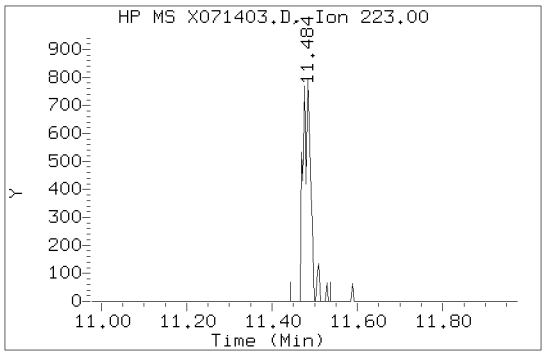
BEFORE

MASS
223
AREA
1025
HEIGHT
792
20-Jul-2023
15:04
linh
pham



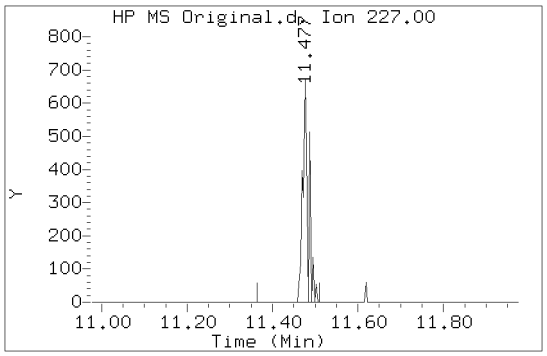
AFTER

MASS
223
AREA
1025
HEIGHT
792
20-Jul-2023
15:04
linh
pham



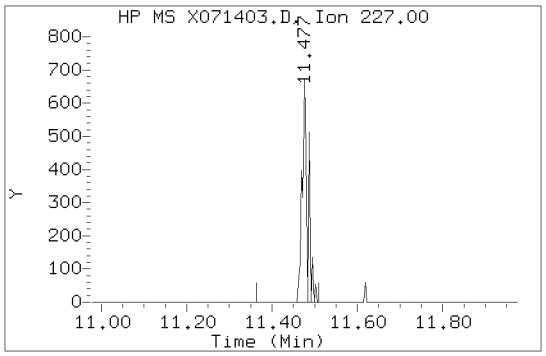
BEFORE

MASS
227
AREA
611
HEIGHT
670
20-Jul-2023
15:04
linh
pham



AFTER

MASS
227
AREA
611
HEIGHT
670
20-Jul-2023
15:04
linh
pham

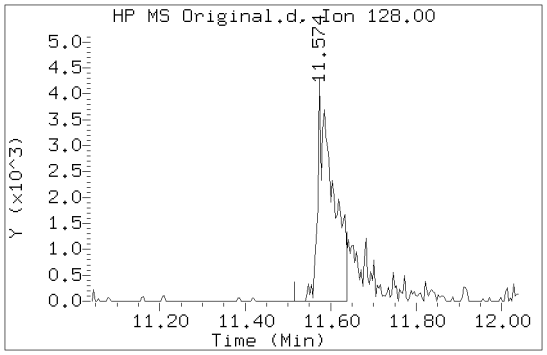


Naphthalene (91-20-3)

Reason Code:

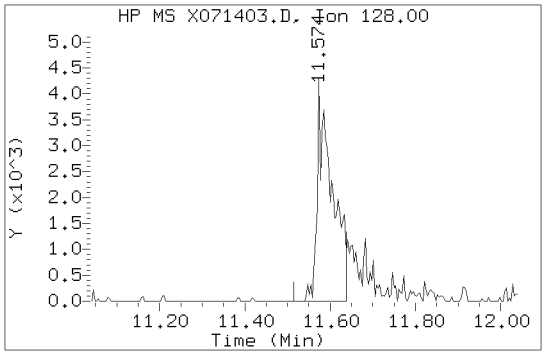
BEFORE

MASS
128
AREA
10357
HEIGHT
4289
20-Jul-2023
15:04
linh
pham



AFTER

MASS
128
AREA
10357
HEIGHT
4289
20-Jul-2023
15:04
linh
pham

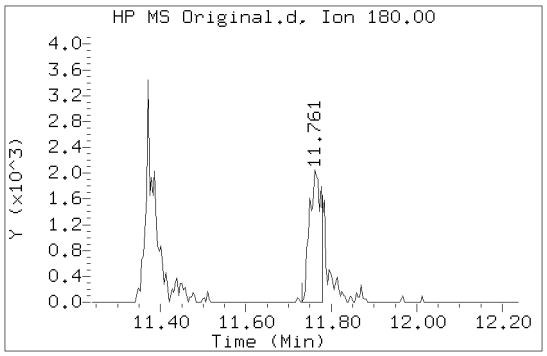


1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

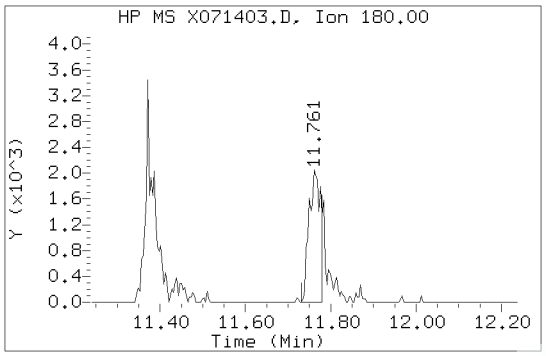
BEFORE

MASS
180
AREA
3845
HEIGHT
2053
20-Jul-2023
15:04
linh
pham



AFTER

MASS
180
AREA
3845
HEIGHT
2053
20-Jul-2023
15:04
linh
pham



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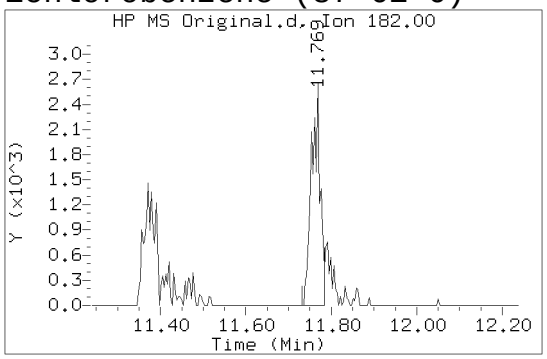
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

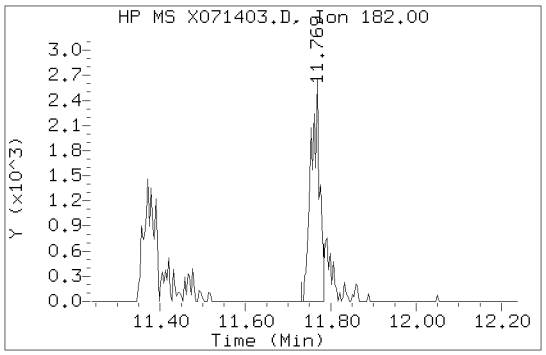
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

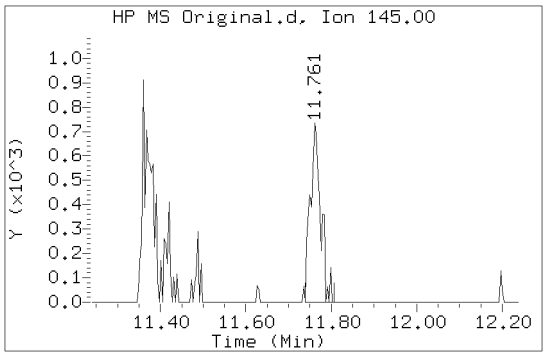
BEFORE
MASS
182
AREA
3757
HEIGHT
2648
20-Jul-2023
15:04
linh
pham



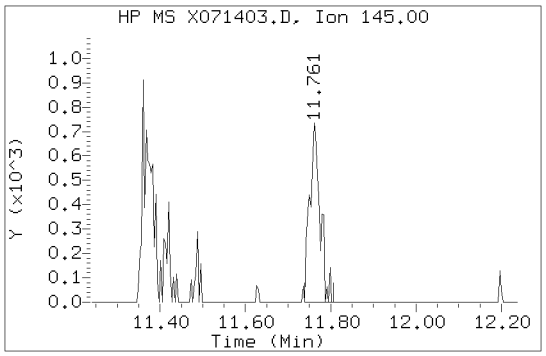
AFTER
MASS
182
AREA
3757
HEIGHT
2648
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
145
AREA
1239
HEIGHT
737
20-Jul-2023
15:04
linh
pham



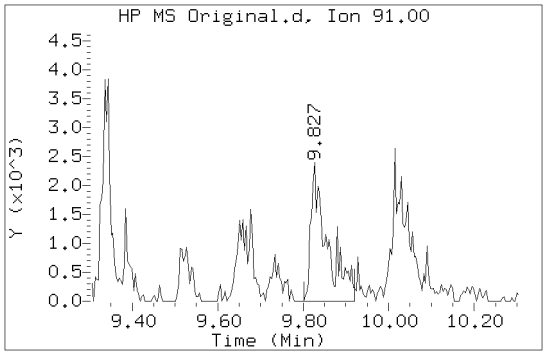
AFTER
MASS
145
AREA
1239
HEIGHT
737
20-Jul-2023
15:04
linh
pham



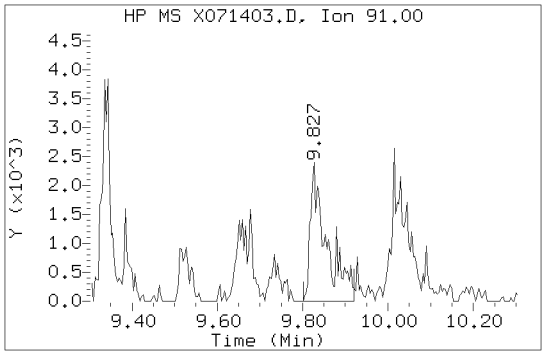
Benzyl Chloride (100-44-7)

Reason Code:

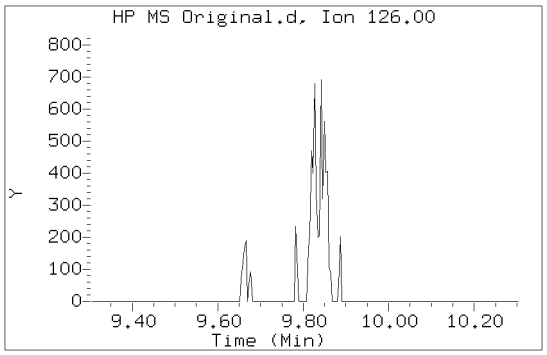
BEFORE
MASS
91
AREA
6245
HEIGHT
2401
20-Jul-2023
15:04
linh
pham



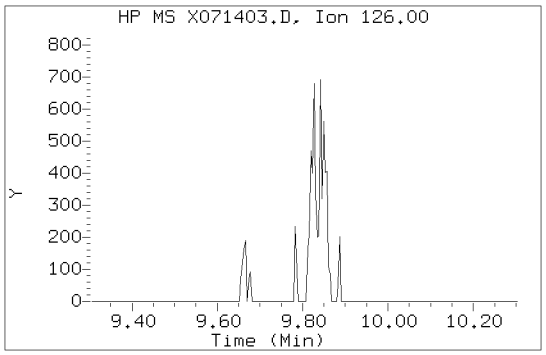
AFTER
MASS
91
AREA
6245
HEIGHT
2401
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
126
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
126
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



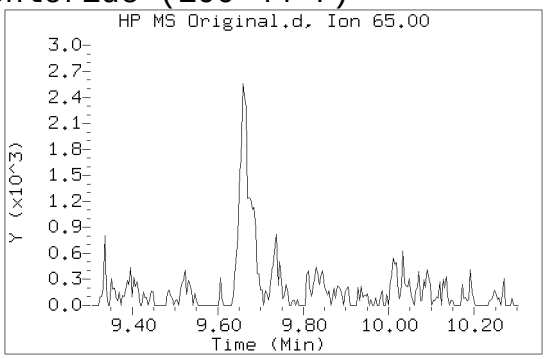
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Benzyl Chloride (100-44-7)

Reason Code:

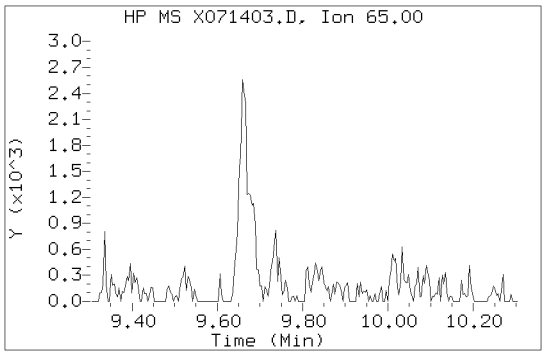
BEFORE

MASS
65
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
65
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

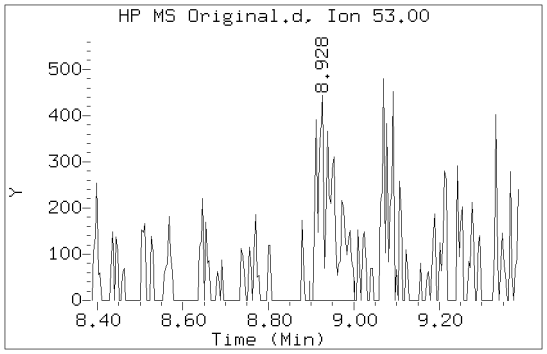


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

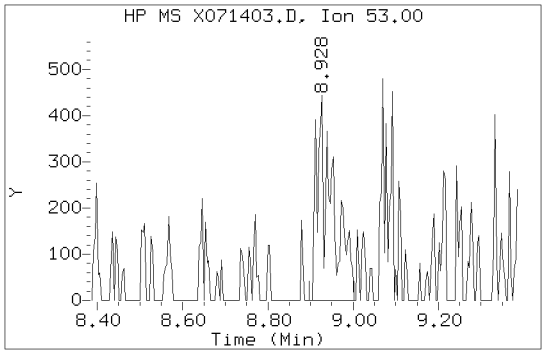
BEFORE

MASS
53
AREA
1124
HEIGHT
444
20-Jul-2023
15:04
linh
pham



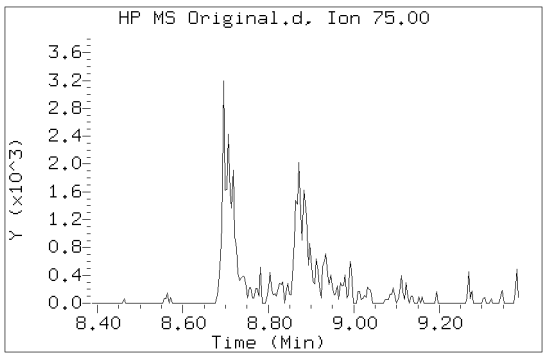
AFTER

MASS
53
AREA
1124
HEIGHT
444
20-Jul-2023
15:04
linh
pham



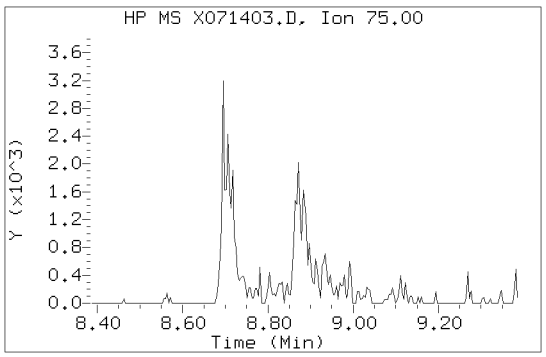
BEFORE

MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

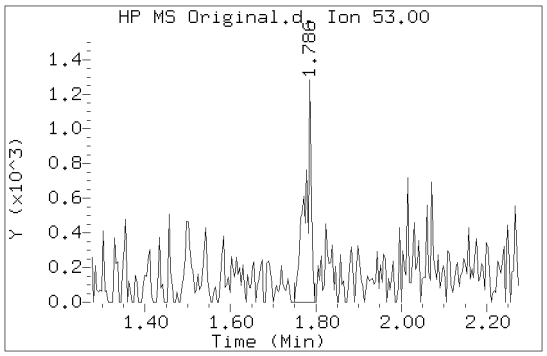


Chloroprene (126-99-8)

Reason Code:

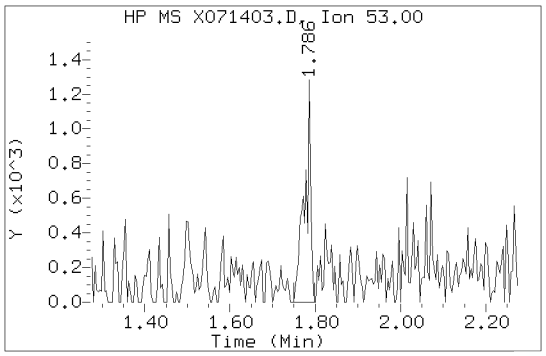
BEFORE

MASS
53
AREA
1292
HEIGHT
1283
20-Jul-2023
15:04
linh
pham



AFTER

MASS
53
AREA
1292
HEIGHT
1283
20-Jul-2023
15:04
linh
pham



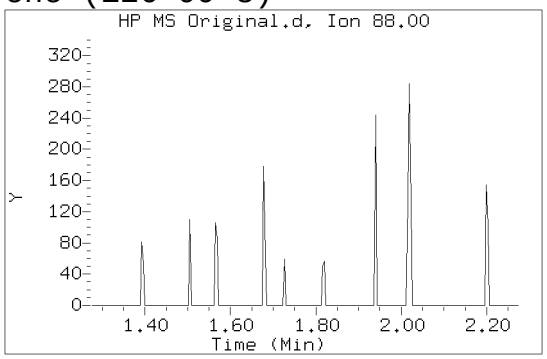
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Chloroprene (126-99-8)

Reason Code:

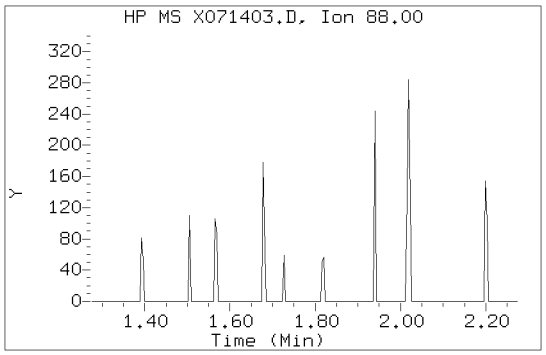
BEFORE

MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

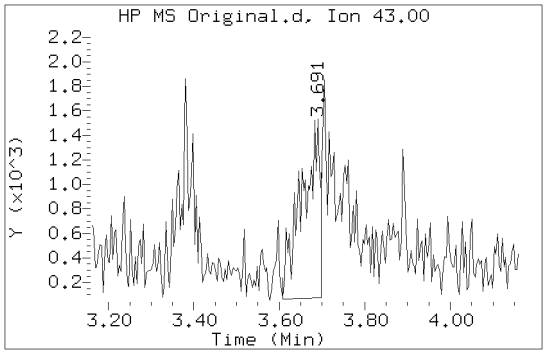


Ethyl Acetate (141-78-6)

Reason Code:

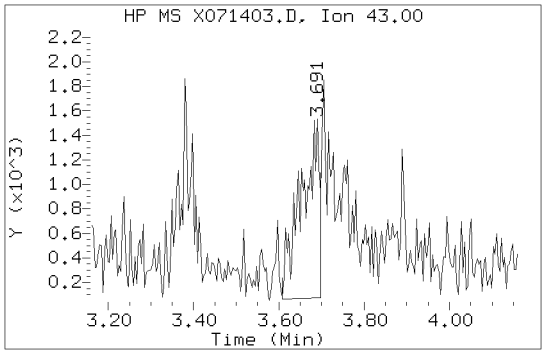
BEFORE

MASS
43
AREA
4291
HEIGHT
1463
20-Jul-2023
15:04
linh
pham



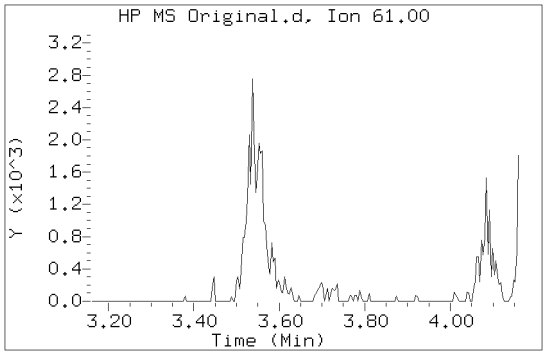
AFTER

MASS
43
AREA
4291
HEIGHT
1463
20-Jul-2023
15:04
linh
pham



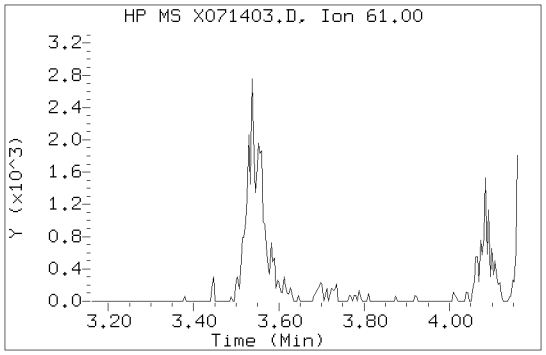
BEFORE

MASS
61
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



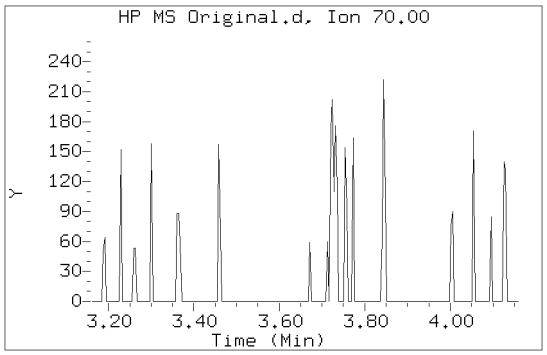
AFTER

MASS
61
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



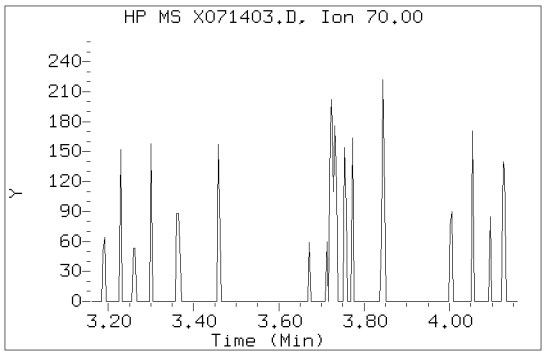
BEFORE

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

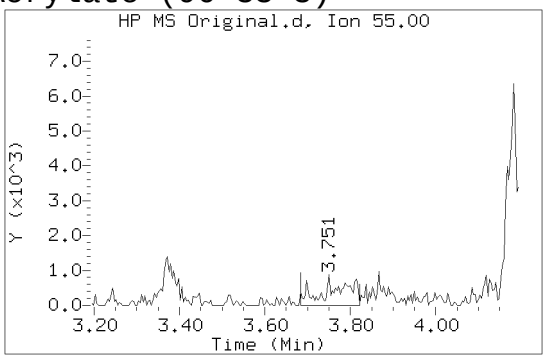


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

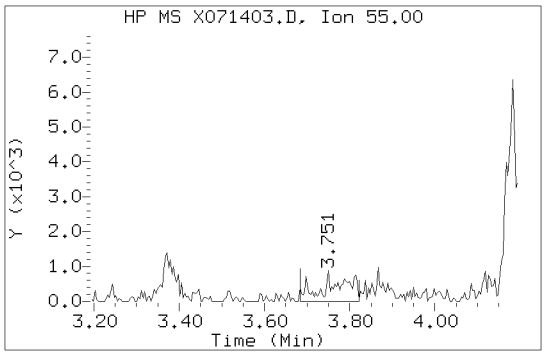
Methyl Acrylate (96-33-3)

Reason Code:

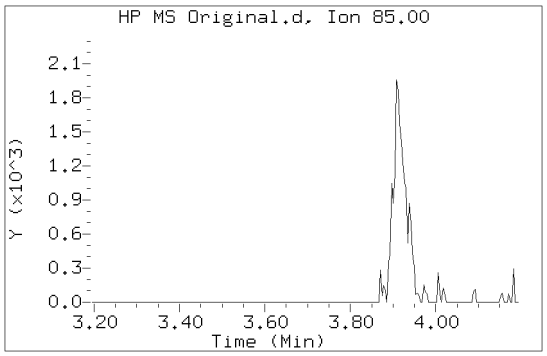
BEFORE
MASS
55
AREA
3365
HEIGHT
887
20-Jul-2023
15:04
linh
pham



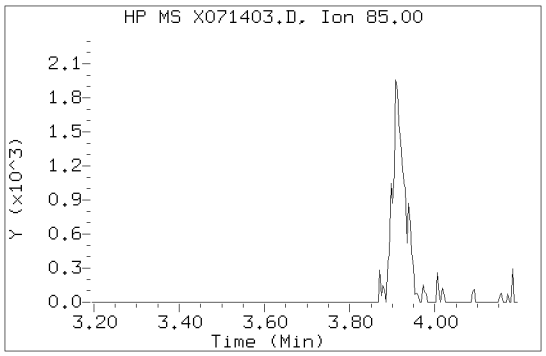
AFTER
MASS
55
AREA
3365
HEIGHT
887
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



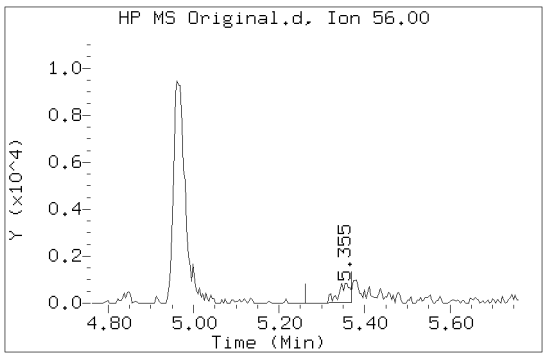
AFTER
MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



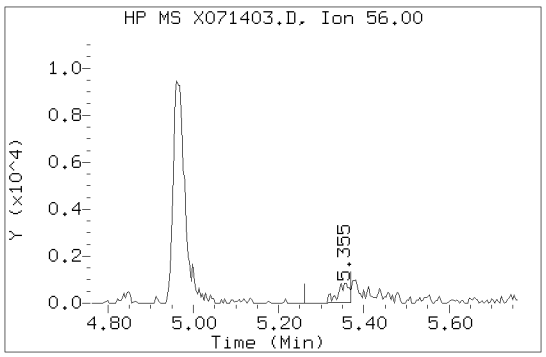
n-Butanol (71-36-3)

Reason Code:

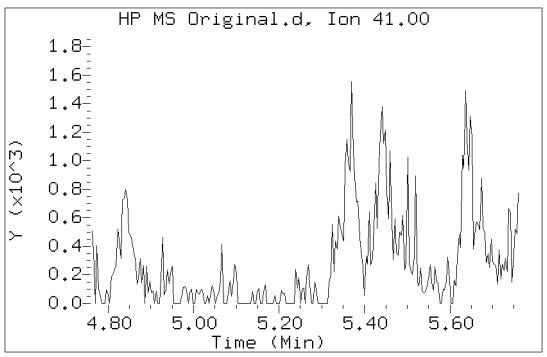
BEFORE
MASS
56
AREA
1626
HEIGHT
848
20-Jul-2023
15:04
linh
pham



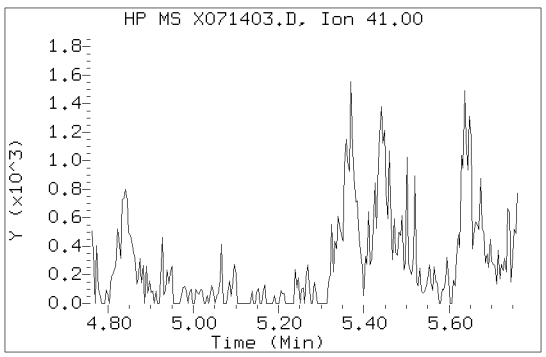
AFTER
MASS
56
AREA
1626
HEIGHT
848
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



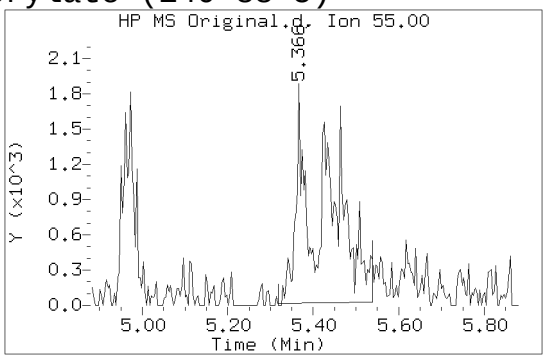
AFTER
MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

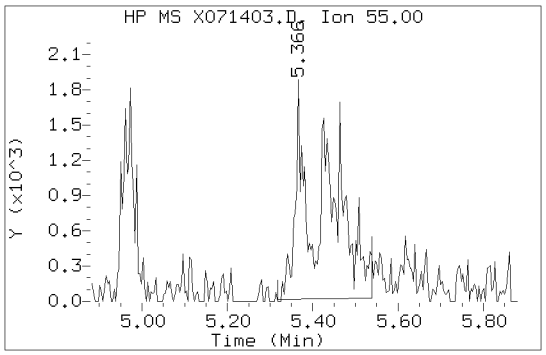
Ethyl Acrylate (140-88-5)

BEFORE
MASS
55
AREA
8232
HEIGHT
1867
20-Jul-2023
15:04
linh
pham

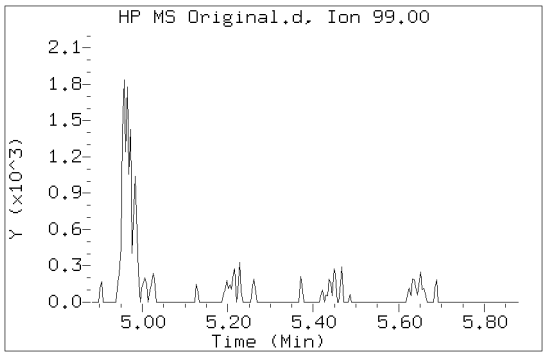


Reason Code:

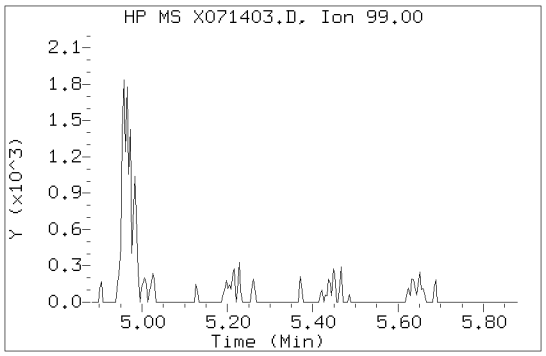
AFTER
MASS
55
AREA
8232
HEIGHT
1867
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
99
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

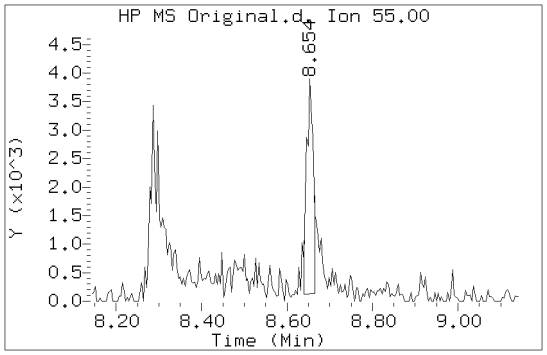


AFTER
MASS
99
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



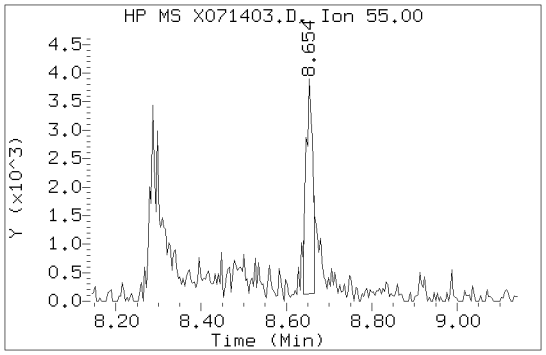
Cyclohexanone (108-94-1)

BEFORE
MASS
55
AREA
4174
HEIGHT
3766
20-Jul-2023
15:04
linh
pham

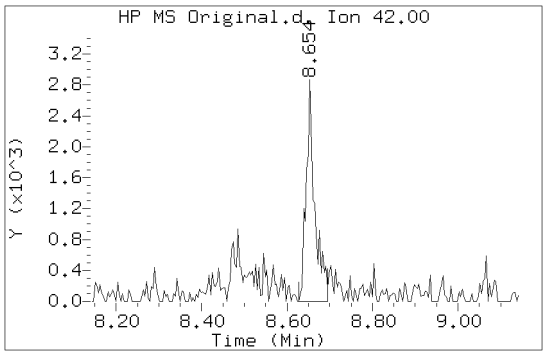


Reason Code:

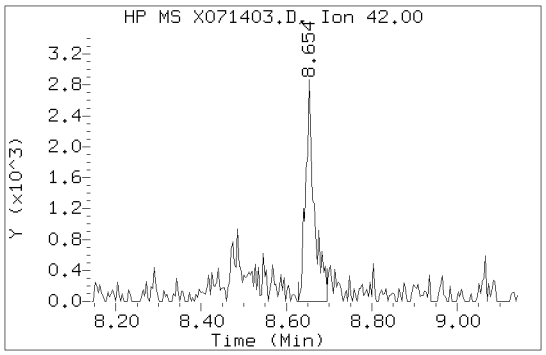
AFTER
MASS
55
AREA
4174
HEIGHT
3766
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
42
AREA
4022
HEIGHT
2868
20-Jul-2023
15:04
linh
pham



AFTER
MASS
42
AREA
4022
HEIGHT
2868
20-Jul-2023
15:04
linh
pham



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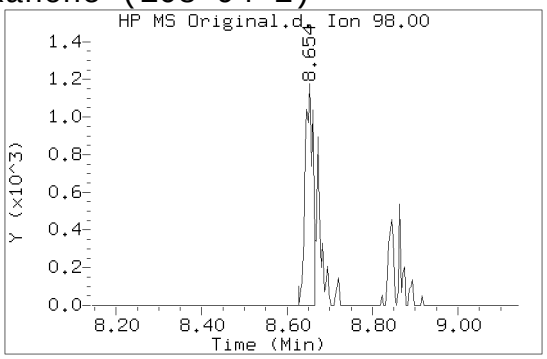
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Cyclohexanone (108-94-1)

Reason Code:

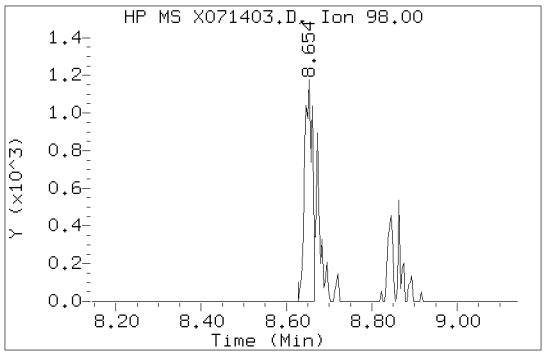
BEFORE

MASS
98
AREA
1506
HEIGHT
1177
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
AREA
1506
HEIGHT
1177
20-Jul-2023
15:04
linh
pham

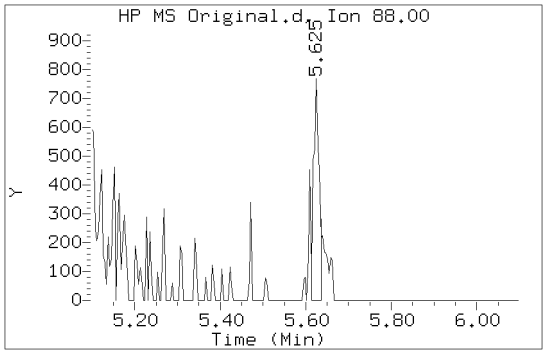


1,4-Dioxane ()

Reason Code:

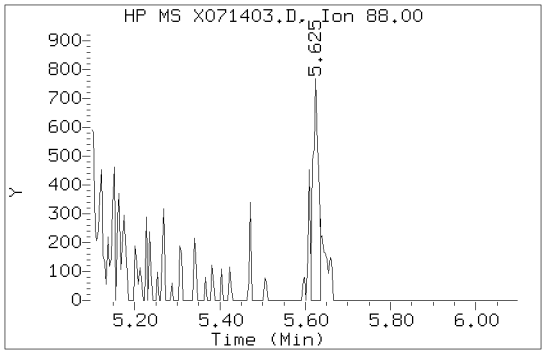
BEFORE

MASS
88
AREA
692
HEIGHT
769
20-Jul-2023
15:04
linh
pham



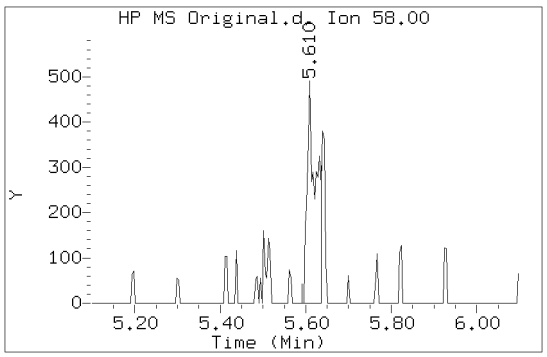
AFTER

MASS
88
AREA
692
HEIGHT
769
20-Jul-2023
15:04
linh
pham



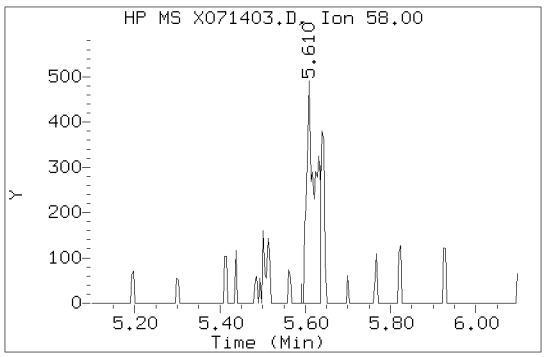
BEFORE

MASS
58
AREA
715
HEIGHT
491
20-Jul-2023
15:04
linh
pham



AFTER

MASS
58
AREA
715
HEIGHT
491
20-Jul-2023
15:04
linh
pham

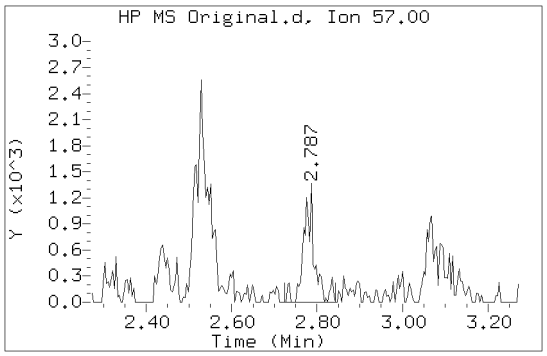


n-Hexane (110-54-3)

Reason Code:

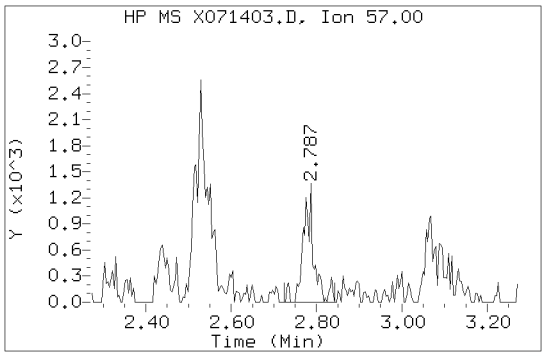
BEFORE

MASS
57
AREA
2320
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
2320
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



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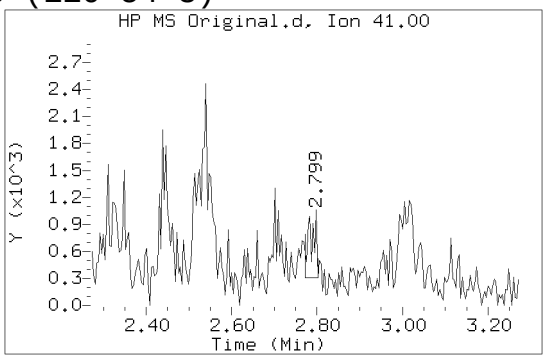
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

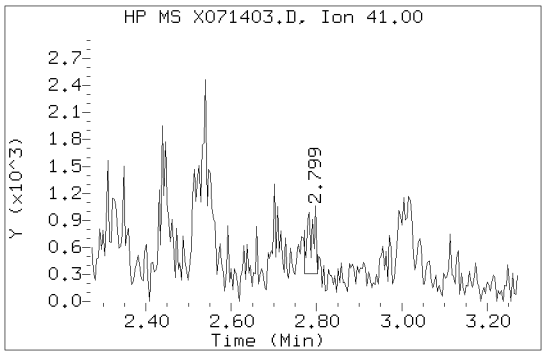
n-Hexane (110-54-3)

Reason Code:

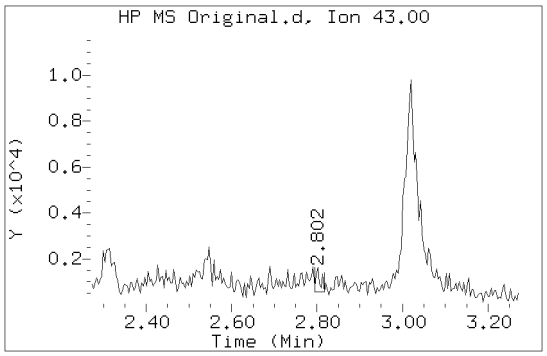
BEFORE
MASS
41
AREA
798
HEIGHT
755
20-Jul-2023
15:04
linh
pham



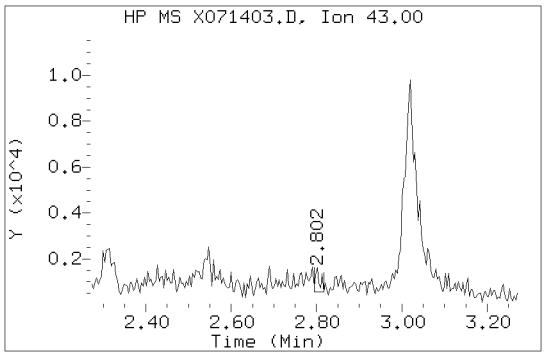
AFTER
MASS
41
AREA
798
HEIGHT
755
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
43
AREA
753
HEIGHT
1069
20-Jul-2023
15:04
linh
pham



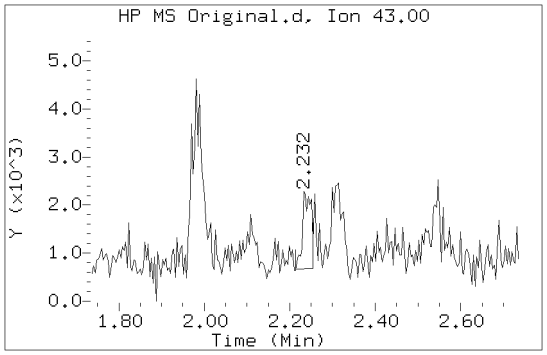
AFTER
MASS
43
AREA
753
HEIGHT
1069
20-Jul-2023
15:04
linh
pham



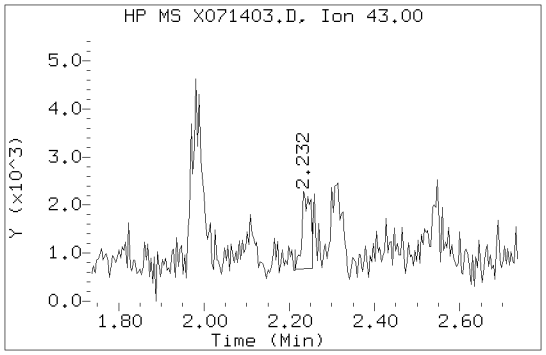
Methyl acetate (79-20-9)

Reason Code:

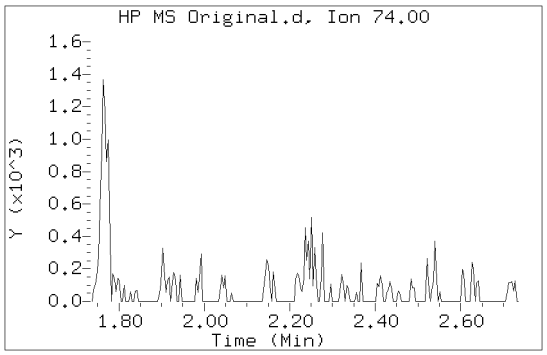
BEFORE
MASS
43
AREA
2344
HEIGHT
1617
20-Jul-2023
15:04
linh
pham



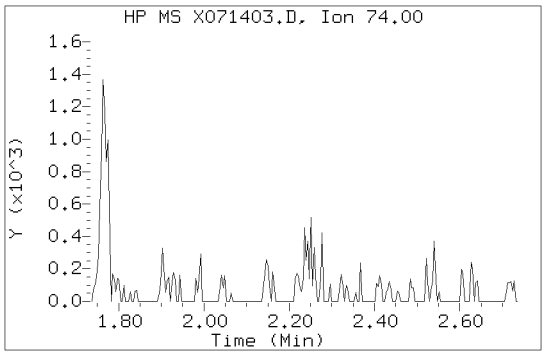
AFTER
MASS
43
AREA
2344
HEIGHT
1617
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
74
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
74
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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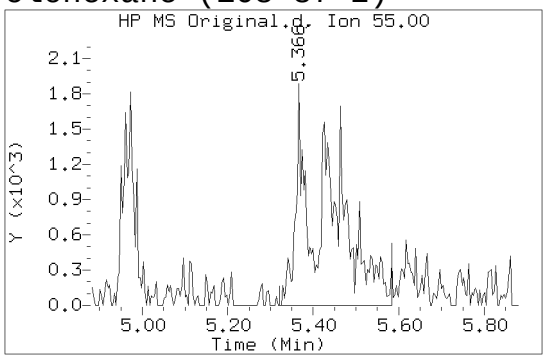
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Methylcyclohexane (108-87-2)

Reason Code:

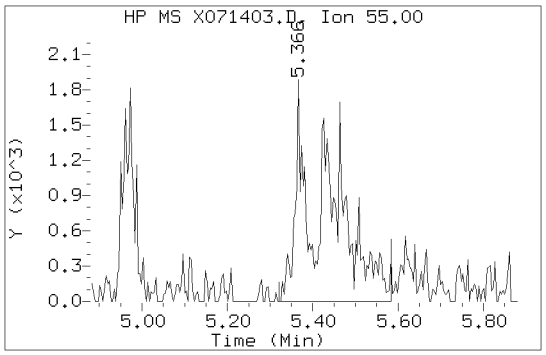
BEFORE

MASS
55
AREA
9168
HEIGHT
1886
20-Jul-2023
15:04
linh
pham



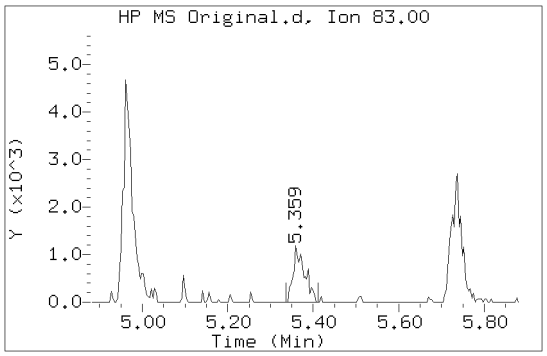
AFTER

MASS
55
AREA
9168
HEIGHT
1886
20-Jul-2023
15:04
linh
pham



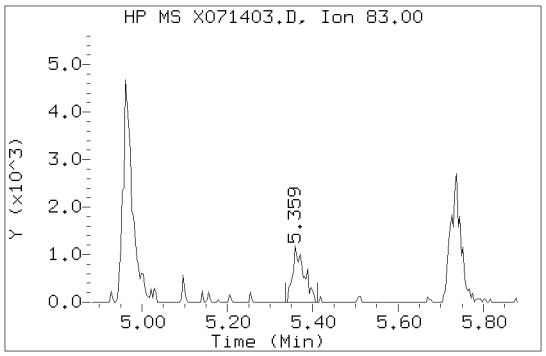
BEFORE

MASS
83
AREA
2193
HEIGHT
1189
20-Jul-2023
15:04
linh
pham



AFTER

MASS
83
AREA
2193
HEIGHT
1189
20-Jul-2023
15:04
linh
pham

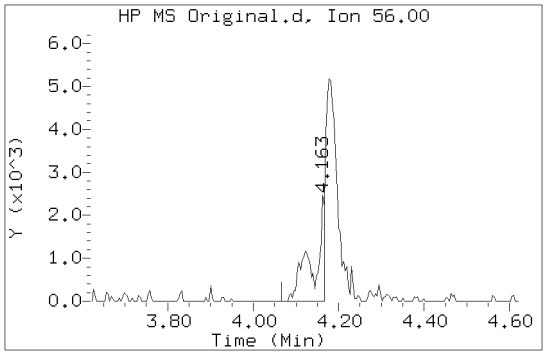


Cyclohexane (110-82-7)

Reason Code:

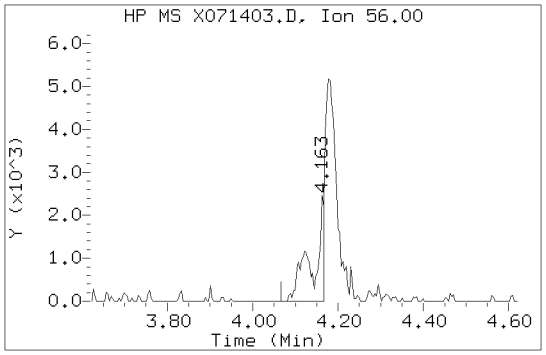
BEFORE

MASS
56
AREA
4321
HEIGHT
2474
20-Jul-2023
15:04
linh
pham



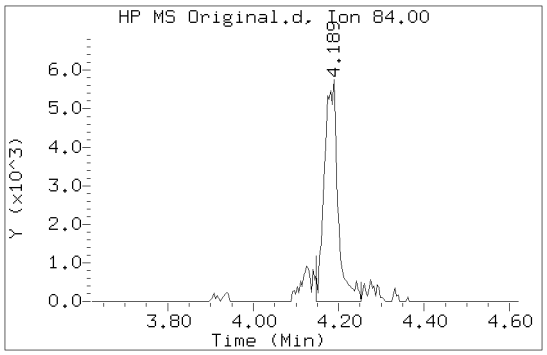
AFTER

MASS
56
AREA
4321
HEIGHT
2474
20-Jul-2023
15:04
linh
pham



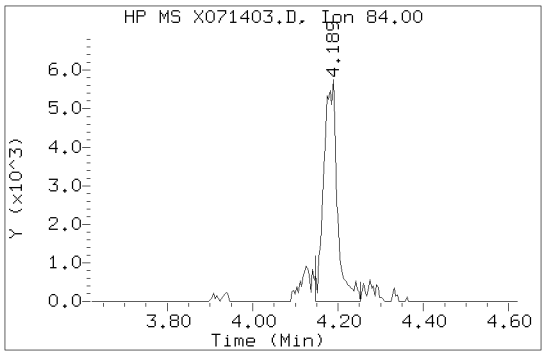
BEFORE

MASS
84
AREA
12654
HEIGHT
5754
20-Jul-2023
15:04
linh
pham



AFTER

MASS
84
AREA
12654
HEIGHT
5754
20-Jul-2023
15:04
linh
pham



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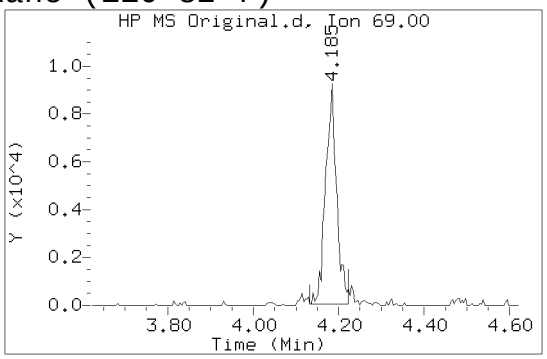
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Cyclohexane (110-82-7)

Reason Code:

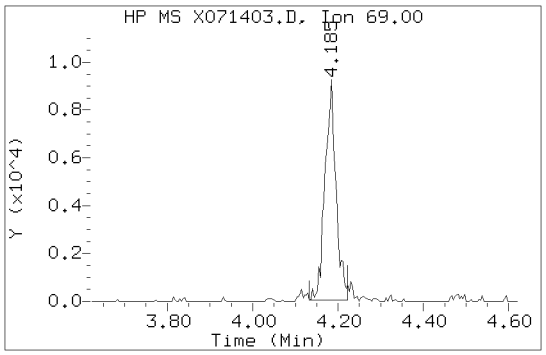
BEFORE

MASS
69
AREA
16448
HEIGHT
9203
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
16448
HEIGHT
9203
20-Jul-2023
15:04
linh
pham

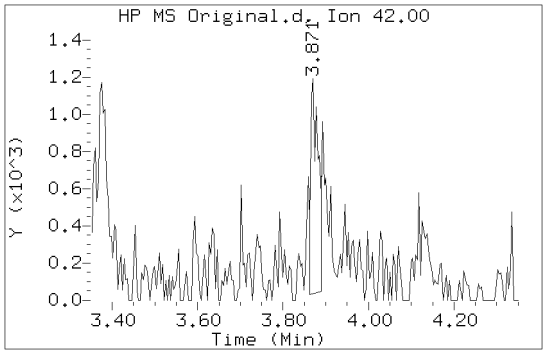


Tetrahydrofuran (109-99-9)

Reason Code:

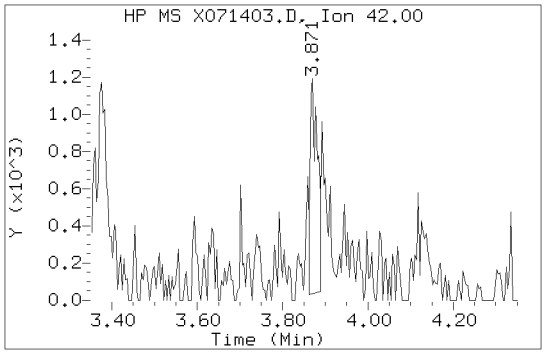
BEFORE

MASS
42
AREA
1418
HEIGHT
1157
20-Jul-2023
15:04
linh
pham



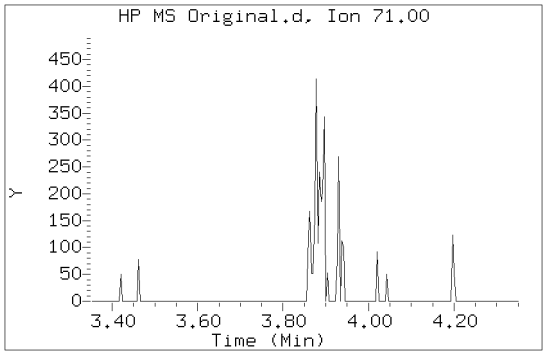
AFTER

MASS
42
AREA
1418
HEIGHT
1157
20-Jul-2023
15:04
linh
pham



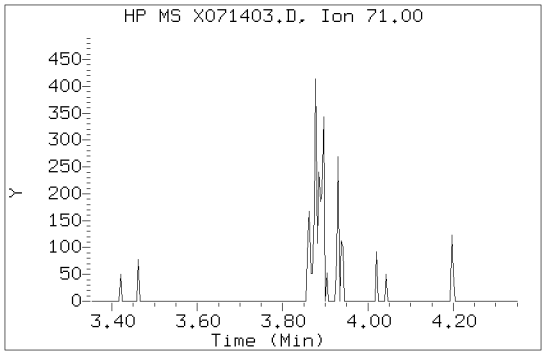
BEFORE

MASS
71
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
71
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

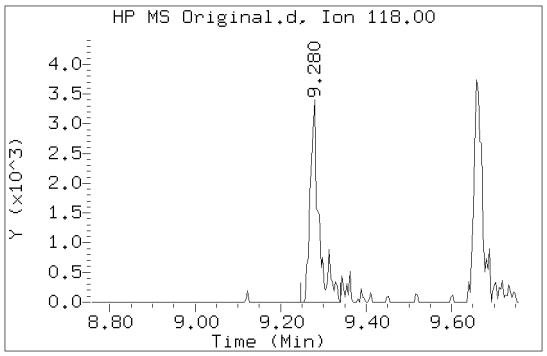


alpha-Methylstyrene (98-83-9)

Reason Code:

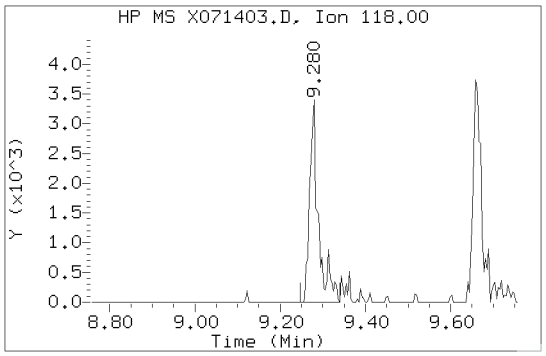
BEFORE

MASS
118
AREA
4759
HEIGHT
3401
20-Jul-2023
15:04
linh
pham



AFTER

MASS
118
AREA
4759
HEIGHT
3401
20-Jul-2023
15:04
linh
pham



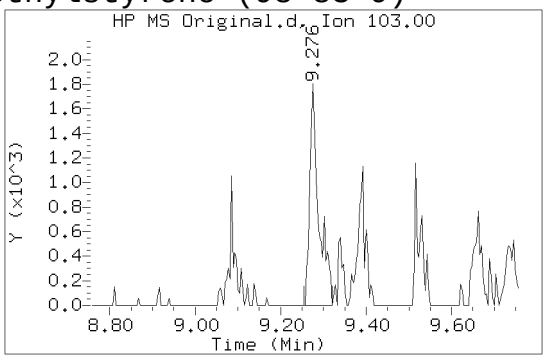
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

alpha-Methylstyrene (98-83-9)

Reason Code:

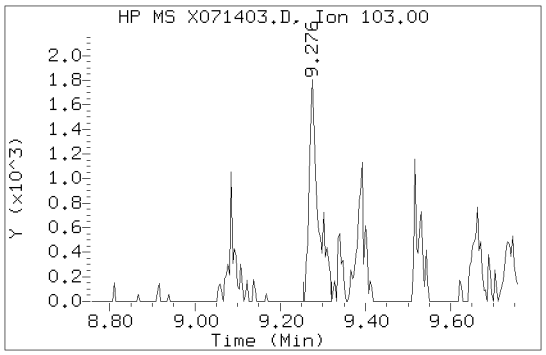
BEFORE

MASS
103
AREA
2652
HEIGHT
1804
20-Jul-2023
15:04
linh
pham



AFTER

MASS
103
AREA
2652
HEIGHT
1804
20-Jul-2023
15:04
linh
pham

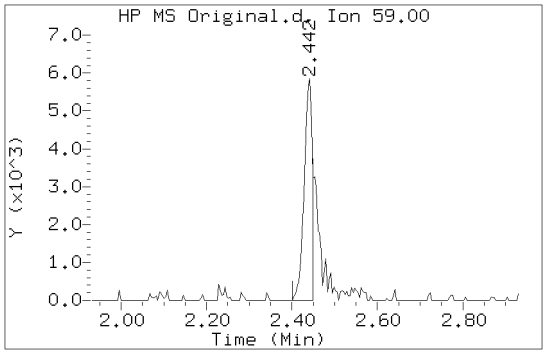


Tert-butyl alcohol (75-65-0)

Reason Code:

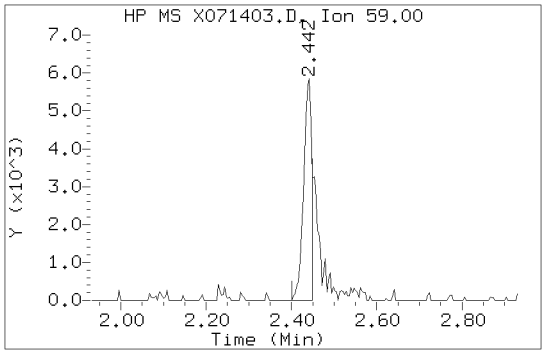
BEFORE

MASS
59
AREA
7856
HEIGHT
5851
20-Jul-2023
15:04
linh
pham



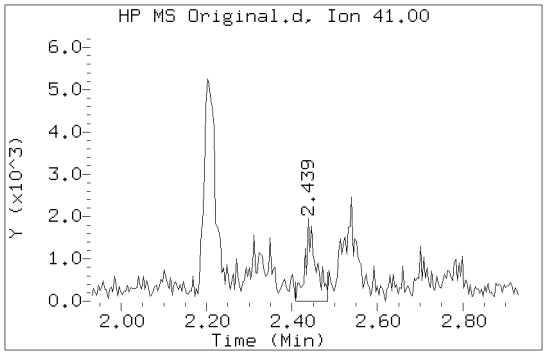
AFTER

MASS
59
AREA
7856
HEIGHT
5851
20-Jul-2023
15:04
linh
pham



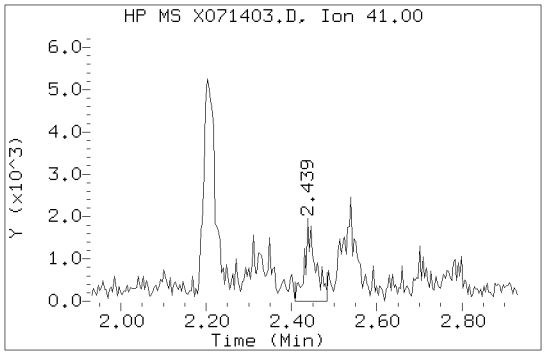
BEFORE

MASS
41
AREA
3380
HEIGHT
1954
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
3380
HEIGHT
1954
20-Jul-2023
15:04
linh
pham

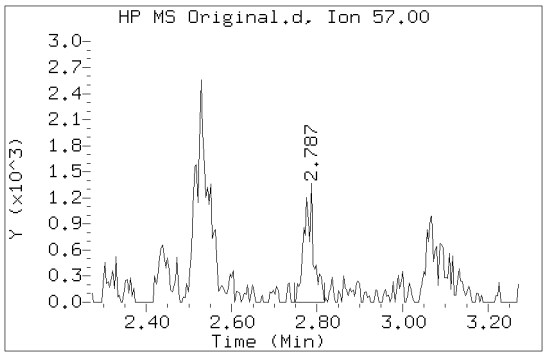


Allyl alcohol (107-18-6)

Reason Code:

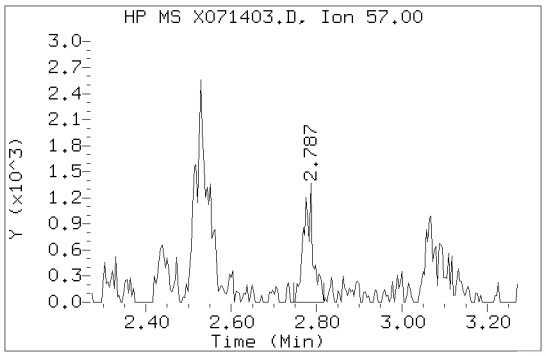
BEFORE

MASS
57
AREA
2068
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
2068
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



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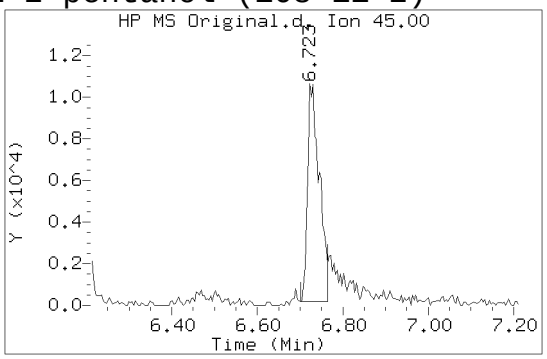
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

4-Methyl-2-pentanol (108-11-2)

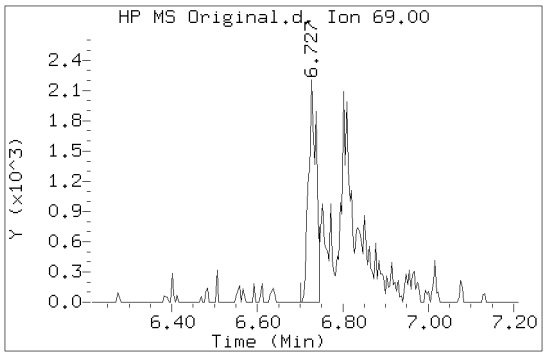
BEFORE

MASS
45
AREA
20217
HEIGHT
10478
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
69
AREA
2780
HEIGHT
2206
20-Jul-2023
15:04
linh
pham



AFTER

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20-Jul-2023
15:04
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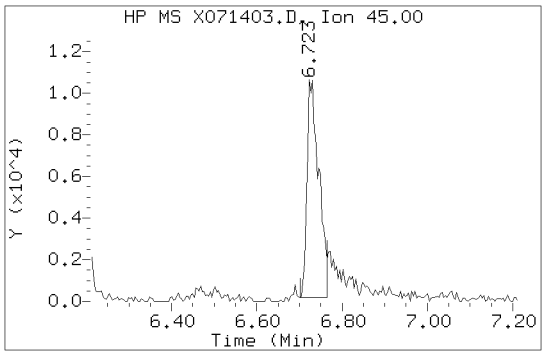

AFTER

MASS
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2780
HEIGHT
2206
20-Jul-2023
15:04
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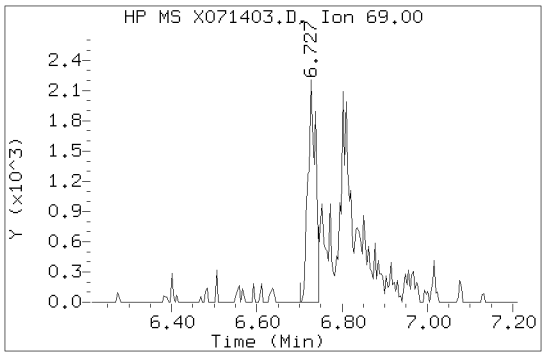
pham



Reason Code:

Amyl alcohol (71-41-0)

BEFORE

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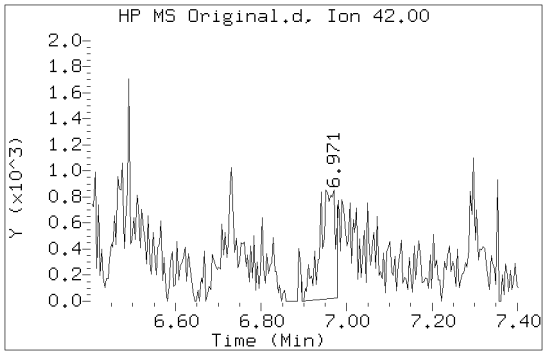
20-Jul-2023
15:04
linh
pham



BEFORE

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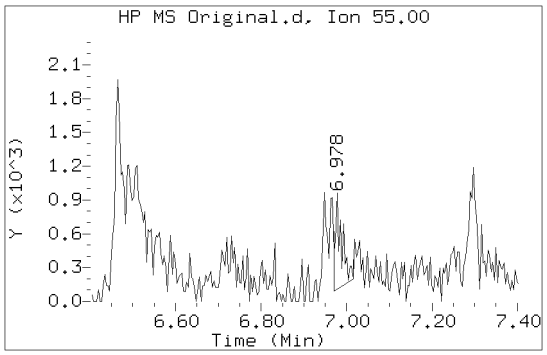
AREA
884
HEIGHT
854
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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2120
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829
20-Jul-2023
15:04
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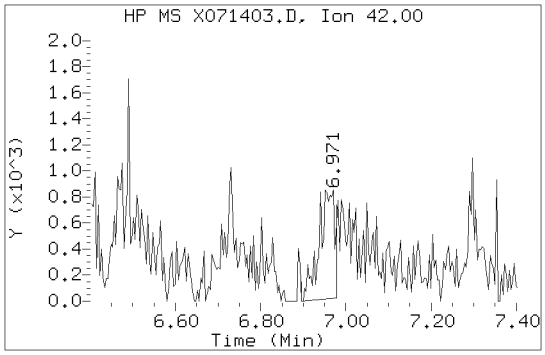
pham



AFTER

MASS
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AREA
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HEIGHT
854
20-Jul-2023
15:04
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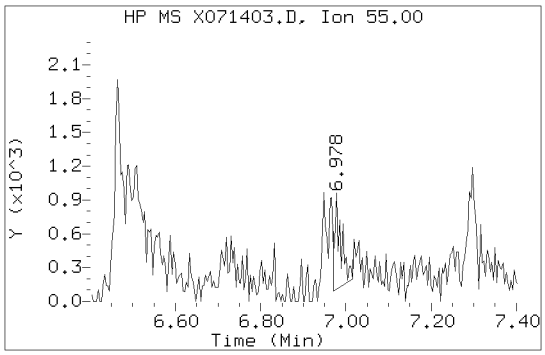

Reason Code:

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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Amyl alcohol (71-41-0)

Reason Code:

BEFORE

MASS
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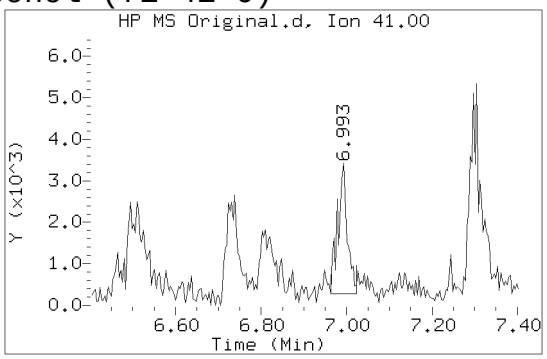
HEIGHT
3144
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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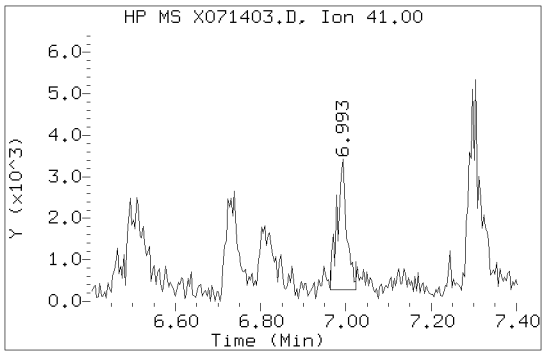
AREA
4891
HEIGHT
3144
20-Jul-2023
15:04
linh
pham



Dichlorofluoromethane (75-43-4)

Reason Code:

BEFORE

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67
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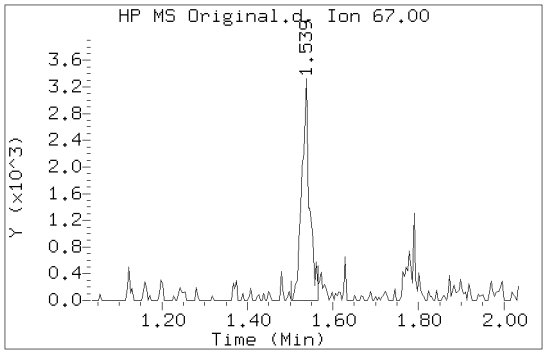
4296
HEIGHT
3324
20-Jul-2023
15:04
linh
pham



AFTER

MASS
67
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4296
HEIGHT
3324
20-Jul-2023
15:04
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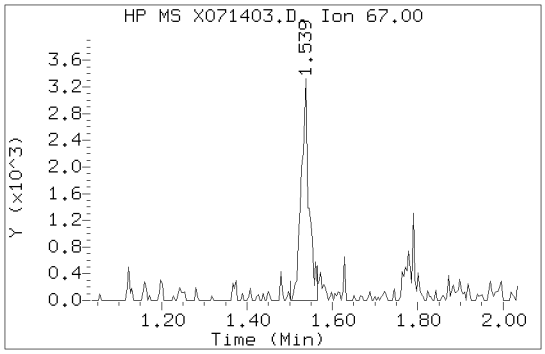
pham



BEFORE

MASS
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AREA
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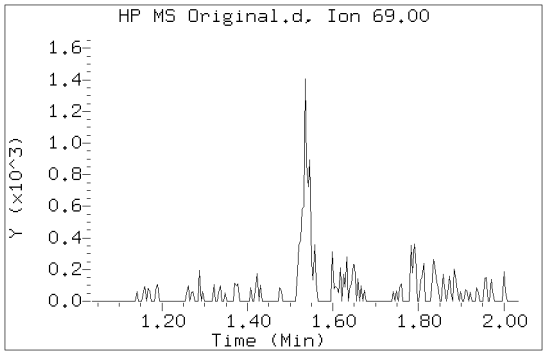
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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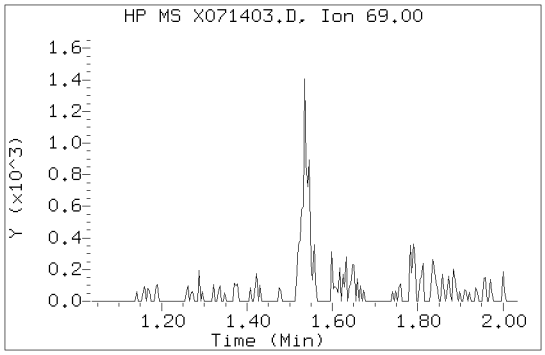
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
37
AREA
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HEIGHT
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20-Jul-2023
15:04
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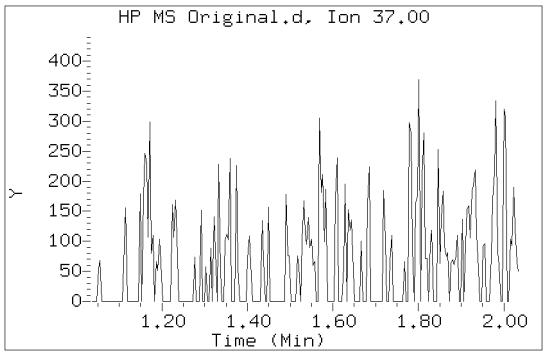
pham



AFTER

MASS
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AREA
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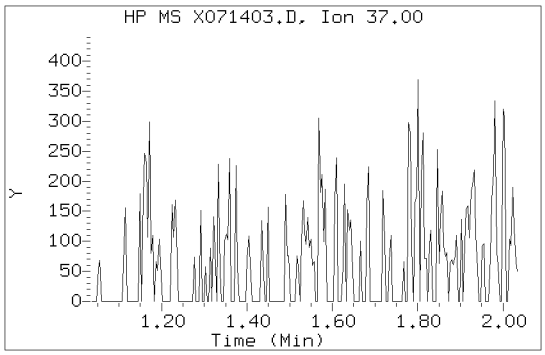
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Propylene oxide ()

Reason Code:

BEFORE
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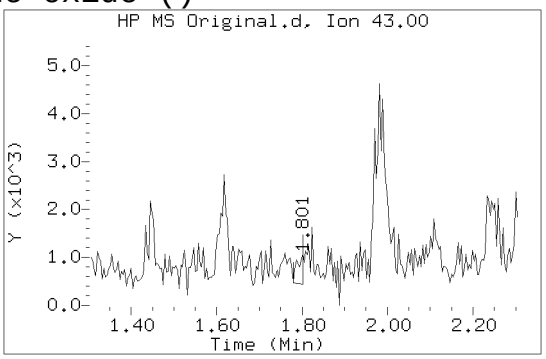
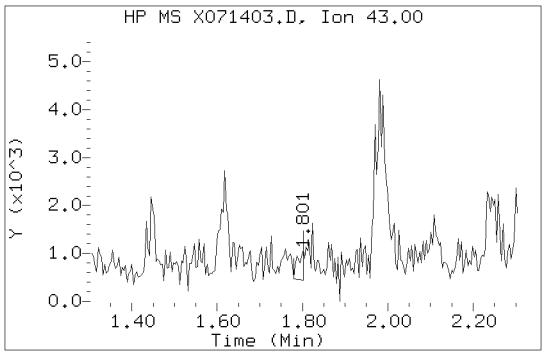
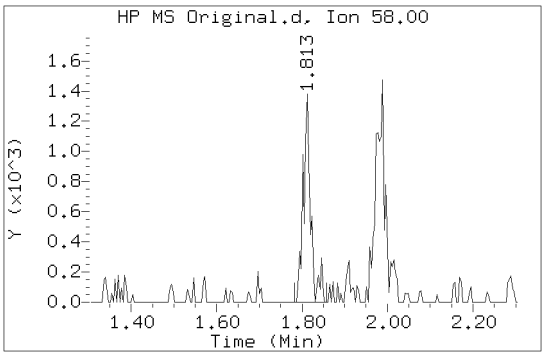
43
AREA
615
HEIGHT
640
20-Jul-2023
15:04
linh
pham



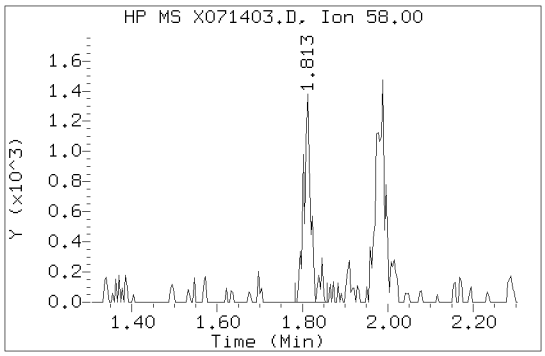
AFTER
MASS
43
AREA
615
HEIGHT
640
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
58
AREA
1675
HEIGHT
1380
20-Jul-2023
15:04
linh
pham



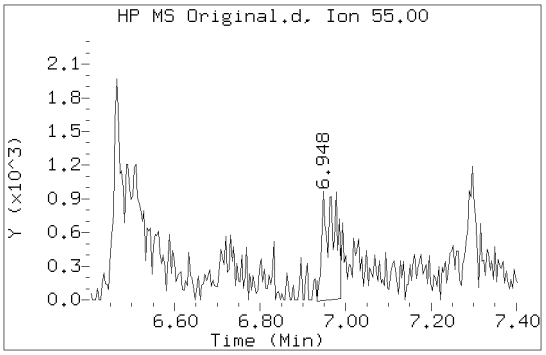
AFTER
MASS
58
AREA
1675
HEIGHT
1380
20-Jul-2023
15:04
linh
pham



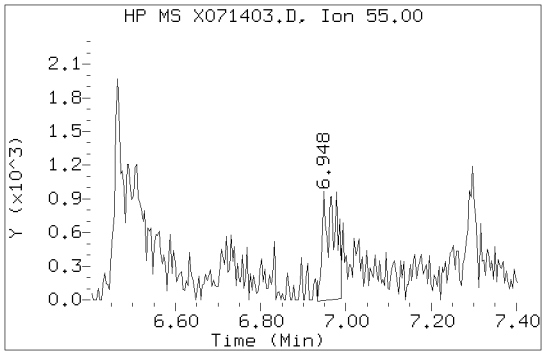
3-Methyl-1-butanol (123-51-3)

Reason Code:

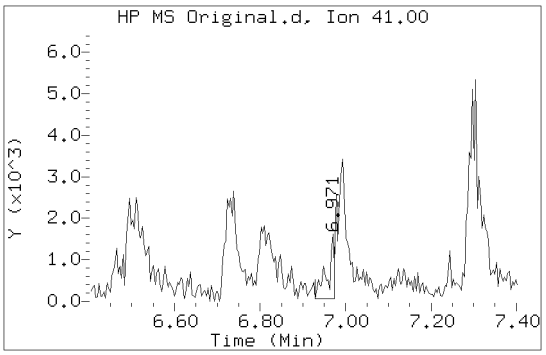
BEFORE
MASS
55
AREA
1945
HEIGHT
970
20-Jul-2023
15:04
linh
pham



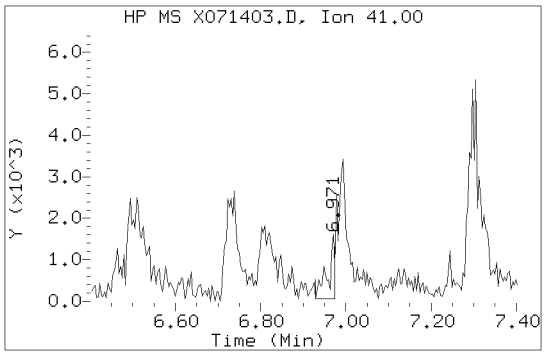
AFTER
MASS
55
AREA
1945
HEIGHT
970
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
41
AREA
1621
HEIGHT
1554
20-Jul-2023
15:04
linh
pham



AFTER
MASS
41
AREA
1621
HEIGHT
1554
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Butyl methacrylate (97-88-1)

Reason Code:

BEFORE
MASS
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AREA
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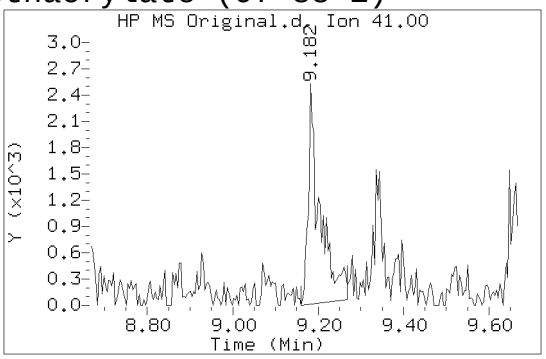
HEIGHT
2516
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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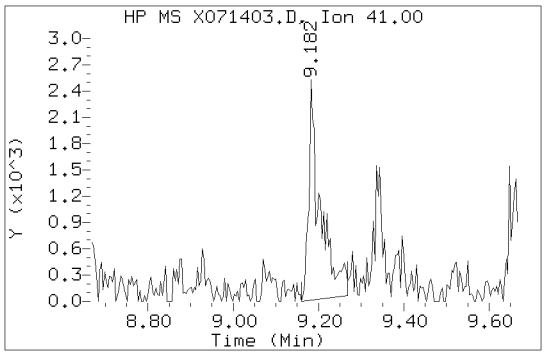
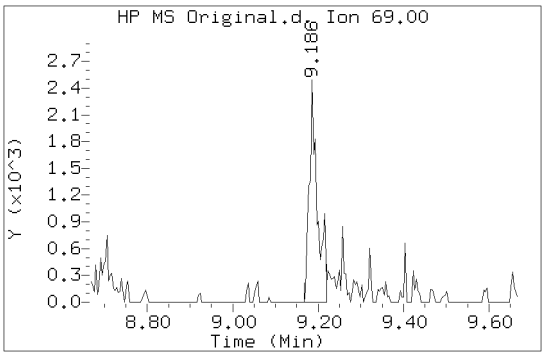
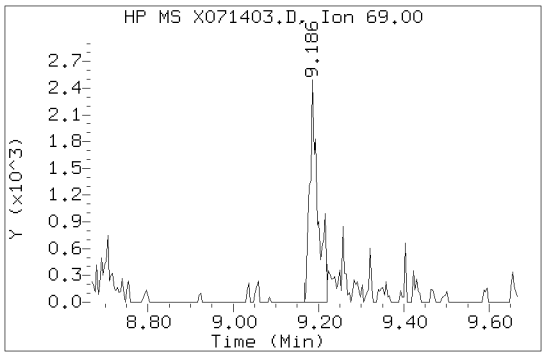
AREA
4724
HEIGHT
2516
20-Jul-2023
15:04
linh
pham



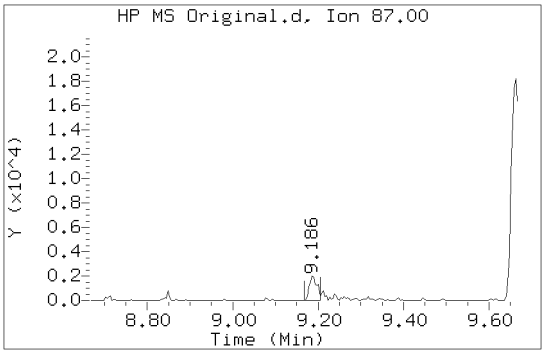
BEFORE
MASS
69
AREA
3258
HEIGHT
2492
20-Jul-2023
15:04
linh
pham



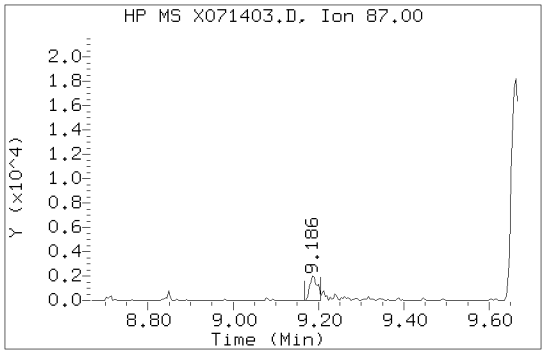
AFTER
MASS
69
AREA
3258
HEIGHT
2492
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
87
AREA
2479
HEIGHT
2026
20-Jul-2023
15:04
linh
pham



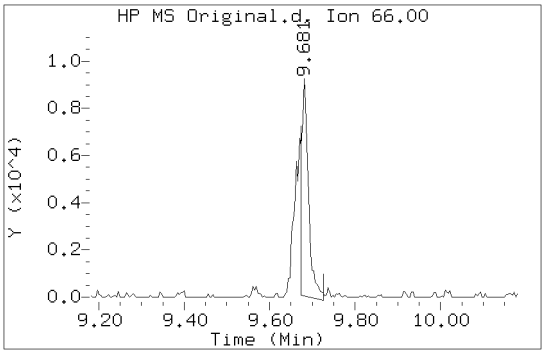
AFTER
MASS
87
AREA
2479
HEIGHT
2026
20-Jul-2023
15:04
linh
pham



Dicyclopentadiene (77-73-6)

Reason Code:

BEFORE
MASS
66
AREA
10848
HEIGHT
9195
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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HEIGHT
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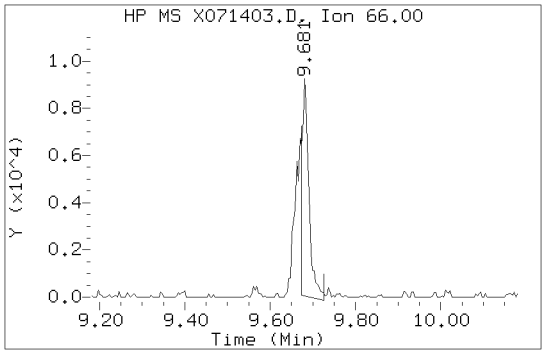
20-Jul-2023
15:04
linh
pham



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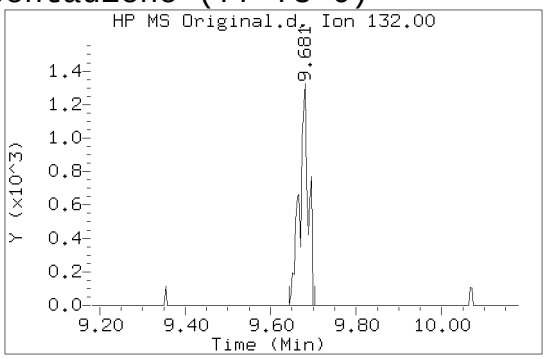
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Dicyclopentadiene (77-73-6)

Reason Code:

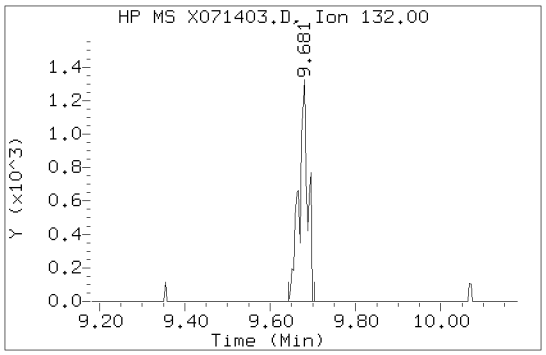
BEFORE

MASS
132
AREA
1955
HEIGHT
1325
20-Jul-2023
15:04
linh
pham



AFTER

MASS
132
AREA
1955
HEIGHT
1325
20-Jul-2023
15:04
linh
pham

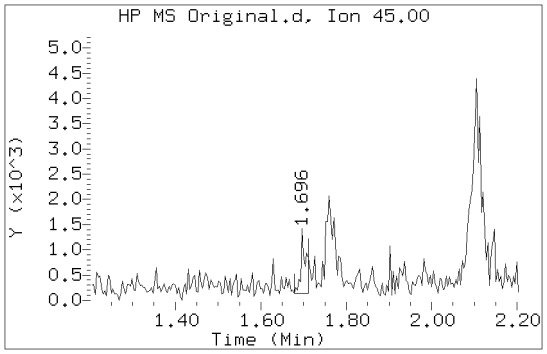


Ethanol (64-17-5)

Reason Code:

BEFORE

MASS
45
AREA
1082
HEIGHT
1281
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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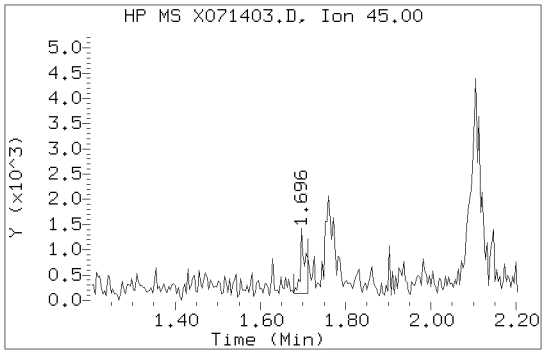
HEIGHT
1281
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
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AREA
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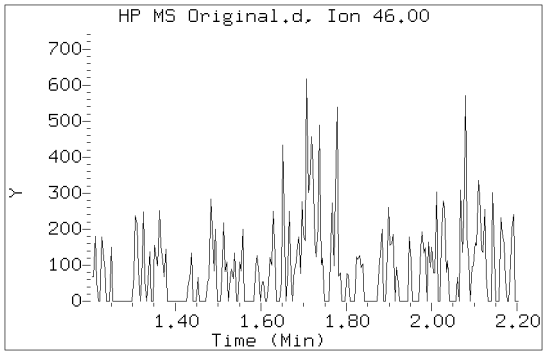
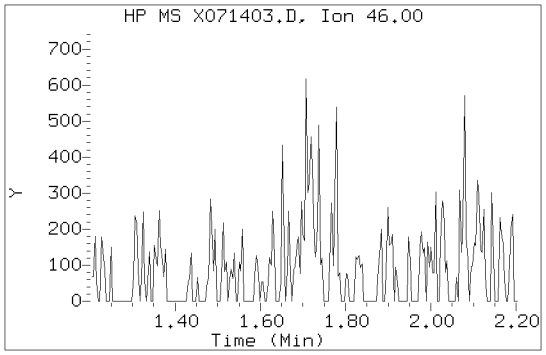
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
46
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE

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AREA
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HEIGHT
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20-Jul-2023
15:04
linh
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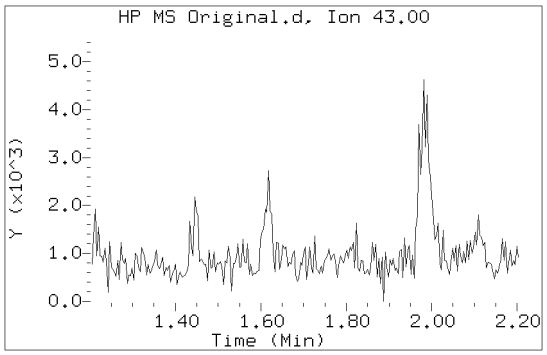

AFTER

MASS
43
AREA
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HEIGHT
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20-Jul-2023
15:04
linh
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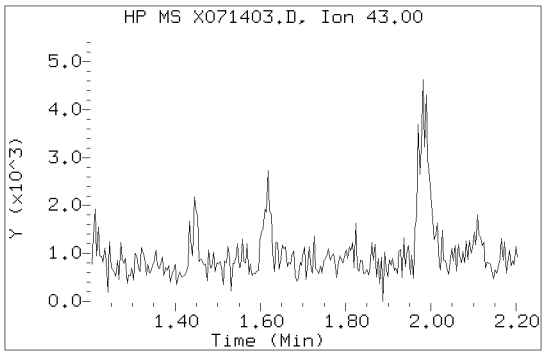

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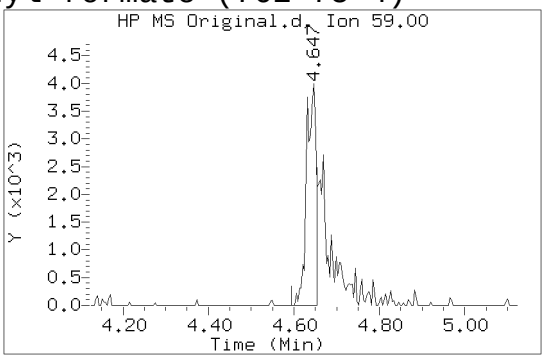
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

tert-Butyl formate (762-75-4)

Reason Code:

BEFORE

MASS
59
AREA
6083
HEIGHT
3995
20-Jul-2023
15:04
linh
pham



AFTER

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HEIGHT
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20-Jul-2023
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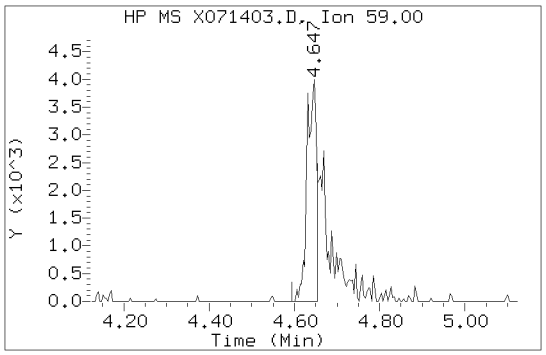

BEFORE

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20-Jul-2023
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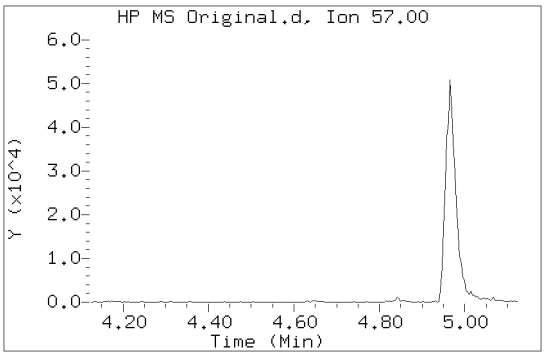

AFTER

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15:04
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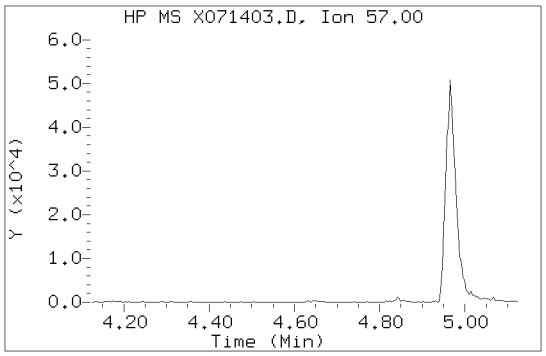

BEFORE

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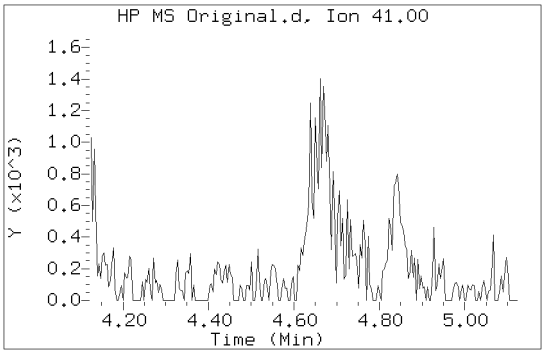

AFTER

MASS
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20-Jul-2023
15:04
linh
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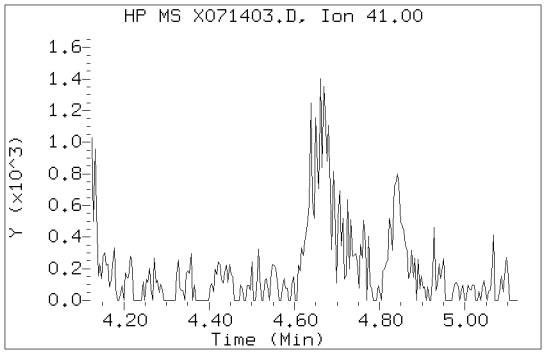

3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

BEFORE

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AREA
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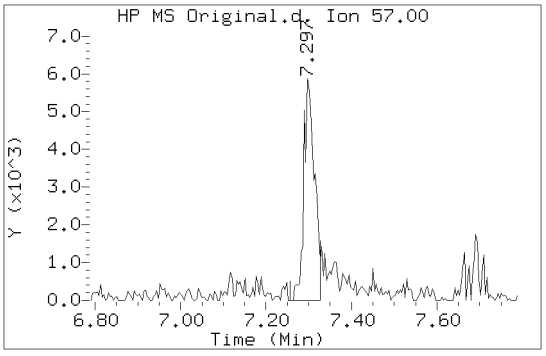
HEIGHT
5870
20-Jul-2023
15:04
linh
pham



AFTER

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HEIGHT
5870
20-Jul-2023
15:04
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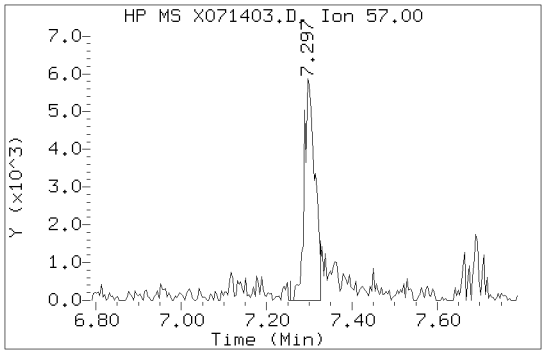

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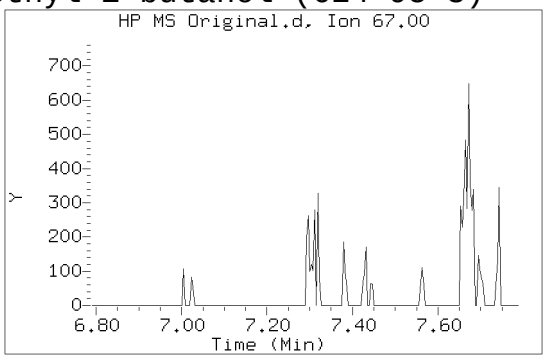
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

BEFORE
MASS
67
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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HEIGHT
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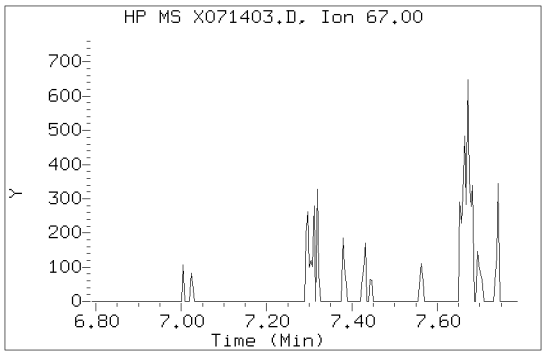
20-Jul-2023
15:04
linh
pham



BEFORE
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20-Jul-2023
15:04
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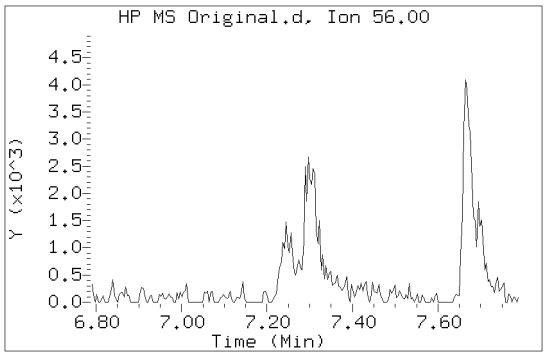

AFTER
MASS
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HEIGHT
0
20-Jul-2023
15:04
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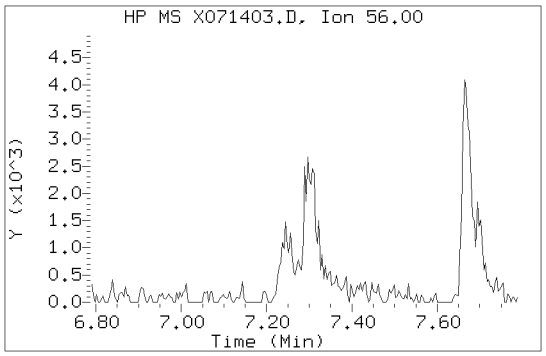
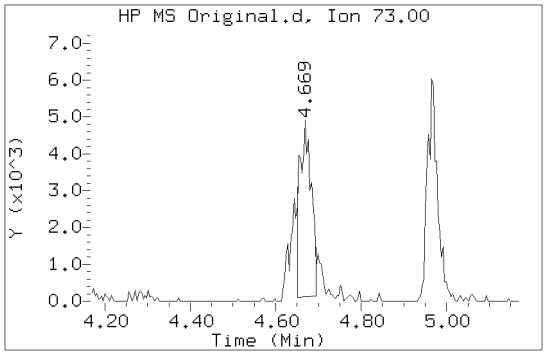
pham



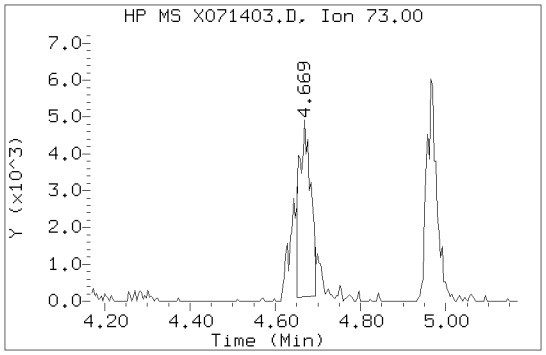
tert-Amyl methyl ether (974-05-08)

Reason Code:

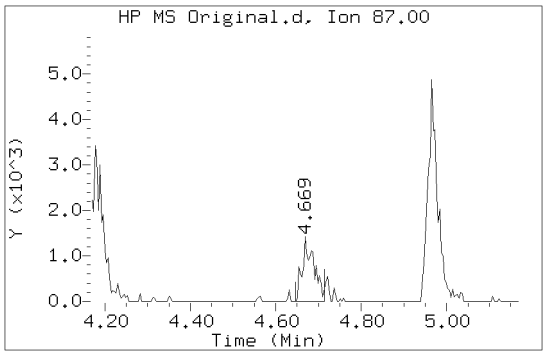
BEFORE
MASS
73
AREA
9377
HEIGHT
4800
20-Jul-2023
15:04
linh
pham



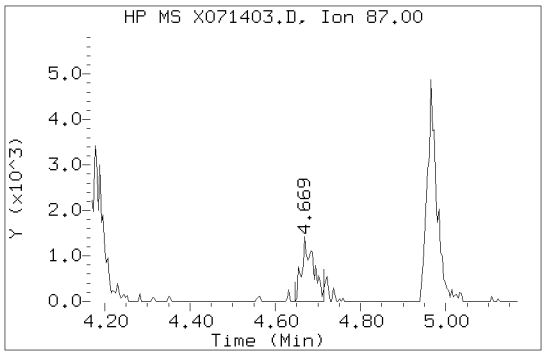
AFTER
MASS
73
AREA
9377
HEIGHT
4800
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
87
AREA
2769
HEIGHT
1423
20-Jul-2023
15:04
linh
pham



AFTER
MASS
87
AREA
2769
HEIGHT
1423
20-Jul-2023
15:04
linh
pham



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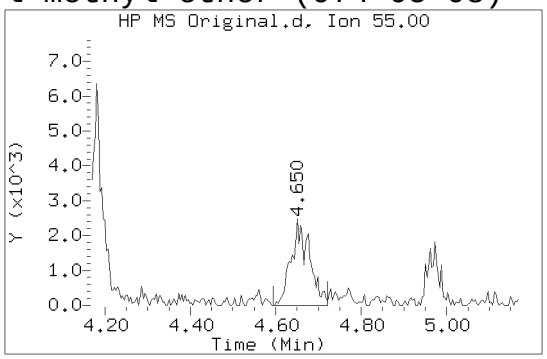
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

tert-Amyl methyl ether (974-05-08)

Reason Code:

BEFORE

MASS
55
AREA
7426
HEIGHT
2483
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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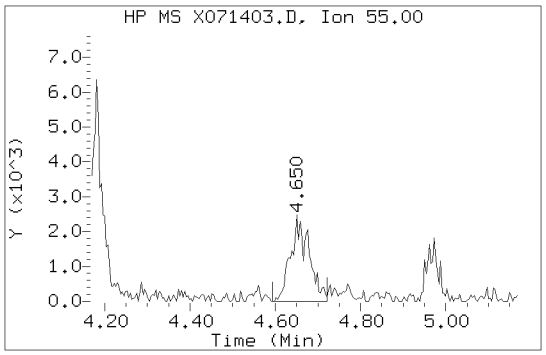
HEIGHT
2483
20-Jul-2023
15:04
linh
pham



tert-Amyl alcohol (75-85-4)

Reason Code:

BEFORE

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AREA
6083
HEIGHT
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20-Jul-2023
15:04
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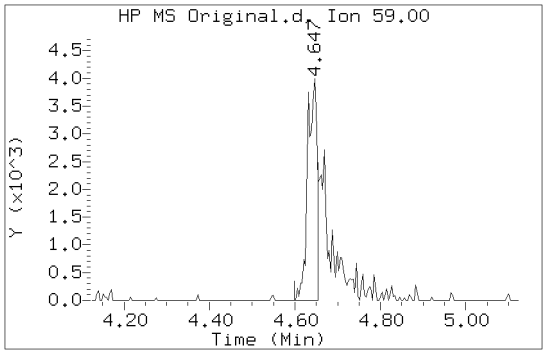
pham



AFTER

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20-Jul-2023
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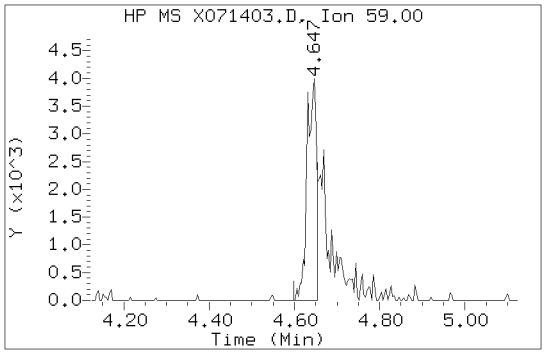

BEFORE

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3364
HEIGHT
2424
20-Jul-2023
15:04
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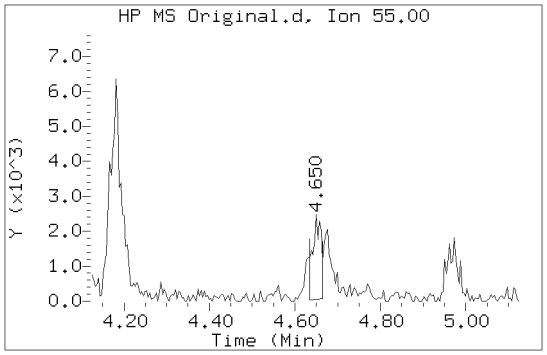
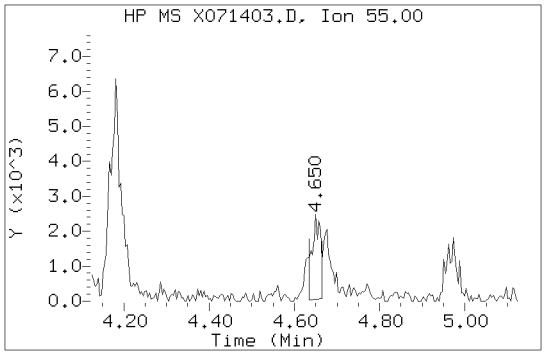


AFTER

MASS
55
AREA
3364
HEIGHT
2424
20-Jul-2023
15:04
linh
pham



BEFORE

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13761
HEIGHT
4914
20-Jul-2023
15:04
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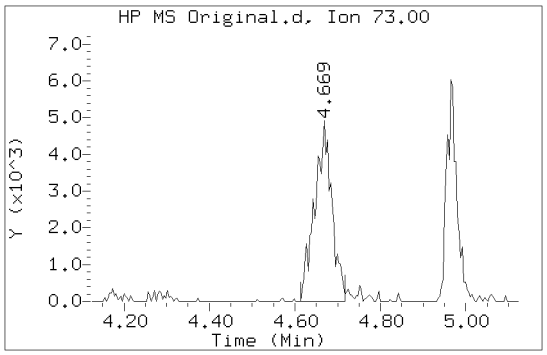
pham



AFTER

MASS
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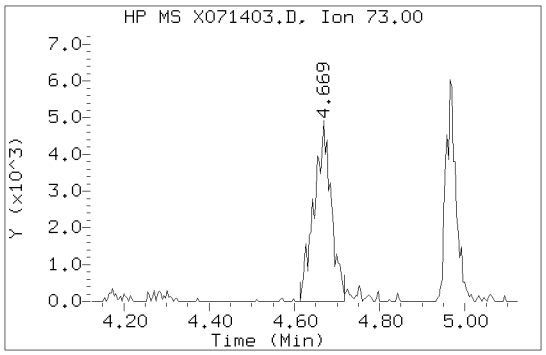
4914
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Epichlorohydrin (106-89-8)

Reason Code:

BEFORE

MASS
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AREA
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HEIGHT
788
20-Jul-2023
15:04
linh
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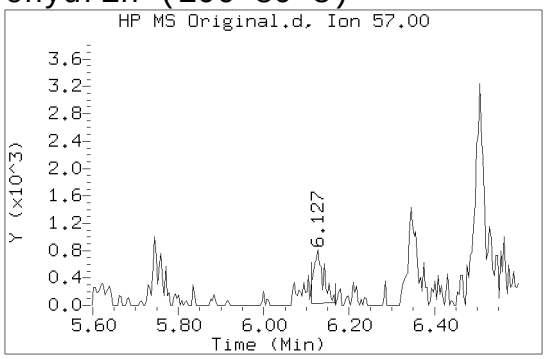

AFTER

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20-Jul-2023
15:04
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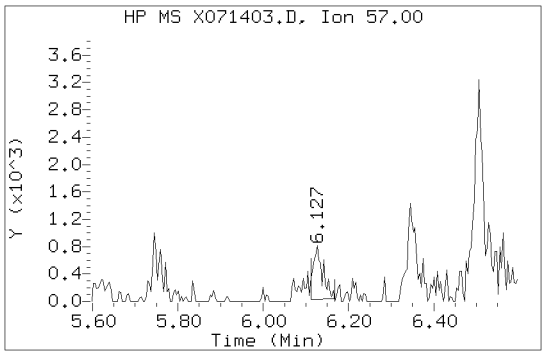

BEFORE

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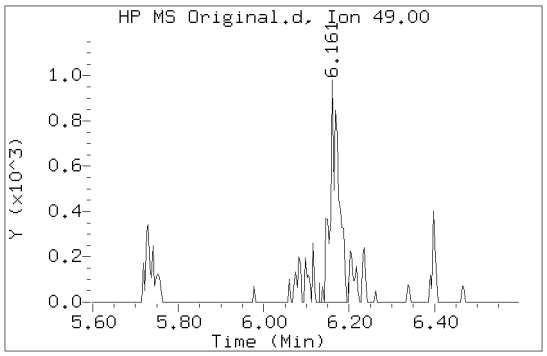
1383
HEIGHT
981
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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20-Jul-2023
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linh
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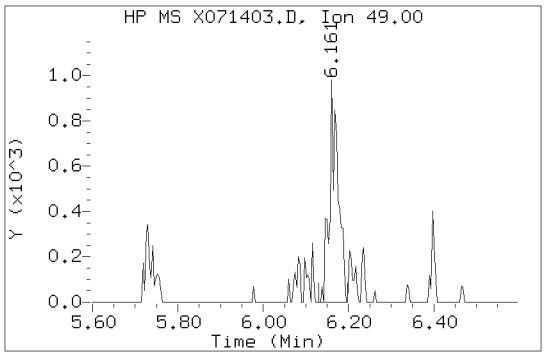

Isoprene (78-79-5)

Reason Code:

BEFORE

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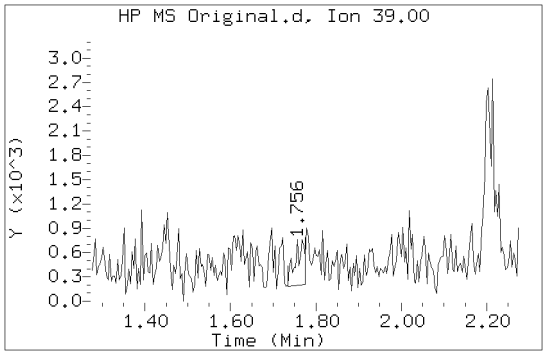
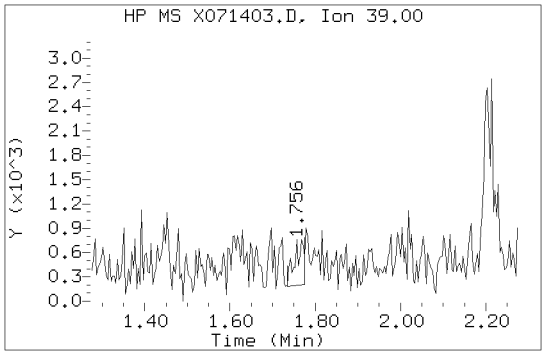
39
AREA
843
HEIGHT
570
20-Jul-2023
15:04
linh
pham



AFTER

MASS
39
AREA
843
HEIGHT
570
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
67
AREA
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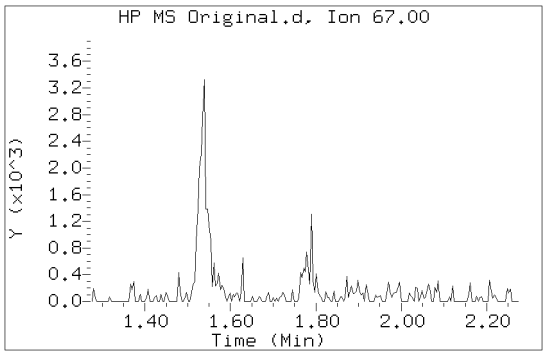
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
67
AREA
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HEIGHT
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20-Jul-2023
15:04
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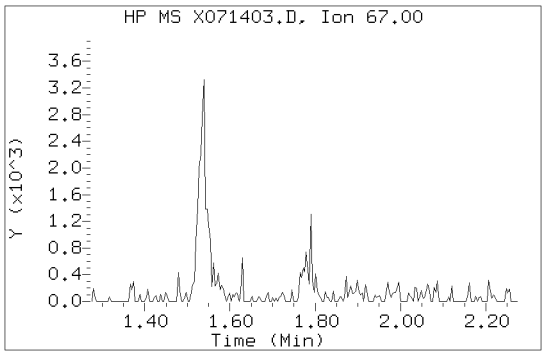

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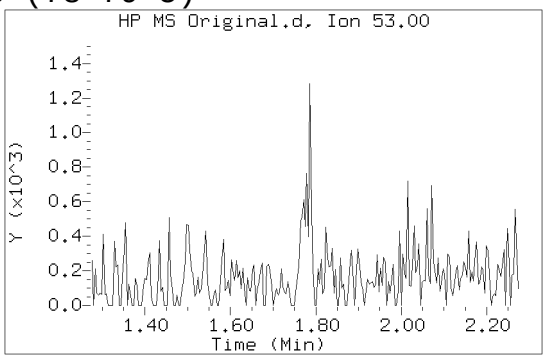
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Isoprene (78-79-5)

Reason Code:

BEFORE

MASS
53
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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20-Jul-2023
15:04
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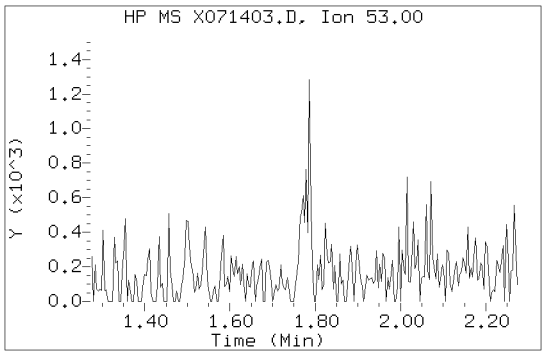
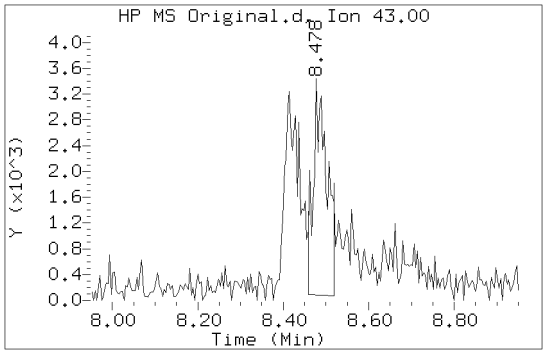


n-Amyl acetate (628-63-7)

Reason Code:

BEFORE

MASS
43
AREA
7447
HEIGHT
3352
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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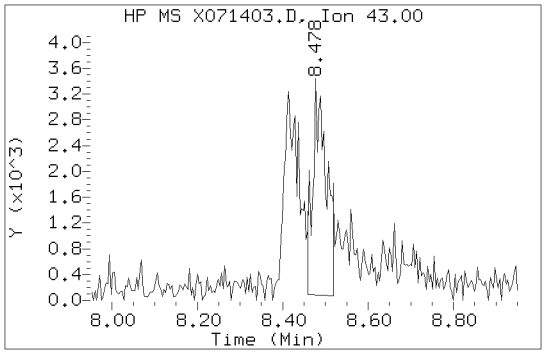
AREA
7447
HEIGHT
3352
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
70
AREA
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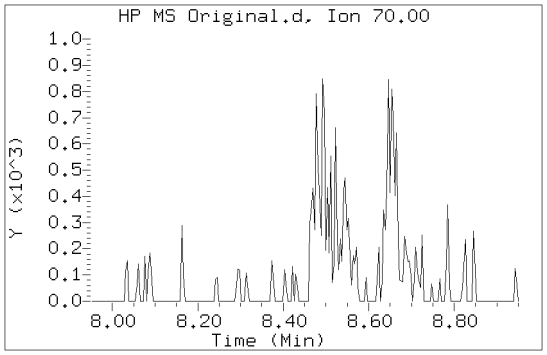
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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20-Jul-2023
15:04
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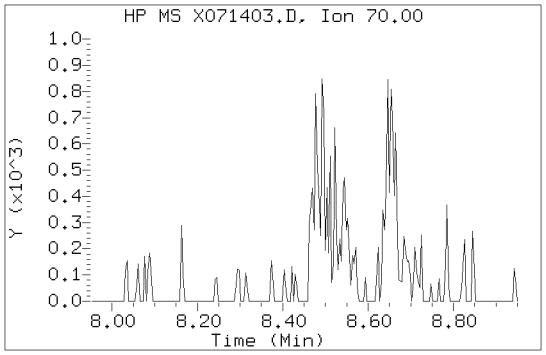

BEFORE

MASS
87
AREA
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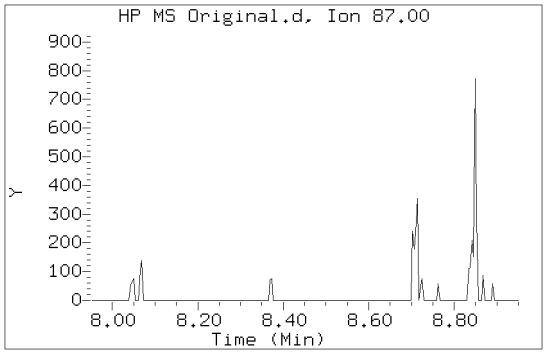
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
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HEIGHT
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20-Jul-2023
15:04
linh
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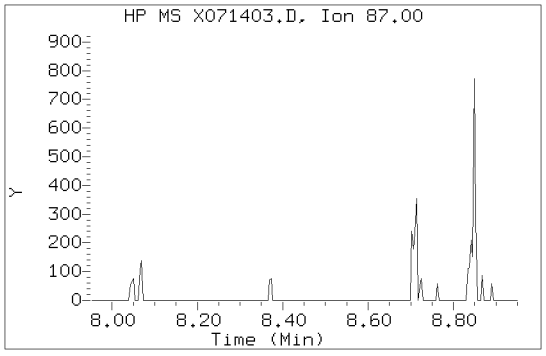

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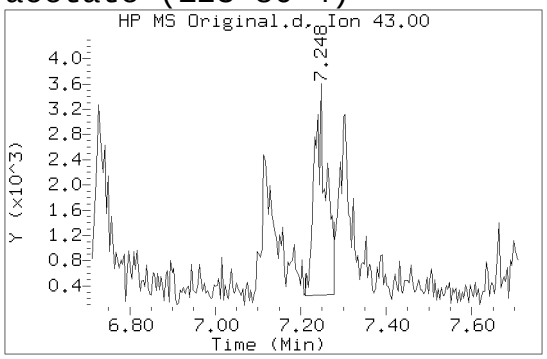
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

n-Butyl acetate (123-86-4)

Reason Code:

BEFORE

MASS
43
AREA
6398
HEIGHT
3352
20-Jul-2023
15:04
linh
pham



AFTER

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20-Jul-2023
15:04
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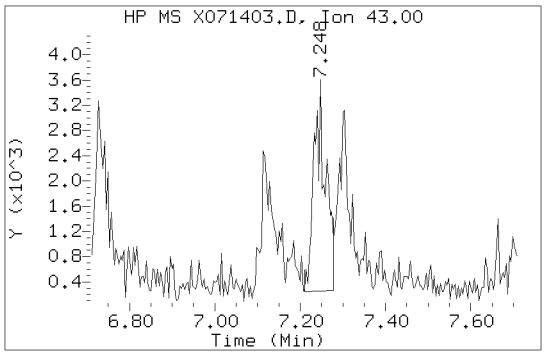

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20-Jul-2023
15:04
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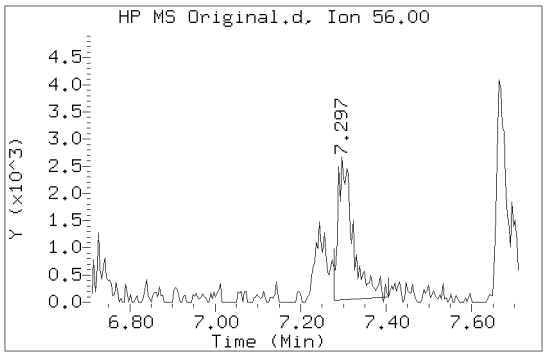

AFTER

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AREA
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20-Jul-2023
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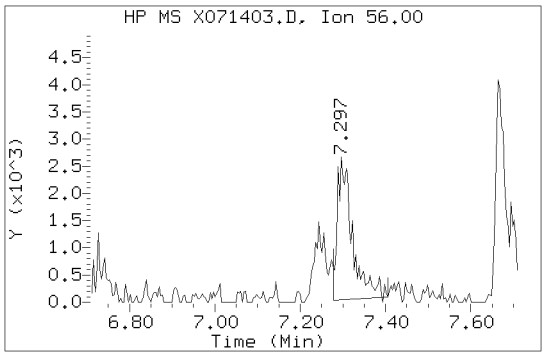

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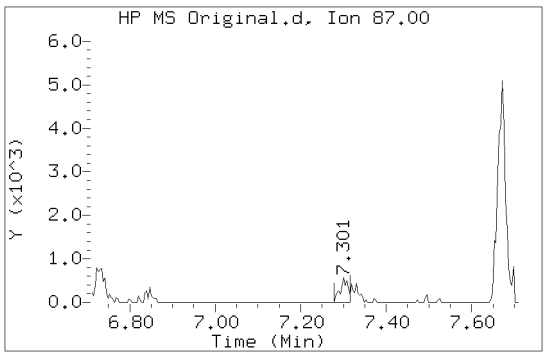

AFTER

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15:04
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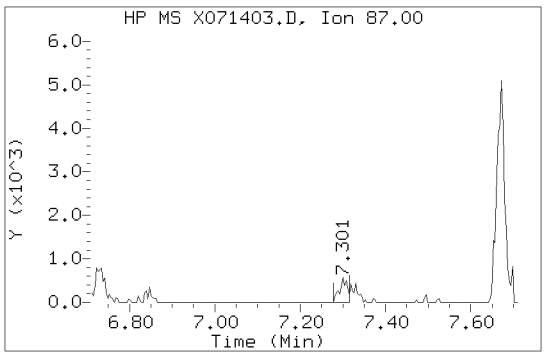

Isobutylene (115-11-7)

Reason Code:

BEFORE

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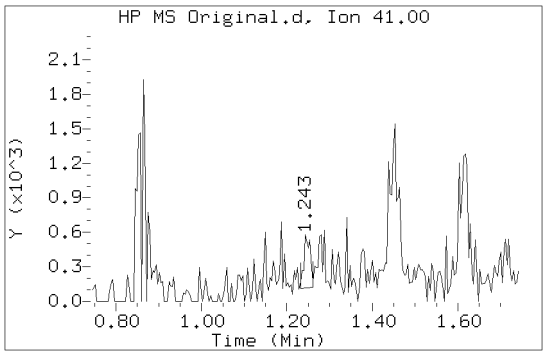

AFTER

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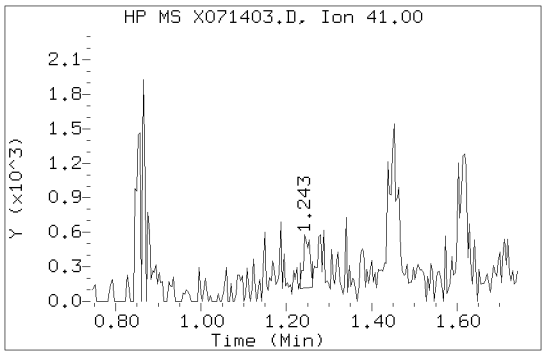

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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Isobutylene (115-11-7)

Reason Code:

BEFORE
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AREA
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HEIGHT
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20-Jul-2023
15:04
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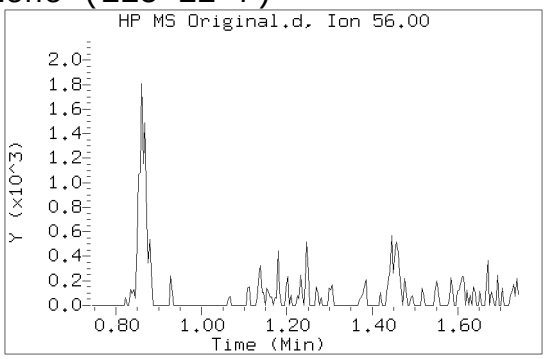
pham



AFTER
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AREA
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HEIGHT
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20-Jul-2023
15:04
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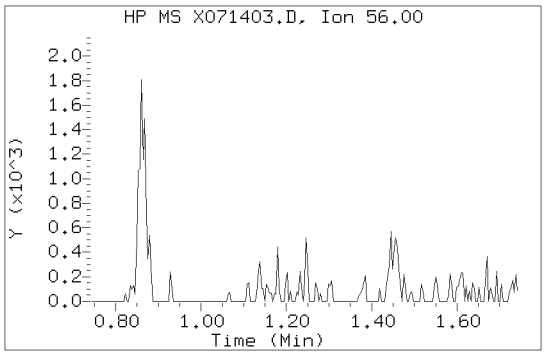

BEFORE
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20-Jul-2023
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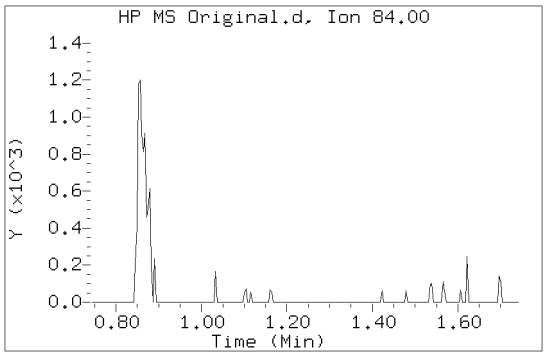

AFTER
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20-Jul-2023
15:04
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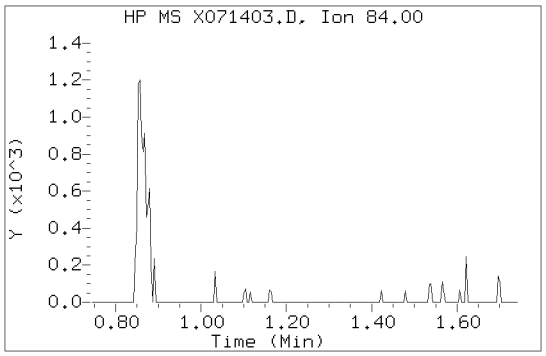

2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

BEFORE
MASS
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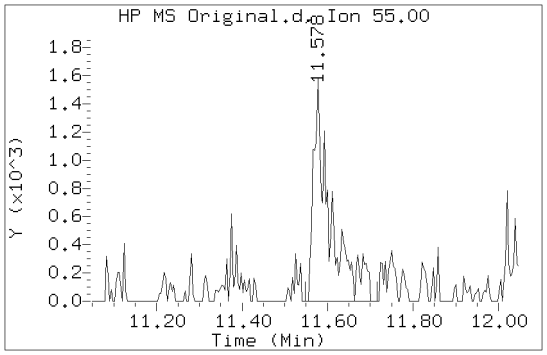
AREA
4236
HEIGHT
1577
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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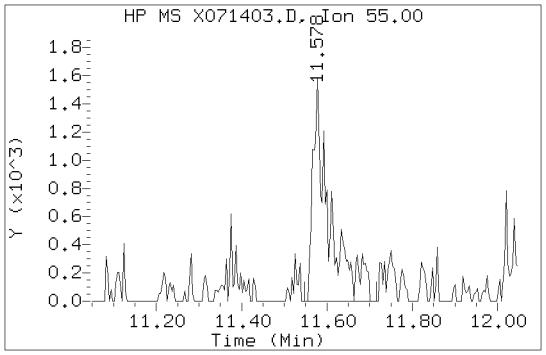
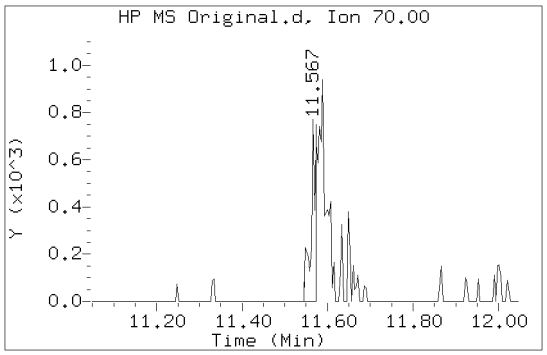
AREA
4236
HEIGHT
1577
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
70
AREA
631
HEIGHT
771
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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HEIGHT
771
20-Jul-2023
15:04
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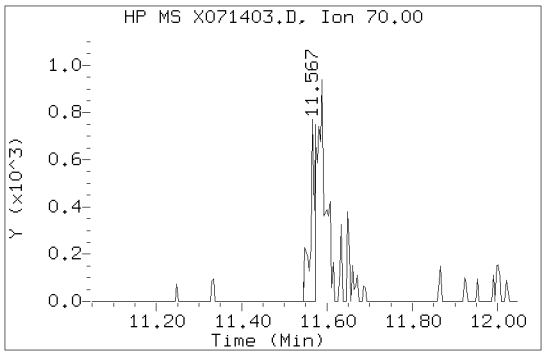

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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Dibromofluoromethane (1868-53-7)

Reason Code:

BEFORE

MASS
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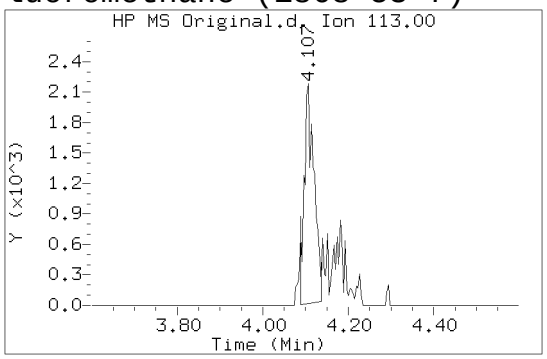
AREA
3536
HEIGHT
2165
20-Jul-2023
15:04
linh
pham



AFTER

MASS
113
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HEIGHT
2165
20-Jul-2023
15:04
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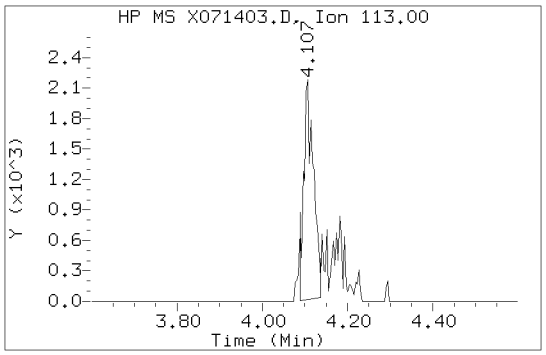
pham



BEFORE

MASS
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AREA
3831
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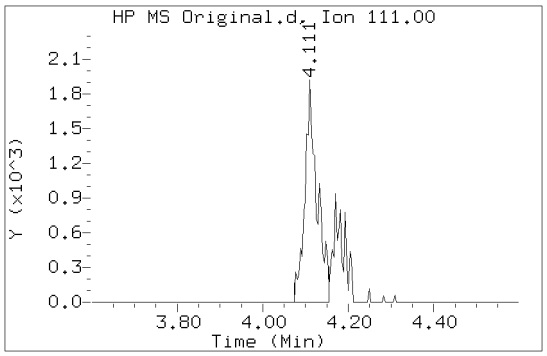
1919
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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HEIGHT
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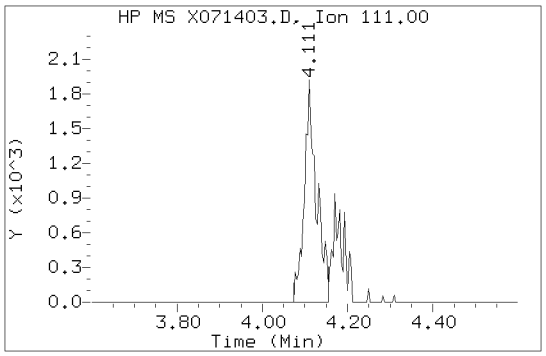
20-Jul-2023
15:04
linh
pham



Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

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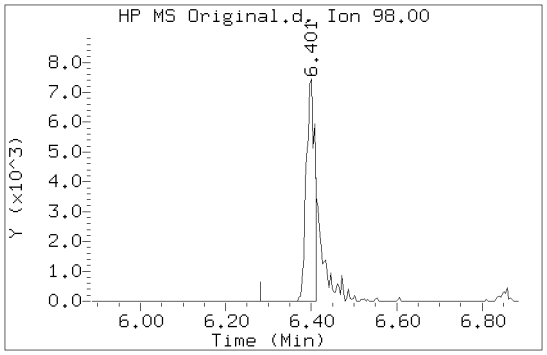
AREA
10379
HEIGHT
7449
20-Jul-2023
15:04
linh
pham



AFTER

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7449
20-Jul-2023
15:04
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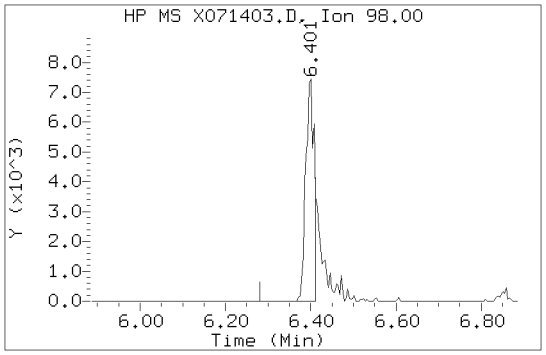
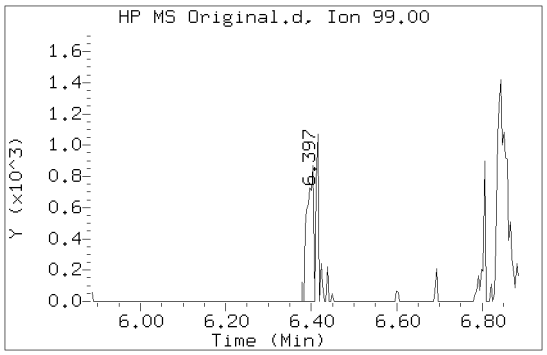
pham



BEFORE

MASS
99
AREA
897
HEIGHT
727
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
897
HEIGHT
727
20-Jul-2023
15:04
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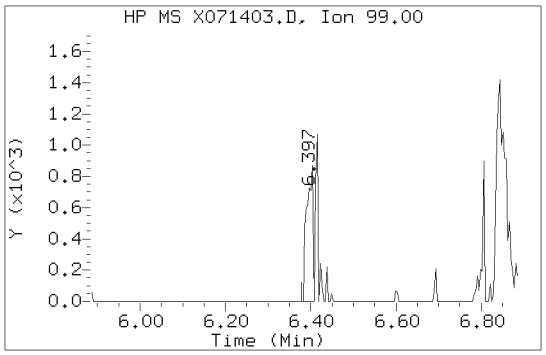
pham



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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

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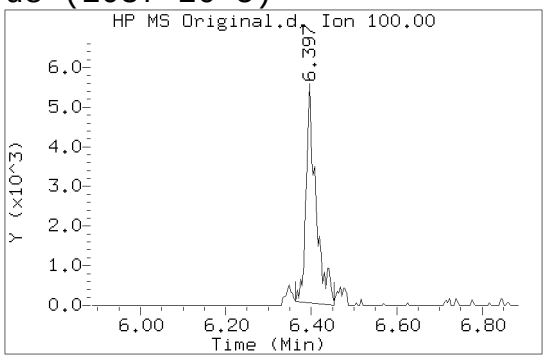
HEIGHT
5534
20-Jul-2023
15:04
linh
pham



AFTER

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15:04
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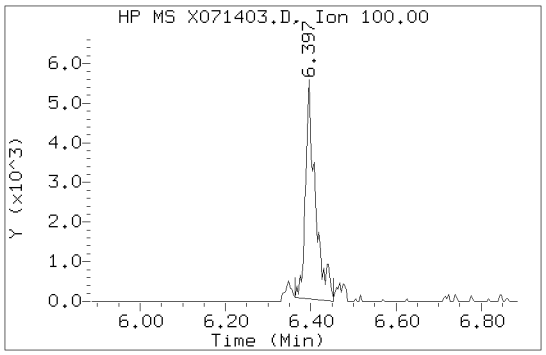

4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

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AREA
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HEIGHT
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20-Jul-2023
15:04
linh
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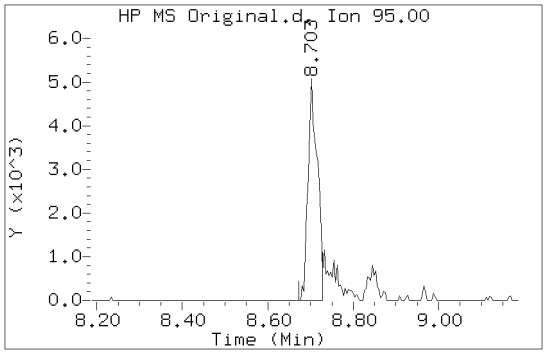

AFTER

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15:04
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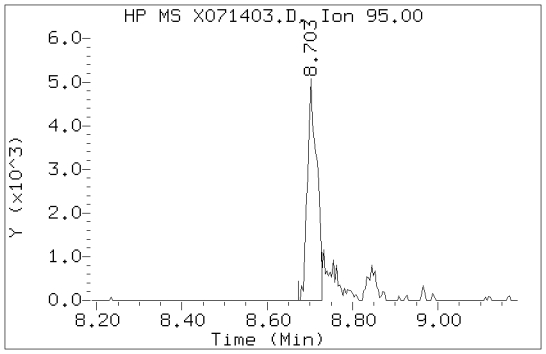

BEFORE

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HEIGHT
4342
20-Jul-2023
15:04
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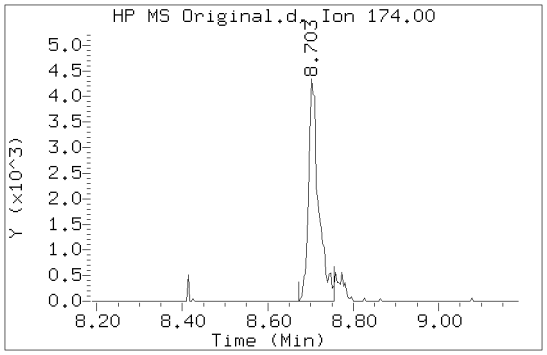
pham



AFTER

MASS
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HEIGHT
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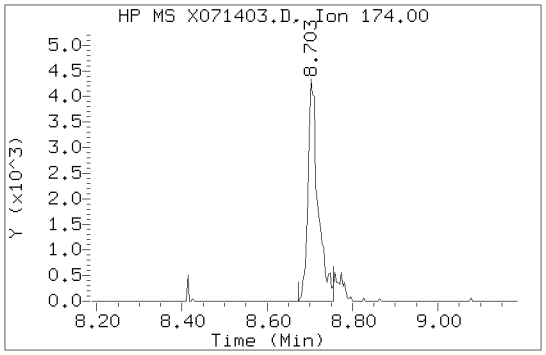
20-Jul-2023
15:04
linh
pham



BEFORE

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20-Jul-2023
15:04
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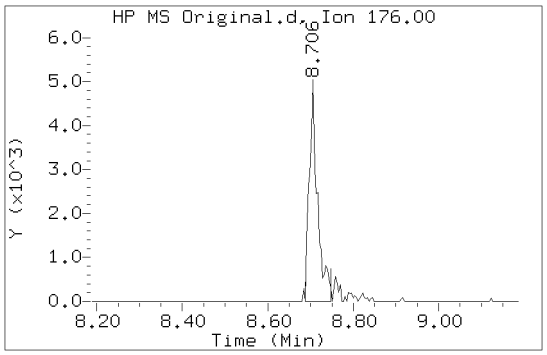

AFTER

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20-Jul-2023
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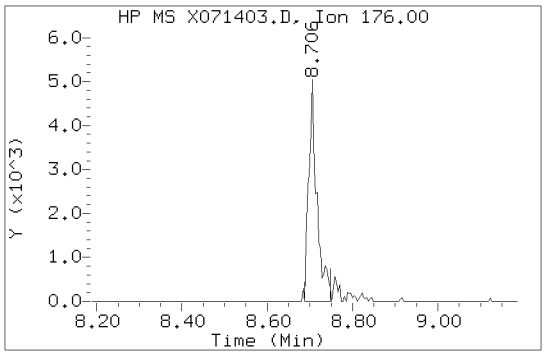

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
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Inj Date : 14-JUL-2023 13:02
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\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 12:22 Cal File: X071403.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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	4.178	4.178	(1.000)	527854	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	3668	1.00000	1.76
3	Chloromethane	50	1.081	1.081	(0.259)	7000	1.00000	0.87
4	Propionitrile	54	3.690	3.690	(0.883)	10495	10.0000	10.03(aM)
5	Vinyl Chloride	62	1.149	1.149	(0.275)	5610	1.00000	0.82
6	Bromomethane	94	1.344	1.344	(0.322)	2584	1.00000	0.91
7	Chloroethane	64	1.407	1.407	(0.337)	3779	1.00000	0.96
8	Trichlorofluoromethane	101	1.561	1.561	(0.374)	5888	1.00000	0.85(M)
9	Acrolein	56	1.861	1.861	(0.446)	510	2.00000	3.65(aM)
11	1,1-Dichloroethene	96	1.913	1.913	(0.458)	3525	1.00000	0.91(M)
12	Isobutyl Alcohol	43	4.687	4.687	(1.122)	16938	20.0000	16.92(aM)
13	Acetonitrile	39	2.198	2.198	(0.526)	7835	10.0000	10.58(a)
14	Allyl Chloride	41	2.202	2.202	(0.527)	19290	1.00000	1.11(a)
15	Iodomethane	142	2.030	2.030	(0.486)	4792	2.00000	4.73(M)
16	Acrylonitrile	53	2.551	2.551	(0.611)	4763	2.00000	1.85(M)
18	Methyl tert-butyl ether	73	2.543	2.543	(0.609)	15895	1.00000	1.10
19	Carbon Disulfide	76	2.071	2.071	(0.496)	21621	2.00000	1.77
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.607)	3665	1.00000	0.81
21	Vinyl Acetate	43	3.015	3.015	(0.722)	36157	2.00000	1.95
22	1,1-Dichloroethane	63	2.929	2.929	(0.701)	9261	1.00000	0.94

23 Chloroprene	53	1.786	1.786 (0.428)	2402	1.00000	1.01(aM)
24 2-Butanone	43	3.686	3.686 (0.882)	5549	2.00000	1.97(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	25 Methacrylonitrile	41	3.874	3.874	(0.927)	6195	1.00000	0.90(aM)
	26 2,2-Dichloropropane	77	3.518	3.518	(0.842)	7001	1.00000	1.12(M)
	27 cis-1,2-Dichloroethene	96	3.540	3.540	(0.847)	5828	1.00000	1.02(M)
	28 Chloroform	83	3.915	3.915	(0.937)	10007	1.00000	0.99
	29 Bromochloromethane	128	3.799	3.799	(0.909)	3002	1.00000	0.94(M)
	31 1,1,1-Trichloroethane	97	4.084	4.084	(0.978)	6398	1.00000	0.82(M)
	32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	6097	1.00000	0.91(M)
	33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	9069	1.00000	1.01
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	7002	1.00000	1.04(M)
$	35 1,2-Dichloroethane-d4	65	4.485	4.485	(1.074)	7805	1.00000	0.68
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	814886	50.0000	
	37 Benzene	78	4.515	4.515	(0.909)	18433	1.00000	0.94
	38 Trichloroethene	130	5.212	5.212	(1.050)	4751	1.00000	0.86(a)
	39 Bromodichloromethane	83	5.730	5.730	(1.154)	6967	1.00000	0.93(aM)
	40 Methyl Methacrylate	41	5.628	5.628	(1.347)	7110	1.00000	1.11(a)
	41 2-Chloroethylvinyl ether	63	6.071	6.071	(1.223)	4176	2.00000	1.83(aM)
	42 1,2-Dichloropropane	63	5.441	5.441	(1.096)	5153	1.00000	0.82(aM)
	43 2-Nitropropane	43	5.992	5.992	(1.434)	2054	1.00000	0.97(aM)
	44 Dibromomethane	93	5.557	5.557	(1.119)	3511	1.00000	0.98(a)
	45 4-Methyl-2-Pentanone	43	6.337	6.337	(0.826)	14106	2.00000	1.87(aM)
	46 cis-1,3-Dichloropropene	75	6.168	6.168	(1.242)	7361	1.00000	0.85(a)
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	765384	50.0000	
$	48 Toluene-d8	98	6.397	6.397	(0.834)	21847	1.00000	1.10(aM)
	49 Ethyl Methacrylate	69	6.730	6.730	(1.356)	5749	1.00000	1.07(aM)
	50 Toluene	91	6.453	6.453	(0.842)	17466	1.00000	0.84(a)
	51 trans-1,3-Dichloropropene	75	6.693	6.693	(1.348)	6303	1.00000	0.87(a)
	52 2-Hexanone	43	7.113	7.113	(0.928)	10319	2.00000	2.08(aM)
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	4429	1.00000	1.01(a)
	54 1,3-Dichloropropane	76	6.985	6.985	(0.911)	8584	1.00000	0.96(a)
	55 Dibromochloromethane	129	7.180	7.180	(0.936)	6003	1.00000	0.95(a)
	56 Tetrachloroethene	164	6.929	6.929	(0.904)	3431	1.00000	0.80(aM)
	57 1,2-Dibromoethane	107	7.270	7.270	(0.948)	4879	1.00000	0.97(a)
	58 1-Chlorohexane	55	7.705	7.705	(1.552)	6663	1.00000	1.01(aM)
	59 Chlorobenzene	112	7.698	7.698	(1.004)	13305	1.00000	0.92(a)
	60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	5021	1.00000	0.89(a)
	61 Ethylbenzene	106	7.806	7.806	(1.018)	6243	1.00000	0.86(a)
	62 m,p-Xylenes	106	7.915	7.915	(1.032)	15703	2.00000	1.73(aM)
	63 o-Xylene	106	8.249	8.249	(1.076)	7717	1.00000	0.89(a)
	64 Styrene	104	8.271	8.271	(1.079)	13315	1.00000	0.88(aM)
	66 Bromoform	173	8.421	8.421	(1.098)	3238	1.00000	0.79(TaM)
	67 Isopropylbenzene	105	8.567	8.567	(1.117)	17710	1.00000	0.80(a)
	68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	6483	1.00000	0.99(a)
$	69 4-Bromofluorobenzene	95	8.702	8.702	(1.135)	11517	1.00000	1.09(aM)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	389630	50.0000	
	71 1,2,3-Trichloropropane	75	8.871	8.871	(0.918)	5203	1.00000	1.00(aM)
	72 trans-1,4-Dichloro-2-butene	53	8.912	8.912	(1.162)	1951	1.00000	0.83(aM)
	73 n-Propylbenzene	91	8.920	8.920	(0.923)	19793	1.00000	0.84(a)
	74 Bromobenzene	156	8.815	8.815	(0.912)	5922	1.00000	0.97(a)
	75 1,3,5-Trimethylbenzene	105	9.077	9.077	(0.939)	14649	1.00000	0.83(aM)
	76 2-Chlorotoluene	91	8.980	8.980	(0.929)	15937	1.00000	1.00(aM)
	77 4-Chlorotoluene	91	9.085	9.085	(0.940)	14190	1.00000	0.81(a)
	78 tert-Butylbenzene	119	9.339	9.339	(0.967)	12560	1.00000	0.83(a)

79 1,2,4-Trimethylbenzene	105	9.388	9.388 (0.972)	14383	1.00000	0.81(a)
81 sec-Butylbenzene	105	9.519	9.519 (0.985)	16259	1.00000	0.80(a)

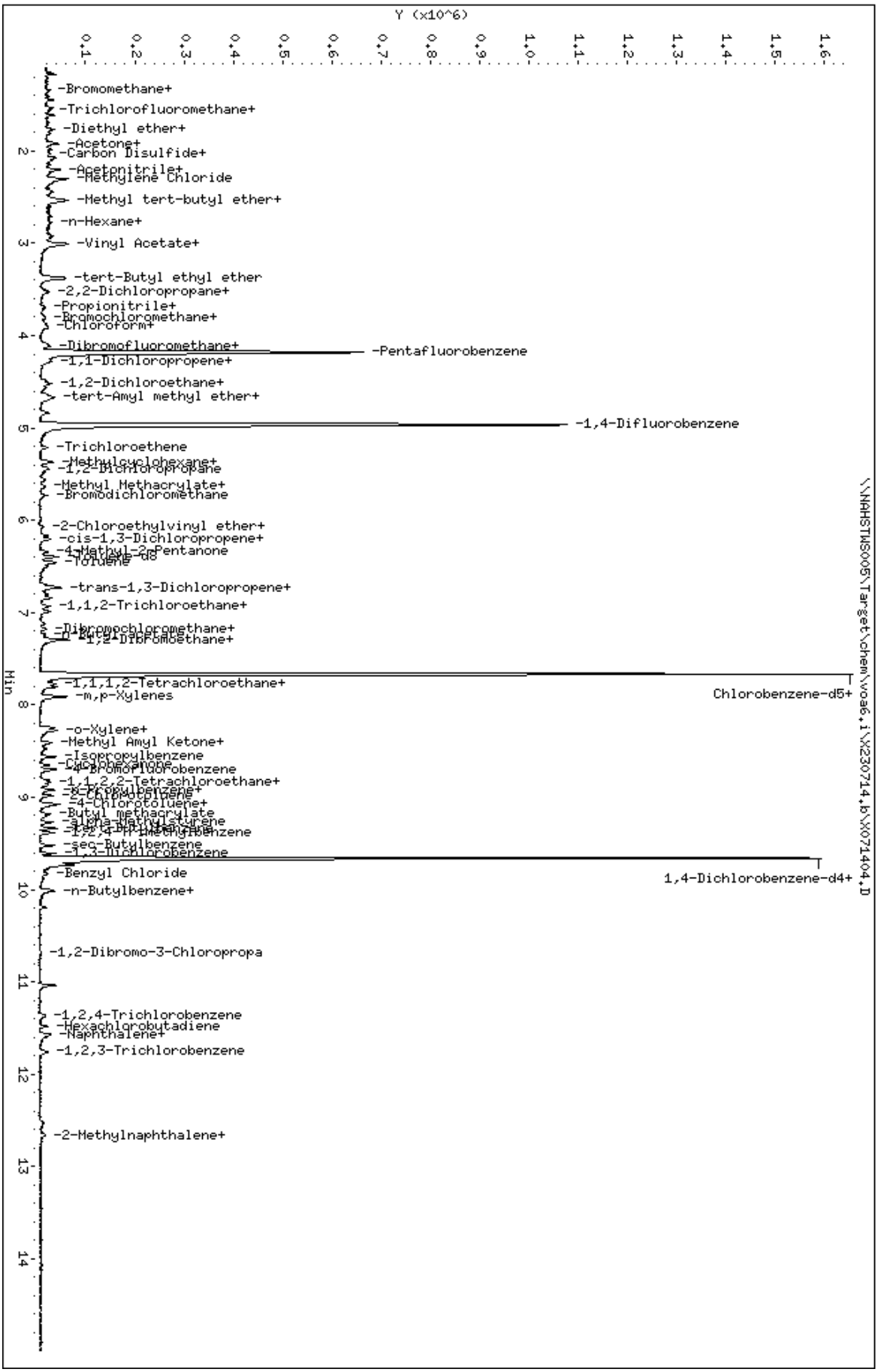
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
82	p-Isopropyltoluene	119	9.651	9.651	(0.999)	15092	1.00000	0.81(aM)
83	1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	9170	1.00000	0.86(a)
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	10311	1.00000	0.88(a)
86	Benzyl Chloride	91	9.827	9.827	(1.282)	10259	1.00000	3.09(aM)
87	n-Butylbenzene	91	10.014	10.014	(1.036)	13321	1.00000	0.86(aM)
88	1,2-Dichlorobenzene	146	10.003	10.003	(1.035)	9791	1.00000	0.93(aM)
89	1,2-Dibromo-3-Chloropropane	155	10.700	10.700	(1.107)	831	1.00000	1.84(aM)
90	1,2,4-Trichlorobenzene	180	11.364	11.364	(1.176)	7113	1.00000	0.99(aM)
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	2109	1.00000	2.96(a)
92	Naphthalene	128	11.574	11.574	(1.198)	18131	1.00000	1.02(aM)
93	1,2,3-Trichlorobenzene	180	11.765	11.765	(1.218)	6973	1.00000	1.04(a)
146	Methyl acetate	43	2.243	2.243	(0.537)	4992	1.00000	1.06(aM)
138	Freon TF	101	1.917	1.917	(0.459)	2818	1.00000	0.25(aM)
141	Cyclohexane	56	4.121	4.121	(0.987)	7673	1.00000	0.83(aM)
142	Tetrahydrofuran	42	3.874	3.874	(0.927)	2815	2.00000	2.07(aM)
147	Methylcyclohexane	55	5.370	5.370	(1.082)	15783	1.00000	0.91(aM)
135	1,4-Dioxane	88	5.613	5.613	(1.344)	1290	20.0000	20.56(M)
132	n-Butanol	56	5.370	5.370	(1.285)	3103	20.0000	17.65(aM)
131	Methyl Acrylate	55	3.750	3.750	(0.898)	5778	1.00000	0.80(aM)
133	Ethyl Acrylate	55	5.370	5.370	(1.285)	18196	1.00000	1.04(M)
136	n-Hexane	57	2.776	2.776	(0.664)	5000	1.00000	0.27(aM)
139	Diethyl ether	59	1.767	1.767	(0.423)	5211	1.00000	1.05(a)
148	Tert-butyl alcohol	59	2.442	2.442	(0.585)	12965	20.0000	19.46(M)
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	9372	20.0000	22.67(TM)
156	Diisopropyl ether	45	3.012	3.012	(0.721)	24757	1.00000	1.13(Ta)
166	1,2,3-Trimethylbenzene	105	9.733	9.733	(1.007)	19017	1.00000	1.05(a)
167	Ethanol	45	1.703	1.703	(0.408)	1613	20.0000	3.59(aM)
172	tert-Butyl formate	59	4.639	4.639	(1.110)	11427	2.00000	2.02(aM)
173	3,3-Dimethyl-1-butanol	57	7.293	7.293	(0.951)	16922	20.0000	20.55(M)
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	19717	1.00000	1.13(a)
175	tert-Butyl ethyl ether	59	3.387	3.387	(0.811)	23746	1.00000	1.06(a)
176	tert-Amyl alcohol	59	4.639	4.639	(1.110)	10855	20.0000	18.82
151	4-Methyl-2-pentanol	45	6.727	6.727	(1.355)	35175	20.0000	20.14(M)
180	1-Methylnaphthalene	142	12.657	12.657	(1.310)	6480	1.00000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	6040	1.00000	0.89(aM)
152	Amyl alcohol	42	6.989	6.989	(0.912)	3944	20.0000	17.91(M)
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	9743	1.00000	1.14(M)
159	Propylene oxide	43	1.805	1.805	(0.432)	1409	2.00000	2.17(aM)
161	3-Methyl-1-butanol	55	6.944	6.944	(0.906)	3623	20.0000	19.22(M)
162	Butyl acrylate	55	8.279	8.279	(1.080)	13586	1.00000	0.93(a)
163	Butyl methacrylate	41	9.178	9.178	(0.950)	9406	1.00000	1.00(a)
164	Dicyclopentadiene	66	9.677	9.677	(1.002)	24319	1.00000	1.08(aM)
182	Epichlorohydrin	57	6.119	6.119	(1.233)	2383	4.00000	3.91(aM)
M 94	1,2-Dichloroethylene (total)	96				9493	2.00000	(a)
130	Ethyl Acetate	43	3.713	3.713	(0.889)	7207	1.00000	0.91(TaM)
134	Cyclohexanone	55	8.646	8.646	(0.895)	7972	20.0000	22.98(aM)
185	Isoprene	39	1.778	1.778	(0.426)	1515	1.00000	0.87(a)
188	Isopropyl acetate	43	4.687	4.687	(0.944)	23748	1.00000	1.10(a)
187	n-Amyl acetate	43	8.474	8.474	(1.105)	15950	1.00000	1.13(aM)
189	n-Butyl acetate	43	7.233	7.233	(0.943)	9795	1.00000	0.83(aM)
150	Allyl alcohol	57	2.776	2.776	(0.664)	5000	20.0000	3.31(aM)
194	Acetaldehyde	44	1.216	1.216	(0.291)	5117	4.00000	(aM)

195 Methyl Amyl Ketone	43	8.406	8.406 (1.096)	14469	1.00000	0.90(a)
200 Dimethyl Disulfide	94	6.202	6.202 (0.809)	9361	1.00000	0.90(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
202 Isobutylene	41	1.246	1.246	(0.298)	875	1.00000	1.00(aM)
205 2-Ethylhexyl Acrylate	55	11.562	11.562	(1.197)	8780	1.00000	0.88(aM)

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.



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Sample Info: VSTD001;VSTD001;1;3;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Trichlorofluoromethane (75-69-4)

Reason Code:

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20-Jul-2023
15:04
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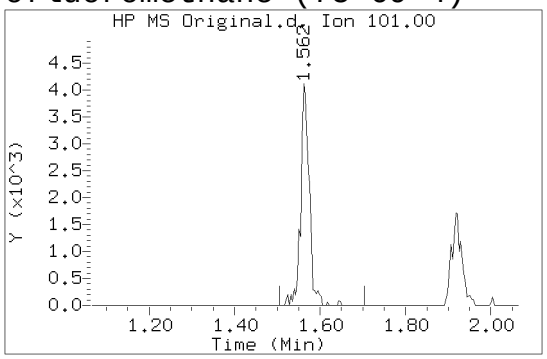

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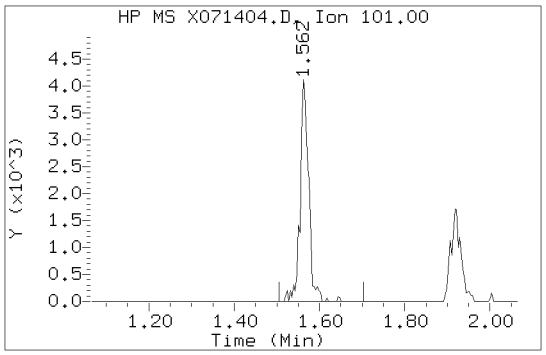

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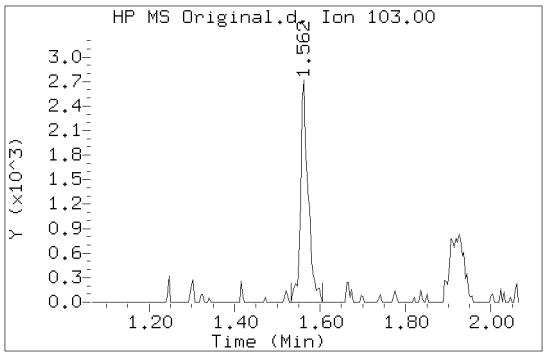

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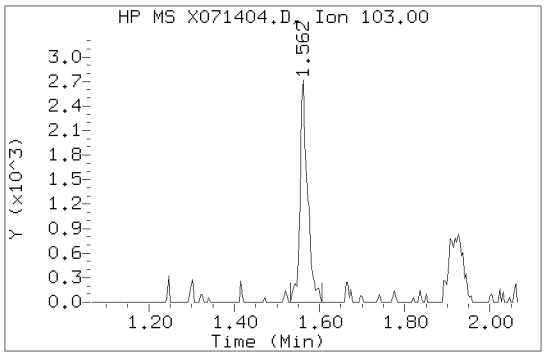

1,1-Dichloroethene (75-35-4)

Reason Code:

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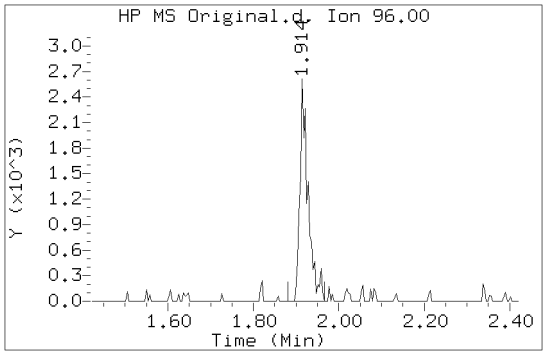

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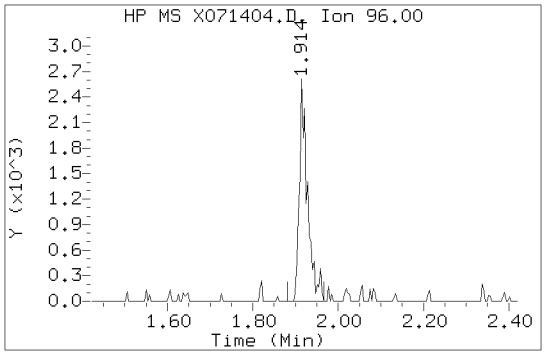

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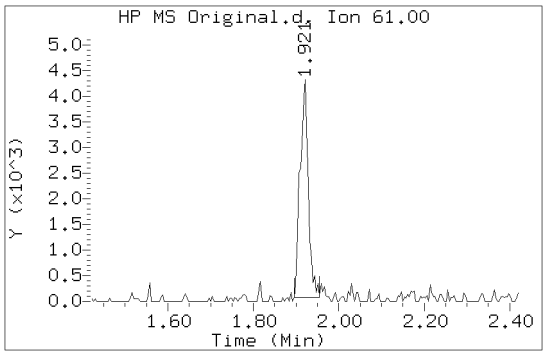

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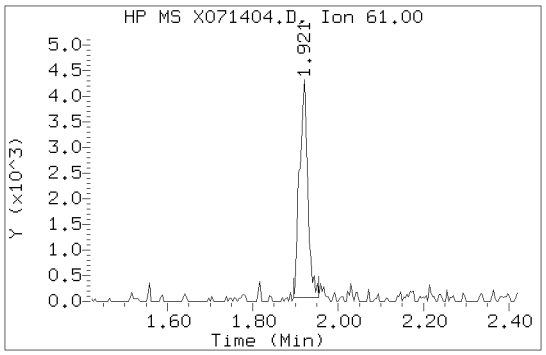

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LabSampID : VSTD001

1,1-Dichloroethene (75-35-4)

Reason Code:

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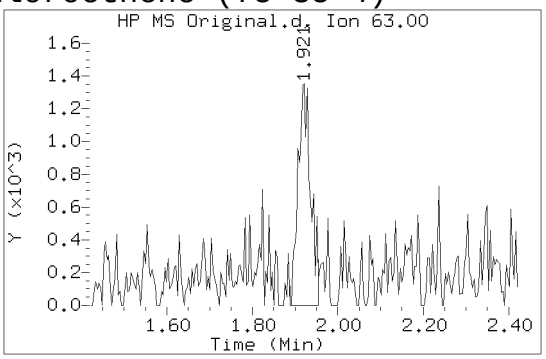

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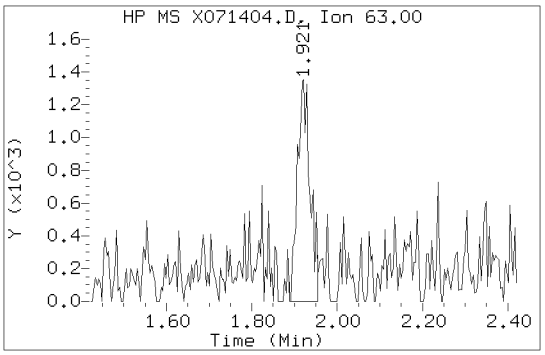

Iodomethane (74-88-4)

Reason Code:

BEFORE

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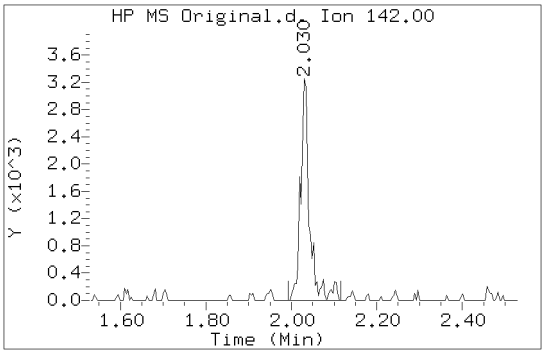

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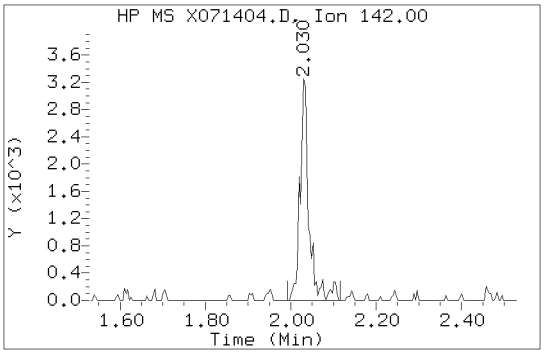

BEFORE

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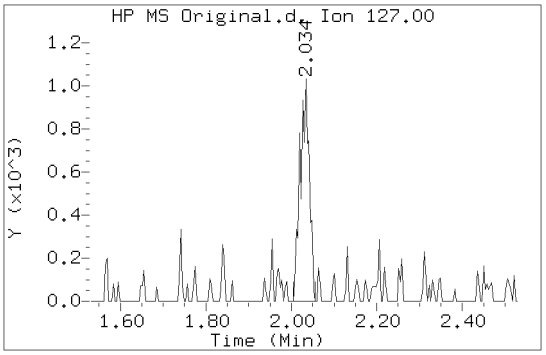

AFTER

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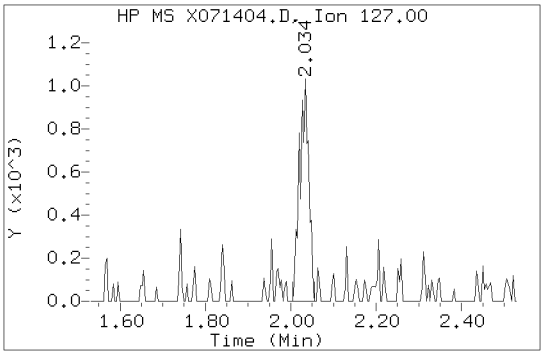

BEFORE

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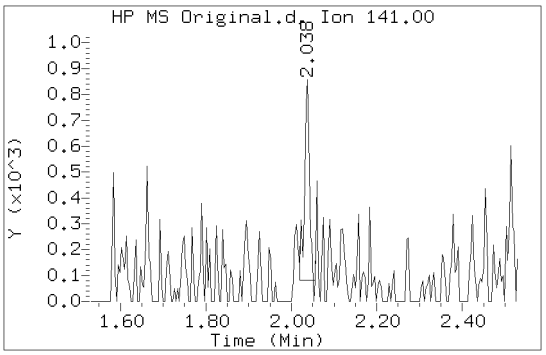

AFTER

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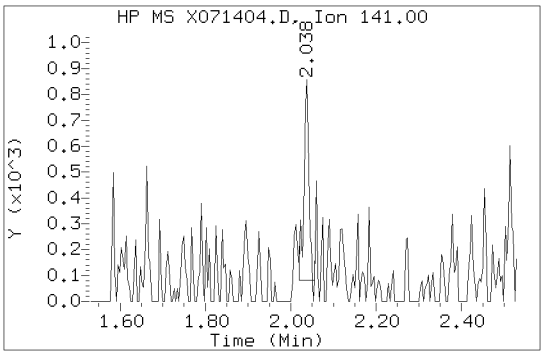

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InstruID : voa6.i
LabSampID : VSTD001

Acrylonitrile (107-13-1)

Reason Code:

BEFORE

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20-Jul-2023
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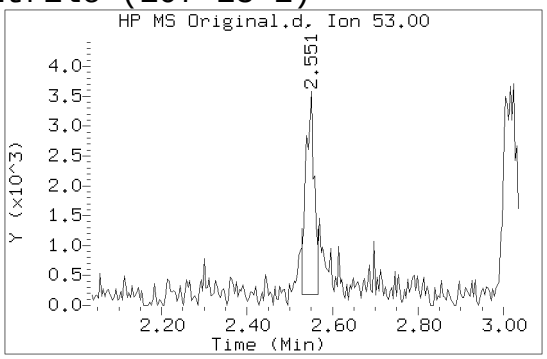
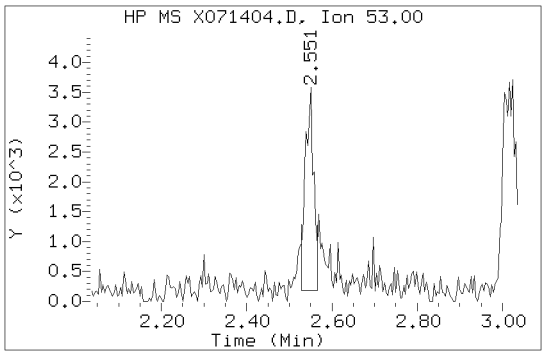
linh
pham



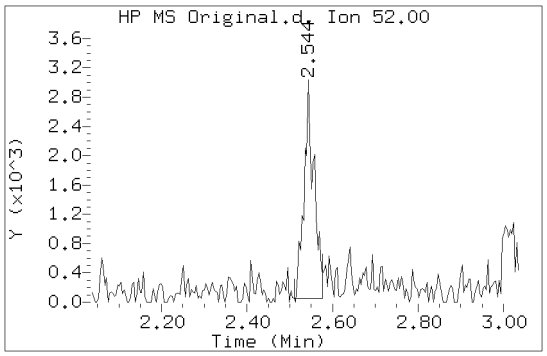
AFTER

MASS
53
AREA
4763
HEIGHT
3403
20-Jul-2023
15:04
linh
pham



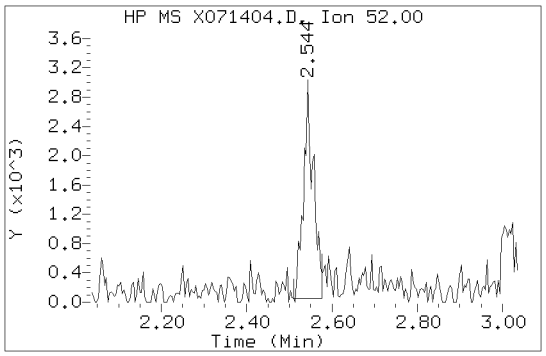
BEFORE

MASS
52
AREA
4911
HEIGHT
2983
20-Jul-2023
15:04
linh
pham



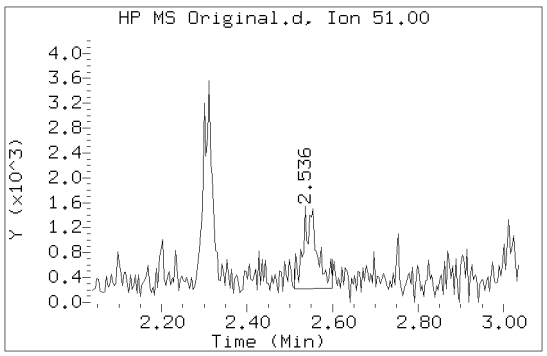
AFTER

MASS
52
AREA
4911
HEIGHT
2983
20-Jul-2023
15:04
linh
pham



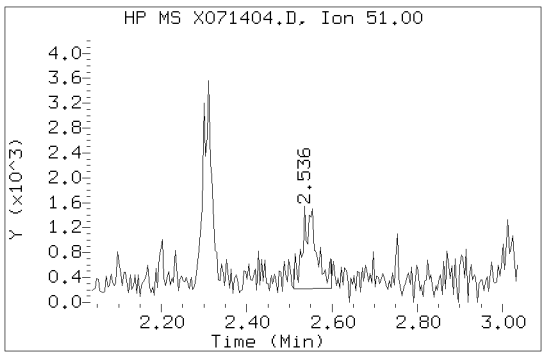
BEFORE

MASS
51
AREA
3020
HEIGHT
1324
20-Jul-2023
15:04
linh
pham



AFTER

MASS
51
AREA
3020
HEIGHT
1324
20-Jul-2023
15:04
linh
pham

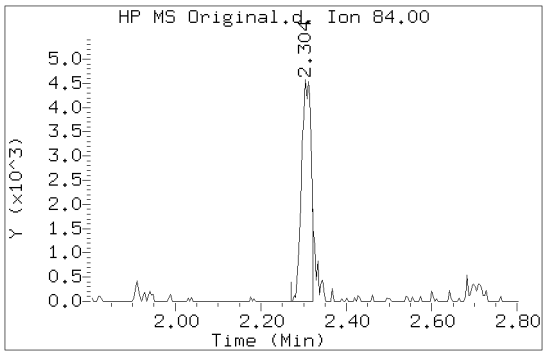


Methylene Chloride (75-09-2)

Reason Code:

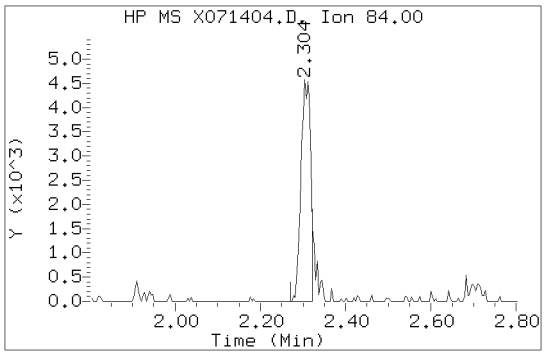
BEFORE

MASS
84
AREA
7389
HEIGHT
4576
20-Jul-2023
15:04
linh
pham



AFTER

MASS
84
AREA
7389
HEIGHT
4576
20-Jul-2023
15:04
linh
pham



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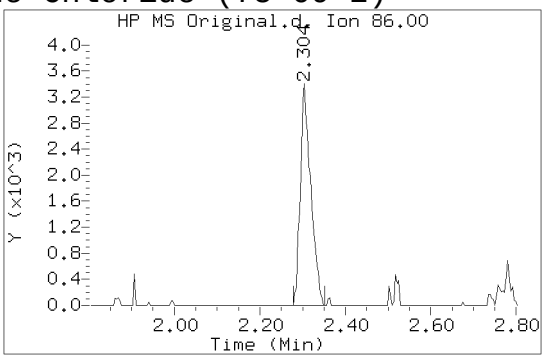
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

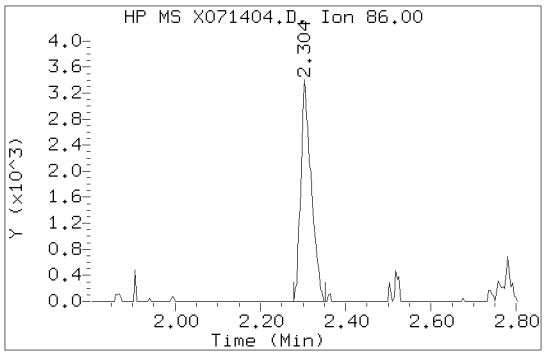
Methylene Chloride (75-09-2)

BEFORE
MASS
86
AREA
5890
HEIGHT
3405
20-Jul-2023
15:04
linh
pham

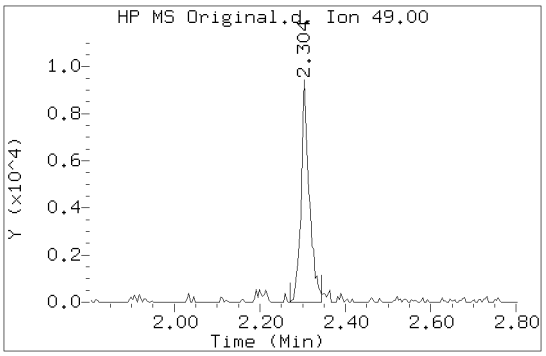


Reason Code:

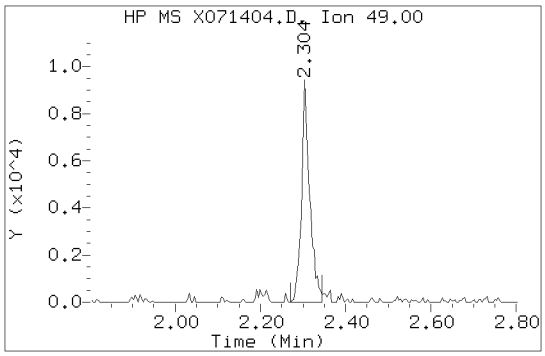
AFTER
MASS
86
AREA
5890
HEIGHT
3405
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
49
AREA
12826
HEIGHT
9432
20-Jul-2023
15:04
linh
pham



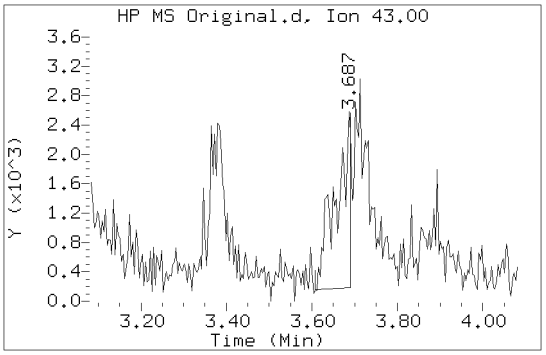
AFTER
MASS
49
AREA
12826
HEIGHT
9432
20-Jul-2023
15:04
linh
pham



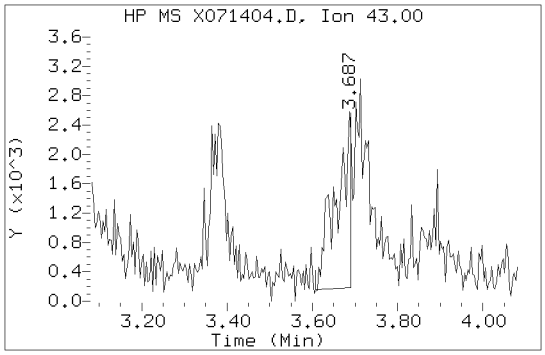
2-Butanone (78-93-3)

Reason Code:

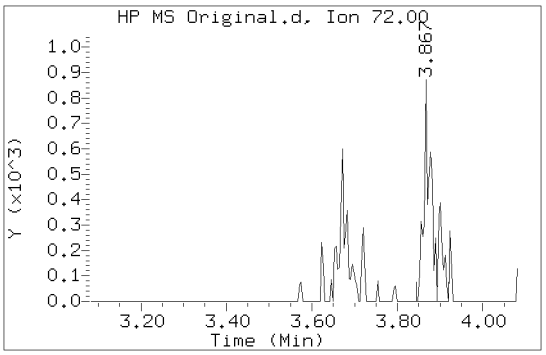
BEFORE
MASS
43
AREA
5549
HEIGHT
2403
20-Jul-2023
15:04
linh
pham



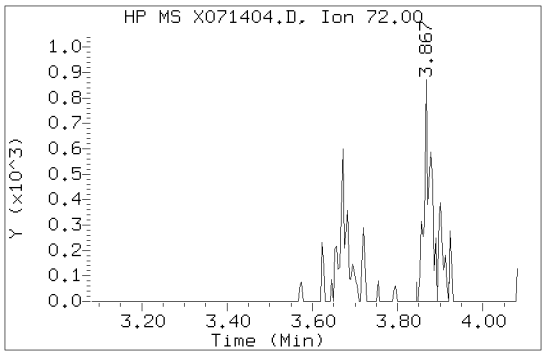
AFTER
MASS
43
AREA
5549
HEIGHT
2403
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
72
AREA
1227
HEIGHT
872
20-Jul-2023
15:04
linh
pham



AFTER
MASS
72
AREA
1227
HEIGHT
872
20-Jul-2023
15:04
linh
pham



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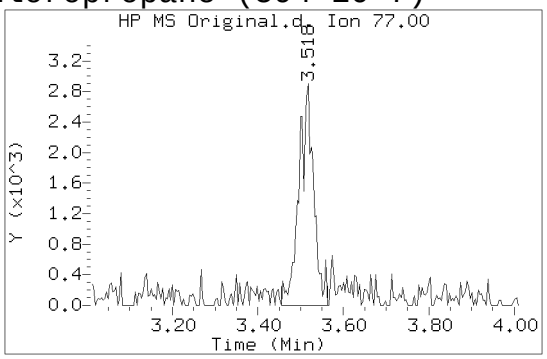
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

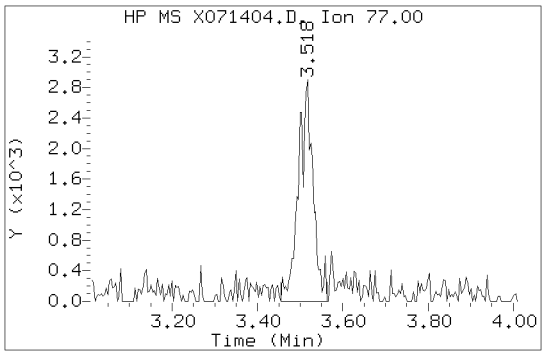
2,2-Dichloropropane (594-20-7)

Reason Code:

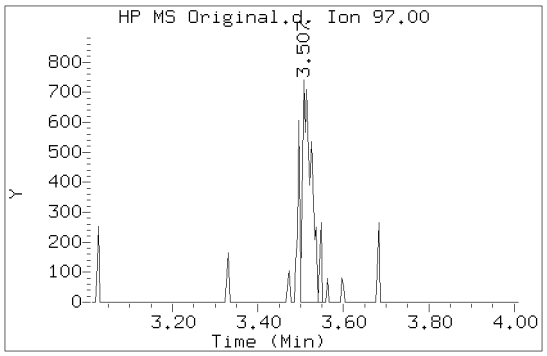
BEFORE
MASS
77
AREA
7001
HEIGHT
2901
20-Jul-2023
15:04
linh
pham



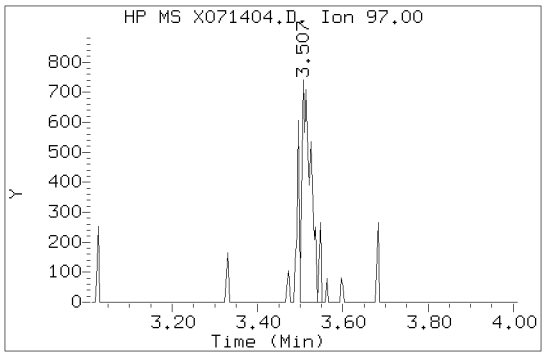
AFTER
MASS
77
AREA
7001
HEIGHT
2901
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
97
AREA
1144
HEIGHT
741
20-Jul-2023
15:04
linh
pham



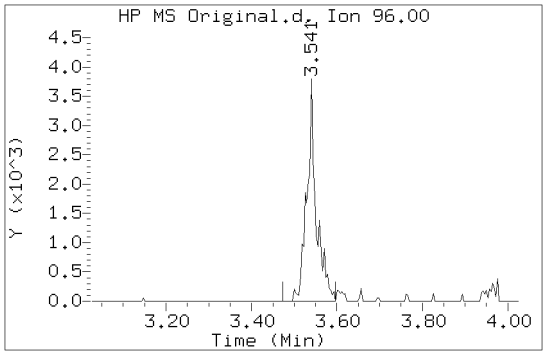
AFTER
MASS
97
AREA
1144
HEIGHT
741
20-Jul-2023
15:04
linh
pham



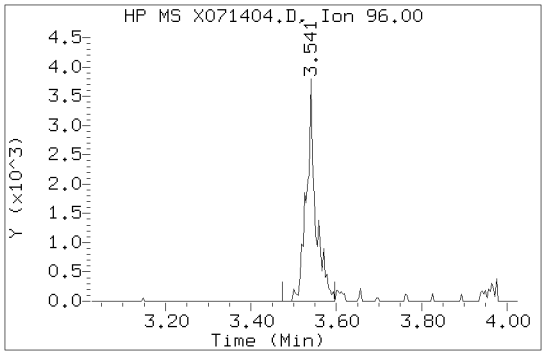
cis-1,2-Dichloroethene (156-59-2)

Reason Code:

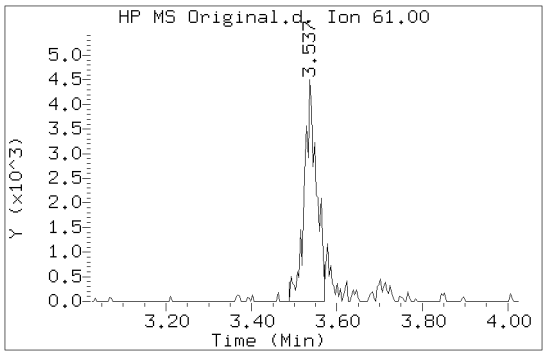
BEFORE
MASS
96
AREA
5828
HEIGHT
3797
20-Jul-2023
15:04
linh
pham



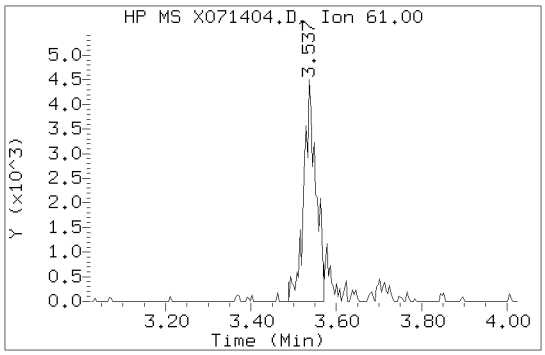
AFTER
MASS
96
AREA
5828
HEIGHT
3797
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
61
AREA
9003
HEIGHT
4504
20-Jul-2023
15:04
linh
pham



AFTER
MASS
61
AREA
9003
HEIGHT
4504
20-Jul-2023
15:04
linh
pham



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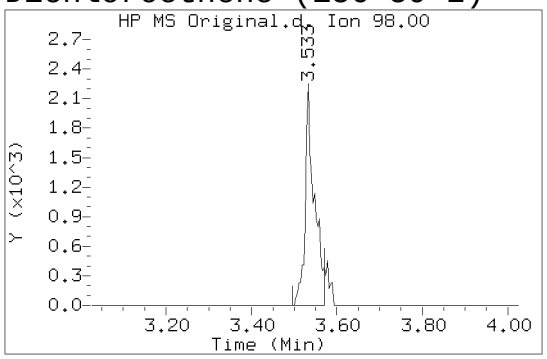
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

cis-1,2-Dichloroethene (156-59-2)

Reason Code:

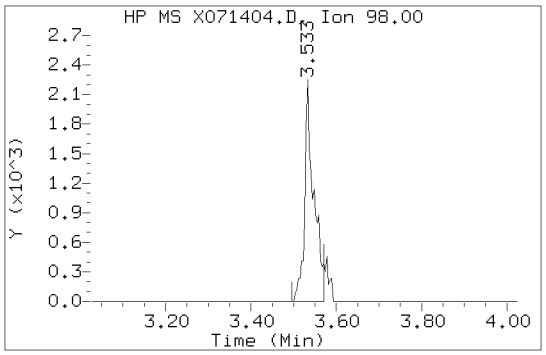
BEFORE

MASS
98
AREA
3384
HEIGHT
2251
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
AREA
3384
HEIGHT
2251
20-Jul-2023
15:04
linh
pham

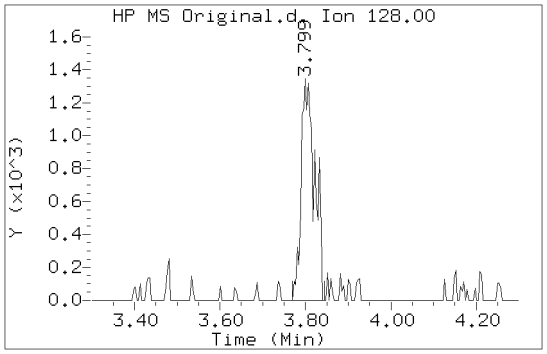


Bromochloromethane (74-97-5)

Reason Code:

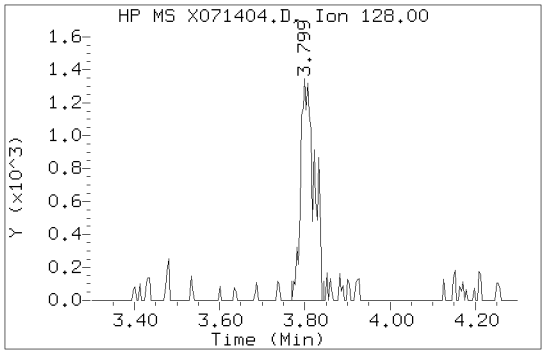
BEFORE

MASS
128
AREA
3002
HEIGHT
1346
20-Jul-2023
15:04
linh
pham



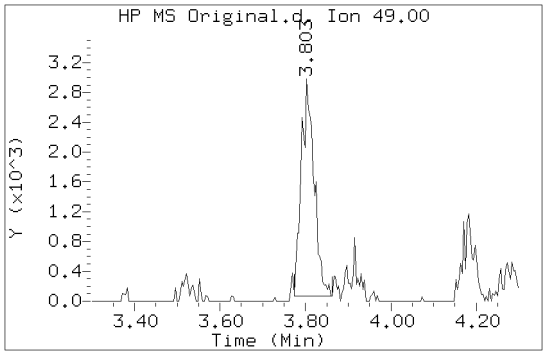
AFTER

MASS
128
AREA
3002
HEIGHT
1346
20-Jul-2023
15:04
linh
pham



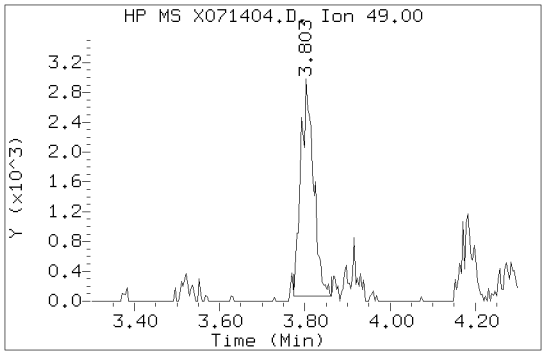
BEFORE

MASS
49
AREA
6119
HEIGHT
2913
20-Jul-2023
15:04
linh
pham



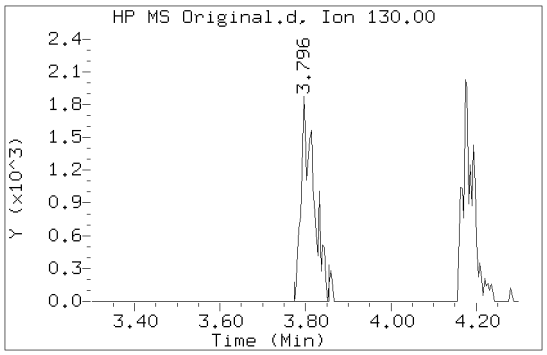
AFTER

MASS
49
AREA
6119
HEIGHT
2913
20-Jul-2023
15:04
linh
pham



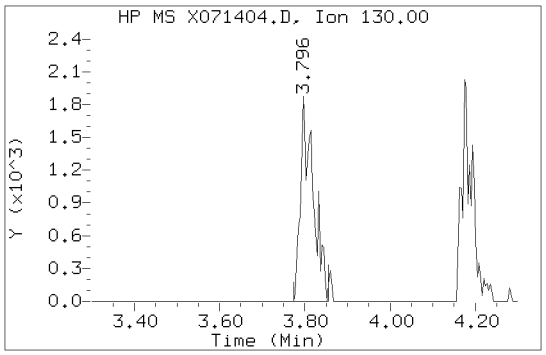
BEFORE

MASS
130
AREA
3970
HEIGHT
1875
20-Jul-2023
15:04
linh
pham



AFTER

MASS
130
AREA
3970
HEIGHT
1875
20-Jul-2023
15:04
linh
pham



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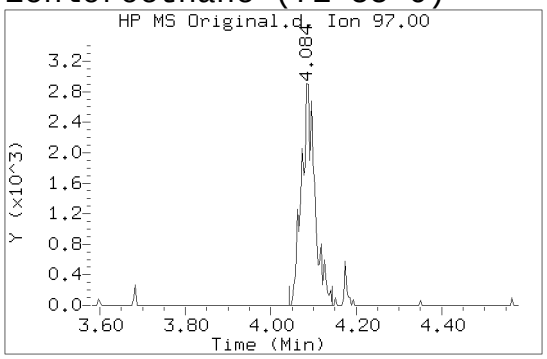
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,1,1-Trichloroethane (71-55-6)

Reason Code:

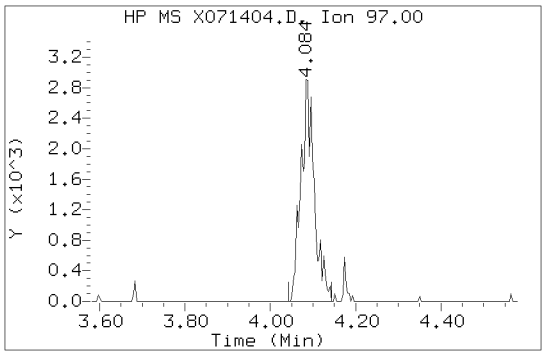
BEFORE

MASS
97
AREA
6398
HEIGHT
2905
20-Jul-2023
15:04
linh
pham



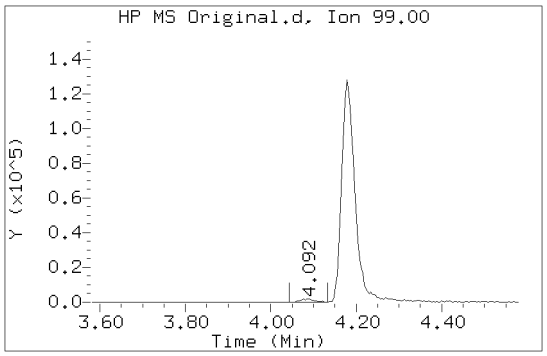
AFTER

MASS
97
AREA
6398
HEIGHT
2905
20-Jul-2023
15:04
linh
pham



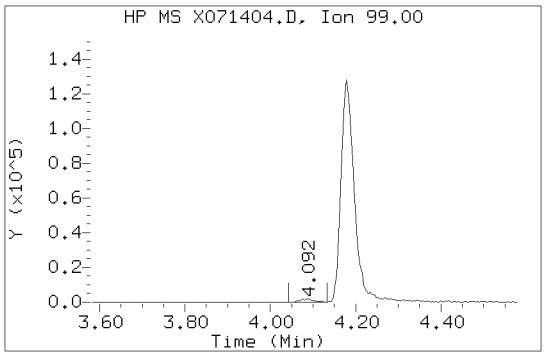
BEFORE

MASS
99
AREA
4128
HEIGHT
1962
20-Jul-2023
15:04
linh
pham



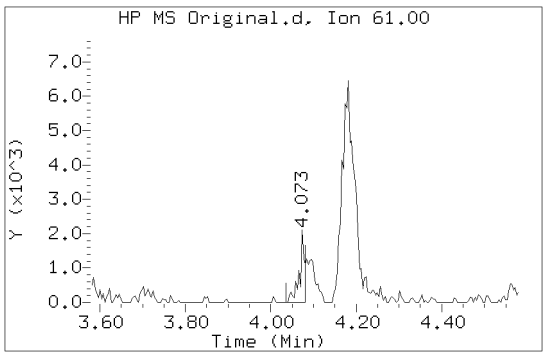
AFTER

MASS
99
AREA
4128
HEIGHT
1962
20-Jul-2023
15:04
linh
pham



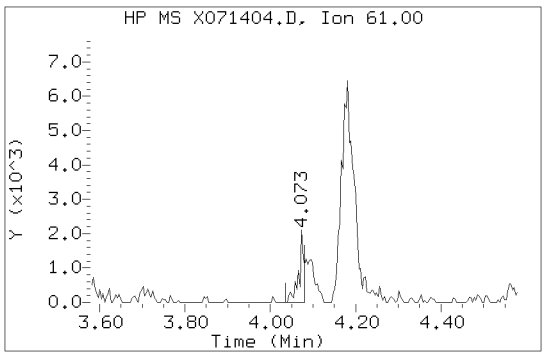
BEFORE

MASS
61
AREA
1719
HEIGHT
2107
20-Jul-2023
15:04
linh
pham



AFTER

MASS
61
AREA
1719
HEIGHT
2107
20-Jul-2023
15:04
linh
pham

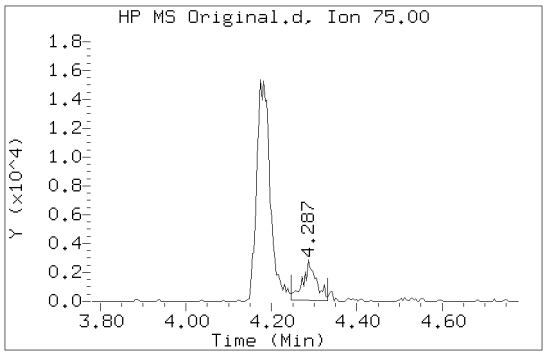


1,1-Dichloropropene (563-58-6)

Reason Code:

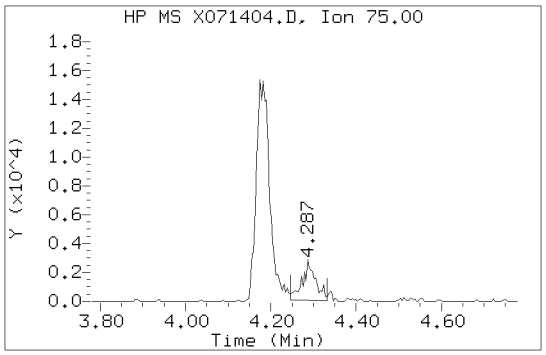
BEFORE

MASS
75
AREA
6097
HEIGHT
2831
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
6097
HEIGHT
2831
20-Jul-2023
15:04
linh
pham



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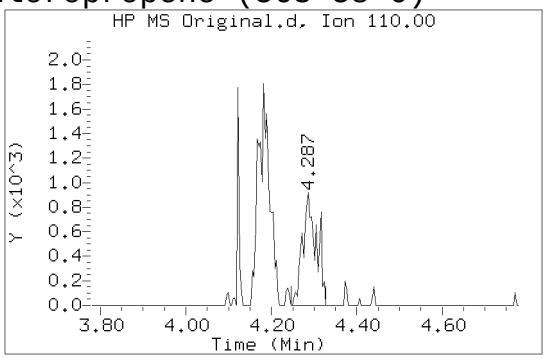
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,1-Dichloropropene (563-58-6)

Reason Code:

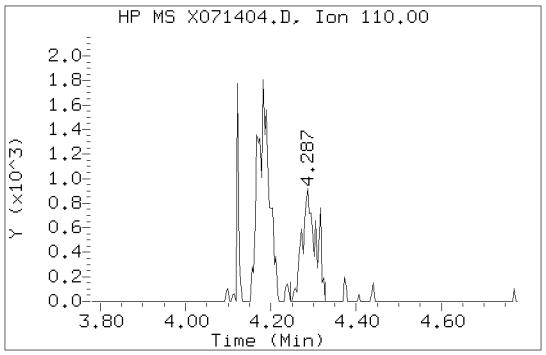
BEFORE

MASS
110
AREA
2079
HEIGHT
917
20-Jul-2023
15:04
linh
pham



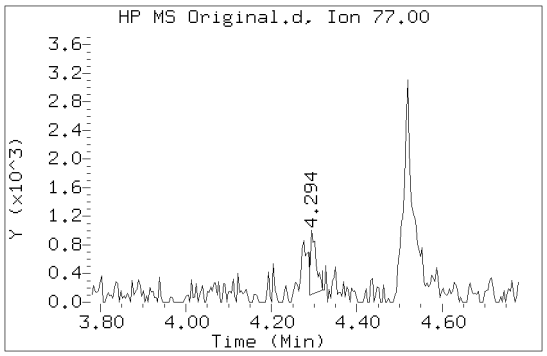
AFTER

MASS
110
AREA
2079
HEIGHT
917
20-Jul-2023
15:04
linh
pham



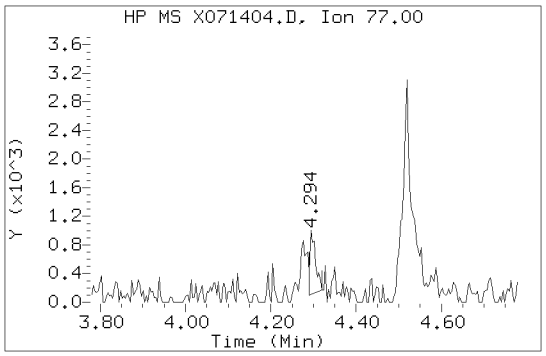
BEFORE

MASS
77
AREA
821
HEIGHT
892
20-Jul-2023
15:04
linh
pham



AFTER

MASS
77
AREA
821
HEIGHT
892
20-Jul-2023
15:04
linh
pham

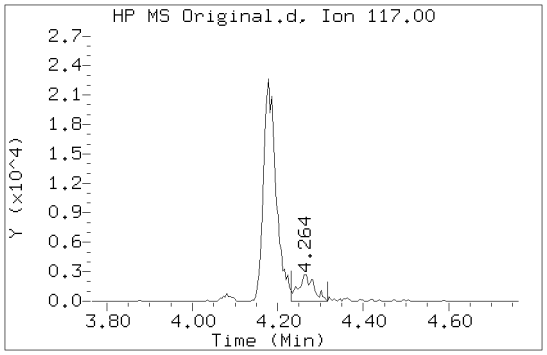


Carbon Tetrachloride (56-23-5)

Reason Code:

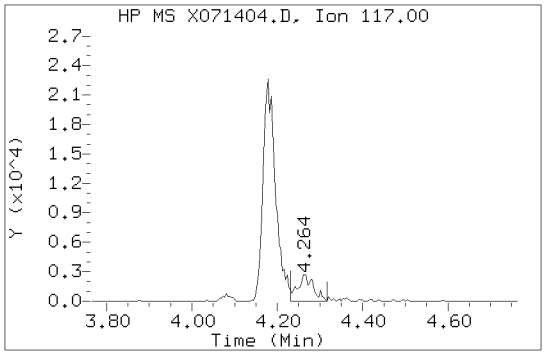
BEFORE

MASS
117
AREA
7002
HEIGHT
2701
20-Jul-2023
15:04
linh
pham



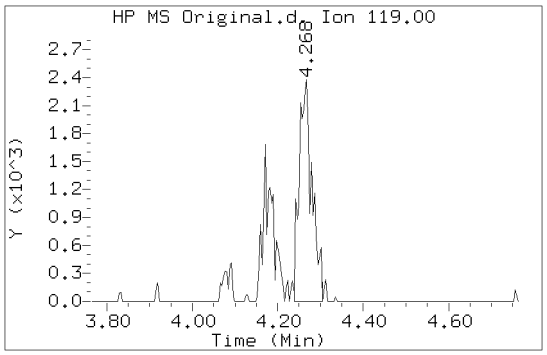
AFTER

MASS
117
AREA
7002
HEIGHT
2701
20-Jul-2023
15:04
linh
pham



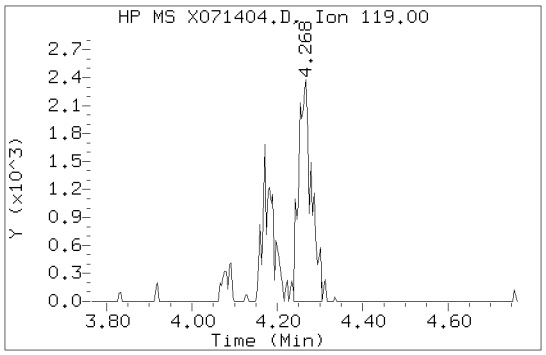
BEFORE

MASS
119
AREA
5029
HEIGHT
2378
20-Jul-2023
15:04
linh
pham



AFTER

MASS
119
AREA
5029
HEIGHT
2378
20-Jul-2023
15:04
linh
pham



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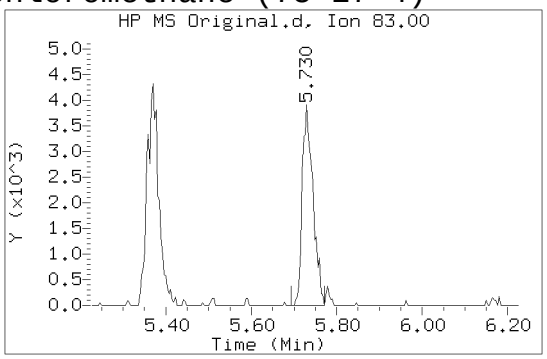
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

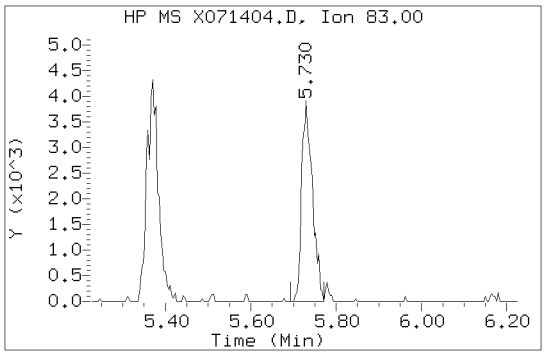
Bromodichloromethane (75-27-4)

Reason Code:

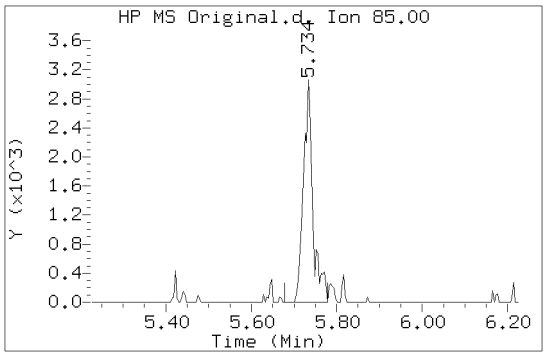
BEFORE
MASS
83
AREA
6967
HEIGHT
3917
20-Jul-2023
15:04
linh
pham



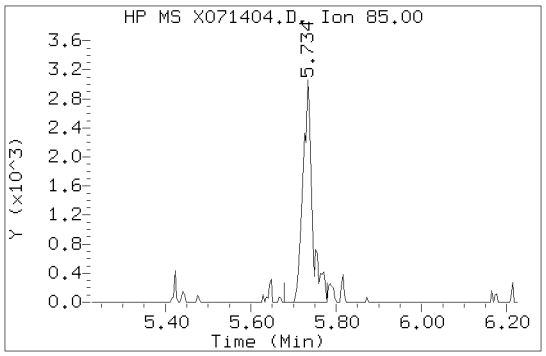
AFTER
MASS
83
AREA
6967
HEIGHT
3917
20-Jul-2023
15:04
linh
pham



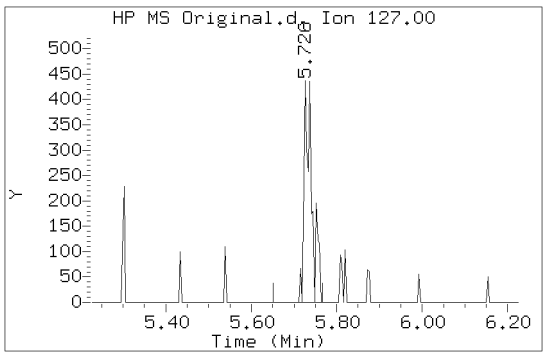
BEFORE
MASS
85
AREA
4797
HEIGHT
3061
20-Jul-2023
15:04
linh
pham



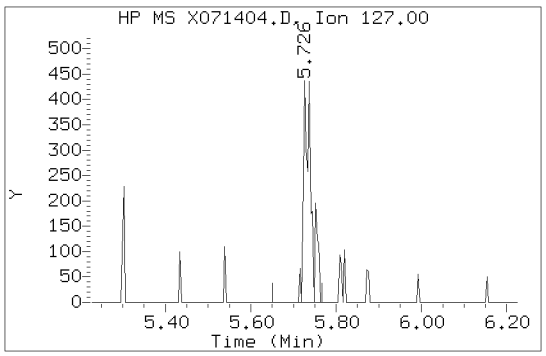
AFTER
MASS
85
AREA
4797
HEIGHT
3061
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
127
AREA
568
HEIGHT
437
20-Jul-2023
15:04
linh
pham



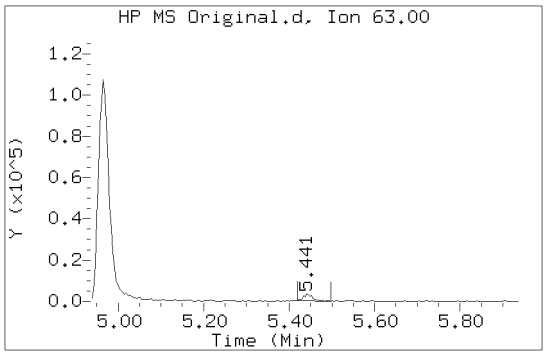
AFTER
MASS
127
AREA
568
HEIGHT
437
20-Jul-2023
15:04
linh
pham



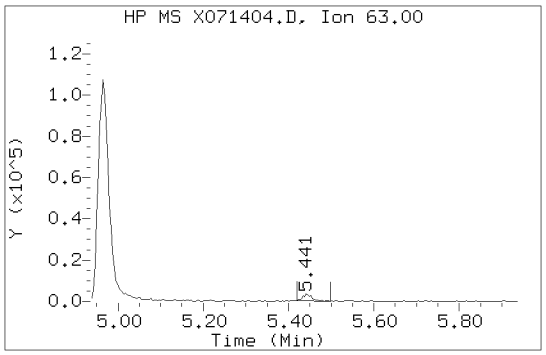
1,2-Dichloropropane (78-87-5)

Reason Code:

BEFORE
MASS
63
AREA
5153
HEIGHT
3474
20-Jul-2023
15:04
linh
pham



AFTER
MASS
63
AREA
5153
HEIGHT
3474
20-Jul-2023
15:04
linh
pham



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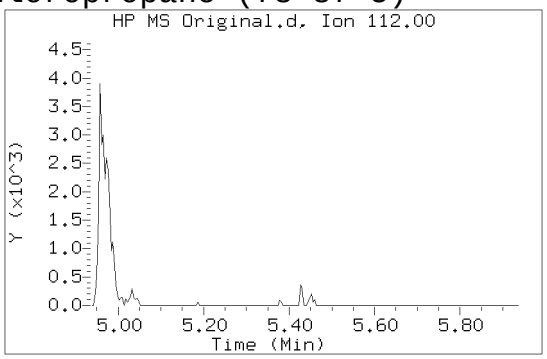
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,2-Dichloropropane (78-87-5)

Reason Code:

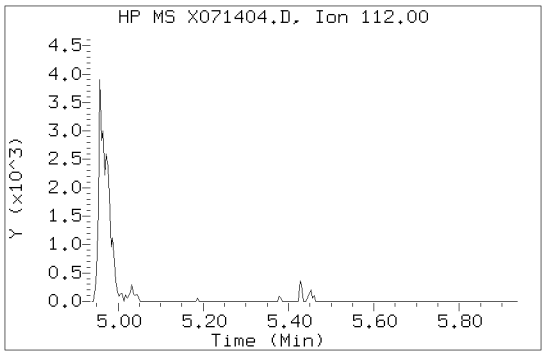
BEFORE

MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

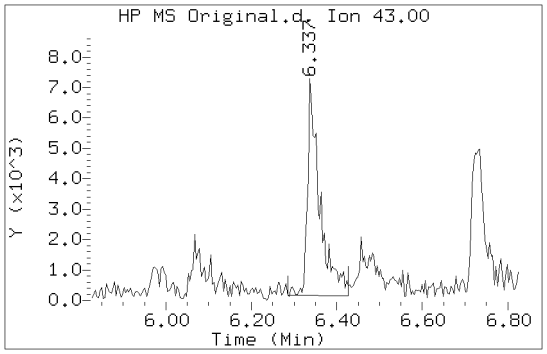


4-Methyl-2-Pentanone (108-10-1)

Reason Code:

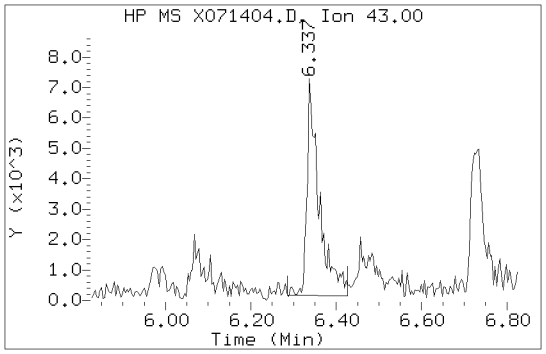
BEFORE

MASS
43
AREA
14106
HEIGHT
7121
20-Jul-2023
15:04
linh
pham



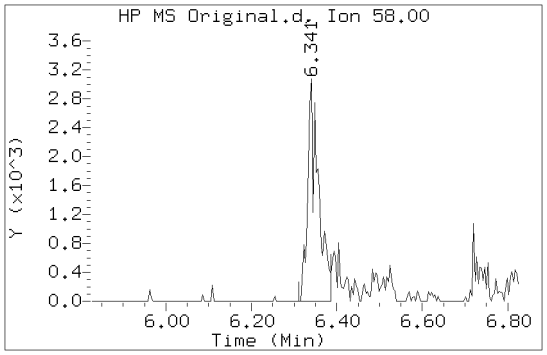
AFTER

MASS
43
AREA
14106
HEIGHT
7121
20-Jul-2023
15:04
linh
pham



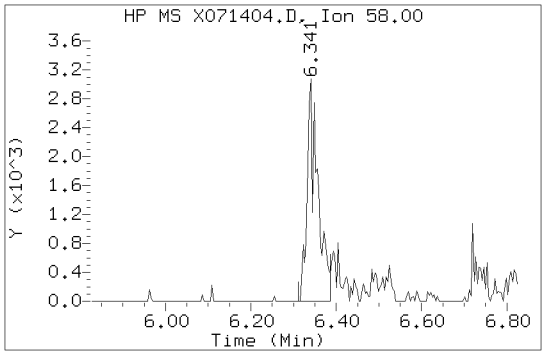
BEFORE

MASS
58
AREA
5370
HEIGHT
3077
20-Jul-2023
15:04
linh
pham



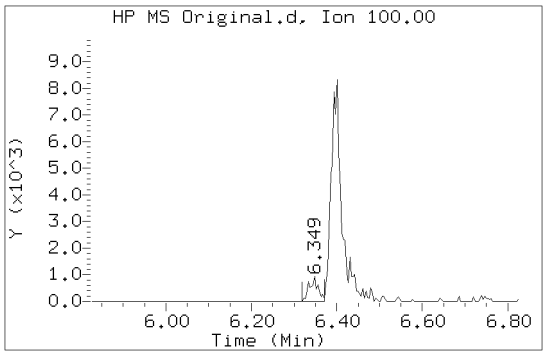
AFTER

MASS
58
AREA
5370
HEIGHT
3077
20-Jul-2023
15:04
linh
pham



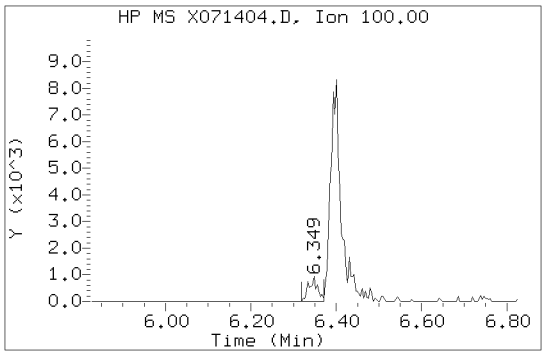
BEFORE

MASS
100
AREA
1328
HEIGHT
944
20-Jul-2023
15:04
linh
pham



AFTER

MASS
100
AREA
1328
HEIGHT
944
20-Jul-2023
15:04
linh
pham



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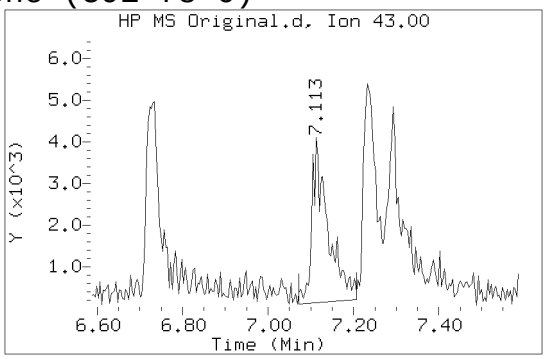
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

2-Hexanone (591-78-6)

Reason Code:

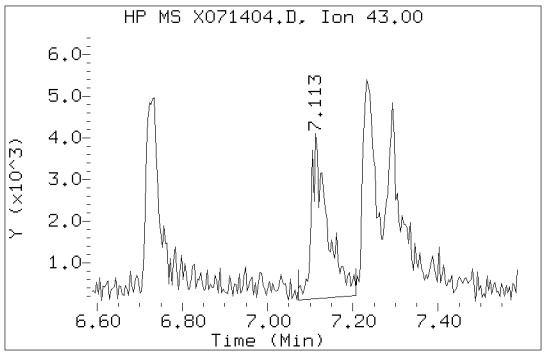
BEFORE

MASS
43
AREA
10319
HEIGHT
3957
20-Jul-2023
15:04
linh
pham



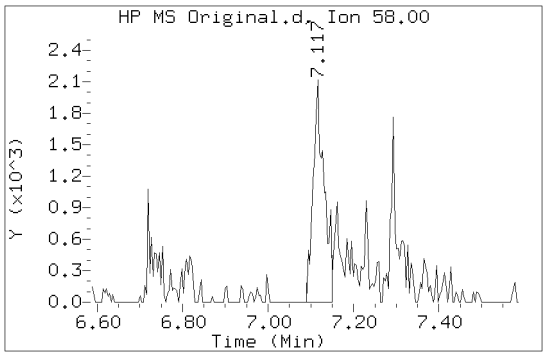
AFTER

MASS
43
AREA
10319
HEIGHT
3957
20-Jul-2023
15:04
linh
pham



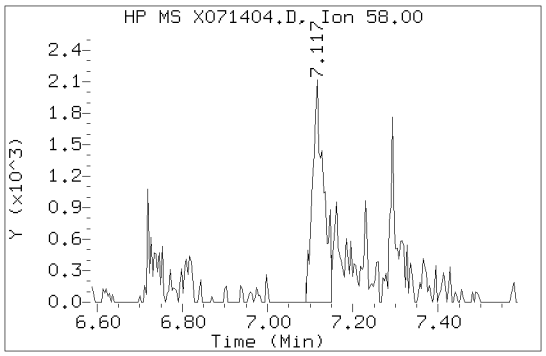
BEFORE

MASS
58
AREA
3772
HEIGHT
2118
20-Jul-2023
15:04
linh
pham



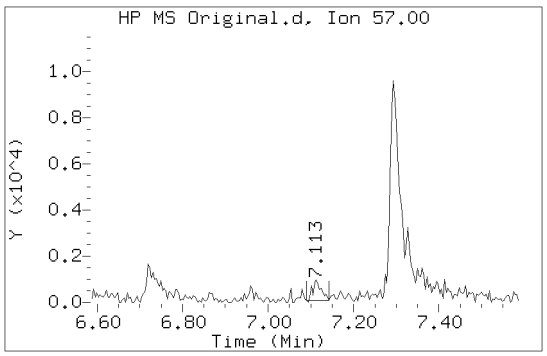
AFTER

MASS
58
AREA
3772
HEIGHT
2118
20-Jul-2023
15:04
linh
pham



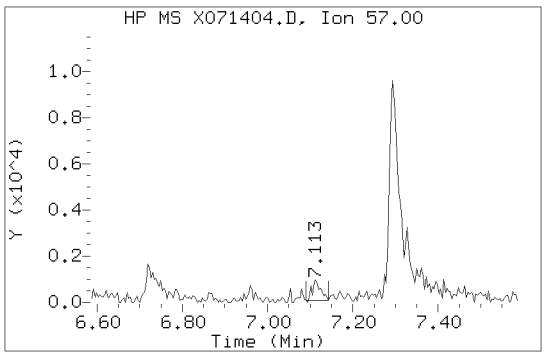
BEFORE

MASS
57
AREA
1177
HEIGHT
882
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
1177
HEIGHT
882
20-Jul-2023
15:04
linh
pham

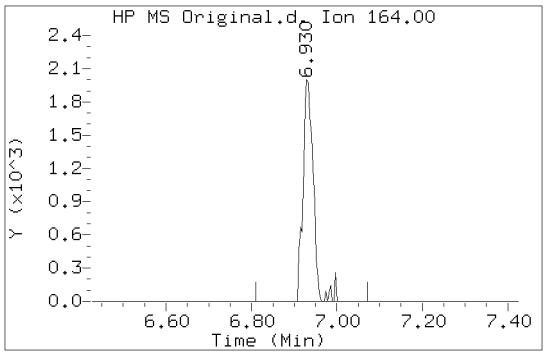


Tetrachloroethene (127-18-4)

Reason Code:

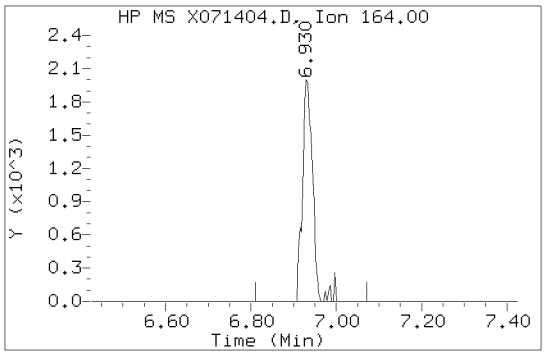
BEFORE

MASS
164
AREA
3431
HEIGHT
2001
20-Jul-2023
15:04
linh
pham



AFTER

MASS
164
AREA
3431
HEIGHT
2001
20-Jul-2023
15:04
linh
pham

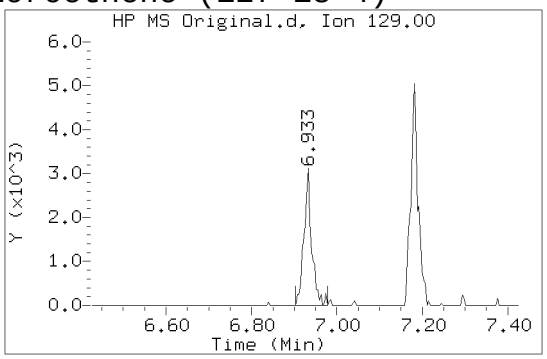


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

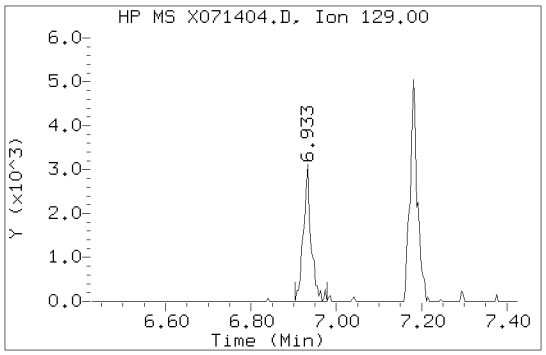
Tetrachloroethene (127-18-4)

Reason Code:

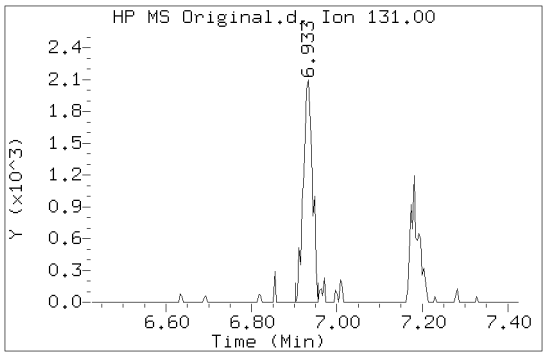
BEFORE
MASS
129
AREA
3977
HEIGHT
3127
20-Jul-2023
15:04
linh
pham



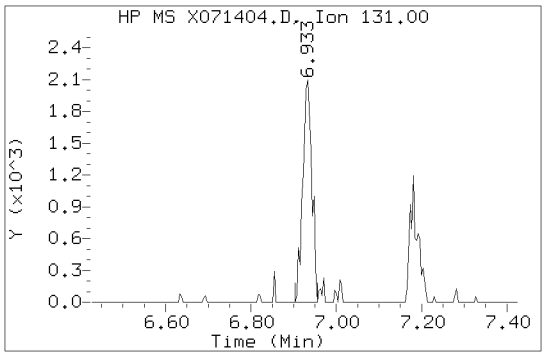
AFTER
MASS
129
AREA
3977
HEIGHT
3127
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
131
AREA
3184
HEIGHT
2098
20-Jul-2023
15:04
linh
pham



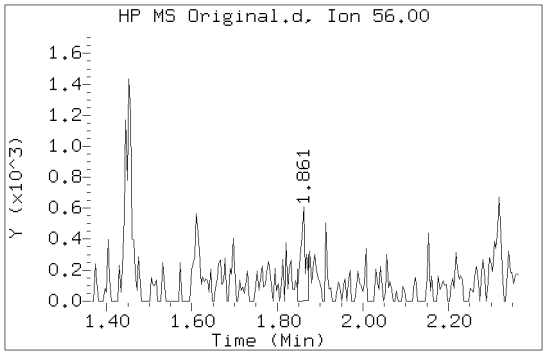
AFTER
MASS
131
AREA
3184
HEIGHT
2098
20-Jul-2023
15:04
linh
pham



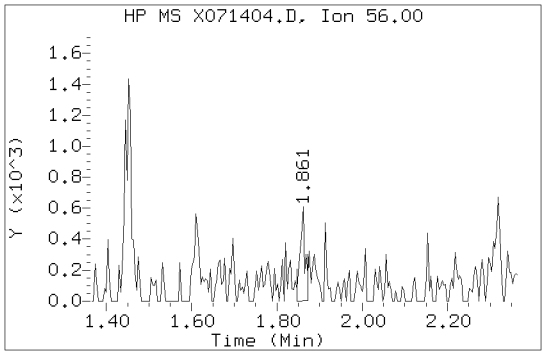
Acrolein (107-02-8)

Reason Code:

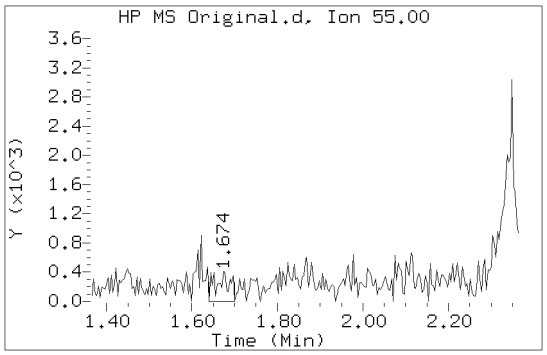
BEFORE
MASS
56
AREA
510
HEIGHT
608
20-Jul-2023
15:04
linh
pham



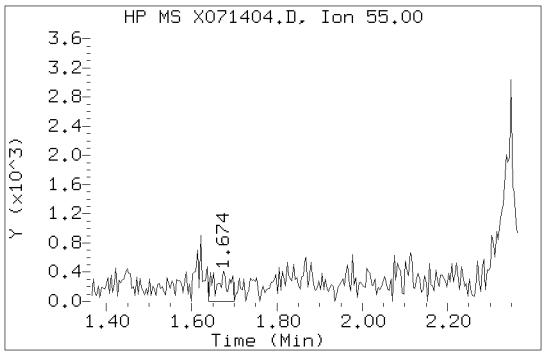
AFTER
MASS
56
AREA
510
HEIGHT
608
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
55
AREA
888
HEIGHT
412
20-Jul-2023
15:04
linh
pham



AFTER
MASS
55
AREA
888
HEIGHT
412
20-Jul-2023
15:04
linh
pham



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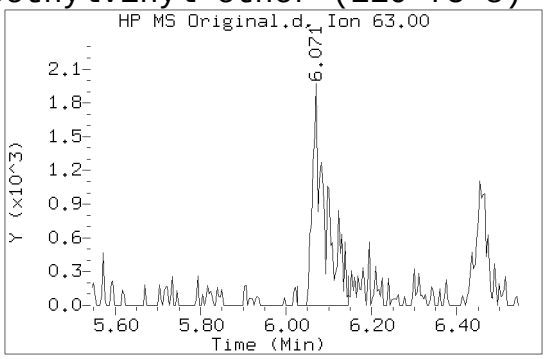
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

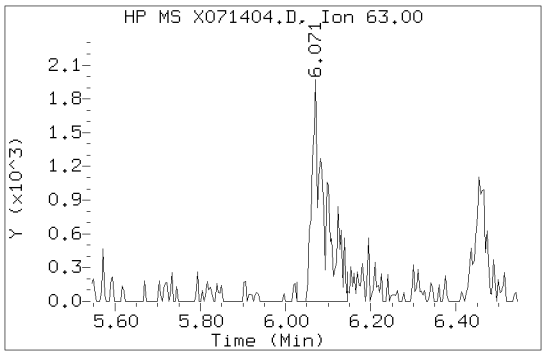
BEFORE

MASS
63
AREA
4176
HEIGHT
1971
20-Jul-2023
15:04
linh
pham



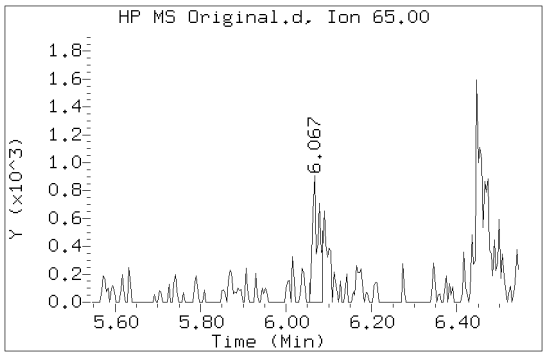
AFTER

MASS
63
AREA
4176
HEIGHT
1971
20-Jul-2023
15:04
linh
pham



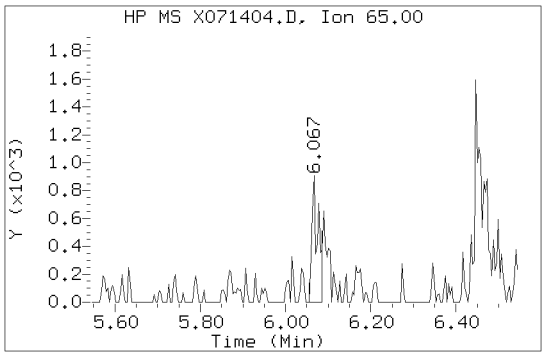
BEFORE

MASS
65
AREA
920
HEIGHT
907
20-Jul-2023
15:04
linh
pham



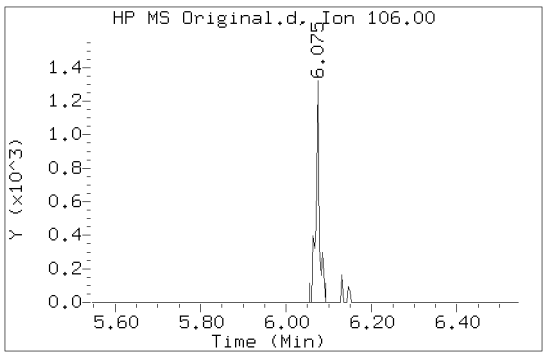
AFTER

MASS
65
AREA
920
HEIGHT
907
20-Jul-2023
15:04
linh
pham



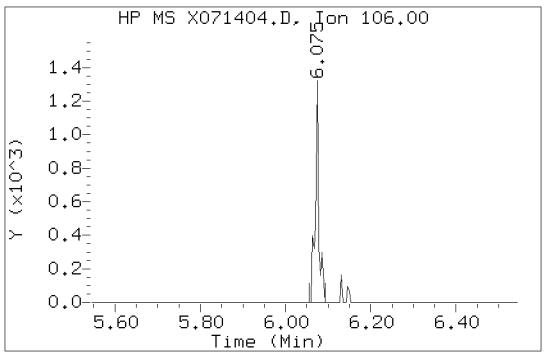
BEFORE

MASS
106
AREA
764
HEIGHT
1322
20-Jul-2023
15:04
linh
pham



AFTER

MASS
106
AREA
764
HEIGHT
1322
20-Jul-2023
15:04
linh
pham

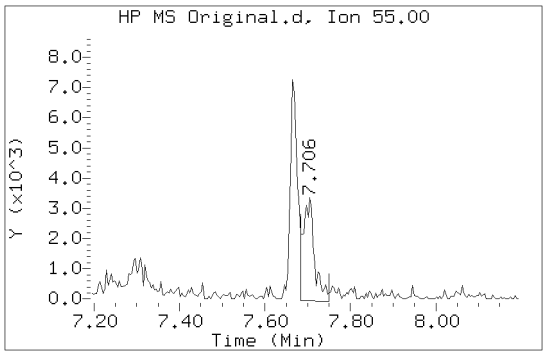


1-Chlorohexane (544-10-5)

Reason Code:

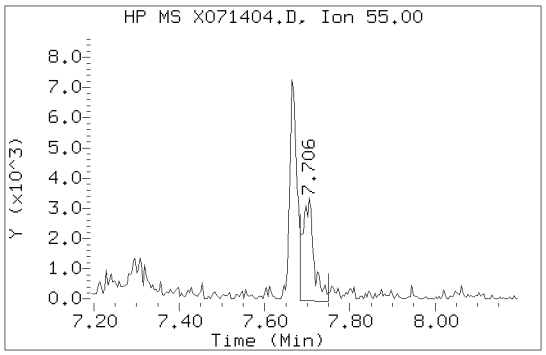
BEFORE

MASS
55
AREA
6663
HEIGHT
3425
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
6663
HEIGHT
3425
20-Jul-2023
15:04
linh
pham



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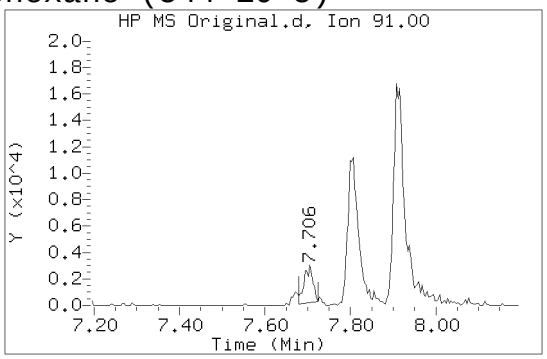
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1-Chlorohexane (544-10-5)

Reason Code:

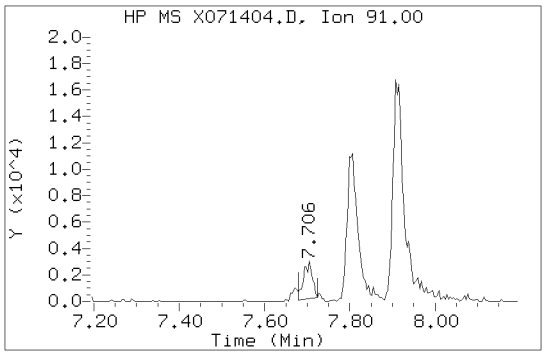
BEFORE

MASS
91
AREA
4133
HEIGHT
2845
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
4133
HEIGHT
2845
20-Jul-2023
15:04
linh
pham

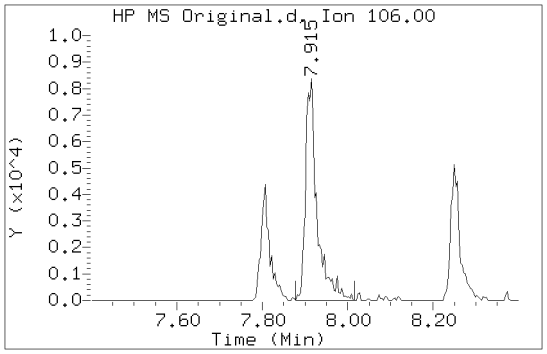


m,p-Xylenes ()

Reason Code:

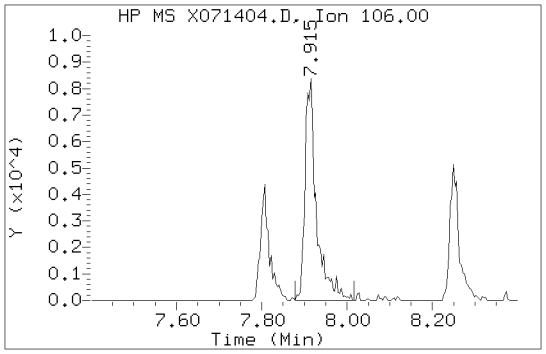
BEFORE

MASS
106
AREA
15703
HEIGHT
8376
20-Jul-2023
15:04
linh
pham



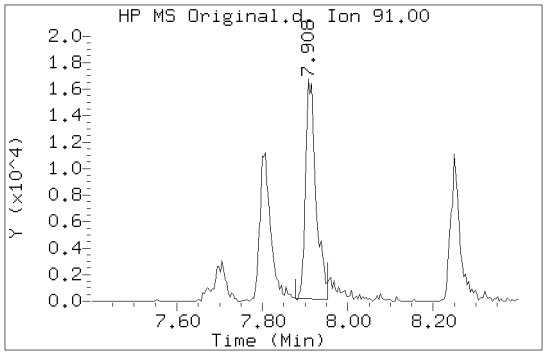
AFTER

MASS
106
AREA
15703
HEIGHT
8376
20-Jul-2023
15:04
linh
pham



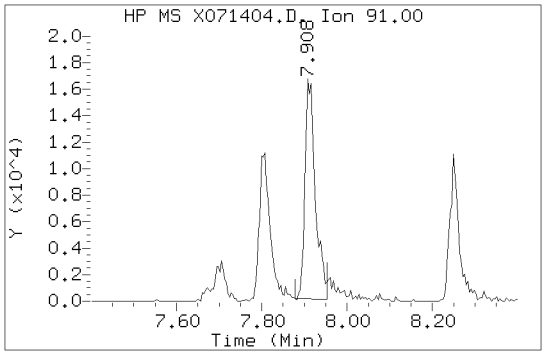
BEFORE

MASS
91
AREA
28386
HEIGHT
16587
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
28386
HEIGHT
16587
20-Jul-2023
15:04
linh
pham

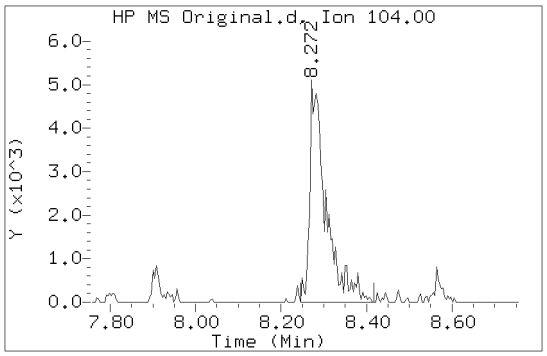


Styrene (100-42-5)

Reason Code:

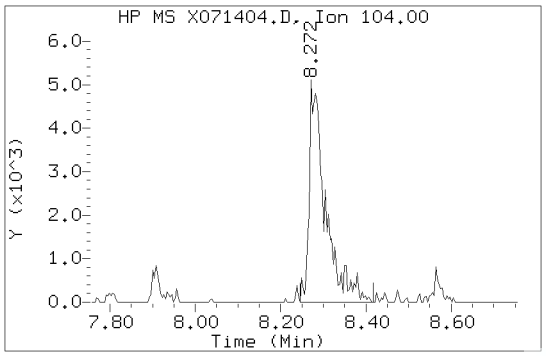
BEFORE

MASS
104
AREA
13315
HEIGHT
5109
20-Jul-2023
15:04
linh
pham



AFTER

MASS
104
AREA
13315
HEIGHT
5109
20-Jul-2023
15:04
linh
pham



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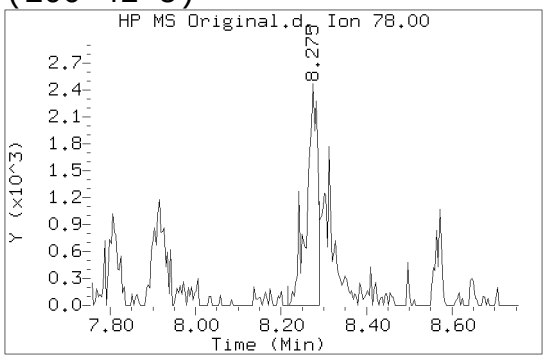
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Styrene (100-42-5)

Reason Code:

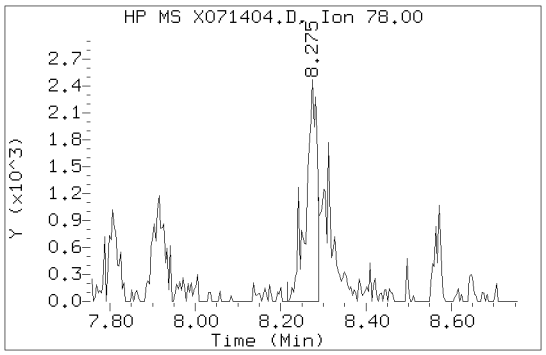
BEFORE

MASS
78
AREA
4442
HEIGHT
2469
20-Jul-2023
15:04
linh
pham



AFTER

MASS
78
AREA
4442
HEIGHT
2469
20-Jul-2023
15:04
linh
pham

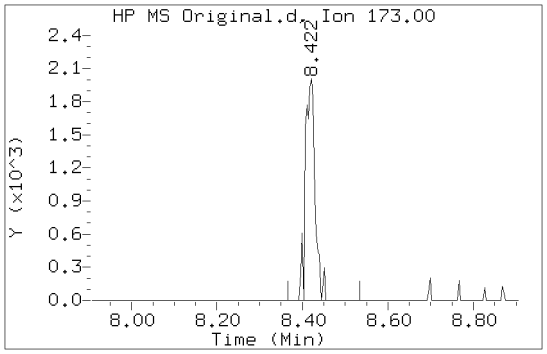


Bromoform (75-25-2)

Reason Code:

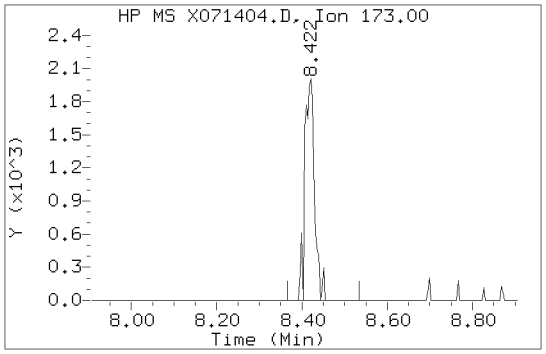
BEFORE

MASS
173
AREA
3238
HEIGHT
2008
20-Jul-2023
15:04
linh
pham



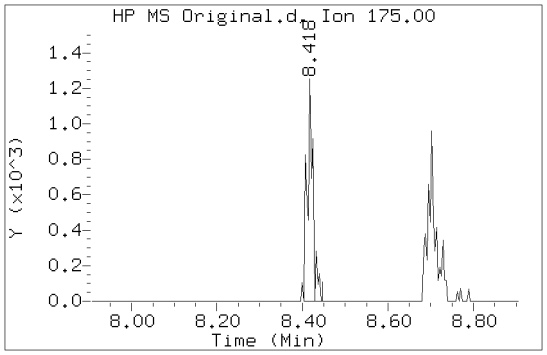
AFTER

MASS
173
AREA
3238
HEIGHT
2008
20-Jul-2023
15:04
linh
pham



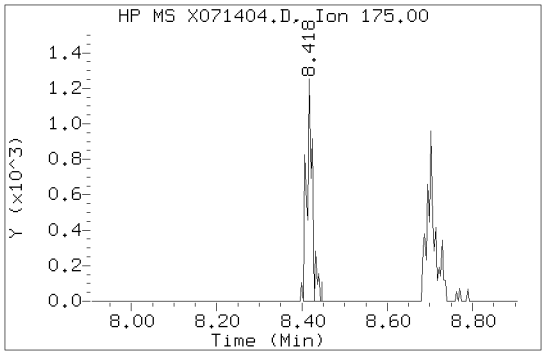
BEFORE

MASS
175
AREA
1174
HEIGHT
1253
20-Jul-2023
15:04
linh
pham



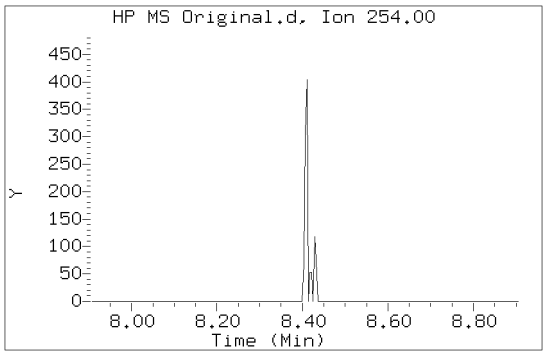
AFTER

MASS
175
AREA
1174
HEIGHT
1253
20-Jul-2023
15:04
linh
pham



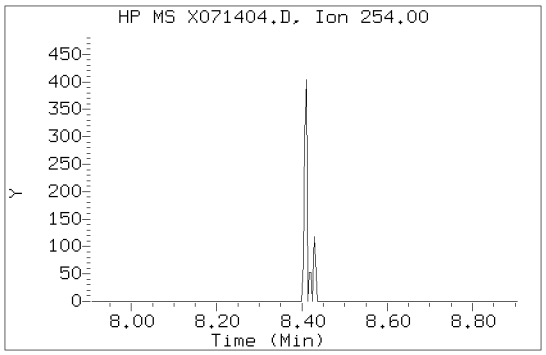
BEFORE

MASS
254
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
254
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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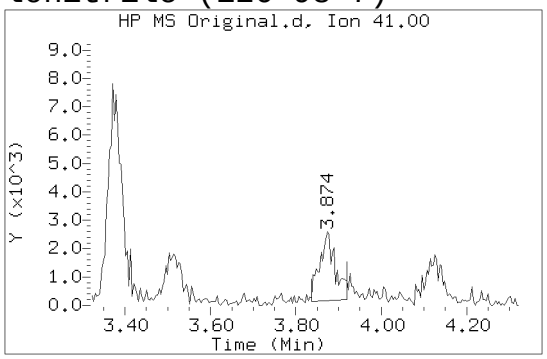
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

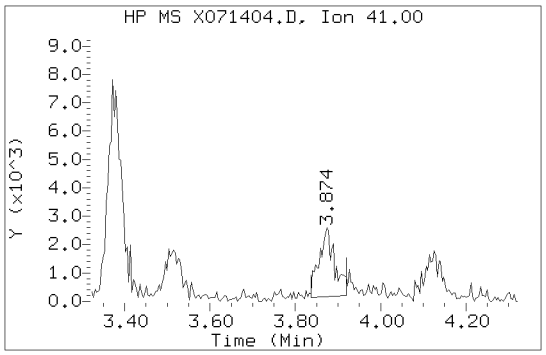
Methacrylonitrile (126-98-7)

Reason Code:

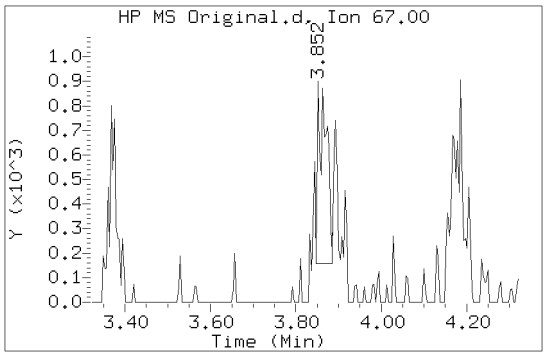
BEFORE
MASS
41
AREA
6195
HEIGHT
2436
20-Jul-2023
15:04
linh
pham



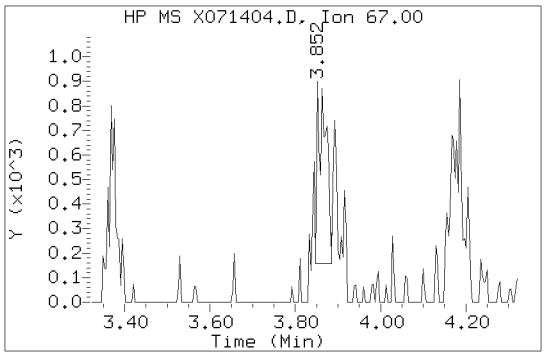
AFTER
MASS
41
AREA
6195
HEIGHT
2436
20-Jul-2023
15:04
linh
pham



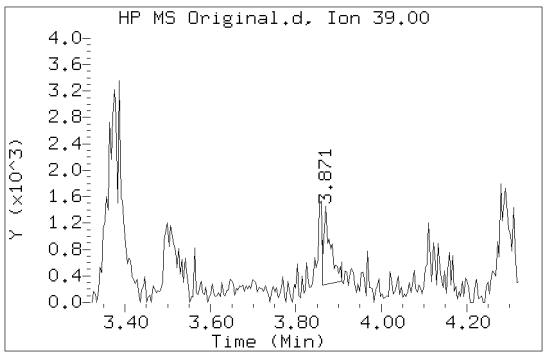
BEFORE
MASS
67
AREA
1024
HEIGHT
744
20-Jul-2023
15:04
linh
pham



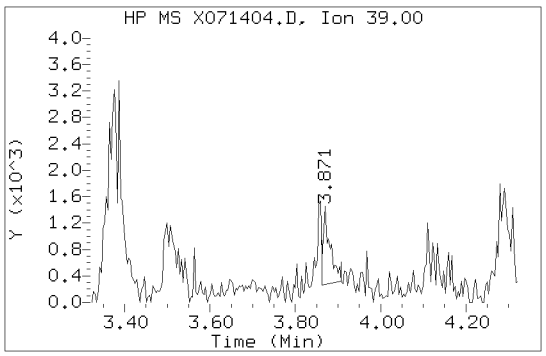
AFTER
MASS
67
AREA
1024
HEIGHT
744
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
39
AREA
1324
HEIGHT
1187
20-Jul-2023
15:04
linh
pham



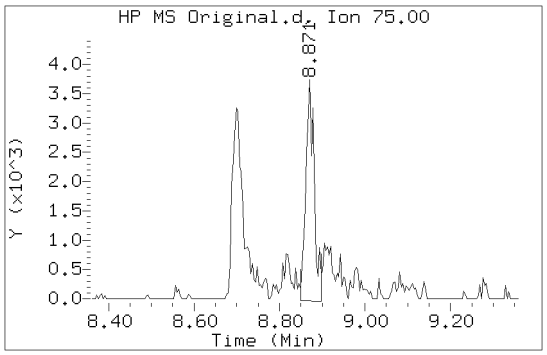
AFTER
MASS
39
AREA
1324
HEIGHT
1187
20-Jul-2023
15:04
linh
pham



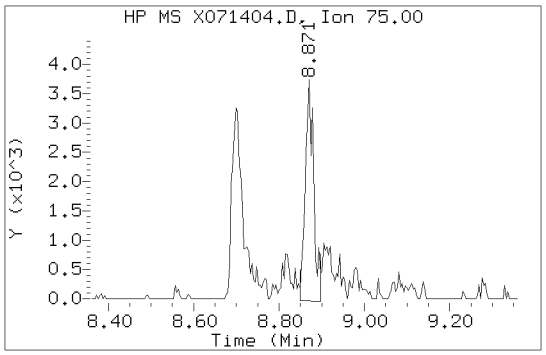
1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE
MASS
75
AREA
5203
HEIGHT
3776
20-Jul-2023
15:04
linh
pham



AFTER
MASS
75
AREA
5203
HEIGHT
3776
20-Jul-2023
15:04
linh
pham



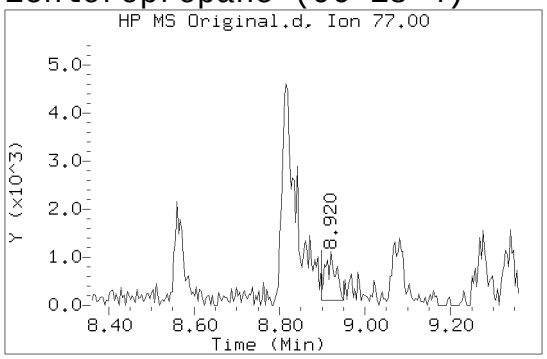
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,2,3-Trichloropropane (96-18-4)

Reason Code:

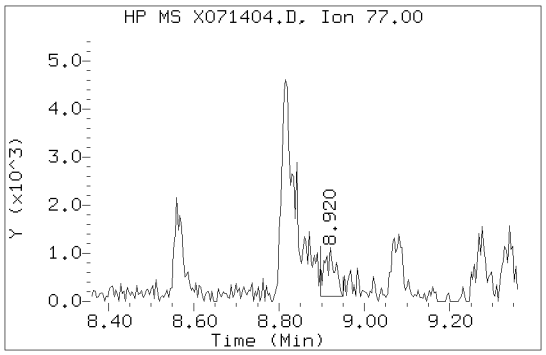
BEFORE

MASS
77
AREA
1749
HEIGHT
1014
20-Jul-2023
15:04
linh
pham



AFTER

MASS
77
AREA
1749
HEIGHT
1014
20-Jul-2023
15:04
linh
pham

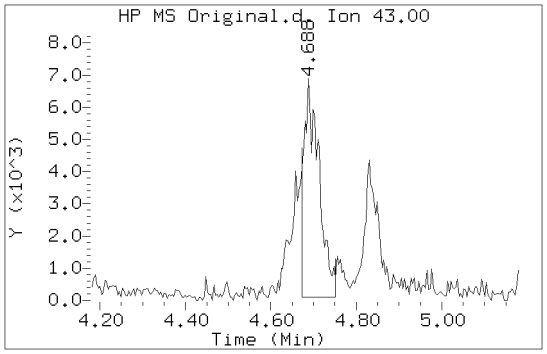


Isobutyl Alcohol (78-83-1)

Reason Code:

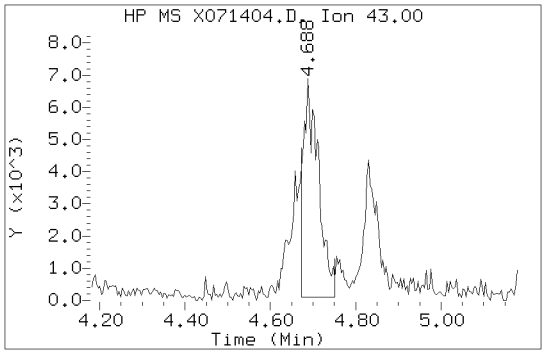
BEFORE

MASS
43
AREA
16938
HEIGHT
6786
20-Jul-2023
15:04
linh
pham



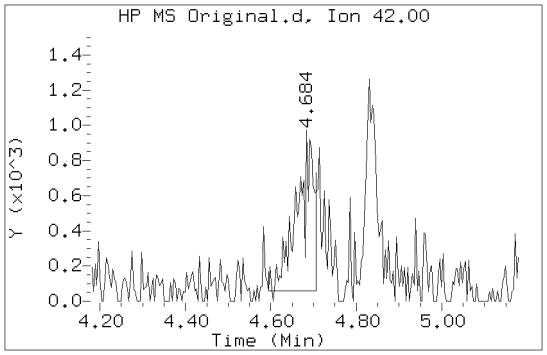
AFTER

MASS
43
AREA
16938
HEIGHT
6786
20-Jul-2023
15:04
linh
pham



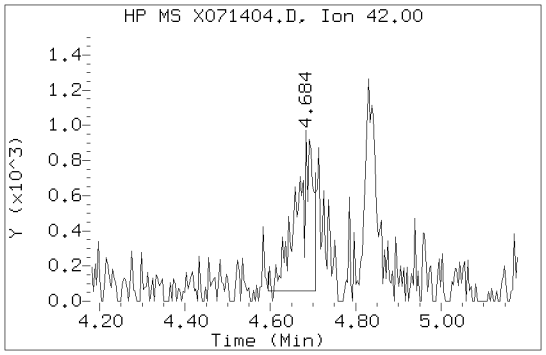
BEFORE

MASS
42
AREA
2469
HEIGHT
914
20-Jul-2023
15:04
linh
pham



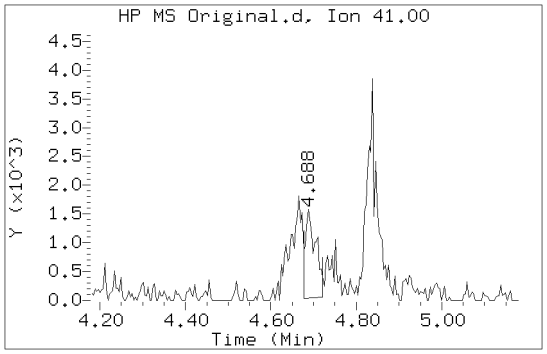
AFTER

MASS
42
AREA
2469
HEIGHT
914
20-Jul-2023
15:04
linh
pham



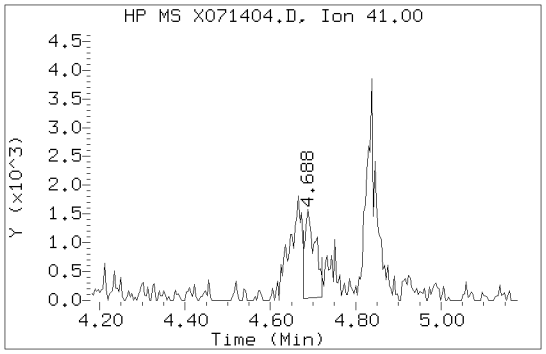
BEFORE

MASS
41
AREA
2733
HEIGHT
1544
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
2733
HEIGHT
1544
20-Jul-2023
15:04
linh
pham



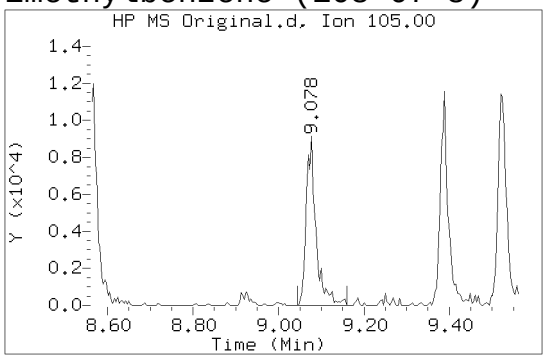
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,3,5-Trimethylbenzene (108-67-8)

Reason Code:

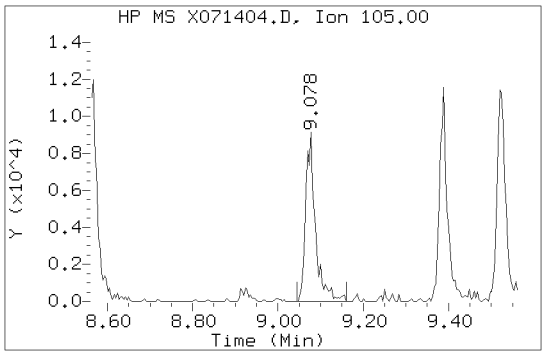
BEFORE

MASS
105
AREA
14649
HEIGHT
9159
20-Jul-2023
15:04
linh
pham



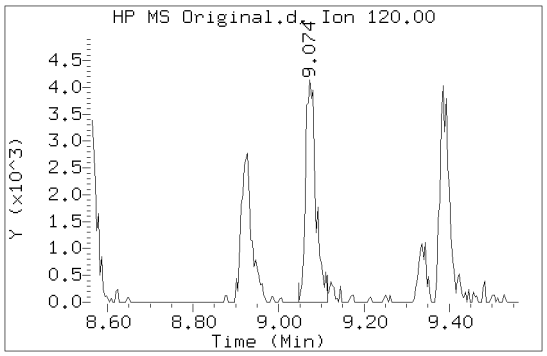
AFTER

MASS
105
AREA
14649
HEIGHT
9159
20-Jul-2023
15:04
linh
pham



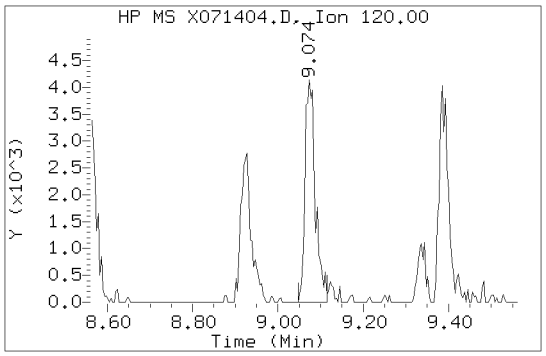
BEFORE

MASS
120
AREA
6985
HEIGHT
4141
20-Jul-2023
15:04
linh
pham



AFTER

MASS
120
AREA
6985
HEIGHT
4141
20-Jul-2023
15:04
linh
pham

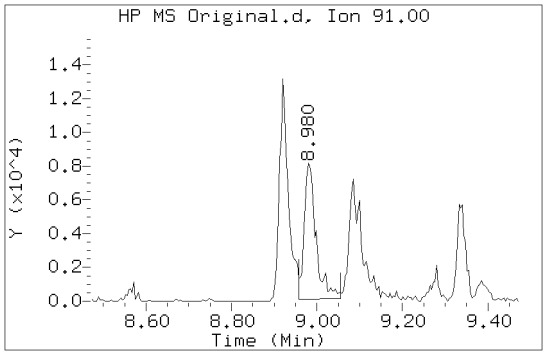


2-Chlorotoluene (95-49-8)

Reason Code:

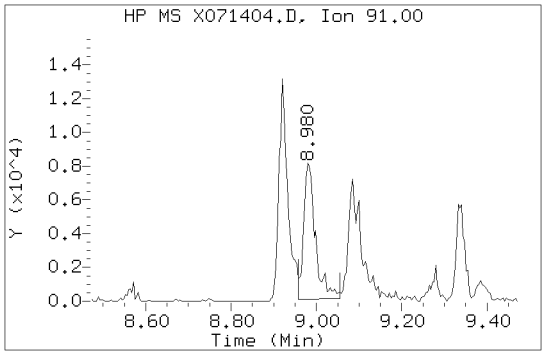
BEFORE

MASS
91
AREA
15937
HEIGHT
8082
20-Jul-2023
15:04
linh
pham



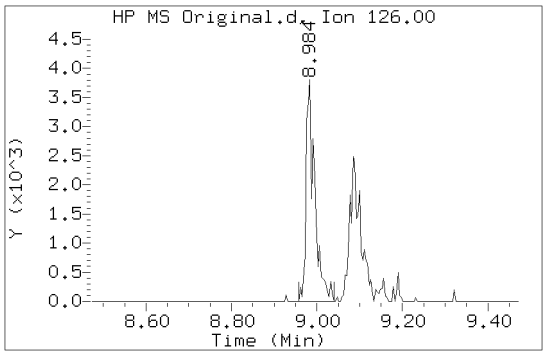
AFTER

MASS
91
AREA
15937
HEIGHT
8082
20-Jul-2023
15:04
linh
pham



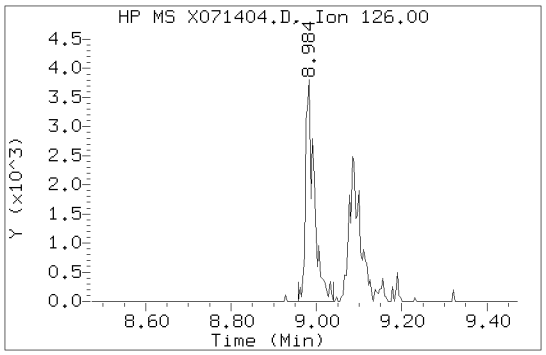
BEFORE

MASS
126
AREA
5351
HEIGHT
3805
20-Jul-2023
15:04
linh
pham



AFTER

MASS
126
AREA
5351
HEIGHT
3805
20-Jul-2023
15:04
linh
pham



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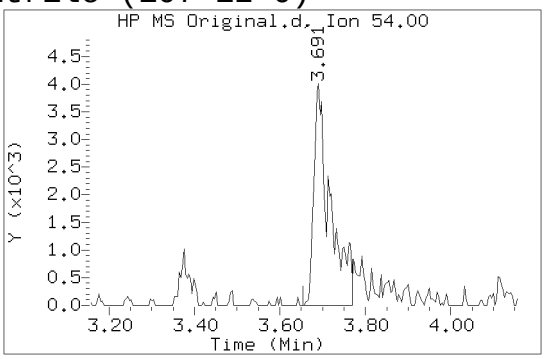
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

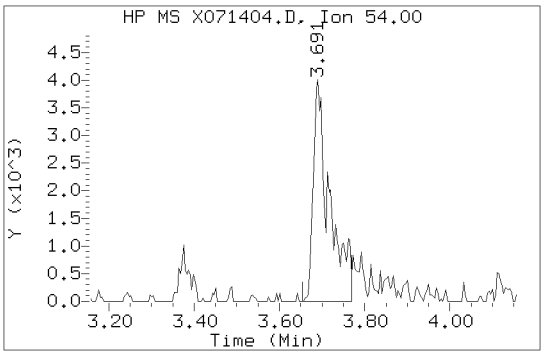
Propionitrile (107-12-0)

Reason Code:

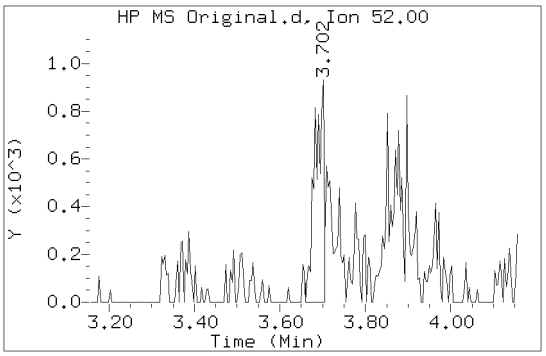
BEFORE
MASS
54
AREA
10495
HEIGHT
4008
20-Jul-2023
15:04
linh
pham



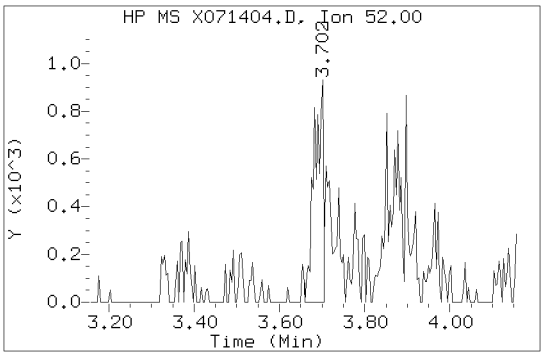
AFTER
MASS
54
AREA
10495
HEIGHT
4008
20-Jul-2023
15:04
linh
pham



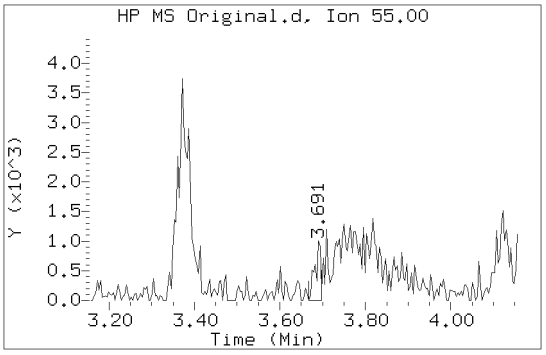
BEFORE
MASS
52
AREA
1356
HEIGHT
931
20-Jul-2023
15:04
linh
pham



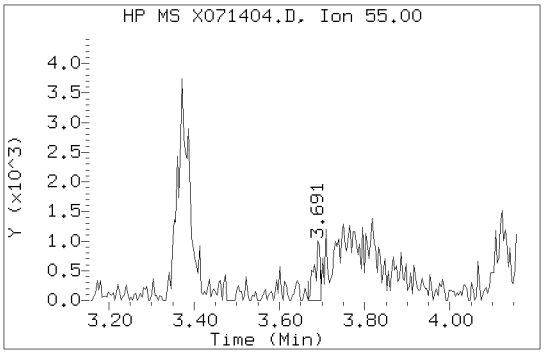
AFTER
MASS
52
AREA
1356
HEIGHT
931
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
55
AREA
924
HEIGHT
1009
20-Jul-2023
15:04
linh
pham



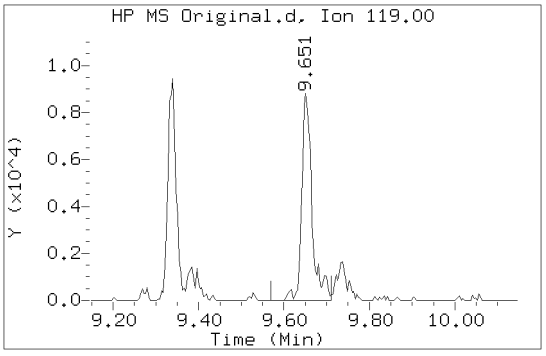
AFTER
MASS
55
AREA
924
HEIGHT
1009
20-Jul-2023
15:04
linh
pham



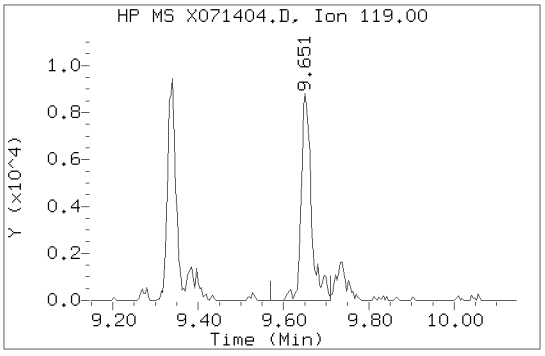
p-Isopropyltoluene (99-87-6)

Reason Code:

BEFORE
MASS
119
AREA
15092
HEIGHT
8813
20-Jul-2023
15:04
linh
pham



AFTER
MASS
119
AREA
15092
HEIGHT
8813
20-Jul-2023
15:04
linh
pham



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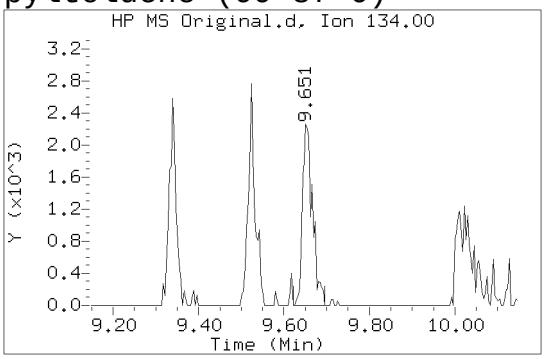
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

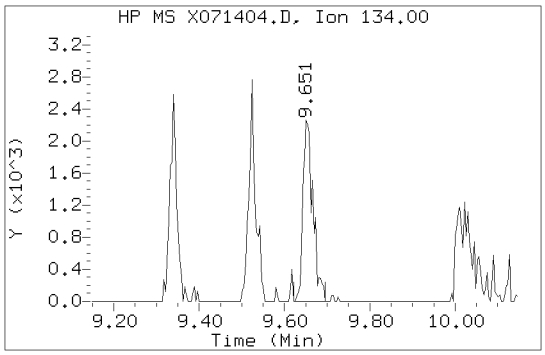
p-Isopropyltoluene (99-87-6)

BEFORE
MASS
134
AREA
3764
HEIGHT
2261
20-Jul-2023
15:04
linh
pham

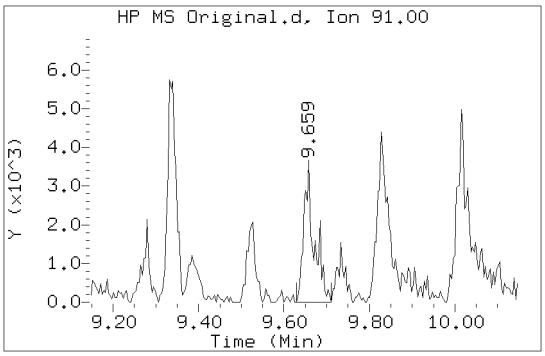


Reason Code:

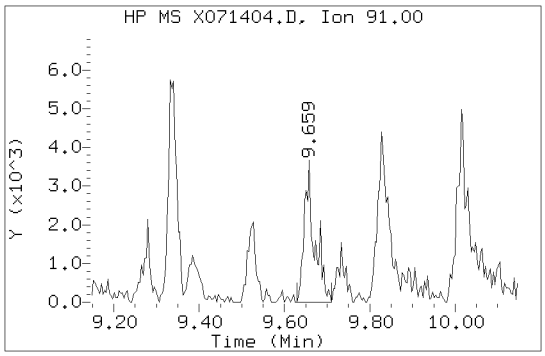
AFTER
MASS
134
AREA
3764
HEIGHT
2261
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
91
AREA
6124
HEIGHT
3669
20-Jul-2023
15:04
linh
pham

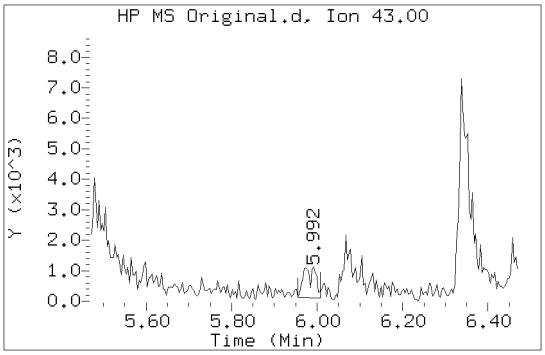


AFTER
MASS
91
AREA
6124
HEIGHT
3669
20-Jul-2023
15:04
linh
pham



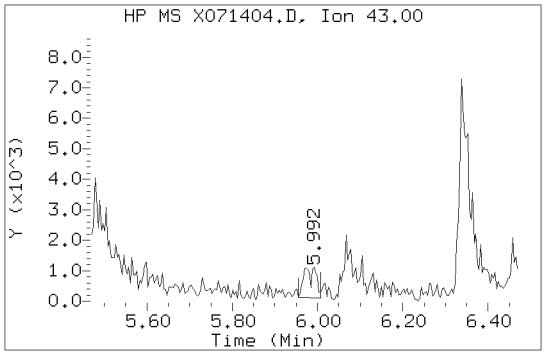
2-Nitropropane (79-46-9)

BEFORE
MASS
43
AREA
2054
HEIGHT
1008
20-Jul-2023
15:04
linh
pham

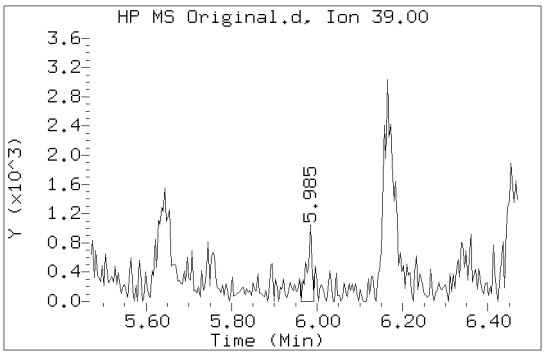


Reason Code:

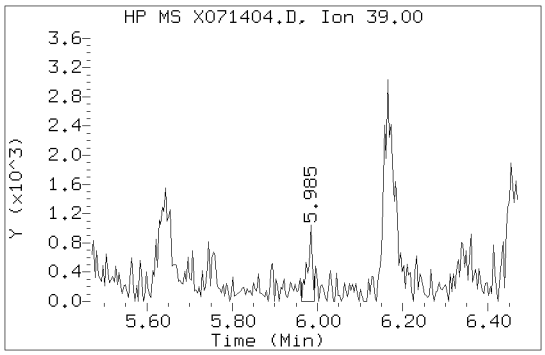
AFTER
MASS
43
AREA
2054
HEIGHT
1008
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
39
AREA
807
HEIGHT
1040
20-Jul-2023
15:04
linh
pham



AFTER
MASS
39
AREA
807
HEIGHT
1040
20-Jul-2023
15:04
linh
pham



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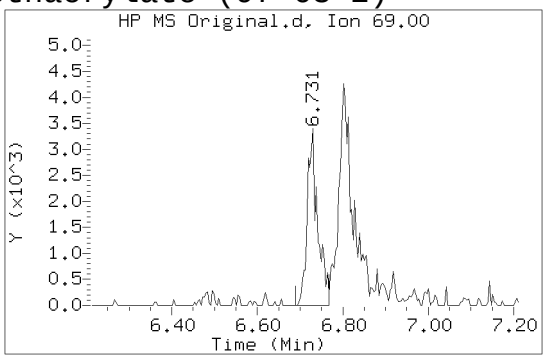
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Ethyl Methacrylate (97-63-2)

Reason Code:

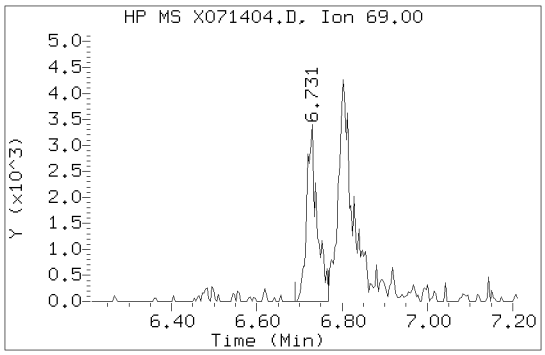
BEFORE

MASS
69
AREA
5749
HEIGHT
3399
20-Jul-2023
15:04
linh
pham



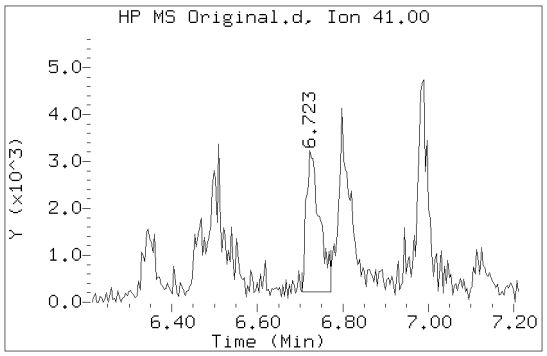
AFTER

MASS
69
AREA
5749
HEIGHT
3399
20-Jul-2023
15:04
linh
pham



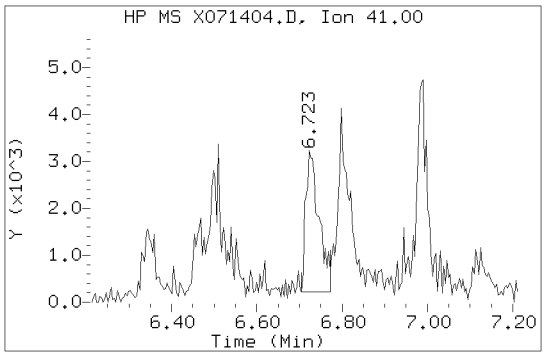
BEFORE

MASS
41
AREA
6505
HEIGHT
3006
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
6505
HEIGHT
3006
20-Jul-2023
15:04
linh
pham

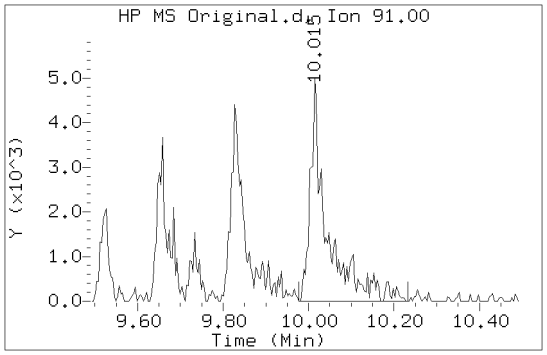


n-Butylbenzene (104-51-8)

Reason Code:

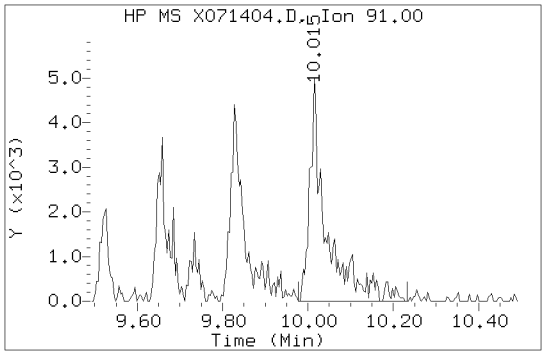
BEFORE

MASS
91
AREA
13321
HEIGHT
4981
20-Jul-2023
15:04
linh
pham



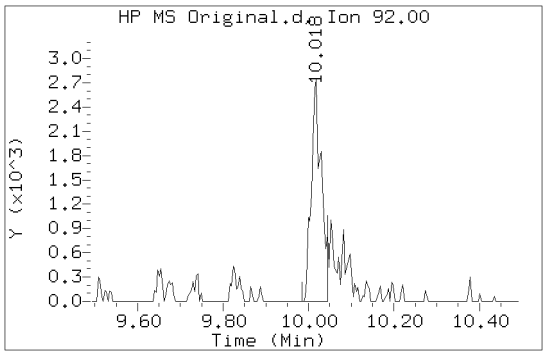
AFTER

MASS
91
AREA
13321
HEIGHT
4981
20-Jul-2023
15:04
linh
pham



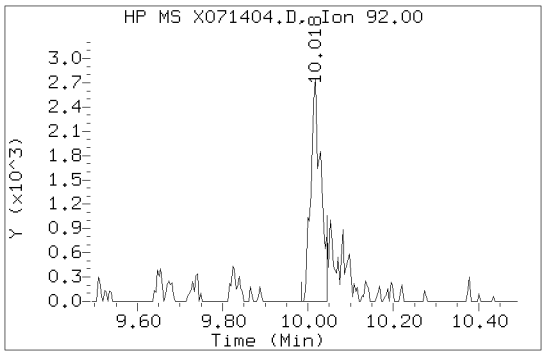
BEFORE

MASS
92
AREA
4505
HEIGHT
2738
20-Jul-2023
15:04
linh
pham



AFTER

MASS
92
AREA
4505
HEIGHT
2738
20-Jul-2023
15:04
linh
pham



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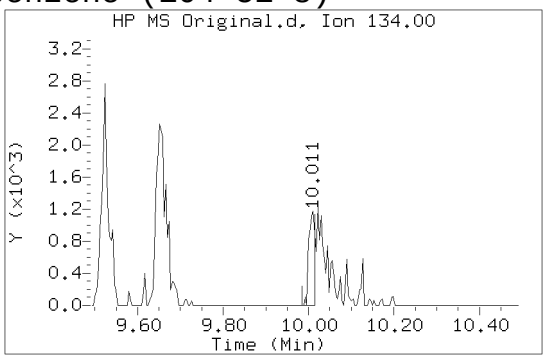
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

n-Butylbenzene (104-51-8)

Reason Code:

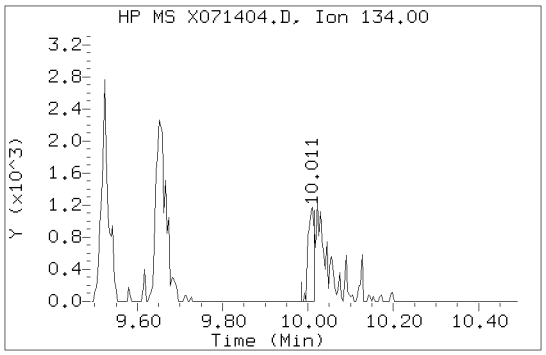
BEFORE

MASS
134
AREA
1125
HEIGHT
1172
20-Jul-2023
15:04
linh
pham



AFTER

MASS
134
AREA
1125
HEIGHT
1172
20-Jul-2023
15:04
linh
pham

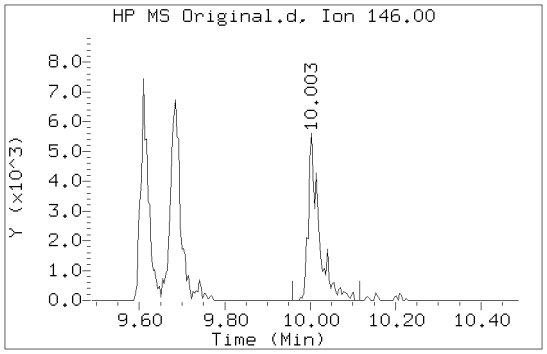


1,2-Dichlorobenzene (95-50-1)

Reason Code:

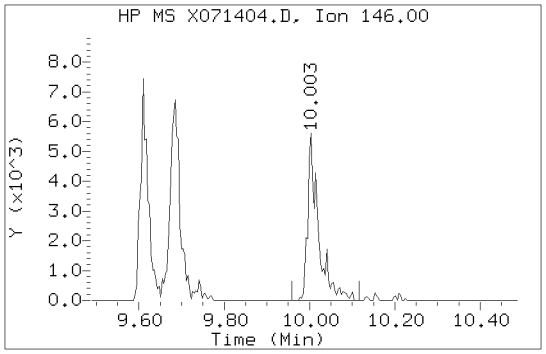
BEFORE

MASS
146
AREA
9791
HEIGHT
5614
20-Jul-2023
15:04
linh
pham



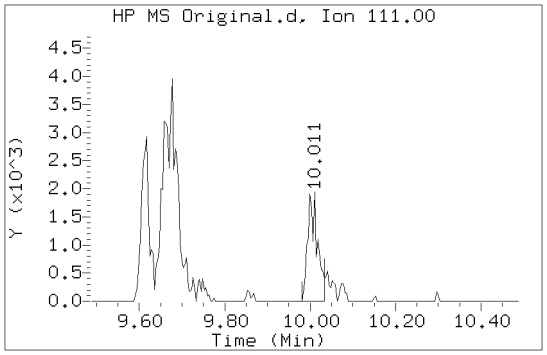
AFTER

MASS
146
AREA
9791
HEIGHT
5614
20-Jul-2023
15:04
linh
pham



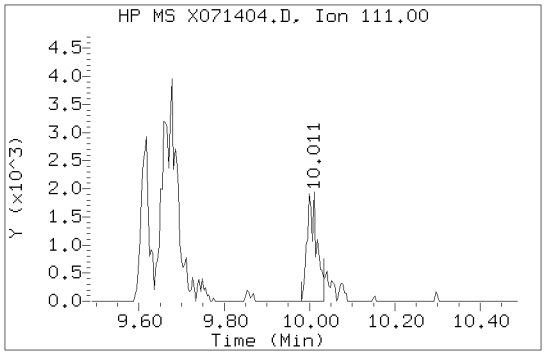
BEFORE

MASS
111
AREA
3070
HEIGHT
1939
20-Jul-2023
15:04
linh
pham



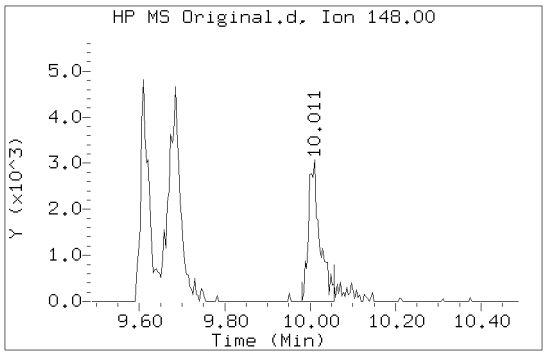
AFTER

MASS
111
AREA
3070
HEIGHT
1939
20-Jul-2023
15:04
linh
pham



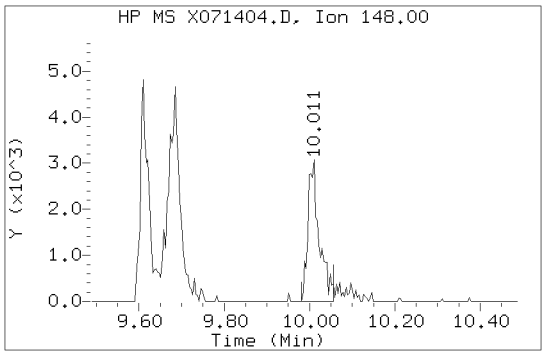
BEFORE

MASS
148
AREA
5707
HEIGHT
3072
20-Jul-2023
15:04
linh
pham



AFTER

MASS
148
AREA
5707
HEIGHT
3072
20-Jul-2023
15:04
linh
pham



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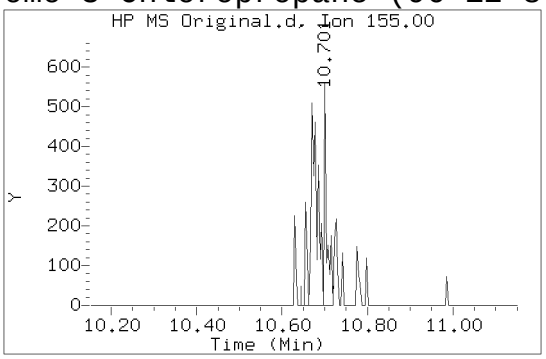
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

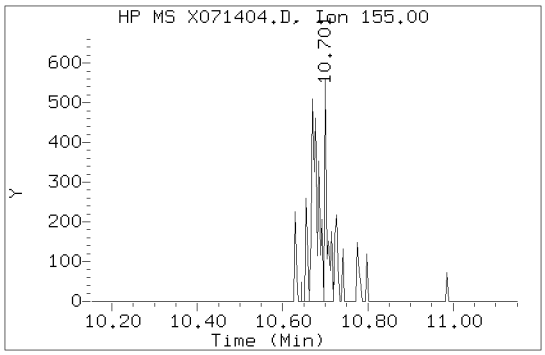
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

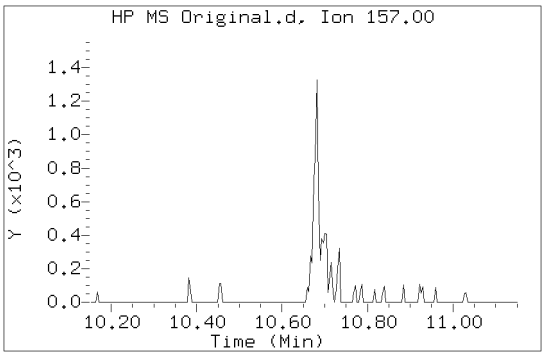
BEFORE
MASS
155
AREA
831
HEIGHT
558
20-Jul-2023
15:04
linh
pham



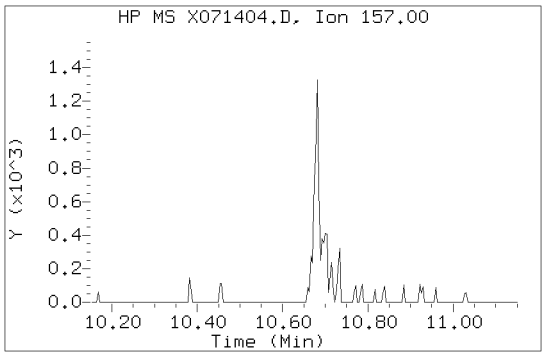
AFTER
MASS
155
AREA
831
HEIGHT
558
20-Jul-2023
15:04
linh
pham



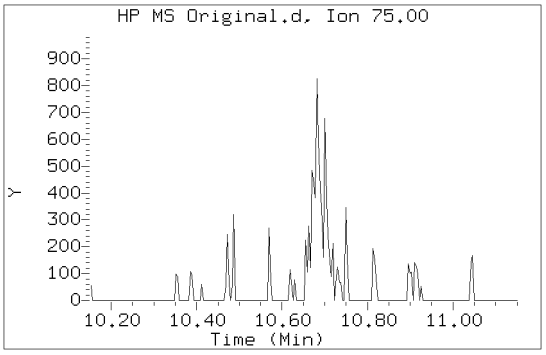
BEFORE
MASS
157
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



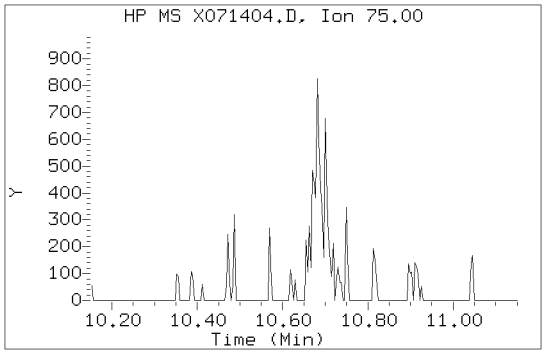
AFTER
MASS
157
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



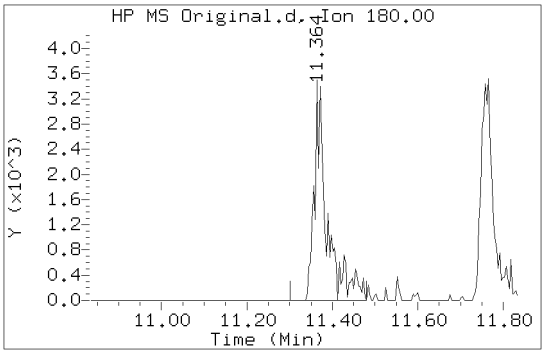
AFTER
MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



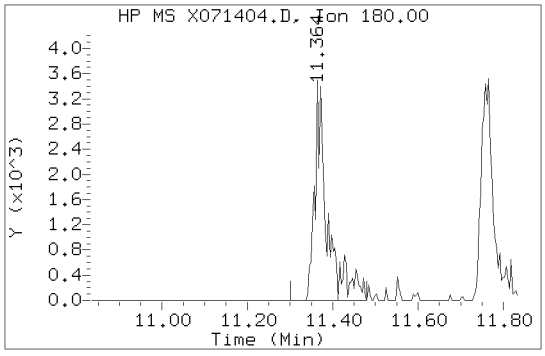
1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

BEFORE
MASS
180
AREA
7113
HEIGHT
3499
20-Jul-2023
15:04
linh
pham



AFTER
MASS
180
AREA
7113
HEIGHT
3499
20-Jul-2023
15:04
linh
pham



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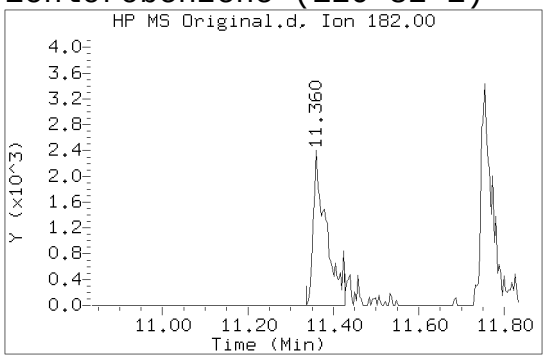
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

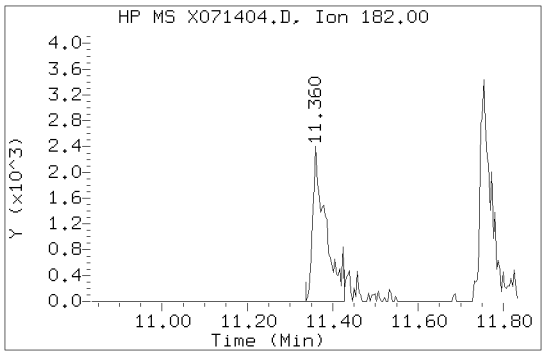
BEFORE

MASS
182
AREA
5066
HEIGHT
2401
20-Jul-2023
15:04
linh
pham



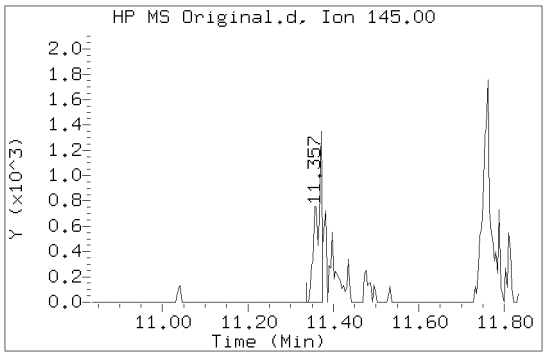
AFTER

MASS
182
AREA
5066
HEIGHT
2401
20-Jul-2023
15:04
linh
pham



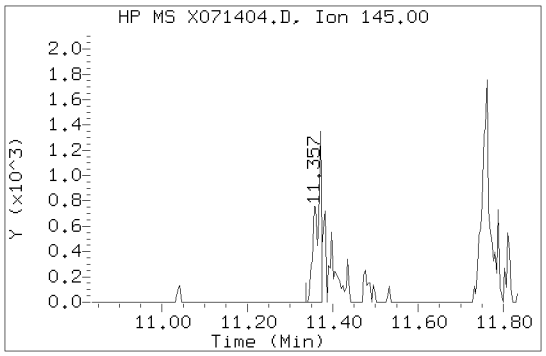
BEFORE

MASS
145
AREA
1146
HEIGHT
757
20-Jul-2023
15:04
linh
pham



AFTER

MASS
145
AREA
1146
HEIGHT
757
20-Jul-2023
15:04
linh
pham

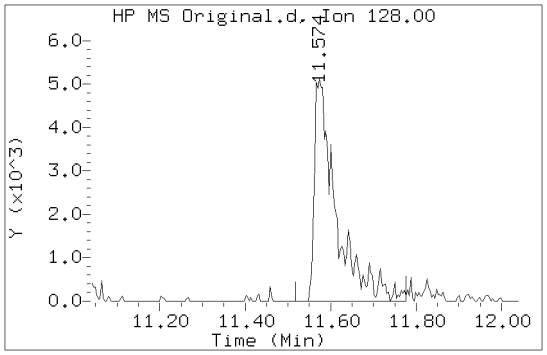


Naphthalene (91-20-3)

Reason Code:

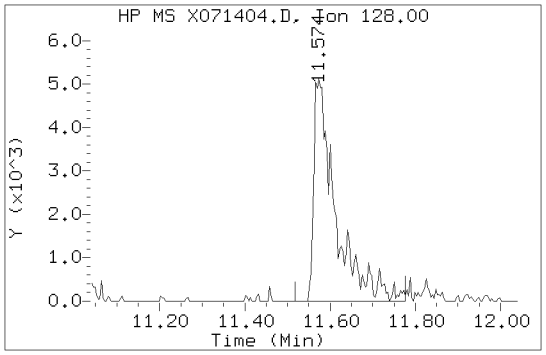
BEFORE

MASS
128
AREA
18131
HEIGHT
5123
20-Jul-2023
15:04
linh
pham



AFTER

MASS
128
AREA
18131
HEIGHT
5123
20-Jul-2023
15:04
linh
pham

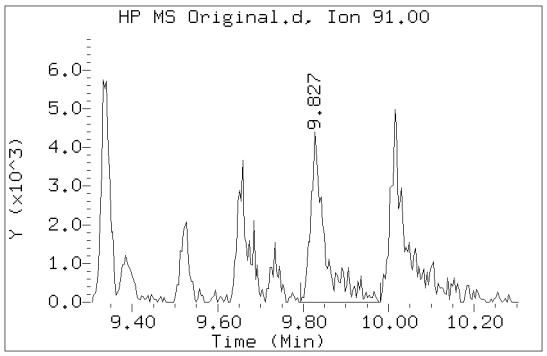


Benzyl Chloride (100-44-7)

Reason Code:

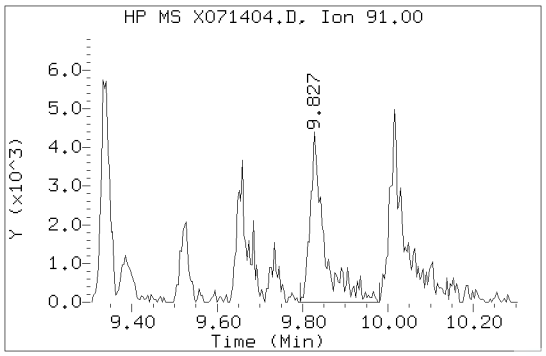
BEFORE

MASS
91
AREA
10259
HEIGHT
4403
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
10259
HEIGHT
4403
20-Jul-2023
15:04
linh
pham



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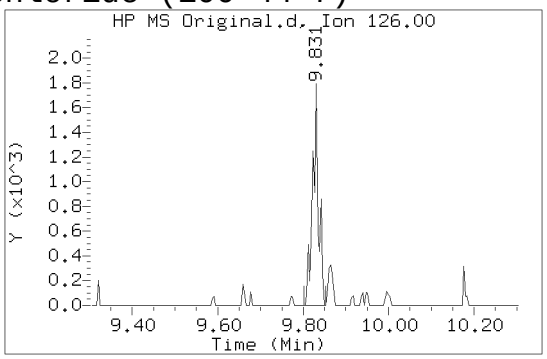
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

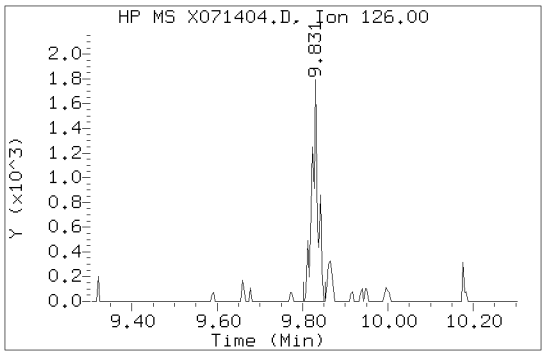
Benzyl Chloride (100-44-7)

Reason Code:

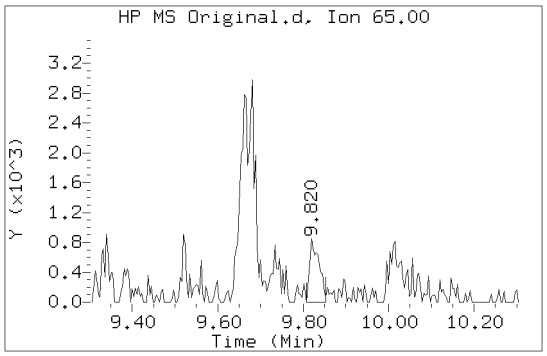
BEFORE
MASS
126
AREA
1709
HEIGHT
1793
20-Jul-2023
15:04
linh
pham



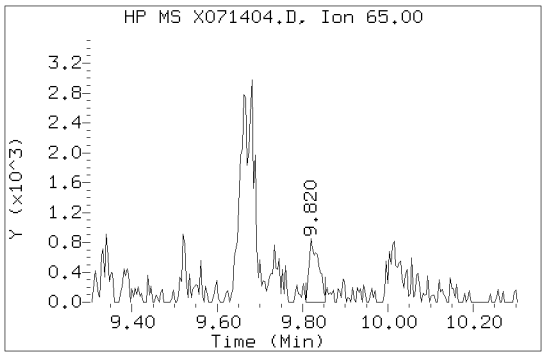
AFTER
MASS
126
AREA
1709
HEIGHT
1793
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
65
AREA
1300
HEIGHT
848
20-Jul-2023
15:04
linh
pham



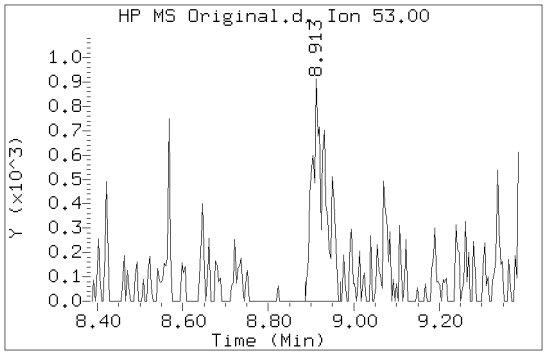
AFTER
MASS
65
AREA
1300
HEIGHT
848
20-Jul-2023
15:04
linh
pham



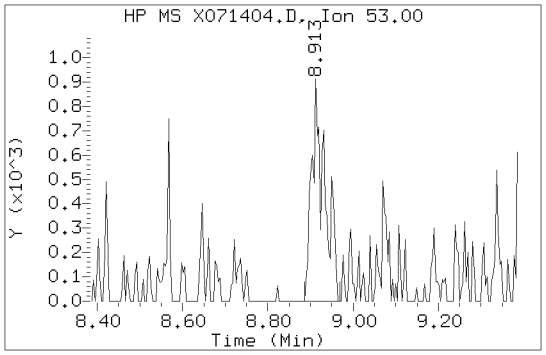
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

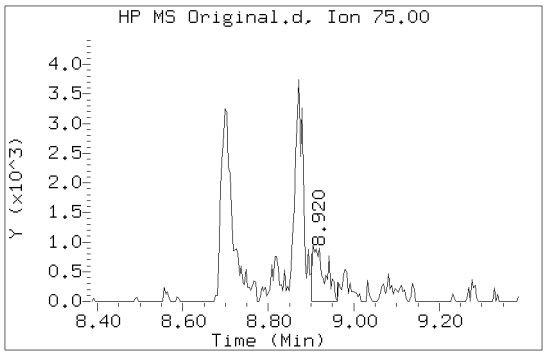
BEFORE
MASS
53
AREA
1951
HEIGHT
913
20-Jul-2023
15:04
linh
pham



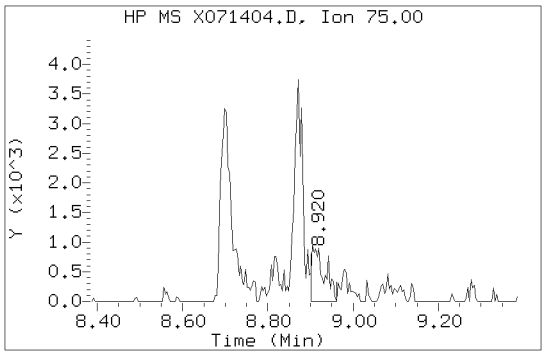
AFTER
MASS
53
AREA
1951
HEIGHT
913
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
75
AREA
1917
HEIGHT
902
20-Jul-2023
15:04
linh
pham



AFTER
MASS
75
AREA
1917
HEIGHT
902
20-Jul-2023
15:04
linh
pham



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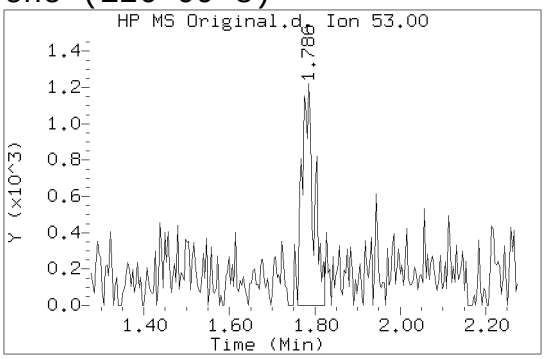
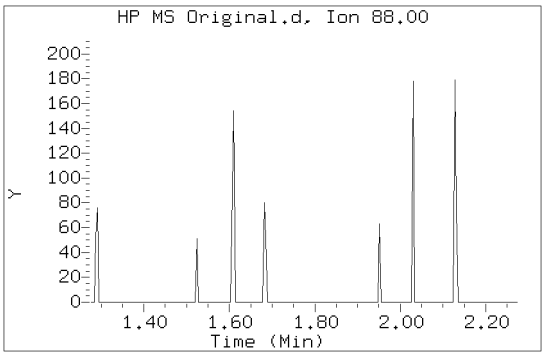
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Chloroprene (126-99-8)

BEFORE
MASS
53
AREA
2402
HEIGHT
1221
20-Jul-2023
15:04
linh
pham

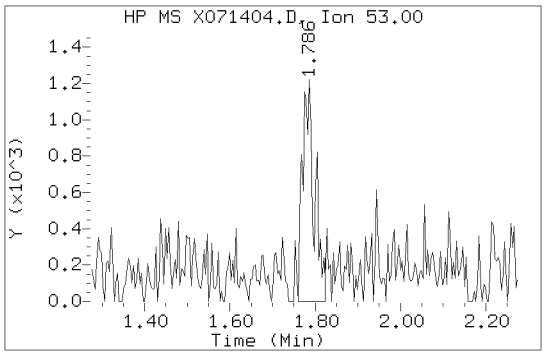


BEFORE
MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

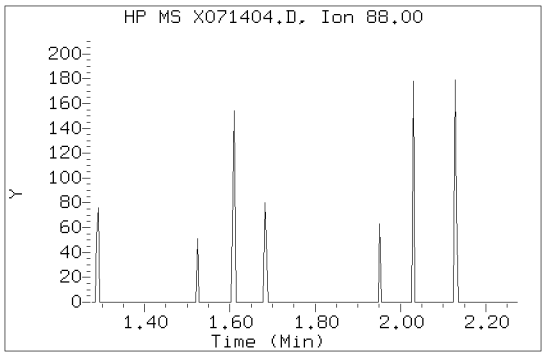


Reason Code:

AFTER
MASS
53
AREA
2402
HEIGHT
1221
20-Jul-2023
15:04
linh
pham

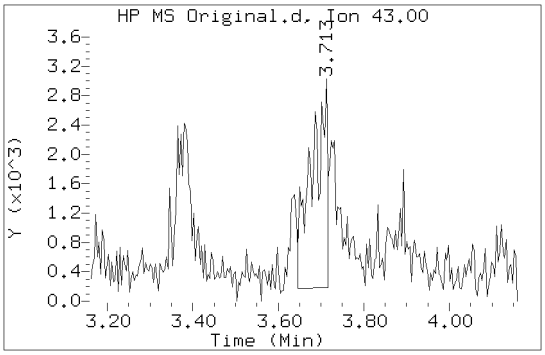


AFTER
MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

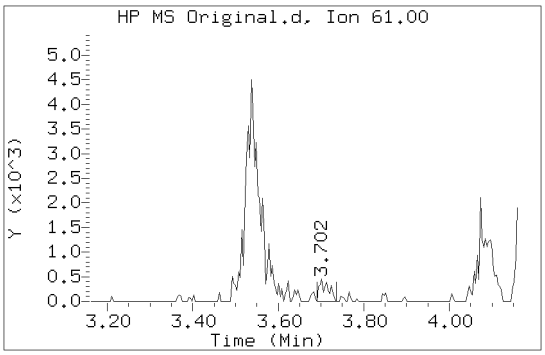


Ethyl Acetate (141-78-6)

BEFORE
MASS
43
AREA
7207
HEIGHT
2844
20-Jul-2023
15:04
linh
pham

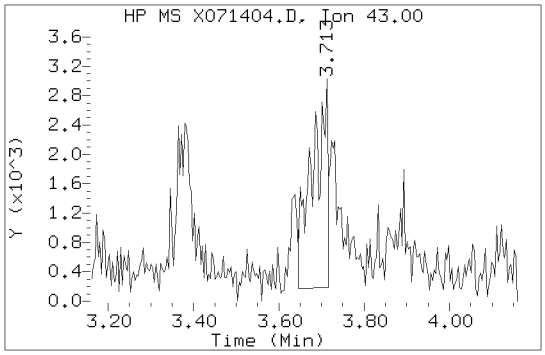


BEFORE
MASS
61
AREA
652
HEIGHT
462
20-Jul-2023
15:04
linh
pham

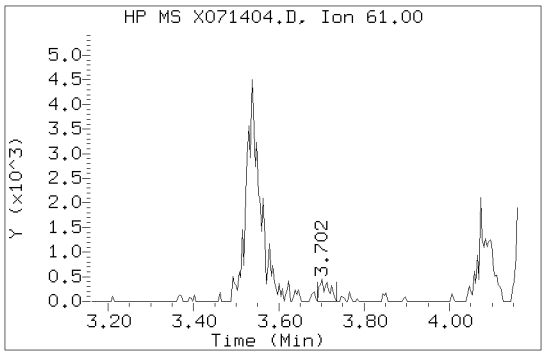


Reason Code:

AFTER
MASS
43
AREA
7207
HEIGHT
2844
20-Jul-2023
15:04
linh
pham



AFTER
MASS
61
AREA
652
HEIGHT
462
20-Jul-2023
15:04
linh
pham



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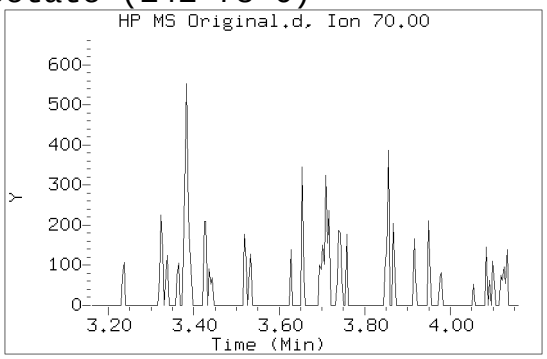
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Ethyl Acetate (141-78-6)

Reason Code:

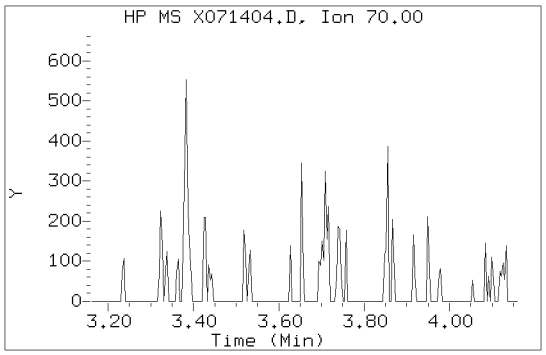
BEFORE

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

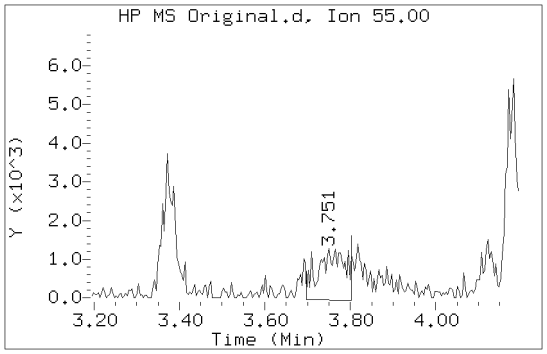


Methyl Acrylate (96-33-3)

Reason Code:

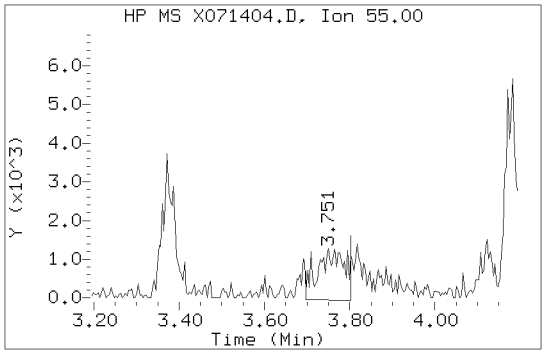
BEFORE

MASS
55
AREA
5778
HEIGHT
1338
20-Jul-2023
15:04
linh
pham



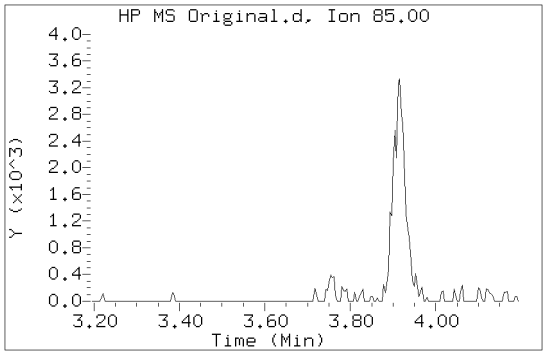
AFTER

MASS
55
AREA
5778
HEIGHT
1338
20-Jul-2023
15:04
linh
pham



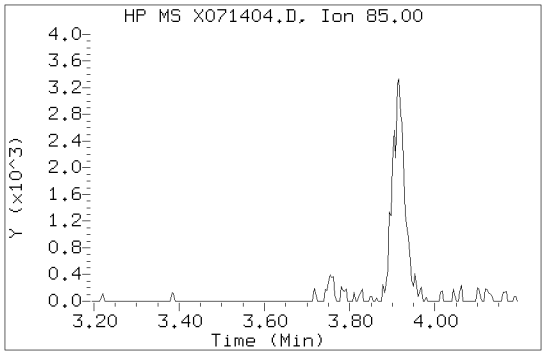
BEFORE

MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

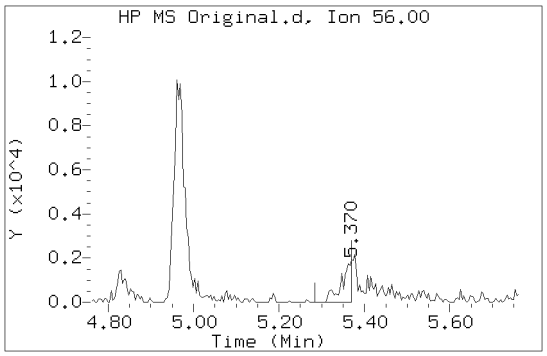


n-Butanol (71-36-3)

Reason Code:

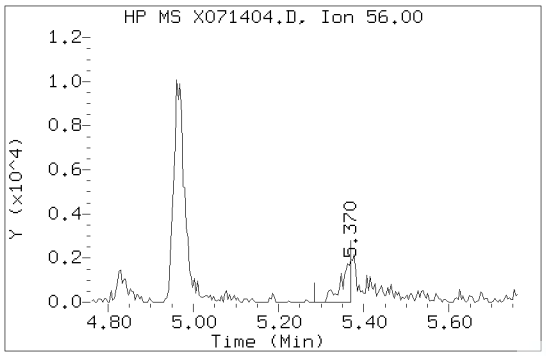
BEFORE

MASS
56
AREA
3103
HEIGHT
1929
20-Jul-2023
15:04
linh
pham



AFTER

MASS
56
AREA
3103
HEIGHT
1929
20-Jul-2023
15:04
linh
pham



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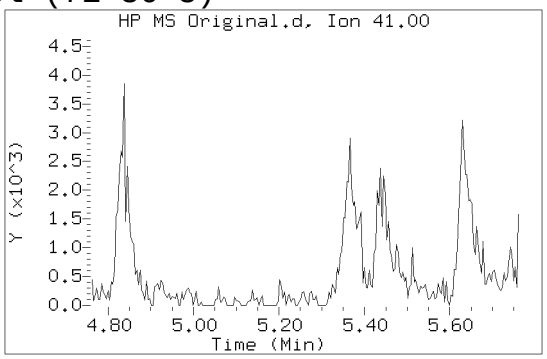
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

n-Butanol (71-36-3)

Reason Code:

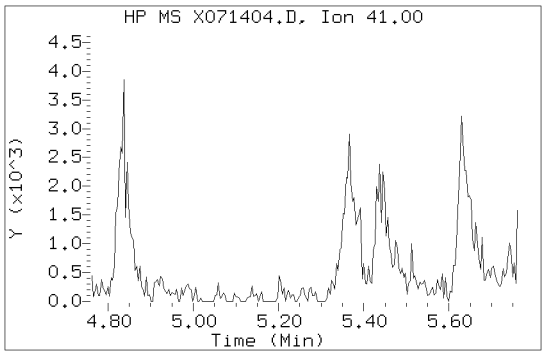
BEFORE

MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

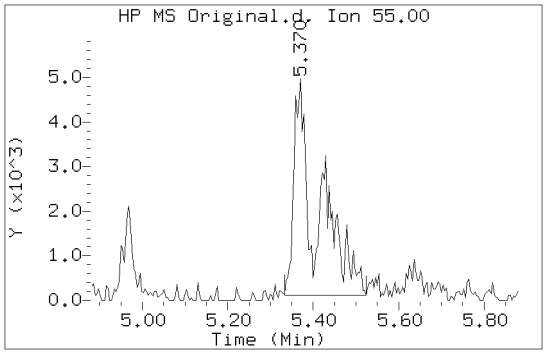


Ethyl Acrylate (140-88-5)

Reason Code:

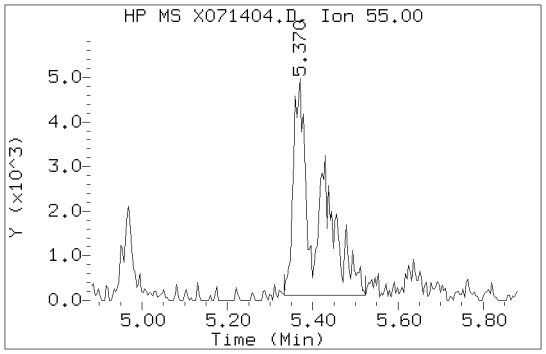
BEFORE

MASS
55
AREA
18196
HEIGHT
4857
20-Jul-2023
15:04
linh
pham



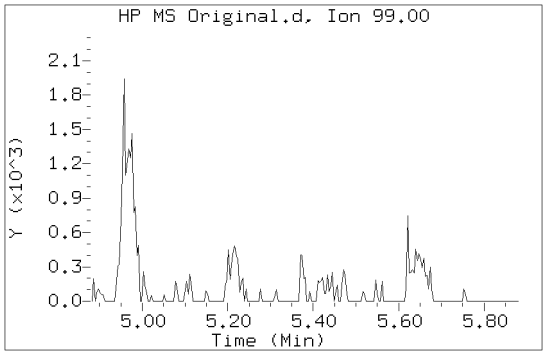
AFTER

MASS
55
AREA
18196
HEIGHT
4857
20-Jul-2023
15:04
linh
pham



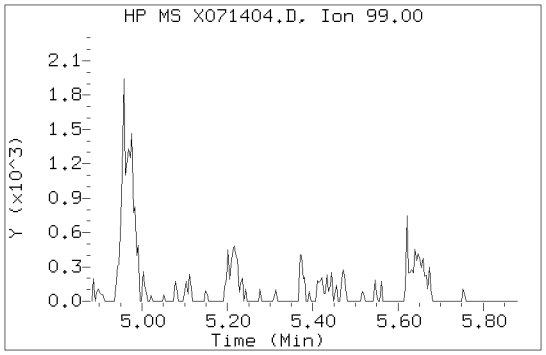
BEFORE

MASS
99
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
99
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

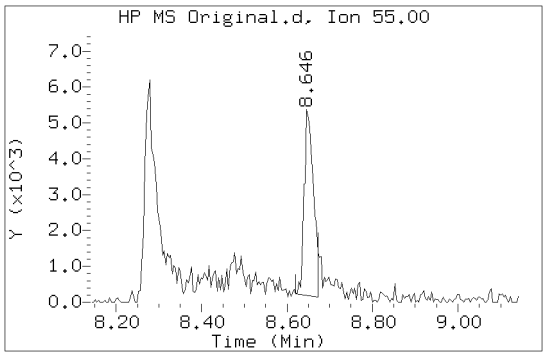


Cyclohexanone (108-94-1)

Reason Code:

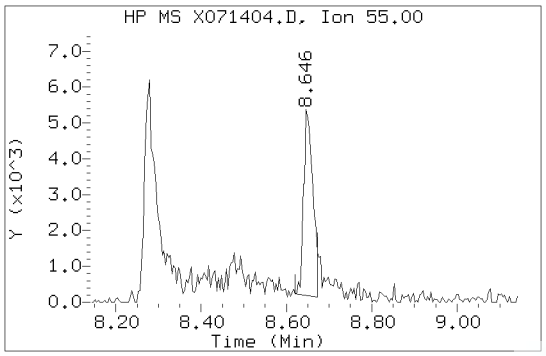
BEFORE

MASS
55
AREA
7972
HEIGHT
5194
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
7972
HEIGHT
5194
20-Jul-2023
15:04
linh
pham



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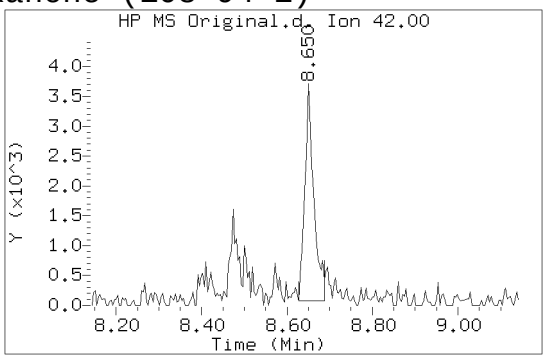
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Cyclohexanone (108-94-1)

Reason Code:

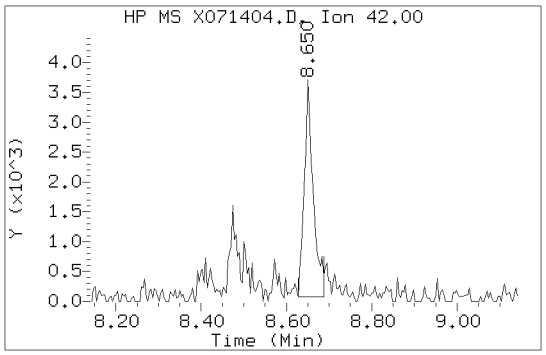
BEFORE

MASS
42
AREA
5392
HEIGHT
3640
20-Jul-2023
15:04
linh
pham



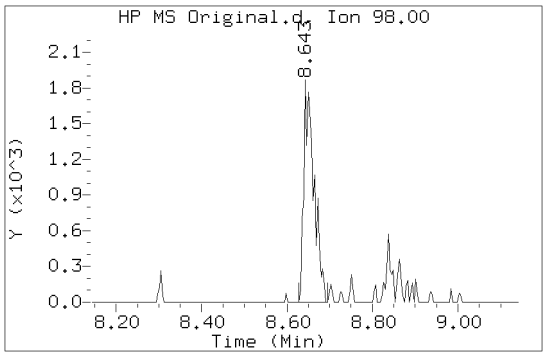
AFTER

MASS
42
AREA
5392
HEIGHT
3640
20-Jul-2023
15:04
linh
pham



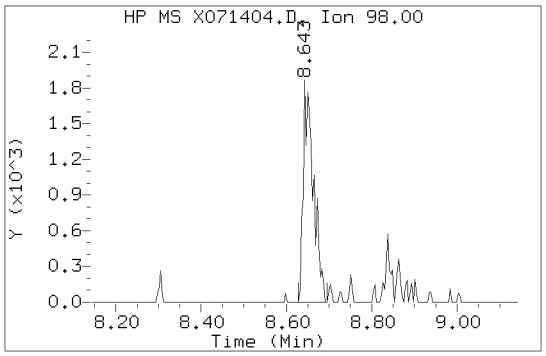
BEFORE

MASS
98
AREA
3142
HEIGHT
1869
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
AREA
3142
HEIGHT
1869
20-Jul-2023
15:04
linh
pham

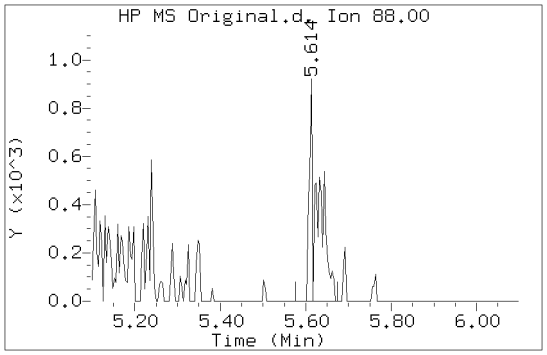


1,4-Dioxane ()

Reason Code:

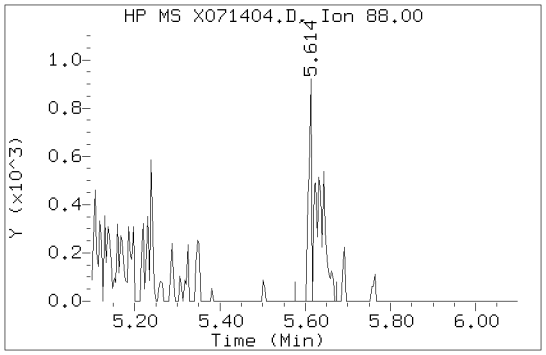
BEFORE

MASS
88
AREA
1290
HEIGHT
921
20-Jul-2023
15:04
linh
pham



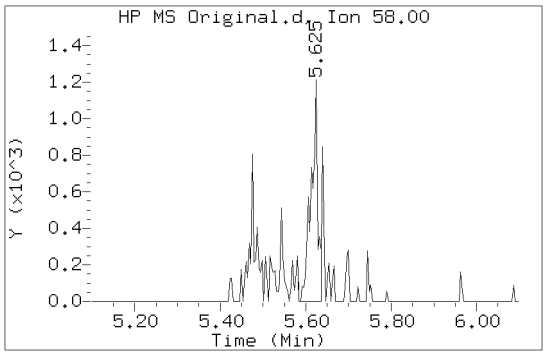
AFTER

MASS
88
AREA
1290
HEIGHT
921
20-Jul-2023
15:04
linh
pham



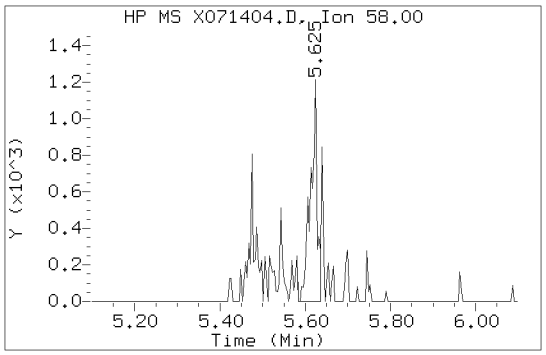
BEFORE

MASS
58
AREA
1310
HEIGHT
1214
20-Jul-2023
15:04
linh
pham



AFTER

MASS
58
AREA
1310
HEIGHT
1214
20-Jul-2023
15:04
linh
pham



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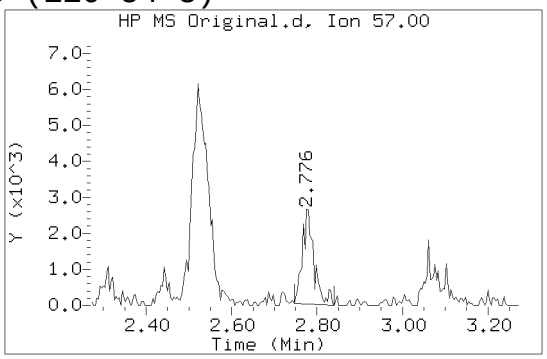
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

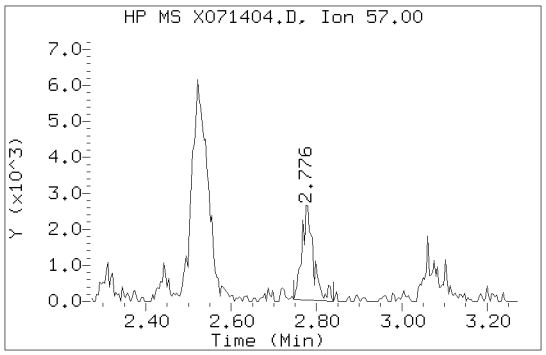
n-Hexane (110-54-3)

Reason Code:

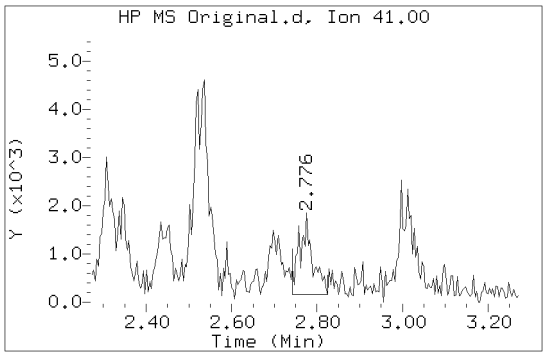
BEFORE
MASS
57
AREA
5000
HEIGHT
2629
20-Jul-2023
15:04
linh
pham



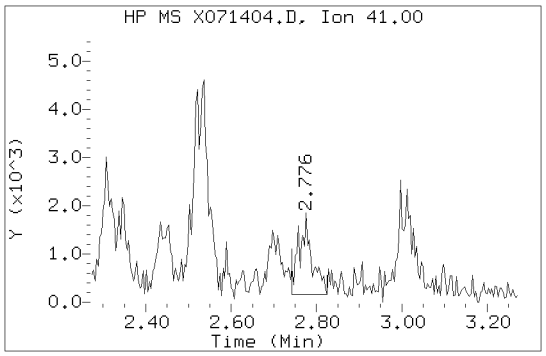
AFTER
MASS
57
AREA
5000
HEIGHT
2629
20-Jul-2023
15:04
linh
pham



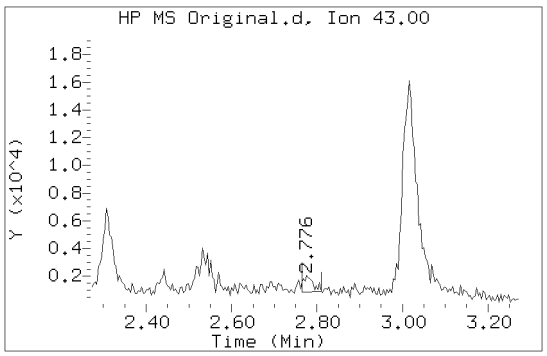
BEFORE
MASS
41
AREA
3569
HEIGHT
1692
20-Jul-2023
15:04
linh
pham



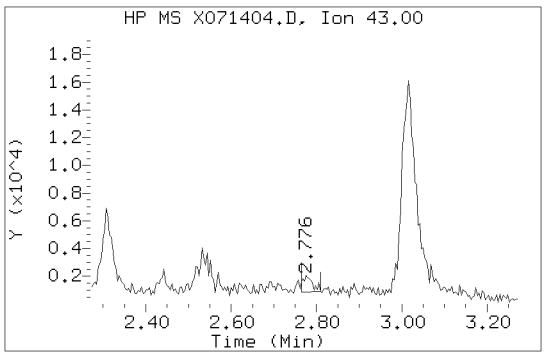
AFTER
MASS
41
AREA
3569
HEIGHT
1692
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
43
AREA
1865
HEIGHT
1174
20-Jul-2023
15:04
linh
pham



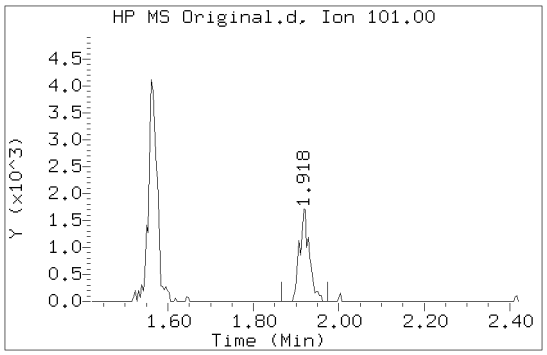
AFTER
MASS
43
AREA
1865
HEIGHT
1174
20-Jul-2023
15:04
linh
pham



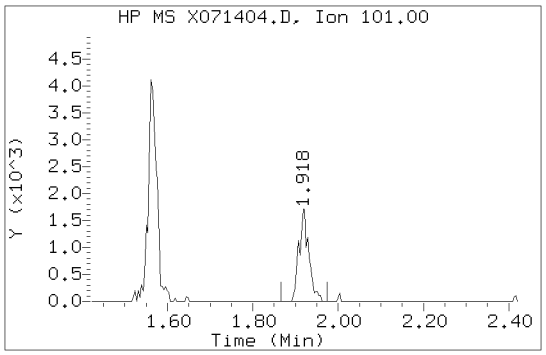
Freon TF (76-13-1)

Reason Code:

BEFORE
MASS
101
AREA
2818
HEIGHT
1714
20-Jul-2023
15:04
linh
pham



AFTER
MASS
101
AREA
2818
HEIGHT
1714
20-Jul-2023
15:04
linh
pham



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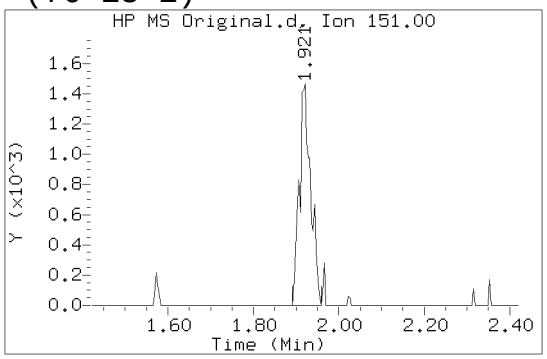
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Freon TF (76-13-1)

BEFORE

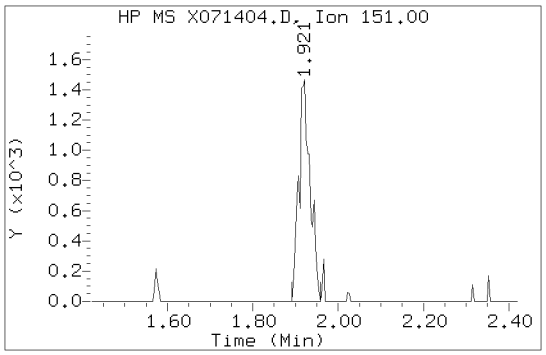
MASS
151
AREA
2770
HEIGHT
1467
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

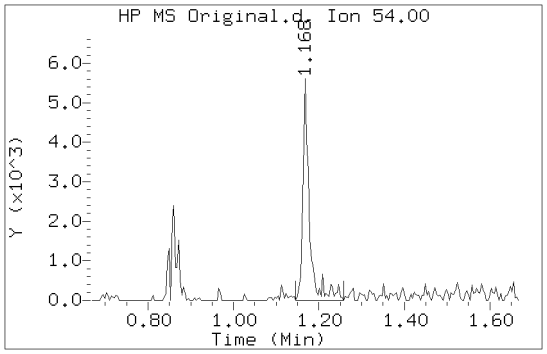
MASS
151
AREA
2770
HEIGHT
1467
20-Jul-2023
15:04
linh
pham



1,3-Butadiene (106-99-0)

BEFORE

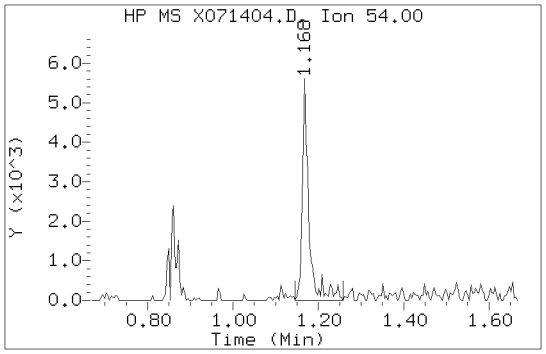
MASS
54
AREA
6040
HEIGHT
5609
20-Jul-2023
15:04
linh
pham



Reason Code:

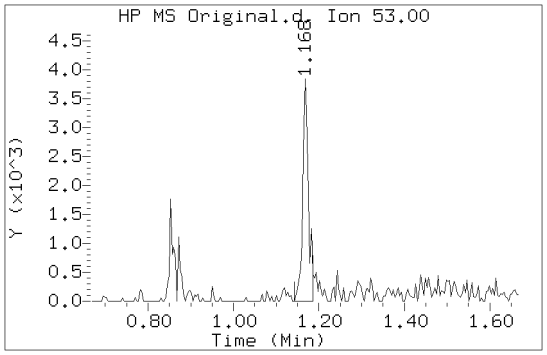
AFTER

MASS
54
AREA
6040
HEIGHT
5609
20-Jul-2023
15:04
linh
pham



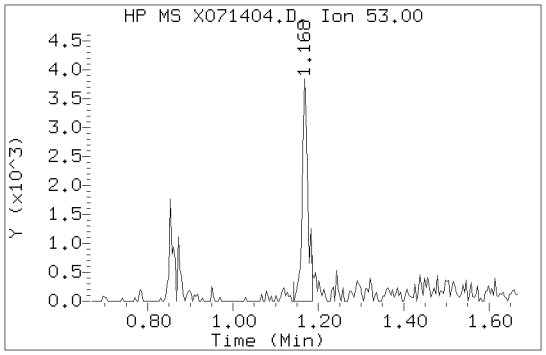
BEFORE

MASS
53
AREA
3632
HEIGHT
3843
20-Jul-2023
15:04
linh
pham



AFTER

MASS
53
AREA
3632
HEIGHT
3843
20-Jul-2023
15:04
linh
pham

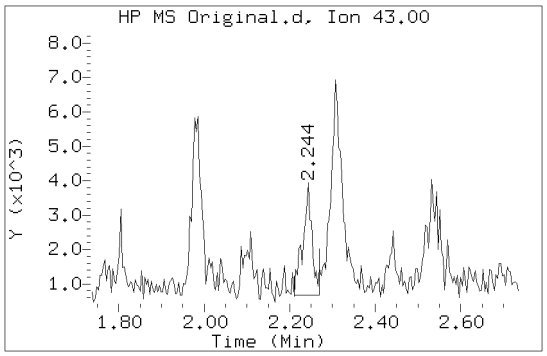


Methyl acetate (79-20-9)

Reason Code:

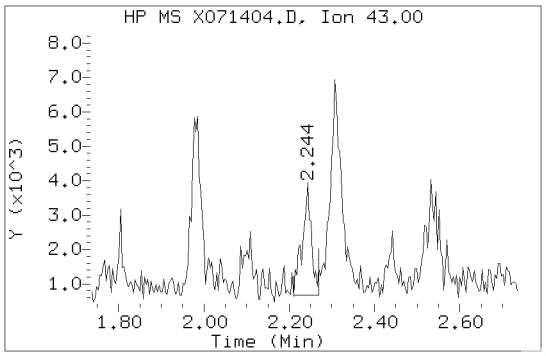
BEFORE

MASS
43
AREA
4992
HEIGHT
3260
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
4992
HEIGHT
3260
20-Jul-2023
15:04
linh
pham

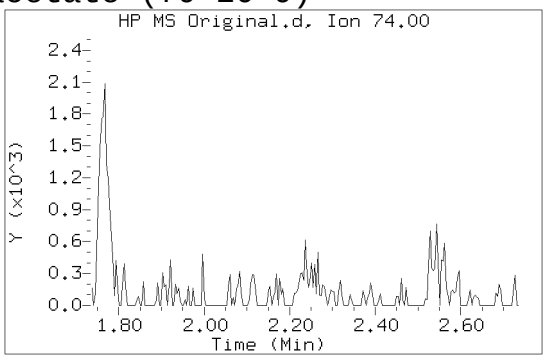


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

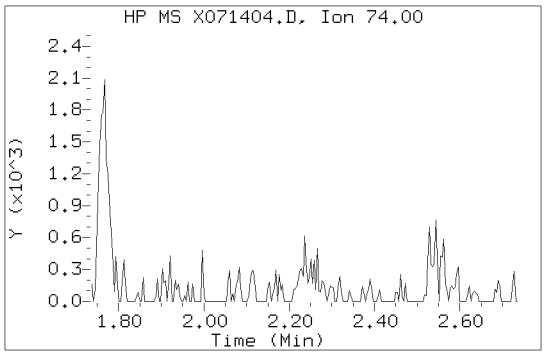
Methyl acetate (79-20-9)

Reason Code:

BEFORE
MASS
74
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



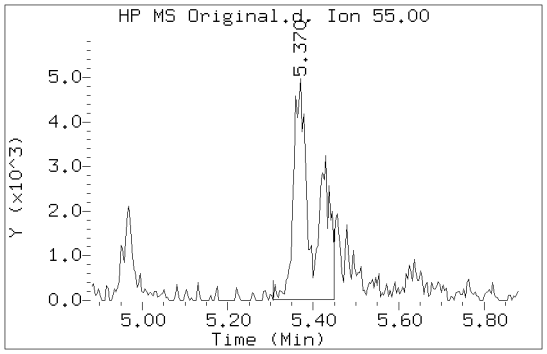
AFTER
MASS
74
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



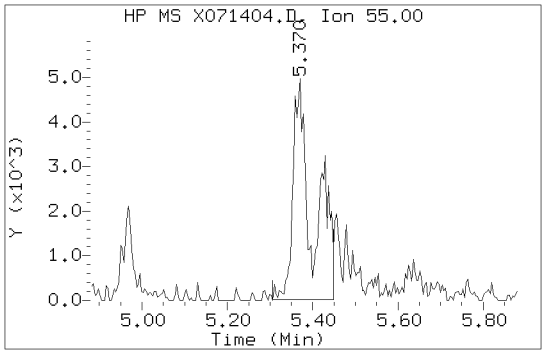
Methylcyclohexane (108-87-2)

Reason Code:

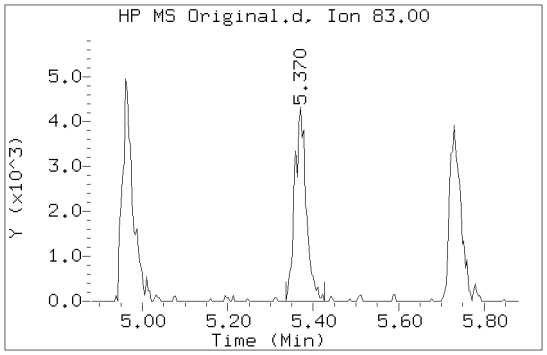
BEFORE
MASS
55
AREA
15783
HEIGHT
4958
20-Jul-2023
15:04
linh
pham



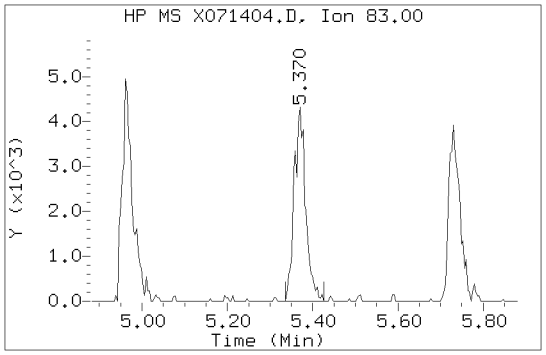
AFTER
MASS
55
AREA
15783
HEIGHT
4958
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
83
AREA
8157
HEIGHT
4322
20-Jul-2023
15:04
linh
pham



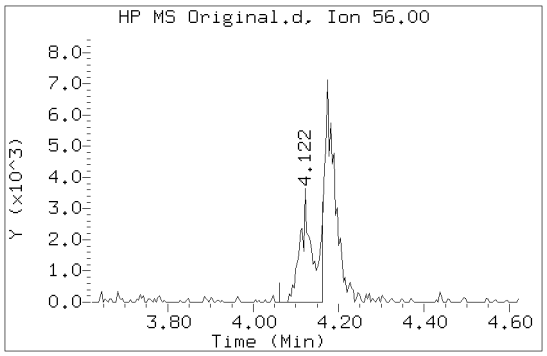
AFTER
MASS
83
AREA
8157
HEIGHT
4322
20-Jul-2023
15:04
linh
pham



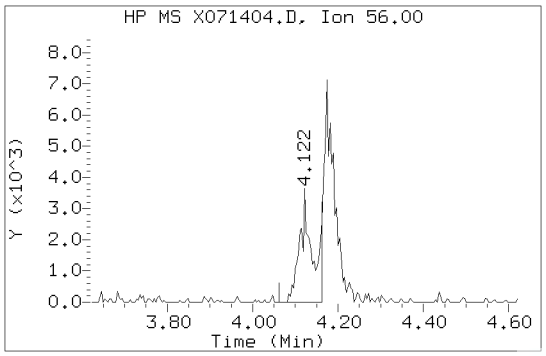
Cyclohexane (110-82-7)

Reason Code:

BEFORE
MASS
56
AREA
7673
HEIGHT
3640
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
AREA
7673
HEIGHT
3640
20-Jul-2023
15:04
linh
pham

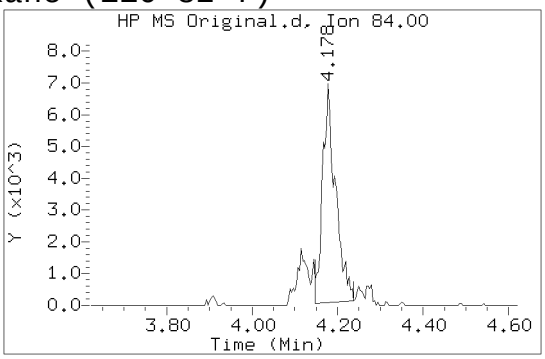


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

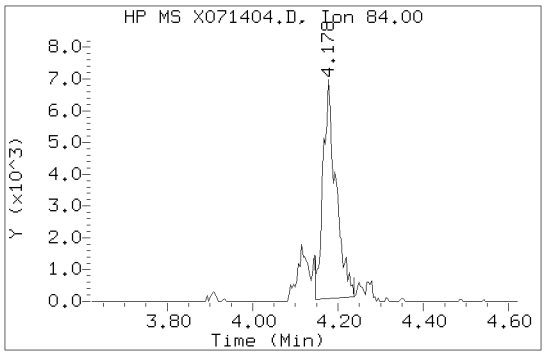
Cyclohexane (110-82-7)

Reason Code:

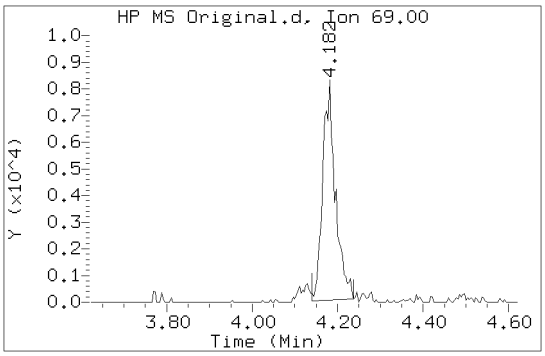
BEFORE
MASS
84
AREA
14444
HEIGHT
6891
20-Jul-2023
15:04
linh
pham



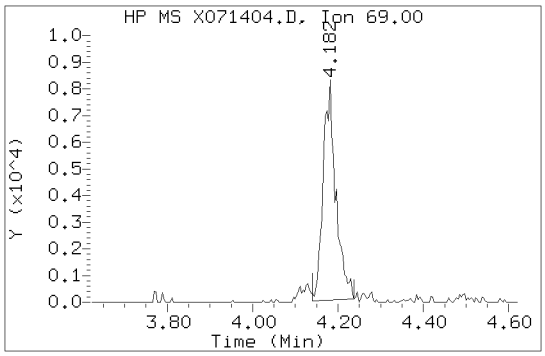
AFTER
MASS
84
AREA
14444
HEIGHT
6891
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
69
AREA
16995
HEIGHT
8270
20-Jul-2023
15:04
linh
pham



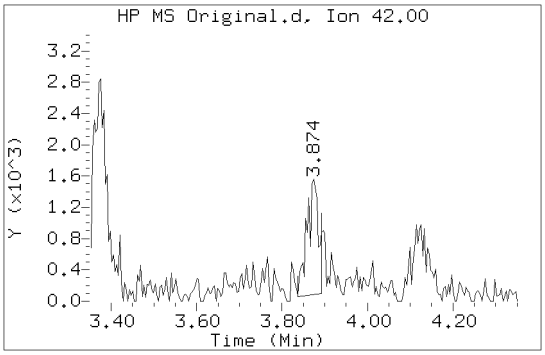
AFTER
MASS
69
AREA
16995
HEIGHT
8270
20-Jul-2023
15:04
linh
pham



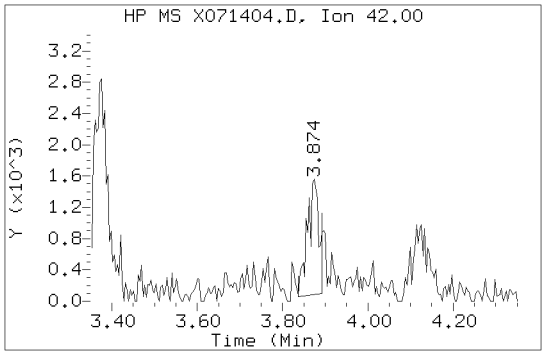
Tetrahydrofuran (109-99-9)

Reason Code:

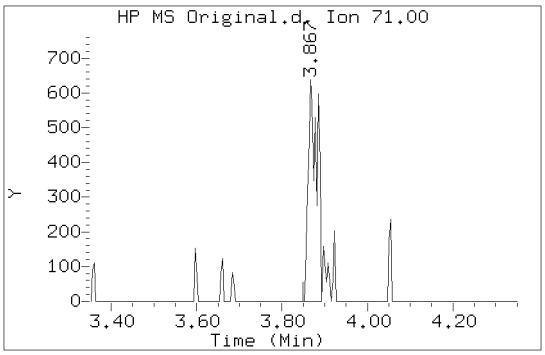
BEFORE
MASS
42
AREA
2815
HEIGHT
1476
20-Jul-2023
15:04
linh
pham



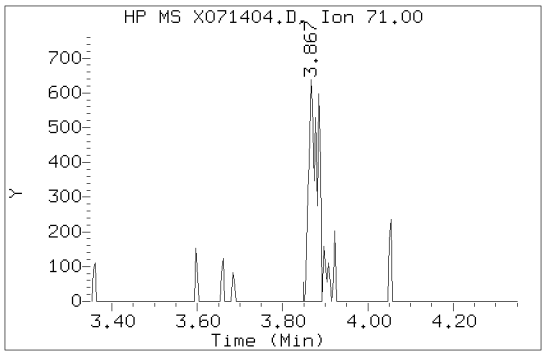
AFTER
MASS
42
AREA
2815
HEIGHT
1476
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
71
AREA
933
HEIGHT
638
20-Jul-2023
15:04
linh
pham



AFTER
MASS
71
AREA
933
HEIGHT
638
20-Jul-2023
15:04
linh
pham



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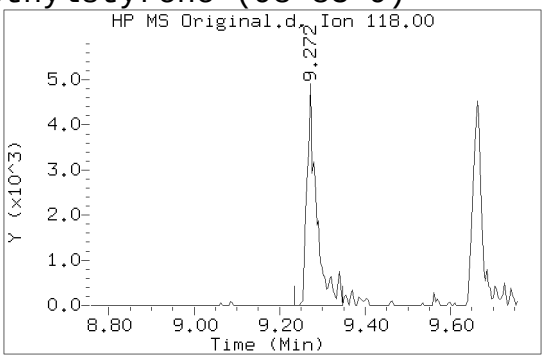
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

alpha-Methylstyrene (98-83-9)

Reason Code:

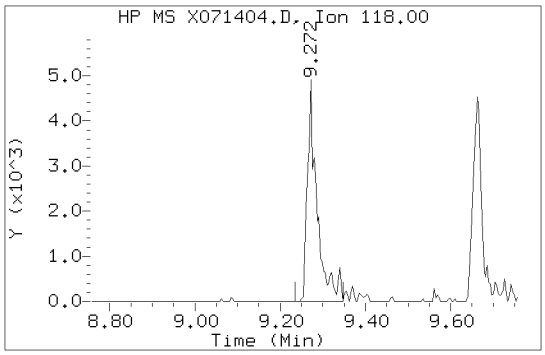
BEFORE

MASS
118
AREA
7755
HEIGHT
4913
20-Jul-2023
15:04
linh
pham



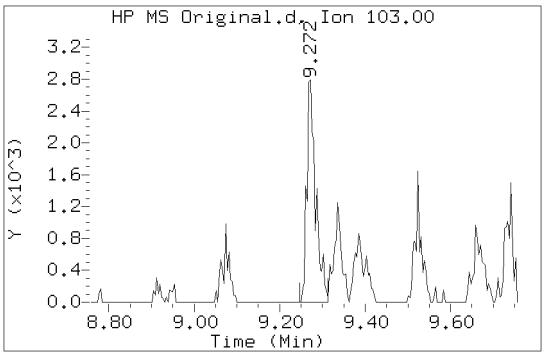
AFTER

MASS
118
AREA
7755
HEIGHT
4913
20-Jul-2023
15:04
linh
pham



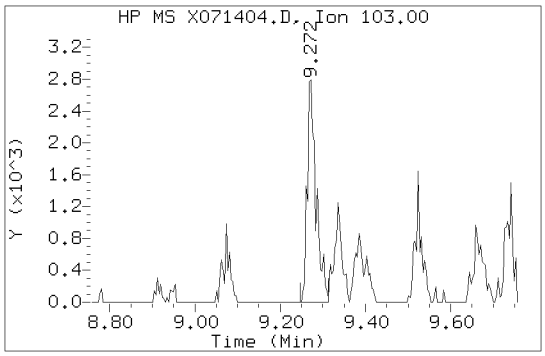
BEFORE

MASS
103
AREA
4028
HEIGHT
2790
20-Jul-2023
15:04
linh
pham



AFTER

MASS
103
AREA
4028
HEIGHT
2790
20-Jul-2023
15:04
linh
pham

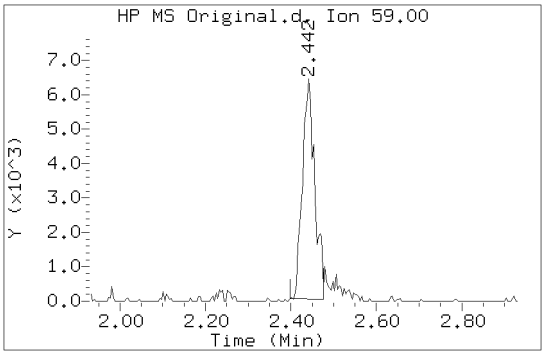


Tert-butyl alcohol (75-65-0)

Reason Code:

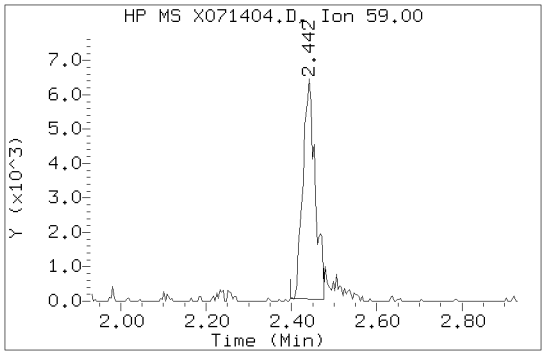
BEFORE

MASS
59
AREA
12965
HEIGHT
6400
20-Jul-2023
15:04
linh
pham



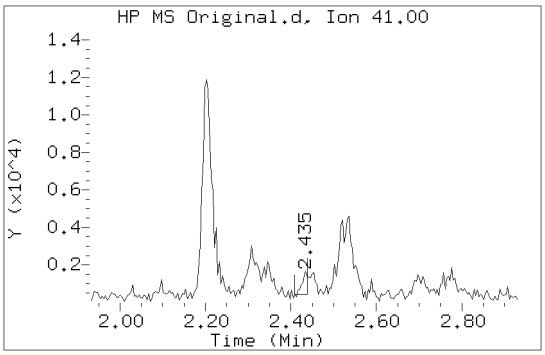
AFTER

MASS
59
AREA
12965
HEIGHT
6400
20-Jul-2023
15:04
linh
pham



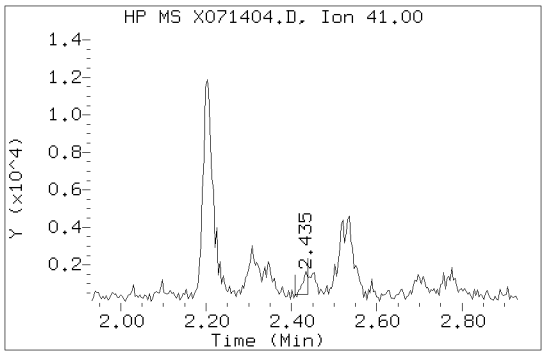
BEFORE

MASS
41
AREA
1041
HEIGHT
1246
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
1041
HEIGHT
1246
20-Jul-2023
15:04
linh
pham



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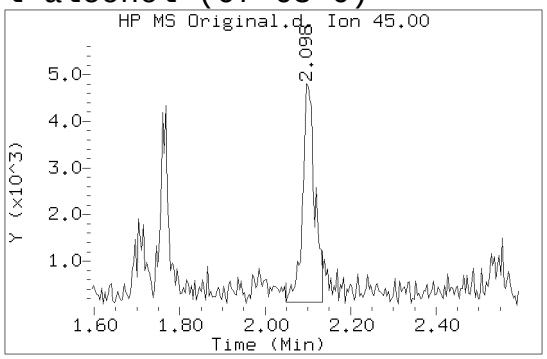
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Isopropyl alcohol (67-63-0)

Reason Code:

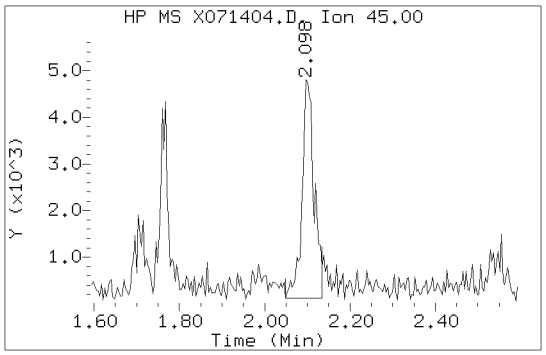
BEFORE

MASS
45
AREA
9372
HEIGHT
4685
20-Jul-2023
15:04
linh
pham



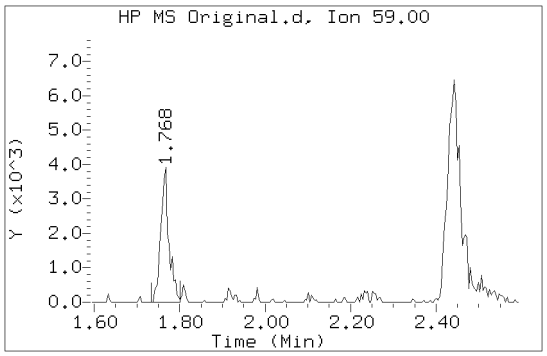
AFTER

MASS
45
AREA
9372
HEIGHT
4685
20-Jul-2023
15:04
linh
pham



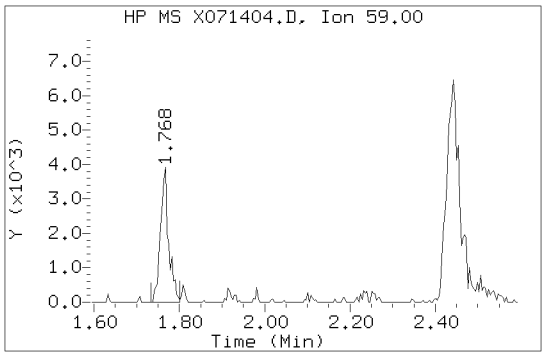
BEFORE

MASS
59
AREA
5211
HEIGHT
3930
20-Jul-2023
15:04
linh
pham



AFTER

MASS
59
AREA
5211
HEIGHT
3930
20-Jul-2023
15:04
linh
pham

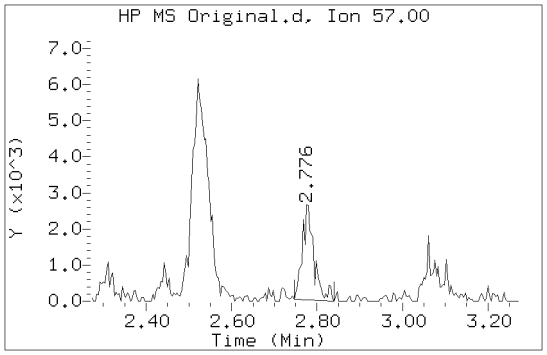


Allyl alcohol (107-18-6)

Reason Code:

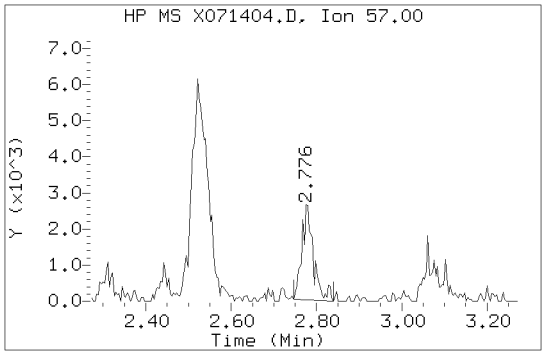
BEFORE

MASS
57
AREA
5000
HEIGHT
2629
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
5000
HEIGHT
2629
20-Jul-2023
15:04
linh
pham

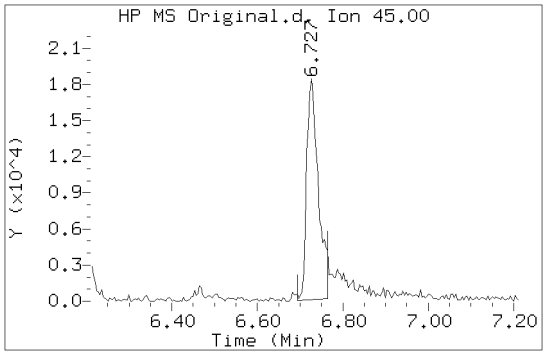


4-Methyl-2-pentanol (108-11-2)

Reason Code:

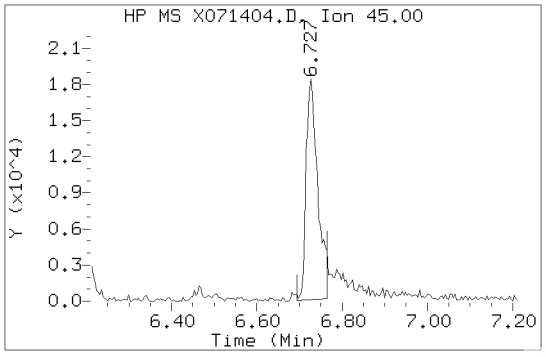
BEFORE

MASS
45
AREA
35175
HEIGHT
18341
20-Jul-2023
15:04
linh
pham



AFTER

MASS
45
AREA
35175
HEIGHT
18341
20-Jul-2023
15:04
linh
pham



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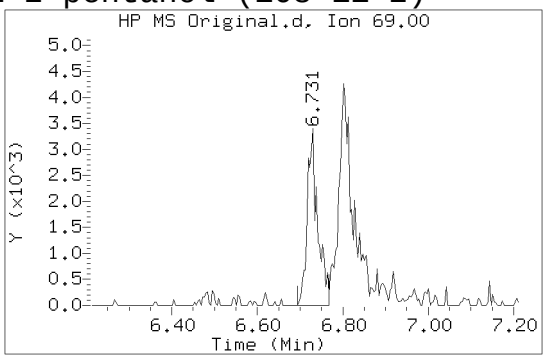
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

4-Methyl-2-pentanol (108-11-2)

Reason Code:

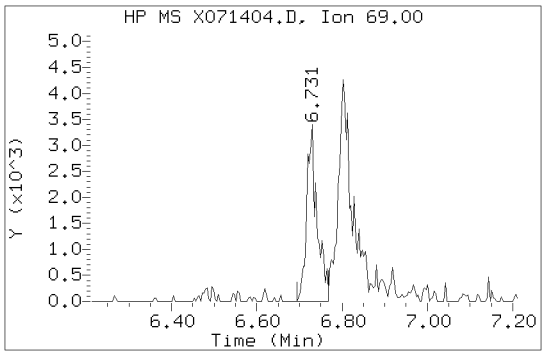
BEFORE

MASS
69
AREA
5748
HEIGHT
3399
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
5748
HEIGHT
3399
20-Jul-2023
15:04
linh
pham

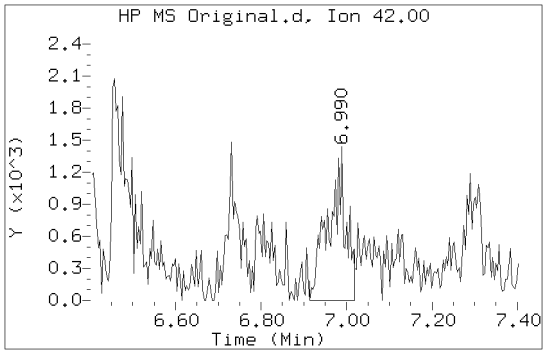


Amyl alcohol (71-41-0)

Reason Code:

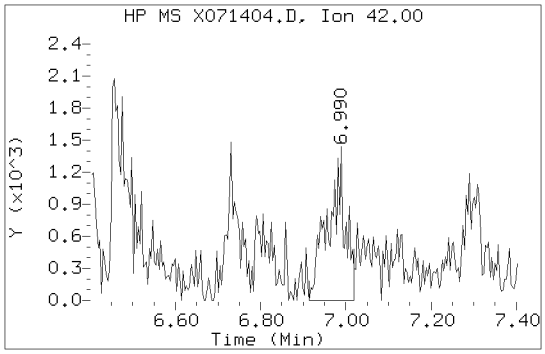
BEFORE

MASS
42
AREA
3944
HEIGHT
1442
20-Jul-2023
15:04
linh
pham



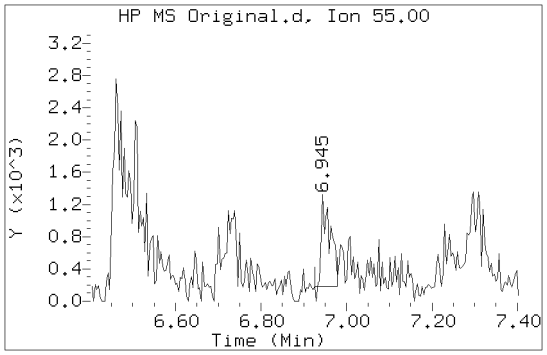
AFTER

MASS
42
AREA
3944
HEIGHT
1442
20-Jul-2023
15:04
linh
pham



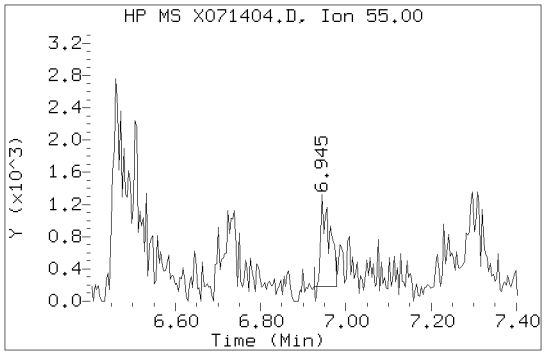
BEFORE

MASS
55
AREA
1617
HEIGHT
1137
20-Jul-2023
15:04
linh
pham



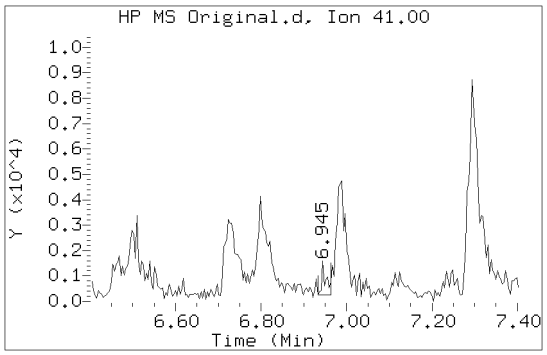
AFTER

MASS
55
AREA
1617
HEIGHT
1137
20-Jul-2023
15:04
linh
pham



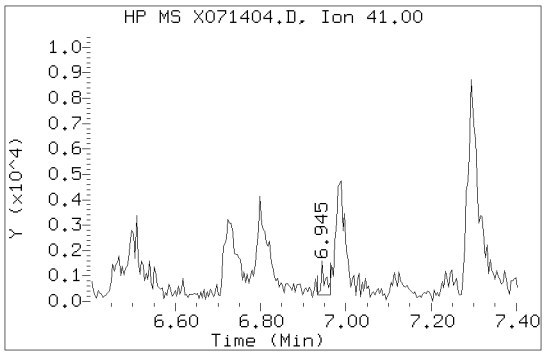
BEFORE

MASS
41
AREA
915
HEIGHT
1326
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
915
HEIGHT
1326
20-Jul-2023
15:04
linh
pham



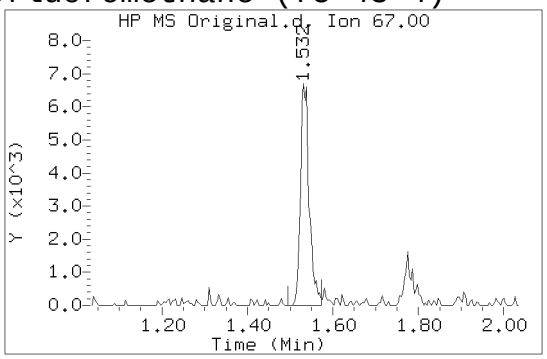
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Dichlorofluoromethane (75-43-4)

Reason Code:

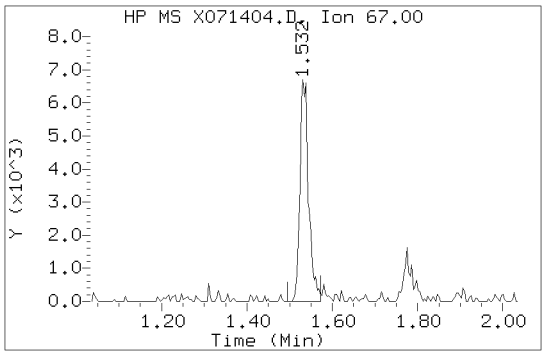
BEFORE

MASS
67
AREA
9743
HEIGHT
6701
20-Jul-2023
15:04
linh
pham



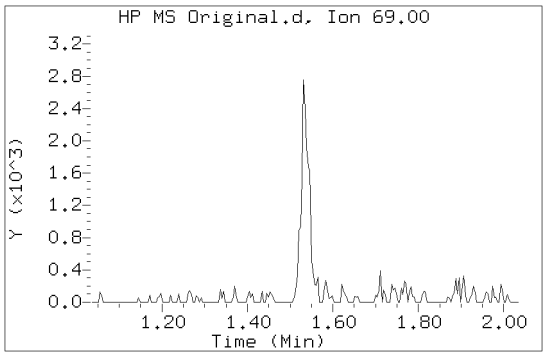
AFTER

MASS
67
AREA
9743
HEIGHT
6701
20-Jul-2023
15:04
linh
pham



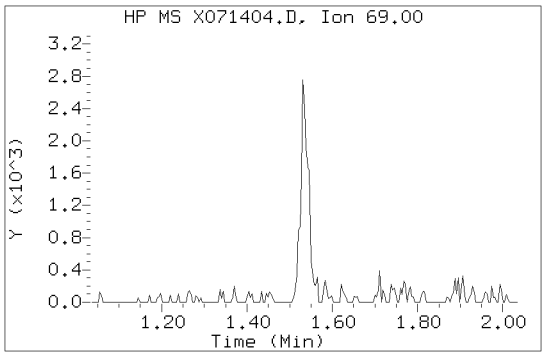
BEFORE

MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



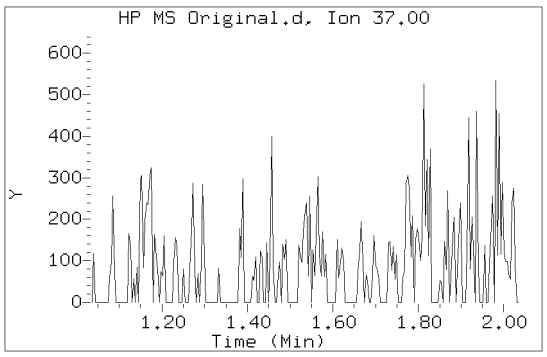
AFTER

MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



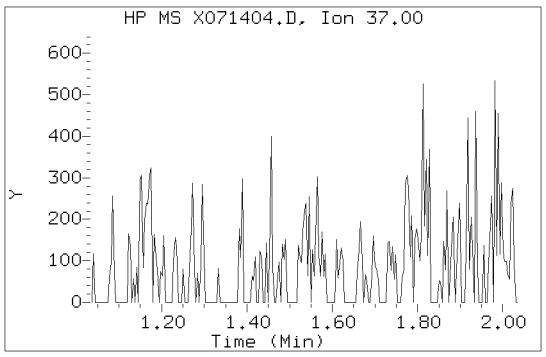
BEFORE

MASS
37
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
37
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

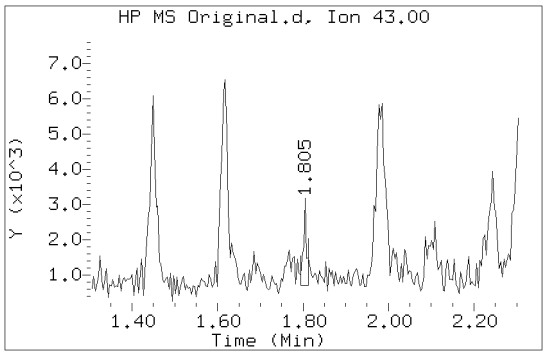


Propylene oxide ()

Reason Code:

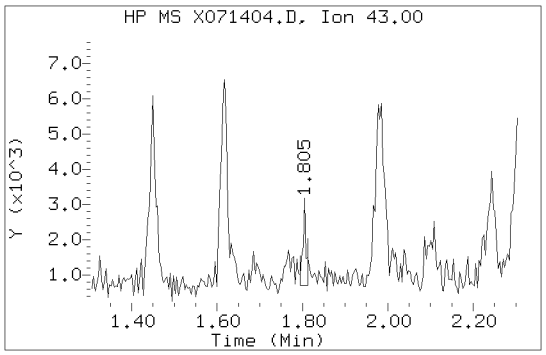
BEFORE

MASS
43
AREA
1409
HEIGHT
2479
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
1409
HEIGHT
2479
20-Jul-2023
15:04
linh
pham



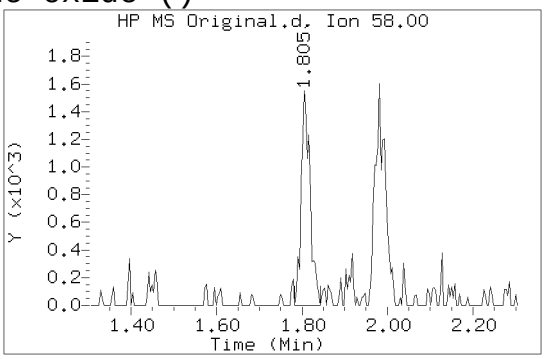
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Propylene oxide ()

Reason Code:

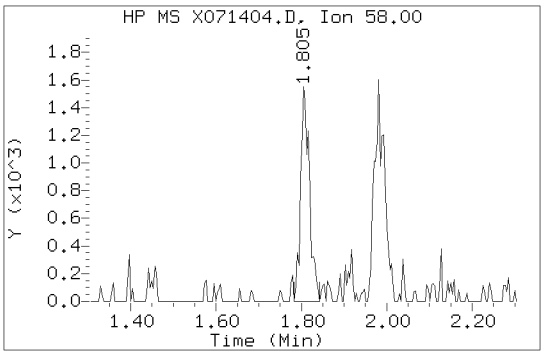
BEFORE

MASS
58
AREA
2276
HEIGHT
1552
20-Jul-2023
15:04
linh
pham



AFTER

MASS
58
AREA
2276
HEIGHT
1552
20-Jul-2023
15:04
linh
pham

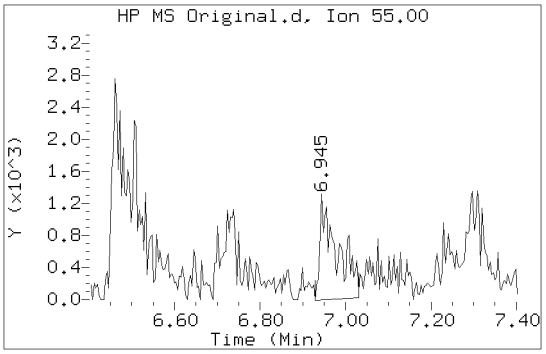


3-Methyl-1-butanol (123-51-3)

Reason Code:

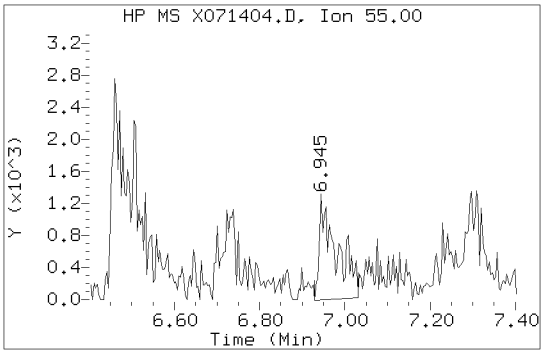
BEFORE

MASS
55
AREA
3623
HEIGHT
1323
20-Jul-2023
15:04
linh
pham



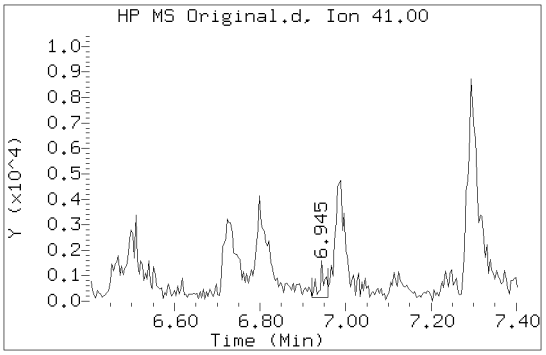
AFTER

MASS
55
AREA
3623
HEIGHT
1323
20-Jul-2023
15:04
linh
pham



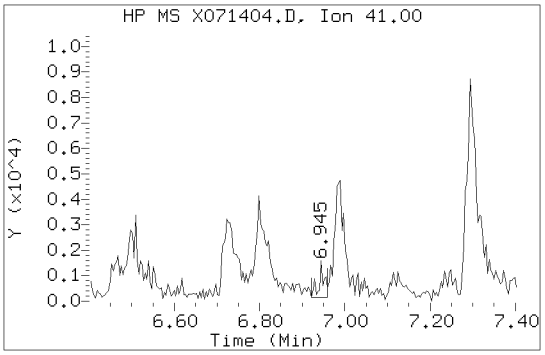
BEFORE

MASS
41
AREA
1239
HEIGHT
1440
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
1239
HEIGHT
1440
20-Jul-2023
15:04
linh
pham

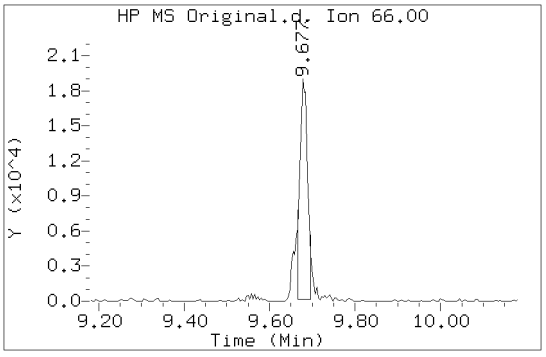


Dicyclopentadiene (77-73-6)

Reason Code:

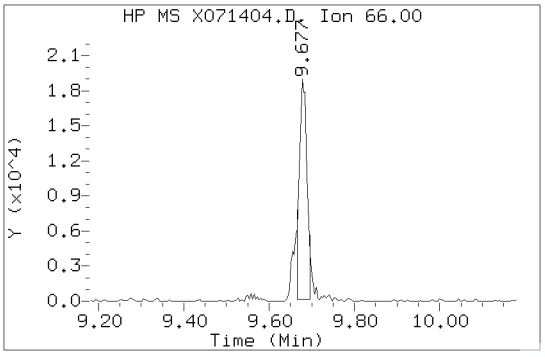
BEFORE

MASS
66
AREA
24319
HEIGHT
18861
20-Jul-2023
15:04
linh
pham



AFTER

MASS
66
AREA
24319
HEIGHT
18861
20-Jul-2023
15:04
linh
pham



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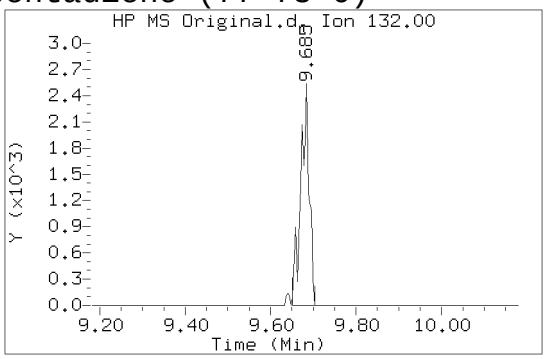
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Dicyclopentadiene (77-73-6)

Reason Code:

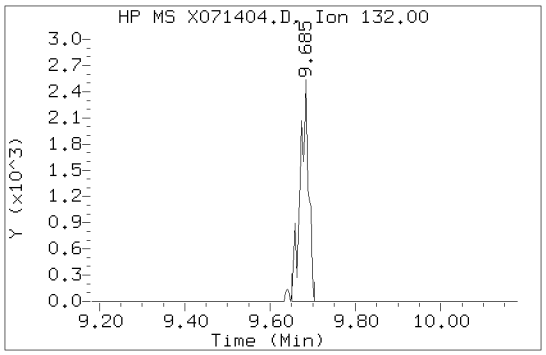
BEFORE

MASS
132
AREA
3579
HEIGHT
2538
20-Jul-2023
15:04
linh
pham



AFTER

MASS
132
AREA
3579
HEIGHT
2538
20-Jul-2023
15:04
linh
pham

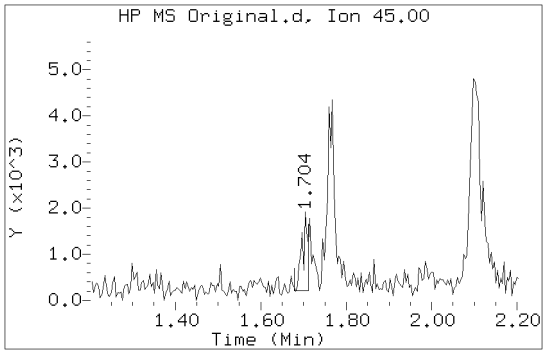


Ethanol (64-17-5)

Reason Code:

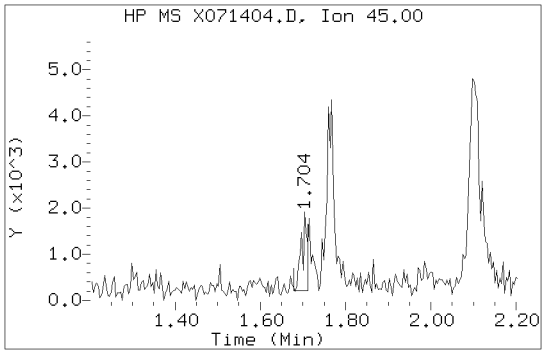
BEFORE

MASS
45
AREA
1613
HEIGHT
1703
20-Jul-2023
15:04
linh
pham



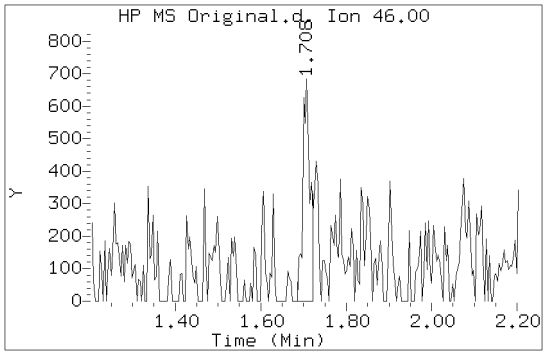
AFTER

MASS
45
AREA
1613
HEIGHT
1703
20-Jul-2023
15:04
linh
pham



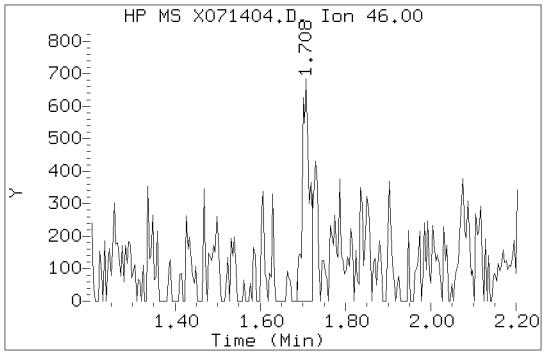
BEFORE

MASS
46
AREA
829
HEIGHT
684
20-Jul-2023
15:04
linh
pham



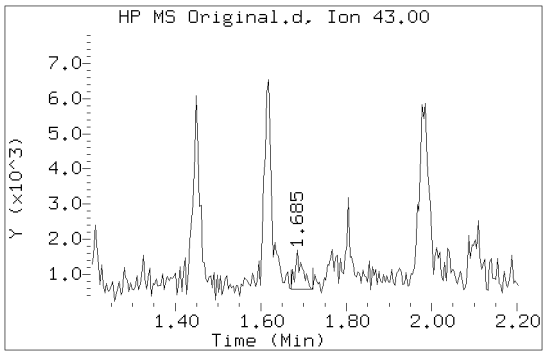
AFTER

MASS
46
AREA
829
HEIGHT
684
20-Jul-2023
15:04
linh
pham



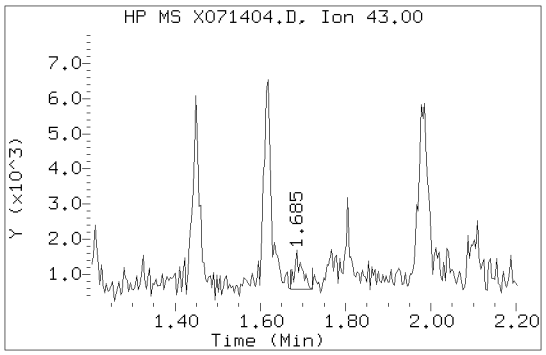
BEFORE

MASS
43
AREA
1337
HEIGHT
1114
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
1337
HEIGHT
1114
20-Jul-2023
15:04
linh
pham



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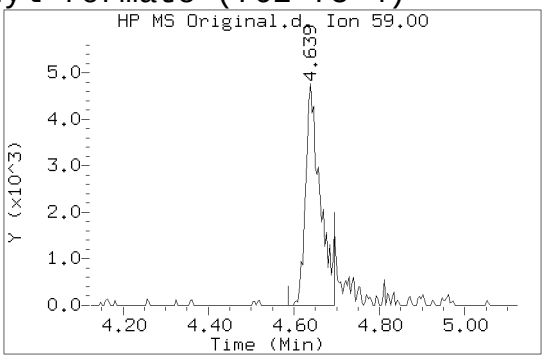
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

tert-Butyl formate (762-75-4)

Reason Code:

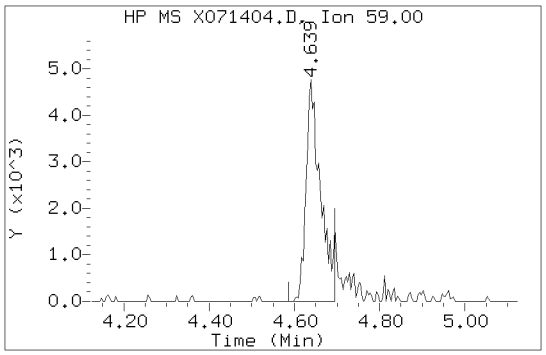
BEFORE

MASS
59
AREA
11427
HEIGHT
4768
20-Jul-2023
15:04
linh
pham



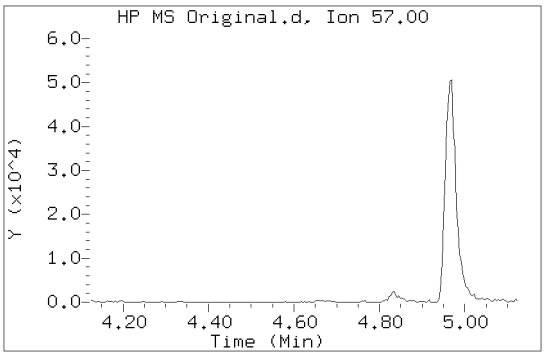
AFTER

MASS
59
AREA
11427
HEIGHT
4768
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
57
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
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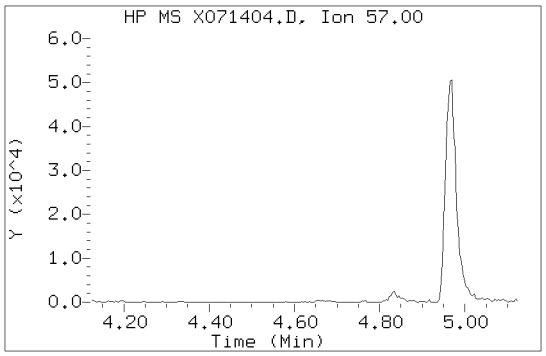
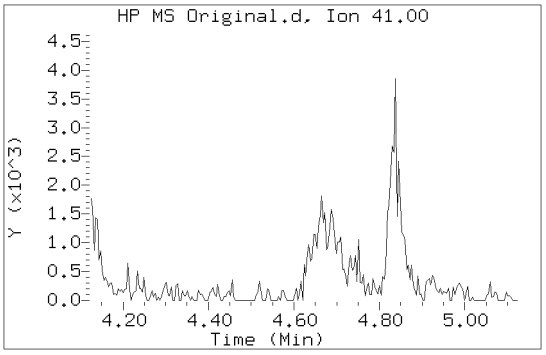
HEIGHT
0
20-Jul-2023
15:04
linh
pham



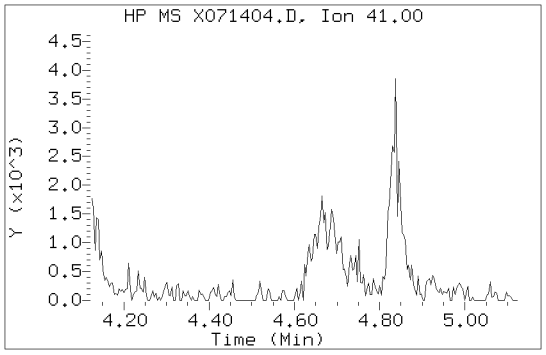
BEFORE

MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

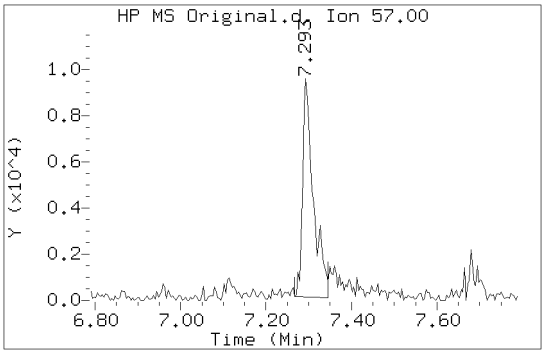


3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

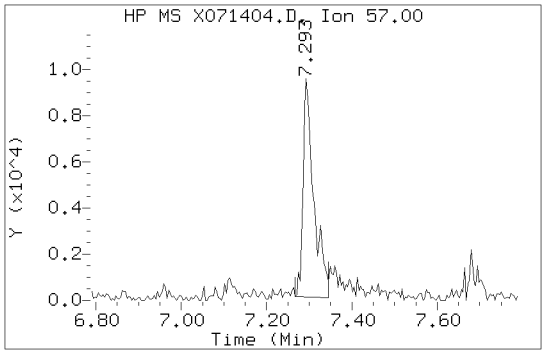
BEFORE

MASS
57
AREA
16922
HEIGHT
9467
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
16922
HEIGHT
9467
20-Jul-2023
15:04
linh
pham



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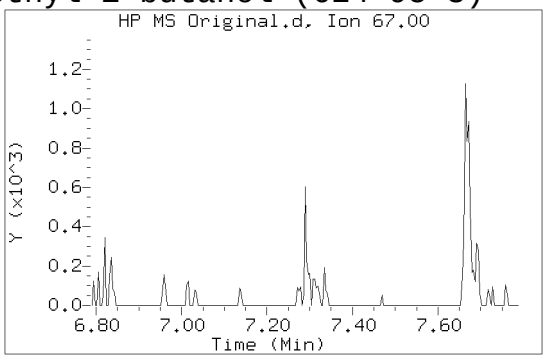
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

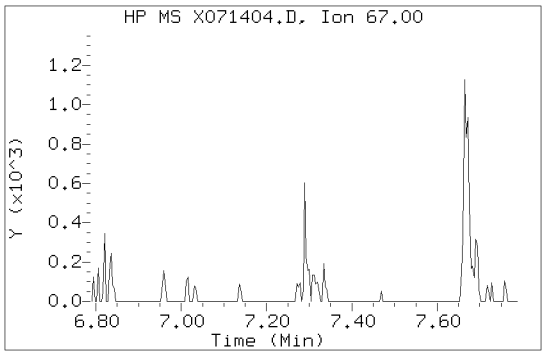
3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

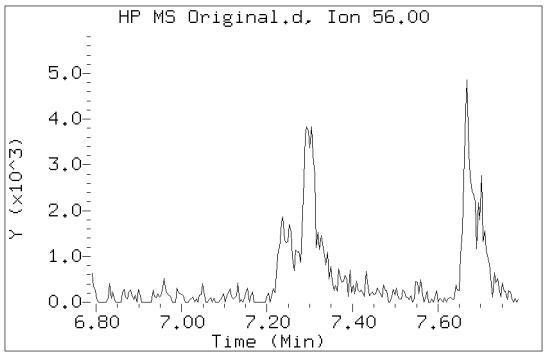
BEFORE
MASS
67
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
67
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
AREA
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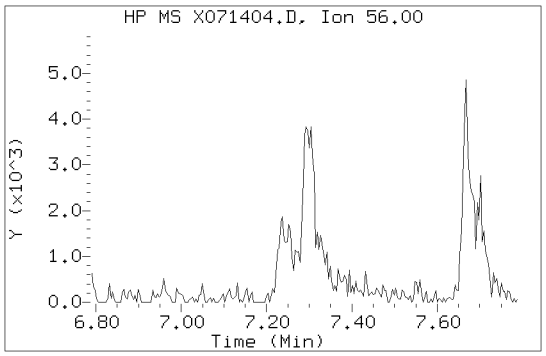
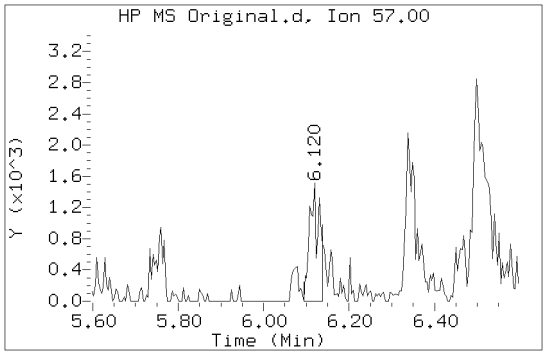
HEIGHT
0
20-Jul-2023
15:04
linh
pham



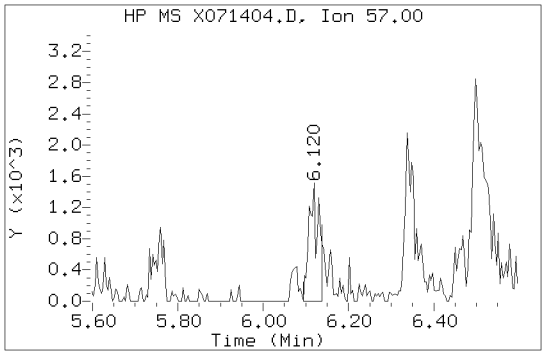
Epichlorohydrin (106-89-8)

Reason Code:

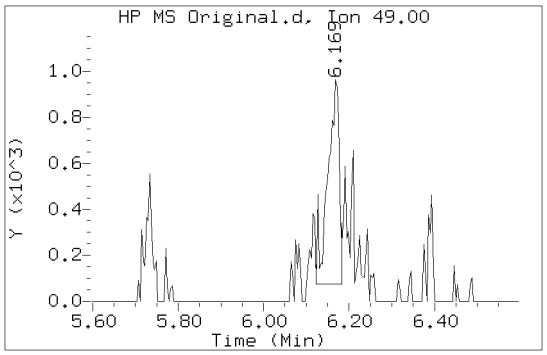
BEFORE
MASS
57
AREA
2383
HEIGHT
1514
20-Jul-2023
15:04
linh
pham



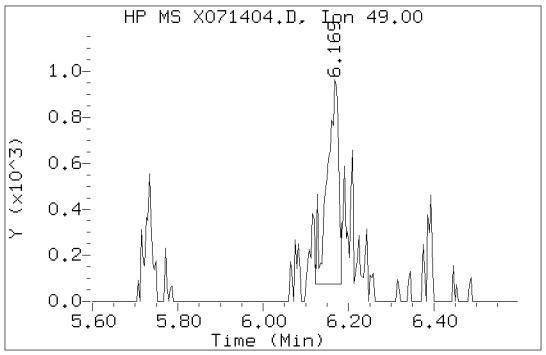
AFTER
MASS
57
AREA
2383
HEIGHT
1514
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
49
AREA
1633
HEIGHT
889
20-Jul-2023
15:04
linh
pham



AFTER
MASS
49
AREA
1633
HEIGHT
889
20-Jul-2023
15:04
linh
pham



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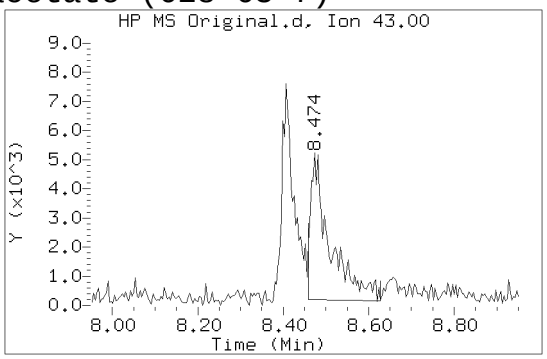
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

n-Amyl acetate (628-63-7)

Reason Code:

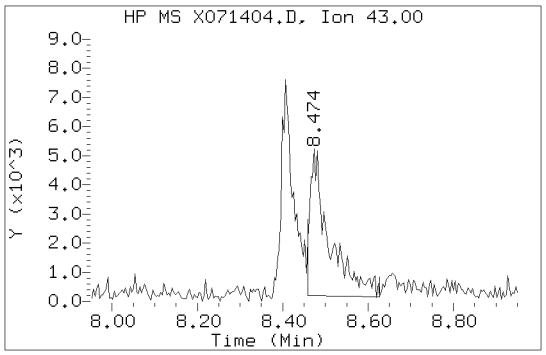
BEFORE

MASS
43
AREA
15950
HEIGHT
5045
20-Jul-2023
15:04
linh
pham



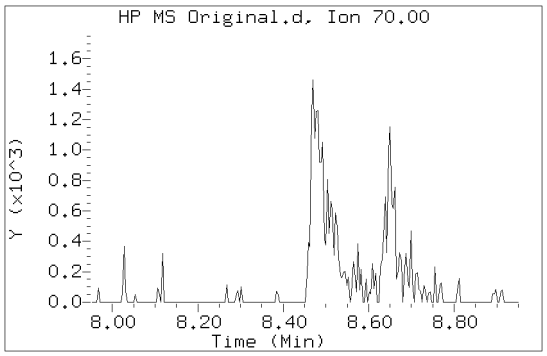
AFTER

MASS
43
AREA
15950
HEIGHT
5045
20-Jul-2023
15:04
linh
pham



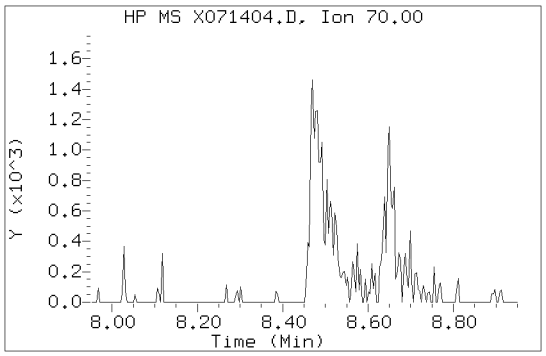
BEFORE

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



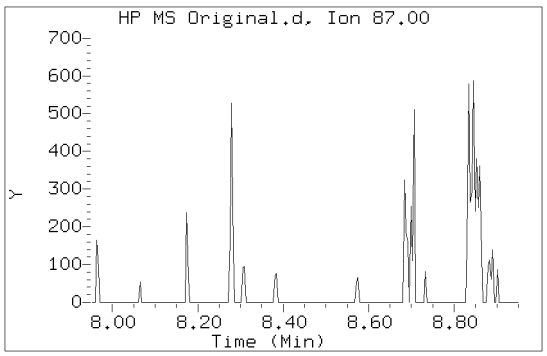
AFTER

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



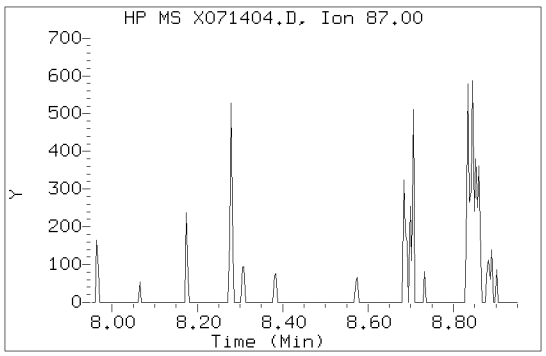
BEFORE

MASS
87
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

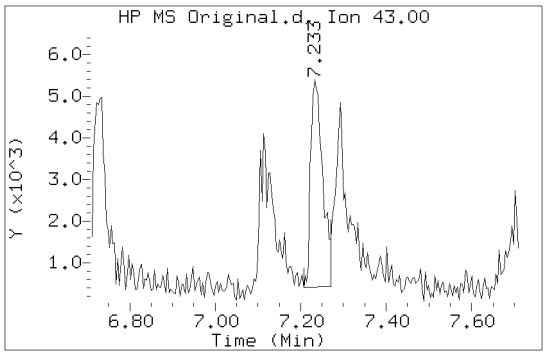


n-Butyl acetate (123-86-4)

Reason Code:

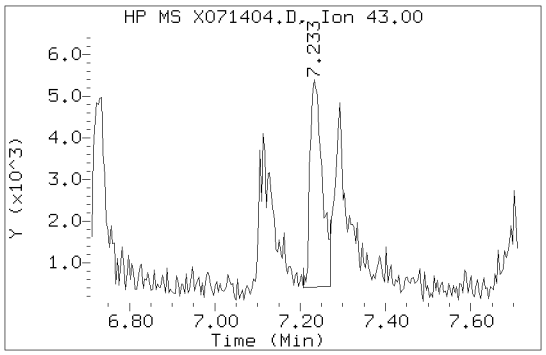
BEFORE

MASS
43
AREA
9795
HEIGHT
4977
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
9795
HEIGHT
4977
20-Jul-2023
15:04
linh
pham



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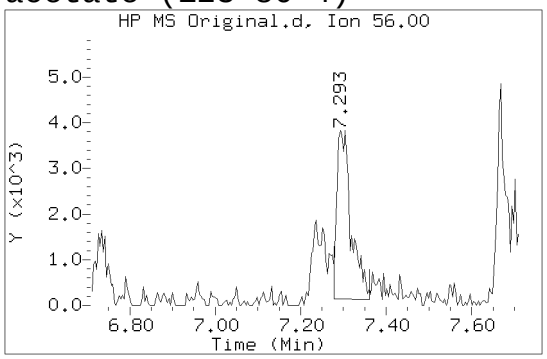
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

n-Butyl acetate (123-86-4)

Reason Code:

BEFORE

MASS
56
AREA
8623
HEIGHT
3689
20-Jul-2023
15:04
linh
pham



AFTER

MASS
56
AREA
8623
HEIGHT
3689
20-Jul-2023
15:04
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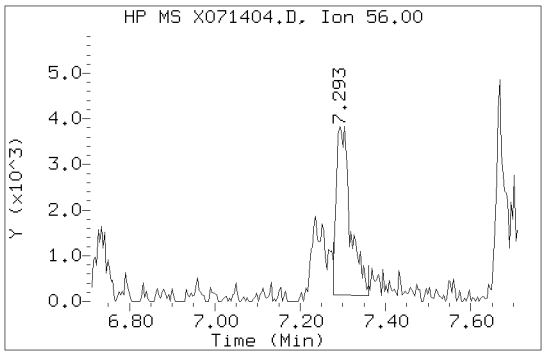

BEFORE

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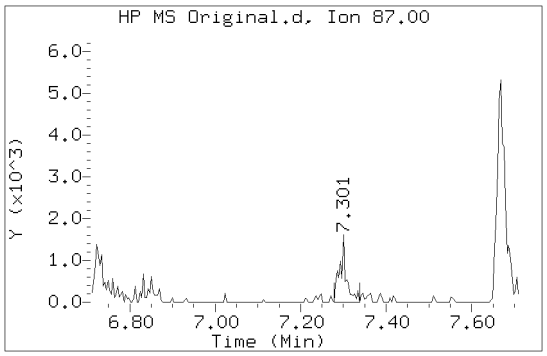

AFTER

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15:04
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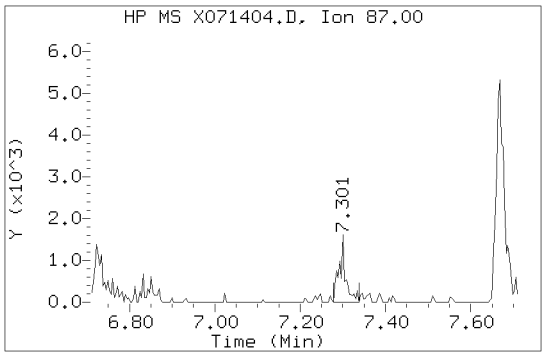

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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44
AREA
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HEIGHT
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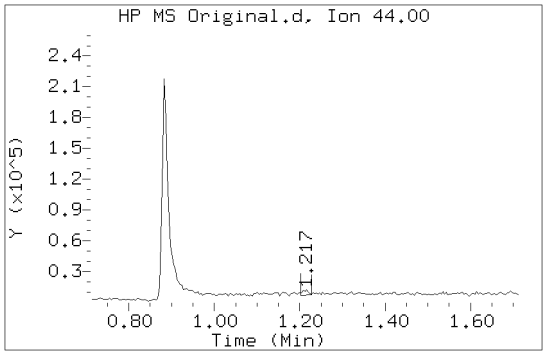
20-Jul-2023
15:04
linh
pham



AFTER

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20-Jul-2023
15:04
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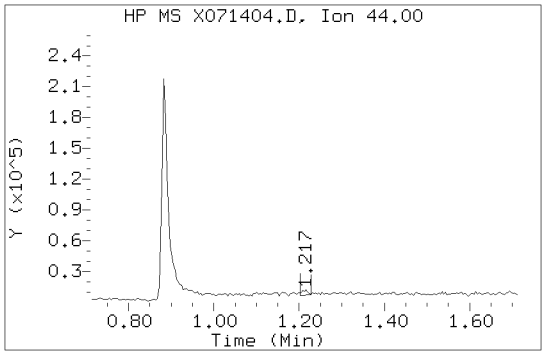

BEFORE

MASS
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AREA
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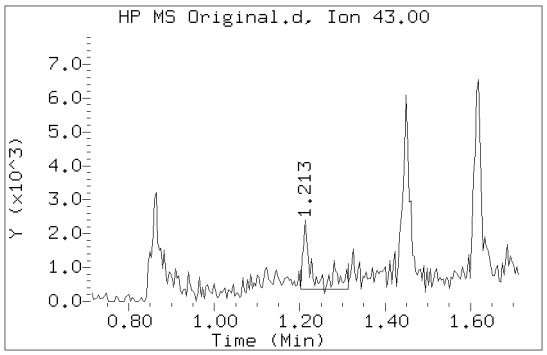
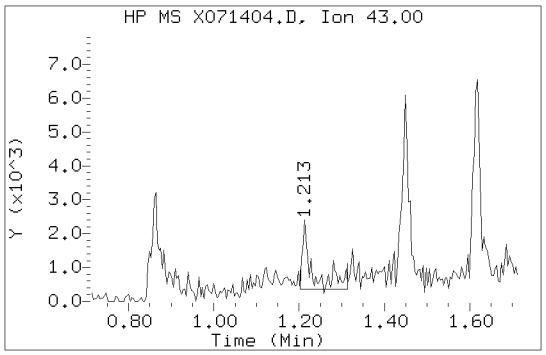
HEIGHT
2038
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
3201
HEIGHT
2038
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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1152
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15:04
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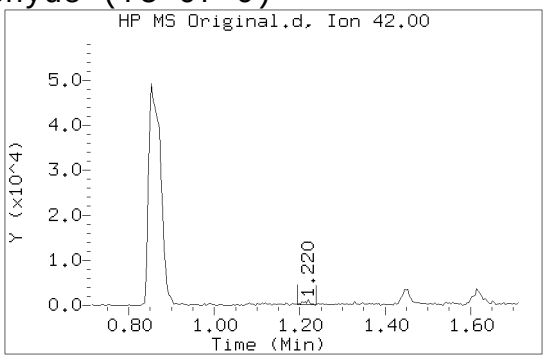
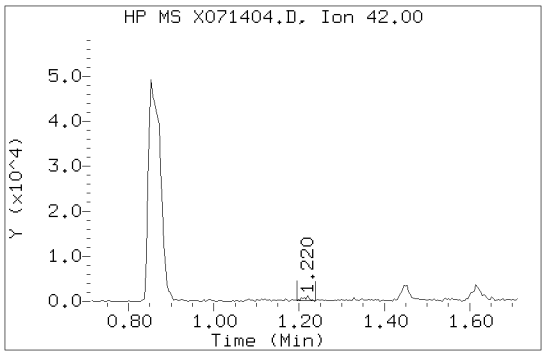


AFTER

MASS
42
AREA
1038
HEIGHT
1152
20-Jul-2023
15:04
linh
pham

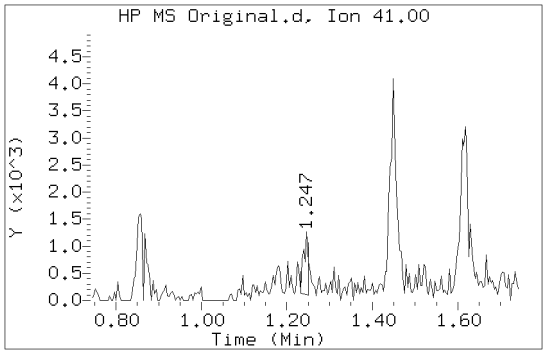


Isobutylene (115-11-7)

Reason Code:

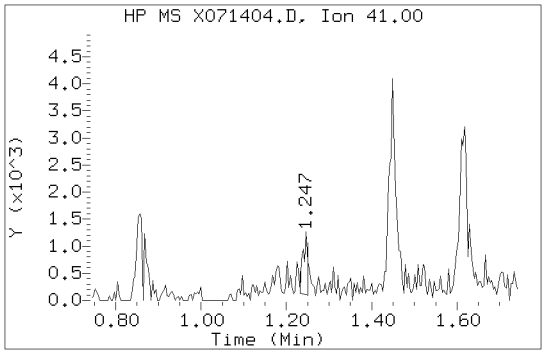
BEFORE

MASS
41
AREA
875
HEIGHT
1172
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
875
HEIGHT
1172
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
56
AREA
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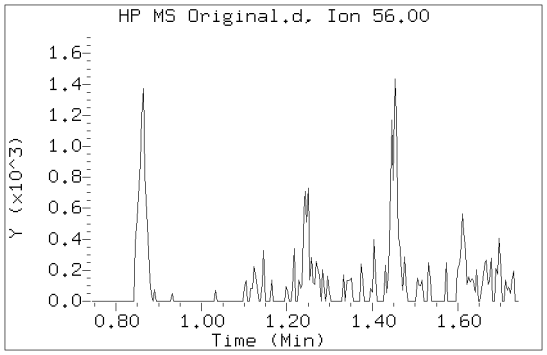
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
56
AREA
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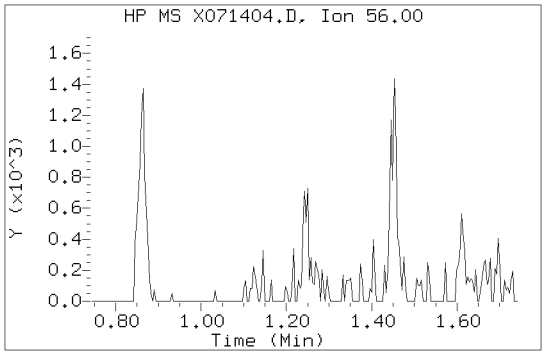
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
84
AREA
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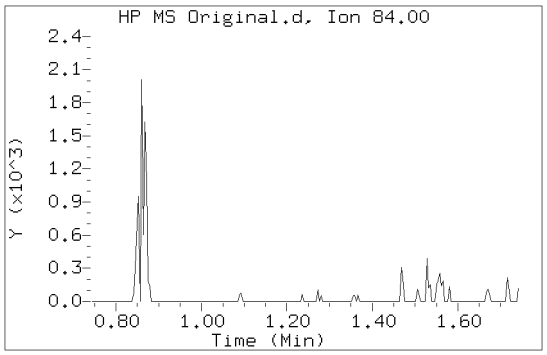
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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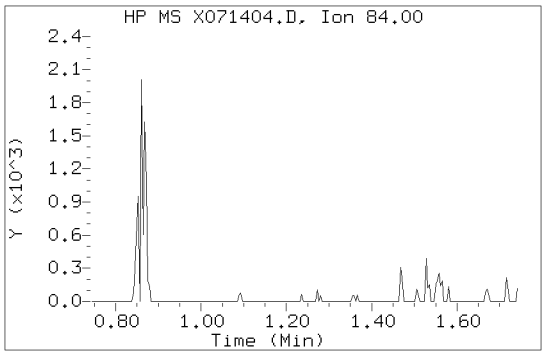
20-Jul-2023
15:04
linh
pham



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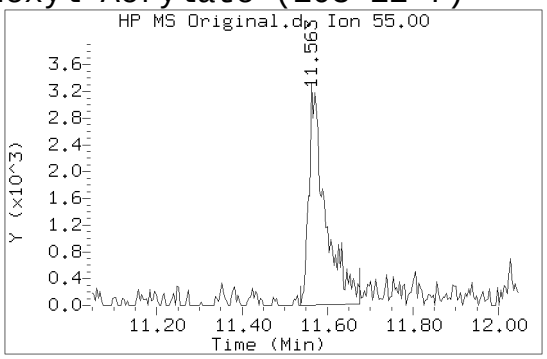
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

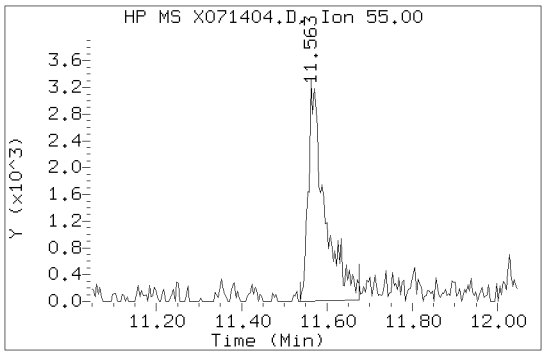
BEFORE

MASS
55
AREA
8780
HEIGHT
3308
20-Jul-2023
15:04
linh
pham



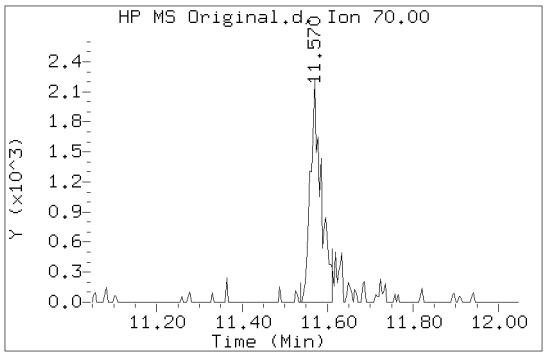
AFTER

MASS
55
AREA
8780
HEIGHT
3308
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
70
AREA
3926
HEIGHT
2219
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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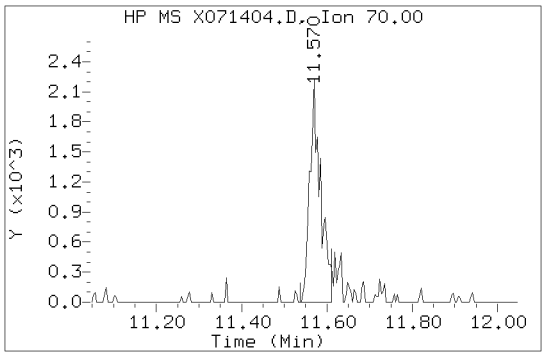
HEIGHT
2219
20-Jul-2023
15:04
linh
pham

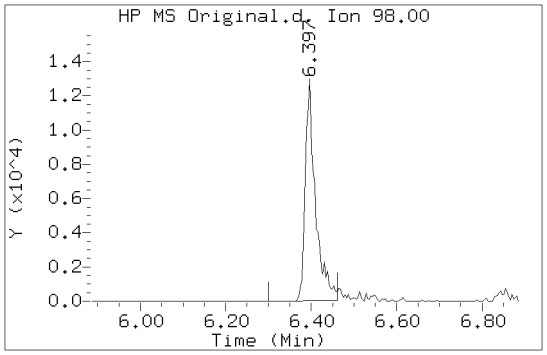


Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

MASS
98
AREA
21847
HEIGHT
12976
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
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HEIGHT
12976
20-Jul-2023
15:04
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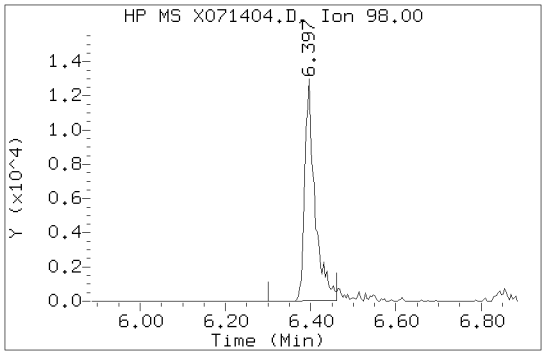
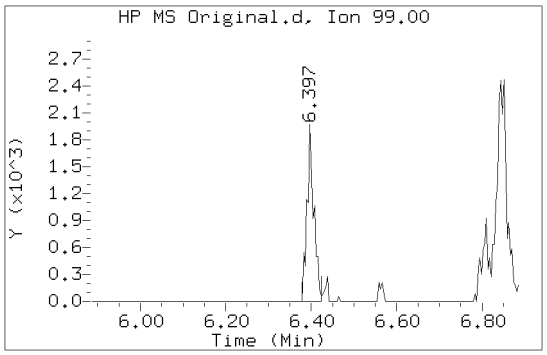
pham



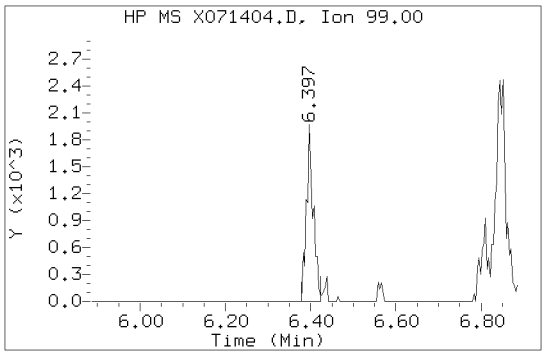
BEFORE

MASS
99
AREA
2184
HEIGHT
1968
20-Jul-2023
15:04
linh
pham



AFTER

MASS
99
AREA
2184
HEIGHT
1968
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

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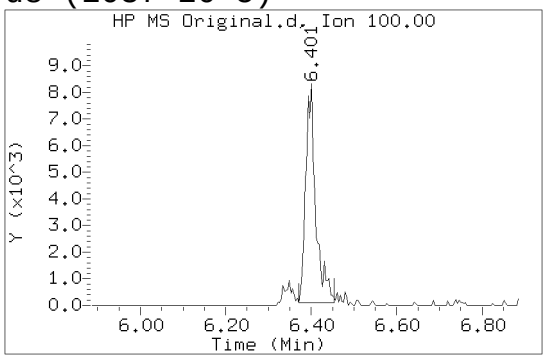
AREA
13429
HEIGHT
8225
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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20-Jul-2023
15:04
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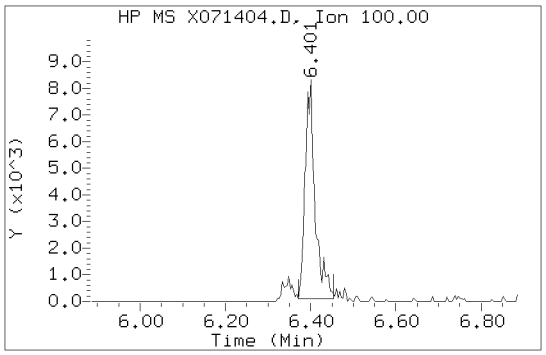
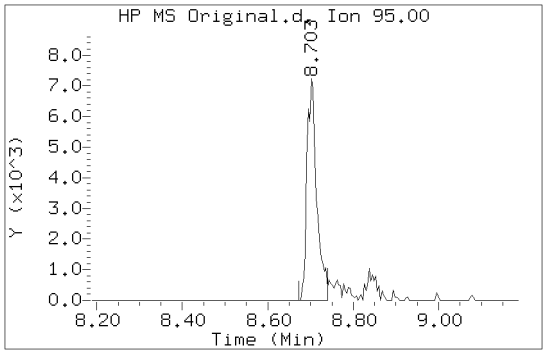


4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

MASS
95
AREA
11517
HEIGHT
7234
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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HEIGHT
7234
20-Jul-2023
15:04
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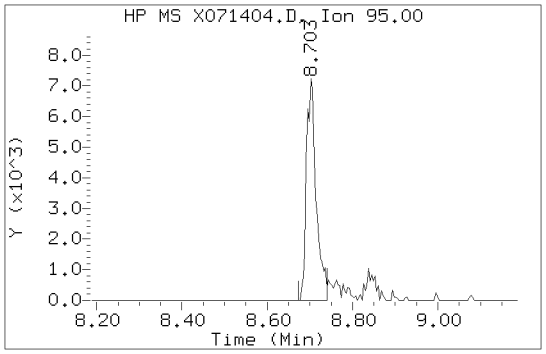

BEFORE

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AREA
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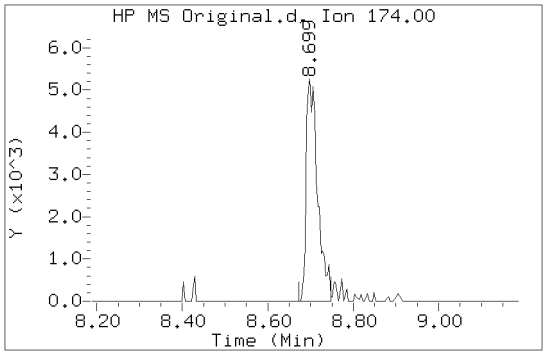
HEIGHT
5262
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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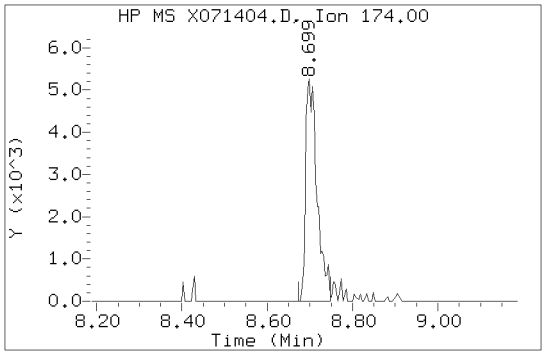
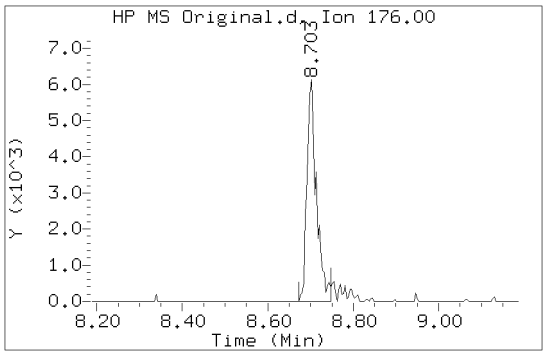
AREA
9804
HEIGHT
5262
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
176
AREA
9576
HEIGHT
6132
20-Jul-2023
15:04
linh
pham



AFTER

MASS
176
AREA
9576
HEIGHT
6132
20-Jul-2023
15:04
linh
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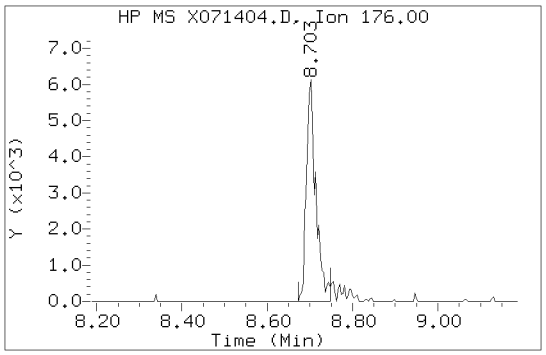

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D
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Inj Date : 14-JUL-2023 13:23
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\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 13:02 Cal File: X071404.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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)	523249	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	9210	2.00000	2.77(M)
3	Chloromethane	50	1.085	1.085	(0.260)	17566	2.00000	2.22
4	Propionitrile	54	3.683	3.683	(0.881)	20667	20.0000	19.93(aM)
5	Vinyl Chloride	62	1.145	1.145	(0.274)	15109	2.00000	2.23
6	Bromomethane	94	1.347	1.347	(0.322)	5769	2.00000	2.05(M)
7	Chloroethane	64	1.404	1.404	(0.336)	8482	2.00000	2.19(M)
8	Trichlorofluoromethane	101	1.561	1.561	(0.373)	15419	2.00000	2.24
9	Acrolein	56	1.861	1.861	(0.445)	917	4.00000	5.70(aMH)
10	Acetone	43	1.977	1.977	(0.473)	15631	4.00000	3.03
11	1,1-Dichloroethene	96	1.921	1.921	(0.459)	8527	2.00000	2.22
12	Isobutyl Alcohol	43	4.684	4.684	(1.120)	37832	40.0000	38.14(aM)
13	Acetonitrile	39	2.202	2.202	(0.527)	15528	20.0000	21.16(a)
14	Allyl Chloride	41	2.202	2.202	(0.527)	33926	2.00000	1.97(a)
15	Iodomethane	142	2.030	2.030	(0.485)	11682	4.00000	6.08(M)
16	Acrylonitrile	53	2.547	2.547	(0.609)	10541	4.00000	4.13
17	Methylene Chloride	84	2.303	2.303	(0.551)	11880	2.00000	1.28(M)
18	Methyl tert-butyl ether	73	2.543	2.543	(0.608)	30252	2.00000	2.12
19	Carbon Disulfide	76	2.075	2.075	(0.496)	52986	4.00000	4.39
20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	9515	2.00000	2.14

21 Vinyl Acetate	43	3.004	3.004 (0.719)	75193	4.00000	4.10
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	21647	2.00000	2.22

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.771	1.771	(0.424)	4560	2.00000	1.93(aM)
	24 2-Butanone	43	3.672	3.672	(0.878)	10454	4.00000	3.75(M)
	25 Methacrylonitrile	41	3.870	3.870	(0.926)	12946	2.00000	1.91(a)
	26 2,2-Dichloropropane	77	3.514	3.514	(0.840)	15882	2.00000	2.30
	27 cis-1,2-Dichloroethene	96	3.537	3.537	(0.846)	11533	2.00000	2.04(M)
	28 Chloroform	83	3.915	3.915	(0.936)	21885	2.00000	2.19
	29 Bromochloromethane	128	3.799	3.799	(0.909)	7550	2.00000	2.38
$	30 Dibromofluoromethane	113	4.106	4.106	(0.982)	10131	2.00000	1.38
	31 1,1,1-Trichloroethane	97	4.088	4.088	(0.978)	16000	2.00000	2.08
	32 1,1-Dichloropropene	75	4.283	4.283	(0.863)	13616	2.00000	2.05
	33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	16880	2.00000	1.89(M)
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	13047	2.00000	1.95(M)
$	35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.071)	14667	2.00000	1.85
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	811220	50.0000	
	37 Benzene	78	4.519	4.519	(0.910)	39692	2.00000	2.04
	38 Trichloroethene	130	5.208	5.208	(1.049)	12354	2.00000	2.25(a)
	39 Bromodichloromethane	83	5.733	5.733	(1.155)	14668	2.00000	1.97(a)
	40 Methyl Methacrylate	41	5.625	5.625	(1.345)	12770	2.00000	2.02(aM)
	41 2-Chloroethylvinyl ether	63	6.059	6.059	(1.220)	8400	4.00000	3.70(a)
	42 1,2-Dichloropropane	63	5.441	5.441	(1.096)	12678	2.00000	2.03(aM)
	43 2-Nitropropane	43	5.973	5.973	(1.428)	4635	2.00000	2.22(a)
	44 Dibromomethane	93	5.557	5.557	(1.119)	7713	2.00000	2.18(a)
	45 4-Methyl-2-Pentanone	43	6.333	6.333	(0.826)	29112	4.00000	3.99(a)
	46 cis-1,3-Dichloropropene	75	6.164	6.164	(1.242)	17329	2.00000	2.02(a)
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	740616	50.0000	
$	48 Toluene-d8	98	6.389	6.389	(0.833)	41058	2.00000	2.15(aM)
	49 Ethyl Methacrylate	69	6.723	6.723	(1.354)	11361	2.00000	2.13(a)
	50 Toluene	91	6.449	6.449	(0.841)	40789	2.00000	2.04(a)
	51 trans-1,3-Dichloropropene	75	6.689	6.689	(1.347)	14549	2.00000	2.02(a)
	52 2-Hexanone	43	7.105	7.105	(0.927)	19503	4.00000	4.07(a)
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	9040	2.00000	2.13(a)
	54 1,3-Dichloropropane	76	6.985	6.985	(0.911)	17344	2.00000	2.00(a)
	55 Dibromochloromethane	129	7.180	7.180	(0.936)	12160	2.00000	1.99(a)
	56 Tetrachloroethene	164	6.929	6.929	(0.904)	9711	2.00000	2.35(aM)
	57 1,2-Dibromoethane	107	7.263	7.263	(0.947)	9815	2.00000	2.03(a)
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	14217	2.00000	2.18(a)
	59 Chlorobenzene	112	7.694	7.694	(1.003)	28612	2.00000	2.05(a)
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	10835	2.00000	1.98(a)
	61 Ethylbenzene	106	7.799	7.799	(1.017)	14708	2.00000	2.10(a)
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	39231	4.00000	4.47(a)
	63 o-Xylene	106	8.245	8.245	(1.075)	17205	2.00000	2.07(a)
	64 Styrene	104	8.275	8.275	(1.079)	28504	2.00000	1.96(a)
	66 Bromoform	173	8.414	8.414	(1.097)	8672	2.00000	2.21(Ta)
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	48187	2.00000	2.25(a)
	68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	14352	2.00000	2.16(aM)
$	69 4-Bromofluorobenzene	95	8.695	8.695	(1.134)	17835	2.00000	2.01(a)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	394737	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	10578	2.00000	2.01(aM)
	72 trans-1,4-Dichloro-2-butene	53	8.901	8.901	(1.161)	4279	2.00000	1.89(aM)
	73 n-Propylbenzene	91	8.916	8.916	(0.923)	50047	2.00000	2.09(a)
	74 Bromobenzene	156	8.815	8.815	(0.912)	12961	2.00000	2.09(a)
	75 1,3,5-Trimethylbenzene	105	9.070	9.070	(0.939)	37798	2.00000	2.11(a)

76	2-Chlorotoluene	91	8.980	8.980 (0.929)	34081	2.00000	2.11(a)
77	4-Chlorotoluene	91	9.077	9.077 (0.939)	37510	2.00000	2.12(a)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D Page 3
Report Date: 20-Jul-2023 15:05

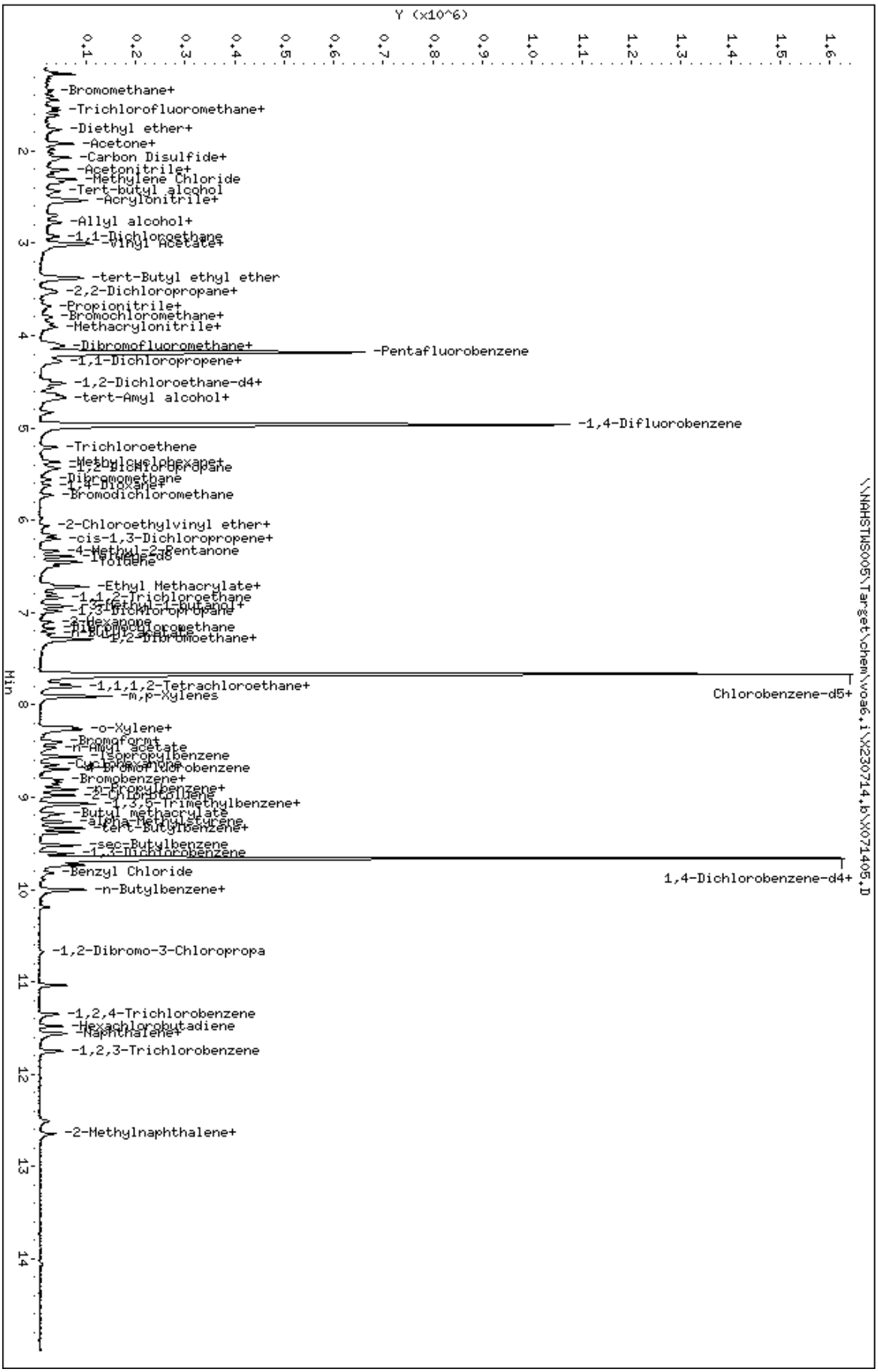
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	34859	2.00000	2.27(a)
79	1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	38346	2.00000	2.13(a)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	45694	2.00000	2.23(a)
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	39231	2.00000	2.10(a)
83	1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	22178	2.00000	2.06(a)
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	26773	2.00000	2.27(a)
86	Benzyl Chloride	91	9.823	9.823	(1.281)	17851	2.00000	3.69(aM)
87	n-Butylbenzene	91	10.003	10.003	(1.035)	31075	2.00000	1.98(a)
88	1,2-Dichlorobenzene	146	9.999	9.999	(1.035)	21840	2.00000	2.06(a)
89	1,2-Dibromo-3-Chloropropane	155	10.678	10.678	(1.105)	1953	2.00000	2.84(a)
90	1,2,4-Trichlorobenzene	180	11.360	11.360	(1.176)	14997	2.00000	2.06(a)
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	6844	2.00000	4.30(aM)
92	Naphthalene	128	11.559	11.559	(1.196)	35806	2.00000	1.99(aM)
93	1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	14737	2.00000	2.16(a)
146	Methyl acetate	43	2.247	2.247	(0.537)	9491	2.00000	2.03(aM)
138	Freon TF	101	1.917	1.917	(0.459)	7195	2.00000	1.83(aM)
141	Cyclohexane	56	4.121	4.121	(0.986)	19462	2.00000	2.14(aH)
142	Tetrahydrofuran	42	3.866	3.866	(0.925)	5657	4.00000	4.20(a)
147	Methylcyclohexane	55	5.370	5.370	(1.082)	31142	2.00000	1.81(aM)
135	1,4-Dioxane	88	5.617	5.617	(1.343)	2323	40.0000	37.36(M)
132	n-Butanol	56	5.362	5.362	(1.282)	7443	40.0000	42.73(aM)
131	Methyl Acrylate	55	3.743	3.743	(0.895)	13406	2.00000	1.88(aM)
133	Ethyl Acrylate	55	5.370	5.370	(1.284)	31450	2.00000	1.81(M)
136	n-Hexane	57	2.768	2.768	(0.662)	11984	2.00000	1.88(aM)
139	Diethyl ether	59	1.760	1.760	(0.421)	10716	2.00000	2.19(a)
148	Tert-butyl alcohol	59	2.442	2.442	(0.584)	29280	40.0000	44.33(M)
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	17366	40.0000	42.37(T)
156	Diisopropyl ether	45	3.008	3.008	(0.719)	43282	2.00000	2.00(Ta)
166	1,2,3-Trimethylbenzene	105	9.733	9.733	(1.007)	31731	2.00000	1.73(a)
167	Ethanol	45	1.711	1.711	(0.409)	3219	40.0000	26.14(M)
172	tert-Butyl formate	59	4.635	4.635	(1.108)	23857	4.00000	4.26(aM)
173	3,3-Dimethyl-1-butanol	57	7.293	7.293	(0.951)	33143	40.0000	41.61
174	tert-Amyl methyl ether	73	4.672	4.672	(1.117)	31345	2.00000	1.82(aM)
175	tert-Butyl ethyl ether	59	3.383	3.383	(0.809)	42907	2.00000	1.93(a)
176	tert-Amyl alcohol	59	4.635	4.635	(1.108)	29185	40.0000	51.05
151	4-Methyl-2-pentanol	45	6.723	6.723	(1.354)	72210	40.0000	41.53(M)
180	1-Methylnaphthalene	142	12.649	12.649	(1.309)	14828	2.00000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.279)	15351	2.00000	2.28(aM)
152	Amyl alcohol	42	6.933	6.933	(0.904)	8579	40.0000	40.28(M)
158	Dichlorofluoromethane	67	1.535	1.535	(0.367)	17587	2.00000	2.08
159	Propylene oxide	43	1.805	1.805	(0.432)	2798	4.00000	4.35(a)
161	3-Methyl-1-butanol	55	6.929	6.929	(0.904)	5263	40.0000	28.86
162	Butyl acrylate	55	8.267	8.267	(1.078)	25518	2.00000	1.81(a)
163	Butyl methacrylate	41	9.178	9.178	(0.950)	19072	2.00000	2.01(a)
164	Dicyclopentadiene	66	9.681	9.681	(1.002)	44874	2.00000	1.97(a)
182	Epichlorohydrin	57	6.112	6.112	(1.231)	4808	8.00000	7.93
M 94	1,2-Dichloroethylene (total)	96				21048	4.00000	(a)
130	Ethyl Acetate	43	3.683	3.683	(0.881)	15481	2.00000	1.99(TaM)
134	Cyclohexanone	55	8.646	8.646	(0.895)	15113	40.0000	43.00(a)
185	Isoprene	39	1.771	1.771	(0.424)	3408	2.00000	1.97(aM)
188	Isopropyl acetate	43	4.684	4.684	(0.943)	48167	2.00000	2.25(a)
187	n-Amyl acetate	43	8.462	8.462	(1.104)	26886	2.00000	1.98(aM)

189 n-Butyl acetate	43	7.225	7.225 (0.942)	20825	2.00000	1.83(aM)
150 Allyl alcohol	57	2.768	2.768 (0.662)	14314	40.0000	46.26

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
194 Acetaldehyde	44	1.212	1.212	(0.290)	8114	8.00000	(aM)
195 Methyl Amyl Ketone	43	8.391	8.391	(1.094)	28766	2.00000	1.85(a)
200 Dimethyl Disulfide	94	6.202	6.202	(0.809)	17864	2.00000	1.78(a)
202 Isobutylene	41	1.246	1.246	(0.298)	1654	2.00000	1.91(aM)
205 2-Ethylhexyl Acrylate	55	11.559	11.559	(1.196)	18101	2.00000	1.79(aM)

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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Sample Info: VSTD002;VSTD002;1;4;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
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Inj Date : 14-JUL-2023 13:23
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LabSampID : VSTD002

Dichlorodifluoromethane (75-71-8)

Reason Code:

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20-Jul-2023
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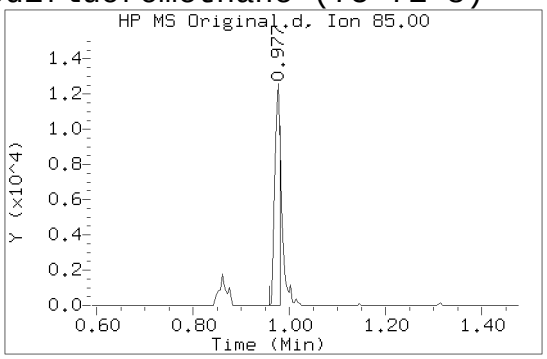

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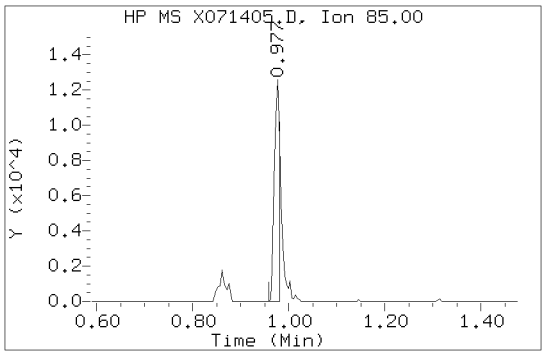

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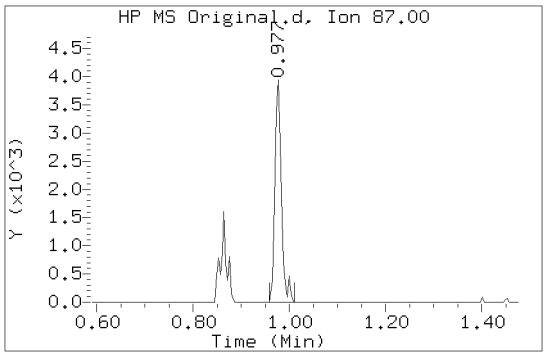

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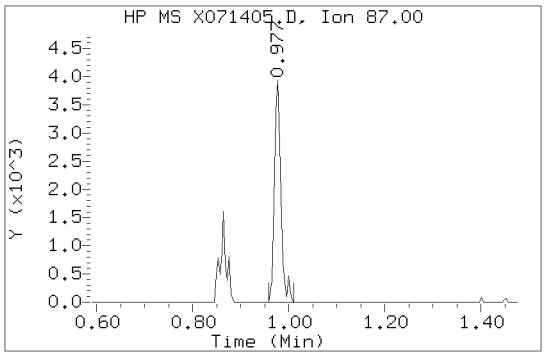

Bromomethane (74-83-9)

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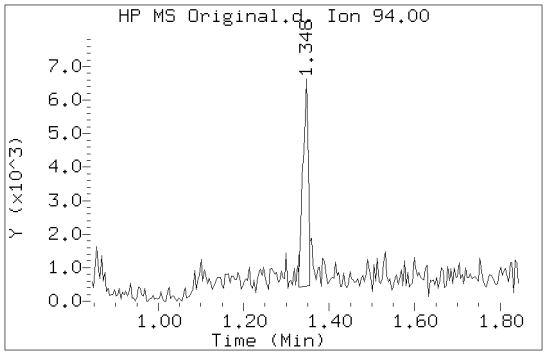

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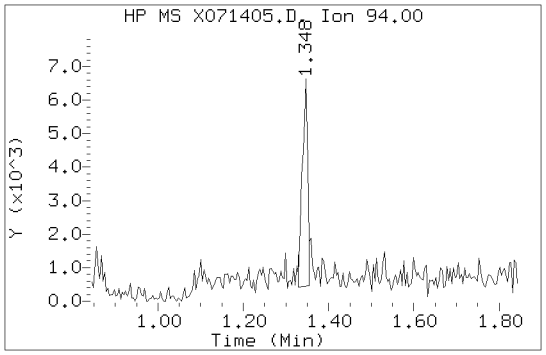

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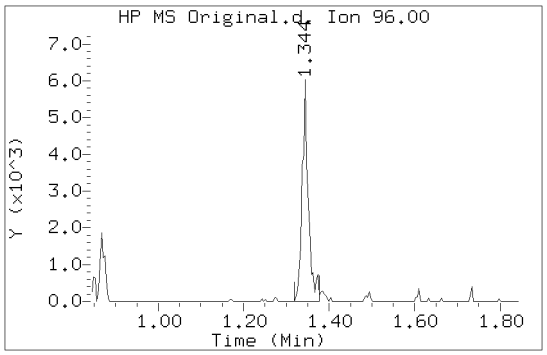

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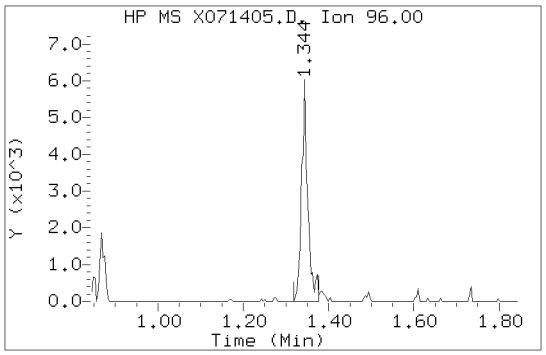

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LabSampID : VSTD002

Chloroethane (75-00-3)

Reason Code:

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20-Jul-2023
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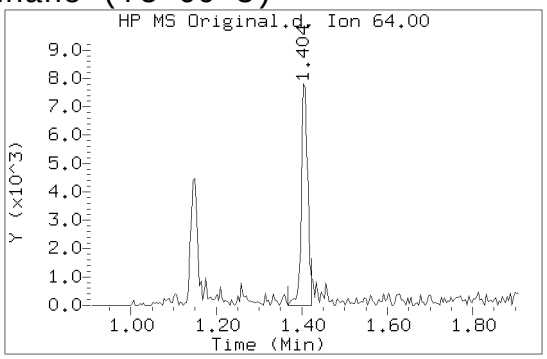

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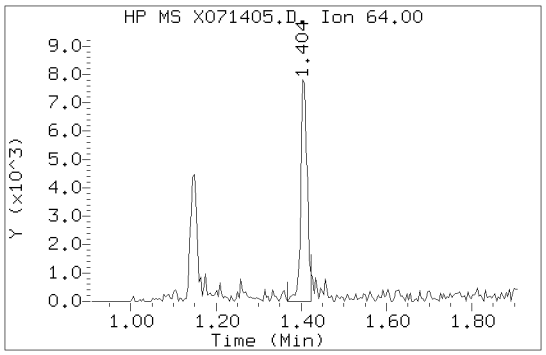

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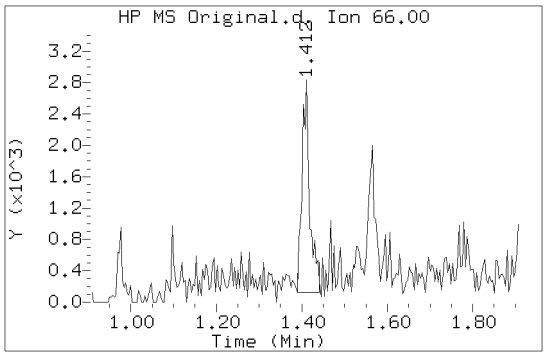

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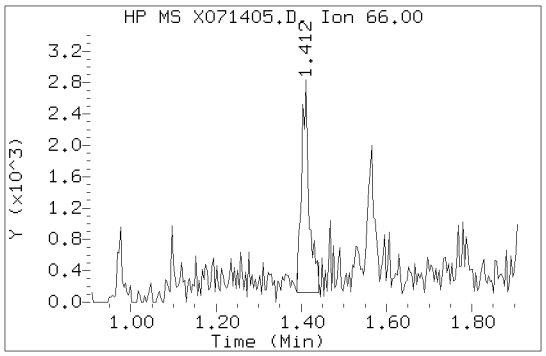

Iodomethane (74-88-4)

Reason Code:

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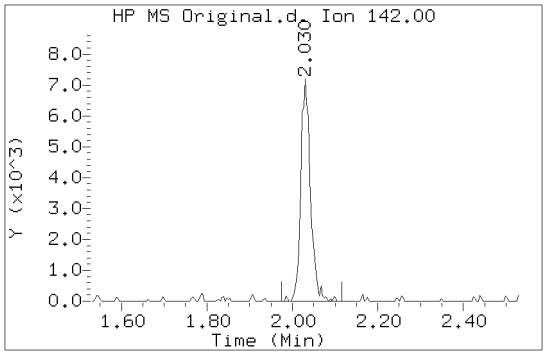

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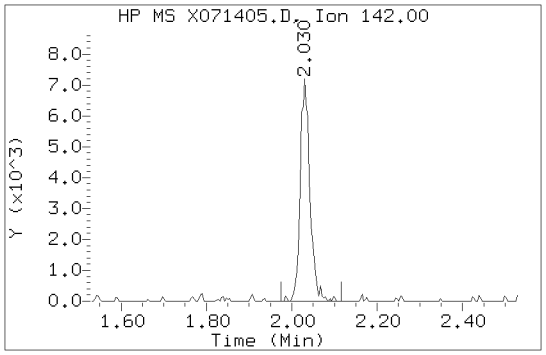

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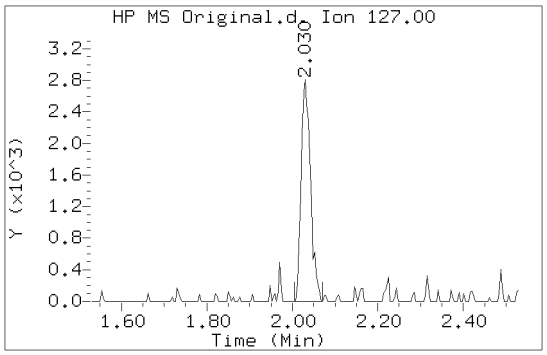

AFTER

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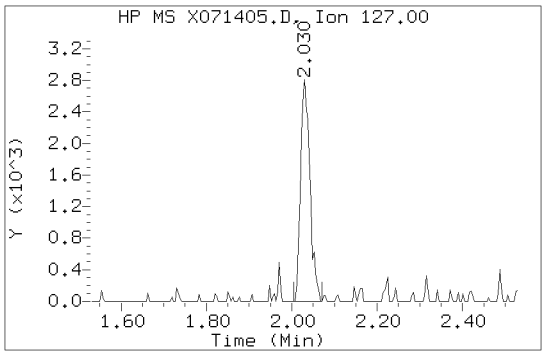

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LabSampID : VSTD002

Iodomethane (74-88-4)

Reason Code:

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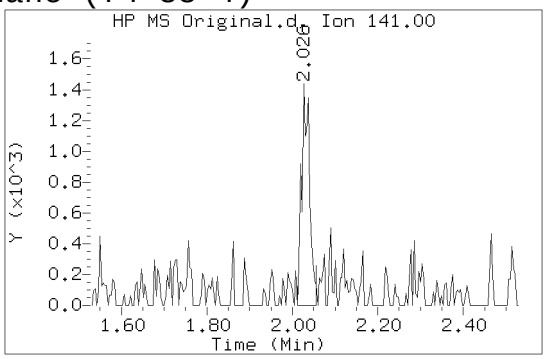

AFTER

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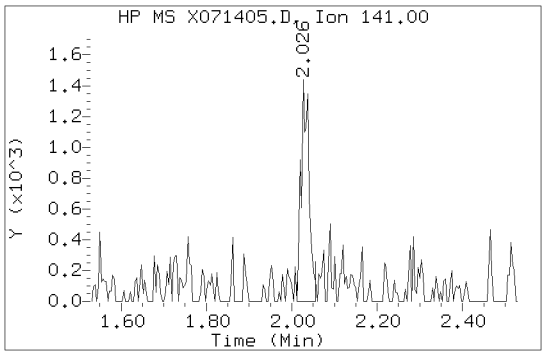
linh
pham

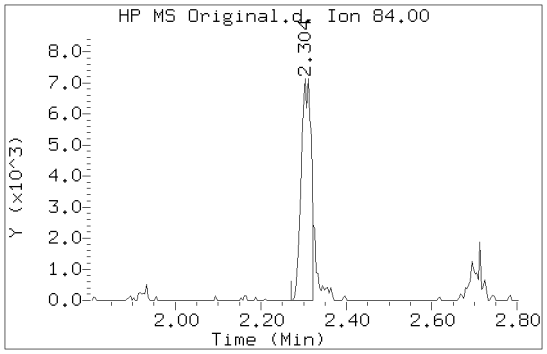


Methylene Chloride (75-09-2)

Reason Code:

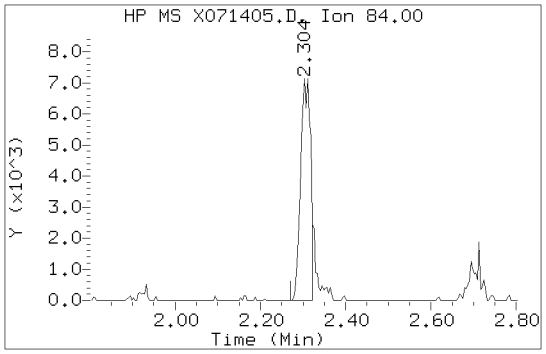
BEFORE

MASS
84
AREA
11880
HEIGHT
7134
20-Jul-2023
15:04
linh
pham



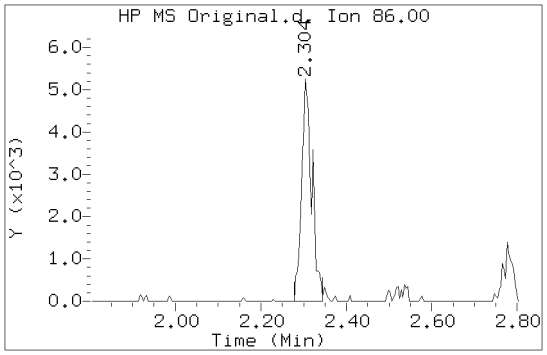
AFTER

MASS
84
AREA
11880
HEIGHT
7134
20-Jul-2023
15:04
linh
pham



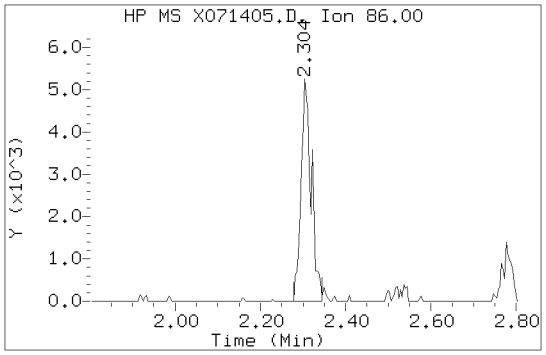
BEFORE

MASS
86
AREA
8944
HEIGHT
5254
20-Jul-2023
15:04
linh
pham



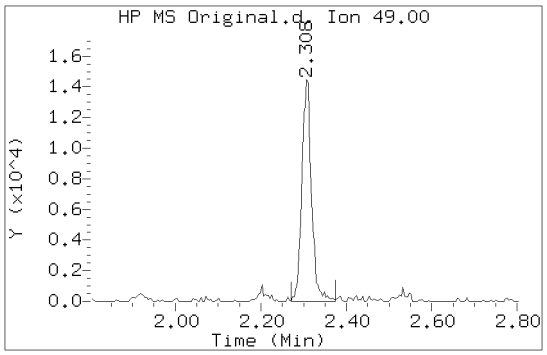
AFTER

MASS
86
AREA
8944
HEIGHT
5254
20-Jul-2023
15:04
linh
pham



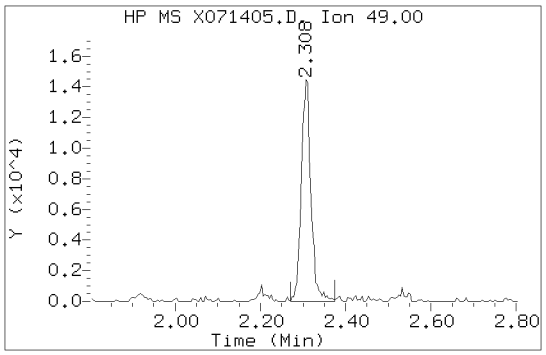
BEFORE

MASS
49
AREA
23277
HEIGHT
14471
20-Jul-2023
15:04
linh
pham



AFTER

MASS
49
AREA
23277
HEIGHT
14471
20-Jul-2023
15:04
linh
pham



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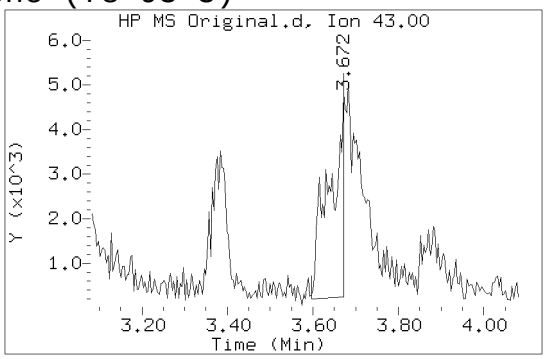
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

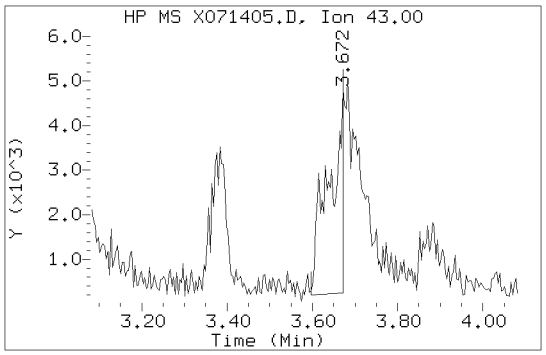
2-Butanone (78-93-3)

Reason Code:

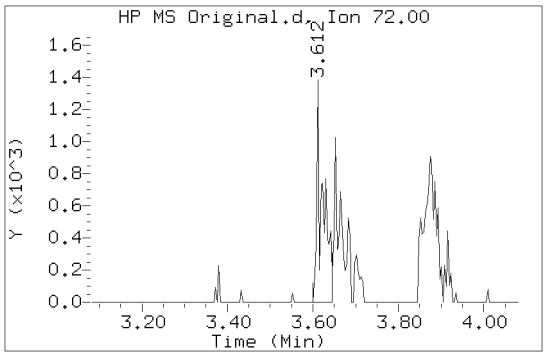
BEFORE
MASS
43
AREA
10454
HEIGHT
4589
20-Jul-2023
15:04
linh
pham



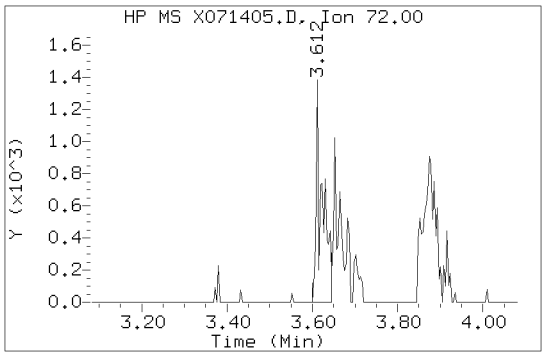
AFTER
MASS
43
AREA
10454
HEIGHT
4589
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
72
AREA
1388
HEIGHT
1384
20-Jul-2023
15:04
linh
pham



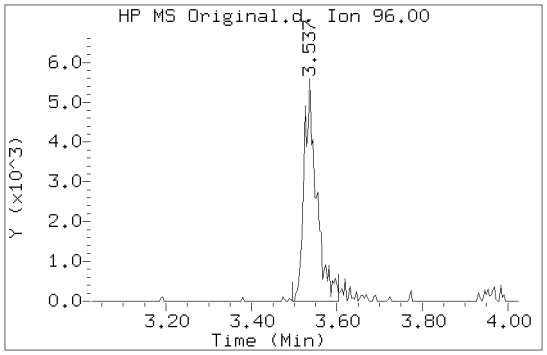
AFTER
MASS
72
AREA
1388
HEIGHT
1384
20-Jul-2023
15:04
linh
pham



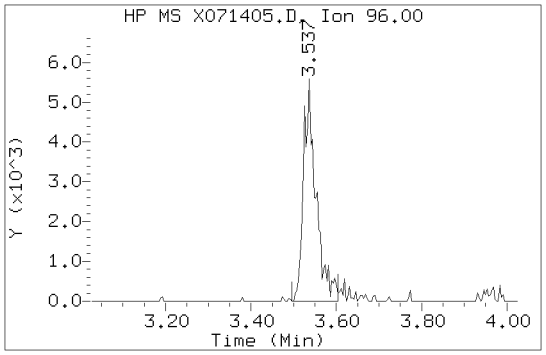
cis-1,2-Dichloroethene (156-59-2)

Reason Code:

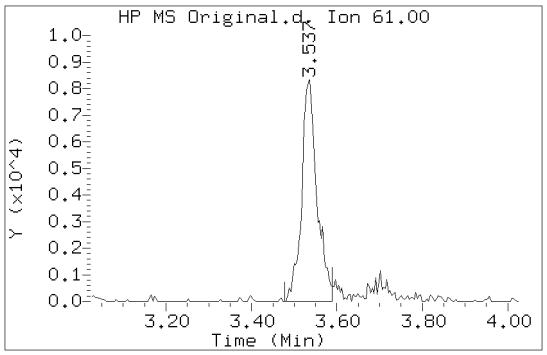
BEFORE
MASS
96
AREA
11533
HEIGHT
5587
20-Jul-2023
15:04
linh
pham



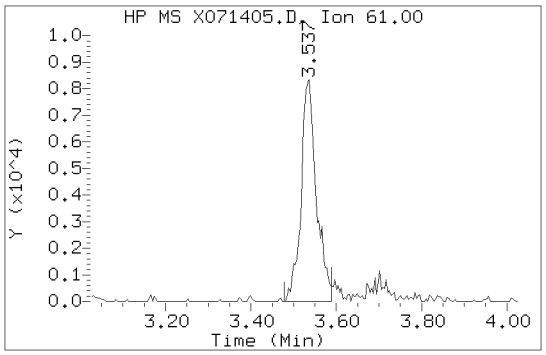
AFTER
MASS
96
AREA
11533
HEIGHT
5587
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
61
AREA
21081
HEIGHT
8339
20-Jul-2023
15:04
linh
pham



AFTER
MASS
61
AREA
21081
HEIGHT
8339
20-Jul-2023
15:04
linh
pham



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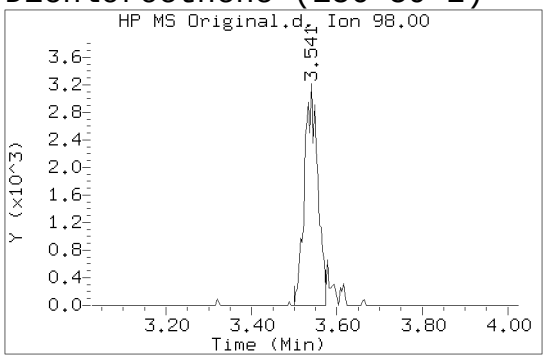
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

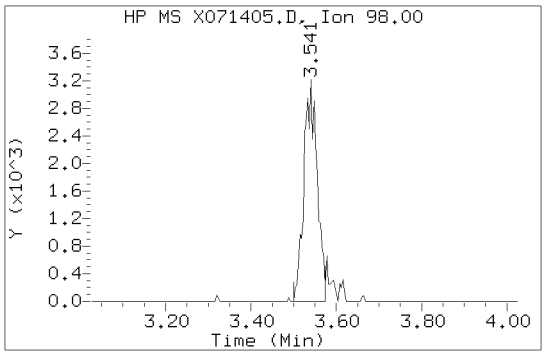
cis-1,2-Dichloroethene (156-59-2)

Reason Code:

BEFORE
MASS
98
AREA
6988
HEIGHT
3216
20-Jul-2023
15:04
linh
pham



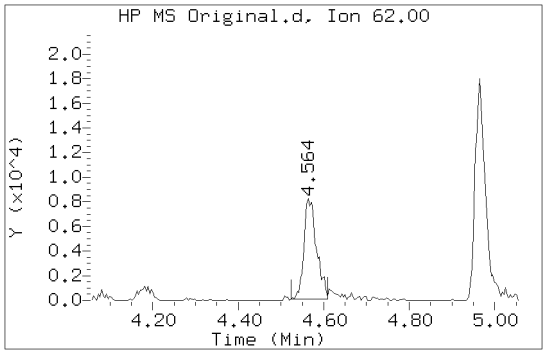
AFTER
MASS
98
AREA
6988
HEIGHT
3216
20-Jul-2023
15:04
linh
pham



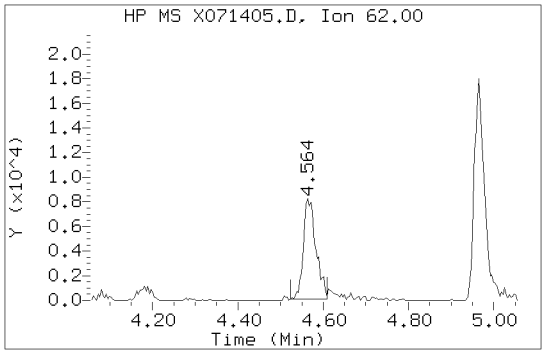
1,2-Dichloroethane (107-06-2)

Reason Code:

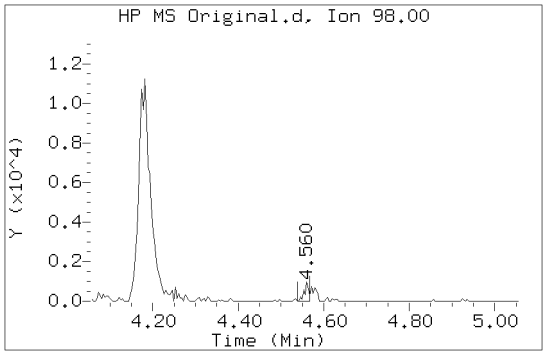
BEFORE
MASS
62
AREA
16880
HEIGHT
8150
20-Jul-2023
15:04
linh
pham



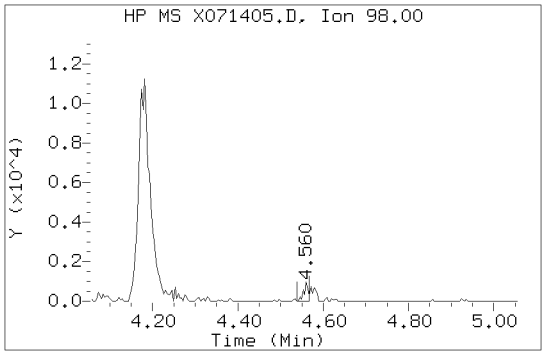
AFTER
MASS
62
AREA
16880
HEIGHT
8150
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
98
AREA
708
HEIGHT
981
20-Jul-2023
15:04
linh
pham



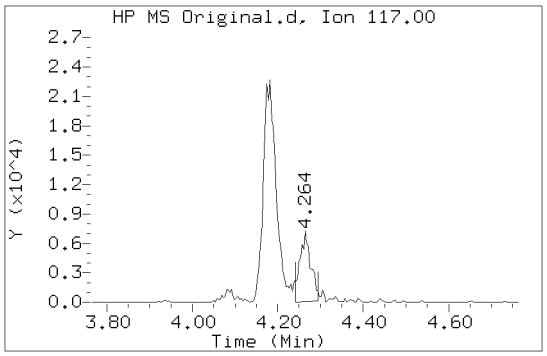
AFTER
MASS
98
AREA
708
HEIGHT
981
20-Jul-2023
15:04
linh
pham



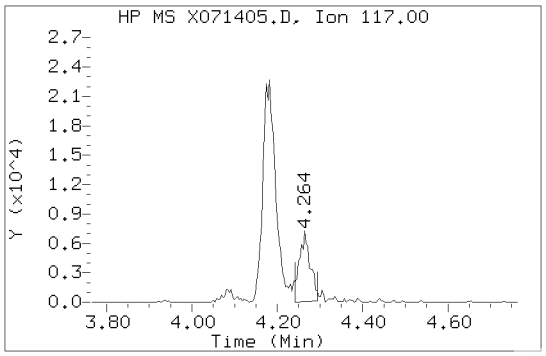
Carbon Tetrachloride (56-23-5)

Reason Code:

BEFORE
MASS
117
AREA
13047
HEIGHT
7258
20-Jul-2023
15:04
linh
pham



AFTER
MASS
117
AREA
13047
HEIGHT
7258
20-Jul-2023
15:04
linh
pham



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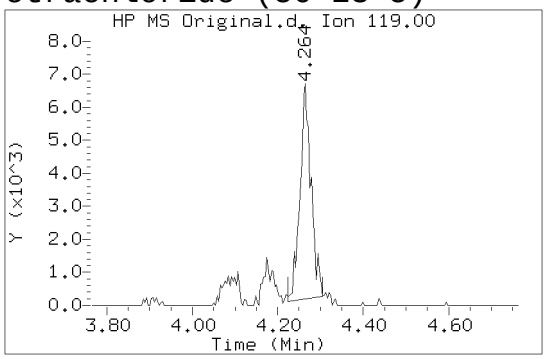
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Carbon Tetrachloride (56-23-5)

Reason Code:

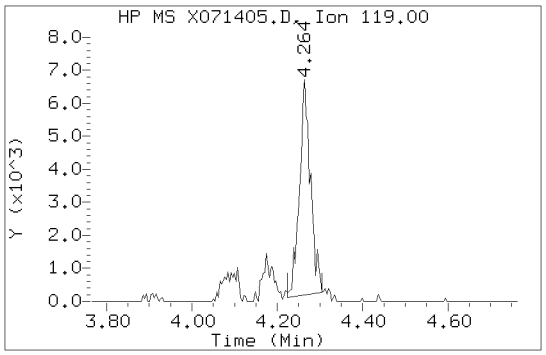
BEFORE

MASS
119
AREA
11949
HEIGHT
6520
20-Jul-2023
15:04
linh
pham



AFTER

MASS
119
AREA
11949
HEIGHT
6520
20-Jul-2023
15:04
linh
pham

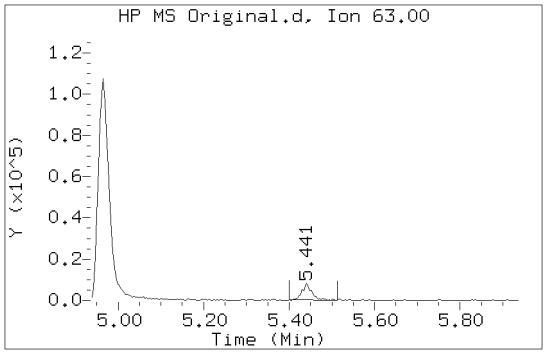


1,2-Dichloropropane (78-87-5)

Reason Code:

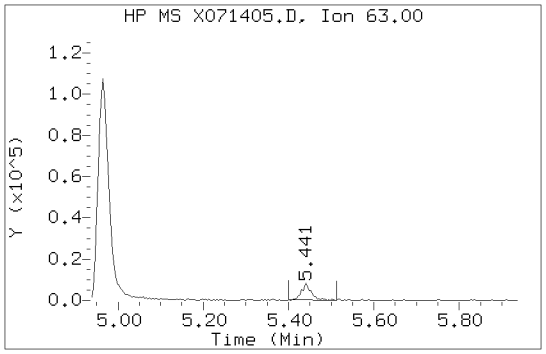
BEFORE

MASS
63
AREA
12678
HEIGHT
8183
20-Jul-2023
15:04
linh
pham



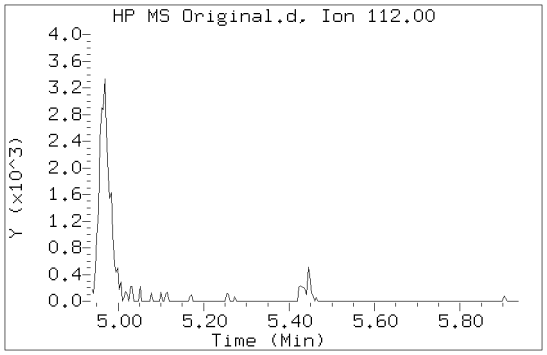
AFTER

MASS
63
AREA
12678
HEIGHT
8183
20-Jul-2023
15:04
linh
pham



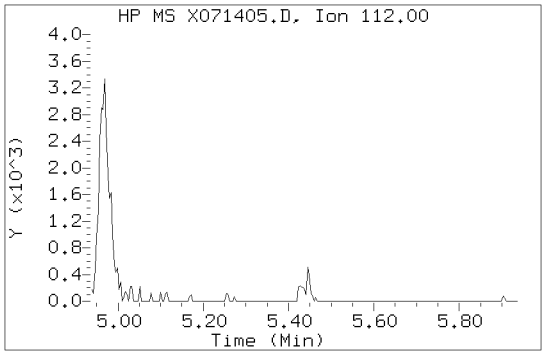
BEFORE

MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

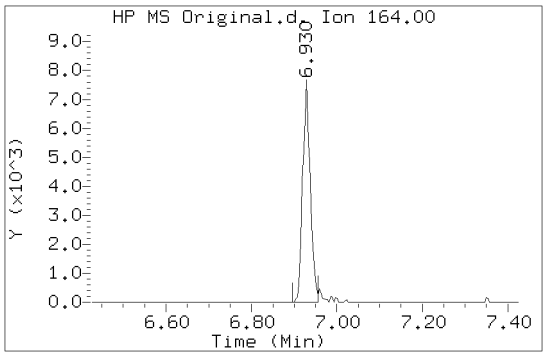


Tetrachloroethene (127-18-4)

Reason Code:

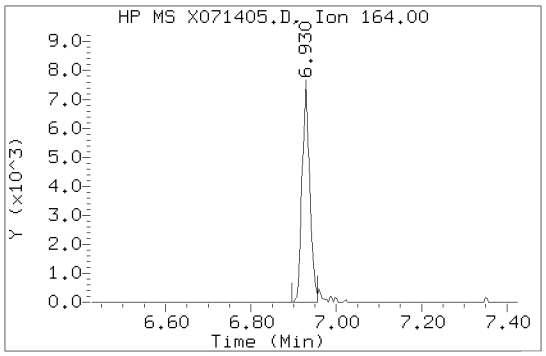
BEFORE

MASS
164
AREA
9711
HEIGHT
7674
20-Jul-2023
15:04
linh
pham



AFTER

MASS
164
AREA
9711
HEIGHT
7674
20-Jul-2023
15:04
linh
pham



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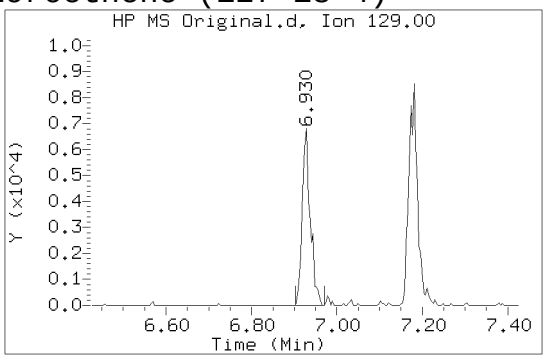
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

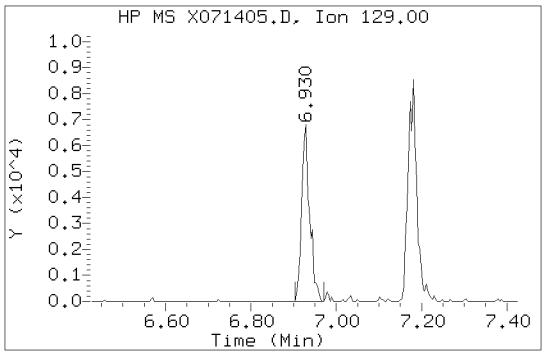
Tetrachloroethene (127-18-4)

Reason Code:

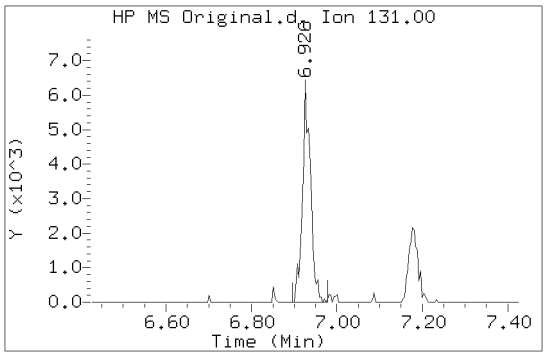
BEFORE
MASS
129
AREA
9180
HEIGHT
6806
20-Jul-2023
15:04
linh
pham



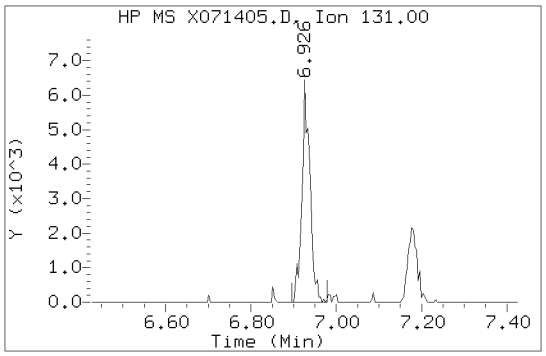
AFTER
MASS
129
AREA
9180
HEIGHT
6806
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
131
AREA
8692
HEIGHT
6442
20-Jul-2023
15:04
linh
pham



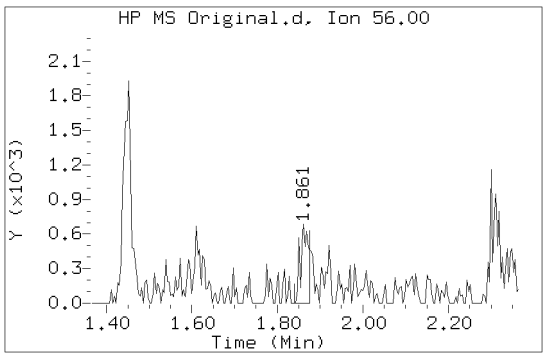
AFTER
MASS
131
AREA
8692
HEIGHT
6442
20-Jul-2023
15:04
linh
pham



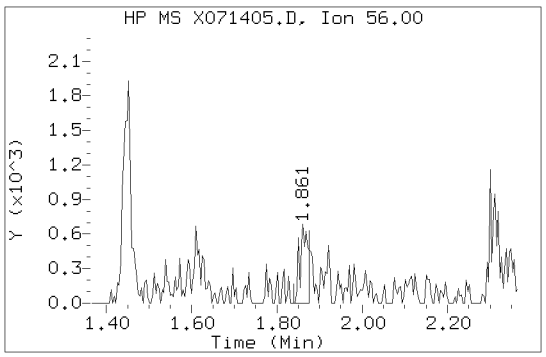
Acrolein (107-02-8)

Reason Code:

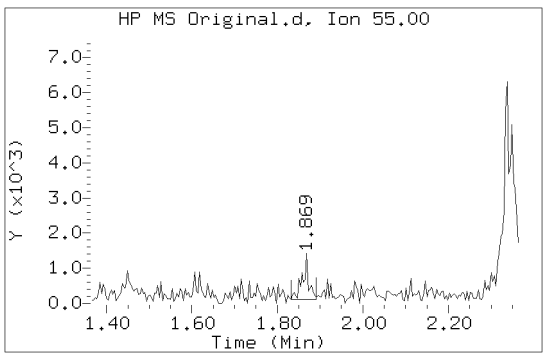
BEFORE
MASS
56
AREA
917
HEIGHT
685
20-Jul-2023
15:04
linh
pham



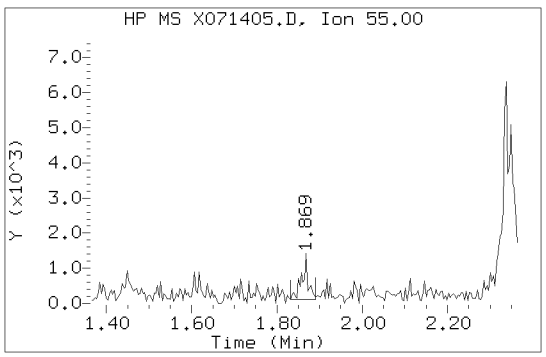
AFTER
MASS
56
AREA
917
HEIGHT
685
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
55
AREA
1362
HEIGHT
1313
20-Jul-2023
15:04
linh
pham



AFTER
MASS
55
AREA
1362
HEIGHT
1313
20-Jul-2023
15:04
linh
pham



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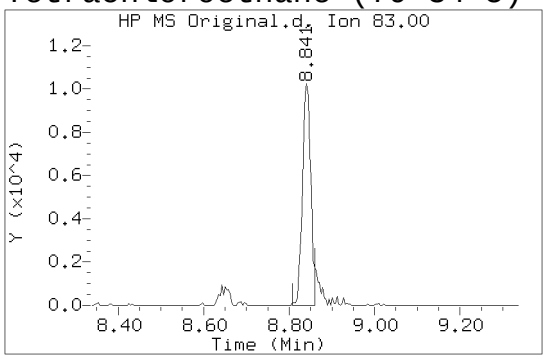
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

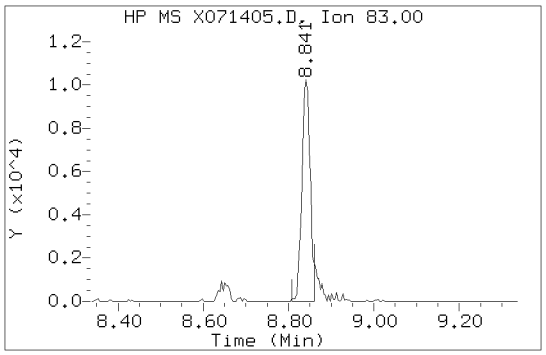
1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

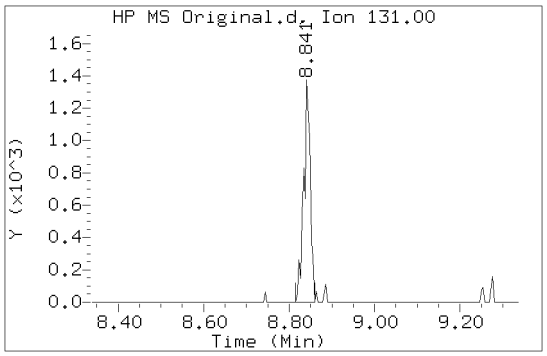
BEFORE
MASS
83
AREA
14352
HEIGHT
10244
20-Jul-2023
15:04
linh
pham



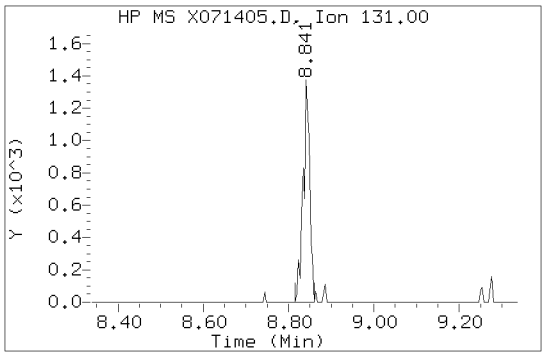
AFTER
MASS
83
AREA
14352
HEIGHT
10244
20-Jul-2023
15:04
linh
pham



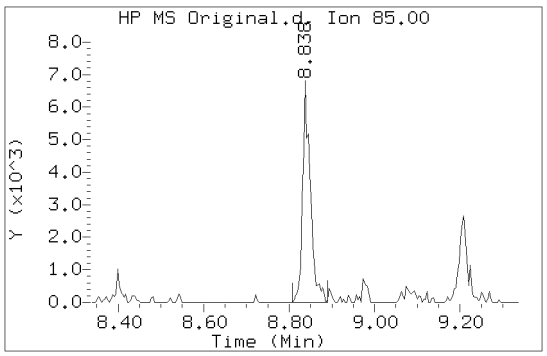
BEFORE
MASS
131
AREA
1498
HEIGHT
1375
20-Jul-2023
15:04
linh
pham



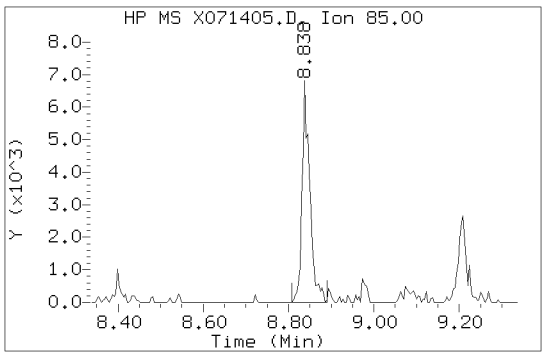
AFTER
MASS
131
AREA
1498
HEIGHT
1375
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
85
AREA
8867
HEIGHT
6812
20-Jul-2023
15:04
linh
pham



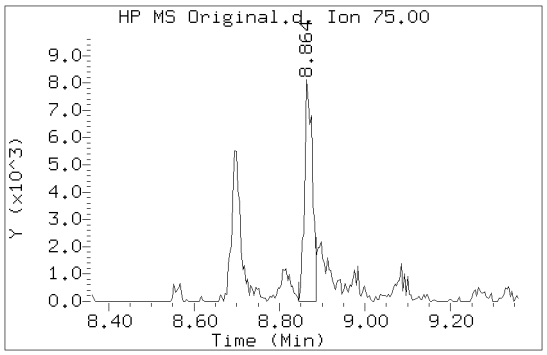
AFTER
MASS
85
AREA
8867
HEIGHT
6812
20-Jul-2023
15:04
linh
pham



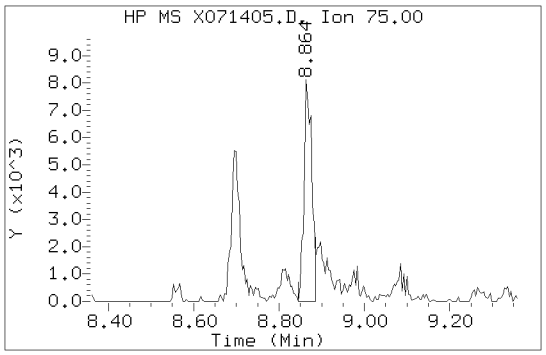
1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE
MASS
75
AREA
10578
HEIGHT
8119
20-Jul-2023
15:04
linh
pham



AFTER
MASS
75
AREA
10578
HEIGHT
8119
20-Jul-2023
15:04
linh
pham



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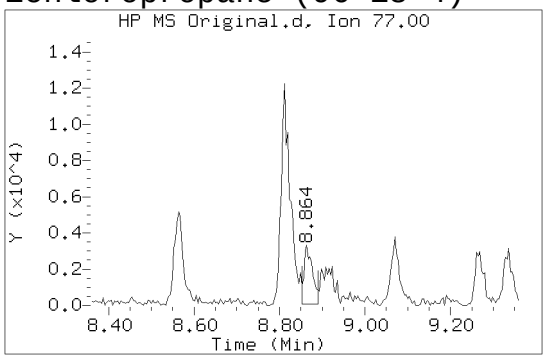
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

1,2,3-Trichloropropane (96-18-4)

Reason Code:

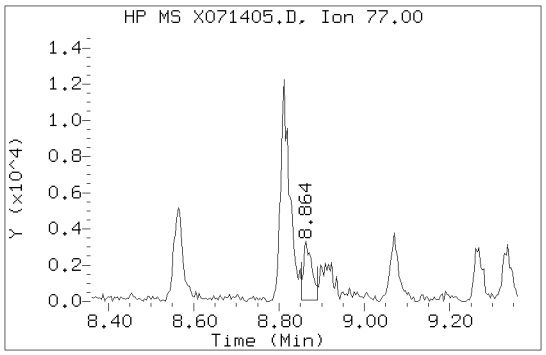
BEFORE

MASS
77
AREA
4616
HEIGHT
3271
20-Jul-2023
15:04
linh
pham



AFTER

MASS
77
AREA
4616
HEIGHT
3271
20-Jul-2023
15:04
linh
pham

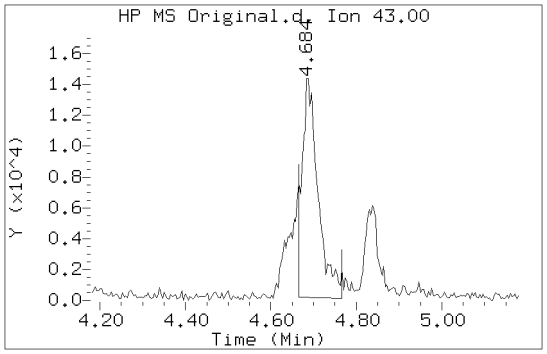


Isobutyl Alcohol (78-83-1)

Reason Code:

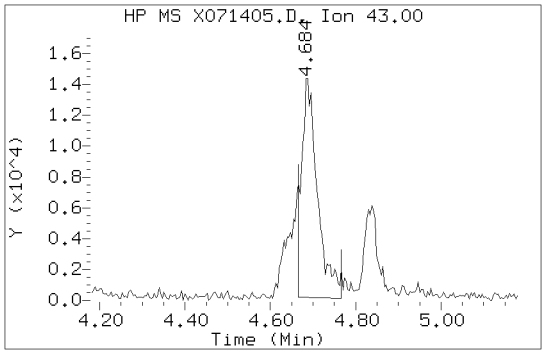
BEFORE

MASS
43
AREA
37832
HEIGHT
14170
20-Jul-2023
15:04
linh
pham



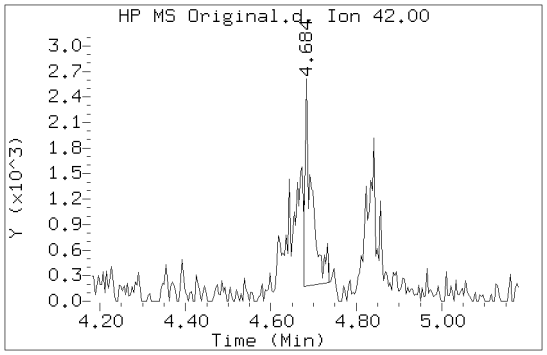
AFTER

MASS
43
AREA
37832
HEIGHT
14170
20-Jul-2023
15:04
linh
pham



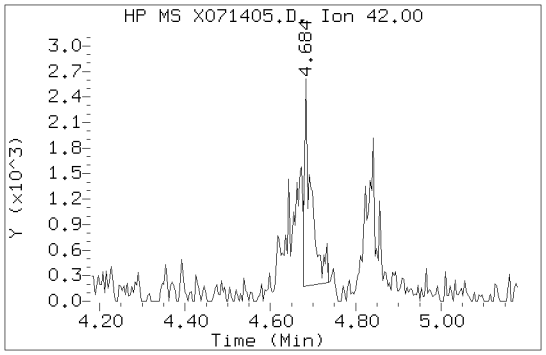
BEFORE

MASS
42
AREA
2790
HEIGHT
2433
20-Jul-2023
15:04
linh
pham



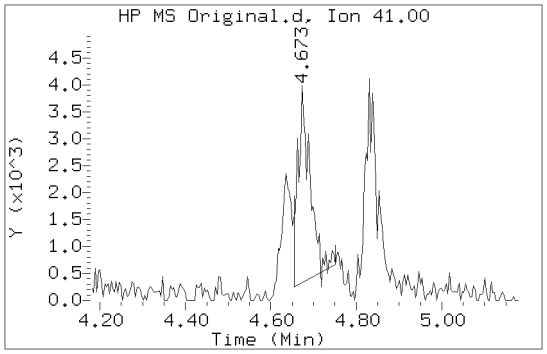
AFTER

MASS
42
AREA
2790
HEIGHT
2433
20-Jul-2023
15:04
linh
pham



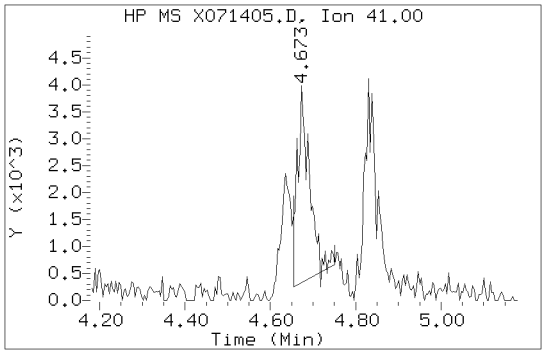
BEFORE

MASS
41
AREA
7292
HEIGHT
3653
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
7292
HEIGHT
3653
20-Jul-2023
15:04
linh
pham



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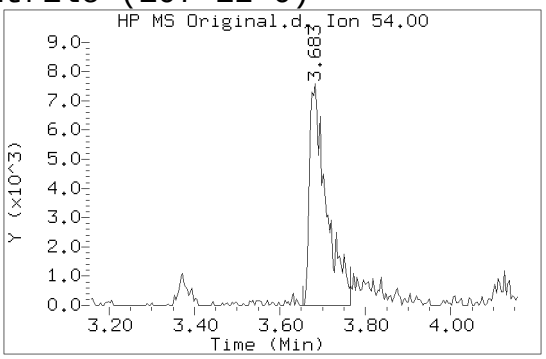
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Propionitrile (107-12-0)

Reason Code:

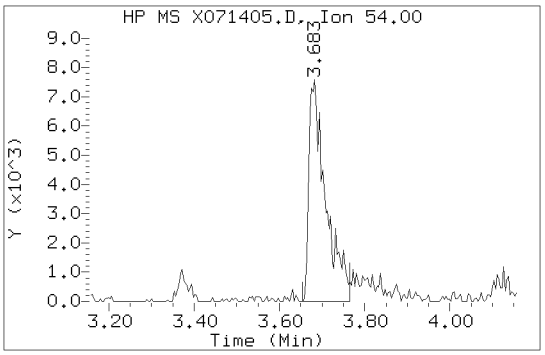
BEFORE

MASS
54
AREA
20667
HEIGHT
7586
20-Jul-2023
15:04
linh
pham



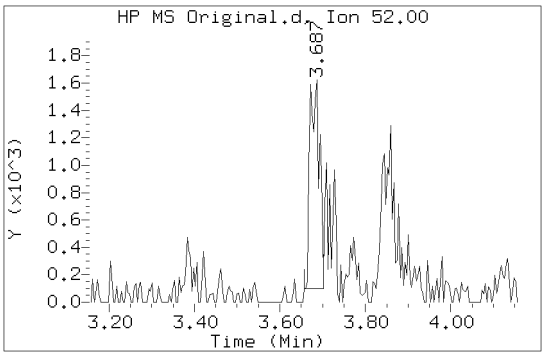
AFTER

MASS
54
AREA
20667
HEIGHT
7586
20-Jul-2023
15:04
linh
pham



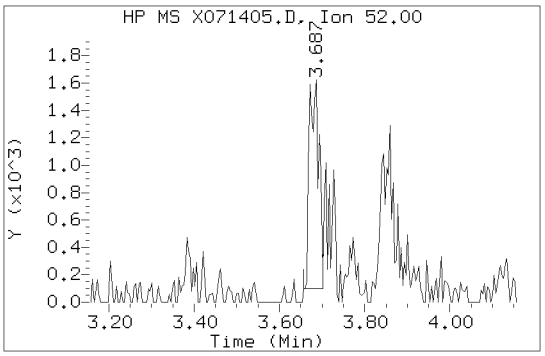
BEFORE

MASS
52
AREA
2370
HEIGHT
1524
20-Jul-2023
15:04
linh
pham



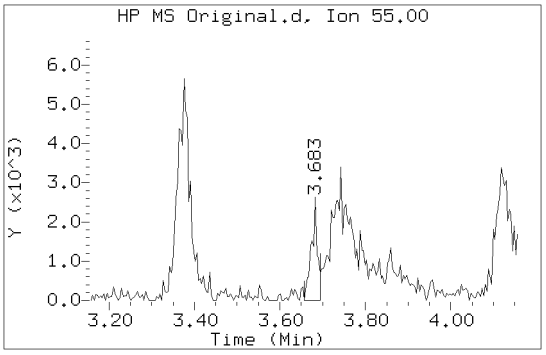
AFTER

MASS
52
AREA
2370
HEIGHT
1524
20-Jul-2023
15:04
linh
pham



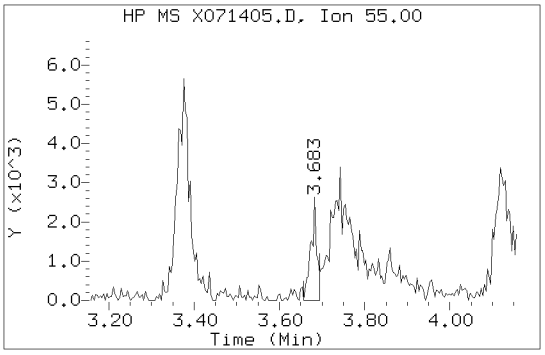
BEFORE

MASS
55
AREA
2547
HEIGHT
2627
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
2547
HEIGHT
2627
20-Jul-2023
15:04
linh
pham

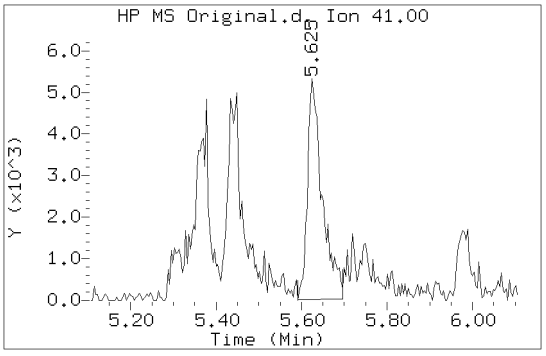


Methyl Methacrylate (80-62-6)

Reason Code:

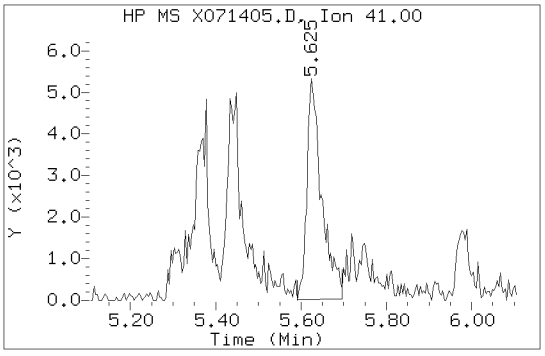
BEFORE

MASS
41
AREA
12770
HEIGHT
5309
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
12770
HEIGHT
5309
20-Jul-2023
15:04
linh
pham



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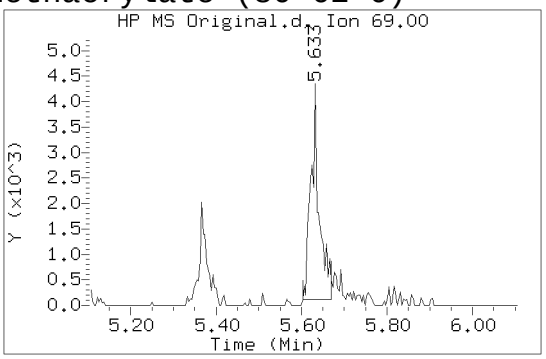
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Methyl Methacrylate (80-62-6)

Reason Code:

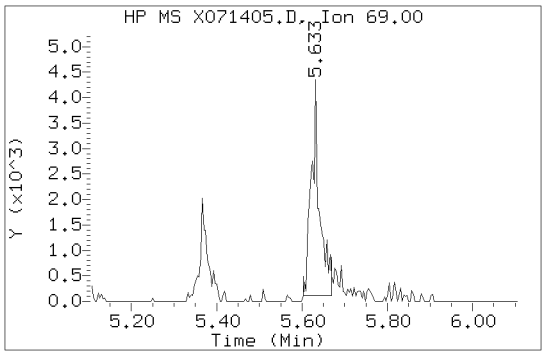
BEFORE

MASS
69
AREA
5709
HEIGHT
4235
20-Jul-2023
15:04
linh
pham



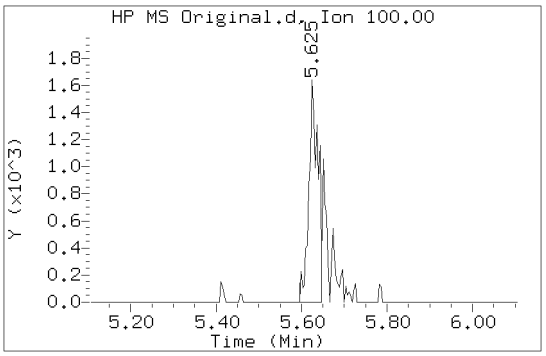
AFTER

MASS
69
AREA
5709
HEIGHT
4235
20-Jul-2023
15:04
linh
pham



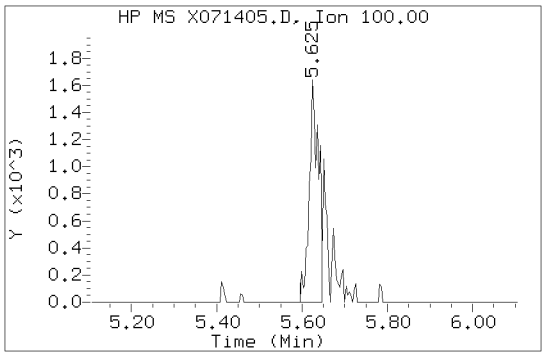
BEFORE

MASS
100
AREA
2452
HEIGHT
1641
20-Jul-2023
15:04
linh
pham



AFTER

MASS
100
AREA
2452
HEIGHT
1641
20-Jul-2023
15:04
linh
pham

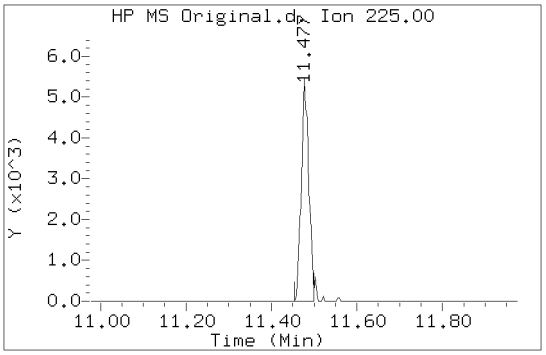


Hexachlorobutadiene (87-68-3)

Reason Code:

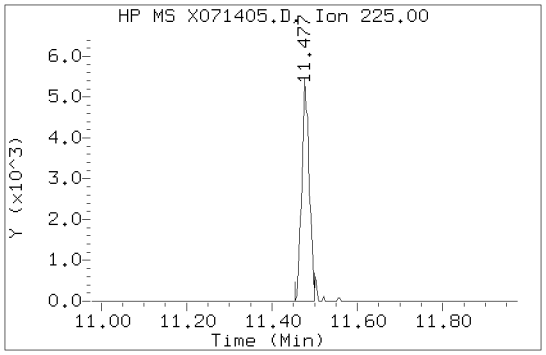
BEFORE

MASS
225
AREA
6844
HEIGHT
5446
20-Jul-2023
15:04
linh
pham



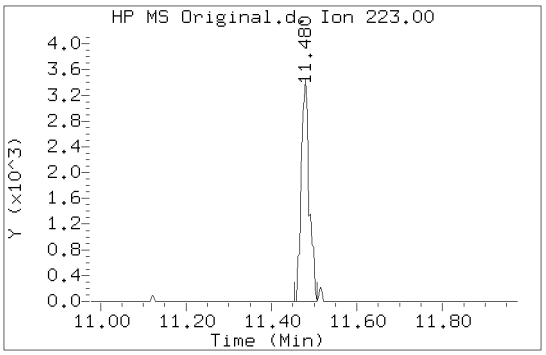
AFTER

MASS
225
AREA
6844
HEIGHT
5446
20-Jul-2023
15:04
linh
pham



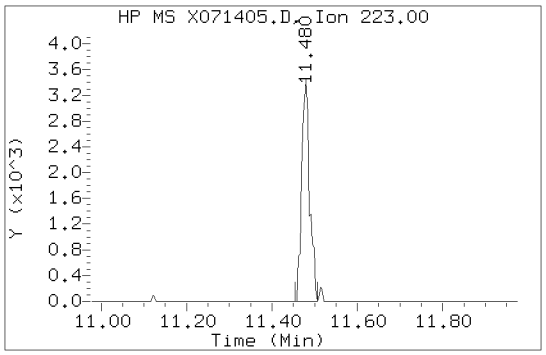
BEFORE

MASS
223
AREA
4606
HEIGHT
3443
20-Jul-2023
15:04
linh
pham



AFTER

MASS
223
AREA
4606
HEIGHT
3443
20-Jul-2023
15:04
linh
pham



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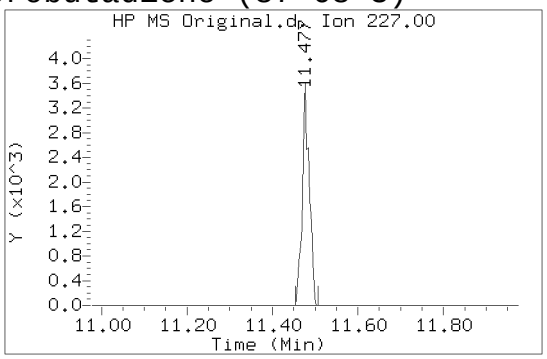
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Hexachlorobutadiene (87-68-3)

Reason Code:

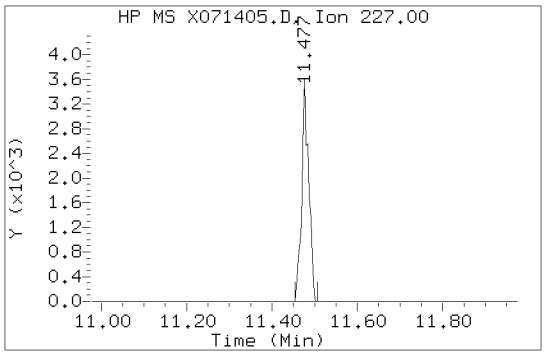
BEFORE

MASS
227
AREA
4231
HEIGHT
3595
20-Jul-2023
15:04
linh
pham



AFTER

MASS
227
AREA
4231
HEIGHT
3595
20-Jul-2023
15:04
linh
pham

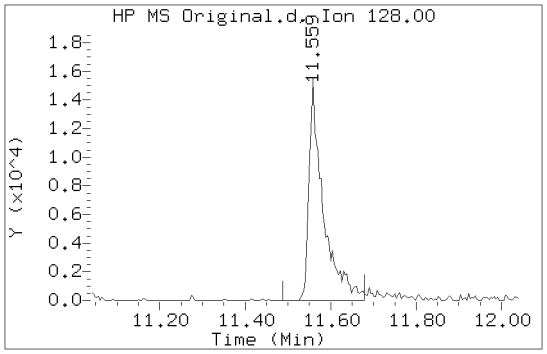


Naphthalene (91-20-3)

Reason Code:

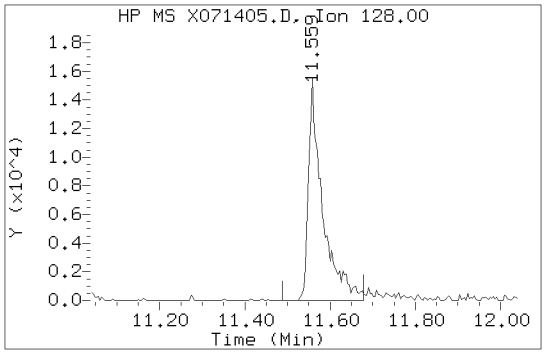
BEFORE

MASS
128
AREA
35806
HEIGHT
15488
20-Jul-2023
15:04
linh
pham



AFTER

MASS
128
AREA
35806
HEIGHT
15488
20-Jul-2023
15:04
linh
pham

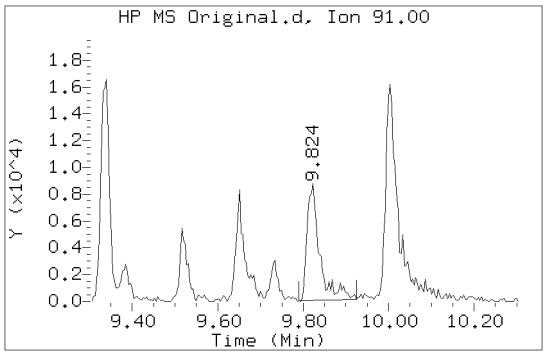


Benzyl Chloride (100-44-7)

Reason Code:

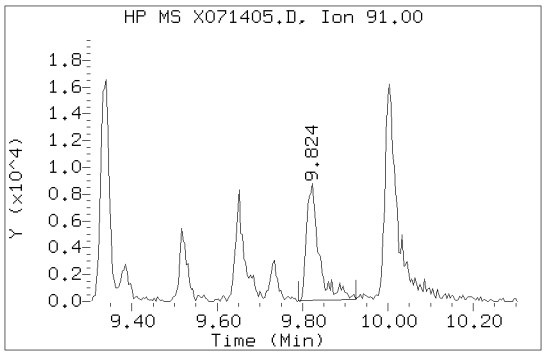
BEFORE

MASS
91
AREA
17851
HEIGHT
8726
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
17851
HEIGHT
8726
20-Jul-2023
15:04
linh
pham



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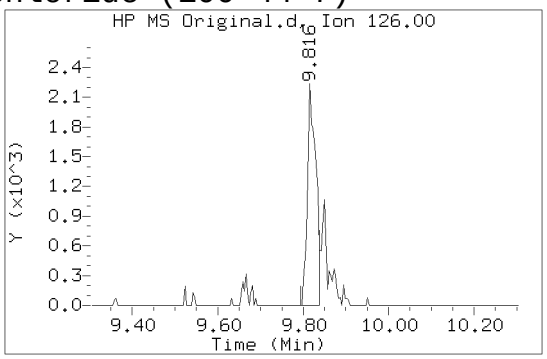
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

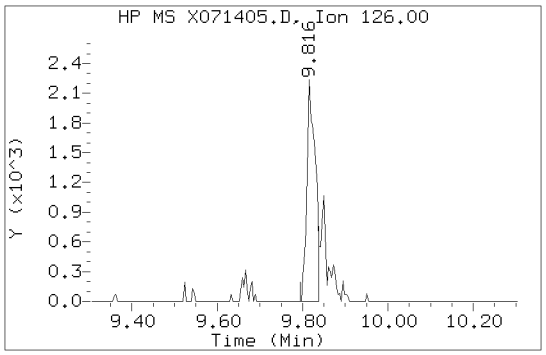
Benzyl Chloride (100-44-7)

Reason Code:

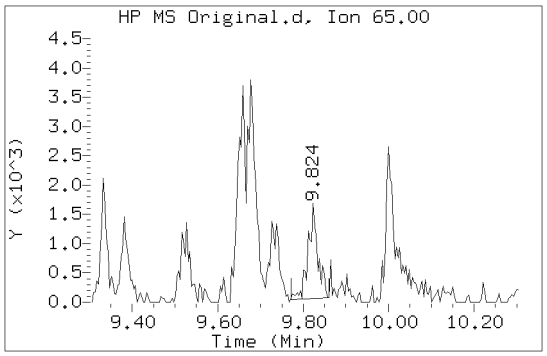
BEFORE
MASS
126
AREA
3073
HEIGHT
2237
20-Jul-2023
15:04
linh
pham



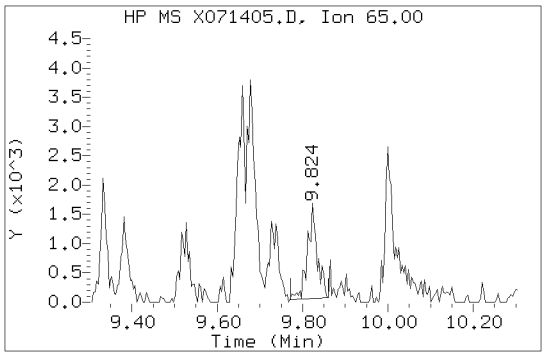
AFTER
MASS
126
AREA
3073
HEIGHT
2237
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
65
AREA
2588
HEIGHT
1635
20-Jul-2023
15:04
linh
pham



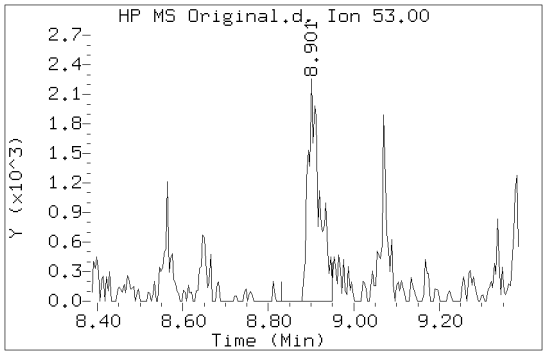
AFTER
MASS
65
AREA
2588
HEIGHT
1635
20-Jul-2023
15:04
linh
pham



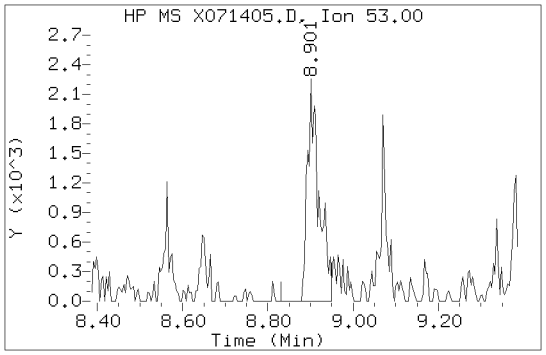
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

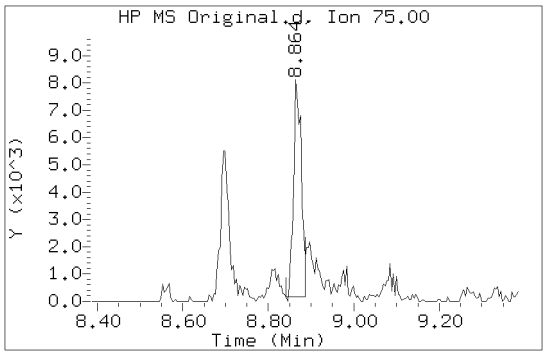
BEFORE
MASS
53
AREA
4279
HEIGHT
2257
20-Jul-2023
15:04
linh
pham



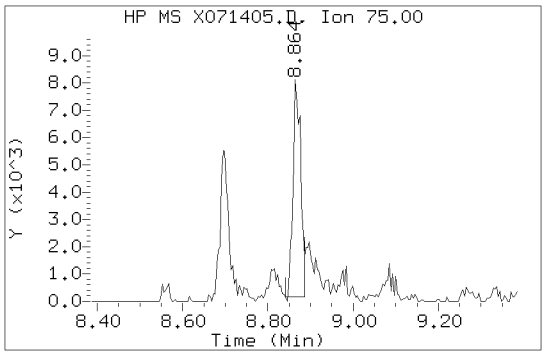
AFTER
MASS
53
AREA
4279
HEIGHT
2257
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
75
AREA
10144
HEIGHT
7958
20-Jul-2023
15:04
linh
pham



AFTER
MASS
75
AREA
10144
HEIGHT
7958
20-Jul-2023
15:04
linh
pham



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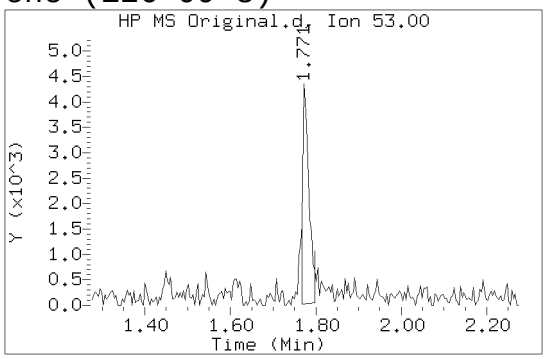
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

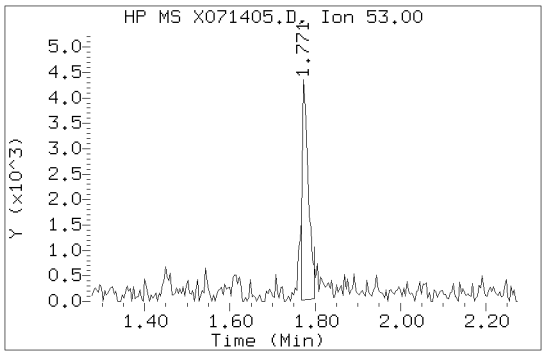
Chloroprene (126-99-8)

Reason Code:

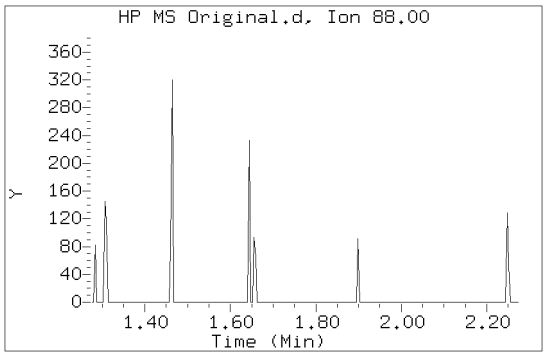
BEFORE
MASS
53
AREA
4560
HEIGHT
4328
20-Jul-2023
15:04
linh
pham



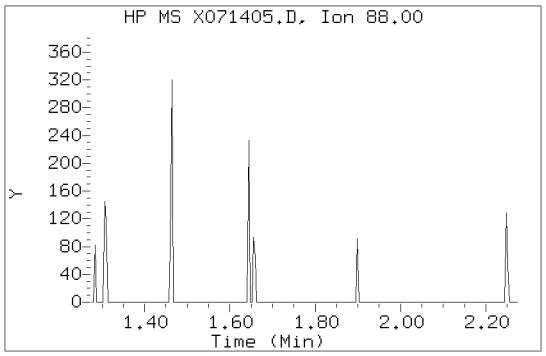
AFTER
MASS
53
AREA
4560
HEIGHT
4328
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



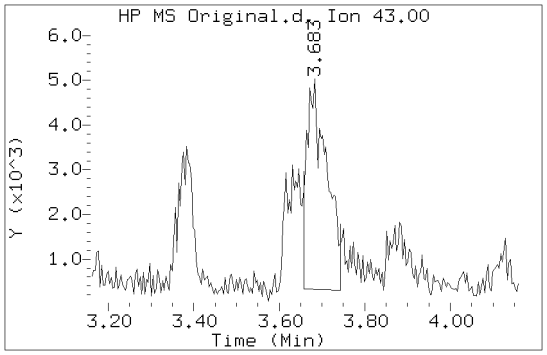
AFTER
MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



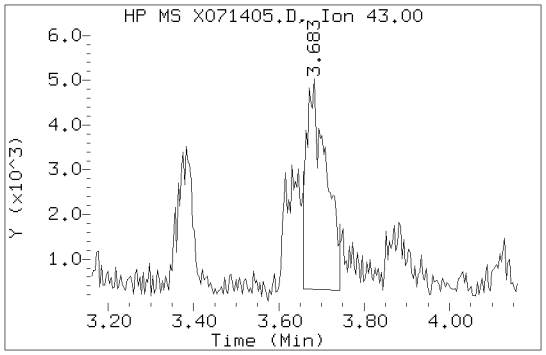
Ethyl Acetate (141-78-6)

Reason Code:

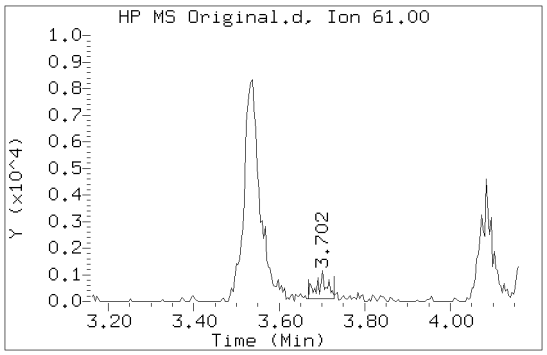
BEFORE
MASS
43
AREA
15481
HEIGHT
4704
20-Jul-2023
15:04
linh
pham



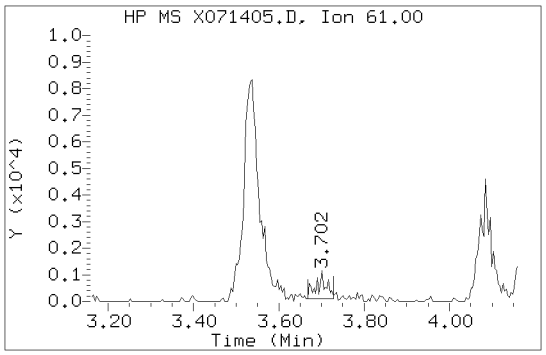
AFTER
MASS
43
AREA
15481
HEIGHT
4704
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
61
AREA
1598
HEIGHT
1061
20-Jul-2023
15:04
linh
pham



AFTER
MASS
61
AREA
1598
HEIGHT
1061
20-Jul-2023
15:04
linh
pham



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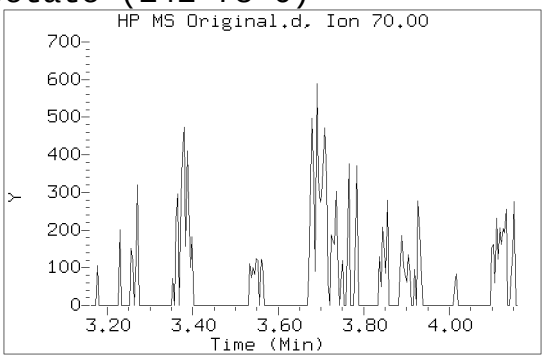
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

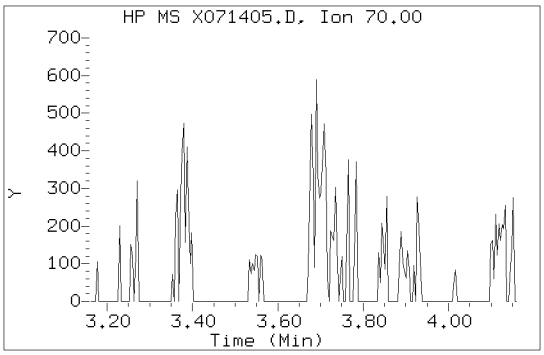
Ethyl Acetate (141-78-6)

Reason Code:

BEFORE
MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



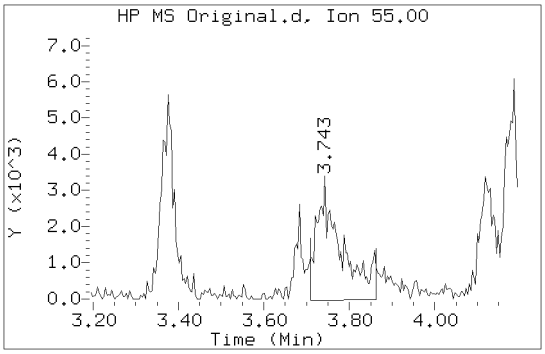
AFTER
MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



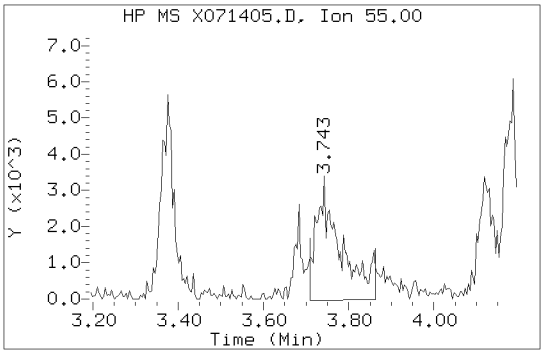
Methyl Acrylate (96-33-3)

Reason Code:

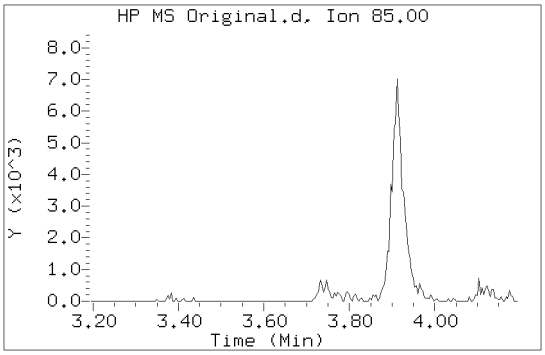
BEFORE
MASS
55
AREA
13406
HEIGHT
3436
20-Jul-2023
15:04
linh
pham



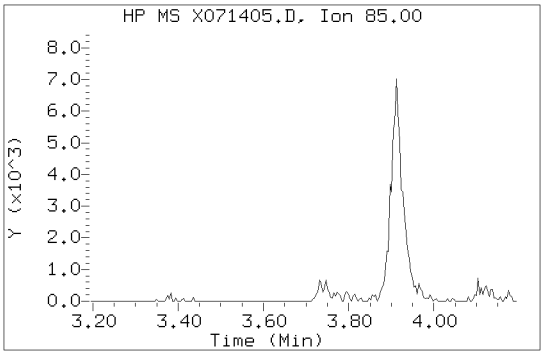
AFTER
MASS
55
AREA
13406
HEIGHT
3436
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



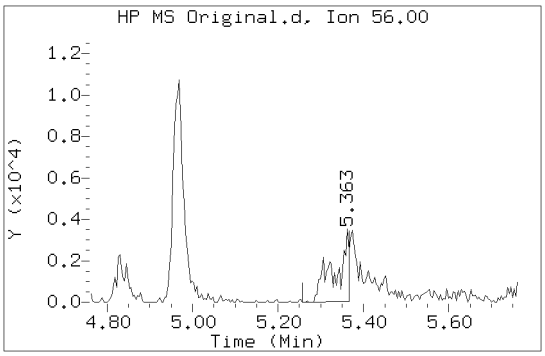
AFTER
MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



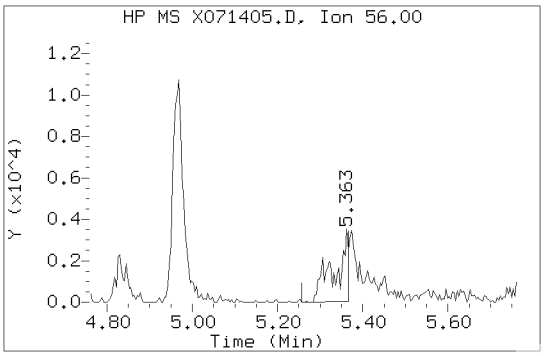
n-Butanol (71-36-3)

Reason Code:

BEFORE
MASS
56
AREA
7443
HEIGHT
3529
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
AREA
7443
HEIGHT
3529
20-Jul-2023
15:04
linh
pham



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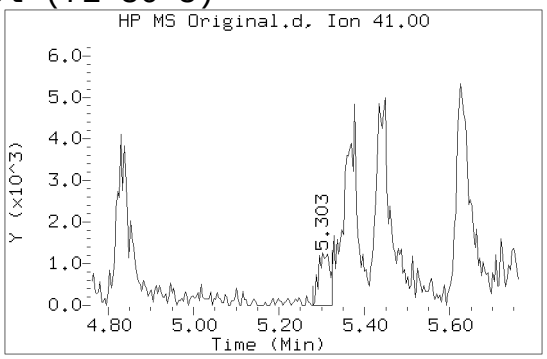
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

n-Butanol (71-36-3)

Reason Code:

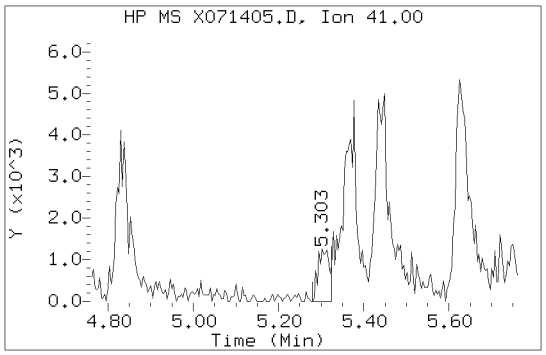
BEFORE

MASS
41
AREA
2384
HEIGHT
1261
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
2384
HEIGHT
1261
20-Jul-2023
15:04
linh
pham

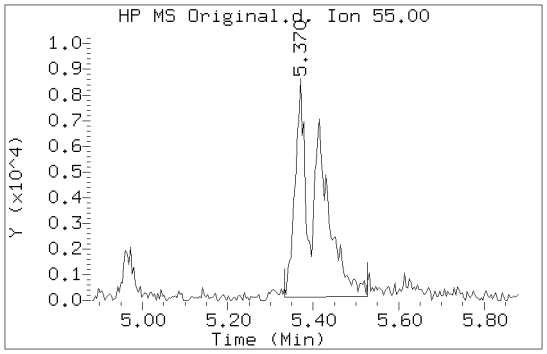


Ethyl Acrylate (140-88-5)

Reason Code:

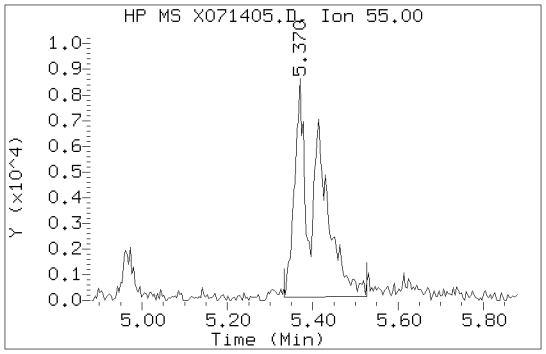
BEFORE

MASS
55
AREA
31450
HEIGHT
8507
20-Jul-2023
15:04
linh
pham



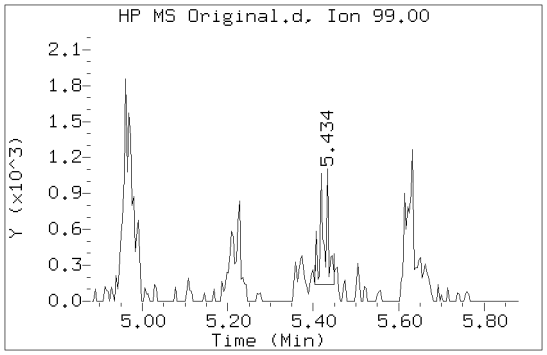
AFTER

MASS
55
AREA
31450
HEIGHT
8507
20-Jul-2023
15:04
linh
pham



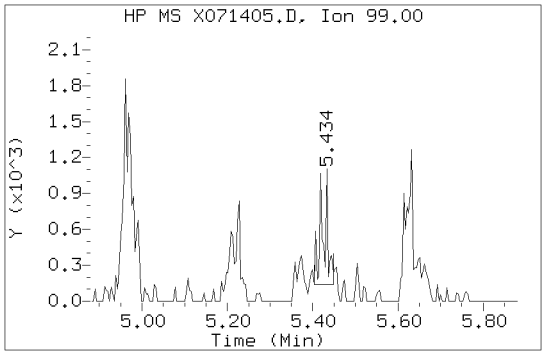
BEFORE

MASS
99
AREA
888
HEIGHT
965
20-Jul-2023
15:04
linh
pham



AFTER

MASS
99
AREA
888
HEIGHT
965
20-Jul-2023
15:04
linh
pham

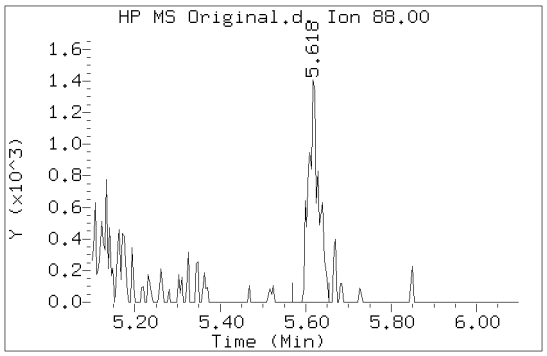


1,4-Dioxane ()

Reason Code:

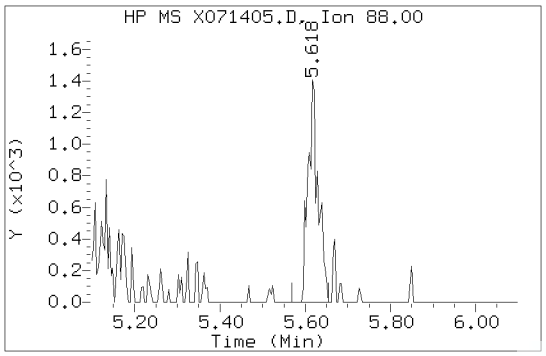
BEFORE

MASS
88
AREA
2323
HEIGHT
1407
20-Jul-2023
15:04
linh
pham



AFTER

MASS
88
AREA
2323
HEIGHT
1407
20-Jul-2023
15:04
linh
pham



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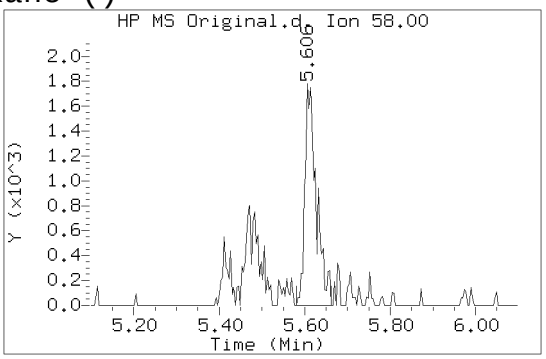
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

1,4-Dioxane ()

Reason Code:

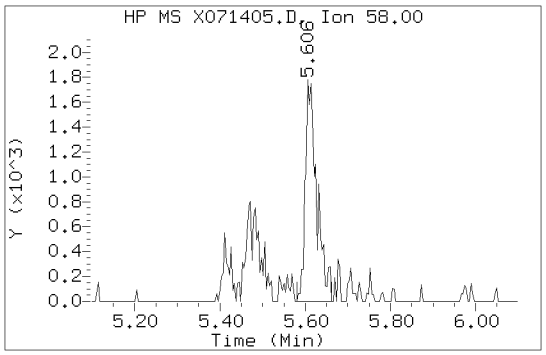
BEFORE

MASS
58
AREA
3341
HEIGHT
1781
20-Jul-2023
15:04
linh
pham



AFTER

MASS
58
AREA
3341
HEIGHT
1781
20-Jul-2023
15:04
linh
pham

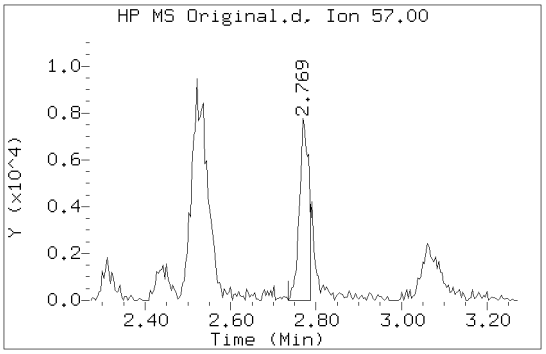


n-Hexane (110-54-3)

Reason Code:

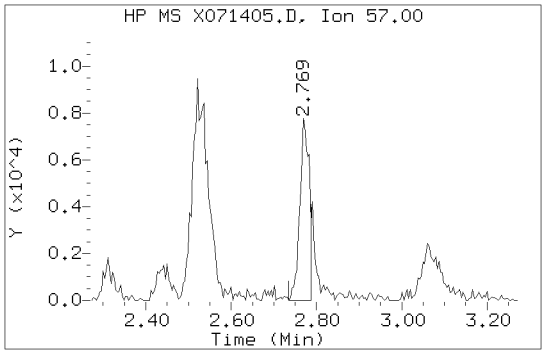
BEFORE

MASS
57
AREA
11984
HEIGHT
7776
20-Jul-2023
15:04
linh
pham



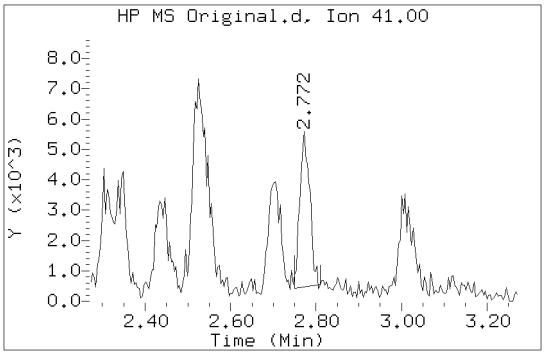
AFTER

MASS
57
AREA
11984
HEIGHT
7776
20-Jul-2023
15:04
linh
pham



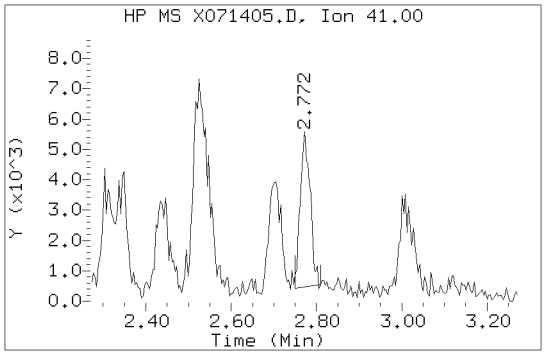
BEFORE

MASS
41
AREA
8381
HEIGHT
5113
20-Jul-2023
15:04
linh
pham



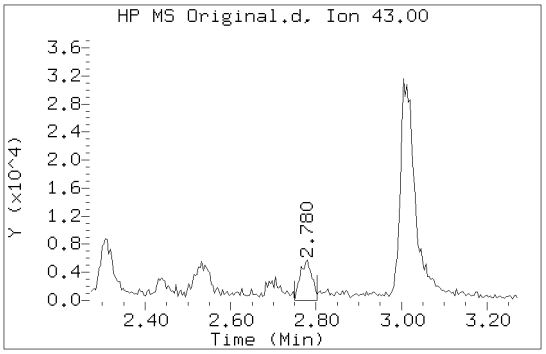
AFTER

MASS
41
AREA
8381
HEIGHT
5113
20-Jul-2023
15:04
linh
pham



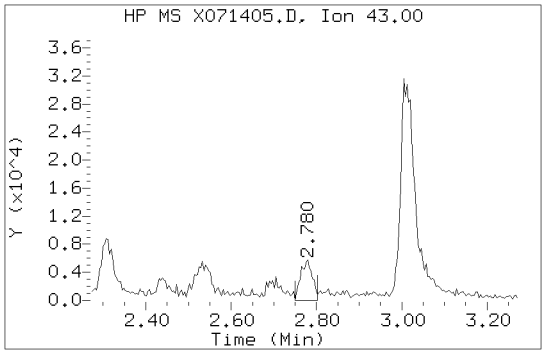
BEFORE

MASS
43
AREA
11133
HEIGHT
5721
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
11133
HEIGHT
5721
20-Jul-2023
15:04
linh
pham



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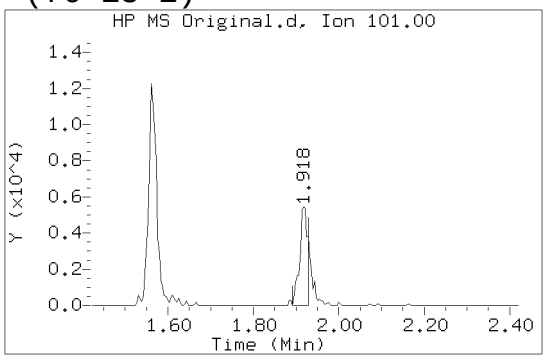
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

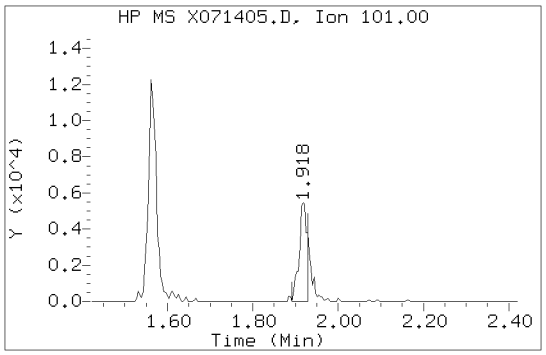
Freon TF (76-13-1)

Reason Code:

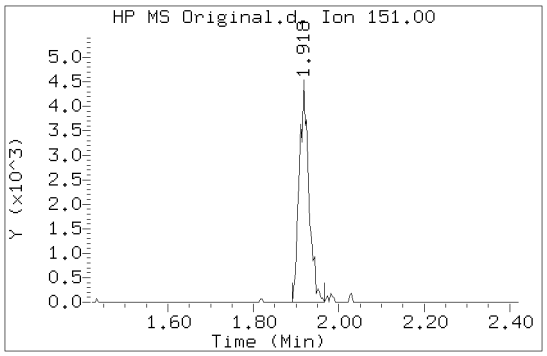
BEFORE
MASS
101
AREA
7195
HEIGHT
5473
20-Jul-2023
15:04
linh
pham



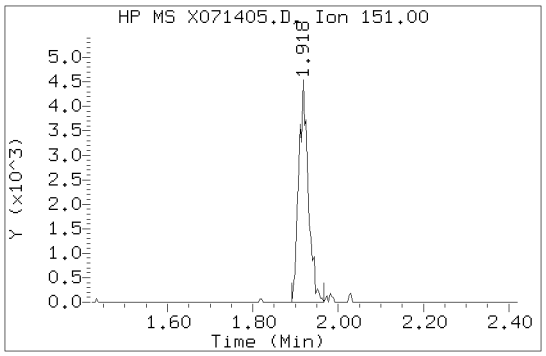
AFTER
MASS
101
AREA
7195
HEIGHT
5473
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
151
AREA
7204
HEIGHT
4541
20-Jul-2023
15:04
linh
pham



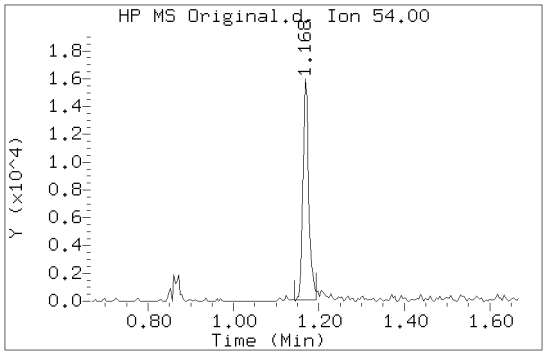
AFTER
MASS
151
AREA
7204
HEIGHT
4541
20-Jul-2023
15:04
linh
pham



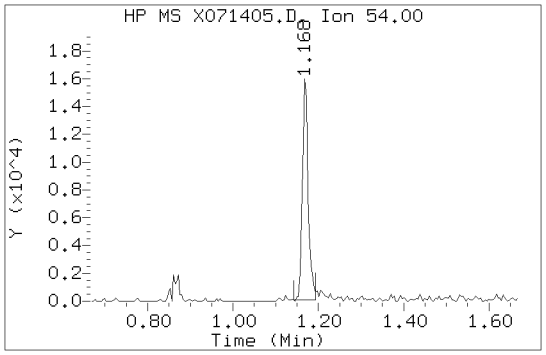
1,3-Butadiene (106-99-0)

Reason Code:

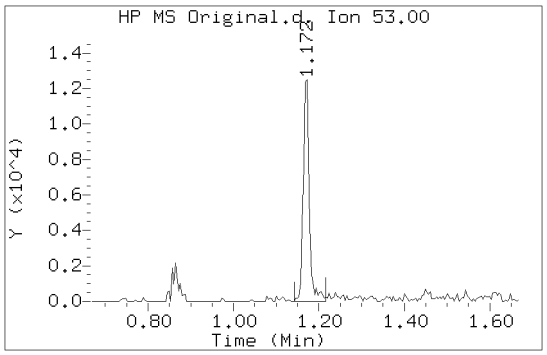
BEFORE
MASS
54
AREA
15351
HEIGHT
15893
20-Jul-2023
15:04
linh
pham



AFTER
MASS
54
AREA
15351
HEIGHT
15893
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
53
AREA
12769
HEIGHT
12495
20-Jul-2023
15:04
linh
pham



AFTER
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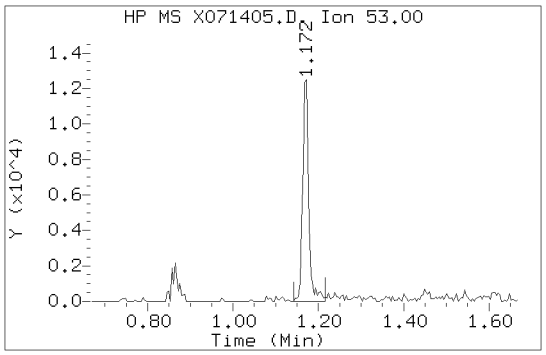
53
AREA
12769
HEIGHT
12495
20-Jul-2023
15:04
linh
pham



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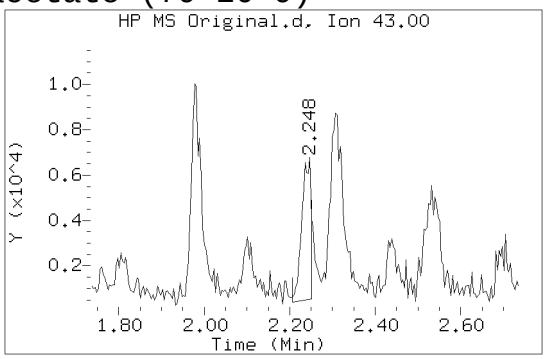
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Methyl acetate (79-20-9)

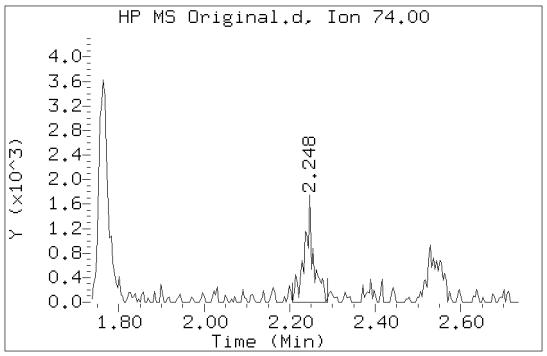
BEFORE

MASS
43
AREA
9491
HEIGHT
6252
20-Jul-2023
15:04
linh
pham



BEFORE

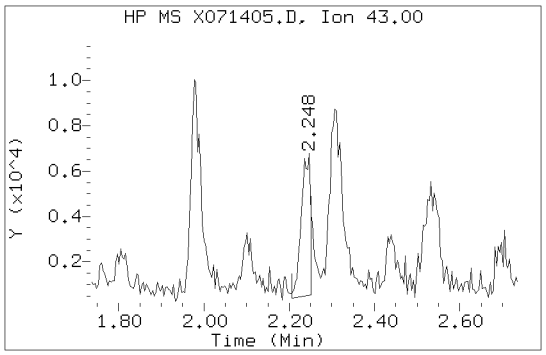
MASS
74
AREA
2612
HEIGHT
1756
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

MASS
43
AREA
9491
HEIGHT
6252
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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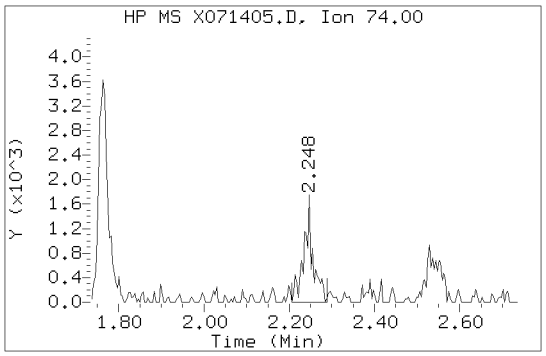
AREA
2612
HEIGHT
1756
20-Jul-2023
15:04
linh
pham



Methylcyclohexane (108-87-2)

BEFORE

MASS
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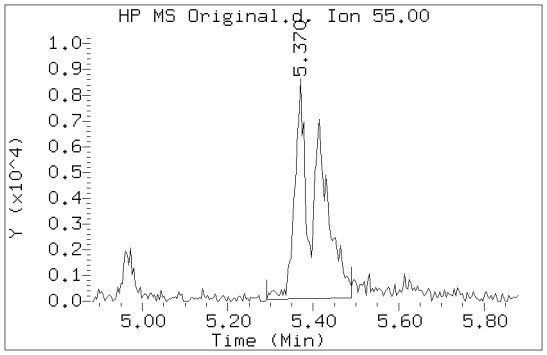
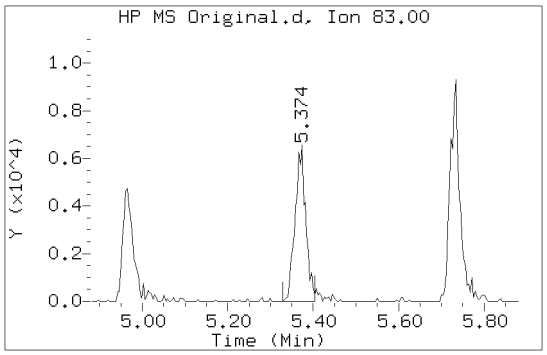
AREA
31142
HEIGHT
8535
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
83
AREA
11484
HEIGHT
6566
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

MASS
55
AREA
31142
HEIGHT
8535
20-Jul-2023
15:04
linh
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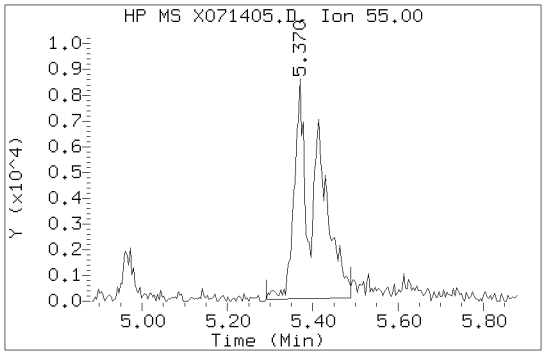

AFTER

MASS
83
AREA
11484
HEIGHT
6566
20-Jul-2023
15:04
linh
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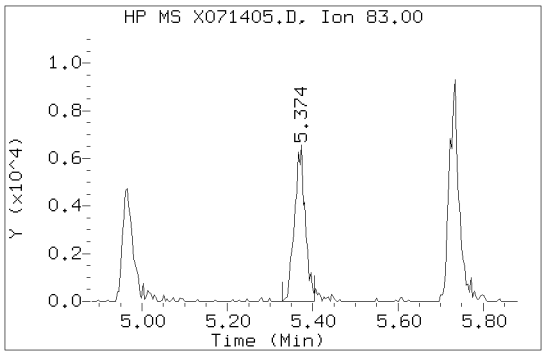

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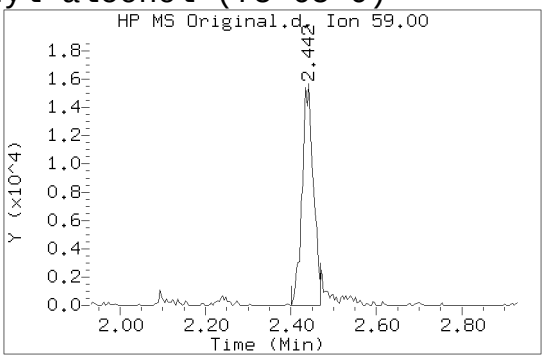
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Tert-butyl alcohol (75-65-0)

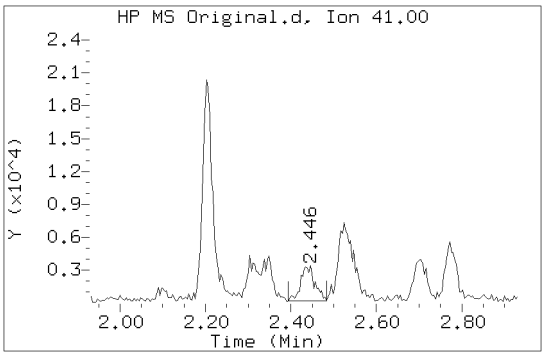
BEFORE

MASS
59
AREA
29280
HEIGHT
15681
20-Jul-2023
15:04
linh
pham



BEFORE

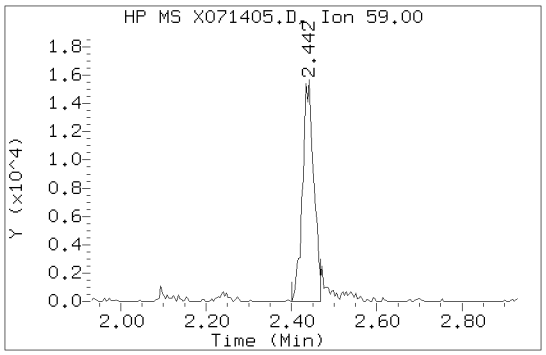
MASS
41
AREA
7457
HEIGHT
3224
20-Jul-2023
15:04
linh
pham



Reason Code:

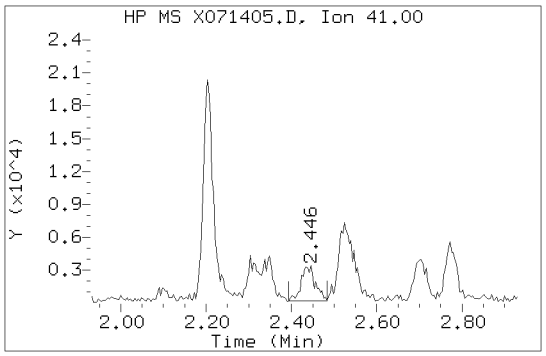
AFTER

MASS
59
AREA
29280
HEIGHT
15681
20-Jul-2023
15:04
linh
pham



AFTER

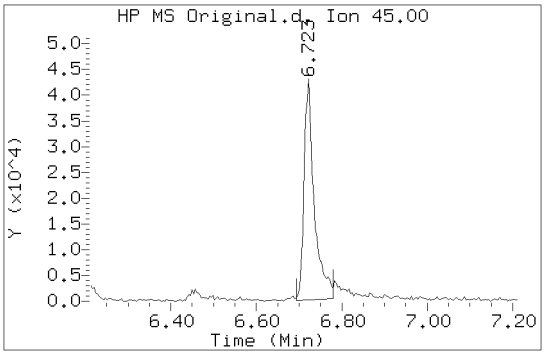
MASS
41
AREA
7457
HEIGHT
3224
20-Jul-2023
15:04
linh
pham



4-Methyl-2-pentanol (108-11-2)

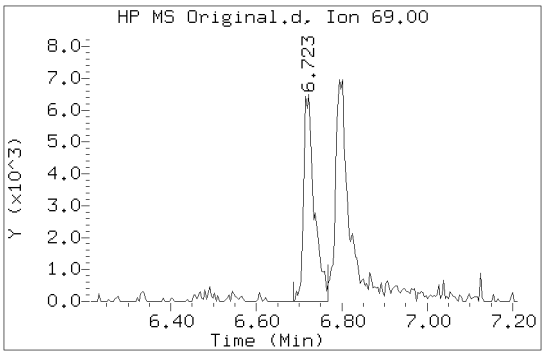
BEFORE

MASS
45
AREA
72210
HEIGHT
42882
20-Jul-2023
15:04
linh
pham



BEFORE

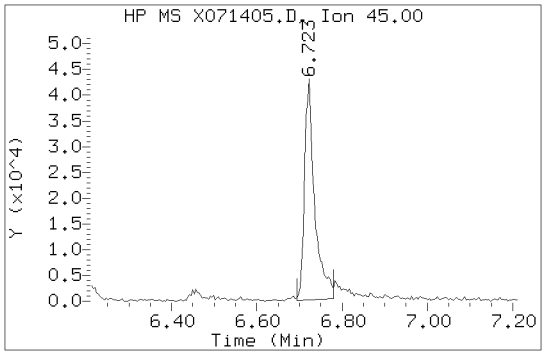
MASS
69
AREA
11484
HEIGHT
6492
20-Jul-2023
15:04
linh
pham



Reason Code:

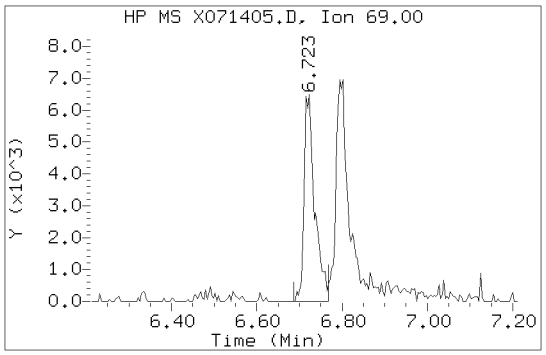
AFTER

MASS
45
AREA
72210
HEIGHT
42882
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
11484
HEIGHT
6492
20-Jul-2023
15:04
linh
pham



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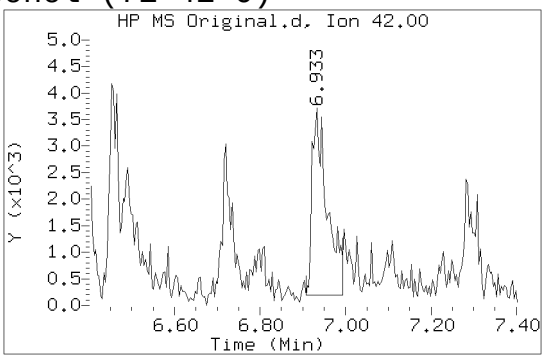
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Amyl alcohol (71-41-0)

Reason Code:

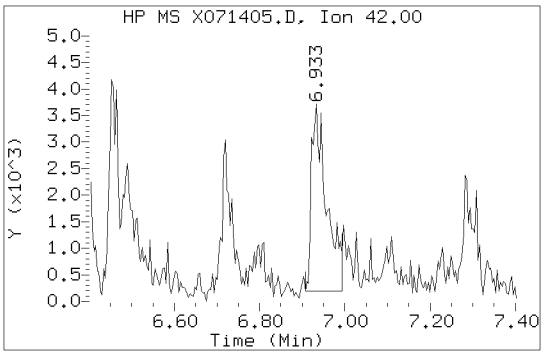
BEFORE

MASS
42
AREA
8579
HEIGHT
3524
20-Jul-2023
15:04
linh
pham



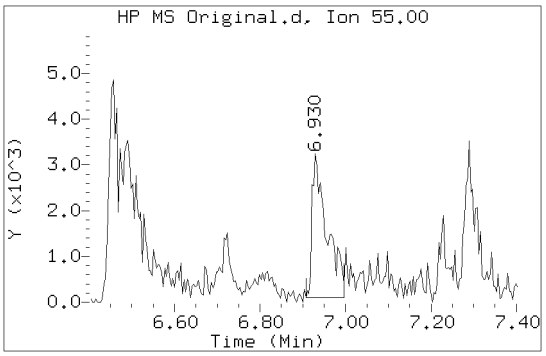
AFTER

MASS
42
AREA
8579
HEIGHT
3524
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
55
AREA
7591
HEIGHT
3153
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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7591
HEIGHT
3153
20-Jul-2023
15:04
linh
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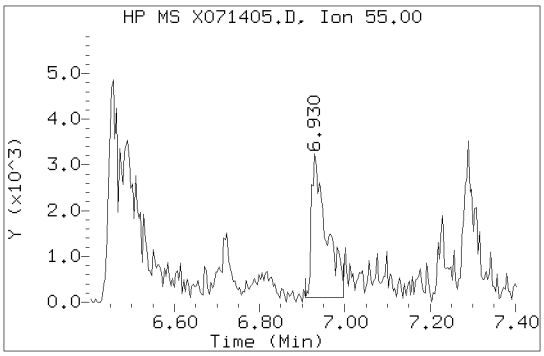

BEFORE

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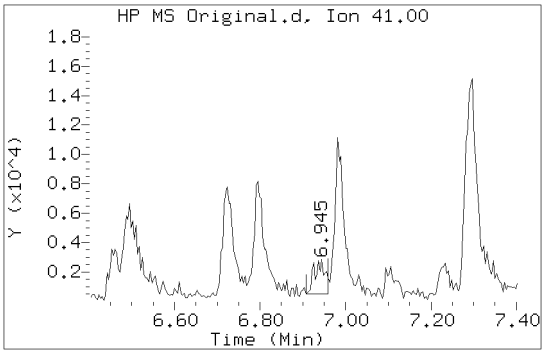
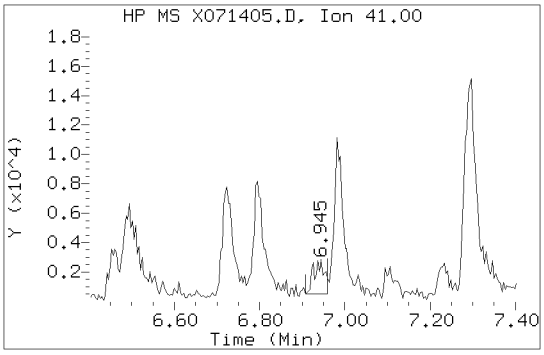
AREA
4124
HEIGHT
2354
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
4124
HEIGHT
2354
20-Jul-2023
15:04
linh
pham



Ethanol (64-17-5)

Reason Code:

BEFORE

MASS
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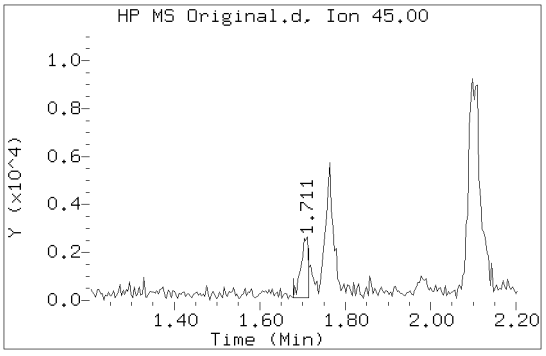
AREA
3219
HEIGHT
2559
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
3219
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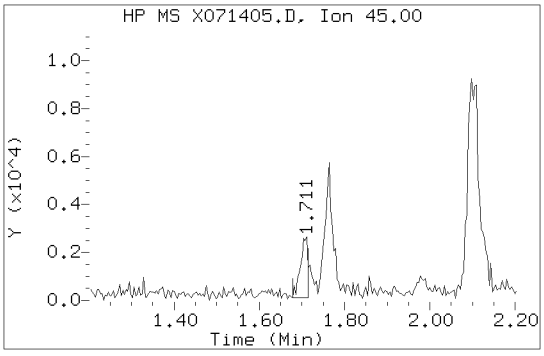
2559
20-Jul-2023
15:04
linh
pham



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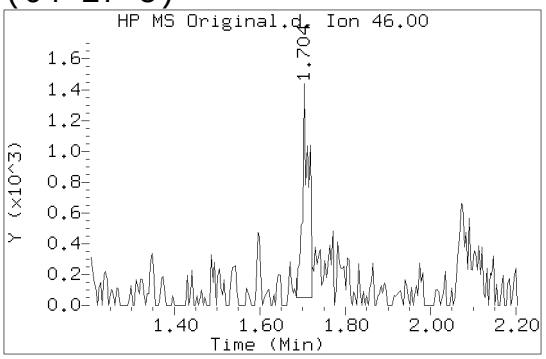
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Ethanol (64-17-5)

BEFORE

MASS
46
AREA
1433
HEIGHT
1387
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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1433
HEIGHT
1387
20-Jul-2023
15:04
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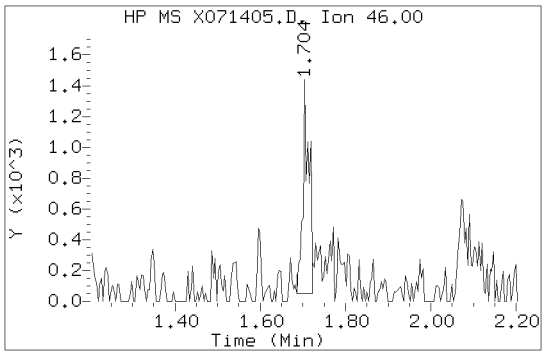

Reason Code:

BEFORE

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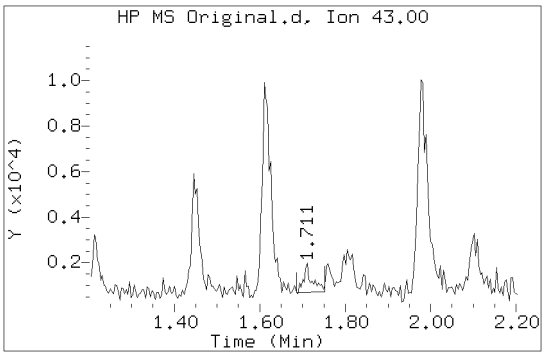
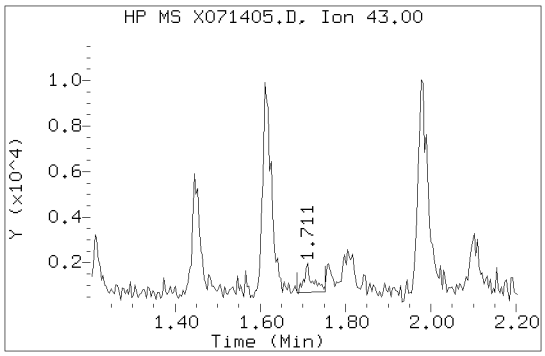
HEIGHT
1290
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
1776
HEIGHT
1290
20-Jul-2023
15:04
linh
pham



Reason Code:

tert-Butyl formate (762-75-4)

BEFORE

MASS
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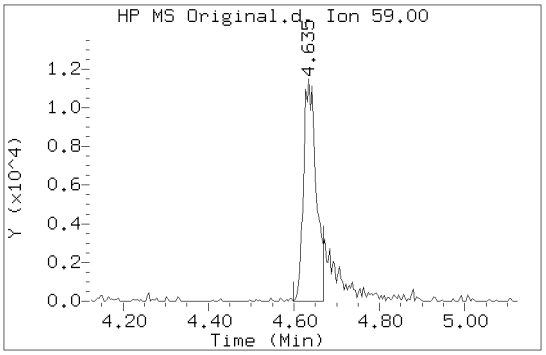
AREA
23857
HEIGHT
11486
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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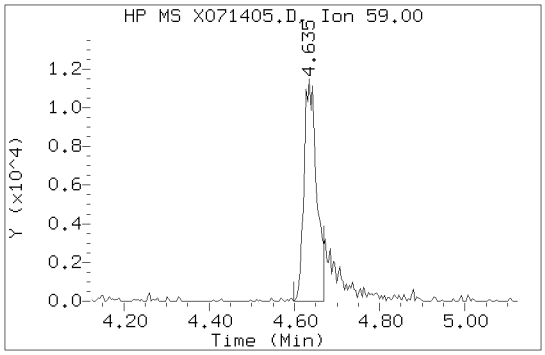
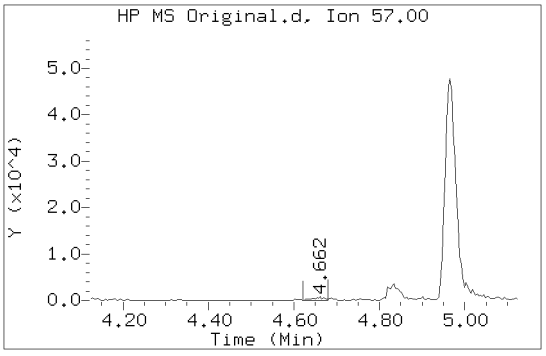
HEIGHT
11486
20-Jul-2023
15:04
linh
pham



Reason Code:

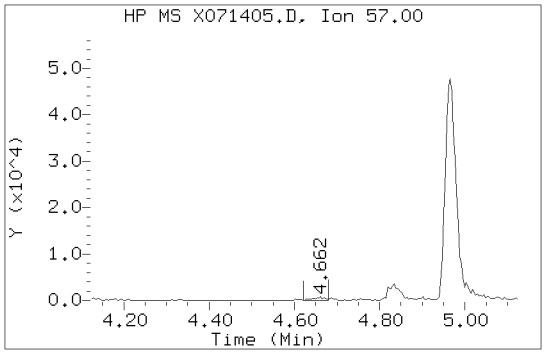
BEFORE

MASS
57
AREA
1334
HEIGHT
778
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
1334
HEIGHT
778
20-Jul-2023
15:04
linh
pham



Reason Code:

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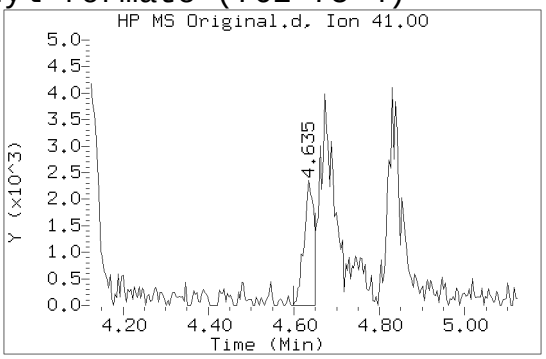
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

tert-Butyl formate (762-75-4)

Reason Code:

BEFORE

MASS
41
AREA
3833
HEIGHT
2355
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
3833
HEIGHT
2355
20-Jul-2023
15:04
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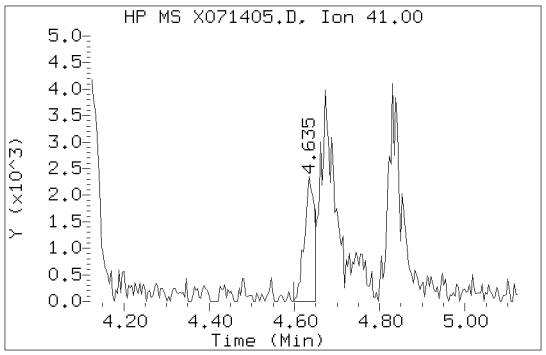
pham

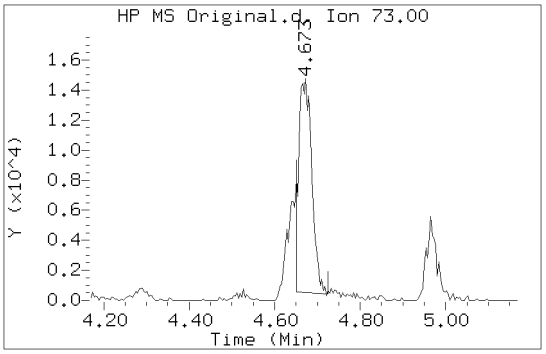


tert-Amyl methyl ether (974-05-08)

Reason Code:

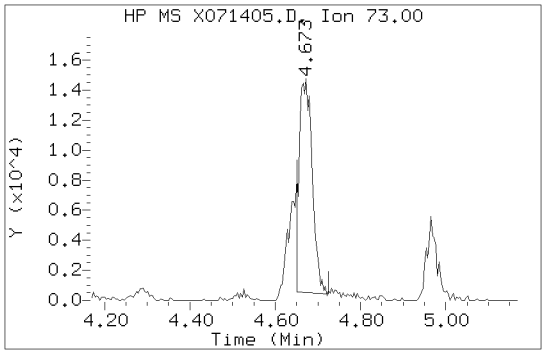
BEFORE

MASS
73
AREA
31345
HEIGHT
14253
20-Jul-2023
15:04
linh
pham



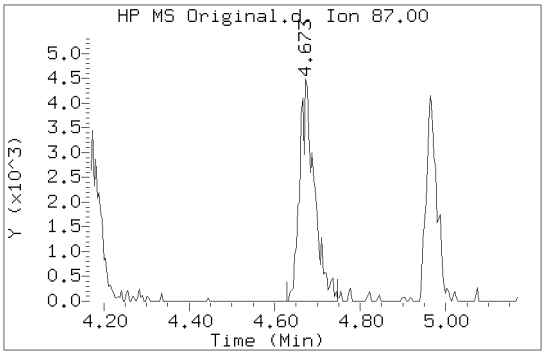
AFTER

MASS
73
AREA
31345
HEIGHT
14253
20-Jul-2023
15:04
linh
pham



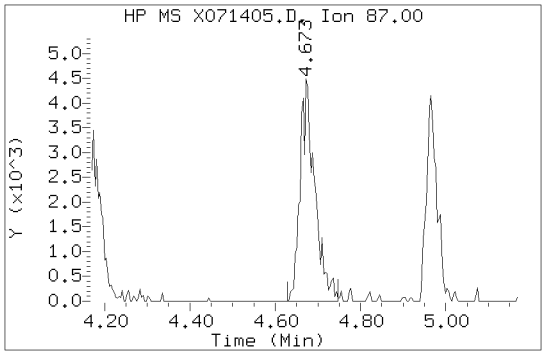
BEFORE

MASS
87
AREA
10923
HEIGHT
4489
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
10923
HEIGHT
4489
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
55
AREA
9755
HEIGHT
6135
20-Jul-2023
15:04
linh
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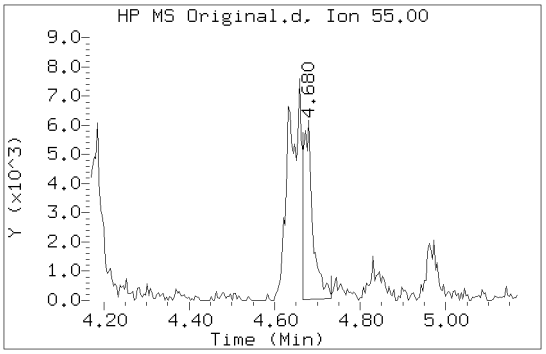
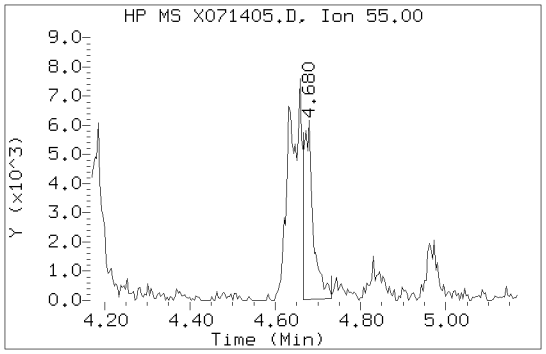


AFTER

MASS
55
AREA
9755
HEIGHT
6135
20-Jul-2023
15:04
linh
pham



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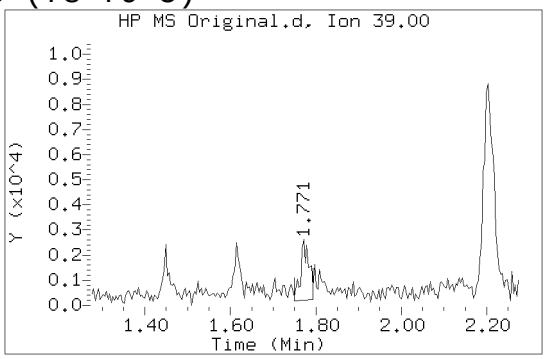
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

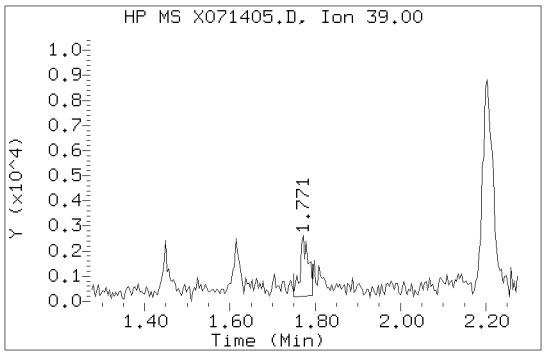
Isoprene (78-79-5)

Reason Code:

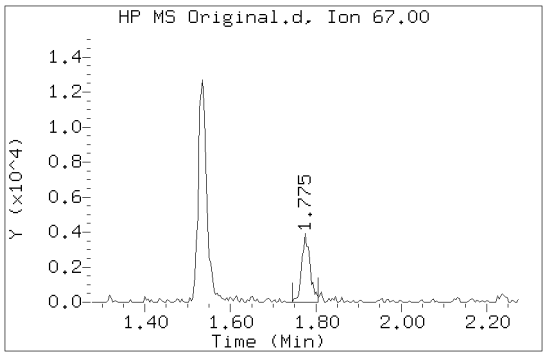
BEFORE
MASS
39
AREA
3408
HEIGHT
2427
20-Jul-2023
15:04
linh
pham



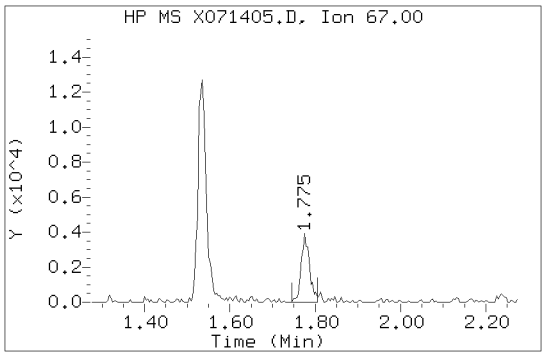
AFTER
MASS
39
AREA
3408
HEIGHT
2427
20-Jul-2023
15:04
linh
pham



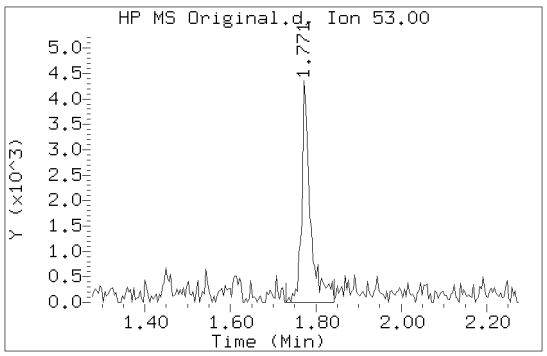
BEFORE
MASS
67
AREA
5482
HEIGHT
3925
20-Jul-2023
15:04
linh
pham



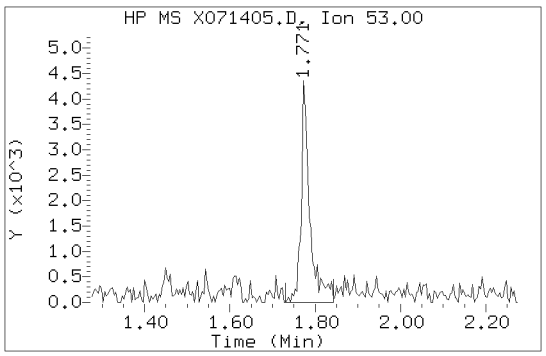
AFTER
MASS
67
AREA
5482
HEIGHT
3925
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
53
AREA
6318
HEIGHT
4358
20-Jul-2023
15:04
linh
pham



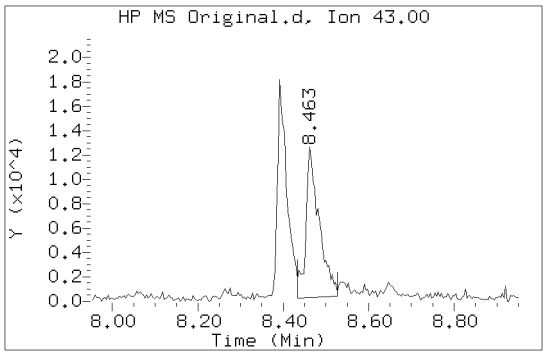
AFTER
MASS
53
AREA
6318
HEIGHT
4358
20-Jul-2023
15:04
linh
pham



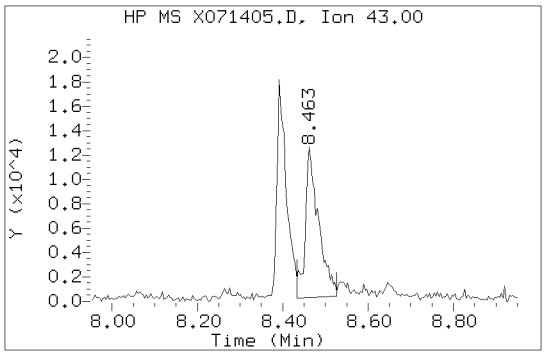
n-Amyl acetate (628-63-7)

Reason Code:

BEFORE
MASS
43
AREA
26886
HEIGHT
12364
20-Jul-2023
15:04
linh
pham



AFTER
MASS
43
AREA
26886
HEIGHT
12364
20-Jul-2023
15:04
linh
pham



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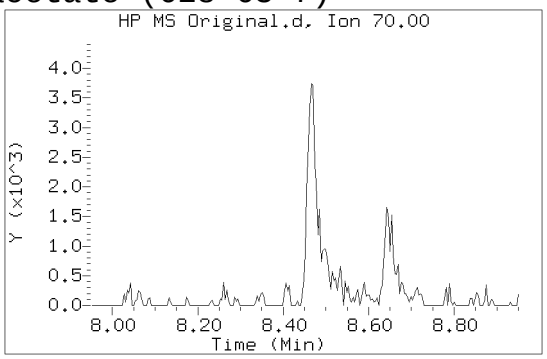
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

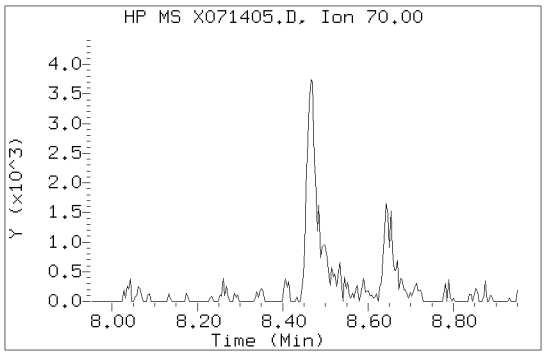
n-Amyl acetate (628-63-7)

Reason Code:

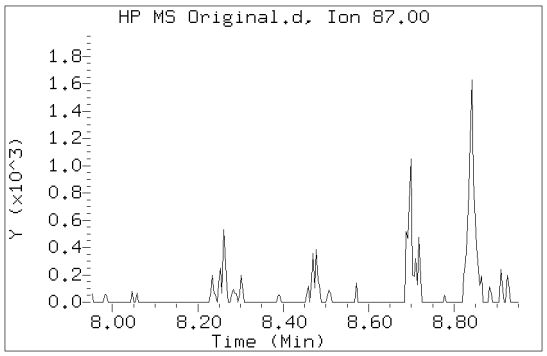
BEFORE
MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



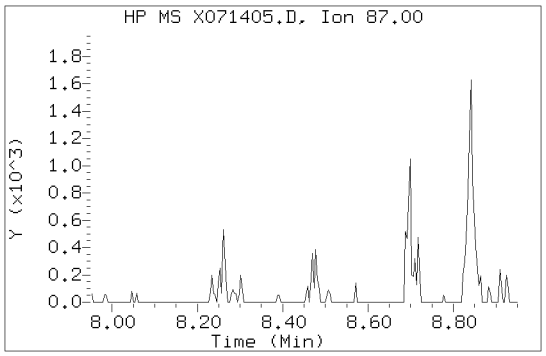
AFTER
MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
87
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



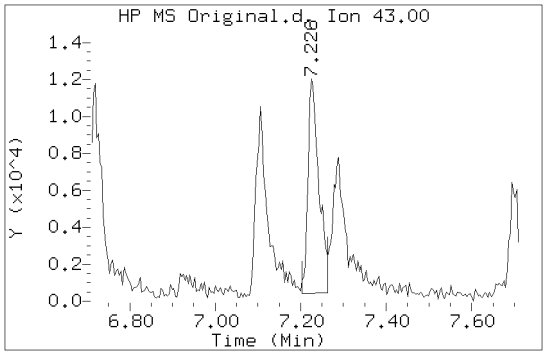
AFTER
MASS
87
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



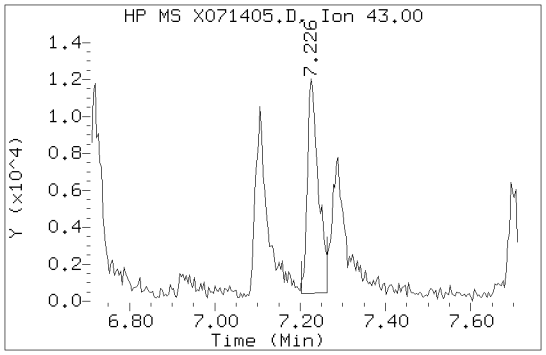
n-Butyl acetate (123-86-4)

Reason Code:

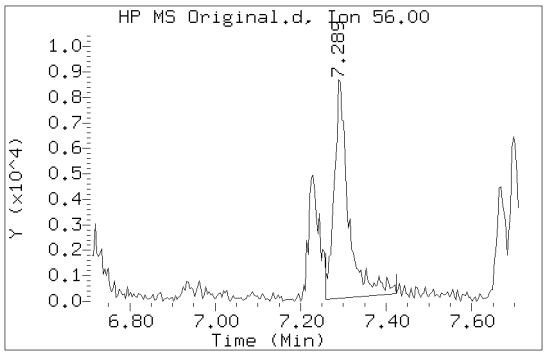
BEFORE
MASS
43
AREA
20825
HEIGHT
11598
20-Jul-2023
15:04
linh
pham



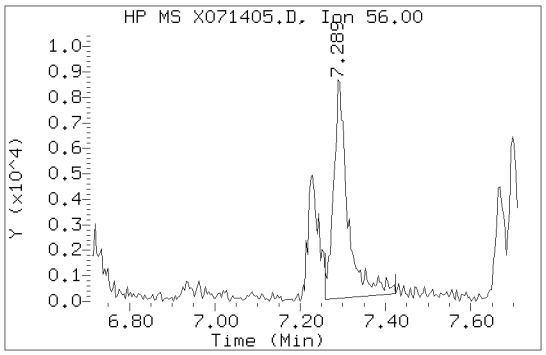
AFTER
MASS
43
AREA
20825
HEIGHT
11598
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
56
AREA
20012
HEIGHT
8570
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
AREA
20012
HEIGHT
8570
20-Jul-2023
15:04
linh
pham



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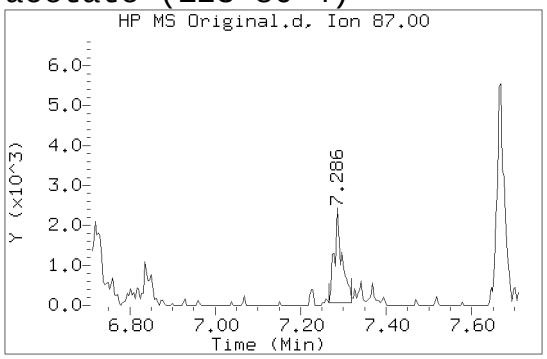
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

n-Butyl acetate (123-86-4)

Reason Code:

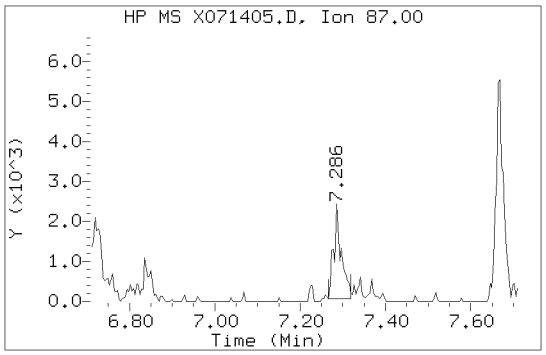
BEFORE

MASS
87
AREA
2958
HEIGHT
2373
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
2958
HEIGHT
2373
20-Jul-2023
15:04
linh
pham

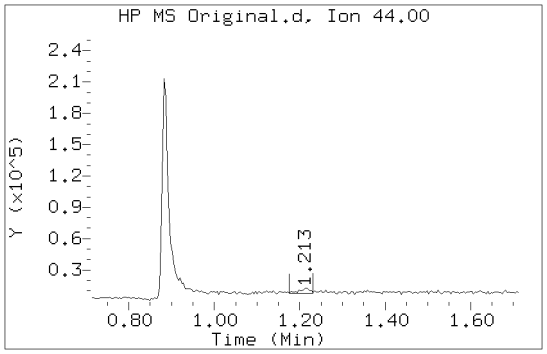


Acetaldehyde (75-07-0)

Reason Code:

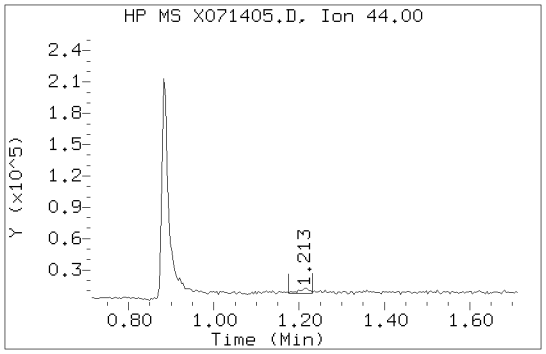
BEFORE

MASS
44
AREA
8114
HEIGHT
5042
20-Jul-2023
15:04
linh
pham



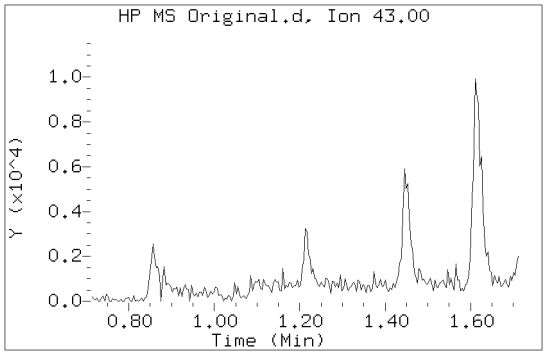
AFTER

MASS
44
AREA
8114
HEIGHT
5042
20-Jul-2023
15:04
linh
pham



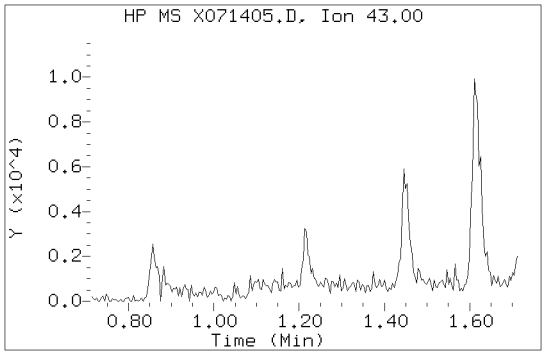
BEFORE

MASS
43
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



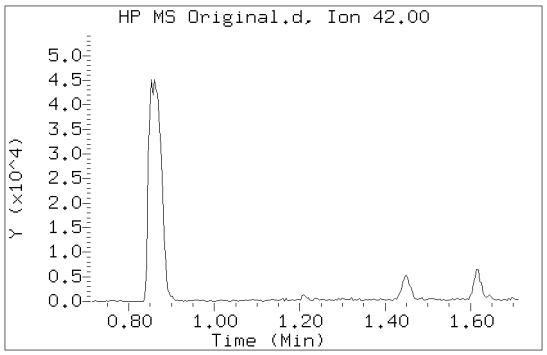
AFTER

MASS
43
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



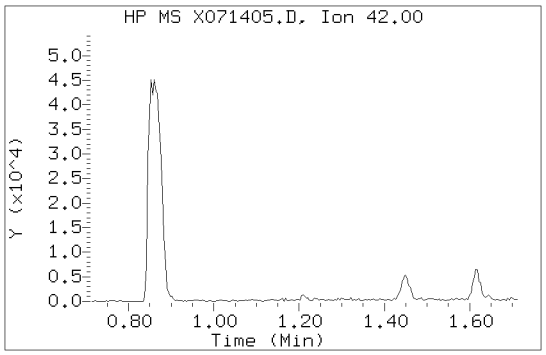
BEFORE

MASS
42
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
42
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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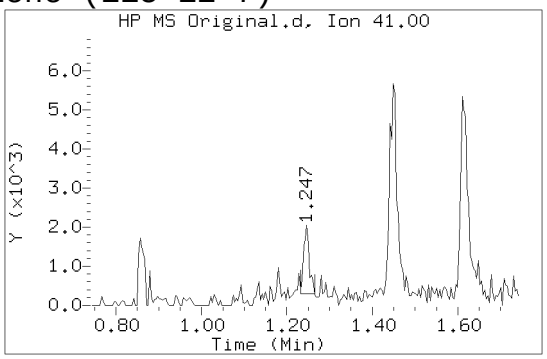
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

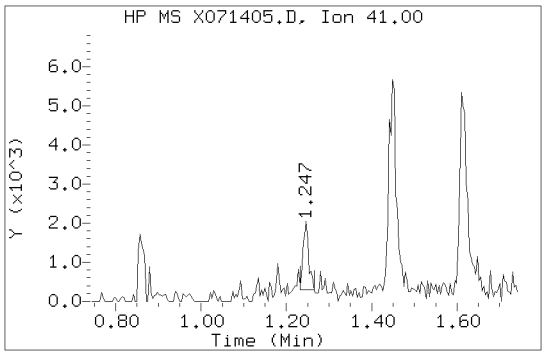
Isobutylene (115-11-7)

Reason Code:

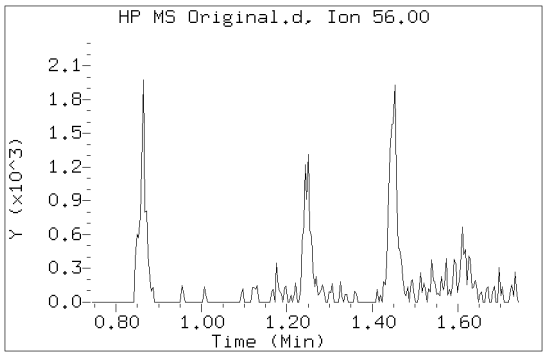
BEFORE
MASS
41
AREA
1654
HEIGHT
1749
20-Jul-2023
15:04
linh
pham



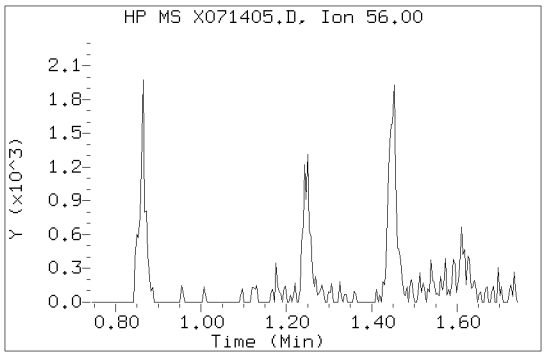
AFTER
MASS
41
AREA
1654
HEIGHT
1749
20-Jul-2023
15:04
linh
pham



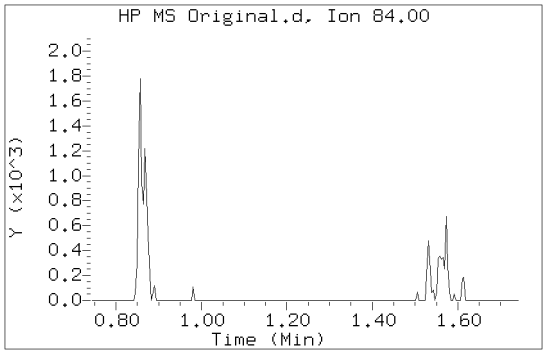
BEFORE
MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



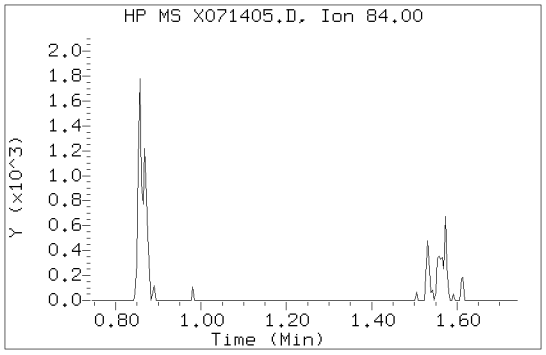
AFTER
MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



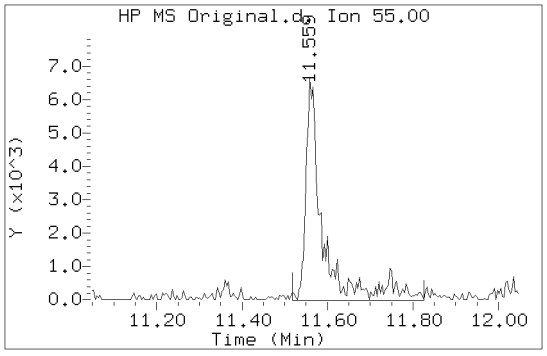
AFTER
MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



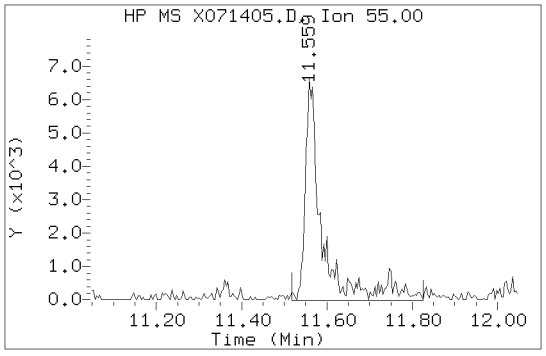
2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

BEFORE
MASS
55
AREA
18101
HEIGHT
6633
20-Jul-2023
15:04
linh
pham



AFTER
MASS
55
AREA
18101
HEIGHT
6633
20-Jul-2023
15:04
linh
pham



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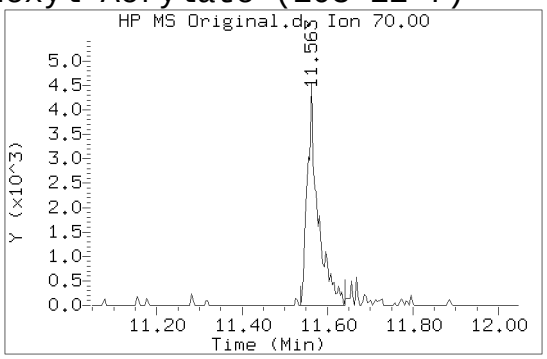
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

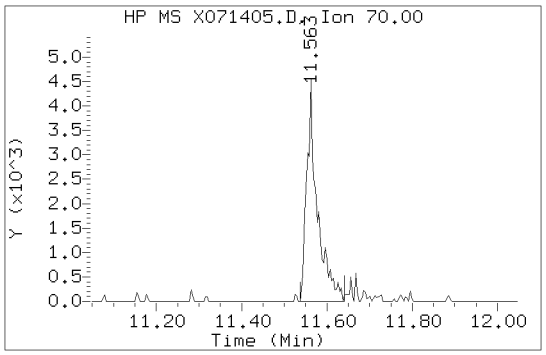
BEFORE

MASS
70
AREA
7844
HEIGHT
4538
20-Jul-2023
15:04
linh
pham



AFTER

MASS
70
AREA
7844
HEIGHT
4538
20-Jul-2023
15:04
linh
pham

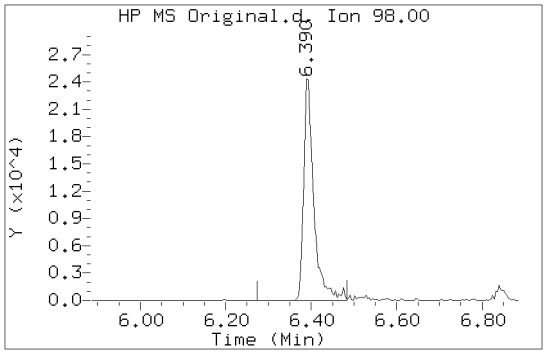


Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

MASS
98
AREA
41058
HEIGHT
24360
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
AREA
41058
HEIGHT
24360
20-Jul-2023
15:04
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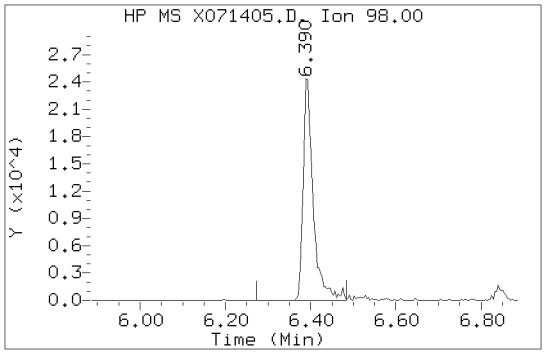

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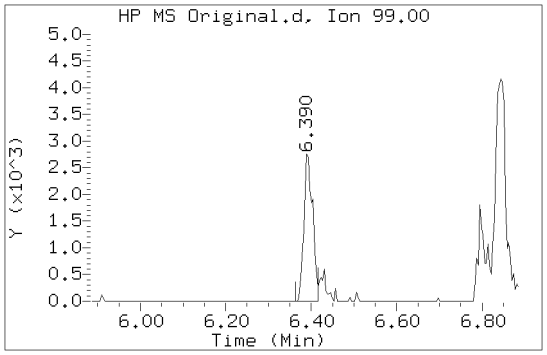

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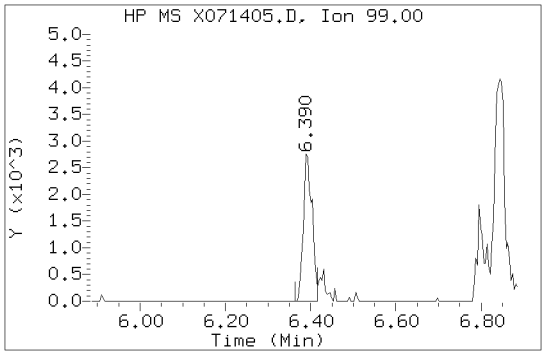

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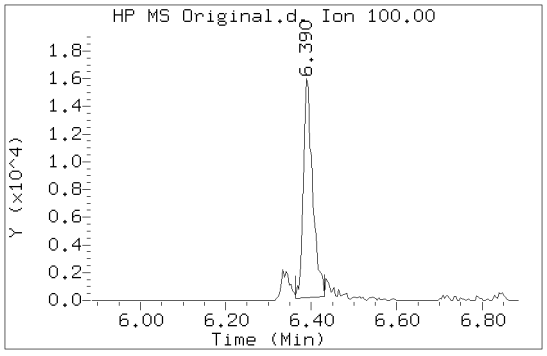

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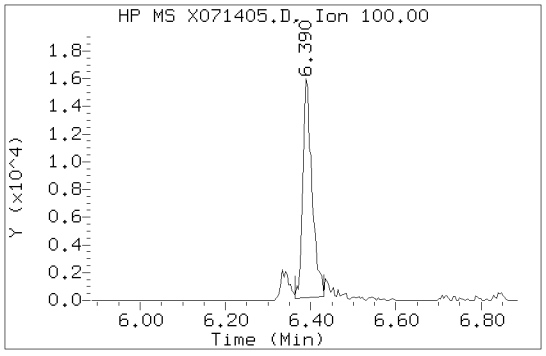

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071406.D Page 1
Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071406.D
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Inj Date : 14-JUL-2023 13:43
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\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 13:23 Cal File: X071405.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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	4.177	4.177	(1.000)	515309	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	21541	5.00000	5.09
3	Chloromethane	50	1.081	1.081	(0.259)	35282	5.00000	4.53(M)
4	Propionitrile	54	3.671	3.671	(0.879)	48685	50.0000	47.69(a)
5	Vinyl Chloride	62	1.149	1.149	(0.275)	31539	5.00000	4.72
6	Bromomethane	94	1.343	1.343	(0.322)	13035	5.00000	4.72(M)
7	Chloroethane	64	1.407	1.407	(0.337)	17933	5.00000	4.71
8	Trichlorofluoromethane	101	1.565	1.565	(0.375)	30820	5.00000	4.56
9	Acrolein	56	1.868	1.868	(0.447)	2341	10.0000	12.99(aH)
10	Acetone	43	1.977	1.977	(0.473)	26152	10.0000	8.56
11	1,1-Dichloroethene	96	1.917	1.917	(0.459)	18372	5.00000	4.86
12	Isobutyl Alcohol	43	4.684	4.684	(1.121)	97691	100.000	100.01(a)
13	Acetonitrile	39	2.206	2.206	(0.528)	34072	50.0000	47.15(a)
14	Allyl Chloride	41	2.206	2.206	(0.528)	83408	5.00000	4.92(a)
15	Iodomethane	142	2.029	2.029	(0.486)	29645	10.0000	9.67(M)
16	Acrylonitrile	53	2.539	2.539	(0.608)	26399	10.0000	10.51
17	Methylene Chloride	84	2.307	2.307	(0.552)	25734	5.00000	4.52
18	Methyl tert-butyl ether	73	2.543	2.543	(0.609)	69208	5.00000	4.92
19	Carbon Disulfide	76	2.074	2.074	(0.497)	111855	10.0000	9.42
20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	22471	5.00000	5.14

21 Vinyl Acetate	43	3.008	3.008 (0.720)	178820	10.0000	9.90
22 1,1-Dichloroethane	63	2.925	2.925 (0.700)	46539	5.00000	4.85

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.778	1.778	(0.426)	11212	5.00000	4.83(aM)
	24 2-Butanone	43	3.608	3.608	(0.864)	25624	10.0000	9.33(M)
	25 Methacrylonitrile	41	3.848	3.848	(0.921)	30821	5.00000	4.63(a)
	26 2,2-Dichloropropane	77	3.506	3.506	(0.839)	34523	5.00000	4.82
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.845)	27063	5.00000	4.86
	28 Chloroform	83	3.908	3.908	(0.935)	45886	5.00000	4.67
	29 Bromochloromethane	128	3.803	3.803	(0.910)	15326	5.00000	4.91
$	30 Dibromofluoromethane	113	4.102	4.102	(0.982)	26145	5.00000	4.85
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	34806	5.00000	4.61
	32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	28199	5.00000	4.24
	33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	41945	5.00000	4.67
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	30432	5.00000	4.54
$	35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.072)	31653	5.00000	4.80
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	815041	50.0000	
	37 Benzene	78	4.515	4.515	(0.909)	91790	5.00000	4.70
	38 Trichloroethene	130	5.212	5.212	(1.050)	24824	5.00000	4.50(a)
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	35030	5.00000	4.69(a)
	40 Methyl Methacrylate	41	5.617	5.617	(1.345)	30166	5.00000	4.85(a)
	41 2-Chloroethylvinyl ether	63	6.056	6.056	(1.220)	21401	10.0000	9.38(a)
	42 1,2-Dichloropropane	63	5.437	5.437	(1.095)	30550	5.00000	4.87(a)
	43 2-Nitropropane	43	5.981	5.981	(1.432)	8304	5.00000	4.05(a)
	44 Dibromomethane	93	5.557	5.557	(1.119)	16922	5.00000	4.76(a)
	45 4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	71437	10.0000	9.87
	46 cis-1,3-Dichloropropene	75	6.160	6.160	(1.241)	38467	5.00000	4.48(a)
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	735002	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	95273	5.00000	5.03(M)
	49 Ethyl Methacrylate	69	6.715	6.715	(1.353)	26485	5.00000	4.96(a)
	50 Toluene	91	6.445	6.445	(0.841)	96792	5.00000	4.89(a)
	51 trans-1,3-Dichloropropene	75	6.685	6.685	(1.347)	33424	5.00000	4.62(a)
	52 2-Hexanone	43	7.098	7.098	(0.926)	48930	10.0000	10.29
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	20880	5.00000	4.97(a)
	54 1,3-Dichloropropane	76	6.981	6.981	(0.911)	43005	5.00000	5.01
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	28644	5.00000	4.72(a)
	56 Tetrachloroethene	164	6.929	6.929	(0.904)	19962	5.00000	4.88(a)
	57 1,2-Dibromoethane	107	7.263	7.263	(0.947)	25723	5.00000	5.36
	58 1-Chlorohexane	55	7.697	7.697	(1.550)	29679	5.00000	4.53(a)
	59 Chlorobenzene	112	7.694	7.694	(1.003)	65984	5.00000	4.77(a)
	60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	25299	5.00000	4.67(a)
	61 Ethylbenzene	106	7.799	7.799	(1.017)	32420	5.00000	4.67(a)
	62 m,p-Xylenes	106	7.907	7.907	(1.031)	79790	10.0000	9.17(a)
	63 o-Xylene	106	8.241	8.241	(1.075)	37444	5.00000	4.54(a)
	64 Styrene	104	8.267	8.267	(1.078)	65591	5.00000	4.56(a)
	66 Bromoform	173	8.413	8.413	(1.097)	17937	5.00000	4.61(a)
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	96601	5.00000	4.56(a)
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	33128	5.00000	5.01
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	40007	5.00000	5.08
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	393512	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	27801	5.00000	5.30
	72 trans-1,4-Dichloro-2-butene	53	8.893	8.893	(1.160)	9958	5.00000	4.45(aM)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	105135	5.00000	4.42(a)
	74 Bromobenzene	156	8.811	8.811	(0.912)	30146	5.00000	4.89(a)
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	77581	5.00000	4.35(a)

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	73357	5.00000	4.57(a)
77	4-Chlorotoluene	91	9.073	9.073 (0.939)	83281	5.00000	4.72(a)

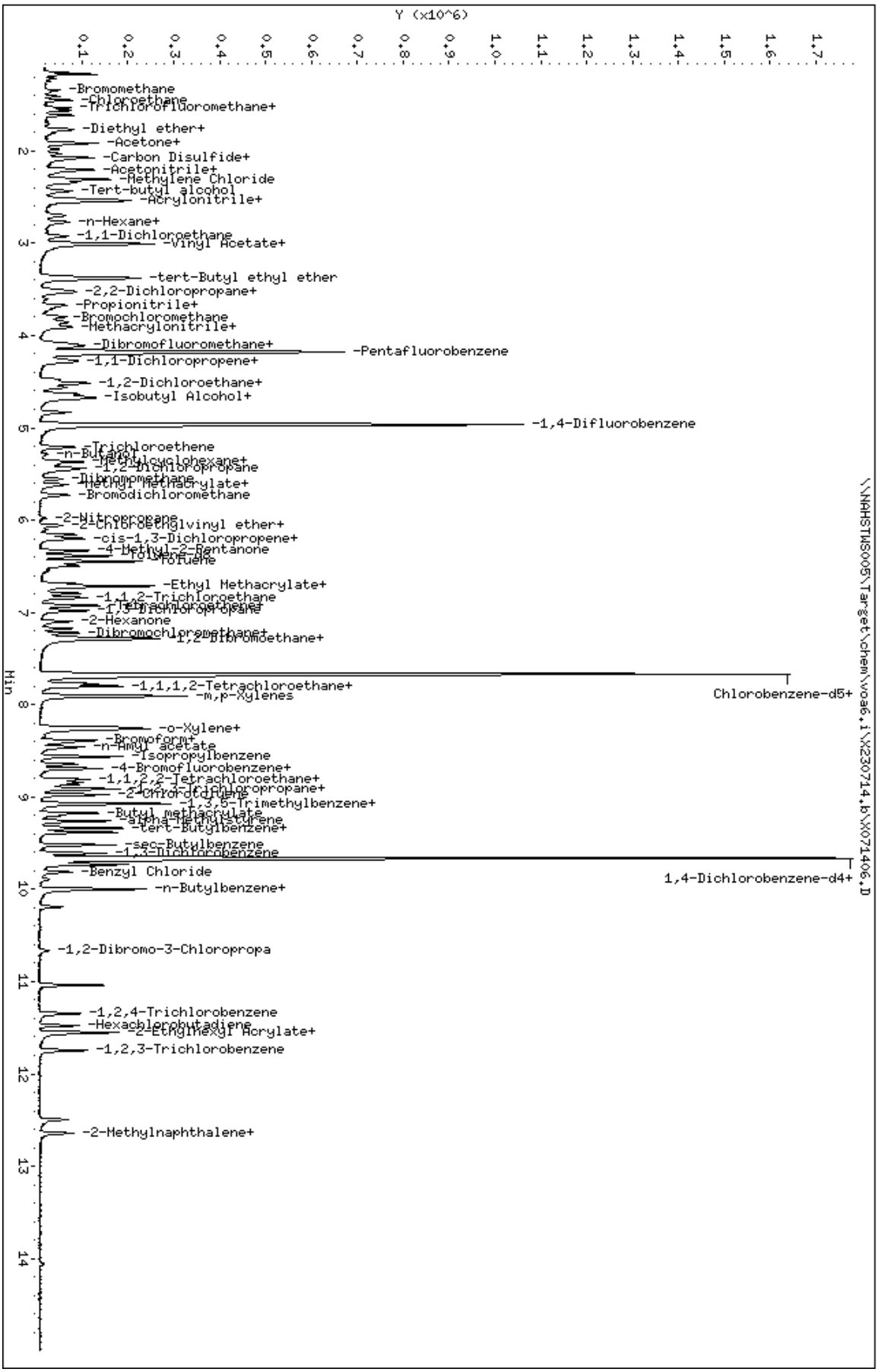
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	68497	5.00000	4.48(a)
79	1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	75897	5.00000	4.24(a)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	89261	5.00000	4.38(a)
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	80480	5.00000	4.32(a)
83	1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	48860	5.00000	4.55(a)
84	1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	56875	5.00000	4.83(a)
86	Benzyl Chloride	91	9.815	9.815	(1.280)	45616	5.00000	5.82(M)
87	n-Butylbenzene	91	9.995	9.995	(1.035)	67203	5.00000	4.31(a)
88	1,2-Dichlorobenzene	146	9.995	9.995	(1.035)	49668	5.00000	4.71(a)
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.659	(1.103)	5268	5.00000	5.83(M)
90	1,2,4-Trichlorobenzene	180	11.349	11.349	(1.175)	33646	5.00000	4.64(aM)
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	13714	5.00000	6.27
92	Naphthalene	128	11.551	11.551	(1.196)	85025	5.00000	4.74(aM)
93	1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	30270	5.00000	4.47(a)
146	Methyl acetate	43	2.236	2.236	(0.535)	23616	5.00000	5.14
138	Freon TF	101	1.921	1.921	(0.460)	16656	5.00000	5.27
141	Cyclohexane	56	4.121	4.121	(0.987)	39083	5.00000	4.37(aH)
142	Tetrahydrofuran	42	3.863	3.863	(0.925)	12650	10.0000	9.54
147	Methylcyclohexane	55	5.399	5.399	(1.088)	84656	5.00000	4.92(aM)
135	1,4-Dioxane	88	5.617	5.617	(1.345)	6551	100.000	106.98(M)
132	n-Butanol	56	5.287	5.287	(1.266)	13588	100.000	79.21(aM)
131	Methyl Acrylate	55	3.716	3.716	(0.890)	33338	5.00000	4.75(aMH)
133	Ethyl Acrylate	55	5.399	5.399	(1.293)	82574	5.00000	4.83(M)
136	n-Hexane	57	2.775	2.775	(0.664)	26276	5.00000	5.21
139	Diethyl ether	59	1.763	1.763	(0.422)	23219	5.00000	4.83(a)
148	Tert-butyl alcohol	59	2.434	2.434	(0.583)	63493	100.000	97.62
149	Isopropyl alcohol	45	2.101	2.101	(0.503)	37998	100.000	94.15
156	Diisopropyl ether	45	3.008	3.008	(0.720)	98591	5.00000	4.64(Ta)
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	83294	5.00000	4.57(a)
167	Ethanol	45	1.703	1.703	(0.408)	7997	100.000	94.37
172	tert-Butyl formate	59	4.627	4.627	(1.108)	54968	10.0000	9.98
173	3,3-Dimethyl-1-butanol	57	7.289	7.289	(0.951)	78844	100.000	99.74
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	83517	5.00000	4.92(aM)
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	109587	5.00000	5.02
176	tert-Amyl alcohol	59	4.627	4.627	(1.108)	54968	100.000	97.64
151	4-Methyl-2-pentanol	45	6.715	6.715	(1.353)	183123	100.000	104.84(M)
180	1-Methylnaphthalene	142	12.642	12.642	(1.308)	33519	5.00000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	30818	5.00000	4.65(a)
152	Amyl alcohol	42	6.921	6.921	(0.903)	21498	100.000	101.70(M)
158	Dichlorofluoromethane	67	1.535	1.535	(0.367)	38837	5.00000	4.67
159	Propylene oxide	43	1.808	1.808	(0.433)	7637	10.0000	12.08
161	3-Methyl-1-butanol	55	6.921	6.921	(0.903)	17029	100.000	94.10(M)
162	Butyl acrylate	55	8.256	8.256	(1.077)	63254	5.00000	4.52(a)
163	Butyl methacrylate	41	9.178	9.178	(0.950)	44524	5.00000	4.72(a)
164	Dicyclopentadiene	66	9.680	9.680	(1.002)	101741	5.00000	4.48(a)
182	Epichlorohydrin	57	6.104	6.104	(1.230)	11661	20.0000	19.15
M 94	1,2-Dichloroethylene (total)	96				49534	10.0000	(a)
130	Ethyl Acetate	43	3.679	3.679	(0.881)	39438	5.00000	5.15(M)
134	Cyclohexanone	55	8.646	8.646	(0.895)	36410	100.000	103.93(a)
185	Isoprene	39	1.775	1.775	(0.425)	9011	5.00000	5.30
188	Isopropyl acetate	43	4.684	4.684	(0.943)	98768	5.00000	4.59(a)
187	n-Amyl acetate	43	8.458	8.458	(1.103)	62876	5.00000	4.66(a)

189 n-Butyl acetate	43	7.221	7.221 (0.942)	54777	5.00000	4.86(aH)
150 Allyl alcohol	57	2.775	2.775 (0.664)	26276	100.000	102.36

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
194 Acetaldehyde	44	1.212	1.212	(0.290)	20987	20.0000	27.87(M)
195 Methyl Amyl Ketone	43	8.387	8.387	(1.094)	76515	5.00000	4.98(aH)
200 Dimethyl Disulfide	94	6.202	6.202	(0.809)	44165	5.00000	4.45(a)
202 Isobutylene	41	1.246	1.246	(0.298)	4070	5.00000	4.77(aM)
205 2-Ethylhexyl Acrylate	55	11.551	11.551	(1.196)	41733	5.00000	4.15(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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Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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Inj Date : 14-JUL-2023 13:43
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LabSampID : VSTD005

Chloromethane (74-87-3)

Reason Code:

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20-Jul-2023
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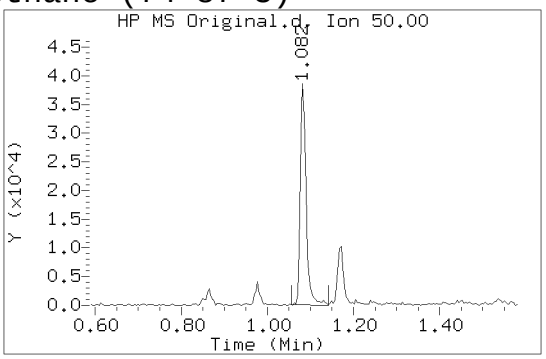

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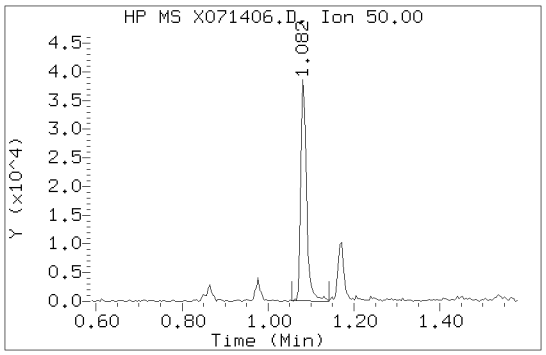

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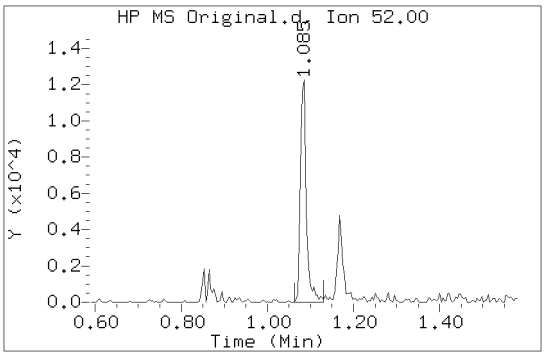

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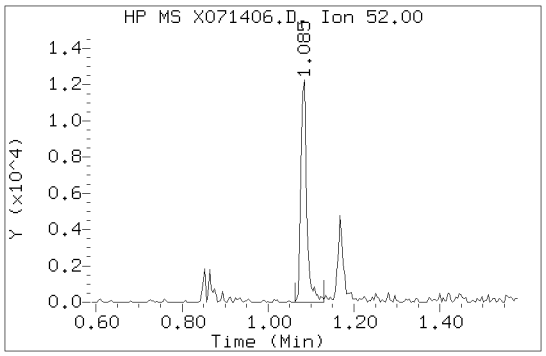

Bromomethane (74-83-9)

Reason Code:

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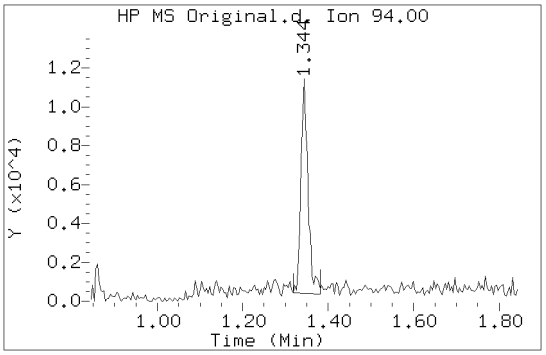
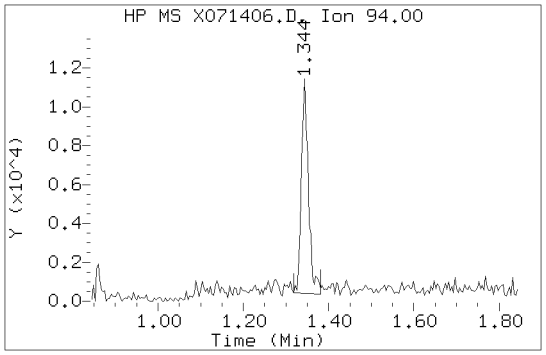
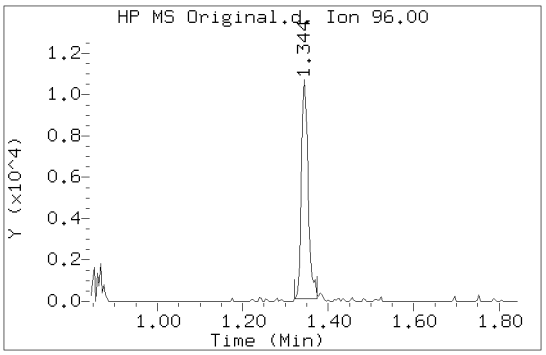
pham



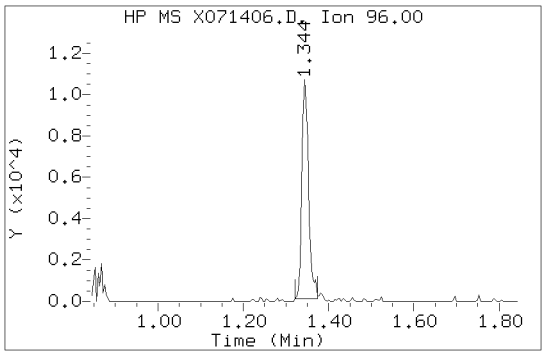
AFTER
MASS
94
AREA
13035
HEIGHT
11040
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
96
AREA
11843
HEIGHT
10597
20-Jul-2023
15:04
linh
pham



AFTER
MASS
96
AREA
11843
HEIGHT
10597
20-Jul-2023
15:04
linh
pham



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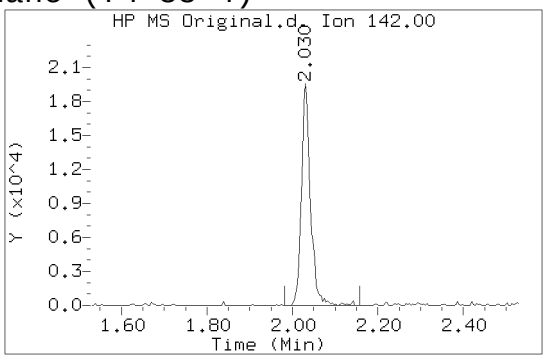
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

Iodomethane (74-88-4)

Reason Code:

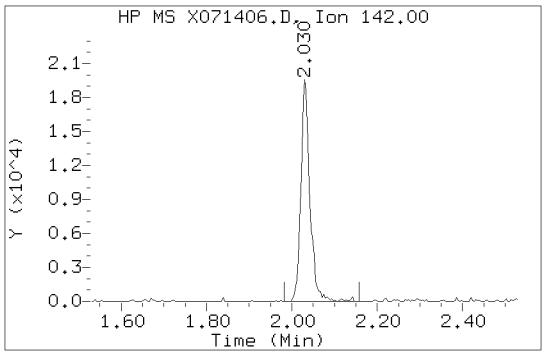
BEFORE

MASS
142
AREA
29645
HEIGHT
19576
20-Jul-2023
15:04
linh
pham



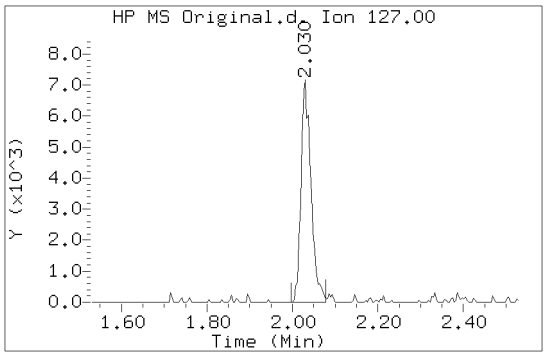
AFTER

MASS
142
AREA
29645
HEIGHT
19576
20-Jul-2023
15:04
linh
pham



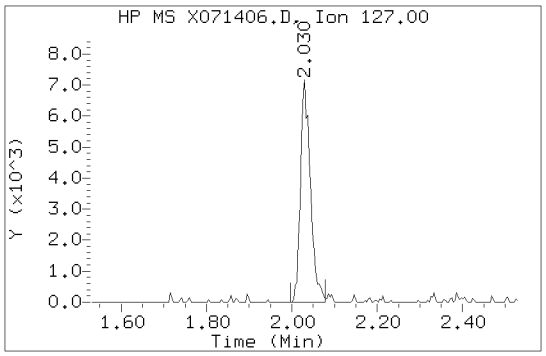
BEFORE

MASS
127
AREA
11941
HEIGHT
7165
20-Jul-2023
15:04
linh
pham



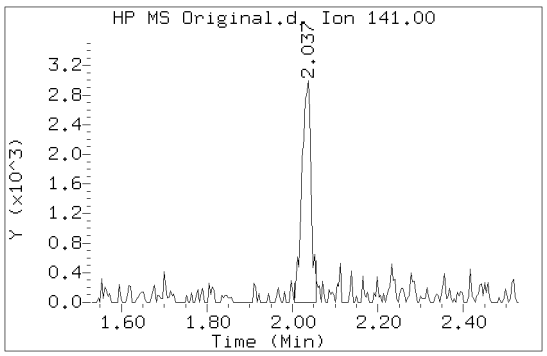
AFTER

MASS
127
AREA
11941
HEIGHT
7165
20-Jul-2023
15:04
linh
pham



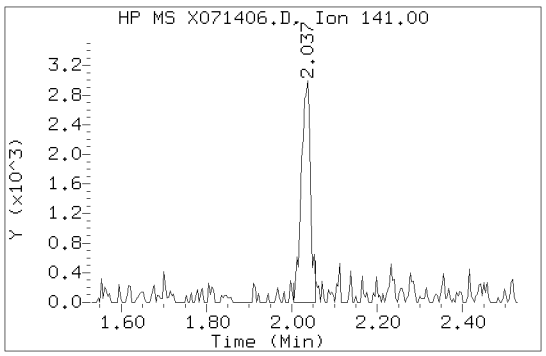
BEFORE

MASS
141
AREA
4591
HEIGHT
2994
20-Jul-2023
15:04
linh
pham



AFTER

MASS
141
AREA
4591
HEIGHT
2994
20-Jul-2023
15:04
linh
pham

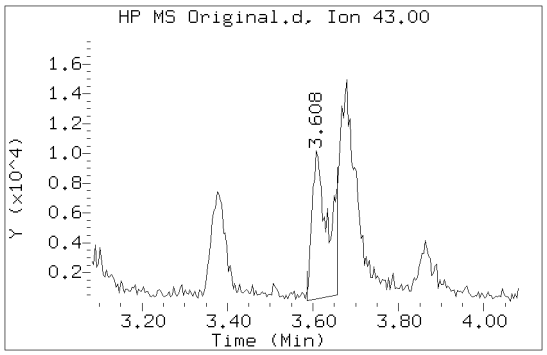


2-Butanone (78-93-3)

Reason Code:

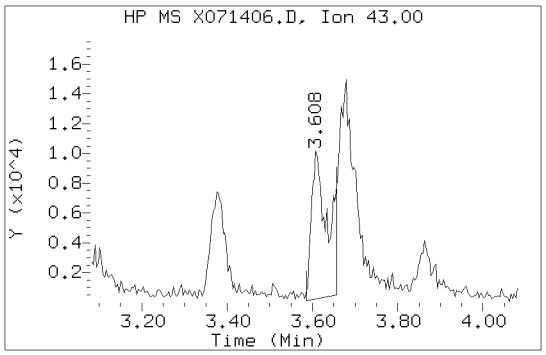
BEFORE

MASS
43
AREA
25624
HEIGHT
9920
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
25624
HEIGHT
9920
20-Jul-2023
15:04
linh
pham



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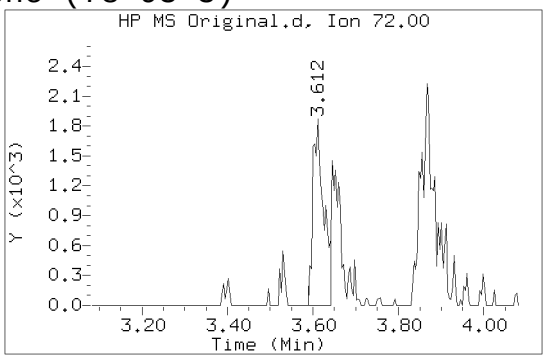
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

2-Butanone (78-93-3)

Reason Code:

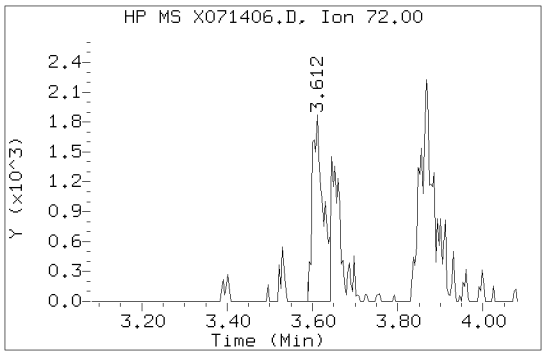
BEFORE

MASS
72
AREA
3309
HEIGHT
1873
20-Jul-2023
15:04
linh
pham



AFTER

MASS
72
AREA
3309
HEIGHT
1873
20-Jul-2023
15:04
linh
pham

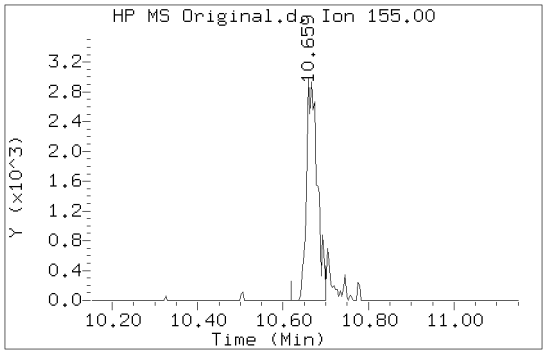


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

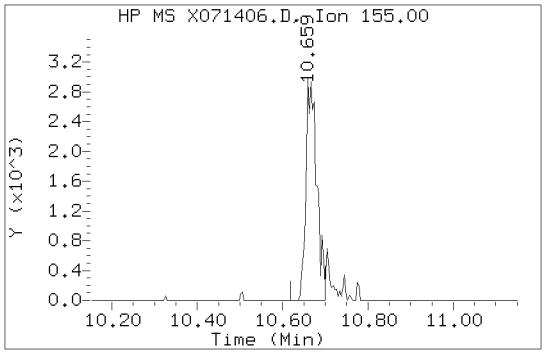
BEFORE

MASS
155
AREA
5268
HEIGHT
2977
20-Jul-2023
15:04
linh
pham



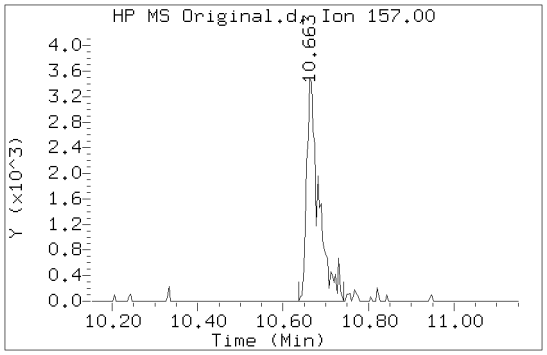
AFTER

MASS
155
AREA
5268
HEIGHT
2977
20-Jul-2023
15:04
linh
pham



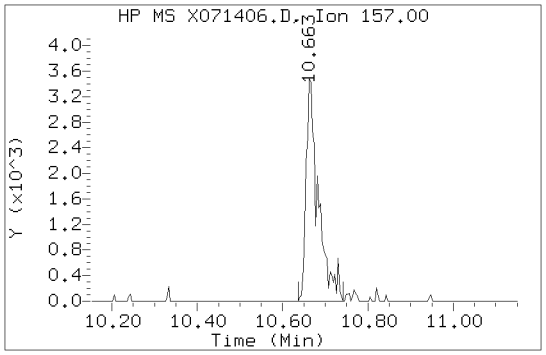
BEFORE

MASS
157
AREA
6914
HEIGHT
3477
20-Jul-2023
15:04
linh
pham



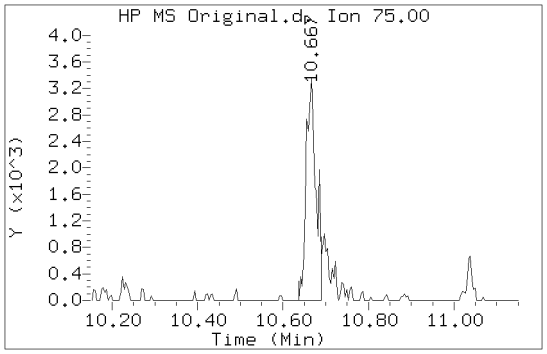
AFTER

MASS
157
AREA
6914
HEIGHT
3477
20-Jul-2023
15:04
linh
pham



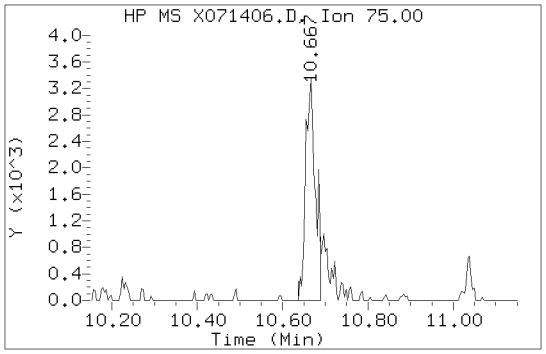
BEFORE

MASS
75
AREA
5387
HEIGHT
3348
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
5387
HEIGHT
3348
20-Jul-2023
15:04
linh
pham



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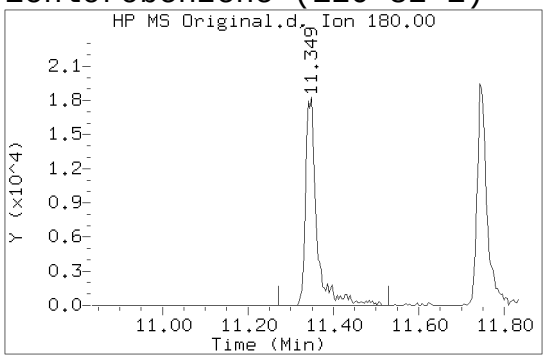
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

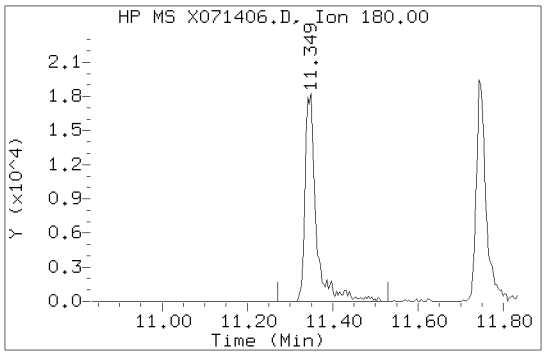
BEFORE

MASS
180
AREA
33646
HEIGHT
18264
20-Jul-2023
15:04
linh
pham



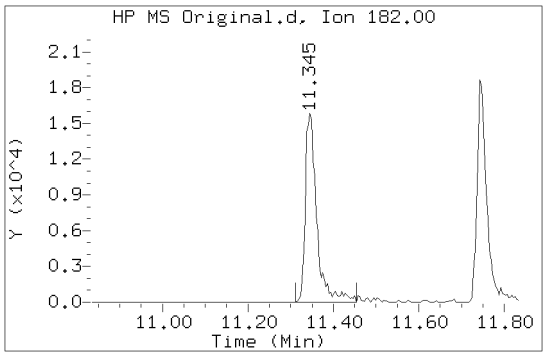
AFTER

MASS
180
AREA
33646
HEIGHT
18264
20-Jul-2023
15:04
linh
pham



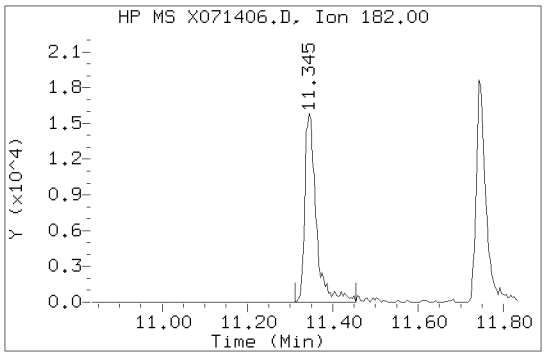
BEFORE

MASS
182
AREA
29855
HEIGHT
15861
20-Jul-2023
15:04
linh
pham



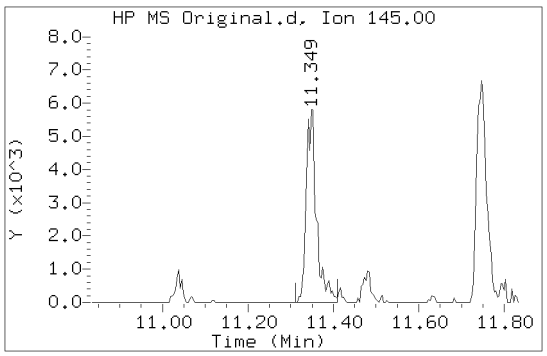
AFTER

MASS
182
AREA
29855
HEIGHT
15861
20-Jul-2023
15:04
linh
pham



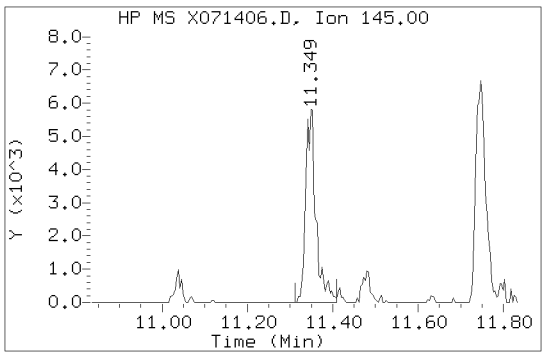
BEFORE

MASS
145
AREA
9753
HEIGHT
5817
20-Jul-2023
15:04
linh
pham



AFTER

MASS
145
AREA
9753
HEIGHT
5817
20-Jul-2023
15:04
linh
pham

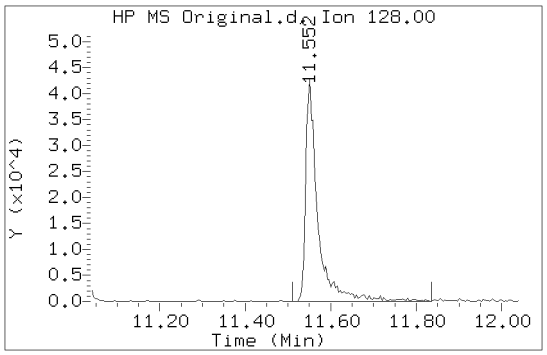


Naphthalene (91-20-3)

Reason Code:

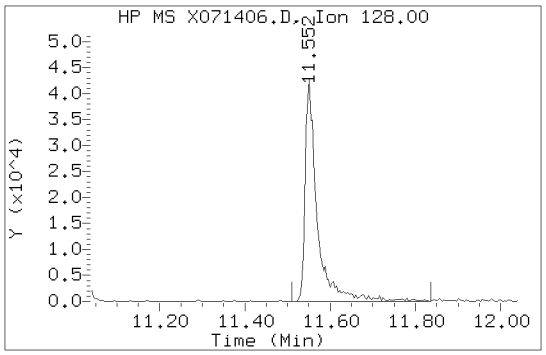
BEFORE

MASS
128
AREA
85025
HEIGHT
42672
20-Jul-2023
15:04
linh
pham



AFTER

MASS
128
AREA
85025
HEIGHT
42672
20-Jul-2023
15:04
linh
pham



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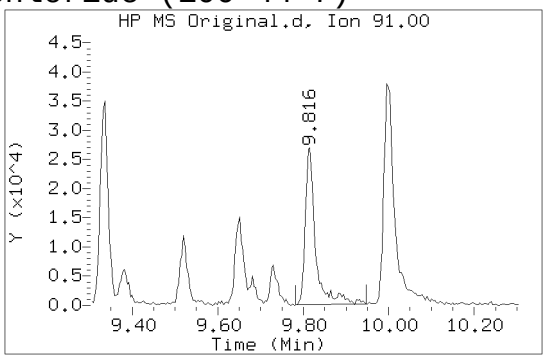
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

Benzyl Chloride (100-44-7)

Reason Code:

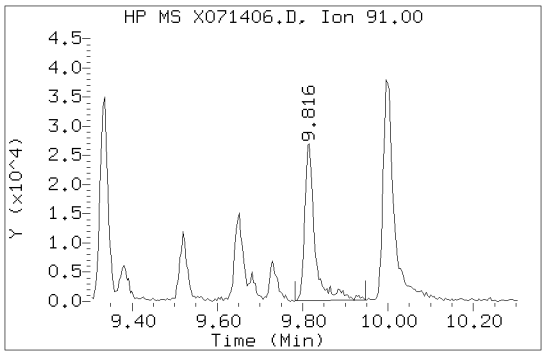
BEFORE

MASS
91
AREA
45616
HEIGHT
26893
20-Jul-2023
15:04
linh
pham



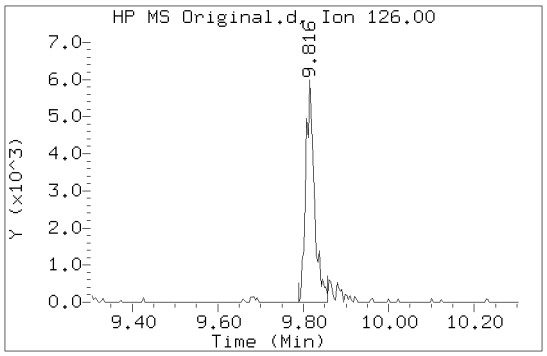
AFTER

MASS
91
AREA
45616
HEIGHT
26893
20-Jul-2023
15:04
linh
pham



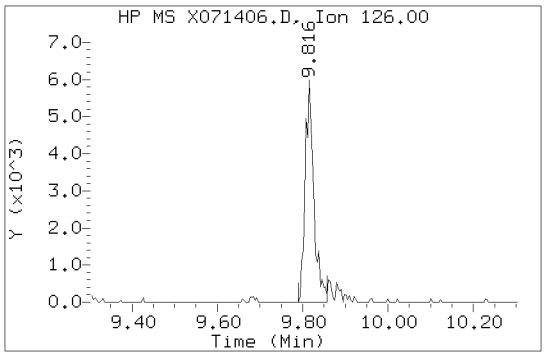
BEFORE

MASS
126
AREA
8499
HEIGHT
5989
20-Jul-2023
15:04
linh
pham



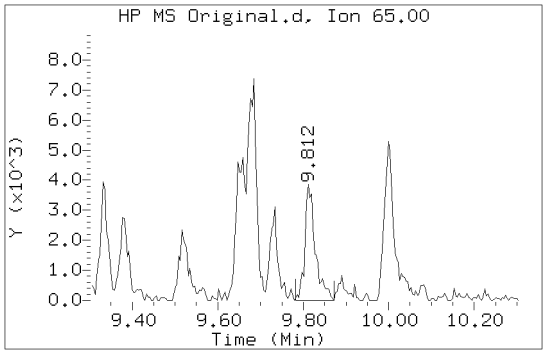
AFTER

MASS
126
AREA
8499
HEIGHT
5989
20-Jul-2023
15:04
linh
pham



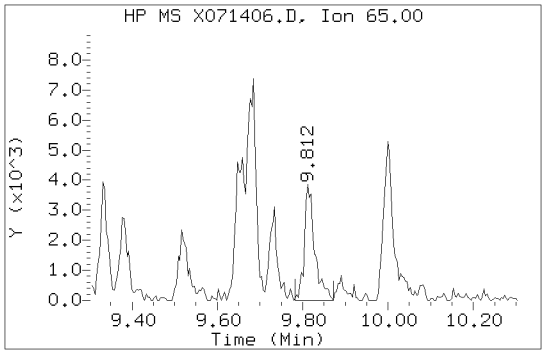
BEFORE

MASS
65
AREA
6591
HEIGHT
3852
20-Jul-2023
15:04
linh
pham



AFTER

MASS
65
AREA
6591
HEIGHT
3852
20-Jul-2023
15:04
linh
pham

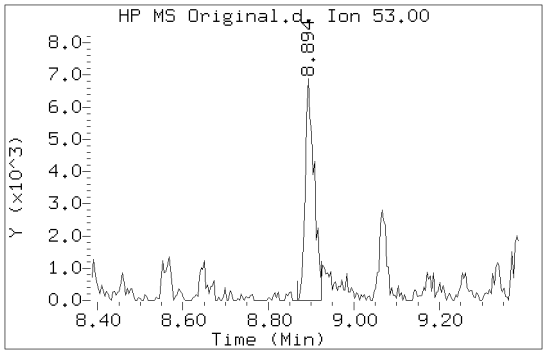


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

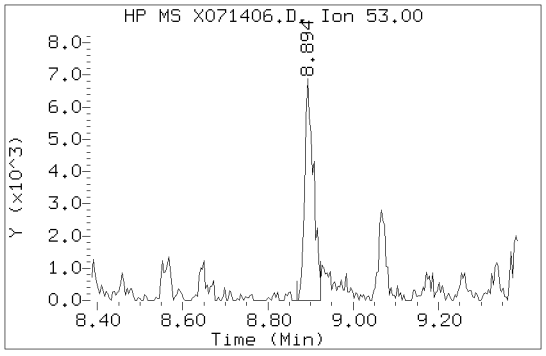
BEFORE

MASS
53
AREA
9958
HEIGHT
6886
20-Jul-2023
15:04
linh
pham



AFTER

MASS
53
AREA
9958
HEIGHT
6886
20-Jul-2023
15:04
linh
pham



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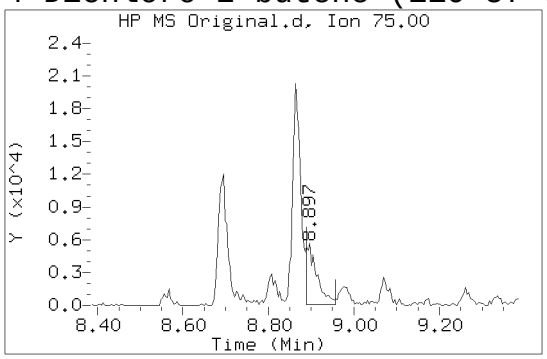
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

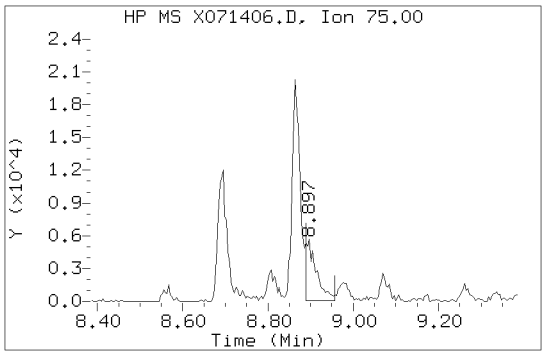
BEFORE

MASS
75
AREA
9615
HEIGHT
5621
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
9615
HEIGHT
5621
20-Jul-2023
15:04
linh
pham

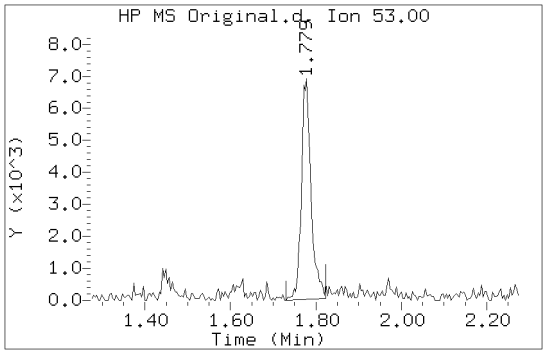


Chloroprene (126-99-8)

Reason Code:

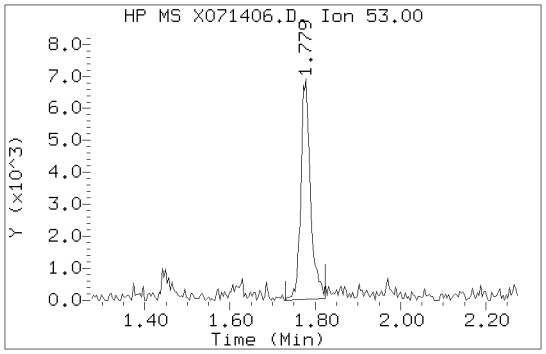
BEFORE

MASS
53
AREA
11212
HEIGHT
6900
20-Jul-2023
15:04
linh
pham



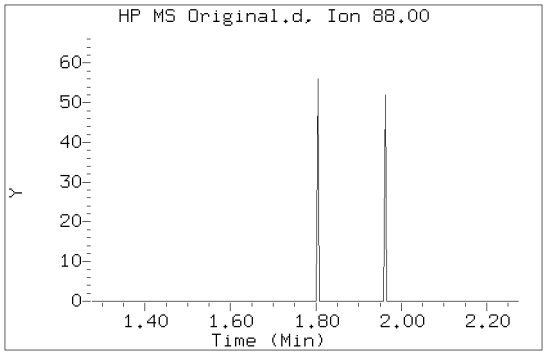
AFTER

MASS
53
AREA
11212
HEIGHT
6900
20-Jul-2023
15:04
linh
pham



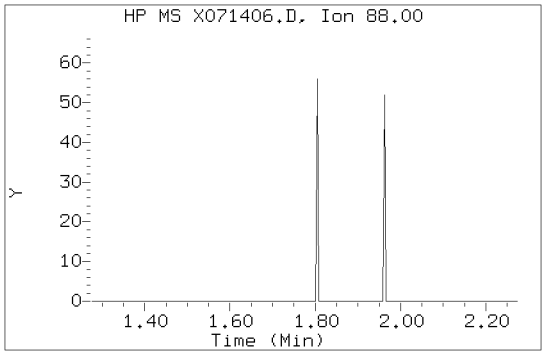
BEFORE

MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

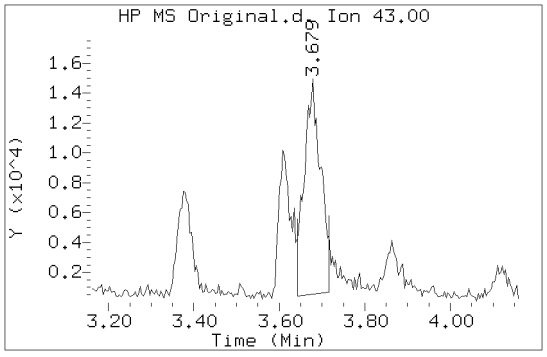


Ethyl Acetate (141-78-6)

Reason Code:

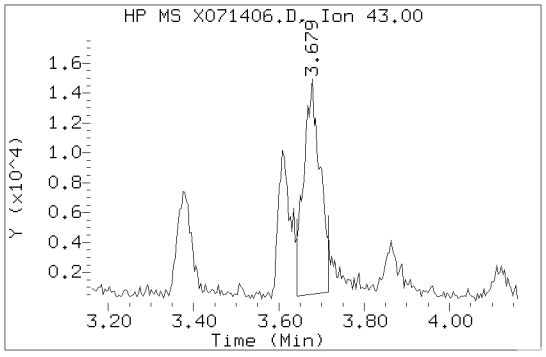
BEFORE

MASS
43
AREA
39438
HEIGHT
14396
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
39438
HEIGHT
14396
20-Jul-2023
15:04
linh
pham



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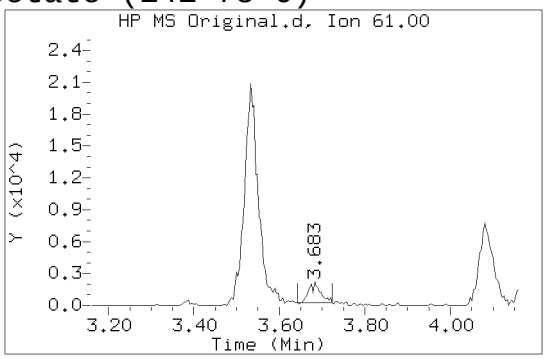
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

Ethyl Acetate (141-78-6)

Reason Code:

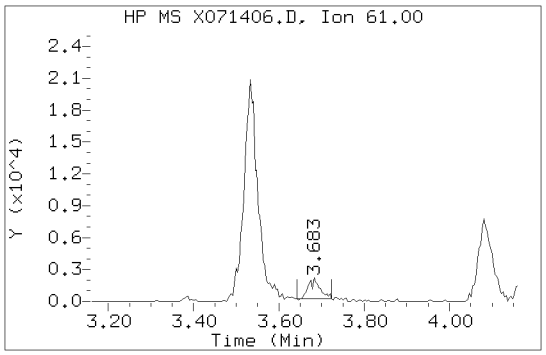
BEFORE

MASS
61
AREA
3702
HEIGHT
2000
20-Jul-2023
15:04
linh
pham



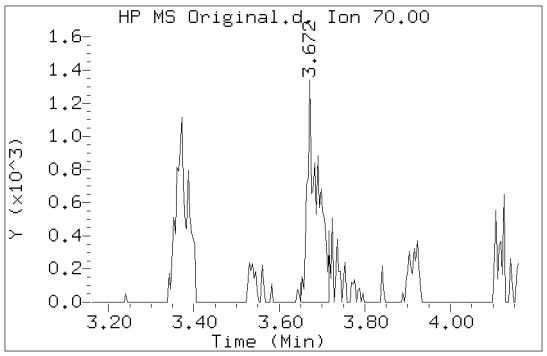
AFTER

MASS
61
AREA
3702
HEIGHT
2000
20-Jul-2023
15:04
linh
pham



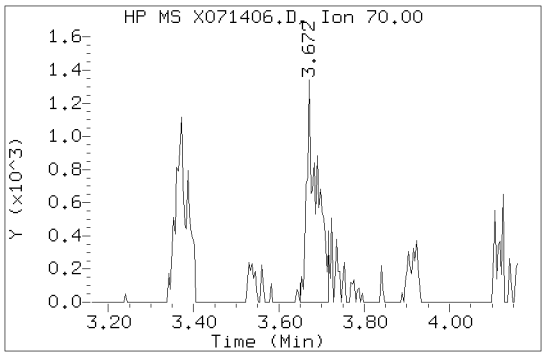
BEFORE

MASS
70
AREA
2283
HEIGHT
1341
20-Jul-2023
15:04
linh
pham



AFTER

MASS
70
AREA
2283
HEIGHT
1341
20-Jul-2023
15:04
linh
pham

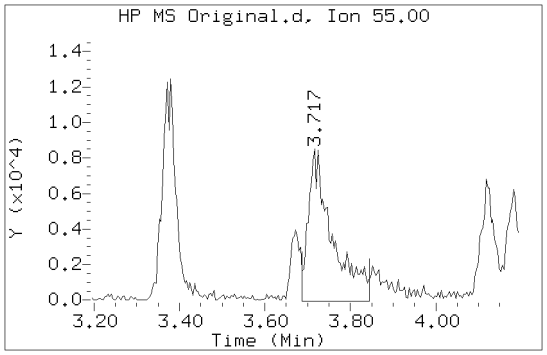


Methyl Acrylate (96-33-3)

Reason Code:

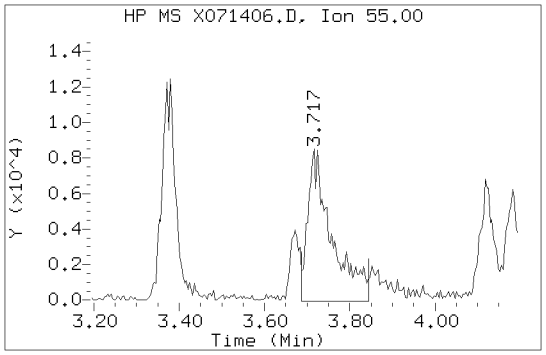
BEFORE

MASS
55
AREA
33338
HEIGHT
8583
20-Jul-2023
15:04
linh
pham



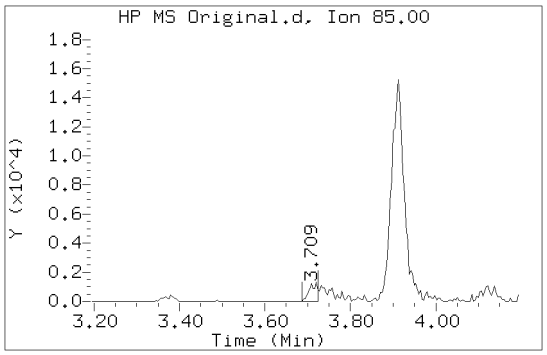
AFTER

MASS
55
AREA
33338
HEIGHT
8583
20-Jul-2023
15:04
linh
pham



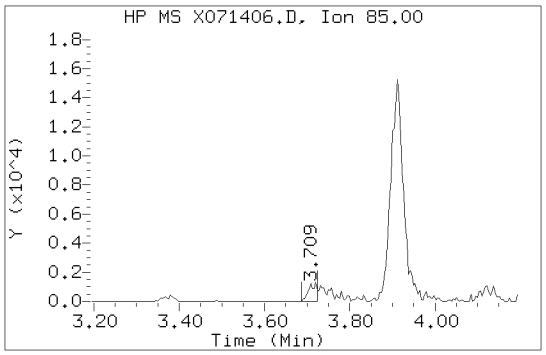
BEFORE

MASS
85
AREA
1657
HEIGHT
1216
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
1657
HEIGHT
1216
20-Jul-2023
15:04
linh
pham



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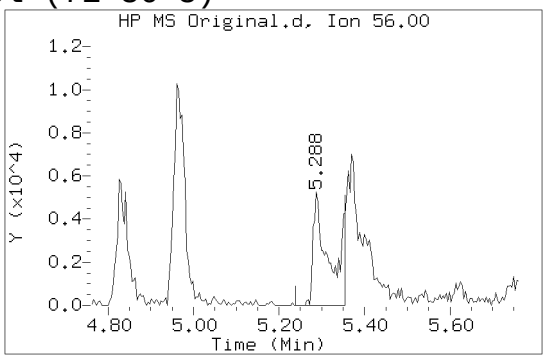
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

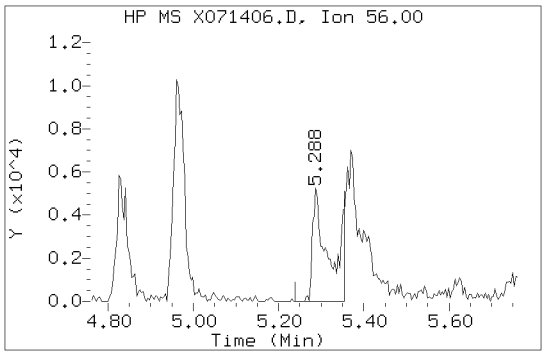
n-Butanol (71-36-3)

Reason Code:

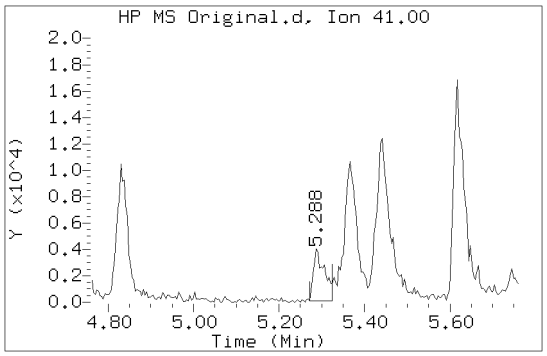
BEFORE
MASS
56
AREA
13588
HEIGHT
5250
20-Jul-2023
15:04
linh
pham



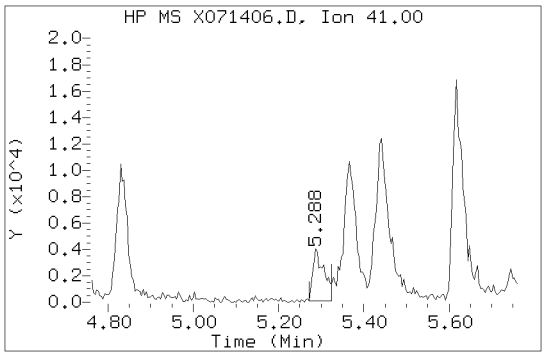
AFTER
MASS
56
AREA
13588
HEIGHT
5250
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
41
AREA
7179
HEIGHT
3942
20-Jul-2023
15:04
linh
pham



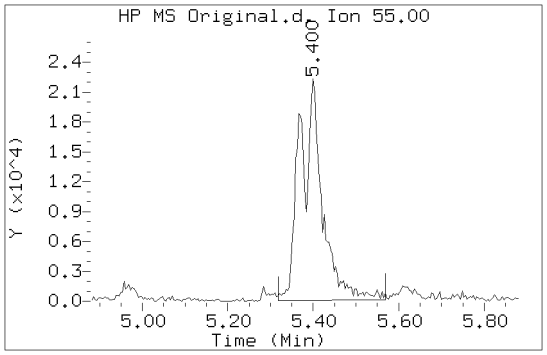
AFTER
MASS
41
AREA
7179
HEIGHT
3942
20-Jul-2023
15:04
linh
pham



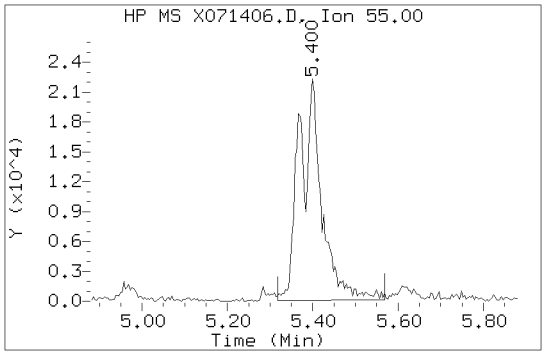
Ethyl Acrylate (140-88-5)

Reason Code:

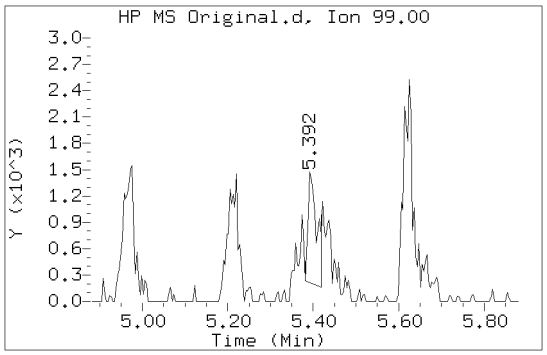
BEFORE
MASS
55
AREA
82574
HEIGHT
22225
20-Jul-2023
15:04
linh
pham



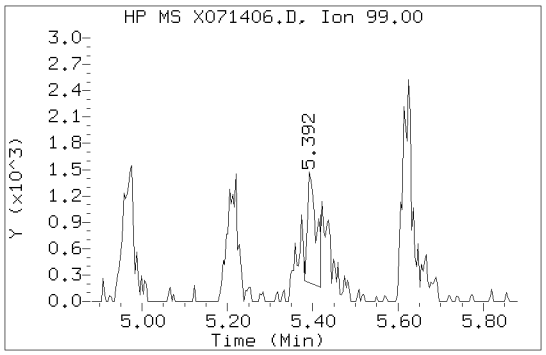
AFTER
MASS
55
AREA
82574
HEIGHT
22225
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
99
AREA
1773
HEIGHT
1256
20-Jul-2023
15:04
linh
pham



AFTER
MASS
99
AREA
1773
HEIGHT
1256
20-Jul-2023
15:04
linh
pham



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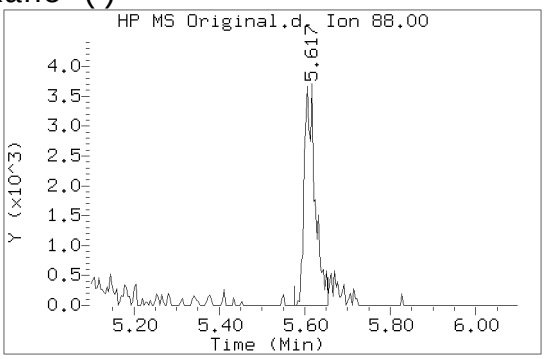
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

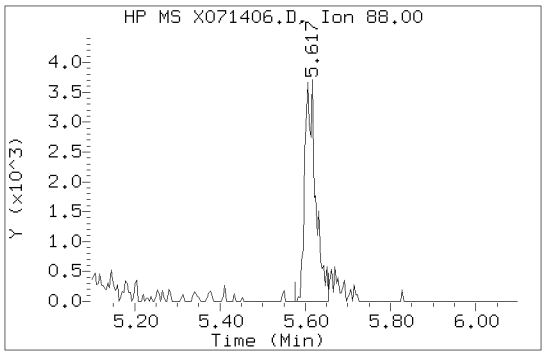
1,4-Dioxane ()

Reason Code:

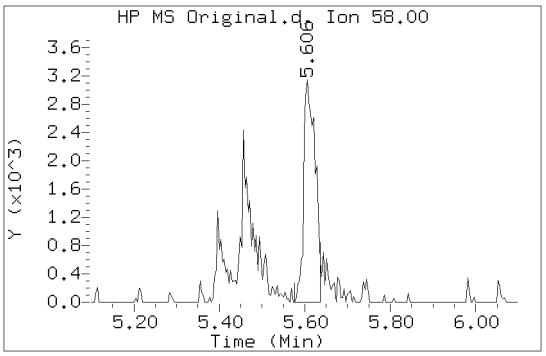
BEFORE
MASS
88
AREA
6551
HEIGHT
3709
20-Jul-2023
15:04
linh
pham



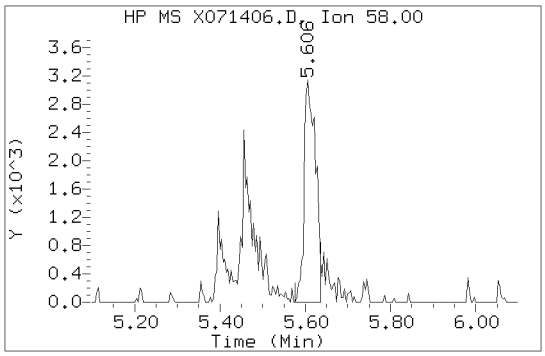
AFTER
MASS
88
AREA
6551
HEIGHT
3709
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
58
AREA
5961
HEIGHT
3144
20-Jul-2023
15:04
linh
pham



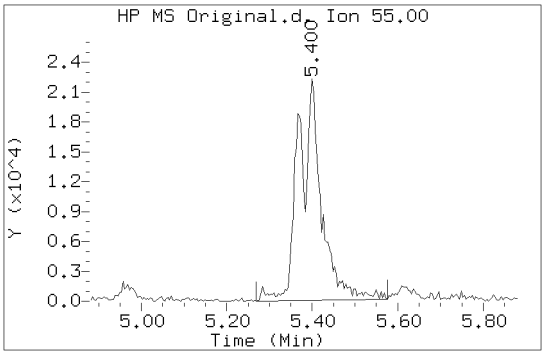
AFTER
MASS
58
AREA
5961
HEIGHT
3144
20-Jul-2023
15:04
linh
pham



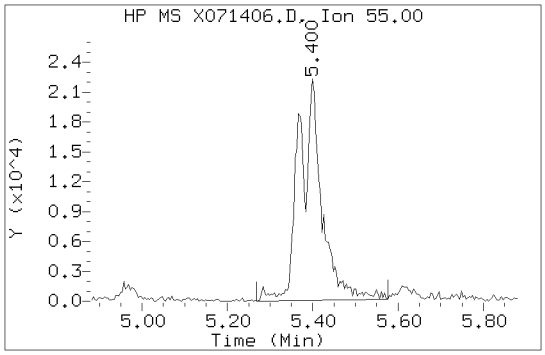
Methylcyclohexane (108-87-2)

Reason Code:

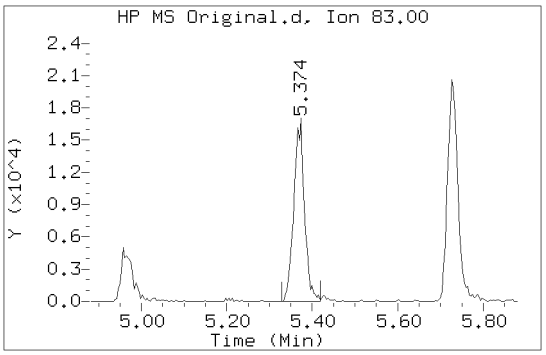
BEFORE
MASS
55
AREA
84656
HEIGHT
22257
20-Jul-2023
15:04
linh
pham



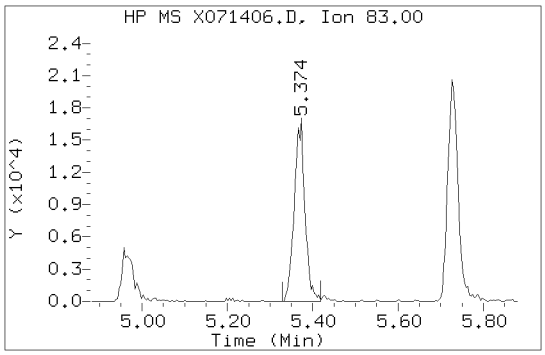
AFTER
MASS
55
AREA
84656
HEIGHT
22257
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
83
AREA
30014
HEIGHT
17040
20-Jul-2023
15:04
linh
pham



AFTER
MASS
83
AREA
30014
HEIGHT
17040
20-Jul-2023
15:04
linh
pham



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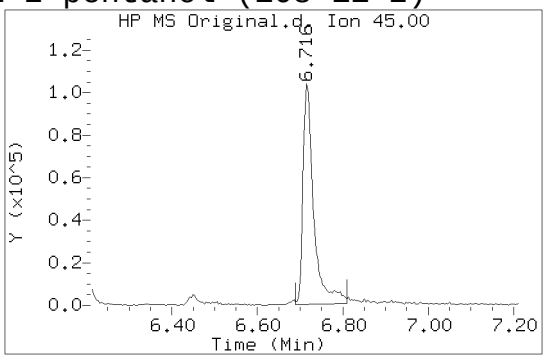
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

4-Methyl-2-pentanol (108-11-2)

Reason Code:

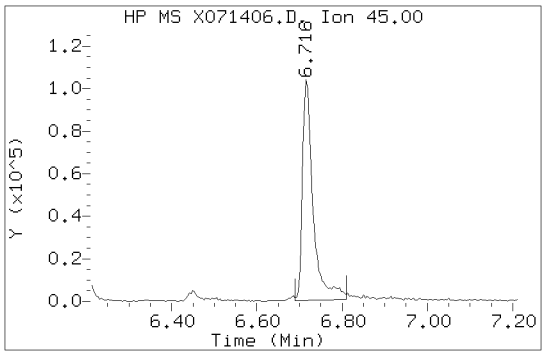
BEFORE

MASS
45
AREA
183123
HEIGHT
103764
20-Jul-2023
15:04
linh
pham



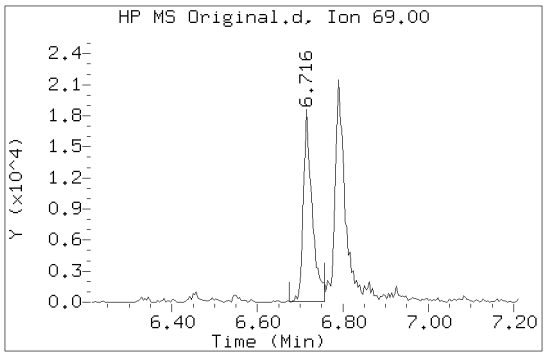
AFTER

MASS
45
AREA
183123
HEIGHT
103764
20-Jul-2023
15:04
linh
pham



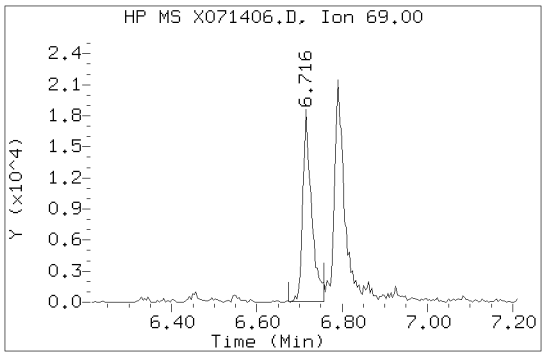
BEFORE

MASS
69
AREA
26485
HEIGHT
18576
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
26485
HEIGHT
18576
20-Jul-2023
15:04
linh
pham

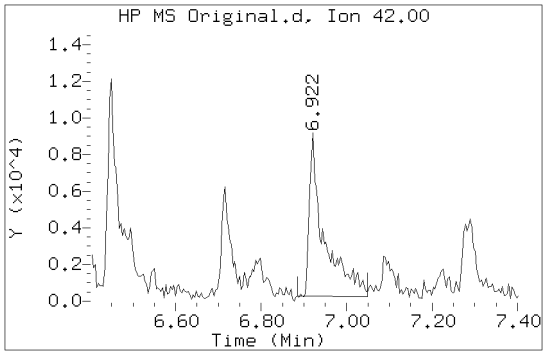


Amyl alcohol (71-41-0)

Reason Code:

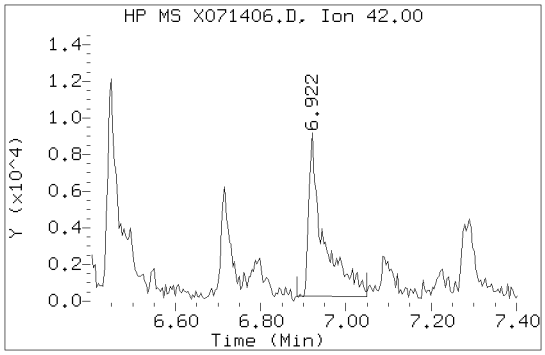
BEFORE

MASS
42
AREA
21498
HEIGHT
8913
20-Jul-2023
15:04
linh
pham



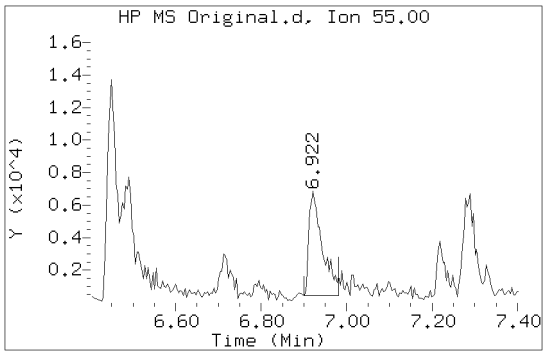
AFTER

MASS
42
AREA
21498
HEIGHT
8913
20-Jul-2023
15:04
linh
pham



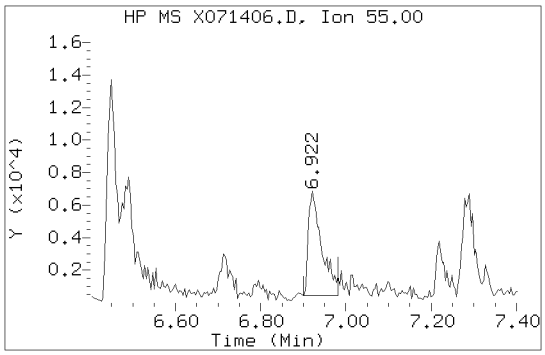
BEFORE

MASS
55
AREA
14214
HEIGHT
6435
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
14214
HEIGHT
6435
20-Jul-2023
15:04
linh
pham



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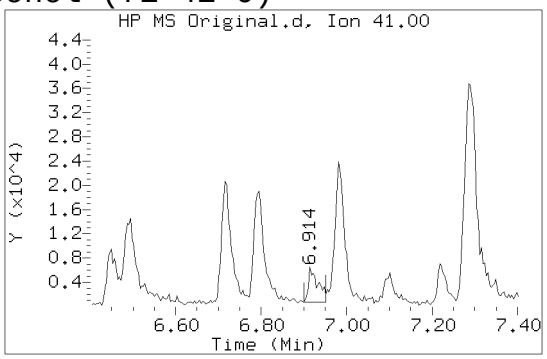
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

Amyl alcohol (71-41-0)

Reason Code:

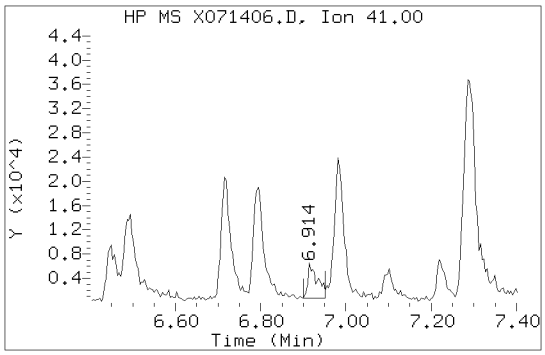
BEFORE

MASS
41
AREA
8850
HEIGHT
5781
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
8850
HEIGHT
5781
20-Jul-2023
15:04
linh
pham

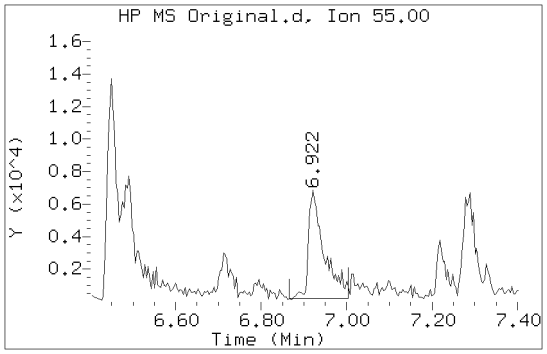


3-Methyl-1-butanol (123-51-3)

Reason Code:

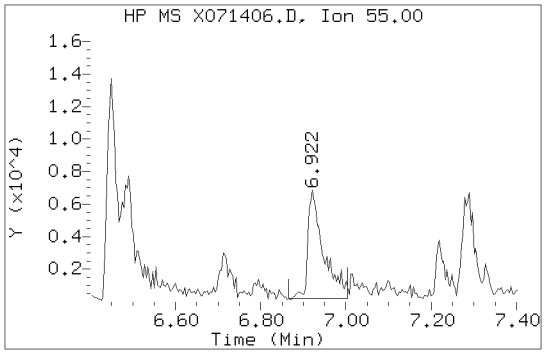
BEFORE

MASS
55
AREA
17029
HEIGHT
6664
20-Jul-2023
15:04
linh
pham



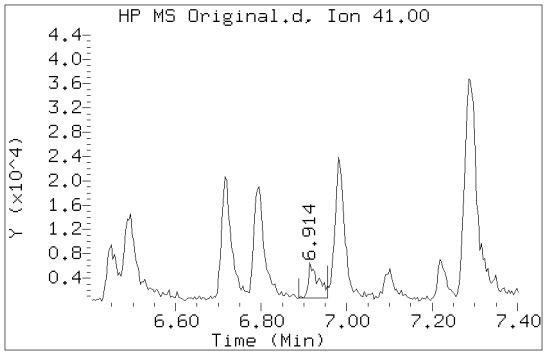
AFTER

MASS
55
AREA
17029
HEIGHT
6664
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
41
AREA
9490
HEIGHT
5807
20-Jul-2023
15:04
linh
pham



AFTER

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20-Jul-2023
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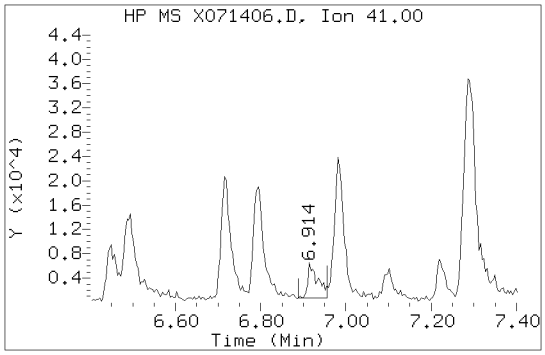

tert-Amyl methyl ether (974-05-08)

Reason Code:

BEFORE

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20-Jul-2023
15:04
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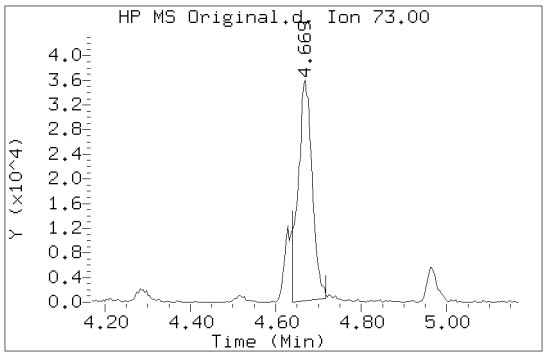

AFTER

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20-Jul-2023
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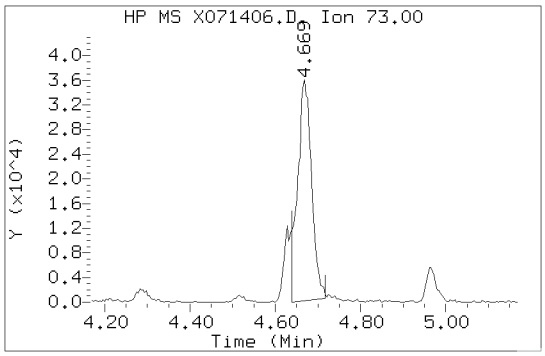

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Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

tert-Amyl methyl ether (974-05-08)

BEFORE

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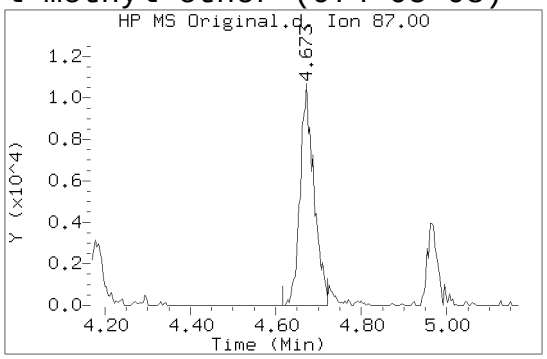
20-Jul-2023
15:04
linh
pham



BEFORE

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13484
20-Jul-2023
15:04
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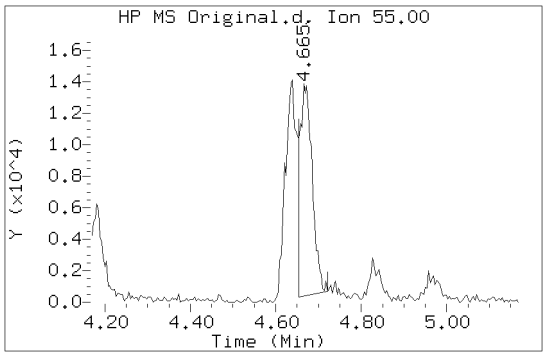

Reason Code:

AFTER

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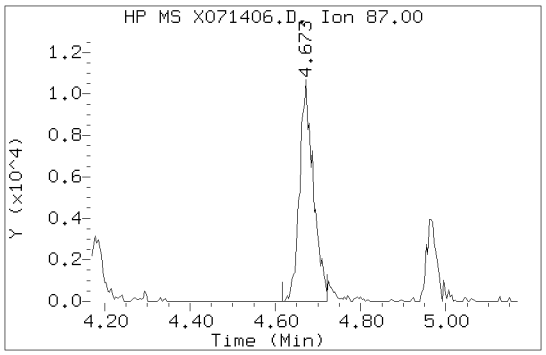

AFTER

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20-Jul-2023
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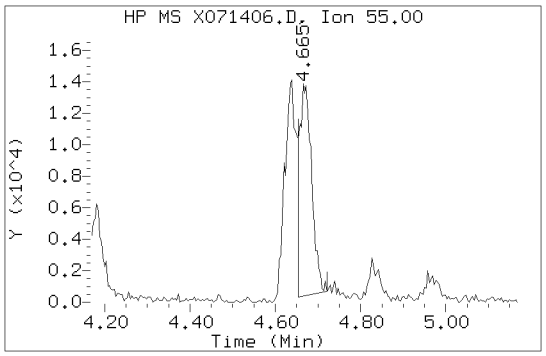

Acetaldehyde (75-07-0)

BEFORE

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20-Jul-2023
15:04
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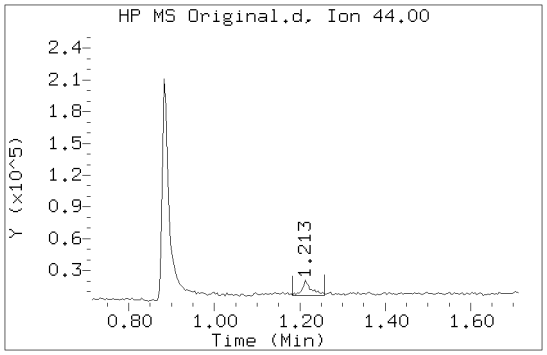
pham



BEFORE

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20-Jul-2023
15:04
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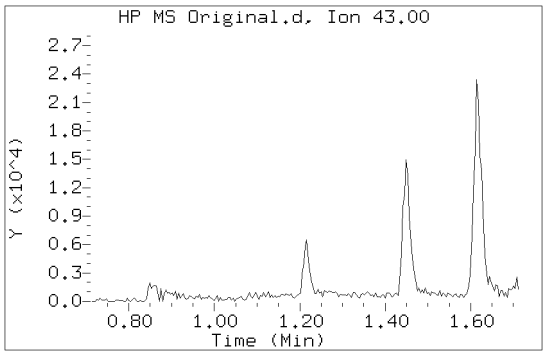

Reason Code:

AFTER

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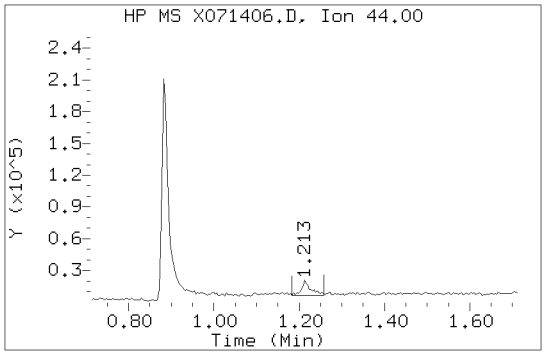

AFTER

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20-Jul-2023
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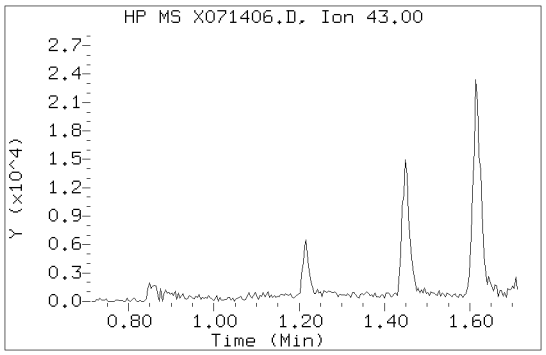

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InstruID : voa6.i
LabSampID : VSTD005

Acetaldehyde (75-07-0)

Reason Code:

BEFORE
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20-Jul-2023
15:04
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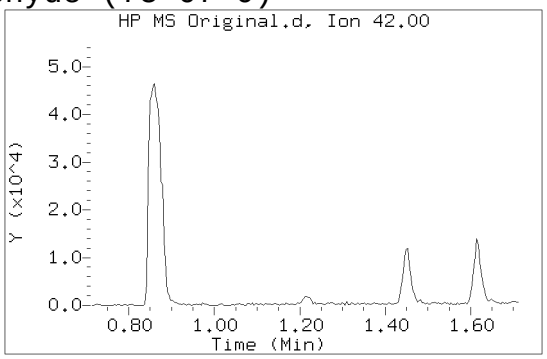

AFTER
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20-Jul-2023
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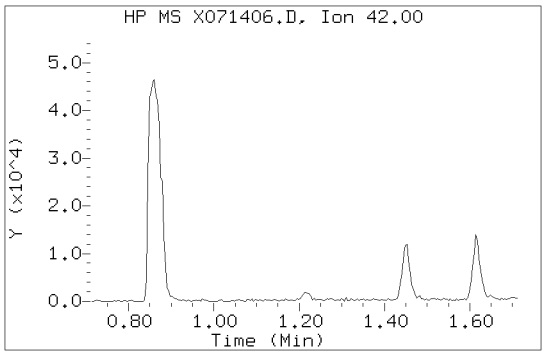

Isobutylene (115-11-7)

Reason Code:

BEFORE
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15:04
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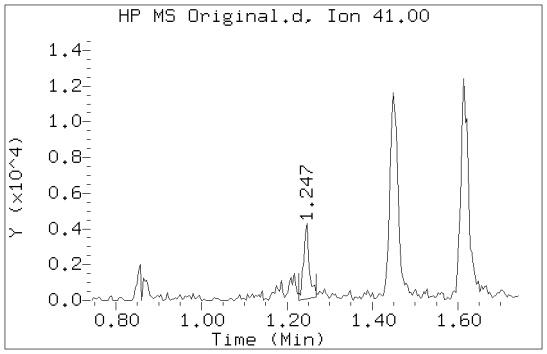
pham



AFTER
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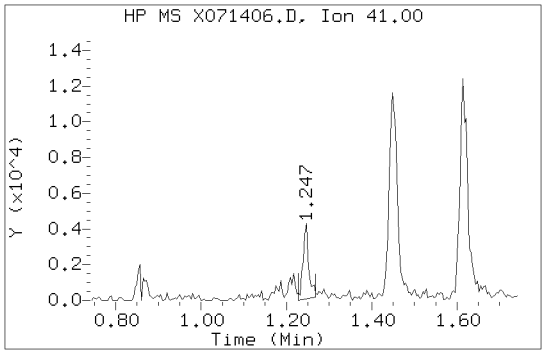

BEFORE
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20-Jul-2023
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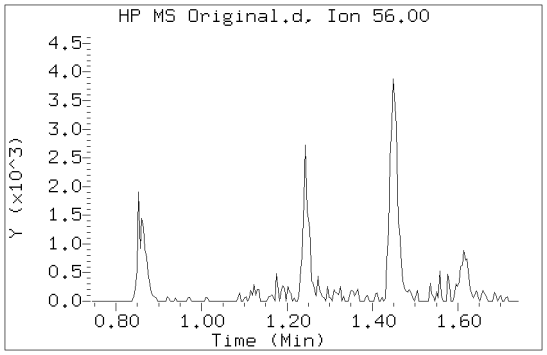

AFTER
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20-Jul-2023
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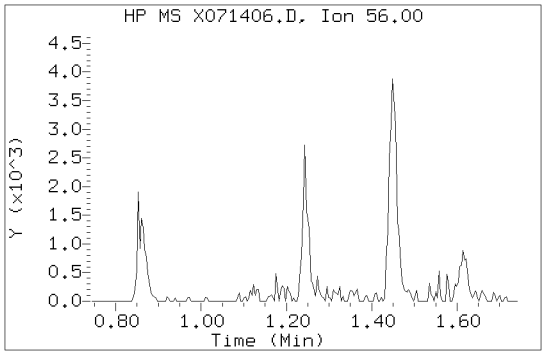

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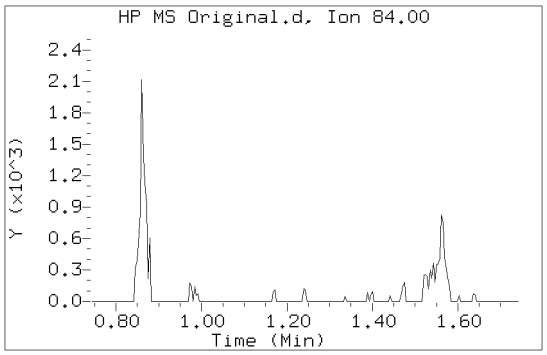

AFTER
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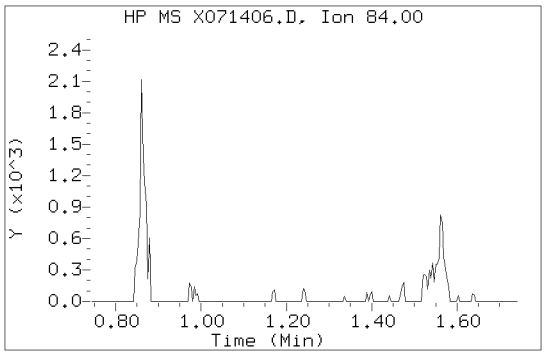

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Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE
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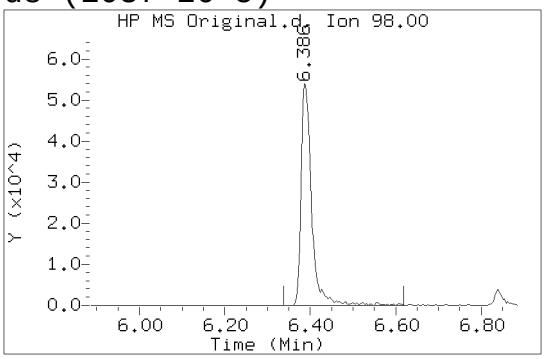
53976
20-Jul-2023
15:04
linh
pham



AFTER
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20-Jul-2023
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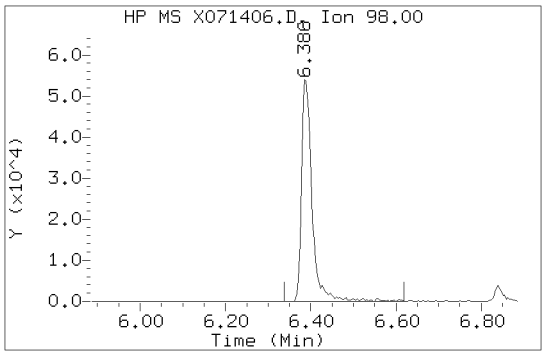

BEFORE
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20-Jul-2023
15:04
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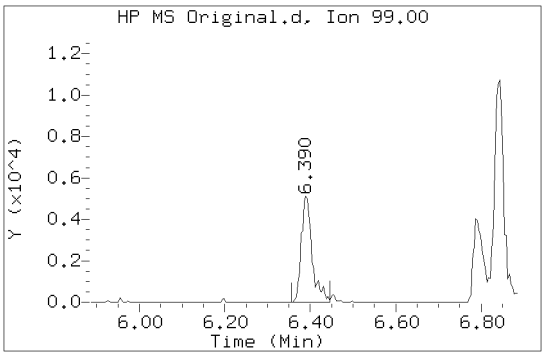

AFTER
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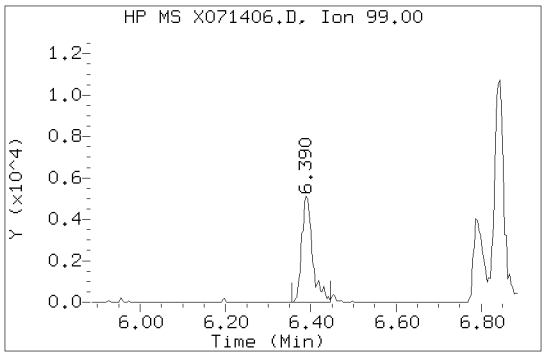

BEFORE
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HEIGHT
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20-Jul-2023
15:04
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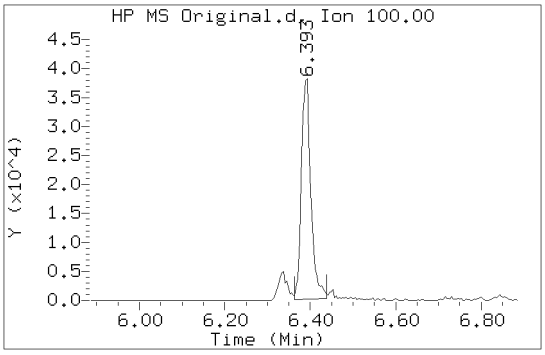

AFTER
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20-Jul-2023
15:04
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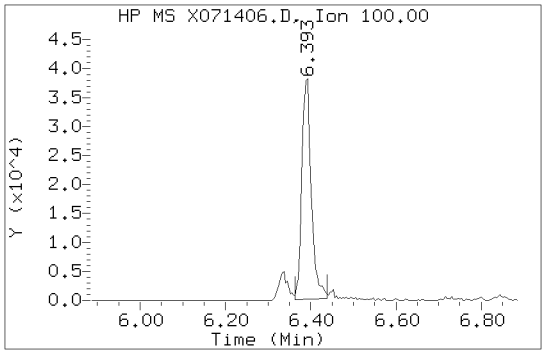

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071407.D
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Inj Date : 14-JUL-2023 14:04
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 : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 13:43 Cal File: X071406.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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	4.178	4.178	(1.000)	507763	50.0000	
	2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	94710	20.0000	18.92
	3 Chloromethane	50	1.081	1.081	(0.259)	133501	20.0000	17.40
	4 Propionitrile	54	3.660	3.660	(0.876)	205441	200.000	204.24(a)
	5 Vinyl Chloride	62	1.145	1.145	(0.274)	126856	20.0000	19.30
	6 Bromomethane	94	1.344	1.344	(0.322)	48177	20.0000	17.71
	7 Chloroethane	64	1.407	1.407	(0.337)	72133	20.0000	19.23
	8 Trichlorofluoromethane	101	1.561	1.561	(0.374)	132138	20.0000	19.84
	9 Acrolein	56	1.865	1.865	(0.446)	6957	40.0000	36.90(H)
	10 Acetone	43	1.977	1.977	(0.473)	92232	40.0000	43.26
	11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	72938	20.0000	19.60
	12 Isobutyl Alcohol	43	4.680	4.680	(1.120)	401784	400.000	417.43(a)
	13 Acetonitrile	39	2.198	2.198	(0.526)	138938	200.000	195.13(a)
	14 Allyl Chloride	41	2.198	2.198	(0.526)	321229	20.0000	19.26(a)
	15 Iodomethane	142	2.030	2.030	(0.486)	147770	40.0000	33.32
	16 Acrylonitrile	53	2.539	2.539	(0.608)	96410	40.0000	38.96
	17 Methylene Chloride	84	2.303	2.303	(0.551)	93705	20.0000	20.53
	18 Methyl tert-butyl ether	73	2.539	2.539	(0.608)	272881	20.0000	19.72
	19 Carbon Disulfide	76	2.075	2.075	(0.497)	443798	40.0000	37.95
	20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	83048	20.0000	19.30

21 Vinyl Acetate	43	3.004	3.004 (0.719)	716288	40.0000	40.25
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	180478	20.0000	19.11

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.775	1.775	(0.425)	42093	20.0000	18.43(M)
	24 2-Butanone	43	3.593	3.593	(0.860)	103083	40.0000	38.12
	25 Methacrylonitrile	41	3.833	3.833	(0.917)	134358	20.0000	20.49(a)
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	136770	20.0000	18.78
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	106626	20.0000	19.45
	28 Chloroform	83	3.904	3.904	(0.935)	185575	20.0000	19.20
	29 Bromochloromethane	128	3.799	3.799	(0.909)	58138	20.0000	18.92
$	30 Dibromofluoromethane	113	4.103	4.103	(0.982)	100577	20.0000	21.17
	31 1,1,1-Trichloroethane	97	4.084	4.084	(0.978)	145149	20.0000	19.51
	32 1,1-Dichloropropene	75	4.283	4.283	(0.863)	122898	20.0000	18.90
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	173705	20.0000	19.79
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	124542	20.0000	19.01
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	125030	20.0000	21.12
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	797093	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	377488	20.0000	19.79
	38 Trichloroethene	130	5.208	5.208	(1.049)	104832	20.0000	19.43
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	141699	20.0000	19.40
	40 Methyl Methacrylate	41	5.610	5.610	(1.343)	116657	20.0000	19.03(a)
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	89929	40.0000	40.33
	42 1,2-Dichloropropane	63	5.437	5.437	(1.095)	123713	20.0000	20.17
	43 2-Nitropropane	43	5.969	5.969	(1.429)	38152	20.0000	18.91
	44 Dibromomethane	93	5.553	5.553	(1.119)	68138	20.0000	19.63
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	285574	40.0000	39.47
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	165788	20.0000	19.76
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	735188	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	356461	20.0000	18.83(M)
	49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	101772	20.0000	19.49(a)
	50 Toluene	91	6.446	6.446	(0.841)	392472	20.0000	19.83
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	139738	20.0000	19.76
	52 2-Hexanone	43	7.090	7.090	(0.925)	197105	40.0000	41.47
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	84947	20.0000	20.23
	54 1,3-Dichloropropane	76	6.982	6.982	(0.911)	170222	20.0000	19.84
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	118768	20.0000	19.59
	56 Tetrachloroethene	164	6.922	6.922	(0.903)	79779	20.0000	19.51
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	99972	20.0000	20.83
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	123726	20.0000	19.32
	59 Chlorobenzene	112	7.694	7.694	(1.003)	270232	20.0000	19.53
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	107430	20.0000	19.83
	61 Ethylbenzene	106	7.795	7.795	(1.017)	131122	20.0000	18.90
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	341700	40.0000	39.26
	63 o-Xylene	106	8.237	8.237	(1.074)	162342	20.0000	19.69
	64 Styrene	104	8.260	8.260	(1.077)	282779	20.0000	19.67
	66 Bromoform	173	8.406	8.406	(1.096)	75861	20.0000	19.50
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	405778	20.0000	19.15
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	127719	20.0000	19.39
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	153161	20.0000	20.67
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	392137	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	106108	20.0000	20.30(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	44727	20.0000	20.00(a)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	471016	20.0000	19.87
	74 Bromobenzene	156	8.803	8.803	(0.911)	121594	20.0000	19.82
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	331762	20.0000	18.68

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	320833	20.0000	20.07
77	4-Chlorotoluene	91	9.070	9.070 (0.939)	358181	20.0000	20.39

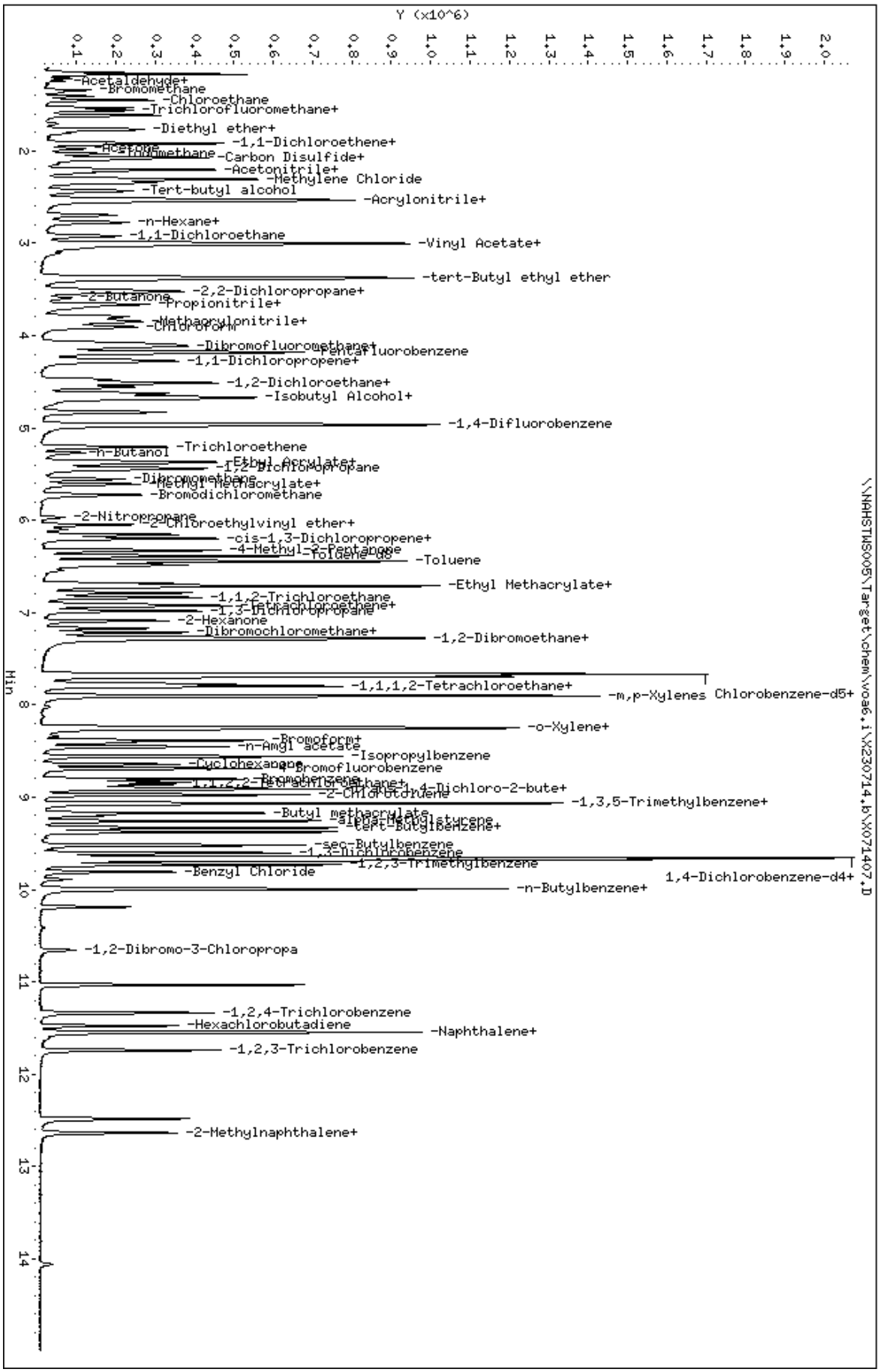
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	287767	20.0000	18.90
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	336741	20.0000	18.91
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	394513	20.0000	19.44
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	346253	20.0000	18.67
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	208939	20.0000	19.55
84	1,4-Dichlorobenzene	146	9.677	9.677	(1.002)	230542	20.0000	19.68
86	Benzyl Chloride	91	9.808	9.808	(1.279)	196200	20.0000	17.29
87	n-Butylbenzene	91	9.992	9.992	(1.034)	282220	20.0000	18.17
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	209204	20.0000	19.91
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.659	(1.103)	19568	20.0000	18.76
90	1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	123442	20.0000	17.11
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	52647	20.0000	17.44
92	Naphthalene	128	11.540	11.540	(1.194)	325767	20.0000	18.24
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	122392	20.0000	18.14
146	Methyl acetate	43	2.232	2.232	(0.534)	91399	20.0000	20.22
138	Freon TF	101	1.917	1.917	(0.459)	67796	20.0000	23.07(M)
141	Cyclohexane	56	4.121	4.121	(0.987)	165922	20.0000	18.85(H)
142	Tetrahydrofuran	42	3.851	3.851	(0.922)	53361	40.0000	40.84
147	Methylcyclohexane	55	5.388	5.388	(1.085)	328269	20.0000	19.51(M)
135	1,4-Dioxane	88	5.606	5.606	(1.342)	23823	400.000	394.82
132	n-Butanol	56	5.265	5.265	(1.260)	60771	400.000	359.52(a)
131	Methyl Acrylate	55	3.702	3.702	(0.886)	135453	20.0000	19.62(H)
133	Ethyl Acrylate	55	5.388	5.388	(1.290)	335022	20.0000	19.90
136	n-Hexane	57	2.772	2.772	(0.664)	106667	20.0000	23.04
139	Diethyl ether	59	1.763	1.763	(0.422)	93008	20.0000	19.64
148	Tert-butyl alcohol	59	2.434	2.434	(0.583)	251621	400.000	392.62
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	157344	400.000	395.67
156	Diisopropyl ether	45	3.008	3.008	(0.720)	419096	20.0000	20.02
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	351806	20.0000	19.40
167	Ethanol	45	1.703	1.703	(0.408)	30252	400.000	415.32
172	tert-Butyl formate	59	4.627	4.627	(1.108)	202938	40.0000	37.41(M)
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	307235	400.000	388.58
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	318193	20.0000	19.04
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	413607	20.0000	19.24
176	tert-Amyl alcohol	59	4.627	4.627	(1.108)	206505	400.000	372.28(M)
151	4-Methyl-2-pentanol	45	6.712	6.712	(1.352)	666674	400.000	390.27(M)
180	1-Methylnaphthalene	142	12.635	12.635	(1.308)	150919	20.0000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	123783	20.0000	18.97
152	Amyl alcohol	42	6.907	6.907	(0.901)	79891	400.000	377.87(M)
158	Dichlorofluoromethane	67	1.535	1.535	(0.367)	158942	20.0000	19.42
159	Propylene oxide	43	1.808	1.808	(0.433)	26882	40.0000	43.15
161	3-Methyl-1-butanol	55	6.907	6.907	(0.901)	65296	400.000	360.74
162	Butyl acrylate	55	8.252	8.252	(1.076)	278950	20.0000	19.94
163	Butyl methacrylate	41	9.167	9.167	(0.949)	181860	20.0000	19.36
164	Dicyclopentadiene	66	9.681	9.681	(1.002)	449218	20.0000	19.88
182	Epichlorohydrin	57	6.101	6.101	(1.229)	46921	80.0000	78.80
M 94	1,2-Dichloroethylene (total)	96				189674	40.0000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	161241	20.0000	18.84
130	Ethyl Acetate	43	3.660	3.660	(0.876)	156852	20.0000	20.79
134	Cyclohexanone	55	8.642	8.642	(0.894)	143296	400.000	410.46(a)
185	Isoprene	39	1.771	1.771	(0.424)	34997	20.0000	20.90
188	Isopropyl acetate	43	4.680	4.680	(0.943)	402950	20.0000	19.17

187 n-Amyl acetate	43	8.451	8.451 (1.102)	257831	20.0000	19.13
189 n-Butyl acetate	43	7.214	7.214 (0.941)	233185	20.0000	20.69(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.772	2.772	(0.664)	106667	400.000	460.03
194 Acetaldehyde	44	1.212	1.212	(0.290)	39093	80.0000	72.86(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	308846	20.0000	20.09(H)
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	200098	20.0000	20.17
202 Isobutylene	41	1.242	1.242	(0.297)	17453	20.0000	20.78(M)
205 2-Ethylhexyl Acrylate	55	11.547	11.547	(1.195)	205728	20.0000	20.54

QC Flag Legend

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: VSTD020
Sample Info: VSTD020;VSTD020;1;6;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071407.D
Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

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20-Jul-2023
15:04
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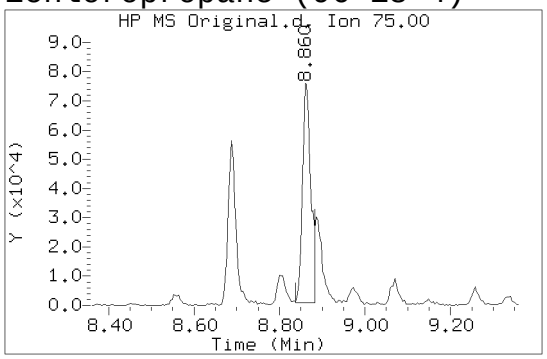

AFTER

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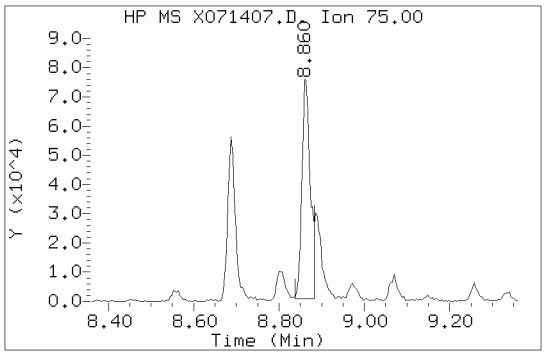

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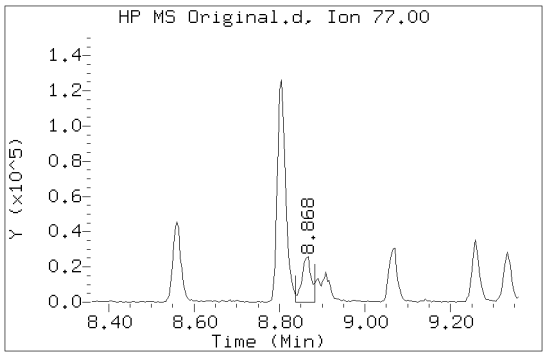

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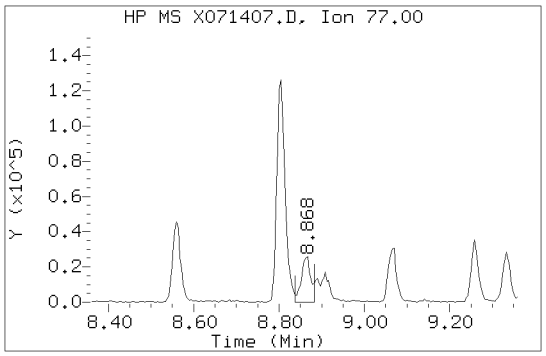

Chloroprene (126-99-8)

Reason Code:

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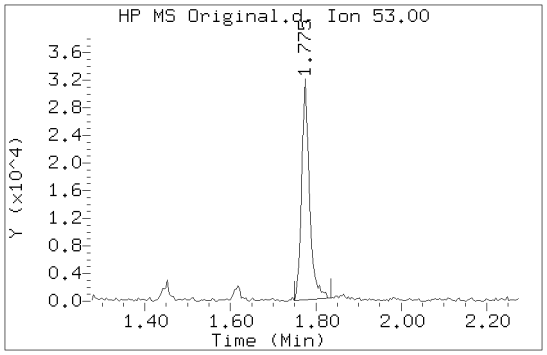

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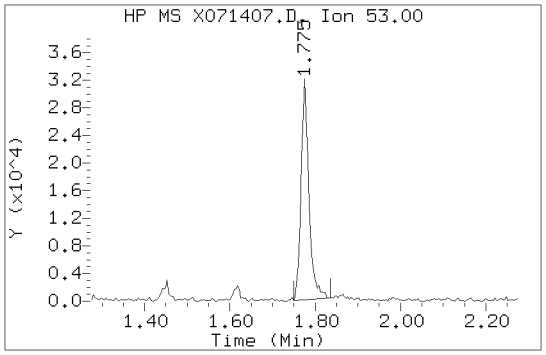

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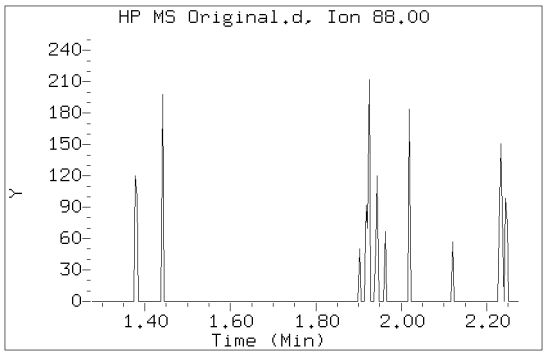

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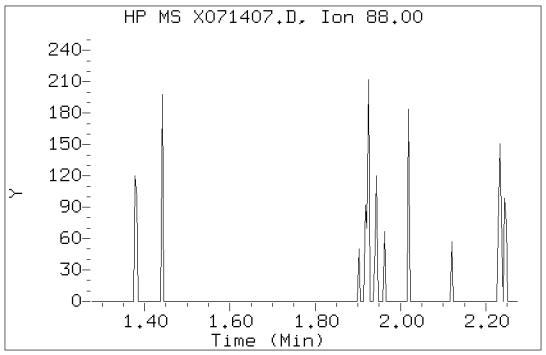

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InstruID : voa6.i
LabSampID : VSTD020

Freon TF (76-13-1)

Reason Code:

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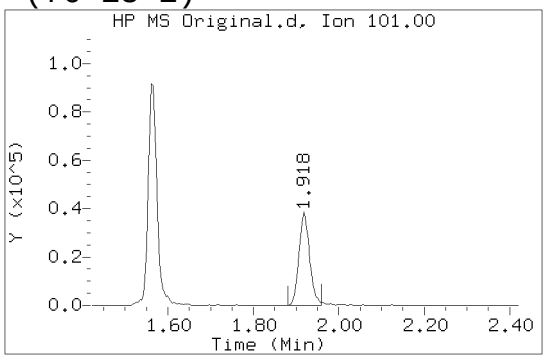

AFTER
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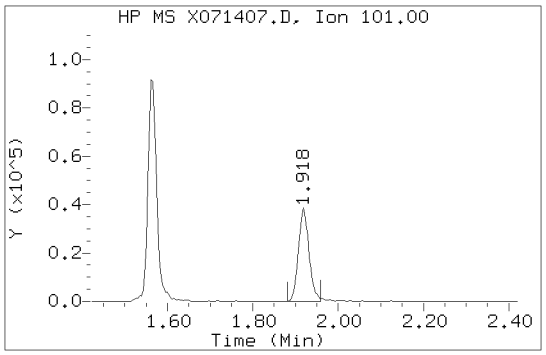

BEFORE
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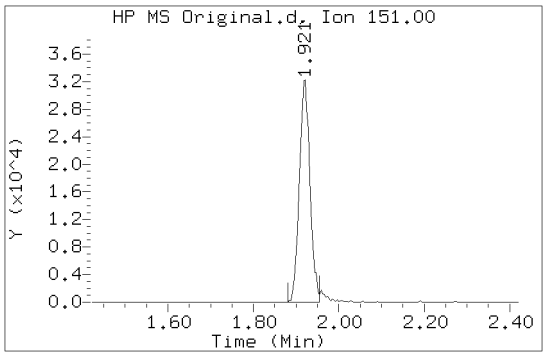

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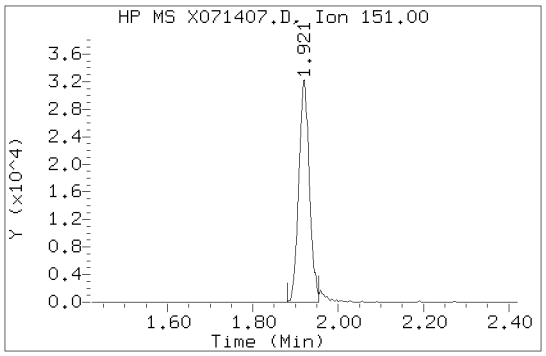

Methylcyclohexane (108-87-2)

Reason Code:

BEFORE
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118927
20-Jul-2023
15:04
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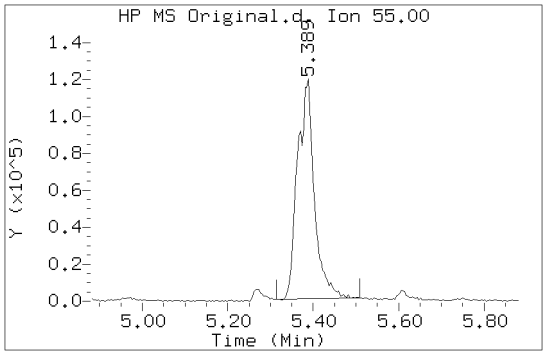

AFTER
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20-Jul-2023
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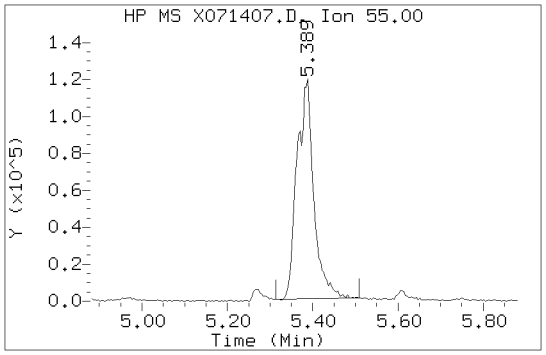

BEFORE
MASS
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20-Jul-2023
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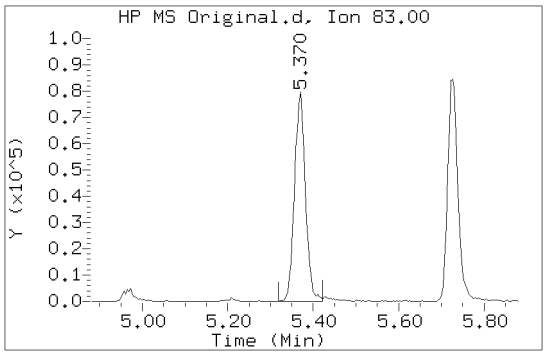

AFTER
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20-Jul-2023
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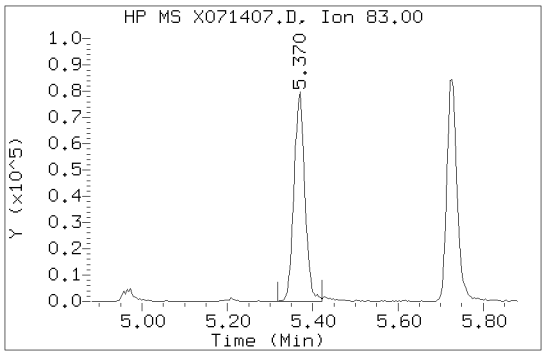

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Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

4-Methyl-2-pentanol (108-11-2)

Reason Code:

BEFORE

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AREA
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HEIGHT
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20-Jul-2023
15:04
linh
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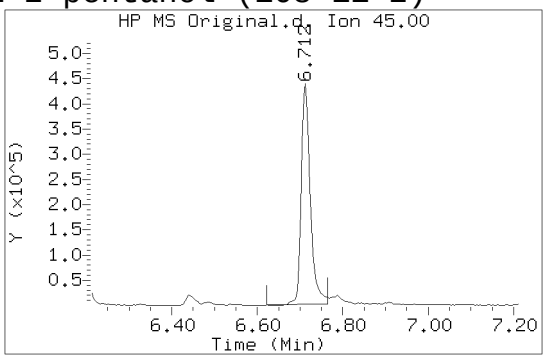

AFTER

MASS
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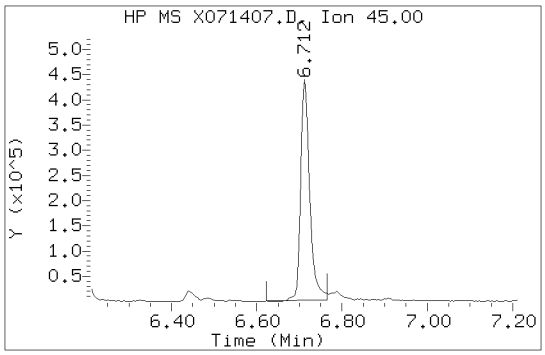

BEFORE

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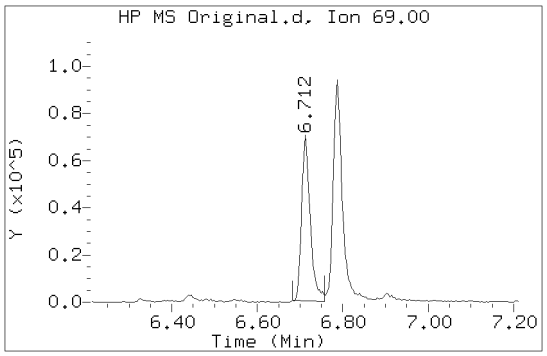

AFTER

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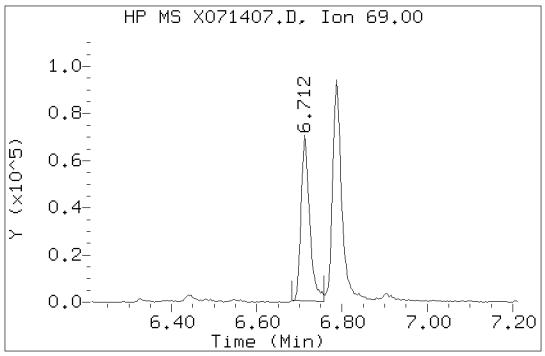

Amyl alcohol (71-41-0)

Reason Code:

BEFORE

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20-Jul-2023
15:04
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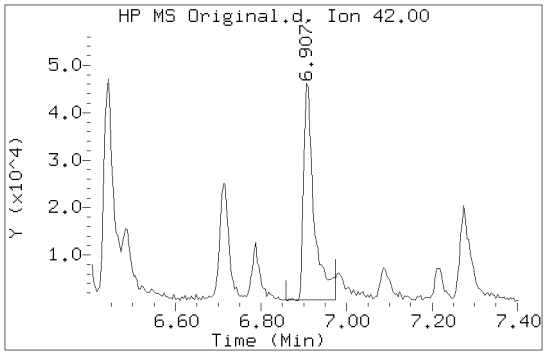

AFTER

MASS
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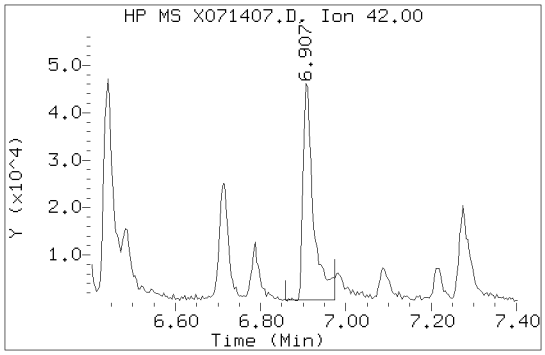

BEFORE

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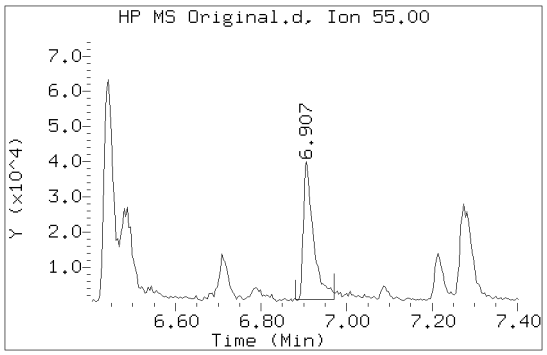

AFTER

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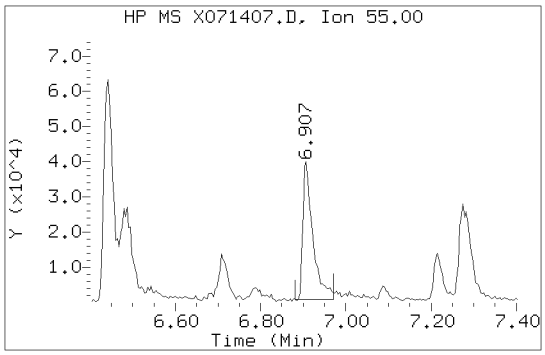

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InstruID : voa6.i
LabSampID : VSTD020

Amyl alcohol (71-41-0)

Reason Code:

BEFORE

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20-Jul-2023
15:04
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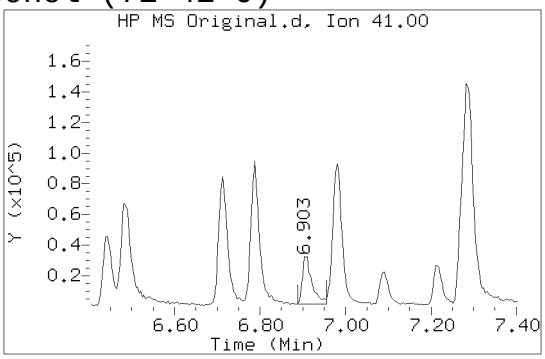

AFTER

MASS
41
AREA
49579
HEIGHT
30812
20-Jul-2023
15:04
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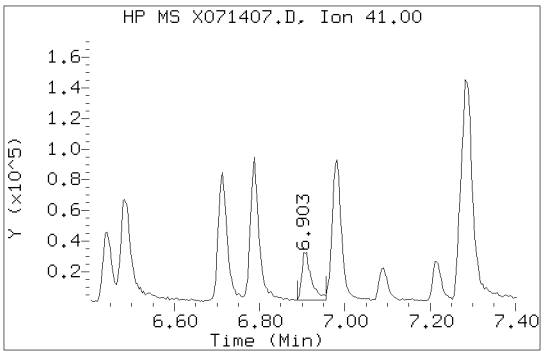

tert-Butyl formate (762-75-4)

Reason Code:

BEFORE

MASS
59
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103862
20-Jul-2023
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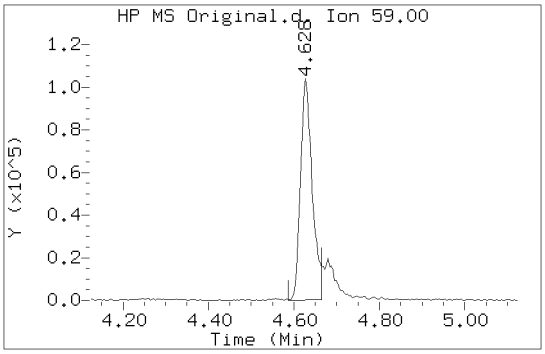

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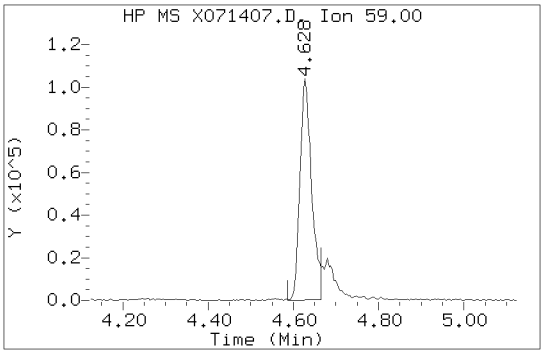

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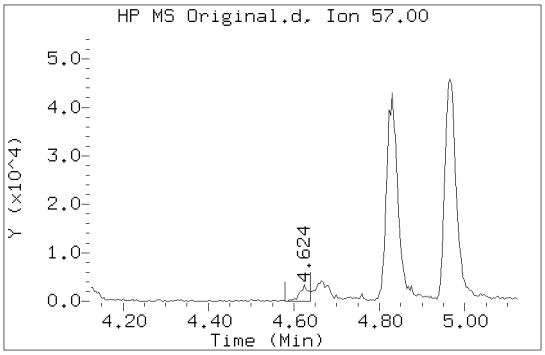

AFTER

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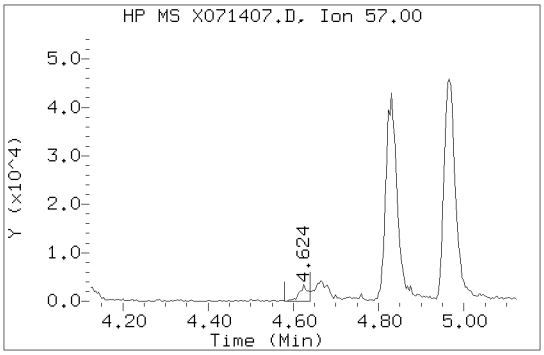

BEFORE

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20-Jul-2023
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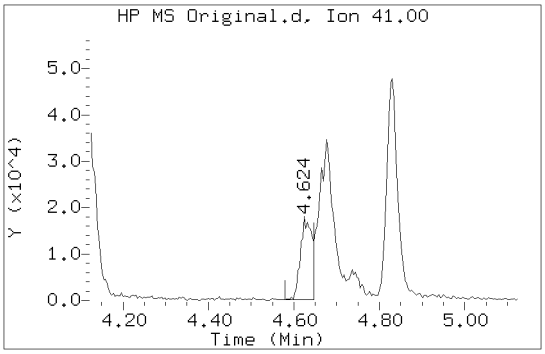

AFTER

MASS
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20-Jul-2023
15:04
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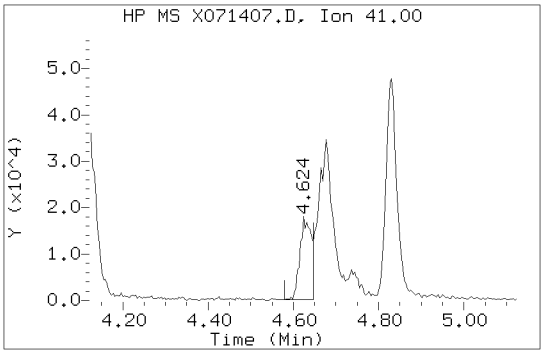

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Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

tert-Amyl alcohol (75-85-4)

Reason Code:

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103862
20-Jul-2023
15:04
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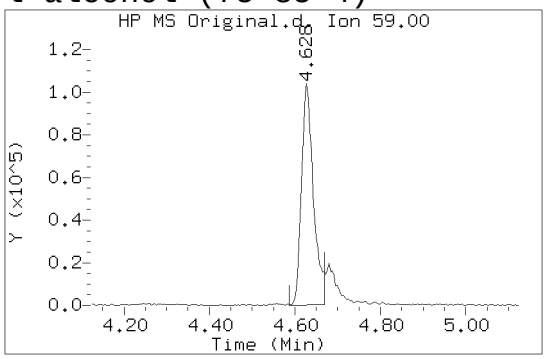

AFTER
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20-Jul-2023
15:04
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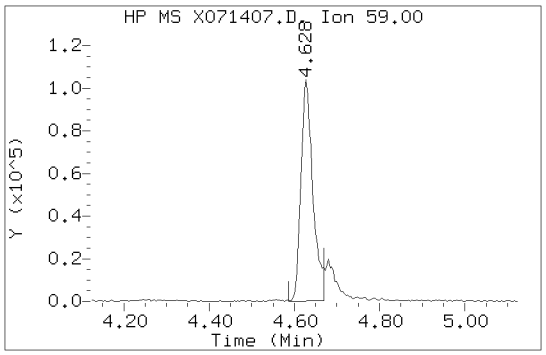

BEFORE
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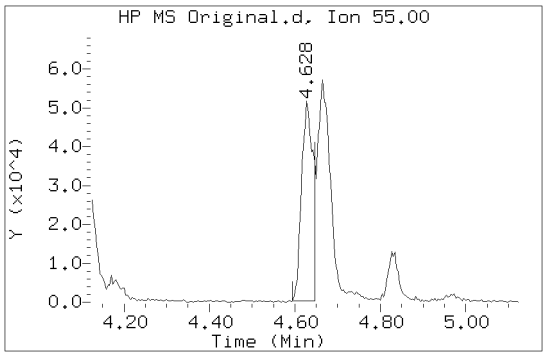
HEIGHT
51399
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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HEIGHT
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20-Jul-2023
15:04
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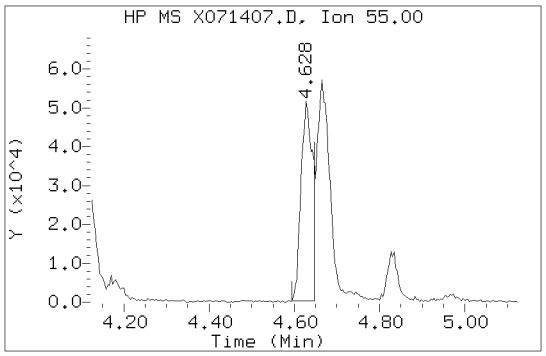

BEFORE
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73
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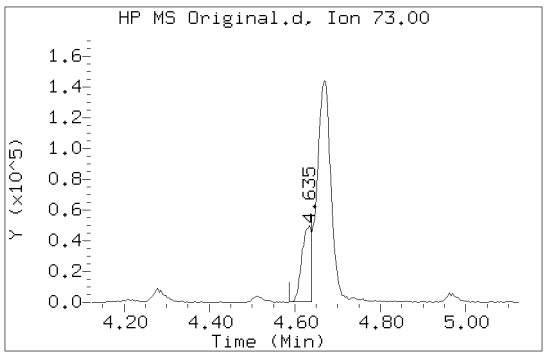
49677
20-Jul-2023
15:04
linh
pham



AFTER
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73
AREA
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HEIGHT
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20-Jul-2023
15:04
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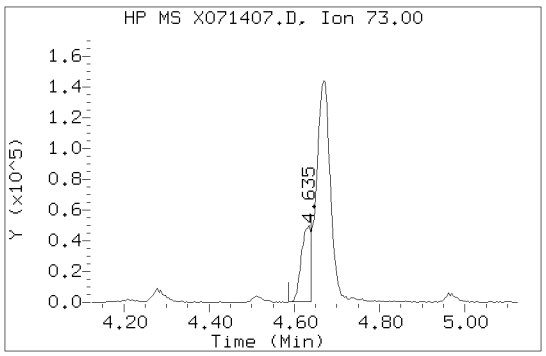

Acetaldehyde (75-07-0)

Reason Code:

BEFORE
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44
AREA
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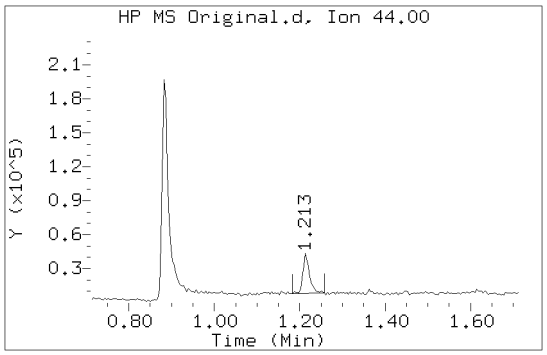
HEIGHT
35571
20-Jul-2023
15:04
linh
pham



AFTER
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HEIGHT
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20-Jul-2023
15:04
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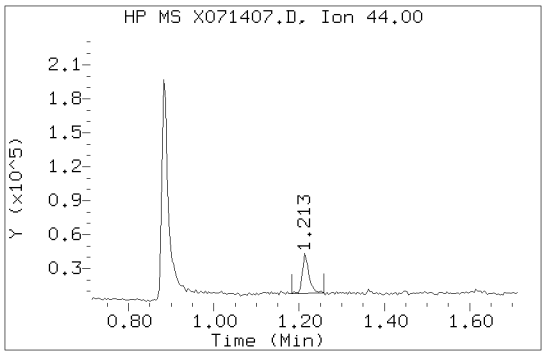

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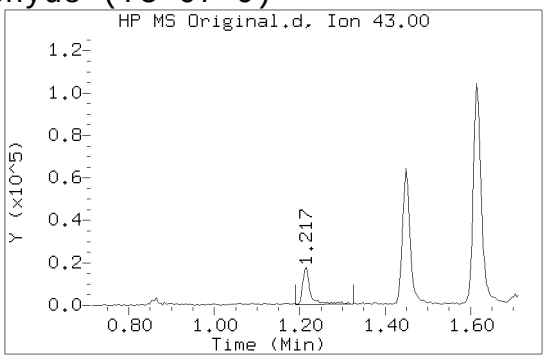
Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
43
AREA
22978
HEIGHT
17443
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
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22978
HEIGHT
17443
20-Jul-2023
15:04
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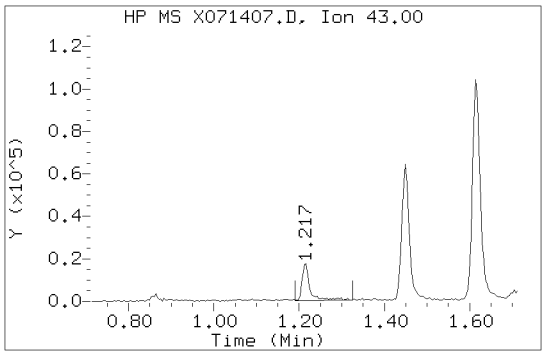

BEFORE

MASS
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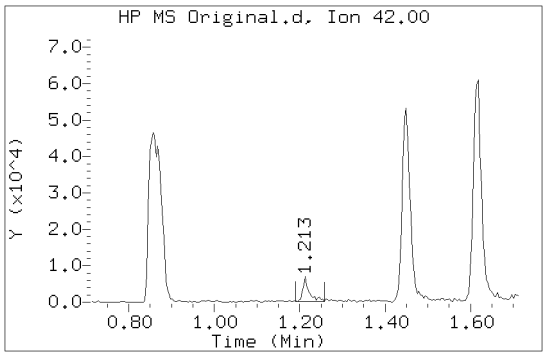
HEIGHT
6800
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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20-Jul-2023
15:04
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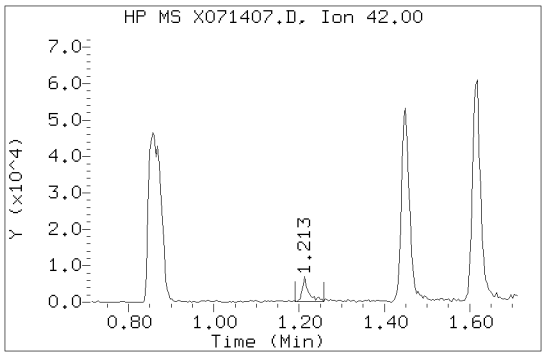

Isobutylene (115-11-7)

Reason Code:

BEFORE

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15:04
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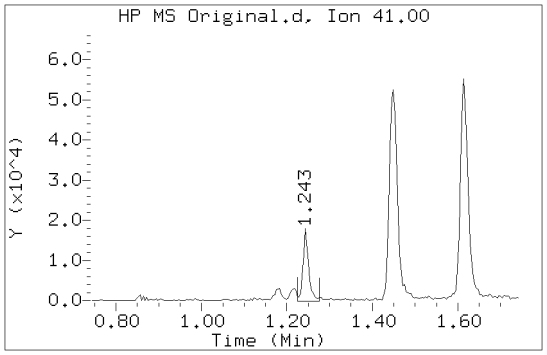

AFTER

MASS
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20-Jul-2023
15:04
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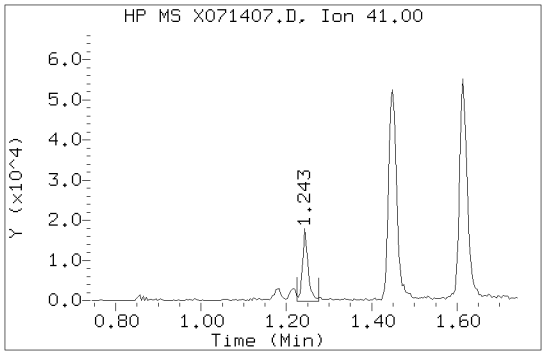
pham



BEFORE

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20-Jul-2023
15:04
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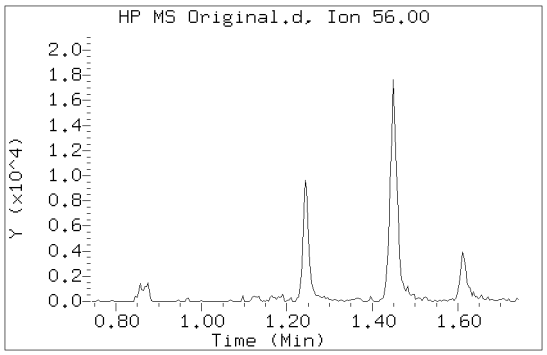

AFTER

MASS
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20-Jul-2023
15:04
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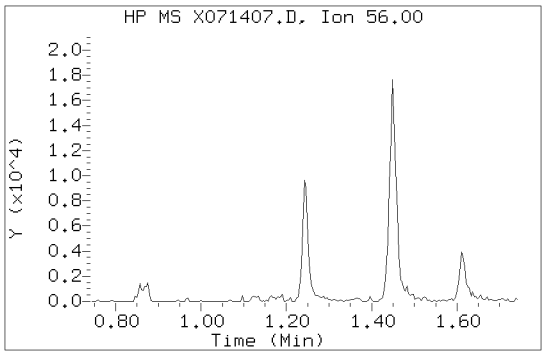
pham



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Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

Isobutylene (115-11-7)

Reason Code:

BEFORE

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20-Jul-2023
15:04
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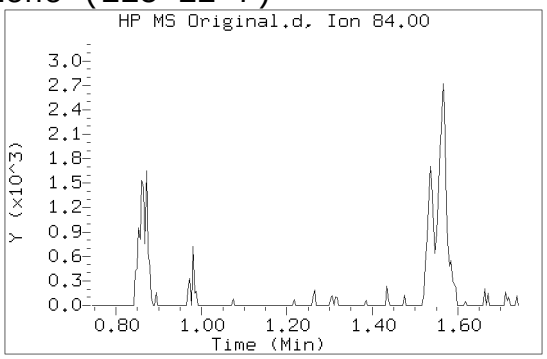
pham



AFTER

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20-Jul-2023
15:04
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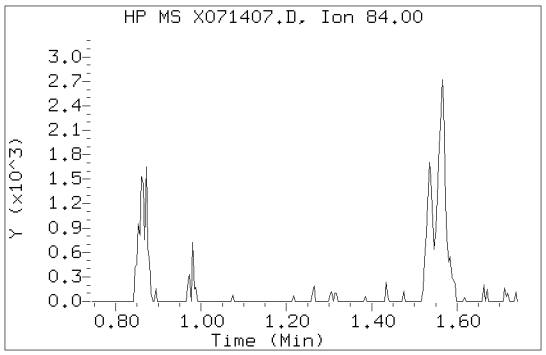

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

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98
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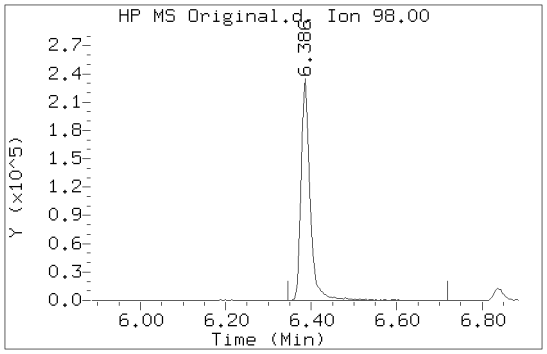
20-Jul-2023
15:04
linh
pham



AFTER

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20-Jul-2023
15:04
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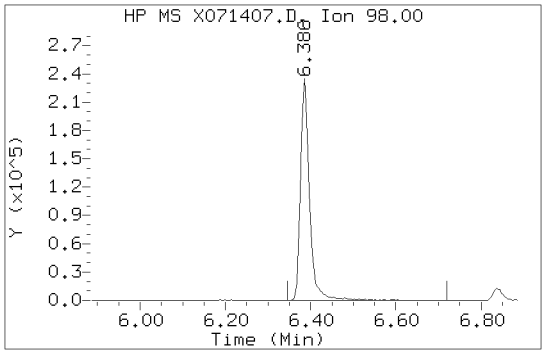

BEFORE

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HEIGHT
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20-Jul-2023
15:04
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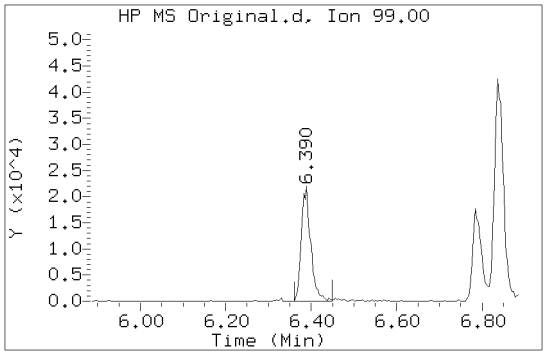

AFTER

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20-Jul-2023
15:04
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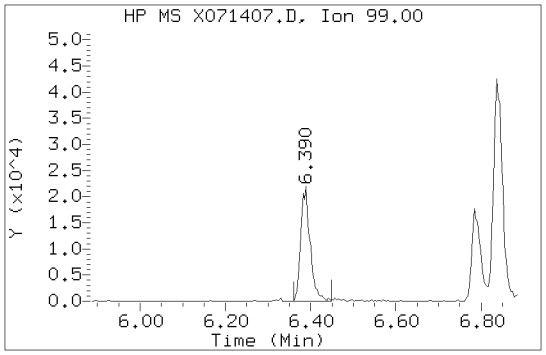

BEFORE

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AREA
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20-Jul-2023
15:04
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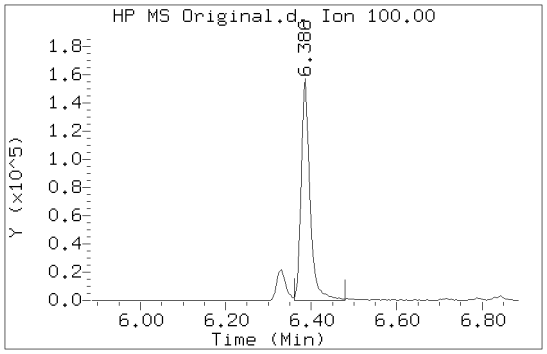

AFTER

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AREA
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HEIGHT
157302
20-Jul-2023
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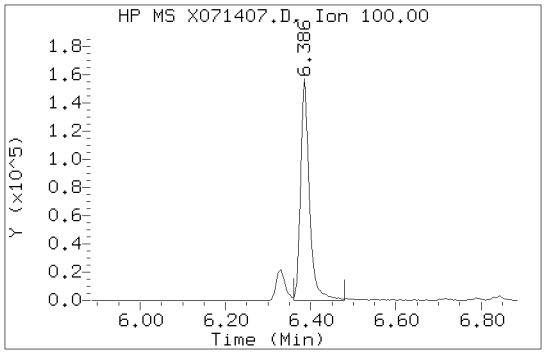

ALS Laboratory Group

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Inj Date : 14-JUL-2023 14:24
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\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:04 Cal File: X071407.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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	4.178	4.178	(1.000)	523013	50.0000	
2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	235300	50.0000	44.11
3 Chloromethane	50	1.081	1.081	(0.259)	354356	50.0000	44.85
4 Propionitrile	54	3.656	3.656	(0.875)	492839	500.000	475.69
5 Vinyl Chloride	62	1.145	1.145	(0.274)	318113	50.0000	47.00
6 Bromomethane	94	1.344	1.344	(0.322)	131891	50.0000	47.09
7 Chloroethane	64	1.407	1.407	(0.337)	180308	50.0000	46.66
8 Trichlorofluoromethane	101	1.561	1.561	(0.374)	315333	50.0000	45.97
9 Acrolein	56	1.861	1.861	(0.446)	19251	100.000	97.23(H)
10 Acetone	43	1.973	1.973	(0.472)	210033	100.000	101.57
11 1,1-Dichloroethene	96	1.913	1.913	(0.458)	183746	50.0000	47.95
12 Isobutyl Alcohol	43	4.680	4.680	(1.120)	992232	1000.00	1000.83
13 Acetonitrile	39	2.198	2.198	(0.526)	357196	500.000	487.03
14 Allyl Chloride	41	2.198	2.198	(0.526)	798138	50.0000	46.48
15 Iodomethane	142	2.030	2.030	(0.486)	473625	100.000	94.10
16 Acrylonitrile	53	2.532	2.532	(0.606)	235726	100.000	92.49
17 Methylene Chloride	84	2.307	2.307	(0.552)	228969	50.0000	50.65
18 Methyl tert-butyl ether	73	2.539	2.539	(0.608)	669525	50.0000	46.98
19 Carbon Disulfide	76	2.071	2.071	(0.496)	1141643	100.000	94.78
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	211279	50.0000	47.66

21 Vinyl Acetate	43	2.997	2.997 (0.717)	1752870	100.000	95.62
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	470383	50.0000	48.36

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.775	1.775	(0.425)	101850	50.0000	43.31(M)
	24 2-Butanone	43	3.582	3.582	(0.857)	268410	100.000	96.36
	25 Methacrylonitrile	41	3.821	3.821	(0.915)	328284	50.0000	48.62(a)
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	357279	50.0000	47.33
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	274899	50.0000	48.68
	28 Chloroform	83	3.904	3.904	(0.935)	470821	50.0000	47.31
	29 Bromochloromethane	128	3.791	3.791	(0.908)	149658	50.0000	47.29
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	227290	50.0000	47.37
	31 1,1,1-Trichloroethane	97	4.084	4.084	(0.978)	366818	50.0000	47.88
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	311339	50.0000	45.93
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	432993	50.0000	47.34
	34 Carbon Tetrachloride	117	4.268	4.268	(0.860)	295641	50.0000	43.30
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	282994	50.0000	47.17
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	830857	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	951794	50.0000	47.89
	38 Trichloroethene	130	5.205	5.205	(1.048)	268578	50.0000	47.77
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	359212	50.0000	47.18
	40 Methyl Methacrylate	41	5.606	5.606	(1.342)	290569	50.0000	46.03
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	231938	100.000	99.79
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	313347	50.0000	49.03
	43 2-Nitropropane	43	5.969	5.969	(1.429)	96529	50.0000	46.45
	44 Dibromomethane	93	5.550	5.550	(1.118)	168989	50.0000	46.71
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	688236	100.000	93.62
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	425194	50.0000	48.63
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	747052	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	806003	50.0000	41.90(M)
	49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	223750	50.0000	41.11
	50 Toluene	91	6.445	6.445	(0.841)	1011174	50.0000	50.28
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	351933	50.0000	47.75
	52 2-Hexanone	43	7.086	7.086	(0.924)	449229	100.000	93.02
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	205411	50.0000	48.15
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	420354	50.0000	48.23
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	303363	50.0000	49.25
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	200679	50.0000	48.30
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	231339	50.0000	47.45
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	276645	50.0000	41.44
	59 Chlorobenzene	112	7.690	7.690	(1.003)	673755	50.0000	47.92
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	270349	50.0000	49.12
	61 Ethylbenzene	106	7.795	7.795	(1.017)	339019	50.0000	48.09
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	871877	100.000	98.59
	63 o-Xylene	106	8.237	8.237	(1.074)	410767	50.0000	49.05
	64 Styrene	104	8.256	8.256	(1.077)	730009	50.0000	49.97
	66 Bromoform	173	8.406	8.406	(1.096)	197185	50.0000	49.90
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1023144	50.0000	47.53
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	323110	50.0000	46.71
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	355682	50.0000	47.79
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	411751	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	256294	50.0000	46.70(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	113164	50.0000	49.80
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	1199683	50.0000	48.21
	74 Bromobenzene	156	8.803	8.803	(0.912)	304391	50.0000	47.26
	75 1,3,5-Trimethylbenzene	105	9.062	9.062	(0.938)	873751	50.0000	46.87

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	787863	50.0000	46.93
77	4-Chlorotoluene	91	9.066	9.066 (0.939)	904673	50.0000	49.04

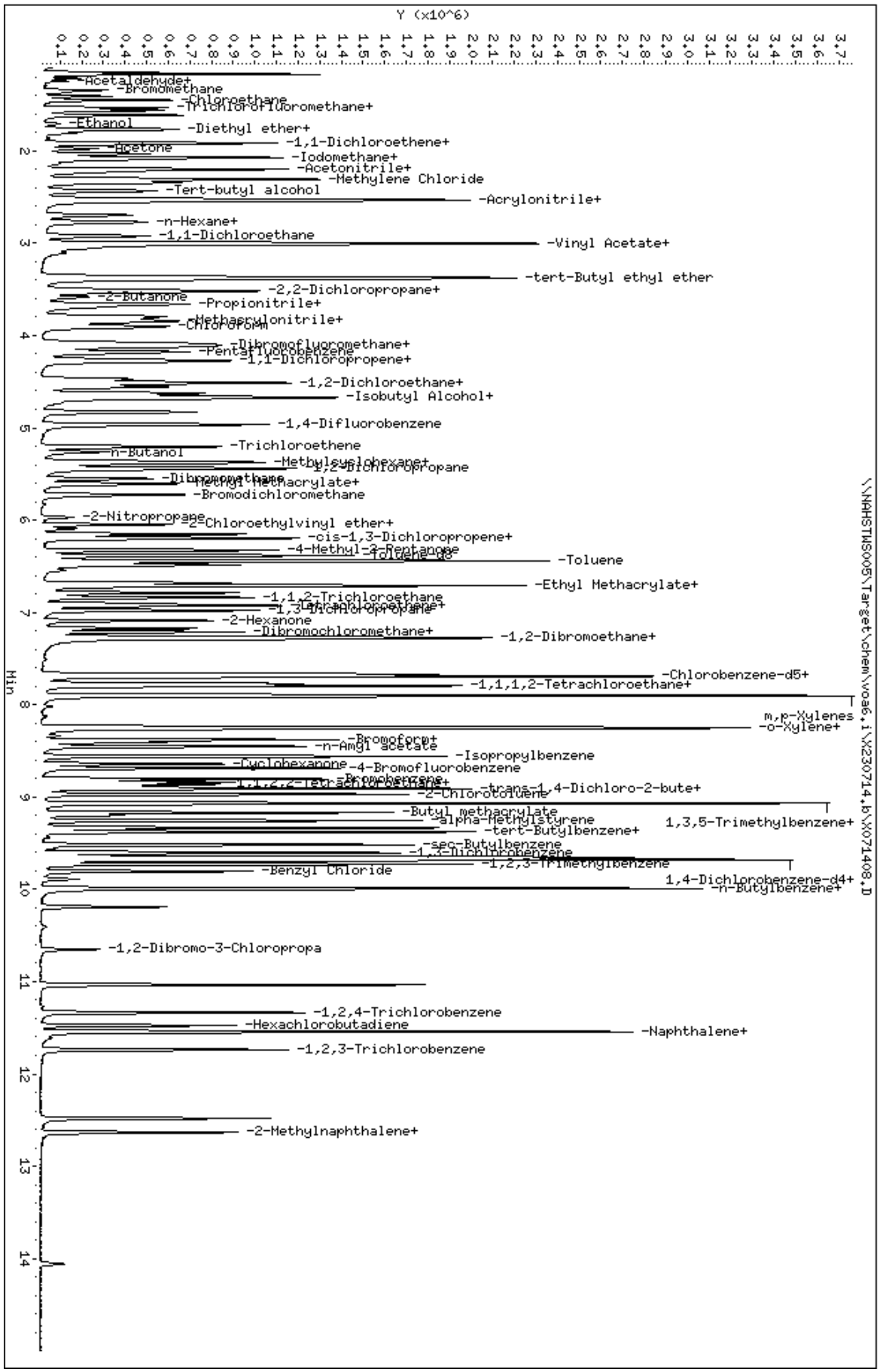
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
78	tert-Butylbenzene	119	9.336	9.336	(0.967)	722967	50.0000	45.22	
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	872776	50.0000	46.69	
81	sec-Butylbenzene	105	9.519	9.519	(0.986)	982642	50.0000	46.11	
82	p-Isopropyltoluene	119	9.647	9.647	(0.999)	896333	50.0000	46.05	
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	530593	50.0000	47.29	
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	570511	50.0000	46.38	
86	Benzyl Chloride	91	9.804	9.804	(1.279)	558112	50.0000	44.19	
87	n-Butylbenzene	91	9.992	9.992	(1.035)	755707	50.0000	46.35	
88	1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	524864	50.0000	47.58	
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.103)	51434	50.0000	45.34	
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	331560	50.0000	43.77	
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	139894	50.0000	40.54	
92	Naphthalene	128	11.540	11.540	(1.195)	833003	50.0000	44.42	
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	307966	50.0000	43.47	
146	Methyl acetate	43	2.232	2.232	(0.534)	220729	50.0000	47.42	
138	Freon TF	101	1.917	1.917	(0.459)	154547	50.0000	48.17	
141	Cyclohexane	56	4.125	4.125	(0.987)	384719	50.0000	42.43	
142	Tetrahydrofuran	42	3.851	3.851	(0.922)	127806	100.000	94.98	
147	Methylcyclohexane	55	5.381	5.381	(1.084)	820341	50.0000	46.77	
135	1,4-Dioxane	88	5.602	5.602	(1.341)	56497	1000.00	909.04	
132	n-Butanol	56	5.261	5.261	(1.259)	163155	1000.00	937.09	
131	Methyl Acrylate	55	3.690	3.690	(0.883)	324862	50.0000	45.69	
133	Ethyl Acrylate	55	5.381	5.381	(1.288)	820341	50.0000	47.32	
136	n-Hexane	57	2.772	2.772	(0.664)	244351	50.0000	48.23	
139	Diethyl ether	59	1.760	1.760	(0.421)	229645	50.0000	47.08	
148	Tert-butyl alcohol	59	2.434	2.434	(0.583)	589524	1000.00	893.06	
149	Isopropyl alcohol	45	2.093	2.093	(0.501)	369866	1000.00	902.98	
156	Diisopropyl ether	45	3.004	3.004	(0.719)	1023782	50.0000	47.49	
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	931868	50.0000	48.95	
167	Ethanol	45	1.703	1.703	(0.408)	72445	1000.00	990.30	
172	tert-Butyl formate	59	4.627	4.627	(1.108)	483988	100.000	86.62	
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	654787	1000.00	815.00	
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	841588	50.0000	48.91	
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	1034229	50.0000	46.70	
176	tert-Amyl alcohol	59	4.627	4.627	(1.108)	483988	1000.00	847.08	
151	4-Methyl-2-pentanol	45	6.712	6.712	(1.352)	1443508	1000.00	810.70	
180	1-Methylnaphthalene	142	12.634	12.634	(1.308)	377609	50.0000	(a)	
140	1,3-Butadiene	54	1.167	1.167	(0.280)	306107	50.0000	45.54	
152	Amyl alcohol	42	6.903	6.903	(0.900)	190741	1000.00	887.85	
158	Dichlorofluoromethane	67	1.535	1.535	(0.367)	398292	50.0000	47.26	
159	Propylene oxide	43	1.805	1.805	(0.432)	59535	100.000	92.78	
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	178568	1000.00	970.88	
162	Butyl acrylate	55	8.249	8.249	(1.076)	713652	50.0000	50.21	
163	Butyl methacrylate	41	9.167	9.167	(0.949)	474324	50.0000	48.09	
164	Dicyclopentadiene	66	9.681	9.681	(1.002)	1133352	50.0000	47.78	
182	Epichlorohydrin	57	6.093	6.093	(1.227)	118291	200.000	190.60	
M 94	1,2-Dichloroethylene (total)	96				486178	100.000	(a)	
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	421857	50.0000	46.96	
130	Ethyl Acetate	43	3.660	3.660	(0.876)	368212	50.0000	47.39	
134	Cyclohexanone	55	8.642	8.642	(0.895)	325236	1000.00	887.25	
185	Isoprene	39	1.775	1.775	(0.425)	78291	50.0000	45.41	
188	Isopropyl acetate	43	4.680	4.680	(0.943)	992232	50.0000	45.29	

187 n-Amyl acetate	43	8.451	8.451 (1.102)	605401	50.0000	44.21
189 n-Butyl acetate	43	7.210	7.210 (0.940)	548658	50.0000	47.91(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.772	2.772	(0.664)	244351	1000.00	964.89
194 Acetaldehyde	44	1.212	1.212	(0.290)	101552	200.000	218.25(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	719543	50.0000	46.08
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	522090	50.0000	51.81
202 Isobutylene	41	1.242	1.242	(0.297)	36655	50.0000	42.38(M)
205 2-Ethylhexyl Acrylate	55	11.547	11.547	(1.196)	561357	50.0000	53.37

QC Flag Legend

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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Sample Info: VSTD050;VSTD050;1;7;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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Inj Date : 14-JUL-2023 14:24
InstruID : voa6.i
LabSampID : VSTD050

1,2,3-Trichloropropane (96-18-4)

Reason Code:

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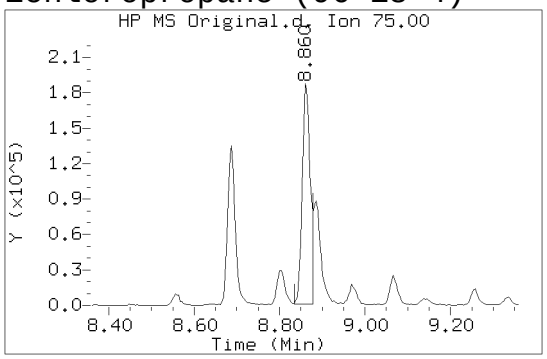

AFTER

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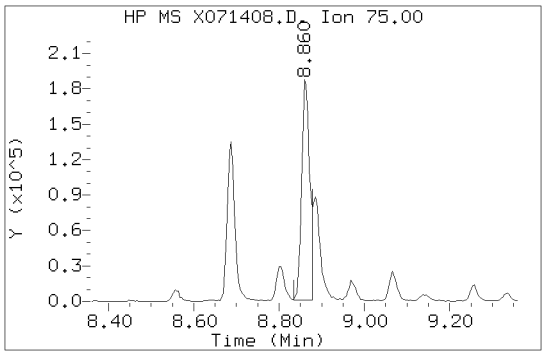

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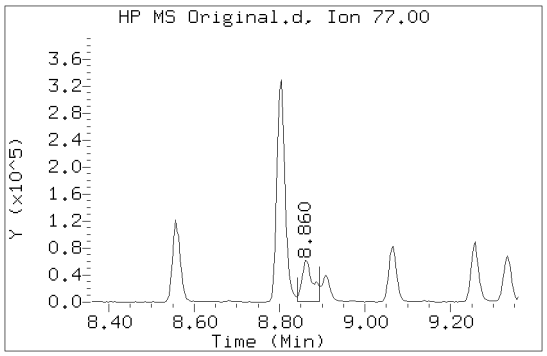

AFTER

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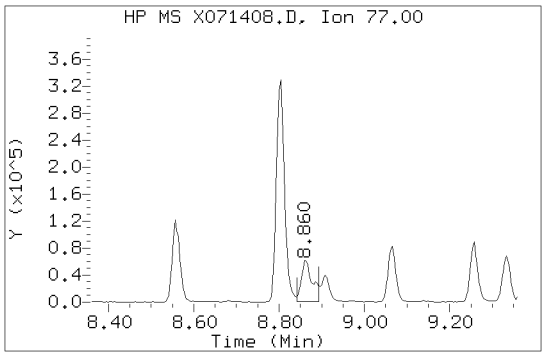

Chloroprene (126-99-8)

Reason Code:

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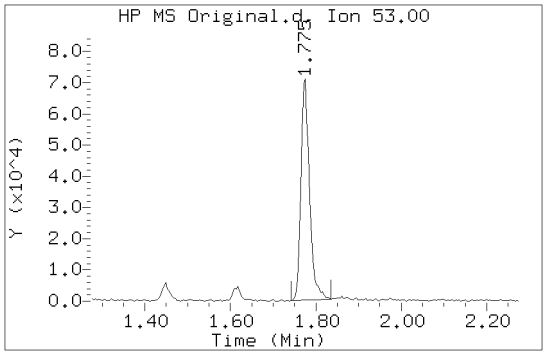

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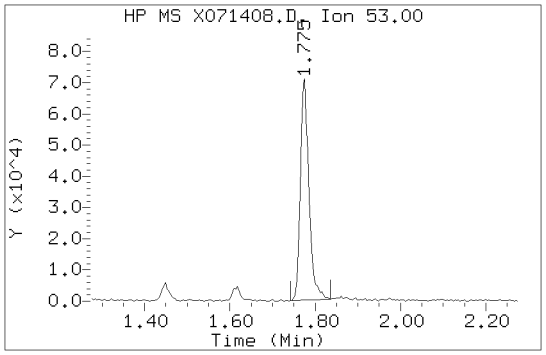

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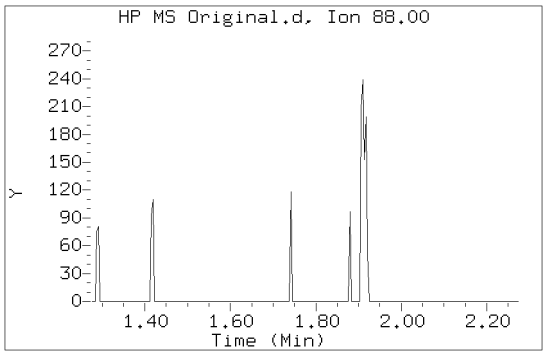

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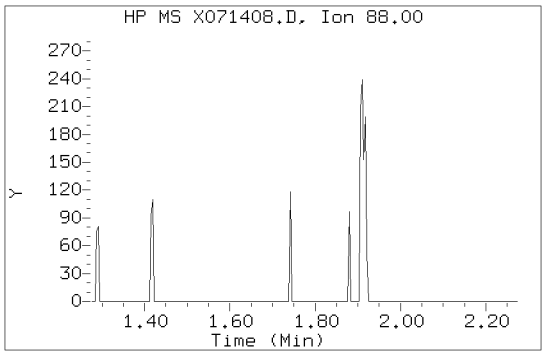

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InstruID : voa6.i
LabSampID : VSTD050

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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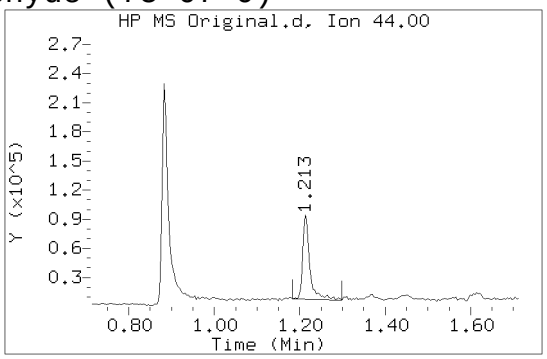

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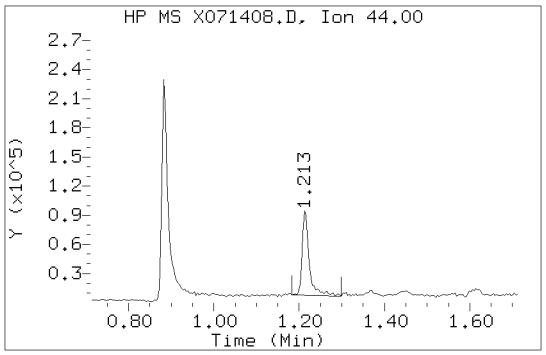

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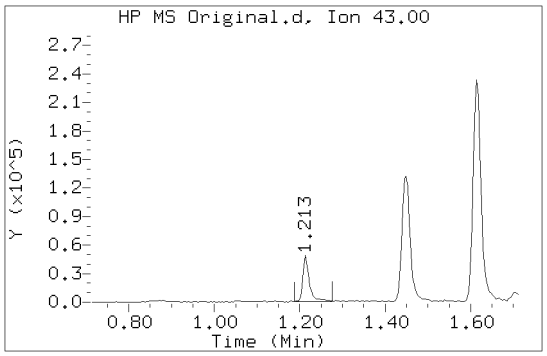

AFTER

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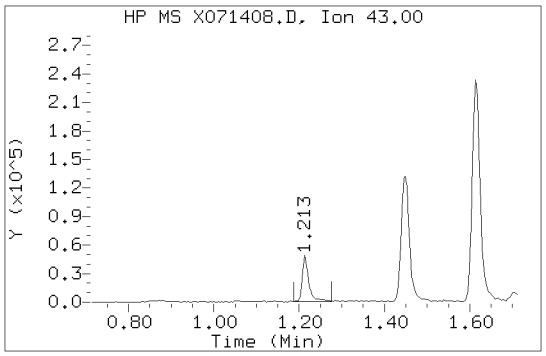

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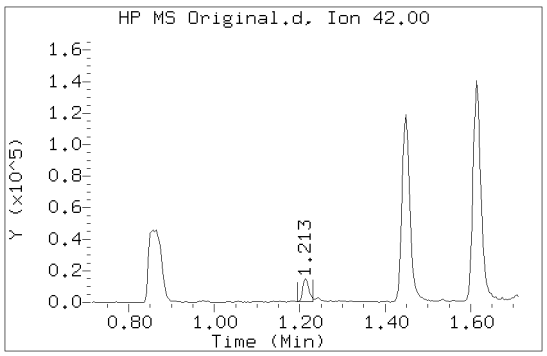

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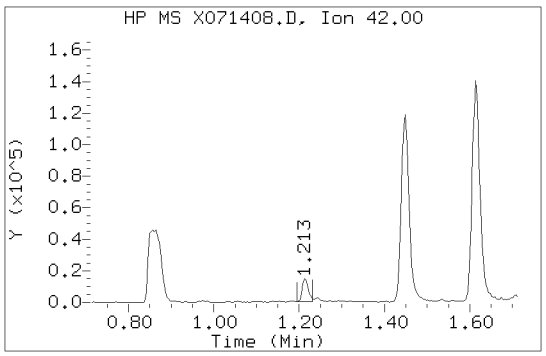

Isobutylene (115-11-7)

Reason Code:

BEFORE

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20-Jul-2023
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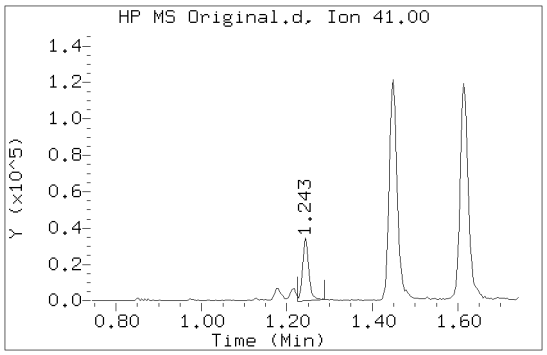

AFTER

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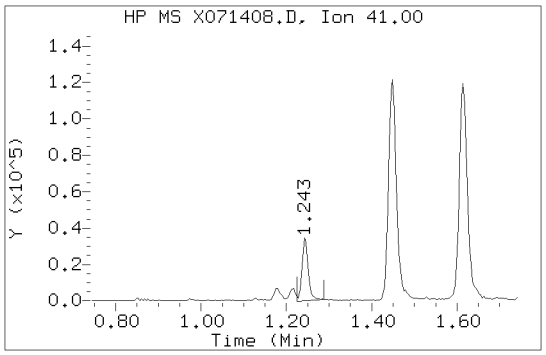

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Inj Date : 14-JUL-2023 14:24
InstruID : voa6.i
LabSampID : VSTD050

Isobutylene (115-11-7)

Reason Code:

BEFORE
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15:04
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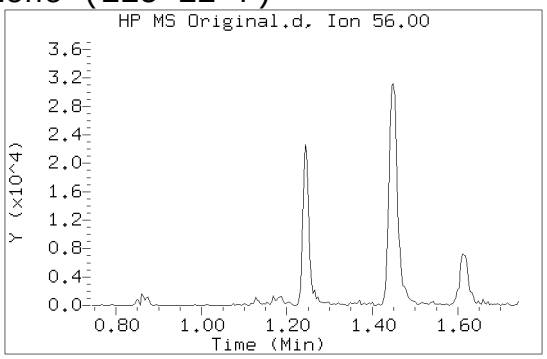

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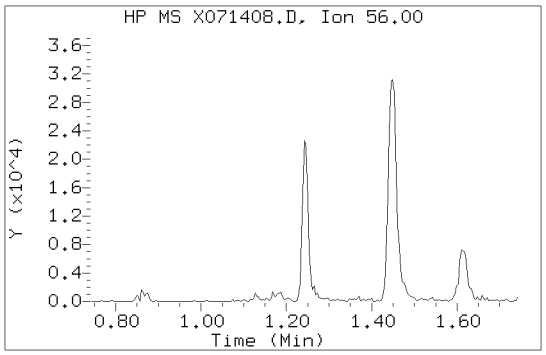

BEFORE
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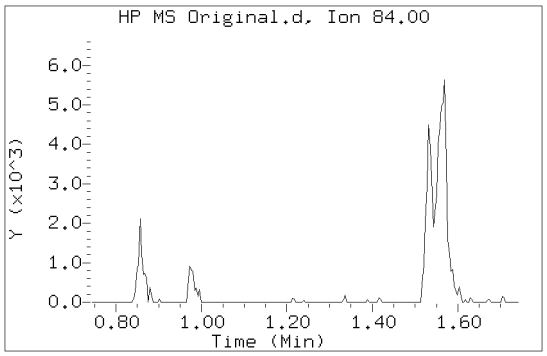

AFTER
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20-Jul-2023
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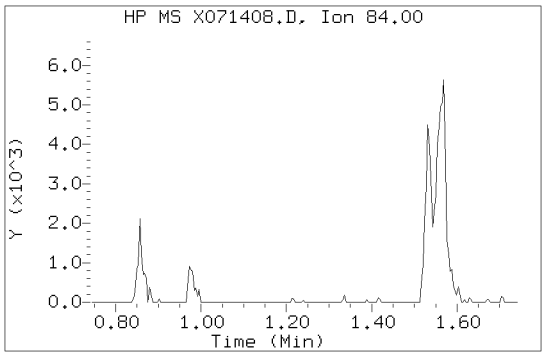

Toluene-d8 (2037-26-5)

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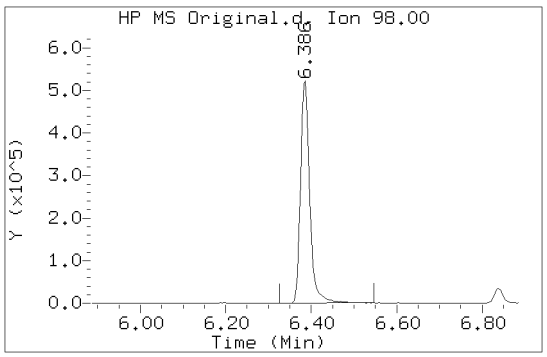

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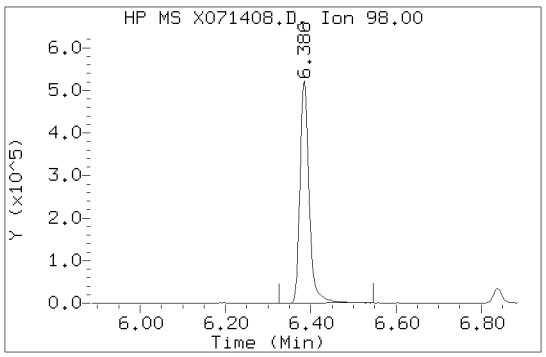

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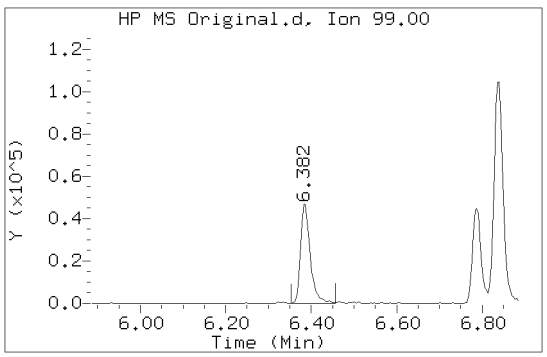

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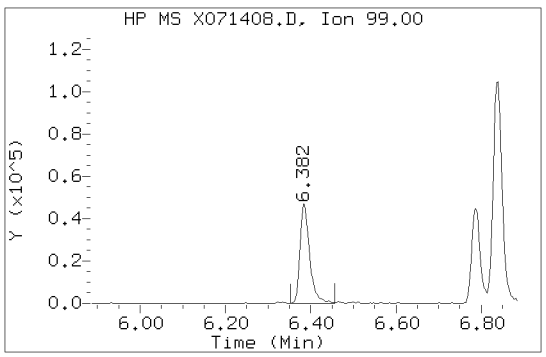

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Toluene-d8 (2037-26-5)

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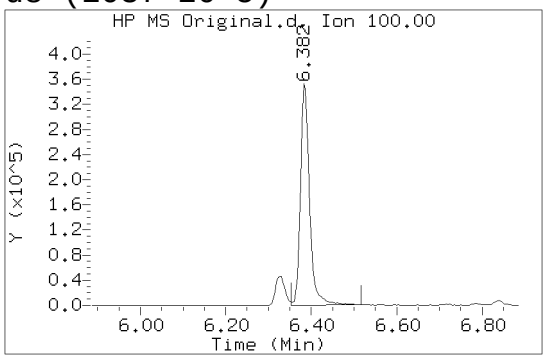

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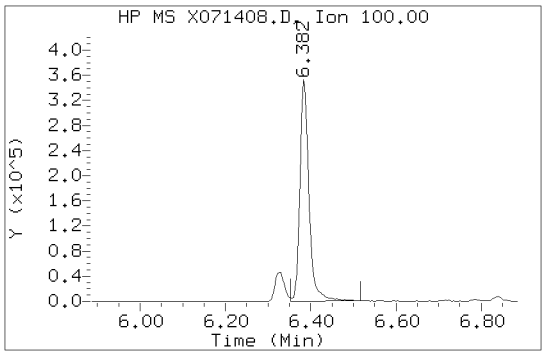

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071409.D
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Inj Date : 14-JUL-2023 14:44
Operator : PC Inst ID: voa6.i
Smp Info : VSTD100;VSTD100;1;8;
Misc Info : V6;WATER;0;1;
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Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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	4.178	4.178	(1.000)	523083	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	576963	100.000	106.55
3	Chloromethane	50	1.081	1.081	(0.259)	835087	100.000	105.69
4	Propionitrile	54	3.657	3.657	(0.875)	1047975	1000.00	1011.37
5	Vinyl Chloride	62	1.145	1.145	(0.274)	734431	100.000	108.50
6	Bromomethane	94	1.340	1.340	(0.321)	298512	100.000	106.56
7	Chloroethane	64	1.404	1.404	(0.336)	388839	100.000	100.62
8	Trichlorofluoromethane	101	1.561	1.561	(0.374)	784790	100.000	114.40
9	Acrolein	56	1.861	1.861	(0.446)	38657	200.000	194.08(H)
10	Acetone	43	1.973	1.973	(0.472)	413238	200.000	204.54
11	1,1-Dichloroethene	96	1.917	1.917	(0.459)	418161	100.000	109.11
12	Isobutyl Alcohol	43	4.676	4.676	(1.119)	2105793	2000.00	2123.76
13	Acetonitrile	39	2.198	2.198	(0.526)	728143	1000.00	992.69
14	Allyl Chloride	41	2.198	2.198	(0.526)	1634102	100.000	95.15
15	Iodomethane	142	2.030	2.030	(0.486)	1101288	200.000	206.62
16	Acrylonitrile	53	2.532	2.532	(0.606)	485413	200.000	190.43
17	Methylene Chloride	84	2.303	2.303	(0.551)	461890	100.000	103.61
18	Methyl tert-butyl ether	73	2.539	2.539	(0.608)	1386267	100.000	97.26
19	Carbon Disulfide	76	2.071	2.071	(0.496)	2567979	200.000	213.18
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	450376	100.000	101.60

21 Vinyl Acetate	43	3.001	3.001 (0.718)	3697154	200.000	201.67
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	974667	100.000	100.19

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.775	1.775	(0.425)	247316	100.000	105.15(M)
	24 2-Butanone	43	3.582	3.582	(0.857)	596777	200.000	214.23
	25 Methacrylonitrile	41	3.821	3.821	(0.915)	700145	100.000	103.69(a)
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	797830	100.000	105.42
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	578093	100.000	102.37
	28 Chloroform	83	3.904	3.904	(0.935)	984765	100.000	98.94
	29 Bromochloromethane	128	3.795	3.795	(0.908)	308539	100.000	97.49
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	502644	100.000	105.68
	31 1,1,1-Trichloroethane	97	4.084	4.084	(0.978)	846403	100.000	110.47
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	731563	100.000	110.92
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	901009	100.000	101.23
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	726709	100.000	109.37
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	615043	100.000	103.24
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	808530	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	2032676	100.000	105.10
	38 Trichloroethene	130	5.201	5.201	(1.048)	584538	100.000	106.85
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	741977	100.000	100.16
	40 Methyl Methacrylate	41	5.606	5.606	(1.342)	628263	100.000	99.51
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	497113	200.000	219.79
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	653249	100.000	105.04
	43 2-Nitropropane	43	5.969	5.969	(1.429)	203991	100.000	98.16
	44 Dibromomethane	93	5.550	5.550	(1.118)	353228	100.000	100.34
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	1478418	200.000	198.78
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	899164	100.000	105.68
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	755792	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	1813180	100.000	93.17(M)
	49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	499748	100.000	94.37
	50 Toluene	91	6.442	6.442	(0.840)	2182793	100.000	107.28
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	755710	100.000	105.36
	52 2-Hexanone	43	7.087	7.087	(0.924)	970744	200.000	198.69
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	424795	100.000	98.42
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	873450	100.000	99.06
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	655964	100.000	105.28
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	469739	100.000	111.75
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	477019	100.000	96.72
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	692334	100.000	106.58
	59 Chlorobenzene	112	7.690	7.690	(1.003)	1451842	100.000	102.08
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	582430	100.000	104.61
	61 Ethylbenzene	106	7.795	7.795	(1.017)	757084	100.000	106.16
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	1920317	200.000	214.63
	63 o-Xylene	106	8.237	8.237	(1.074)	894211	100.000	105.54
	64 Styrene	104	8.256	8.256	(1.077)	1543196	100.000	104.42
	66 Bromoform	173	8.410	8.410	(1.097)	423146	100.000	105.85
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	2408268	100.000	110.58
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	686871	100.000	97.37
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	767493	100.000	102.43
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	419955	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	550885	100.000	98.41(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	253486	100.000	110.27
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	2861434	100.000	112.75
	74 Bromobenzene	156	8.803	8.803	(0.911)	667827	100.000	101.67
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	2103222	100.000	110.62

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	1748246	100.000	102.12
77	4-Chlorotoluene	91	9.066	9.066 (0.938)	2018059	100.000	107.27

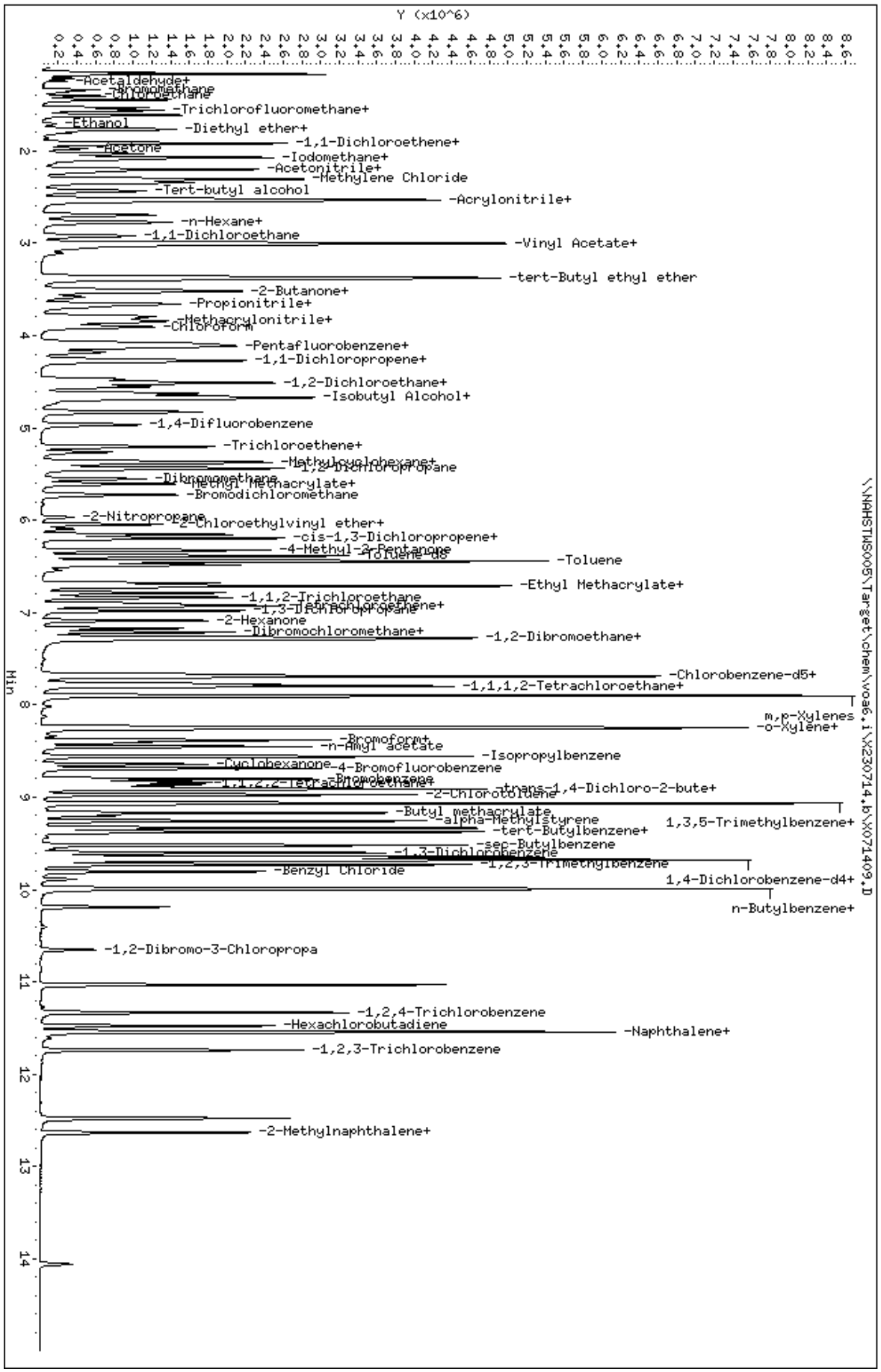
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	1780796	100.000	109.22
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	2073163	100.000	108.74
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	2510459	100.000	115.52
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	2265107	100.000	114.10
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	1217703	100.000	106.42
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	1289815	100.000	102.81
86	Benzyl Chloride	91	9.804	9.804	(1.279)	1321247	100.000	100.26
87	n-Butylbenzene	91	9.992	9.992	(1.034)	1995906	100.000	120.04
88	1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	1197079	100.000	106.41
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	119154	100.000	101.61
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	818711	100.000	105.96
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	382401	100.000	104.71
92	Naphthalene	128	11.540	11.540	(1.194)	1978675	100.000	103.47
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	745369	100.000	103.15
146	Methyl acetate	43	2.228	2.228	(0.533)	452160	100.000	97.12
138	Freon TF	101	1.917	1.917	(0.459)	422615	100.000	100.16
141	Cyclohexane	56	4.118	4.118	(0.986)	1080112	100.000	119.12
142	Tetrahydrofuran	42	3.848	3.848	(0.921)	261433	200.000	194.26
147	Methylcyclohexane	55	5.381	5.381	(1.084)	1785418	100.000	104.61(A)
135	1,4-Dioxane	88	5.598	5.598	(1.340)	124490	2000.00	2002.78
132	n-Butanol	56	5.261	5.261	(1.259)	380486	2000.00	2185.06
131	Methyl Acrylate	55	3.690	3.690	(0.883)	811825	100.000	114.17
133	Ethyl Acrylate	55	5.381	5.381	(1.288)	1785418	100.000	102.98
136	n-Hexane	57	2.772	2.772	(0.664)	700280	100.000	100.13
139	Diethyl ether	59	1.760	1.760	(0.421)	469212	100.000	96.19
148	Tert-butyl alcohol	59	2.434	2.434	(0.583)	1247600	2000.00	1889.72
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	761231	2000.00	1858.21
156	Diisopropyl ether	45	3.004	3.004	(0.719)	2133149	100.000	98.94
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	2052311	100.000	105.71
167	Ethanol	45	1.703	1.703	(0.408)	150451	2000.00	2076.45
172	tert-Butyl formate	59	4.627	4.627	(1.108)	1076721	200.000	192.69
173	3,3-Dimethyl-1-butanol	57	7.289	7.289	(0.951)	1478367	2000.00	1818.81
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	1654411	100.000	96.14
175	tert-Butyl ethyl ether	59	3.383	3.383	(0.810)	2142435	100.000	96.74
176	tert-Amyl alcohol	59	4.627	4.627	(1.108)	1076721	2000.00	1884.24
151	4-Methyl-2-pentanol	45	6.712	6.712	(1.352)	3281154	2000.00	1893.64
180	1-Methylnaphthalene	142	12.635	12.635	(1.308)	878613	100.000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	742885	100.000	110.52
152	Amyl alcohol	42	6.903	6.903	(0.900)	457453	2000.00	2104.71
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	823584	100.000	97.72
159	Propylene oxide	43	1.805	1.805	(0.432)	116784	200.000	181.98
161	3-Methyl-1-butanol	55	6.899	6.899	(0.900)	421402	2000.00	2264.68
162	Butyl acrylate	55	8.249	8.249	(1.076)	1549632	100.000	107.77
163	Butyl methacrylate	41	9.167	9.167	(0.949)	1085490	100.000	107.91
164	Dicyclopentadiene	66	9.681	9.681	(1.002)	2485958	100.000	102.76
182	Epichlorohydrin	57	6.093	6.093	(1.227)	253170	400.000	419.20
M 94	1,2-Dichloroethylene (total)	96				1028469	200.000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	977451	100.000	106.68
130	Ethyl Acetate	43	3.660	3.660	(0.876)	772631	100.000	99.44
134	Cyclohexanone	55	8.642	8.642	(0.894)	668441	2000.00	1787.90
185	Isoprene	39	1.771	1.771	(0.424)	186523	100.000	108.17
188	Isopropyl acetate	43	4.676	4.676	(0.942)	2105793	100.000	98.77

187 n-Amyl acetate	43	8.451	8.451 (1.102)	1369941	100.000	98.90
189 n-Butyl acetate	43	7.210	7.210 (0.940)	1203586	100.000	103.89(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.772	2.772	(0.664)	700280	2000.00	2002.79
194 Acetaldehyde	44	1.212	1.212	(0.290)	189053	400.000	425.78(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	1583303	100.000	100.22
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	1112805	100.000	109.15
202 Isobutylene	41	1.242	1.242	(0.297)	90557	100.000	104.71(M)
205 2-Ethylhexyl Acrylate	55	11.544	11.544	(1.195)	1235080	100.000	115.14

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.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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Inj Date : 14-JUL-2023 14:44
InstruID : voa6.i
LabSampID : VSTD100

1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

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20-Jul-2023
15:04
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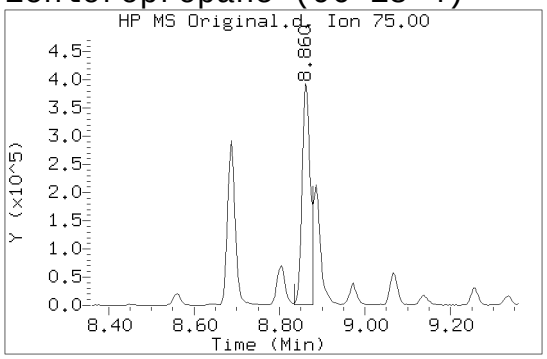

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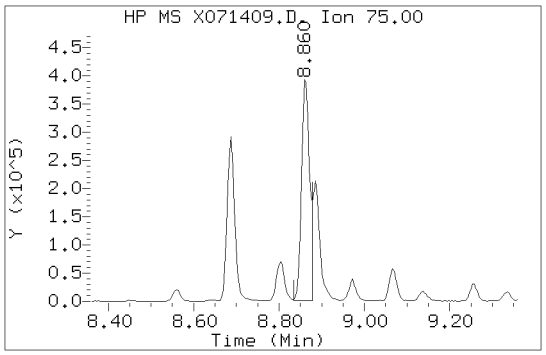

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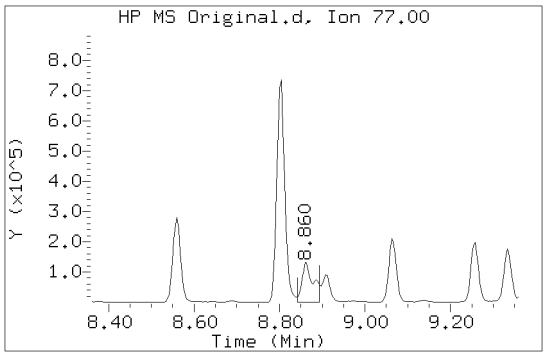

AFTER

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20-Jul-2023
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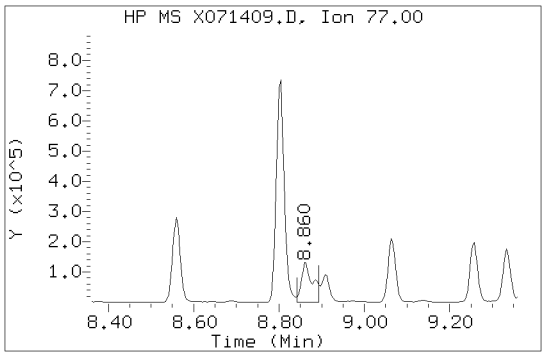

Chloroprene (126-99-8)

Reason Code:

BEFORE

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20-Jul-2023
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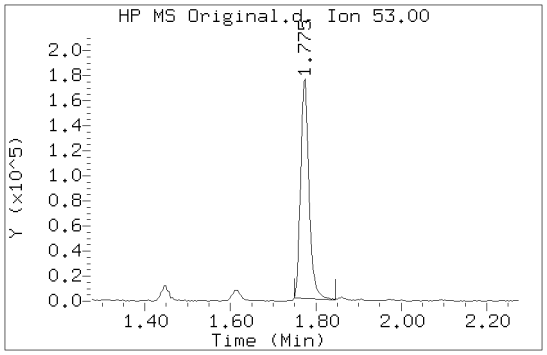

AFTER

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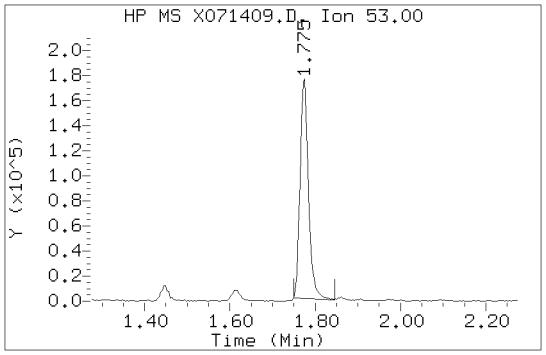

BEFORE

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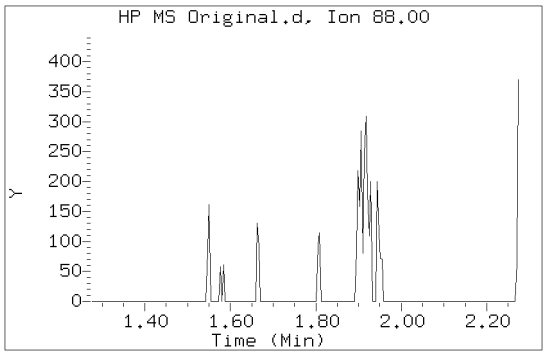

AFTER

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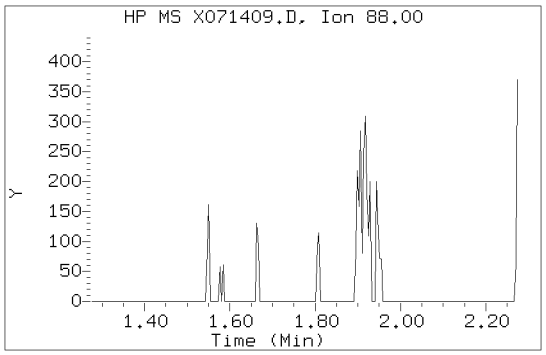

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Inj Date : 14-JUL-2023 14:44
InstruID : voa6.i
LabSampID : VSTD100

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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163907
20-Jul-2023
15:04
linh
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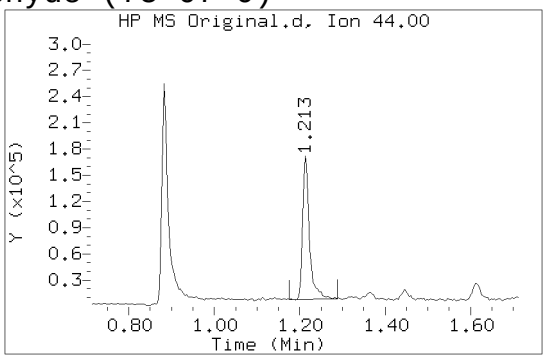

AFTER

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20-Jul-2023
15:04
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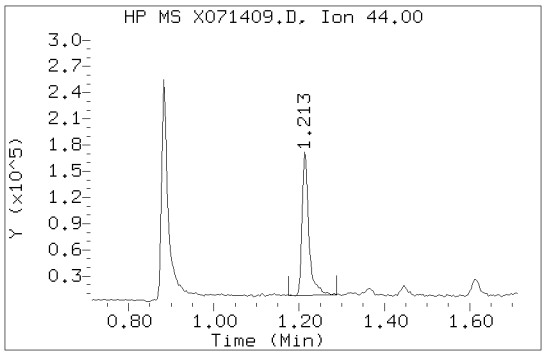

BEFORE

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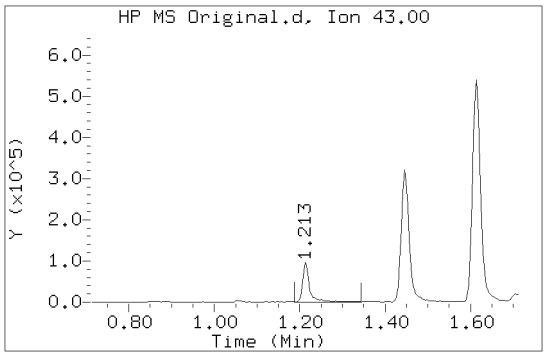
96750
20-Jul-2023
15:04
linh
pham



AFTER

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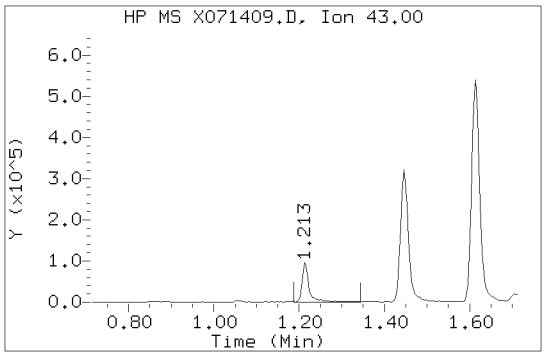

BEFORE

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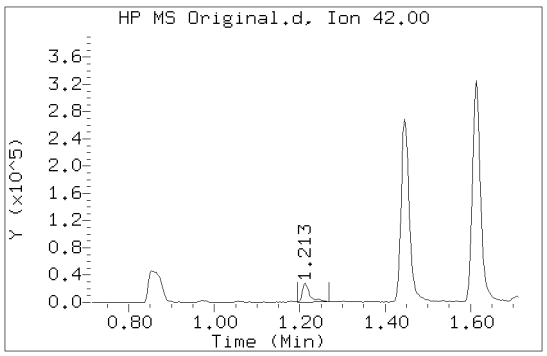

AFTER

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20-Jul-2023
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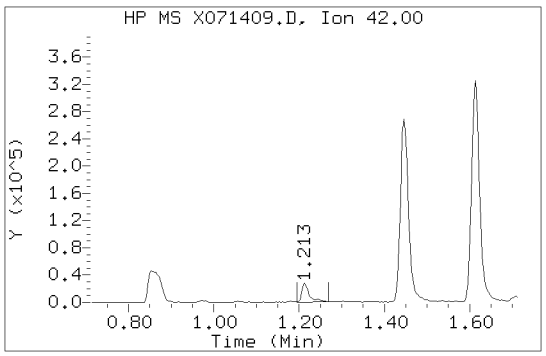

Isobutylene (115-11-7)

Reason Code:

BEFORE

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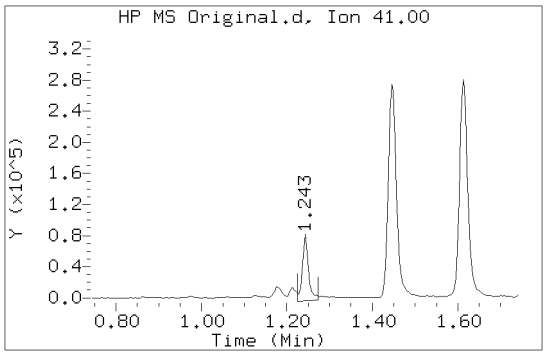
HEIGHT
86300
20-Jul-2023
15:04
linh
pham



AFTER

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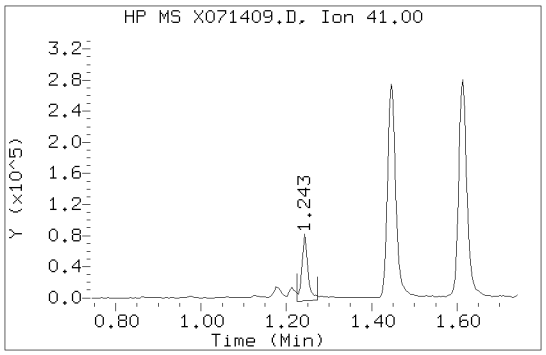

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InstruID : voa6.i
LabSampID : VSTD100

Isobutylene (115-11-7)

Reason Code:

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20-Jul-2023
15:04
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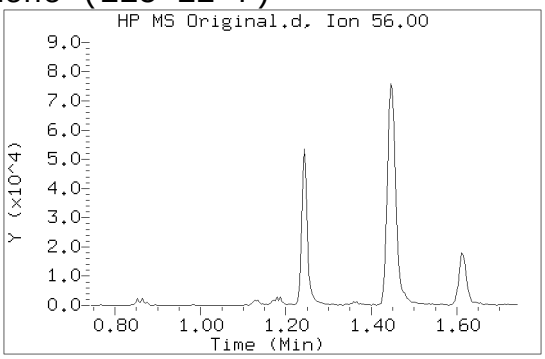

AFTER
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20-Jul-2023
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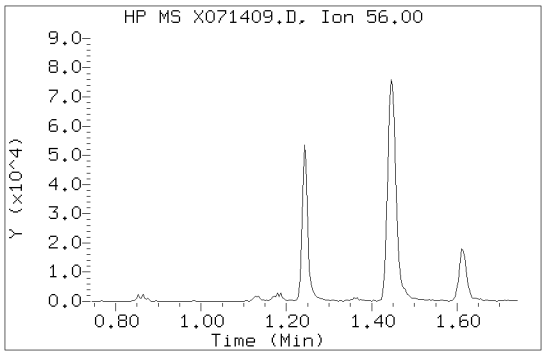

BEFORE
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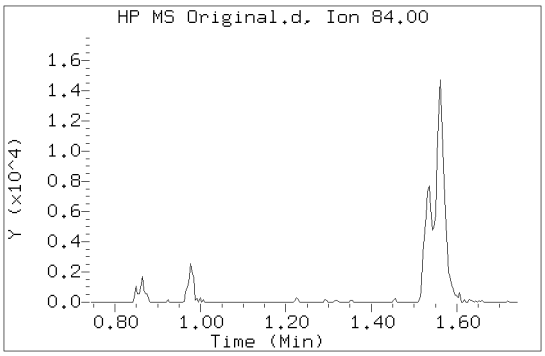

AFTER
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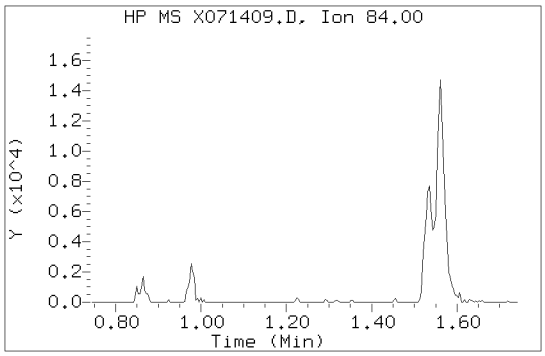

Toluene-d8 (2037-26-5)

Reason Code:

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20-Jul-2023
15:04
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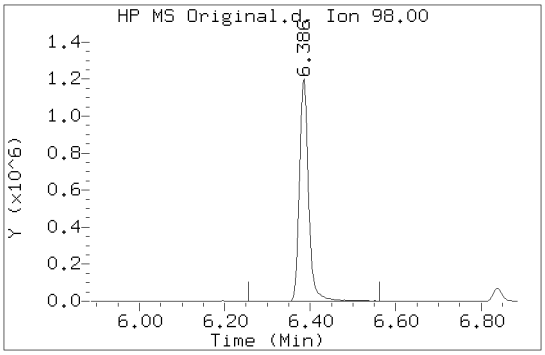

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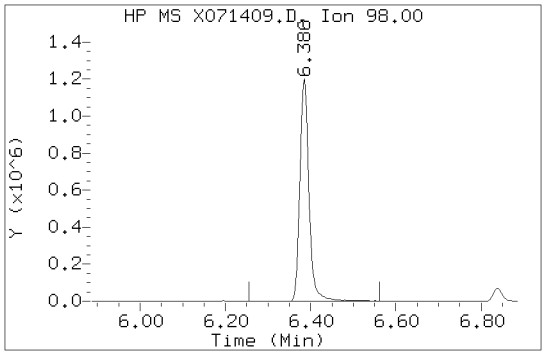

BEFORE
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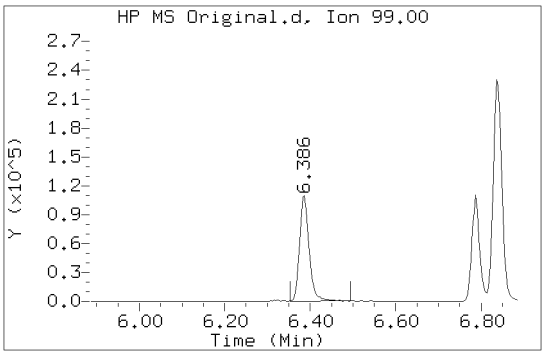

AFTER
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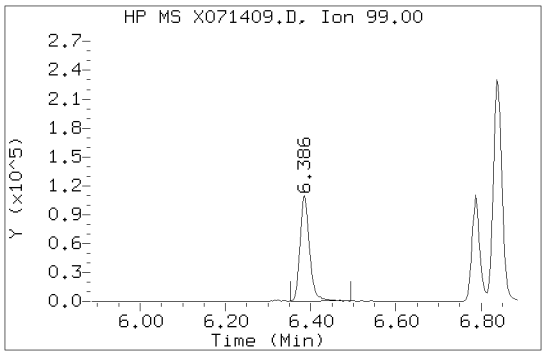

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Inj Date : 14-JUL-2023 14:44
InstruID : voa6.i
LabSampID : VSTD100

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

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HEIGHT
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20-Jul-2023
15:04
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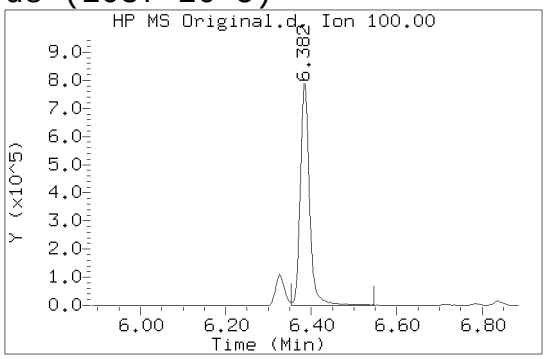

AFTER

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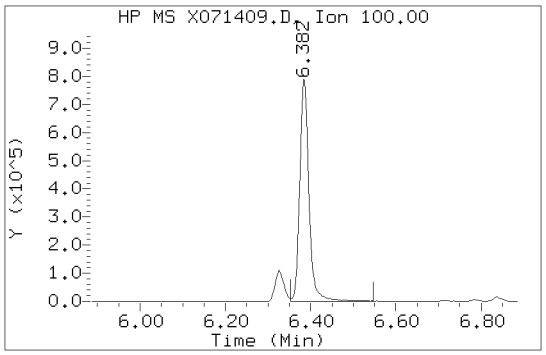

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071410.D Page 1
Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071410.D
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Inj Date : 14-JUL-2023 15:05
Operator : PC Inst ID: voa6.i
Smp Info : VSTD150;VSTD150;1;9;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:44 Cal File: X071409.D
Als bottle: 11 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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	4.178	4.178	(1.000)	527810	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	822037	150.000	150.00
3	Chloromethane	50	1.081	1.081	(0.259)	1286174	150.000	161.33
4	Propionitrile	54	3.656	3.656	(0.875)	1601430	1500.00	1531.66
5	Vinyl Chloride	62	1.145	1.145	(0.274)	1063794	150.000	155.75
6	Bromomethane	94	1.336	1.336	(0.320)	469612	150.000	166.14
7	Chloroethane	64	1.404	1.404	(0.336)	574620	150.000	147.37
8	Trichlorofluoromethane	101	1.561	1.561	(0.374)	1133831	150.000	163.80
9	Acrolein	56	1.861	1.861	(0.446)	60619	300.000	301.00(M)
10	Acetone	43	1.973	1.973	(0.472)	616513	300.000	304.76
11	1,1-Dichloroethene	96	1.913	1.913	(0.458)	592973	150.000	153.35
12	Isobutyl Alcohol	43	4.676	4.676	(1.119)	3143464	3000.00	3141.89
13	Acetonitrile	39	2.198	2.198	(0.526)	1116521	1500.00	1508.54
14	Allyl Chloride	41	2.198	2.198	(0.526)	2479475	150.000	143.08
15	Iodomethane	142	2.030	2.030	(0.486)	1666204	300.000	298.54
16	Acrylonitrile	53	2.532	2.532	(0.606)	742882	300.000	288.83
17	Methylene Chloride	84	2.303	2.303	(0.551)	679924	150.000	151.80
18	Methyl tert-butyl ether	73	2.539	2.539	(0.608)	2090757	150.000	145.38
19	Carbon Disulfide	76	2.071	2.071	(0.496)	3776842	300.000	310.72
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	652435	150.000	145.86

21 Vinyl Acetate	43	3.000	3.000 (0.718)	5593666	300.000	302.39
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	1431683	150.000	145.86

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
23	Chloroprene	53	1.771	1.771	(0.424)	369436	150.000	155.66
24	2-Butanone	43	3.581	3.581	(0.857)	878521	300.000	312.55
25	Methacrylonitrile	41	3.821	3.821	(0.915)	1065216	150.000	156.35(aM)
26	2,2-Dichloropropane	77	3.507	3.507	(0.839)	1150093	150.000	150.52
27	cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	837160	150.000	146.92
28	Chloroform	83	3.904	3.904	(0.935)	1446796	150.000	144.05
29	Bromochloromethane	128	3.791	3.791	(0.908)	457063	150.000	143.13
$ 30	Dibromofluoromethane	113	4.099	4.099	(0.981)	719790	150.000	150.30
31	1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	1235806	150.000	159.84
32	1,1-Dichloropropene	75	4.279	4.279	(0.862)	1058110	150.000	156.11
33	1,2-Dichloroethane	62	4.552	4.552	(0.917)	1349536	150.000	147.53
34	Carbon Tetrachloride	117	4.264	4.264	(0.859)	1056698	150.000	154.75(H)
$ 35	1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	911155	150.000	151.87
* 36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	830945	50.0000	
37	Benzene	78	4.511	4.511	(0.909)	2966123	150.000	149.23
38	Trichloroethene	130	5.205	5.205	(1.048)	855874	150.000	152.23
39	Bromodichloromethane	83	5.726	5.726	(1.153)	1126828	150.000	148.01
40	Methyl Methacrylate	41	5.606	5.606	(1.342)	952441	150.000	149.51
41	2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	736745	300.000	316.95
42	1,2-Dichloropropane	63	5.437	5.437	(1.095)	965373	150.000	151.04
43	2-Nitropropane	43	5.969	5.969	(1.429)	327090	150.000	155.99
44	Dibromomethane	93	5.550	5.550	(1.118)	514778	150.000	142.29
45	4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	2236545	300.000	293.85
46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	1331094	150.000	152.22
* 47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	773431	50.0000	
$ 48	Toluene-d8	98	6.385	6.385	(0.833)	2609088	150.000	131.02(M)
49	Ethyl Methacrylate	69	6.715	6.715	(1.353)	829910	150.000	152.50
50	Toluene	91	6.442	6.442	(0.840)	3226930	150.000	154.99
51	trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	1129301	150.000	153.20
52	2-Hexanone	43	7.086	7.086	(0.924)	1502232	300.000	300.46
53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	629049	150.000	142.43
54	1,3-Dichloropropane	76	6.978	6.978	(0.910)	1287243	150.000	142.66
55	Dibromochloromethane	129	7.173	7.173	(0.935)	978359	150.000	153.44
56	Tetrachloroethene	164	6.925	6.925	(0.903)	682053	150.000	158.57
57	1,2-Dibromoethane	107	7.255	7.255	(0.946)	707106	150.000	140.10
58	1-Chlorohexane	55	7.694	7.694	(1.550)	1016479	150.000	152.26
59	Chlorobenzene	112	7.690	7.690	(1.003)	2169037	150.000	149.03
60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	874873	150.000	153.55
61	Ethylbenzene	106	7.795	7.795	(1.017)	1121097	150.000	153.61
62	m,p-Xylenes	106	7.900	7.900	(1.030)	2832546	300.000	309.38
63	o-Xylene	106	8.237	8.237	(1.074)	1332457	150.000	153.68
64	Styrene	104	8.256	8.256	(1.077)	2314702	150.000	153.05
66	Bromoform	173	8.406	8.406	(1.096)	644372	150.000	157.51
67	Isopropylbenzene	105	8.560	8.560	(1.116)	3517587	150.000	157.83
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	1039682	150.000	143.99
$ 69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	1135204	150.000	148.24
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	429875	50.0000	
71	1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	832853	150.000	145.35(M)
72	trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	389558	150.000	165.60
73	n-Propylbenzene	91	8.908	8.908	(0.922)	4183180	150.000	161.03
74	Bromobenzene	156	8.803	8.803	(0.911)	988462	150.000	147.02
75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	3151476	150.000	161.94

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	2593717	150.000	148.01
77	4-Chlorotoluene	91	9.066	9.066 (0.938)	3011546	150.000	156.39

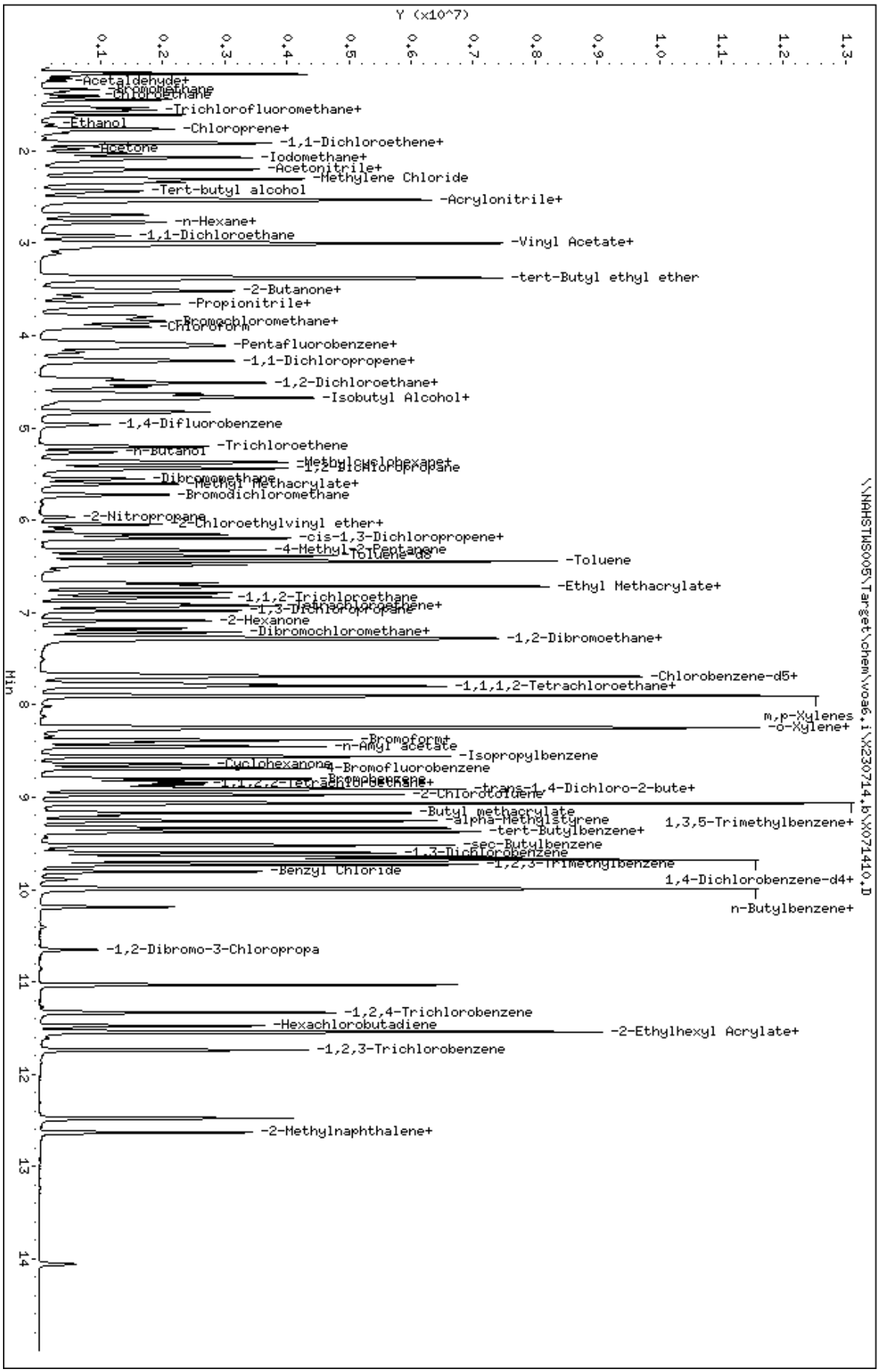
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	2639400	150.000	158.15
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	3108890	150.000	159.30
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	3705100	150.000	166.56
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	3332963	150.000	164.02
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	1820441	150.000	155.43
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	1873658	150.000	145.90
86	Benzyl Chloride	91	9.804	9.804	(1.279)	2041719	150.000	150.20
87	n-Butylbenzene	91	9.992	9.992	(1.034)	2930740	150.000	172.20
88	1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	1771825	150.000	153.87
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	181917	150.000	151.02
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	1234851	150.000	156.14
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	564457	150.000	149.95
92	Naphthalene	128	11.536	11.536	(1.194)	2932468	150.000	149.81(H)
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	1112132	150.000	150.36
146	Methyl acetate	43	2.228	2.228	(0.533)	681317	150.000	145.04
138	Freon TF	101	1.917	1.917	(0.459)	606555	150.000	111.66
141	Cyclohexane	56	4.118	4.118	(0.986)	1542802	150.000	168.63
142	Tetrahydrofuran	42	3.851	3.851	(0.922)	399301	300.000	294.06
147	Methylcyclohexane	55	5.377	5.377	(1.083)	2810624	150.000	160.25(A)
135	1,4-Dioxane	88	5.602	5.602	(1.341)	190045	3000.00	3030.04
132	n-Butanol	56	5.261	5.261	(1.259)	615802	3000.00	3504.76
131	Methyl Acrylate	55	3.690	3.690	(0.883)	1248423	150.000	174.00
133	Ethyl Acrylate	55	5.377	5.377	(1.287)	2810624	150.000	160.67
136	n-Hexane	57	2.772	2.772	(0.664)	1037045	150.000	105.54
139	Diethyl ether	59	1.756	1.756	(0.420)	707615	150.000	143.77
148	Tert-butyl alcohol	59	2.438	2.438	(0.584)	1892876	3000.00	2841.43
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	1176234	3000.00	2845.54
156	Diisopropyl ether	45	3.004	3.004	(0.719)	3254817	150.000	149.61
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	3200479	150.000	161.06
167	Ethanol	45	1.711	1.711	(0.410)	220615	3000.00	3026.01
172	tert-Butyl formate	59	4.631	4.631	(1.109)	1704396	300.000	302.29(A)
173	3,3-Dimethyl-1-butanol	57	7.289	7.289	(0.951)	2433401	3000.00	2925.50
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	2611847	150.000	150.42(M)
175	tert-Butyl ethyl ether	59	3.383	3.383	(0.810)	3273017	150.000	146.47
176	tert-Amyl alcohol	59	4.631	4.631	(1.109)	1704396	3000.00	2955.95
151	4-Methyl-2-pentanol	45	6.715	6.715	(1.353)	5221709	3000.00	2932.29
180	1-Methylnaphthalene	142	12.631	12.631	(1.307)	1346422	150.000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	1064415	150.000	156.94
152	Amyl alcohol	42	6.903	6.903	(0.900)	729736	3000.00	3280.90
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	1246213	150.000	146.54
159	Propylene oxide	43	1.805	1.805	(0.432)	172752	300.000	266.78
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	658666	3000.00	3459.04
162	Butyl acrylate	55	8.249	8.249	(1.076)	2429512	150.000	165.11
163	Butyl methacrylate	41	9.167	9.167	(0.949)	1571014	150.000	152.57
164	Dicyclopentadiene	66	9.684	9.684	(1.002)	3894938	150.000	157.29(H)
182	Epichlorohydrin	57	6.093	6.093	(1.227)	380786	600.000	613.50
M 94	1,2-Dichloroethylene (total)	96				1489595	300.000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	1478505	150.000	157.64
130	Ethyl Acetate	43	3.660	3.660	(0.876)	1137763	150.000	145.13
134	Cyclohexanone	55	8.642	8.642	(0.894)	1027116	3000.00	2683.87
185	Isoprene	39	1.771	1.771	(0.424)	269460	150.000	154.87
188	Isopropyl acetate	43	4.676	4.676	(0.942)	3143464	150.000	143.47

187 n-Amyl acetate	43	8.451	8.451 (1.102)	2118647	150.000	149.46
189 n-Butyl acetate	43	7.210	7.210 (0.940)	1862306	150.000	157.09(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.772	2.772	(0.664)	1037045	3000.00	2106.54
194 Acetaldehyde	44	1.212	1.212	(0.290)	265471	600.000	601.40(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	2526261	150.000	156.27
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	1709034	150.000	163.81
202 Isobutylene	41	1.242	1.242	(0.297)	129814	150.000	148.75(M)
205 2-Ethylhexyl Acrylate	55	11.544	11.544	(1.195)	1882332	150.000	171.43

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.
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

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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Inj Date : 14-JUL-2023 15:05
InstruID : voa6.i
LabSampID : VSTD150

Acrolein (107-02-8)

Reason Code:

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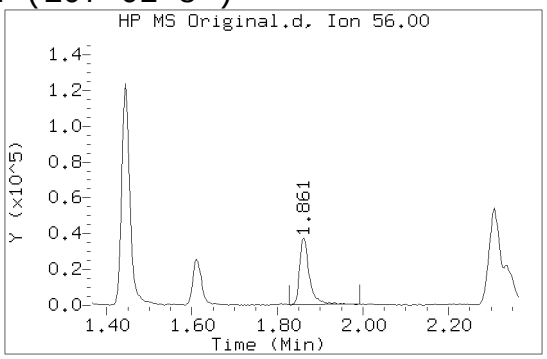
AREA
60619
HEIGHT
37327
20-Jul-2023
15:04
linh
pham



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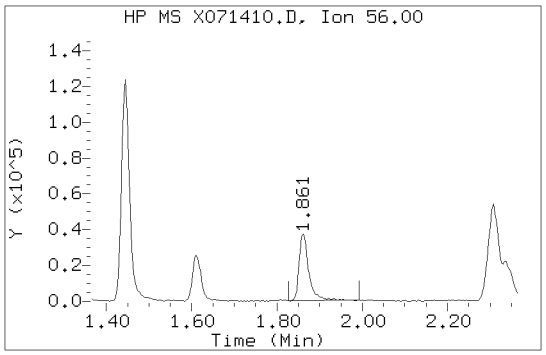

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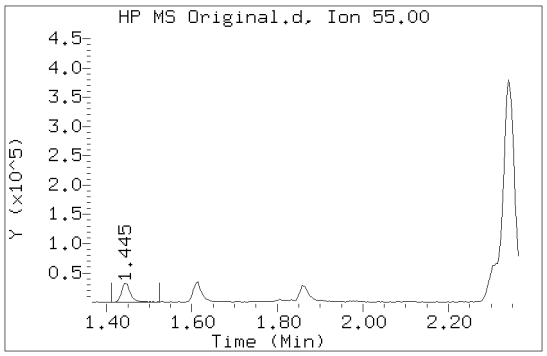

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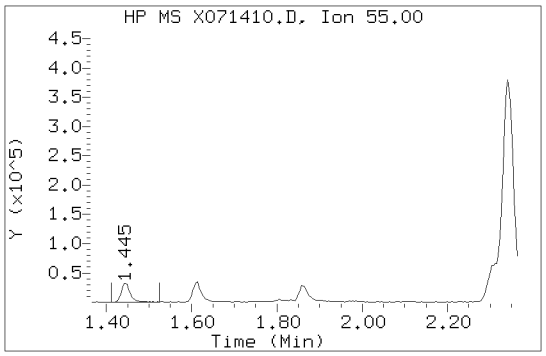

Methacrylonitrile (126-98-7)

Reason Code:

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20-Jul-2023
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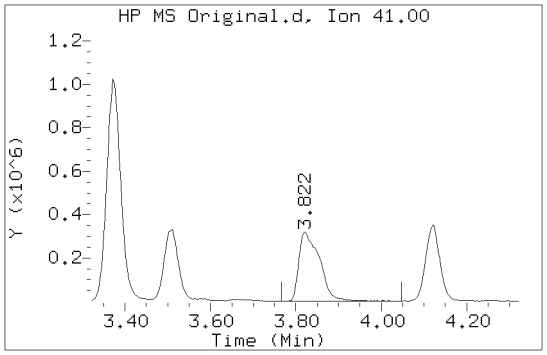

AFTER
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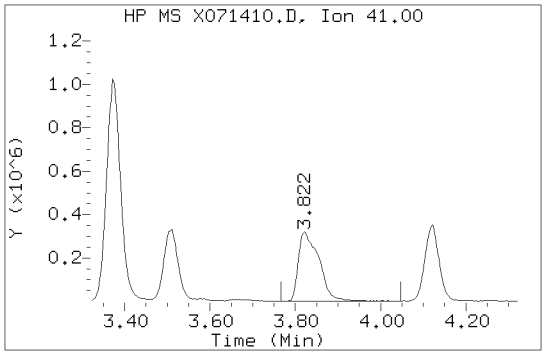

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67
AREA
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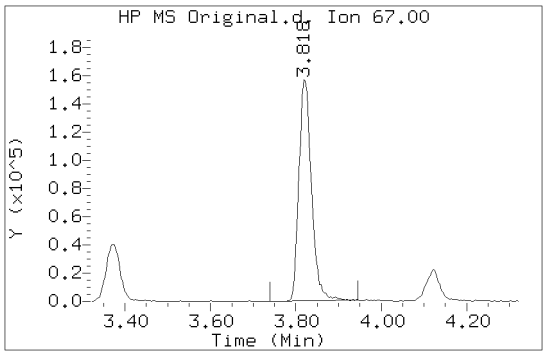

AFTER
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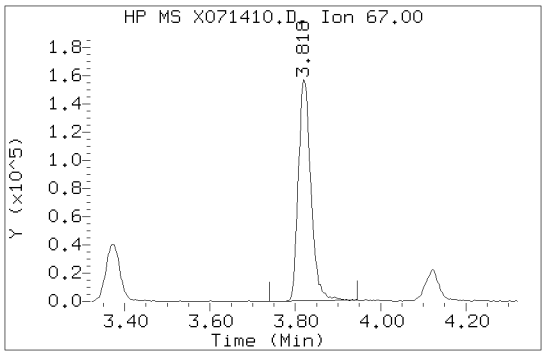

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InstruID : voa6.i
LabSampID : VSTD150

Methacrylonitrile (126-98-7)

Reason Code:

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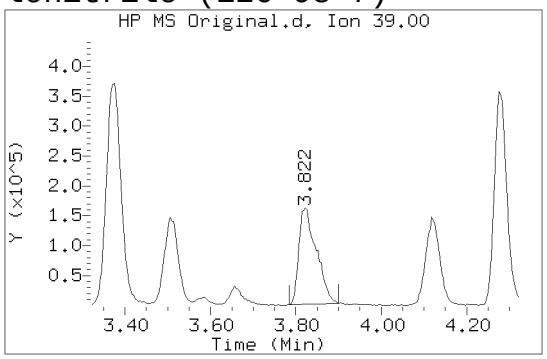

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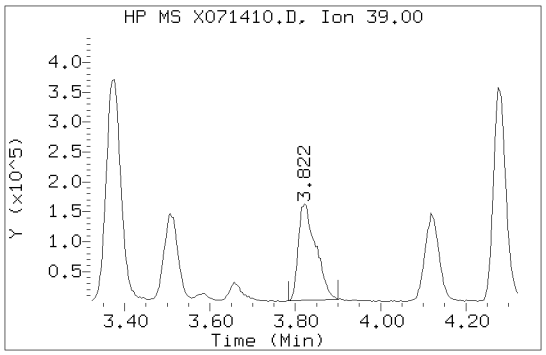

1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

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20-Jul-2023
15:04
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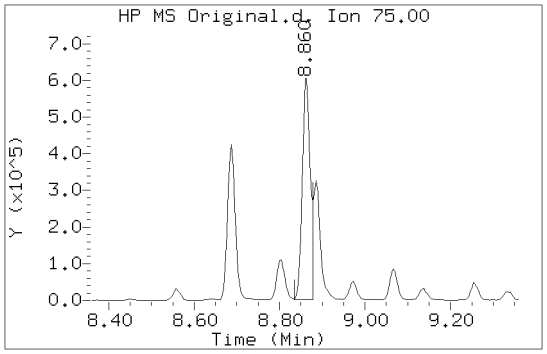

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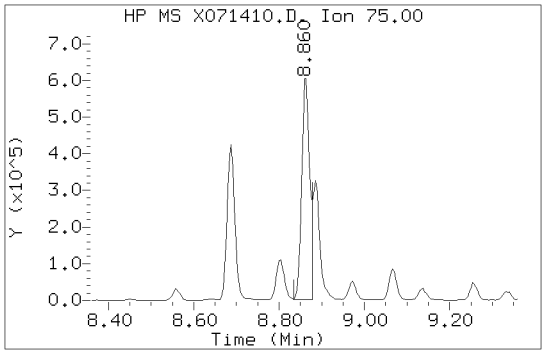

BEFORE

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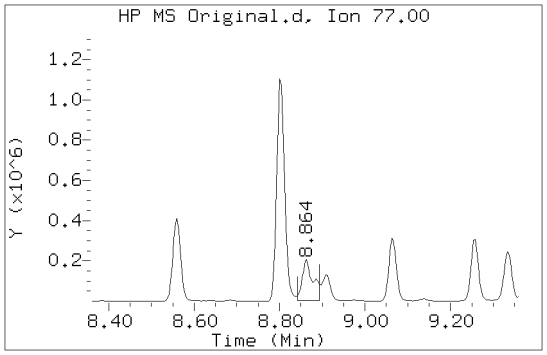

AFTER

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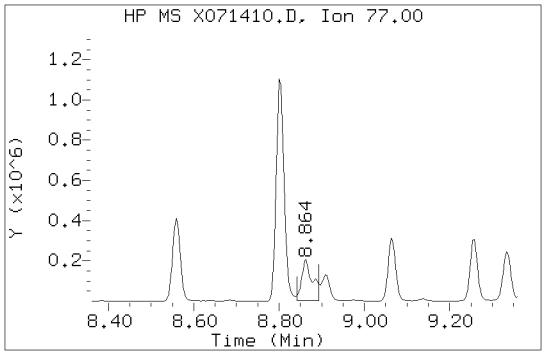

tert-Amyl methyl ether (974-05-08)

Reason Code:

BEFORE

MASS
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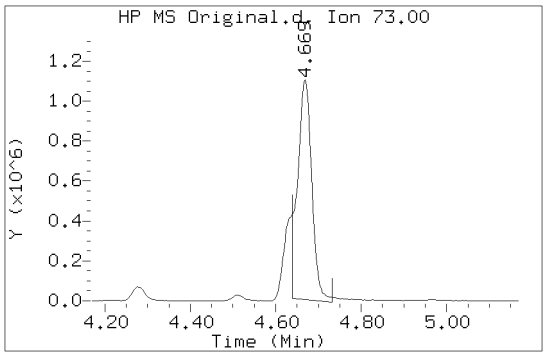
HEIGHT
1100641
20-Jul-2023
15:04
linh
pham



AFTER

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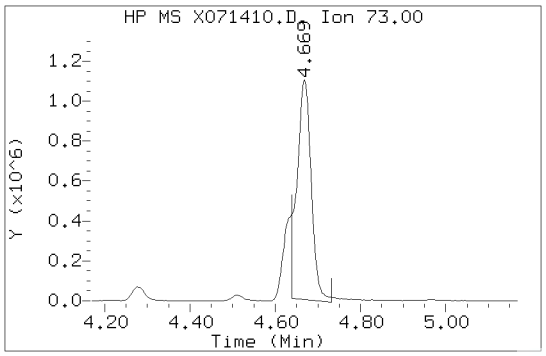

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Inj Date : 14-JUL-2023 15:05
InstruID : voa6.i
LabSampID : VSTD150

tert-Amyl methyl ether (974-05-08)

BEFORE

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87
AREA
775395
HEIGHT
328192
20-Jul-2023
15:04
linh
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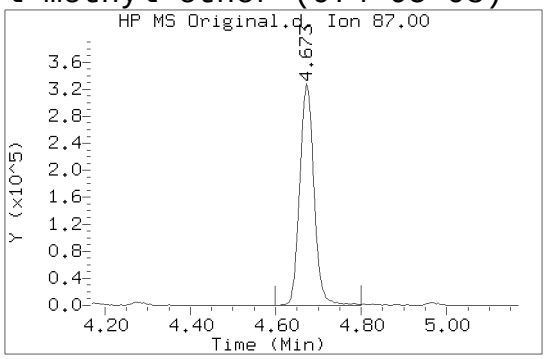

BEFORE

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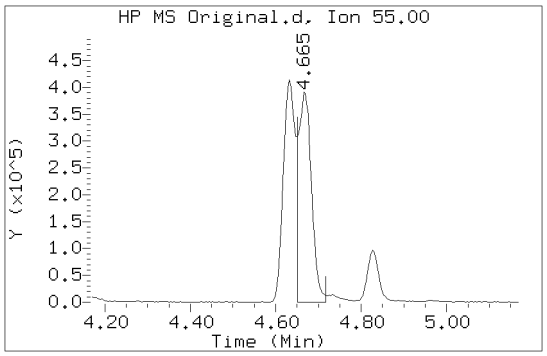

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AFTER

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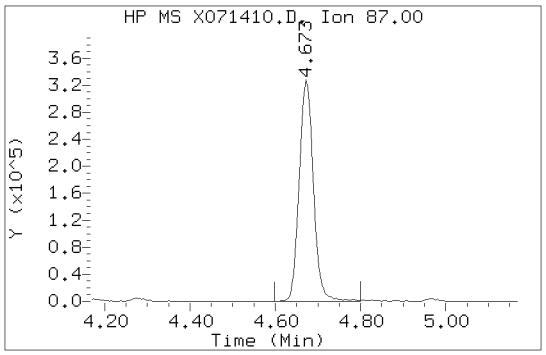

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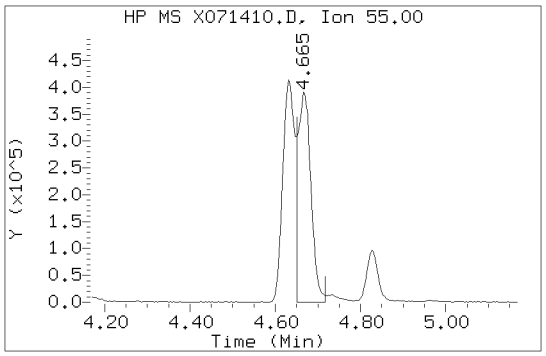

Acetaldehyde (75-07-0)

BEFORE

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20-Jul-2023
15:04
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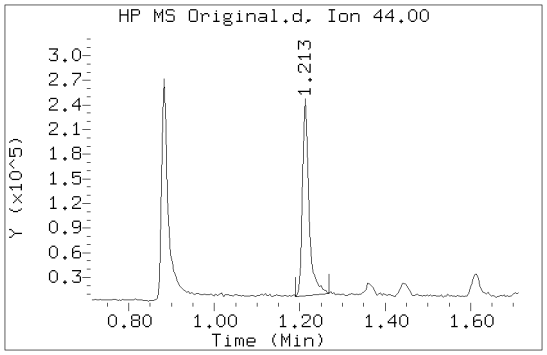

BEFORE

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140408
20-Jul-2023
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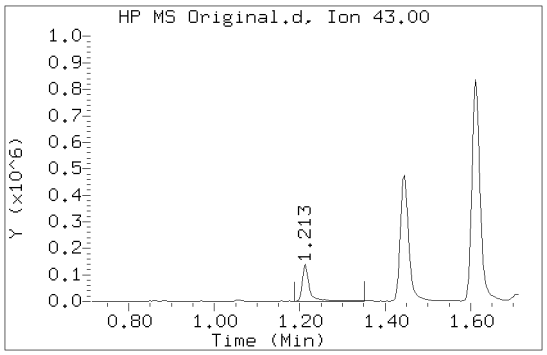

Reason Code:

AFTER

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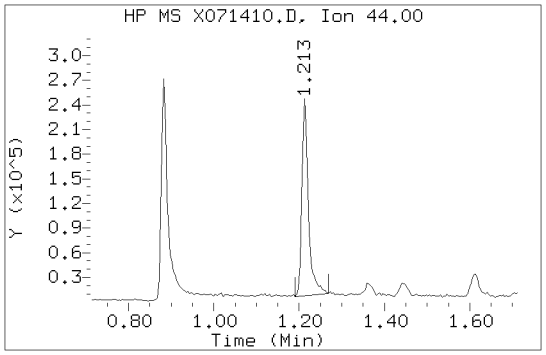

AFTER

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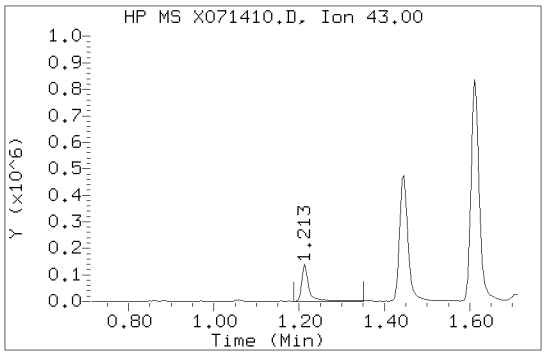

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InstruID : voa6.i
LabSampID : VSTD150

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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AREA
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HEIGHT
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20-Jul-2023
15:04
linh
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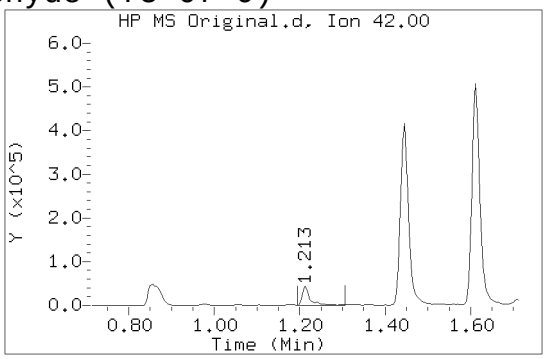

AFTER

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20-Jul-2023
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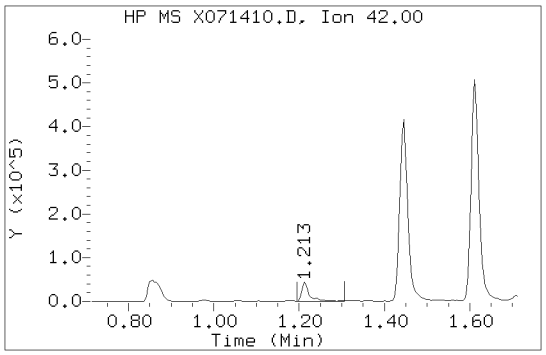

Isobutylene (115-11-7)

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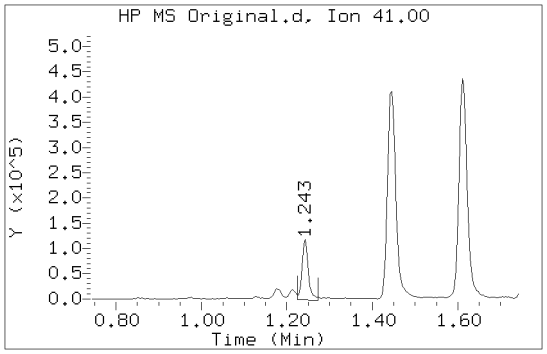

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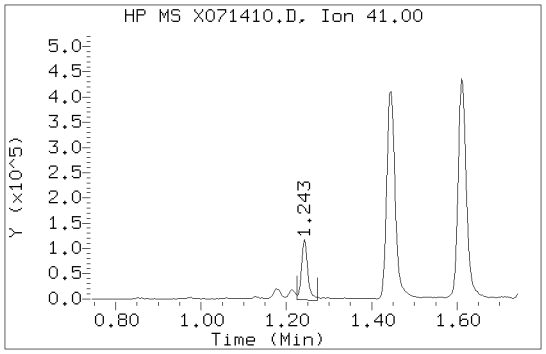

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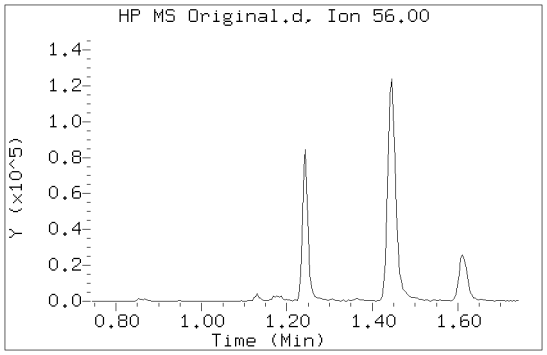

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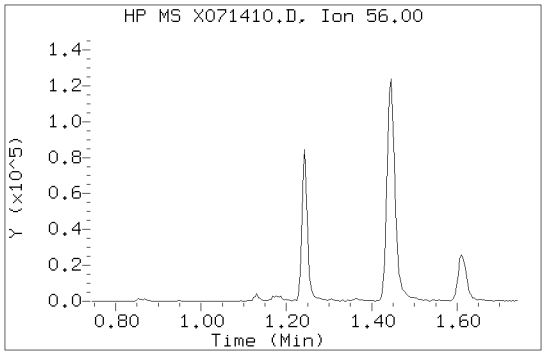

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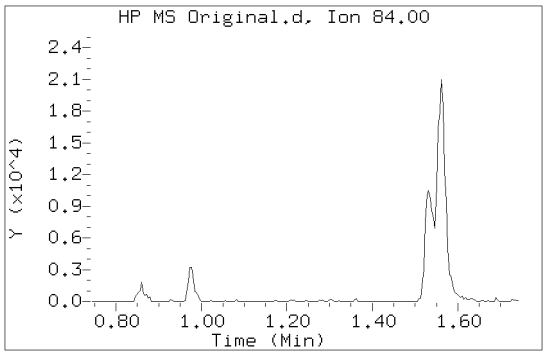

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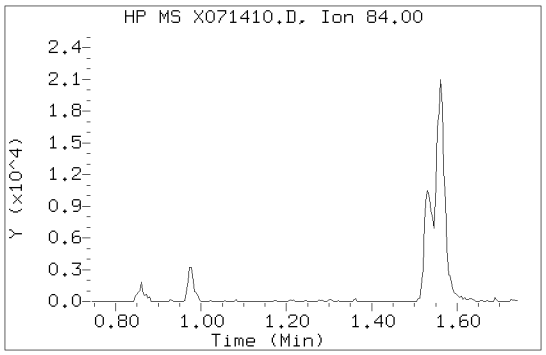

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Toluene-d8 (2037-26-5)

Reason Code:

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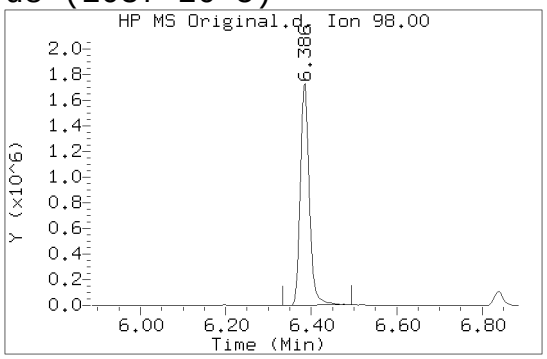

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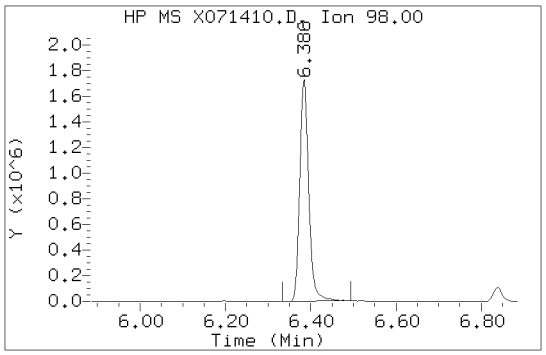

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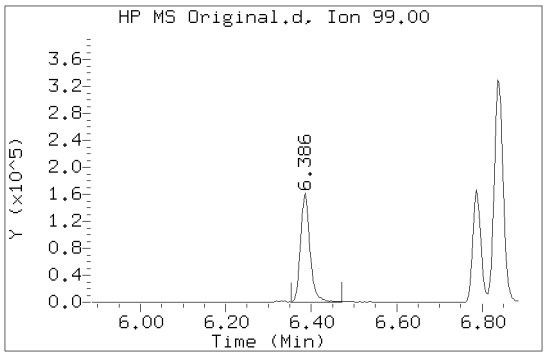

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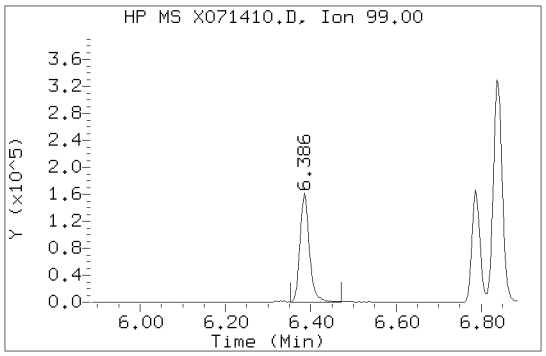

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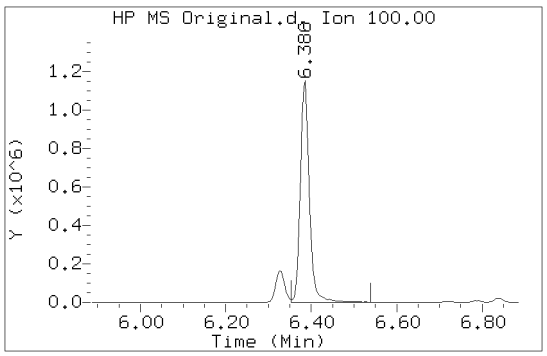

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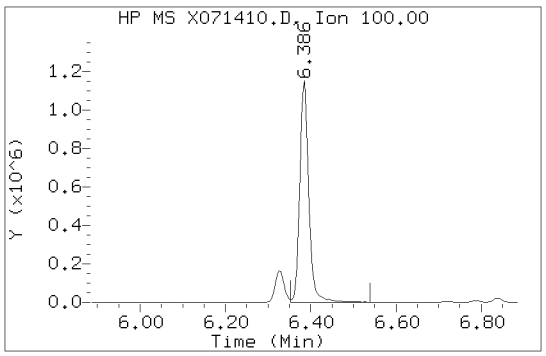

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071411.D
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Operator : PC Inst ID: voa6.i
Smp Info : VSTD200;VSTD200;1;10;
Misc Info : V6;WATER;0;1;
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Als bottle: 12 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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)	537032	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	1105119	200.000	197.85
3	Chloromethane	50	1.081	1.081	(0.259)	1771073	200.000	218.34(A)
4	Propionitrile	54	3.660	3.660	(0.875)	2109183	2000.00	1982.65
5	Vinyl Chloride	62	1.145	1.145	(0.274)	1416013	200.000	203.75(A)
6	Bromomethane	94	1.332	1.332	(0.319)	617046	200.000	214.56(A)
7	Chloroethane	64	1.400	1.400	(0.335)	747413	200.000	188.39
8	Trichlorofluoromethane	101	1.561	1.561	(0.373)	1509581	200.000	214.34(A)
9	Acrolein	56	1.857	1.857	(0.444)	82636	400.000	402.90(AM)
10	Acetone	43	1.973	1.973	(0.472)	806431	400.000	393.20
11	1,1-Dichloroethene	96	1.913	1.913	(0.458)	797906	200.000	202.80(A)
12	Isobutyl Alcohol	43	4.680	4.680	(1.119)	4072757	4000.00	4000.82(A)
13	Acetonitrile	39	2.198	2.198	(0.526)	1461877	2000.00	1941.23
14	Allyl Chloride	41	2.198	2.198	(0.526)	3258545	200.000	184.81
15	Iodomethane	142	2.029	2.029	(0.485)	2365259	400.000	399.51
16	Acrylonitrile	53	2.535	2.535	(0.606)	973671	400.000	372.06
17	Methylene Chloride	84	2.303	2.303	(0.551)	893552	200.000	196.48
18	Methyl tert-butyl ether	73	2.535	2.535	(0.606)	2728667	200.000	186.48
19	Carbon Disulfide	76	2.071	2.071	(0.495)	5098731	400.000	412.27(A)
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	885590	200.000	194.59

21 Vinyl Acetate	43	3.000	3.000 (0.718)	7496591	400.000	398.30
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	1905438	200.000	190.79

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
23	Chloroprene	53	1.771	1.771	(0.424)	498457	200.000	206.42(A)
24	2-Butanone	43	3.581	3.581	(0.857)	1209313	400.000	422.85(A)
25	Methacrylonitrile	41	3.818	3.818	(0.913)	1405724	200.000	202.79(aA)
26	2,2-Dichloropropane	77	3.506	3.506	(0.839)	1535535	200.000	197.45
27	cis-1,2-Dichloroethene	96	3.521	3.521	(0.842)	1110625	200.000	191.56
28	Chloroform	83	3.904	3.904	(0.934)	1909053	200.000	186.82
29	Bromochloromethane	128	3.791	3.791	(0.907)	607870	200.000	187.09
$ 30	Dibromofluoromethane	113	4.099	4.099	(0.980)	959895	200.000	197.23
31	1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	1657906	200.000	210.76(A)
32	1,1-Dichloropropene	75	4.279	4.279	(0.862)	1408668	200.000	209.46(A)
33	1,2-Dichloroethane	62	4.552	4.552	(0.917)	1793850	200.000	197.64
34	Carbon Tetrachloride	117	4.260	4.260	(0.858)	1394099	200.000	205.76(AH)
$ 35	1,2-Dichloroethane-d4	65	4.470	4.470	(1.069)	1203985	200.000	197.42
* 36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	824484	50.0000	
37	Benzene	78	4.511	4.511	(0.909)	3956301	200.000	200.61(A)
38	Trichloroethene	130	5.205	5.205	(1.048)	1148728	200.000	205.93(A)
39	Bromodichloromethane	83	5.722	5.722	(1.153)	1517659	200.000	200.91(A)
40	Methyl Methacrylate	41	5.606	5.606	(1.341)	1251379	200.000	193.06
41	2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	991998	400.000	430.11(A)
42	1,2-Dichloropropane	63	5.437	5.437	(1.095)	1286655	200.000	202.89(A)
43	2-Nitropropane	43	5.969	5.969	(1.428)	436967	200.000	204.81(A)
44	Dibromomethane	93	5.549	5.549	(1.118)	688009	200.000	191.66
45	4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	3017637	400.000	395.46
46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	1783083	200.000	205.51(A)
* 47	Chlorobenzene-d5	117	7.667	7.667	(1.000)	775428	50.0000	
$ 48	Toluene-d8	98	6.385	6.385	(0.833)	3447548	200.000	172.68(M)
49	Ethyl Methacrylate	69	6.719	6.719	(1.353)	1128954	200.000	209.07
50	Toluene	91	6.445	6.445	(0.841)	4312229	200.000	206.58(A)
51	trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	1544556	200.000	211.18(A)
52	2-Hexanone	43	7.086	7.086	(0.924)	2017738	400.000	402.53(A)
53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	846183	200.000	191.10
54	1,3-Dichloropropane	76	6.981	6.981	(0.911)	1733058	200.000	191.57
55	Dibromochloromethane	129	7.173	7.173	(0.935)	1320761	200.000	206.61(A)
56	Tetrachloroethene	164	6.925	6.925	(0.903)	902535	200.000	209.29(A)
57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	964928	200.000	190.69
58	1-Chlorohexane	55	7.694	7.694	(1.550)	1371878	200.000	207.11(A)
59	Chlorobenzene	112	7.690	7.690	(1.003)	2926240	200.000	200.54(A)
60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	1173596	200.000	205.45(A)
61	Ethylbenzene	106	7.799	7.799	(1.017)	1505552	200.000	205.76(A)
62	m,p-Xylenes	106	7.900	7.900	(1.030)	3831125	400.000	417.37(A)
63	o-Xylene	106	8.241	8.241	(1.075)	1805494	200.000	207.70(A)
64	Styrene	104	8.256	8.256	(1.077)	3136788	200.000	206.88(A)
66	Bromoform	173	8.406	8.406	(1.096)	880696	200.000	214.73(A)
67	Isopropylbenzene	105	8.560	8.560	(1.116)	4823863	200.000	215.89(A)
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	1401164	200.000	192.48
$ 69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	1538168	200.000	200.50(A)
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	433375	50.0000	
71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	1119387	200.000	193.78(M)
72	trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	524884	200.000	222.56(A)
73	n-Propylbenzene	91	8.912	8.912	(0.922)	5714404	200.000	218.20(A)
74	Bromobenzene	156	8.803	8.803	(0.911)	1365207	200.000	201.42(A)
75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	4273312	200.000	217.81(A)

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	3520653	200.000	199.28
77	4-Chlorotoluene	91	9.069	9.069 (0.939)	4116709	200.000	212.06(A)

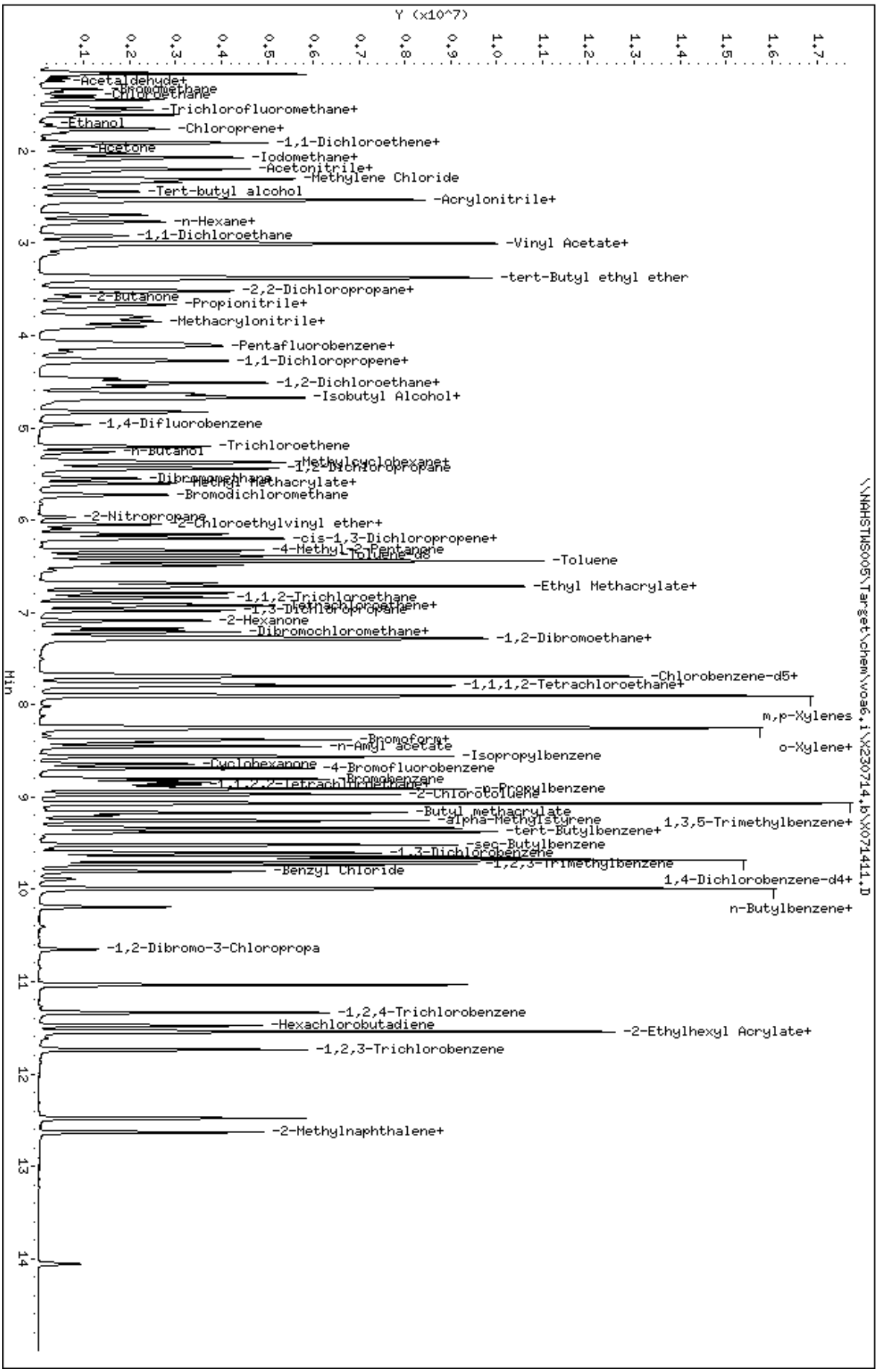
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	3564918	200.000	211.88(A)
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	4248690	200.000	215.95(A)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	4998963	200.000	222.91(A)
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	4531097	200.000	221.18(A)
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	2443663	200.000	206.95(A)
84	1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	2568367	200.000	198.39
86	Benzyl Chloride	91	9.804	9.804	(1.279)	2751633	200.000	201.10(A)
87	n-Butylbenzene	91	9.992	9.992	(1.034)	3988441	200.000	232.46(A)
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	2403758	200.000	207.07(A)
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	242707	200.000	199.51
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	1693827	200.000	212.44(A)
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	760294	200.000	199.55
92	Naphthalene	128	11.536	11.536	(1.194)	4036891	200.000	204.57(AH)
93	1,2,3-Trichlorobenzene	180	11.738	11.738	(1.215)	1513592	200.000	202.99(A)
146	Methyl acetate	43	2.228	2.228	(0.533)	902568	200.000	188.84
138	Freon TF	101	1.917	1.917	(0.459)	815067	200.000	103.34
141	Cyclohexane	56	4.117	4.117	(0.985)	2078176	200.000	223.25(A)
142	Tetrahydrofuran	42	3.851	3.851	(0.921)	520211	400.000	376.52
147	Methylcyclohexane	55	5.381	5.381	(1.084)	3760283	200.000	216.07(A)
135	1,4-Dioxane	88	5.602	5.602	(1.340)	258483	4000.00	4050.44(A)
132	n-Butanol	56	5.261	5.261	(1.258)	850812	4000.00	4759.14(A)
131	Methyl Acrylate	55	3.686	3.686	(0.882)	1635344	200.000	224.02(A)
133	Ethyl Acrylate	55	5.381	5.381	(1.287)	3760283	200.000	211.27(A)
136	n-Hexane	57	2.768	2.768	(0.662)	1402092	200.000	83.16
139	Diethyl ether	59	1.760	1.760	(0.421)	924117	200.000	184.53
148	Tert-butyl alcohol	59	2.442	2.442	(0.584)	2546793	4000.00	3757.39
149	Isopropyl alcohol	45	2.101	2.101	(0.502)	1585037	4000.00	3768.67
156	Diisopropyl ether	45	3.008	3.008	(0.719)	4204307	200.000	189.94
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	4285563	200.000	213.92(A)
167	Ethanol	45	1.711	1.711	(0.409)	291912	4000.00	3940.79
172	tert-Butyl formate	59	4.635	4.635	(1.108)	2334112	400.000	406.87(AM)
173	3,3-Dimethyl-1-butanol	57	7.293	7.293	(0.951)	3164338	4000.00	3794.46
174	tert-Amyl methyl ether	73	4.668	4.668	(1.117)	3325871	200.000	188.25(M)
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.808)	4320968	200.000	190.05
176	tert-Amyl alcohol	59	4.635	4.635	(1.108)	2334112	4000.00	3978.56(M)
151	4-Methyl-2-pentanol	45	6.715	6.715	(1.353)	7205996	4000.00	4078.30(A)
180	1-Methylnaphthalene	142	12.631	12.631	(1.307)	1852094	200.000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.279)	1429438	200.000	207.14(A)
152	Amyl alcohol	42	6.903	6.903	(0.900)	980159	4000.00	4395.46(A)
158	Dichlorofluoromethane	67	1.531	1.531	(0.366)	1636710	200.000	189.15
159	Propylene oxide	43	1.805	1.805	(0.432)	214178	400.000	325.08
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	873259	4000.00	4574.19(A)
162	Butyl acrylate	55	8.248	8.248	(1.076)	3266024	200.000	221.39(A)
163	Butyl methacrylate	41	9.171	9.171	(0.949)	2061719	200.000	198.61
164	Dicyclopentadiene	66	9.684	9.684	(1.002)	5152004	200.000	206.38(A)
182	Epichlorohydrin	57	6.093	6.093	(1.227)	509575	800.000	827.43(A)
M 94	1,2-Dichloroethylene (total)	96				1996215	400.000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	1984425	200.000	209.88(A)
130	Ethyl Acetate	43	3.660	3.660	(0.875)	1526148	200.000	191.33
134	Cyclohexanone	55	8.642	8.642	(0.894)	1269424	4000.00	3290.23
185	Isoprene	39	1.771	1.771	(0.424)	352780	200.000	199.28
188	Isopropyl acetate	43	4.680	4.680	(0.943)	4112016	200.000	189.15

187 n-Amyl acetate	43	8.451	8.451 (1.102)	2862687	200.000	201.43(A)
189 n-Butyl acetate	43	7.210	7.210 (0.940)	2520952	200.000	212.11(AH)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.768	2.768	(0.662)	1402092	4000.00	1651.10
194 Acetaldehyde	44	1.212	1.212	(0.290)	347350	800.000	779.86(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	3390972	200.000	209.22
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	2283547	200.000	218.32(A)
202 Isobutylene	41	1.242	1.242	(0.297)	170200	200.000	191.69(M)
205 2-Ethylhexyl Acrylate	55	11.547	11.547	(1.195)	2531204	200.000	228.67(A)

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.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Date : 14-JUL-2023 15:25
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

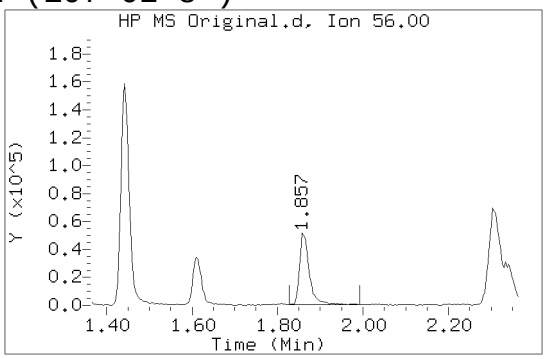
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071411.D
Inj Date : 14-JUL-2023 15:25
InstruID : voa6.i
LabSampID : VSTD200

Acrolein (107-02-8)

Reason Code:

BEFORE

MASS
56
AREA
82636
HEIGHT
51148
20-Jul-2023
15:04
linh
pham



AFTER

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20-Jul-2023
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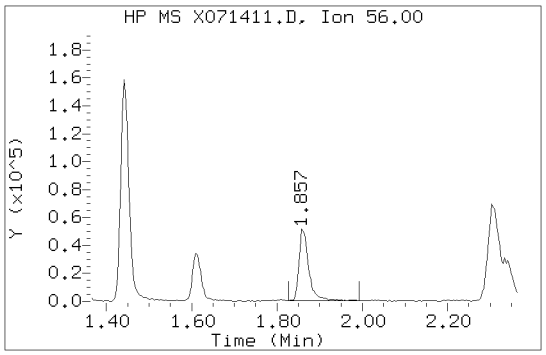

BEFORE

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46730
20-Jul-2023
15:04
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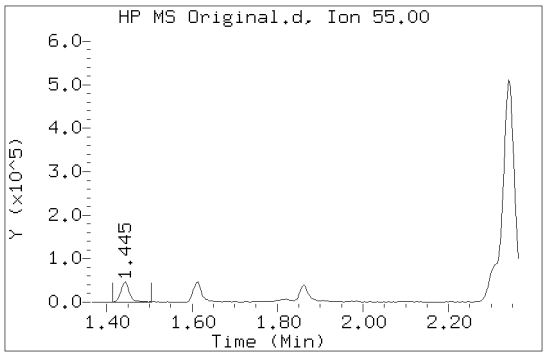

AFTER

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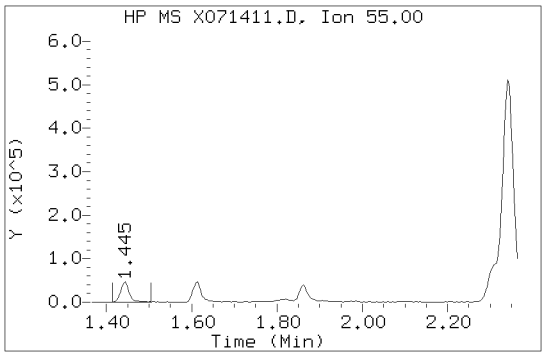

1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

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20-Jul-2023
15:04
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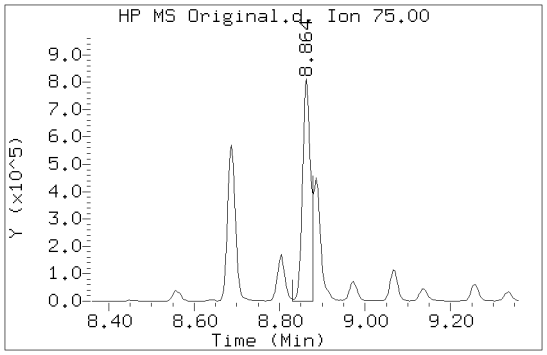
pham



AFTER

MASS
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AREA
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HEIGHT
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20-Jul-2023
15:04
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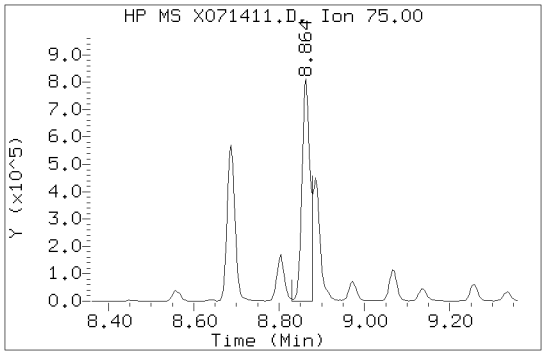

BEFORE

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268689
20-Jul-2023
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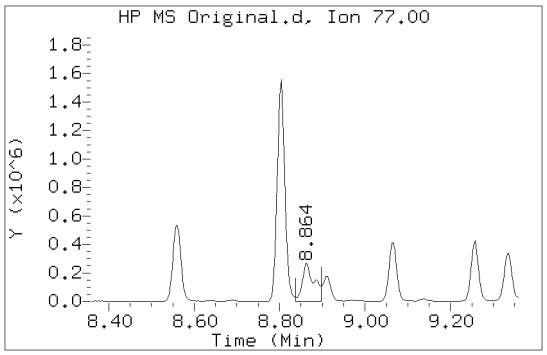
pham



AFTER

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20-Jul-2023
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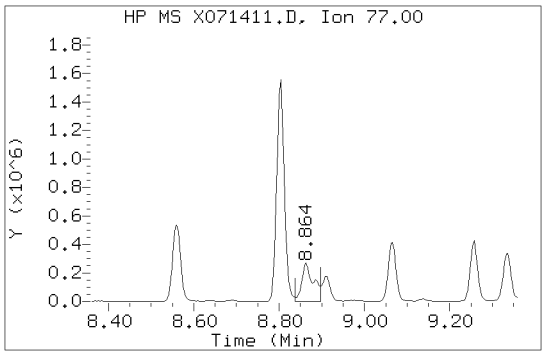

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Inj Date : 14-JUL-2023 15:25
InstruID : voa6.i
LabSampID : VSTD200

tert-Butyl formate (762-75-4)

Reason Code:

BEFORE

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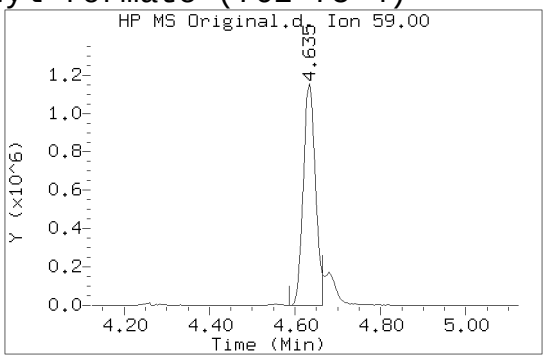
1154659
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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15:04
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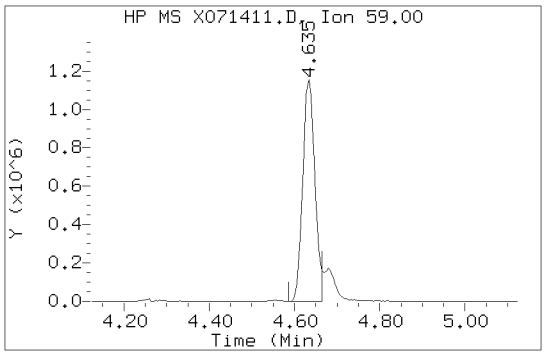
pham



BEFORE

MASS
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AREA
61248
HEIGHT
27018
20-Jul-2023
15:04
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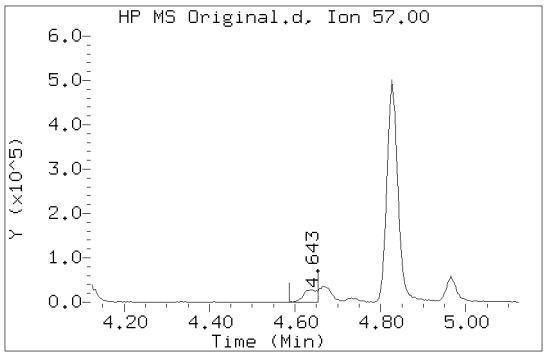

AFTER

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20-Jul-2023
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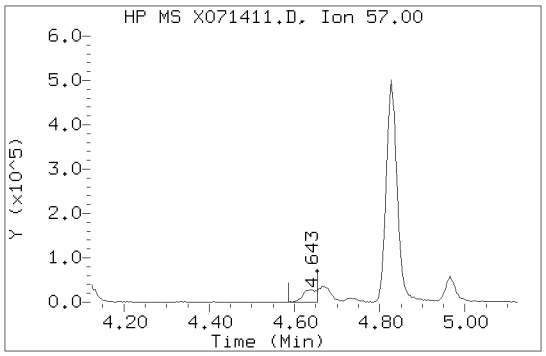

BEFORE

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AREA
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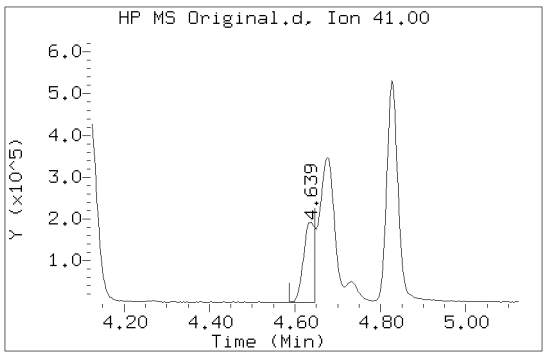
190663
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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20-Jul-2023
15:04
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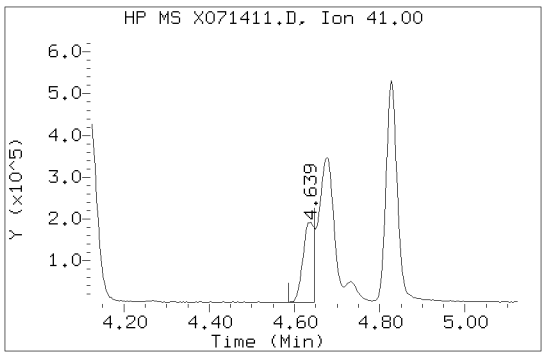
pham



tert-Amyl methyl ether (974-05-08)

Reason Code:

BEFORE

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AREA
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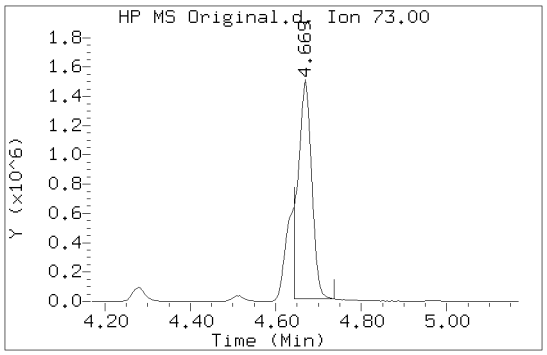
HEIGHT
1495166
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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20-Jul-2023
15:04
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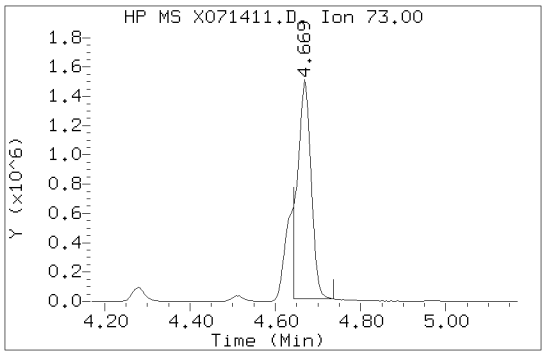
pham



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Inj Date : 14-JUL-2023 15:25
InstruID : voa6.i
LabSampID : VSTD200

tert-Amyl methyl ether (974-05-08)

Reason Code:

BEFORE

MASS
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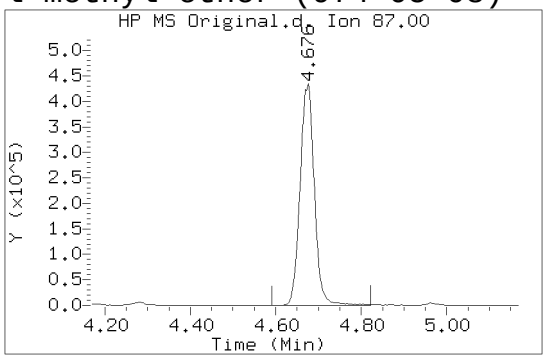
AREA
1024271
HEIGHT
434624
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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20-Jul-2023
15:04
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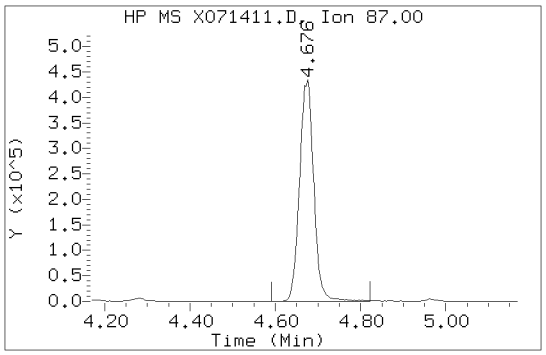
pham



BEFORE

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AREA
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521301
20-Jul-2023
15:04
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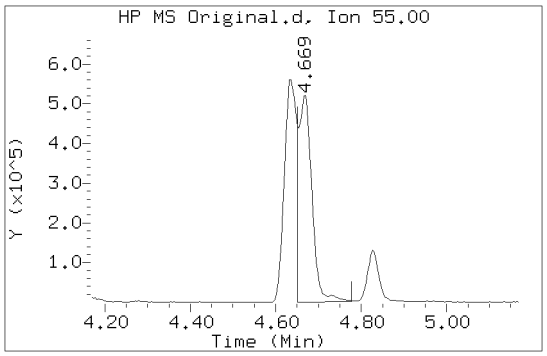
pham



AFTER

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20-Jul-2023
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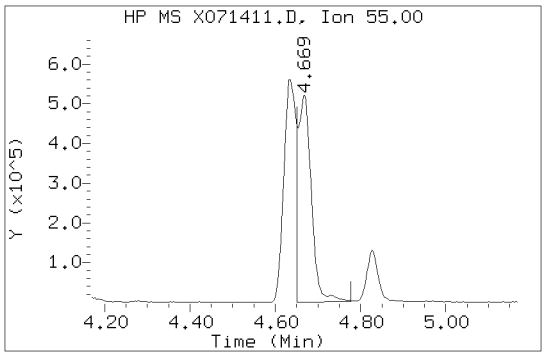

tert-Amyl alcohol (75-85-4)

Reason Code:

BEFORE

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AREA
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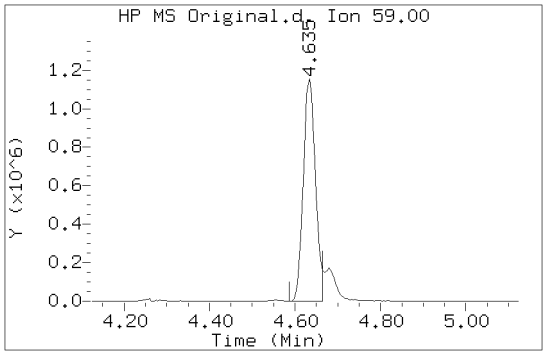
HEIGHT
1154659
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
2334112
HEIGHT
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20-Jul-2023
15:04
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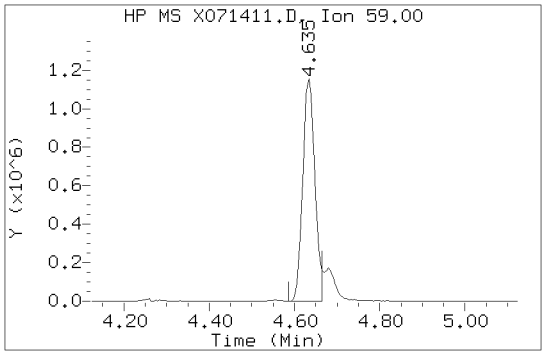
pham



BEFORE

MASS
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AREA
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HEIGHT
559928
20-Jul-2023
15:04
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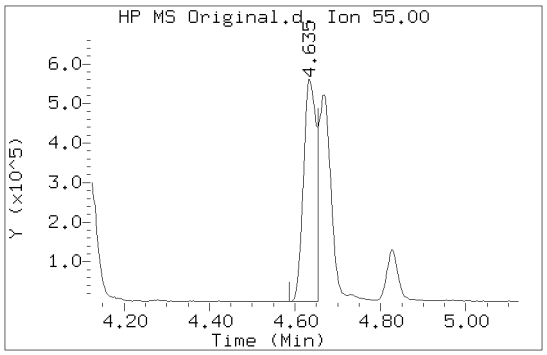
pham



AFTER

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AREA
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20-Jul-2023
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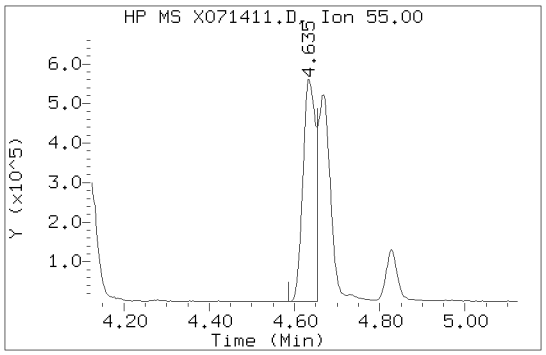

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Inj Date : 14-JUL-2023 15:25
InstruID : voa6.i
LabSampID : VSTD200

tert-Amyl alcohol (75-85-4)

Reason Code:

BEFORE

MASS
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AREA
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HEIGHT
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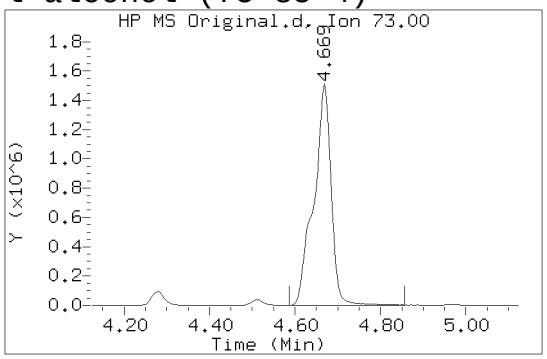
20-Jul-2023
15:04
linh
pham



AFTER

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20-Jul-2023
15:04
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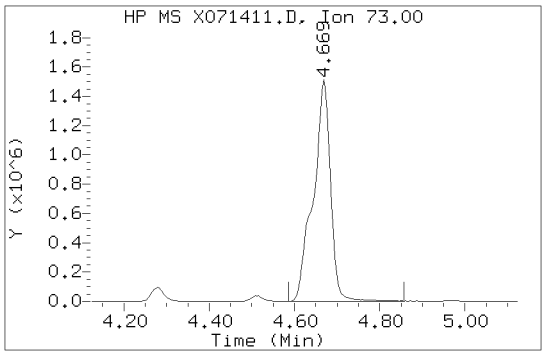

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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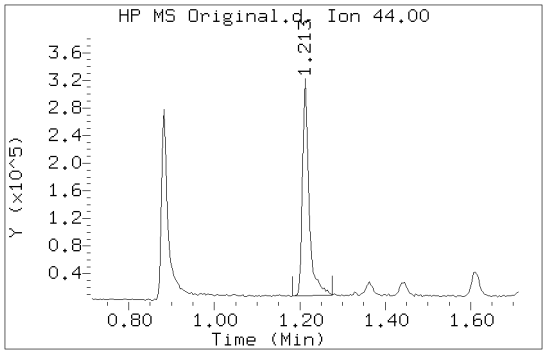

AFTER

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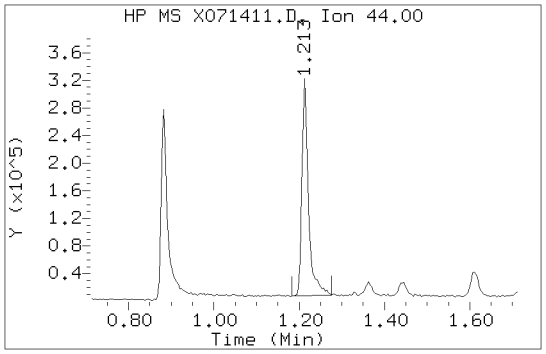

BEFORE

MASS
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AREA
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HEIGHT
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20-Jul-2023
15:04
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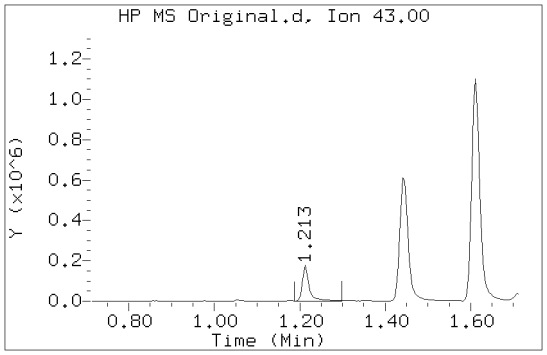

AFTER

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20-Jul-2023
15:04
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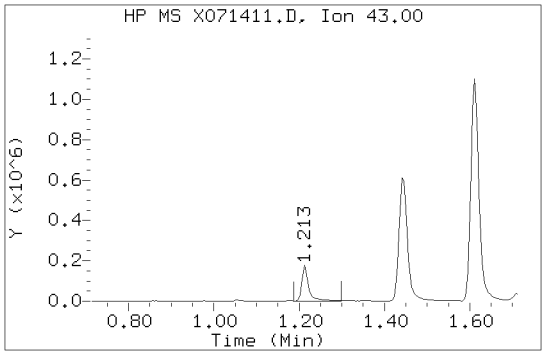

BEFORE

MASS
42
AREA
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HEIGHT
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20-Jul-2023
15:04
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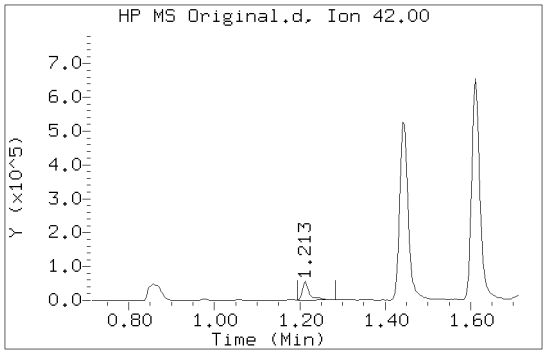
pham



AFTER

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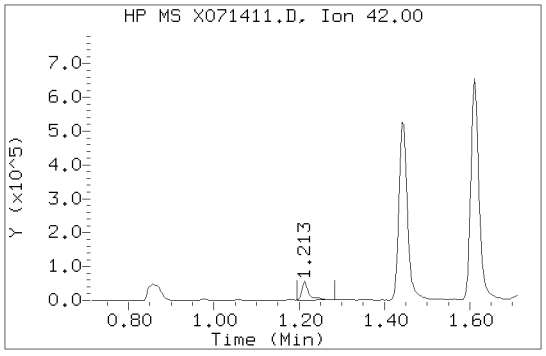

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Inj Date : 14-JUL-2023 15:25
InstruID : voa6.i
LabSampID : VSTD200

Isobutylene (115-11-7)

Reason Code:

BEFORE
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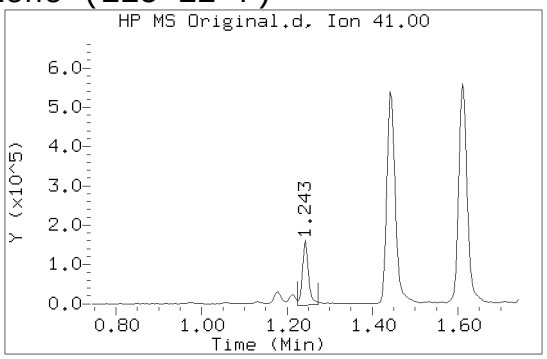
AREA
170200
HEIGHT
165804
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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AREA
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165804
20-Jul-2023
15:04
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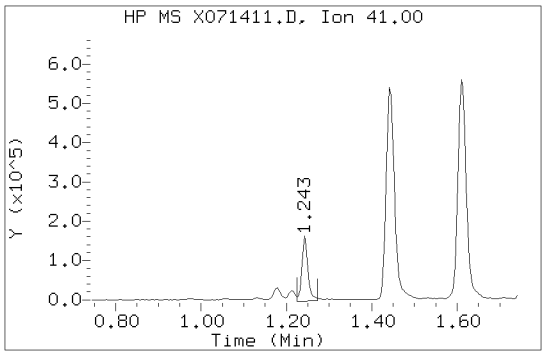

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AREA
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HEIGHT
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20-Jul-2023
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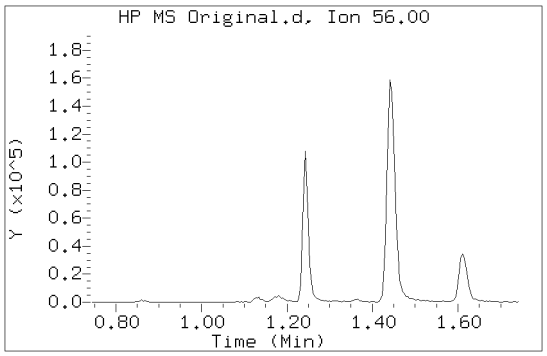

AFTER
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20-Jul-2023
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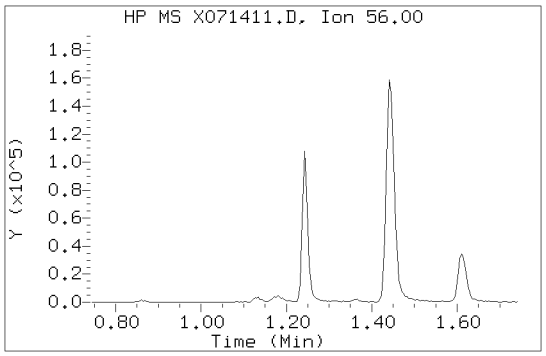

BEFORE
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AREA
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20-Jul-2023
15:04
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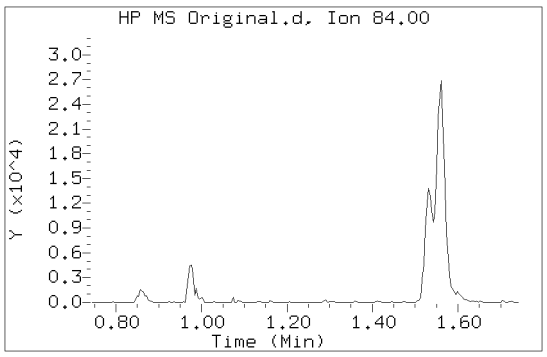

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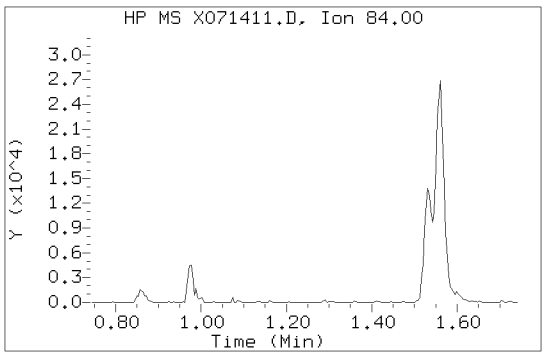

Toluene-d8 (2037-26-5)

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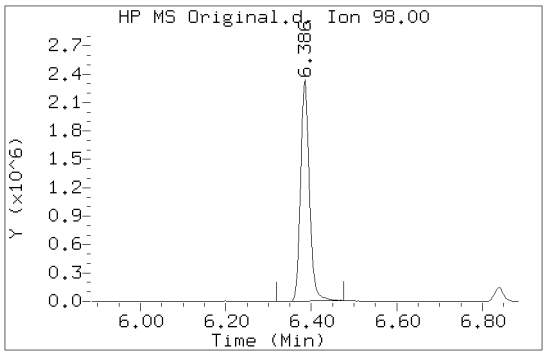

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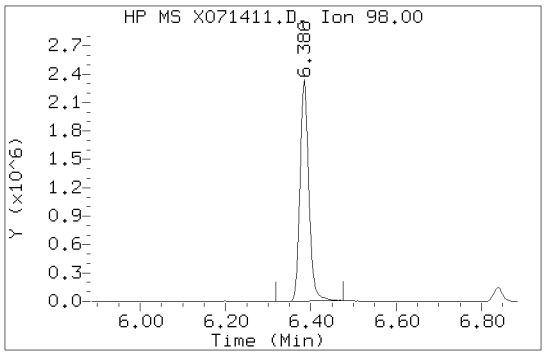

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Toluene-d8 (2037-26-5)

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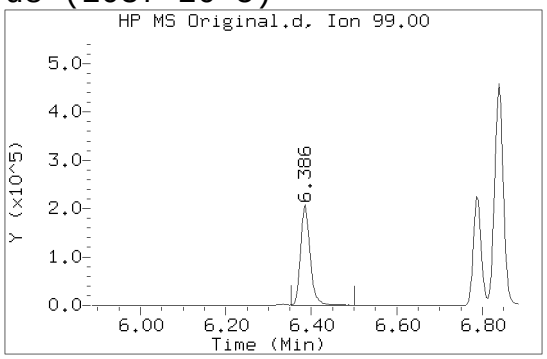

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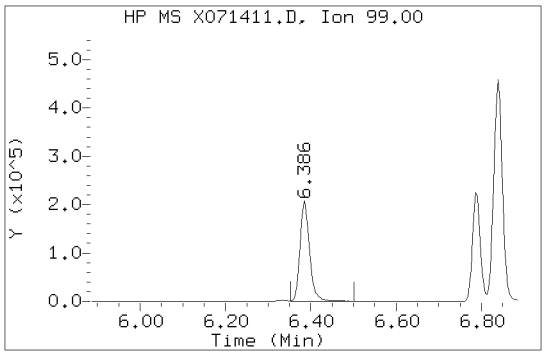

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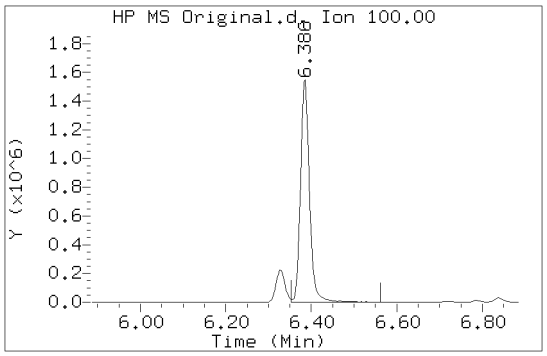

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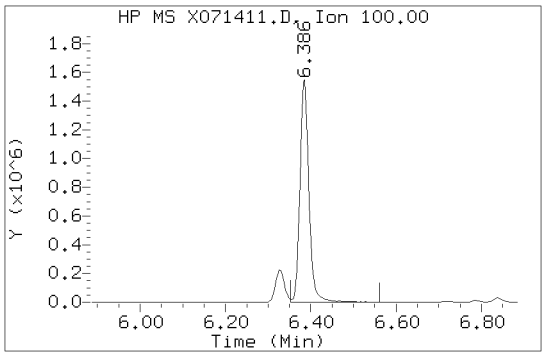

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071413.D
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Misc Info : V6;WATER;0;1;
Comment :
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Cal Date : 14-JUL-2023 15:25 Cal File: X071411.D
Als bottle: 14 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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)	523560	50.0000	
2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	235700	44.1394	44.13
3 Chloromethane	50	1.081	1.081	(0.259)	369706	46.7515	46.75
4 Propionitrile	54	3.656	3.660	(0.875)	514137	495.730	495.72
5 Vinyl Chloride	62	1.145	1.145	(0.274)	314786	46.4622	46.46
6 Bromomethane	94	1.344	1.332	(0.322)	147749	52.6978	52.69
7 Chloroethane	64	1.404	1.400	(0.336)	174555	45.1318	45.13
8 Trichlorofluoromethane	101	1.561	1.561	(0.374)	321870	46.8787	46.87
9 Acrolein	56	1.857	1.857	(0.445)	18891	95.3394	95.33
10 Acetone	43	1.973	1.973	(0.472)	226282	109.688	109.68
11 1,1-Dichloroethene	96	1.913	1.913	(0.458)	173630	45.2674	45.26
12 Isobutyl Alcohol	43	4.680	4.680	(1.120)	1029947	1037.79	1037.79
13 Acetonitrile	39	2.202	2.198	(0.527)	350837	477.867	477.86
14 Allyl Chloride	41	2.198	2.198	(0.526)	795160	46.2587	46.25
15 Iodomethane	142	2.030	2.029	(0.486)	426627	85.2702	85.27
16 Acrylonitrile	53	2.536	2.535	(0.607)	247354	96.9514	96.95
17 Methylene Chloride	84	2.303	2.303	(0.551)	221542	48.9173	48.91
18 Methyl tert-butyl ether	73	2.539	2.535	(0.608)	686179	48.1012	48.10
19 Carbon Disulfide	76	2.071	2.071	(0.496)	1115788	92.5432	92.54
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	201576	45.4331	45.43

21 Vinyl Acetate	43	3.000	3.000 (0.718)	1840684	100.315	100.31
22 1,1-Dichloroethane	63	2.918	2.922 (0.699)	455953	46.8308	46.83

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071413.D Page 2
Report Date: 20-Jul-2023 15:05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	23 Chloroprene	53	1.771	1.771	(0.424)	106109	45.0742	45.07(M)
	24 2-Butanone	43	3.582	3.581	(0.857)	292924	105.060	105.06
	25 Methacrylonitrile	41	3.825	3.818	(0.916)	346558	51.2815	51.28(a)
	26 2,2-Dichloropropane	77	3.510	3.506	(0.840)	355659	47.0700	47.06
	27 cis-1,2-Dichloroethene	96	3.522	3.521	(0.843)	269347	47.6547	47.65
	28 Chloroform	83	3.904	3.904	(0.935)	458057	45.9797	45.97
	29 Bromochloromethane	128	3.795	3.791	(0.908)	150697	47.5755	47.57
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	251919	52.5379	52.53
	31 1,1,1-Trichloroethane	97	4.076	4.080	(0.976)	356334	46.4653	46.46
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	303929	45.5996	45.59
	33 1,2-Dichloroethane	62	4.552	4.552	(0.917)	426885	47.4578	47.45
	34 Carbon Tetrachloride	117	4.264	4.260	(0.859)	294766	43.8978	43.89
$	35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.071)	312436	52.0928	52.09
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	817135	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	922063	47.1756	47.17
	38 Trichloroethene	130	5.205	5.205	(1.048)	257816	46.6338	46.63
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	352205	47.0449	47.04
	40 Methyl Methacrylate	41	5.606	5.606	(1.342)	307355	48.6390	48.63
	41 2-Chloroethylvinyl ether	63	6.044	6.048	(1.217)	236549	103.486	103.48
	42 1,2-Dichloropropane	63	5.433	5.437	(1.094)	308027	49.0106	49.01
	43 2-Nitropropane	43	5.966	5.969	(1.428)	100815	48.4694	48.46
	44 Dibromomethane	93	5.550	5.549	(1.118)	168843	47.4595	47.45
	45 4-Methyl-2-Pentanone	43	6.326	6.325	(0.825)	705887	96.7791	96.77
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	426551	49.6054	49.60
*	47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	741203	50.0000	
$	48 Toluene-d8	98	6.382	6.385	(0.832)	919255	48.1696	48.16
	49 Ethyl Methacrylate	69	6.712	6.719	(1.352)	227813	42.5696	42.56
	50 Toluene	91	6.442	6.445	(0.840)	975883	48.9113	48.91
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	355856	49.0932	49.09
	52 2-Hexanone	43	7.086	7.086	(0.924)	481140	100.419	100.41
	53 1,1,2-Trichloroethane	83	6.835	6.839	(0.891)	205333	48.5132	48.51
	54 1,3-Dichloropropane	76	6.982	6.981	(0.911)	419059	48.4632	48.46
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	311577	50.9926	50.99
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	194514	47.1890	47.18
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	231451	47.8539	47.85
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	263762	40.1795	40.17
	59 Chlorobenzene	112	7.690	7.690	(1.003)	668608	47.9390	47.93
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	267606	49.0109	49.01
	61 Ethylbenzene	106	7.795	7.799	(1.017)	323263	46.2211	46.22
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	828056	94.3758	94.37
	63 o-Xylene	106	8.237	8.241	(1.074)	397534	47.8450	47.84
	64 Styrene	104	8.256	8.256	(1.077)	710304	49.0101	49.01
	66 Bromoform	173	8.406	8.406	(1.096)	197925	50.4868	50.48
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	956821	44.8008	44.80
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	331151	48.2326	48.23
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	388935	52.7245	52.72
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	408757	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	262052	48.0990	48.09(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	119855	53.1678	53.16
	73 n-Propylbenzene	91	8.908	8.912	(0.922)	1109886	44.9330	44.93
	74 Bromobenzene	156	8.803	8.803	(0.911)	301361	47.1405	47.14
	75 1,3,5-Trimethylbenzene	105	9.062	9.066	(0.938)	826279	44.6531	44.65

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	751134	45.0789	45.07
77	4-Chlorotoluene	91	9.070	9.069 (0.939)	862507	47.1055	47.10

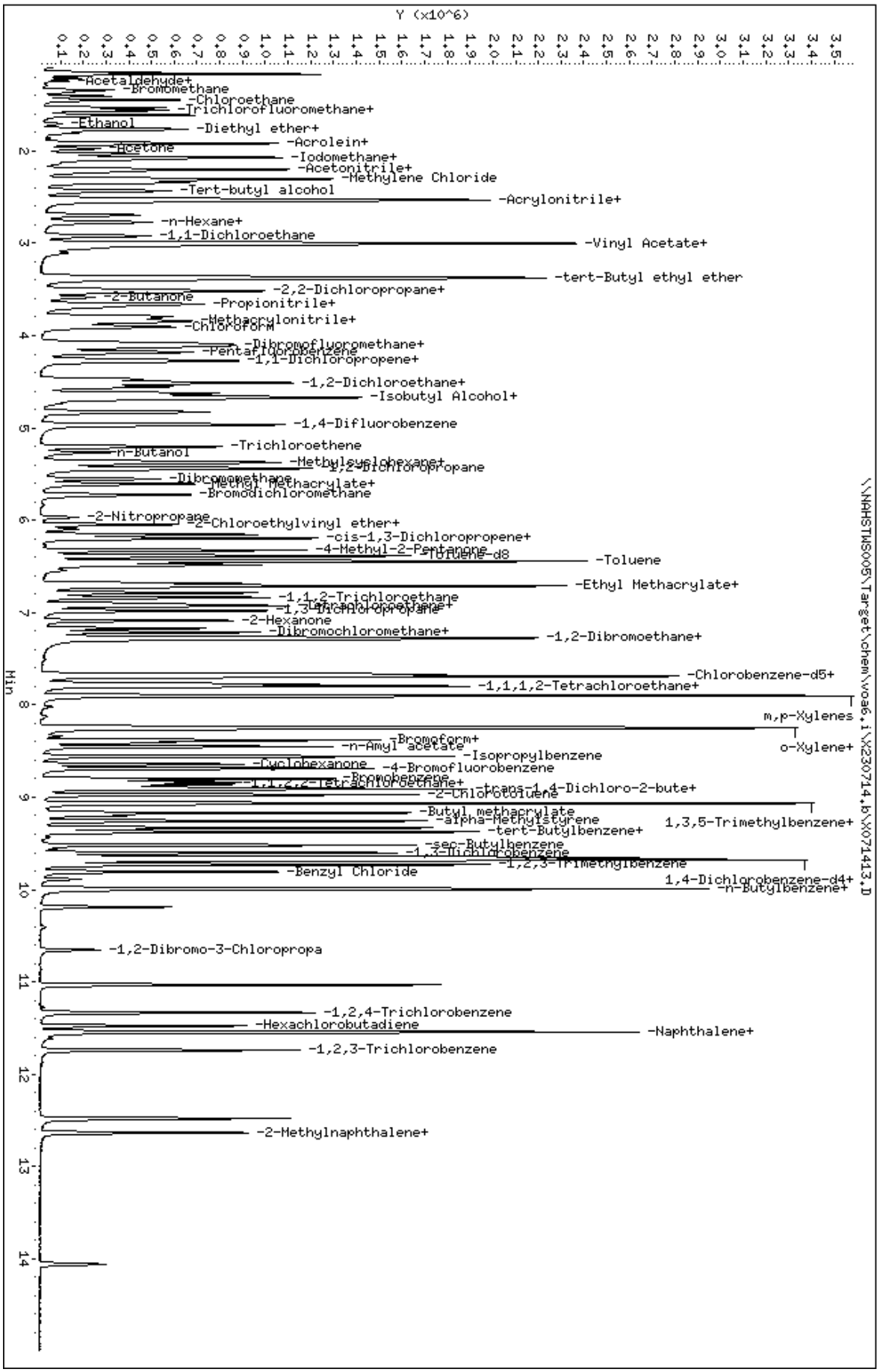
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	
78	tert-Butylbenzene	119	9.332	9.336	(0.966)	675255	42.5524	42.55	
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	830881	44.7762	44.77	
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	905955	42.8308	42.83	
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	820416	42.4603	42.46	
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	517212	46.4420	46.44	
84	1,4-Dichlorobenzene	146	9.681	9.680	(1.002)	560136	45.8733	45.87	
86	Benzyl Chloride	91	9.808	9.804	(1.279)	615356	48.8480	48.84	
87	n-Butylbenzene	91	9.992	9.992	(1.034)	697021	43.0724	43.07	
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	522905	47.7589	47.75	
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	54433	48.2708	48.27	
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	326047	43.3575	43.35	
91	Hexachlorobutadiene	225	11.476	11.480	(1.188)	139858	40.8152	40.81	
92	Naphthalene	128	11.540	11.536	(1.194)	838509	45.0509	45.05	
93	1,2,3-Trichlorobenzene	180	11.739	11.738	(1.215)	302822	43.0586	43.05	
146	Methyl acetate	43	2.232	2.228	(0.534)	226459	48.6009	48.60	
138	Freon TF	101	1.917	1.917	(0.459)	164256	50.7362	50.73	
141	Cyclohexane	56	4.121	4.117	(0.987)	392805	43.2834	43.28	
142	Tetrahydrofuran	42	3.848	3.851	(0.921)	129569	96.1946	96.19	
147	Methylcyclohexane	55	5.381	5.381	(1.084)	818352	47.4476	47.44	
135	1,4-Dioxane	88	5.602	5.602	(1.341)	61482	988.216	988.21	
132	n-Butanol	56	5.261	5.261	(1.259)	170908	980.599	980.59	
131	Methyl Acrylate	55	3.690	3.686	(0.883)	366966	51.5629	51.56	
133	Ethyl Acrylate	55	5.381	5.381	(1.288)	818352	47.1623	47.16	
136	n-Hexane	57	2.772	2.768	(0.664)	239027	47.2779	47.27	
139	Diethyl ether	59	1.760	1.760	(0.421)	234998	48.1340	48.13	
148	Tert-butyl alcohol	59	2.434	2.442	(0.583)	626708	948.402	948.40	
149	Isopropyl alcohol	45	2.093	2.101	(0.501)	377497	920.653	920.65	
156	Diisopropyl ether	45	3.004	3.008	(0.719)	1037147	48.0634	48.06	
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	913282	48.3344	48.33	
167	Ethanol	45	1.703	1.711	(0.408)	74613	1019.42	1019.41	
172	tert-Butyl formate	59	4.627	4.635	(1.108)	507413	90.7266	90.72	
173	3,3-Dimethyl-1-butanol	57	7.285	7.293	(0.950)	688113	863.240	863.23	
174	tert-Amyl methyl ether	73	4.669	4.668	(1.118)	862678	50.0877	50.08	
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	1050302	47.3858	47.38	
176	tert-Amyl alcohol	59	4.627	4.635	(1.108)	507413	887.155	887.15	
151	4-Methyl-2-pentanol	45	6.712	6.715	(1.352)	1515654	865.514	865.51	
180	1-Methylnaphthalene	142	12.634	12.631	(1.308)	384606			(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	301891	44.8739	44.87	
152	Amyl alcohol	42	6.903	6.903	(0.900)	195847	918.818	918.81	
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	380825	45.1447	45.14	
159	Propylene oxide	43	1.805	1.805	(0.432)	61412	95.6112	95.61	
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	186846	1023.91	1023.90	
162	Butyl acrylate	55	8.249	8.248	(1.076)	731306	51.8619	51.86	
163	Butyl methacrylate	41	9.167	9.171	(0.949)	489010	49.9457	49.94	
164	Dicyclopentadiene	66	9.681	9.684	(1.002)	1106669	47.0024	47.00	
182	Epichlorohydrin	57	6.093	6.093	(1.227)	124324	203.690	203.69	
M 94	1,2-Dichloroethylene (total)	96				470923	93.0878	93.08	
M 95	Xylenes (total)	106				1225590	142.221	142.22	
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	409265	45.8929	45.89	
130	Ethyl Acetate	43	3.660	3.660	(0.876)	382709	49.2142	49.21	
134	Cyclohexanone	55	8.642	8.642	(0.894)	353883	972.476	972.47	
185	Isoprene	39	1.771	1.771	(0.424)	82361	47.7228	47.72	

188 Isopropyl acetate	43	4.680	4.680 (0.943)	1029947	47.8043	47.80
187 n-Amyl acetate	43	8.451	8.451 (1.102)	635386	46.7743	46.77

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
189 n-Butyl acetate	43	7.214	7.210	(0.941)	567096	49.9183	49.91(H)
150 Allyl alcohol	57	2.772	2.768	(0.664)	239027	945.764	945.76
194 Acetaldehyde	44	1.212	1.212	(0.290)	96727	206.571	206.57
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	761129	49.1308	49.13
200 Dimethyl Disulfide	94	6.194	6.198	(0.808)	522553	52.2664	52.26
202 Isobutylene	41	1.242	1.242	(0.297)	41486	47.9266	47.92(M)
205 2-Ethylhexyl Acrylate	55	11.547	11.547	(1.195)	553935	53.0575	53.05

QC Flag Legend

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: ICV
Sample Info: CCV;CCV;2;;ICV
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071413.D
Inj Date : 14-JUL-2023 16:06
InstruID : voa6.i
LabSampID : ICV

1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

MASS
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HEIGHT
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20-Jul-2023
15:04
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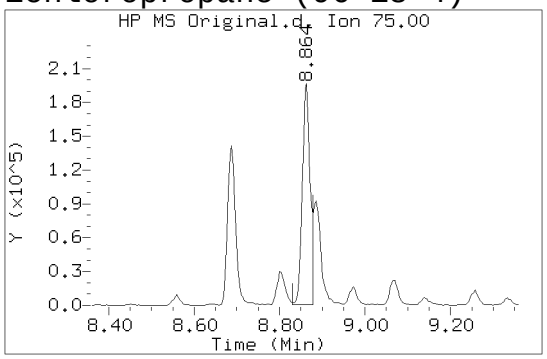

AFTER

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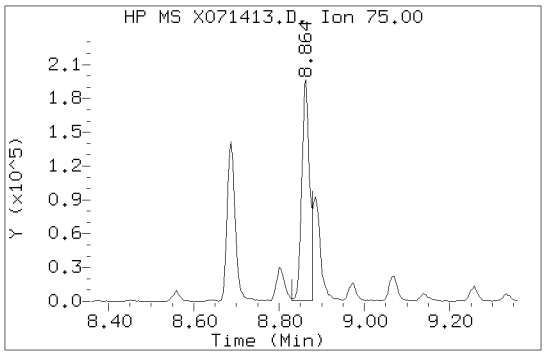
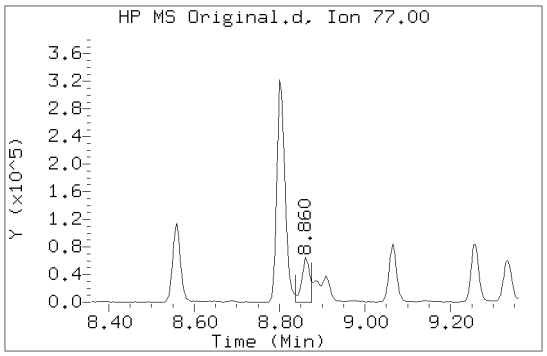


BEFORE

MASS
77
AREA
87073
HEIGHT
64756
20-Jul-2023
15:04
linh
pham



AFTER

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77
AREA
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HEIGHT
64756
20-Jul-2023
15:04
linh
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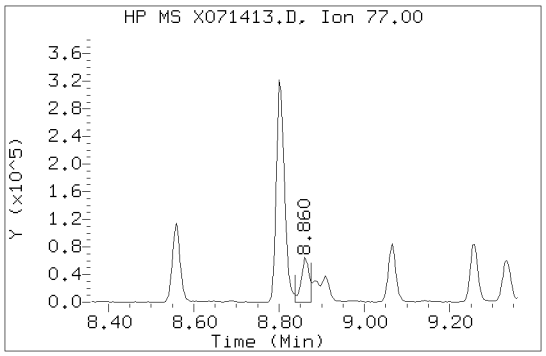
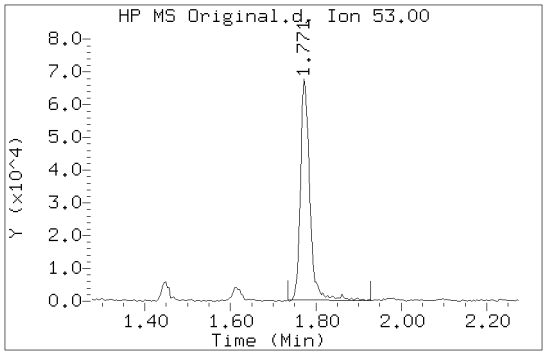


Chloroprene (126-99-8)

Reason Code:

BEFORE

MASS
53
AREA
106109
HEIGHT
67580
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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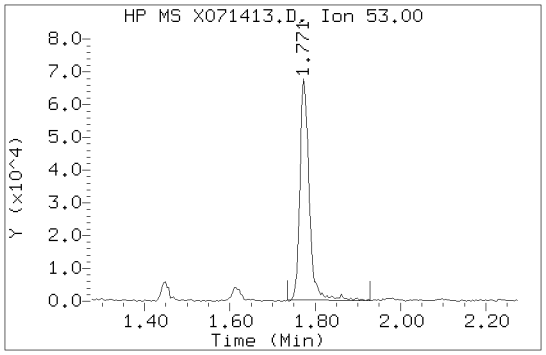
AREA
106109
HEIGHT
67580
20-Jul-2023
15:04
linh
pham



BEFORE

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88
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20-Jul-2023
15:04
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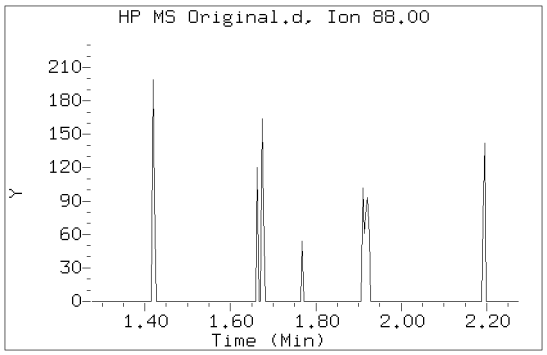
pham



AFTER

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AREA
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HEIGHT
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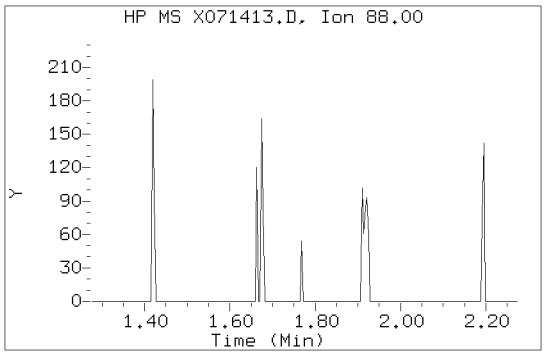
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 16:06
InstruID : voa6.i
LabSampID : ICV

Isobutylene (115-11-7)

Reason Code:

BEFORE
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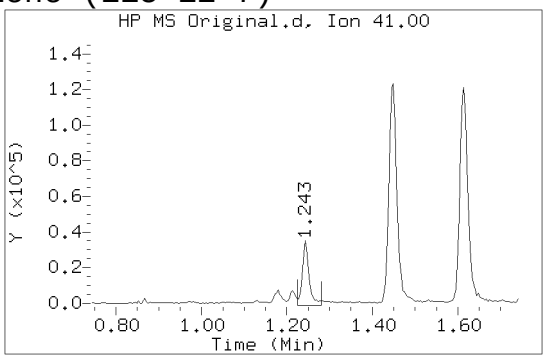
41
AREA
41486
HEIGHT
36200
20-Jul-2023
15:04
linh
pham



AFTER
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AREA
41486
HEIGHT
36200
20-Jul-2023
15:04
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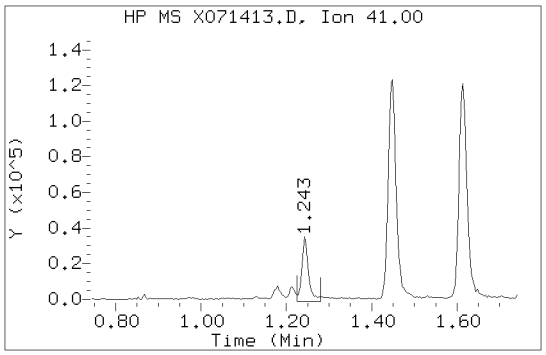

BEFORE
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AREA
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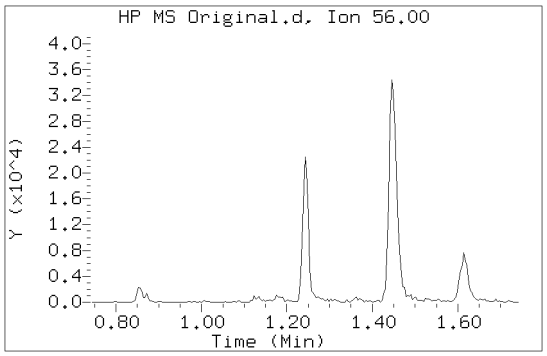
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
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AREA
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HEIGHT
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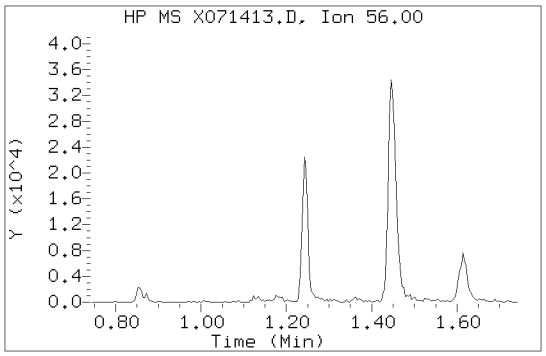
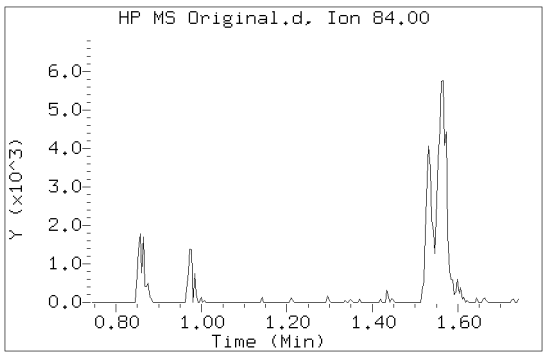
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
84
AREA
0
HEIGHT
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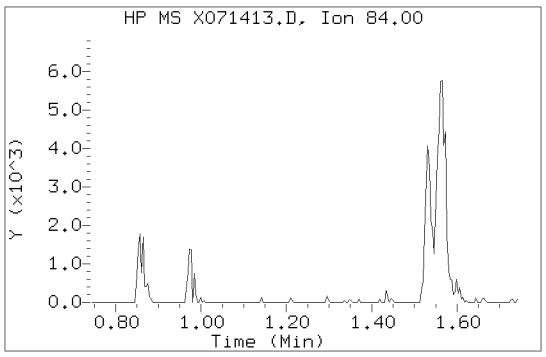
20-Jul-2023
15:04
linh
pham



01324209

right solutions.
right partner.

Raw Data VOA6 442290

Volatiles by EPA 8260

Workorder

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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\voa6.i\X230725.b\X072501.D Page 1
Report Date: 25-Jul-2023 20:34

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072501.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 25-JUL-2023 10:08
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\X230725.b\bfb.m
Meth Date : 14-Mar-2023 15:45 Linh.Pham 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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.687	8.889	(0.000)	95	170112			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	49440			15.00- 40.00	29.06
8.687	8.889	(0.000)	75	80264			30.00- 60.00	47.18
8.687	8.889	(0.000)	96	13068			5.00- 9.00	7.68
8.687	8.889	(0.000)	173	1046			0.00- 2.00	0.86
8.687	8.889	(0.000)	174	121632			50.00- 0.00	71.50
8.687	8.889	(0.000)	175	10246			5.00- 9.00	8.42
8.687	8.889	(0.000)	176	116144			95.00- 101.00	95.49
8.687	8.889	(0.000)	177	8032			5.00- 9.00	6.92

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	29.06
75	30.00 - 60.00% of mass 95	47.18
96	5.00 - 9.00% of mass 95	7.68
173	Less than 2.00% of mass 174	0.61 (0.86)
174	Greater than 50.00% of mass 95	71.50
175	5.00 - 9.00% of mass 174	6.02 (8.42)
176	95.00 - 101.00% of mass 174	68.28 (95.49)
177	5.00 - 9.00% of mass 176	4.72 (6.92)

Data File: X072501.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 110

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2997	64.10	567	94.00	19480	138.70	119
37.10	12548	65.00	169	95.00	170112	139.50	75
38.10	9542	66.80	360	96.00	13068	140.90	1887
39.10	7098	68.00	17352	96.90	517	143.00	1534
40.10	4370	69.00	19208	98.10	1424	143.80	170
41.10	3024	70.10	1289	98.90	83	145.10	74
42.10	4165	71.00	351	103.10	150	145.90	388
43.10	2875	72.00	635	103.80	737	147.70	567
44.00	4668	73.00	5995	104.70	593	148.80	174
44.90	2333	74.10	28016	105.70	825	149.60	151
45.90	274	75.00	80264	106.90	1037	150.10	144
47.00	3512	76.10	7416	108.80	1120	152.90	315
48.00	1417	76.90	597	109.90	182	154.00	136
49.00	8792	78.20	797	111.90	146	154.90	484
50.10	49440	78.90	3752	113.30	131	156.80	341
51.00	14627	79.90	2029	113.70	120	158.80	249
52.00	764	81.00	4300	115.00	158	160.90	179
52.90	467	81.80	1184	115.70	615	171.00	131
54.00	424	82.80	407	116.70	798	172.80	1046
55.10	7082	83.10	376	118.00	418	174.00	121632
56.00	4103	85.10	520	118.90	962	174.90	10246
57.00	6554	86.10	204	126.90	221	175.90	116144
58.10	614	87.00	6575	128.00	611	177.00	8032
58.80	76	87.90	6495	128.90	345	177.90	266
59.90	2731	88.70	293	130.00	698	233.80	196
61.00	10342	90.80	613	131.00	173	235.80	148
62.00	6914	92.00	4116	134.80	240		
63.00	6530	92.90	6217	137.00	271		

Data File: \\nahstws005\target\chem\voa6.i\x230725.b\x072501.d Page 1

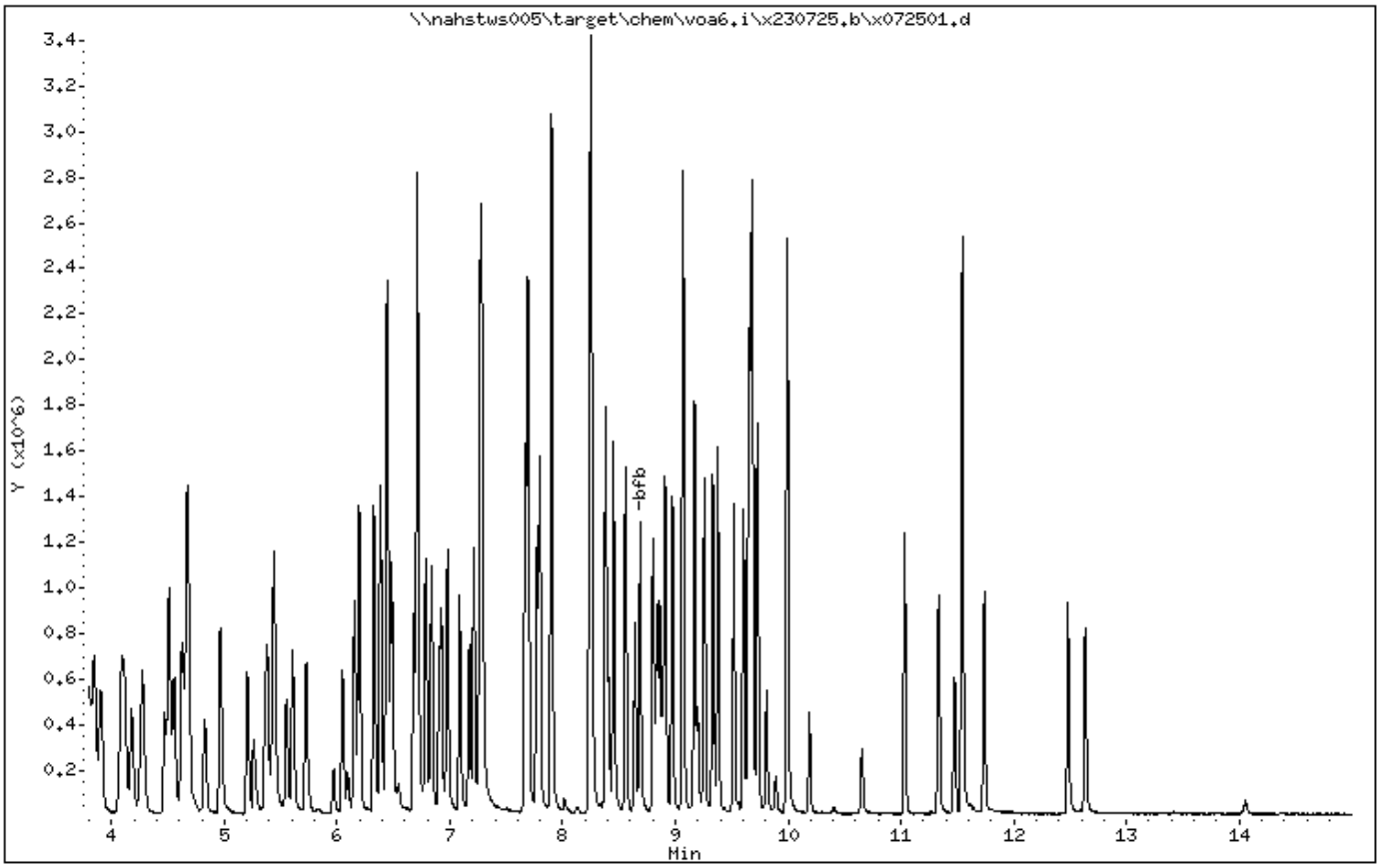
Date : 25-JUL-2023 10:08

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



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Inj Date : 25-JUL-2023 10:08
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072502.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072502.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 25-JUL-2023 10:28
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.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)	575260	50.0000	
135 1,4-Dioxane	88	5.602	5.602	(1.340)	68501	1000.00	1002.08
140 1,3-Butadiene	54	1.171	1.171	(0.280)	429408	50.0000	58.09
25 Methacrylonitrile	41	3.821	3.821	(0.914)	487190	50.0000	65.61
12 Isobutyl Alcohol	43	4.680	4.680	(1.119)	1392841	1000.00	1277.31
13 Acetonitrile	39	2.202	2.202	(0.527)	487523	500.000	604.36
14 Allyl Chloride	41	2.202	2.202	(0.527)	1183127	50.0000	62.64
4 Propionitrile	54	3.656	3.656	(0.875)	672947	500.000	590.54
2 Dichlorodifluoromethane	85	0.980	0.980	(0.234)	252381	50.0000	43.04
3 Chloromethane	50	1.085	1.085	(0.260)	387693	50.0000	44.62
5 Vinyl Chloride	62	1.149	1.149	(0.275)	382136	50.0000	51.33
6 Bromomethane	94	1.344	1.344	(0.321)	123517	50.0000	40.09
7 Chloroethane	64	1.407	1.407	(0.337)	253127	50.0000	59.56
8 Trichlorofluoromethane	101	1.565	1.565	(0.374)	392898	50.0000	52.08
9 Acrolein	56	1.865	1.865	(0.446)	34201	100.000	156.36
10 Acetone	43	1.977	1.977	(0.473)	287659	100.000	127.67
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	214667	50.0000	50.93
15 Iodomethane	142	2.030	2.030	(0.485)	482696	100.000	87.63
16 Acrylonitrile	53	2.536	2.536	(0.606)	309145	100.000	110.28
17 Methylene Chloride	84	2.307	2.307	(0.552)	251567	50.0000	50.60

18	Methyl tert-butyl ether	73	2.539	2.539 (0.607)	744093	50.0000	47.47
19	Carbon Disulfide	76	2.075	2.075 (0.496)	1378741	100.000	104.07

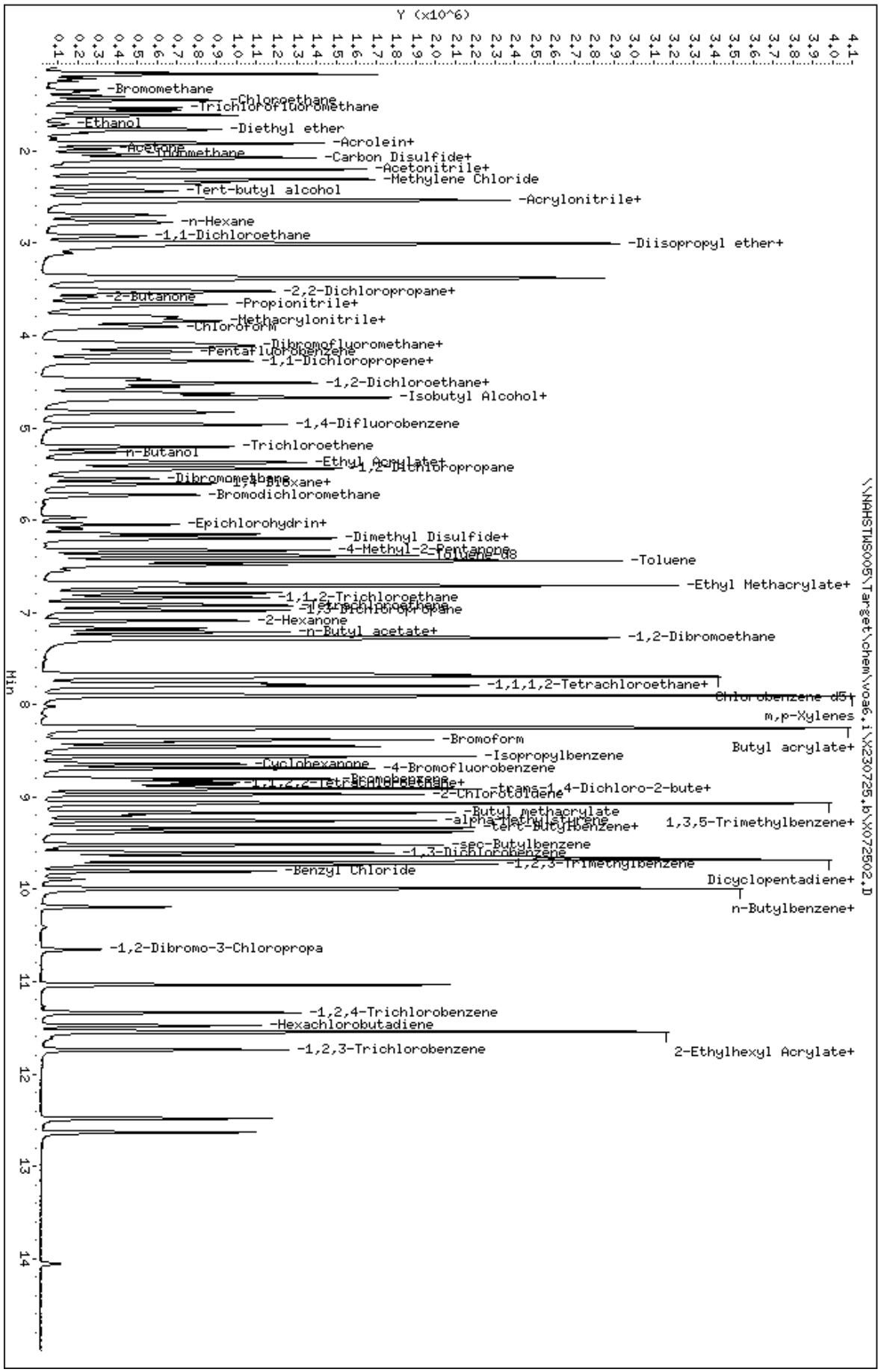
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	20 trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	213350	50.0000	43.76
	21 Vinyl Acetate	43	3.000	3.000	(0.718)	2316293	100.000	114.88
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	501109	50.0000	46.84
	24 2-Butanone	43	3.585	3.585	(0.857)	351224	100.000	114.64
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	411712	50.0000	49.58
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.844)	310147	50.0000	49.94
	28 Chloroform	83	3.908	3.908	(0.935)	519022	50.0000	47.41
	29 Bromochloromethane	128	3.795	3.795	(0.908)	162897	50.0000	46.80
$	30 Dibromofluoromethane	113	4.099	4.099	(0.980)	278162	50.0000	52.80
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	410960	50.0000	48.77
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	354488	50.0000	46.38
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	515833	50.0000	50.01
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	344118	50.0000	44.69
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	357202	50.0000	54.22
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	936985	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	1113809	50.0000	49.69
	38 Trichloroethene	130	5.208	5.208	(1.049)	296632	50.0000	46.79
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	407766	50.0000	47.49
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	248843	100.000	94.93
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	387989	50.0000	53.83
	44 Dibromomethane	93	5.553	5.553	(1.119)	193746	50.0000	47.49
	45 4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	954082	100.000	114.36
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	476954	50.0000	48.37
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	847733	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	1013985	50.0000	46.45
	50 Toluene	91	6.445	6.445	(0.841)	1119903	50.0000	49.07
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	394965	50.0000	47.51
	52 2-Hexanone	43	7.086	7.086	(0.924)	634187	100.000	115.72
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	232527	50.0000	48.03
	54 1,3-Dichloropropane	76	6.981	6.981	(0.911)	484561	50.0000	48.99
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	333514	50.0000	47.72
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	208903	50.0000	44.31
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	265372	50.0000	47.97
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	352180	50.0000	46.78
	59 Chlorobenzene	112	7.694	7.694	(1.003)	754964	50.0000	47.32
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	291042	50.0000	46.60
	61 Ethylbenzene	106	7.795	7.795	(1.017)	374825	50.0000	46.85
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	937266	100.000	93.39
	63 o-Xylene	106	8.237	8.237	(1.074)	450627	50.0000	47.41
	64 Styrene	104	8.256	8.256	(1.077)	803584	50.0000	48.47
	66 Bromoform	173	8.410	8.410	(1.097)	209469	50.0000	46.71
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1119211	50.0000	45.81
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	383373	50.0000	48.97
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	437075	50.0000	51.79
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	466038	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	300358	50.0000	48.35(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	1330831	50.0000	47.25
	74 Bromobenzene	156	8.803	8.803	(0.911)	330775	50.0000	45.38
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	918688	50.0000	43.54
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	846725	50.0000	44.56
	77 4-Chlorotoluene	91	9.066	9.066	(0.938)	972941	50.0000	46.60
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	790685	50.0000	43.70

79 1,2,4-Trimethylbenzene	105	9.377	9.377 (0.971)	934995	50.0000	44.19
81 sec-Butylbenzene	105	9.519	9.519 (0.985)	1116421	50.0000	46.29

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	979219	50.0000	44.45
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	566172	50.0000	44.58
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	602604	50.0000	43.28
87	n-Butylbenzene	91	9.992	9.992	(1.034)	874689	50.0000	47.40
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	564663	50.0000	45.23
89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	55342	50.0000	43.16
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	344768	50.0000	40.21
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	160844	50.0000	41.14
92	Naphthalene	128	11.540	11.540	(1.194)	906661	50.0000	42.72
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	323262	50.0000	40.31(M)
M 94	1,2-Dichloroethylene (total)	96				523497	100.000	(a)
141	Cyclohexane	56	4.121	4.121	(0.986)	533634	50.0000	53.51
138	Freon TF	101	1.917	1.917	(0.459)	201828	50.0000	55.79
147	Methylcyclohexane	55	5.381	5.381	(1.084)	1070768	50.0000	54.14
146	Methyl Acetate	43	2.232	2.232	(0.534)	325454	50.0000	63.56
148	Tert-Butyl alcohol	59	2.434	2.434	(0.582)	715798	1000.00	985.87
149	Isopropyl Alcohol	45	2.097	2.097	(0.502)	549491	1000.00	1219.67

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



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Date : 25-JUL-2023 10:28
Client ID: CCV
Sample Info: CCV,CCV,2,,
Purge Volume: 5.0
Column phase: DB624

\\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072502.D

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072502.D
Inj Date : 25-JUL-2023 10:28
InstruID : voa6.i
LabSampID : CCV

1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

MASS
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300358
HEIGHT
222013
27-Jul-2023
13:09
linh
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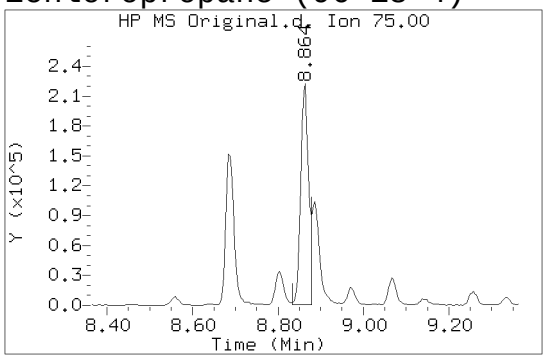

AFTER

MASS
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AREA
300358
HEIGHT
222013
27-Jul-2023
13:09
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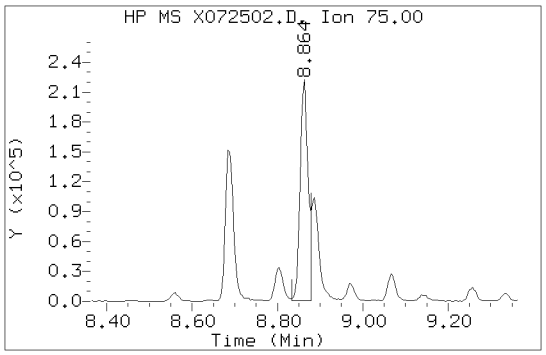

BEFORE

MASS
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AREA
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73498
27-Jul-2023
13:09
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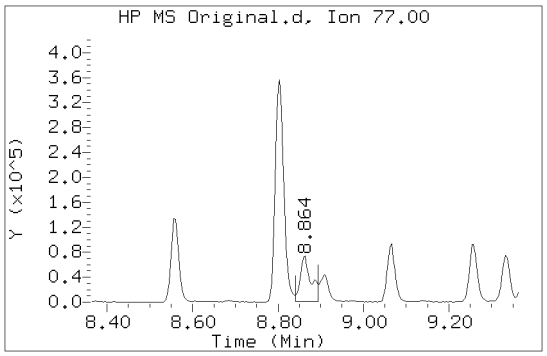

AFTER

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27-Jul-2023
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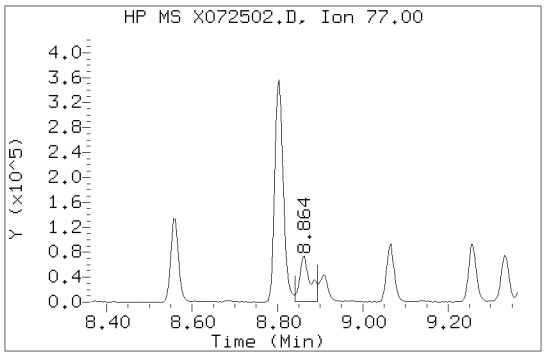

1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

BEFORE

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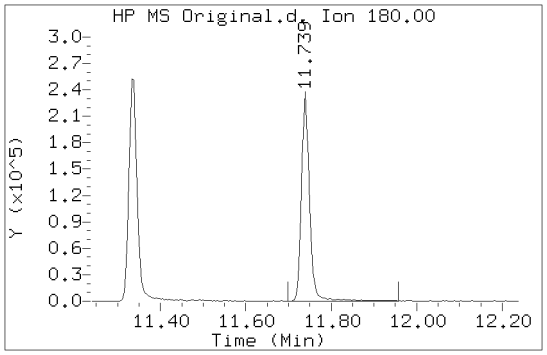
AREA
323262
HEIGHT
238033
27-Jul-2023
13:09
linh
pham



AFTER

MASS
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AREA
323262
HEIGHT
238033
27-Jul-2023
13:09
linh
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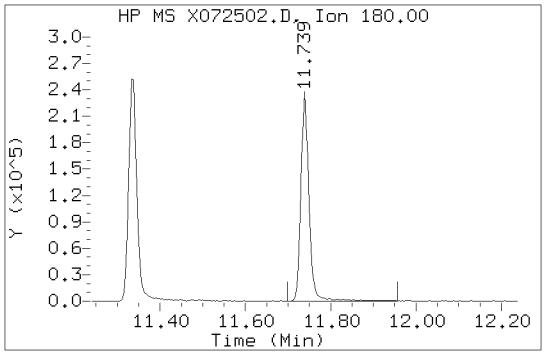

BEFORE

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HEIGHT
226434
27-Jul-2023
13:09
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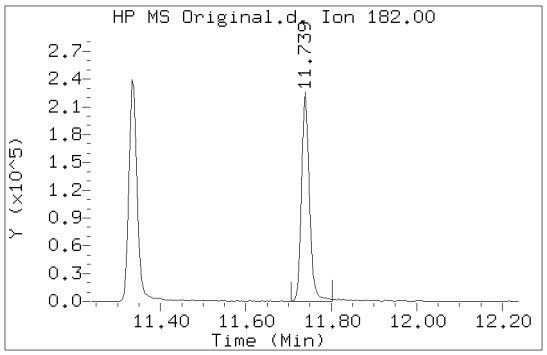
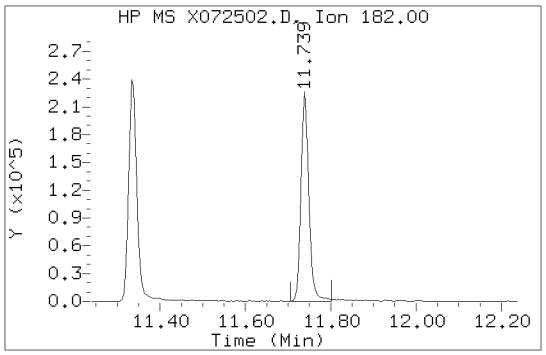


AFTER

MASS
182
AREA
299857
HEIGHT
226434
27-Jul-2023
13:09
linh
pham



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Inj Date : 25-JUL-2023 10:28
InstruID : voa6.i
LabSampID : CCV

1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

BEFORE

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AREA
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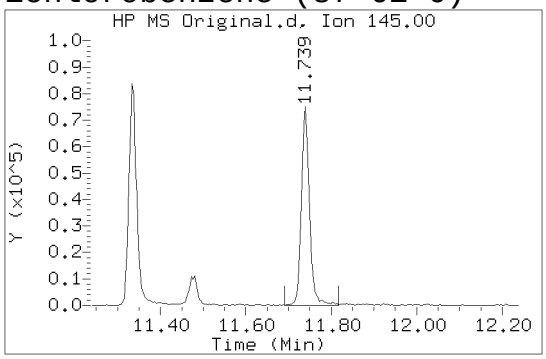
HEIGHT
75208
27-Jul-2023
13:09
linh
pham



AFTER

MASS
145
AREA
102115
HEIGHT
75208
27-Jul-2023
13:09
linh
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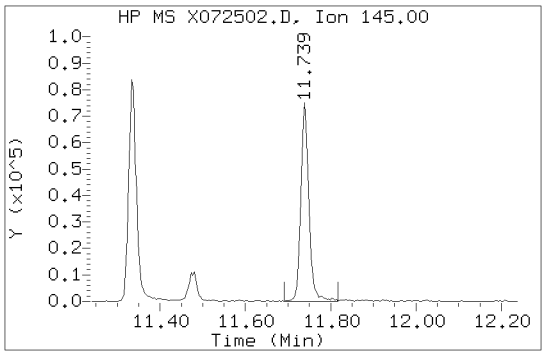


Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072504.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072504.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 25-JUL-2023 11:09
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.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	4.181	4.181	(1.000)	570751	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.980)	284848	54.5219	54.52
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	371688	56.9048	56.90
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	885705	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	745492	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1000257	52.1126	52.11
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	360479	48.5522	48.55
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	369968	50.0000	

01324224

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072504.D

Date : 25-JUL-2023 11:09

Client ID: CCB

Instrument: voa6.i

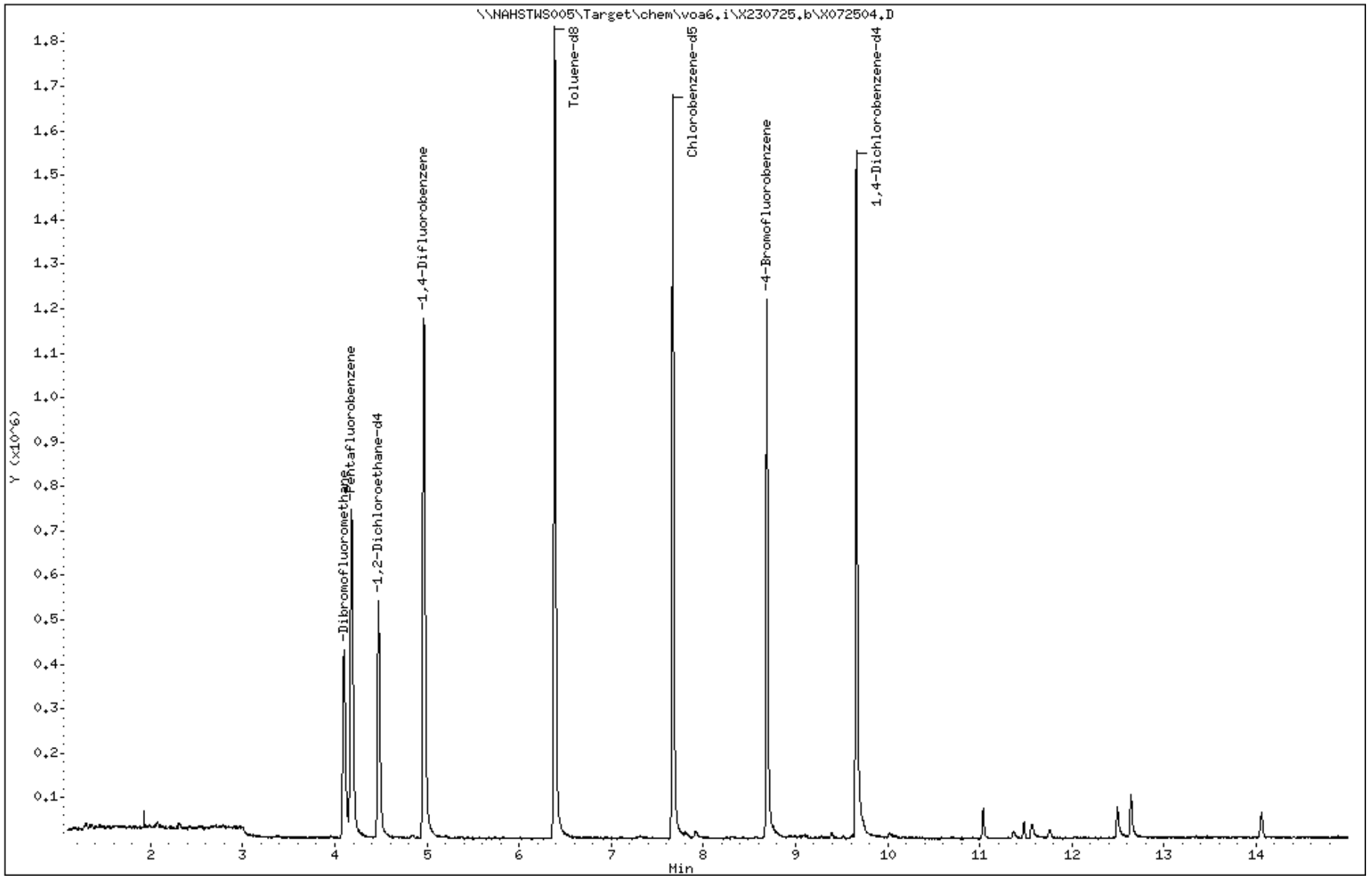
Sample Info: CCB:CCB:::

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Inj Date : 25-JUL-2023 11:09
InstruID : voa6.i
LabSampID : CCB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072505.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072505.D
Lab Smp Id: VLCSW-230725 Client Smp ID: VLCSW-230725
Inj Date : 25-JUL-2023 11:30
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-230725;VLCSW-230725;3;;LCS
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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: 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	4.181	4.181	(1.000)	567256	50.0000	
135 1,4-Dioxane	88	5.606	5.602	(1.341)	26556	393.962	393.96(a)
140 1,3-Butadiene	54	1.167	1.171	(0.279)	196833	27.0040	27.00
25 Methacrylonitrile	41	3.837	3.821	(0.918)	192819	26.3343	26.33
12 Isobutyl Alcohol	43	4.680	4.680	(1.119)	520435	484.004	484.00
13 Acetonitrile	39	2.202	2.202	(0.527)	179039	225.080	225.07
14 Allyl Chloride	41	2.202	2.202	(0.527)	438566	23.5484	23.54
4 Propionitrile	54	3.664	3.656	(0.876)	269936	240.223	240.22(a)
2 Dichlorodifluoromethane	85	0.976	0.980	(0.234)	116772	20.7780	20.77
3 Chloromethane	50	1.085	1.085	(0.260)	187763	21.9148	21.91
5 Vinyl Chloride	62	1.149	1.149	(0.275)	176368	24.0265	24.02
6 Bromomethane	94	1.344	1.344	(0.321)	62997	20.7384	20.73
7 Chloroethane	64	1.407	1.407	(0.337)	104157	24.8557	24.85
8 Trichlorofluoromethane	101	1.565	1.565	(0.374)	179486	24.1276	24.12
9 Acrolein	56	1.865	1.865	(0.446)	11775	55.3279	55.32
10 Acetone	43	1.981	1.977	(0.474)	104794	44.0857	44.08
11 1,1-Dichloroethene	96	1.917	1.921	(0.459)	91691	22.0635	22.06
15 Iodomethane	142	2.033	2.030	(0.486)	148173	30.3257	30.32
16 Acrylonitrile	53	2.539	2.536	(0.607)	132348	47.8784	47.87
17 Methylene Chloride	84	2.307	2.307	(0.552)	105219	20.6508	20.65

18	Methyl tert-butyl ether	73	2.539	2.539 (0.607)	309248	20.0084	20.00
19	Carbon Disulfide	76	2.075	2.075 (0.496)	550591	42.1482	42.14

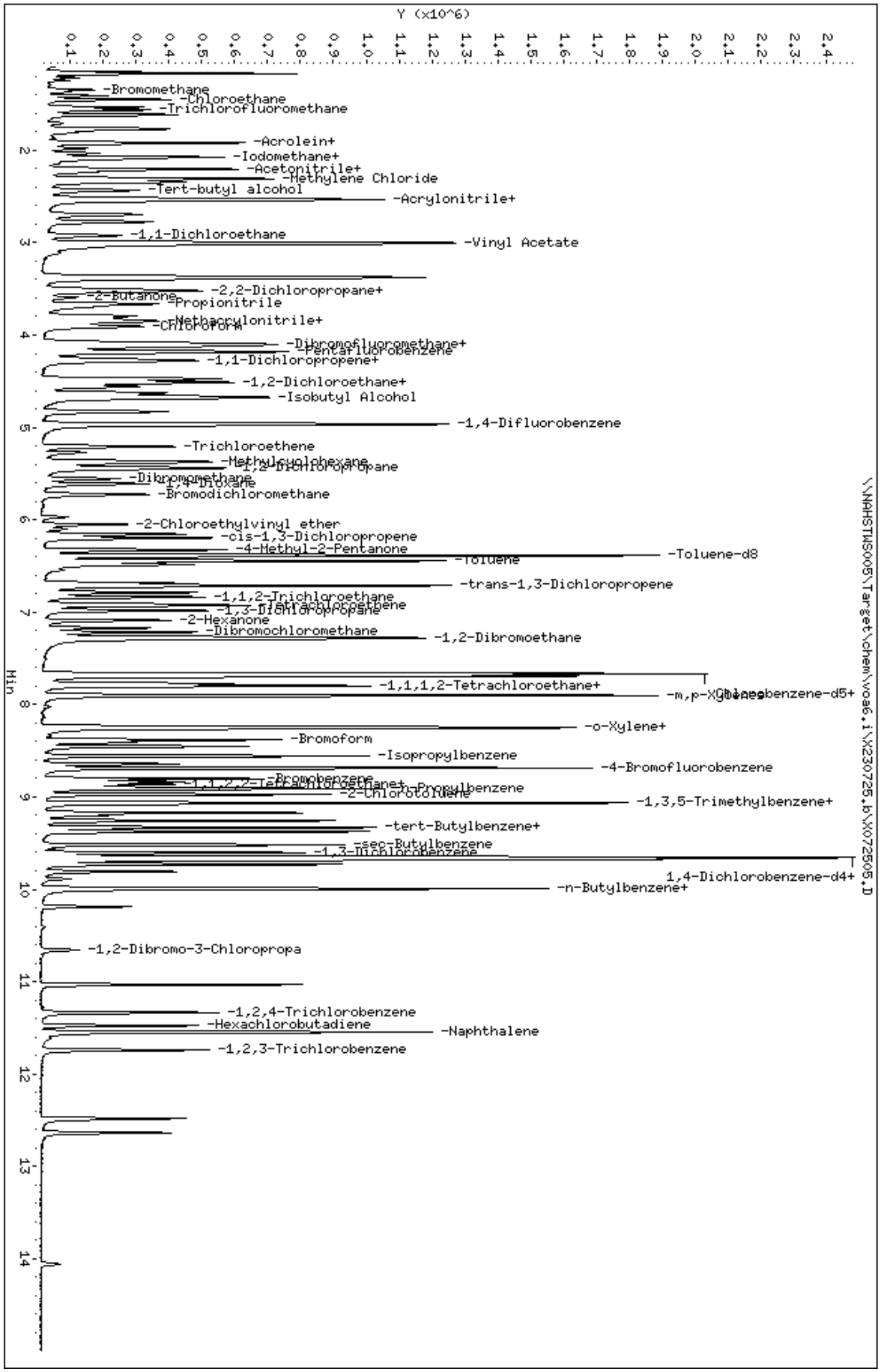
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	20 trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	98095	20.4065	20.40
	21 Vinyl Acetate	43	3.001	3.000	(0.718)	990674	49.8314	49.83
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	223840	21.2196	21.21
	24 2-Butanone	43	3.589	3.585	(0.858)	127523	42.2142	42.21
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	178207	21.8800	21.88
	27 cis-1,2-Dichloroethene	96	3.525	3.529	(0.843)	135098	22.0612	22.06
	28 Chloroform	83	3.908	3.908	(0.935)	222720	20.6345	20.63
	29 Bromochloromethane	128	3.795	3.795	(0.908)	69916	20.3724	20.37
$	30 Dibromofluoromethane	113	4.099	4.099	(0.980)	284136	54.7235	54.72
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	185478	22.3229	22.32
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	157733	20.5093	20.50
	33 1,2-Dichloroethane	62	4.560	4.556	(0.918)	213814	20.6002	20.60
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	157272	20.2982	20.29
$	35 1,2-Dichloroethane-d4	65	4.470	4.474	(1.069)	373109	57.4806	57.48
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	942875	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	473030	20.9742	20.97
	38 Trichloroethene	130	5.209	5.208	(1.049)	128336	20.1178	20.11
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	168213	19.4723	19.47
	41 2-Chloroethylvinyl ether	63	6.052	6.048	(1.219)	105016	39.8159	39.81
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	159725	22.0249	22.02
	44 Dibromomethane	93	5.553	5.553	(1.119)	81033	19.7398	19.73
	45 4-Methyl-2-Pentanone	43	6.326	6.325	(0.825)	384968	46.2041	46.20
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	188100	18.9577	18.95
*	47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	846696	50.0000	
$	48 Toluene-d8	98	6.386	6.385	(0.833)	1039336	47.6763	47.67
	50 Toluene	91	6.446	6.445	(0.841)	492710	21.6178	21.61
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	157532	18.8346	18.83
	52 2-Hexanone	43	7.087	7.086	(0.924)	258150	47.1659	47.16
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	100511	20.7886	20.78
	54 1,3-Dichloropropane	76	6.982	6.981	(0.911)	200750	20.3237	20.32
	55 Dibromochloromethane	129	7.177	7.173	(0.936)	134118	19.2149	19.21
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	101462	21.5478	21.54
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	109614	19.8397	19.83
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	165269	21.8184	21.81
	59 Chlorobenzene	112	7.690	7.694	(1.003)	331637	20.8156	20.81
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.772	(1.014)	124609	19.9782	19.97
	61 Ethylbenzene	106	7.795	7.795	(1.017)	168987	21.1518	21.15
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	437548	43.6552	43.65
	63 o-Xylene	106	8.241	8.237	(1.075)	202596	21.3453	21.34
	64 Styrene	104	8.260	8.256	(1.077)	344877	20.8312	20.83
	66 Bromoform	173	8.410	8.410	(1.097)	86989	19.4246	19.42
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	524252	21.4885	21.48
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	157404	20.5532	20.55
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	454714	53.9715	53.97
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.662	(1.000)	455950	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.918)	118161	19.4433	19.44(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	614984	22.3202	22.32
	74 Bromobenzene	156	8.803	8.803	(0.912)	142700	20.0115	20.01
	75 1,3,5-Trimethylbenzene	105	9.062	9.066	(0.938)	423745	20.5295	20.52
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	390343	21.0015	21.00
	77 4-Chlorotoluene	91	9.070	9.066	(0.939)	444742	21.7753	21.77
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	379352	21.4312	21.43

79	1,2,4-Trimethylbenzene	105	9.377	9.377 (0.971)	423171	20.4443	20.44
81	sec-Butylbenzene	105	9.519	9.519 (0.986)	529091	22.4248	22.42

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	82 p-Isopropyltoluene	119	9.647	9.647	(0.999)	450554	20.9047	20.90
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	250025	20.1267	20.12
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	274431	20.1487	20.14
	87 n-Butylbenzene	91	9.992	9.992	(1.035)	389445	21.5749	21.57
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.035)	254576	20.8448	20.84
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	23868	19.6355	19.63
	90 1,2,4-Trichlorobenzene	180	11.338	11.334	(1.174)	146953	17.5191	17.51
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	73088	20.3732	20.37
	92 Naphthalene	128	11.544	11.540	(1.195)	368997	17.7732	17.77
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.216)	136514	17.4019	17.40
M	94 1,2-Dichloroethylene (total)	96				233193	42.4677	42.46
M	95 Xylenes (total)	106				640144	65.0006	65.00
	141 Cyclohexane	56	4.118	4.121	(0.985)	272440	27.7078	27.70
	138 Freon TF	101	1.917	1.917	(0.459)	93338	28.2011	28.20
	147 Methylcyclohexane	55	5.388	5.381	(1.085)	423363	21.2729	21.27
	146 Methyl Acetate	43	2.236	2.232	(0.535)	123223	24.4081	24.40
	148 Tert-Butyl alcohol	59	2.435	2.434	(0.582)	295014	412.057	412.05
	149 Isopropyl Alcohol	45	2.093	2.097	(0.501)	207183	466.363	466.36

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072505.D
Date : 25-JUL-2023 11:30
Client ID: VLCSW-230725
Sample Info: VLCSW-230725;VLCSW-230725;3;;LCS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

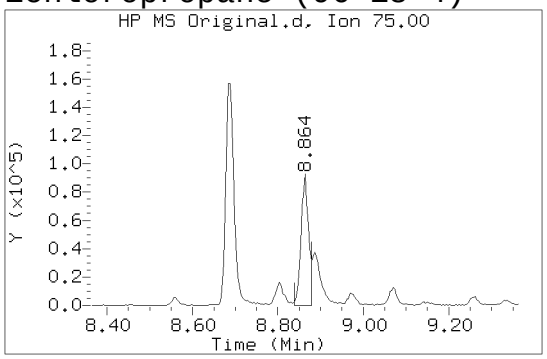
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072505.D
Inj Date : 25-JUL-2023 11:30
InstruID : voa6.i
LabSampID : VLCSW-230725

1,2,3-Trichloropropane (96-18-4)

Reason Code:

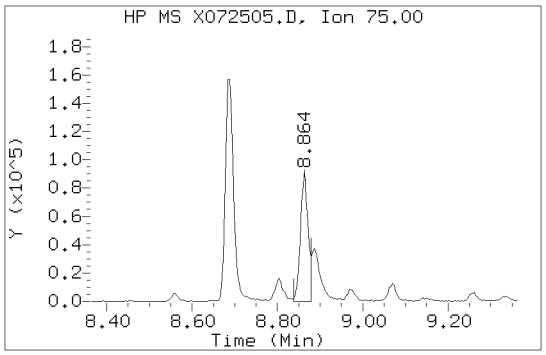
BEFORE

MASS
75
AREA
118161
HEIGHT
92554
27-Jul-2023
13:09
linh
pham



AFTER

MASS
75
AREA
118161
HEIGHT
92554
27-Jul-2023
13:09
linh
pham



BEFORE

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AREA
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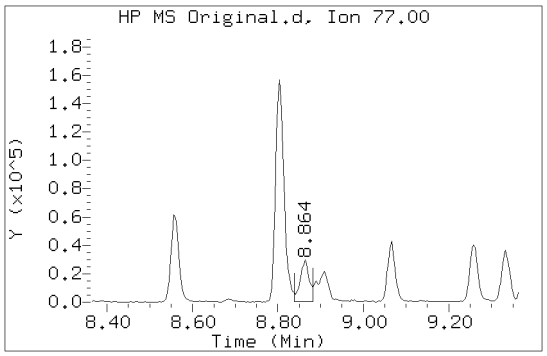
HEIGHT
29401
27-Jul-2023
13:09
linh
pham



AFTER

MASS
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AREA
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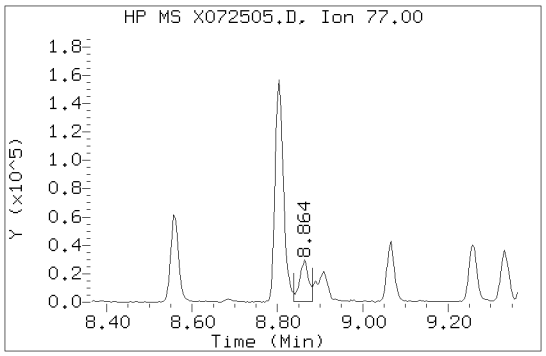
HEIGHT
29401
27-Jul-2023
13:09
linh
pham



ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072507.D
Lab Smp Id: VBLKW-230725 Client Smp ID: VBLKW-230725
Inj Date : 25-JUL-2023 12:11
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-230725;VBLKW-230725;3;;BLANK
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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: 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	4.181	4.181	(1.000)	585803	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.099	(0.981)	292572	54.5620	54.56
$ 35 1,2-Dichloroethane-d4	65	4.470	4.474	(1.069)	378446	56.4458	56.44
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	919826	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	787286	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1039232	51.2689	51.26
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	381759	48.6900	48.68
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	400742	50.0000	

01324234

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072507.D

Date : 25-JUL-2023 12:11

Client ID: VBLKW-230725

Instrument: voa6.i

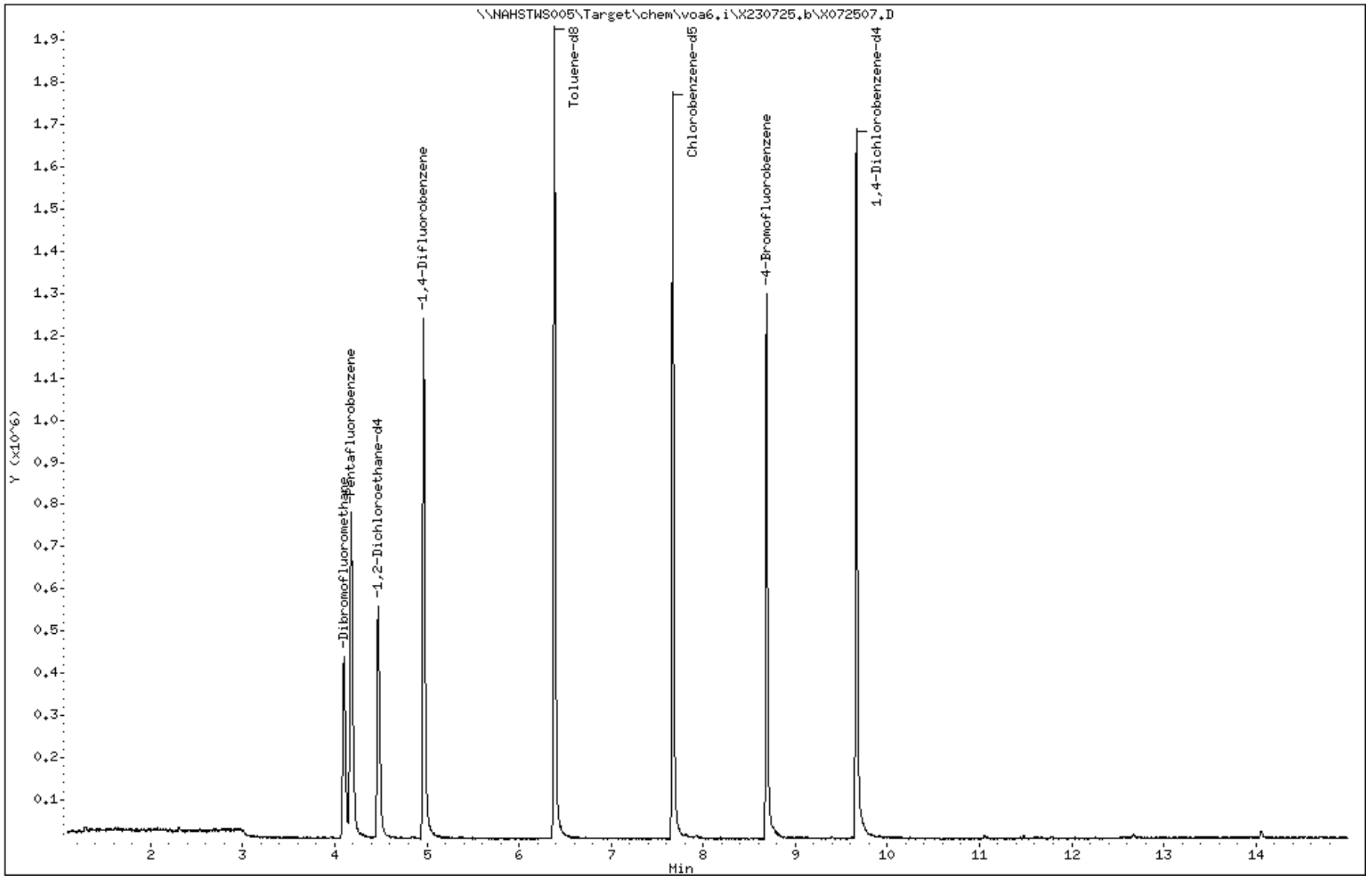
Sample Info: VBLKW-230725;VBLKW-230725;3;;BLANK

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Inj Date : 25-JUL-2023 12:11
InstruID : voa6.i
LabSampID : VBLKW-230725

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072511.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072511.D
Lab Smp Id: HS23071289-11 Client Smp ID: HS23071289-11
Inj Date : 25-JUL-2023 13:33
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-11;HS23071289-11;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.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	4.181	4.181	(1.000)	507585	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.980)	251057	54.0273	54.02
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	342303	58.9498	58.94(M)
* 36 1,4-Difluorobenzene	114	4.968	4.965	(1.000)	881696	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	785787	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1020371	50.4345	50.43
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	387115	49.4741	49.47
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	421429	50.0000	

QC Flag Legend

M - Compound response manually integrated.

01324237

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072511.D

Page 1

Date : 25-JUL-2023 13:33

Client ID: HS23071289-11

Instrument: voa6.i

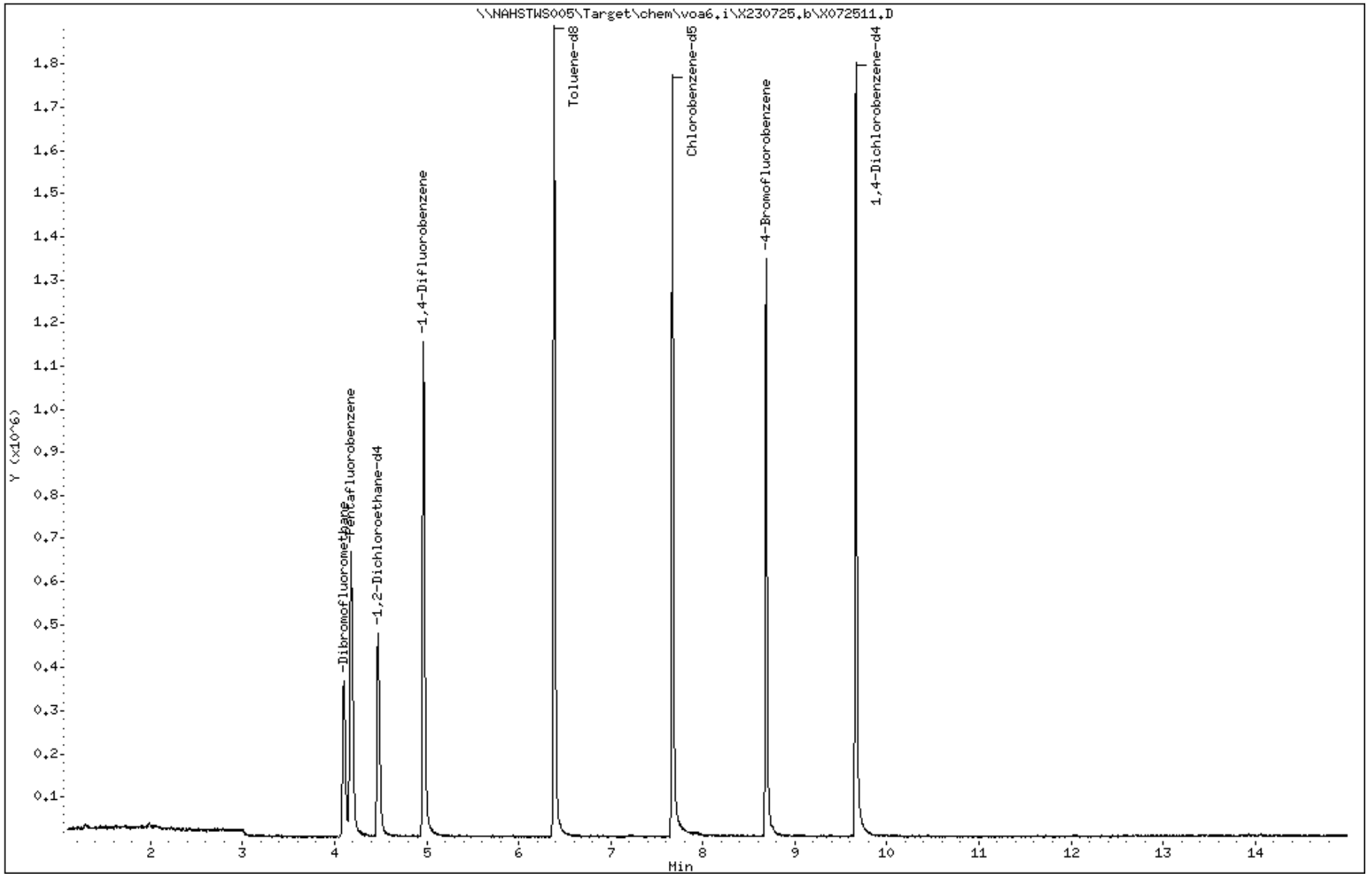
Sample Info: HS23071289-11;HS23071289-11;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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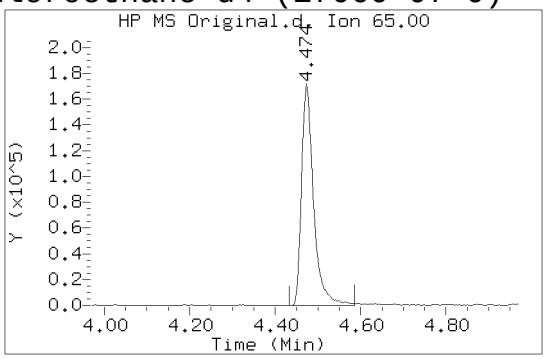
Inj Date : 25-JUL-2023 13:33
InstruID : voa6.i
LabSampID : HS23071289-11

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

MASS
65
AREA
342303
HEIGHT
171968
27-Jul-2023
13:09
linh
pham



AFTER

MASS
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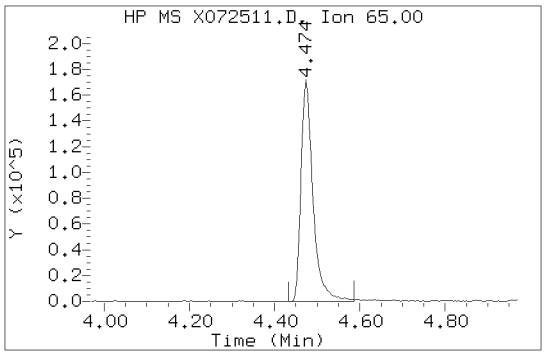
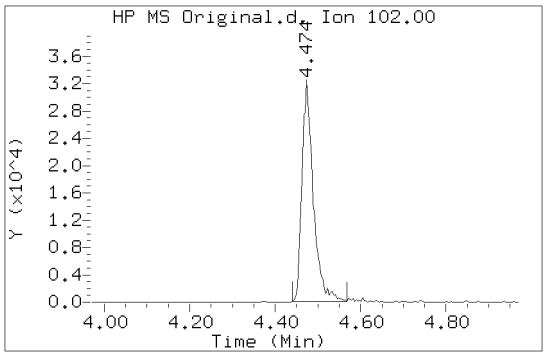
AREA
342303
HEIGHT
171968
27-Jul-2023
13:09
linh
pham



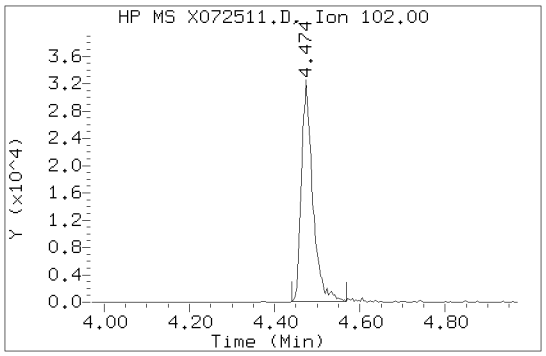
BEFORE

MASS
102
AREA
60751
HEIGHT
32446
27-Jul-2023
13:09
linh
pham



AFTER

MASS
102
AREA
60751
HEIGHT
32446
27-Jul-2023
13:09
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072513.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072513.D
Lab Smp Id: HS23071289-11MS Client Smp ID: HS23071289-11MS
Inj Date : 25-JUL-2023 14:14
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-11MS;HS23071289-11MS;3;;MS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 12 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.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	4.181	4.181	(1.000)	565124	50.0000	
135 1,4-Dioxane	88	5.598	5.602	(1.339)	29006	431.931	431.93(a)
140 1,3-Butadiene	54	1.167	1.171	(0.279)	203521	28.0269	28.02
25 Methacrylonitrile	41	3.833	3.821	(0.917)	201777	27.6617	27.66
12 Isobutyl Alcohol	43	4.680	4.680	(1.119)	602257	562.211	562.21
13 Acetonitrile	39	2.202	2.202	(0.527)	222729	281.061	281.06
14 Allyl Chloride	41	2.202	2.202	(0.527)	505409	27.2398	27.23
4 Propionitrile	54	3.660	3.656	(0.875)	262759	234.718	234.71(a)
2 Dichlorodifluoromethane	85	0.976	0.980	(0.234)	103907	18.6756	18.67
3 Chloromethane	50	1.081	1.085	(0.259)	188155	22.0434	22.04
5 Vinyl Chloride	62	1.145	1.149	(0.274)	189342	25.8913	25.89
6 Bromomethane	94	1.340	1.344	(0.320)	68919	22.7735	22.77
7 Chloroethane	64	1.407	1.407	(0.337)	112293	26.8984	26.89
8 Trichlorofluoromethane	101	1.561	1.565	(0.373)	217116	29.2961	29.29
9 Acrolein	56	1.861	1.865	(0.445)	15148	71.1166	71.11
10 Acetone	43	1.977	1.977	(0.473)	105852	44.7668	44.76
11 1,1-Dichloroethene	96	1.917	1.921	(0.459)	107104	25.8696	25.86
15 Iodomethane	142	2.029	2.030	(0.485)	154047	31.4725	31.47
16 Acrylonitrile	53	2.536	2.536	(0.606)	117628	42.7139	42.71
17 Methylene Chloride	84	2.307	2.307	(0.552)	117306	23.2779	23.27

18 Methyl tert-butyl ether	73	2.539	2.539 (0.607)	287473	18.6697	18.66
19 Carbon Disulfide	76	2.071	2.075 (0.495)	656525	50.4472	50.44

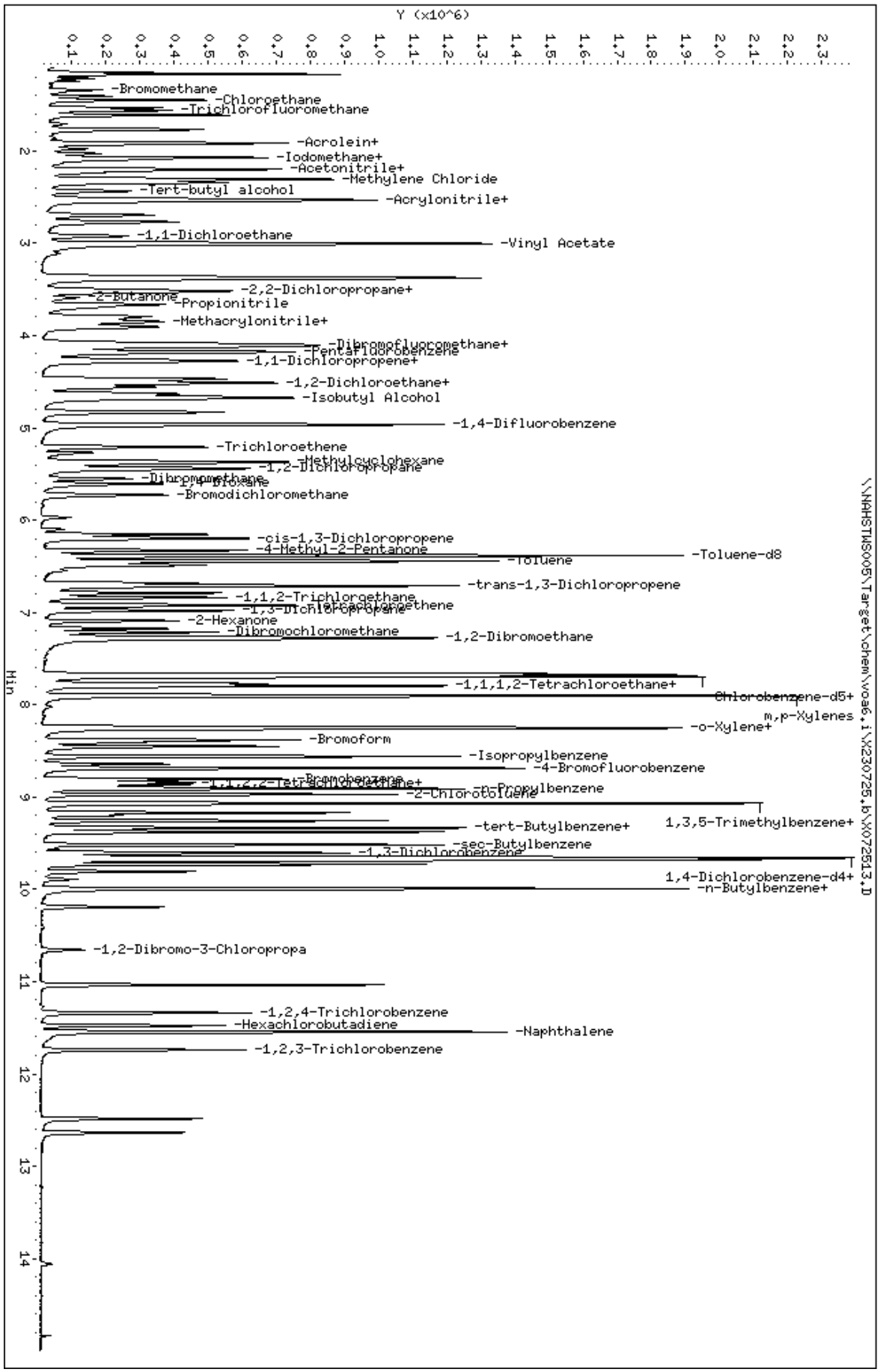
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	20 trans-1,2-Dichloroethene	96	2.528	2.532	(0.605)	97636	20.3876	20.38
	21 Vinyl Acetate	43	3.004	3.000	(0.719)	960002	48.4707	48.47
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	236225	22.4781	22.47
	24 2-Butanone	43	3.589	3.585	(0.858)	141067	46.8739	46.87
	26 2,2-Dichloropropane	77	3.514	3.510	(0.840)	213733	26.2984	26.29
	27 cis-1,2-Dichloroethene	96	3.525	3.529	(0.843)	150024	24.5911	24.59
	28 Chloroform	83	3.908	3.908	(0.935)	254283	23.6476	23.64
	29 Bromochloromethane	128	3.791	3.795	(0.907)	77977	22.8070	22.80
$	30 Dibromofluoromethane	113	4.099	4.099	(0.980)	288458	55.7800	55.78
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	222340	26.8604	26.86
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	193871	26.5765	26.57
	33 1,2-Dichloroethane	62	4.560	4.556	(0.918)	240996	24.4795	24.47
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	197384	26.8580	26.85
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	373162	57.7080	57.70
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	894329	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	544238	25.4414	25.44
	38 Trichloroethene	130	5.208	5.208	(1.049)	155331	25.6712	25.67
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	191278	23.3442	23.34
	42 1,2-Dichloropropane	63	5.437	5.433	(1.095)	178935	26.0132	26.01
	44 Dibromomethane	93	5.549	5.553	(1.118)	90329	23.1987	23.19
	45 4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	403224	53.2017	53.20
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	212314	22.5597	22.55
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	770201	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	1028182	51.8490	51.84
	50 Toluene	91	6.445	6.445	(0.841)	567745	27.3840	27.38
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	174964	22.0542	22.05
	52 2-Hexanone	43	7.086	7.086	(0.924)	263503	52.9255	52.92
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	111844	25.4300	25.43
	54 1,3-Dichloropropane	76	6.981	6.981	(0.911)	222174	24.7265	24.72
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	151820	23.9114	23.91
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	121240	28.3054	28.30
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	121436	24.1624	24.16
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	226274	31.4937	31.49
	59 Chlorobenzene	112	7.690	7.694	(1.003)	379420	26.1800	26.18
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	140401	24.7457	24.74
	61 Ethylbenzene	106	7.795	7.795	(1.017)	195465	26.8959	26.89
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	498093	54.6317	54.63
	63 o-Xylene	106	8.241	8.237	(1.075)	237379	27.4940	27.49
	64 Styrene	104	8.256	8.256	(1.077)	400362	26.5844	26.58
	66 Bromoform	173	8.406	8.410	(1.096)	94250	23.1362	23.13
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	636256	28.6695	28.66
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	169226	24.9457	24.94
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	378329	49.3284	49.32
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	403879	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	130975	24.3305	24.33(M)
	73 n-Propylbenzene	91	8.912	8.908	(0.922)	744127	30.4893	30.48
	74 Bromobenzene	156	8.803	8.803	(0.911)	162844	25.7806	25.78
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	510588	27.9261	27.92
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	458429	27.8446	27.84
	77 4-Chlorotoluene	91	9.069	9.066	(0.939)	517807	28.6214	28.62
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	463179	29.5406	29.54
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	504130	27.4957	27.49

81 sec-Butylbenzene	105	9.519	9.519 (0.985)	656250	31.4002	31.40
82 p-Isopropyltoluene	119	9.647	9.647 (0.998)	547965	28.7022	28.70

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	83 1,3-Dichlorobenzene	146	9.605	9.602	(0.994)	296578	26.9523	26.95
	84 1,4-Dichlorobenzene	146	9.680	9.681	(1.002)	302198	25.0479	25.04
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	486431	30.4221	30.42
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	284392	26.2883	26.28
	89 1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	25611	23.5559	23.55
	90 1,2,4-Trichlorobenzene	180	11.337	11.334	(1.173)	170160	22.9011	22.90
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	83673	25.6423	25.64
	92 Naphthalene	128	11.540	11.540	(1.194)	401247	21.8183	21.81
	93 1,2,3-Trichlorobenzene	180	11.738	11.739	(1.215)	149312	21.4872	21.48
M	94 1,2-Dichloroethylene (total)	96				247660	44.9787	44.97
M	95 Xylenes (total)	106				735472	82.1257	82.12
	141 Cyclohexane	56	4.117	4.121	(0.985)	344462	35.1648	35.16
	138 Freon TF	101	1.921	1.917	(0.459)	114821	34.3760	34.37
	147 Methylcyclohexane	55	5.385	5.381	(1.085)	526650	27.8993	27.89
	146 Methyl Acetate	43	2.232	2.232	(0.534)	133771	26.5974	26.59
	148 Tert-Butyl alcohol	59	2.438	2.434	(0.583)	269325	377.596	377.59
	149 Isopropyl Alcohol	45	2.097	2.097	(0.502)	214328	484.266	484.26

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



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Client ID: HS23071289-11MS
Sample Info: HS23071289-11MS;HS23071289-11MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072513.D
Inj Date : 25-JUL-2023 14:14
InstruID : voa6.i
LabSampID : HS23071289-11MS

1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

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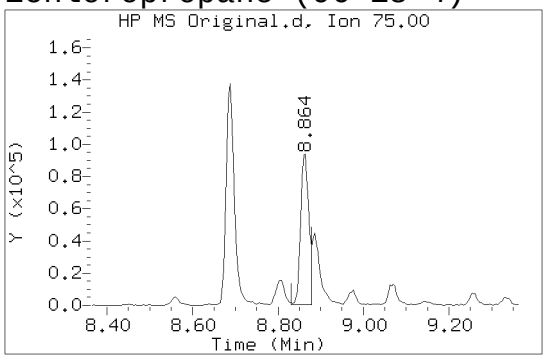
75
AREA
130975
HEIGHT
93726
27-Jul-2023
13:09
linh
pham



AFTER

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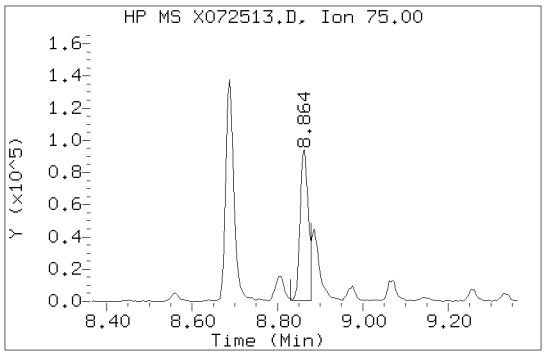

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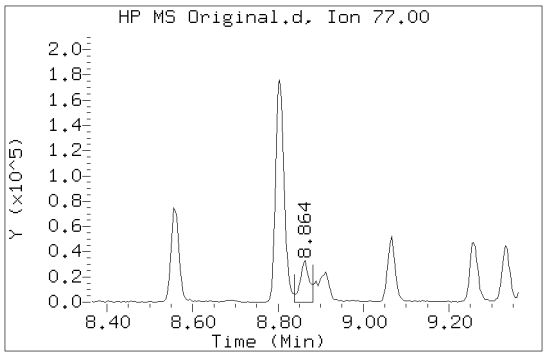

AFTER

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27-Jul-2023
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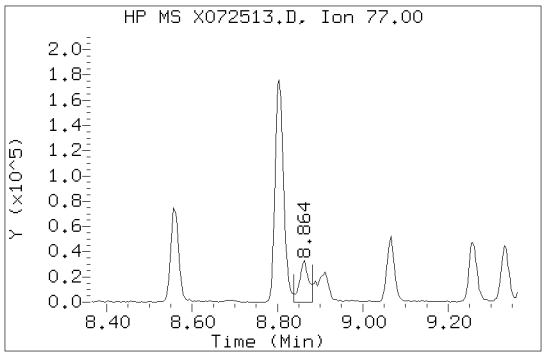

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Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072514.D
Lab Smp Id: HS23071289-11MSD Client Smp ID: HS23071289-11MSD
Inj Date : 25-JUL-2023 14:34
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-11MSD;HS23071289-11MSD;3;;MSD
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 12 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.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)	565484	50.0000	
135 1,4-Dioxane	88	5.598	5.602	(1.340)	31971	475.780	475.78(a)
140 1,3-Butadiene	54	1.167	1.171	(0.280)	194437	26.7589	26.75
25 Methacrylonitrile	41	3.833	3.821	(0.917)	196260	26.8882	26.88
12 Isobutyl Alcohol	43	4.680	4.680	(1.120)	590821	551.184	551.18
13 Acetonitrile	39	2.202	2.202	(0.527)	216859	273.480	273.47
14 Allyl Chloride	41	2.202	2.202	(0.527)	503802	27.1359	27.13
4 Propionitrile	54	3.660	3.656	(0.876)	268547	239.736	239.73(a)
2 Dichlorodifluoromethane	85	0.976	0.980	(0.234)	98274	17.7120	17.71
3 Chloromethane	50	1.085	1.085	(0.260)	189014	22.1299	22.12
5 Vinyl Chloride	62	1.149	1.149	(0.275)	186158	25.4397	25.43
6 Bromomethane	94	1.344	1.344	(0.322)	69626	22.9925	22.99
7 Chloroethane	64	1.407	1.407	(0.337)	111360	26.6579	26.65
8 Trichlorofluoromethane	101	1.565	1.565	(0.375)	205406	27.6984	27.69
9 Acrolein	56	1.861	1.865	(0.446)	13826	64.9679	64.96
10 Acetone	43	1.977	1.977	(0.473)	107938	45.7131	45.71
11 1,1-Dichloroethene	96	1.917	1.921	(0.459)	97615	23.5626	23.56
15 Iodomethane	142	2.030	2.030	(0.486)	179681	36.0159	36.01
16 Acrylonitrile	53	2.539	2.536	(0.608)	126430	45.8809	45.88
17 Methylene Chloride	84	2.307	2.307	(0.552)	113957	22.5578	22.55

18 Methyl tert-butyl ether	73	2.543	2.539 (0.609)	306766	19.9100	19.91
19 Carbon Disulfide	76	2.075	2.075 (0.497)	637197	48.9309	48.93

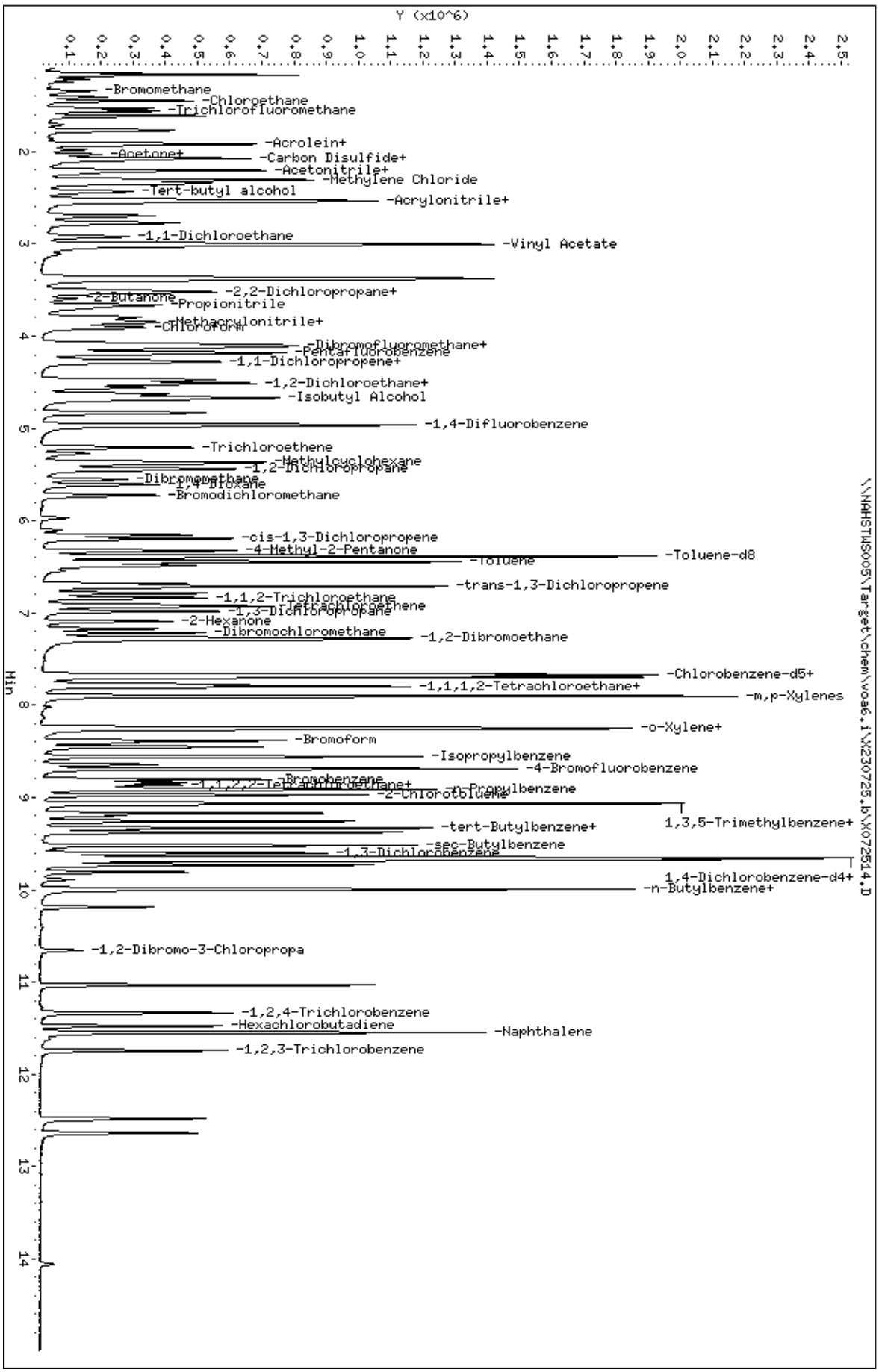
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	20 trans-1,2-Dichloroethene	96	2.536	2.532	(0.607)	103557	21.6102	21.61
	21 Vinyl Acetate	43	3.004	3.000	(0.719)	1066562	53.8167	53.81
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	255046	24.2536	24.25
	24 2-Butanone	43	3.589	3.585	(0.859)	132453	43.9836	43.98
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	204386	25.1416	25.14
	27 cis-1,2-Dichloroethene	96	3.525	3.529	(0.844)	147897	24.2270	24.22
	28 Chloroform	83	3.908	3.908	(0.935)	244699	22.7418	22.74
	29 Bromochloromethane	128	3.795	3.795	(0.908)	75449	22.0535	22.05
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	288576	55.7671	55.76
	31 1,1,1-Trichloroethane	97	4.084	4.080	(0.978)	213425	25.7670	25.76
	32 1,1-Dichloropropene	75	4.279	4.279	(0.861)	185710	25.4448	25.44
	33 1,2-Dichloroethane	62	4.556	4.556	(0.917)	233558	23.7119	23.71
	34 Carbon Tetrachloride	117	4.267	4.264	(0.859)	180707	24.5763	24.57
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.071)	363721	56.1961	56.19
*	36 1,4-Difluorobenzene	114	4.968	4.965	(1.000)	894784	50.0000	
	37 Benzene	78	4.511	4.511	(0.908)	519871	24.2900	24.29
	38 Trichloroethene	130	5.208	5.208	(1.048)	147346	24.3391	24.33
	39 Bromodichloromethane	83	5.726	5.726	(1.152)	184120	22.4592	22.45
	42 1,2-Dichloropropane	63	5.437	5.433	(1.094)	175909	25.5603	25.56
	44 Dibromomethane	93	5.553	5.553	(1.118)	87223	22.3896	22.38
	45 4-Methyl-2-Pentanone	43	6.329	6.325	(0.825)	404737	51.5329	51.53
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.238)	213362	22.6595	22.65
*	47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	798127	50.0000	
$	48 Toluene-d8	98	6.382	6.385	(0.832)	1036266	50.4282	50.42
	50 Toluene	91	6.445	6.445	(0.841)	546859	25.4537	25.45
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.345)	172489	21.7312	21.73
	52 2-Hexanone	43	7.090	7.086	(0.925)	268940	52.1275	52.12
	53 1,1,2-Trichloroethane	83	6.835	6.839	(0.891)	107412	23.5678	23.56
	54 1,3-Dichloropropane	76	6.982	6.981	(0.911)	221834	23.8248	23.82
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	147563	22.4277	22.42
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	118093	26.6060	26.60
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	118834	22.8173	22.81
	58 1-Chlorohexane	55	7.694	7.694	(1.548)	216235	30.0811	30.08
	59 Chlorobenzene	112	7.690	7.694	(1.003)	361954	24.1010	24.10
	60 1,1,1,2-Tetrachloroethane	131	7.769	7.772	(1.013)	138082	23.4855	23.48
	61 Ethylbenzene	106	7.795	7.795	(1.017)	191240	25.3938	25.39
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	492804	52.1603	52.16
	63 o-Xylene	106	8.241	8.237	(1.075)	231875	25.9168	25.91
	64 Styrene	104	8.256	8.256	(1.077)	390603	25.0289	25.02
	66 Bromoform	173	8.410	8.410	(1.097)	93554	22.1618	22.16
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	622097	27.0507	27.05
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	171552	23.6728	23.67
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	395084	49.7139	49.71
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.662	(1.000)	431446	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.918)	127664	22.2001	22.20(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	736135	28.2347	28.23
	74 Bromobenzene	156	8.803	8.803	(0.912)	161275	23.9008	23.90
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.939)	486201	24.8931	24.89
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	443883	25.2385	25.23
	77 4-Chlorotoluene	91	9.069	9.066	(0.939)	497269	25.7299	25.72
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	451987	26.9849	26.98
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	488650	24.9485	24.94

81 sec-Butylbenzene	105	9.519	9.519 (0.986)	638222	28.5864	28.58
82 p-Isopropyltoluene	119	9.647	9.647 (0.999)	547426	26.8419	26.84

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	289430	24.6221	24.62
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	308529	23.9387	23.93
	87 n-Butylbenzene	91	9.992	9.992	(1.035)	477519	27.9565	27.95
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.035)	279202	24.1596	24.15
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	25874	22.3363	22.33
	90 1,2,4-Trichlorobenzene	180	11.337	11.334	(1.174)	164239	20.6919	20.69
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	85919	24.7395	24.73
	92 Naphthalene	128	11.540	11.540	(1.195)	394657	20.0888	20.08
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.216)	153885	20.7304	20.73
M	94 1,2-Dichloroethylene (total)	96				251454	45.8372	45.83
M	95 Xylenes (total)	106				724679	78.0771	78.07
	141 Cyclohexane	56	4.121	4.121	(0.987)	333862	34.0610	34.06
	138 Freon TF	101	1.921	1.917	(0.460)	103523	31.1917	31.19
	147 Methylcyclohexane	55	5.385	5.381	(1.084)	513973	27.2139	27.21
	146 Methyl Acetate	43	2.236	2.232	(0.535)	137296	27.2809	27.28
	148 Tert-Butyl alcohol	59	2.434	2.434	(0.583)	295617	414.193	414.19
	149 Isopropyl Alcohol	45	2.097	2.097	(0.502)	216922	489.815	489.81

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



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Sample Info: HS230712B9-11MSD;HS230712B9-11MSD;3;;MSD
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

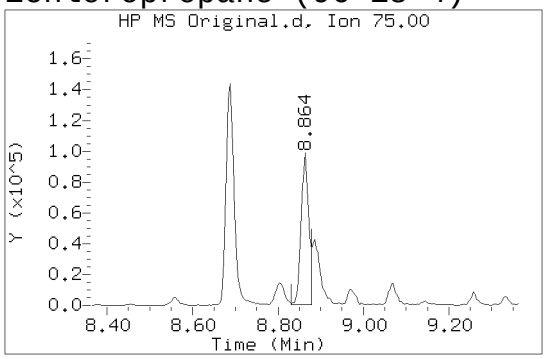
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072514.D
Inj Date : 25-JUL-2023 14:34
InstruID : voa6.i
LabSampID : HS23071289-11MSD

1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

MASS
75
AREA
127664
HEIGHT
98588
27-Jul-2023
13:09
linh
pham



AFTER

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27-Jul-2023
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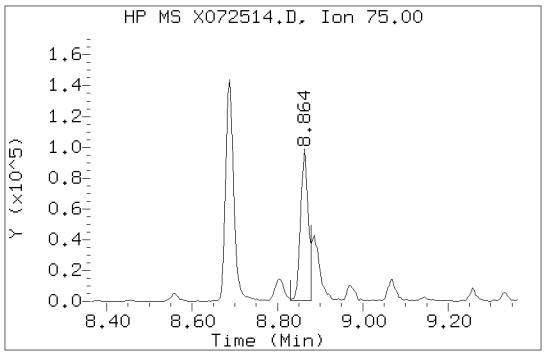

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27-Jul-2023
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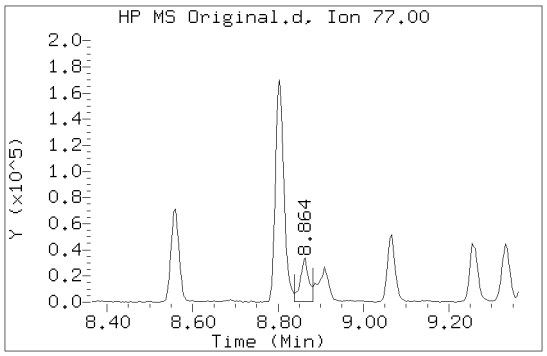

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27-Jul-2023
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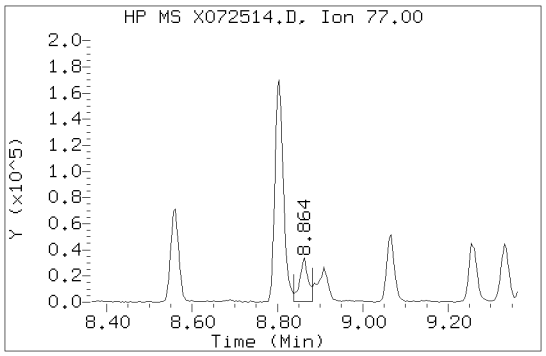

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Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072518.D
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Inj Date : 25-JUL-2023 15:56
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-12;HS23071289-12;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.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	4.181	4.181	(1.000)	553186	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.099	(0.981)	273045	53.9138	53.91
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	354125	55.9269	55.92
* 36 1,4-Difluorobenzene	114	4.968	4.965	(1.000)	839277	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	727182	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	980939	52.3930	52.39
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	351709	48.5639	48.56
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	352104	50.0000	

01324254

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072518.D

Date : 25-JUL-2023 15:56

Client ID: HS23071289-12

Instrument: voa6.i

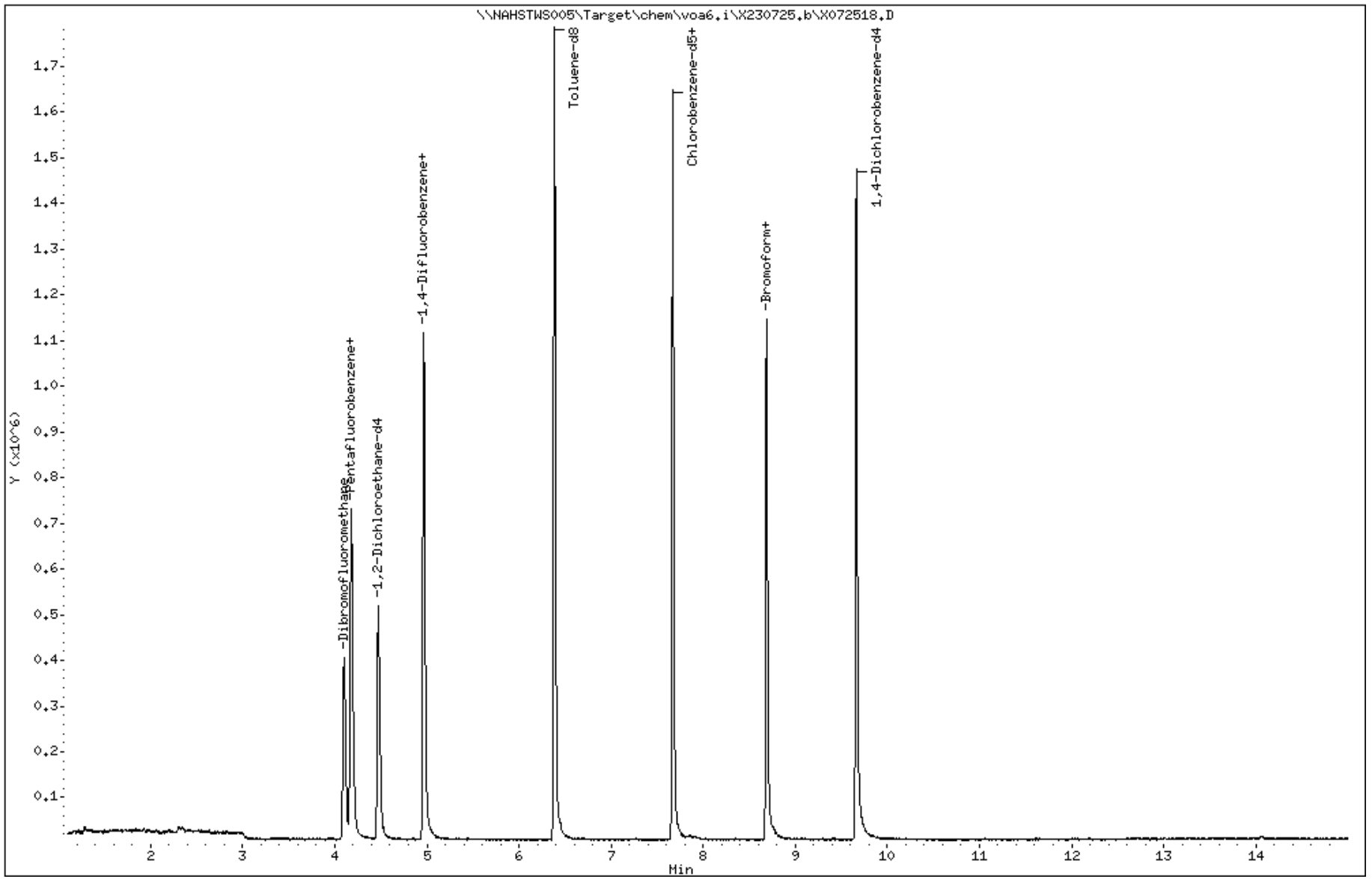
Sample Info: HS23071289-12;HS23071289-12;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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InstruID : voa6.i
LabSampID : HS23071289-12

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072519.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072519.D
Lab Smp Id: HS23071289-08 Client Smp ID: HS23071289-08
Inj Date : 25-JUL-2023 16:16
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-08;HS23071289-08;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.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	4.181	4.181	(1.000)	559613	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.099	(0.981)	278850	54.4350	54.43
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	354153	55.2818	55.28
* 36 1,4-Difluorobenzene	114	4.969	4.965	(1.000)	861195	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	753377	50.0000	
$ 48 Toluene-d8	98	6.386	6.385	(0.833)	988655	50.9691	50.96
$ 69 4-Bromofluorobenzene	95	8.691	8.687	(1.133)	370311	49.3615	49.36
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	400091	50.0000	

01324257

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072519.D

Date : 25-JUL-2023 16:16

Client ID: HS23071289-08

Instrument: voa6.i

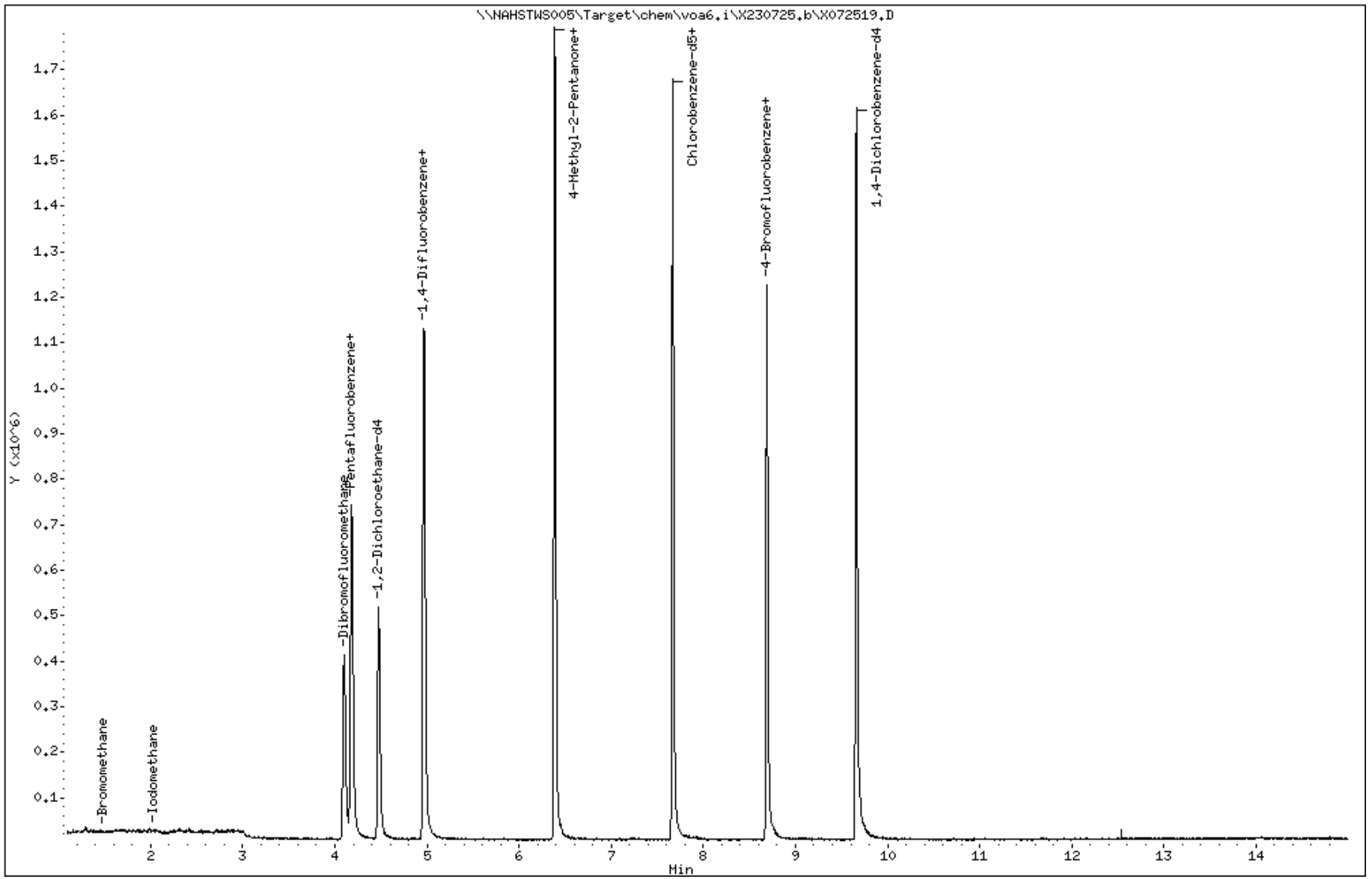
Sample Info: HS23071289-08;HS23071289-08;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072519.D
Inj Date : 25-JUL-2023 16:16
InstruID : voa6.i
LabSampID : HS23071289-08

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072520.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072520.D
Lab Smp Id: HS23071289-09 Client Smp ID: HS23071289-09
Inj Date : 25-JUL-2023 16:37
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-09;HS23071289-09;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.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)	557822	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.099	(0.982)	278916	54.6253	54.62
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.071)	363714	56.9754	56.97
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	858776	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	758380	50.0000	
$ 48 Toluene-d8	98	6.386	6.385	(0.833)	1002918	51.3633	51.36
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	358249	47.4220	47.42
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	393919	50.0000	

01324260

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072520.D

Date : 25-JUL-2023 16:37

Client ID: HS23071289-09

Instrument: voa6.i

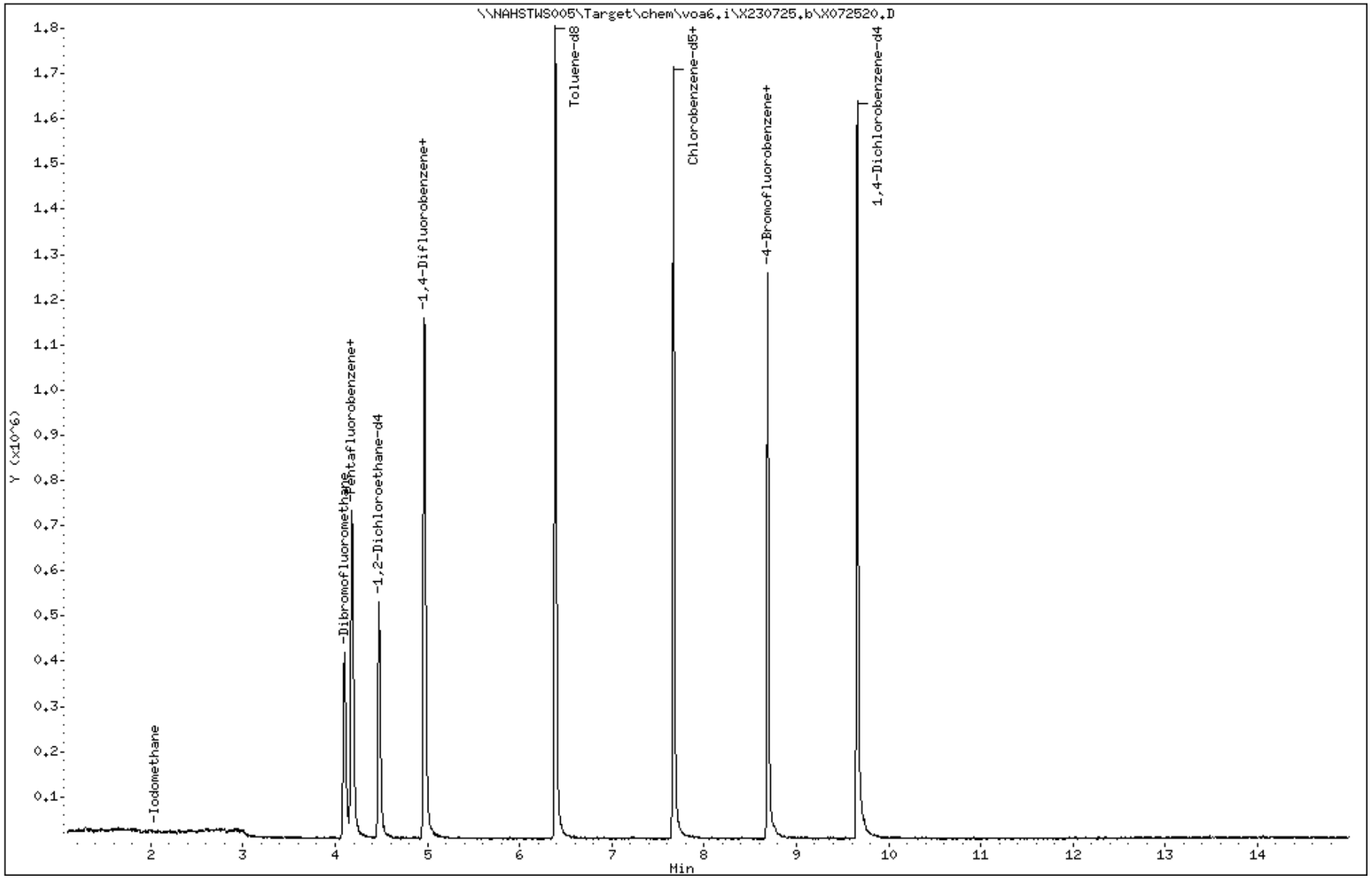
Sample Info: HS23071289-09;HS23071289-09;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072520.D
Inj Date : 25-JUL-2023 16:37
InstruID : voa6.i
LabSampID : HS23071289-09

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072521.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072521.D
Lab Smp Id: HS23071289-10 Client Smp ID: HS23071289-10
Inj Date : 25-JUL-2023 16:57
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-10;HS23071289-10;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.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	4.181	4.181	(1.000)	451507	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.099	(0.981)	223151	53.9858	53.98
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	300673	58.2039	58.20
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	697086	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	736342	50.0000	
$ 48 Toluene-d8	98	6.386	6.385	(0.833)	973152	51.3305	51.33
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	357493	48.7501	48.75
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	377524	50.0000	

01324263

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072521.D

Date : 25-JUL-2023 16:57

Client ID: HS23071289-10

Instrument: voa6.i

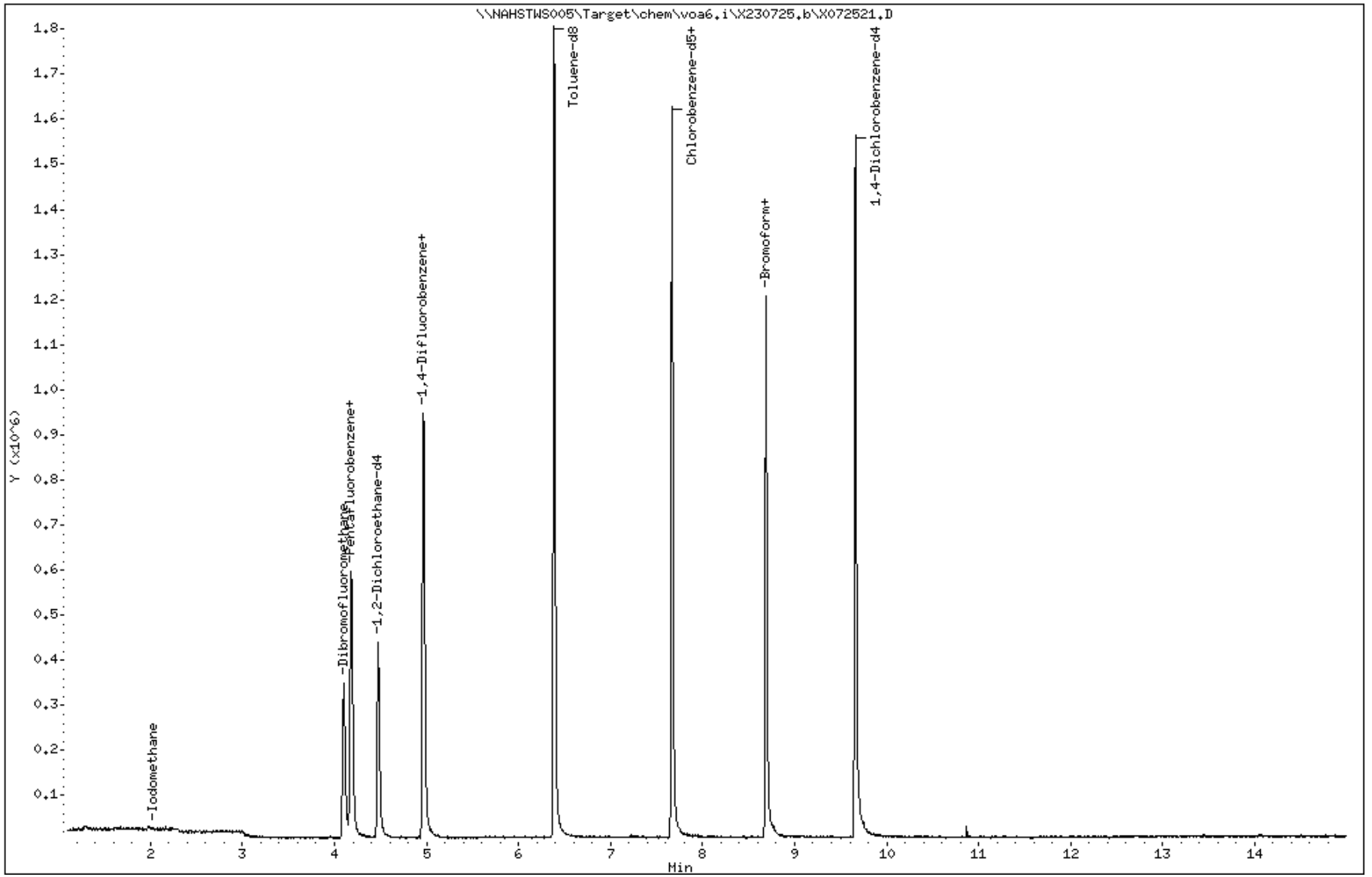
Sample Info: HS23071289-10;HS23071289-10;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072521.D
Inj Date : 25-JUL-2023 16:57
InstruID : voa6.i
LabSampID : HS23071289-10

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072522.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072522.D
Lab Smp Id: HS23071289-06 Client Smp ID: HS23071289-06
Inj Date : 25-JUL-2023 17:18
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-06;HS23071289-06;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.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	4.181	4.181	(1.000)	557073	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.099	(0.981)	279706	54.8568	54.85
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	363519	57.0219	57.02
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	866233	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	761553	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1009108	51.4650	51.46
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	364901	48.1074	48.10
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	398141	50.0000	
5 Vinyl Chloride	62	1.149	1.149	(0.275)	7003	0.97145	0.97(a)
11 1,1-Dichloroethene	96	1.917	1.921	(0.459)	4855	1.18961	1.18(a)
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.844)	193398	32.1588	32.15
38 Trichloroethene	130	5.205	5.208	(1.048)	1473686	251.452	251.45(A)

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.

01324266

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072522.D

Date : 25-JUL-2023 17:18

Client ID: HS23071289-06

Instrument: voa6.i

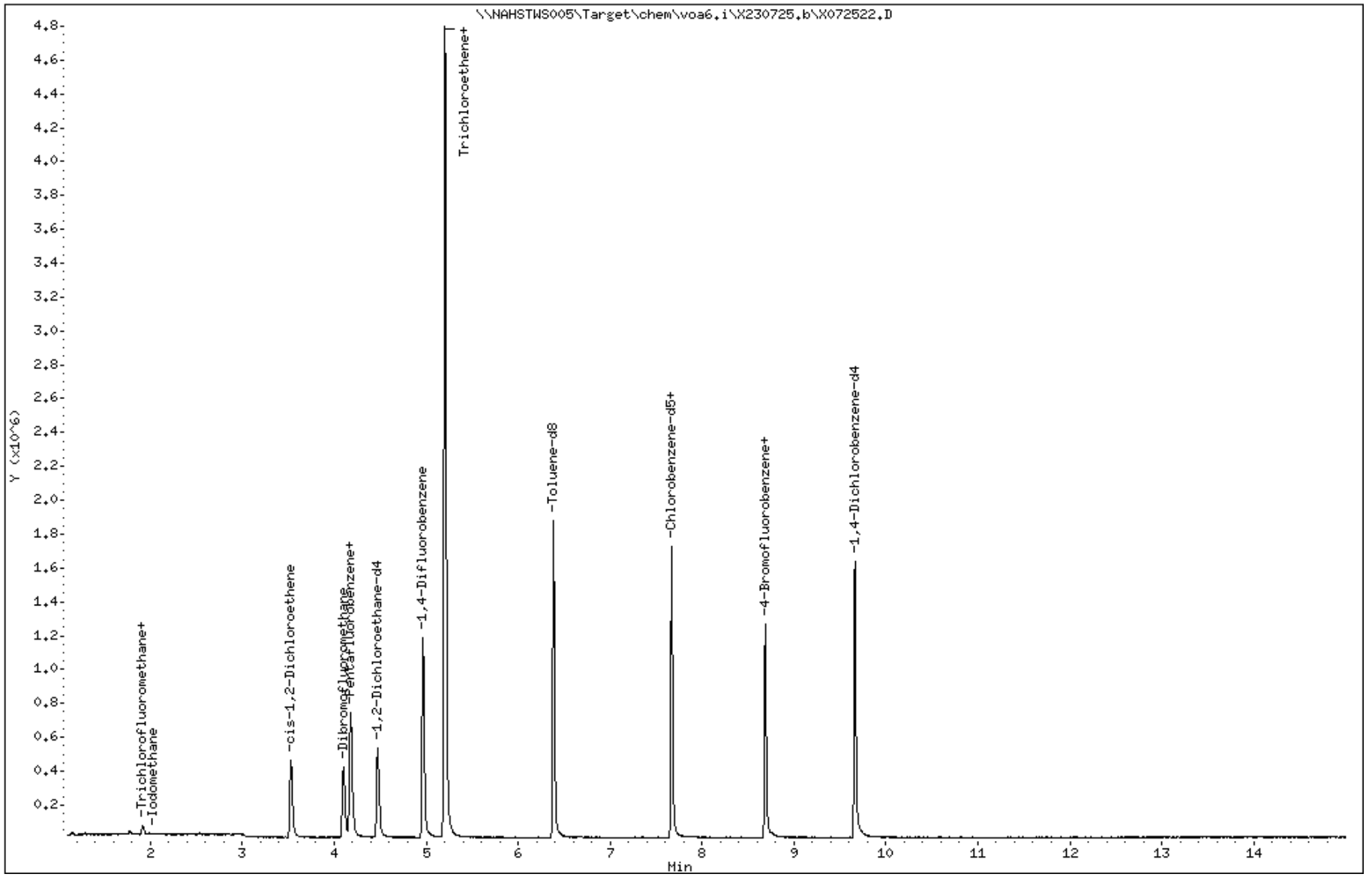
Sample Info: HS23071289-06;HS23071289-06;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072522.D

Date : 25-JUL-2023 17:18

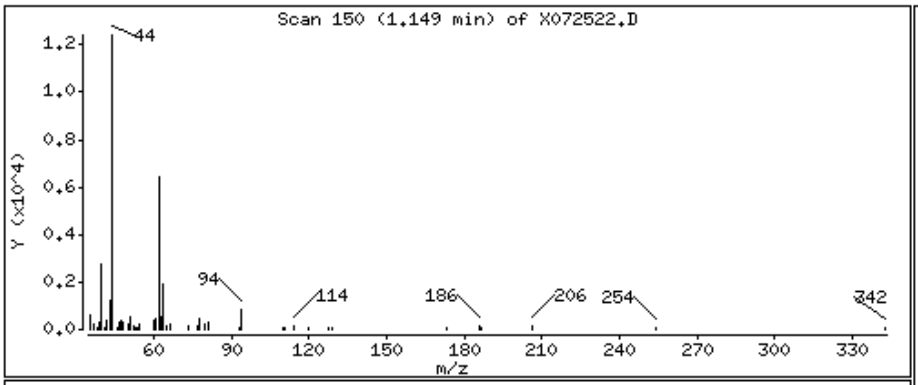
Client ID: HS23071289-06 Instrument: voa6.i

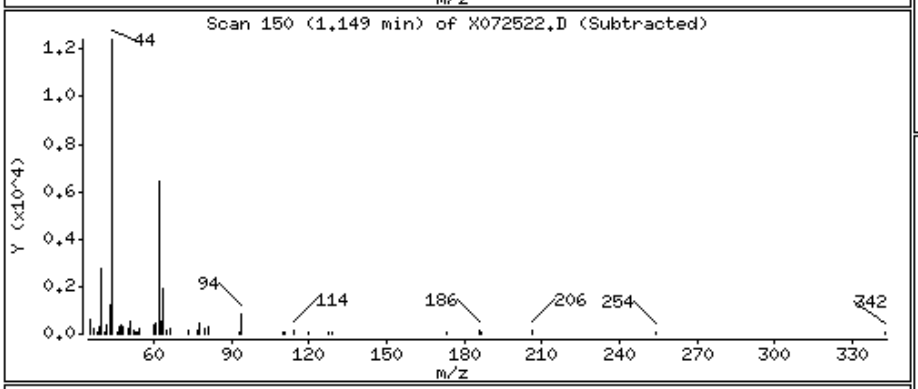
Sample Info: HS23071289-06;HS23071289-06;;;

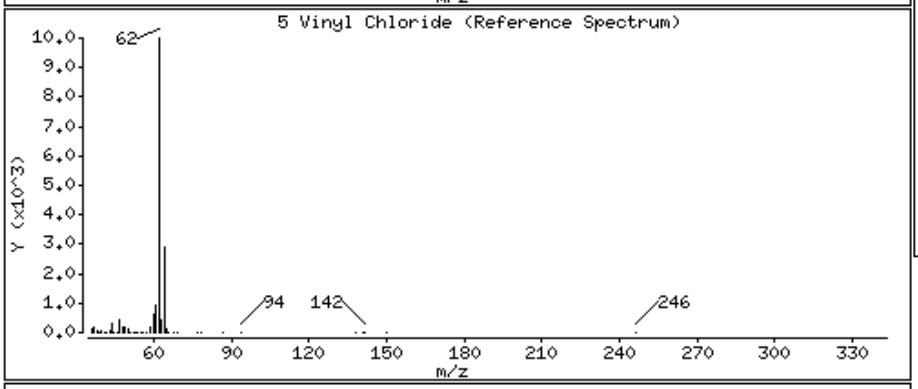
Purge Volume: 5.0 Operator: PC

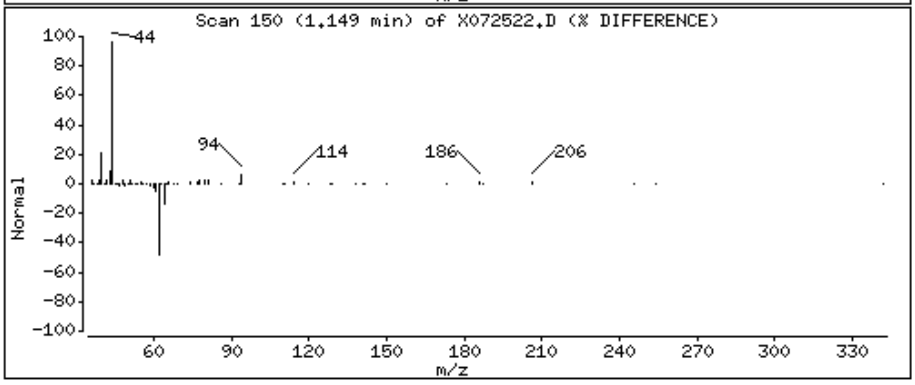
Column phase: DB624 Column diameter: 0.18

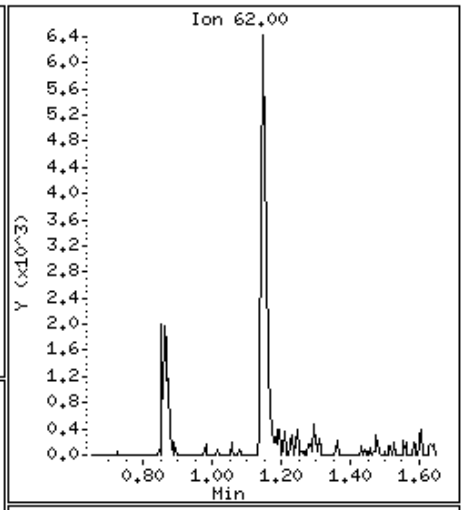
5 Vinyl Chloride Concentration: 0.97 ug/l

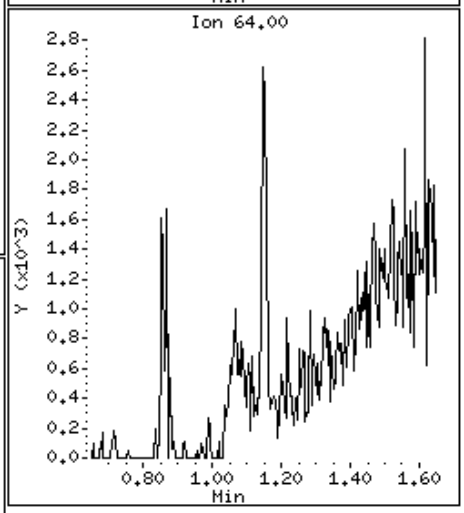












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072522.D Page 3

Date : 25-JUL-2023 17:18

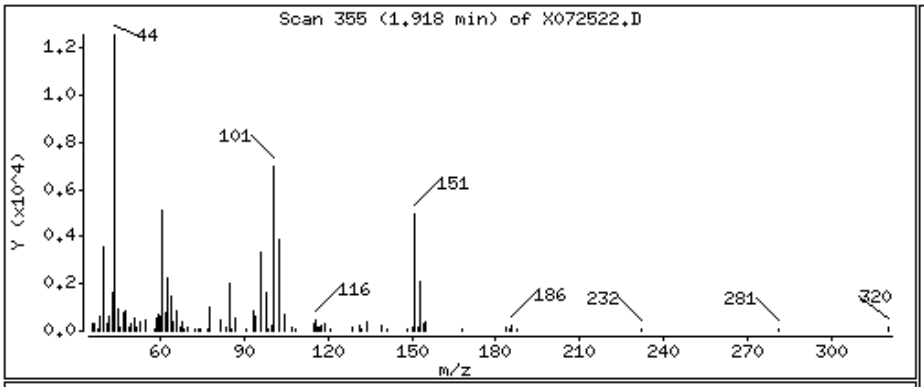
Client ID: HS23071289-06 Instrument: voa6.i

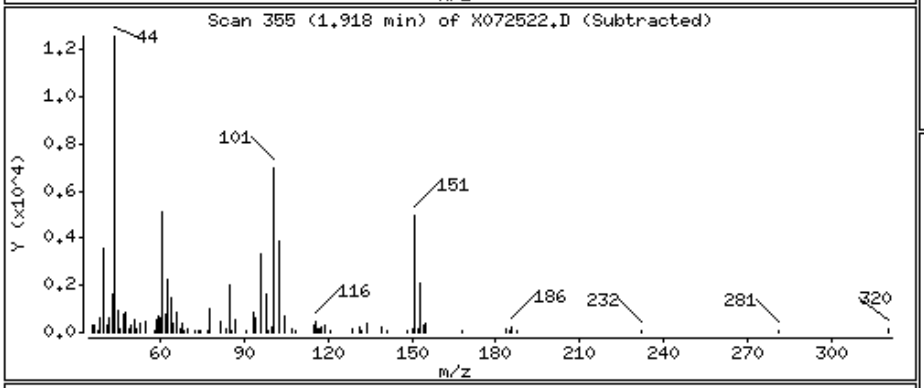
Sample Info: HS23071289-06;HS23071289-06;;;

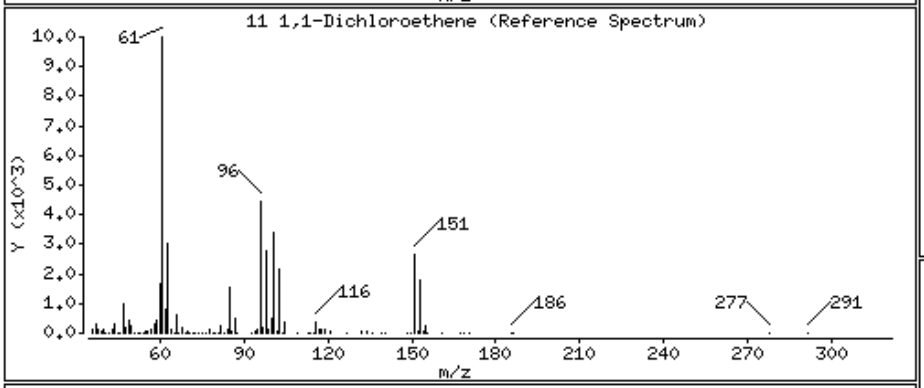
Purge Volume: 5.0 Operator: PC

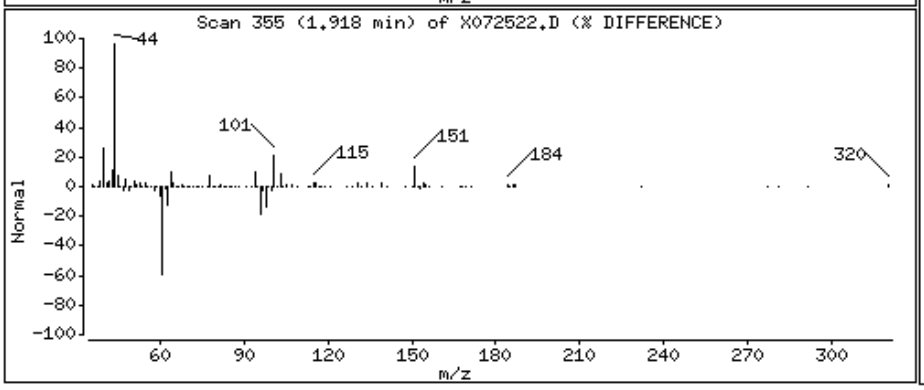
Column phase: DB624 Column diameter: 0.18

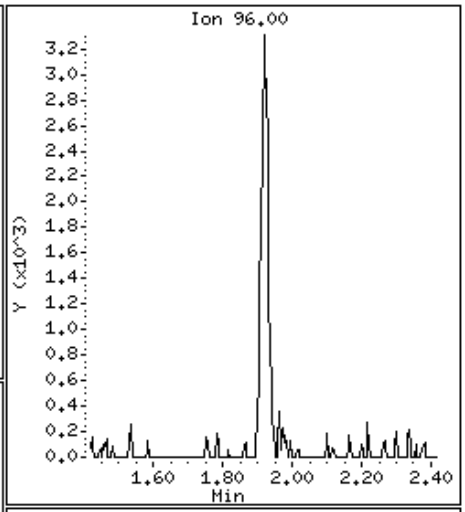
11 1,1-Dichloroethene Concentration: 1.18 ug/l

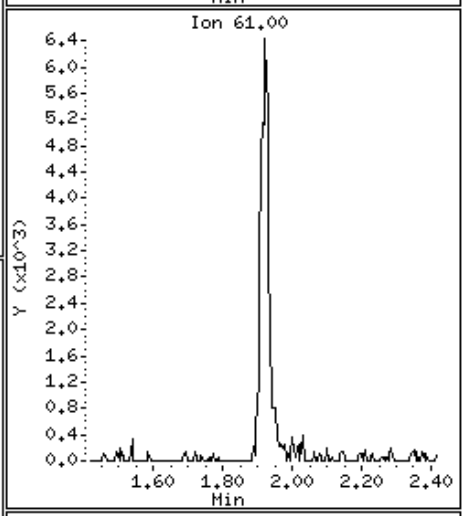


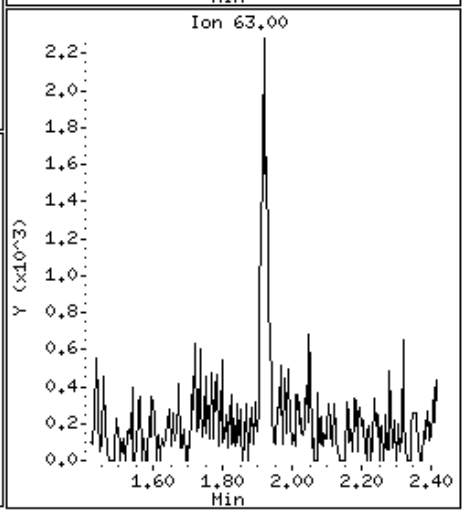












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072522.D Page 4

Date : 25-JUL-2023 17:18

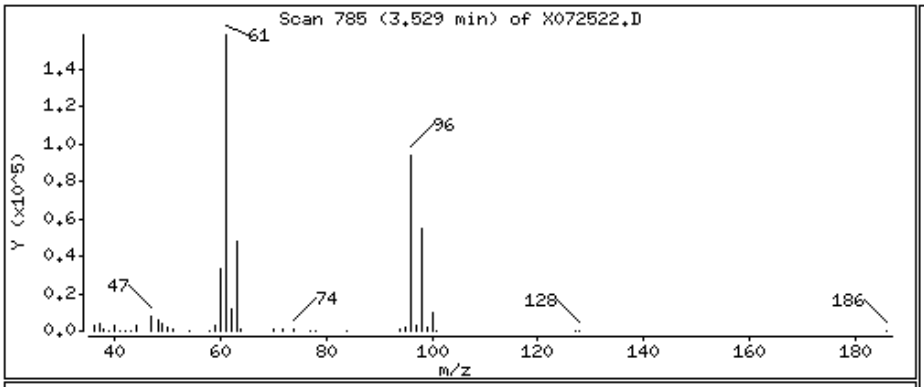
Client ID: HS23071289-06 Instrument: voa6.i

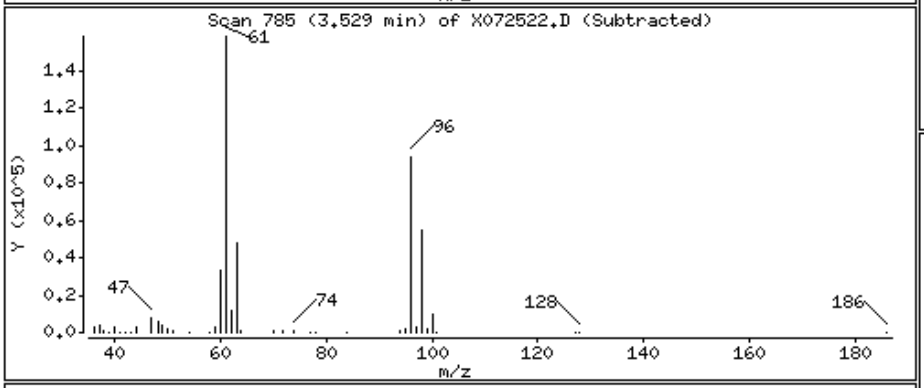
Sample Info: HS23071289-06;HS23071289-06;;;

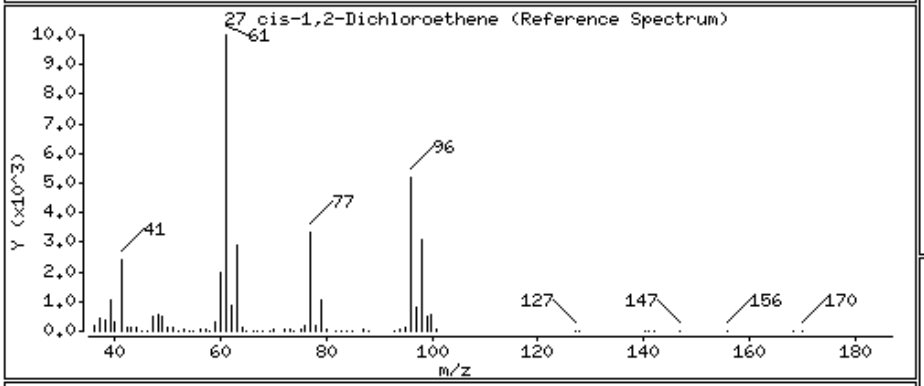
Purge Volume: 5.0 Operator: PC

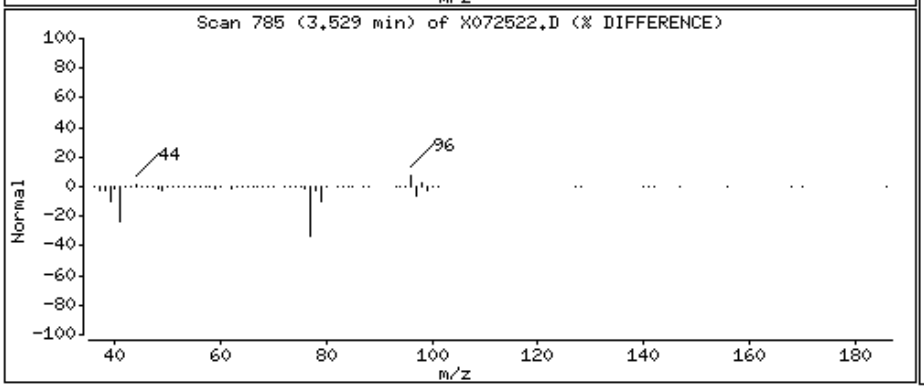
Column phase: DB624 Column diameter: 0.18

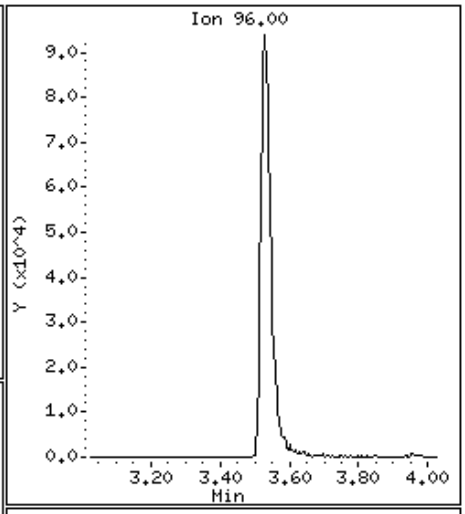
27 cis-1,2-Dichloroethene Concentration: 32.15 ug/l

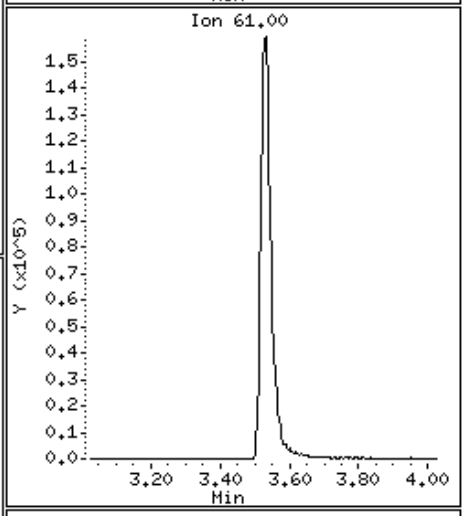


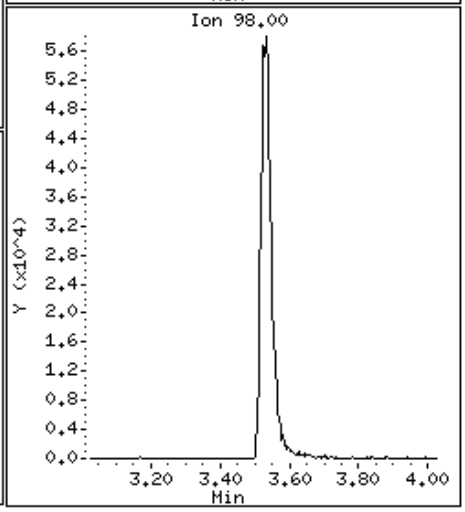












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072522.D Page 5

Date : 25-JUL-2023 17:18

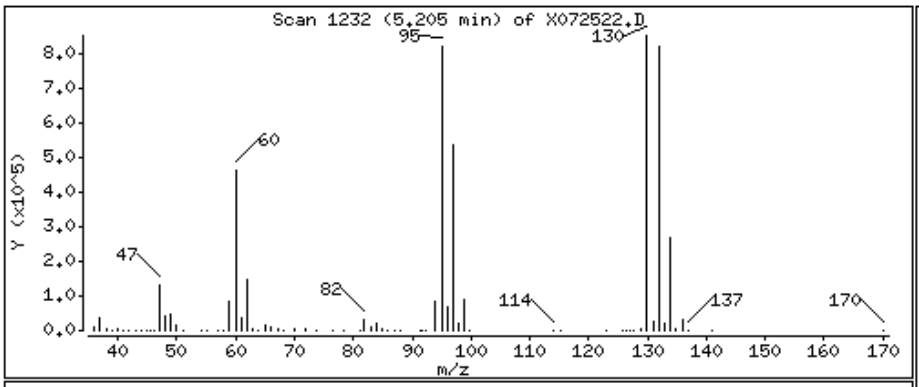
Client ID: HS23071289-06 Instrument: voa6.i

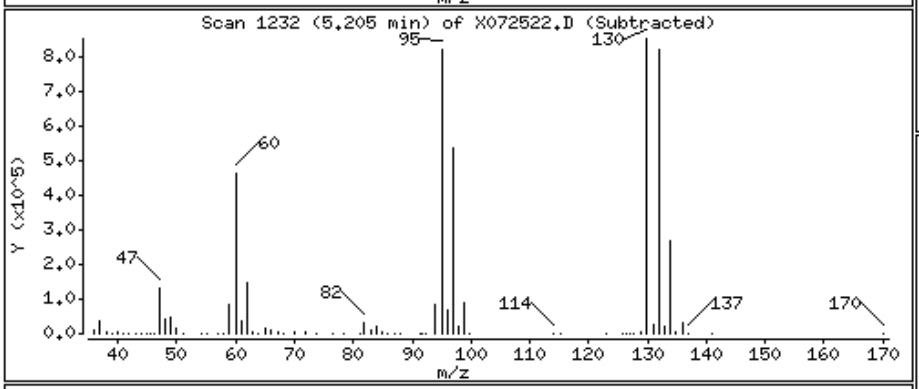
Sample Info: HS23071289-06;HS23071289-06;;;

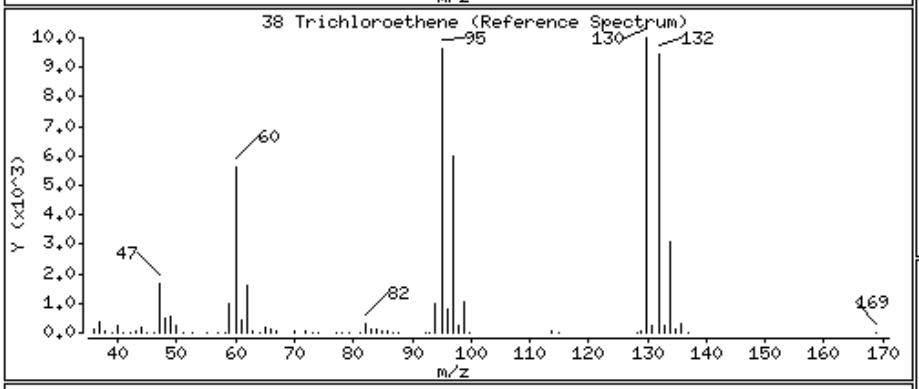
Purge Volume: 5.0 Operator: PC

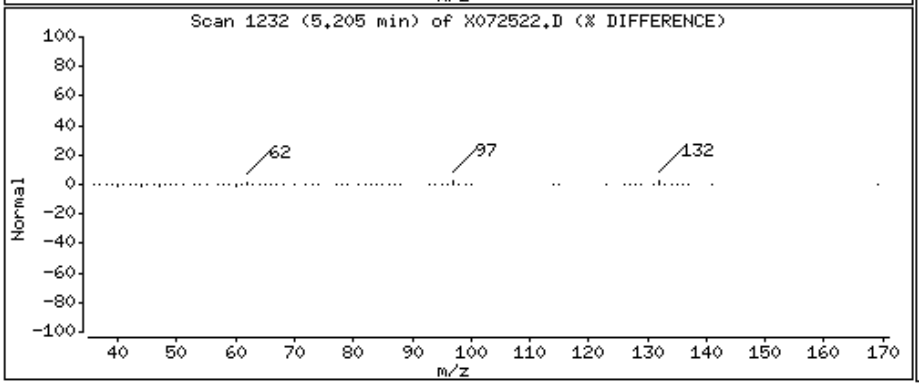
Column phase: DB624 Column diameter: 0.18

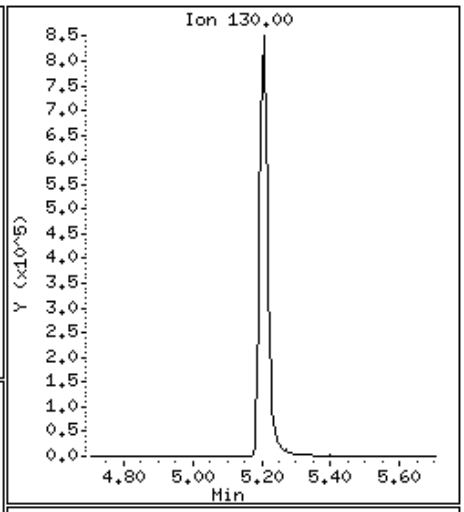
38 Trichloroethene Concentration: 251.45 ug/l

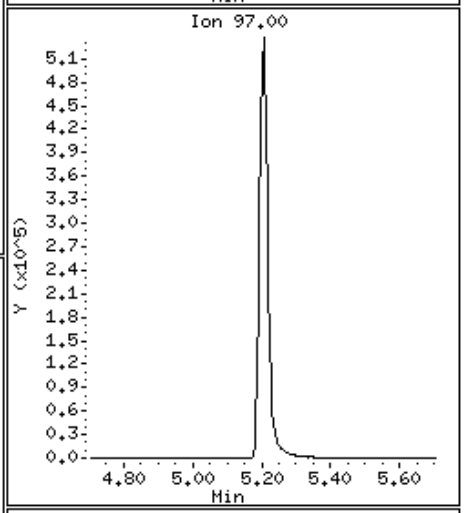


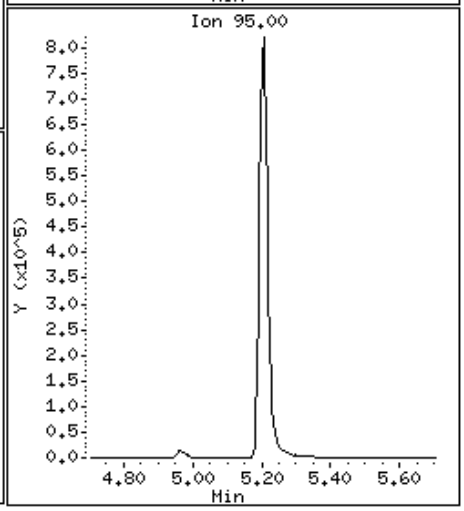












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Inj Date : 25-JUL-2023 17:18
InstruID : voa6.i
LabSampID : HS23071289-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072523.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072523.D
Lab Smp Id: HS23071289-07 Client Smp ID: HS23071289-07
Inj Date : 25-JUL-2023 17:38
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-07;HS23071289-07;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.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	4.181	4.181	(1.000)	547361	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.099	(0.981)	275245	54.9409	54.94
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	353470	56.4229	56.42
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	848568	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	743574	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	974265	50.8894	50.88
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	354718	47.8937	47.89
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	375907	50.0000	
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.844)	192470	32.5724	32.57
38 Trichloroethene	130	5.208	5.208	(1.049)	293581	51.1360	51.13

01324273

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072523.D

Date : 25-JUL-2023 17:38

Client ID: HS23071289-07

Instrument: voa6.i

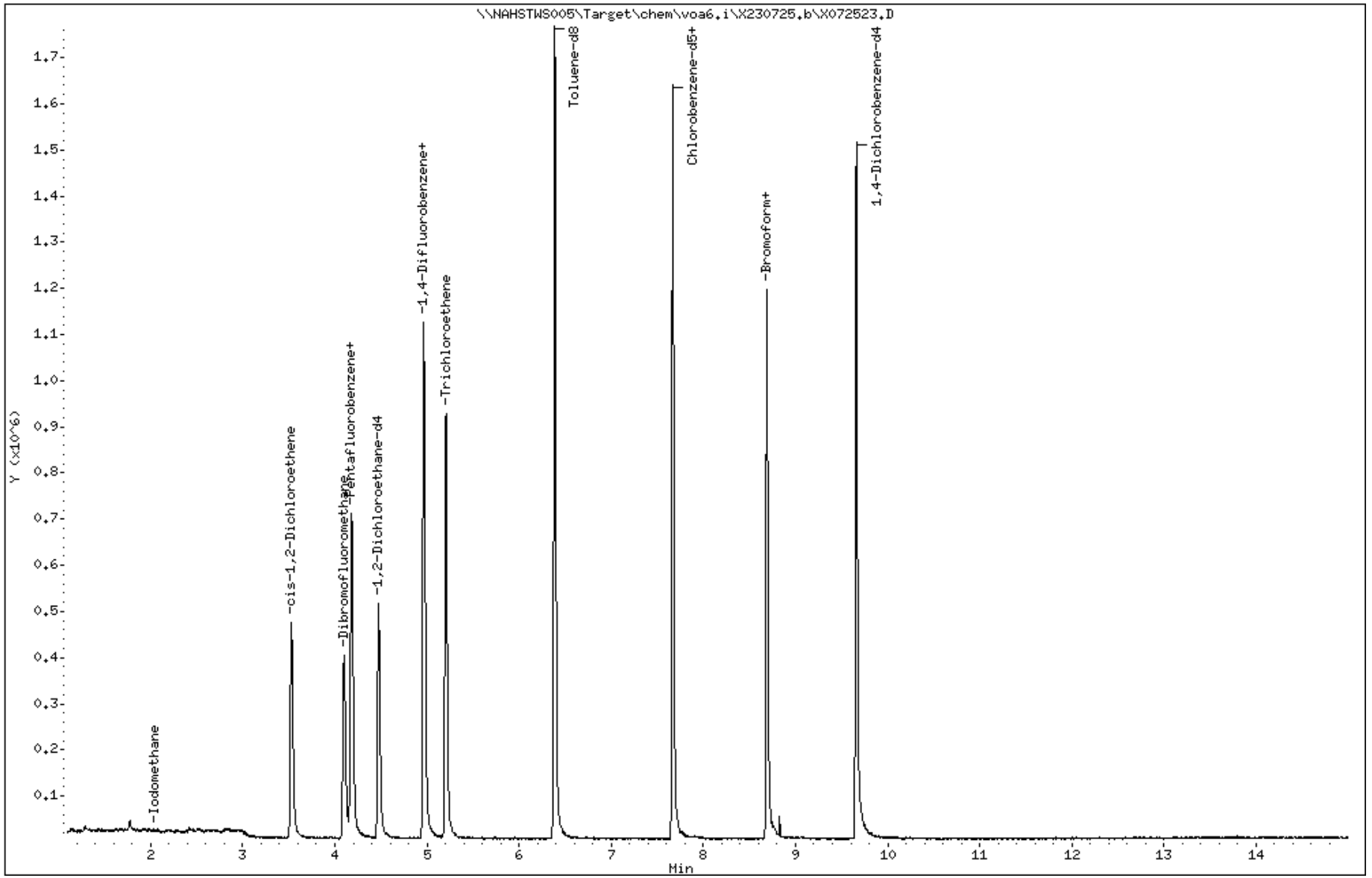
Sample Info: HS23071289-07;HS23071289-07;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072523.D

Date : 25-JUL-2023 17:38

Client ID: HS23071289-07

Instrument: voa6.i

Sample Info: HS23071289-07;HS23071289-07;;;

Purge Volume: 5.0

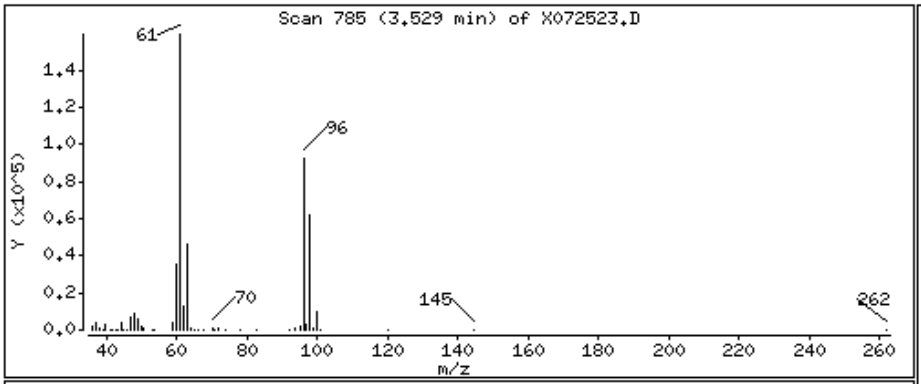
Operator: PC

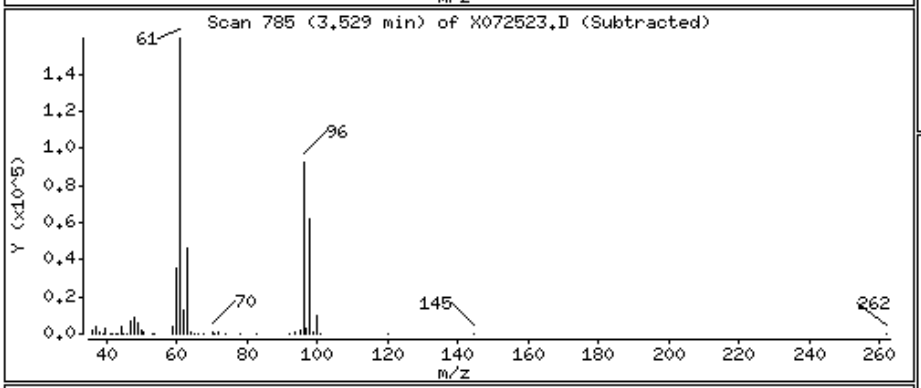
Column phase: DB624

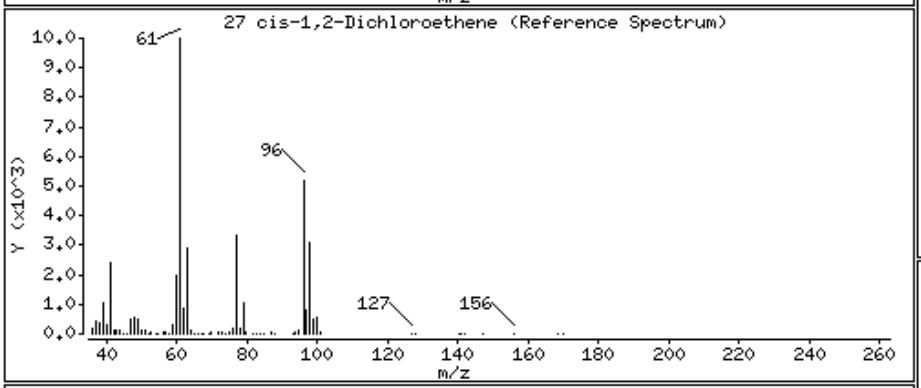
Column diameter: 0.18

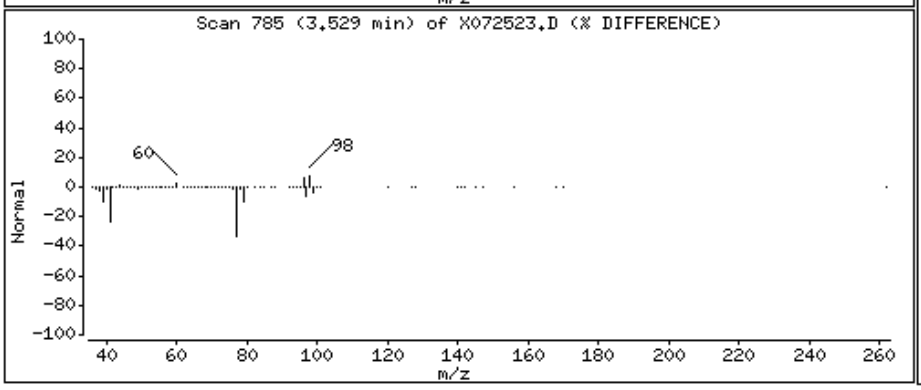
27 cis-1,2-Dichloroethene

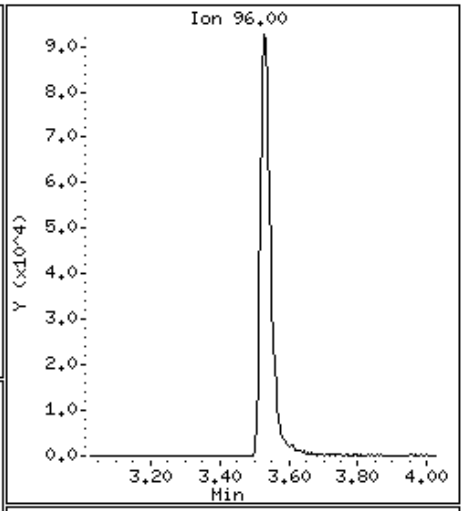
Concentration: 32.57 ug/l

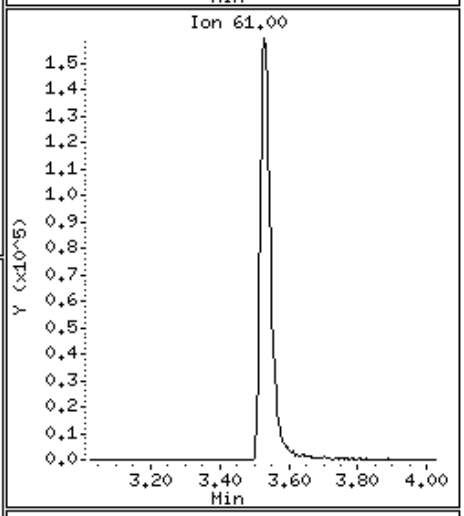


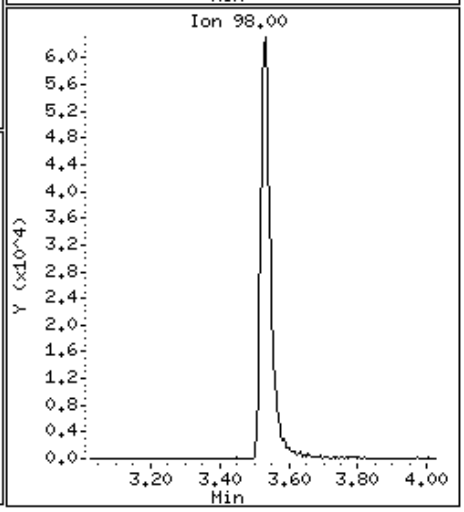












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072523.D Page 3

Date : 25-JUL-2023 17:38

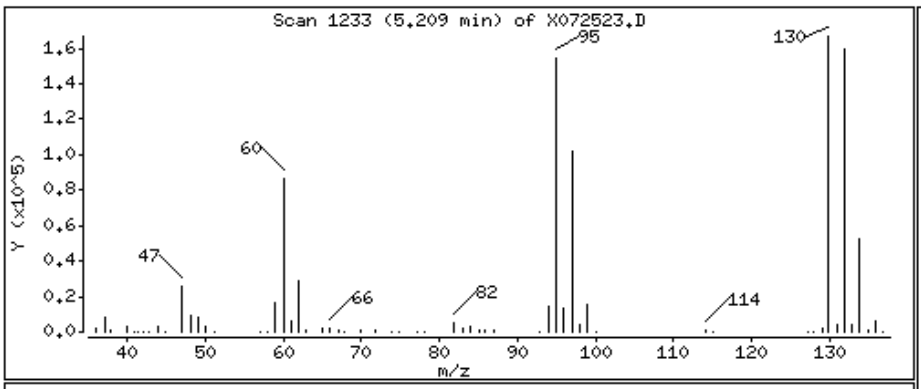
Client ID: HS23071289-07 Instrument: voa6.i

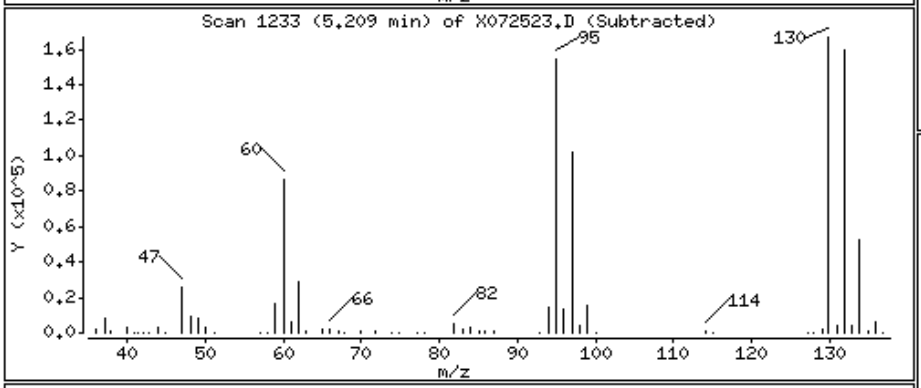
Sample Info: HS23071289-07;HS23071289-07;;;

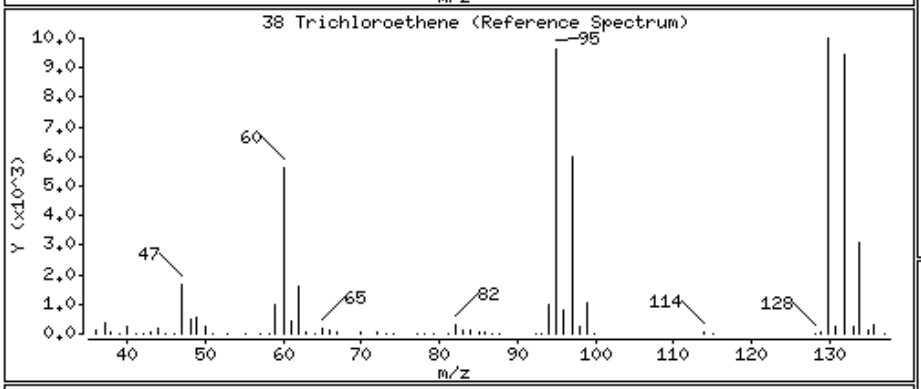
Purge Volume: 5.0 Operator: PC

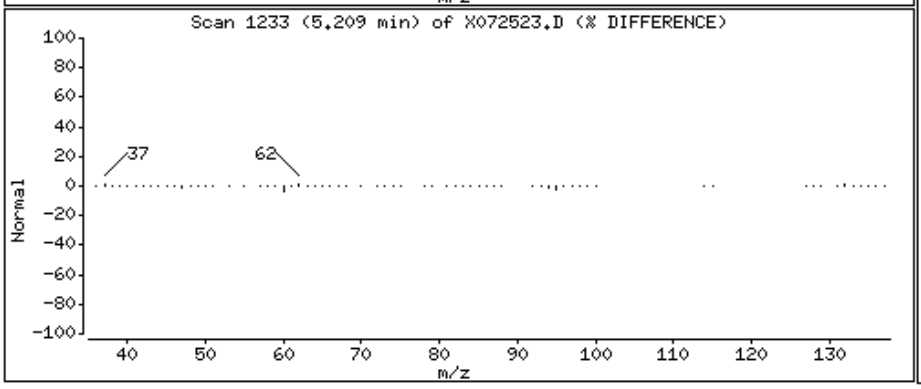
Column phase: DB624 Column diameter: 0.18

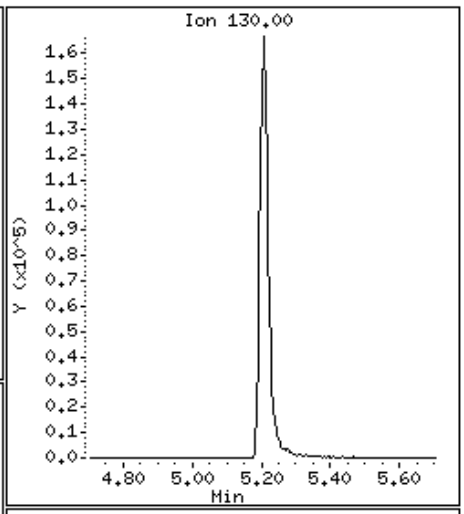
38 Trichloroethene Concentration: 51.13 ug/l

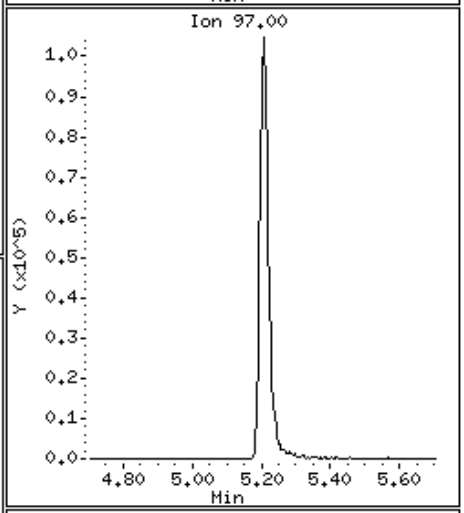


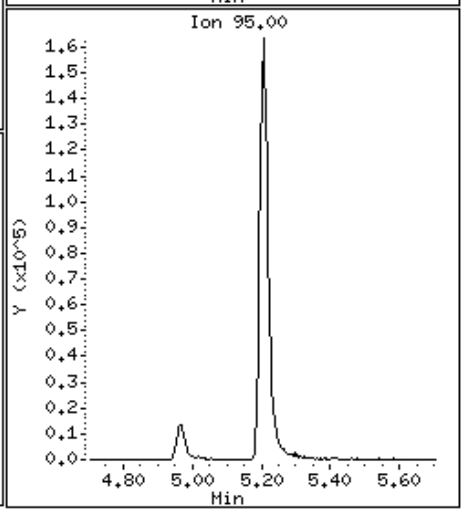












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072523.D
Inj Date : 25-JUL-2023 17:38
InstruID : voa6.i
LabSampID : HS23071289-07

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072524.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072524.D
Lab Smp Id: HS23071289-03 Client Smp ID: HS23071289-03
Inj Date : 25-JUL-2023 17:59
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-03;HS23071289-03;;;
Misc Info : V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 22
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	5.000	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)	533788	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.099	(0.981)	268888	55.0381	55.03
$ 35 1,2-Dichloroethane-d4	65	4.470	4.474	(1.069)	347255	56.8450	56.84
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	839683	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	728098	50.0000	
$ 48 Toluene-d8	98	6.386	6.385	(0.833)	959374	51.1767	51.17
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	354739	48.9238	48.92
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	378436	50.0000	
5 Vinyl Chloride	62	1.149	1.149	(0.275)	341491	49.4380	247.19
11 1,1-Dichloroethene	96	1.925	1.921	(0.460)	23936	6.12083	30.60
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.844)	472178	81.9402	409.70
33 1,2-Dichloroethane	62	4.567	4.556	(0.920)	10766	1.16474	5.82(a)
38 Trichloroethene	130	5.205	5.208	(1.048)	1495336	263.214	1316.06(A)

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.

01324279

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072524.D

Date : 25-JUL-2023 17:59

Client ID: HS23071289-03

Instrument: voa6.i

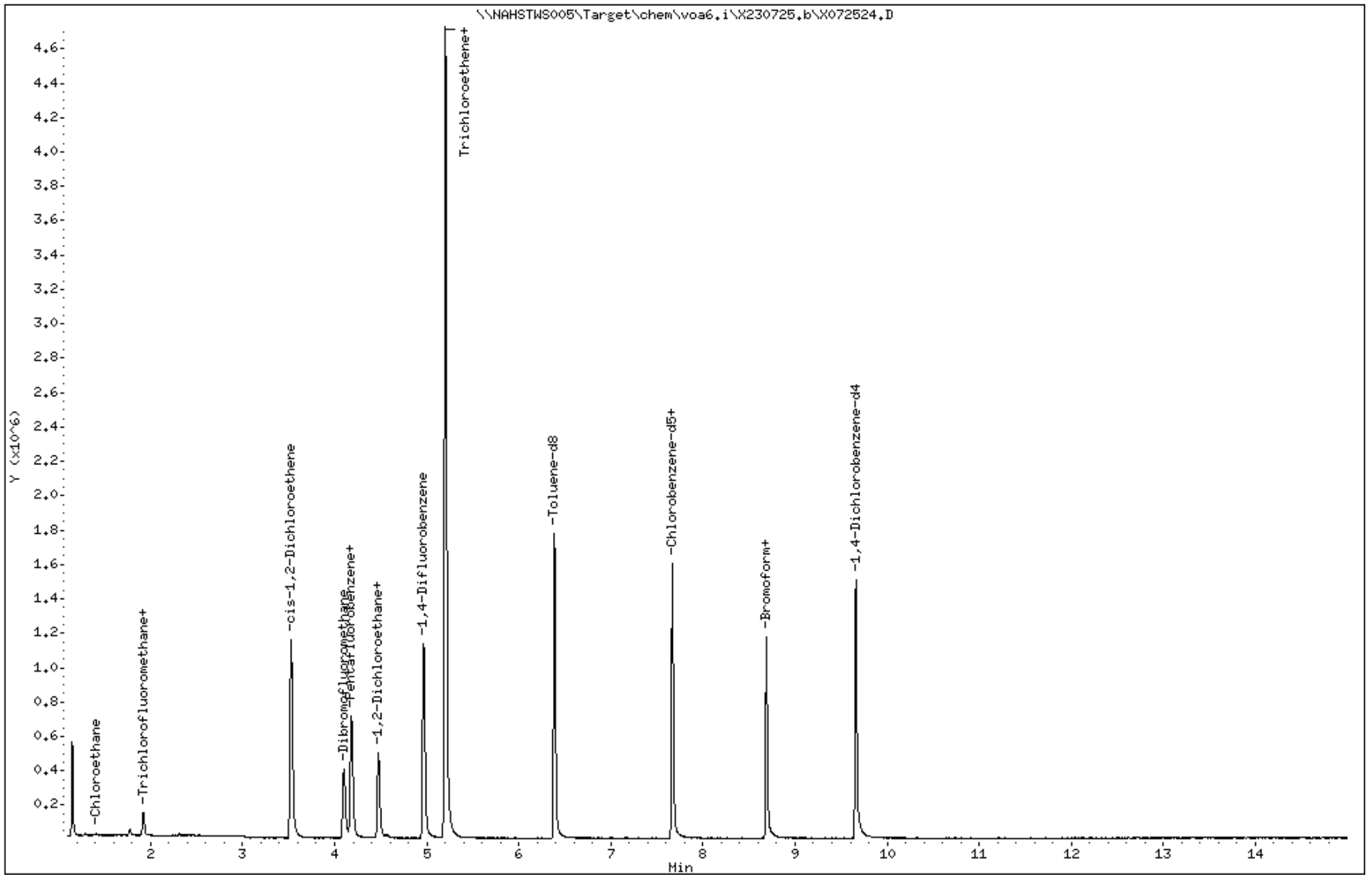
Sample Info: HS23071289-03;HS23071289-03;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072524.D

Date : 25-JUL-2023 17:59

Client ID: HS23071289-03

Instrument: voa6.i

Sample Info: HS23071289-03;HS23071289-03;;;

Purge Volume: 5.0

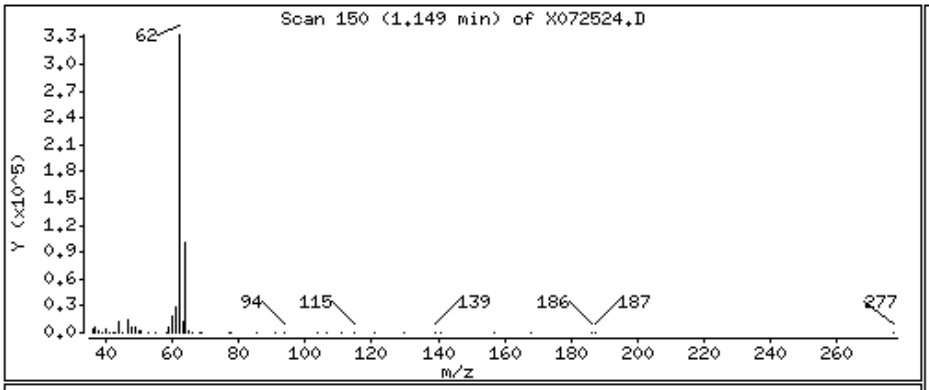
Operator: PC

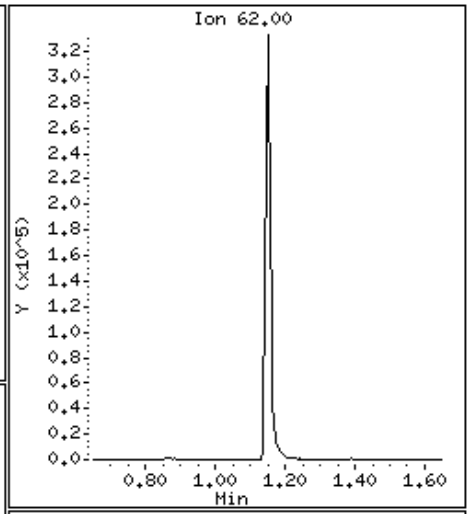
Column phase: DB624

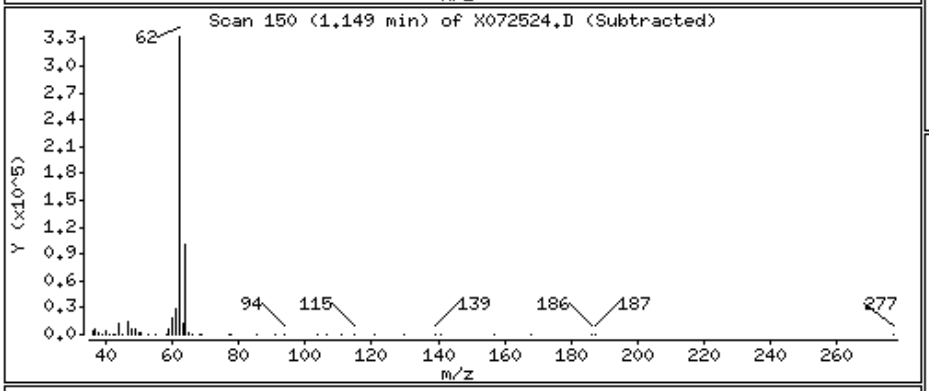
Column diameter: 0.18

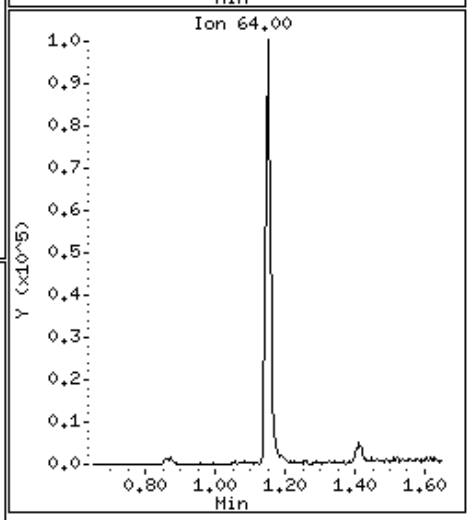
5 Vinyl Chloride

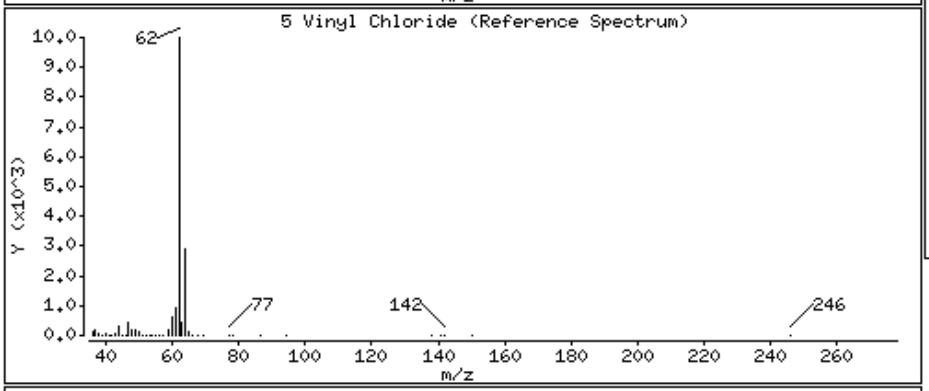
Concentration: 247.19 ug/l

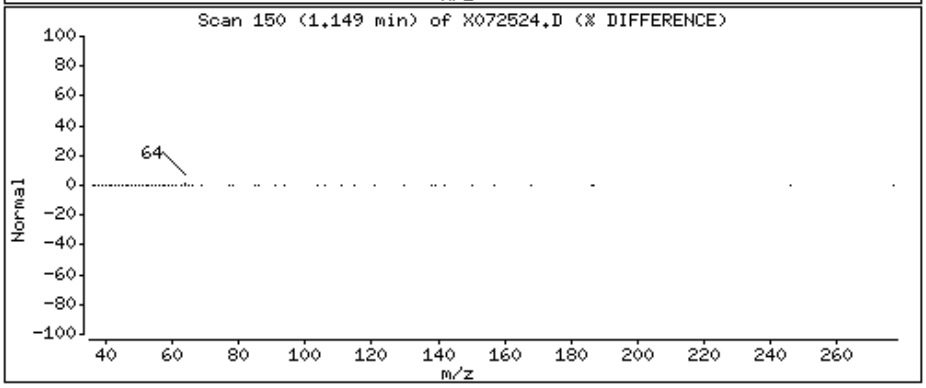












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072524.D

Date : 25-JUL-2023 17:59

Client ID: HS23071289-03

Instrument: voa6.i

Sample Info: HS23071289-03;HS23071289-03;;;

Purge Volume: 5.0

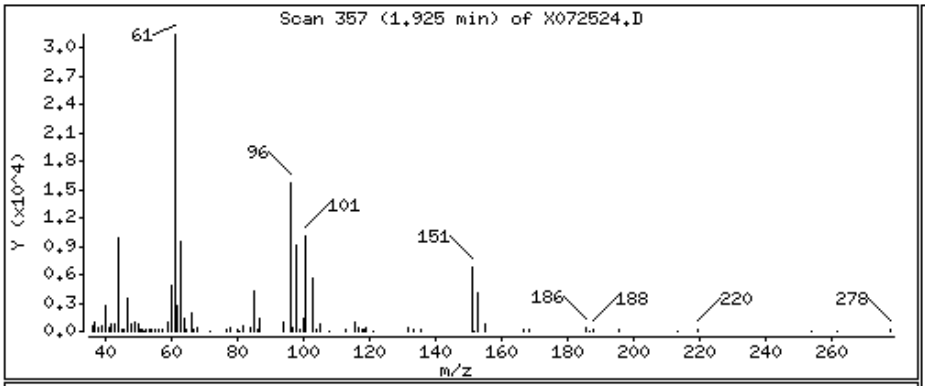
Operator: PC

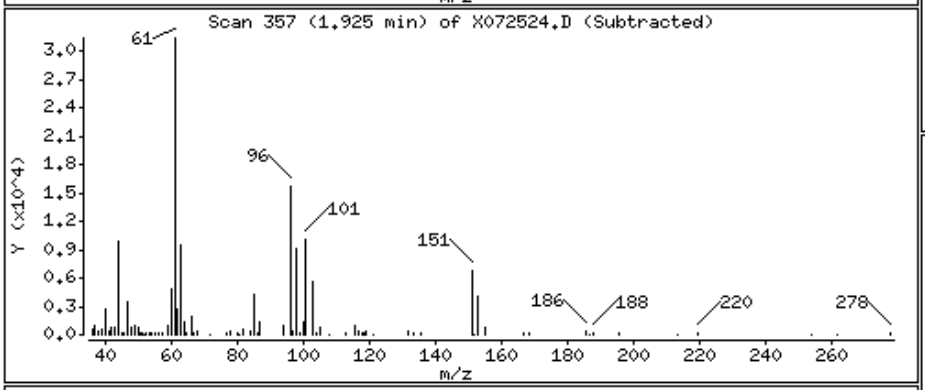
Column phase: DB624

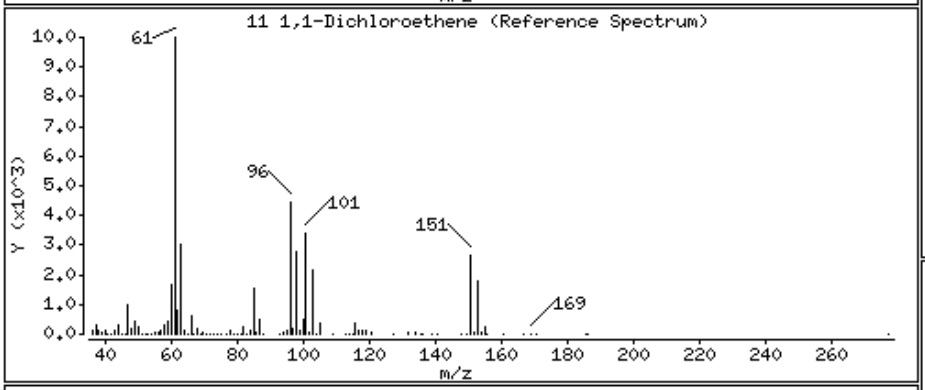
Column diameter: 0.18

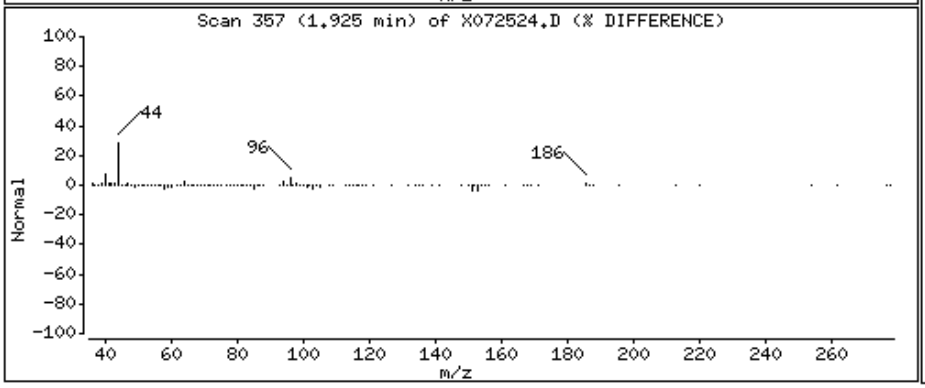
11 1,1-Dichloroethene

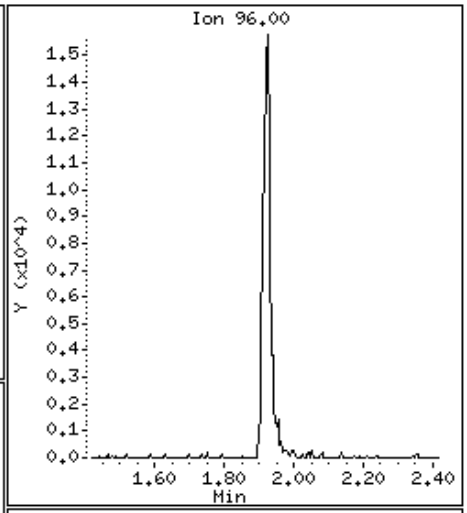
Concentration: 30.60 ug/l

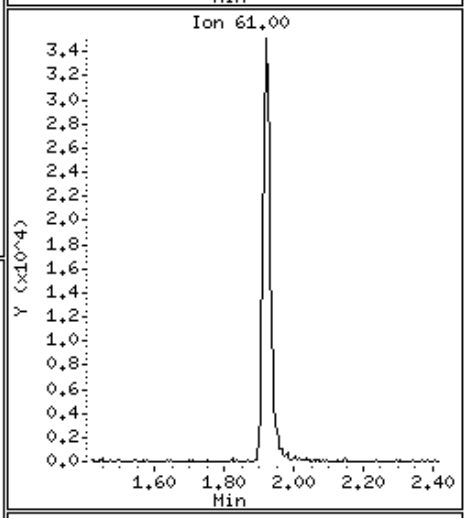


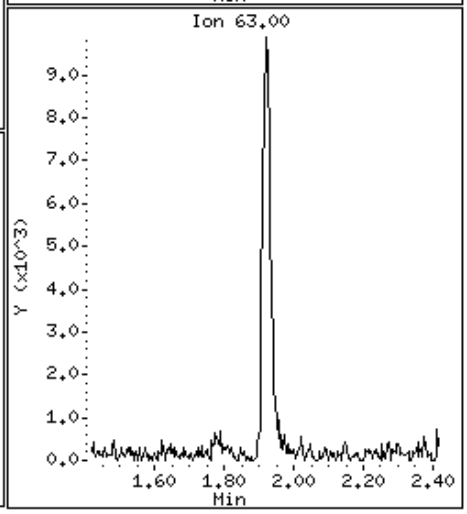












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072524.D Page 4

Date : 25-JUL-2023 17:59

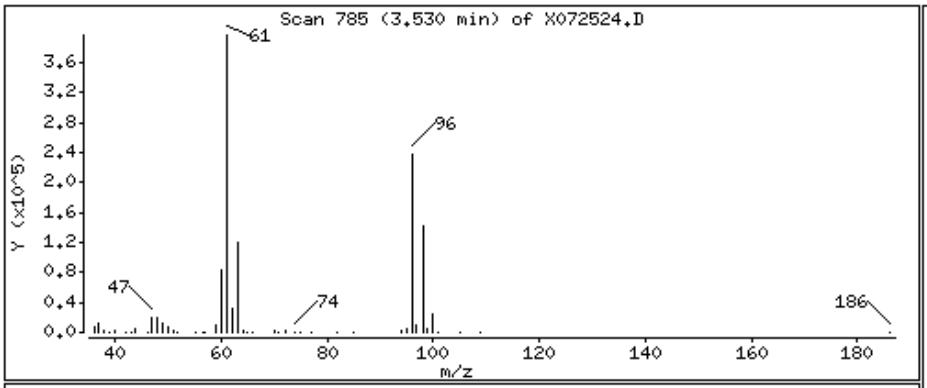
Client ID: HS23071289-03 Instrument: voa6.i

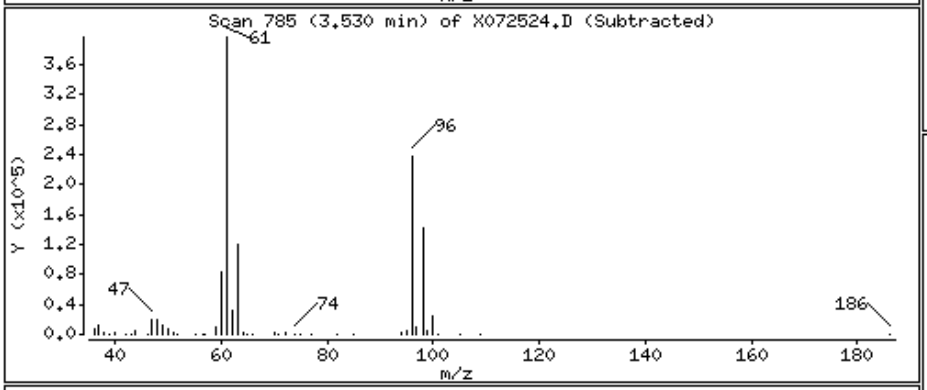
Sample Info: HS23071289-03;HS23071289-03;;;

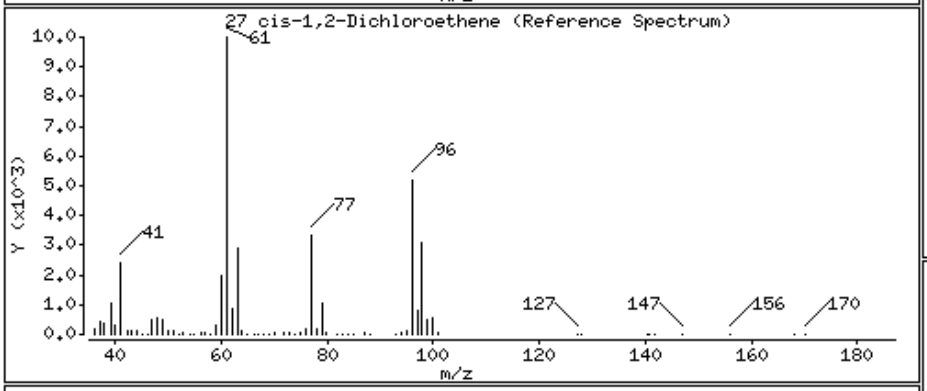
Purge Volume: 5.0 Operator: PC

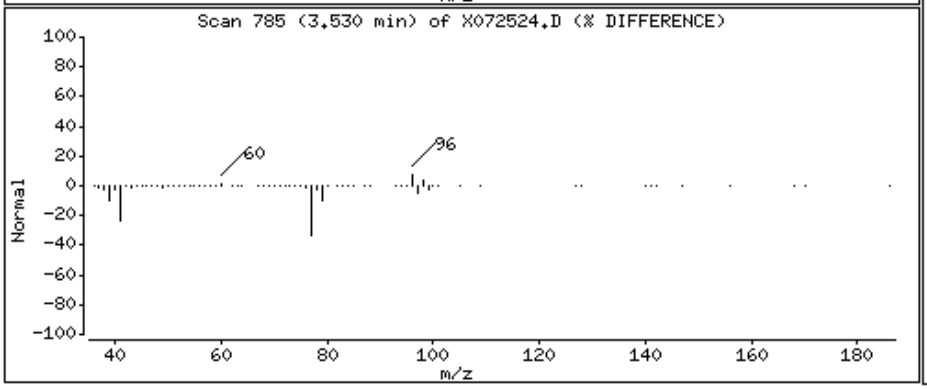
Column phase: DB624 Column diameter: 0.18

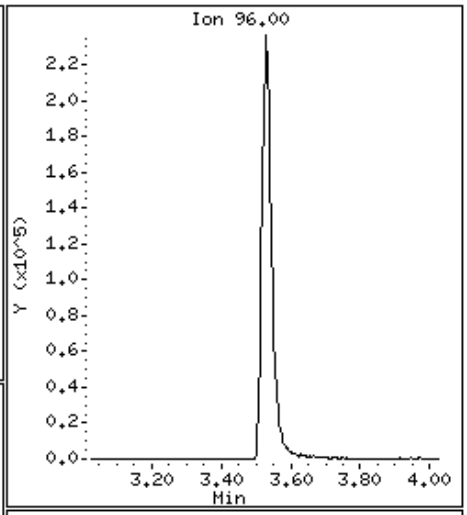
27 cis-1,2-Dichloroethene Concentration: 409.70 ug/l

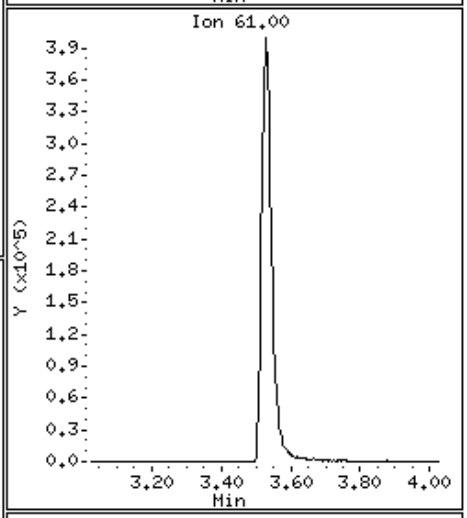


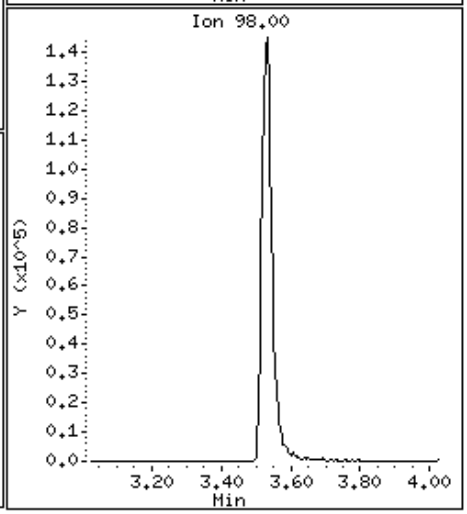












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072524.D Page 5

Date : 25-JUL-2023 17:59

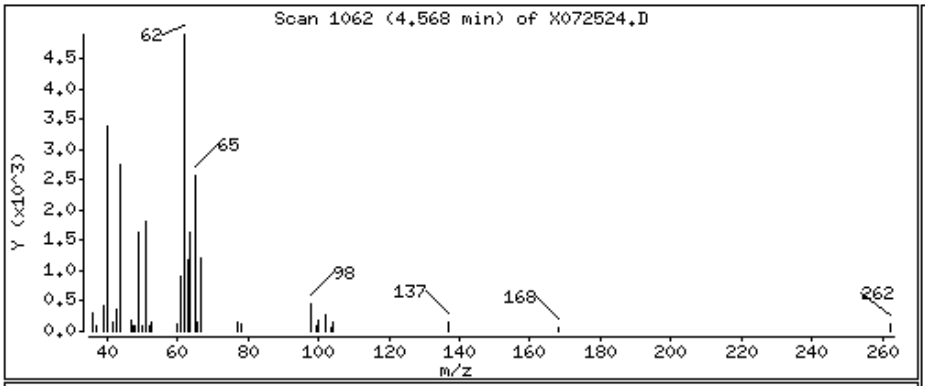
Client ID: HS23071289-03 Instrument: voa6.i

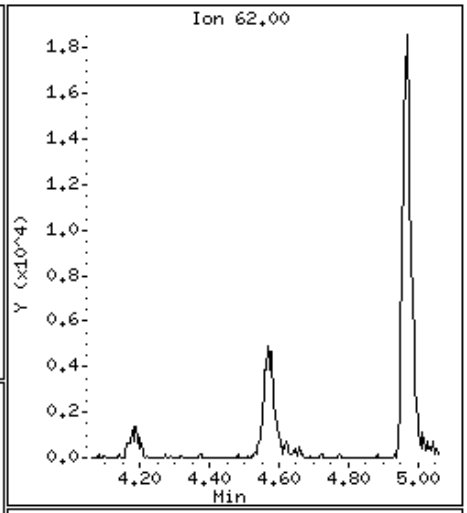
Sample Info: HS23071289-03;HS23071289-03;;;

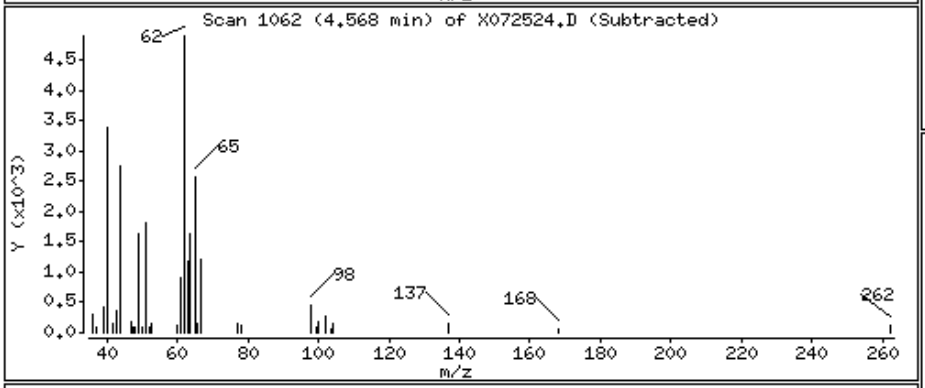
Purge Volume: 5.0 Operator: PC

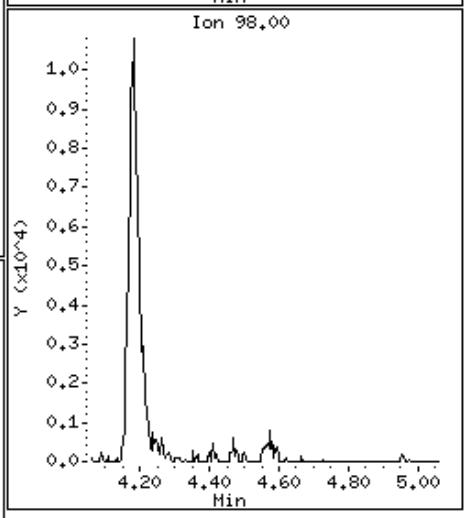
Column phase: DB624 Column diameter: 0.18

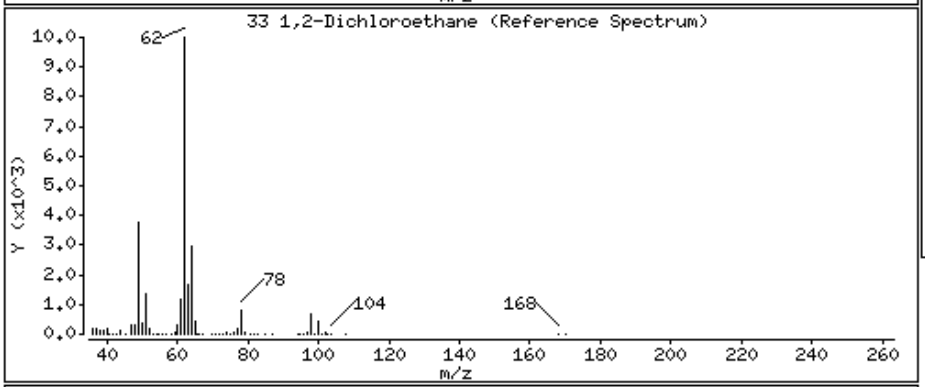
33 1,2-Dichloroethane Concentration: 5.82 ug/l

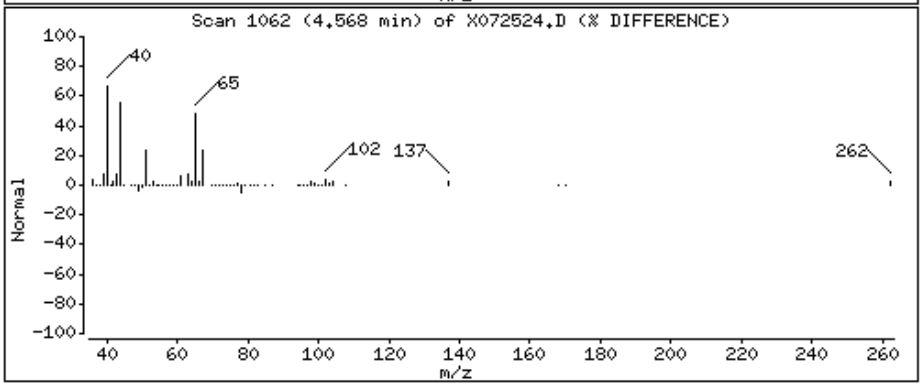












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072524.D Page 6

Date : 25-JUL-2023 17:59

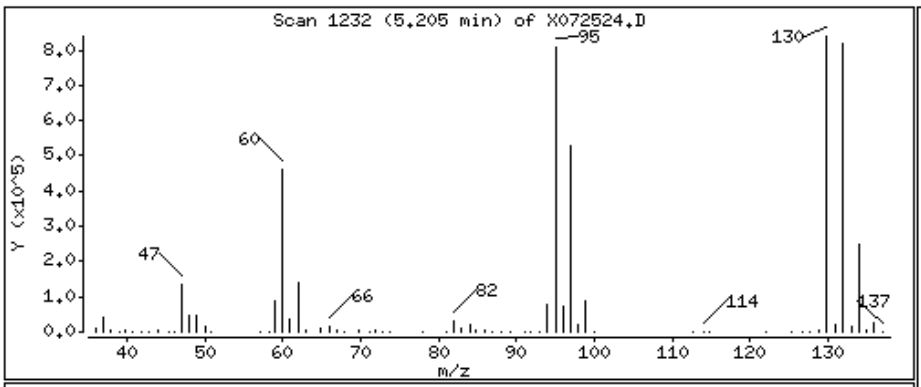
Client ID: HS23071289-03 Instrument: voa6.i

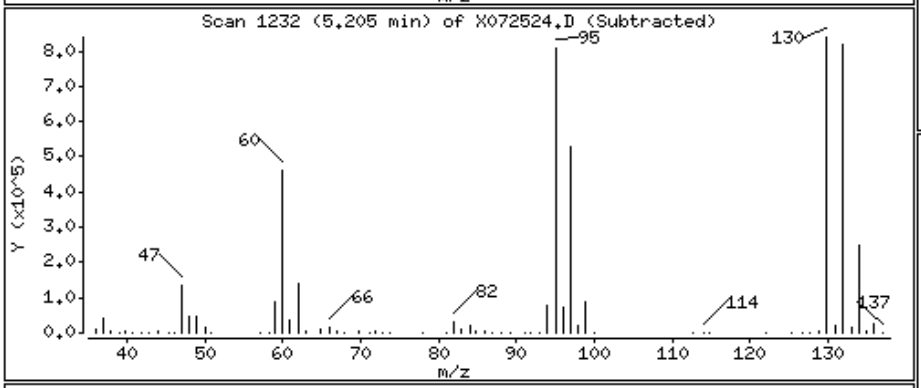
Sample Info: HS23071289-03;HS23071289-03;;;

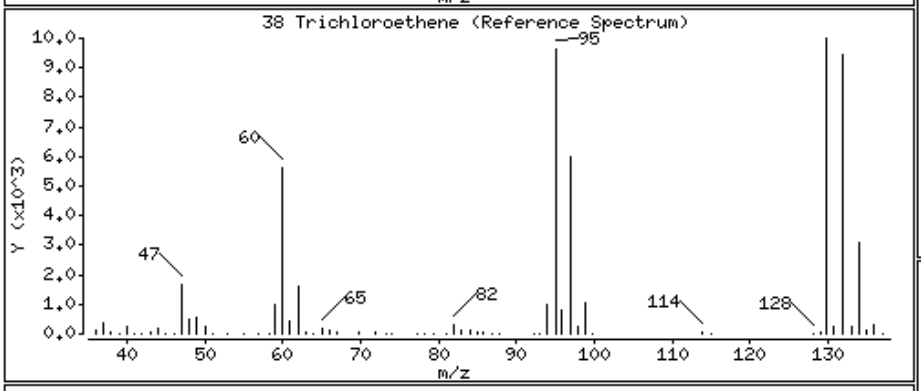
Purge Volume: 5.0 Operator: PC

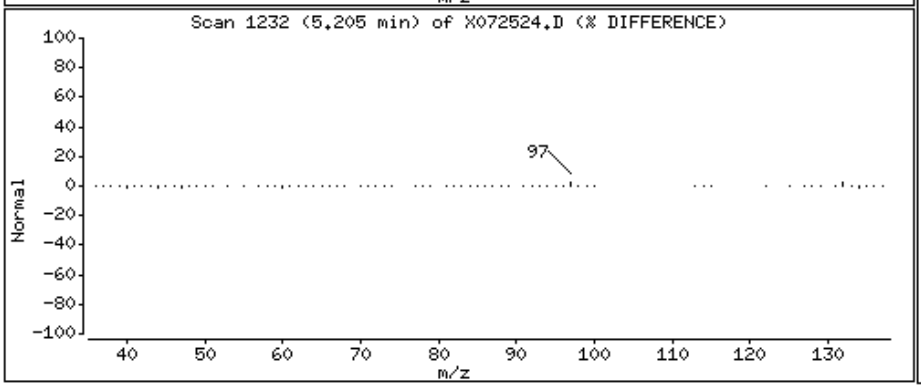
Column phase: DB624 Column diameter: 0.18

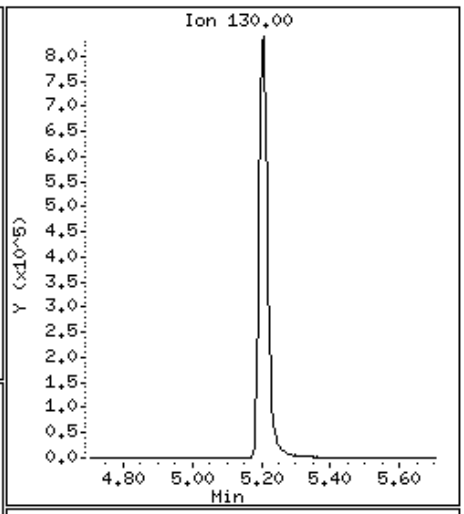
38 Trichloroethene Concentration: 1316.06 ug/l

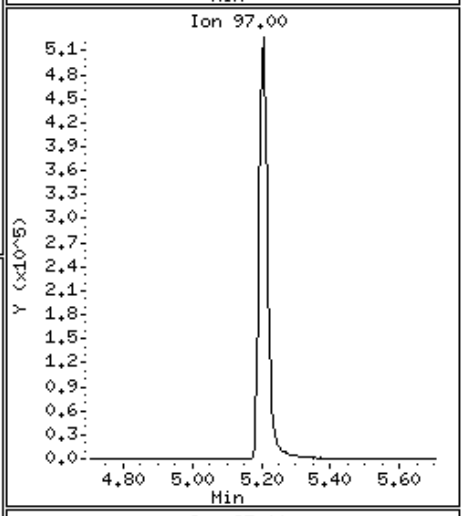


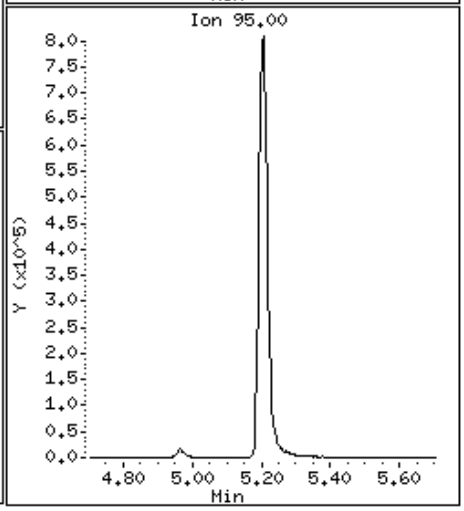












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072524.D
Inj Date : 25-JUL-2023 17:59
InstruID : voa6.i
LabSampID : HS23071289-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072525.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072525.D
Lab Smp Id: HS23071289-03 Client Smp ID: HS23071289-03
Inj Date : 25-JUL-2023 18:19
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-03;HS23071289-03;;;
Misc Info : V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 23
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	25.000	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)	531497	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.980)	267094	54.9047	54.90
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	358613	58.9804	58.98(M)
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	843748	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	728305	50.0000	
$ 48 Toluene-d8	98	6.386	6.385	(0.833)	960571	51.2260	51.22
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	347063	47.8421	47.84
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	358957	50.0000	
5 Vinyl Chloride	62	1.149	1.149	(0.275)	69862	10.1576	253.93
11 1,1-Dichloroethene	96	1.917	1.921	(0.459)	4688	1.20397	30.09(a)
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.845)	89513	15.6007	390.01
38 Trichloroethene	130	5.208	5.208	(1.049)	292905	51.3097	1282.74

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

01324287

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072525.D

Date : 25-JUL-2023 18:19

Client ID: HS23071289-03

Instrument: voa6.i

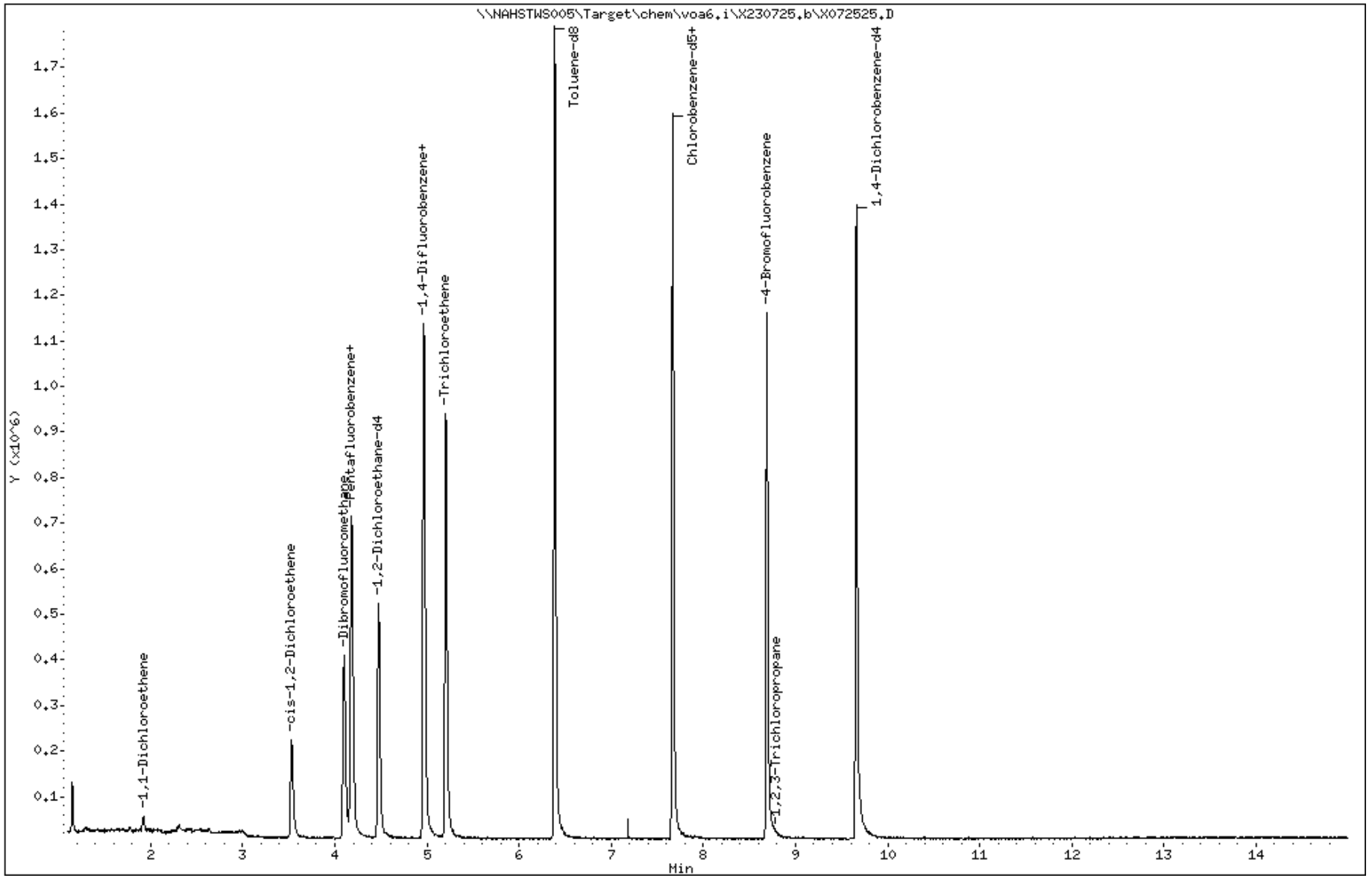
Sample Info: HS23071289-03;HS23071289-03;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072525.D

Date : 25-JUL-2023 18:19

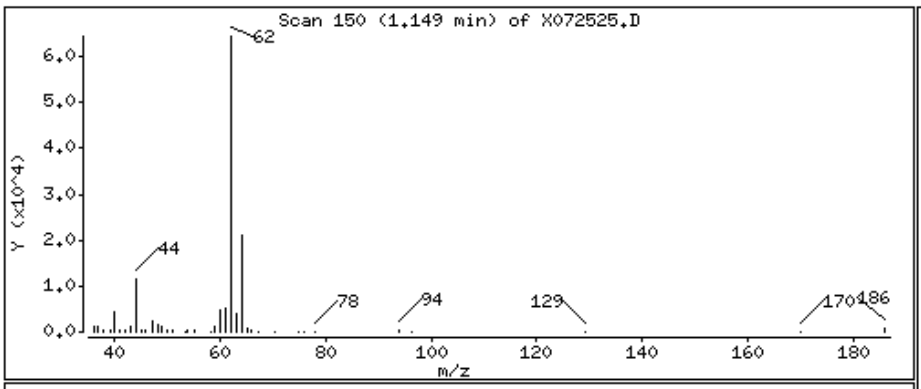
Client ID: HS23071289-03 Instrument: voa6.i

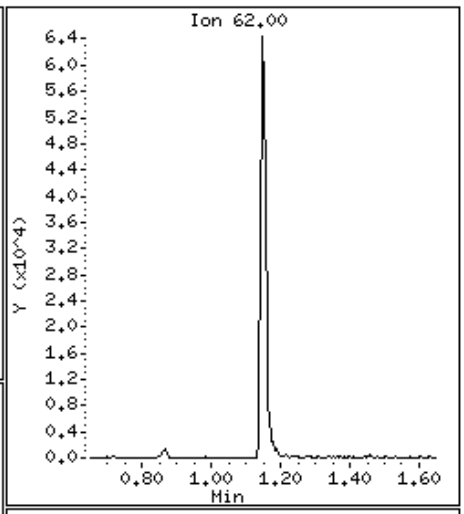
Sample Info: HS23071289-03;HS23071289-03;;;

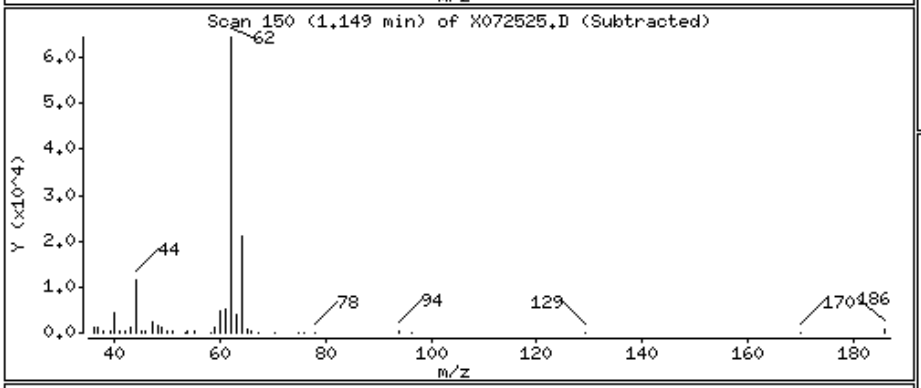
Purge Volume: 5.0 Operator: PC

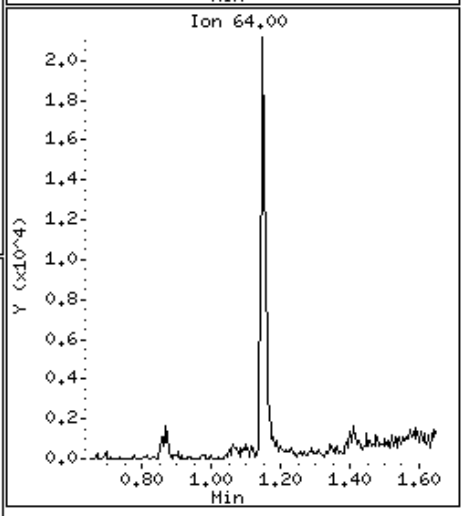
Column phase: DB624 Column diameter: 0.18

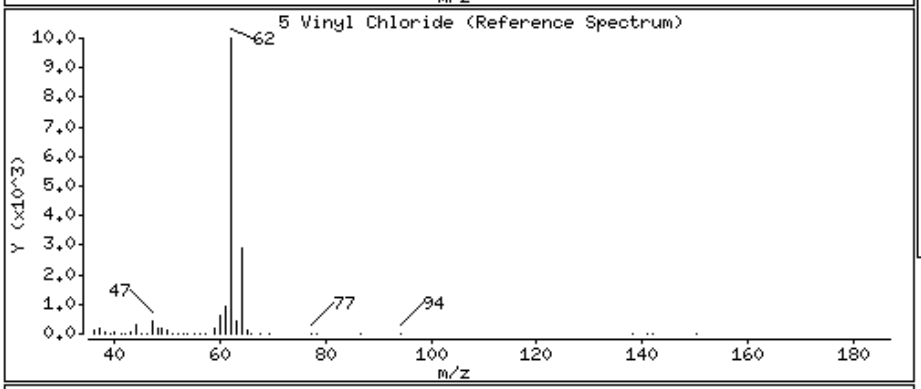
5 Vinyl Chloride Concentration: 253.93 ug/l

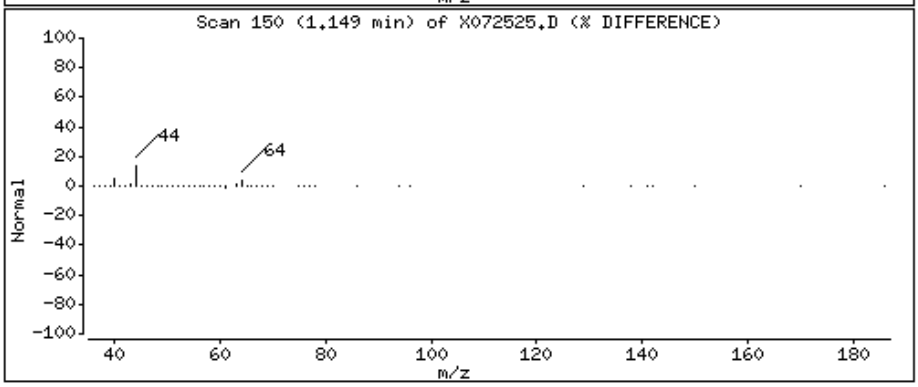












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072525.D Page 3

Date : 25-JUL-2023 18:19

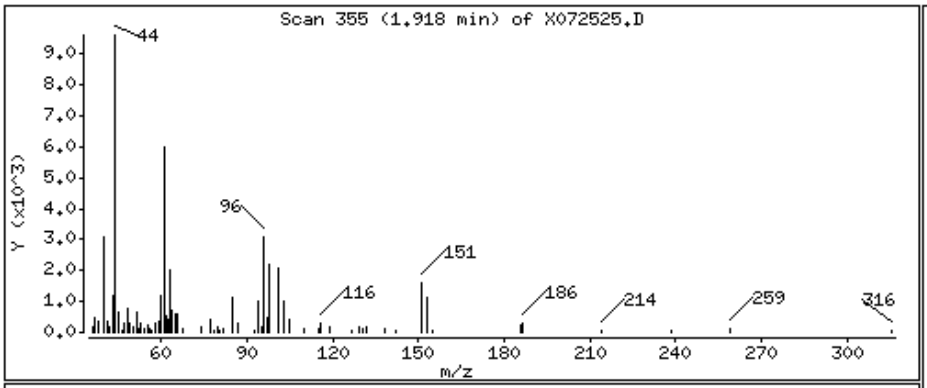
Client ID: HS23071289-03 Instrument: voa6.i

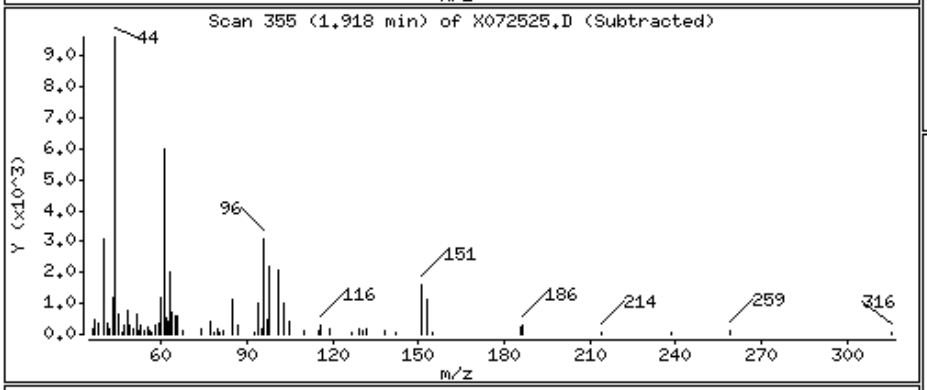
Sample Info: HS23071289-03;HS23071289-03;;;

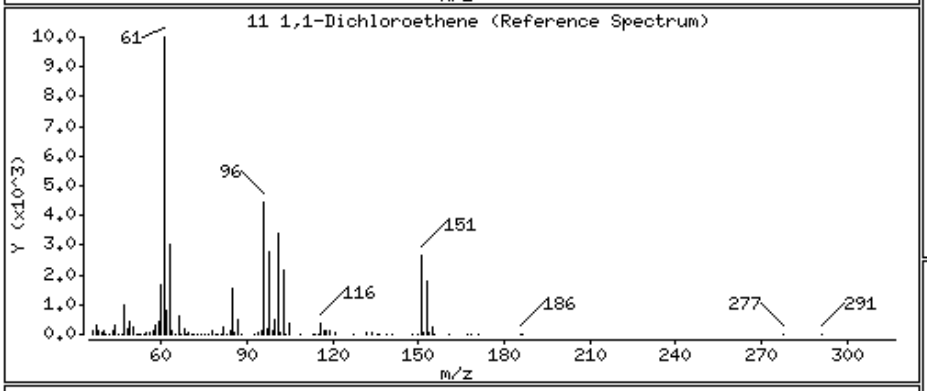
Purge Volume: 5.0 Operator: PC

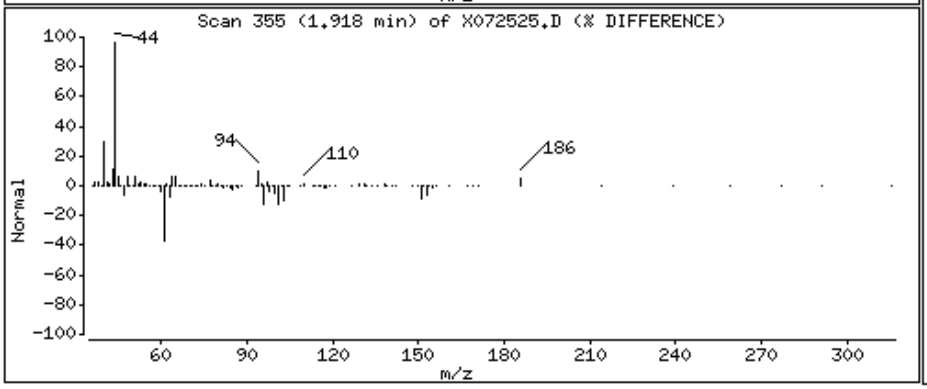
Column phase: DB624 Column diameter: 0.18

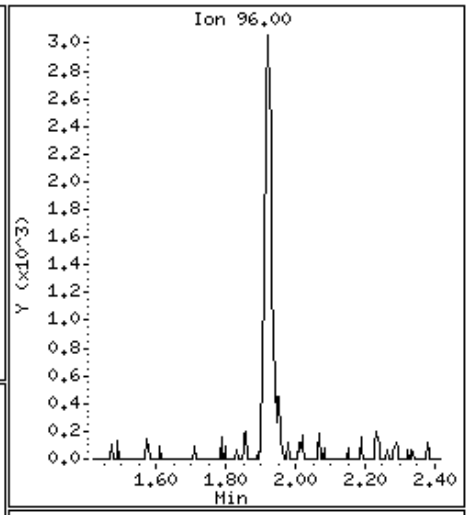
11 1,1-Dichloroethene Concentration: 30.09 ug/l

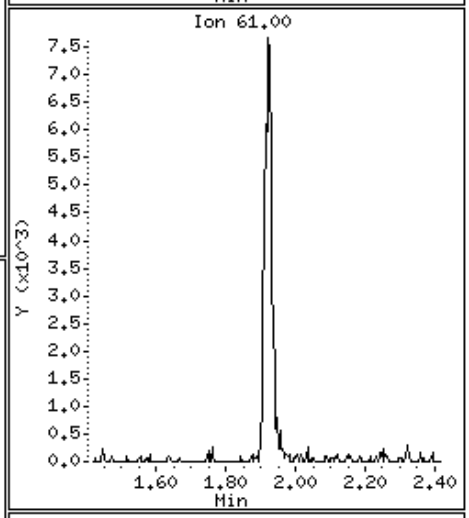


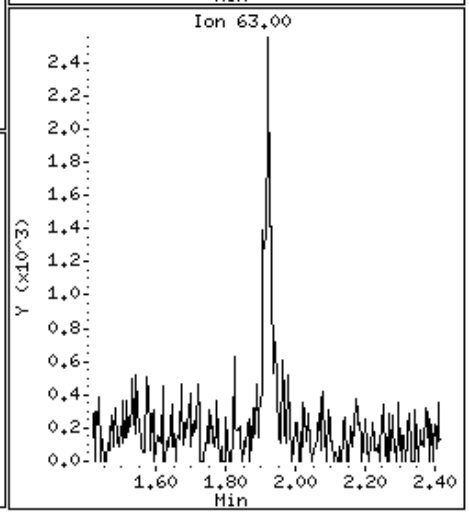












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072525.D Page 4

Date : 25-JUL-2023 18:19

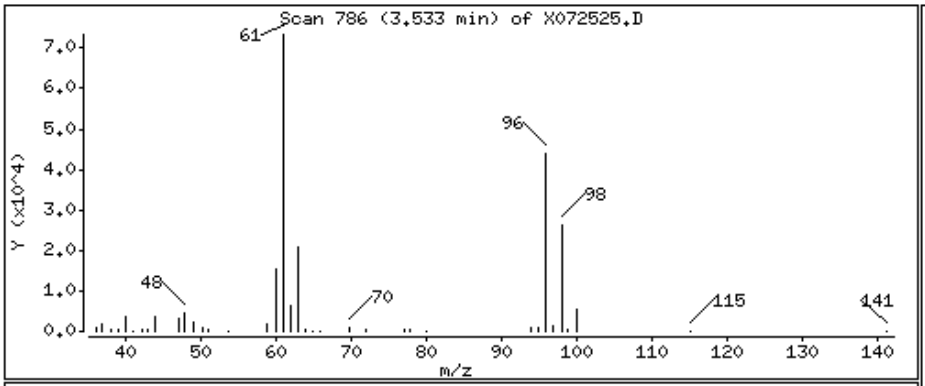
Client ID: HS23071289-03 Instrument: voa6.i

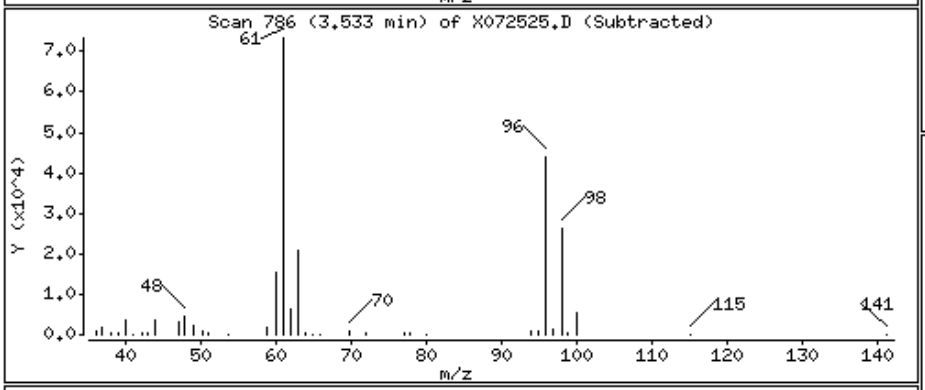
Sample Info: HS23071289-03;HS23071289-03;;;

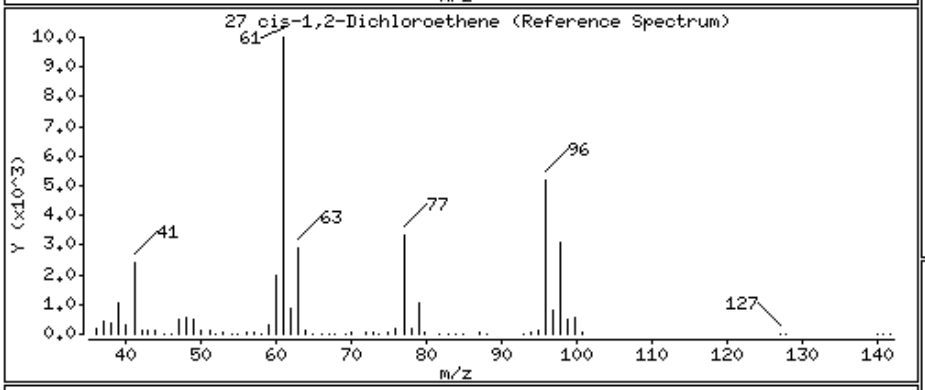
Purge Volume: 5.0 Operator: PC

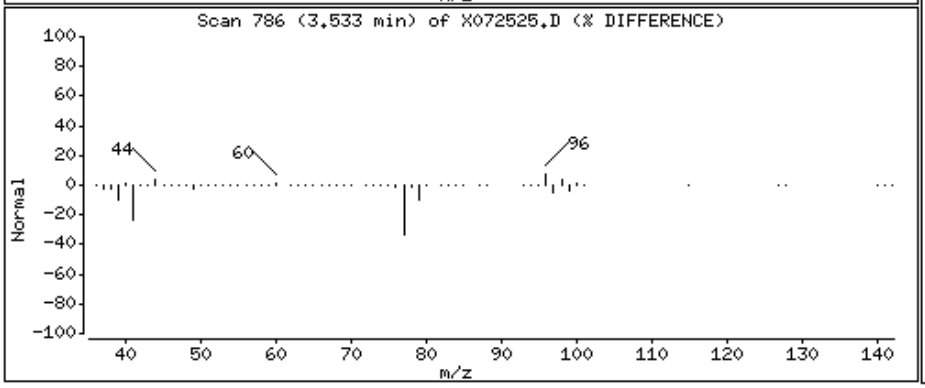
Column phase: DB624 Column diameter: 0.18

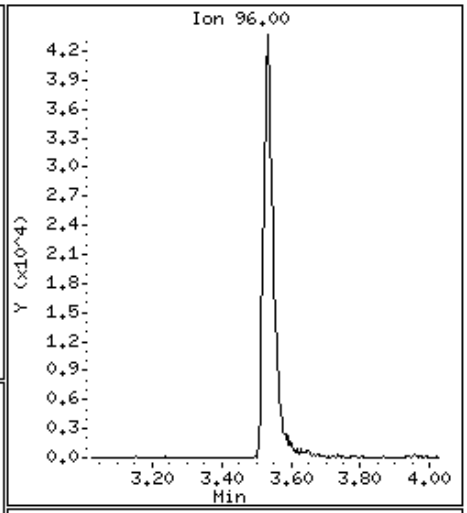
27 cis-1,2-Dichloroethene Concentration: 390.01 ug/l

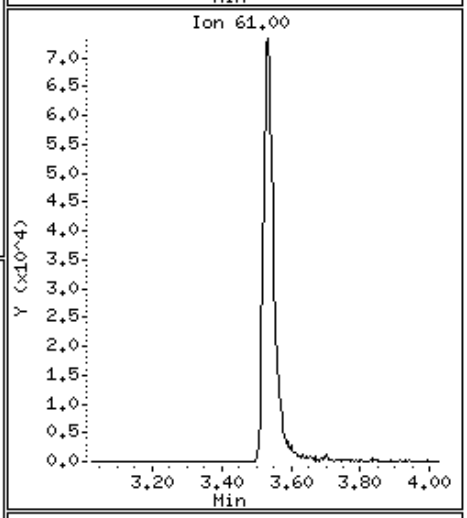


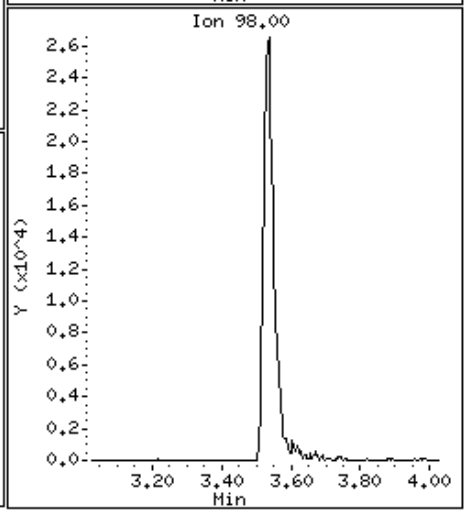












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072525.D

Date : 25-JUL-2023 18:19

Client ID: HS23071289-03

Instrument: voa6.i

Sample Info: HS23071289-03;HS23071289-03;;;

Purge Volume: 5.0

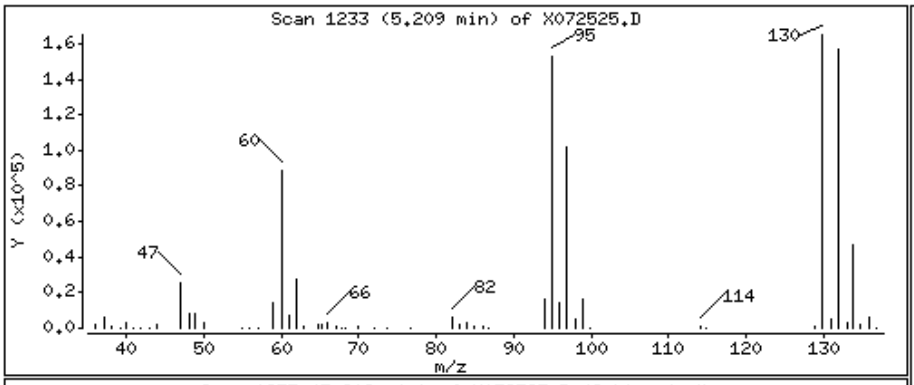
Operator: PC

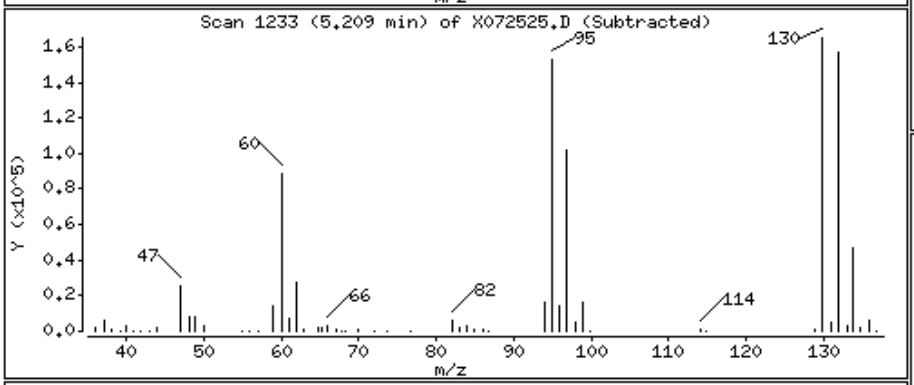
Column phase: DB624

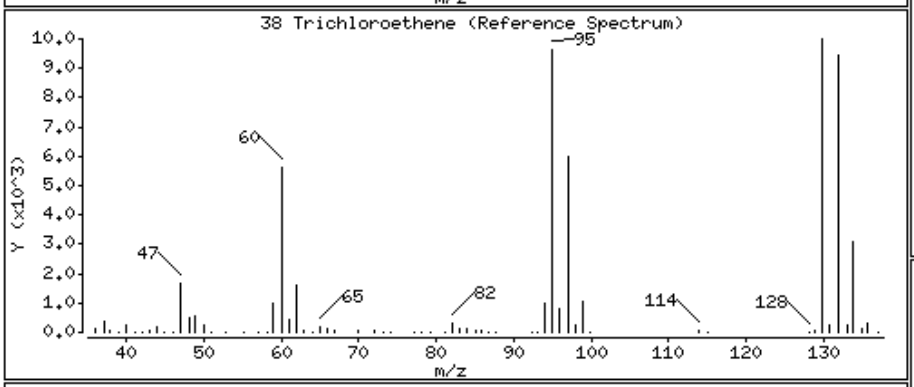
Column diameter: 0.18

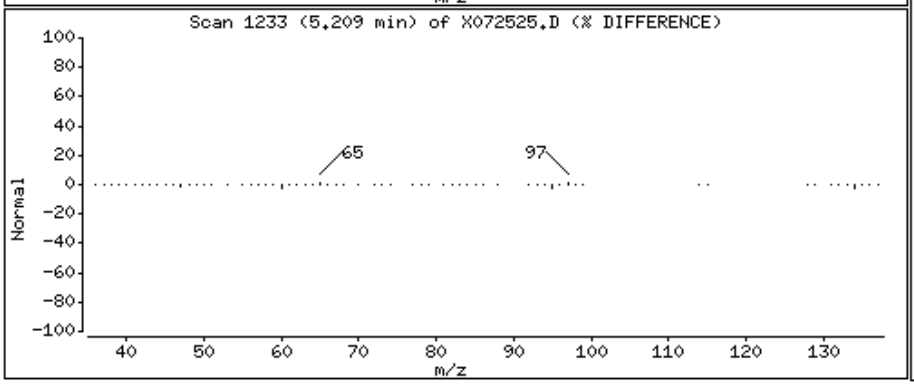
38 Trichloroethene

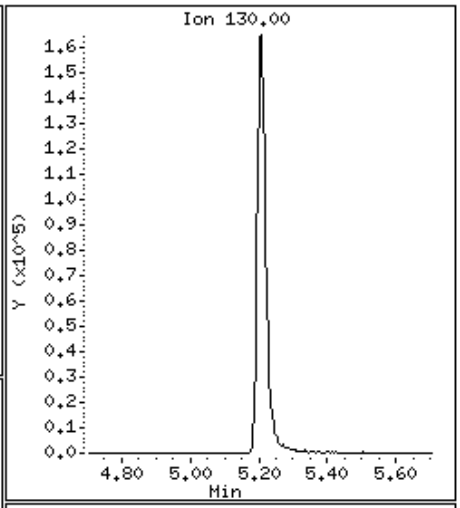
Concentration: 1282.74 ug/l

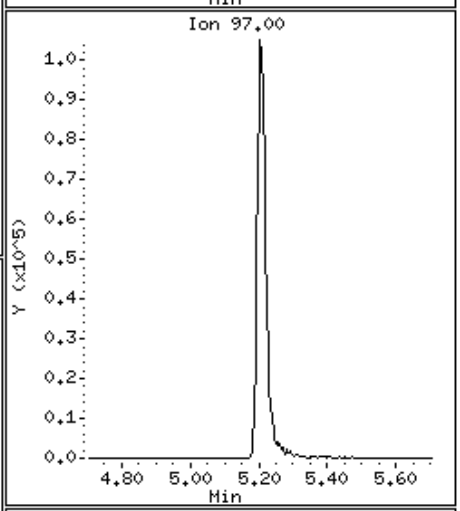


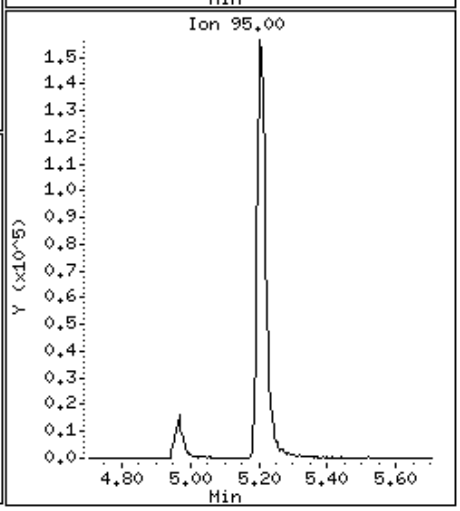












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Inj Date : 25-JUL-2023 18:19
InstruID : voa6.i
LabSampID : HS23071289-03

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

MASS
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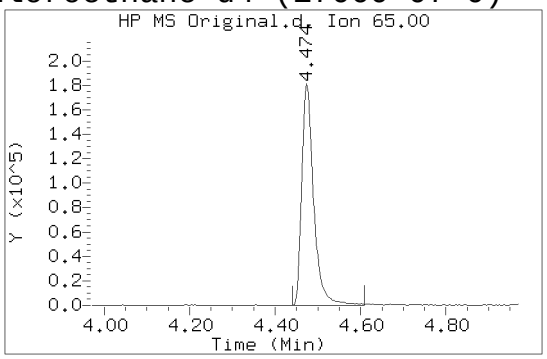
358613
HEIGHT
181236
27-Jul-2023
13:09
linh
pham



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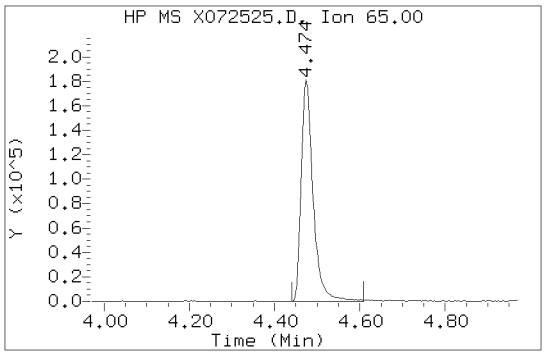

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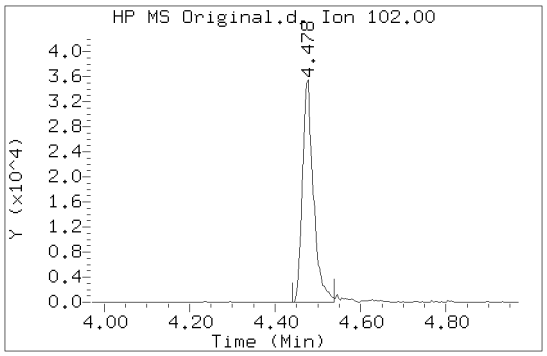

AFTER

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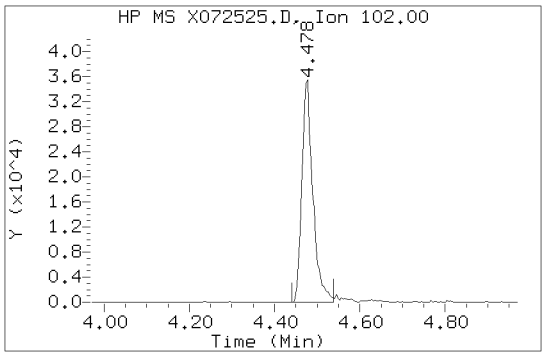


Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072526.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072526.D
Lab Smp Id: HS23071289-05 Client Smp ID: HS23071289-05
Inj Date : 25-JUL-2023 18:40
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-05;HS23071289-05;;;
Misc Info : V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 24
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	5.000	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)	550024	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.980)	278233	55.2730	55.27
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	354159	56.2574	56.25
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	848640	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	748272	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	981587	50.9499	50.94
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	342898	45.9903	45.99
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	391508	50.0000	
5 Vinyl Chloride	62	1.149	1.149	(0.275)	27825	3.90935	19.54(a)
11 1,1-Dichloroethene	96	1.925	1.921	(0.460)	4849	1.20337	6.01(a)
27 cis-1,2-Dichloroethene	96	3.525	3.529	(0.843)	246196	41.4629	207.31
33 1,2-Dichloroethane	62	4.564	4.556	(0.919)	11902	1.27405	6.37(a)
38 Trichloroethene	130	5.205	5.208	(1.048)	2588175	450.770	2253.85(A)

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.

01324295

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072526.D

Date : 25-JUL-2023 18:40

Client ID: HS23071289-05

Instrument: voa6.i

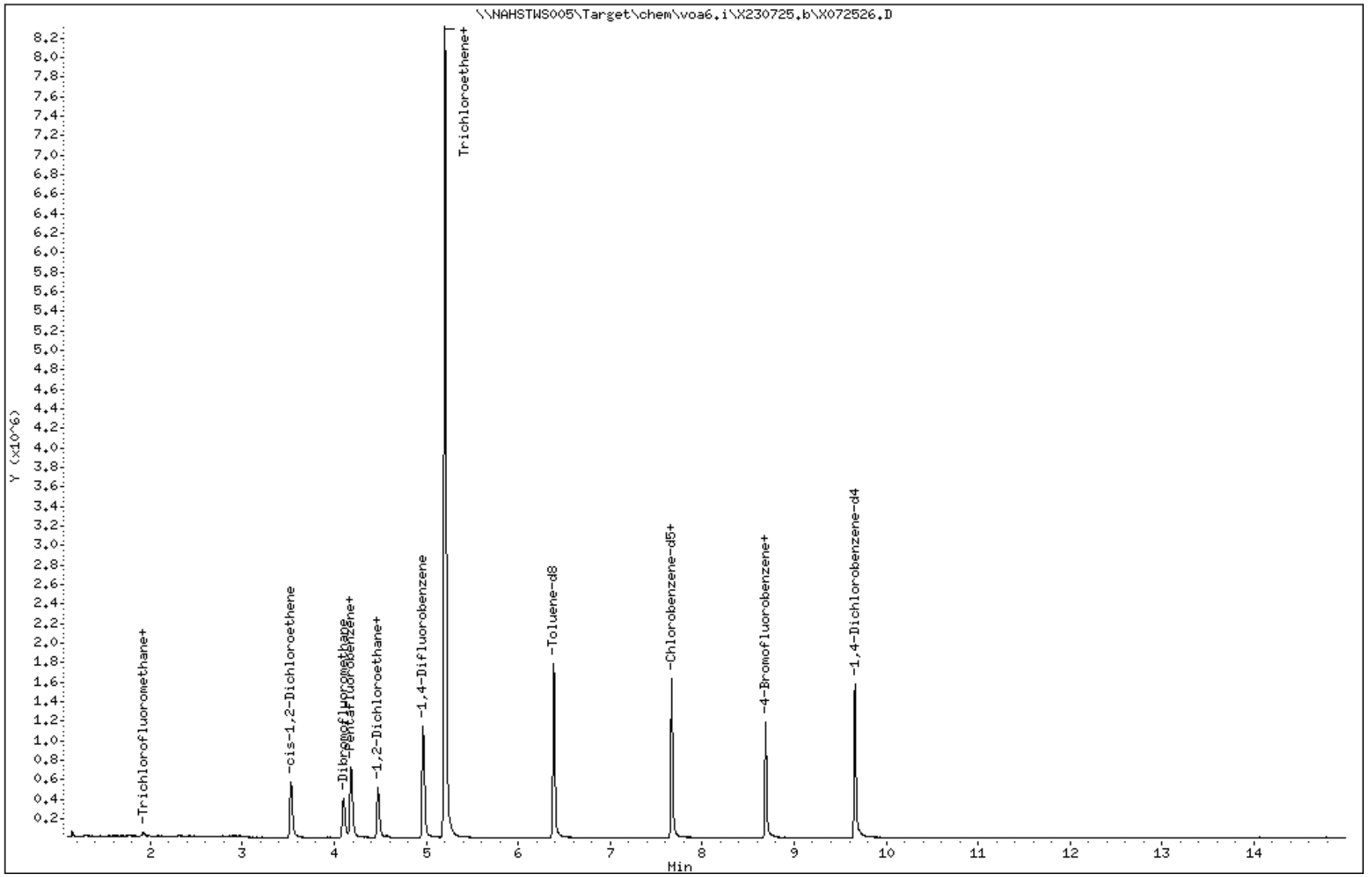
Sample Info: HS23071289-05;HS23071289-05;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072526.D

Date : 25-JUL-2023 18:40

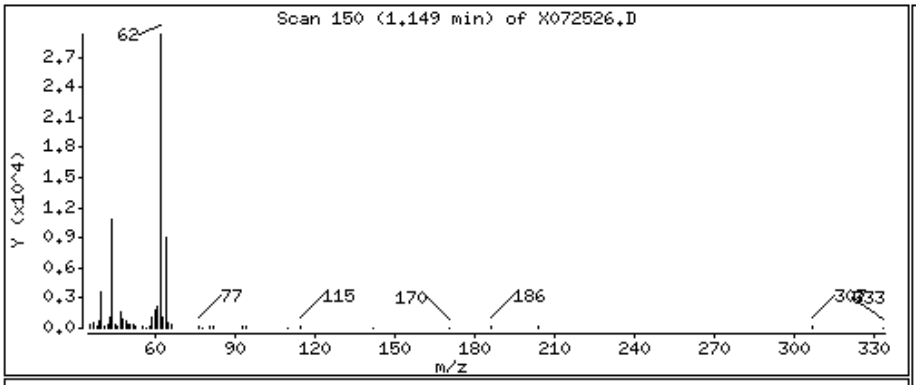
Client ID: HS23071289-05 Instrument: voa6.i

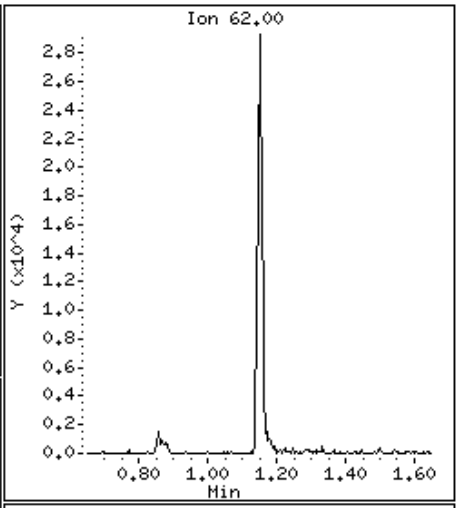
Sample Info: HS23071289-05;HS23071289-05;;;

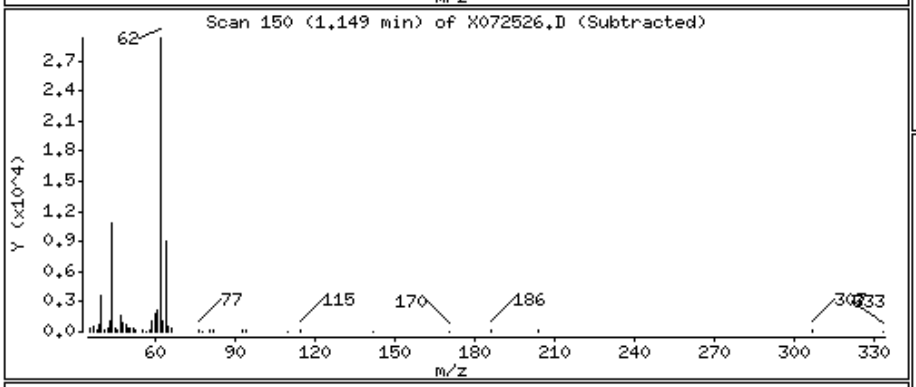
Purge Volume: 5.0 Operator: PC

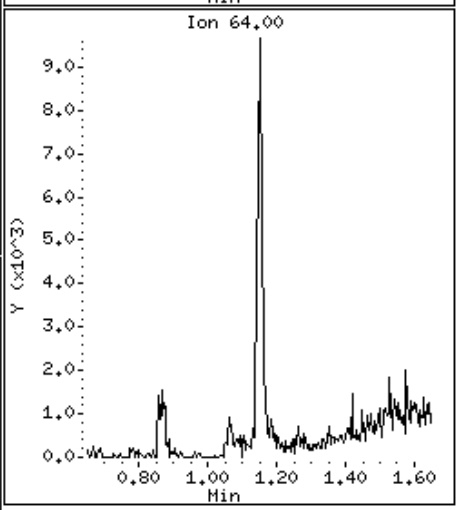
Column phase: DB624 Column diameter: 0.18

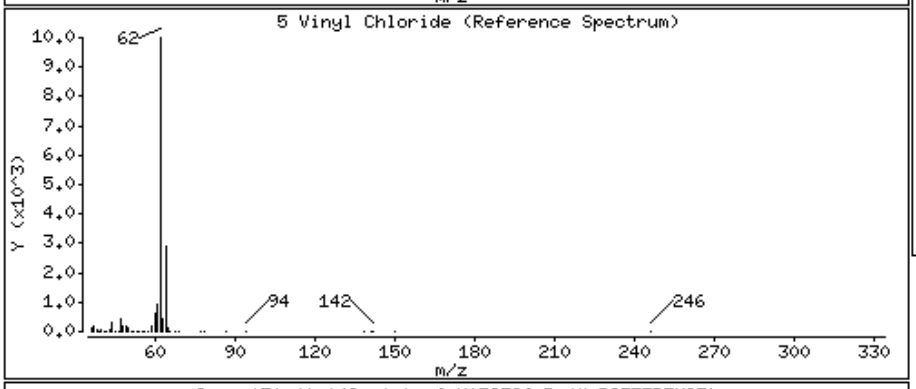
5 Vinyl Chloride Concentration: 19.54 ug/l

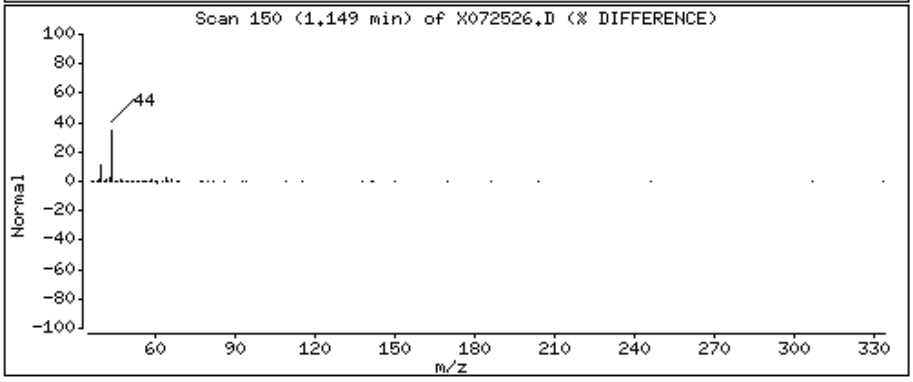












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072526.D Page 3

Date : 25-JUL-2023 18:40

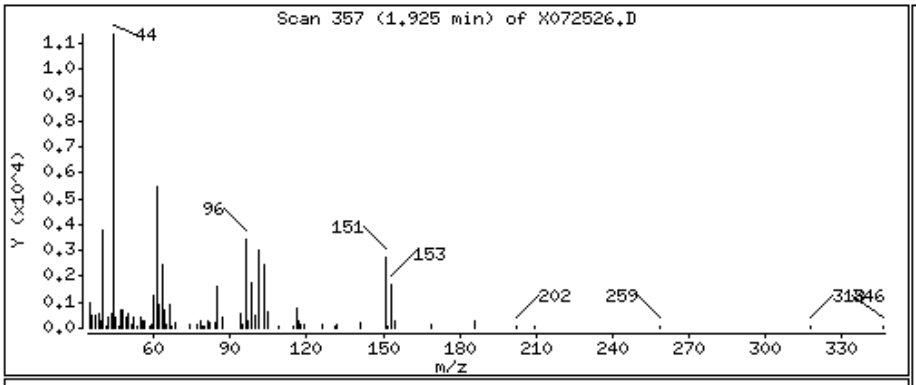
Client ID: HS23071289-05 Instrument: voa6.i

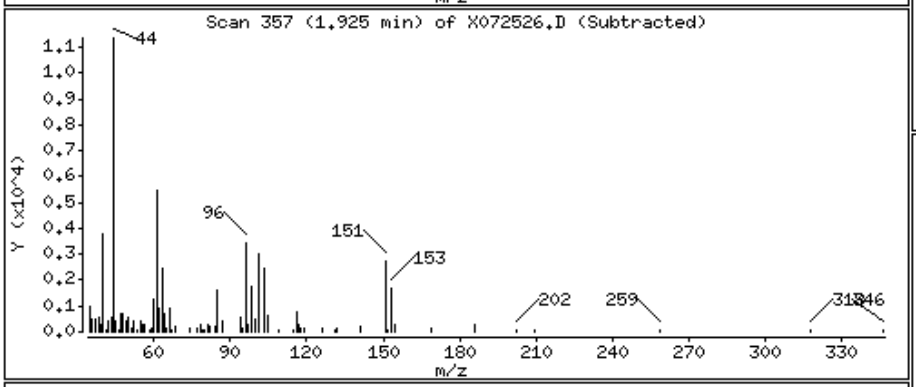
Sample Info: HS23071289-05;HS23071289-05;;;

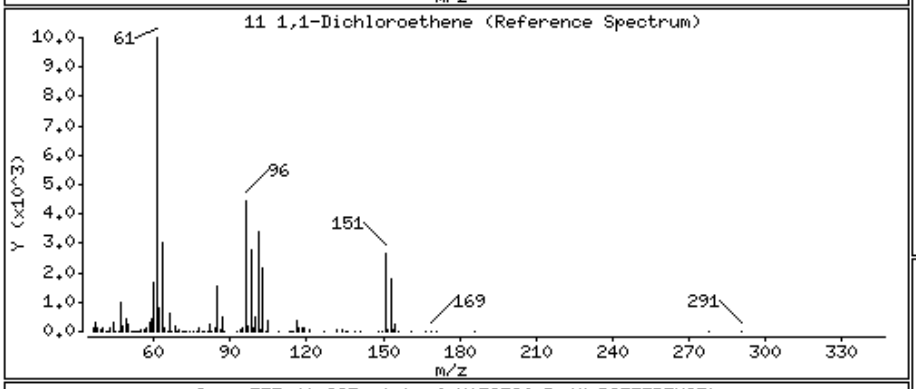
Purge Volume: 5.0 Operator: PC

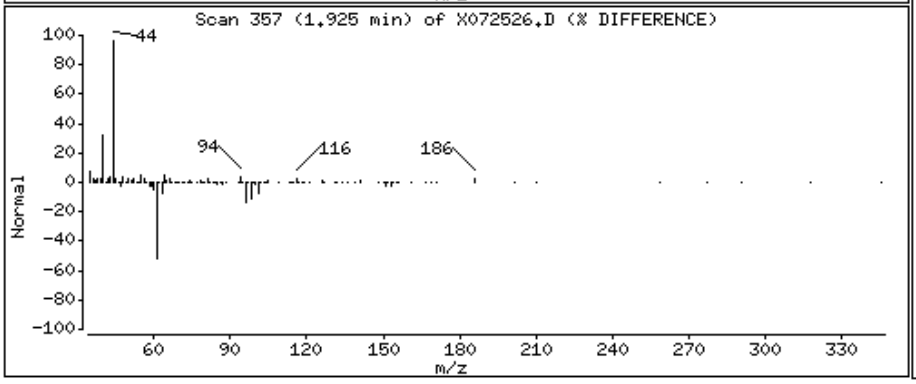
Column phase: DB624 Column diameter: 0.18

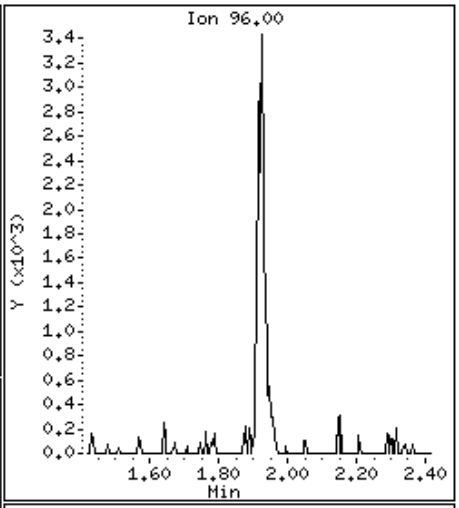
11 1,1-Dichloroethene Concentration: 6.01 ug/l

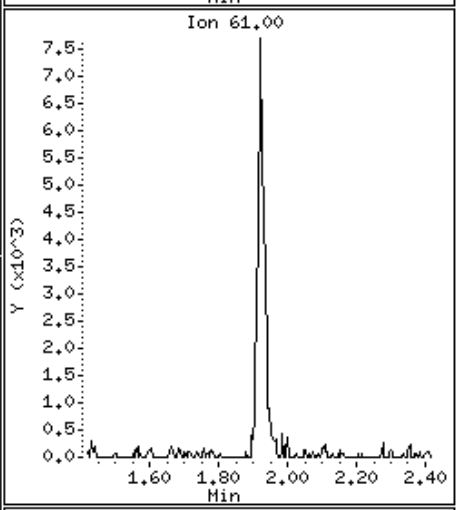


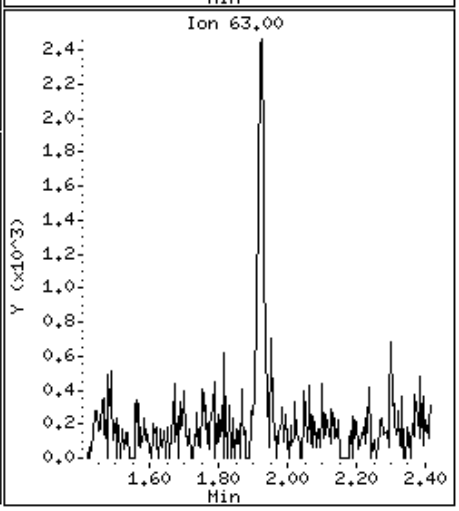












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072526.D

Date : 25-JUL-2023 18:40

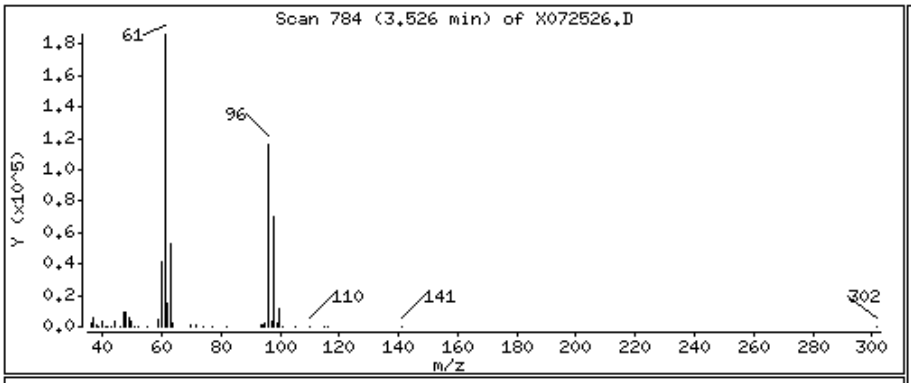
Client ID: HS23071289-05 Instrument: voa6.i

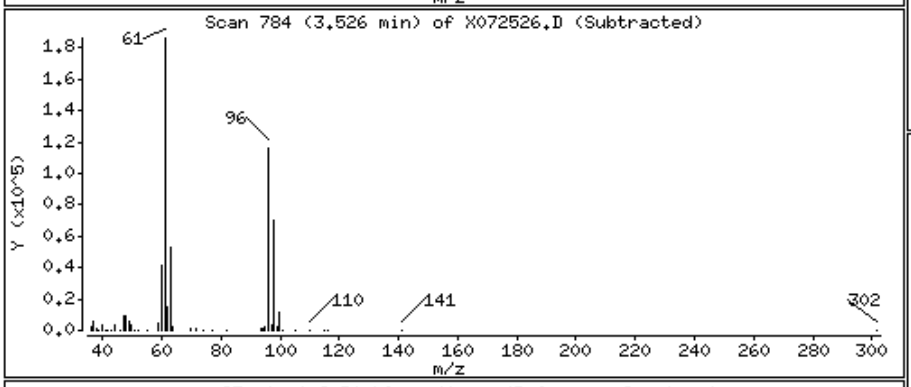
Sample Info: HS23071289-05;HS23071289-05;;;

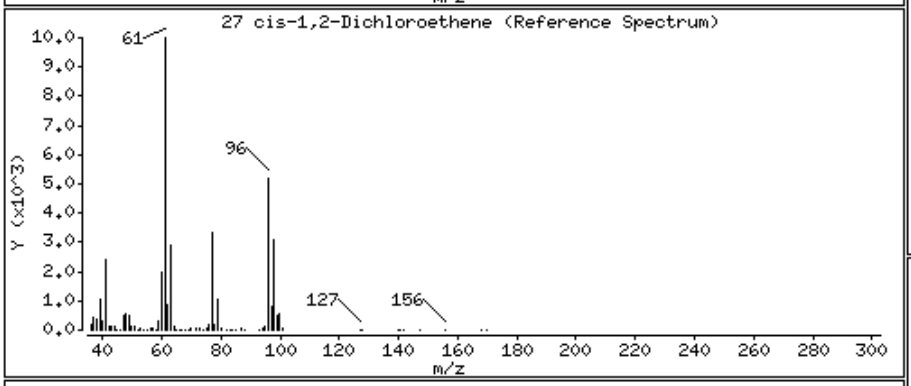
Purge Volume: 5.0 Operator: PC

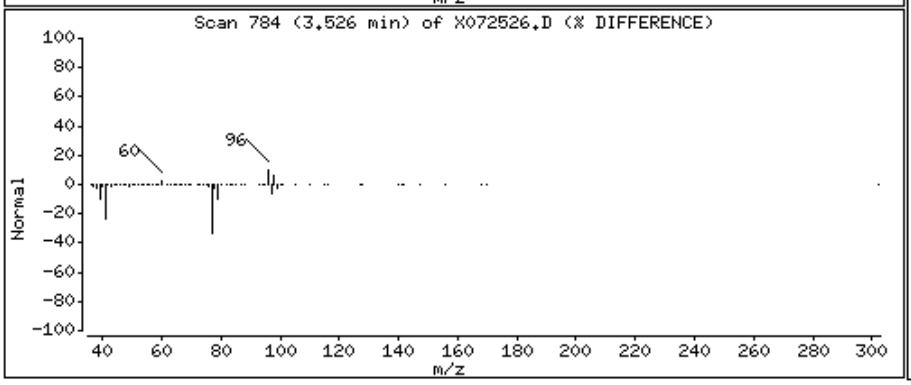
Column phase: DB624 Column diameter: 0.18

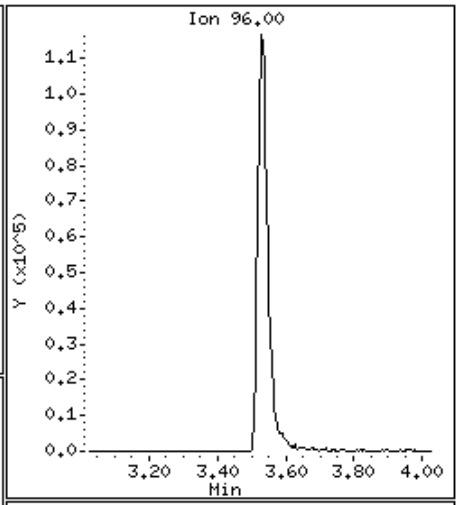
27 cis-1,2-Dichloroethene Concentration: 207.31 ug/l

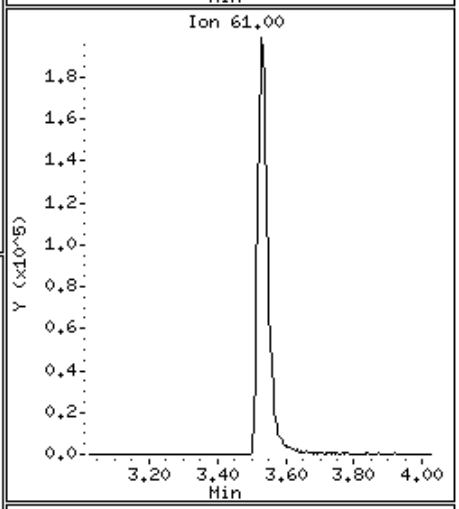


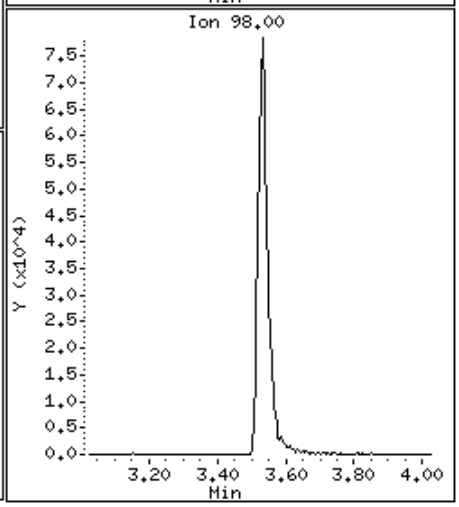












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072526.D Page 5

Date : 25-JUL-2023 18:40

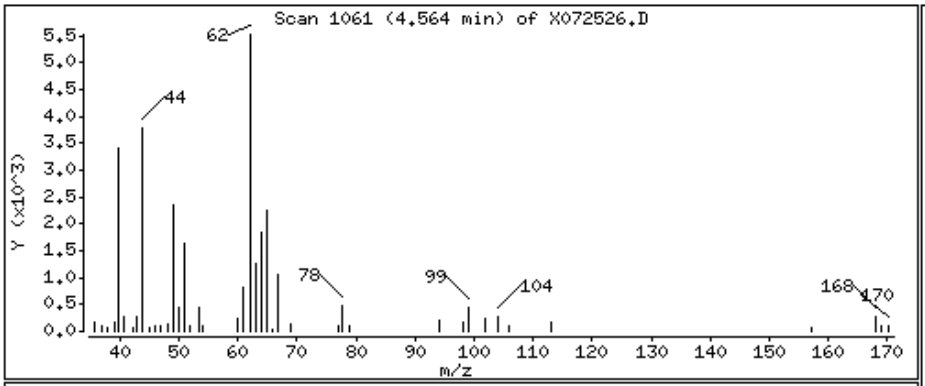
Client ID: HS23071289-05 Instrument: voa6.i

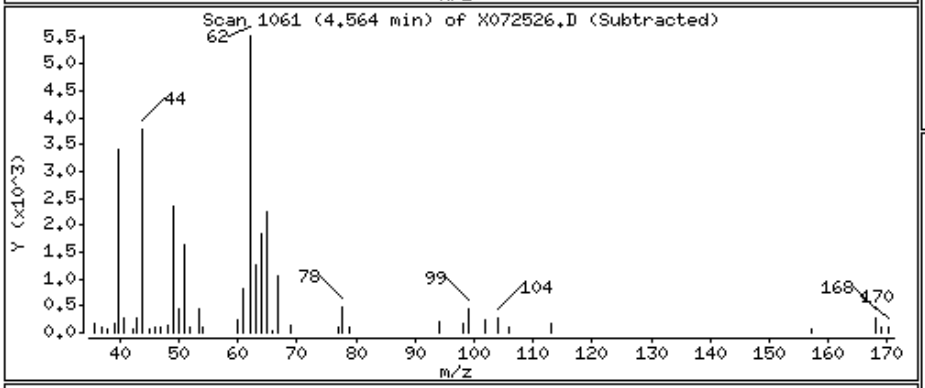
Sample Info: HS23071289-05;HS23071289-05;;;

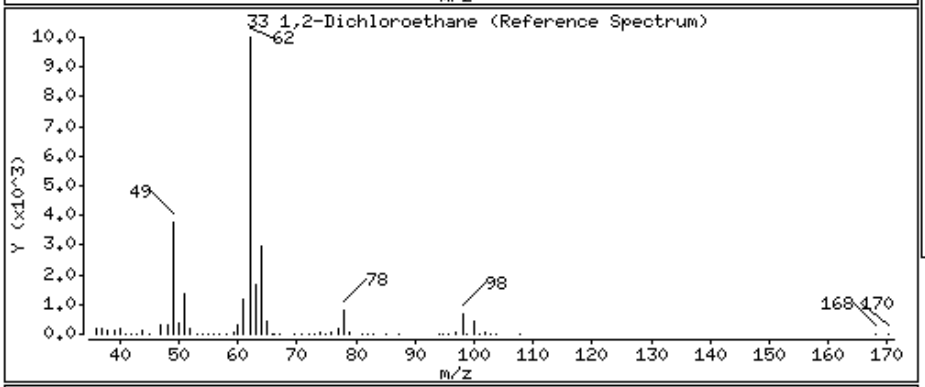
Purge Volume: 5.0 Operator: PC

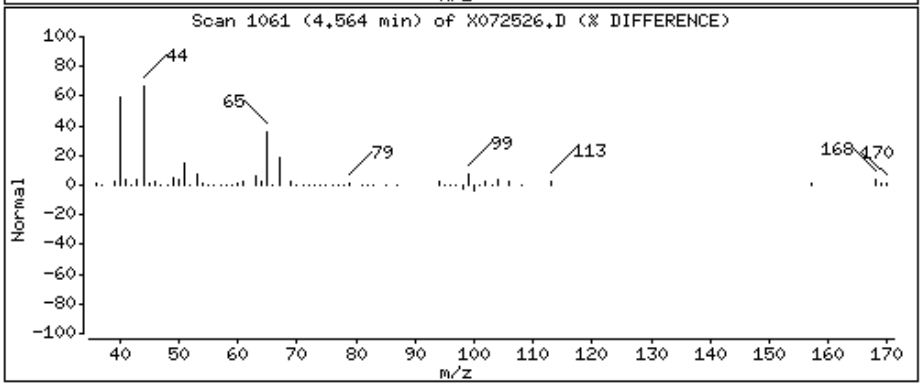
Column phase: DB624 Column diameter: 0.18

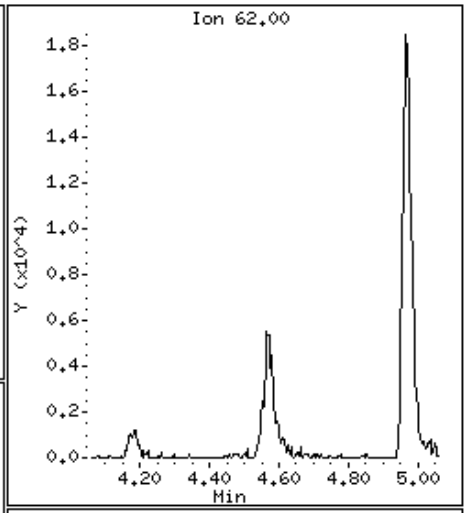
33 1,2-Dichloroethane Concentration: 6.37 ug/l

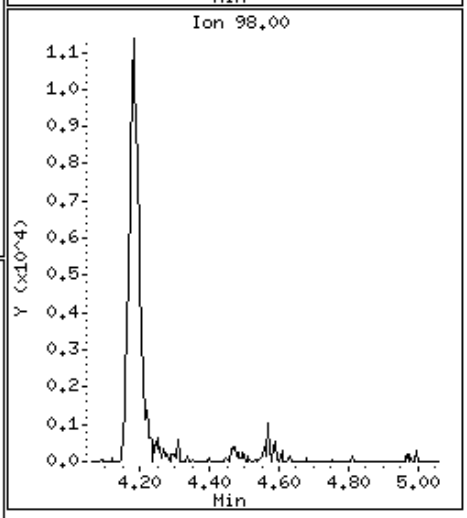












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072526.D

Date : 25-JUL-2023 18:40

Client ID: HS23071289-05

Instrument: voa6.i

Sample Info: HS23071289-05;HS23071289-05;;;

Purge Volume: 5.0

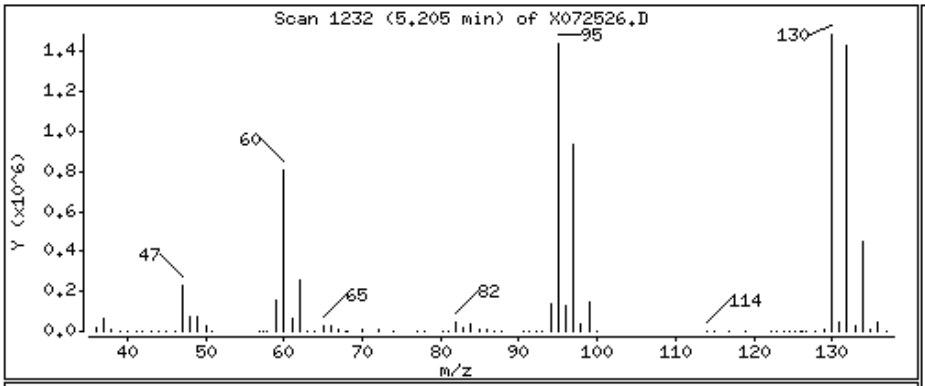
Operator: PC

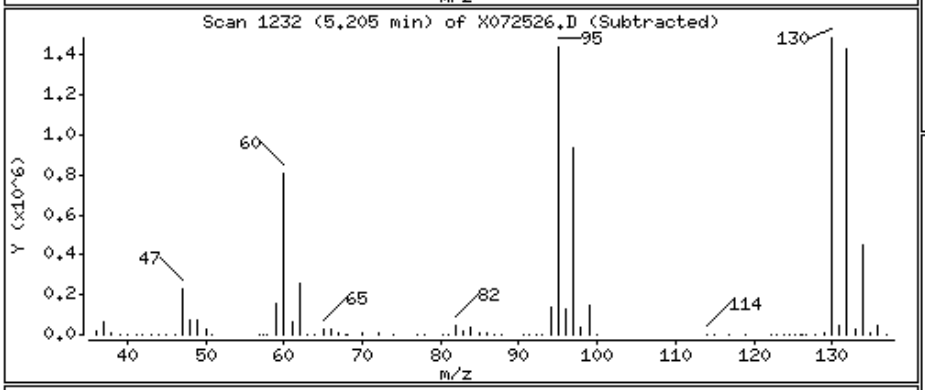
Column phase: DB624

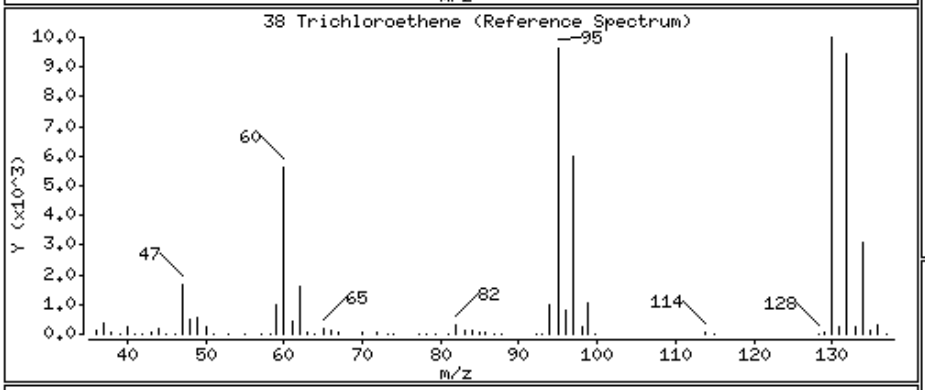
Column diameter: 0.18

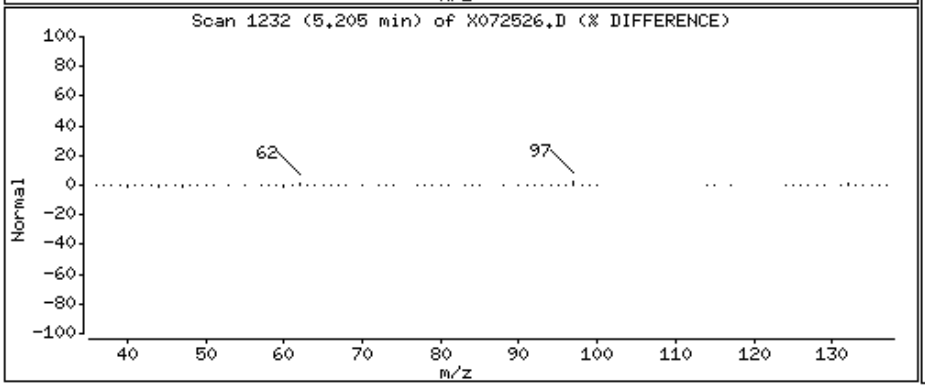
38 Trichloroethene

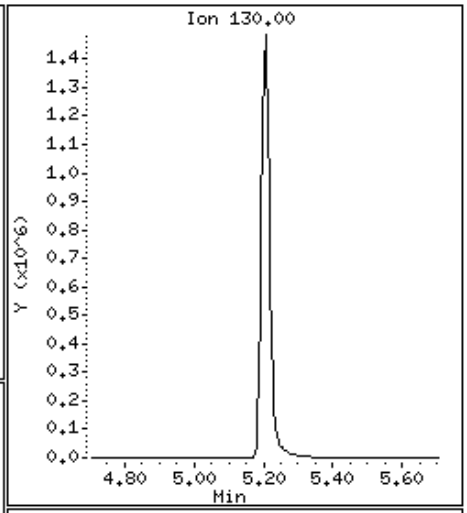
Concentration: 2253.85 ug/l

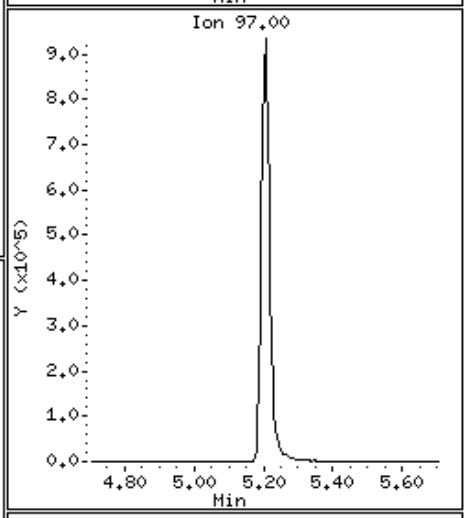


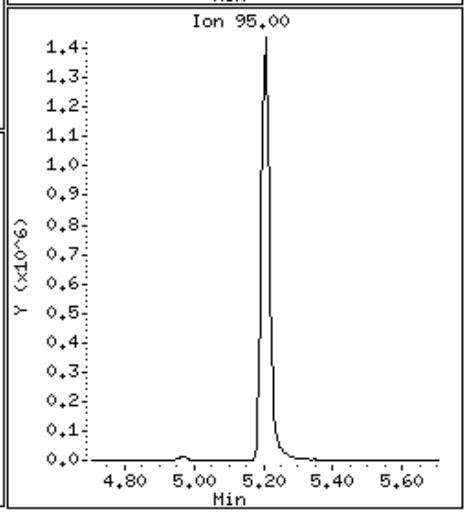












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072526.D
Inj Date : 25-JUL-2023 18:40
InstruID : voa6.i
LabSampID : HS23071289-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072527.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072527.D
Lab Smp Id: HS23071289-05 Client Smp ID: HS23071289-05
Inj Date : 25-JUL-2023 19:00
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-05;HS23071289-05;;;
Misc Info : V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 25
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	25.000	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)	442048	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.980)	220095	54.3915	54.39
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.071)	294948	58.3186	58.31(M)
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	668455	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	746128	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	979542	50.9899	50.98
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	350903	47.2104	47.21
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	374403	50.0000	
5 Vinyl Chloride	62	1.148	1.149	(0.275)	5627	0.98369	24.59(a)
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.845)	36900	7.73245	193.31
38 Trichloroethene	130	5.208	5.208	(1.049)	399837	88.4089	2210.22

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

01324303

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072527.D

Date : 25-JUL-2023 19:00

Client ID: HS23071289-05

Instrument: voa6.i

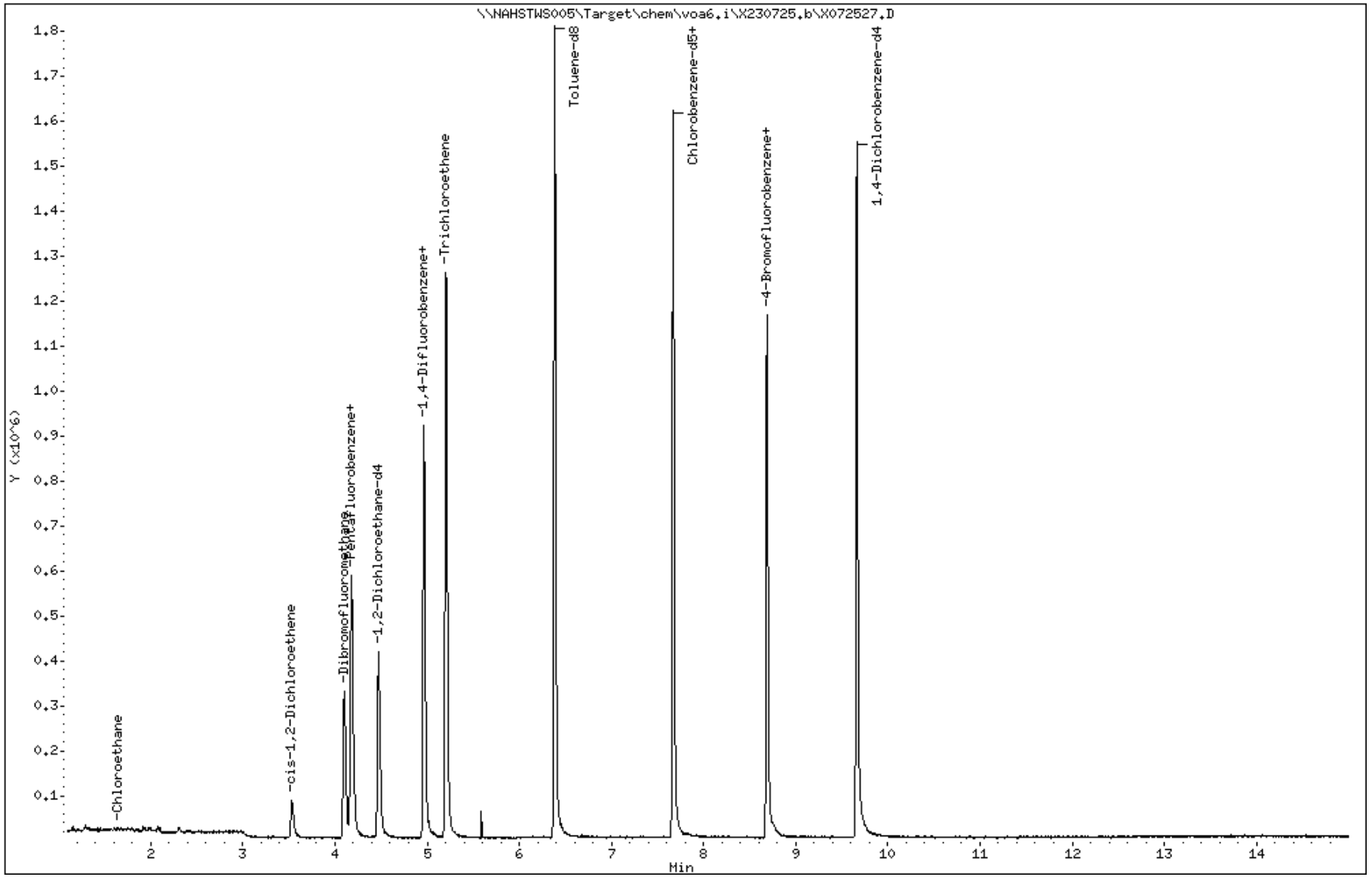
Sample Info: HS23071289-05;HS23071289-05;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Date : 25-JUL-2023 19:00

Client ID: HS23071289-05

Instrument: voa6.i

Sample Info: HS23071289-05;HS23071289-05;;;

Purge Volume: 5.0

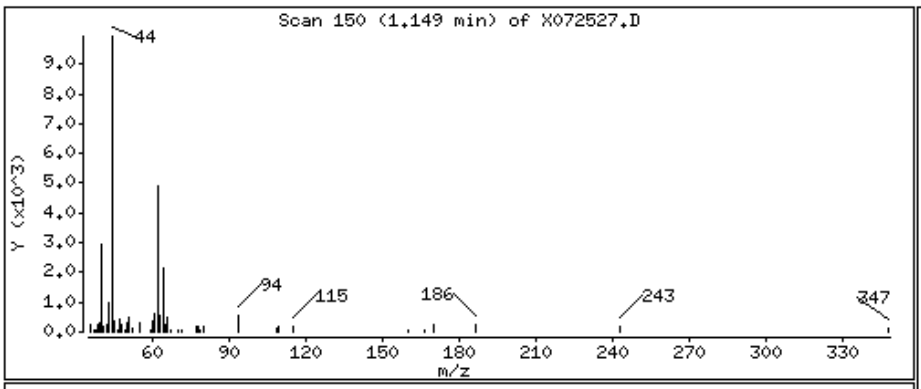
Operator: PC

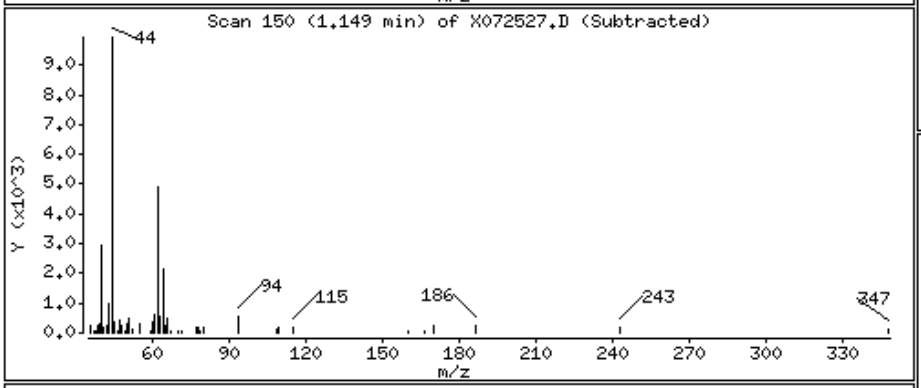
Column phase: DB624

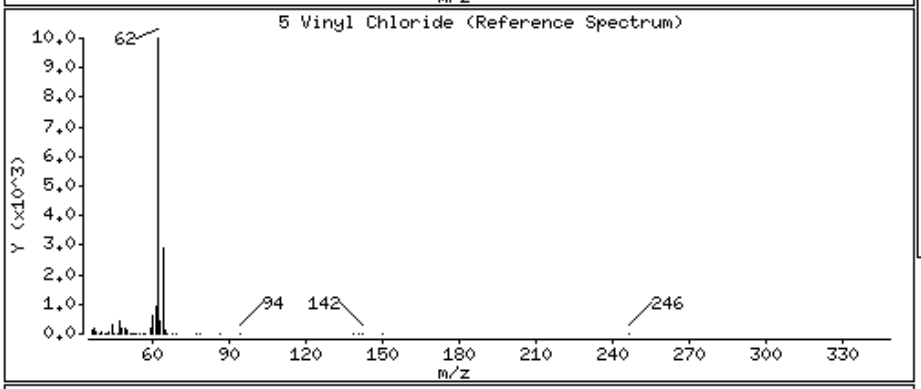
Column diameter: 0.18

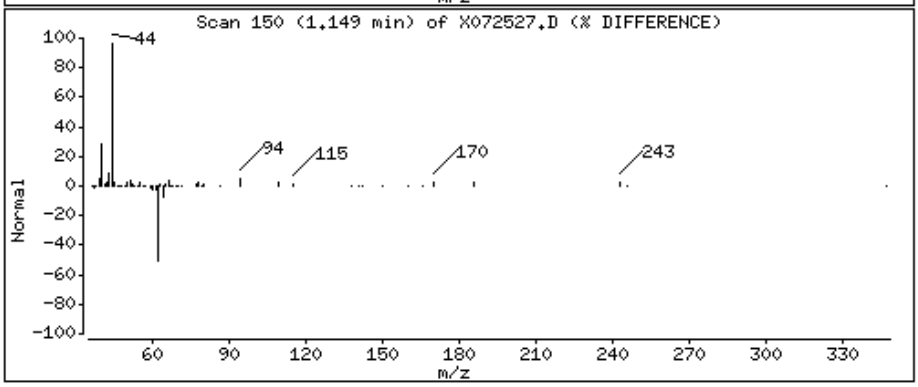
5 Vinyl Chloride

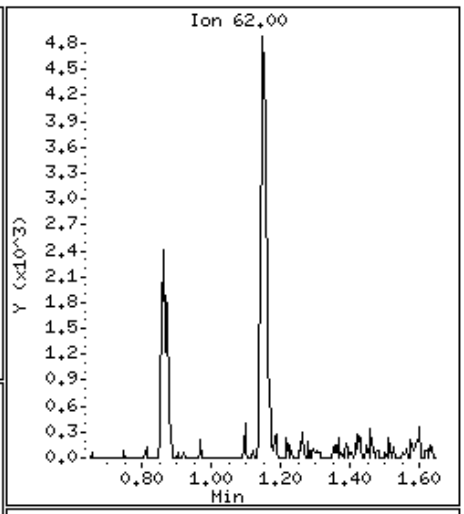
Concentration: 24.59 ug/l

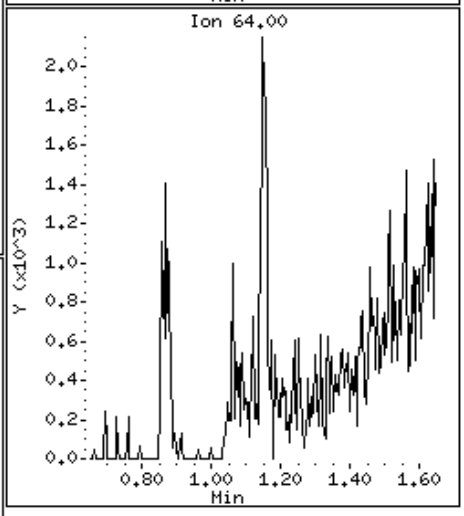












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072527.D Page 3

Date : 25-JUL-2023 19:00

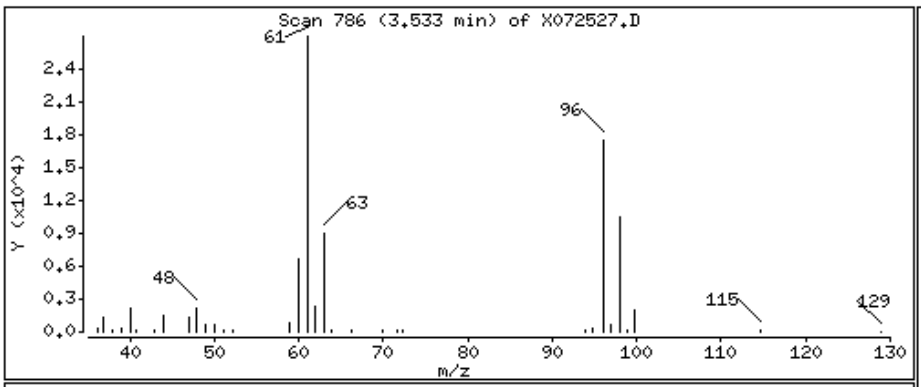
Client ID: HS23071289-05 Instrument: voa6.i

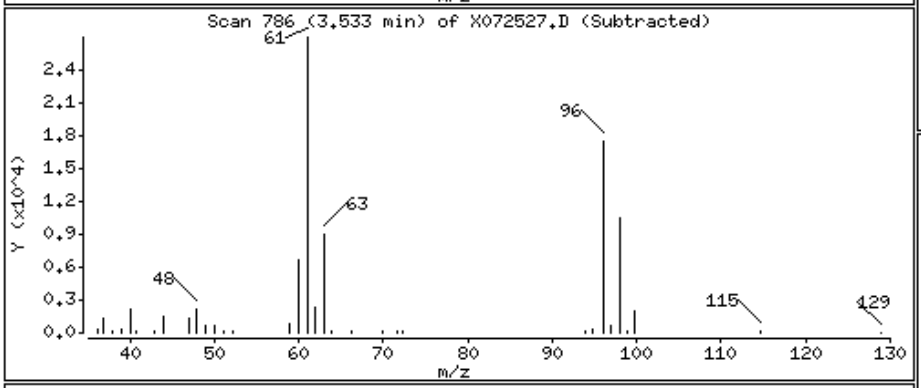
Sample Info: HS23071289-05;HS23071289-05;;;

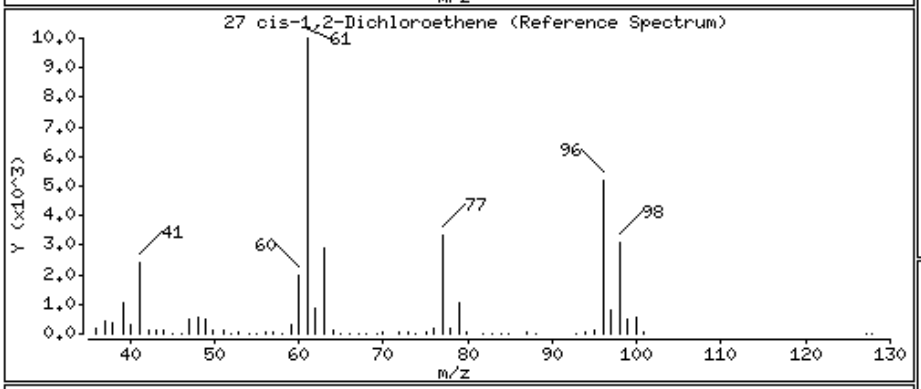
Purge Volume: 5.0 Operator: PC

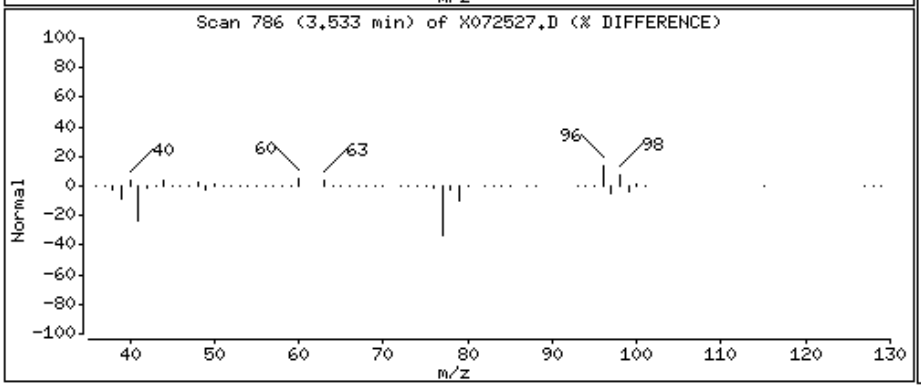
Column phase: DB624 Column diameter: 0.18

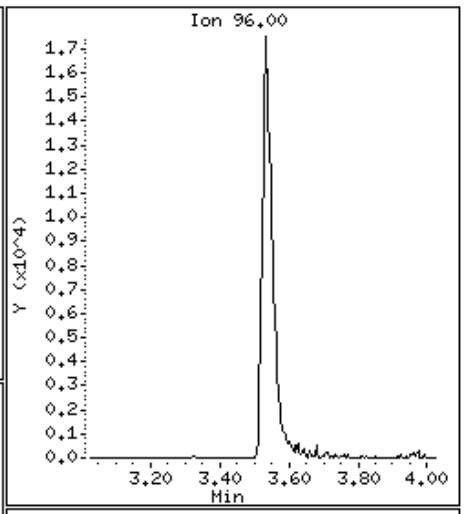
27 cis-1,2-Dichloroethene Concentration: 193.31 ug/l

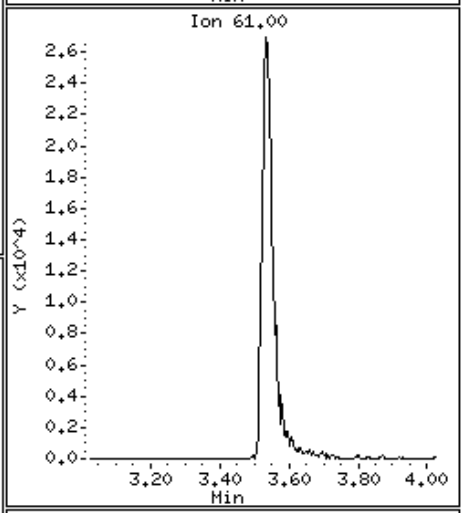


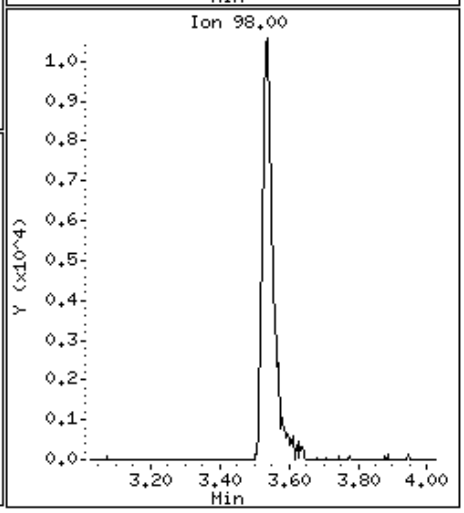












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072527.D

Date : 25-JUL-2023 19:00

Client ID: HS23071289-05

Instrument: voa6.i

Sample Info: HS23071289-05;HS23071289-05;;;

Purge Volume: 5.0

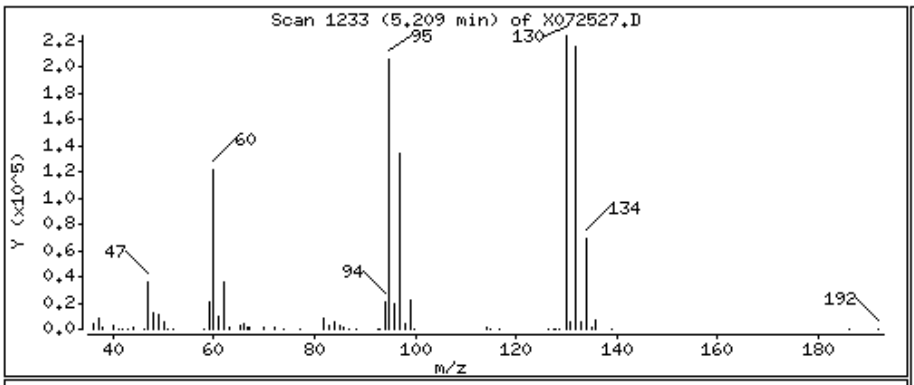
Operator: PC

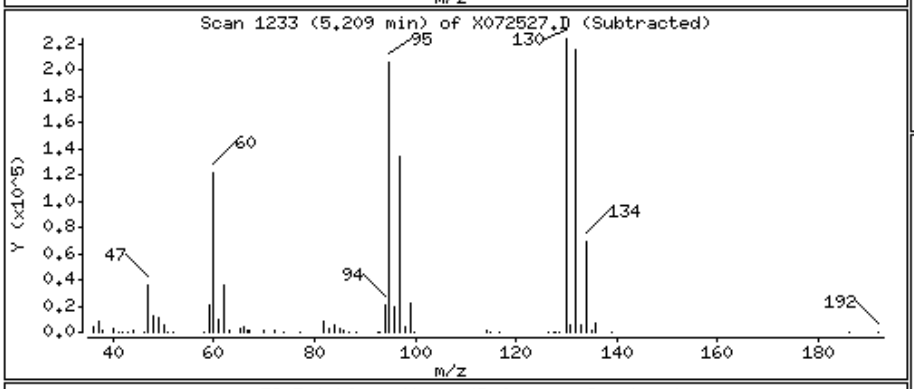
Column phase: DB624

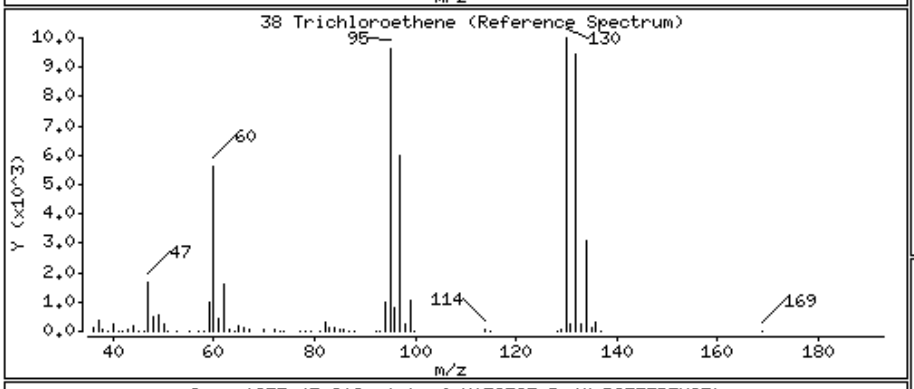
Column diameter: 0.18

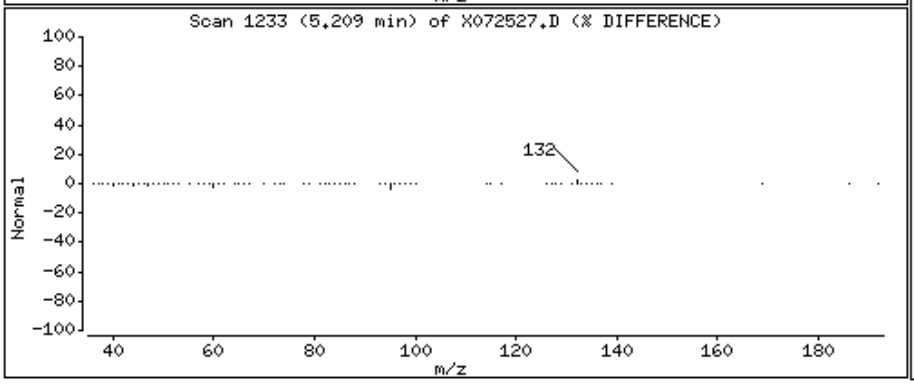
38 Trichloroethene

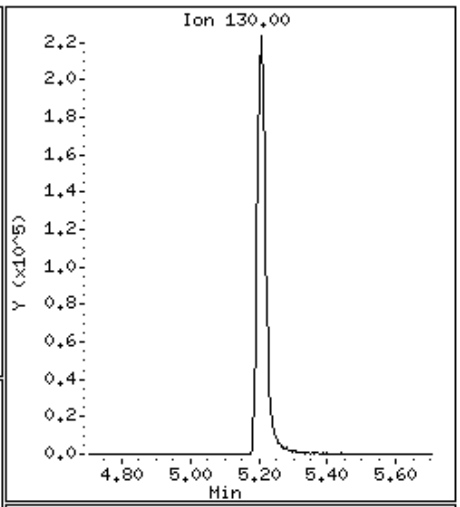
Concentration: 2210.22 ug/l

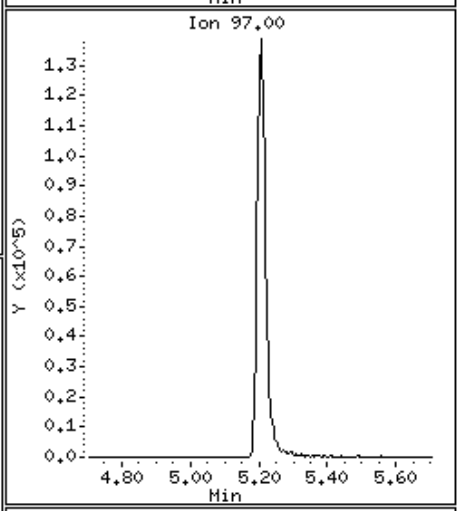


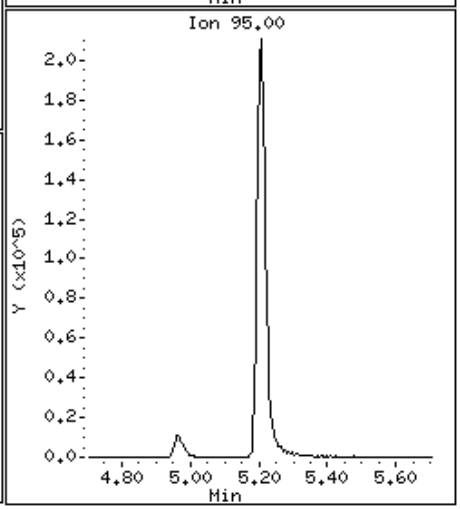












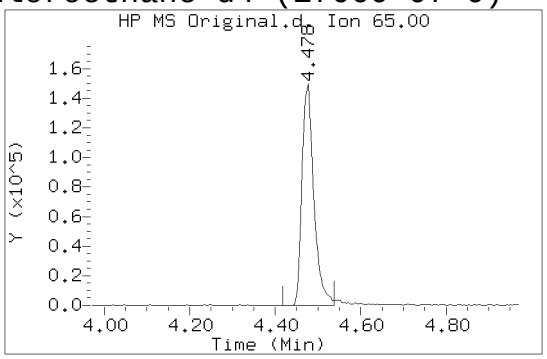
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072527.D
Inj Date : 25-JUL-2023 19:00
InstruID : voa6.i
LabSampID : HS23071289-05

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

MASS
65
AREA
294948
HEIGHT
149771
27-Jul-2023
13:09
linh
pham



AFTER

MASS
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AREA
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HEIGHT
149771
27-Jul-2023
13:09
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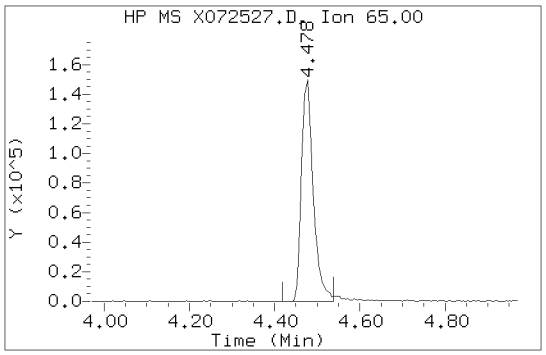
pham



BEFORE

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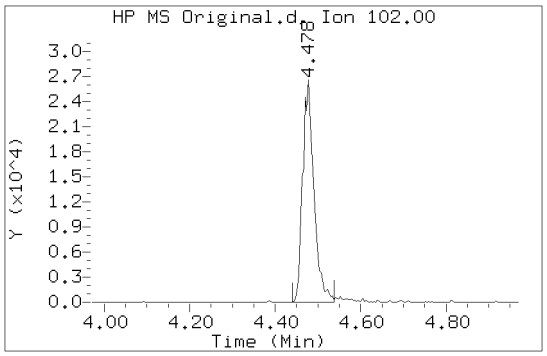

AFTER

MASS
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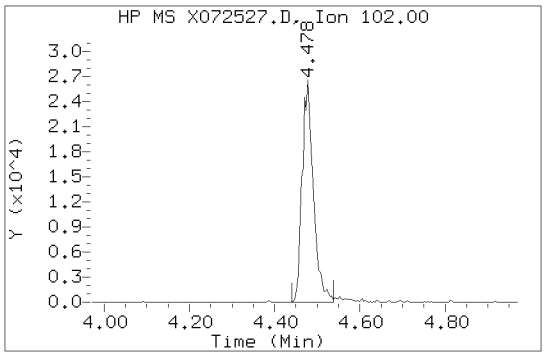
AREA
49759
HEIGHT
26632
27-Jul-2023
13:09
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072528.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072528.D
Lab Smp Id: HS23071289-01 Client Smp ID: HS23071289-01
Inj Date : 25-JUL-2023 19:21
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-01;HS23071289-01;;;
Misc Info : V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 26
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	5.000	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)	576985	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.099	(0.981)	289039	54.7292	54.72
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	376456	57.0133	57.01
* 36 1,4-Difluorobenzene	114	4.968	4.965	(1.000)	884032	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	764632	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1010729	51.3401	51.34
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	381347	50.0906	50.09
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	399709	50.0000	
5 Vinyl Chloride	62	1.148	1.149	(0.275)	205565	27.5318	137.65
11 1,1-Dichloroethene	96	1.924	1.921	(0.460)	12955	3.06479	15.32(a)
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.844)	297093	47.6967	238.48
38 Trichloroethene	130	5.205	5.208	(1.048)	3080836	515.093	2575.46(A)

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.

01324309

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072528.D

Date : 25-JUL-2023 19:21

Client ID: HS23071289-01

Instrument: voa6.i

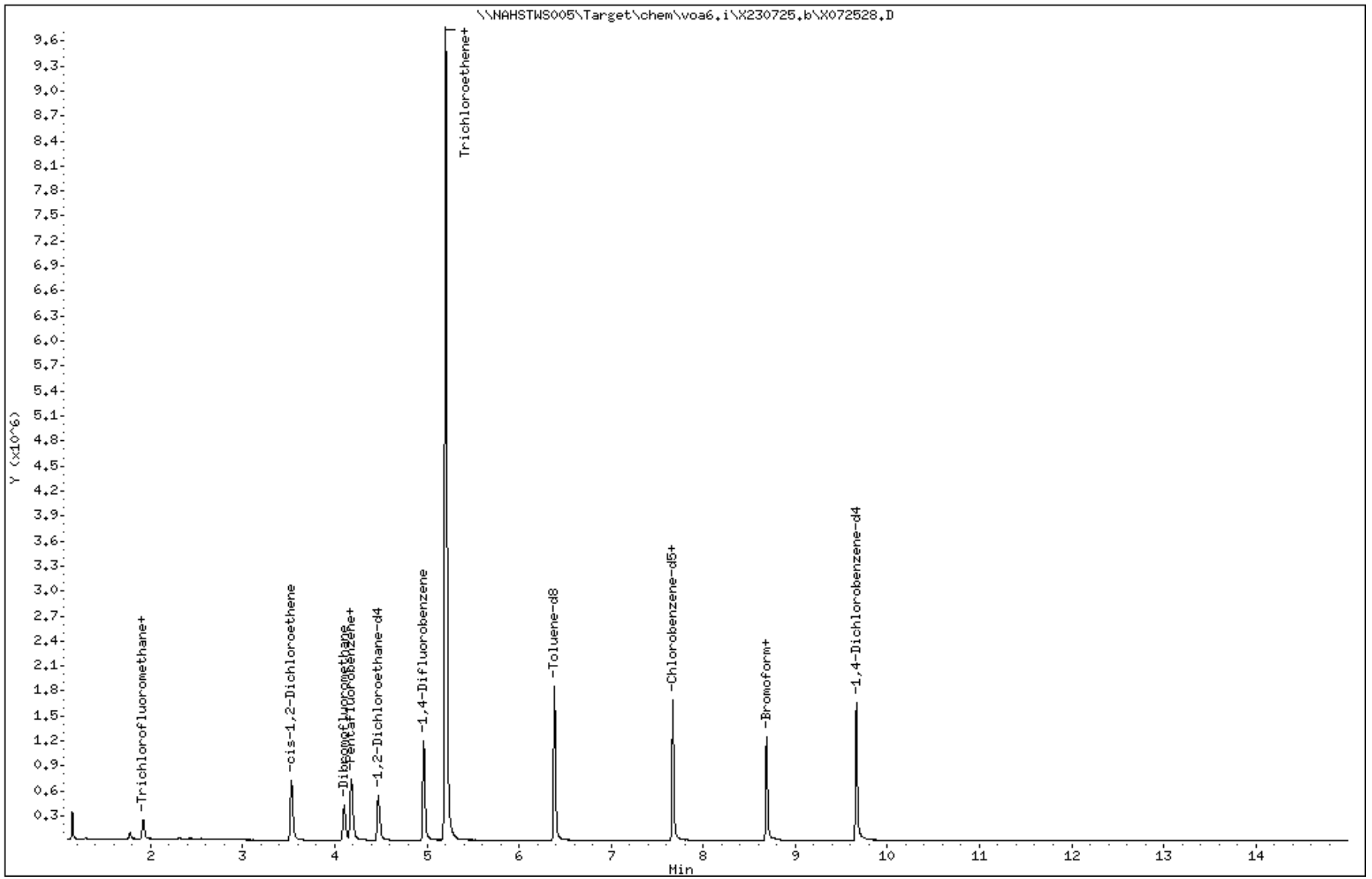
Sample Info: HS23071289-01;HS23071289-01;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072528.D

Date : 25-JUL-2023 19:21

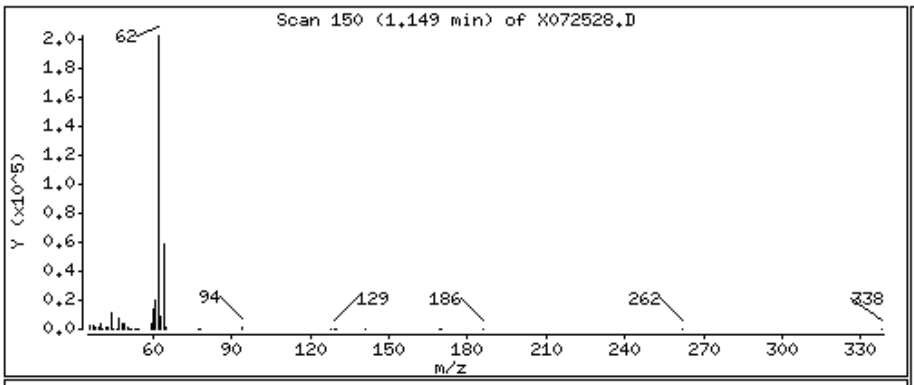
Client ID: HS23071289-01 Instrument: voa6.i

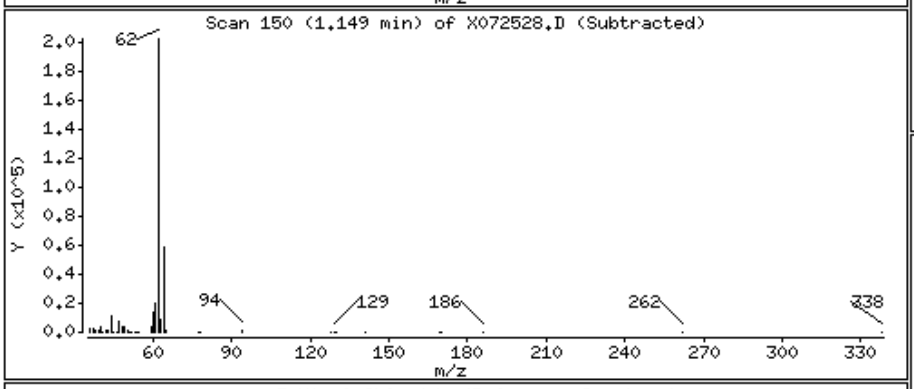
Sample Info: HS23071289-01;HS23071289-01;;;

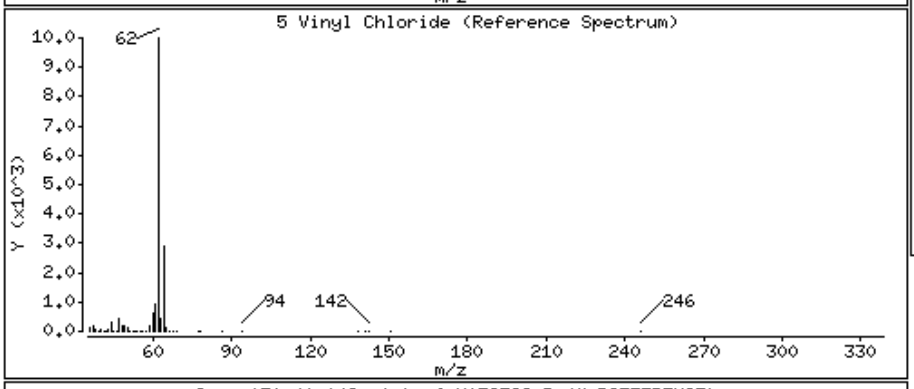
Purge Volume: 5.0 Operator: PC

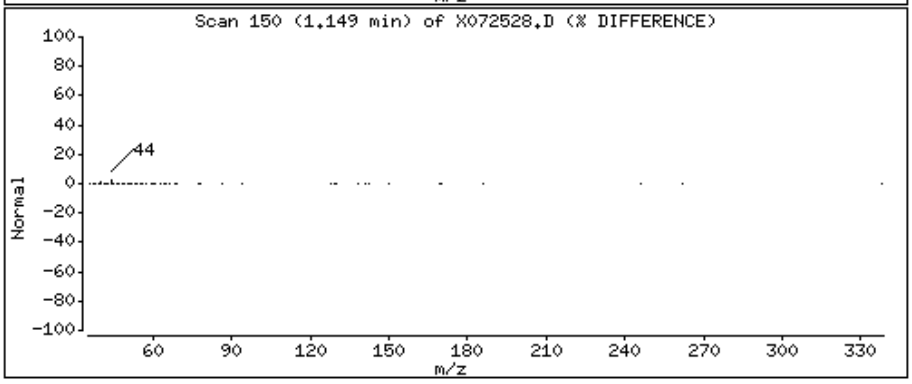
Column phase: DB624 Column diameter: 0.18

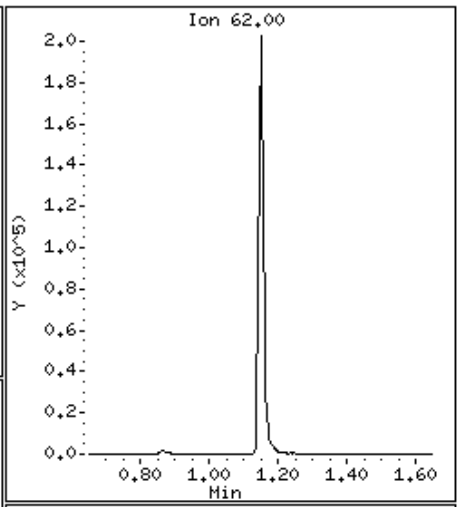
5 Vinyl Chloride Concentration: 137.65 ug/l

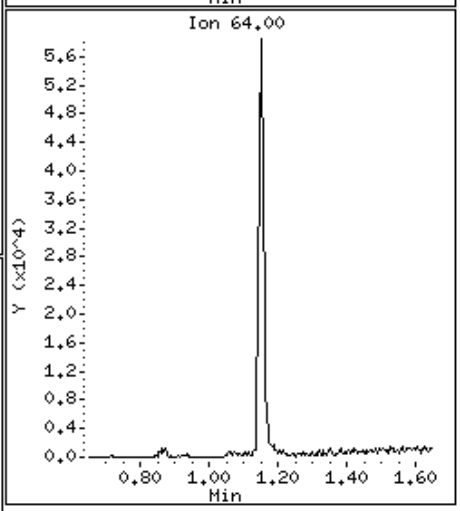












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072528.D Page 3

Date : 25-JUL-2023 19:21

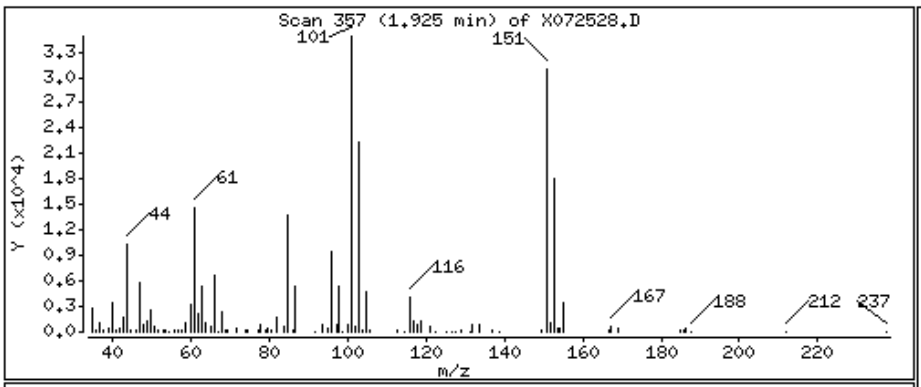
Client ID: HS23071289-01 Instrument: voa6.i

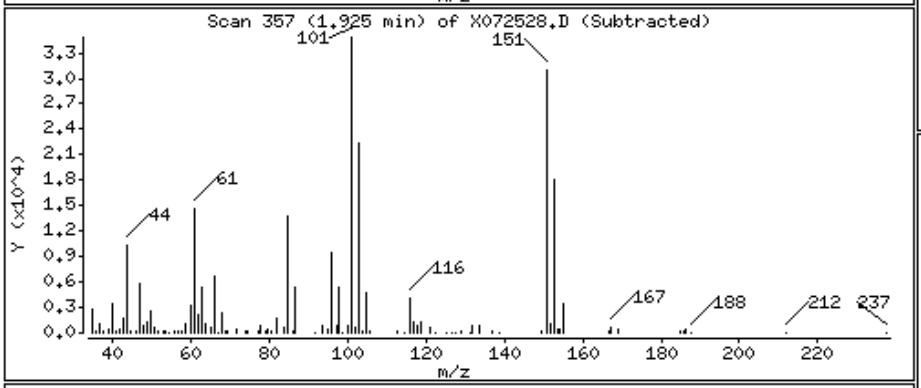
Sample Info: HS23071289-01;HS23071289-01;;;

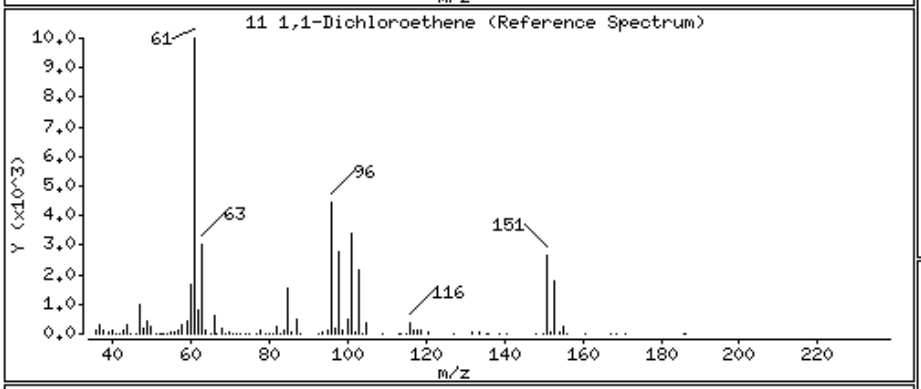
Purge Volume: 5.0 Operator: PC

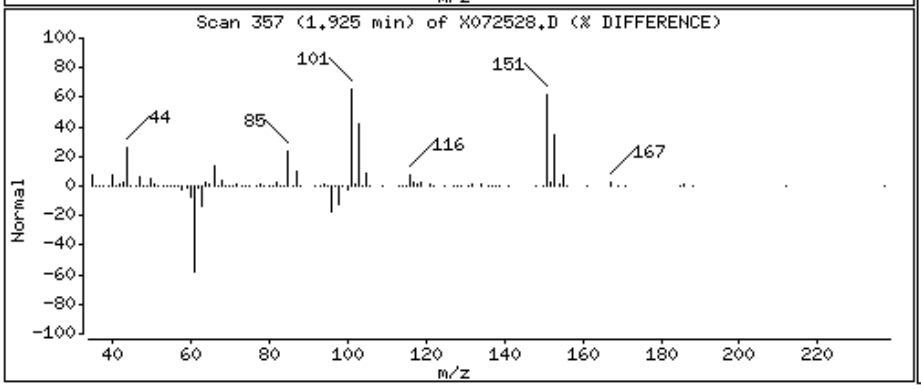
Column phase: DB624 Column diameter: 0.18

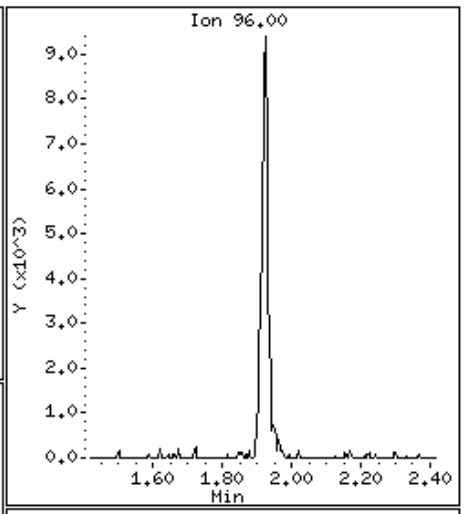
11 1,1-Dichloroethene Concentration: 15.32 ug/l

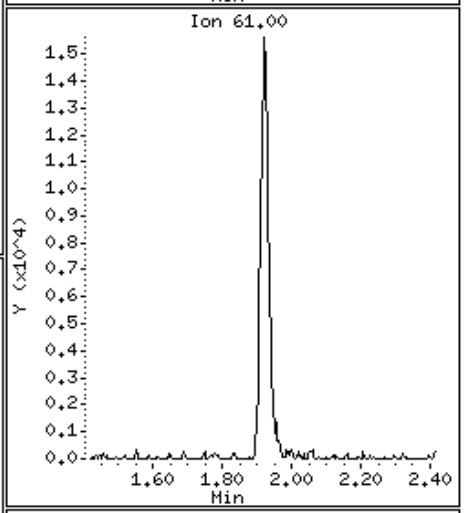


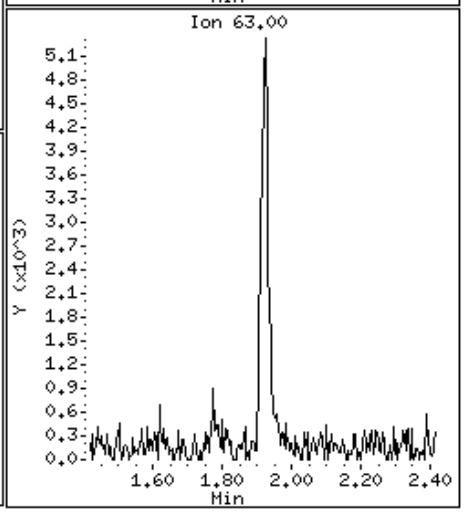












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072528.D Page 4

Date : 25-JUL-2023 19:21

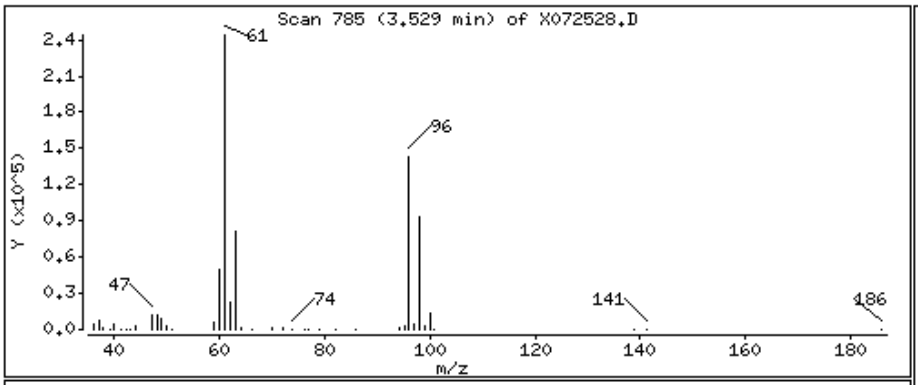
Client ID: HS23071289-01 Instrument: voa6.i

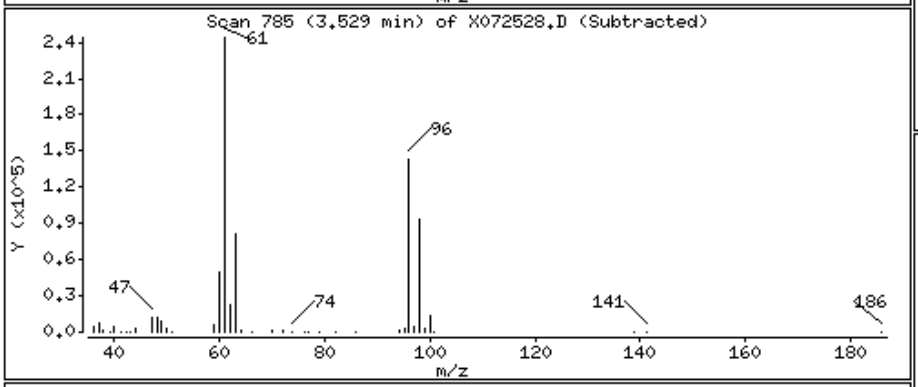
Sample Info: HS23071289-01;HS23071289-01;;;

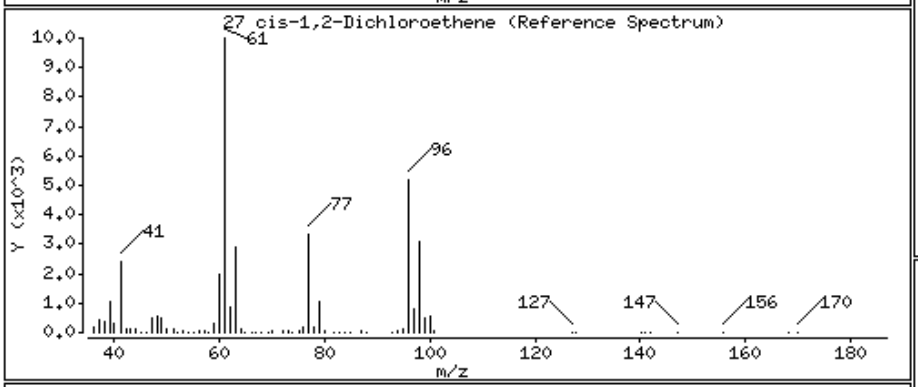
Purge Volume: 5.0 Operator: PC

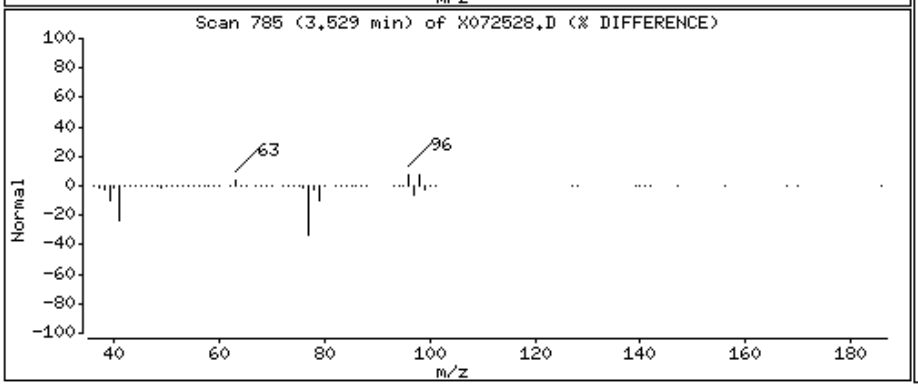
Column phase: DB624 Column diameter: 0.18

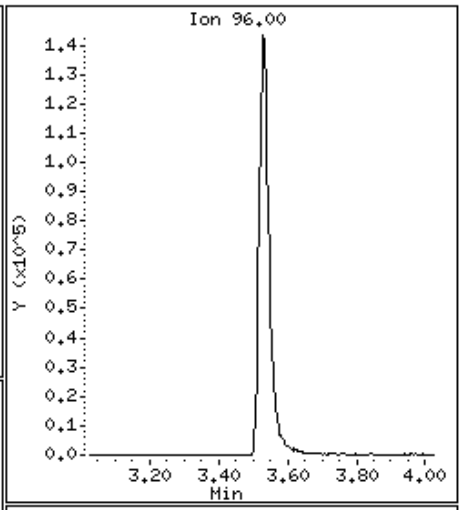
27 cis-1,2-Dichloroethene Concentration: 238.48 ug/l

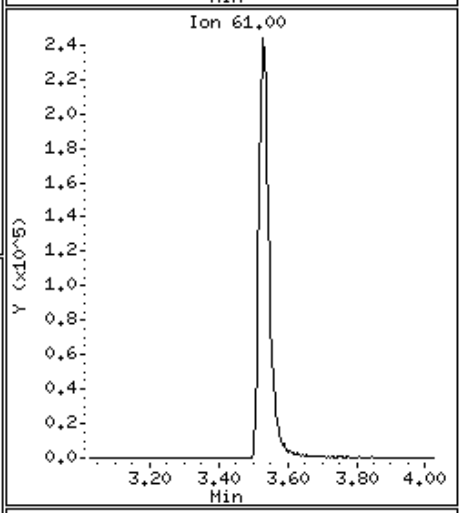


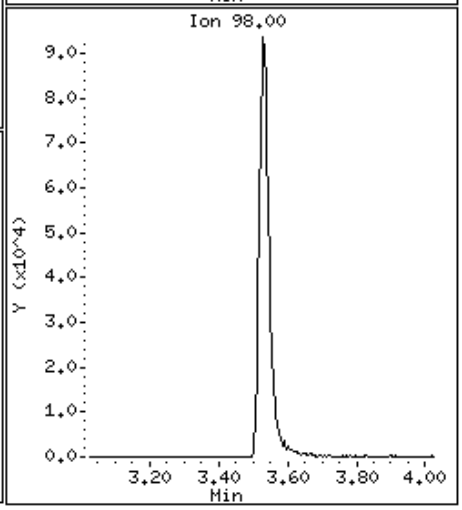












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072528.D Page 5

Date : 25-JUL-2023 19:21

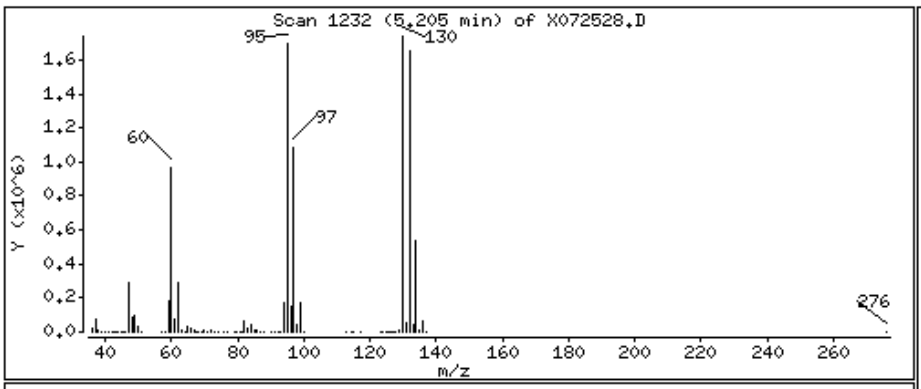
Client ID: HS23071289-01 Instrument: voa6.i

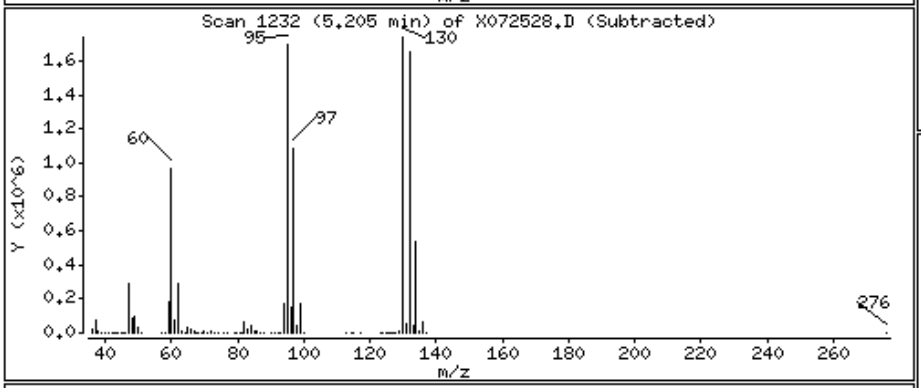
Sample Info: HS23071289-01;HS23071289-01;;;

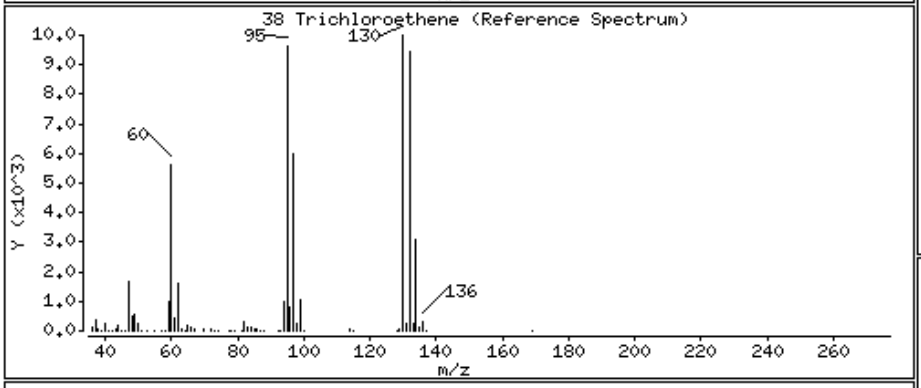
Purge Volume: 5.0 Operator: PC

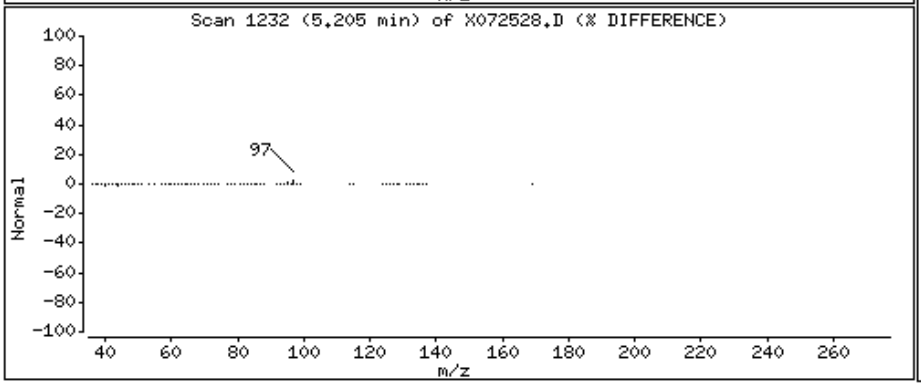
Column phase: DB624 Column diameter: 0.18

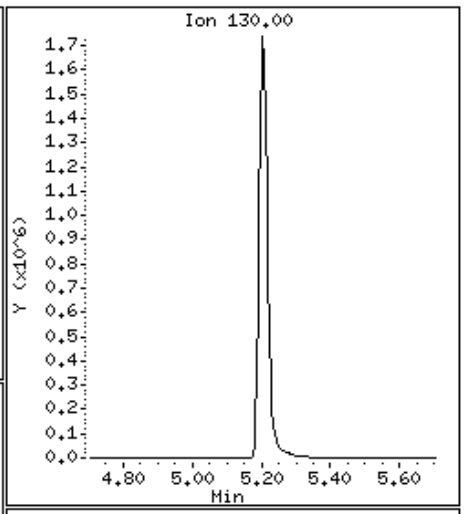
38 Trichloroethene Concentration: 2575.46 ug/l

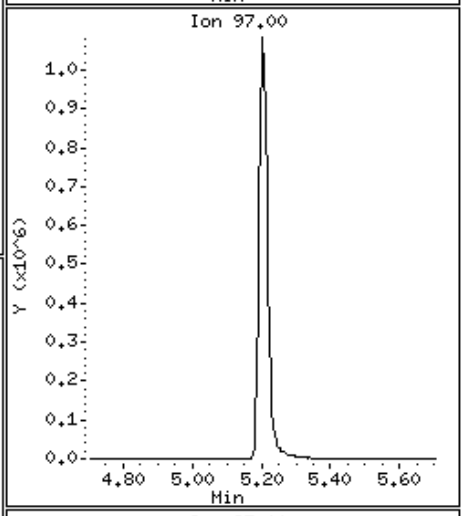


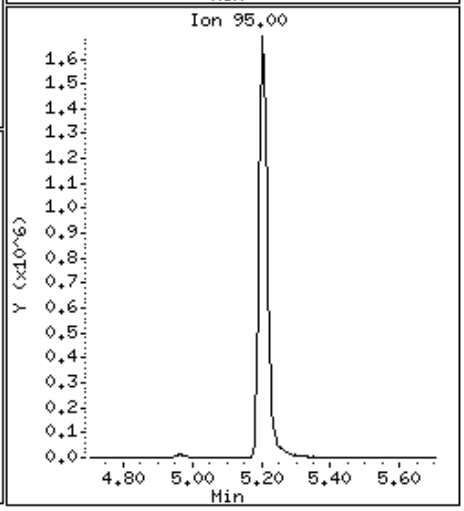












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072528.D
Inj Date : 25-JUL-2023 19:21
InstruID : voa6.i
LabSampID : HS23071289-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072529.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072529.D
Lab Smp Id: HS23071289-02 Client Smp ID: HS23071289-02
Inj Date : 25-JUL-2023 19:41
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-02;HS23071289-02;;;
Misc Info : V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 27
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

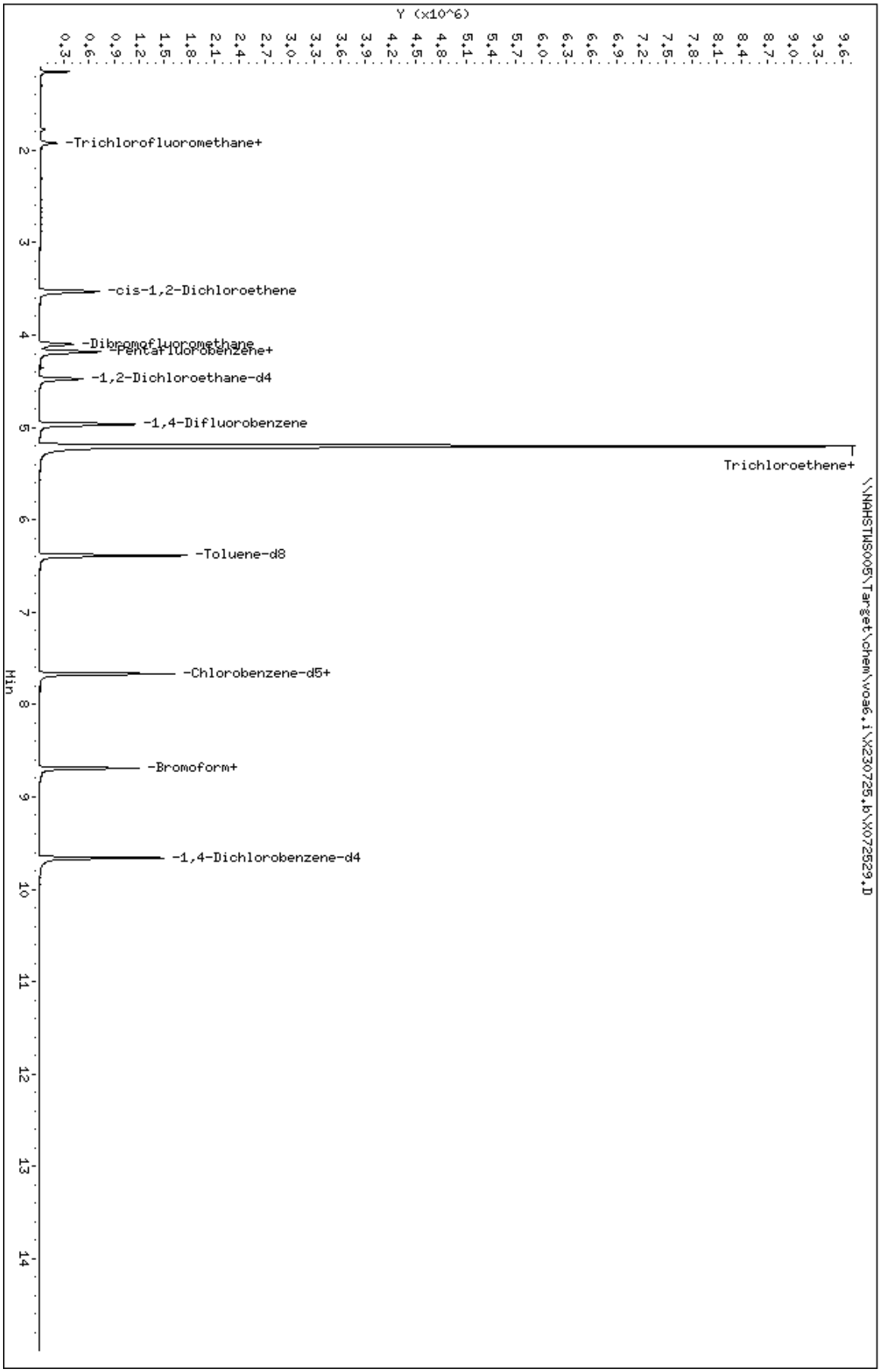
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.181	(1.000)	548257	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.099	(0.981)	273249	54.4466	54.44
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	356984	56.8959	56.89
* 36 1,4-Difluorobenzene	114	4.969	4.965	(1.000)	838923	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	729438	50.0000	
$ 48 Toluene-d8	98	6.386	6.385	(0.833)	970050	51.6512	51.65
$ 69 4-Bromofluorobenzene	95	8.691	8.687	(1.133)	350101	48.1890	48.18
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	364601	50.0000	
5 Vinyl Chloride	62	1.149	1.149	(0.275)	206093	29.0489	145.24
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	11742	2.92338	14.61(a)
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.844)	300946	50.8469	254.23
38 Trichloroethene	130	5.205	5.208	(1.048)	3040200	535.630	2678.15(A)

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: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072529.D
Date : 25-JUL-2023 19:41
Client ID: HS230712B9-02
Sample Info: HS230712B9-02;HS230712B9-02;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072529.D

Date : 25-JUL-2023 19:41

Client ID: HS23071289-02

Instrument: voa6.i

Sample Info: HS23071289-02;HS23071289-02;;;

Purge Volume: 5.0

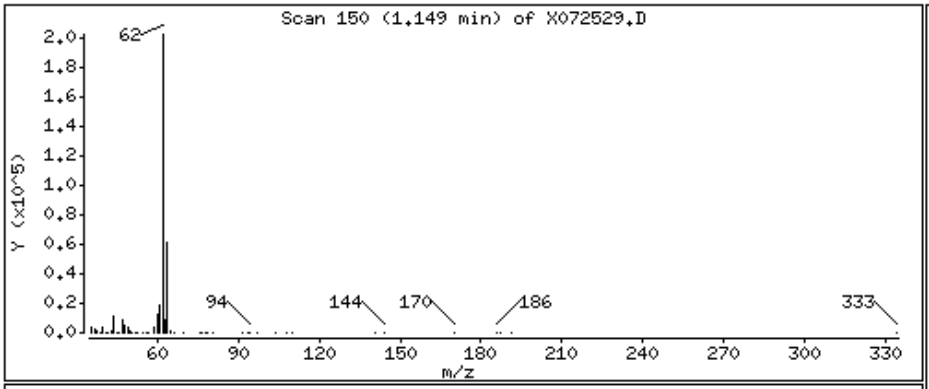
Operator: PC

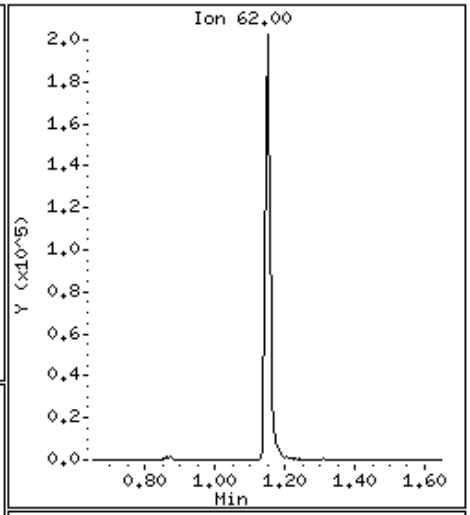
Column phase: DB624

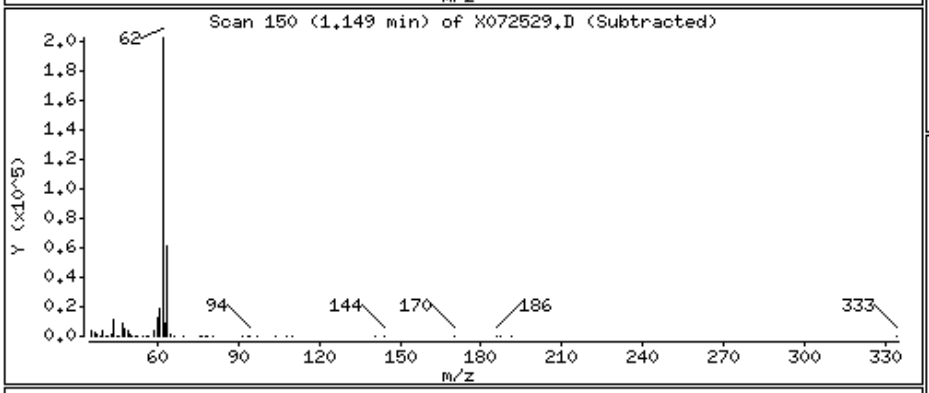
Column diameter: 0.18

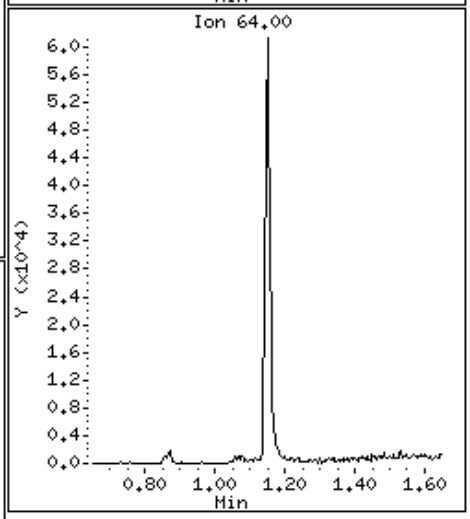
5 Vinyl Chloride

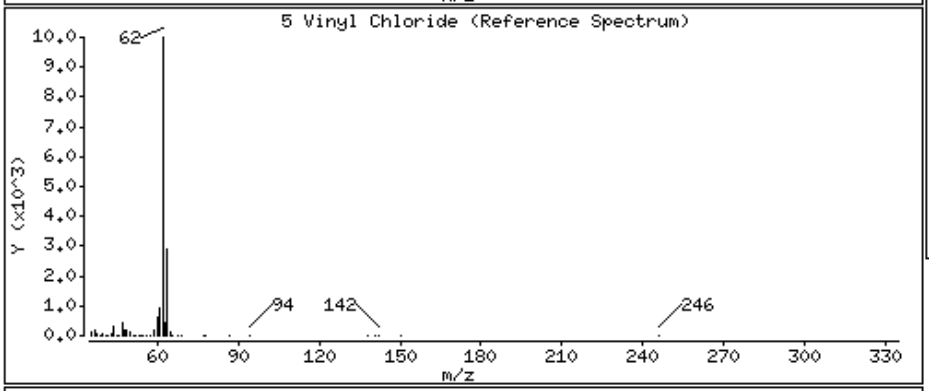
Concentration: 145.24 ug/l

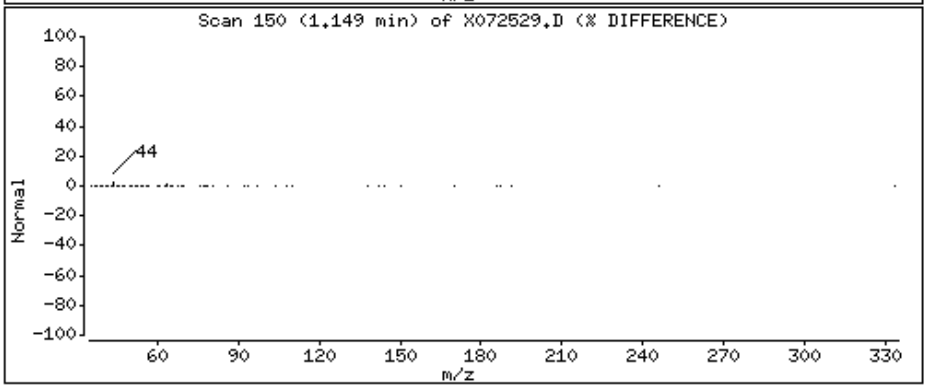












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072529.D

Date : 25-JUL-2023 19:41

Client ID: HS23071289-02

Instrument: voa6.i

Sample Info: HS23071289-02;HS23071289-02;;;

Purge Volume: 5.0

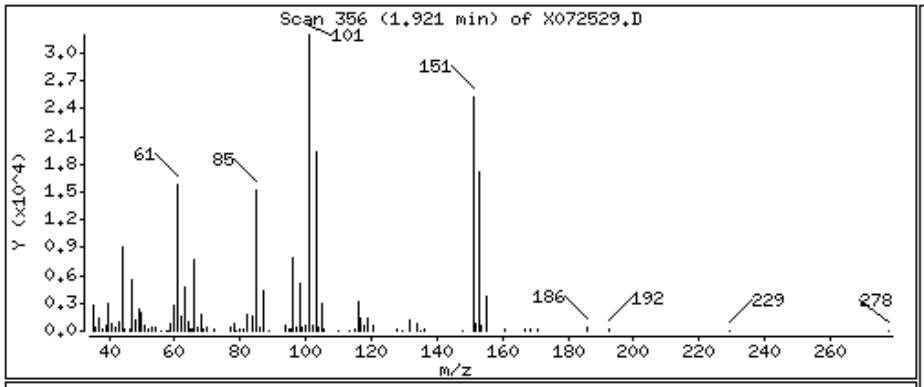
Operator: PC

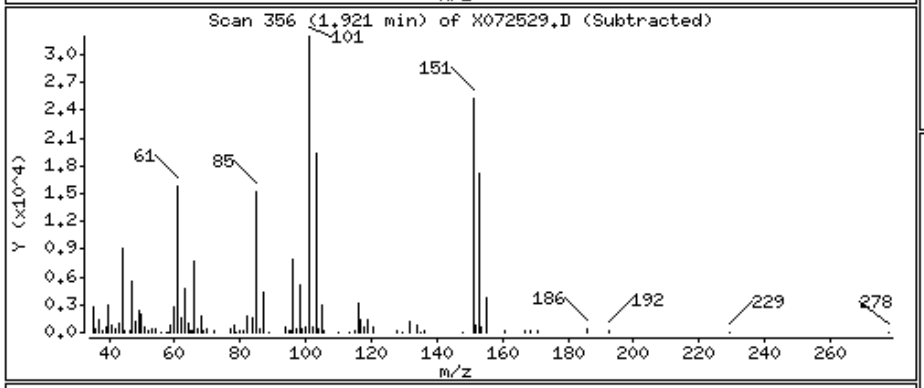
Column phase: DB624

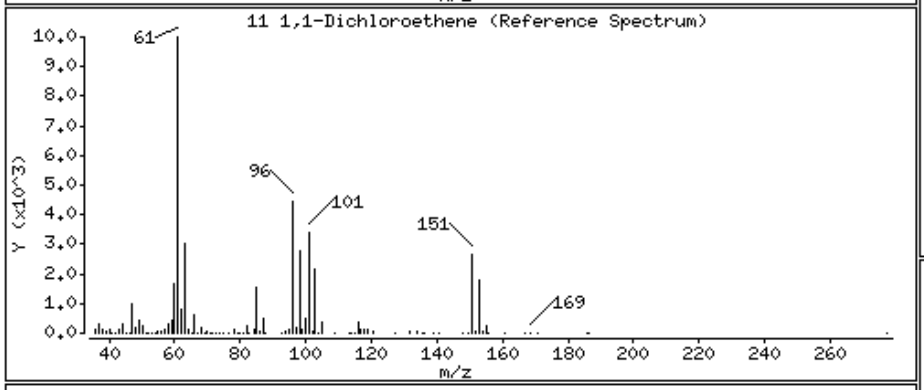
Column diameter: 0.18

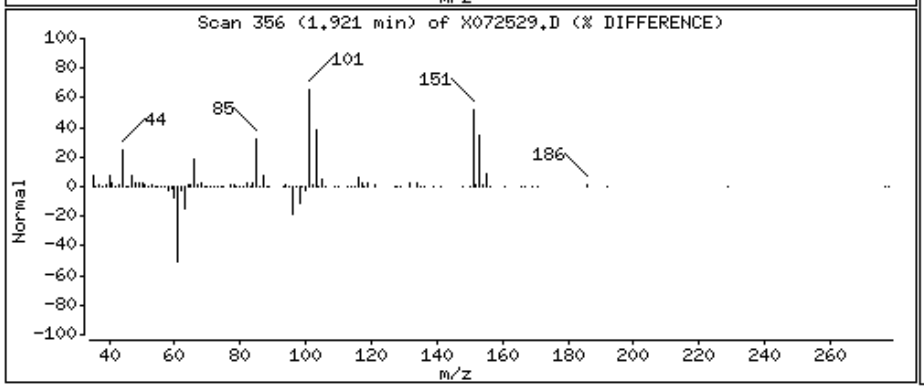
11 1,1-Dichloroethene

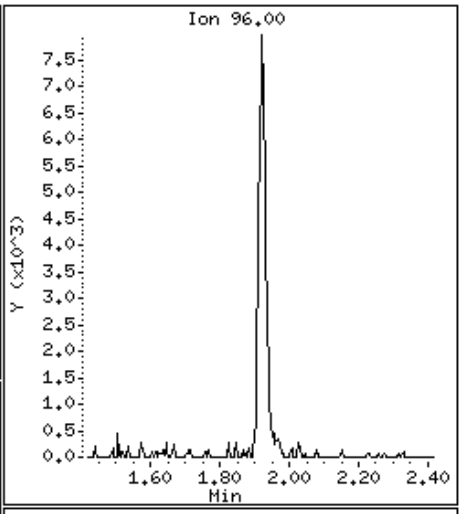
Concentration: 14.61 ug/l

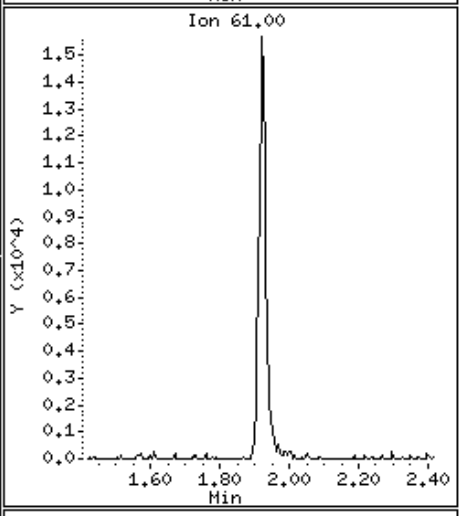


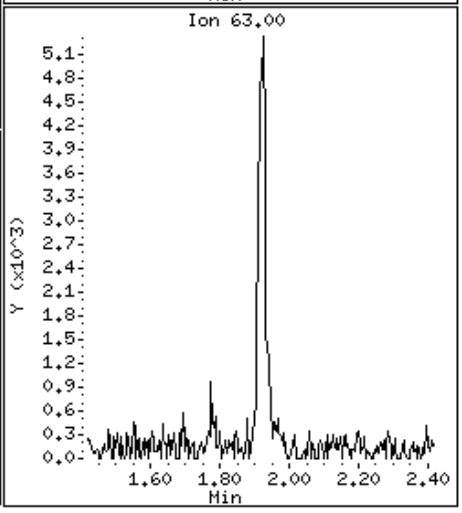












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072529.D Page 4

Date : 25-JUL-2023 19:41

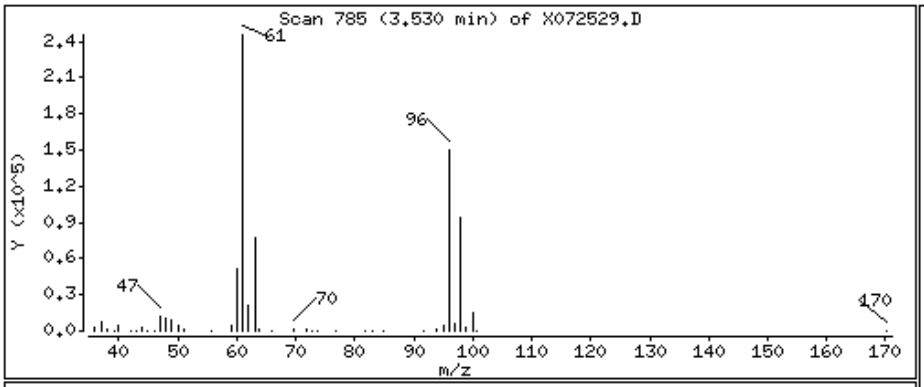
Client ID: HS23071289-02 Instrument: voa6.i

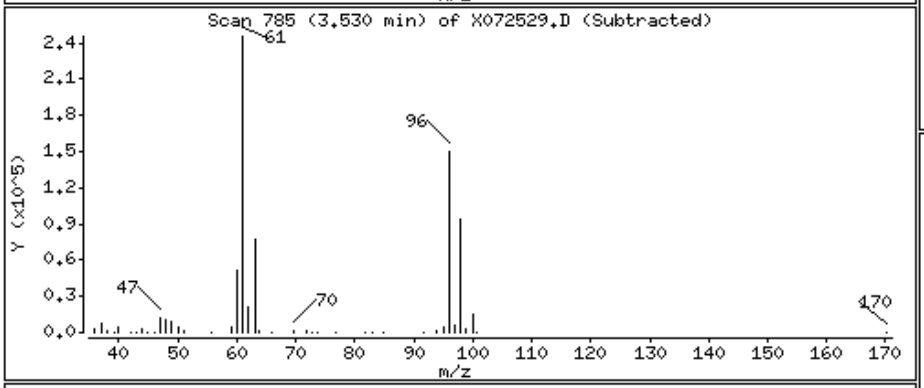
Sample Info: HS23071289-02;HS23071289-02;;;

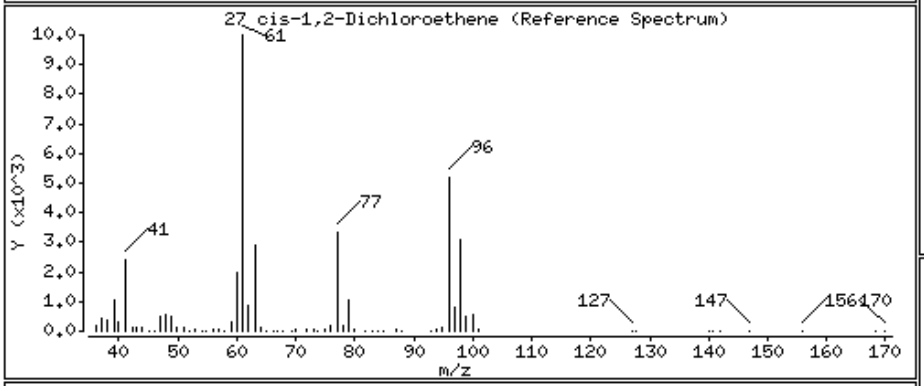
Purge Volume: 5.0 Operator: PC

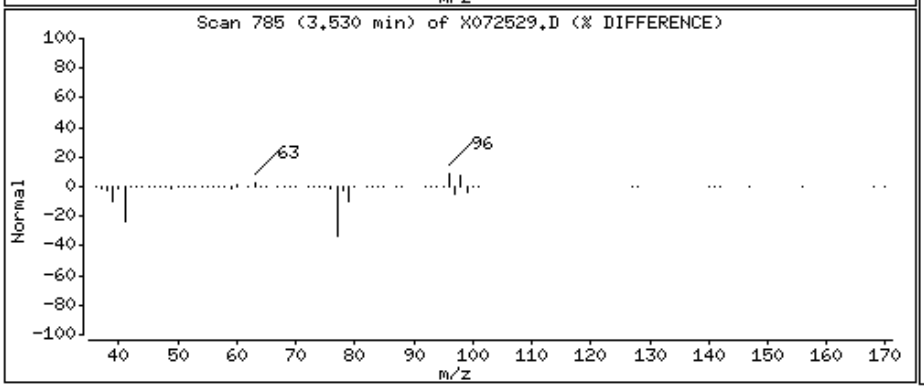
Column phase: DB624 Column diameter: 0.18

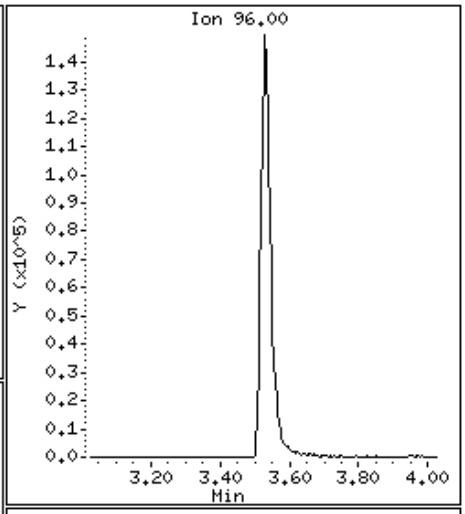
27 cis-1,2-Dichloroethene Concentration: 254.23 ug/l

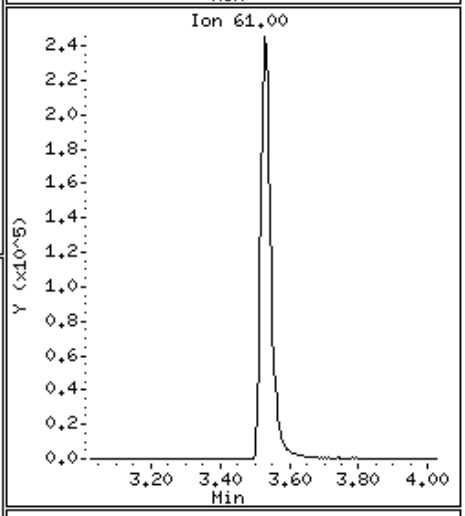


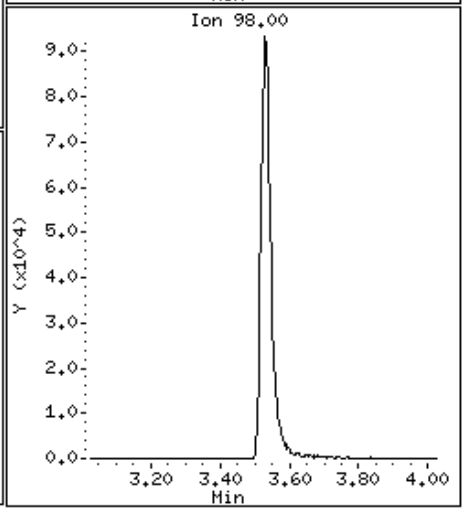












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072529.D Page 5

Date : 25-JUL-2023 19:41

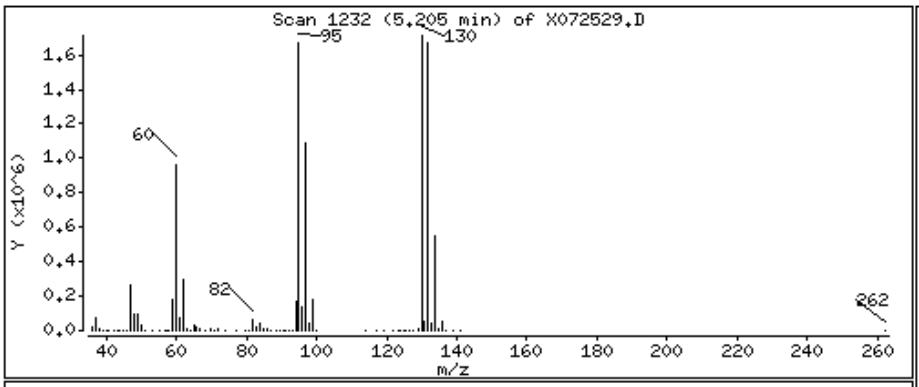
Client ID: HS23071289-02 Instrument: voa6.i

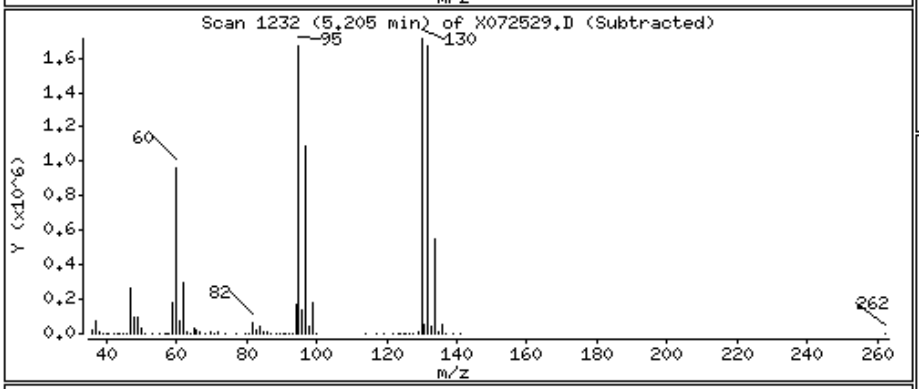
Sample Info: HS23071289-02;HS23071289-02;;;

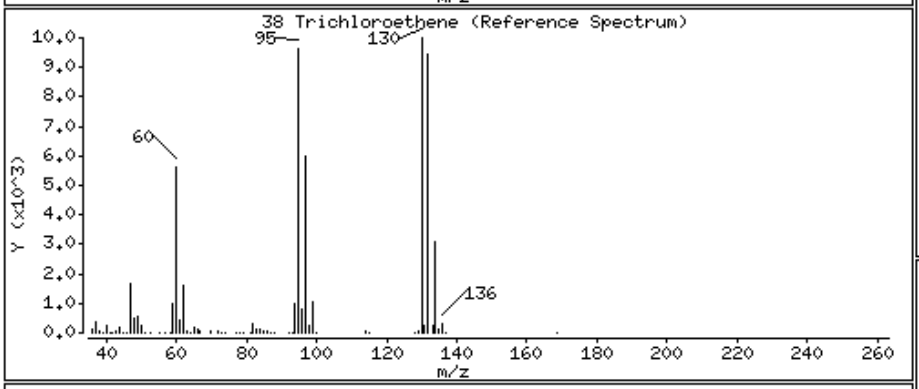
Purge Volume: 5.0 Operator: PC

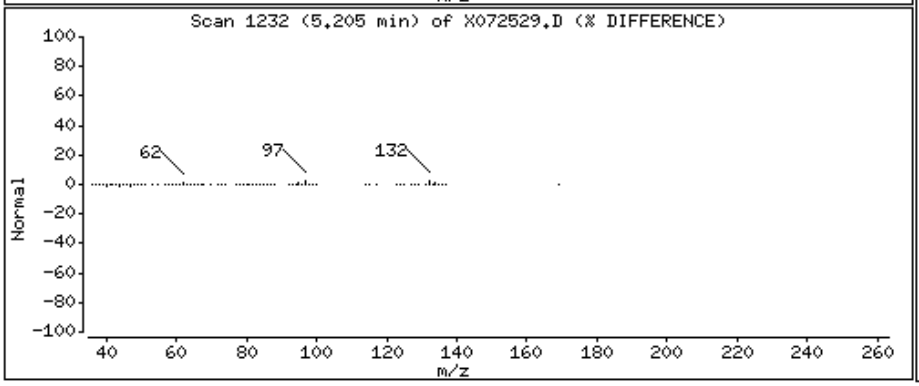
Column phase: DB624 Column diameter: 0.18

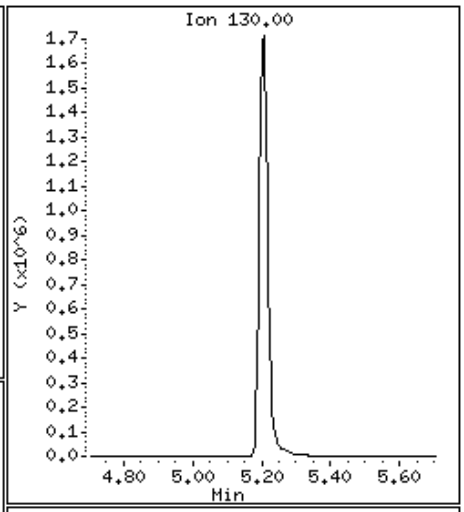
38 Trichloroethene Concentration: 2678.15 ug/l

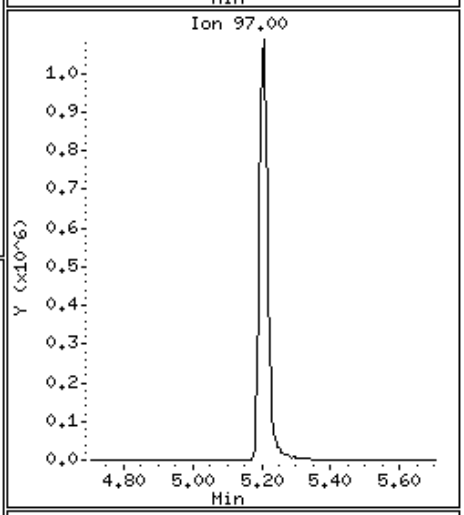


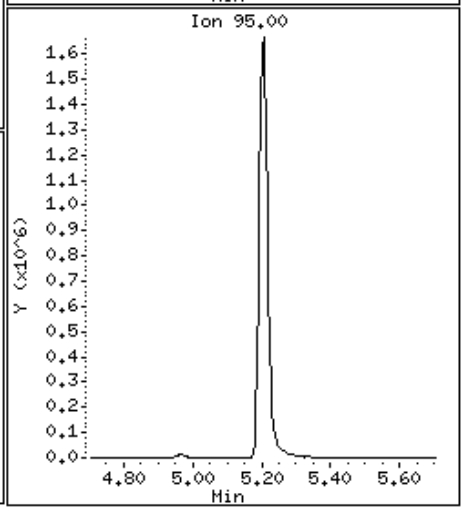












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Inj Date : 25-JUL-2023 19:41
InstruID : voa6.i
LabSampID : HS23071289-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072530.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072530.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 25-JUL-2023 20:02
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 28 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.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)	528964	50.0000	
135 1,4-Dioxane	88	5.602	5.602	(1.340)	64229	1000.00	1021.82
140 1,3-Butadiene	54	1.171	1.171	(0.280)	435050	50.0000	64.00
25 Methacrylonitrile	41	3.829	3.829	(0.916)	435680	50.0000	63.81
12 Isobutyl Alcohol	43	4.680	4.680	(1.119)	1259821	1000.00	1256.44
13 Acetonitrile	39	2.202	2.202	(0.527)	320554	500.000	432.15
14 Allyl Chloride	41	2.202	2.202	(0.527)	767937	50.0000	44.21
4 Propionitrile	54	3.656	3.656	(0.874)	619179	500.000	590.91
2 Dichlorodifluoromethane	85	0.980	0.980	(0.234)	258448	50.0000	47.81
3 Chloromethane	50	1.085	1.085	(0.260)	421845	50.0000	52.79
5 Vinyl Chloride	62	1.149	1.149	(0.275)	406548	50.0000	59.39
6 Bromomethane	94	1.343	1.343	(0.321)	145389	50.0000	51.32
7 Chloroethane	64	1.407	1.407	(0.337)	226372	50.0000	57.93
8 Trichlorofluoromethane	101	1.565	1.565	(0.374)	397807	50.0000	57.34
9 Acrolein	56	1.868	1.868	(0.447)	24355	100.000	121.34
10 Acetone	43	1.977	1.977	(0.473)	224618	100.000	107.68
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	174913	50.0000	45.13
15 Iodomethane	142	2.033	2.033	(0.486)	386383	100.000	77.00
16 Acrylonitrile	53	2.539	2.539	(0.607)	233003	100.000	90.39
17 Methylene Chloride	84	2.307	2.307	(0.552)	182566	50.0000	39.63

18 Methyl tert-butyl ether	73	2.543	2.543 (0.608)	565838	50.0000	39.26
19 Carbon Disulfide	76	2.074	2.074 (0.496)	942948	100.000	77.40

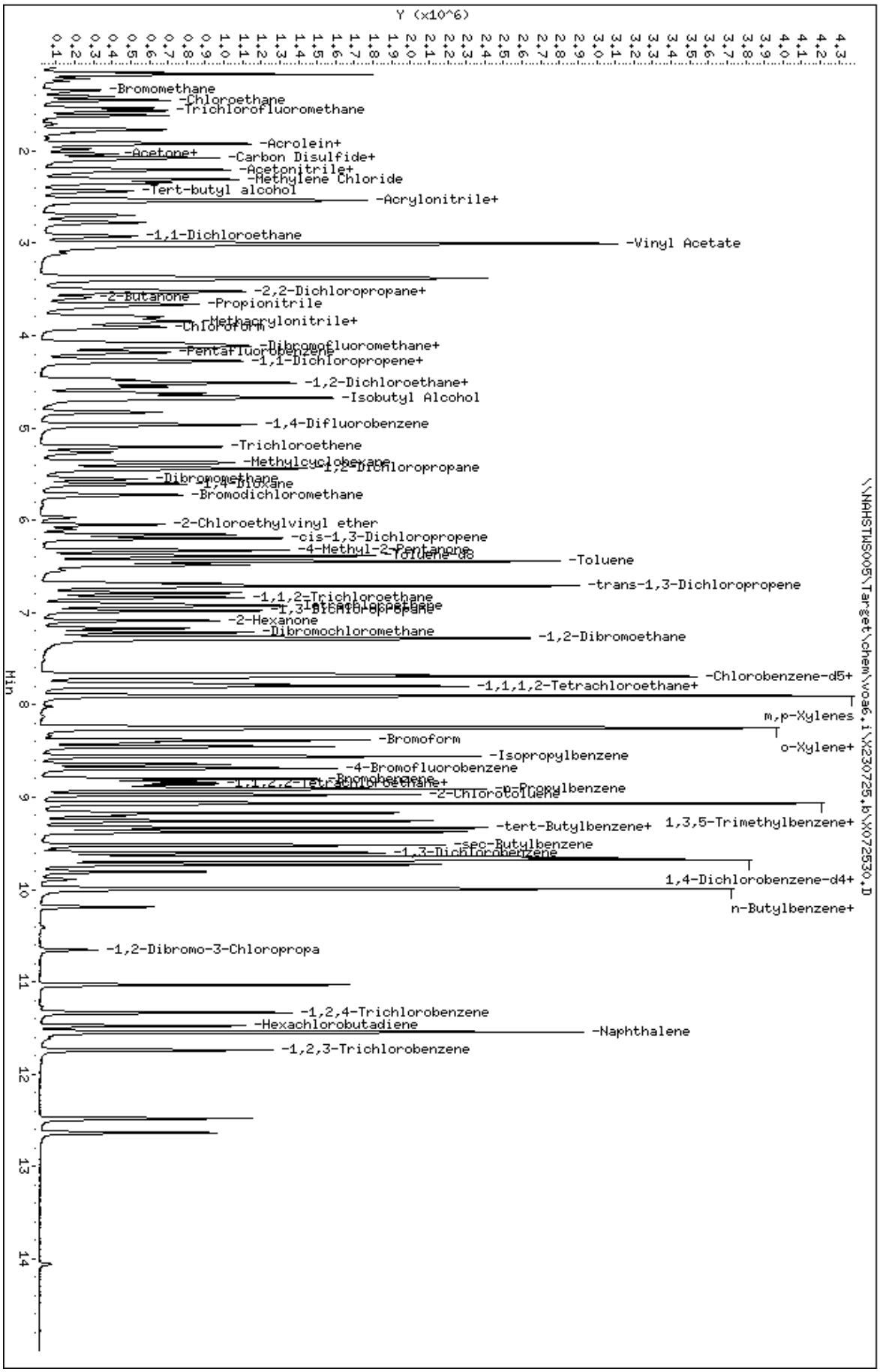
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	20 trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	176939	50.0000	39.47
	21 Vinyl Acetate	43	3.000	3.000	(0.718)	2311271	100.000	124.67
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	523983	50.0000	53.26
	24 2-Butanone	43	3.585	3.585	(0.857)	327572	100.000	116.28
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	377766	50.0000	49.47
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.844)	300700	50.0000	52.65
	28 Chloroform	83	3.908	3.908	(0.935)	502338	50.0000	49.90
	29 Bromochloromethane	128	3.799	3.799	(0.909)	157669	50.0000	49.26
$	30 Dibromofluoromethane	113	4.099	4.099	(0.980)	262359	50.0000	54.17
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	426660	50.0000	55.06
	32 1,1-Dichloropropene	75	4.279	4.279	(0.861)	365624	50.0000	50.67
	33 1,2-Dichloroethane	62	4.556	4.556	(0.917)	506879	50.0000	52.05
	34 Carbon Tetrachloride	117	4.260	4.260	(0.857)	350041	50.0000	48.15
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	333890	50.0000	55.13
*	36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	884527	50.0000	
	37 Benzene	78	4.511	4.511	(0.908)	1066510	50.0000	50.40
	38 Trichloroethene	130	5.205	5.205	(1.048)	306541	50.0000	51.22
	39 Bromodichloromethane	83	5.726	5.726	(1.152)	388801	50.0000	47.97
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.217)	236783	100.000	95.69
	42 1,2-Dichloropropane	63	5.437	5.437	(1.094)	366915	50.0000	53.93
	44 Dibromomethane	93	5.549	5.549	(1.117)	185013	50.0000	48.04
	45 4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	865673	100.000	108.35
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.238)	453729	50.0000	48.74
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	811867	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	967820	50.0000	46.30
	50 Toluene	91	6.445	6.445	(0.841)	1117096	50.0000	51.11
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.344)	373874	50.0000	47.64
	52 2-Hexanone	43	7.086	7.086	(0.924)	585776	100.000	111.61
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	221830	50.0000	47.84
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	458538	50.0000	48.41
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	322238	50.0000	48.14
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	226677	50.0000	50.20
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	251476	50.0000	47.46
	58 1-Chlorohexane	55	7.694	7.694	(1.548)	374676	50.0000	52.72
	59 Chlorobenzene	112	7.690	7.690	(1.003)	761274	50.0000	49.83
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	286881	50.0000	47.96
	61 Ethylbenzene	106	7.795	7.795	(1.017)	381712	50.0000	49.82
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	980209	100.000	101.99
	63 o-Xylene	106	8.237	8.237	(1.074)	470983	50.0000	51.75
	64 Styrene	104	8.256	8.256	(1.077)	807765	50.0000	50.88
	66 Bromoform	173	8.406	8.406	(1.096)	201657	50.0000	46.96
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1204951	50.0000	51.50
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	357150	50.0000	48.76
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	415614	50.0000	51.42
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	436075	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	260193	50.0000	44.76
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	1410266	50.0000	53.51
	74 Bromobenzene	156	8.803	8.803	(0.911)	337678	50.0000	49.51
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	997269	50.0000	50.51
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	892280	50.0000	50.19
	77 4-Chlorotoluene	91	9.069	9.069	(0.939)	1017300	50.0000	52.07
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	881146	50.0000	52.04

79 1,2,4-Trimethylbenzene	105	9.377	9.377 (0.971)	993762	50.0000	50.19
81 sec-Butylbenzene	105	9.519	9.519 (0.985)	1221220	50.0000	54.11

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	1045311	50.0000	50.71	
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	590766	50.0000	49.72	
	84 1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	621266	50.0000	47.69	
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	909481	50.0000	52.68	
	88 1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	592661	50.0000	50.73	
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	54655	50.0000	45.49	
	90 1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	346289	50.0000	43.16	
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	161123	50.0000	43.88	
	92 Naphthalene	128	11.540	11.540	(1.194)	894201	50.0000	45.03	
	93 1,2,3-Trichlorobenzene	180	11.738	11.738	(1.215)	324752	50.0000	43.28	
M	94 1,2-Dichloroethylene (total)	96				477639	100.000		(a)
	141 Cyclohexane	56	4.121	4.121	(0.986)	574097	50.0000	62.61	
	138 Freon TF	101	1.921	1.921	(0.459)	175448	50.0000	53.21	
	147 Methylcyclohexane	55	5.384	5.384	(1.084)	902556	50.0000	48.34	
	146 Methyl Acetate	43	2.236	2.236	(0.535)	224519	50.0000	47.69	
	148 Tert-Butyl alcohol	59	2.438	2.438	(0.583)	527595	1000.00	790.25	
	149 Isopropyl Alcohol	45	2.097	2.097	(0.502)	353784	1000.00	854.00	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).



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Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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Inj Date : 25-JUL-2023 20:02
InstruID : voa6.i
LabSampID : CCV-END

NO MANUAL INTEGRATIONS

HS23071289-GCSEMI-RSK-175

ALS WO# HS23071289

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Form 1

Organic Analysis Data Sheet

Dissolved Gasses by RSK-175

Workorder

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

08/07/2023

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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Dissolved Gasses by RSK-175

HS23071289-01

16RW09-230718

Collected	Received	Matrix	Basis
07/18/23 07:05	07/19/23 13:25	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.000144	0.00100	0.00100	1	07/28/23 09:19	FID-4_442732	008.D
Ethene	mg/L	0.0413		0.000234	0.00100	0.00100	1	07/28/23 09:19	FID-4_442732	008.D
Methane	mg/L	1.42		0.00535	0.0250	0.0250	50	07/28/23 10:37	FID-4_442732	013.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Dissolved Gasses by RSK-175

HS23071289-02

16RW09-230718-FD

Collected	Received	Matrix	Basis
07/18/23 07:05	07/19/23 13:25	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.000144	0.00100	0.00100	1	07/28/23 09:34	FID-4_442732	009.D
Ethene	mg/L	0.0422		0.000234	0.00100	0.00100	1	07/28/23 09:34	FID-4_442732	009.D
Methane	mg/L	1.42		0.00535	0.0250	0.0250	50	07/28/23 10:50	FID-4_442732	014.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Dissolved Gasses by RSK-175

HS23071289-03

16RW10-230718

Collected	Received	Matrix	Basis
07/18/23 07:50	07/19/23 13:25	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.000144	0.00100	0.00100	1	07/28/23 09:52	FID-4_442732	010.D
Ethene	mg/L	0.0156		0.000234	0.00100	0.00100	1	07/28/23 09:52	FID-4_442732	010.D
Methane	mg/L	1.44		0.00535	0.0250	0.0250	50	07/28/23 11:08	FID-4_442732	015.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Dissolved Gasses by RSK-175

HS23071289-04

16WW40-230718

Collected	Received	Matrix	Basis
07/18/23 08:30	07/19/23 13:25	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00226		0.000144	0.00100	0.00100	1	07/28/23 10:29	FID-4_442732	012.D
Ethene	mg/L	0.00556		0.000234	0.00100	0.00100	1	07/28/23 10:29	FID-4_442732	012.D
Methane	mg/L	0.960		0.00535	0.0250	0.0250	50	07/28/23 11:44	FID-4_442732	016.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

Dissolved Gasses by RSK-175

MBLK-230728

MBLK-230728

Collected	Received	Matrix	Basis
NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.000144	0.00100	0.00100	1	07/28/23 08:00	FID-4_442732	002.D
Ethene	mg/L	0.00100	U	0.000234	0.00100	0.00100	1	07/28/23 08:00	FID-4_442732	002.D
Methane	mg/L	0.000500	U	0.000107	0.000500	0.000500	1	07/28/23 08:00	FID-4_442732	002.D

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Form 4

Method Blank Summary

Dissolved Gasses by RSK-175

Workorder

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

08/07/2023

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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071289

Dissolved Gasses by RSK-175

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	MBLK-230728	002.D	07/28/23 08:00	FID-4_442732
LCS-230728	LCS	LCS-230728	003.D	07/28/23 08:09	FID-4_442732
LCSD-230728	LCSD	LCSD-230728	004.D	07/28/23 08:18	FID-4_442732
16RW09-230718	SAMP	HS23071289-01	008.D	07/28/23 09:19	FID-4_442732
16RW09-230718-FD	SAMP	HS23071289-02	009.D	07/28/23 09:34	FID-4_442732
16RW10-230718	SAMP	HS23071289-03	010.D	07/28/23 09:52	FID-4_442732
16WW40-230718	SAMP	HS23071289-04	012.D	07/28/23 10:29	FID-4_442732
16RW09-230718	SAMP	HS23071289-01	013.D	07/28/23 10:37	FID-4_442732
16RW09-230718-FD	SAMP	HS23071289-02	014.D	07/28/23 10:50	FID-4_442732
16RW10-230718	SAMP	HS23071289-03	015.D	07/28/23 11:08	FID-4_442732
16WW40-230718	SAMP	HS23071289-04	016.D	07/28/23 11:44	FID-4_442732

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Form 6

Initial Calibration Data

Dissolved Gasses by RSK-175

Workorder

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

08/07/2023

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 Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071289

RunID FID-4_322102

Dissolved Gasses by RSK-175

ICAL Start Date 24-JAN-2017 0906
ICAL End Date 24-JAN-2017 1113

Calibration Files

Calibration file names

Level 1..target\chem\fid-4.i\170124.b\001.d
Level 2..target\chem\fid-4.i\170124.b\002.d
Level 3..target\chem\fid-4.i\170124.b\003.d
Level 4..target\chem\fid-4.i\170124.b\004.d
Level 5..target\chem\fid-4.i\170124.b\005.d
Level 6..target\chem\fid-4.i\170124.b\006.d
Level 7..target\chem\fid-4.i\170124.b\007.d

Compound	10.00 Level 1	25.00 Level 2	50.00 Level 3	100.00 Level 4	250.00 Level 5	500.00 Level 6	1000.00 Level 7	Curve	b	m1	m2	%RSD or R2	Q
Methane	969 1082	978	1020	881	961	931		AVRG		974		6.55041	
Ethene	536 829	567	565	516	665	426		AVRG		586		21.93197	
Ethane	602 999	670	659	597	809	818		AVRG		736		19.88517	
Propane	500 96509	1279	2602	4785	18294	38286		QUAD	0.97987	0.00153	-4.583e-00	0.99914	
N-Butane	438 114164	936	2034	3864	18446	42817		QUAD	2.46870	0.00183	-5.537e-00	0.99808	
Pentane	115 488	3945	2080	950	501	412		AVRG		1213		112	*
Hexane	NE NE	NE	NE	NE	NE	NE		AVRG		0.000e+000		0.000e+000	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

01324340

right solutions.
right partner.

Form 6I

Initial Calibration Verification (ICV)

Dissolved Gasses by RSK-175

Workorder

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

08/07/2023

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 Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071289

RunID FID-4_322102

Dissolved Gasses by RSK-175

Sample Matrix LIQUID
Lab Smp Id ICV
Level LOW
Fraction GASES
Client Smp ID ICV
Operator MA

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
Methane	9.647	9.597	99.49	75-125	
Ethene	16.800	19.090	113.63	75-125	
Ethane	18.043	19.657	108.95	75-125	
Propane	26.463	27.238	102.93	75-125	
N-Butane	34.955	36.010	103.02	75-125	

01324342

right solutions.
right partner.

Form 7

Continuing Calibration Verification (CCV)

Dissolved Gasses by RSK-175

Workorder

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

08/07/2023

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 Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071289

RunID FID-4_442732

Dissolved Gasses by RSK-175

Instrument ID FID-4.I
Lab File ID 001.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date :51
ICAL Date(s) 24-JAN-2017 24-JAN-2017
ICAL Times :06 11:13
Quant Type ESTD

Compound	___ RRF / Conc	RF250	CCV RRF250	Min RRF	%D/ %D / %DRIFT	Max %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	802	802	0.010	17.76308	20.0	Averaged	
Ethene	586	622	622	0.010	-6.19993	20.0	Averaged	
Ethane	719	807	807	0.010	-12.21135	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071289

RunID FID-4_442732

Dissolved Gasses by RSK-175

Instrument ID FID-4.I
Lab File ID 011.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date :18
ICAL Date(s) 24-JAN-2017 24-JAN-2017
ICAL Times :06 11:13
Quant Type ESTD

Compound	___ RRF / Conc	RF250	CCV RRF250	Min RRF	%D/ %D / %DRIFT	Max %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	796	796	0.010	18.37972	20.0	Averaged	
Ethene	586	632	632	0.010	-7.90204	20.0	Averaged	
Ethane	719	809	809	0.010	-12.50407	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071289

RunID FID-4_442732

Dissolved Gasses by RSK-175

Instrument ID FID-4.I
Lab File ID 022.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date :36
ICAL Date(s) 24-JAN-2017 24-JAN-2017
ICAL Times :06 11:13
Quant Type ESTD

Compound	___ RRF / Conc	RF250	CCV RRF250	Min RRF	%D/ %D / %DRIFT	Max %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	789	789	0.010	19.09205	20.0	Averaged	
Ethene	586	611	611	0.010	-4.33570	20.0	Averaged	
Ethane	719	799	799	0.010	-11.11751	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071289

RunID FID-4_442732

Dissolved Gasses by RSK-175

Instrument ID FID-4.I
Lab File ID 033.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date :58
ICAL Date(s) 24-JAN-2017 24-JAN-2017
ICAL Times :06 11:13
Quant Type ESTD

Compound	___ RRF / Conc	RF250	CCV RRF250	Min RRF	%D/ %D / %DRIFT	Max %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	795	795	0.010	18.42225	20.0	Averaged	
Ethene	586	627	627	0.010	-7.07125	20.0	Averaged	
Ethane	719	807	807	0.010	-12.22676	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 January 2023

Workorder HS23071289

RunID FID-4_442732

Dissolved Gasses by RSK-175

Instrument ID FID-4.I
Lab File ID 043.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date :54
ICAL Date(s) 24-JAN-2017 24-JAN-2017
ICAL Times :06 11:13
Quant Type ESTD

Compound	___ RRF / Conc	RF250	CCV RRF250	Min RRF	%D/ %D / %DRIFT	Max %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	792	792	0.010	18.75184	20.0	Averaged	
Ethene	586	632	632	0.010	-7.93244	20.0	Averaged	
Ethane	719	808	808	0.010	-12.24217	20.0	Averaged	

01324348

right solutions.
right partner.

Analysis Run Log

Dissolved Gasses by RSK-175

Workorder

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

08/07/2023

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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071289

RunID
FID-4-322102

Dissolved Gasses by RSK-175

Run ID FID-4_322102 **Start Date** 01/24/17 **EndDate** 01/24/17

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
09:06	ICAL1	ICAL1	ICAL1	001.D	01/24/17	1
09:30	ICAL2	ICAL2	ICAL2	002.D	01/24/17	1
09:59	ICAL3	ICAL3	ICAL3	003.D	01/24/17	1
10:15	ICAL4	ICAL4	ICAL4	004.D	01/24/17	1
10:39	ICAL5	ICAL5	ICAL5	005.D	01/24/17	1
10:57	ICAL6	ICAL6	ICAL6	006.D	01/24/17	1
11:13	ICAL7	ICAL7	ICAL7	007.D	01/24/17	1
12:05	ICV	ICV	ICV	008.D	01/24/17	1

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071289**

RunID FID-4-442732

Dissolved Gasses by RSK-175

Run ID FID-4_442732 **Start Date** 07/28/23 **EndDate** 07/28/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
07:51	RSK-CCV	CCV	RSK-CCV	001.D	07/28/23	1
07:51	RSK-CCV	CCV	RSK-CCV	001.D	07/28/23	1
08:00	MBLK-230728	MBLK	MBLK-230728	002.D	07/28/23	1
08:00	MBLK-230728	MBLK	MBLK-230728	002.D	07/28/23	1
08:09	LCS-230728	LCS	LCS-230728	003.D	07/28/23	1
08:09	LCS-230728	LCS	LCS-230728	003.D	07/28/23	1
08:18	LCSD-230728	LCSD	LCSD-230728	004.D	07/28/23	1
08:18	LCSD-230728	LCSD	LCSD-230728	004.D	07/28/23	1
08:26	HS23071330-01	SAMP	ZZZZZZZZZZ	005.D	07/28/23	1
08:51	HS23071330-04	SAMP	ZZZZZZZZZZ	006.D	07/28/23	1
09:00	HS23071330-04DUP	DUP	ZZZZZZDUP	007.D	07/28/23	1
09:19	HS23071289-01	SAMP	16RW09-230718	008.D	07/28/23	1
09:34	HS23071289-02	SAMP	16RW09-230718-FD	009.D	07/28/23	1
09:52	HS23071289-03	SAMP	16RW10-230718	010.D	07/28/23	1
10:18	RSK-CCV	CCV	RSK-CCV	011.D	07/28/23	1
10:18	RSK-CCV	CCV	RSK-CCV	011.D	07/28/23	1
10:29	HS23071289-04	SAMP	16WW40-230718	012.D	07/28/23	1
10:37	HS23071289-01	SAMP	16RW09-230718	013.D	07/28/23	50
10:50	HS23071289-02	SAMP	16RW09-230718-FD	014.D	07/28/23	50
11:08	HS23071289-03	SAMP	16RW10-230718	015.D	07/28/23	50
11:44	HS23071289-04	SAMP	16WW40-230718	016.D	07/28/23	50
12:10	HS23071150-06	SAMP	ZZZZZZZZZZ	017.D	07/28/23	1
12:34	HS23071150-07	SAMP	ZZZZZZZZZZ	018.D	07/28/23	1
13:30	HS23071150-07	SAMP	ZZZZZZZZZZ	019.D	07/28/23	50
13:47	HS23071063-01	SAMP	ZZZZZZZZZZ	020.D	07/28/23	1
13:58	HS23071063-02	SAMP	ZZZZZZZZZZ	021.D	07/28/23	1
15:36	RSK-CCV	CCV	RSK-CCV	022.D	07/28/23	1
15:52	HS23071063-03	SAMP	ZZZZZZZZZZ	023.D	07/28/23	1
16:01	HS23071063-04	SAMP	ZZZZZZZZZZ	024.D	07/28/23	1
16:16	HS23071063-06	SAMP	ZZZZZZZZZZ	025.D	07/28/23	1
16:29	HS23071063-07	SAMP	ZZZZZZZZZZ	026.D	07/28/23	1
16:48	HS23071063-02	SAMP	ZZZZZZZZZZ	027.D	07/28/23	5
17:04	HS23071063-04	SAMP	ZZZZZZZZZZ	028.D	07/28/23	20
17:14	HS23071063-06	SAMP	ZZZZZZZZZZ	029.D	07/28/23	20
17:26	HS23071063-07	SAMP	ZZZZZZZZZZ	030.D	07/28/23	100
17:37	HS23071068-09	SAMP	ZZZZZZZZZZ	031.D	07/28/23	1
17:48	HS23071068-09	SAMP	ZZZZZZZZZZ	032.D	07/28/23	10
17:58	RSK-CCV	CCV	RSK-CCV	033.D	07/28/23	1

Form 13 - Analysis Run Log

Client	Aptim Environmental & Infrastucture, Inc.	Workorder	
Project	LHAAP 16 January 2023	**HS23071289**	

Dissolved Gasses by RSK-175

RunID: FID-4-442732

18:07	HS23071066-12	SAMP	ZZZZZZZZZZ	034.D	07/28/23	1
18:22	HS23071588-01	SAMP	ZZZZZZZZZZ	035.D	07/28/23	1
18:35	HS23071588-02	SAMP	ZZZZZZZZZZ	036.D	07/28/23	1
18:48	HS23071588-03	SAMP	ZZZZZZZZZZ	037.D	07/28/23	1
18:57	HS23071588-01	SAMP	ZZZZZZZZZZ	038.D	07/28/23	2
19:20	HS23071588-02	SAMP	ZZZZZZZZZZ	040.D	07/28/23	100
19:36	HS23071588-03	SAMP	ZZZZZZZZZZ	042.D	07/28/23	500
19:54	RSK-CCV	CCV	RSK-CCV	043.D	07/28/23	1

01324352

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right partner.

Raw Data FID 4 322102

Dissolved Gasses by RSK-175

Workorder

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

08/07/2023

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\FID-4.i\170124.b\001.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D
Lab Smp Id: ICAL1 Client Smp ID: ICAL1
Inj Date : 24-JAN-2017 09:06
Operator : JA Inst ID: FID-4.i
Smp Info : ICAL1;ICAL1;;;
Misc Info :
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	374	0.38600	0.383(a)
2 Ethene	1.553	1.553	0.000	361	0.67400	0.615(a)
3 Ethane	1.716	1.716	0.000	435	0.72200	0.590(a)
4 Propane	4.073	4.073	0.000	500	1.05900	1.743
5 N-Butane	7.640	7.640	0.000	438	1.39800	3.271

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

01324354

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D

Date : 24-JAN-2017 09:06

Client ID: ICAL1

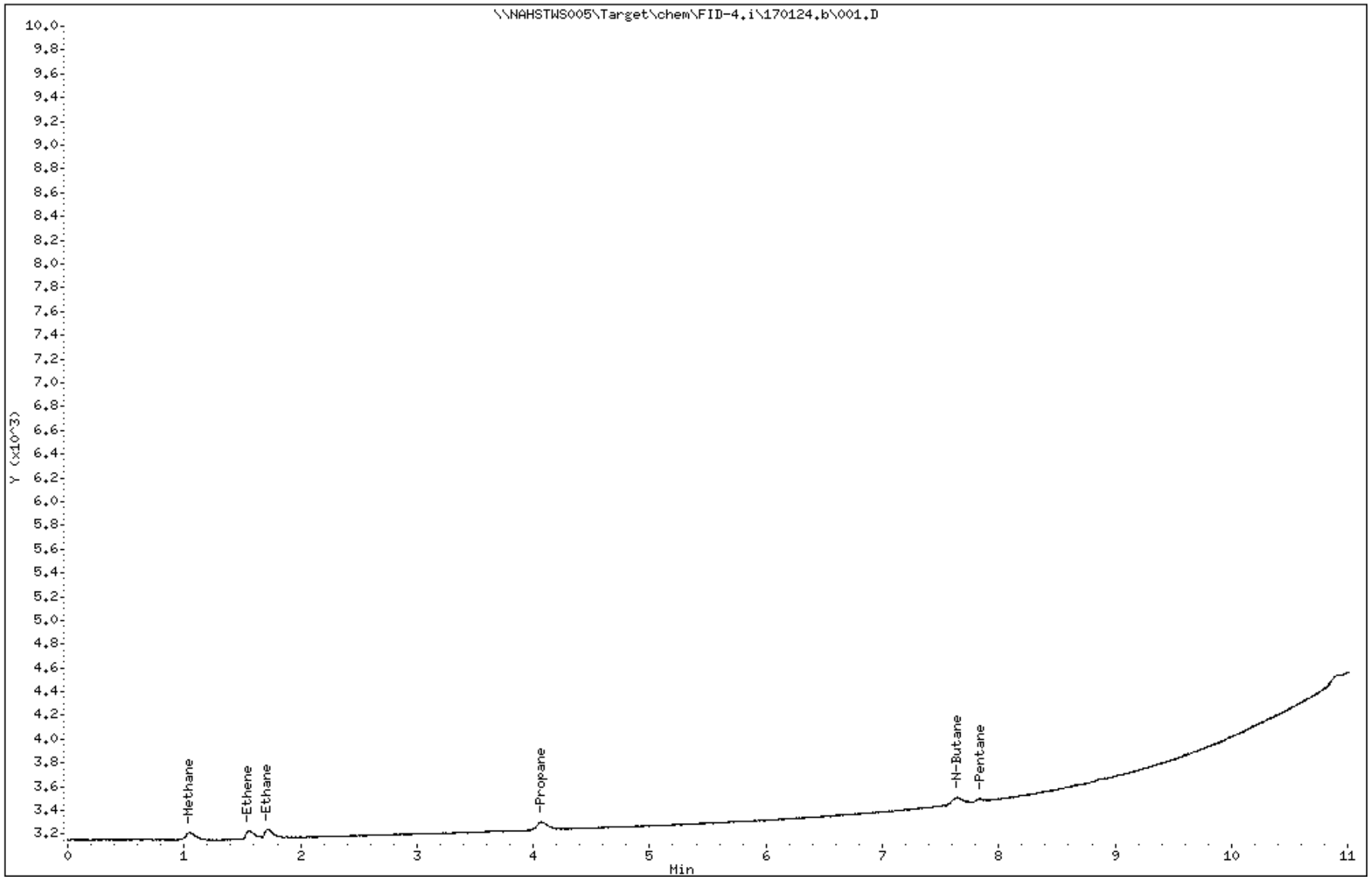
Instrument: FID-4.i

Sample Info: ICAL1;ICAL1;;;

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D
Inj Date : 24-JAN-2017 09:06
InstruID : FID-4.i
LabSampID : ICAL1

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D
Lab Smp Id: ICAL2 Client Smp ID: ICAL2
Inj Date : 24-JAN-2017 09:30
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL2;ICAL2;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:06 Cal File: 001.D
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.023	1.023	0.000	944	0.96500	0.968
2 Ethene	1.560	1.560	0.000	956	1.68500	1.630
3 Ethane	1.723	1.723	0.000	1209	1.80400	1.641
4 Propane	4.123	4.123	0.000	1279	2.64600	2.927
5 N-Butane	7.716	7.716	0.000	936	3.49600	4.180

01324357

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D

Date : 24-JAN-2017 09:30

Client ID: ICAL2

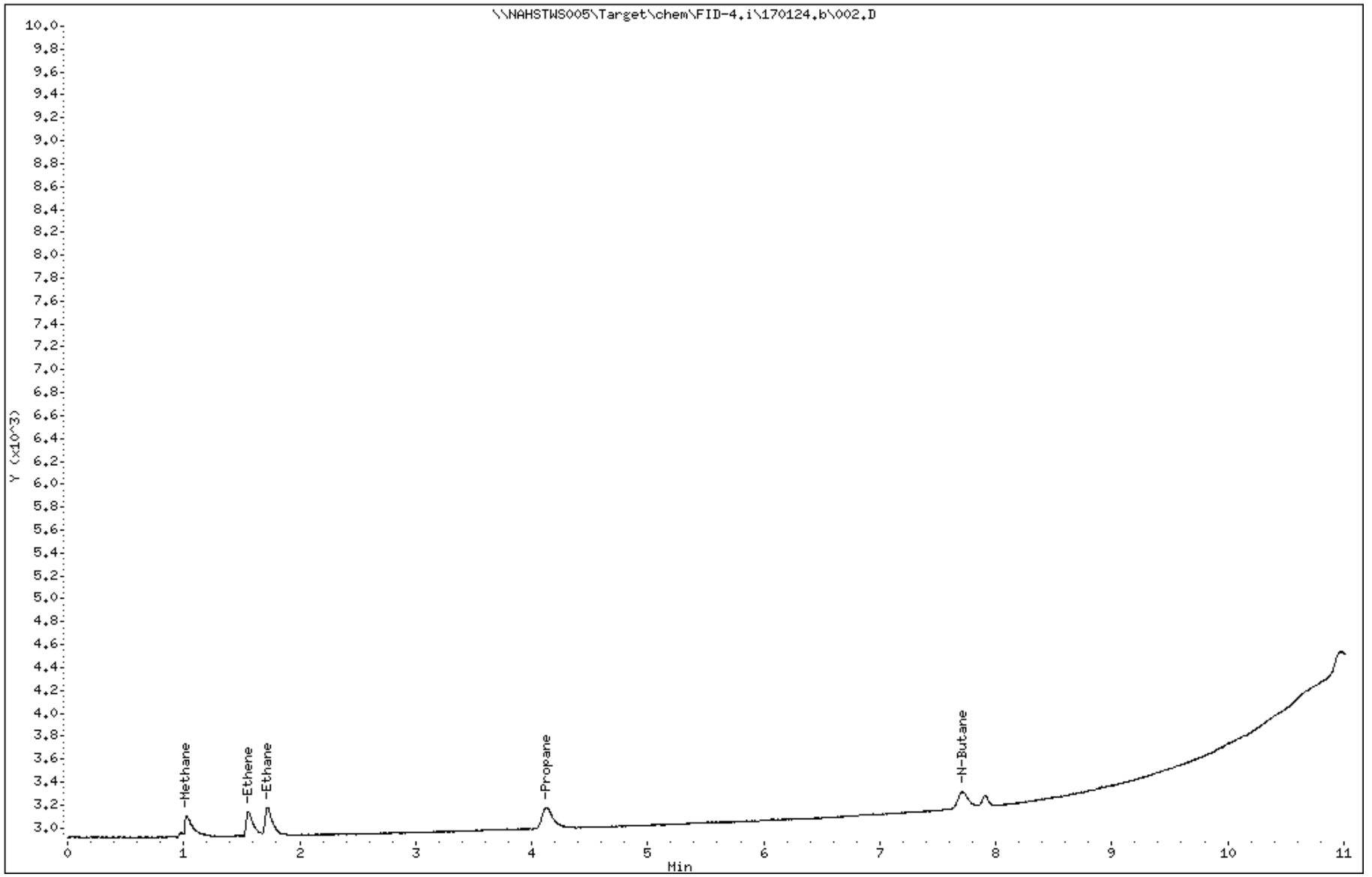
Instrument: FID-4.i

Sample Info: ICAL2;ICAL2;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D
Inj Date : 24-JAN-2017 09:30
InstruID : FID-4.i
LabSampID : ICAL2

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D
Lab Smp Id: ICAL3 Client Smp ID: ICAL3
Inj Date : 24-JAN-2017 09:59
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL3;ICAL3;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:30 Cal File: 002.D
Als bottle: 3 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	1967	1.92900	2.018
2 Ethene	1.570	1.570	0.000	1904	3.37000	3.247
3 Ethane	1.736	1.736	0.000	2378	3.60900	3.229
4 Propane	4.123	4.123	0.000	2602	5.29300	4.926
5 N-Butane	7.703	7.703	0.000	2034	6.99100	6.176

01324360

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D

Date : 24-JAN-2017 09:59

Client ID: ICAL3

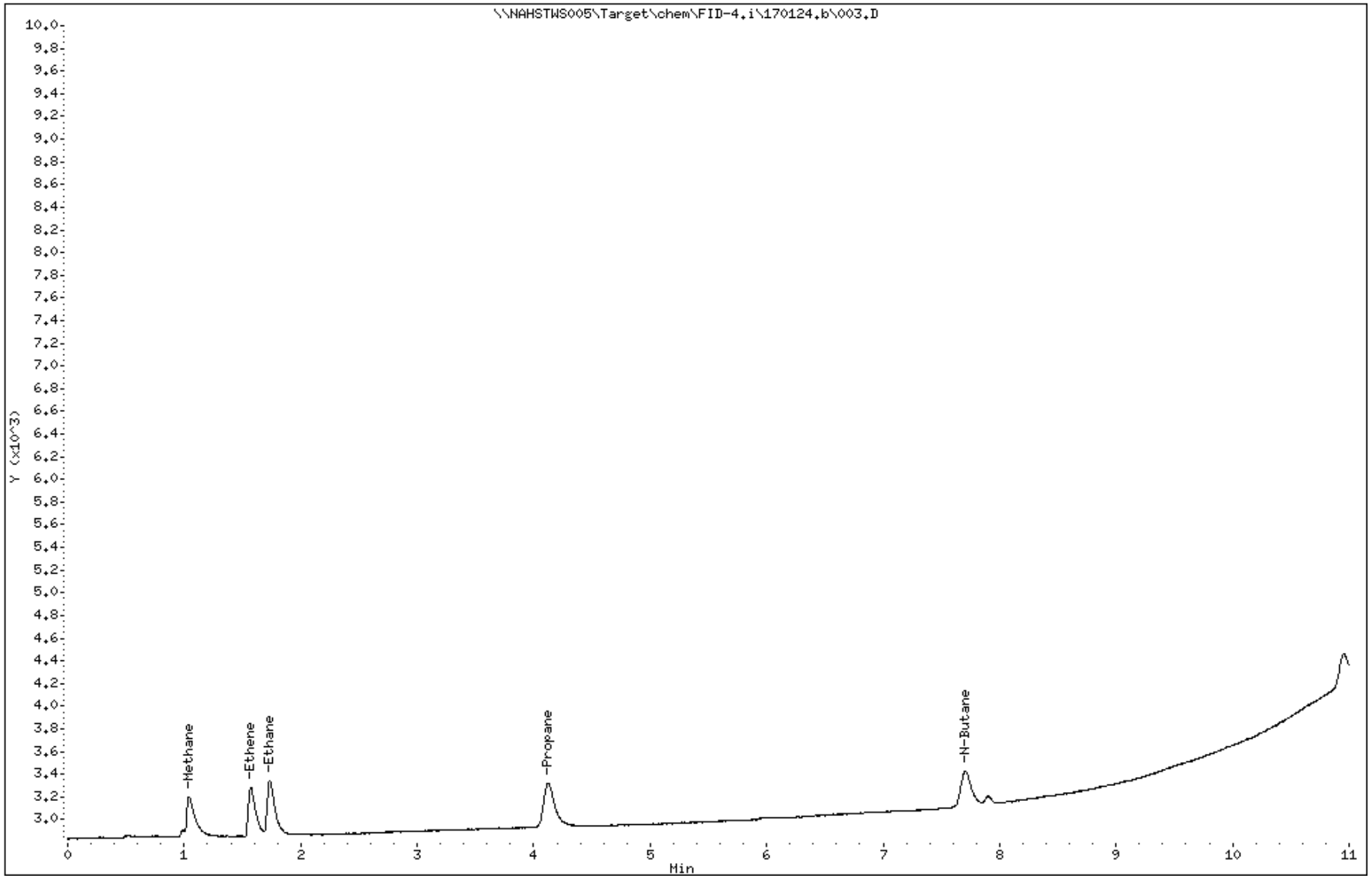
Instrument: FID-4.i

Sample Info: ICAL3;ICAL3;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D
Inj Date : 24-JAN-2017 09:59
InstruID : FID-4.i
LabSampID : ICAL3

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D Page 1
Report Date: 28-Sep-2022 10:02

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Lab Smp Id: ICAL4 Client Smp ID: ICAL4
Inj Date : 24-JAN-2017 10:15
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL4;ICAL4;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:02 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 4 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	1.033	1.033	0.000	3399	3.85900	3.488
2 Ethene	1.563	1.563	0.000	3478	6.74000	5.932
3 Ethane	1.726	1.726	0.000	4310	7.21700	5.853
4 Propane	4.120	4.120	0.000	4785	10.5850	8.190
5 N-Butane	7.703	7.703	0.000	3864	13.9820	9.473(M)

QC Flag Legend

M - Compound response manually integrated.

01324363

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D

Date : 24-JAN-2017 10:15

Client ID: ICAL4

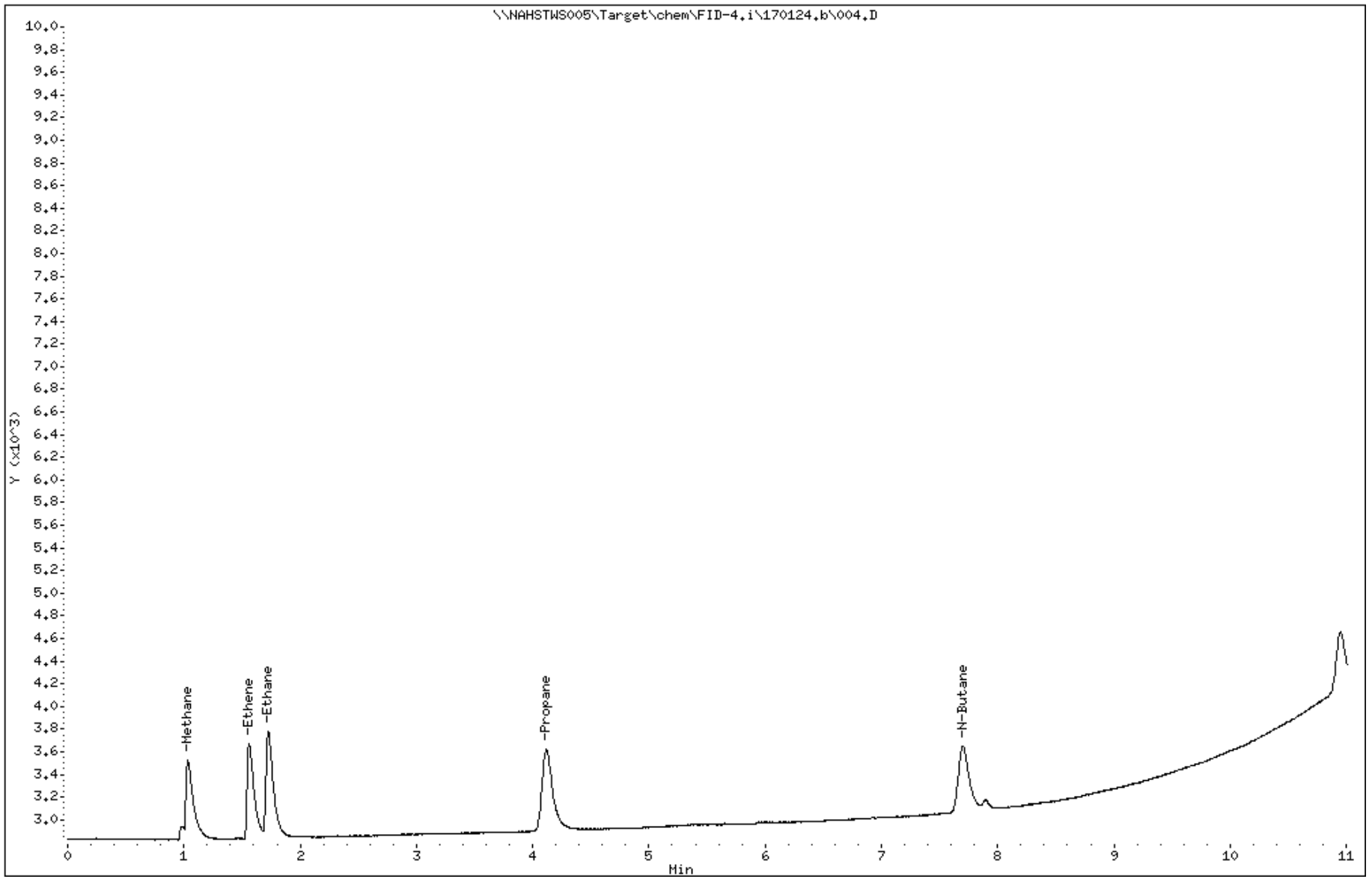
Instrument: FID-4.i

Sample Info: ICAL4;ICAL4;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



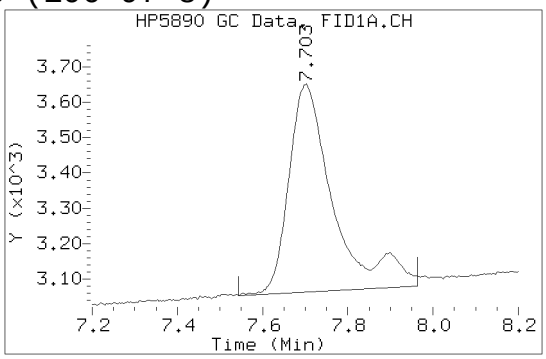
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Inj Date : 24-JAN-2017 10:15
InstruID : FID-4.i
LabSampID : ICAL4

N-Butane (106-97-8)

Reason Code:

BEFORE

MASS
100
AREA
4292
HEIGHT
591
28-Sep-2022
10:02
linh
pham



AFTER

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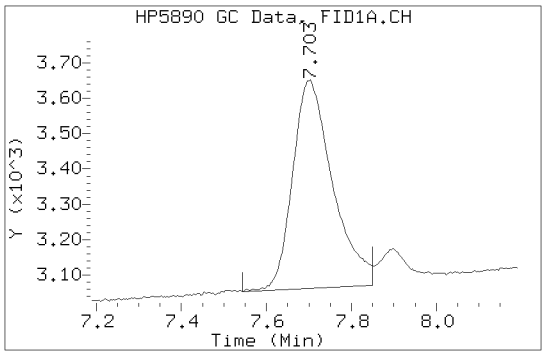
AREA
3864
HEIGHT
591
28-Sep-2022
10:02
linh
pham



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Lab Smp Id: ICAL5 Client Smp ID: ICAL5
Inj Date : 24-JAN-2017 10:39
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL5;ICAL5;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:02 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	9268	9.64700	9.511
2 Ethene	1.570	1.570	0.000	11210	16.8500	19.121
3 Ethane	1.733	1.733	0.000	14588	18.0430	19.811
4 Propane	4.120	4.120	0.000	18294	26.4630	27.415
5 N-Butane	7.700	7.700	0.000	18446	34.9550	34.419(M)

QC Flag Legend

M - Compound response manually integrated.

01324366

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D

Page 1

Date : 24-JAN-2017 10:39

Client ID: ICAL5

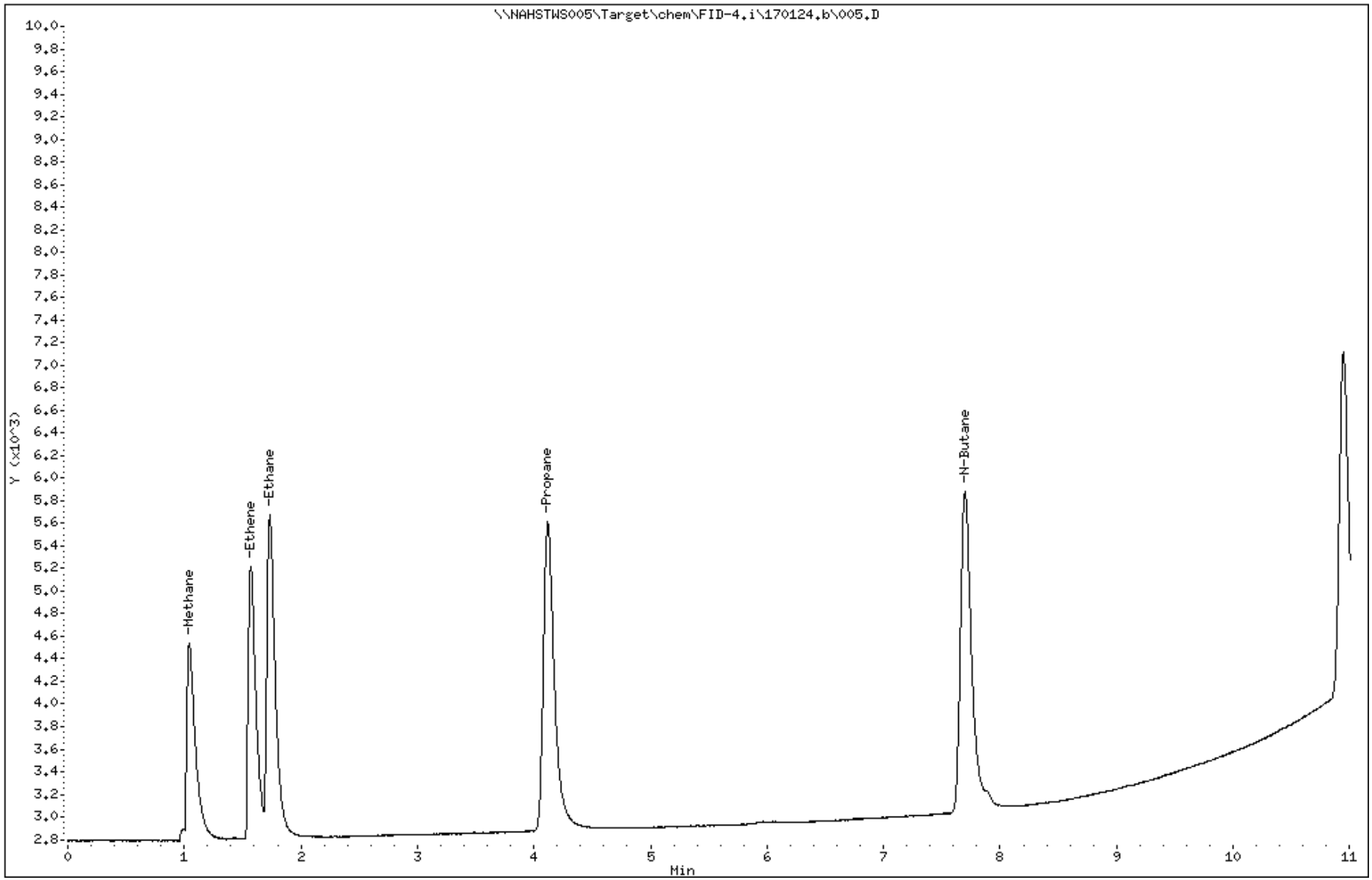
Instrument: FID-4.i

Sample Info: ICAL5;ICAL5;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



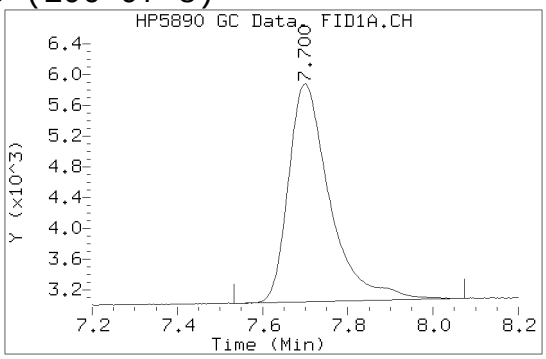
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Inj Date : 24-JAN-2017 10:39
InstruID : FID-4.i
LabSampID : ICAL5

N-Butane (106-97-8)

Reason Code:

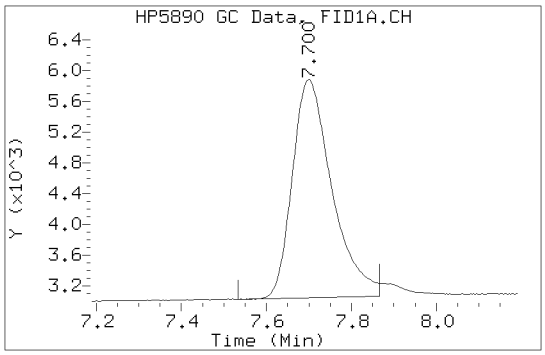
BEFORE

MASS
100
AREA
19142
HEIGHT
2839
28-Sep-2022
10:02
linh
pham



AFTER

MASS
100
AREA
18446
HEIGHT
2838
28-Sep-2022
10:02
linh
pham



Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D
Lab Smp Id: ICAL6 Client Smp ID: ICAL6
Inj Date : 24-JAN-2017 10:57
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL6;ICAL6;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:39 Cal File: 005.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.023	1.023	0.000	17957	19.2940	18.429
2 Ethene	1.550	1.550	0.000	22910	53.8200	39.078
3 Ethane	1.716	1.716	0.000	29505	36.0860	40.070
4 Propane	4.110	4.110	0.000	38286	52.9260	52.796
5 N-Butane	7.696	7.696	0.000	42817	69.9110	70.855

01324369

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D

Page 1

Date : 24-JAN-2017 10:57

Client ID: ICAL6

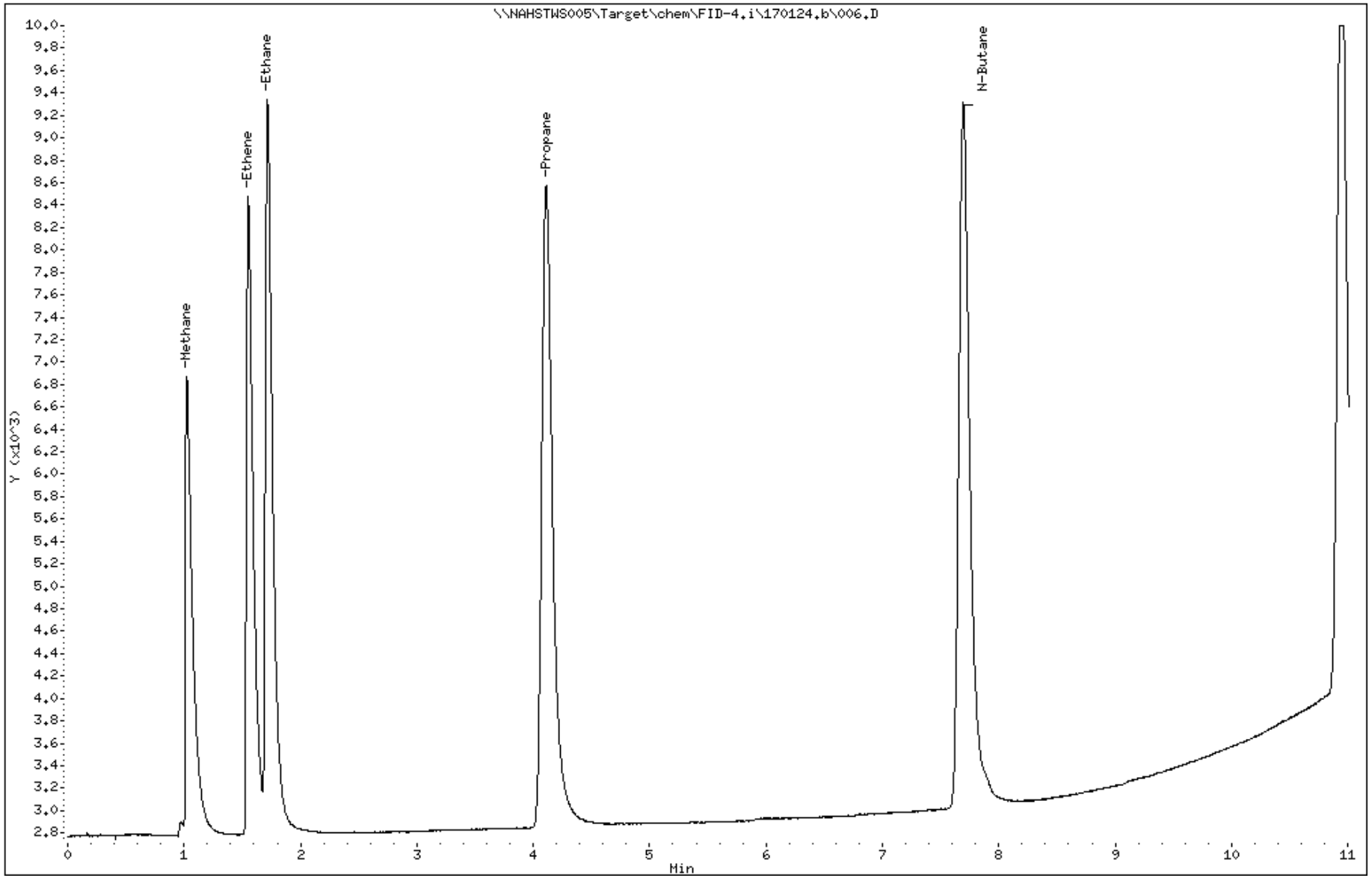
Instrument: FID-4.i

Sample Info: ICAL6;ICAL6;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D
Inj Date : 24-JAN-2017 10:57
InstruID : FID-4.i
LabSampID : ICAL6

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D
Lab Smp Id: ICAL7 Client Smp ID: ICAL7
Inj Date : 24-JAN-2017 11:13
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL7;ICAL7;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:57 Cal File: 006.D
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.030	1.030	0.000	41736	38.5880	42.833(A)
2 Ethene	1.556	1.556	0.000	55865	67.4000	95.291(A)
3 Ethane	1.723	1.723	0.000	72124	72.1720	97.951(A)
4 Propane	4.113	4.113	0.000	96509	105.852	105.844
5 N-Butane	7.690	7.690	0.000	114164	139.821	139.707

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

01324372

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D

Date : 24-JAN-2017 11:13

Client ID: ICAL7

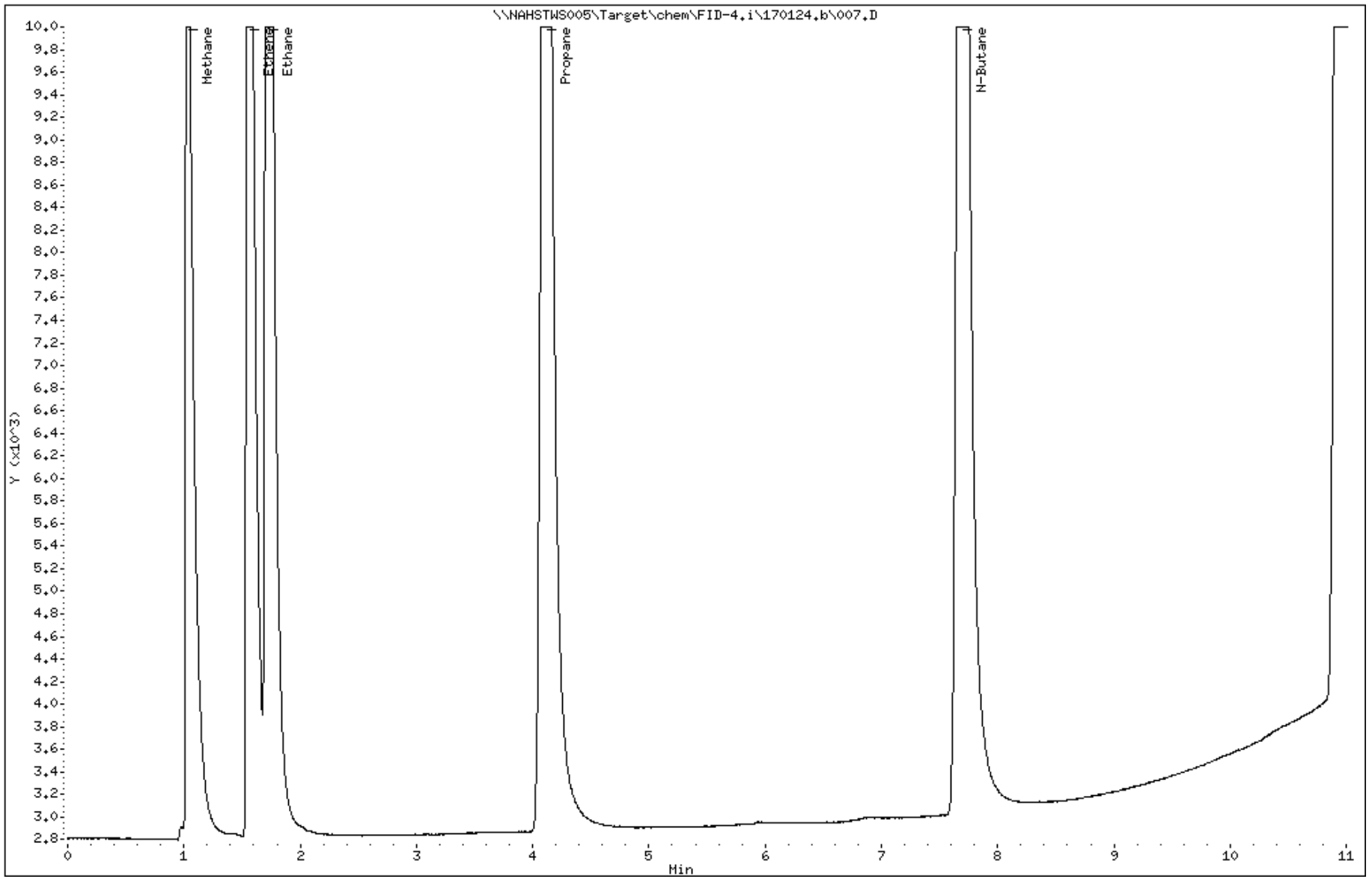
Instrument: FID-4.i

Sample Info: ICAL7;ICAL7;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D
Inj Date : 24-JAN-2017 11:13
InstruID : FID-4.i
LabSampID : ICAL7

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 24-JAN-2017 12:05
Operator : MA Inst ID: FID-4.i
Smp Info : ICV;ICV;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 8 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	1.046	1.030	0.016	9352	9.59792	9.597
2 Ethene	1.573	1.556	0.017	11192	19.0906	19.090
3 Ethane	1.736	1.723	0.013	14474	19.6571	19.657
4 Propane	4.116	4.113	0.003	18164	27.2381	27.238
5 N-Butane	7.696	7.690	0.006	19425	36.0103	36.010

01324375

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D

Date : 24-JAN-2017 12:05

Client ID: ICV

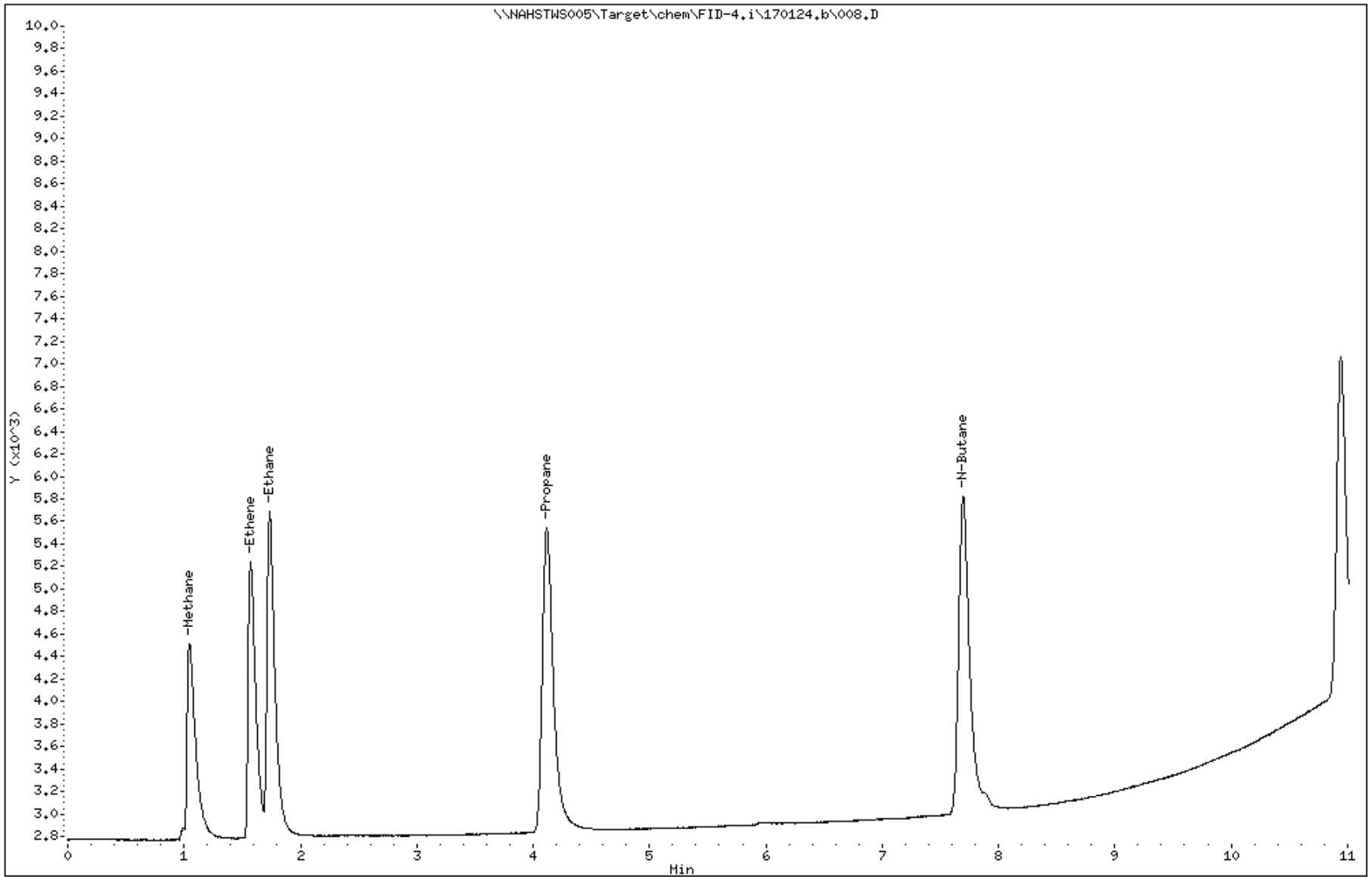
Instrument: FID-4.i

Sample Info: ICV;ICV;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D
Inj Date : 24-JAN-2017 12:05
InstruID : FID-4.i
LabSampID : ICV

NO MANUAL INTEGRATIONS

01324377

right solutions.
right partner.

Raw Data FID 4 442732

Dissolved Gasses by RSK-175

Workorder

HS23071289

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

08/07/2023

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\FID-4.i\230728.b\001.D Page 1
Report Date: 28-Jul-2023 08:13

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230728.b\001.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 28-JUL-2023 07:51
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230728.b\RSKNI3.m
Meth Date : 28-Jul-2023 08:13 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	0.430	0.430	0.000	7735	9.64700	7.933
2 Ethene	0.640	0.640	0.000	10482	16.8500	17.894
3 Ethane	0.706	0.706	0.000	14567	18.0430	20.246

01324379

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\001.D

Page 1

Date : 28-JUL-2023 07:51

Client ID: RSK-CCV

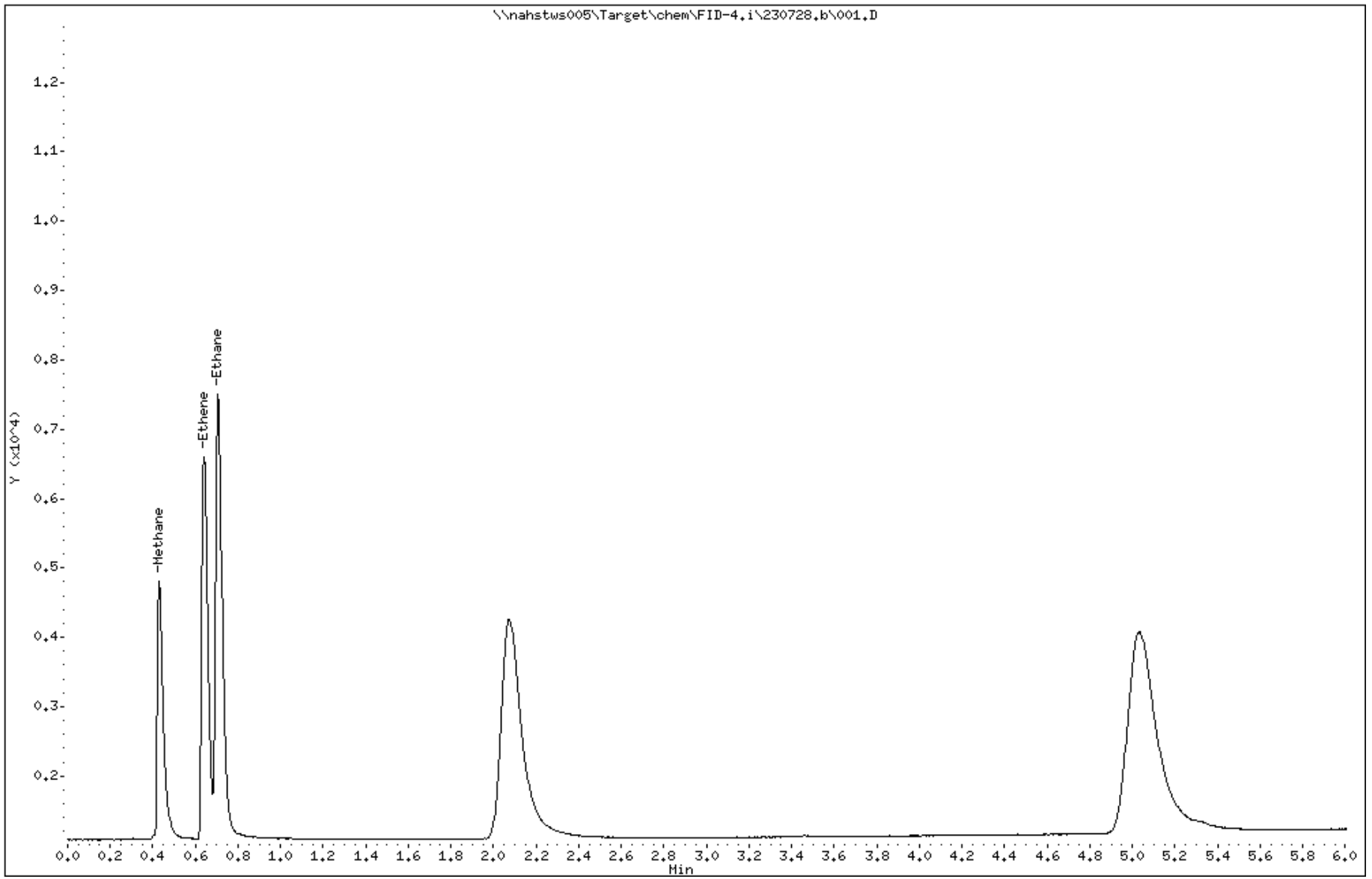
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



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Inj Date : 28-JUL-2023 07:51
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230728.b\002.D
Lab Smp Id: MBLK-230728 Client Smp ID: MBLK-230728
Inj Date : 28-JUL-2023 08:00
Operator : PL Inst ID: FID-4.i
Smp Info : MBLK-230728;MBLK-230728;3;;BLANK
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230728.b\RSKNI3.m
Meth Date : 28-Jul-2023 08:13 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)

01324382

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\002.D

Date : 28-JUL-2023 08:00

Client ID: MBLK-230728

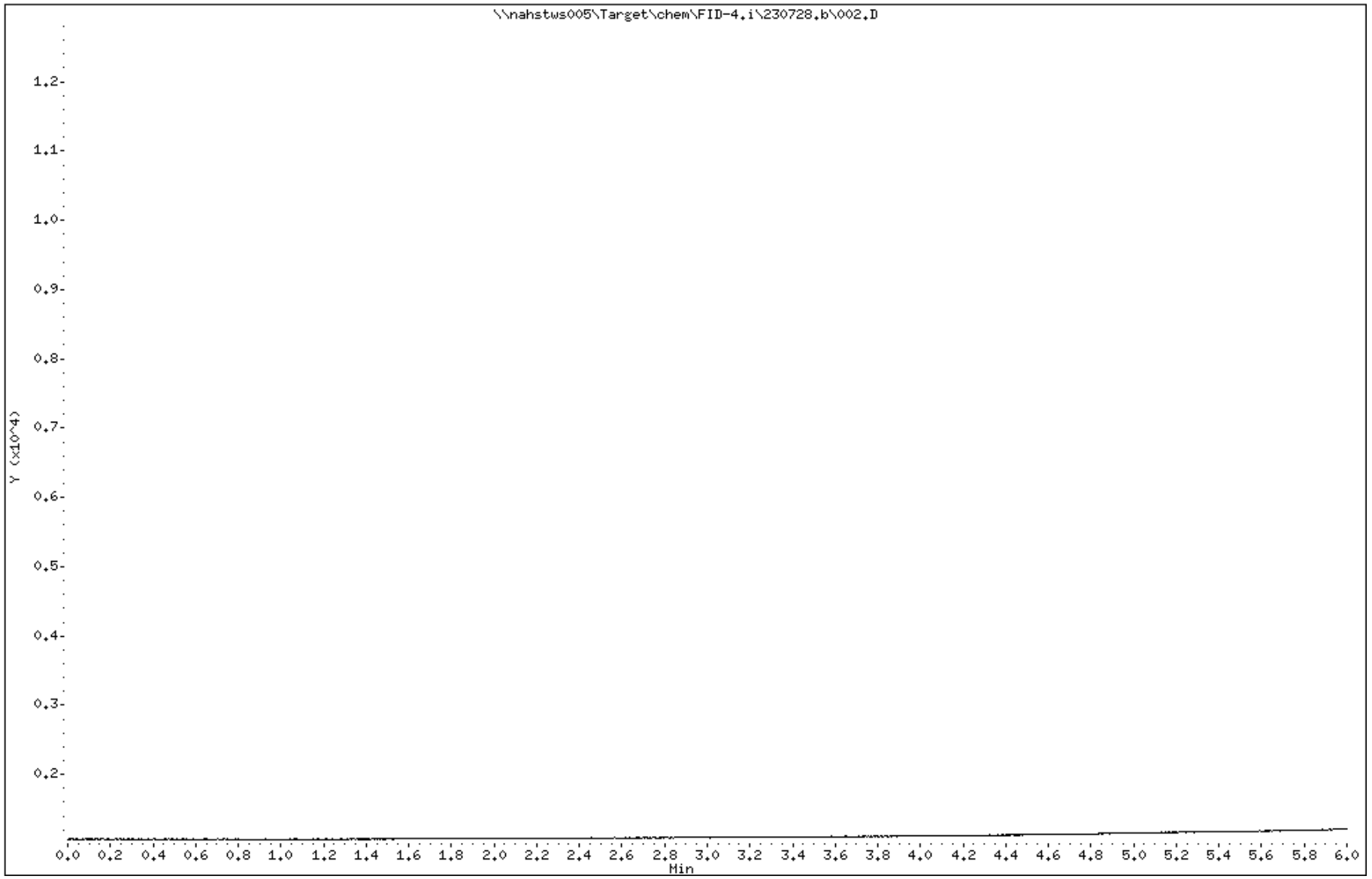
Instrument: FID-4.i

Sample Info: MBLK-230728;MBLK-230728;3;;BLANK

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230728.b\002.D
Inj Date : 28-JUL-2023 08:00
InstruID : FID-4.i
LabSampID : MBLK-230728

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\003.D Page 1
Report Date: 28-Jul-2023 08:17

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230728.b\003.D
Lab Smp Id: LCS-230728 Client Smp ID: LCS-230728
Inj Date : 28-JUL-2023 08:09
Operator : PL Inst ID: FID-4.i
Smp Info : LCS-230728;LCS-230728;3;;LCS
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230728.b\RSKNI3.m
Meth Date : 28-Jul-2023 08:13 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.423	0.430	-0.007	7754	7.95288	7.952
2 Ethene	0.636	0.640	-0.004	10592	18.0825	18.082
3 Ethane	0.703	0.706	-0.003	14525	20.1879	20.187

01324385

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\003.D

Date : 28-JUL-2023 08:09

Client ID: LCS-230728

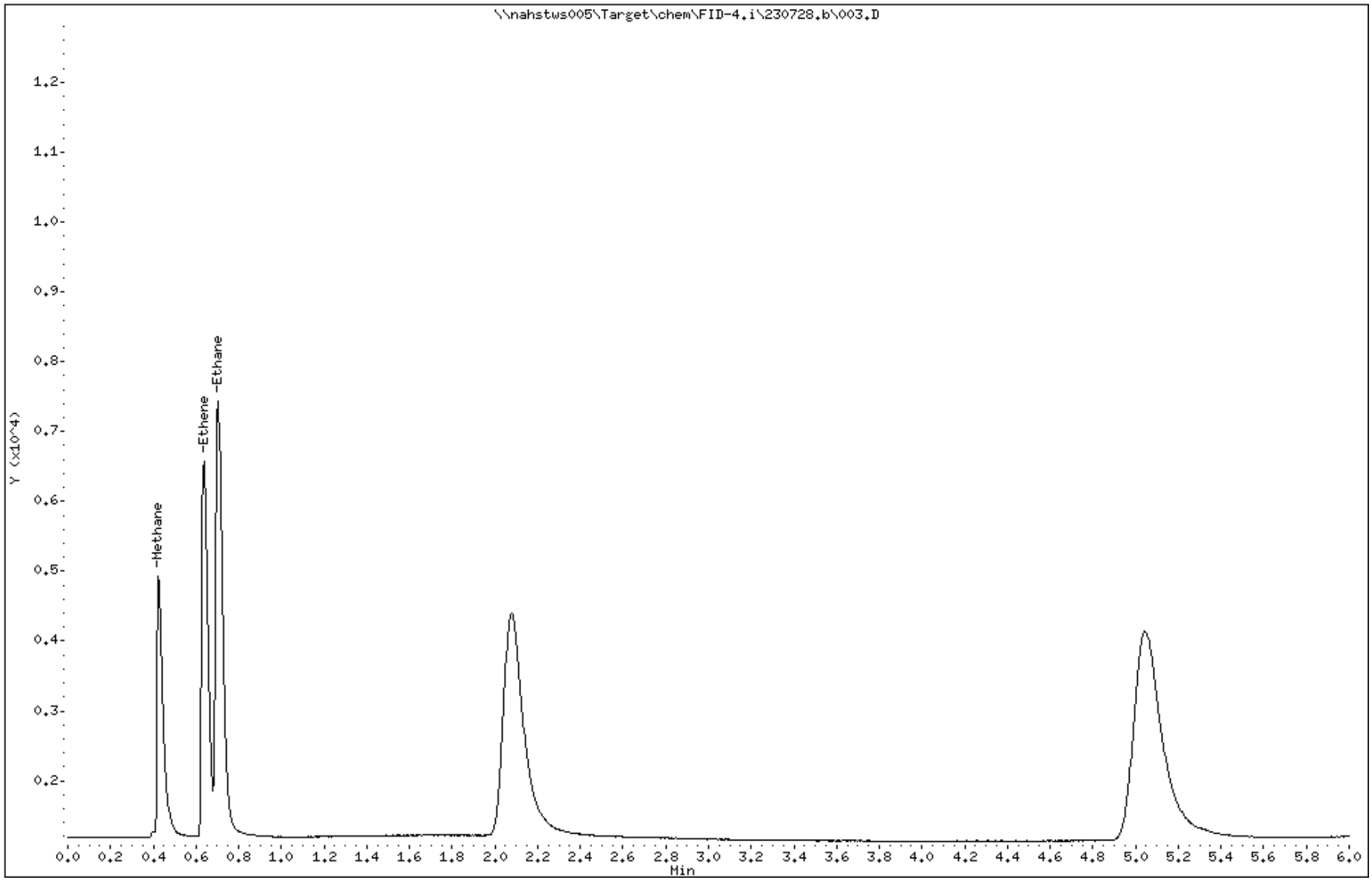
Instrument: FID-4.i

Sample Info: LCS-230728;LCS-230728;3;;LCS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230728.b\003.D
Inj Date : 28-JUL-2023 08:09
InstruID : FID-4.i
LabSampID : LCS-230728

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\004.D Page 1
Report Date: 28-Jul-2023 09:01

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230728.b\004.D
Lab Smp Id: LCSD-230728 Client Smp ID: LCSD-230728
Inj Date : 28-JUL-2023 08:18
Operator : PL Inst ID: FID-4.i
Smp Info : LCSD-230728;LCSD-230728;3;;LCSD
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230728.b\RSKNI3.m
Meth Date : 28-Jul-2023 08:13 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 4 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.430	0.430	0.000	7810	8.01032	8.010
2 Ethene	0.640	0.640	0.000	10735	18.3266	18.326
3 Ethane	0.710	0.706	0.004	14807	20.5799	20.579

01324388

Data File: \\nahstws005\target\chem\fid-4.i\230728.b\004.d

Page 1

Date : 28-JUL-2023 08:18

Client ID: LCSD-230728

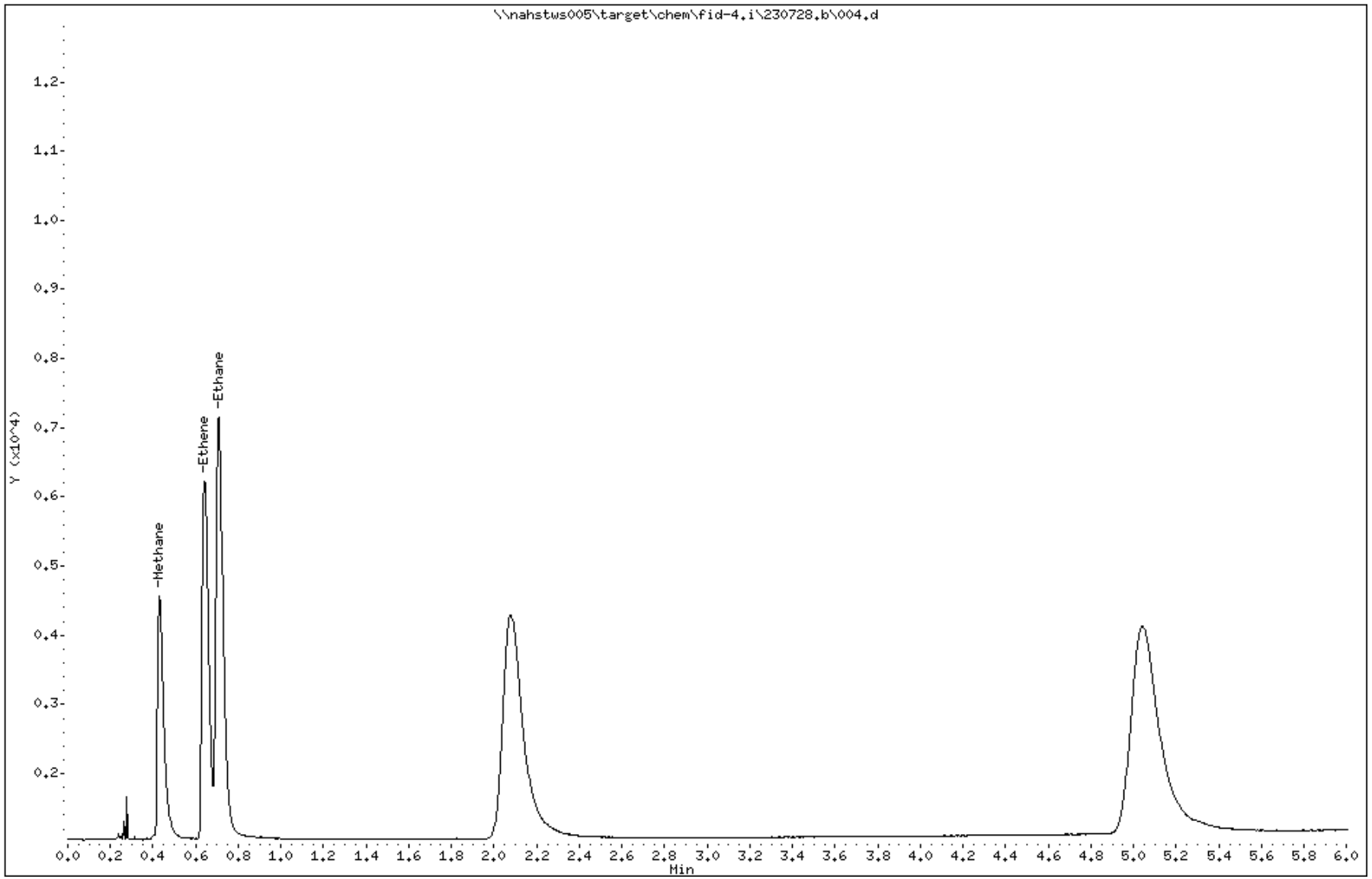
Instrument: FID-4.i

Sample Info: LCSD-230728;LCSD-230728;3;;LCSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\target\chem\fid-4.i\230728.b\004.d
Inj Date : 28-JUL-2023 08:18
InstruID : FID-4.i
LabSampID : LCSD-230728

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\007.D Page 1
Report Date: 28-Jul-2023 09:33

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230728.b\007.D
Lab Smp Id: HS23071330-04DUP Client Smp ID: HS23071330-04DUP
Inj Date : 28-JUL-2023 09:00
Operator : PL Inst ID: FID-4.i
Smp Info : HS23071330-04DUP;HS23071330-04DUP
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230728.b\RSKNI3.m
Meth Date : 28-Jul-2023 08:13 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.423	0.430	-0.007	8366	8.58058	8.580(M)

QC Flag Legend

M - Compound response manually integrated.

01324391

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\007.D

Date : 28-JUL-2023 09:00

Client ID: HS23071330-04DUP

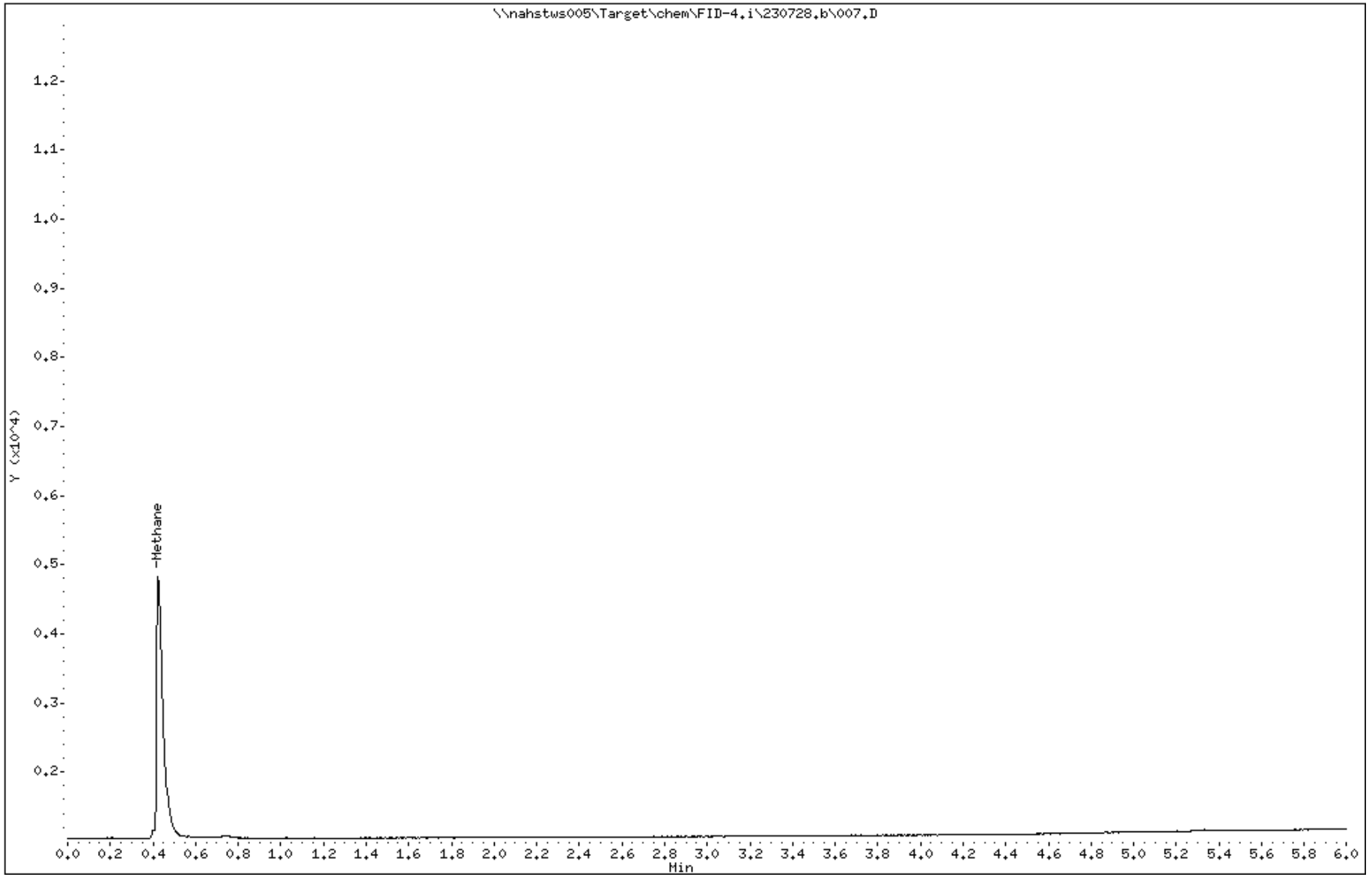
Instrument: FID-4.i

Sample Info: HS23071330-04DUP;HS23071330-04DUP

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



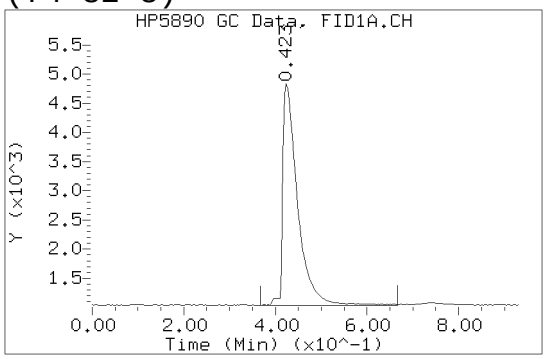
Data File : \\nahstws005\Target\chem\FID-4.i\230728.b\007.D
Inj Date : 28-JUL-2023 09:00
InstruID : FID-4.i
LabSampID : HS23071330-04DUP

Methane (74-82-8)

Reason Code:

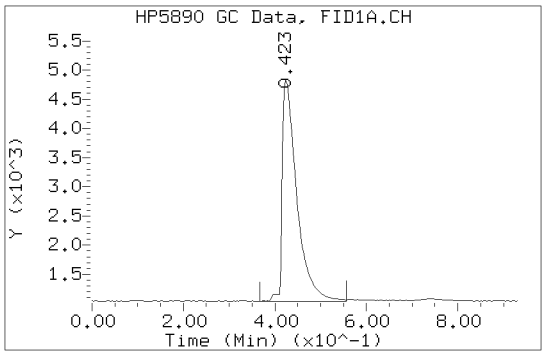
BEFORE

MASS
100
AREA
0
HEIGHT
0
28-Jul-2023
09:07
ALSHS
Server



AFTER

MASS
100
AREA
8366
HEIGHT
3796
28-Jul-2023
09:33
ALSHS
Ser



Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\008.D Page 1
Report Date: 28-Jul-2023 09:33

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230728.b\008.D
Lab Smp Id: HS23071289-01 Client Smp ID: HS23071289-01
Inj Date : 28-JUL-2023 09:19
Operator : PL Inst ID: FID-4.i
Smp Info : HS23071289-01;HS23071289-01
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230728.b\RSKNI3.m
Meth Date : 28-Jul-2023 08:13 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.426	0.430	-0.004	1230478	1262.04	1262.038(A)
2 Ethene	0.636	0.640	-0.004	24208	41.3275	41.327(M)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

01324394

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\008.D

Date : 28-JUL-2023 09:19

Client ID: HS23071289-01

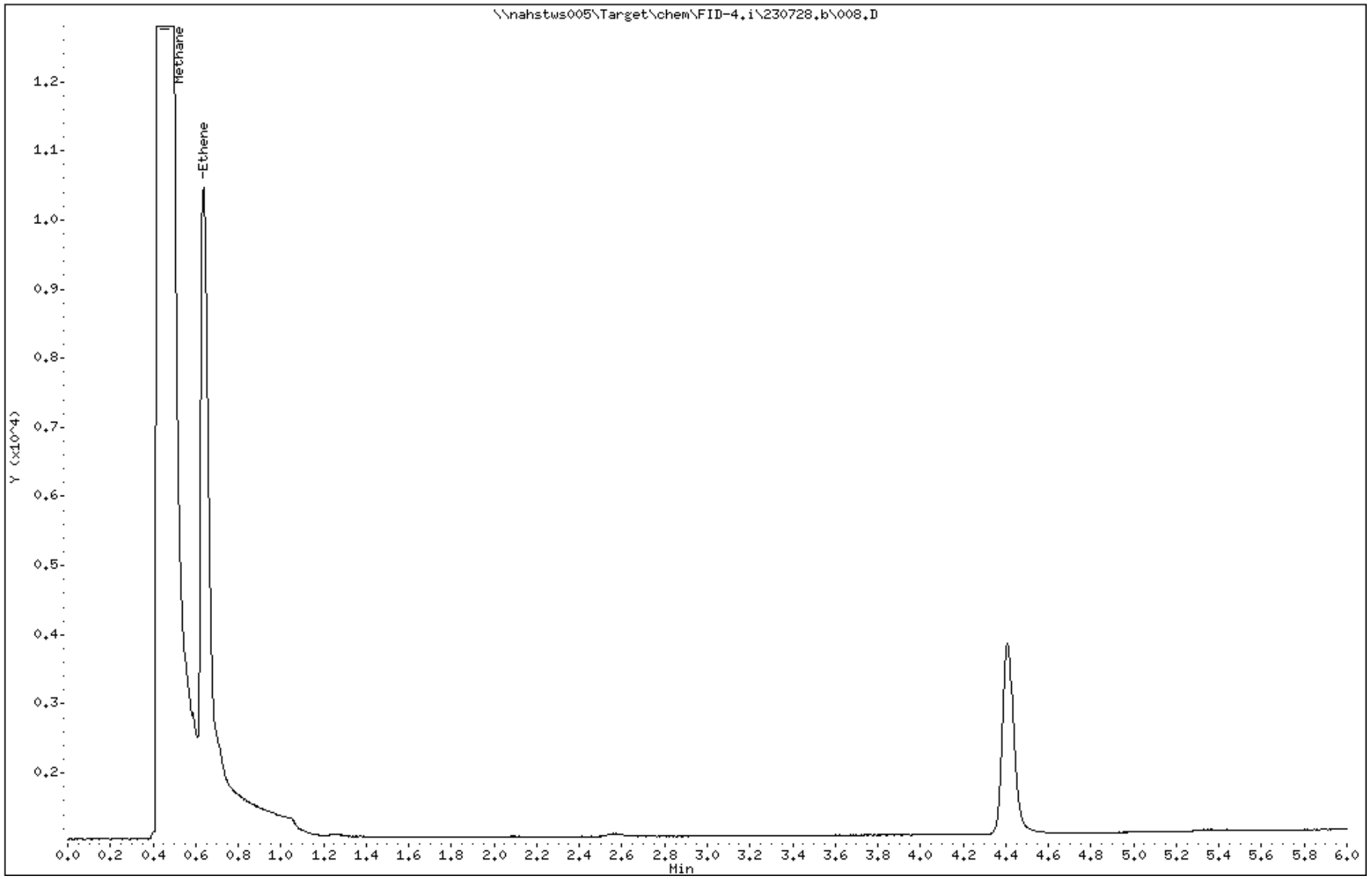
Instrument: FID-4.i

Sample Info: HS23071289-01;HS23071289-01

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



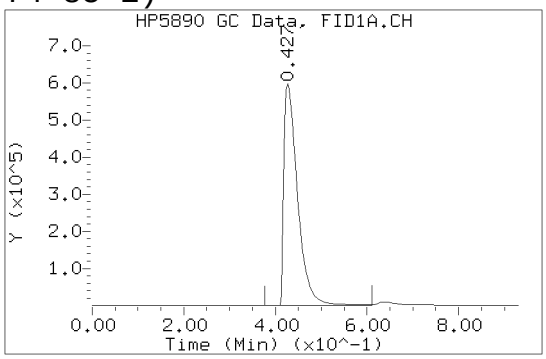
Data File : \\nahstws005\Target\chem\FID-4.i\230728.b\008.D
Inj Date : 28-JUL-2023 09:19
InstruID : FID-4.i
LabSampID : HS23071289-01

Ethene (74-85-1)

Reason Code:

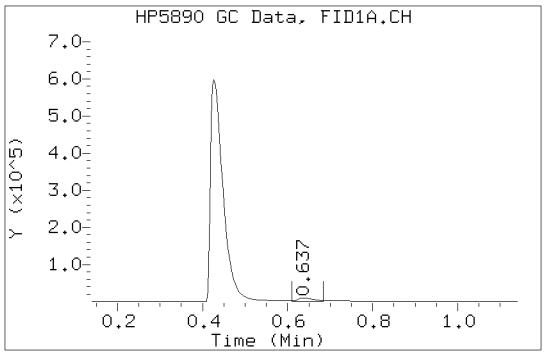
BEFORE

MASS
100
AREA
0
HEIGHT
0
28-Jul-2023
09:26
ALSHS
Server



AFTER

MASS
100
AREA
24208
HEIGHT
9420
28-Jul-2023
09:33
ALSHS
Ser



Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\009.D Page 1
Report Date: 28-Jul-2023 09:51

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230728.b\009.D
Lab Smp Id: HS23071289-02 Client Smp ID: HS23071289-02
Inj Date : 28-JUL-2023 09:34
Operator : PL Inst ID: FID-4.i
Smp Info : HS23071289-02;HS23071289-02
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230728.b\RSKNI3.m
Meth Date : 28-Jul-2023 08:13 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.423	0.430	-0.007	1232658	1264.27	1264.274(A)
2 Ethene	0.633	0.640	-0.007	24702	42.1708	42.170(M)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

01324397

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\009.D

Date : 28-JUL-2023 09:34

Client ID: HS23071289-02

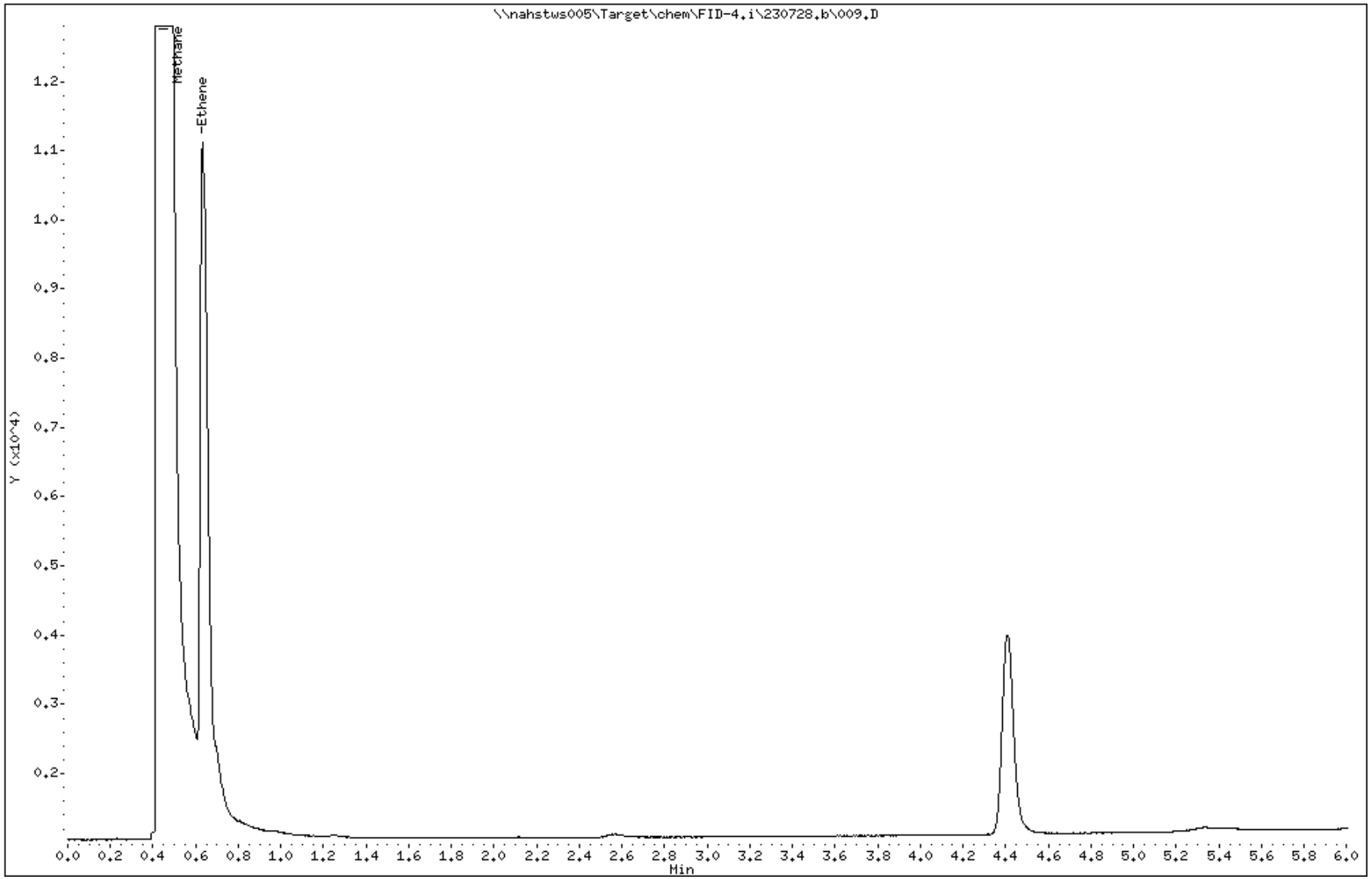
Instrument: FID-4.i

Sample Info: HS23071289-02;HS23071289-02

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



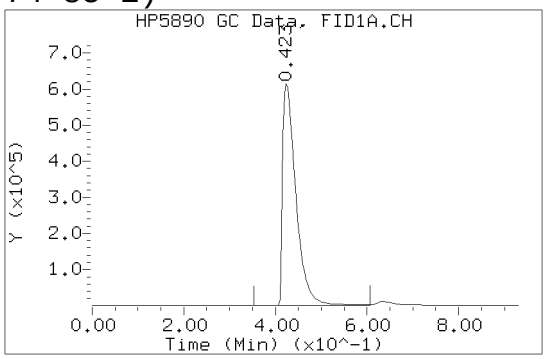
Data File : \\nahstws005\Target\chem\FID-4.i\230728.b\009.D
Inj Date : 28-JUL-2023 09:34
InstruID : FID-4.i
LabSampID : HS23071289-02

Ethene (74-85-1)

Reason Code:

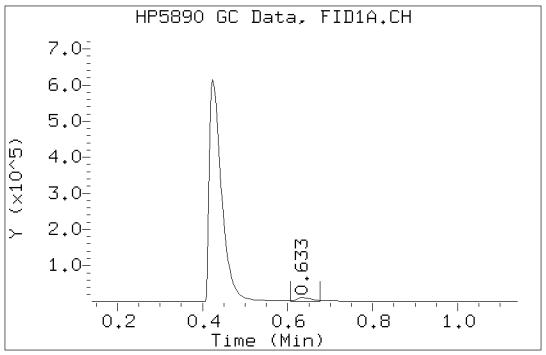
BEFORE

MASS
100
AREA
0
HEIGHT
0
28-Jul-2023
09:42
ALSHS
Server



AFTER

MASS
100
AREA
24702
HEIGHT
10063
28-Jul-2023
09:51
ALSHS
Ser



Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\010.D Page 1
Report Date: 28-Jul-2023 10:21

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230728.b\010.D
Lab Smp Id: HS23071289-03 Client Smp ID: HS23071289-03
Inj Date : 28-JUL-2023 09:52
Operator : PL Inst ID: FID-4.i
Smp Info : HS23071289-03;HS23071289-03
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230728.b\RSKNI3.m
Meth Date : 28-Jul-2023 08:13 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.420	0.430	-0.010	1244861	1276.79	1276.790(A)
2 Ethene	0.626	0.640	-0.014	21312	36.3835	36.383

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

01324400

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\010.D

Date : 28-JUL-2023 09:52

Client ID: HS23071289-03

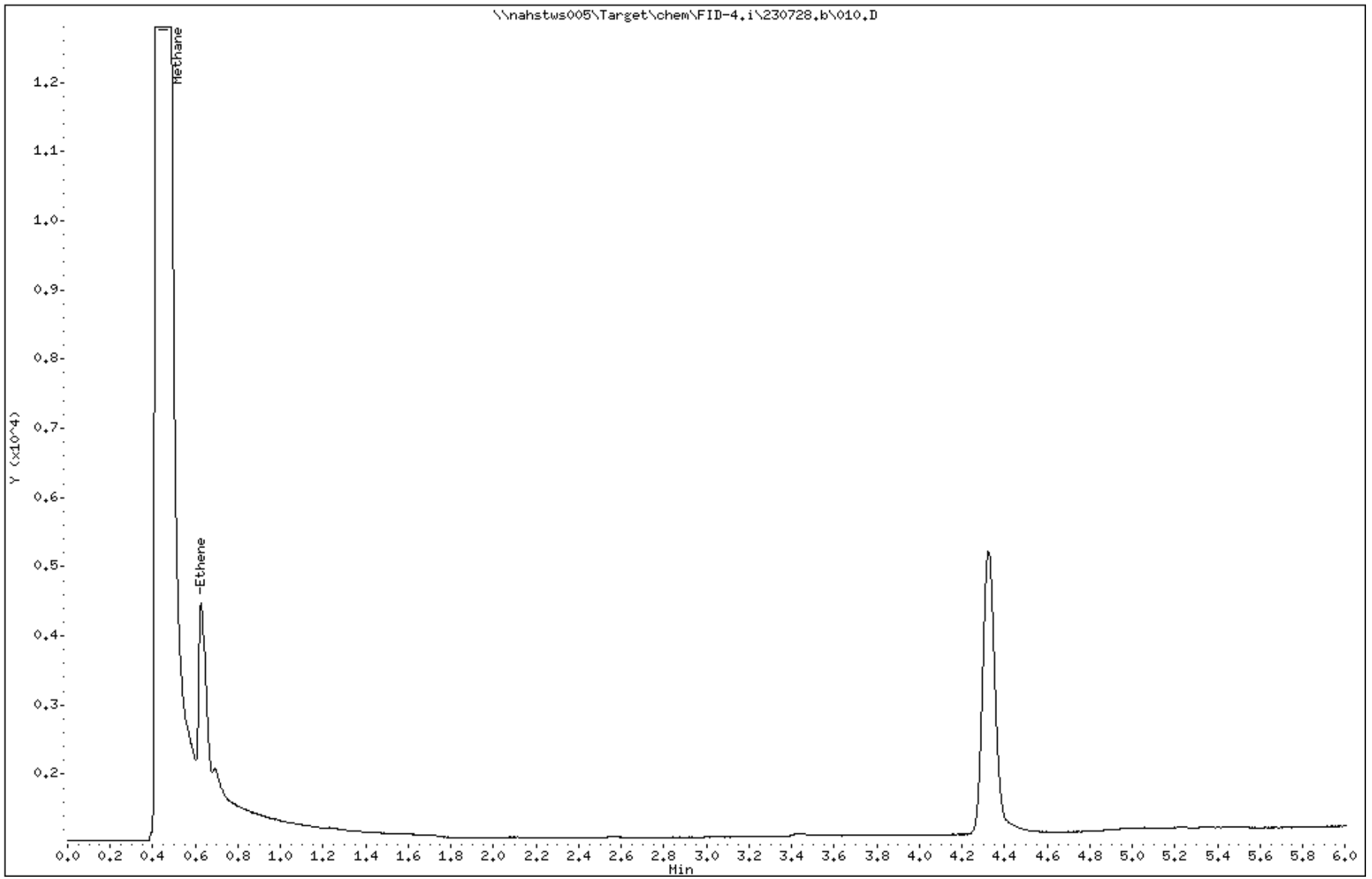
Instrument: FID-4.i

Sample Info: HS23071289-03;HS23071289-03

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230728.b\010.D
Inj Date : 28-JUL-2023 09:52
InstruID : FID-4.i
LabSampID : HS23071289-03

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\011.D Page 1
Report Date: 28-Jul-2023 10:28

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230728.b\011.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 28-JUL-2023 10:18
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230728.b\RSKNI3.m
Meth Date : 28-Jul-2023 10:27 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	0.430	0.430	0.000	7677	9.64700	7.873
2 Ethene	0.643	0.643	0.000	10650	16.8500	18.181
3 Ethane	0.710	0.710	0.000	14605	18.0430	20.299

01324403

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\011.D

Page 1

Date : 28-JUL-2023 10:18

Client ID: RSK-CCV

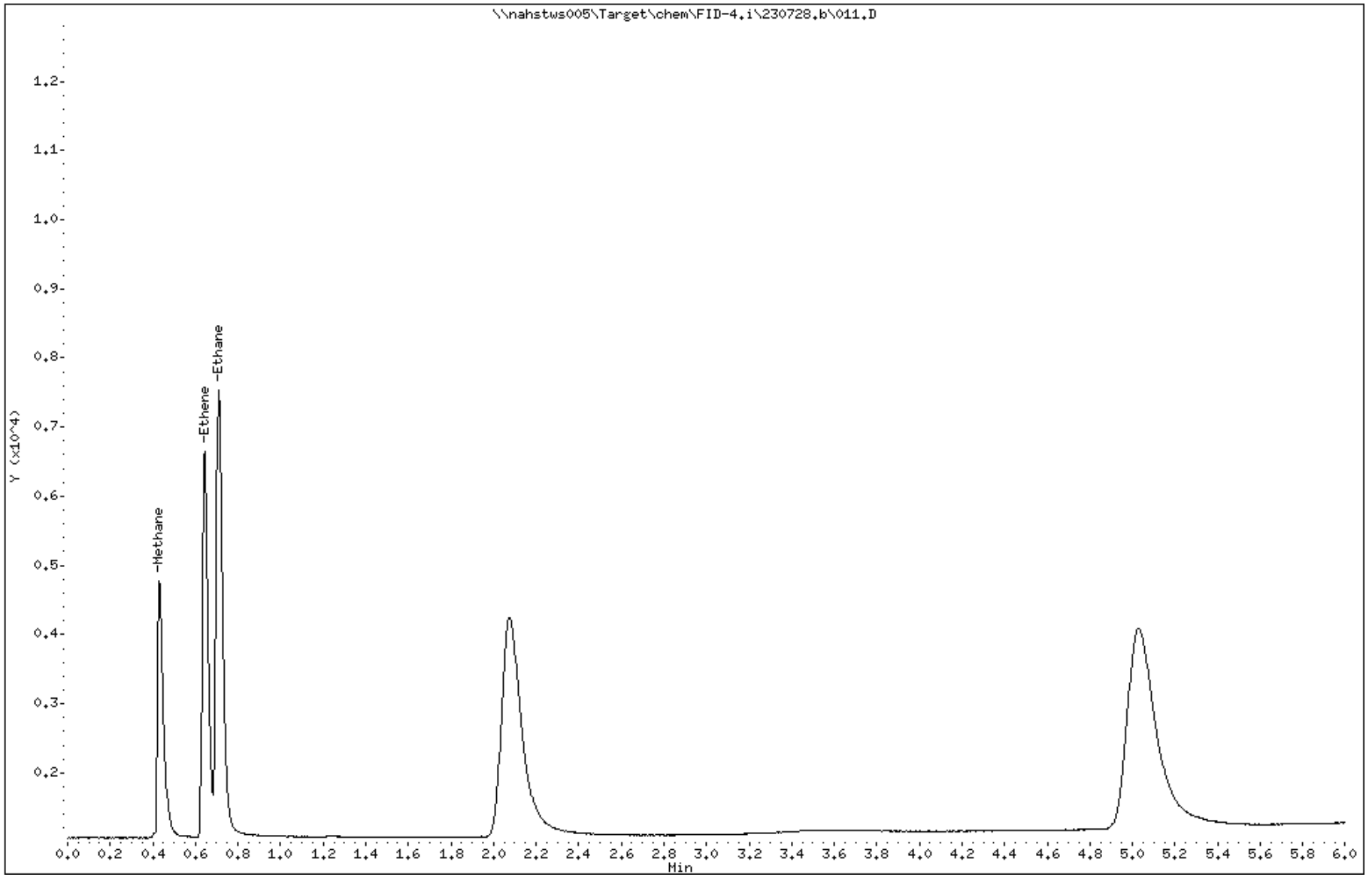
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230728.b\011.D
Inj Date : 28-JUL-2023 10:18
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\012.D Page 1
Report Date: 28-Jul-2023 10:40

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230728.b\012.D
Lab Smp Id: HS23071289-04 Client Smp ID: HS23071289-04
Inj Date : 28-JUL-2023 10:29
Operator : PL Inst ID: FID-4.i
Smp Info : HS23071289-04;HS23071289-04
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230728.b\RSKNI3.m
Meth Date : 28-Jul-2023 10:27 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.423	0.430	-0.007	811235	832.042	832.042(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

01324406

Data File: \\nahstws005\target\chem\fid-4.i\230728.b\012.d

Date : 28-JUL-2023 10:29

Client ID: HS23071289-04

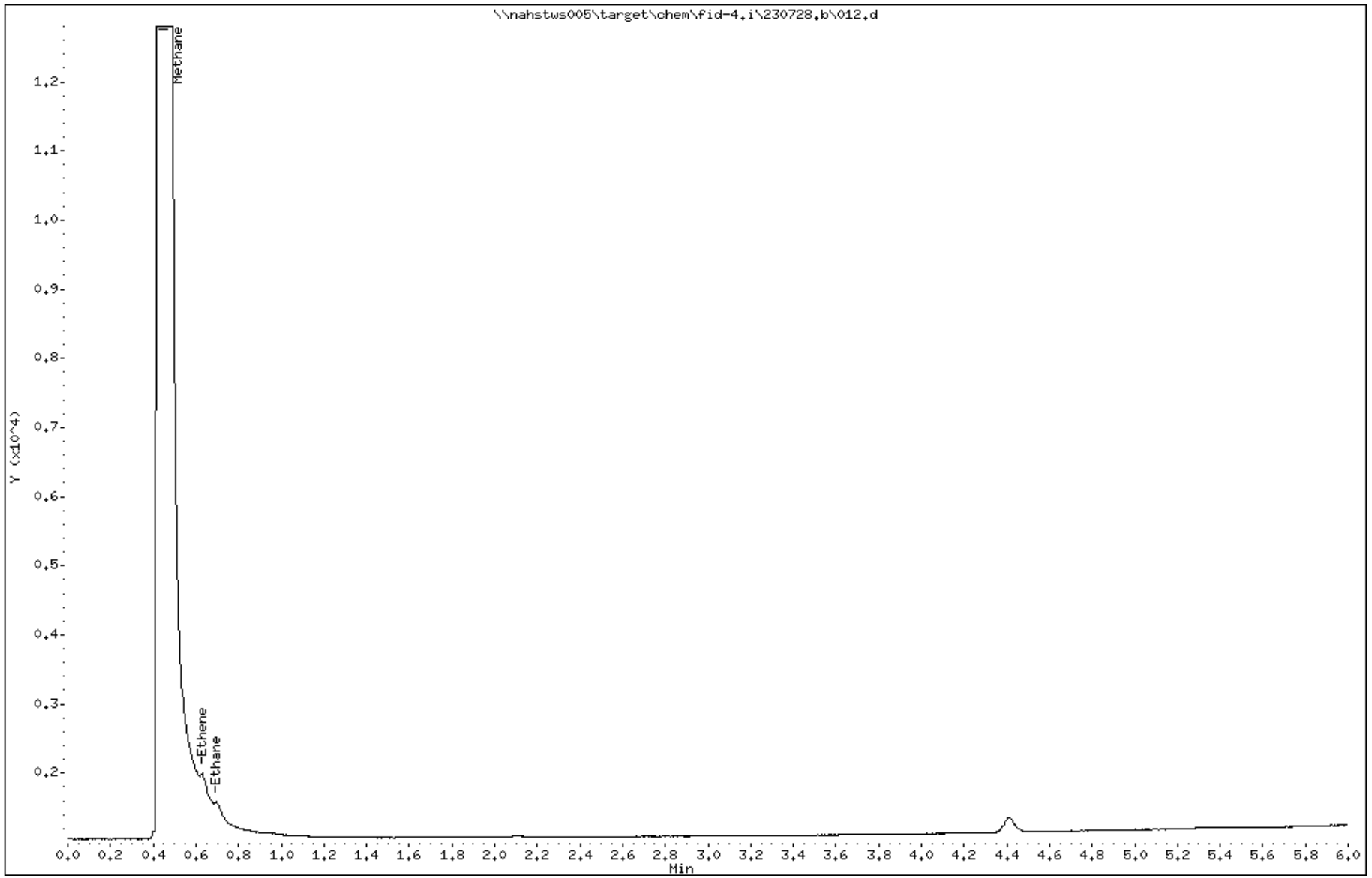
Instrument: FID-4.i

Sample Info: HS23071289-04;HS23071289-04

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



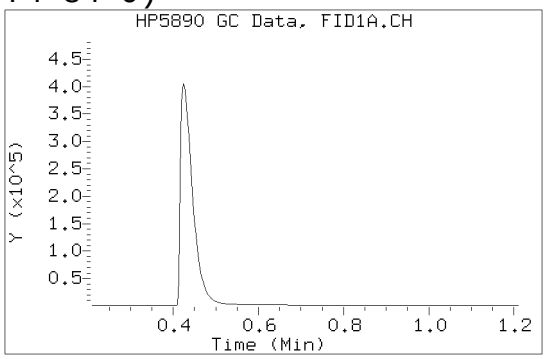
Data File : \\nahstws005\target\chem\fid-4.i\230728.b\012.d
Inj Date : 28-JUL-2023 10:29
InstruID : FID-4.i
LabSampID : HS23071289-04

Ethane (74-84-0)

Reason Code:

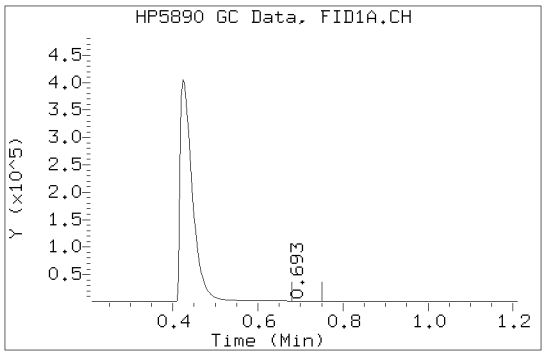
BEFORE

MASS
44
AREA
0
HEIGHT
0
28-Jul-2023
10:36
ALSHS
Server



AFTER

MASS
44
AREA
1624
HEIGHT
503
31-Jul-2023
09:24
ALSHS
Ser

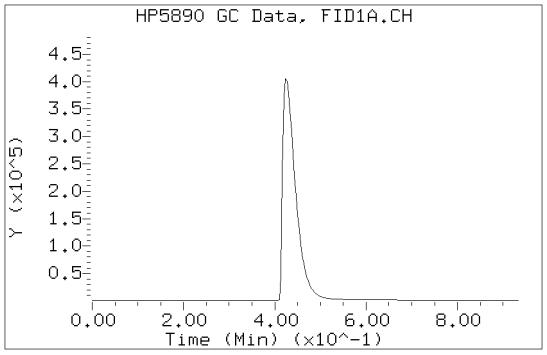


Methane (74-82-8)

Reason Code:

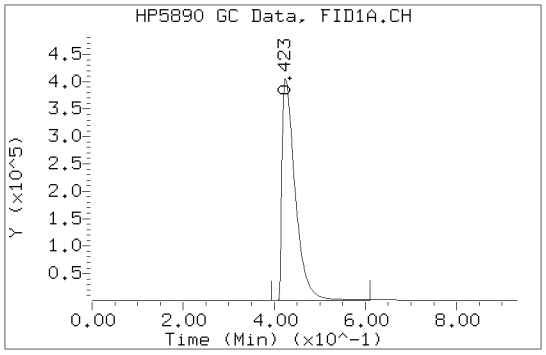
BEFORE

MASS
100
AREA
0
HEIGHT
0
28-Jul-2023
10:36
ALSHS
Server



AFTER

MASS
100
AREA
805259
HEIGHT
404279
31-Jul-2023
09:24
ALSHS
Ser

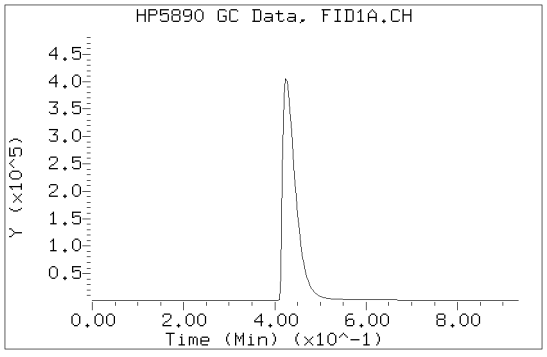


Ethene (74-85-1)

Reason Code:

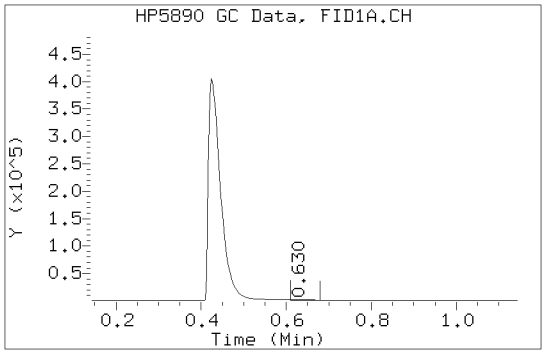
BEFORE

MASS
100
AREA
0
HEIGHT
0
28-Jul-2023
10:36
ALSHS
Server



AFTER

MASS
100
AREA
3258
HEIGHT
938
31-Jul-2023
09:24
ALSHS
Ser



Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\013.D Page 1
Report Date: 28-Jul-2023 12:55

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230728.b\013.D
Lab Smp Id: HS23071289-01 Client Smp ID: HS23071289-01
Inj Date : 28-JUL-2023 10:37
Operator : PL Inst ID: FID-4.i
Smp Info : HS23071289-01;HS23071289-01
Misc Info : ;1;0;50
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230728.b\RSKNI3.m
Meth Date : 28-Jul-2023 10:27 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 13
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.443	0.430	0.013	27617	28.3254	1416.267(M)
2 Ethene	0.653	0.643	0.010	1066	1.81986	90.992(M)

QC Flag Legend

M - Compound response manually integrated.

01324409

Data File: \\nahstws005\target\chem\fid-4.i\230728.b\013.d

Date : 28-JUL-2023 10:37

Client ID: HS23071289-01

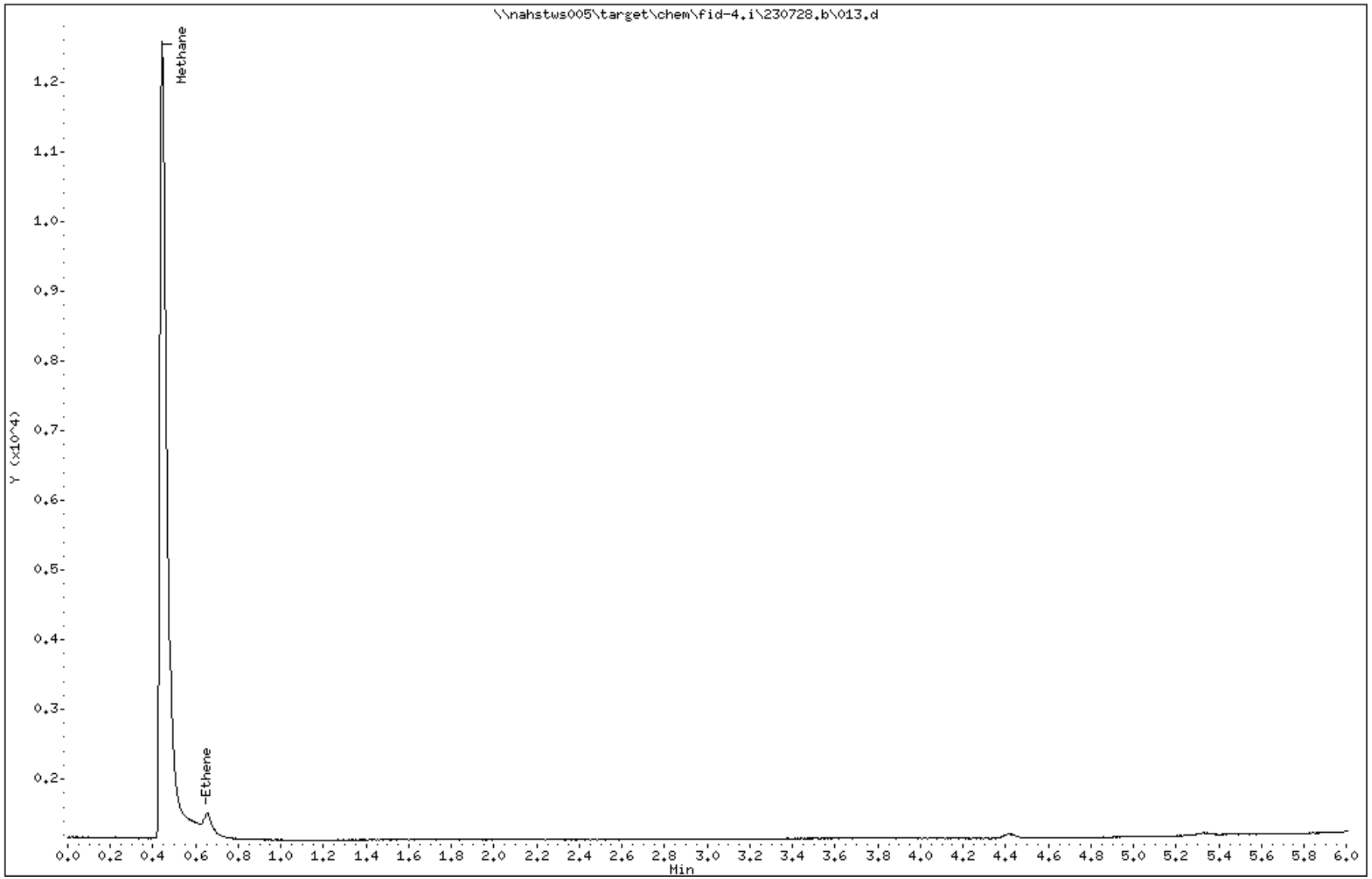
Instrument: FID-4.i

Sample Info: HS23071289-01;HS23071289-01

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



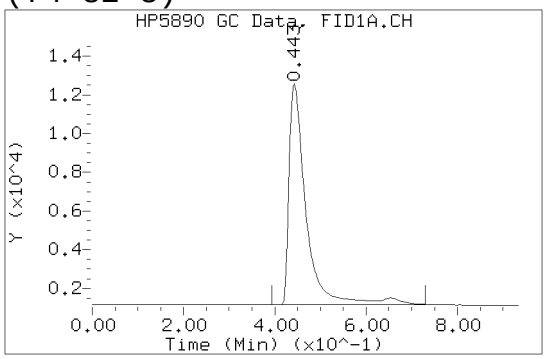
Data File : \\nahstws005\target\chem\fid-4.i\230728.b\013.d
Inj Date : 28-JUL-2023 10:37
InstruID : FID-4.i
LabSampID : HS23071289-01

Methane (74-82-8)

Reason Code:

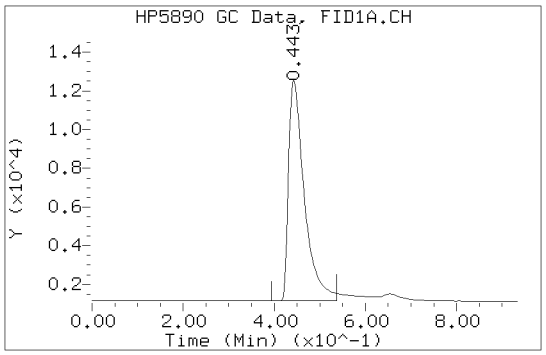
BEFORE

MASS
100
AREA
0
HEIGHT
0
28-Jul-2023
10:46
ALSHS
Server



AFTER

MASS
100
AREA
27617
HEIGHT
11425
31-Jul-2023
09:24
ALSHS
Ser

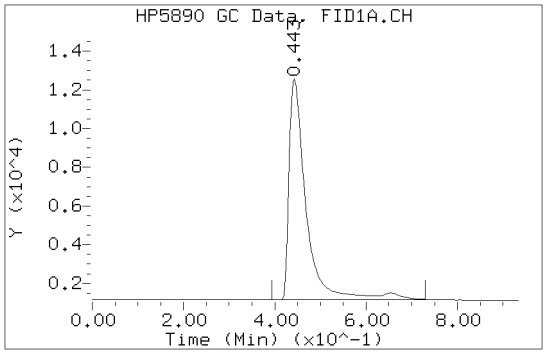


Ethene (74-85-1)

Reason Code:

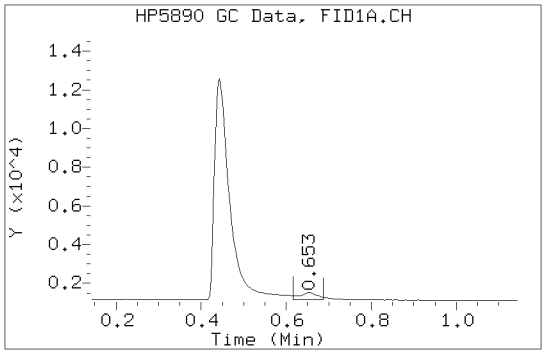
BEFORE

MASS
100
AREA
0
HEIGHT
0
28-Jul-2023
10:46
ALSHS
Server



AFTER

MASS
100
AREA
1066
HEIGHT
355
31-Jul-2023
09:24
ALSHS
Ser



Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\014.D Page 1
Report Date: 28-Jul-2023 12:55

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230728.b\014.D
Lab Smp Id: HS23071289-02 Client Smp ID: HS23071289-02
Inj Date : 28-JUL-2023 10:50
Operator : PL Inst ID: FID-4.i
Smp Info : HS23071289-02;HS23071289-02
Misc Info : ;1;0;50
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230728.b\RSKNI3.m
Meth Date : 28-Jul-2023 10:27 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 14
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.443	0.430	0.013	27725	28.4361	1421.806(M)

QC Flag Legend

M - Compound response manually integrated.

01324412

Data File: \\nahstws005\target\chem\fid-4.i\230728.b\014.d

Date : 28-JUL-2023 10:50

Client ID: HS23071289-02

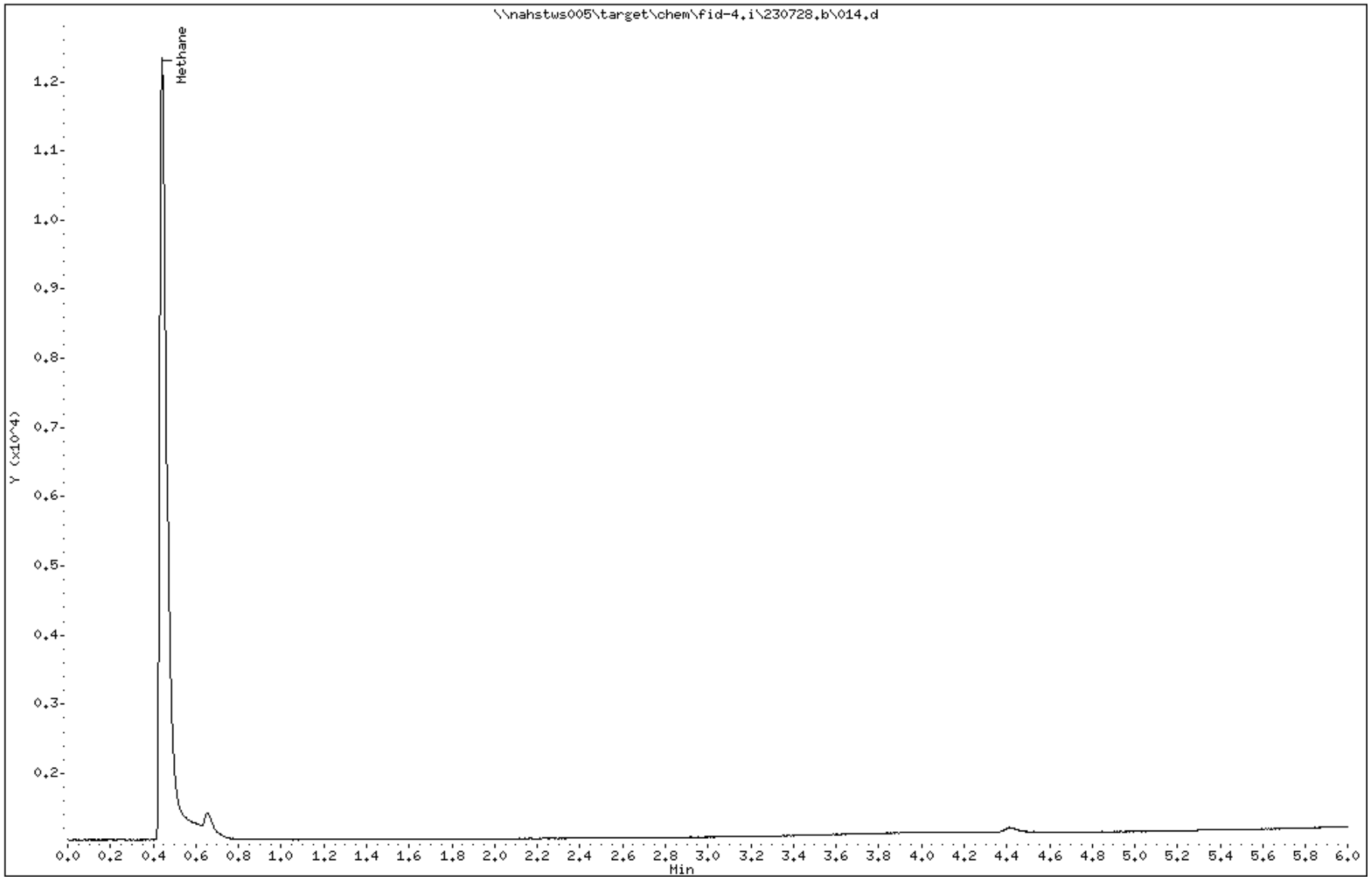
Instrument: FID-4.i

Sample Info: HS23071289-02;HS23071289-02

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



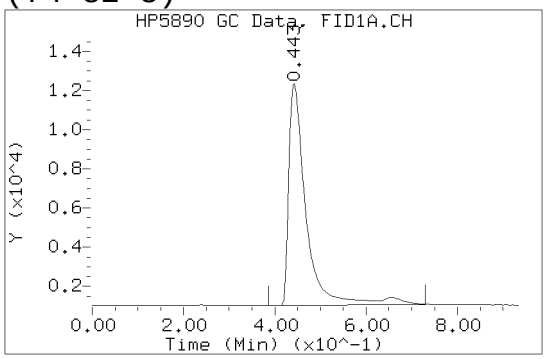
Data File : \\nahstws005\target\chem\fid-4.i\230728.b\014.d
Inj Date : 28-JUL-2023 10:50
InstruID : FID-4.i
LabSampID : HS23071289-02

Methane (74-82-8)

Reason Code:

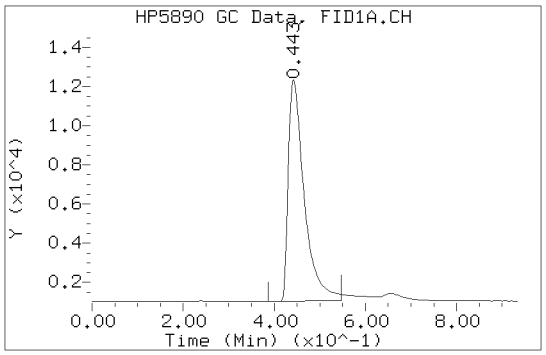
BEFORE

MASS
100
AREA
0
HEIGHT
0
28-Jul-2023
10:58
ALSHS
Server



AFTER

MASS
100
AREA
27725
HEIGHT
11309
31-Jul-2023
09:24
ALSHS
Ser



Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\015.D Page 1
Report Date: 28-Jul-2023 12:56

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230728.b\015.D
Lab Smp Id: HS23071289-03 Client Smp ID: HS23071289-03
Inj Date : 28-JUL-2023 11:08
Operator : PL Inst ID: FID-4.i
Smp Info : HS23071289-03;HS23071289-03
Misc Info : ;1;0;50
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230728.b\RSKNI3.m
Meth Date : 28-Jul-2023 10:27 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 15
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.443	0.430	0.013	28098	28.8187	1440.934(M)

QC Flag Legend

M - Compound response manually integrated.

01324415

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\015.D

Date : 28-JUL-2023 11:08

Client ID: HS23071289-03

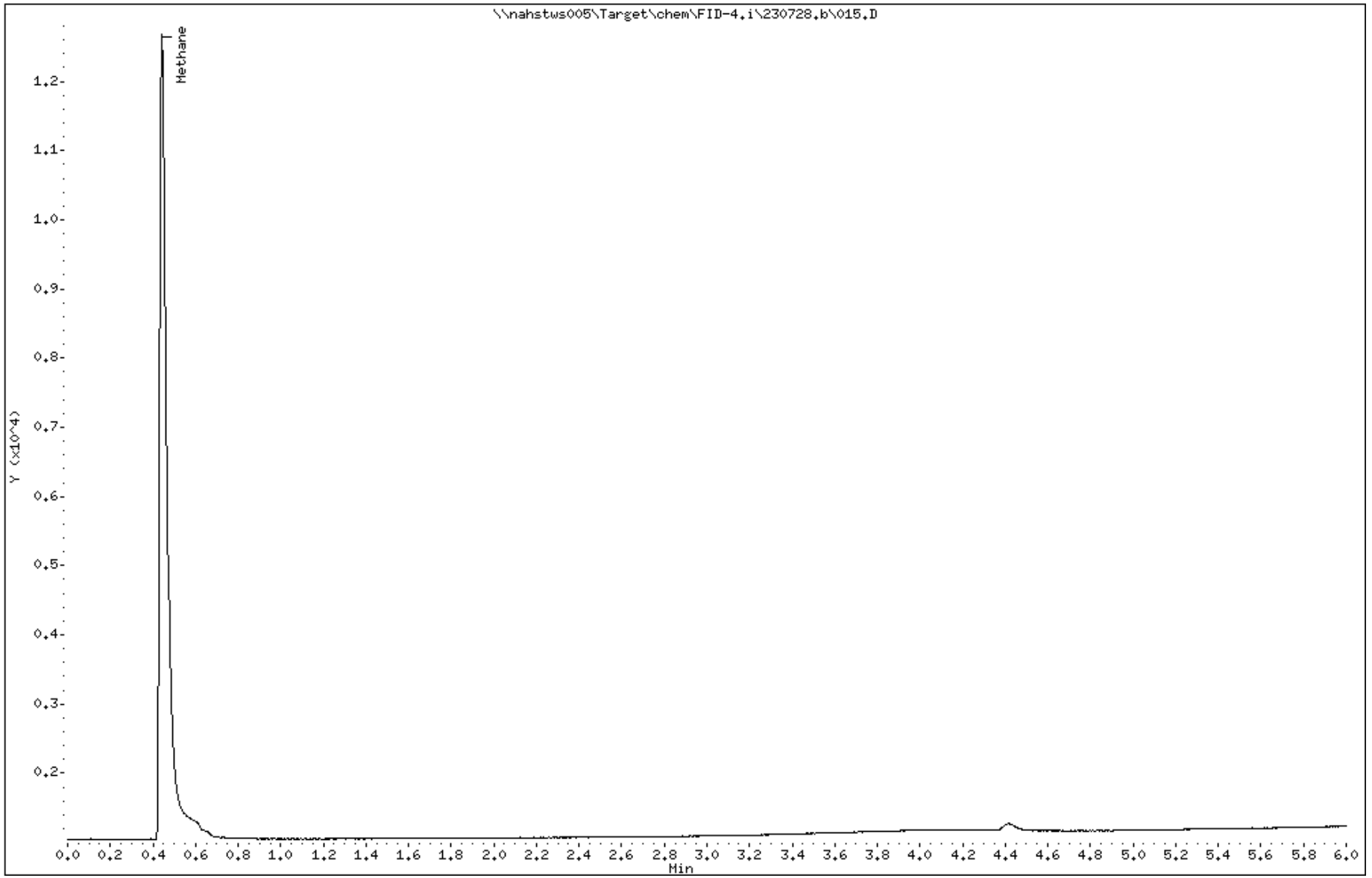
Instrument: FID-4.i

Sample Info: HS23071289-03;HS23071289-03

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



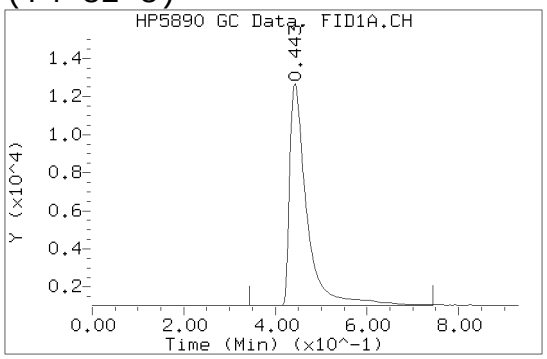
Data File : \\nahstws005\Target\chem\FID-4.i\230728.b\015.D
Inj Date : 28-JUL-2023 11:08
InstruID : FID-4.i
LabSampID : HS23071289-03

Methane (74-82-8)

Reason Code:

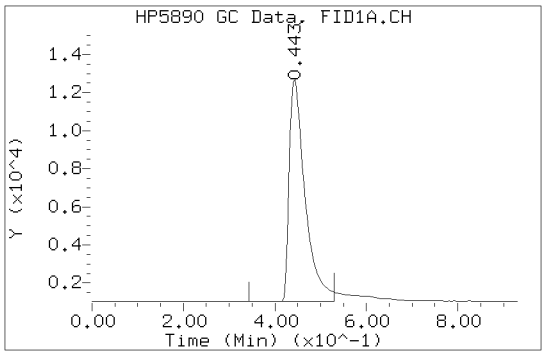
BEFORE

MASS
100
AREA
0
HEIGHT
0
28-Jul-2023
11:15
ALSHS
Server



AFTER

MASS
100
AREA
28098
HEIGHT
11631
28-Jul-2023
12:56
ALSHS
Ser



Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\016.D Page 1
Report Date: 28-Jul-2023 12:57

ALS Laboratory Group

Dissolved Gases Analysis
Data file : \\nahstws005\Target\chem\FID-4.i\230728.b\016.D
Lab Smp Id: HS23071289-04 Client Smp ID: HS23071289-04
Inj Date : 28-JUL-2023 11:44
Operator : PL Inst ID: FID-4.i
Smp Info : HS23071289-04;HS23071289-04
Misc Info : ;1;0;50
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230728.b\RSKNI3.m
Meth Date : 28-Jul-2023 10:27 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 16
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.443	0.430	0.013	18724	19.2043	960.212(M)

QC Flag Legend

M - Compound response manually integrated.

01324418

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\016.D

Date : 28-JUL-2023 11:44

Client ID: HS23071289-04

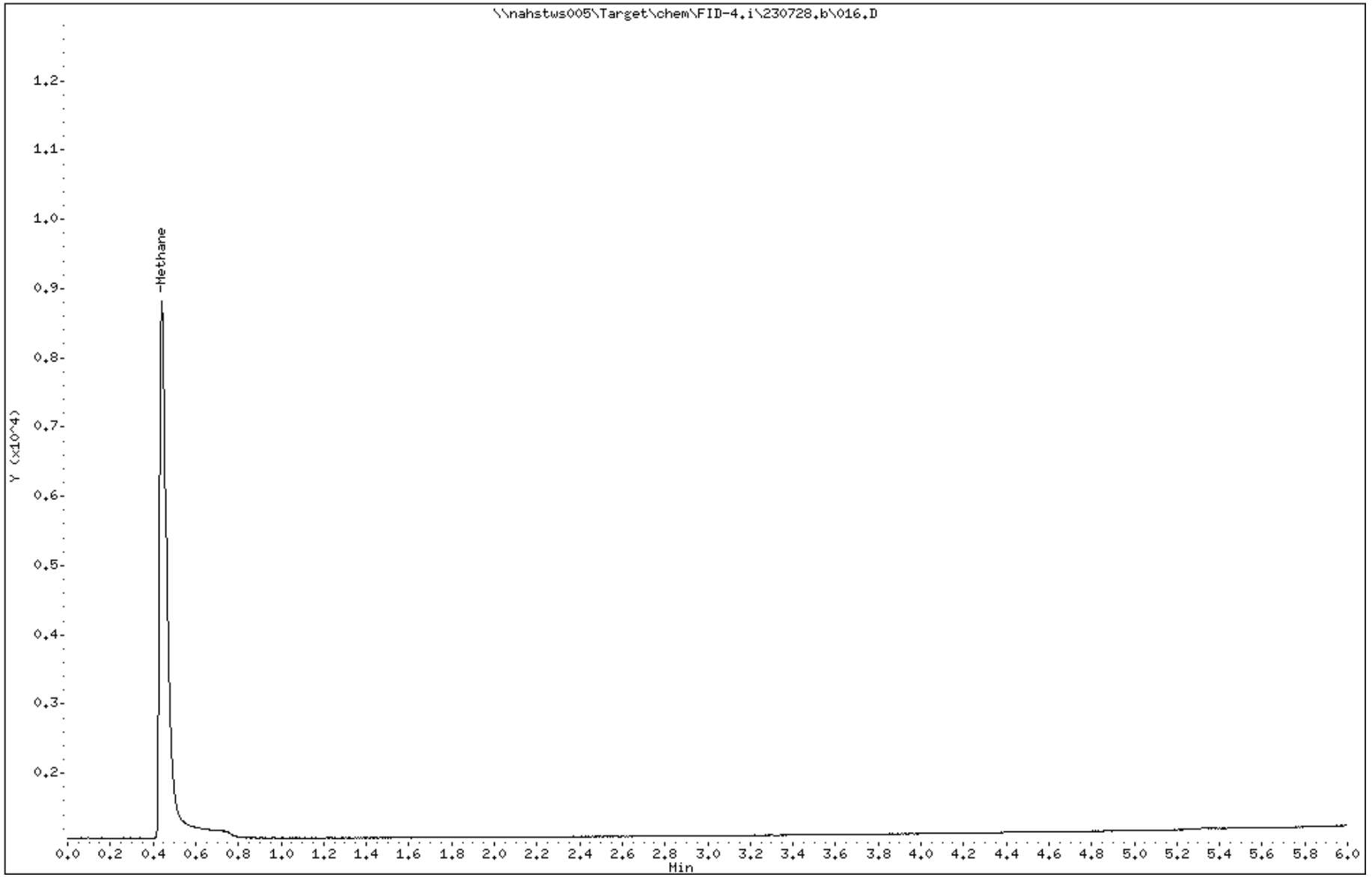
Instrument: FID-4.i

Sample Info: HS23071289-04;HS23071289-04

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



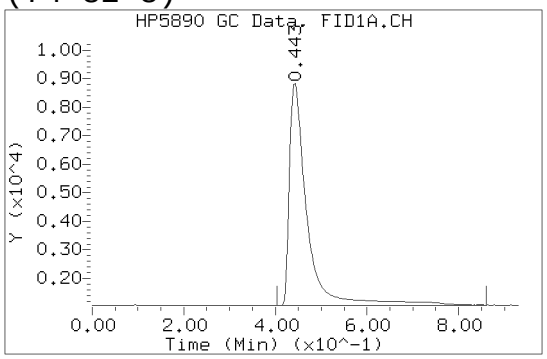
Data File : \\nahstws005\Target\chem\FID-4.i\230728.b\016.D
Inj Date : 28-JUL-2023 11:44
InstruID : FID-4.i
LabSampID : HS23071289-04

Methane (74-82-8)

Reason Code:

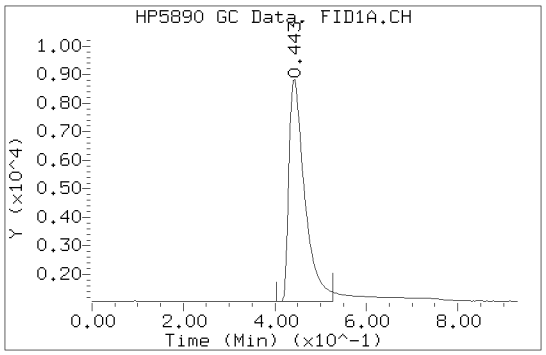
BEFORE

MASS
100
AREA
0
HEIGHT
0
28-Jul-2023
11:51
ALSHS
Server



AFTER

MASS
100
AREA
18724
HEIGHT
7762
28-Jul-2023
12:57
ALSHS
Ser



Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\022.D Page 1
Report Date: 28-Jul-2023 16:03

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230728.b\022.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 28-JUL-2023 15:36
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230728.b\RSKNI3.m
Meth Date : 28-Jul-2023 16:03 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	0.430	0.430	0.000	7610	9.64700	7.805
2 Ethene	0.640	0.640	0.000	10298	16.8500	17.580
3 Ethane	0.706	0.706	0.000	14425	18.0430	20.048

01324421

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\022.D

Date : 28-JUL-2023 15:36

Client ID: RSK-CCV

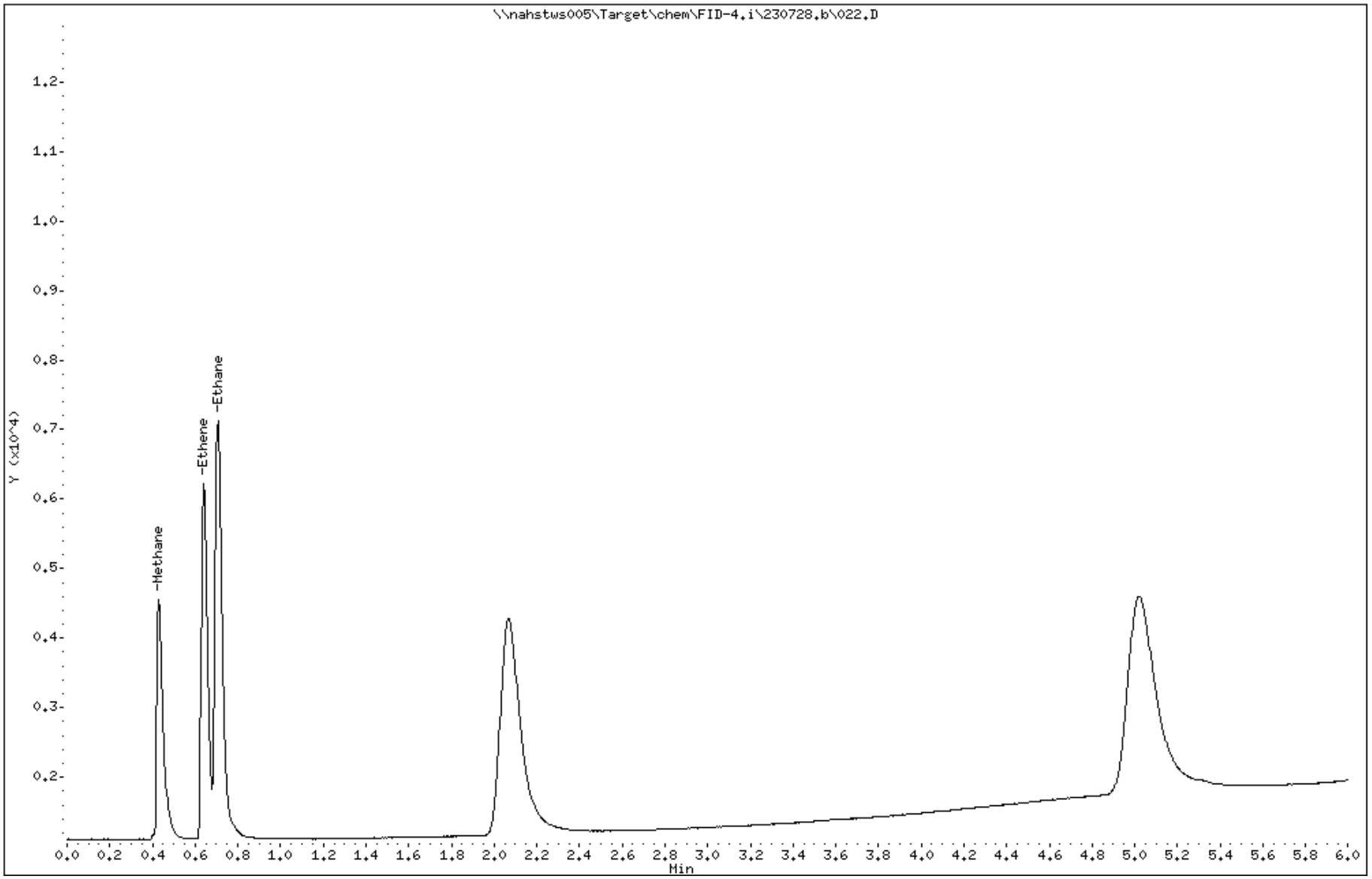
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230728.b\022.D
Inj Date : 28-JUL-2023 15:36
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\033.D Page 1
Report Date: 28-Jul-2023 18:20

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230728.b\033.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 28-JUL-2023 17:58
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230728.b\RSKNI3.m
Meth Date : 28-Jul-2023 18:19 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	0.430	0.430	0.000	7673	9.64700	7.869
2 Ethene	0.640	0.640	0.000	10568	16.8500	18.041
3 Ethane	0.706	0.706	0.000	14569	18.0430	20.249

01324424

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\033.D

Date : 28-JUL-2023 17:58

Client ID: RSK-CCV

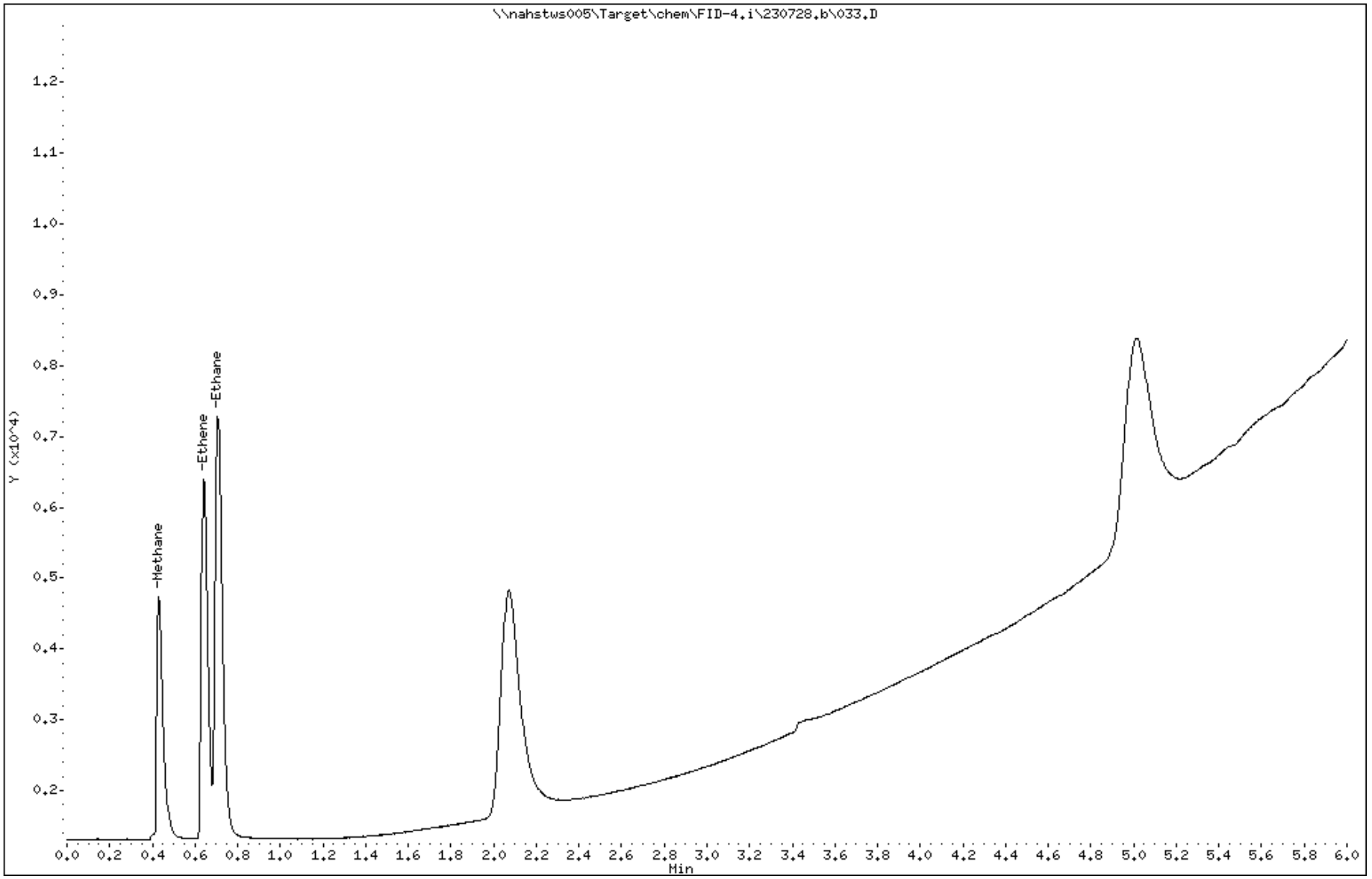
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230728.b\033.D
Inj Date : 28-JUL-2023 17:58
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\043.D Page 1
Report Date: 28-Jul-2023 20:05

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230728.b\043.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 28-JUL-2023 19:54
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230728.b\RSKNI3.m
Meth Date : 28-Jul-2023 20:05 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 43 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	0.433	0.433	0.000	7642	9.64700	7.838
2 Ethene	0.643	0.643	0.000	10653	16.8500	18.186
3 Ethane	0.710	0.710	0.000	14571	18.0430	20.251

01324427

Data File: \\nahstws005\Target\chem\FID-4.i\230728.b\043.D

Page 1

Date : 28-JUL-2023 19:54

Client ID: RSK-CCV

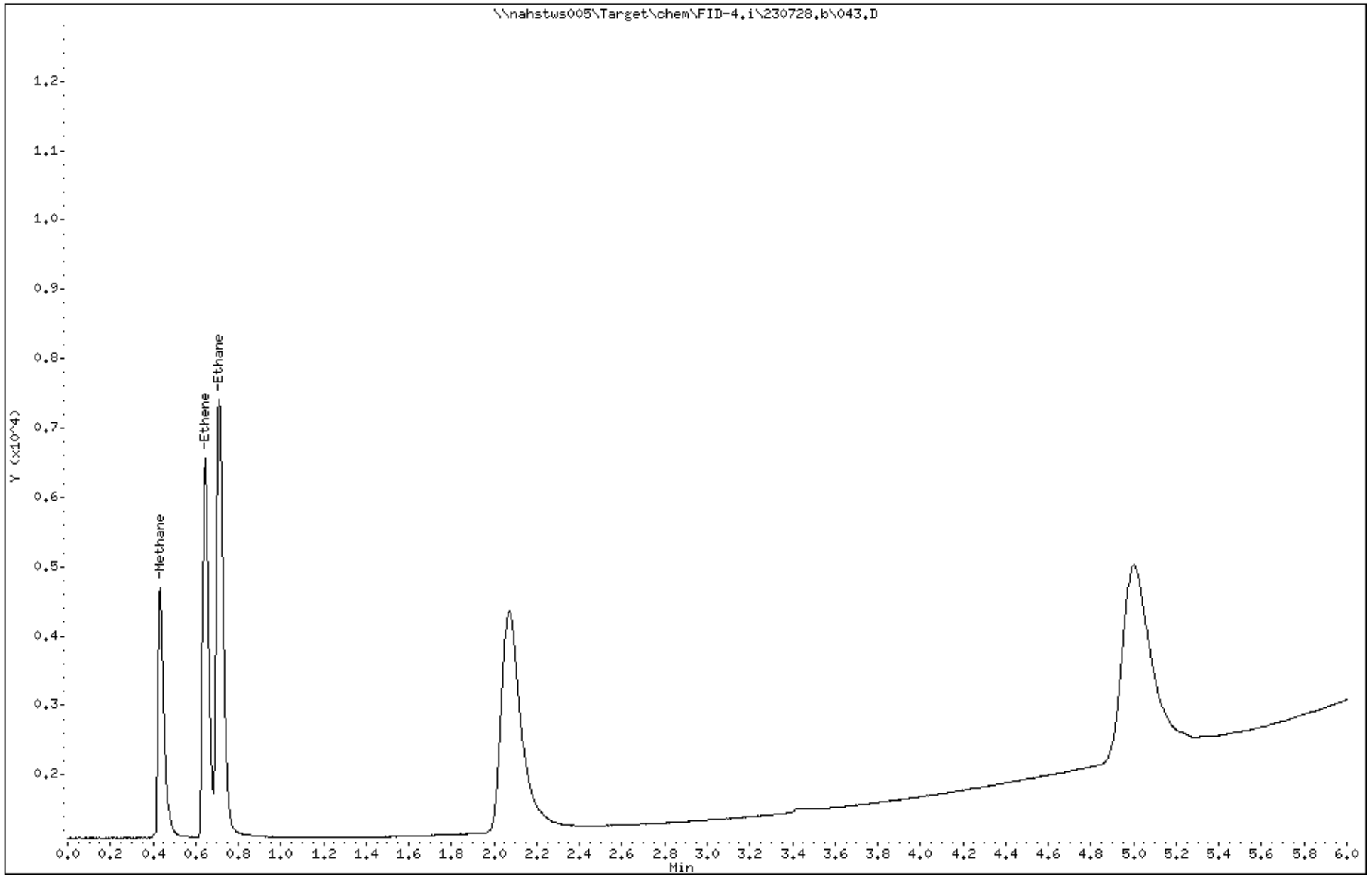
Instrument: FID-4.i

Sample Info: RSK-CCV;RSK-CCV;2;4

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230728.b\043.D
Inj Date : 28-JUL-2023 19:54
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

HS23071289 - ME - ICP_W_DOD

ALS WO# HS23071289

ALS Houston, US

Date: 07-Aug-23

Form 11 - INTERNAL STANDARD ASSOCIATION

Client: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

WorkOrder: HS23071289

Instrument:ICPMS06

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: 07-Aug-23

FORM 13 - ANALYSIS RUN LOG

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289
Start Date: 02-Aug-2023 End Date: 02-Aug-2023

Run ID:ICPMS06_442949
Instrument:ICPMS06
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS06_442949_Tune	1	02-Aug-2023 00:00	ICPMS06_442949_Tune_1	
CAL BLK	1	02-Aug-2023 10:27	012CALB.d_7466321	AS CR MN NI TL
2/10/200	1	02-Aug-2023 10:29	013CALS.d_7466322	AS CR MN NI TL
5/25/500	1	02-Aug-2023 10:31	014CALS.d_7466323	AS CR MN NI TL
10/50/100	1	02-Aug-2023 10:33	015CALS.d_7466324	AS CR MN NI TL
100/500/10K	1	02-Aug-2023 10:35	016CALS.d_7466325	AS CR MN NI TL
200/1000/20K	1	02-Aug-2023 10:37	017CALS.d_7466326	AS CR MN NI TL
ICV	1	02-Aug-2023 10:42	019_ICV.d_7466328	AS CR MN NI TL
LLICV2	1	02-Aug-2023 10:46	021LCV2.d_7466330	AS CR MN NI TL
ICB	1	02-Aug-2023 10:50	023_ICB.d_7466332	AS CR MN NI TL
ICSA	1	02-Aug-2023 10:56	025ICSA.d_7466334	AS CR MN NI TL
ICSAB	1	02-Aug-2023 10:59	026ICSB.d_7466335	AS CR MN NI TL
LLCCV5	1	02-Aug-2023 11:11	029LCV5.d_7466338	AS CR MN NI TL
CCV 1	1	02-Aug-2023 11:21	031_CCV.d_7466394	AS CR MN NI TL
CCB 1	1	02-Aug-2023 11:23	032_CCB.d_7466395	AS CR MN NI TL
MBLK-198377	1	02-Aug-2023 11:27	033SMPL.d_7466396	AS CR MN NI TL
16SW03-230718	1	02-Aug-2023 11:31	035SMPL.d_7466398	AS CR NI TL
16SW03-230718SD	5	02-Aug-2023 11:33	036SMPL.d_7466399	AS CR NI TL
16SW03-230718MS	1	02-Aug-2023 11:35	037SMPL.d_7466400	AS CR MN NI TL
16SW03-230718MSD	1	02-Aug-2023 11:37	038SMPL.d_7466401	AS CR MN NI TL
16SW03-230718PDS	1	02-Aug-2023 11:39	039SMPL.d_7466402	AS CR NI TL
LCS-198377	1	02-Aug-2023 11:41	040SMPL.d_7466403	AS CR MN NI TL
CCV 2	1	02-Aug-2023 11:43	041_CCV.d_7466404	AS CR MN NI TL
CCB 2	1	02-Aug-2023 11:45	042_CCB.d_7466405	AS CR MN NI TL
ZZZZZZSD	5	02-Aug-2023 11:49	044SMPL.d_7466407	AS CR MN NI TL
ZZZZZZMS	1	02-Aug-2023 11:51	045SMPL.d_7466408	AS CR MN NI TL
ZZZZZZMSD	1	02-Aug-2023 11:54	046SMPL.d_7466409	AS CR MN NI TL
ZZZZZZPDS	1	02-Aug-2023 11:55	047SMPL.d_7466410	AS CR MN NI TL
16SW01-230718	1	02-Aug-2023 11:58	048SMPL.d_7466411	AS CR MN NI TL
16SW01-230718-FD	1	02-Aug-2023 12:01	049SMPL.d_7466412	AS CR MN NI TL
16SW02-230718	1	02-Aug-2023 12:02	050SMPL.d_7466413	AS CR MN NI TL
CCB 3	1	02-Aug-2023 12:11	054_CCB.d_7466417	AS CR MN NI TL
CCV 3	1	02-Aug-2023 12:21	057_CCV.d_7466420	AS CR MN NI TL
CCV 4	1	02-Aug-2023 12:23	058_CCV.d_7466421	AS CR MN NI TL
CCV 5	1	02-Aug-2023 12:50	069_CCV.d_7466469	AS CR MN NI TL
CCB 4	1	02-Aug-2023 12:52	070_CCB.d_7466470	AS CR MN NI TL
16SW03-230718	5	02-Aug-2023 13:06	076SMPL.d_7466596	MN
16SW03-230718SD	25	02-Aug-2023 13:08	077SMPL.d_7466597	MN
16SW03-230718PDS	5	02-Aug-2023 13:10	078SMPL.d_7466598	MN
16SW03-230718MSD	1	02-Aug-2023 13:12	079SMPL.d_7466599	
CCV 6	1	02-Aug-2023 13:21	081_CCV.d_7466777	AS CR MN NI TL
CCB 5	1	02-Aug-2023 13:23	082_CCB.d_7466778	AS CR MN NI TL
CAL BLK	1	02-Aug-2023 15:38	143CALB.d_7467385	AS CR MN NI TL
2/10/200	1	02-Aug-2023 15:40	144CALS.d_7467386	AS CR MN NI TL
5/25/500	1	02-Aug-2023 15:43	145CALS.d_7467387	AS CR MN NI TL
10/50/100	1	02-Aug-2023 15:44	146CALS.d_7467388	AS CR MN NI TL
100/500/10K	1	02-Aug-2023 15:47	147CALS.d_7467389	AS CR MN NI TL
200/1000/20K	1	02-Aug-2023 15:49	148CALS.d_7467390	AS CR MN NI TL
LLCCV2	1	02-Aug-2023 15:55	151LCV2.d_7467393	AS CR MN NI TL
ICCB 6	1	02-Aug-2023 15:59	153_ICB.d_7467395	AS CR MN NI TL

ALS Houston, US

Date: 07-Aug-23

FORM 13 - ANALYSIS RUN LOG

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289
Start Date: 02-Aug-2023 End Date: 02-Aug-2023

Run ID:ICPMS06_442949
Instrument:ICPMS06
Method:

Sample No.	D/F	Time	FileID	Analytes
ICV	1	02-Aug-2023 16:06	155_ICV.d_7467397	AS CR MN NI TL
LLCCV5	1	02-Aug-2023 16:17	160LCV5.d_7467433	AS CR MN NI TL
CCV 7	1	02-Aug-2023 16:19	161_CCV.d_7467512	AS CR MN NI TL
CCB 7	1	02-Aug-2023 16:21	162_CCB.d_7467513	AS CR MN NI TL
CCV 8	1	02-Aug-2023 16:45	173_CCV.d_7467653	AS CR MN NI TL
CCB 8	1	02-Aug-2023 16:47	174_CCB.d_7467654	AS CR MN NI TL

ALS Houston, US Date: 07-Aug-23

Form 2 - Initial and Continuing Calibration Verification

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

Run ID: ICPMS06_442949
Instrument: ICPMS06
Method: SW6020A

ICV	Date: 02-Aug-2023 10:42		Seq: 7466328	ICV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	97.257	97	90-110	
Chromium	100	99.587	100	90-110	
Manganese	100	98.189	98	90-110	
Nickel	100	102.497	102	90-110	
Thallium	100	102.647	103	90-110	

CCV1	Date: 02-Aug-2023 11:21		Seq: 7466394	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	92.34	92	90-110	
Chromium	100	96.104	96	90-110	
Manganese	100	96.299	96	90-110	
Nickel	100	94.674	95	90-110	
Thallium	100	93.336	93	90-110	

CCV2	Date: 02-Aug-2023 11:43		Seq: 7466404	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	91.399	91	90-110	
Chromium	100	96.193	96	90-110	
Manganese	100	95.141	95	90-110	
Nickel	100	97.108	97	90-110	
Thallium	100	96.867	97	90-110	

CCV3	Date: 02-Aug-2023 12:21		Seq: 7466420	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	93.03	93	90-110	
Chromium	100	96.335	96	90-110	
Manganese	100	96.45	96	90-110	
Nickel	100	96.903	97	90-110	
Thallium	100	100.641	101	90-110	

CCV4	Date: 02-Aug-2023 12:23		Seq: 7466421	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	95.91	96	90-110	
Chromium	100	97.983	98	90-110	
Manganese	100	98.594	99	90-110	
Nickel	100	98.978	99	90-110	
Thallium	100	104.182	104	90-110	

CCV5	Date: 02-Aug-2023 12:50		Seq: 7466469	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	93.85	94	90-110	
Chromium	100	96.632	97	90-110	
Manganese	100	97.288	97	90-110	
Nickel	100	97.637	98	90-110	
Thallium	100	99.532	100	90-110	

CCV6	Date: 02-Aug-2023 13:21		Seq: 7466777	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	93.262	93	90-110	
Chromium	100	96.367	96	90-110	
Manganese	100	97.567	98	90-110	
Nickel	100	98.112	98	90-110	
Thallium	100	97.776	98	90-110	

ALS Houston, US

Date: 07-Aug-23

Form 2 - Initial and Continuing Calibration Verification

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

Run ID: ICPMS06_442949
Instrument: ICPMS06
Method: SW6020A

ICV	Date: 02-Aug-2023 16:06		Seq: 7467397	ICV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	100.935	101	90-110	
Chromium	100	103.095	103	90-110	
Manganese	100	101.955	102	90-110	
Nickel	100	103.191	103	90-110	
Thallium	100	103.355	103	90-110	

CCV7	Date: 02-Aug-2023 16:19		Seq: 7467512	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	97.903	98	90-110	
Chromium	100	102.178	102	90-110	
Manganese	100	98.59	99	90-110	
Nickel	100	100.941	101	90-110	
Thallium	100	97.833	98	90-110	

CCV8	Date: 02-Aug-2023 16:45		Seq: 7467653	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	98.098	98	90-110	
Chromium	100	101.824	102	90-110	
Manganese	100	98.05	98	90-110	
Nickel	100	100.618	101	90-110	
Thallium	100	96.458	97	90-110	

ALS Houston, US Date: 07-Aug-23

Form 3 - BLANKS

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

Run ID: ICPMS06_442949
Instrument: ICPMS06
Method: SW6020A

ICB	Date: 02-Aug-2023 10:50		Seq: 7466332	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	5	0.4	5	U	
Chromium	5	0.4	5	U	
Manganese	5	0.7	5	U	
Nickel	5	0.6	5	U	
Thallium	2	0.2	2	U	

CCB1	Date: 02-Aug-2023 11:23		Seq: 7466395	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	0.386	0.2	2	J	

MBLK-198377	Date: 02-Aug-2023 11:27		Seq: 7466396	MBLK	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	5	0.4	5	U	
Chromium	5	0.4	5	U	
Manganese	5	0.7	5	U	
Nickel	5	0.6	5	U	
Thallium	2	0.2	2	U	

CCB2	Date: 02-Aug-2023 11:45		Seq: 7466405	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	0.463	0.2	2	J	

CCB3	Date: 02-Aug-2023 12:11		Seq: 7466417	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	0.36	0.2	2	J	

CCB4	Date: 02-Aug-2023 12:52		Seq: 7466470	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	0.241	0.2	2	J	

CCB5	Date: 02-Aug-2023 13:23		Seq: 7466778	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	0.253	0.2	2	J	

ALS Houston, US

Date: 07-Aug-23

Form 3 - BLANKS

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

Run ID: ICPMS06_442949
Instrument: ICPMS06
Method: SW6020A

ICCB6	Date: 02-Aug-2023 15:59		Seq: 7467395	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	5	0.4	5	U	
Chromium	5	0.4	5	U	
Manganese	5	0.7	5	U	
Nickel	5	0.6	5	U	
Thallium	2	0.2	2	U	

CCB7	Date: 02-Aug-2023 16:21		Seq: 7467513	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	0.633	0.2	2	J	

CCB8	Date: 02-Aug-2023 16:47		Seq: 7467654	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	0.71	0.2	2	J	

ALS Houston, US Date: 07-Aug-23

Form 4 - ICP Interference Check Sample

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

Run ID: ICPMS06_442949
Instrument: ICPMS06
Method: SW6020A

ICSA	Date: 02-Aug-2023 10:56	Seq: 7466334	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Arsenic		0.166	0	
Chromium		1.402	0	
Manganese		0.631	0	
Nickel		0.81	0	
Thallium		-0.006	0	

ICSAB	Date: 02-Aug-2023 10:59	Seq: 7466335	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Arsenic	100	93.76	93.8	
Chromium	100	95.77	95.8	
Manganese	100	96.07	96.1	
Nickel	100	90.57	90.6	
Thallium	100	87.88	87.9	

ALS Houston, US Date: 07-Aug-23

Form 5A - Matrix Spike/Matrix Spike Duplicate Recovery

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

Date Analyzed: 02-Aug-2023 11:37
Date Extracted: 01-Aug-2023 12:00
Units: ug/L

Matrix Spike: HS23071289-11MS
Client Sample ID: 16SW03-230718
Analysis Method: SW6020A

Analyte	Sample Result	MS Result	Spike Amount	% Rec	MSD Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Arsenic	0.9160	42.68	50.00	83.5	42.38	50.00	82.9	84-116	0.705	20
Chromium	0.4760	44.63	50.00	88.3	43.97	50.00	87.0	85-116	1.49	20
Manganese	120.1	161.0	50.00	81.7	160.9	50.00	81.6	87-115	0.0404	20
Nickel	3.375	48.42	50.00	90.1	47.65	50.00	88.6	85-117	1.58	20
Thallium	0.7720	43.00	50.00	84.5	43.13	50.00	84.7	82-116	0.295	20

Matrix Spike: HS23071697-01MS
Client Sample ID:
Analysis Method: SW6020A

Analyte	Sample Result	MS Result	Spike Amount	% Rec	MSD Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Arsenic	1.828	47.18	50.00	90.7	47.47	50.00	91.3	84-116	0.617	20
Chromium	1.984	49.98	50.00	96.0	49.92	50.00	95.9	85-116	0.130	20
Manganese	4.330	53.71	50.00	98.8	53.55	50.00	98.4	87-115	0.295	20
Nickel	1.442	48.93	50.00	95.0	48.57	50.00	94.2	85-117	0.749	20
Thallium	2.000	37.81	50.00	75.6	39.35	50.00	78.7	82-116	3.99	20

ALS Houston, US Date: 07-Aug-23

Form 5B - Post Digest Sample Recovery

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

Date Analyzed: 02-Aug-2023 11:39
Date Extracted: 01-Aug-2023 12:00
Units: ug/L

Lab Sample ID: HS23071289-11PDS
Client Sample ID: 16SW03-230718
Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0.916	84.34	100	83	80-120
Chromium	0.476	89.64	100	89	80-120
Nickel	3.375	92.99	100	90	80-120
Thallium	0.772	88.93	100	88	80-120
Manganese	120.4	583.9	500	93	80-120

Lab Sample ID: HS23071697-01PDS
Client Sample ID:
Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Arsenic	1.828	93.37	100	92	80-120
Chromium	1.984	95.94	100	94	80-120
Manganese	4.33	98.86	100	95	80-120
Nickel	1.442	94.07	100	93	80-120
Thallium	0	98.29	100	98	80-120

ALS Houston, US

Date: 07-Aug-23

Form 7 - Laboratory Control Sample

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

Date Analyzed: 02-Aug-2023 11:41
Date Extracted: 01-Aug-2023 12:00
Units: ug/L

Lab Sample ID: LCS-198377
Analysis Method: SW6020A

Analyte	Spike Amount	LCS Result	% Rec	% Rec Limits
Arsenic	50	49.36	99	84-116
Chromium	50	52.44	105	85-116
Manganese	50	51.85	104	87-115
Nickel	50	53.29	107	85-117
Thallium	50	45.88	92	82-116

ALS Houston, US Date: 07-Aug-23

Form 8 - ICP Serial Dilutions

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071289

Date Analyzed: 02-Aug-2023 11:33
Date Extracted: 01-Aug-2023 12:00
Units: ug/L

Lab Sample ID: HS23071289-11SD
Client Sample ID:16SW03-230718
Analysis Method: SW6020A

Analyte	Sample Result	C	SD Result	C	RPD	Q
Arsenic	0.916	J	0	U	0	
Chromium	0.476	J	0	U	0	
Nickel	3.375	J	3.193	J	5	
Thallium	0.772	J	0	U	0	
Manganese	120.4		118.1	J	2	

Lab Sample ID: HS23071697-01SD
Client Sample ID:
Analysis Method: SW6020A

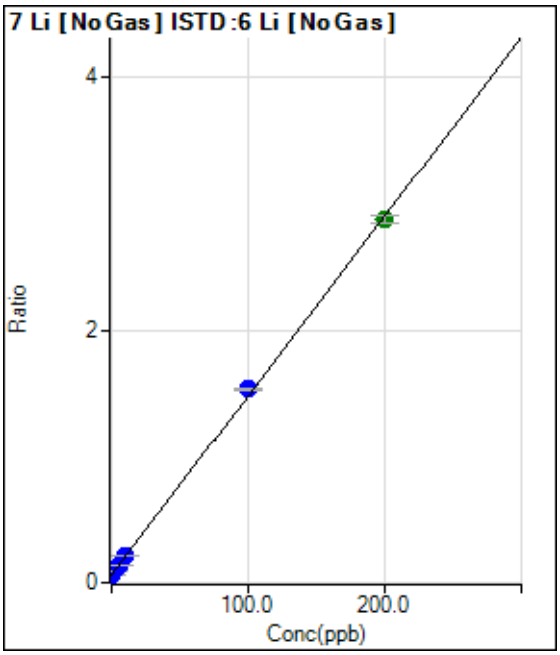
Analyte	Sample Result	C	SD Result	C	RPD	Q
Arsenic	1.828	J	0	U	0	
Chromium	1.984	J	2.862	J	44	
Manganese	4.33	J	4.44	J	3	
Nickel	1.442	J	0	U	0	
Thallium	0	U	0	U	0	

Calibration for 343_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\080223A.b\
Analysis File: 080223A.batch.bin
DA Date-Time: 8/2/2023 11:57:54 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	336CALB.d	CAL BLK	8/2/2023 10:57:09 PM
2	337CALS.d	2/10/200	8/2/2023 10:59:20 PM
3	338CALS.d	5/25/500	8/2/2023 11:01:29 PM
4	339CALS.d	10/50/100	8/2/2023 11:03:28 PM
5	340CALS.d	100/500/10K	8/2/2023 11:05:25 PM
6	341CALS.d	200/1000/20K	8/2/2023 11:07:32 PM

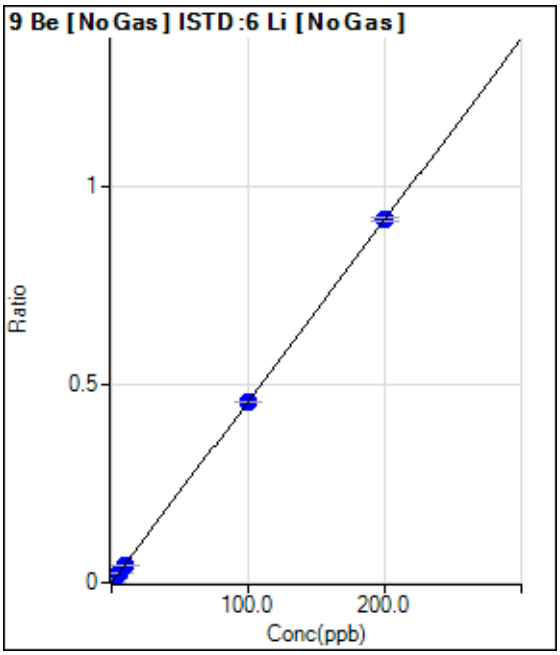
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26514.98	0.0619	P	1.3
2	☐	2.000	2.120	39214.41	0.0919	P	2.9
3	☐	5.000	5.163	57674.35	0.1351	P	0.1
4	☐	10.000	10.311	89147.05	0.2081	P	2.0
5	☐	100.000	103.607	629199.34	1.5312	P	1.5
6	☐	200.000	198.176	1135982.07	2.8723	A	2.0

y = 0.0142 * x + 0.0619
R = 0.9998
DL = 0.1687
BEC = 4.364

Weight: <None>
Min Conc: <None>

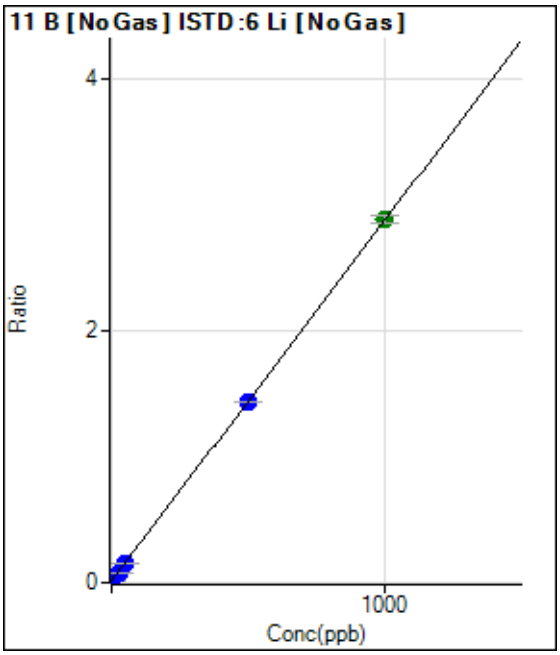


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	23.33	0.0001	P	12.1
2	☐	2.000	1.904	3740.53	0.0088	P	3.8
3	☐	5.000	4.850	9499.96	0.0223	P	3.5
4	☐	10.000	9.822	19281.67	0.0450	P	1.7
5	☐	100.000	99.885	187919.02	0.4573	P	0.1
6	☐	200.000	200.071	362223.33	0.9159	P	0.9

y = 0.0046 * x + 5.4449E-005
R = 1.0000
DL = 0.004332
BEC = 0.0119

Weight: <None>
Min Conc: <None>

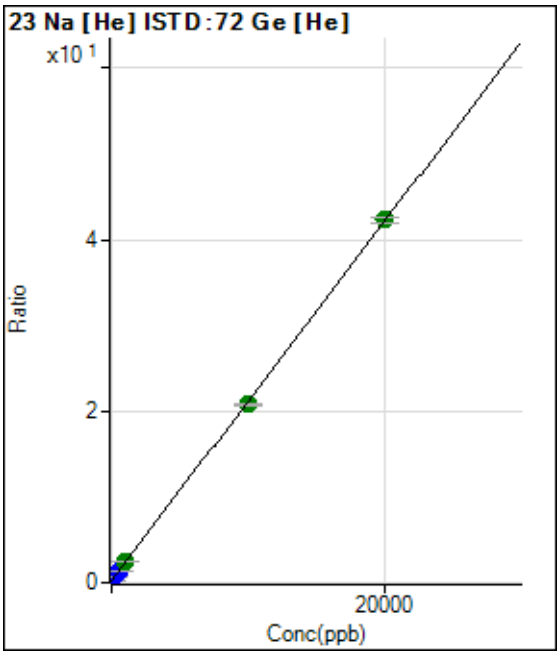
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5502.79	0.0128	P	1.2
2	☐	10.000	9.473	17023.72	0.0399	P	1.3
3	☐	25.000	23.845	34569.20	0.0810	P	0.8
4	☐	50.000	47.782	63993.35	0.1494	P	1.1
5	☐	500.000	496.533	588349.55	1.4317	P	0.7
6	☐	1000.000	1001.878	1137300.14	2.8757	A	2.2

y = 0.0029 * x + 0.0128
R = 1.0000
DL = 0.1654
BEC = 4.495

Weight: <None>
Min Conc: <None>

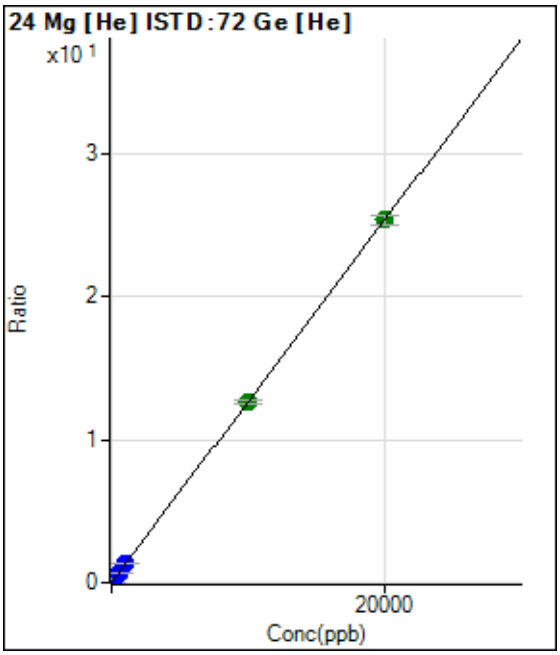


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	93229.94	0.2527	P	1.7
2	☐	200.000	206.793	254007.82	0.6854	P	1.5
3	☐	500.000	531.367	496956.89	1.3646	P	1.2
4	☐	1000.000	1034.643	886393.66	2.4177	A	4.0
5	☐	10000.000	9812.881	7567540.93	20.7858	A	0.6
6	☐	20000.000	20090.975	15276332.27	42.2922	A	1.5

y = 0.0021 * x + 0.2527
R = 0.9999
DL = 6.071
BEC = 120.8

Weight: <None>
Min Conc: <None>

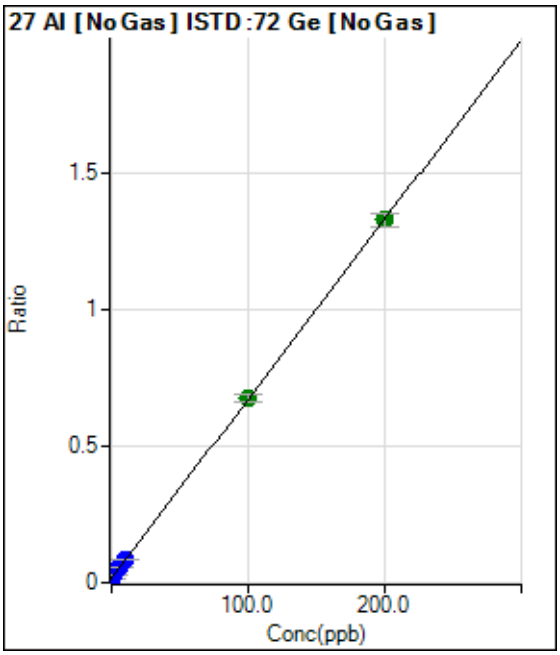
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	736.70	0.0020	P	7.5
2	☐	200.000	213.503	100802.74	0.2720	P	2.6
3	☐	500.000	547.216	252781.97	0.6941	P	0.8
4	☐	1000.000	1098.714	510184.07	1.3916	P	1.5
5	☐	10000.000	9943.804	4578878.68	12.5783	A	2.2
6	☐	20000.000	20021.847	9144291.32	25.3244	A	2.7

y = 0.0013 * x + 0.0020
R = 1.0000
DL = 0.3534
BEC = 1.578

Weight: <None>
Min Conc: <None>

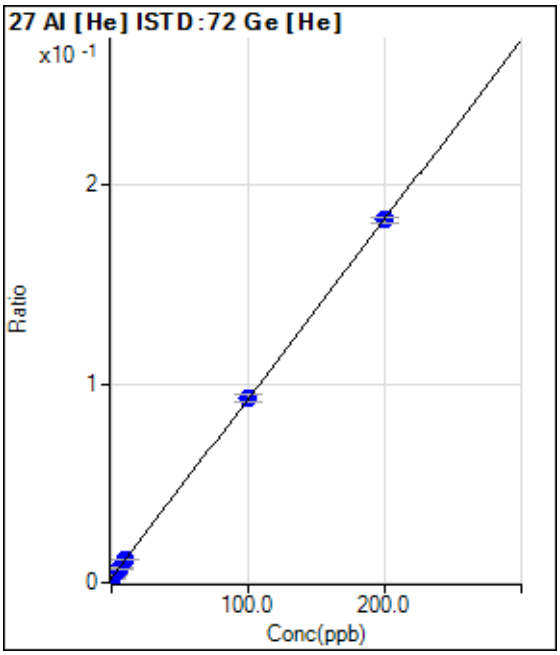


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20966.22	0.0157	P	0.2
2	☐	2.000	2.177	40526.11	0.0300	P	2.8
3	☐	5.000	5.713	69473.29	0.0533	P	1.6
4	☐	10.000	10.717	113019.62	0.0862	P	1.6
5	☐	100.000	100.235	880706.39	0.6747	A	4.2
6	☐	200.000	199.827	1710223.98	1.3295	A	3.4

y = 0.0066 * x + 0.0157
R = 1.0000
DL = 0.01343
BEC = 2.391

Weight: <None>
Min Conc: <None>

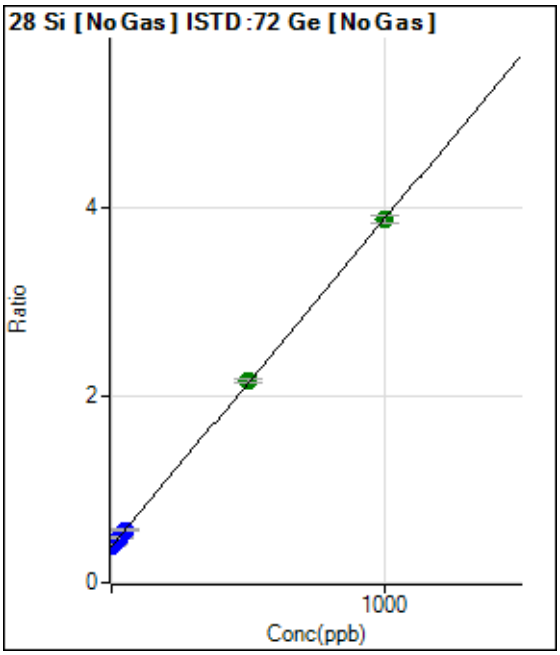
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	850.04	0.0023	P	21.9
2	☐	2.000	2.170	1580.12	0.0043	P	12.1
3	☐	5.000	5.360	2600.29	0.0071	P	13.0
4	☐	10.000	10.126	4194.03	0.0114	P	1.2
5	☐	100.000	100.492	33821.55	0.0929	P	4.2
6	☐	200.000	199.737	65865.96	0.1824	P	1.8

y = 9.0156E-004 * x + 0.0023
R = 1.0000
DL = 1.681
BEC = 2.562

Weight: <None>
Min Conc: <None>

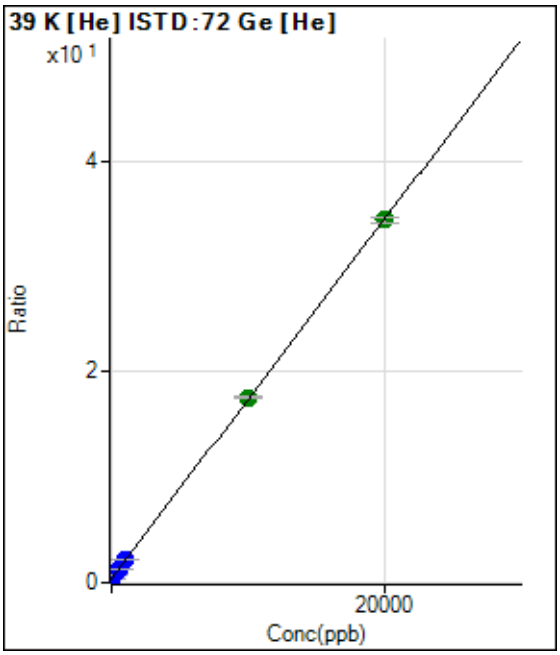


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	515131.18	0.3863	P	1.5
2	☐	10.000	7.858	558275.42	0.4138	P	2.8
3	☐	25.000	26.999	626593.77	0.4806	P	1.7
4	☐	50.000	50.752	739240.25	0.5637	P	1.2
5	☐	500.000	505.603	2811057.98	2.1532	A	2.3
6	☐	1000.000	997.132	4979609.82	3.8710	A	2.2

y = 0.0035 * x + 0.3863
R = 1.0000
DL = 4.998
BEC = 110.5

Weight: <None>
Min Conc: <None>

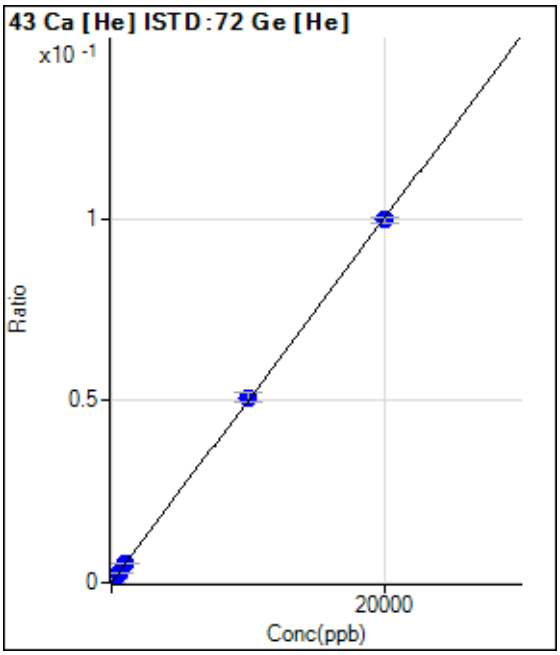
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	139114.93	0.3771	P	0.8
2	☐	200.000	206.348	270244.37	0.7292	P	1.4
3	☐	500.000	522.217	461867.27	1.2683	P	1.9
4	☐	1000.000	1068.426	806716.60	2.2004	P	1.8
5	☐	10000.000	10067.888	6392122.40	17.5583	A	0.9
6	☐	20000.000	19962.016	12438340.23	34.4430	A	1.8

y = 0.0017 * x + 0.3771
R = 1.0000
DL = 5.03
BEC = 221

Weight: <None>
Min Conc: <None>

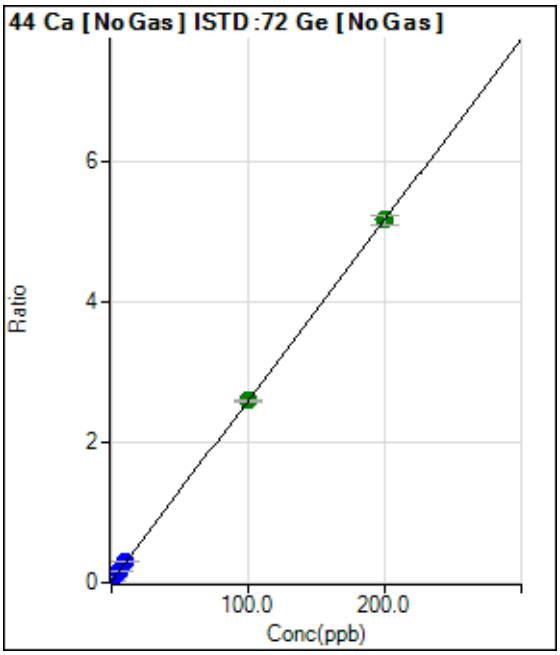


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0000	P	69.9
2	☐	200.000	197.397	383.35	0.0010	P	21.7
3	☐	500.000	490.145	910.05	0.0025	P	1.9
4	☐	1000.000	1057.105	1956.85	0.0053	P	4.6
5	☐	10000.000	10177.857	18569.46	0.0510	P	4.3
6	☐	20000.000	19908.489	36007.40	0.0997	P	1.9

y = 5.0061E-006 * x + 4.5300E-005
R = 0.9999
DL = 18.97
BEC = 9.049

Weight: <None>
Min Conc: <None>

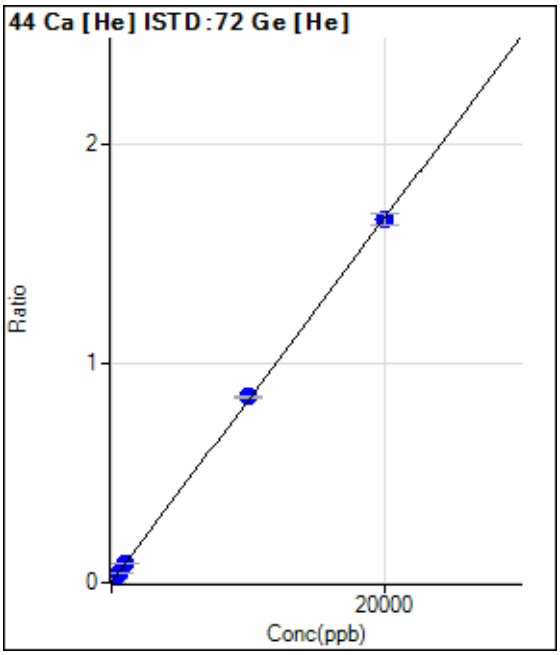
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26676.11	0.0200	P	5.9
2	☐	2.000	2.047	97970.08	0.0726	P	2.2
3	☐	5.000	5.350	205262.26	0.1574	P	1.3
4	☐	10.000	10.695	386592.61	0.2948	P	0.7
5	☐	100.000	99.934	3377776.10	2.5872	A	1.7
6	☐	200.000	199.989	6634718.86	5.1575	A	2.7

y = 0.0257 * x + 0.0200
R = 1.0000
DL = 0.1384
BEC = 0.7789

Weight: <None>
Min Conc: <None>

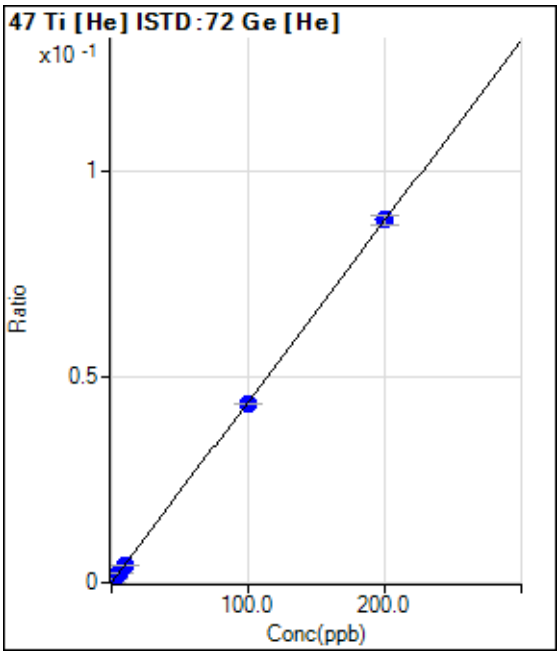


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	780.04	0.0021	P	22.4
2	☐	200.000	200.666	6951.87	0.0188	P	4.4
3	☐	500.000	488.438	15525.70	0.0426	P	1.3
4	☐	1000.000	1014.782	31636.65	0.0863	P	0.4
5	☐	10000.000	10178.128	308136.72	0.8464	P	0.7
6	☐	20000.000	19910.479	597103.36	1.6536	P	3.1

y = 8.2947E-005 * x + 0.0021
R = 0.9999
DL = 17.16
BEC = 25.53

Weight: <None>
Min Conc: <None>

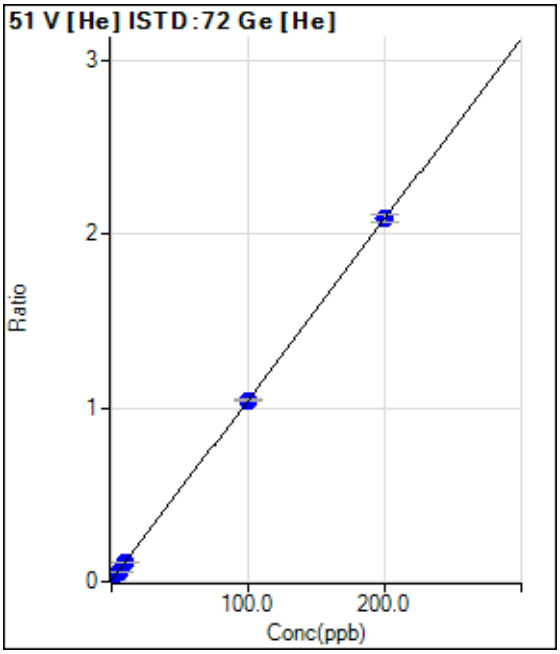
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10.00	0.0000	P	1.8
2	☐	2.000	1.960	330.01	0.0009	P	5.1
3	☐	5.000	5.223	846.71	0.0023	P	16.9
4	☐	10.000	9.583	1556.78	0.0042	P	0.6
5	☐	100.000	98.797	15846.07	0.0435	P	0.9
6	☐	200.000	200.617	31907.36	0.0884	P	2.5

y = 4.4029E-004 * x + 2.7109E-005
R = 1.0000
DL = 0.003268
BEC = 0.06157

Weight: <None>
Min Conc: <None>

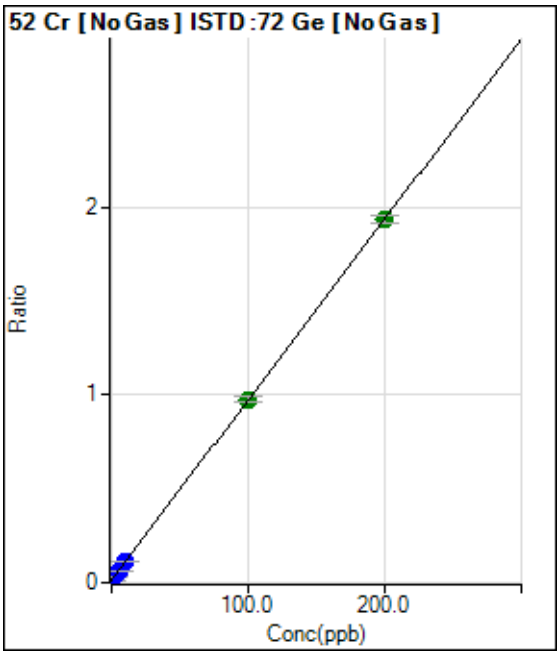


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2864.76	0.0078	P	2.0
2	☐	2.000	1.953	10396.20	0.0281	P	1.9
3	☐	5.000	5.011	21788.46	0.0598	P	2.2
4	☐	10.000	10.006	40963.23	0.1117	P	1.7
5	☐	100.000	99.652	379785.42	1.0432	P	0.6
6	☐	200.000	200.174	753841.03	2.0876	P	2.3

y = 0.0104 * x + 0.0078
R = 1.0000
DL = 0.04399
BEC = 0.7474

Weight: <None>
Min Conc: <None>

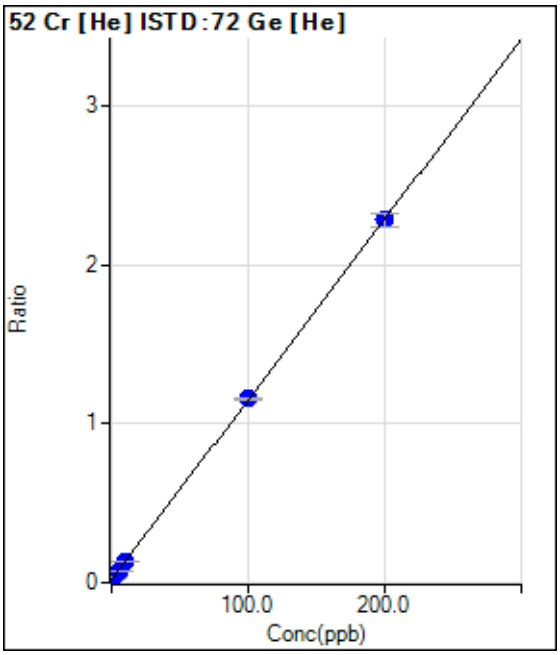
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16086.36	0.0121	P	3.6
2	☐	2.000	1.961	41747.25	0.0309	P	2.8
3	☐	5.000	5.233	81408.47	0.0624	P	0.7
4	☐	10.000	10.487	148211.47	0.1130	P	1.2
5	☐	100.000	100.425	1277654.15	0.9788	A	3.7
6	☐	200.000	199.757	2489079.70	1.9350	A	2.2

y = 0.0096 * x + 0.0121
R = 1.0000
DL = 0.1348
BEC = 1.253

Weight: <None>
Min Conc: <None>

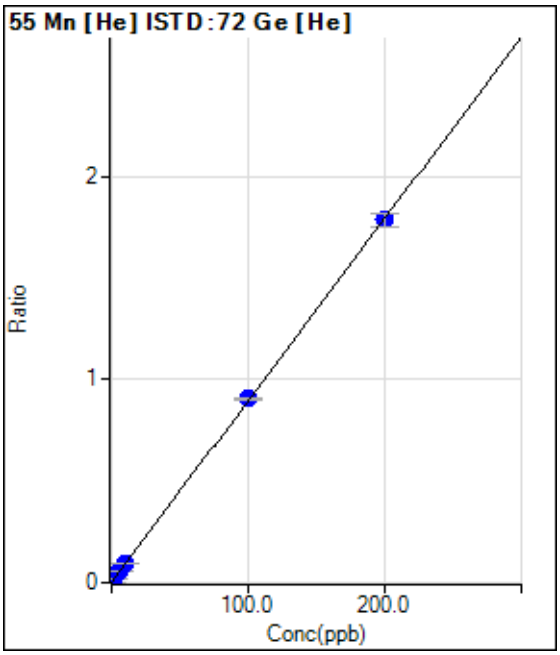


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6848.51	0.0186	P	4.1
2	☐	2.000	2.001	15298.82	0.0413	P	3.2
3	☐	5.000	4.982	27354.38	0.0751	P	1.3
4	☐	10.000	10.261	49503.25	0.1350	P	0.9
5	☐	100.000	100.369	421488.46	1.1577	P	1.5
6	☐	200.000	199.803	825402.93	2.2862	P	3.9

y = 0.0113 * x + 0.0186
R = 1.0000
DL = 0.202
BEC = 1.636

Weight: <None>
Min Conc: <None>

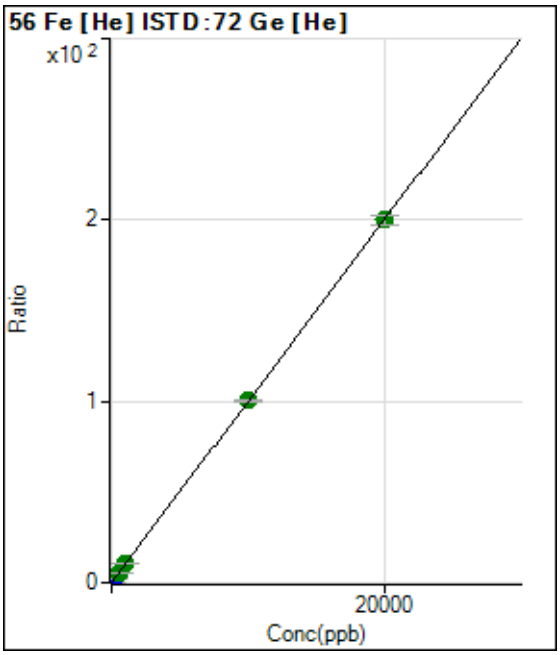
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	530.02	0.0014	P	2.5
2	☐	2.000	2.010	7192.05	0.0194	P	2.5
3	☐	5.000	5.955	19908.14	0.0547	P	4.8
4	☐	10.000	10.307	34306.85	0.0936	P	1.8
5	☐	100.000	100.965	329113.94	0.9040	P	0.5
6	☐	200.000	199.478	644347.97	1.7846	P	3.5

y = 0.0089 * x + 0.0014
R = 1.0000
DL = 0.01212
BEC = 0.1607

Weight: <None>
Min Conc: <None>

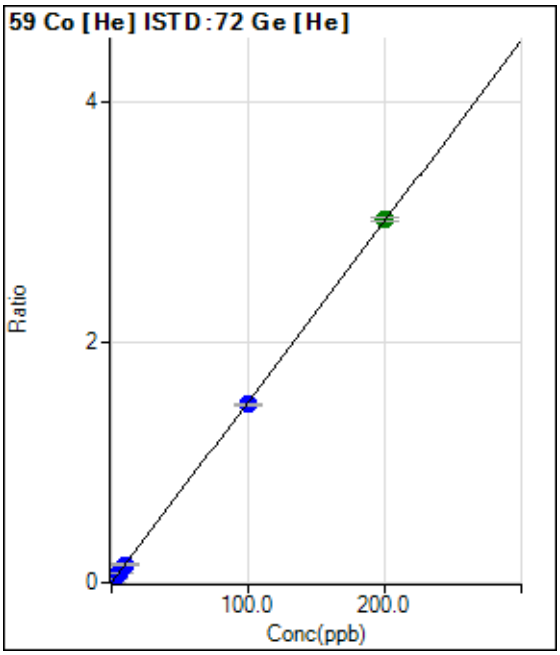


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16997.47	0.0461	P	3.0
2	☐	200.000	204.333	774809.18	2.0908	P	1.7
3	☐	500.000	519.242	1909036.22	5.2419	A	1.7
4	☐	1000.000	1035.477	3815656.09	10.4077	A	2.1
5	☐	10000.000	10020.076	36520922.79	100.3135	A	1.0
6	☐	20000.000	19987.664	72235002.26	200.0556	A	2.9

y = 0.0100 * x + 0.0461
R = 1.0000
DL = 0.4138
BEC = 4.604

Weight: <None>
Min Conc: <None>

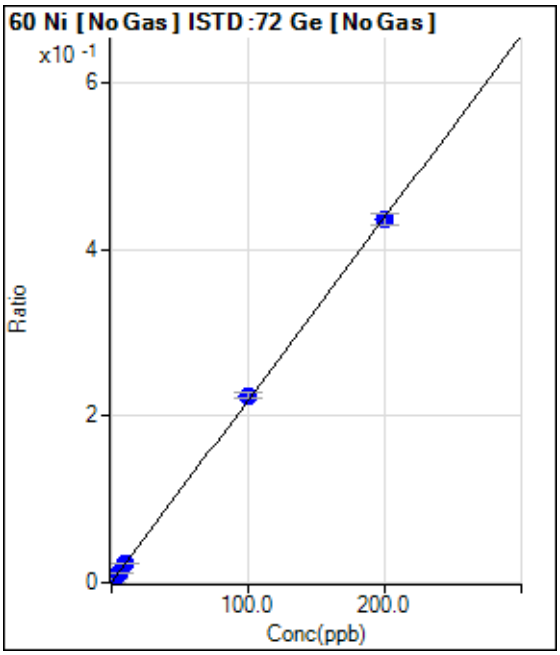
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	96.67	0.0003	P	34.6
2	☐	2.000	1.964	11048.02	0.0298	P	5.0
3	☐	5.000	4.955	27250.93	0.0748	P	2.7
4	☐	10.000	10.043	55493.47	0.1514	P	1.5
5	☐	100.000	98.488	539547.74	1.4820	P	0.2
6	☐	200.000	200.755	1090973.11	3.0206	A	1.0

y = 0.0150 * x + 2.6308E-004
R = 1.0000
DL = 0.01815
BEC = 0.01749

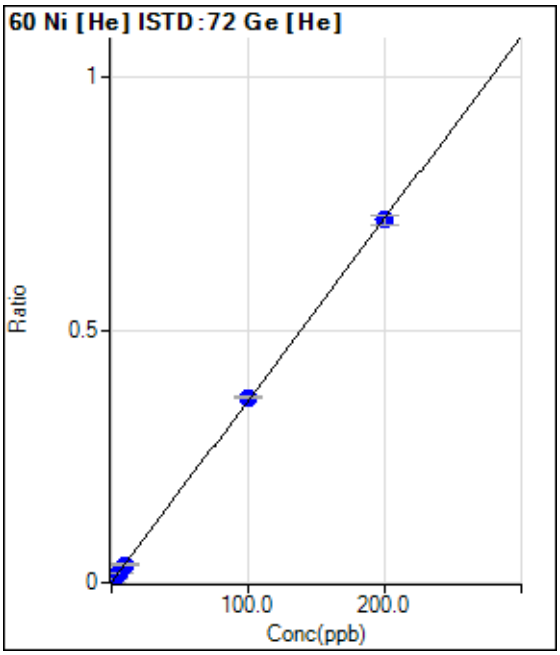
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	403.35	0.0003	P	21.3
2	☐	2.000	1.997	6311.60	0.0047	P	5.2
3	☐	5.000	5.215	15285.48	0.0117	P	2.8
4	☐	10.000	10.629	30918.88	0.0236	P	2.9
5	☐	100.000	102.344	292938.75	0.2244	P	3.4
6	☐	200.000	198.791	560271.62	0.4356	P	3.0

y = 0.0022 * x + 3.0266E-004
R = 0.9999
DL = 0.08835
BEC = 0.1382

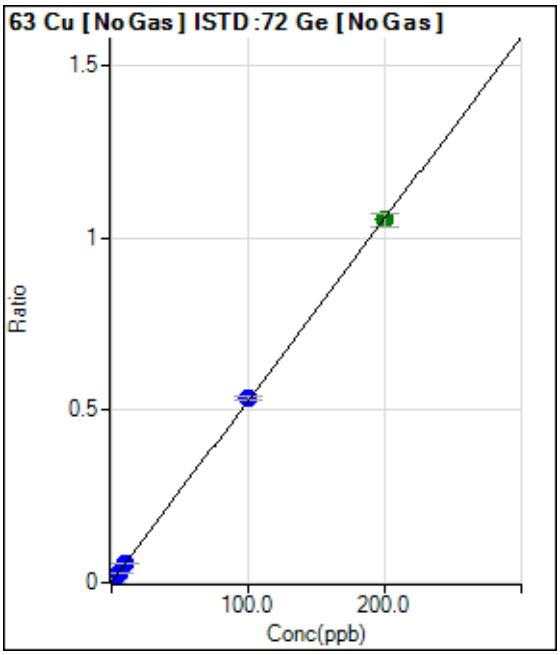
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	180.00	0.0005	P	16.6
2	☐	2.000	1.964	2800.34	0.0076	P	3.3
3	☐	5.000	5.182	6968.57	0.0191	P	1.7
4	☐	10.000	9.880	13213.27	0.0360	P	4.9
5	☐	100.000	101.439	133058.76	0.3655	P	1.2
6	☐	200.000	199.283	259118.32	0.7176	P	2.3

y = 0.0036 * x + 4.8779E-004
R = 1.0000
DL = 0.06742
BEC = 0.1356

Weight: <None>
Min Conc: <None>

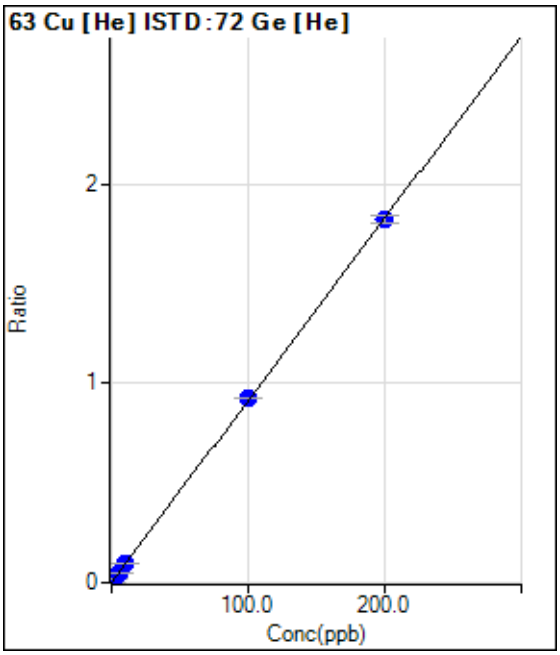


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1306.76	0.0010	P	7.4
2	☐	2.000	1.976	15372.26	0.0114	P	3.4
3	☐	5.000	5.148	36633.09	0.0281	P	1.4
4	☐	10.000	10.493	73762.82	0.0562	P	1.2
5	☐	100.000	101.091	696343.17	0.5334	P	2.4
6	☐	200.000	199.426	1352106.28	1.0513	A	3.6

y = 0.0053 * x + 9.8028E-004
R = 1.0000
DL = 0.04107
BEC = 0.1861

Weight: <None>
Min Conc: <None>

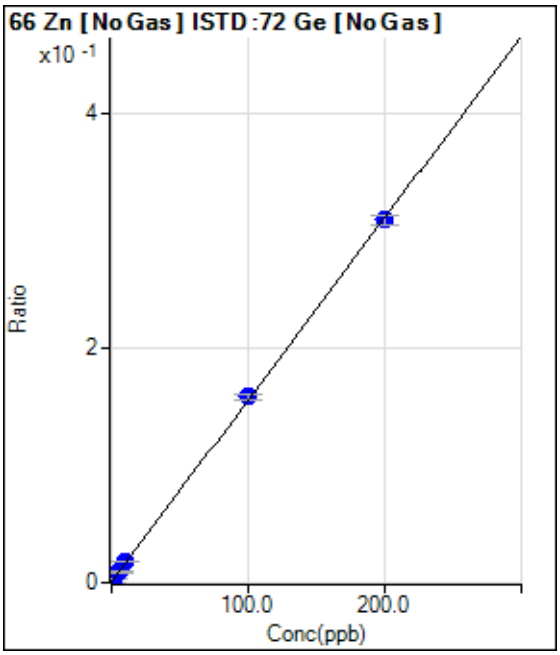
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	406.68	0.0011	P	15.9
2	☐	2.000	2.013	7228.70	0.0195	P	0.1
3	☐	5.000	5.002	17054.23	0.0468	P	0.9
4	☐	10.000	10.274	34831.86	0.0950	P	3.2
5	☐	100.000	101.432	337918.98	0.9282	P	0.8
6	☐	200.000	199.270	658124.52	1.8224	P	2.0

y = 0.0091 * x + 0.0011
R = 1.0000
DL = 0.05762
BEC = 0.1208

Weight: <None>
Min Conc: <None>

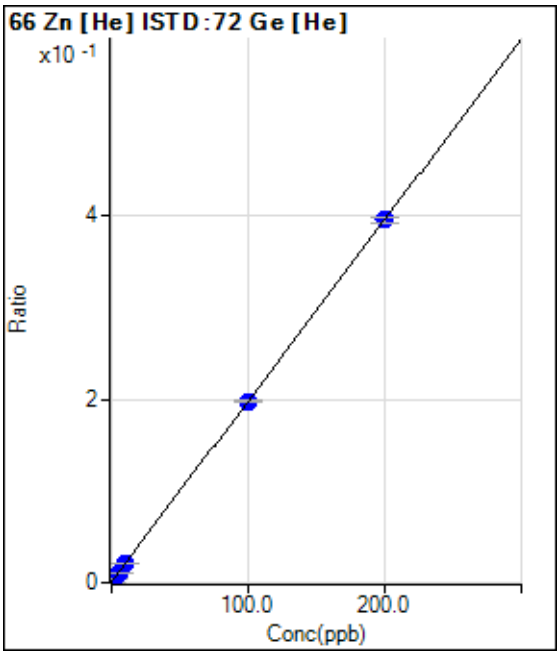


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	896.71	0.0007	P	9.8
2	☐	2.000	1.974	5041.01	0.0037	P	4.3
3	☐	5.000	5.444	11895.45	0.0091	P	2.3
4	☐	10.000	10.829	22922.98	0.0175	P	1.3
5	☐	100.000	101.830	207173.75	0.1587	P	3.1
6	☐	200.000	199.033	398172.99	0.3095	P	2.5

y = 0.0016 * x + 6.7301E-004
R = 0.9999
DL = 0.1281
BEC = 0.4337

Weight: <None>
Min Conc: <None>

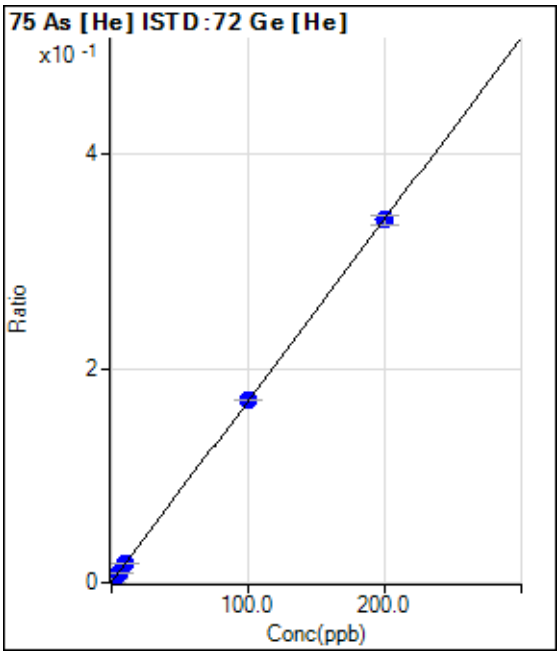
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	340.01	0.0009	P	24.5
2	☐	2.000	1.935	1756.82	0.0047	P	11.6
3	☐	5.000	5.146	4037.34	0.0111	P	2.3
4	☐	10.000	10.227	7742.35	0.0211	P	1.4
5	☐	100.000	99.869	72131.19	0.1981	P	1.3
6	☐	200.000	200.051	142987.42	0.3959	P	1.9

y = 0.0020 * x + 9.2305E-004
R = 1.0000
DL = 0.3431
BEC = 0.4675

Weight: <None>
Min Conc: <None>

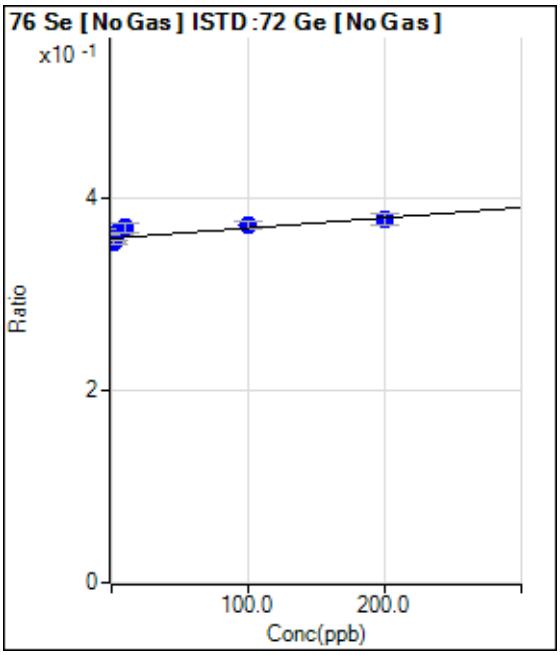


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	154.45	0.0004	P	13.8
2	☐	2.000	2.011	1420.08	0.0038	P	5.2
3	☐	5.000	5.096	3300.42	0.0091	P	1.3
4	☐	10.000	10.056	6405.99	0.0175	P	3.3
5	☐	100.000	100.657	62302.95	0.1711	P	0.5
6	☐	200.000	199.666	122426.85	0.3391	P	2.7

y = 0.0017 * x + 4.1902E-004
R = 1.0000
DL = 0.1019
BEC = 0.2471

Weight: <None>
Min Conc: <None>

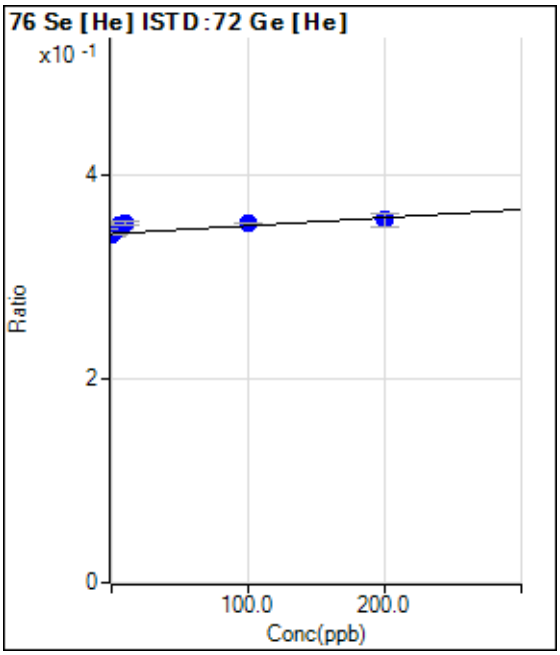
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	477449.04	0.3581	P	2.4
2	☐	2.000	-41.651	477236.76	0.3536	P	1.3
3	☐	5.000	64.873	475814.56	0.3650	P	1.6
4	☐	10.000	107.039	484536.18	0.3695	P	2.8
5	☐	100.000	130.306	485586.36	0.3720	P	2.5
6	☐	200.000	178.935	485071.54	0.3771	P	3.2

y = 1.0666E-004 * x + 0.3581
R = 0.7963
DL = 239.2
BEC = 3357

Weight: <None>
Min Conc: <None>

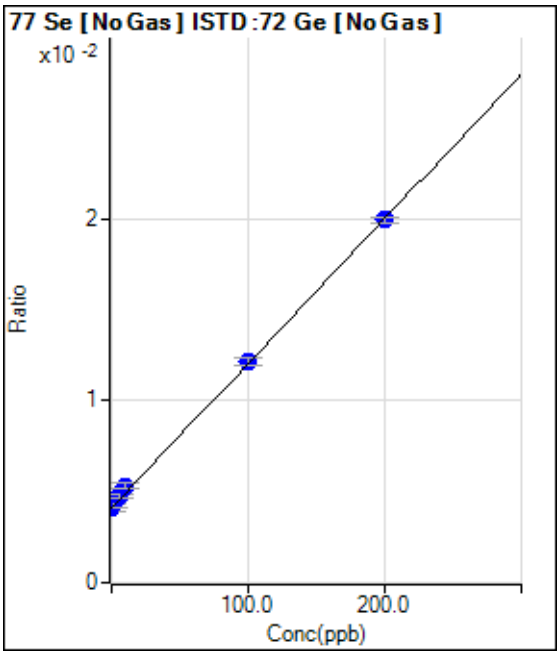


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	126085.66	0.3418	P	1.6
2	☐	2.000	9.943	126950.43	0.3425	P	0.5
3	☐	5.000	97.475	127267.00	0.3495	P	1.5
4	☐	10.000	127.040	128983.57	0.3518	P	1.1
5	☐	100.000	141.038	128485.01	0.3529	P	0.1
6	☐	200.000	171.237	128280.55	0.3553	P	3.5

y = 7.9160E-005 * x + 0.3418
R = 0.7334
DL = 204.9
BEC = 4317

Weight: <None>
Min Conc: <None>

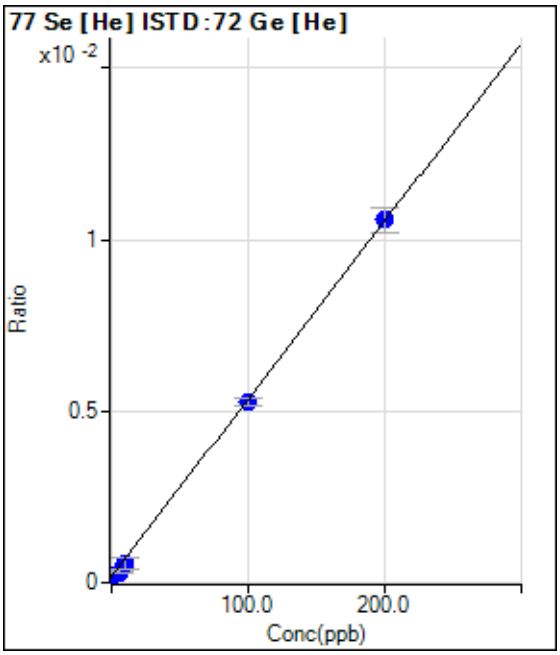
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5481.21	0.0041	P	11.0
2	☐	2.000	2.893	5854.69	0.0043	P	9.0
3	☐	5.000	8.076	6194.89	0.0048	P	3.7
4	☐	10.000	15.042	6958.58	0.0053	P	5.7
5	☐	100.000	101.053	15859.54	0.0121	P	3.6
6	☐	200.000	199.136	25668.15	0.0200	P	1.8

y = 7.9551E-005 * x + 0.0041
R = 0.9997
DL = 17.1
BEC = 51.67

Weight: <None>
Min Conc: <None>

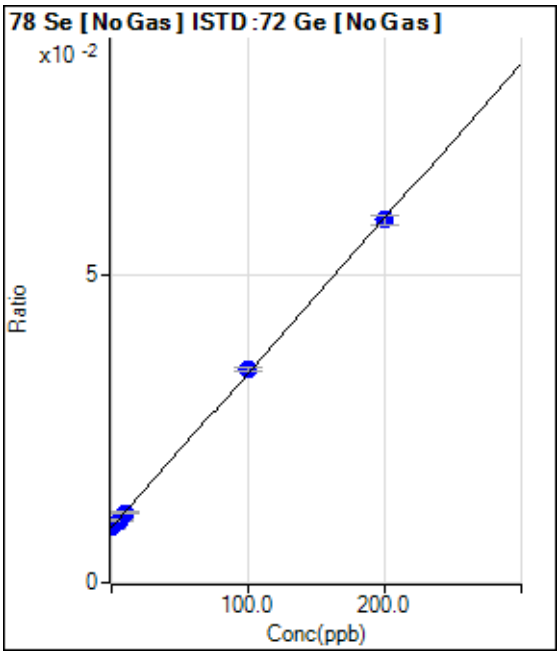


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0002	P	8.3
2	☐	2.000	1.032	86.67	0.0002	P	18.5
3	☐	5.000	2.343	110.00	0.0003	P	8.6
4	☐	10.000	7.748	213.34	0.0006	P	55.5
5	☐	100.000	98.740	1926.85	0.0053	P	4.1
6	☐	200.000	200.819	3817.29	0.0106	P	6.9

y = 5.1770E-005 * x + 1.8067E-004
R = 0.9999
DL = 0.8707
BEC = 3.49

Weight: <None>
Min Conc: <None>

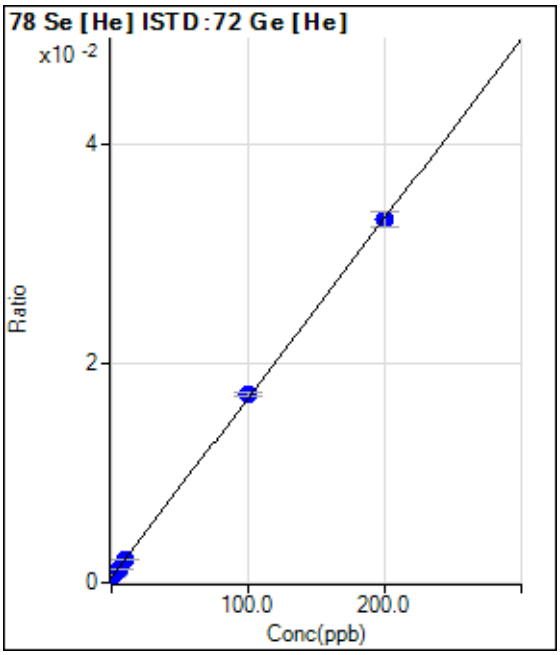
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11932.19	0.0089	P	2.4
2	☐	2.000	1.196	12485.98	0.0092	P	1.1
3	☐	5.000	4.514	13143.32	0.0101	P	3.2
4	☐	10.000	9.331	14805.02	0.0113	P	3.2
5	☐	100.000	102.418	45196.02	0.0346	P	2.0
6	☐	200.000	198.845	75621.61	0.0588	P	2.3

y = 2.5064E-004 * x + 0.0089
R = 0.9999
DL = 2.574
BEC = 35.7

Weight: <None>
Min Conc: <None>

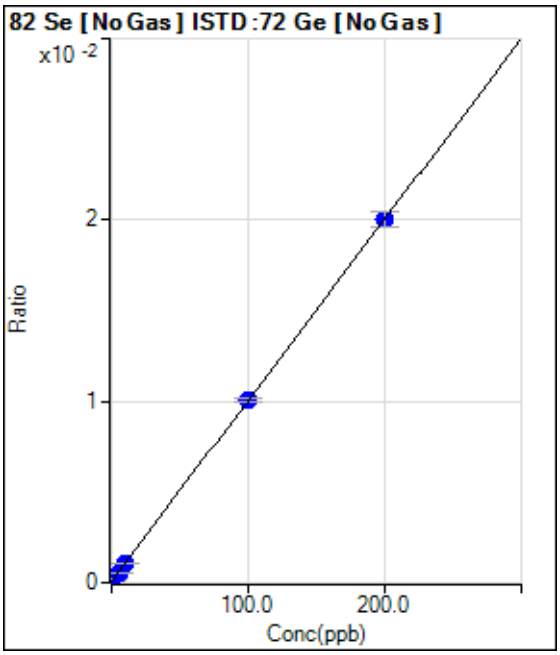


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	180.67	0.0005	P	16.3
2	☐	2.000	1.346	263.33	0.0007	P	4.4
3	☐	5.000	4.474	445.34	0.0012	P	2.7
4	☐	10.000	9.887	773.36	0.0021	P	3.6
5	☐	100.000	101.674	6240.13	0.0171	P	2.4
6	☐	200.000	199.188	11953.98	0.0331	P	4.2

y = 1.6378E-004 * x + 4.9003E-004
R = 0.9999
DL = 1.462
BEC = 2.992

Weight: <None>
Min Conc: <None>

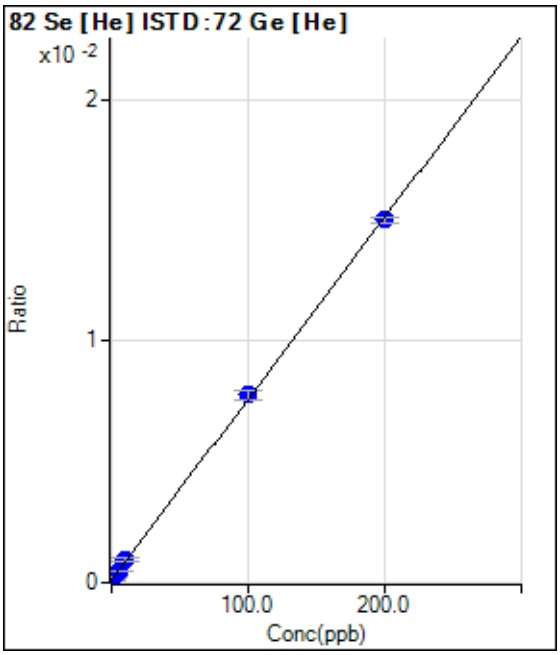
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	101.78	0.0001	P	23.5
2	☐	2.000	2.167	394.98	0.0003	P	27.7
3	☐	5.000	4.394	671.39	0.0005	P	6.5
4	☐	10.000	9.924	1398.62	0.0011	P	2.2
5	☐	100.000	100.366	13174.86	0.0101	P	1.7
6	☐	200.000	199.834	25740.46	0.0200	P	4.2

y = 9.9776E-005 * x + 7.6366E-005
R = 1.0000
DL = 0.5387
BEC = 0.7654

Weight: <None>
Min Conc: <None>

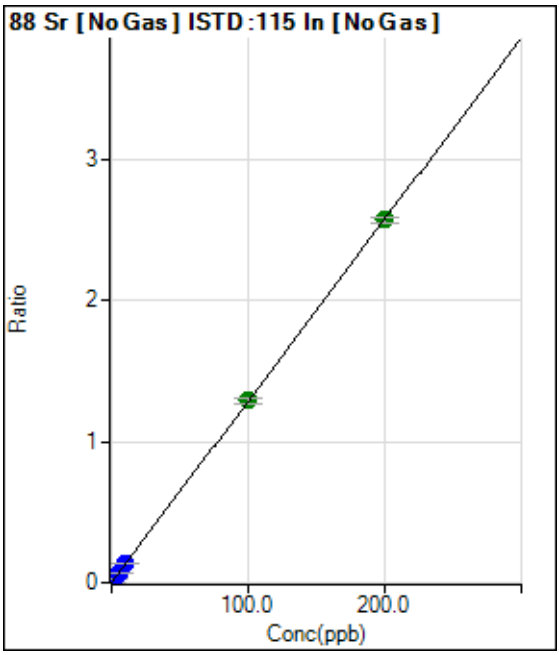


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	36.67	0.0001	P	76.9
2	☐	2.000	1.682	83.33	0.0002	P	17.7
3	☐	5.000	5.151	176.67	0.0005	P	5.9
4	☐	10.000	11.292	346.68	0.0009	P	12.1
5	☐	100.000	102.328	2830.35	0.0078	P	4.7
6	☐	200.000	198.771	5421.19	0.0150	P	1.7

y = 7.5026E-005 * x + 9.8497E-005
R = 0.9999
DL = 3.029
BEC = 1.313

Weight: <None>
Min Conc: <None>

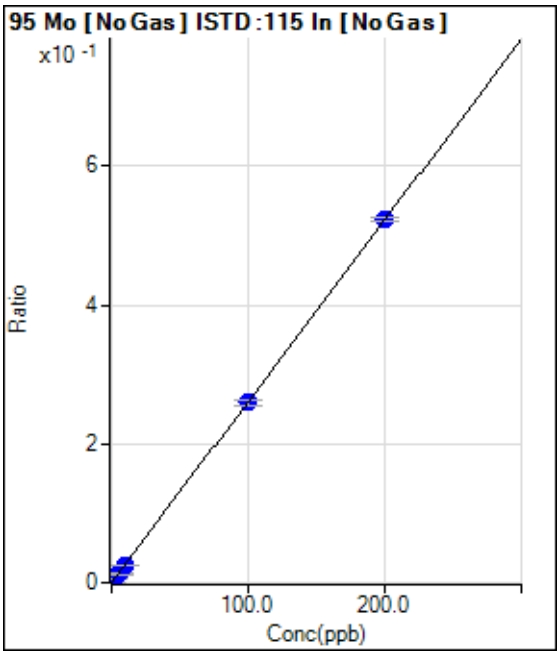
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	693.36	0.0005	P	17.5
2	☐	2.000	2.008	39191.09	0.0263	P	2.4
3	☐	5.000	4.966	96751.73	0.0644	P	1.3
4	☐	10.000	10.177	195940.17	0.1316	P	1.5
5	☐	100.000	100.356	1905523.51	1.2934	A	3.0
6	☐	200.000	199.814	3684252.34	2.5748	A	1.7

y = 0.0129 * x + 4.6466E-004
R = 1.0000
DL = 0.01889
BEC = 0.03607

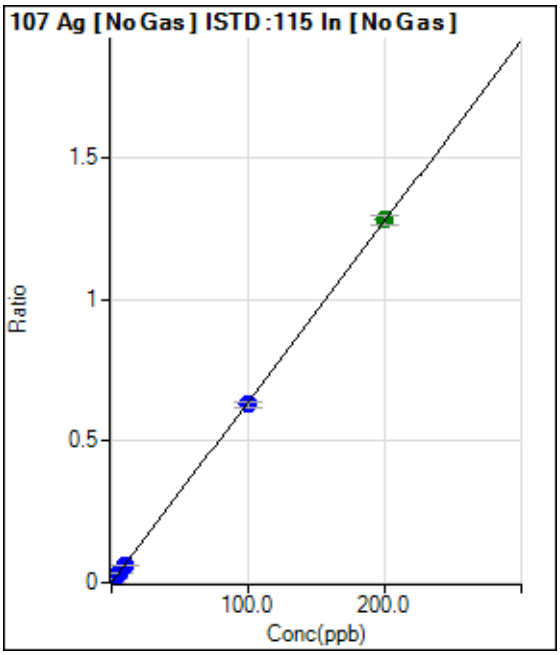
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.33	0.0000	P	59.7
2	☐	2.000	1.865	7298.82	0.0049	P	7.4
3	☐	5.000	4.803	18877.00	0.0126	P	3.0
4	☐	10.000	9.803	38131.61	0.0256	P	3.1
5	☐	100.000	99.470	382283.22	0.2595	P	3.1
6	☐	200.000	200.281	747541.37	0.5224	P	1.0

y = 0.0026 * x + 4.2427E-005
R = 1.0000
DL = 0.02916
BEC = 0.01627

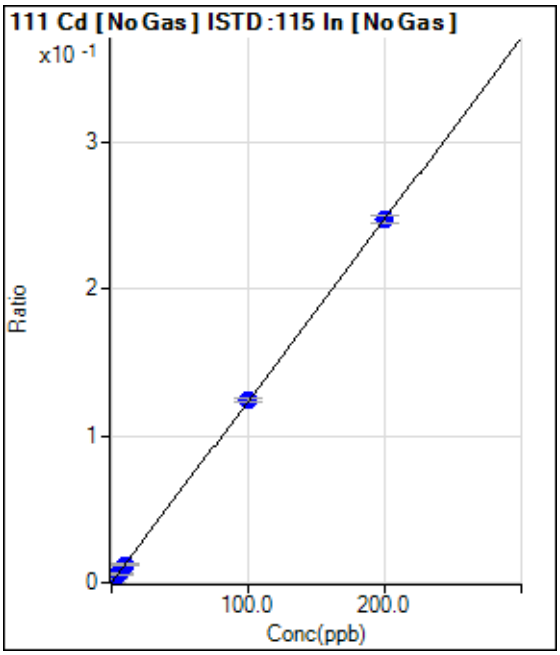
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	93.33	0.0001	P	34.4
2	☐	2.000	1.955	18673.43	0.0125	P	1.6
3	☐	5.000	4.878	46839.92	0.0312	P	1.7
4	☐	10.000	9.928	94459.71	0.0634	P	2.9
5	☐	100.000	98.526	926882.67	0.6291	P	2.5
6	☐	200.000	200.744	1833712.37	1.2816	A	2.6

y = 0.0064 * x + 6.2543E-005
R = 1.0000
DL = 0.01012
BEC = 0.009797

Weight: <None>
Min Conc: <None>

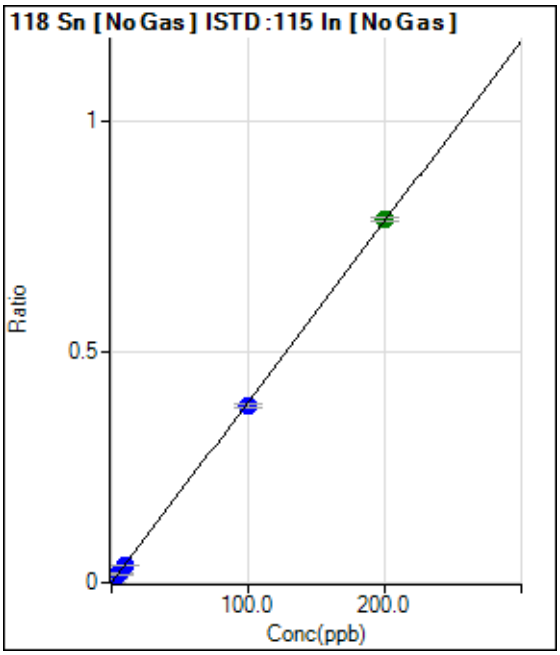


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3.09	0.0000	P	503.5
2	☐	2.000	1.934	3560.55	0.0024	P	6.5
3	☐	5.000	4.805	8921.33	0.0059	P	1.8
4	☐	10.000	9.971	18350.92	0.0123	P	5.3
5	☐	100.000	100.369	182817.12	0.1241	P	2.3
6	☐	200.000	199.822	353411.82	0.2470	P	2.2

y = 0.0012 * x + 2.0766E-006
R = 1.0000
DL = 0.02538
BEC = 0.00168

Weight: <None>
Min Conc: <None>

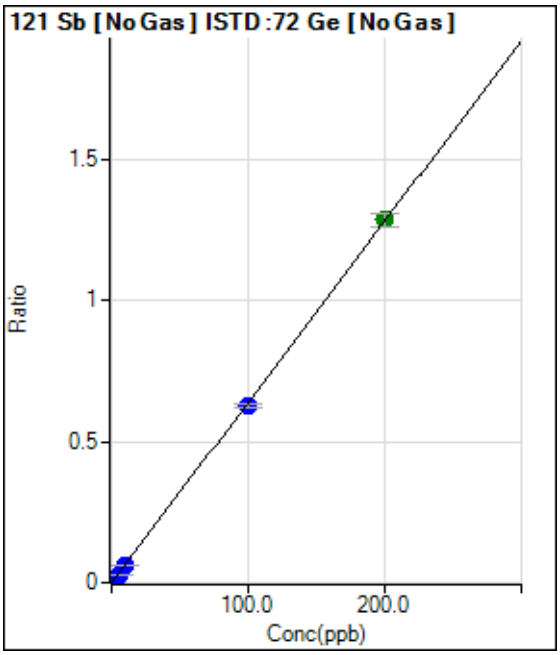
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	516.68	0.0003	P	11.8
2	☐	2.000	2.190	13249.82	0.0089	P	22.1
3	☐	5.000	4.732	28327.65	0.0189	P	1.4
4	☐	10.000	9.753	57372.15	0.0385	P	1.8
5	☐	100.000	98.265	567342.13	0.3850	P	2.2
6	☐	200.000	200.885	1125772.17	0.7867	A	1.2

y = 0.0039 * x + 3.4623E-004
R = 0.9999
DL = 0.03134
BEC = 0.08845

Weight: <None>
Min Conc: <None>

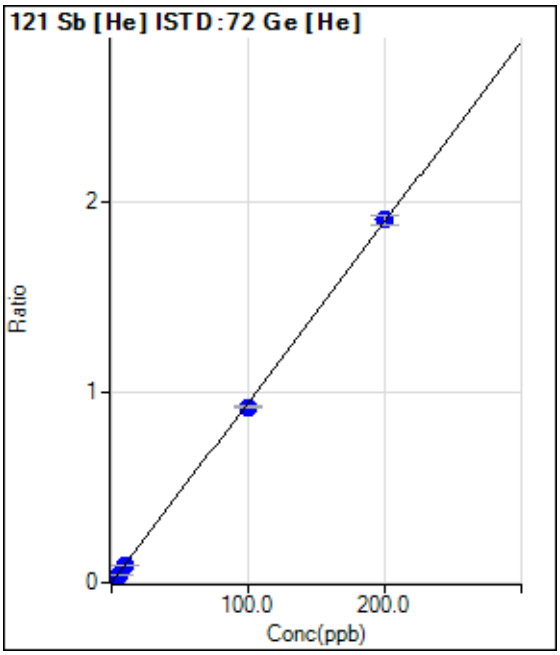


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	80.00	0.0001	P	13.5
2	☐	2.000	1.731	15035.59	0.0111	P	2.5
3	☐	5.000	4.644	38847.90	0.0298	P	2.0
4	☐	10.000	9.473	79621.23	0.0607	P	2.8
5	☐	100.000	98.076	819903.71	0.6280	P	2.3
6	☐	200.000	201.000	1655567.21	1.2871	A	3.4

y = 0.0064 * x + 6.0046E-005
R = 0.9999
DL = 0.003804
BEC = 0.009378

Weight: <None>
Min Conc: <None>

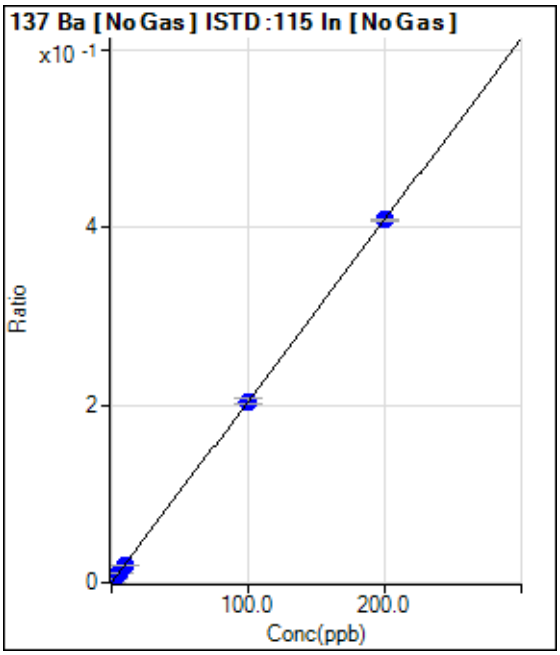
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	46.67	0.0001	P	11.4
2	☐	2.000	1.726	6098.19	0.0165	P	2.5
3	☐	5.000	4.614	15936.64	0.0438	P	1.5
4	☐	10.000	9.606	33352.74	0.0910	P	2.8
5	☐	100.000	97.511	335792.00	0.9224	P	1.2
6	☐	200.000	201.277	687461.32	1.9038	P	2.7

y = 0.0095 * x + 1.2639E-004
R = 0.9999
DL = 0.004564
BEC = 0.01336

Weight: <None>
Min Conc: <None>

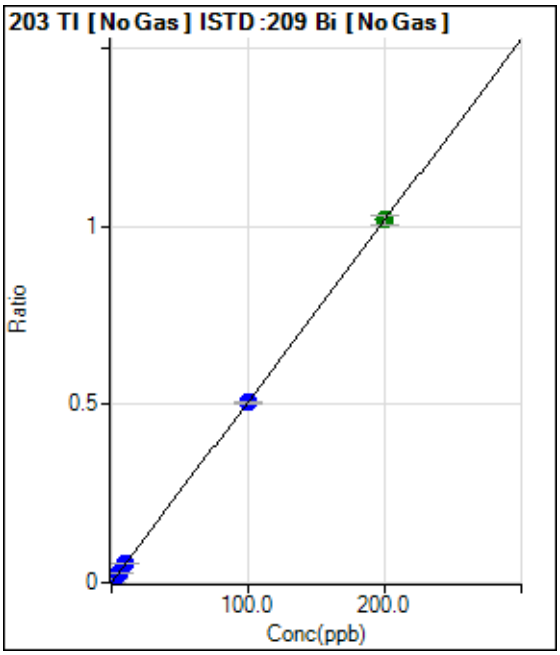


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	173.34	0.0001	P	21.8
2	☐	2.000	1.894	5928.11	0.0040	P	3.4
3	☐	5.000	4.988	15456.11	0.0103	P	4.5
4	☐	10.000	9.816	30011.66	0.0202	P	1.2
5	☐	100.000	99.935	300648.07	0.2041	P	3.6
6	☐	200.000	200.043	584450.64	0.4084	P	0.7

y = 0.0020 * x + 1.1614E-004
R = 1.0000
DL = 0.03718
BEC = 0.0569

Weight: <None>
Min Conc: <None>

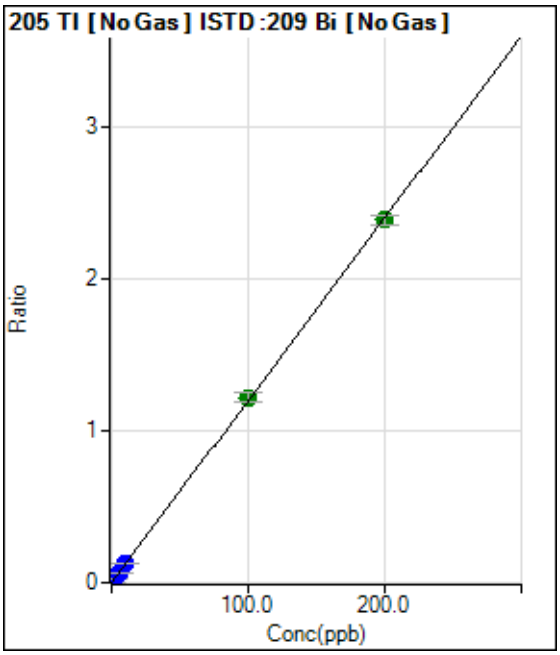
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	80.00	0.0001	P	23.1
2	☐	2.000	2.020	13731.17	0.0103	P	4.2
3	☐	5.000	4.905	33749.24	0.0250	P	1.7
4	☐	10.000	10.212	69650.83	0.0520	P	0.7
5	☐	100.000	99.375	653386.12	0.5054	P	1.8
6	☐	200.000	200.304	1311245.45	1.0186	A	2.9

y = 0.0051 * x + 6.1142E-005
R = 1.0000
DL = 0.008337
BEC = 0.01202

Weight: <None>
Min Conc: <None>

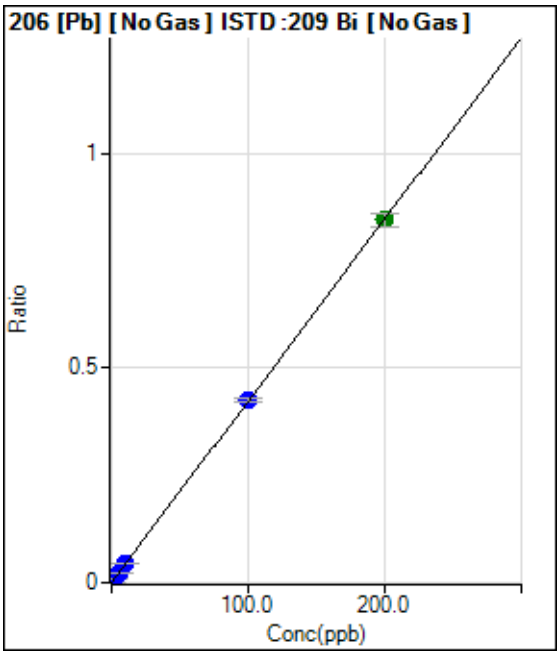


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	213.34	0.0002	P	25.8
2	☐	2.000	2.034	32606.45	0.0245	P	2.9
3	☐	5.000	5.009	81243.81	0.0602	P	1.4
4	☐	10.000	10.263	164987.99	0.1231	P	1.1
5	☐	100.000	101.665	1574648.00	1.2185	A	4.9
6	☐	200.000	199.154	3072744.02	2.3867	A	2.4

y = 0.0120 * x + 1.6223E-004
R = 1.0000
DL = 0.01049
BEC = 0.01354

Weight: <None>
Min Conc: <None>

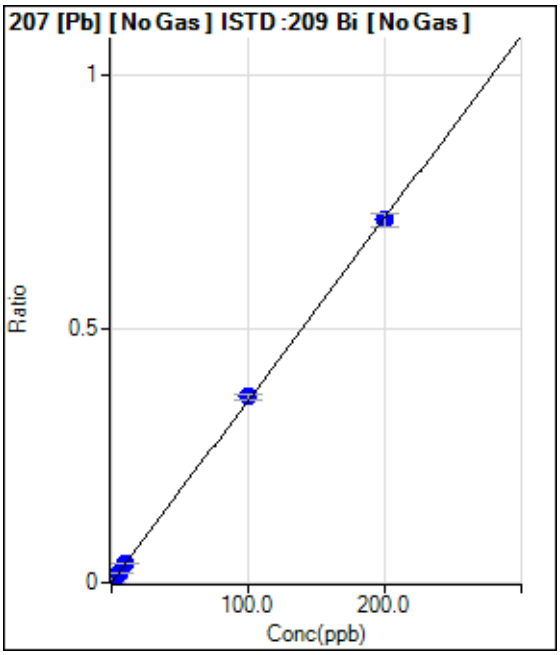
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	113.33	0.0001	P	30.5
2	☐	2.000	1.920	10908.29	0.0082	P	2.5
3	☐	5.000	4.914	28182.20	0.0209	P	1.6
4	☐	10.000	10.144	57603.64	0.0430	P	2.0
5	☐	100.000	100.449	549455.47	0.4250	P	2.4
6	☐	200.000	199.771	1087931.84	0.8452	A	4.0

y = 0.0042 * x + 8.6708E-005
R = 1.0000
DL = 0.01873
BEC = 0.0205

Weight: <None>
Min Conc: <None>

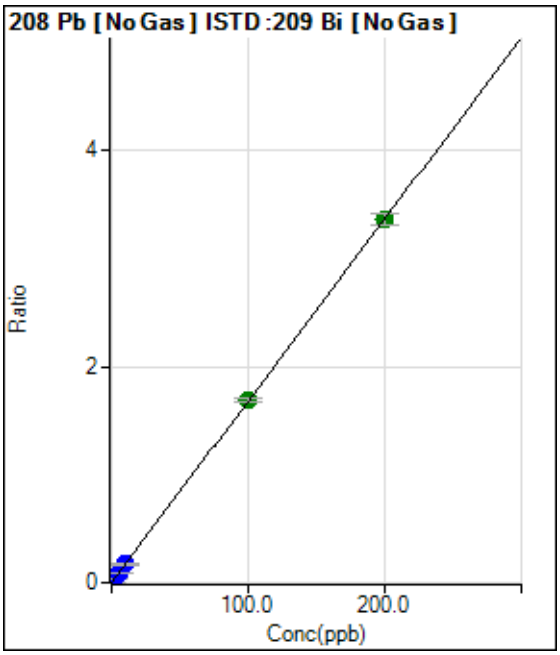


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	100.00	0.0001	P	10.8
2	☐	2.000	2.010	9683.92	0.0073	P	3.1
3	☐	5.000	4.930	23990.10	0.0178	P	0.7
4	☐	10.000	10.112	48732.31	0.0364	P	1.2
5	☐	100.000	101.931	473024.58	0.3659	P	2.5
6	☐	200.000	199.031	919463.97	0.7144	P	3.6

y = 0.0036 * x + 7.6284E-005
R = 0.9999
DL = 0.006919
BEC = 0.02126

Weight: <None>
Min Conc: <None>

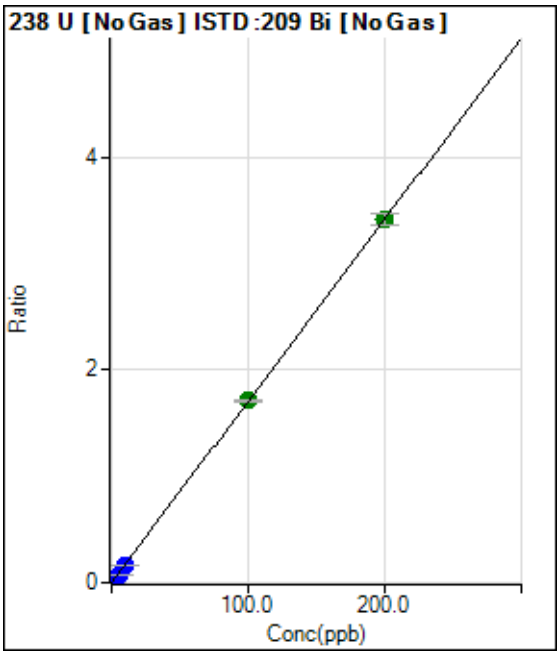
Calibration for 343_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	423.34	0.0003	P	14.5
2	☐	2.000	1.960	44261.79	0.0333	P	1.4
3	☐	5.000	4.913	112039.46	0.0830	P	0.8
4	☐	10.000	10.040	226796.11	0.1693	P	1.0
5	☐	100.000	100.584	2188509.33	1.6929	A	2.6
6	☐	200.000	199.708	4326000.98	3.3609	A	3.3

y = 0.0168 * x + 3.2320E-004
R = 1.0000
DL = 0.008346
BEC = 0.01921

Weight: <None>
Min Conc: <None>

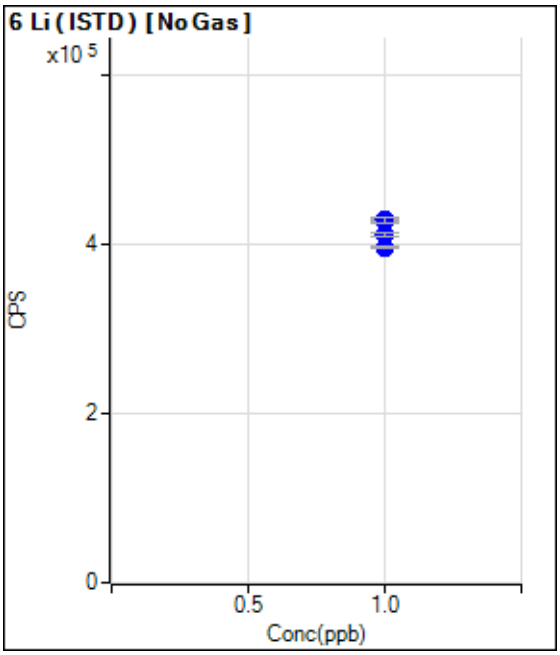


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20.00	0.0000	P	2.1
2	☐	2.000	1.913	43320.45	0.0326	P	5.5
3	☐	5.000	4.739	109066.49	0.0808	P	0.9
4	☐	10.000	9.554	218164.53	0.1629	P	2.1
5	☐	100.000	100.233	2209261.22	1.7084	A	0.4
6	☐	200.000	199.913	4385991.91	3.4073	A	3.2

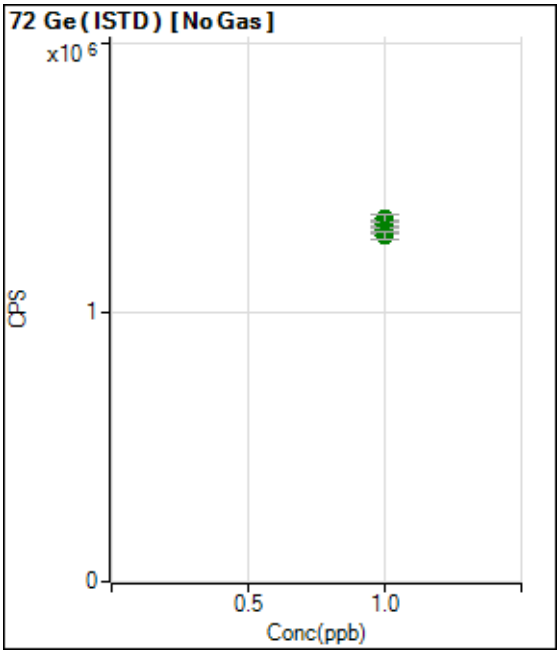
y = 0.0170 * x + 1.5249E-005
R = 1.0000
DL = 5.726E-05
BEC = 0.0008947

Weight: <None>
Min Conc: <None>

Calibration for 343_ICV.d

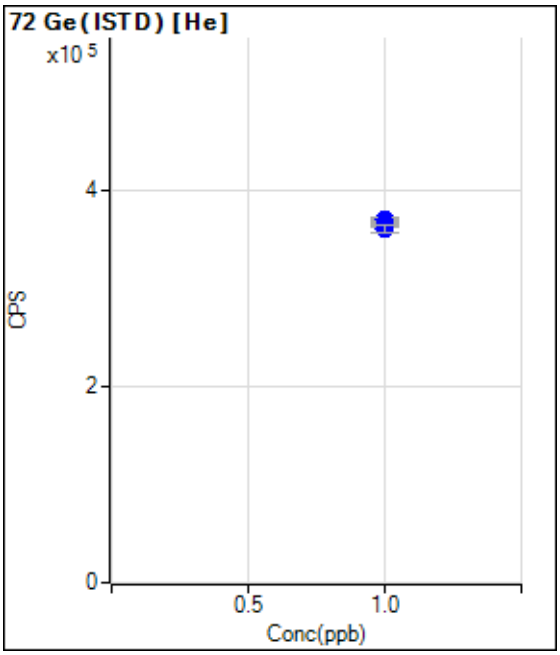


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		428449.30		P	0.5
2	☐	1.000		426545.29		P	1.2
3	☐	1.000		426885.88		P	0.4
4	☐	1.000		428426.75		P	1.2
5	☐	1.000		410964.64		P	1.2
6	☐	1.000		395513.45		P	0.5

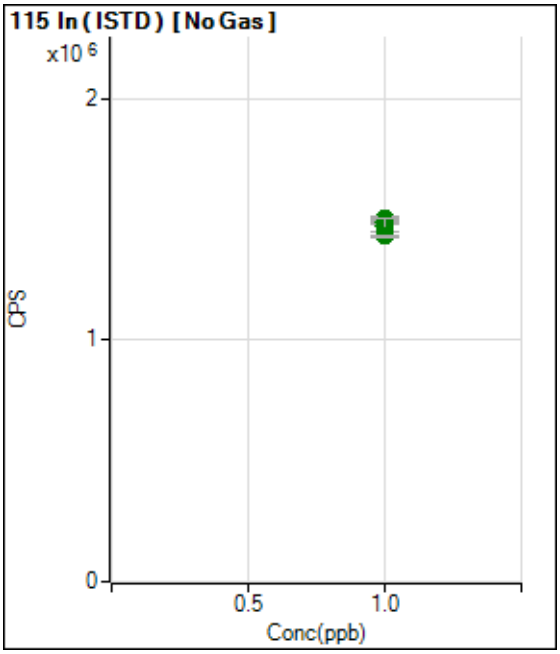


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1333725.87		A	1.6
2	☐	1.000		1349859.41		A	2.3
3	☐	1.000		1303881.54		A	1.7
4	☐	1.000		1311620.21		A	1.2
5	☐	1.000		1305776.15		A	1.4
6	☐	1.000		1286825.45		A	2.5

Calibration for 343_ICV.d

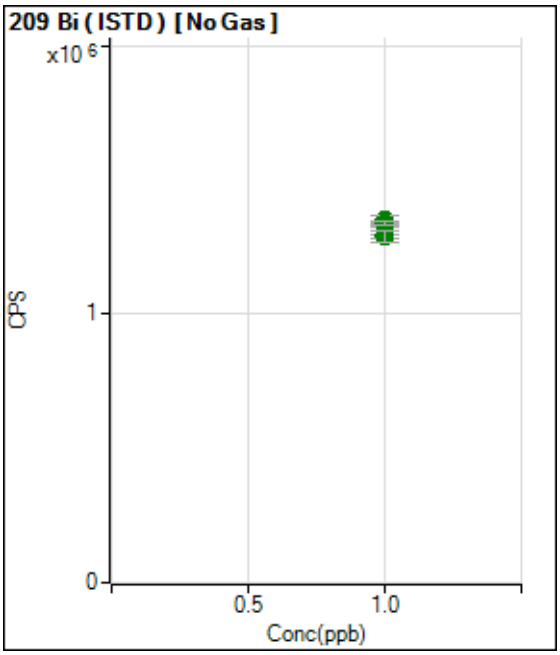


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		368953.03		P	1.8
2	☐	1.000		370627.00		P	1.0
3	☐	1.000		364201.34		P	0.8
4	☐	1.000		366627.51		P	0.3
5	☐	1.000		364067.32		P	0.7
6	☐	1.000		361219.87		P	2.1



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1492289.31		A	0.1
2	☐	1.000		1488821.98		A	1.5
3	☐	1.000		1501519.54		A	1.8
4	☐	1.000		1489358.44		A	1.5
5	☐	1.000		1474327.81		A	3.6
6	☐	1.000		1430966.51		A	0.7

Calibration for 343_ICV.d



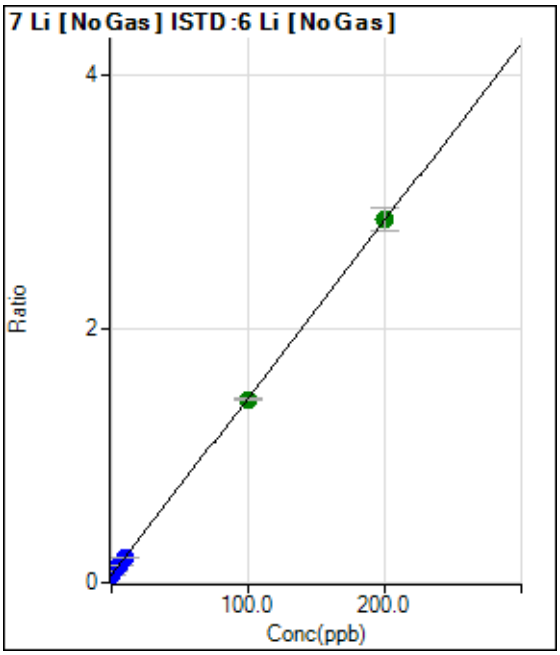
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1311990.81		A	2.1
2	☐	1.000		1329277.06		A	2.6
3	☐	1.000		1350064.25		A	2.1
4	☐	1.000		1339837.48		A	1.1
5	☐	1.000		1293247.64		A	2.2
6	☐	1.000		1288171.41		A	3.6

Calibration for 150_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\080223A.b\
Analysis File: 080223A.batch.bin
DA Date-Time: 8/2/2023 11:57:54 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	143CALB.d	CAL BLK	8/2/2023 3:38:42 PM
2	144CALS.d	2/10/200	8/2/2023 3:40:51 PM
3	145CALS.d	5/25/500	8/2/2023 3:43:02 PM
4	146CALS.d	10/50/100	8/2/2023 3:44:59 PM
5	147CALS.d	100/500/10K	8/2/2023 3:47:09 PM
6	148CALS.d	200/1000/20K	8/2/2023 3:49:01 PM

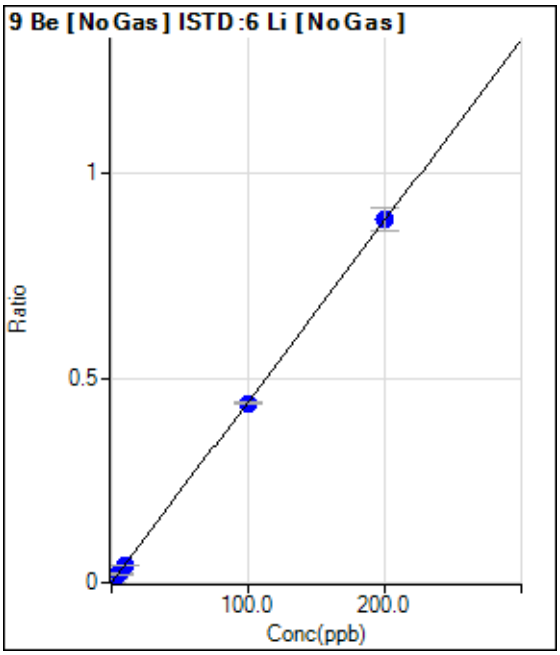
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	39664.15	0.0607	P	0.7
2	☐	2.000	2.007	57486.85	0.0887	P	0.5
3	☐	5.000	4.984	85467.79	0.1302	P	1.9
4	☐	10.000	10.227	131522.17	0.2033	P	0.9
5	☐	100.000	99.134	878080.64	1.4426	A	1.6
6	☐	200.000	200.422	1632099.25	2.8544	A	6.3

y = 0.0139 * x + 0.0607
R = 1.0000
DL = 0.08905
BEC = 4.357

Weight: <None>
Min Conc: <None>

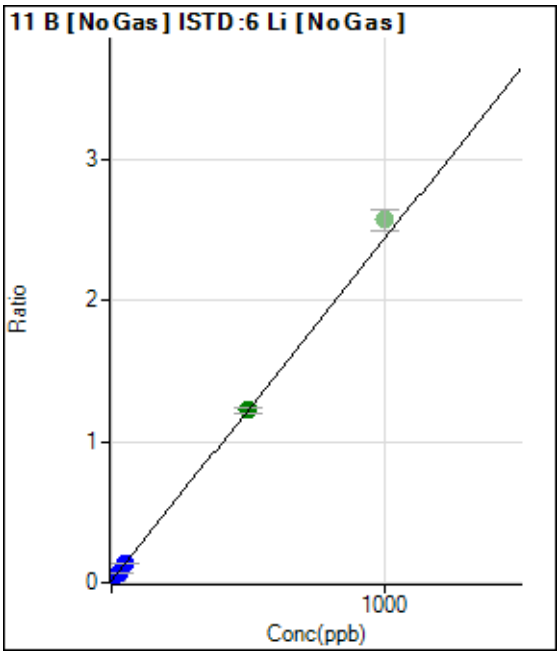


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0000	P	75.2
2	☐	2.000	1.976	5677.86	0.0088	P	3.3
3	☐	5.000	4.812	13982.02	0.0213	P	2.1
4	☐	10.000	9.749	27902.79	0.0431	P	0.8
5	☐	100.000	99.178	266907.13	0.4385	P	0.7
6	☐	200.000	200.429	506645.08	0.8862	P	6.3

y = 0.0044 * x + 2.5530E-005
R = 1.0000
DL = 0.01303
BEC = 0.005774

Weight: <None>
Min Conc: <None>

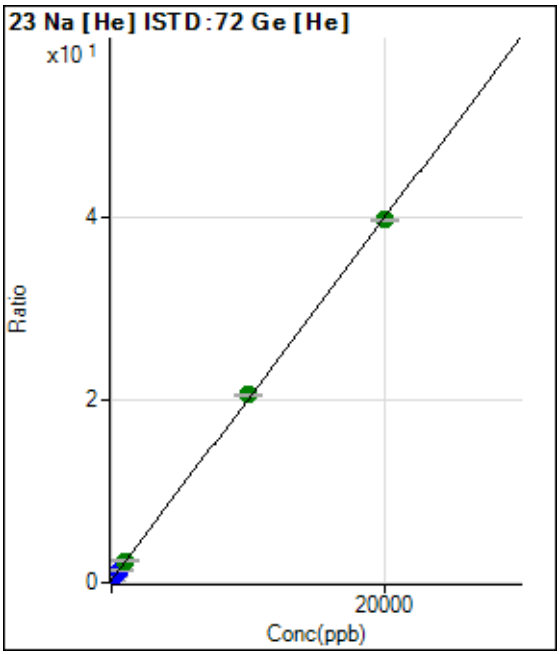
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8834.51	0.0135	P	2.2
2	☐	10.000	10.259	24852.05	0.0384	P	2.3
3	☐	25.000	24.819	48297.75	0.0736	P	2.6
4	☐	50.000	51.024	88639.70	0.1370	P	1.8
5	☐	500.000	499.901	744497.75	1.2232	A	3.1
6	☑	1000.000		1468936.49	2.5689	A	6.2

y = 0.0024 * x + 0.0135
R = 1.0000
DL = 0.3747
BEC = 5.591

Weight: <None>
Min Conc: <None>

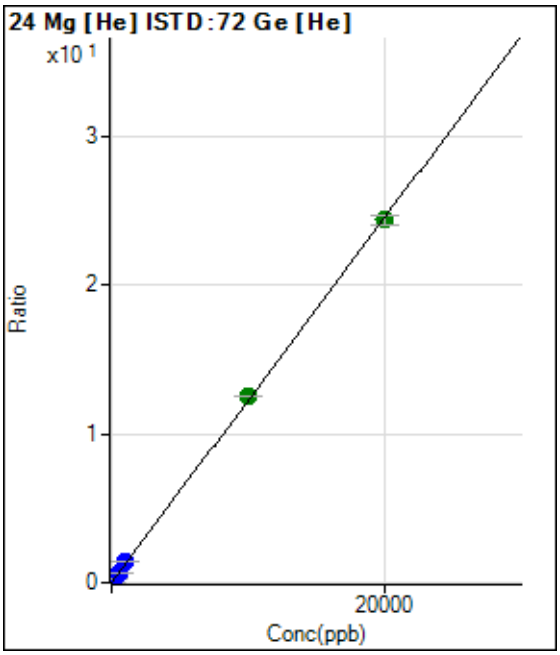


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	127790.76	0.2857	P	1.7
2	☐	200.000	214.814	321330.48	0.7115	P	1.9
3	☐	500.000	540.865	606091.25	1.3578	P	2.4
4	☐	1000.000	1070.003	1059885.51	2.4067	A	2.2
5	☐	10000.000	10217.596	8868555.91	20.5392	A	0.7
6	☐	20000.000	19886.532	16891458.92	39.7052	A	0.5

y = 0.0020 * x + 0.2857
R = 0.9999
DL = 7.448
BEC = 144.1

Weight: <None>
Min Conc: <None>

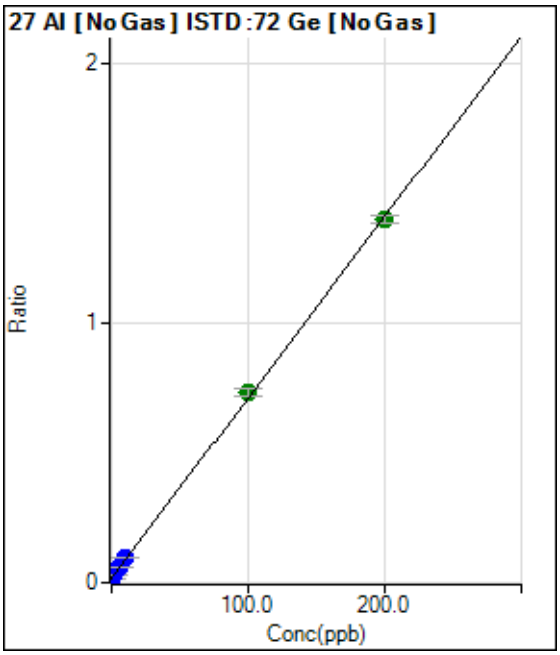
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	726.70	0.0016	P	8.5
2	☐	200.000	222.319	123894.74	0.2743	P	2.2
3	☐	500.000	552.269	303158.68	0.6791	P	1.5
4	☐	1000.000	1126.561	609330.12	1.3836	P	0.9
5	☐	10000.000	10199.280	5403152.42	12.5131	A	0.4
6	☐	20000.000	19892.502	10380291.09	24.4037	A	3.0

y = 0.0012 * x + 0.0016
R = 0.9999
DL = 0.3382
BEC = 1.325

Weight: <None>
Min Conc: <None>

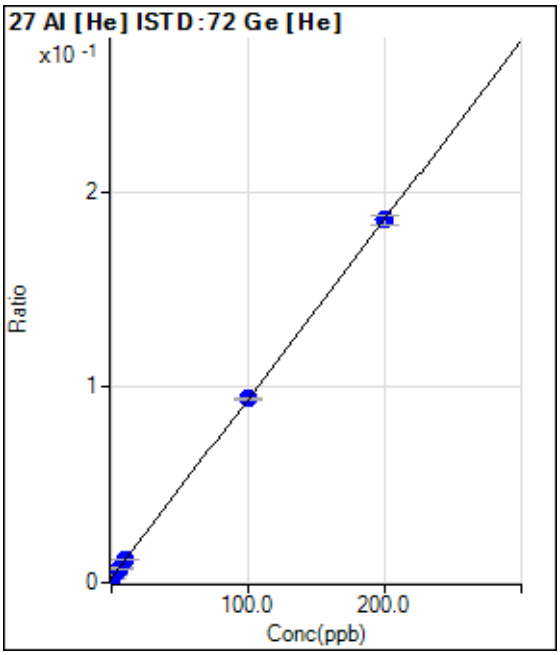


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	28439.42	0.0174	P	2.2
2	☐	2.000	2.116	52736.97	0.0322	P	2.8
3	☐	5.000	5.901	93580.21	0.0585	P	1.1
4	☐	10.000	11.049	151720.56	0.0944	P	2.1
5	☐	100.000	102.888	1146667.33	0.7339	A	3.8
6	☐	200.000	198.480	2214648.87	1.3997	A	2.0

y = 0.0070 * x + 0.0174
R = 0.9999
DL = 0.1662
BEC = 2.501

Weight: <None>
Min Conc: <None>

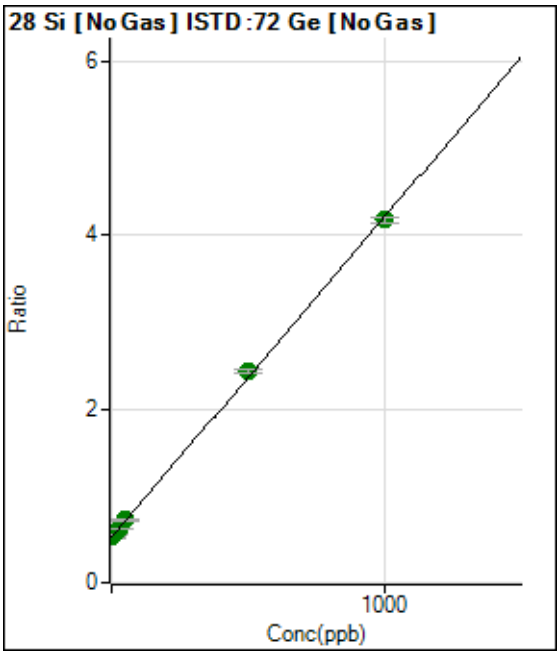
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1016.73	0.0023	P	11.1
2	☐	2.000	1.904	1816.83	0.0040	P	6.7
3	☐	5.000	5.466	3253.78	0.0073	P	6.3
4	☐	10.000	10.622	5294.43	0.0120	P	3.2
5	☐	100.000	100.180	40679.99	0.0942	P	0.5
6	☐	200.000	199.868	78990.49	0.1857	P	2.7

y = 9.1768E-004 * x + 0.0023
R = 1.0000
DL = 0.8227
BEC = 2.476

Weight: <None>
Min Conc: <None>

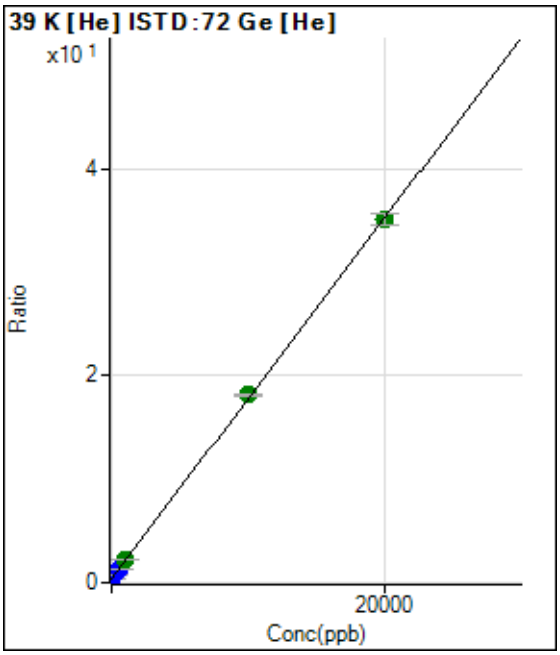


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	851714.80	0.5216	A	1.2
2	☐	10.000	10.339	917975.40	0.5597	A	1.4
3	☐	25.000	27.984	999095.79	0.6247	A	1.7
4	☐	50.000	54.352	1160642.61	0.7218	A	2.0
5	☐	500.000	518.099	3797050.98	2.4300	A	1.9
6	☐	1000.000	990.655	6598901.15	4.1705	A	1.9

y = 0.0037 * x + 0.5216
R = 0.9998
DL = 4.978
BEC = 141.6

Weight: <None>
Min Conc: <None>

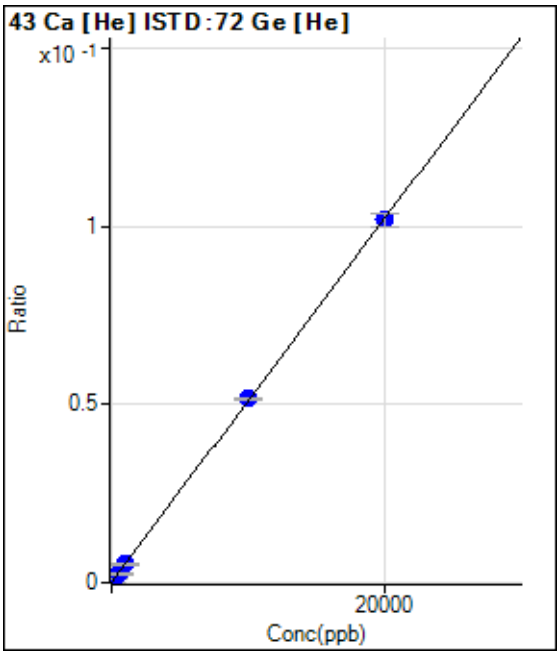
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	160837.05	0.3595	P	0.9
2	☐	200.000	201.915	321504.56	0.7119	P	2.5
3	☐	500.000	521.598	566888.22	1.2699	P	1.3
4	☐	1000.000	1047.195	963214.15	2.1872	A	2.1
5	☐	10000.000	10202.159	7843548.21	18.1649	A	1.5
6	☐	20000.000	19896.002	14922577.69	35.0831	A	3.2

y = 0.0017 * x + 0.3595
R = 0.9999
DL = 5.348
BEC = 206

Weight: <None>
Min Conc: <None>

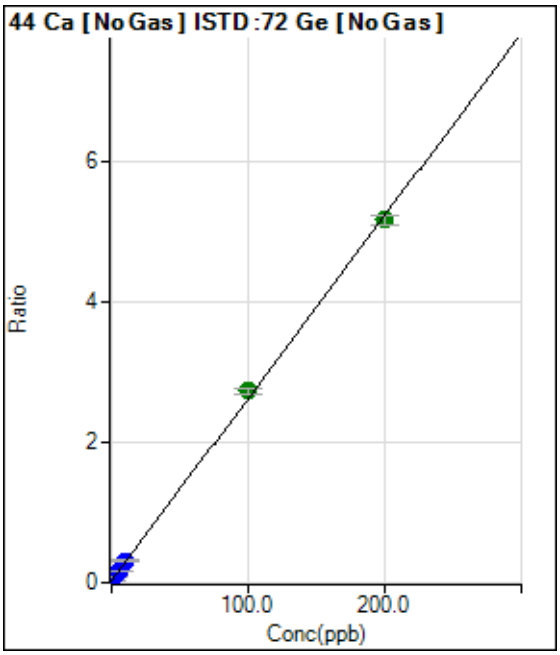


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	36.67	0.0001	P	15.7
2	☐	200.000	195.030	486.68	0.0011	P	16.0
3	☐	500.000	467.091	1100.07	0.0025	P	5.3
4	☐	1000.000	1010.680	2306.90	0.0052	P	8.0
5	☐	10000.000	10111.934	22308.44	0.0517	P	0.7
6	☐	20000.000	19944.372	43308.38	0.1018	P	3.7

y = 5.1011E-006 * x + 8.1966E-005
R = 1.0000
DL = 7.566
BEC = 16.07

Weight: <None>
Min Conc: <None>

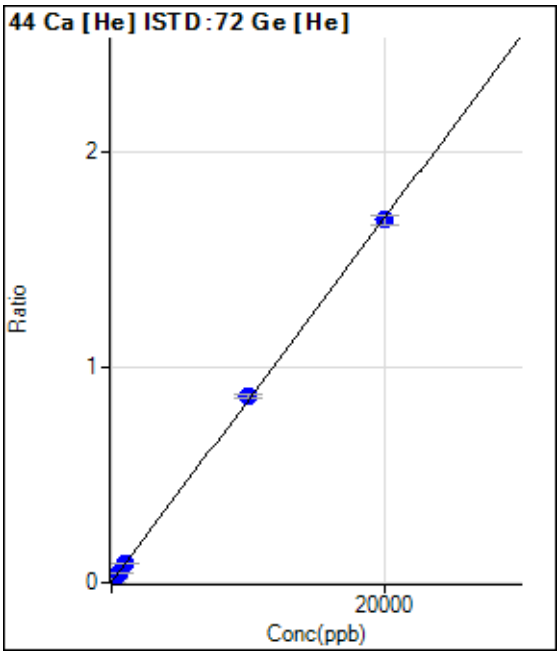
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	42522.57	0.0260	P	1.1
2	☐	2.000	2.139	133754.93	0.0815	P	0.3
3	☐	5.000	5.483	269185.07	0.1683	P	2.1
4	☐	10.000	10.979	499980.89	0.3110	P	3.0
5	☐	100.000	104.208	4266773.48	2.7308	A	2.9
6	☐	200.000	197.834	8166360.30	5.1609	A	2.8

y = 0.0260 * x + 0.0260
R = 0.9997
DL = 0.03364
BEC = 1.003

Weight: <None>
Min Conc: <None>

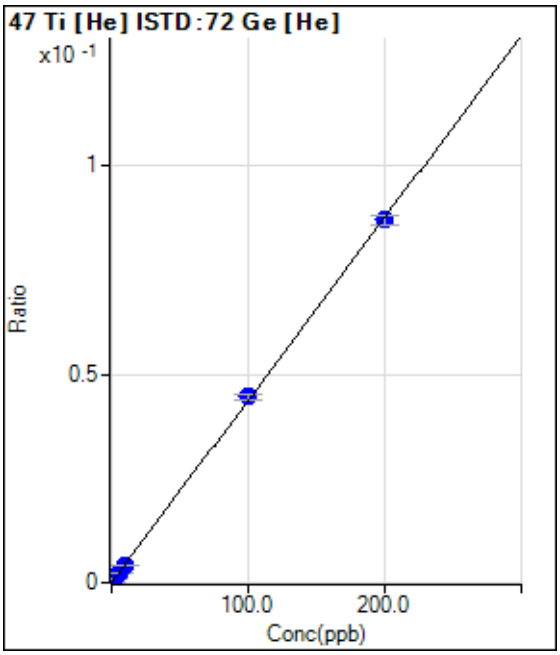


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	916.72	0.0020	P	11.2
2	☐	200.000	200.409	8576.14	0.0190	P	6.6
3	☐	500.000	510.489	20185.08	0.0452	P	3.5
4	☐	1000.000	1022.706	38992.37	0.0885	P	4.6
5	☐	10000.000	10203.978	373493.47	0.8650	P	1.5
6	☐	20000.000	19896.609	716654.37	1.6848	P	2.4

y = 8.4573E-005 * x + 0.0020
R = 0.9999
DL = 8.153
BEC = 24.23

Weight: <None>
Min Conc: <None>

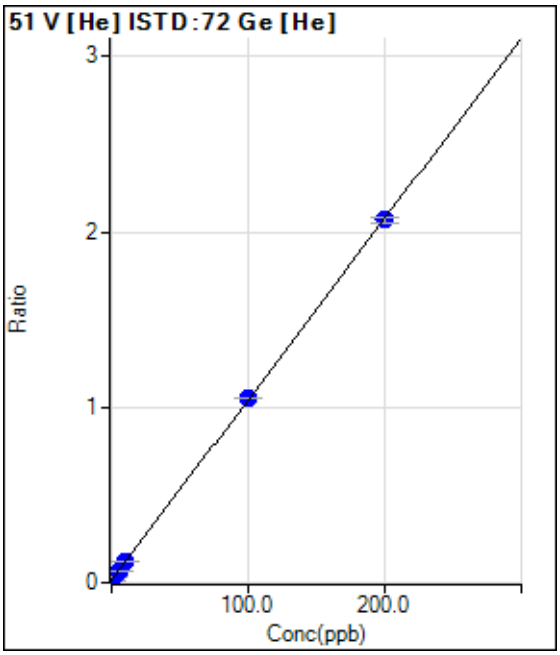
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	86.6
2	☐	2.000	1.825	366.68	0.0008	P	7.2
3	☐	5.000	5.193	1020.05	0.0023	P	9.1
4	☐	10.000	9.594	1853.49	0.0042	P	6.7
5	☐	100.000	102.180	19287.20	0.0447	P	3.0
6	☐	200.000	198.927	36990.29	0.0870	P	2.7

y = 4.3707E-004 * x + 1.4897E-005
R = 0.9999
DL = 0.08856
BEC = 0.03408

Weight: <None>
Min Conc: <None>

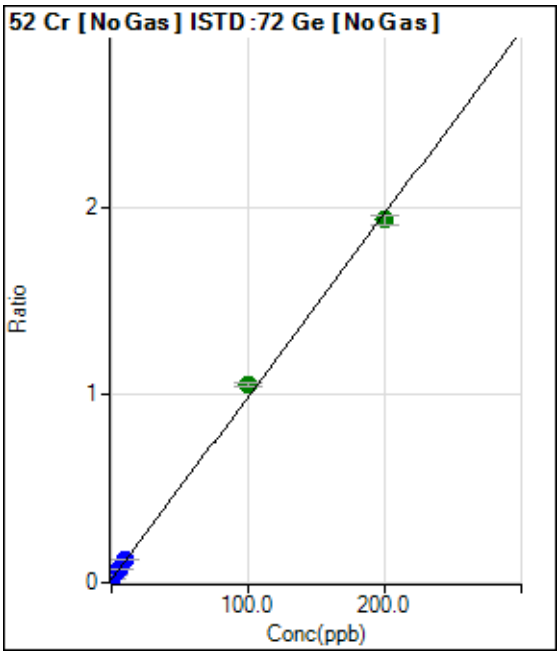


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6160.30	0.0138	P	2.0
2	☐	2.000	1.929	15192.88	0.0336	P	1.2
3	☐	5.000	4.992	29091.93	0.0652	P	2.1
4	☐	10.000	10.180	52234.62	0.1186	P	2.1
5	☐	100.000	100.891	454579.48	1.0527	P	0.2
6	☐	200.000	199.546	880010.90	2.0687	P	1.6

y = 0.0103 * x + 0.0138
R = 1.0000
DL = 0.0797
BEC = 1.337

Weight: <None>
Min Conc: <None>

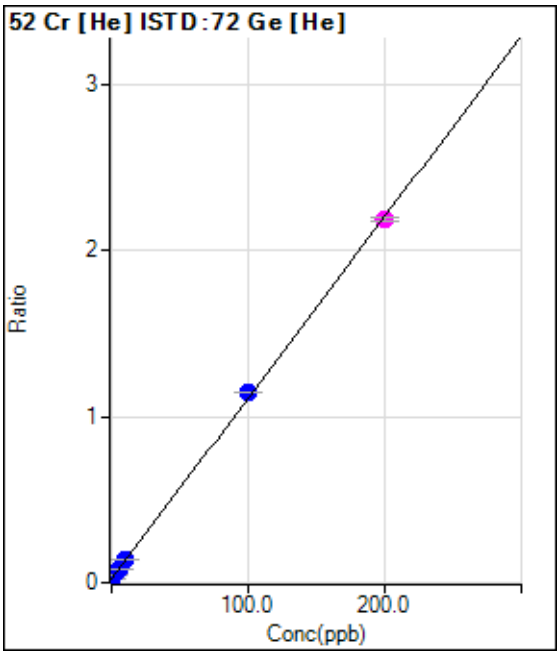
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26486.09	0.0162	P	2.8
2	☐	2.000	2.067	59623.19	0.0364	P	1.9
3	☐	5.000	5.372	109596.40	0.0685	P	1.4
4	☐	10.000	10.788	194964.83	0.1213	P	2.4
5	☐	100.000	106.583	1647067.06	1.0540	A	1.8
6	☐	200.000	196.659	3056076.10	1.9311	A	2.8

y = 0.0097 * x + 0.0162
R = 0.9992
DL = 0.1394
BEC = 1.666

Weight: <None>
Min Conc: <None>

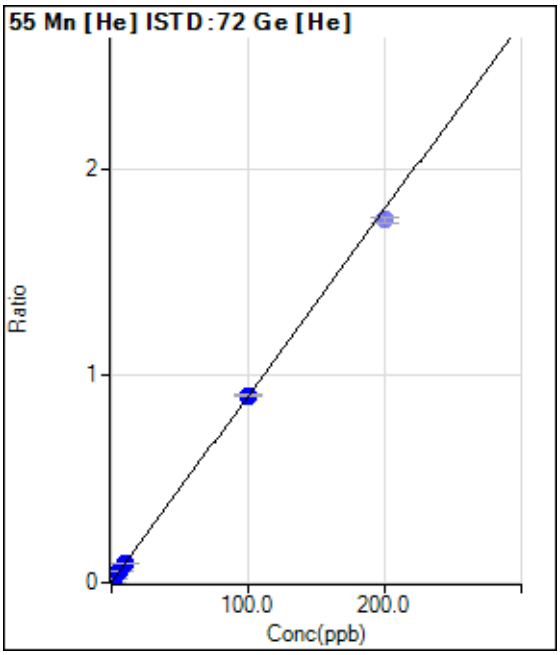


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9770.34	0.0218	P	2.7
2	☐	2.000	2.014	19784.61	0.0438	P	3.6
3	☐	5.000	5.045	34316.70	0.0769	P	0.7
4	☐	10.000	10.443	59784.52	0.1357	P	1.5
5	☐	100.000	103.059	494819.06	1.1460	P	0.6
6	☐	200.000	198.447	930126.91	2.1864	M	1.0

y = 0.0109 * x + 0.0218
R = 0.9998
DL = 0.1613
BEC = 2.002

Weight: <None>
Min Conc: <None>

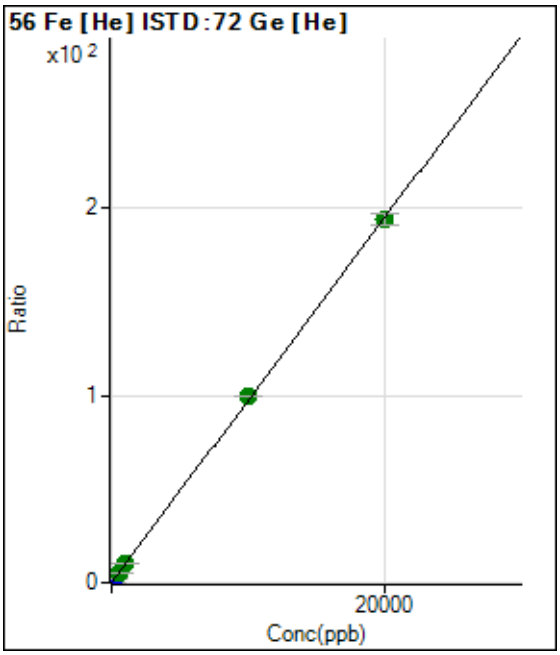
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	860.04	0.0019	P	15.7
2	☐	2.000	1.913	8656.20	0.0192	P	5.5
3	☐	5.000	5.935	24756.19	0.0555	P	1.7
4	☐	10.000	10.051	40771.30	0.0926	P	1.0
5	☐	100.000	99.950	390094.61	0.9034	P	0.8
6	☑	200.000		746593.72	1.7550	P	1.3

y = 0.0090 * x + 0.0019
R = 1.0000
DL = 0.1006
BEC = 0.213

Weight: <None>
Min Conc: <None>

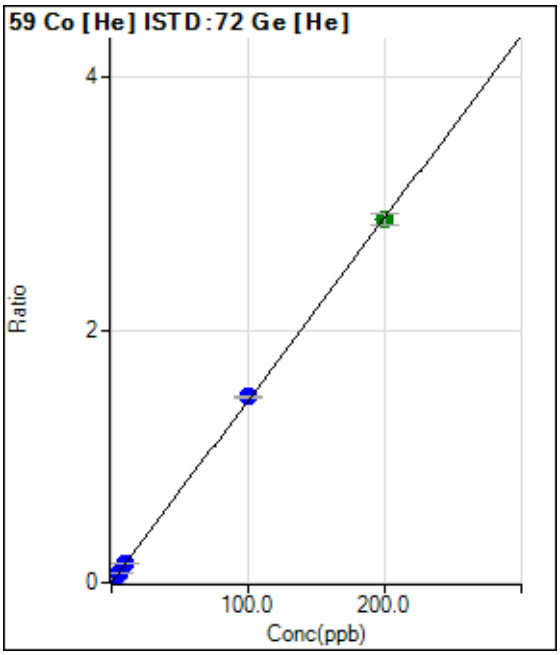


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20943.10	0.0468	P	4.4
2	☐	200.000	207.954	934723.11	2.0698	P	2.4
3	☐	500.000	526.411	2306704.60	5.1678	A	3.1
4	☐	1000.000	1043.836	4492859.52	10.2013	A	0.6
5	☐	10000.000	10207.467	42897476.03	99.3459	A	0.4
6	☐	20000.000	19893.335	82336195.44	193.5707	A	3.2

y = 0.0097 * x + 0.0468
R = 0.9999
DL = 0.6413
BEC = 4.813

Weight: <None>
Min Conc: <None>

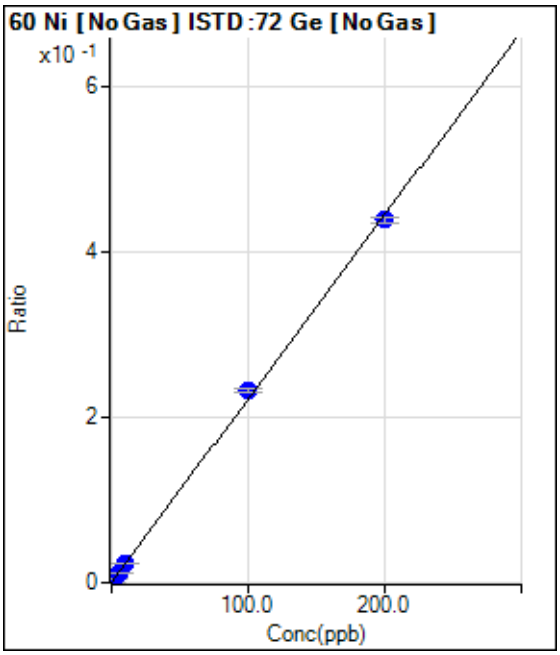
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	120.00	0.0003	P	29.0
2	☐	2.000	2.030	13350.10	0.0296	P	2.6
3	☐	5.000	4.992	32265.19	0.0723	P	1.6
4	☐	10.000	10.424	66334.96	0.1506	P	1.2
5	☐	100.000	101.919	634901.93	1.4704	P	0.8
6	☐	200.000	199.019	1221197.17	2.8710	A	3.1

y = 0.0144 * x + 2.6831E-004
R = 0.9999
DL = 0.01616
BEC = 0.0186

Weight: <None>
Min Conc: <None>

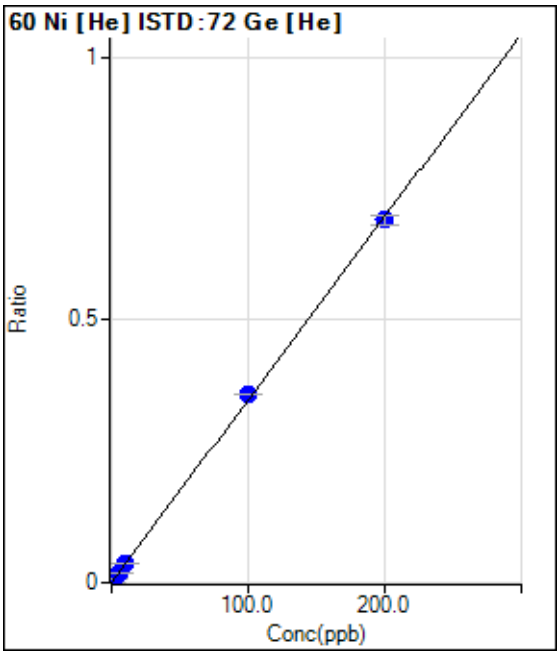


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	420.01	0.0003	P	24.7
2	☐	2.000	2.112	8115.87	0.0049	P	3.5
3	☐	5.000	5.385	19541.11	0.0122	P	1.4
4	☐	10.000	10.738	38765.72	0.0241	P	1.3
5	☐	100.000	105.056	365060.31	0.2336	P	2.0
6	☐	200.000	197.424	694319.65	0.4388	P	1.8

y = 0.0022 * x + 2.5644E-004
R = 0.9996
DL = 0.0854
BEC = 0.1154

Weight: <None>
Min Conc: <None>

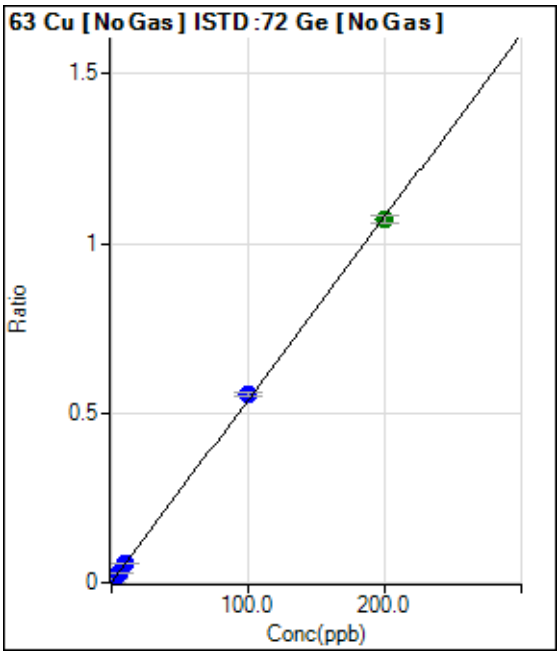
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	146.67	0.0003	P	21.4
2	☐	2.000	1.923	3170.42	0.0070	P	5.1
3	☐	5.000	5.206	8229.29	0.0184	P	2.9
4	☐	10.000	10.592	16366.80	0.0372	P	1.7
5	☐	100.000	103.087	154944.86	0.3588	P	0.8
6	☐	200.000	198.423	293655.05	0.6904	P	2.9

y = 0.0035 * x + 3.2758E-004
R = 0.9998
DL = 0.06035
BEC = 0.0942

Weight: <None>
Min Conc: <None>

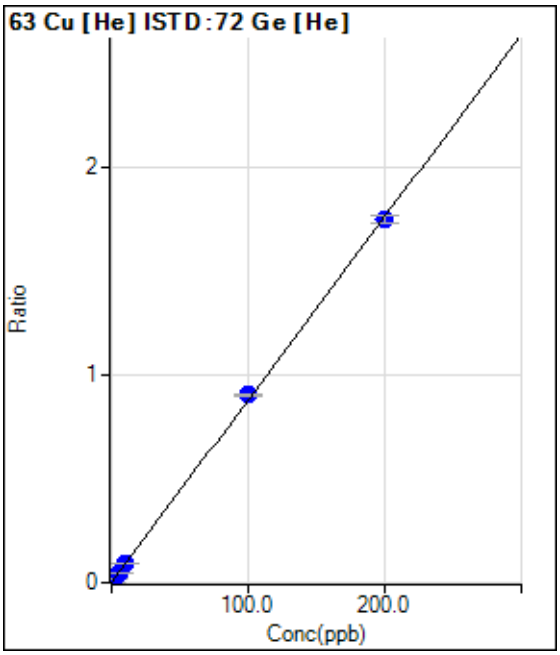


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	970.06	0.0006	P	6.2
2	☐	2.000	2.057	19147.16	0.0117	P	2.5
3	☐	5.000	5.348	47008.41	0.0294	P	3.3
4	☐	10.000	10.716	93762.18	0.0583	P	2.1
5	☐	100.000	103.103	868781.94	0.5560	P	1.6
6	☐	200.000	198.404	1691918.46	1.0693	A	2.1

y = 0.0054 * x + 5.9448E-004
R = 0.9998
DL = 0.0206
BEC = 0.1104

Weight: <None>
Min Conc: <None>

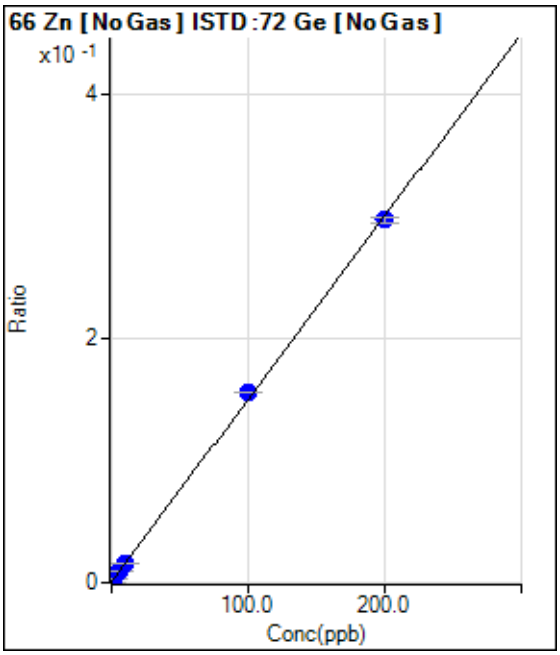
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	490.02	0.0011	P	12.6
2	☐	2.000	2.015	8509.46	0.0188	P	0.8
3	☐	5.000	5.191	20896.41	0.0468	P	2.8
4	☐	10.000	10.387	40771.58	0.0926	P	0.6
5	☐	100.000	102.889	391725.51	0.9072	P	1.2
6	☐	200.000	198.531	744238.37	1.7496	P	2.0

y = 0.0088 * x + 0.0011
R = 0.9999
DL = 0.04702
BEC = 0.1244

Weight: <None>
Min Conc: <None>

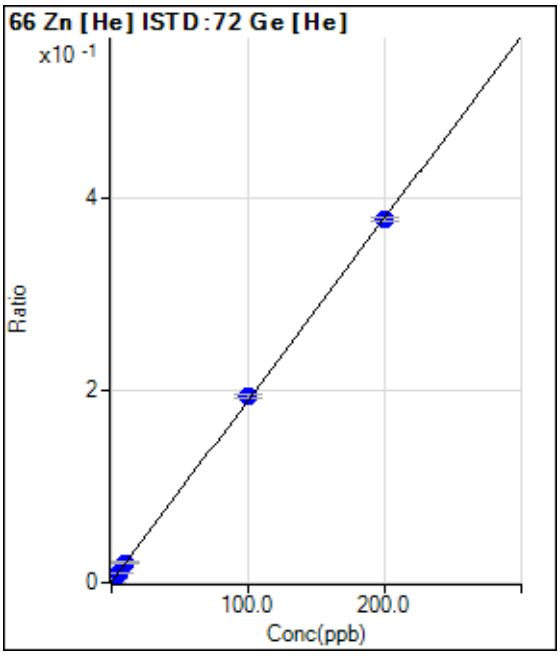


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1073.39	0.0007	P	6.5
2	☐	2.000	2.006	6008.12	0.0037	P	3.9
3	☐	5.000	5.733	14791.71	0.0092	P	2.7
4	☐	10.000	10.375	26058.61	0.0162	P	1.6
5	☐	100.000	103.798	244094.87	0.1562	P	0.8
6	☐	200.000	198.064	470632.08	0.2974	P	1.8

y = 0.0015 * x + 6.5748E-004
R = 0.9997
DL = 0.08562
BEC = 0.4388

Weight: <None>
Min Conc: <None>

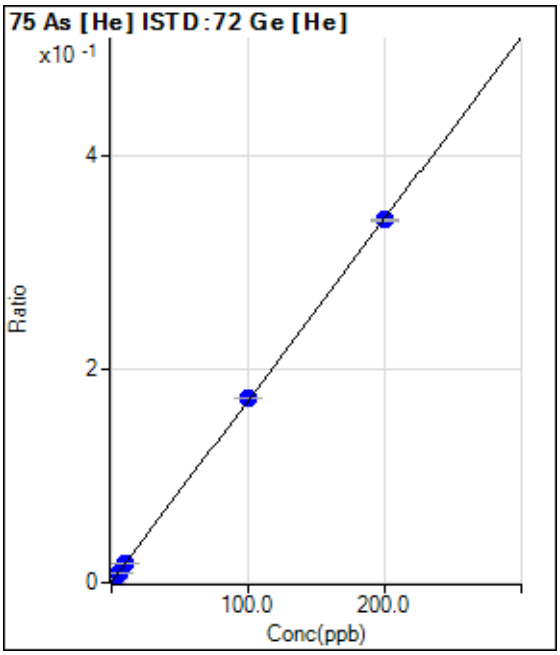
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	353.34	0.0008	P	7.5
2	☐	2.000	1.982	2053.53	0.0045	P	10.8
3	☐	5.000	5.239	4787.59	0.0107	P	3.6
4	☐	10.000	10.373	9006.49	0.0205	P	6.7
5	☐	100.000	101.793	83674.13	0.1938	P	2.1
6	☐	200.000	199.079	160885.00	0.3782	P	1.2

y = 0.0019 * x + 7.9007E-004
R = 0.9999
DL = 0.09355
BEC = 0.4168

Weight: <None>
Min Conc: <None>

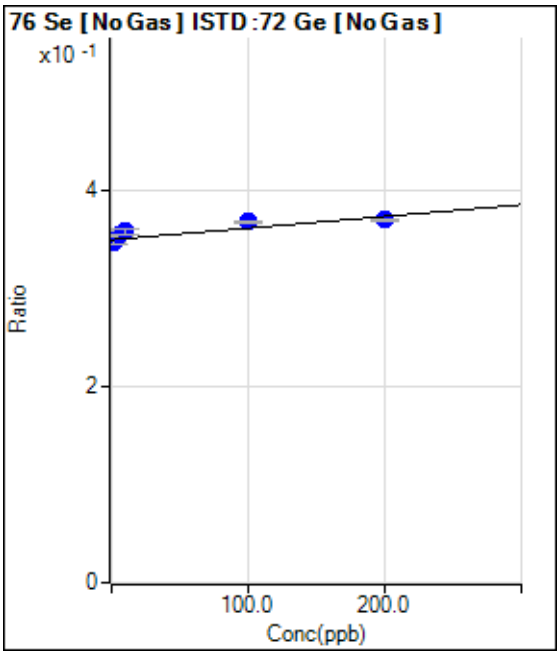


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	255.56	0.0006	P	12.2
2	☐	2.000	1.930	1743.46	0.0039	P	2.8
3	☐	5.000	4.968	4033.96	0.0090	P	2.1
4	☐	10.000	9.968	7731.14	0.0176	P	1.1
5	☐	100.000	101.245	74732.41	0.1731	P	0.5
6	☐	200.000	199.381	144759.72	0.3403	P	0.7

y = 0.0017 * x + 5.7148E-004
R = 1.0000
DL = 0.1223
BEC = 0.3354

Weight: <None>
Min Conc: <None>

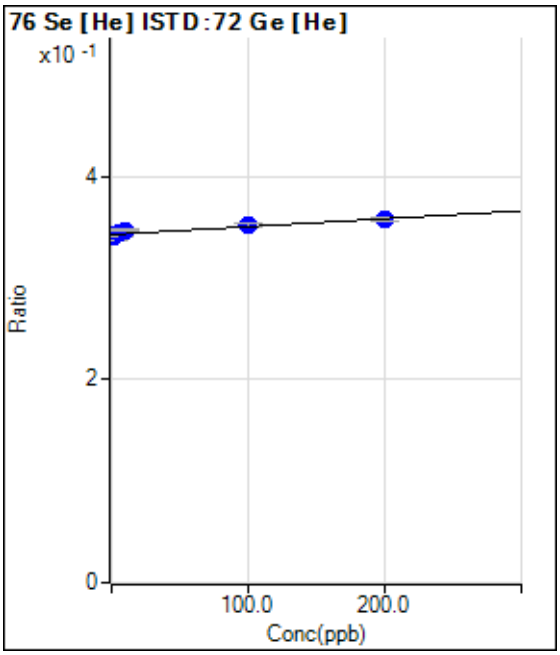
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	571627.62	0.3501	P	1.3
2	☐	2.000	-14.408	571372.65	0.3484	P	1.4
3	☐	5.000	50.985	569599.25	0.3562	P	2.1
4	☐	10.000	72.446	576799.50	0.3588	P	1.8
5	☐	100.000	152.363	575585.56	0.3683	P	0.3
6	☐	200.000	169.711	586154.52	0.3704	P	0.5

y = 1.1936E-004 * x + 0.3501
R = 0.8777
DL = 117.4
BEC = 2933

Weight: <None>
Min Conc: <None>

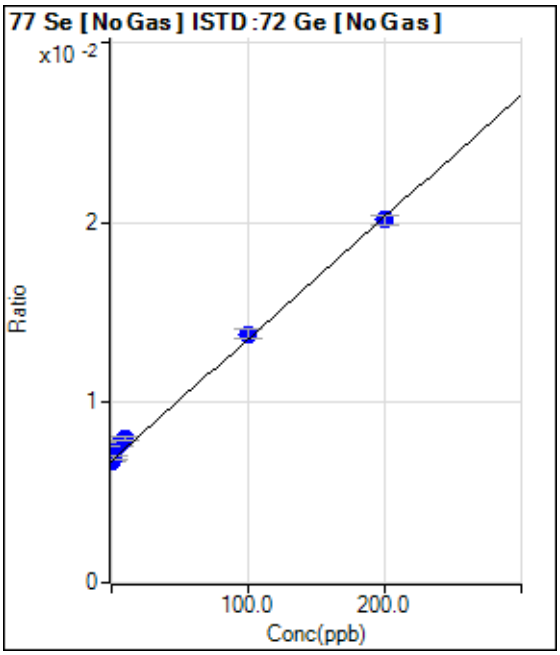


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	153237.11	0.3426	P	1.0
2	☐	2.000	-18.348	154076.76	0.3412	P	2.1
3	☐	5.000	12.941	153382.99	0.3436	P	1.4
4	☐	10.000	49.254	152571.38	0.3464	P	0.5
5	☐	100.000	127.434	152212.83	0.3525	P	1.2
6	☐	200.000	184.325	151855.66	0.3570	P	1.2

y = 7.8002E-005 * x + 0.3426
R = 0.9579
DL = 132.7
BEC = 4392

Weight: <None>
Min Conc: <None>

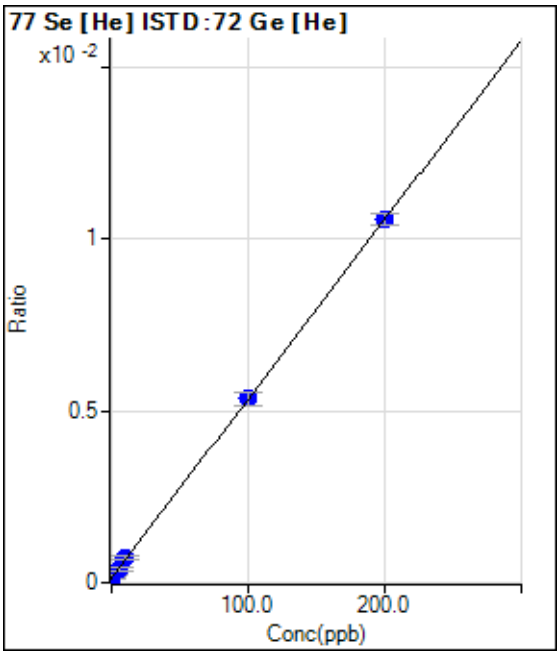
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11071.35	0.0068	P	0.4
2	☐	2.000	2.099	11351.64	0.0069	P	3.8
3	☐	5.000	13.790	12342.55	0.0077	P	1.9
4	☐	10.000	18.112	12876.39	0.0080	P	1.8
5	☐	100.000	103.930	21607.70	0.0138	P	3.4
6	☐	200.000	197.408	31908.22	0.0202	P	3.0

y = 6.7819E-005 * x + 0.0068
R = 0.9987
DL = 1.299
BEC = 99.97

Weight: <None>
Min Conc: <None>

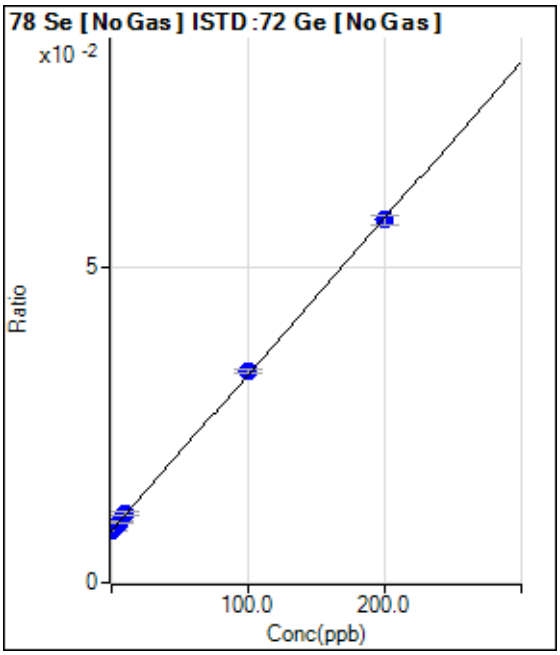


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	60.00	0.0001	P	33.6
2	☐	2.000	3.075	133.34	0.0003	P	29.3
3	☐	5.000	4.869	173.34	0.0004	P	38.8
4	☐	10.000	11.368	320.01	0.0007	P	19.4
5	☐	100.000	100.021	2306.90	0.0053	P	7.6
6	☐	200.000	199.913	4487.49	0.0105	P	3.0

y = 5.2094E-005 * x + 1.3426E-004
R = 1.0000
DL = 2.599
BEC = 2.577

Weight: <None>
Min Conc: <None>

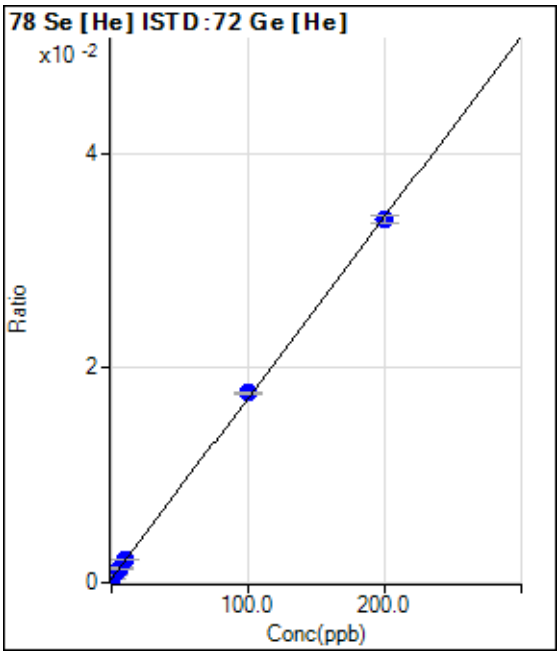
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13420.27	0.0082	P	0.6
2	☐	2.000	1.077	13914.05	0.0085	P	4.5
3	☐	5.000	5.409	15282.24	0.0096	P	1.9
4	☐	10.000	11.264	17688.49	0.0110	P	3.8
5	☐	100.000	102.077	52261.49	0.0334	P	1.4
6	☐	200.000	198.897	90768.83	0.0574	P	2.7

y = 2.4712E-004 * x + 0.0082
R = 0.9999
DL = 0.5631
BEC = 33.25

Weight: <None>
Min Conc: <None>

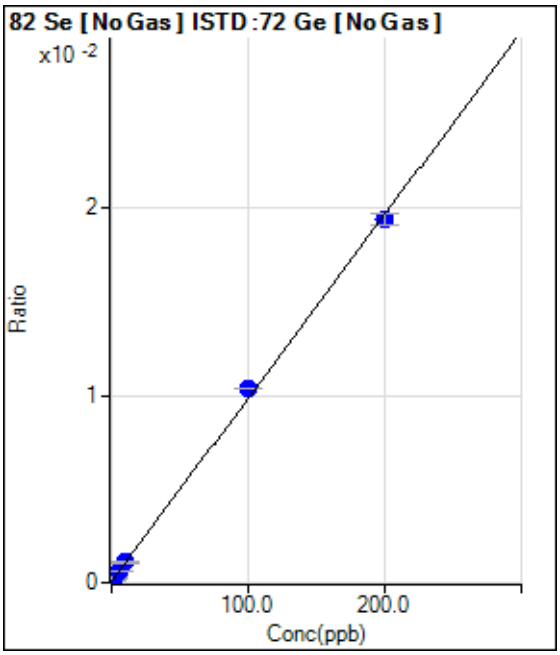


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	164.00	0.0004	P	10.2
2	☐	2.000	2.238	336.00	0.0007	P	11.6
3	☐	5.000	5.420	570.68	0.0013	P	10.4
4	☐	10.000	10.852	966.04	0.0022	P	2.2
5	☐	100.000	102.906	7638.84	0.0177	P	1.0
6	☐	200.000	198.492	14371.00	0.0338	P	2.1

y = 1.6835E-004 * x + 3.6647E-004
R = 0.9999
DL = 0.6667
BEC = 2.177

Weight: <None>
Min Conc: <None>

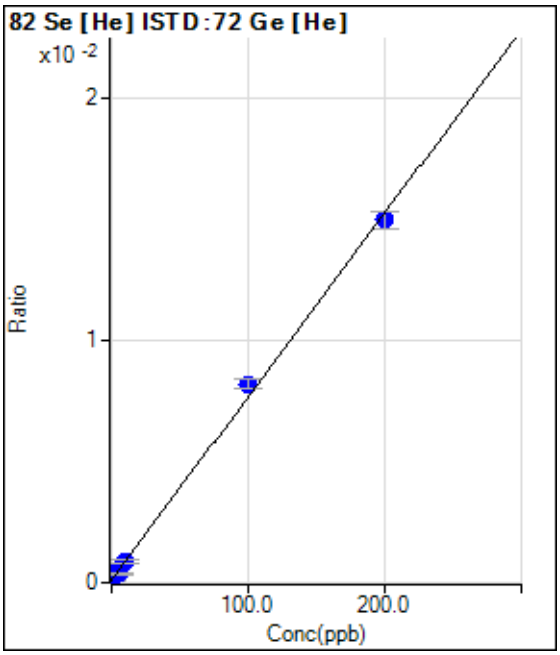
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	107.99	0.0001	P	33.6
2	☐	2.000	1.880	411.13	0.0003	P	15.5
3	☐	5.000	5.310	937.82	0.0006	P	2.1
4	☐	10.000	10.554	1768.32	0.0011	P	6.4
5	☐	100.000	105.392	16234.81	0.0104	P	0.7
6	☐	200.000	197.270	30673.86	0.0194	P	3.3

y = 9.7931E-005 * x + 6.6385E-005
R = 0.9995
DL = 0.683
BEC = 0.6779

Weight: <None>
Min Conc: <None>

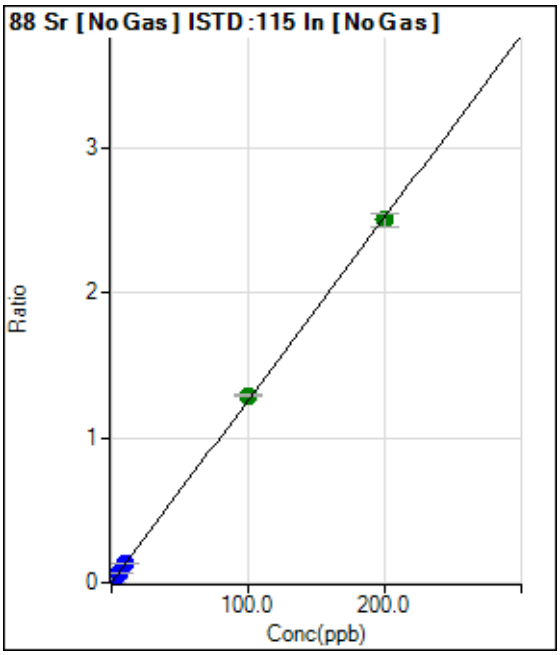


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0001	P	19.8
2	☐	2.000	3.591	173.34	0.0004	P	7.9
3	☐	5.000	3.357	163.33	0.0004	P	9.1
4	☐	10.000	10.025	383.35	0.0009	P	10.9
5	☐	100.000	107.090	3547.20	0.0082	P	4.5
6	☐	200.000	196.479	6374.95	0.0150	P	4.5

y = 7.5687E-005 * x + 1.1174E-004
R = 0.9990
DL = 0.8771
BEC = 1.476

Weight: <None>
Min Conc: <None>

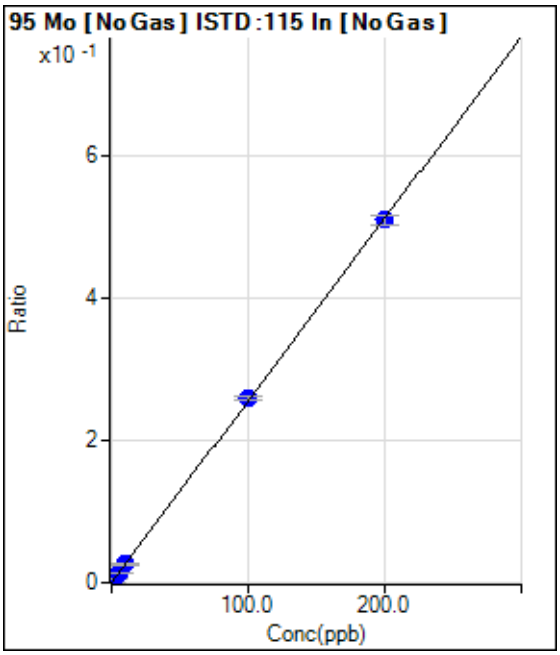
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	936.72	0.0005	P	18.5
2	☐	2.000	2.091	46845.57	0.0268	P	2.5
3	☐	5.000	5.150	116327.16	0.0653	P	1.5
4	☐	10.000	10.518	232539.60	0.1328	P	0.4
5	☐	100.000	102.465	2193870.23	1.2895	A	1.6
6	☐	200.000	198.737	4224830.98	2.5005	A	4.0

y = 0.0126 * x + 5.3380E-004
R = 0.9999
DL = 0.0236
BEC = 0.04243

Weight: <None>
Min Conc: <None>

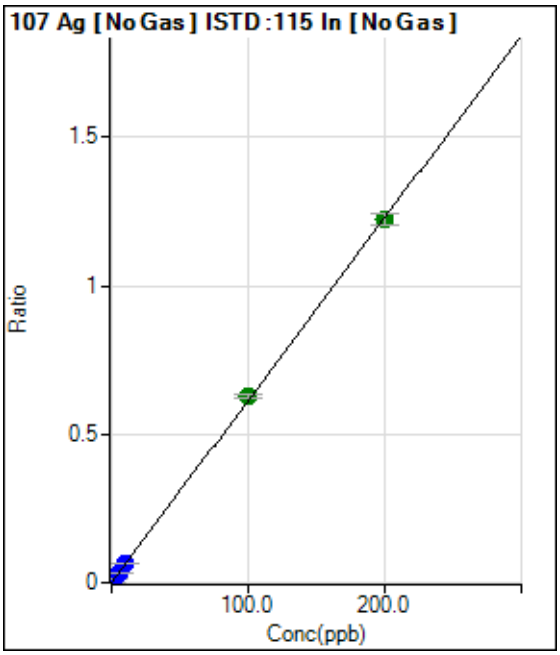


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	120.00	0.0001	P	38.3
2	☐	2.000	2.026	9180.00	0.0053	P	6.2
3	☐	5.000	4.899	22469.40	0.0126	P	6.6
4	☐	10.000	10.023	45076.72	0.0258	P	0.5
5	☐	100.000	101.238	441469.97	0.2595	P	1.5
6	☐	200.000	199.382	863381.60	0.5110	P	2.8

y = 0.0026 * x + 6.8340E-005
R = 1.0000
DL = 0.03065
BEC = 0.02667

Weight: <None>
Min Conc: <None>

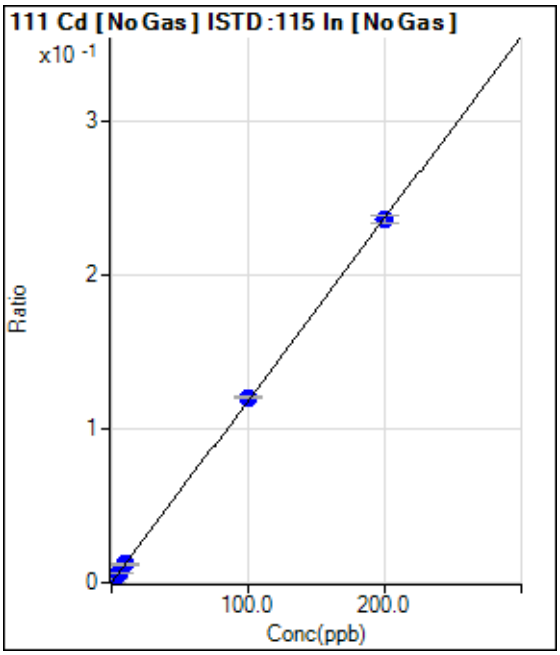
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	120.00	0.0001	P	20.9
2	☐	2.000	2.055	22135.57	0.0127	P	4.6
3	☐	5.000	5.088	55747.62	0.0313	P	2.5
4	☐	10.000	10.297	110782.08	0.0633	P	0.7
5	☐	100.000	101.908	1064417.15	0.6257	A	2.2
6	☐	200.000	199.028	2064993.30	1.2220	A	3.1

y = 0.0061 * x + 6.8254E-005
R = 0.9999
DL = 0.006973
BEC = 0.01112

Weight: <None>
Min Conc: <None>

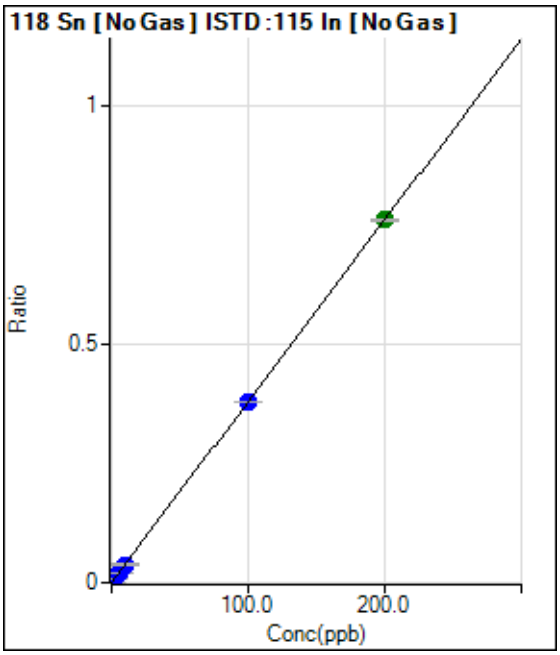


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-15.28	0.0000	P	-144.4
2	☐	2.000	2.064	4254.18	0.0024	P	7.9
3	☐	5.000	5.078	10707.63	0.0060	P	3.2
4	☐	10.000	10.163	21071.95	0.0120	P	5.7
5	☐	100.000	101.610	204904.45	0.1204	P	1.1
6	☐	200.000	199.184	399016.95	0.2361	P	2.0

y = 0.0012 * x - 8.6739E-006
R = 1.0000
DL = 0.0317
BEC = -0.007317

Weight: <None>
Min Conc: <None>

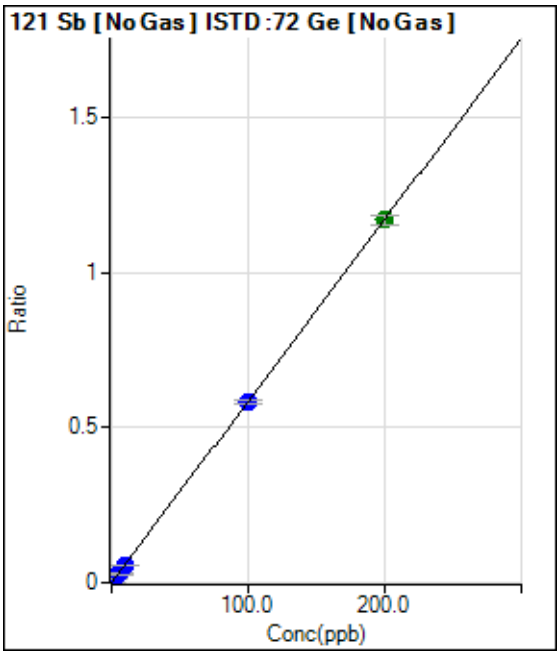
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	616.69	0.0004	P	11.0
2	☐	2.000	1.988	13817.44	0.0079	P	1.1
3	☐	5.000	4.968	34275.19	0.0192	P	1.8
4	☐	10.000	9.928	66709.44	0.0381	P	1.5
5	☐	100.000	99.602	645031.14	0.3792	P	0.4
6	☐	200.000	200.203	1287641.73	0.7618	A	0.5

y = 0.0038 * x + 3.5142E-004
R = 1.0000
DL = 0.0304
BEC = 0.0924

Weight: <None>
Min Conc: <None>

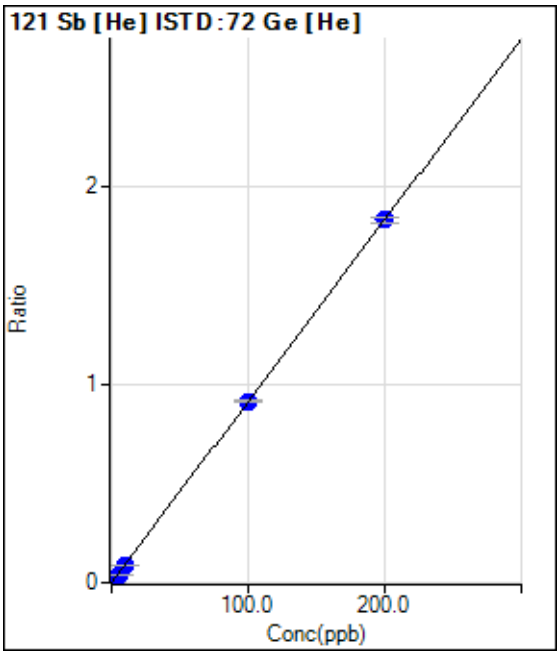


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	40.00	0.0000	P	48.7
2	☐	2.000	1.876	18016.10	0.0110	P	2.4
3	☐	5.000	4.769	44606.41	0.0279	P	1.2
4	☐	10.000	9.760	91729.94	0.0570	P	1.8
5	☐	100.000	100.126	914131.55	0.5850	P	2.1
6	☐	200.000	199.956	1848363.10	1.1683	A	2.9

y = 0.0058 * x + 2.4414E-005
R = 1.0000
DL = 0.006107
BEC = 0.004179

Weight: <None>
Min Conc: <None>

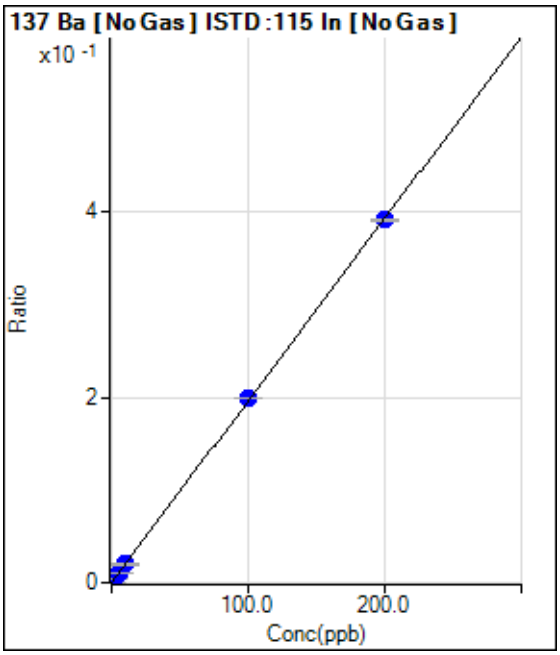
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0001	P	62.4
2	☐	2.000	1.813	7522.28	0.0167	P	1.2
3	☐	5.000	4.648	19000.79	0.0426	P	3.5
4	☐	10.000	9.494	38256.13	0.0869	P	3.3
5	☐	100.000	99.815	394060.74	0.9126	P	1.2
6	☐	200.000	200.128	778361.42	1.8297	P	1.6

y = 0.0091 * x + 7.4378E-005
R = 1.0000
DL = 0.01522
BEC = 0.008135

Weight: <None>
Min Conc: <None>

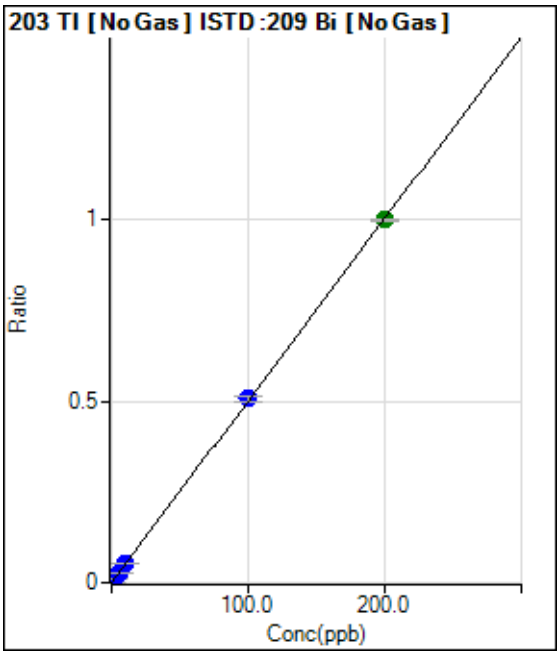


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	166.67	0.0001	P	27.1
2	☐	2.000	2.004	7038.70	0.0040	P	2.7
3	☐	5.000	5.042	17805.77	0.0100	P	0.5
4	☐	10.000	10.008	34576.59	0.0198	P	3.4
5	☐	100.000	101.161	338169.97	0.1988	P	0.3
6	☐	200.000	199.418	662145.02	0.3917	P	0.8

y = 0.0020 * x + 9.4921E-005
R = 1.0000
DL = 0.03929
BEC = 0.04833

Weight: <None>
Min Conc: <None>

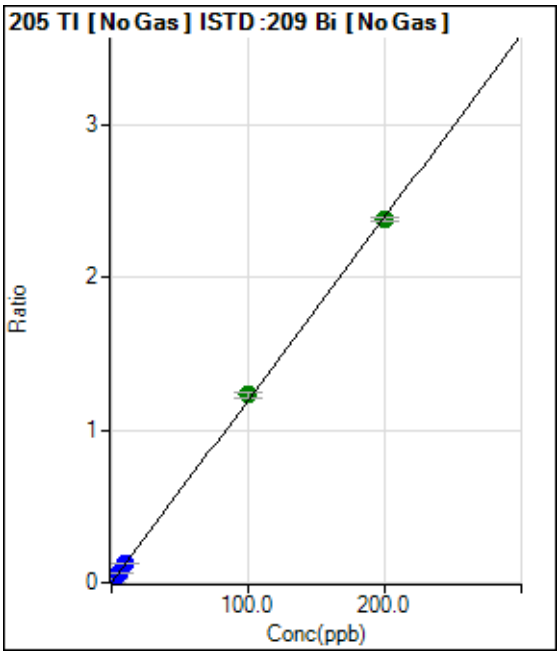
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	113.33	0.0001	P	23.4
2	☐	2.000	2.055	15379.72	0.0104	P	4.7
3	☐	5.000	5.126	37740.84	0.0258	P	4.7
4	☐	10.000	10.561	76514.33	0.0530	P	2.1
5	☐	100.000	100.976	716695.17	0.5060	P	3.1
6	☐	200.000	199.480	1410071.65	0.9996	A	0.6

y = 0.0050 * x + 7.7240E-005
R = 1.0000
DL = 0.01082
BEC = 0.01542

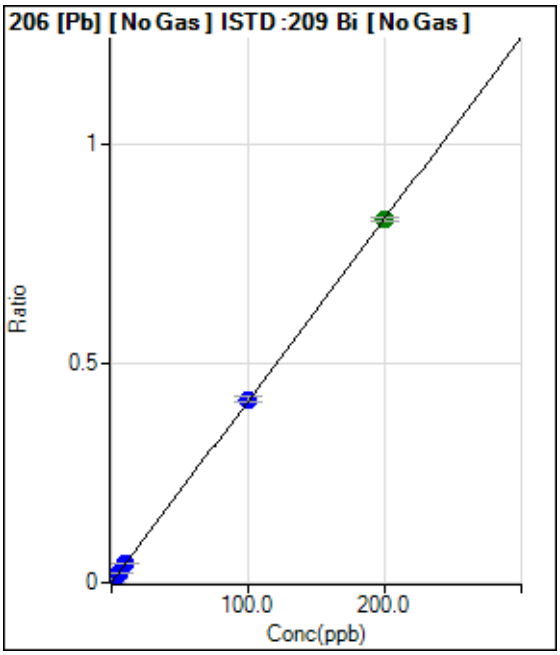
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	260.01	0.0002	P	12.4
2	☐	2.000	2.022	36139.44	0.0244	P	3.9
3	☐	5.000	5.089	89483.34	0.0611	P	2.2
4	☐	10.000	10.580	182986.68	0.1268	P	3.6
5	☐	100.000	102.697	1740629.09	1.2289	A	2.7
6	☐	200.000	198.620	3352796.10	2.3765	A	1.1

y = 0.0120 * x + 1.7711E-004
R = 0.9999
DL = 0.005511
BEC = 0.0148

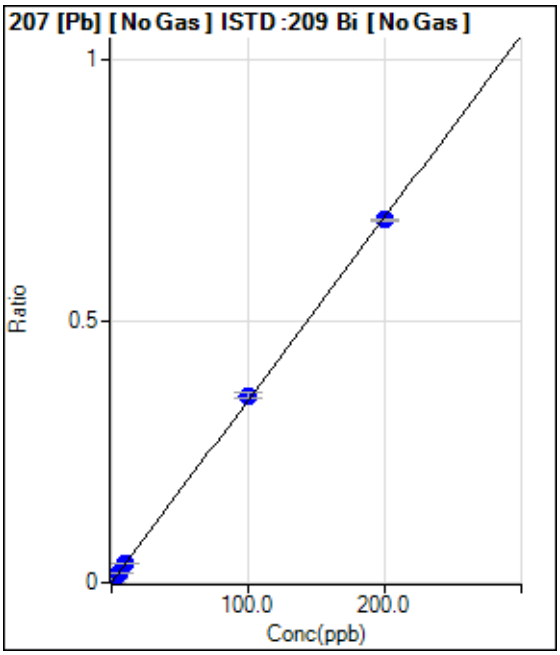
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	146.67	0.0001	P	26.7
2	☐	2.000	1.951	12139.44	0.0082	P	0.7
3	☐	5.000	4.979	30347.30	0.0207	P	4.1
4	☐	10.000	10.298	61712.66	0.0427	P	2.3
5	☐	100.000	100.840	591597.23	0.4177	P	3.0
6	☐	200.000	199.566	1166023.99	0.8265	A	0.9

y = 0.0041 * x + 9.9079E-005
R = 1.0000
DL = 0.01917
BEC = 0.02393

Weight: <None>
Min Conc: <None>

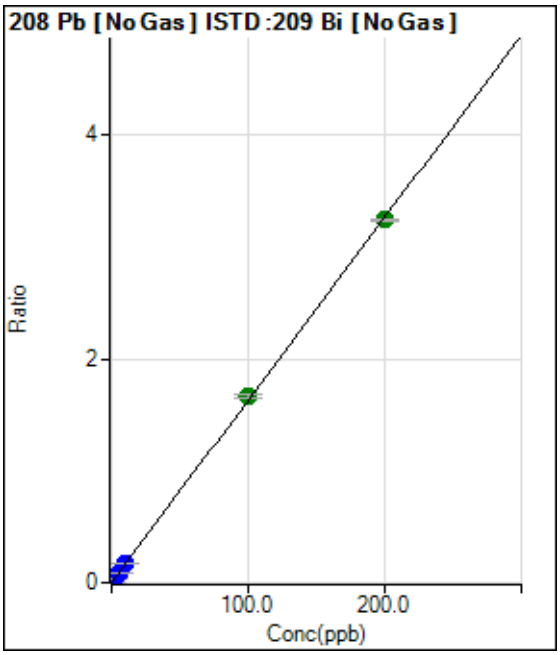


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	83.33	0.0001	P	49.8
2	☐	2.000	2.015	10537.97	0.0071	P	3.1
3	☐	5.000	5.214	26799.17	0.0183	P	2.0
4	☐	10.000	10.552	53357.85	0.0369	P	0.9
5	☐	100.000	102.533	507815.07	0.3585	P	3.1
6	☐	200.000	198.700	980051.31	0.6948	P	0.8

y = 0.0035 * x + 5.6727E-005
R = 0.9999
DL = 0.02423
BEC = 0.01623

Weight: <None>
Min Conc: <None>

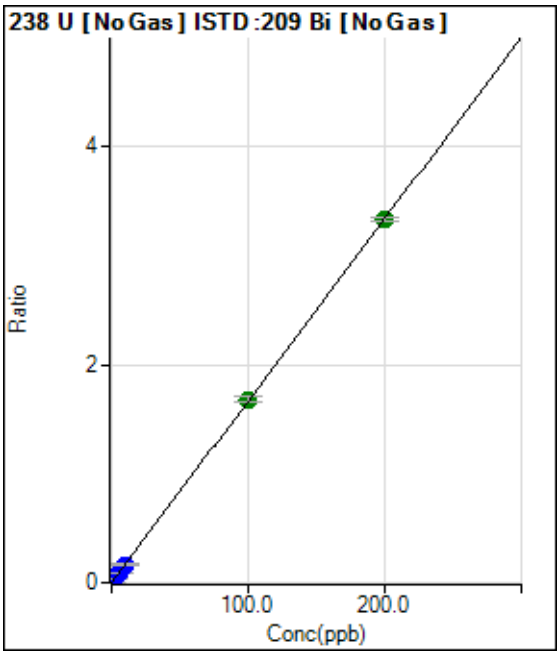
Calibration for 150_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	450.01	0.0003	P	2.9
2	☐	2.000	2.002	48888.62	0.0330	P	2.5
3	☐	5.000	5.107	122504.67	0.0836	P	2.4
4	☐	10.000	10.435	246194.08	0.1705	P	1.5
5	☐	100.000	102.314	2364359.34	1.6690	A	2.5
6	☐	200.000	198.818	4574852.77	3.2430	A	0.2

y = 0.0163 * x + 3.0627E-004
R = 0.9999
DL = 0.001614
BEC = 0.01878

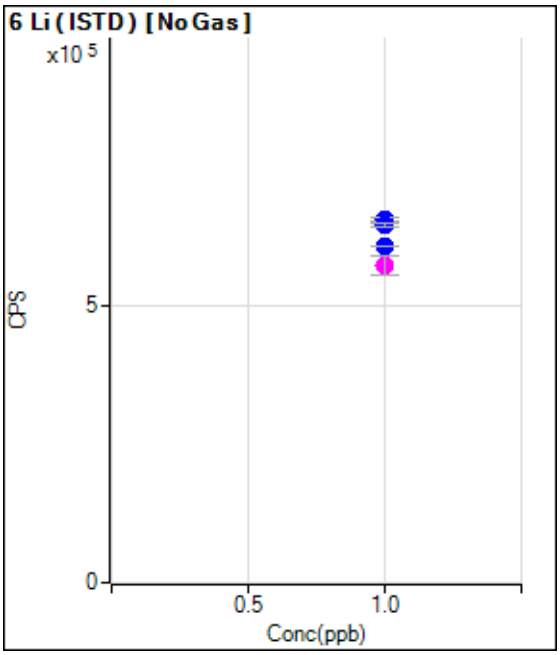
Weight: <None>
Min Conc: <None>



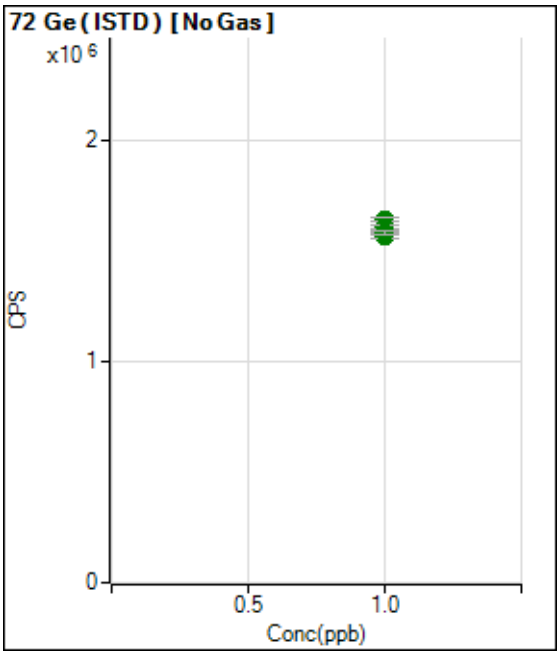
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26.67	0.0000	P	73.3
2	☐	2.000	1.918	47445.69	0.0320	P	2.4
3	☐	5.000	4.894	119578.52	0.0816	P	2.0
4	☐	10.000	10.032	241512.41	0.1672	P	0.7
5	☐	100.000	100.822	2380254.60	1.6806	A	3.4
6	☐	200.000	199.591	4693047.01	3.3270	A	1.1

y = 0.0167 * x + 1.7741E-005
R = 1.0000
DL = 0.002341
BEC = 0.001064

Weight: <None>
Min Conc: <None>

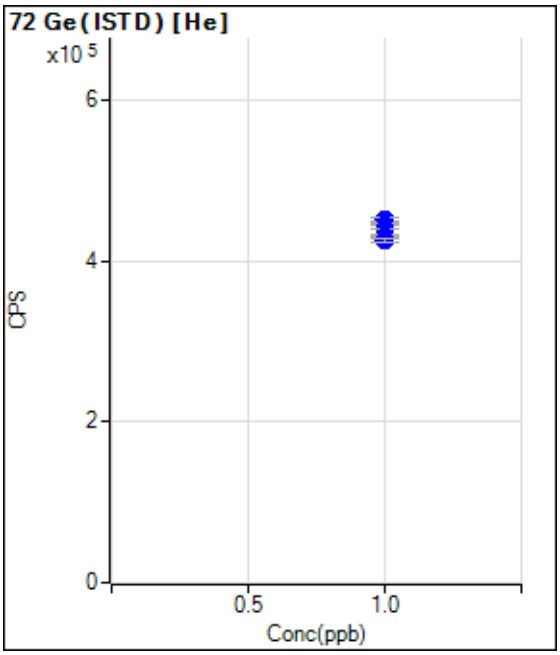


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		653055.31		P	0.8
2	☐	1.000		648034.35		P	0.9
3	☐	1.000		656528.36		P	1.8
4	☐	1.000		646998.29		P	0.8
5	☐	1.000		608666.54		P	0.4
6	☐	1.000		573202.64		M	6.1

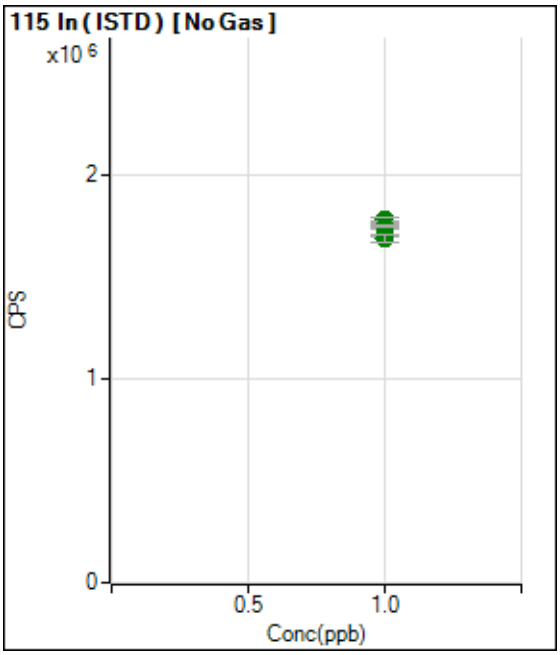


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1632975.97		A	1.8
2	☐	1.000		1640180.91		A	1.0
3	☐	1.000		1599422.69		A	1.8
4	☐	1.000		1608073.05		A	1.6
5	☐	1.000		1562879.77		A	1.4
6	☐	1.000		1582554.61		A	1.4

Calibration for 150_ICV.d

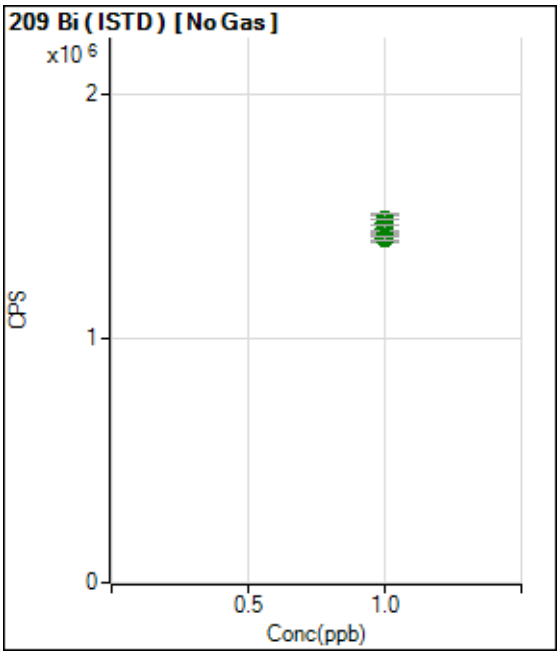


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		447319.58		P	0.7
2	☐	1.000		451702.74		P	1.5
3	☐	1.000		446431.50		P	0.8
4	☐	1.000		440413.52		P	0.5
5	☐	1.000		431805.82		P	0.9
6	☐	1.000		425435.89		P	0.9



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1755542.33		A	1.1
2	☐	1.000		1746072.73		A	1.5
3	☐	1.000		1781028.14		A	1.1
4	☐	1.000		1750476.30		A	0.4
5	☐	1.000		1701261.67		A	0.8
6	☐	1.000		1690372.26		A	2.1

Calibration for 150_ICV.d



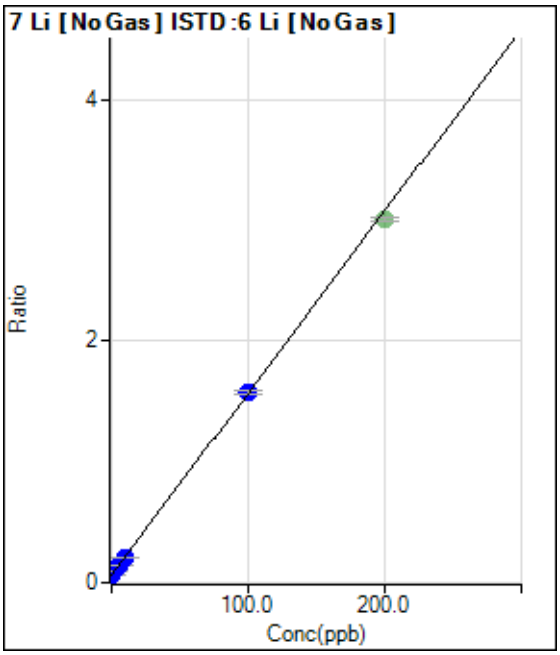
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1469936.59		A	4.9
2	☐	1.000		1484017.01		A	3.1
3	☐	1.000		1466061.28		A	3.1
4	☐	1.000		1444358.21		A	2.8
5	☐	1.000		1417262.74		A	3.3
6	☐	1.000		1410708.05		A	1.0

Calibration for 019_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\080223A.b\
Analysis File: 080223A.batch.bin
DA Date-Time: 8/2/2023 11:57:54 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	012CALB.d	CAL BLK	8/2/2023 10:27:17 AM
2	013CALS.d	2/10/200	8/2/2023 10:29:29 AM
3	014CALS.d	5/25/500	8/2/2023 10:31:26 AM
4	015CALS.d	10/50/100	8/2/2023 10:33:25 AM
5	016CALS.d	100/500/10K	8/2/2023 10:35:33 AM
6	017CALS.d	200/1000/20K	8/2/2023 10:37:40 AM

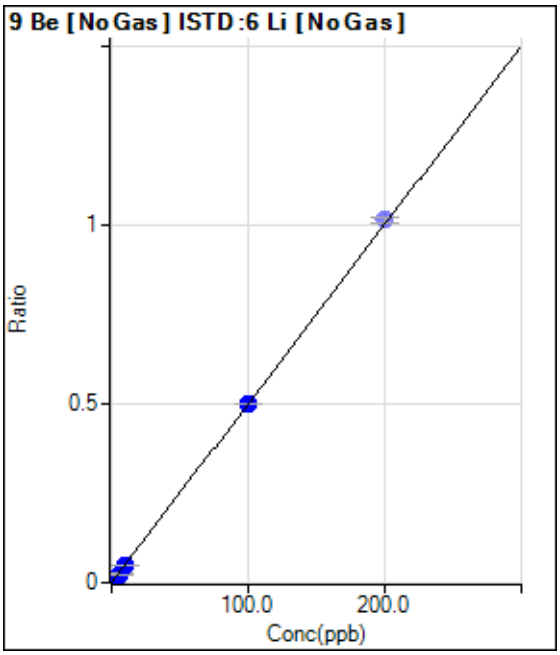
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27807.55	0.0630	P	1.7
2	☐	2.000	2.016	40762.15	0.0934	P	0.4
3	☐	5.000	4.868	58638.58	0.1364	P	1.2
4	☐	10.000	9.875	91477.22	0.2119	P	0.6
5	☐	100.000	100.019	655401.27	1.5708	P	1.9
6	☑	200.000		1242620.79	3.0060	A	1.0

y = 0.0151 * x + 0.0630
R = 1.0000
DL = 0.2137
BEC = 4.18

Weight: <None>
Min Conc: <None>

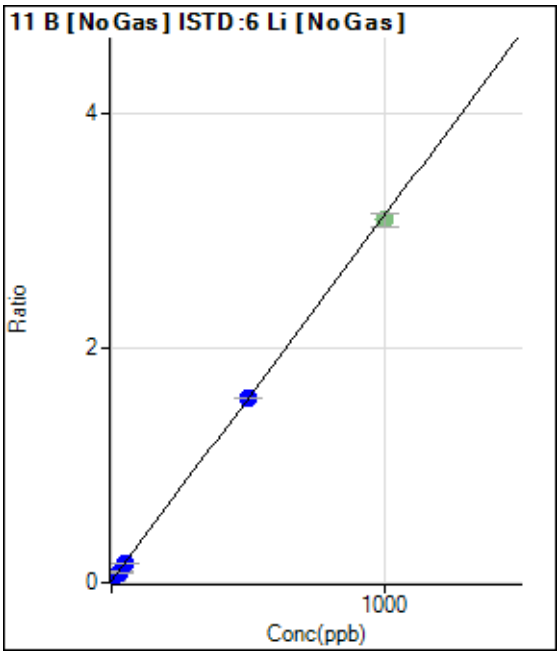


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.67	0.0000	P	24.0
2	☐	2.000	1.919	4198.99	0.0096	P	3.1
3	☐	5.000	4.814	10358.88	0.0241	P	1.4
4	☐	10.000	9.714	20980.72	0.0486	P	2.2
5	☐	100.000	100.040	208723.23	0.5002	P	0.5
6	☑	200.000		419141.70	1.0140	P	1.5

y = 0.0050 * x + 2.6406E-005
R = 1.0000
DL = 0.003799
BEC = 0.005281

Weight: <None>
Min Conc: <None>

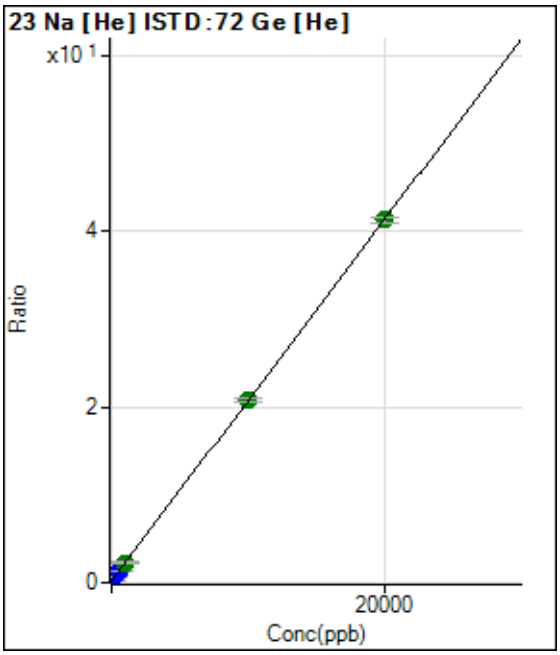
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6481.55	0.0147	P	6.3
2	☐	10.000	9.353	19104.75	0.0438	P	0.5
3	☐	25.000	24.178	38633.23	0.0899	P	3.6
4	☐	50.000	48.391	71318.56	0.1652	P	0.8
5	☐	500.000	500.215	655273.00	1.5704	P	0.8
6	☑	1000.000		1276190.95	3.0876	A	3.7

y = 0.0031 * x + 0.0147
R = 1.0000
DL = 0.8941
BEC = 4.724

Weight: <None>
Min Conc: <None>

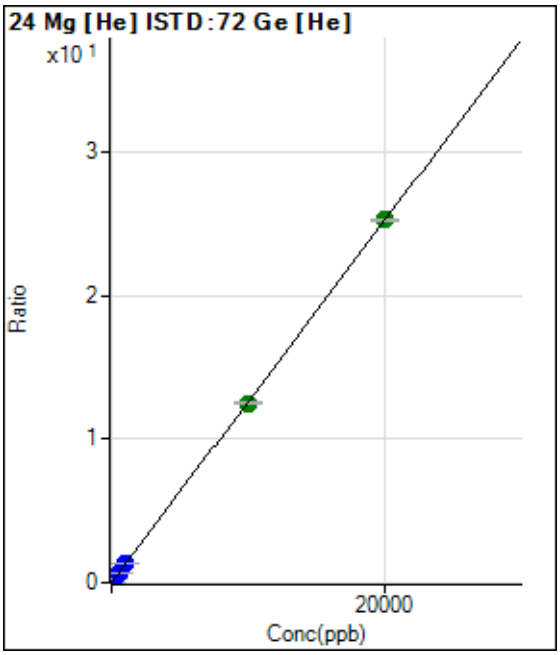


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	82050.08	0.2079	P	0.5
2	☐	200.000	213.135	255696.22	0.6459	P	0.5
3	☐	500.000	548.541	517542.14	1.3351	P	0.8
4	☐	1000.000	1011.540	886740.12	2.2865	A	1.2
5	☐	10000.000	10010.198	7999361.34	20.7769	A	2.0
6	☐	20000.000	19992.979	15697830.18	41.2896	A	1.7

y = 0.0021 * x + 0.2079
R = 1.0000
DL = 1.425
BEC = 101.2

Weight: <None>
Min Conc: <None>

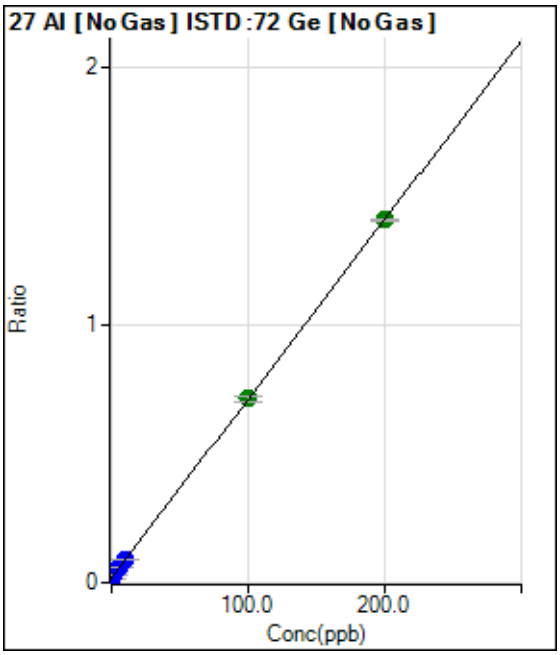
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	606.69	0.0015	P	15.1
2	☐	200.000	214.730	107751.71	0.2722	P	1.8
3	☐	500.000	549.838	269259.90	0.6945	P	0.2
4	☐	1000.000	1084.315	530576.53	1.3682	P	2.7
5	☐	10000.000	9903.982	4806646.49	12.4844	A	1.4
6	☐	20000.000	20042.400	9604890.90	25.2627	A	0.8

y = 0.0013 * x + 0.0015
R = 1.0000
DL = 0.5532
BEC = 1.22

Weight: <None>
Min Conc: <None>

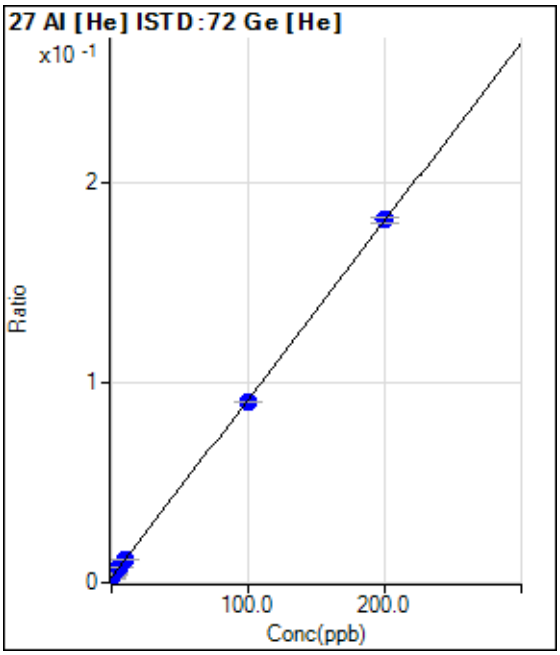


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25403.56	0.0181	P	0.8
2	☐	2.000	1.986	45425.04	0.0318	P	1.4
3	☐	5.000	5.665	79352.89	0.0574	P	1.0
4	☐	10.000	10.365	124595.14	0.0900	P	3.7
5	☐	100.000	99.965	978851.08	0.7117	A	2.2
6	☐	200.000	199.983	1884676.90	1.4057	A	0.6

y = 0.0069 * x + 0.0181
R = 1.0000
DL = 0.06268
BEC = 2.603

Weight: <None>
Min Conc: <None>

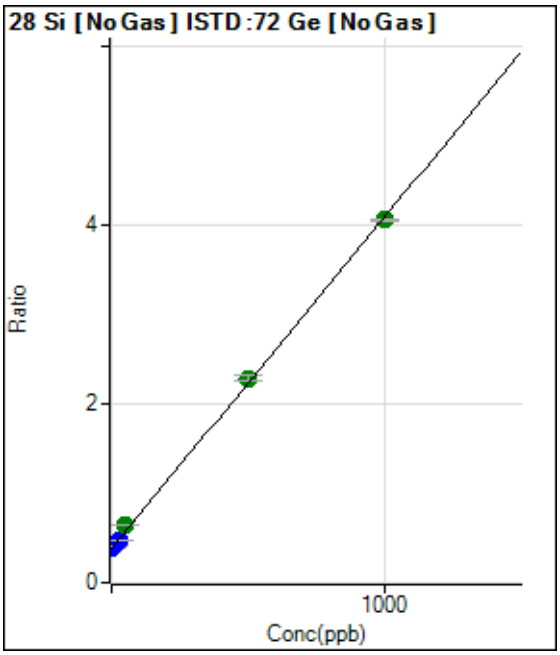
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1003.39	0.0025	P	12.0
2	☐	2.000	2.098	1746.81	0.0044	P	9.5
3	☐	5.000	5.783	2987.05	0.0077	P	4.6
4	☐	10.000	9.879	4407.45	0.0114	P	4.6
5	☐	100.000	98.662	34877.58	0.0906	P	0.4
6	☐	200.000	200.655	69044.34	0.1816	P	1.6

y = 8.9242E-004 * x + 0.0025
R = 1.0000
DL = 1.024
BEC = 2.849

Weight: <None>
Min Conc: <None>

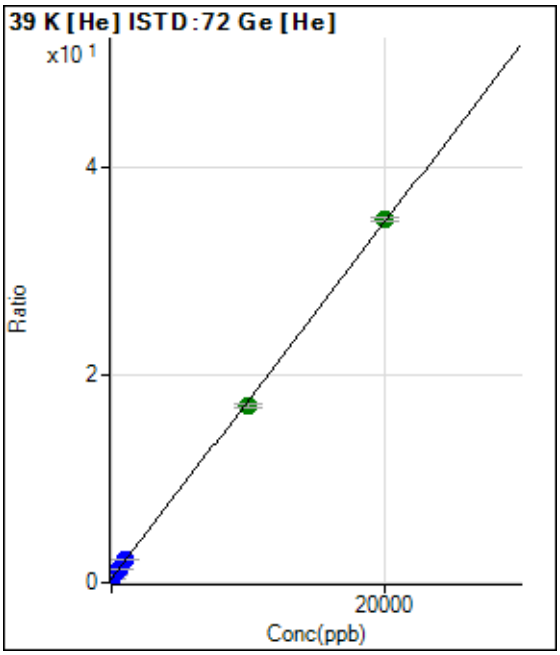


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	537703.65	0.3824	P	1.8
2	☐	10.000	7.469	585014.46	0.4101	P	0.9
3	☐	25.000	25.843	661218.95	0.4781	P	1.9
4	☐	50.000	70.976	893557.15	0.6453	A	2.4
5	☐	500.000	514.291	3145455.79	2.2871	A	2.7
6	☐	1000.000	991.810	5437385.33	4.0556	A	0.6

y = 0.0037 * x + 0.3824
R = 0.9997
DL = 5.693
BEC = 103.3

Weight: <None>
Min Conc: <None>

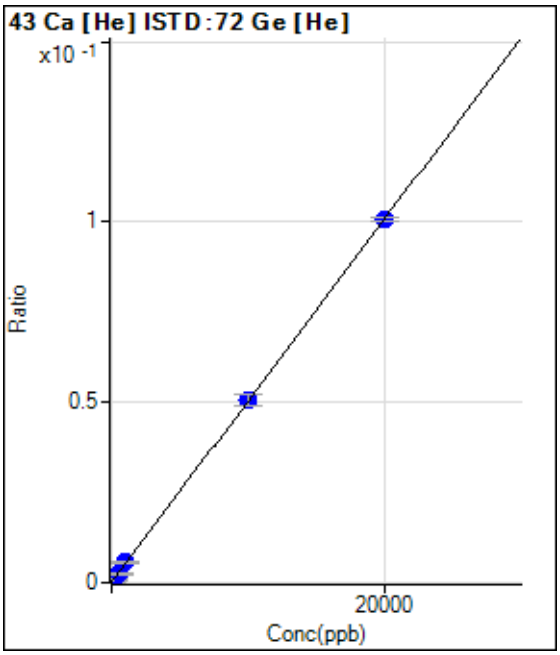
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	150727.65	0.3820	P	0.6
2	☐	200.000	201.819	288215.87	0.7281	P	0.6
3	☐	500.000	526.130	497772.73	1.2842	P	1.8
4	☐	1000.000	1049.847	846388.19	2.1824	P	1.1
5	☐	10000.000	9718.714	6563455.74	17.0485	A	1.7
6	☐	20000.000	20137.479	13275336.47	34.9154	A	1.1

y = 0.0017 * x + 0.3820
R = 0.9999
DL = 4.172
BEC = 222.7

Weight: <None>
Min Conc: <None>

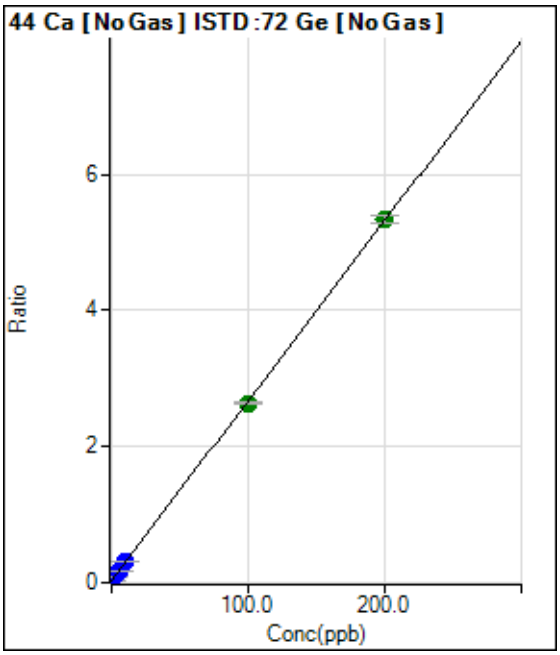


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0001	P	46.1
2	☐	200.000	142.347	316.68	0.0008	P	18.5
3	☐	500.000	461.730	933.38	0.0024	P	5.7
4	☐	1000.000	1097.085	2173.54	0.0056	P	5.3
5	☐	10000.000	10072.181	19554.27	0.0508	P	6.0
6	☐	20000.000	19960.589	38233.58	0.1005	P	1.2

y = 5.0332E-006 * x + 8.4545E-005
R = 1.0000
DL = 23.24
BEC = 16.8

Weight: <None>
Min Conc: <None>

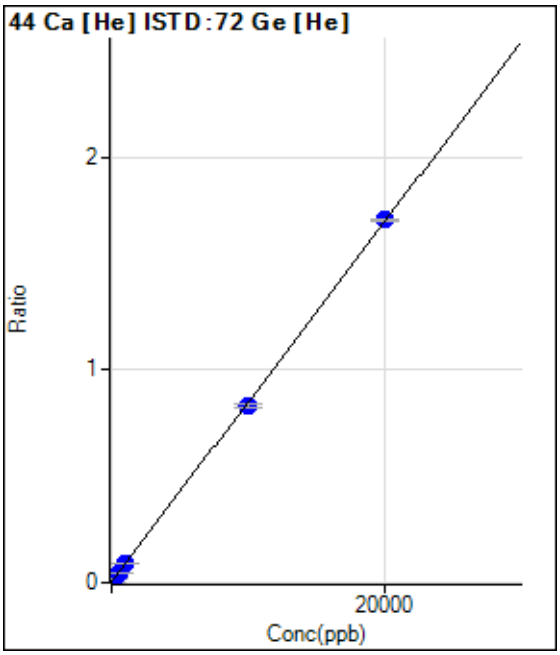
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	46411.90	0.0330	P	0.8
2	☐	2.000	1.987	121946.67	0.0855	P	1.8
3	☐	5.000	5.177	234719.12	0.1697	P	2.6
4	☐	10.000	10.319	423152.30	0.3055	P	1.9
5	☐	100.000	98.755	3632895.05	2.6413	A	0.9
6	☐	200.000	200.602	7147525.94	5.3312	A	2.2

y = 0.0264 * x + 0.0330
R = 1.0000
DL = 0.03028
BEC = 1.249

Weight: <None>
Min Conc: <None>

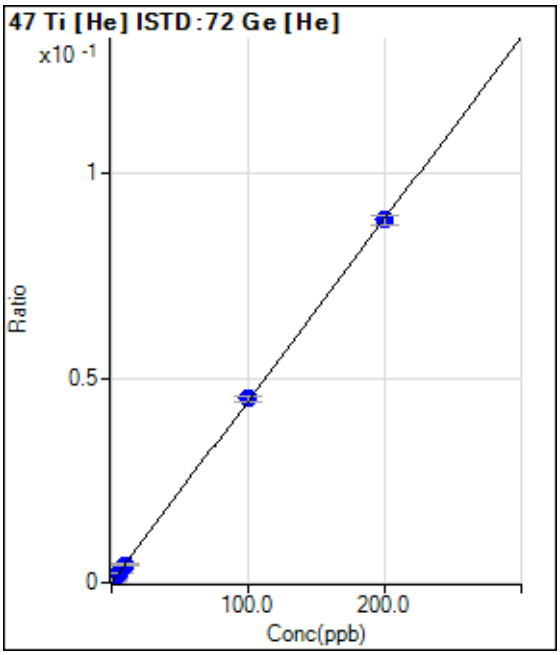


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	993.39	0.0025	P	9.6
2	☐	200.000	190.476	7378.79	0.0186	P	4.3
3	☐	500.000	485.356	16907.34	0.0436	P	1.7
4	☐	1000.000	989.549	33474.32	0.0863	P	0.3
5	☐	10000.000	9777.685	319712.62	0.8304	P	2.1
6	☐	20000.000	20112.142	648467.37	1.7054	P	0.6

y = 8.4671E-005 * x + 0.0025
R = 0.9999
DL = 8.608
BEC = 29.74

Weight: <None>
Min Conc: <None>

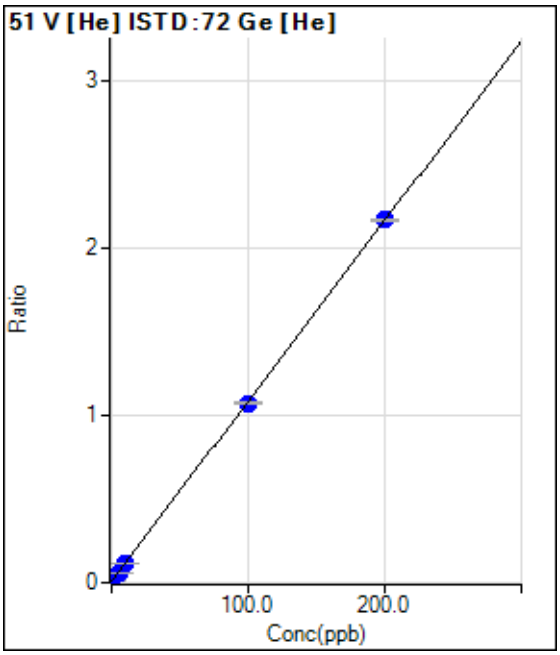
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	86.6
2	☐	2.000	1.667	300.01	0.0008	P	16.5
3	☐	5.000	5.110	886.71	0.0023	P	9.1
4	☐	10.000	9.973	1726.82	0.0045	P	5.8
5	☐	100.000	101.068	17307.82	0.0450	P	3.7
6	☐	200.000	199.468	33725.24	0.0887	P	2.9

y = 4.4461E-004 * x + 1.6909E-005
R = 1.0000
DL = 0.09881
BEC = 0.03803

Weight: <None>
Min Conc: <None>

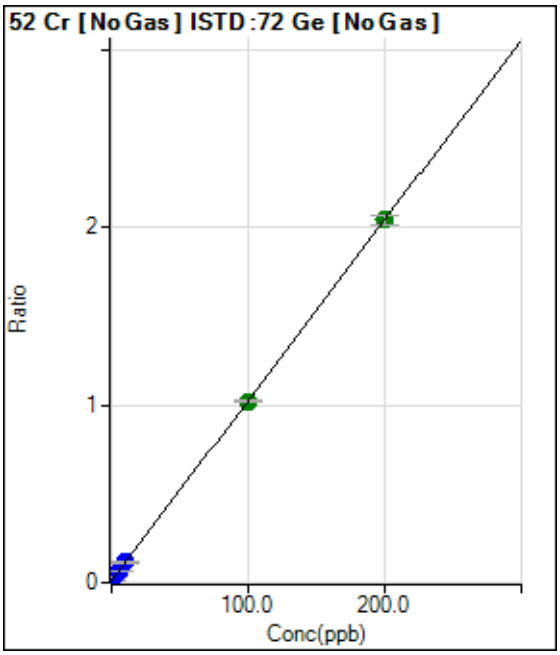


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3621.61	0.0092	P	2.8
2	☐	2.000	1.918	11808.46	0.0298	P	1.2
3	☐	5.000	4.894	23987.67	0.0619	P	0.7
4	☐	10.000	9.933	45043.98	0.1161	P	0.6
5	☐	100.000	98.752	412929.76	1.0725	P	1.1
6	☐	200.000	200.631	824900.07	2.1695	P	0.4

y = 0.0108 * x + 0.0092
R = 1.0000
DL = 0.07142
BEC = 0.8524

Weight: <None>
Min Conc: <None>

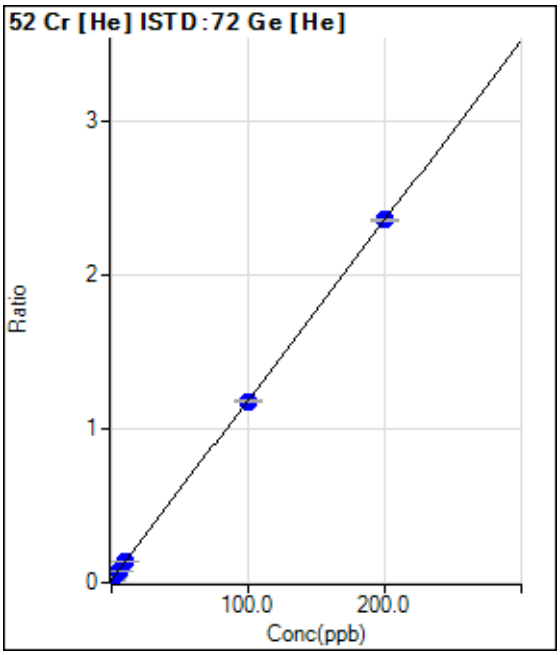
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	17778.51	0.0126	P	2.0
2	☐	2.000	1.939	46081.23	0.0323	P	1.2
3	☐	5.000	5.009	87717.38	0.0634	P	2.3
4	☐	10.000	9.993	157848.83	0.1140	P	0.7
5	☐	100.000	99.578	1406172.84	1.0223	A	1.9
6	☐	200.000	200.212	2738636.31	2.0427	A	2.7

y = 0.0101 * x + 0.0126
R = 1.0000
DL = 0.07389
BEC = 1.247

Weight: <None>
Min Conc: <None>

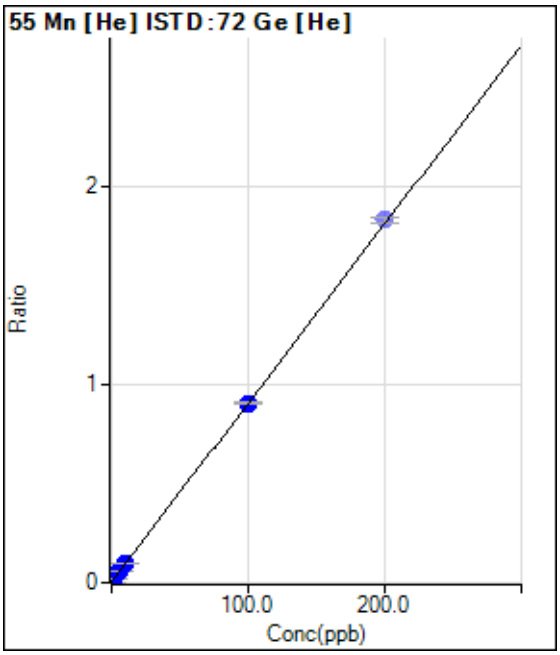


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7295.43	0.0185	P	5.9
2	☐	2.000	1.846	15852.71	0.0401	P	2.3
3	☐	5.000	5.183	30631.48	0.0790	P	2.5
4	☐	10.000	10.008	52497.74	0.1354	P	3.3
5	☐	100.000	99.450	454334.68	1.1801	P	0.9
6	☐	200.000	200.272	896449.10	2.3577	P	0.6

y = 0.0117 * x + 0.0185
R = 1.0000
DL = 0.2792
BEC = 1.583

Weight: <None>
Min Conc: <None>

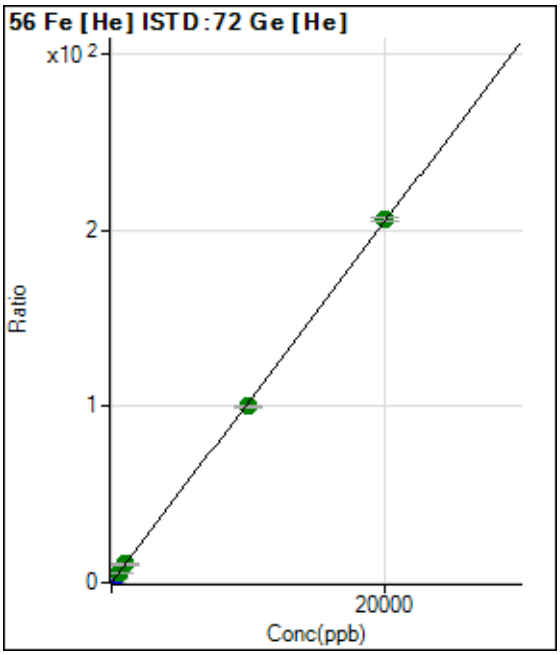
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1046.73	0.0027	P	5.2
2	☐	2.000	1.893	7815.68	0.0197	P	2.2
3	☐	5.000	6.252	22909.64	0.0591	P	2.7
4	☐	10.000	10.018	36104.73	0.0931	P	1.9
5	☐	100.000	99.938	348347.41	0.9048	P	1.1
6	☑	200.000		695833.06	1.8302	P	1.4

y = 0.0090 * x + 0.0027
R = 0.9999
DL = 0.04621
BEC = 0.2938

Weight: <None>
Min Conc: <None>

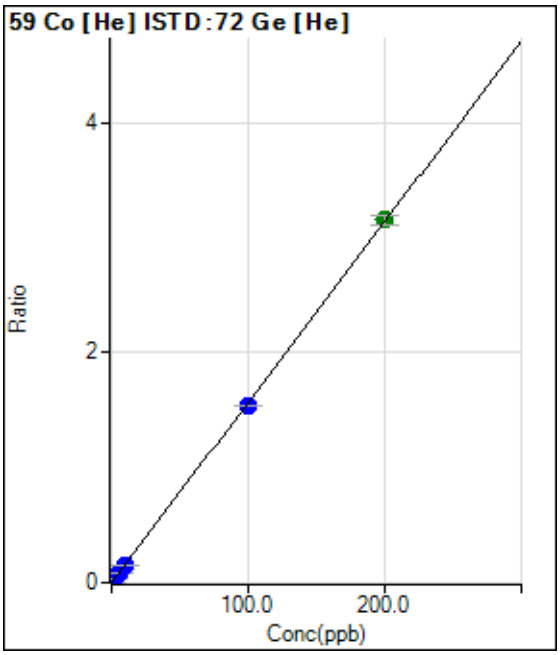


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16683.83	0.0423	P	6.3
2	☐	200.000	201.229	830992.75	2.0992	P	0.7
3	☐	500.000	508.141	2029668.09	5.2365	A	2.0
4	☐	1000.000	1010.336	4021976.71	10.3699	A	2.5
5	☐	10000.000	9762.702	38435238.59	99.8362	A	1.5
6	☐	20000.000	20117.917	78200948.84	205.6868	A	1.0

y = 0.0102 * x + 0.0423
R = 0.9999
DL = 0.7815
BEC = 4.136

Weight: <None>
Min Conc: <None>

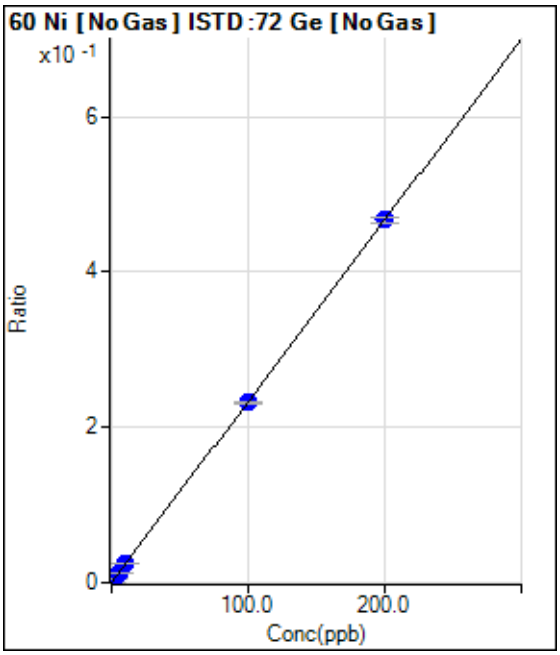
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	146.67	0.0004	P	41.0
2	☐	2.000	1.933	12138.89	0.0307	P	2.3
3	☐	5.000	4.988	30461.20	0.0786	P	2.4
4	☐	10.000	9.939	60571.66	0.1562	P	2.3
5	☐	100.000	97.925	591150.05	1.5355	P	0.9
6	☐	200.000	201.041	1198238.47	3.1520	A	2.8

y = 0.0157 * x + 3.7168E-004
R = 0.9999
DL = 0.02917
BEC = 0.02371

Weight: <None>
Min Conc: <None>

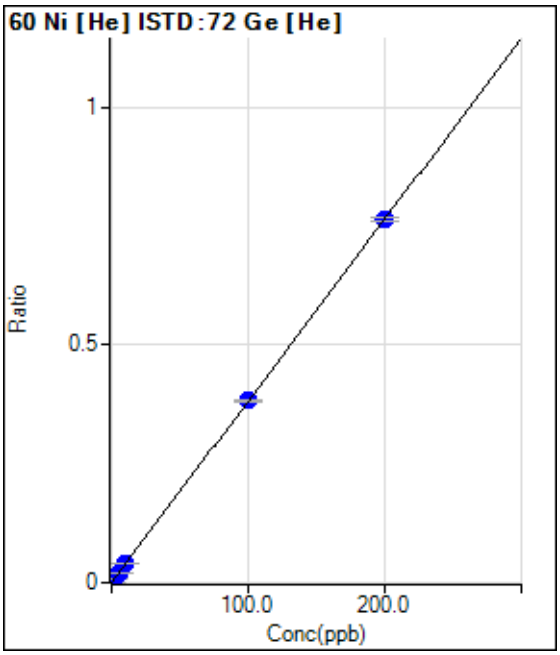


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	340.01	0.0002	P	1.2
2	☐	2.000	1.920	6725.12	0.0047	P	5.2
3	☐	5.000	4.869	16022.97	0.0116	P	4.3
4	☐	10.000	10.174	33170.62	0.0240	P	1.8
5	☐	100.000	99.430	319064.00	0.2320	P	1.6
6	☐	200.000	200.280	626103.82	0.4670	P	1.7

y = 0.0023 * x + 2.4173E-004
R = 1.0000
DL = 0.003679
BEC = 0.1037

Weight: <None>
Min Conc: <None>

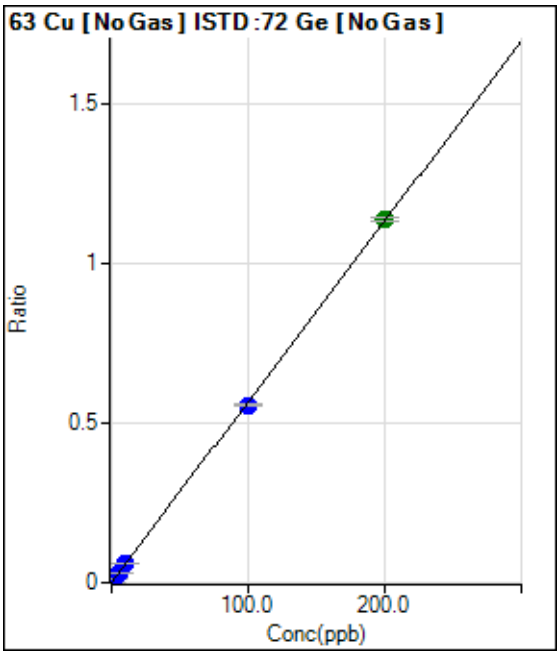
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	140.00	0.0004	P	49.3
2	☐	2.000	2.024	3197.11	0.0081	P	1.8
3	☐	5.000	5.343	8035.86	0.0207	P	2.4
4	☐	10.000	10.205	15235.42	0.0393	P	2.7
5	☐	100.000	100.225	147320.54	0.3826	P	0.6
6	☐	200.000	199.869	289983.22	0.7627	P	1.0

y = 0.0038 * x + 3.5465E-004
R = 1.0000
DL = 0.1376
BEC = 0.09298

Weight: <None>
Min Conc: <None>

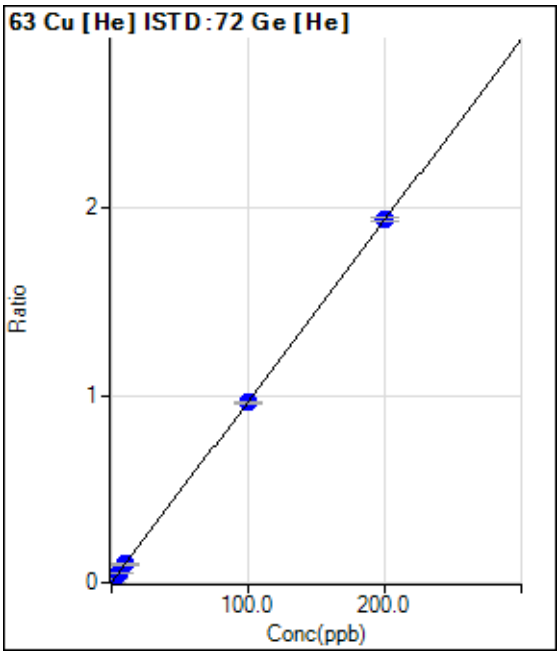


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1106.73	0.0008	P	10.5
2	☐	2.000	1.991	17207.95	0.0121	P	2.9
3	☐	5.000	5.027	40450.76	0.0292	P	1.8
4	☐	10.000	10.127	80488.51	0.0581	P	2.8
5	☐	100.000	98.253	766224.34	0.5571	P	0.6
6	☐	200.000	200.867	1525810.34	1.1381	A	1.1

y = 0.0057 * x + 7.8809E-004
R = 0.9999
DL = 0.04402
BEC = 0.1392

Weight: <None>
Min Conc: <None>

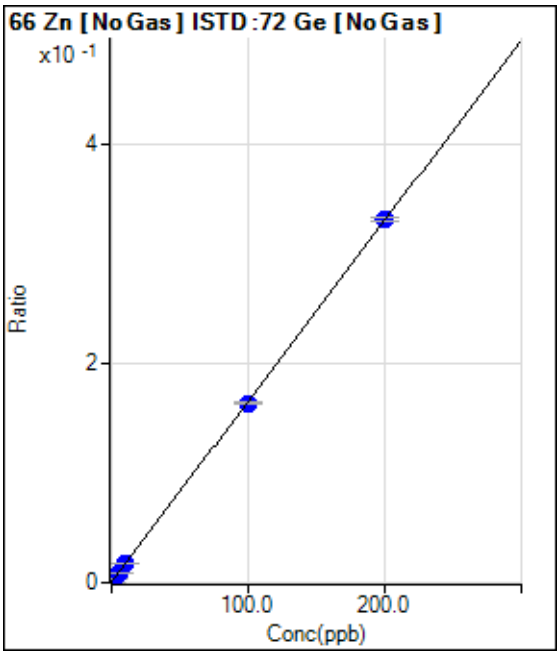
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	586.69	0.0015	P	24.1
2	☐	2.000	1.933	7985.80	0.0202	P	2.0
3	☐	5.000	5.041	19467.58	0.0502	P	2.7
4	☐	10.000	10.009	38100.43	0.0982	P	2.1
5	☐	100.000	99.433	370560.03	0.9625	P	1.0
6	☐	200.000	200.283	736607.51	1.9372	P	1.1

y = 0.0097 * x + 0.0015
R = 1.0000
DL = 0.1113
BEC = 0.1538

Weight: <None>
Min Conc: <None>

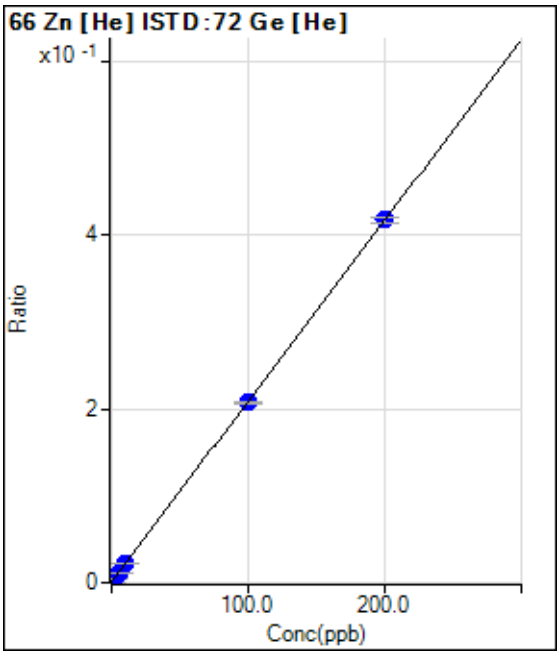


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1013.39	0.0007	P	18.7
2	☐	2.000	1.721	5067.71	0.0036	P	4.8
3	☐	5.000	5.081	12559.36	0.0091	P	1.3
4	☐	10.000	9.984	23737.78	0.0171	P	3.3
5	☐	100.000	98.987	224944.30	0.1635	P	0.8
6	☐	200.000	200.508	443124.23	0.3305	P	1.1

y = 0.0016 * x + 7.2211E-004
R = 1.0000
DL = 0.2467
BEC = 0.439

Weight: <None>
Min Conc: <None>

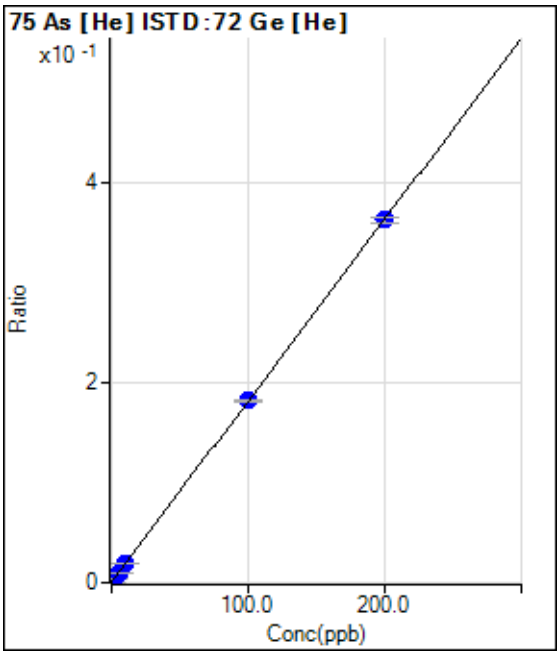
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	323.34	0.0008	P	18.0
2	☐	2.000	2.046	2010.18	0.0051	P	1.8
3	☐	5.000	5.263	4564.18	0.0118	P	5.3
4	☐	10.000	10.168	8522.83	0.0220	P	4.8
5	☐	100.000	99.243	79818.57	0.2073	P	1.2
6	☐	200.000	200.363	158849.26	0.4177	P	1.3

y = 0.0021 * x + 8.1935E-004
R = 1.0000
DL = 0.2127
BEC = 0.3938

Weight: <None>
Min Conc: <None>

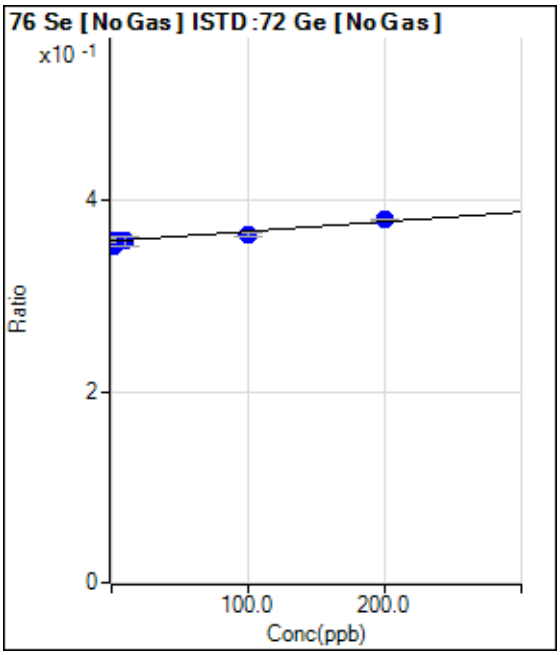


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	176.67	0.0004	P	9.8
2	☐	2.000	1.931	1560.10	0.0039	P	0.6
3	☐	5.000	5.109	3756.10	0.0097	P	0.8
4	☐	10.000	10.108	7263.10	0.0187	P	2.9
5	☐	100.000	100.273	70000.59	0.1818	P	0.7
6	☐	200.000	199.856	137608.92	0.3620	P	1.4

y = 0.0018 * x + 4.4768E-004
R = 1.0000
DL = 0.07276
BEC = 0.2475

Weight: <None>
Min Conc: <None>

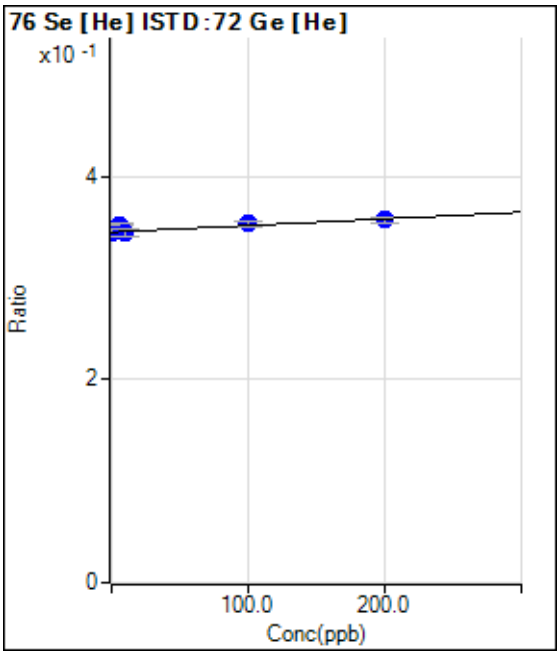
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	502492.94	0.3573	P	1.2
2	☐	2.000	-47.473	502899.13	0.3525	P	0.7
3	☐	5.000	7.338	495259.64	0.3581	P	1.4
4	☐	10.000	-2.255	494454.99	0.3571	P	3.2
5	☐	100.000	67.322	500876.59	0.3642	P	1.0
6	☐	200.000	217.388	508663.81	0.3794	P	0.3

y = 1.0151E-004 * x + 0.3573
R = 0.9705
DL = 122.7
BEC = 3520

Weight: <None>
Min Conc: <None>

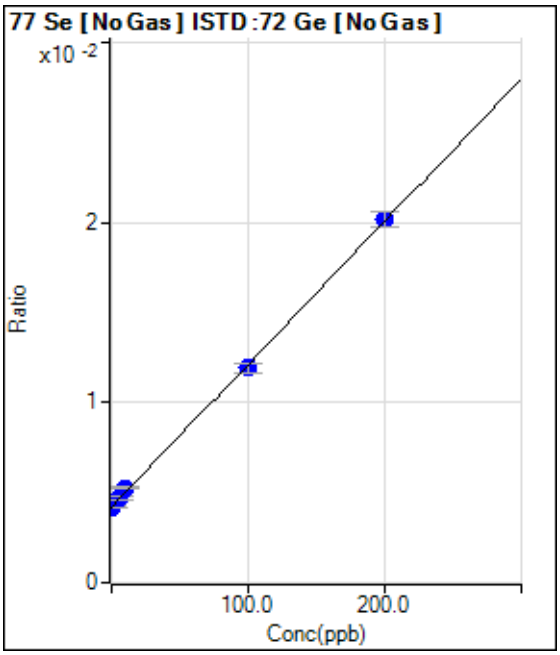


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	136109.24	0.3449	P	0.7
2	☐	2.000	47.000	137752.13	0.3480	P	1.3
3	☐	5.000	118.273	136711.79	0.3527	P	0.6
4	☐	10.000	-0.090	133762.19	0.3449	P	2.4
5	☐	100.000	128.040	136018.31	0.3533	P	1.6
6	☐	200.000	183.203	135689.01	0.3569	P	1.8

y = 6.5382E-005 * x + 0.3449
R = 0.8117
DL = 112
BEC = 5276

Weight: <None>
Min Conc: <None>

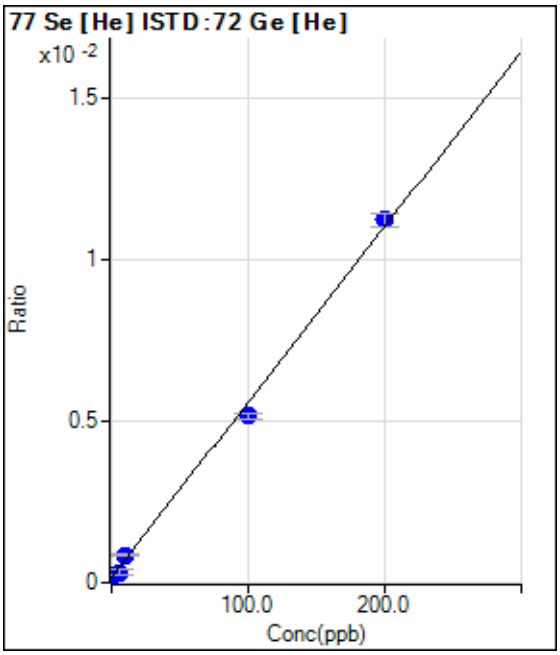
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5918.06	0.0042	P	3.8
2	☐	2.000	1.695	6194.89	0.0043	P	5.9
3	☐	5.000	6.119	6495.02	0.0047	P	4.4
4	☐	10.000	13.280	7288.80	0.0053	P	2.8
5	☐	100.000	97.697	16456.91	0.0120	P	4.5
6	☐	200.000	200.962	27040.89	0.0202	P	4.1

y = 7.9428E-005 * x + 0.0042
R = 0.9998
DL = 6.101
BEC = 52.97

Weight: <None>
Min Conc: <None>

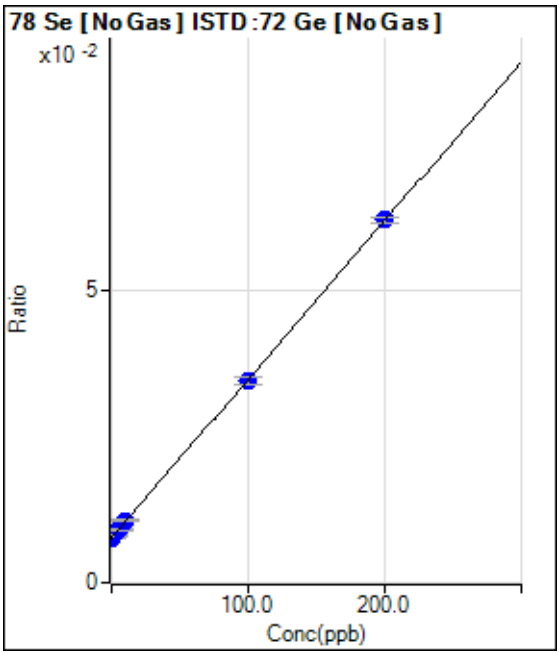


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0002	P	8.8
2	☐	2.000	0.778	83.33	0.0002	P	49.4
3	☐	5.000	2.920	126.67	0.0003	P	37.8
4	☐	10.000	12.727	333.34	0.0009	P	8.1
5	☐	100.000	91.904	1983.51	0.0052	P	3.8
6	☐	200.000	203.976	4267.43	0.0112	P	4.0

y = 5.4212E-005 * x + 1.6897E-004
R = 0.9987
DL = 0.8227
BEC = 3.117

Weight: <None>
Min Conc: <None>

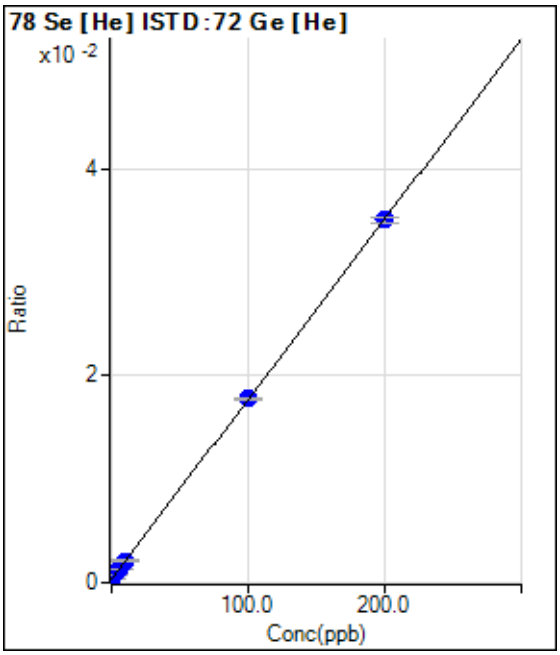
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10814.51	0.0077	P	1.6
2	☐	2.000	1.542	11568.50	0.0081	P	2.9
3	☐	5.000	5.246	12602.77	0.0091	P	2.6
4	☐	10.000	10.622	14638.17	0.0106	P	3.1
5	☐	100.000	98.924	47467.58	0.0345	P	3.1
6	☐	200.000	200.505	83203.44	0.0621	P	1.3

y = 2.7116E-004 * x + 0.0077
R = 1.0000
DL = 1.357
BEC = 28.36

Weight: <None>
Min Conc: <None>

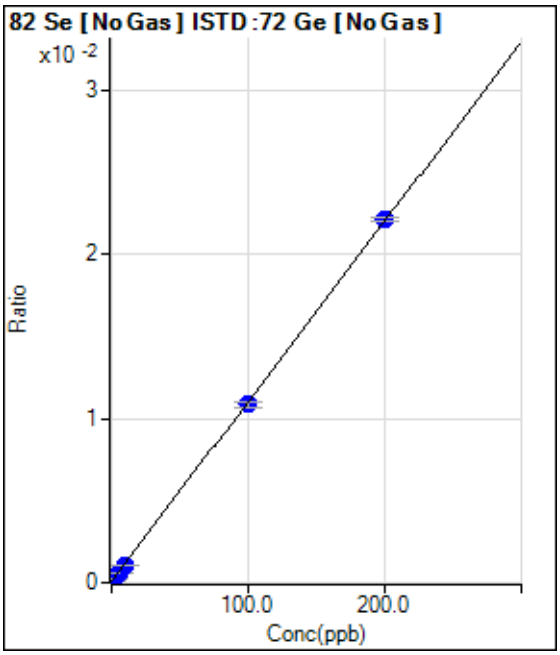


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	121.33	0.0003	P	7.7
2	☐	2.000	2.316	281.33	0.0007	P	8.2
3	☐	5.000	5.543	493.34	0.0013	P	5.0
4	☐	10.000	10.287	814.03	0.0021	P	4.7
5	☐	100.000	100.536	6861.09	0.0178	P	0.7
6	☐	200.000	199.701	13342.63	0.0351	P	1.8

y = 1.7420E-004 * x + 3.0748E-004
R = 1.0000
DL = 0.4075
BEC = 1.765

Weight: <None>
Min Conc: <None>

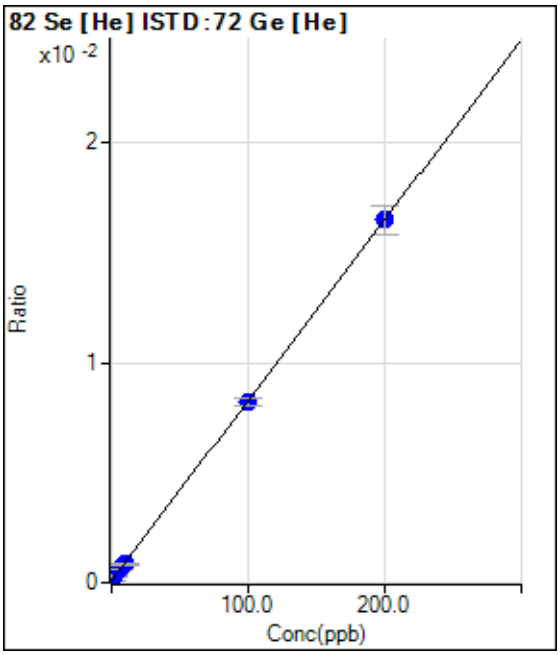
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	118.38	0.0001	P	53.7
2	☐	2.000	1.689	384.73	0.0003	P	25.2
3	☐	5.000	4.413	784.95	0.0006	P	5.5
4	☐	10.000	8.953	1474.88	0.0011	P	4.5
5	☐	100.000	98.178	14897.05	0.0108	P	3.4
6	☐	200.000	200.981	29611.28	0.0221	P	1.1

y = 1.0947E-004 * x + 8.4286E-005
R = 0.9999
DL = 1.241
BEC = 0.7699

Weight: <None>
Min Conc: <None>

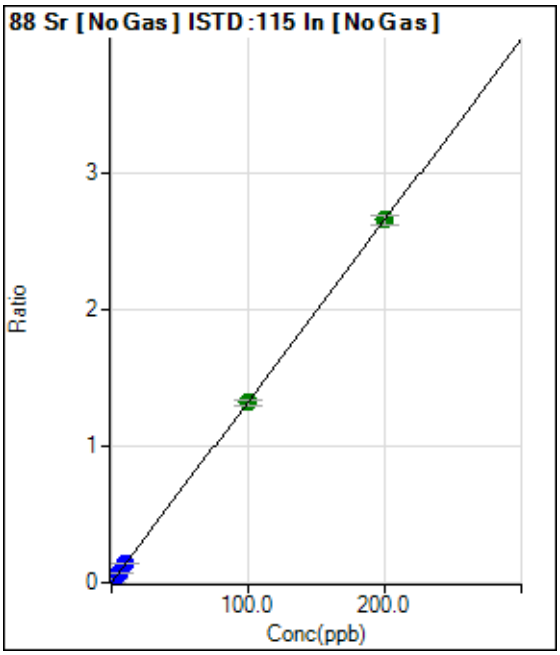


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30.00	0.0001	P	57.6
2	☐	2.000	2.570	113.33	0.0003	P	18.7
3	☐	5.000	6.430	233.34	0.0006	P	10.4
4	☐	10.000	9.573	333.34	0.0009	P	10.5
5	☐	100.000	99.420	3163.77	0.0082	P	3.7
6	☐	200.000	200.270	6261.58	0.0165	P	8.0

y = 8.1900E-005 * x + 7.5946E-005
R = 1.0000
DL = 1.603
BEC = 0.9273

Weight: <None>
Min Conc: <None>

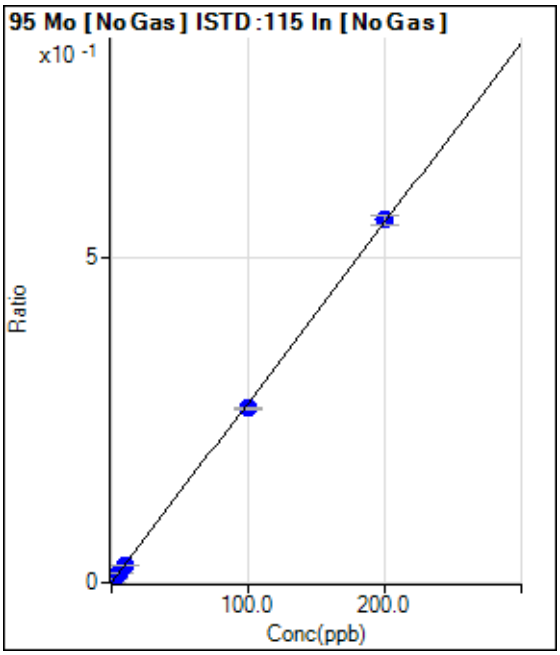
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	846.71	0.0005	P	8.9
2	☐	2.000	1.928	41220.59	0.0261	P	2.8
3	☐	5.000	5.062	103091.90	0.0676	P	0.3
4	☐	10.000	10.322	207094.55	0.1374	P	1.0
5	☐	100.000	99.471	2003804.66	1.3194	A	3.5
6	☐	200.000	200.248	3882817.75	2.6555	A	2.4

y = 0.0133 * x + 5.3367E-004
R = 1.0000
DL = 0.0108
BEC = 0.04025

Weight: <None>
Min Conc: <None>

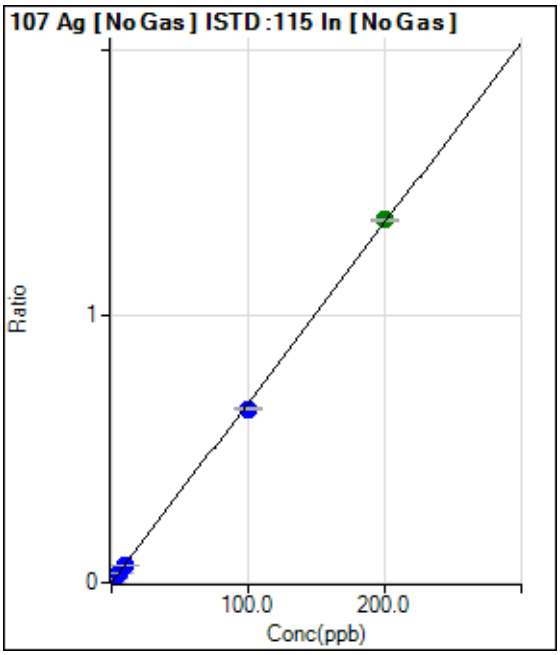


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	156.67	0.0001	P	24.4
2	☐	2.000	1.885	8382.76	0.0053	P	1.8
3	☐	5.000	4.824	20462.65	0.0134	P	1.3
4	☐	10.000	9.686	40481.98	0.0269	P	1.6
5	☐	100.000	96.842	406633.87	0.2676	P	0.4
6	☐	200.000	201.600	814471.86	0.5571	P	2.7

y = 0.0028 * x + 9.8808E-005
R = 0.9998
DL = 0.02614
BEC = 0.03577

Weight: <None>
Min Conc: <None>

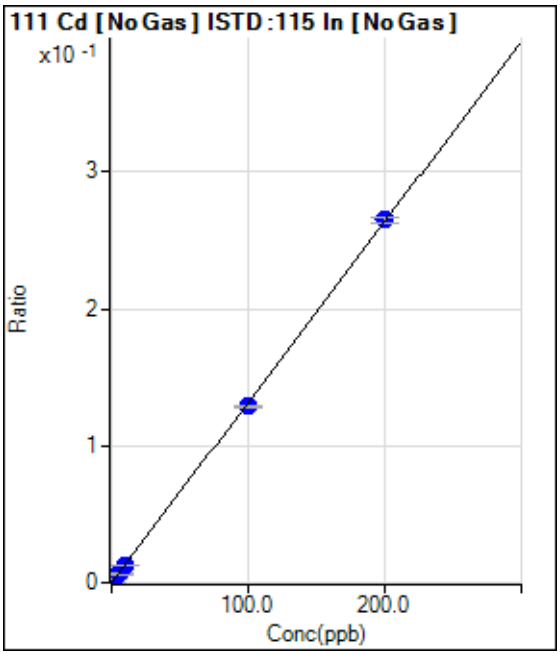
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	146.67	0.0001	P	15.4
2	☐	2.000	1.908	20469.47	0.0130	P	2.4
3	☐	5.000	4.891	50413.10	0.0331	P	1.3
4	☐	10.000	9.862	100356.62	0.0666	P	3.4
5	☐	100.000	96.644	990183.97	0.6518	P	1.6
6	☐	200.000	201.688	1989443.30	1.3602	A	0.6

y = 0.0067 * x + 9.2437E-005
R = 0.9998
DL = 0.006321
BEC = 0.01371

Weight: <None>
Min Conc: <None>

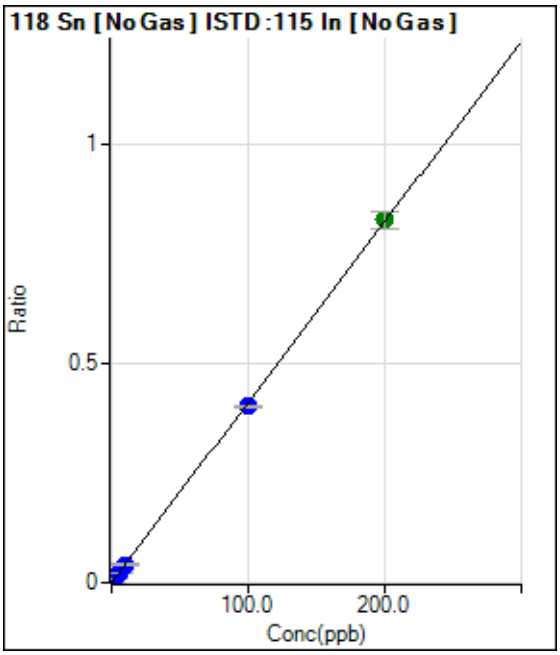


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0000	P	86.6
2	☐	2.000	1.865	3896.48	0.0025	P	5.6
3	☐	5.000	5.010	10074.65	0.0066	P	9.6
4	☐	10.000	9.856	19584.07	0.0130	P	2.3
5	☐	100.000	97.669	195535.52	0.1287	P	1.3
6	☐	200.000	201.174	387665.61	0.2651	P	1.7

y = 0.0013 * x + 8.3862E-006
R = 0.9999
DL = 0.01654
BEC = 0.006365

Weight: <None>
Min Conc: <None>

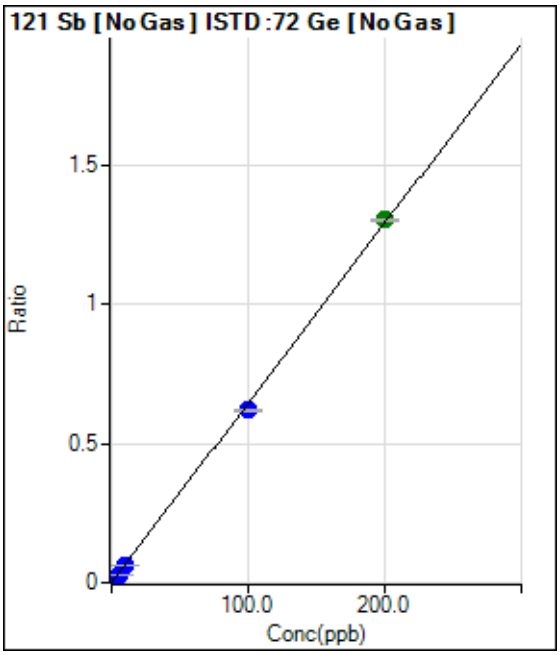
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	500.02	0.0003	P	20.2
2	☐	2.000	1.810	12249.24	0.0078	P	3.4
3	☐	5.000	4.927	31354.43	0.0206	P	1.9
4	☐	10.000	9.938	62043.18	0.0412	P	3.3
5	☐	100.000	97.613	610176.29	0.4016	P	1.0
6	☐	200.000	201.200	1209626.47	0.8275	A	4.5

y = 0.0041 * x + 3.1553E-004
R = 0.9999
DL = 0.04656
BEC = 0.07675

Weight: <None>
Min Conc: <None>

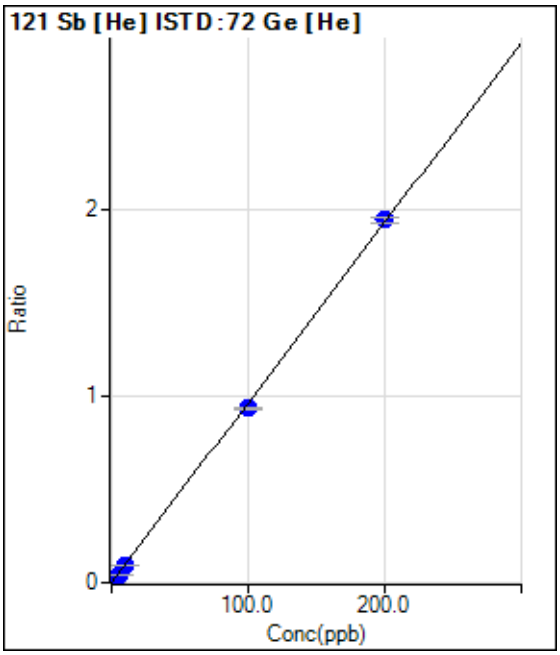


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	76.67	0.0001	P	40.4
2	☐	2.000	1.750	16190.26	0.0113	P	3.1
3	☐	5.000	4.643	41522.80	0.0300	P	1.4
4	☐	10.000	9.287	83083.10	0.0600	P	2.2
5	☐	100.000	96.008	852418.63	0.6197	P	0.7
6	☐	200.000	202.043	1748492.58	1.3042	A	0.5

y = 0.0065 * x + 5.4539E-005
R = 0.9997
DL = 0.01024
BEC = 0.00845

Weight: <None>
Min Conc: <None>

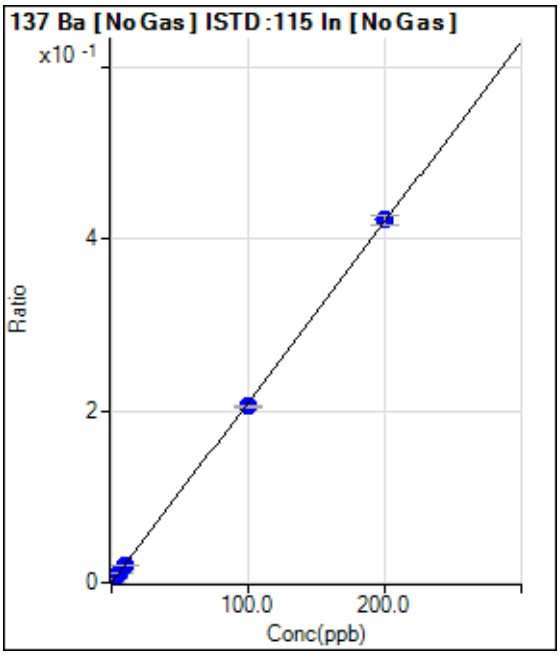
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	46.67	0.0001	P	44.5
2	☐	2.000	1.709	6565.10	0.0166	P	2.0
3	☐	5.000	4.664	17458.56	0.0450	P	1.8
4	☐	10.000	9.354	34980.47	0.0902	P	3.4
5	☐	100.000	96.832	359104.58	0.9328	P	1.2
6	☐	200.000	201.628	738358.97	1.9421	P	1.3

y = 0.0096 * x + 1.1824E-004
R = 0.9998
DL = 0.01638
BEC = 0.01228

Weight: <None>
Min Conc: <None>

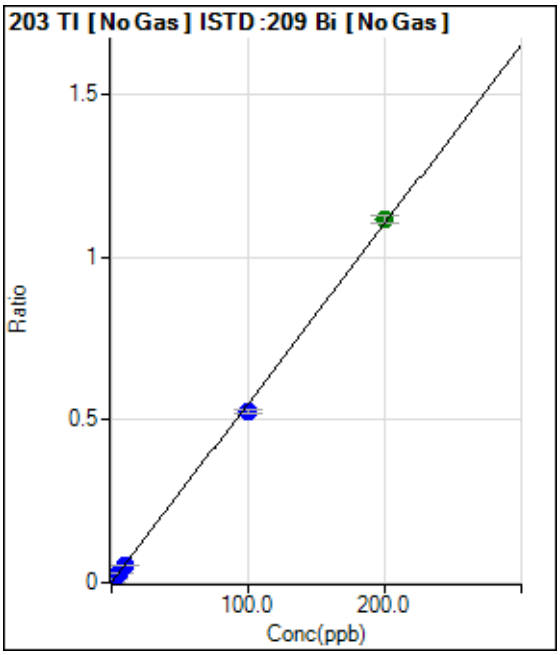


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	96.67	0.0001	P	33.0
2	☐	2.000	1.960	6605.17	0.0042	P	4.5
3	☐	5.000	4.875	15709.79	0.0103	P	3.3
4	☐	10.000	9.941	31585.44	0.0210	P	2.1
5	☐	100.000	97.848	312535.49	0.2057	P	1.3
6	☐	200.000	201.083	618077.87	0.4227	P	2.6

y = 0.0021 * x + 6.0908E-005
R = 0.9999
DL = 0.02866
BEC = 0.02898

Weight: <None>
Min Conc: <None>

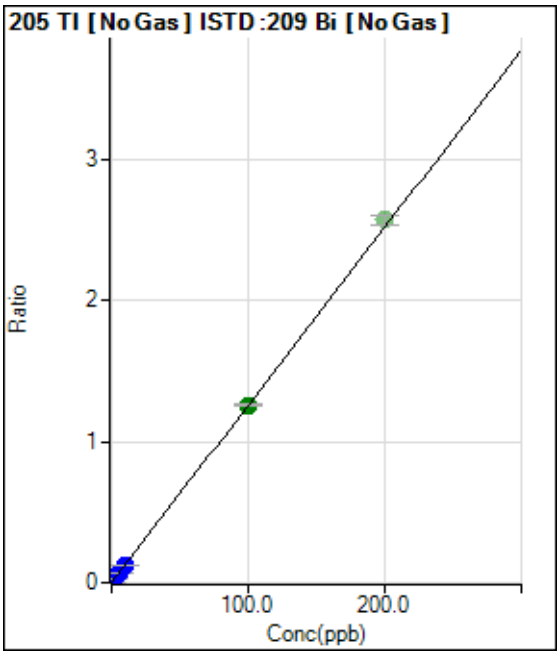
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	296.68	0.0002	P	22.9
2	☐	2.000	1.944	15493.25	0.0109	P	7.6
3	☐	5.000	4.909	37981.47	0.0272	P	2.7
4	☐	10.000	9.679	75810.66	0.0535	P	3.2
5	☐	100.000	95.448	723426.11	0.5254	P	2.5
6	☐	200.000	202.295	1486024.93	1.1134	A	2.1

y = 0.0055 * x + 2.1230E-004
R = 0.9996
DL = 0.02655
BEC = 0.03858

Weight: <None>
Min Conc: <None>

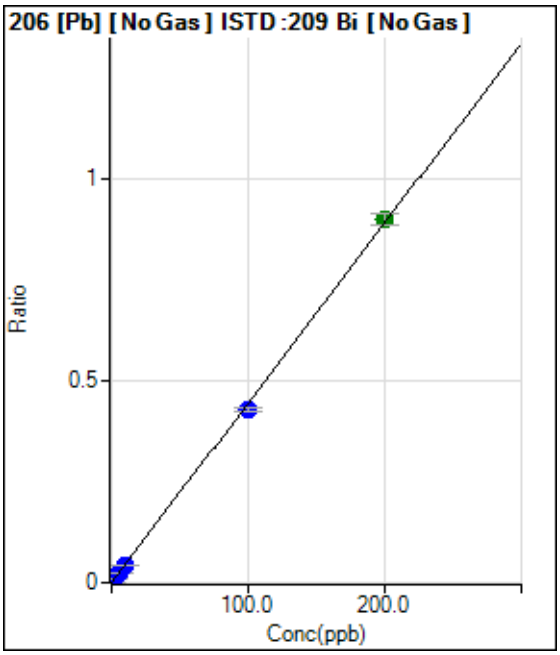


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	623.36	0.0004	P	12.2
2	☐	2.000	2.030	36848.25	0.0260	P	7.5
3	☐	5.000	5.103	90057.90	0.0646	P	4.2
4	☐	10.000	9.994	178693.57	0.1260	P	2.5
5	☐	100.000	99.995	1731015.86	1.2570	A	1.2
6	☑	200.000		3428671.10	2.5693	A	2.7

y = 0.0126 * x + 4.4517E-004
R = 1.0000
DL = 0.01294
BEC = 0.03543

Weight: <None>
Min Conc: <None>

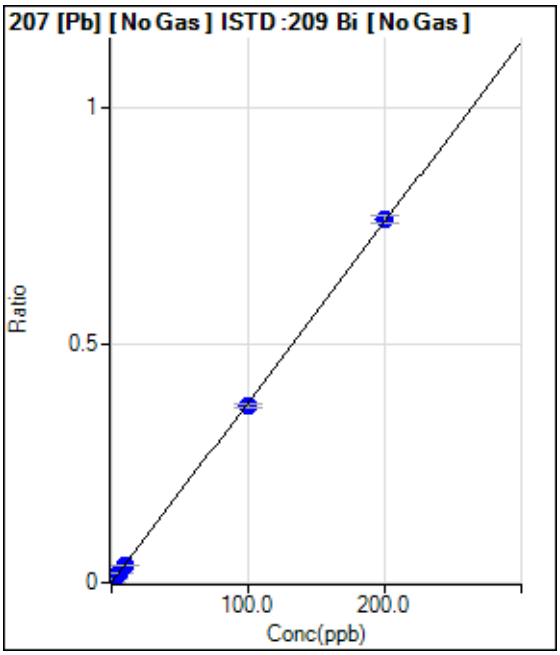
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	110.00	0.0001	P	33.8
2	☐	2.000	1.950	12413.07	0.0087	P	5.0
3	☐	5.000	4.903	30471.00	0.0218	P	3.9
4	☐	10.000	9.769	61595.63	0.0435	P	3.0
5	☐	100.000	96.263	588552.15	0.4275	P	2.1
6	☐	200.000	201.883	1196109.98	0.8964	A	3.2

y = 0.0044 * x + 7.8508E-005
R = 0.9998
DL = 0.01793
BEC = 0.01768

Weight: <None>
Min Conc: <None>

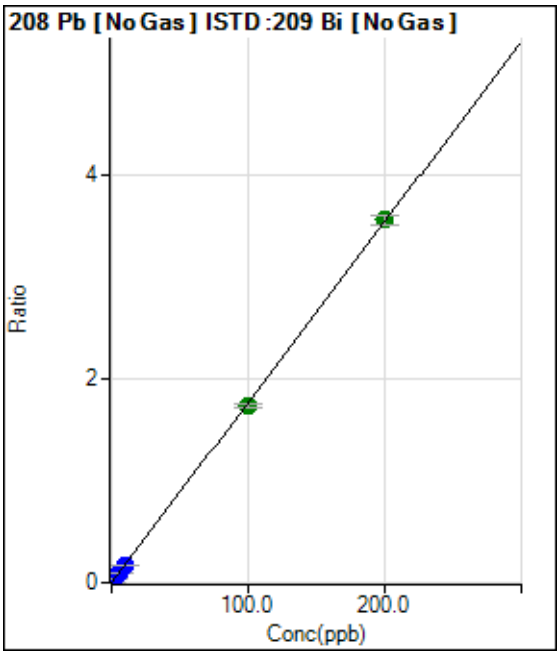


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	136.67	0.0001	P	10.1
2	☐	2.000	1.913	10454.59	0.0074	P	5.2
3	☐	5.000	4.920	26177.96	0.0188	P	3.6
4	☐	10.000	9.850	53096.89	0.0375	P	4.5
5	☐	100.000	97.841	511241.01	0.3713	P	2.3
6	☐	200.000	201.090	1018408.29	0.7631	P	2.1

y = 0.0038 * x + 9.7508E-005
R = 0.9999
DL = 0.00778
BEC = 0.0257

Weight: <None>
Min Conc: <None>

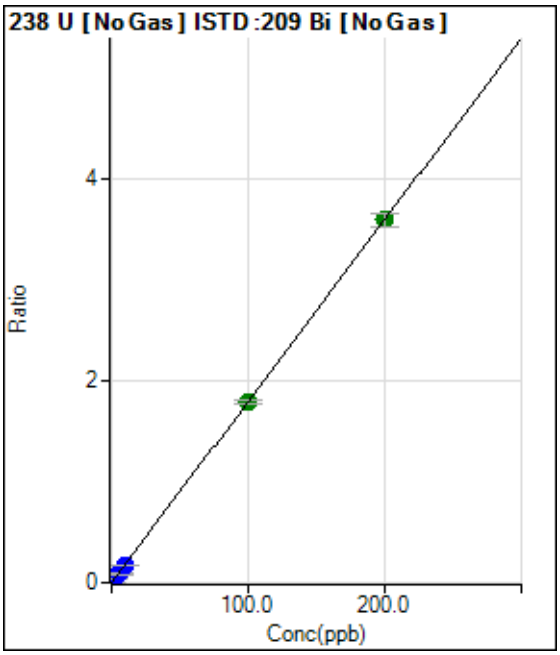
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	516.68	0.0004	P	0.8
2	☐	2.000	1.897	48227.23	0.0339	P	4.6
3	☐	5.000	4.915	121836.17	0.0873	P	3.2
4	☐	10.000	9.793	246125.43	0.1737	P	3.6
5	☐	100.000	97.834	2384131.76	1.7315	A	2.3
6	☐	200.000	201.097	4749532.98	3.5588	A	2.4

y = 0.0177 * x + 3.6821E-004
R = 0.9999
DL = 0.0004827
BEC = 0.02081

Weight: <None>
Min Conc: <None>

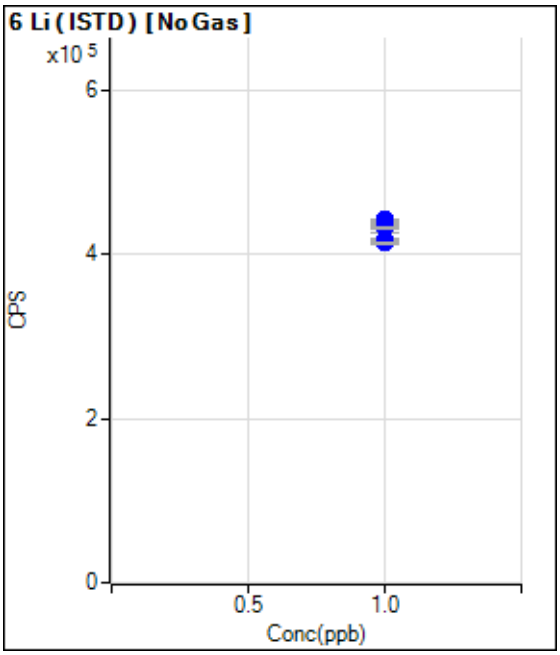


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0000	P	17.5
2	☐	2.000	1.838	46950.51	0.0330	P	3.2
3	☐	5.000	4.780	119732.31	0.0858	P	2.7
4	☐	10.000	9.507	241846.40	0.1707	P	4.4
5	☐	100.000	99.959	2470142.31	1.7941	A	2.3
6	☐	200.000	200.052	4790903.05	3.5905	A	3.5

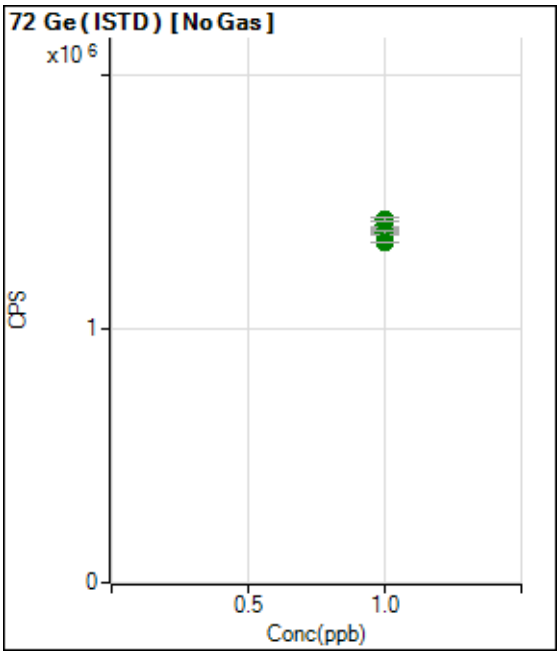
y = 0.0179 * x + 3.5533E-005
R = 1.0000
DL = 0.001042
BEC = 0.00198

Weight: <None>
Min Conc: <None>

Calibration for 019_ICV.d

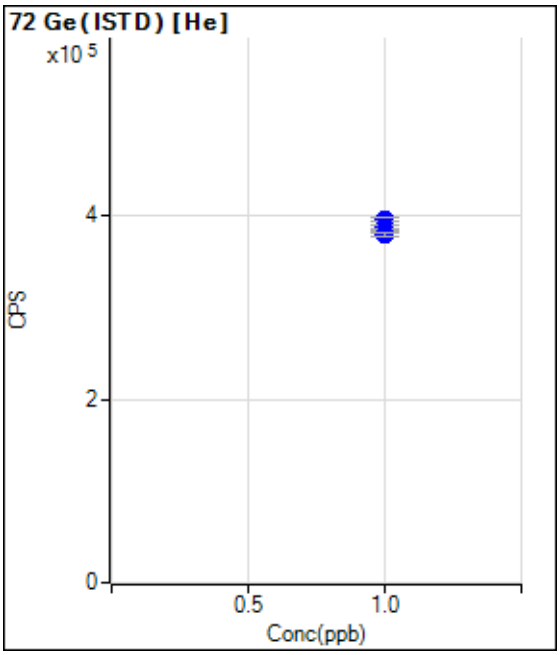


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		441332.77		P	0.7
2	☐	1.000		436404.34		P	0.7
3	☐	1.000		429962.46		P	1.7
4	☐	1.000		431749.18		P	0.5
5	☐	1.000		417280.39		P	0.6
6	☐	1.000		413388.70		P	0.6

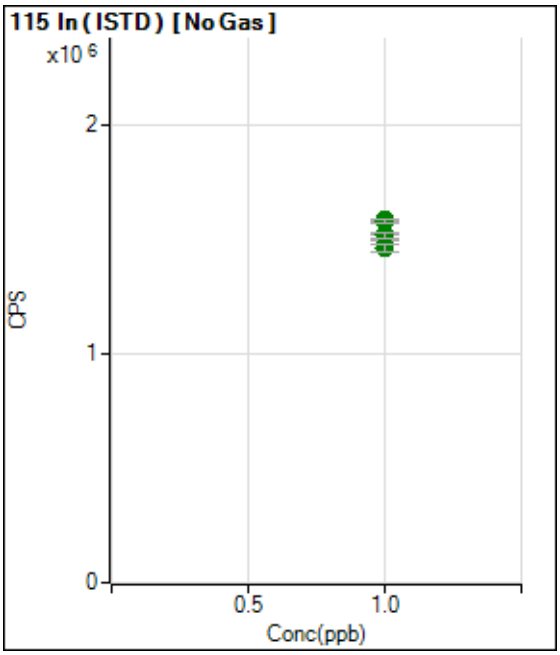


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1406469.67		A	2.3
2	☐	1.000		1426683.05		A	1.1
3	☐	1.000		1383265.81		A	1.8
4	☐	1.000		1385052.74		A	1.6
5	☐	1.000		1375465.76		A	0.7
6	☐	1.000		1340706.44		A	0.1

Calibration for 019_ICV.d

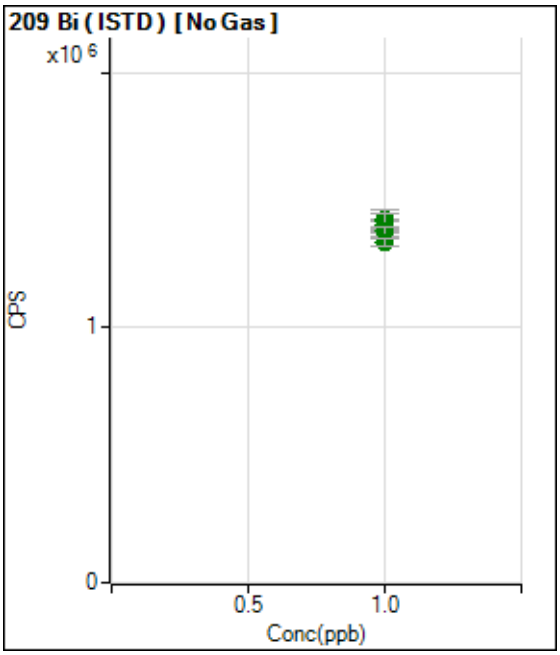


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		394589.33		P	0.3
2	☐	1.000		395867.90		P	1.2
3	☐	1.000		387670.92		P	1.5
4	☐	1.000		387860.39		P	1.2
5	☐	1.000		385003.33		P	0.5
6	☐	1.000		380223.42		P	1.2



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1585990.53		A	0.7
2	☐	1.000		1579802.71		A	0.9
3	☐	1.000		1524106.38		A	0.2
4	☐	1.000		1507474.60		A	1.9
5	☐	1.000		1519389.80		A	1.9
6	☐	1.000		1462706.31		A	2.3

Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1403422.63		A	3.0
2	☐	1.000		1423455.08		A	5.2
3	☐	1.000		1396025.34		A	3.4
4	☐	1.000		1418761.18		A	4.2
5	☐	1.000		1377406.65		A	2.9
6	☐	1.000		1335090.55		A	2.5

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	012CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T10:27:17-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	27808	0.01
Be	9	1	No Gas	12	212.09
V	51	2	He	3622	0.07
Cr	52	2	He	7295	0.08
Fe	56	2	He	16684	0.04
Se	78	2	He	121	6.42
As	75	2	He	177	5.65
Ca	44	2	He	993	0.94
Na	23	2	He	82050	0.00
Mg	24	2	He	607	2.52
K	39	2	He	150728	0.00
Mn	55	2	He	1047	0.53
Co	59	2	He	147	28.02
Ni	60	2	He	140	35.35
Cu	63	2	He	587	4.12
Zn	66	2	He	323	5.60
Al	27	2	He	1003	1.20
B	11	1	No Gas	6482	0.09
Al	27	1	No Gas	25404	0.01
Si	28	1	No Gas	537704	0.00
Ag	107	1	No Gas	147	10.74
Cd	111	1	No Gas	13	649.52
Sr	88	1	No Gas	847	1.14
Mo	95	1	No Gas	157	15.42
Sn	118	1	No Gas	500	3.94
Sb	121	1	No Gas	77	51.98
Ba	137	1	No Gas	97	34.40
Tl	205	1	No Gas	623	1.55
Tl	203	1	No Gas	297	6.94
Pb	208	1	No Gas	517	0.43
U	238	1	No Gas	50	40.00
Ca	43	2	He	33	137.48
Sb	121	2	He	47	95.59
Ti	47	2	He	7	1299.04
Cu	63	1	No Gas	1107	0.77

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD

Calibration Blank Report

Li	6	1	No Gas	441333	0.73
Ge	72	2	He	394589	0.28
Ge	72	1	No Gas	1406470	2.27
In	115	1	No Gas	1585991	0.67

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	No Gas	1403423	2.99

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	013CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T10:29:29-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	4199	0.06
V	51	2	He	11808	0.00
Cr	52	2	He	15853	0.01
Fe	56	2	He	830993	0.00
Se	78	2	He	281	2.63
As	75	2	He	1560	0.10
Ca	44	2	He	7379	0.04
Na	23	2	He	255696	0.00
Mg	24	2	He	107752	0.00
K	39	2	He	288216	0.00
Mn	55	2	He	7816	0.03
Co	59	2	He	12139	0.02
Ni	60	2	He	3197	0.07
Cu	63	2	He	7986	0.03
Zn	66	2	He	2010	0.14
Al	27	2	He	1747	0.49
B	11	1	No Gas	19105	0.00
Al	27	1	No Gas	45425	0.00
Si	28	1	No Gas	585014	0.00
Ag	107	1	No Gas	20469	0.01
Cd	111	1	No Gas	3896	0.16
Sr	88	1	No Gas	41221	0.01
Mo	95	1	No Gas	8383	0.02
Sn	118	1	No Gas	12249	0.02
Sb	121	1	No Gas	16190	0.02
Ba	137	1	No Gas	6605	0.08
Tl	205	1	No Gas	36848	0.01
Tl	203	1	No Gas	15493	0.02
Pb	208	1	No Gas	48227	0.00
U	238	1	No Gas	46951	0.00
Ca	43	2	He	317	5.49
Sb	121	2	He	6565	0.04
Cu	63	1	No Gas	17208	0.01

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	436404	0.68	441333	98.88	70	120	
Ge	72	2	He	395868	1.19	394589	100.32	70	120	
Ge	72	1	No Gas	1426683	1.13	1406470	101.44	70	120	

Calibration Standard Report

In	115	1	No Gas	1579803	0.91	1585991	99.61	70	120	
Bi	209	1	No Gas	1423455	5.19	1403423	101.43	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	014CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T10:31:26-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	10359	0.01
V	51	2	He	23988	0.00
Cr	52	2	He	30631	0.00
Fe	56	2	He	2029668	0.00
Se	78	2	He	493	0.78
As	75	2	He	3756	0.02
Ca	44	2	He	16907	0.01
Na	23	2	He	517542	0.00
Mg	24	2	He	269260	0.00
K	39	2	He	497773	0.00
Mn	55	2	He	22910	0.01
Co	59	2	He	30461	0.01
Ni	60	2	He	8036	0.01
Cu	63	2	He	19468	0.02
Zn	66	2	He	4564	0.13
Al	27	2	He	2987	0.18
B	11	1	No Gas	38633	0.01
Al	27	1	No Gas	79353	0.00
Si	28	1	No Gas	661219	0.00
Ag	107	1	No Gas	50413	0.00
Cd	111	1	No Gas	10075	0.10
Sr	88	1	No Gas	103092	0.00
Mo	95	1	No Gas	20463	0.01
Sn	118	1	No Gas	31354	0.01
Sb	121	1	No Gas	41523	0.00
Ba	137	1	No Gas	15710	0.02
Tl	205	1	No Gas	90058	0.00
Tl	203	1	No Gas	37981	0.00
Pb	208	1	No Gas	121836	0.00
U	238	1	No Gas	119732	0.00
Ca	43	2	He	933	0.52
Sb	121	2	He	17459	0.00
Cu	63	1	No Gas	40451	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	429962	1.66	441333	97.42	70	120	
Ge	72	2	He	387671	1.52	394589	98.25	70	120	
Ge	72	1	No Gas	1383266	1.84	1406470	98.35	70	120	

Calibration Standard Report

In	115	1	No Gas	1524106	0.21	1585991	96.10	70	120	
Bi	209	1	No Gas	1396025	3.38	1403423	99.47	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	015CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T10:33:25-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	20981	0.01
V	51	2	He	45044	0.00
Cr	52	2	He	52498	0.00
Fe	56	2	He	4021977	0.00
Se	78	2	He	814	0.46
As	75	2	He	7263	0.02
Ca	44	2	He	33474	0.00
Na	23	2	He	886740	0.00
Mg	24	2	He	530577	0.00
K	39	2	He	846388	0.00
Mn	55	2	He	36105	0.01
Co	59	2	He	60572	0.00
Ni	60	2	He	15235	0.02
Cu	63	2	He	38100	0.01
Zn	66	2	He	8523	0.05
Al	27	2	He	4407	0.13
B	11	1	No Gas	71319	0.00
Al	27	1	No Gas	124595	0.00
Si	28	1	No Gas	893557	0.00
Ag	107	1	No Gas	100357	0.00
Cd	111	1	No Gas	19584	0.00
Sr	88	1	No Gas	207095	0.00
Mo	95	1	No Gas	40482	0.00
Sn	118	1	No Gas	62043	0.00
Sb	121	1	No Gas	83083	0.00
Ba	137	1	No Gas	31585	0.01
Tl	205	1	No Gas	178694	0.00
Tl	203	1	No Gas	75811	0.00
Pb	208	1	No Gas	246125	0.00
U	238	1	No Gas	241846	0.00
Ca	43	2	He	2174	0.19
Sb	121	2	He	34980	0.01
Cu	63	1	No Gas	80489	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	431749	0.55	441333	97.83	70	120	
Ge	72	2	He	387860	1.23	394589	98.29	70	120	
Ge	72	1	No Gas	1385053	1.58	1406470	98.48	70	120	

Calibration Standard Report

In	115	1	No Gas	1507475	1.90	1585991	95.05	70	120	
Bi	209	1	No Gas	1418761	4.24	1403423	101.09	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	016CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T10:35:33-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	208723	0.00
V	51	2	He	412930	0.00
Cr	52	2	He	454335	0.00
Fe	56	2	He	38435239	0.00
Se	78	2	He	6861	0.01
As	75	2	He	70001	0.00
Ca	44	2	He	319713	0.00
Na	23	2	He	7999361	0.00
Mg	24	2	He	4806646	0.00
K	39	2	He	6563456	0.00
Mn	55	2	He	348347	0.00
Co	59	2	He	591150	0.00
Ni	60	2	He	147321	0.00
Cu	63	2	He	370560	0.00
Zn	66	2	He	79819	0.00
Al	27	2	He	34878	0.00
B	11	1	No Gas	655273	0.00
Al	27	1	No Gas	978851	0.00
Si	28	1	No Gas	3145456	0.00
Ag	107	1	No Gas	990184	0.00
Cd	111	1	No Gas	195536	0.00
Sr	88	1	No Gas	2003805	0.00
Mo	95	1	No Gas	406634	0.00
Sn	118	1	No Gas	610176	0.00
Sb	121	1	No Gas	852419	0.00
Ba	137	1	No Gas	312535	0.00
Tl	205	1	No Gas	1731016	0.00
Tl	203	1	No Gas	723426	0.00
Pb	208	1	No Gas	2384132	0.00
U	238	1	No Gas	2470142	0.00
Ca	43	2	He	19554	0.03
Sb	121	2	He	359105	0.00
Cu	63	1	No Gas	766224	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	417280	0.62	441333	94.55	70	120	
Ge	72	2	He	385003	0.53	394589	97.57	70	120	
Ge	72	1	No Gas	1375466	0.68	1406470	97.80	70	120	

Calibration Standard Report

In	115	1	No Gas	1519390	1.89	1585991	95.80	70	120	
Bi	209	1	No Gas	1377407	2.86	1403423	98.15	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	017CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T10:37:40-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	419142	0.00
V	51	2	He	824900	0.00
Cr	52	2	He	896449	0.00
Fe	56	2	He	78200949	0.00
Se	78	2	He	13343	0.01
As	75	2	He	137609	0.00
Ca	44	2	He	648467	0.00
Na	23	2	He	15697830	0.00
Mg	24	2	He	9604891	0.00
K	39	2	He	13275336	0.00
Mn	55	2	He	695833	0.00
Co	59	2	He	1198238	0.00
Ni	60	2	He	289983	0.00
Cu	63	2	He	736608	0.00
Zn	66	2	He	158849	0.00
Al	27	2	He	69044	0.00
B	11	1	No Gas	1276191	0.00
Al	27	1	No Gas	1884677	0.00
Si	28	1	No Gas	5437385	0.00
Ag	107	1	No Gas	1989443	0.00
Cd	111	1	No Gas	387666	0.00
Sr	88	1	No Gas	3882818	0.00
Mo	95	1	No Gas	814472	0.00
Sn	118	1	No Gas	1209626	0.00
Sb	121	1	No Gas	1748493	0.00
Ba	137	1	No Gas	618078	0.00
Tl	205	1	No Gas	3428671	0.00
Tl	203	1	No Gas	1486025	0.00
Pb	208	1	No Gas	4749533	0.00
U	238	1	No Gas	4790903	0.00
Ca	43	2	He	38234	0.01
Sb	121	2	He	738359	0.00
Cu	63	1	No Gas	1525810	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	413389	0.60	441333	93.67	70	120	
Ge	72	2	He	380223	1.16	394589	96.36	70	120	
Ge	72	1	No Gas	1340706	0.06	1406470	95.32	70	120	

Calibration Standard Report

In	115	1	No Gas	1462706	2.30	1585991	92.23	70	120	
Bi	209	1	No Gas	1335091	2.50	1403423	95.13	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	019_ICV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T10:42:00-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	012CALB.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	101.959	1.199	692566	1.63	100	102.0	90	110	
Be	9	1	No Gas	95.493	0.568	212863	0.08	100	95.5	90	110	
V	51	2	He	99.217	0.294	427593	0.19	100	99.2	90	110	
Cr	52	2	He	99.587	0.831	468928	0.64	100	99.6	90	110	
Fe	56	2	He	10149.521	0.933	41186674	0.85	10000	101.5	90	110	
Se	78	2	He	97.448	1.495	6858	1.52	100	97.4	90	110	
As	75	2	He	97.257	1.343	69988	1.38	100	97.3	90	110	
Ca	44	2	He	9998.807	1.857	336962	1.92	10000	100.0	90	110	
Na	23	2	He	10143.706	0.334	8353699	0.15	10000	101.4	90	110	
Mg	24	2	He	10338.310	2.154	5171480	2.30	10000	103.4	90	110	
K	39	2	He	9998.998	0.668	6956031	0.63	10000	100.0	90	110	
Mn	55	2	He	98.189	0.529	356221	0.36	100	98.2	90	110	
Co	59	2	He	99.167	0.828	617047	0.82	100	99.2	90	110	
Ni	60	2	He	102.497	0.287	155282	0.11	100	102.5	90	110	
Cu	63	2	He	98.945	1.161	380071	0.99	100	98.9	90	110	
Zn	66	2	He	99.046	1.713	82109	1.54	100	99.0	90	110	
Al	27	2	He	103.938	7.647	37816	7.35	100	103.9	90	110	
B	11	1	No Gas	477.942	1.155	655587	1.17	500	95.6	90	110	
Al	27	1	No Gas	98.946	0.750	997420	1.48	100	98.9	90	110	
Si	28	1	No Gas	496.521	3.038	3143649	1.57	500	99.3	90	110	
Ag	107	1	No Gas	97.635	1.821	1011122	0.23	100	97.6	90	110	
Cd	111	1	No Gas	97.737	1.263	197766	0.62	100	97.7	90	110	
Sr	88	1	No Gas	101.938	4.095	2075697	2.86	100	101.9	90	110	
Mo	95	1	No Gas	94.077	2.248	399211	0.70	100	94.1	90	110	
Sn	118	1	No Gas	98.396	0.966	621729	1.02	100	98.4	90	110	
Sb	121	1	No Gas	97.714	1.384	892745	0.72	100	97.7	90	110	
Ba	137	1	No Gas	101.045	1.571	326229	0.49	100	101.0	90	110	
Tl	205	1	No Gas	100.868	3.022	1841439	1.65	100	100.9	90	110	
Tl	203	1	No Gas	96.924	3.945	761230	0.69	100	96.9	90	110	
Pb	208	1	No Gas	98.260	5.496	2479949	0.90	100	98.3	90	110	
U	238	1	No Gas	96.266	3.805	2465144	0.94	100	96.3	90	110	
Ca	43	2	He	10061.075	1.055	20128	0.91	10000	100.6	90	110	
Sb	121	2	He	99.805	0.557	381507	0.54	100	99.8	90	110	
Ti	47	2	He	99.781	2.010	17612	2.10	100	99.8	90	110	
Cu	63	1	No Gas	97.529	1.312	782666	0.83	100	97.5	90	110	
Se	82	1	No Gas	92.811	1.090	14503	2.47	100	92.8	90	110	

QC ISTD Table

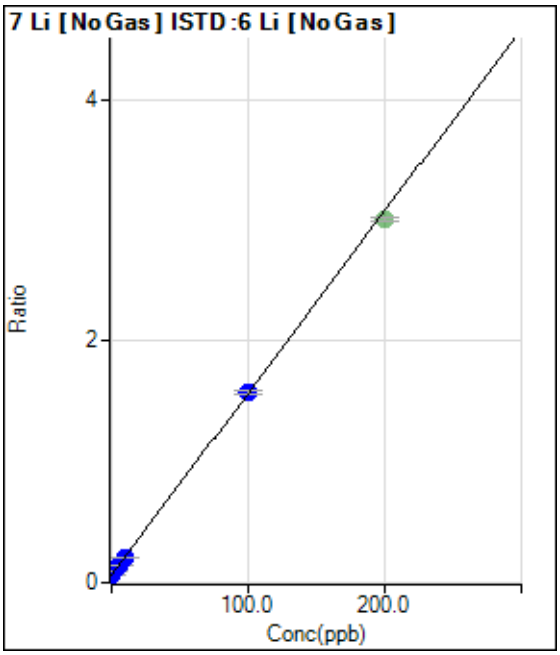
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	440899	0.51	441333	99.90	70	120	
Ge	72	2	He	396828	0.19	394589	100.57	70	120	
Ge	72	1	No Gas	1415510	1.42	1406470	100.64	70	120	
In	115	1	No Gas	1535824	1.81	1585991	96.84	70	120	
Bi	209	1	No Gas	1428423	4.63	1403423	101.78	70	120	

Calibration for 019_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\080223A.b\
Analysis File: 080223A.batch.bin
DA Date-Time: 8/2/2023 11:57:54 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	012CALB.d	CAL BLK	8/2/2023 10:27:17 AM
2	013CALS.d	2/10/200	8/2/2023 10:29:29 AM
3	014CALS.d	5/25/500	8/2/2023 10:31:26 AM
4	015CALS.d	10/50/100	8/2/2023 10:33:25 AM
5	016CALS.d	100/500/10K	8/2/2023 10:35:33 AM
6	017CALS.d	200/1000/20K	8/2/2023 10:37:40 AM

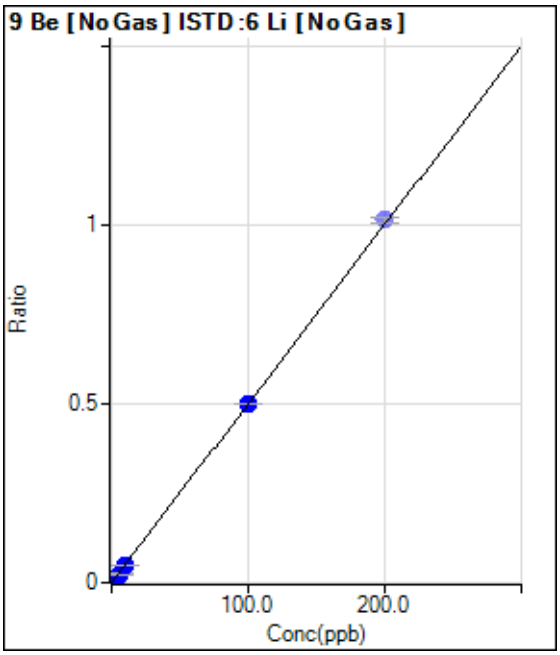
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27807.55	0.0630	P	1.7
2	☐	2.000	2.016	40762.15	0.0934	P	0.4
3	☐	5.000	4.868	58638.58	0.1364	P	1.2
4	☐	10.000	9.875	91477.22	0.2119	P	0.6
5	☐	100.000	100.019	655401.27	1.5708	P	1.9
6	☑	200.000		1242620.79	3.0060	A	1.0

y = 0.0151 * x + 0.0630
R = 1.0000
DL = 0.2137
BEC = 4.18

Weight: <None>
Min Conc: <None>

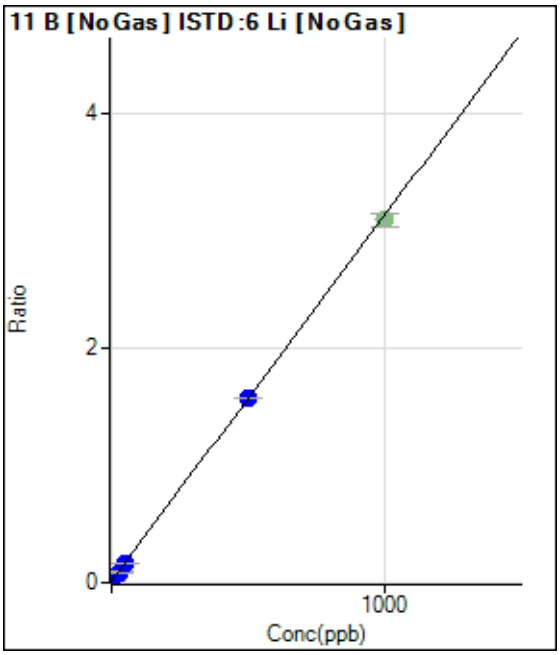


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.67	0.0000	P	24.0
2	☐	2.000	1.919	4198.99	0.0096	P	3.1
3	☐	5.000	4.814	10358.88	0.0241	P	1.4
4	☐	10.000	9.714	20980.72	0.0486	P	2.2
5	☐	100.000	100.040	208723.23	0.5002	P	0.5
6	☑	200.000		419141.70	1.0140	P	1.5

y = 0.0050 * x + 2.6406E-005
R = 1.0000
DL = 0.003799
BEC = 0.005281

Weight: <None>
Min Conc: <None>

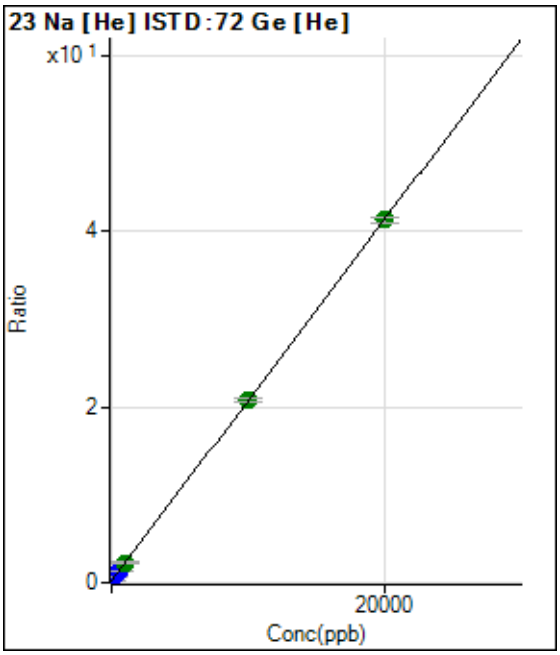
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6481.55	0.0147	P	6.3
2	☐	10.000	9.353	19104.75	0.0438	P	0.5
3	☐	25.000	24.178	38633.23	0.0899	P	3.6
4	☐	50.000	48.391	71318.56	0.1652	P	0.8
5	☐	500.000	500.215	655273.00	1.5704	P	0.8
6	☑	1000.000		1276190.95	3.0876	A	3.7

y = 0.0031 * x + 0.0147
R = 1.0000
DL = 0.8941
BEC = 4.724

Weight: <None>
Min Conc: <None>

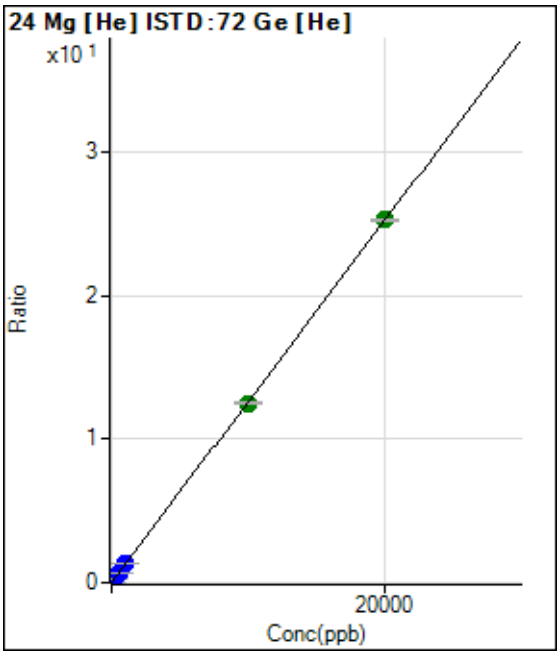


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	82050.08	0.2079	P	0.5
2	☐	200.000	213.135	255696.22	0.6459	P	0.5
3	☐	500.000	548.541	517542.14	1.3351	P	0.8
4	☐	1000.000	1011.540	886740.12	2.2865	A	1.2
5	☐	10000.000	10010.198	7999361.34	20.7769	A	2.0
6	☐	20000.000	19992.979	15697830.18	41.2896	A	1.7

y = 0.0021 * x + 0.2079
R = 1.0000
DL = 1.425
BEC = 101.2

Weight: <None>
Min Conc: <None>

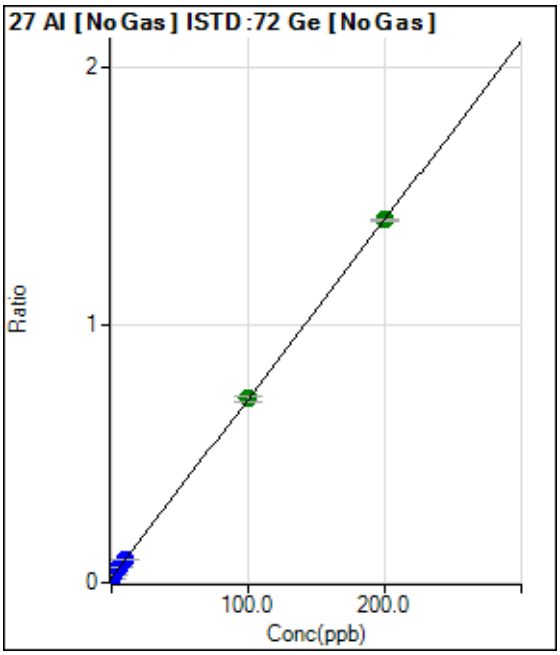
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	606.69	0.0015	P	15.1
2	☐	200.000	214.730	107751.71	0.2722	P	1.8
3	☐	500.000	549.838	269259.90	0.6945	P	0.2
4	☐	1000.000	1084.315	530576.53	1.3682	P	2.7
5	☐	10000.000	9903.982	4806646.49	12.4844	A	1.4
6	☐	20000.000	20042.400	9604890.90	25.2627	A	0.8

y = 0.0013 * x + 0.0015
R = 1.0000
DL = 0.5532
BEC = 1.22

Weight: <None>
Min Conc: <None>

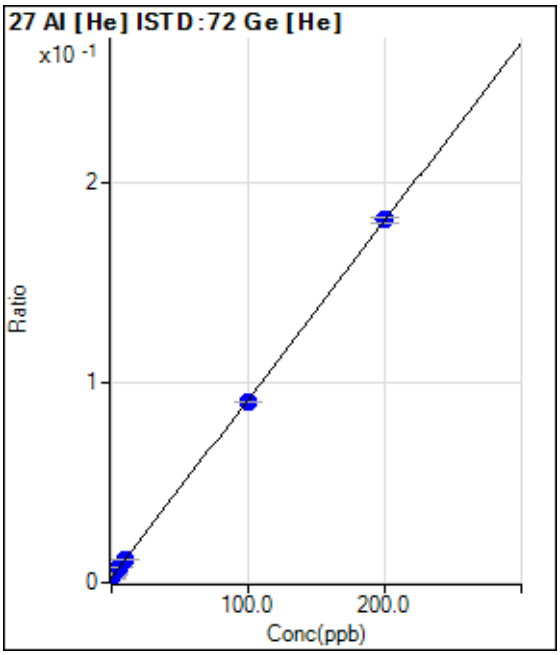


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25403.56	0.0181	P	0.8
2	☐	2.000	1.986	45425.04	0.0318	P	1.4
3	☐	5.000	5.665	79352.89	0.0574	P	1.0
4	☐	10.000	10.365	124595.14	0.0900	P	3.7
5	☐	100.000	99.965	978851.08	0.7117	A	2.2
6	☐	200.000	199.983	1884676.90	1.4057	A	0.6

y = 0.0069 * x + 0.0181
R = 1.0000
DL = 0.06268
BEC = 2.603

Weight: <None>
Min Conc: <None>

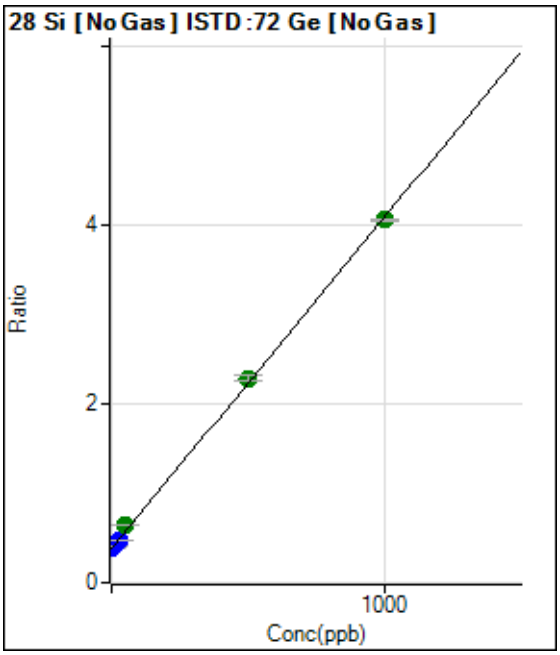
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1003.39	0.0025	P	12.0
2	☐	2.000	2.098	1746.81	0.0044	P	9.5
3	☐	5.000	5.783	2987.05	0.0077	P	4.6
4	☐	10.000	9.879	4407.45	0.0114	P	4.6
5	☐	100.000	98.662	34877.58	0.0906	P	0.4
6	☐	200.000	200.655	69044.34	0.1816	P	1.6

y = 8.9242E-004 * x + 0.0025
R = 1.0000
DL = 1.024
BEC = 2.849

Weight: <None>
Min Conc: <None>

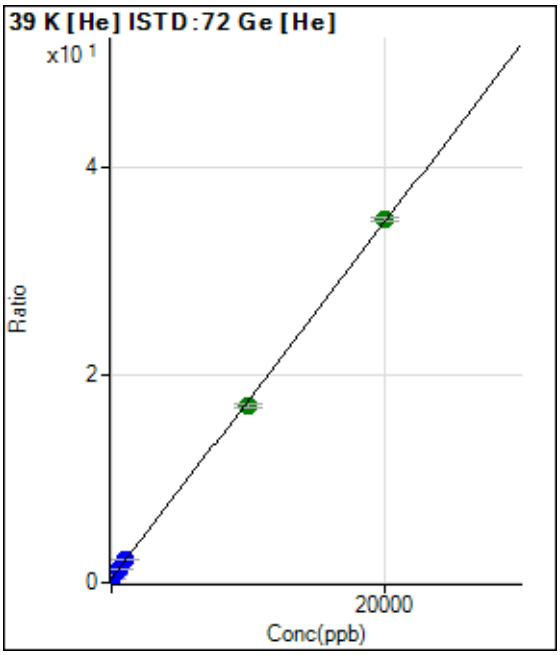


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	537703.65	0.3824	P	1.8
2	☐	10.000	7.469	585014.46	0.4101	P	0.9
3	☐	25.000	25.843	661218.95	0.4781	P	1.9
4	☐	50.000	70.976	893557.15	0.6453	A	2.4
5	☐	500.000	514.291	3145455.79	2.2871	A	2.7
6	☐	1000.000	991.810	5437385.33	4.0556	A	0.6

y = 0.0037 * x + 0.3824
R = 0.9997
DL = 5.693
BEC = 103.3

Weight: <None>
Min Conc: <None>

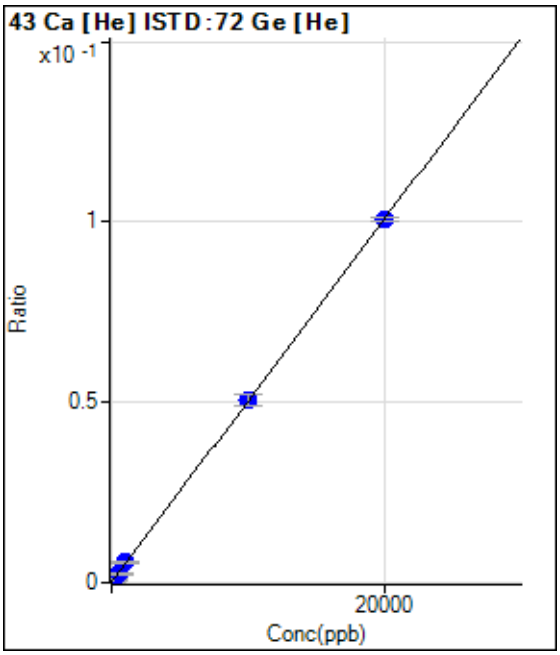
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	150727.65	0.3820	P	0.6
2	☐	200.000	201.819	288215.87	0.7281	P	0.6
3	☐	500.000	526.130	497772.73	1.2842	P	1.8
4	☐	1000.000	1049.847	846388.19	2.1824	P	1.1
5	☐	10000.000	9718.714	6563455.74	17.0485	A	1.7
6	☐	20000.000	20137.479	13275336.47	34.9154	A	1.1

y = 0.0017 * x + 0.3820
R = 0.9999
DL = 4.172
BEC = 222.7

Weight: <None>
Min Conc: <None>

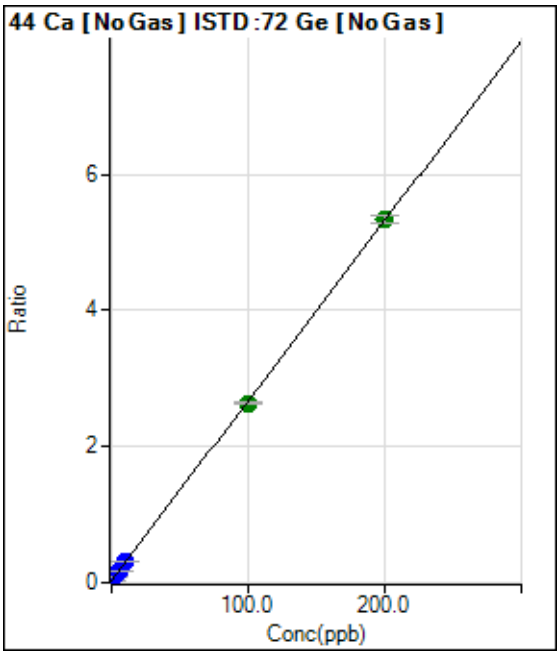


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0001	P	46.1
2	☐	200.000	142.347	316.68	0.0008	P	18.5
3	☐	500.000	461.730	933.38	0.0024	P	5.7
4	☐	1000.000	1097.085	2173.54	0.0056	P	5.3
5	☐	10000.000	10072.181	19554.27	0.0508	P	6.0
6	☐	20000.000	19960.589	38233.58	0.1005	P	1.2

y = 5.0332E-006 * x + 8.4545E-005
R = 1.0000
DL = 23.24
BEC = 16.8

Weight: <None>
Min Conc: <None>

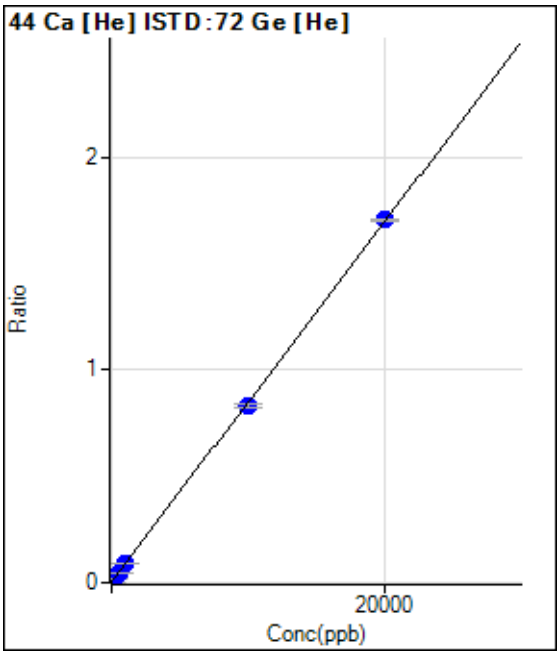
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	46411.90	0.0330	P	0.8
2	☐	2.000	1.987	121946.67	0.0855	P	1.8
3	☐	5.000	5.177	234719.12	0.1697	P	2.6
4	☐	10.000	10.319	423152.30	0.3055	P	1.9
5	☐	100.000	98.755	3632895.05	2.6413	A	0.9
6	☐	200.000	200.602	7147525.94	5.3312	A	2.2

y = 0.0264 * x + 0.0330
R = 1.0000
DL = 0.03028
BEC = 1.249

Weight: <None>
Min Conc: <None>

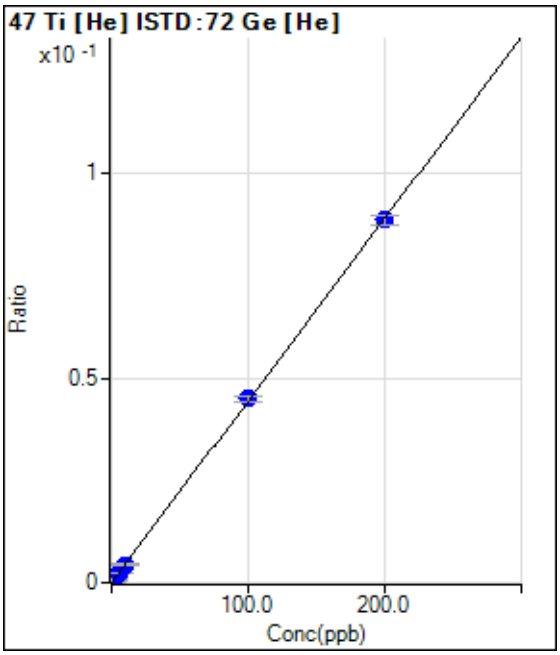


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	993.39	0.0025	P	9.6
2	☐	200.000	190.476	7378.79	0.0186	P	4.3
3	☐	500.000	485.356	16907.34	0.0436	P	1.7
4	☐	1000.000	989.549	33474.32	0.0863	P	0.3
5	☐	10000.000	9777.685	319712.62	0.8304	P	2.1
6	☐	20000.000	20112.142	648467.37	1.7054	P	0.6

y = 8.4671E-005 * x + 0.0025
R = 0.9999
DL = 8.608
BEC = 29.74

Weight: <None>
Min Conc: <None>

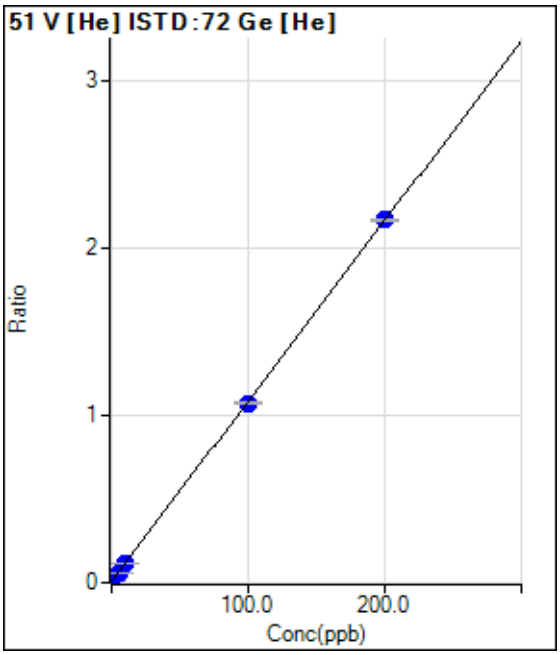
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	86.6
2	☐	2.000	1.667	300.01	0.0008	P	16.5
3	☐	5.000	5.110	886.71	0.0023	P	9.1
4	☐	10.000	9.973	1726.82	0.0045	P	5.8
5	☐	100.000	101.068	17307.82	0.0450	P	3.7
6	☐	200.000	199.468	33725.24	0.0887	P	2.9

y = 4.4461E-004 * x + 1.6909E-005
R = 1.0000
DL = 0.09881
BEC = 0.03803

Weight: <None>
Min Conc: <None>

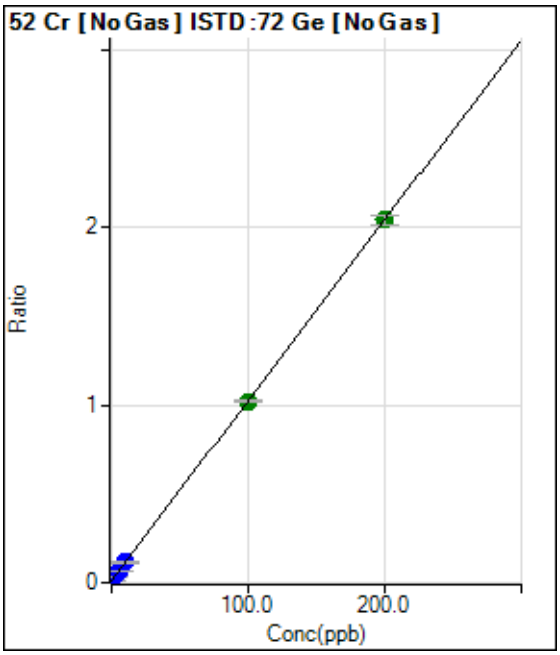


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3621.61	0.0092	P	2.8
2	☐	2.000	1.918	11808.46	0.0298	P	1.2
3	☐	5.000	4.894	23987.67	0.0619	P	0.7
4	☐	10.000	9.933	45043.98	0.1161	P	0.6
5	☐	100.000	98.752	412929.76	1.0725	P	1.1
6	☐	200.000	200.631	824900.07	2.1695	P	0.4

y = 0.0108 * x + 0.0092
R = 1.0000
DL = 0.07142
BEC = 0.8524

Weight: <None>
Min Conc: <None>

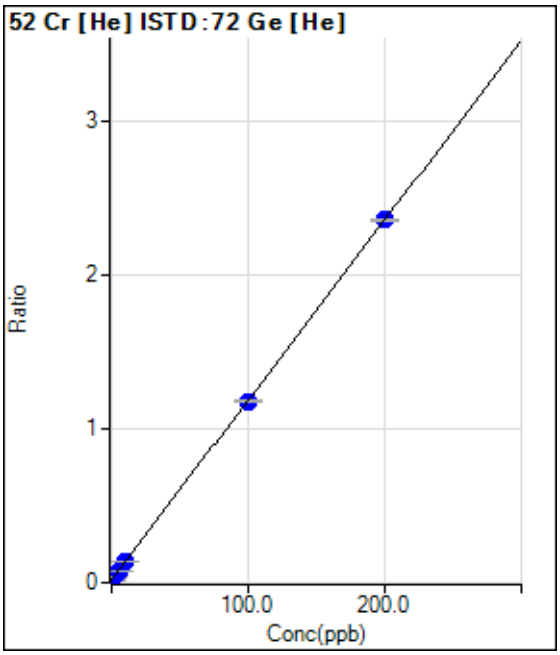
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	17778.51	0.0126	P	2.0
2	☐	2.000	1.939	46081.23	0.0323	P	1.2
3	☐	5.000	5.009	87717.38	0.0634	P	2.3
4	☐	10.000	9.993	157848.83	0.1140	P	0.7
5	☐	100.000	99.578	1406172.84	1.0223	A	1.9
6	☐	200.000	200.212	2738636.31	2.0427	A	2.7

y = 0.0101 * x + 0.0126
R = 1.0000
DL = 0.07389
BEC = 1.247

Weight: <None>
Min Conc: <None>

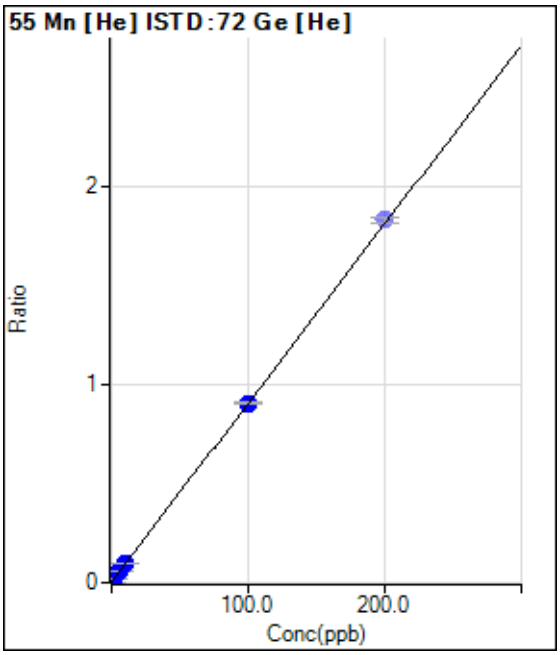


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7295.43	0.0185	P	5.9
2	☐	2.000	1.846	15852.71	0.0401	P	2.3
3	☐	5.000	5.183	30631.48	0.0790	P	2.5
4	☐	10.000	10.008	52497.74	0.1354	P	3.3
5	☐	100.000	99.450	454334.68	1.1801	P	0.9
6	☐	200.000	200.272	896449.10	2.3577	P	0.6

y = 0.0117 * x + 0.0185
R = 1.0000
DL = 0.2792
BEC = 1.583

Weight: <None>
Min Conc: <None>

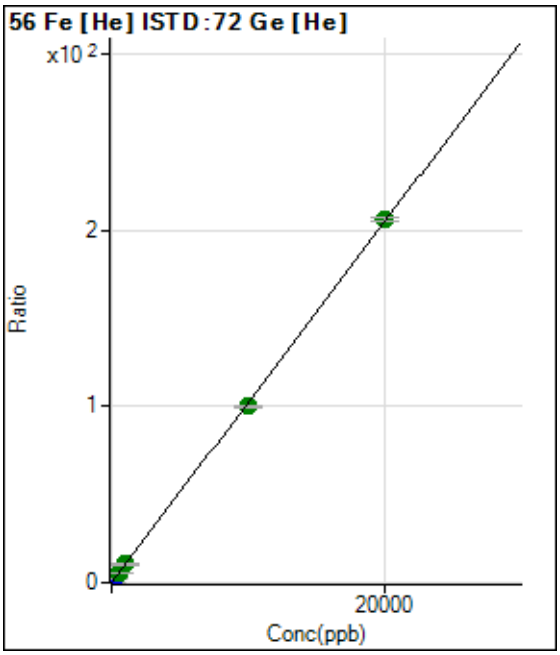
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1046.73	0.0027	P	5.2
2	☐	2.000	1.893	7815.68	0.0197	P	2.2
3	☐	5.000	6.252	22909.64	0.0591	P	2.7
4	☐	10.000	10.018	36104.73	0.0931	P	1.9
5	☐	100.000	99.938	348347.41	0.9048	P	1.1
6	☑	200.000		695833.06	1.8302	P	1.4

y = 0.0090 * x + 0.0027
R = 0.9999
DL = 0.04621
BEC = 0.2938

Weight: <None>
Min Conc: <None>

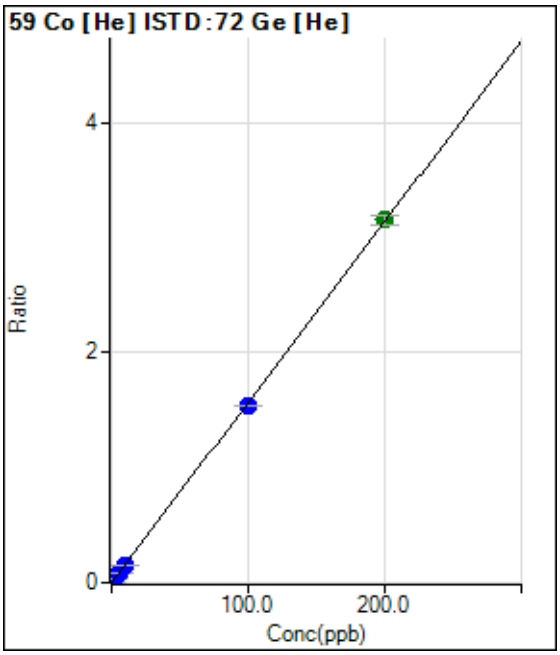


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16683.83	0.0423	P	6.3
2	☐	200.000	201.229	830992.75	2.0992	P	0.7
3	☐	500.000	508.141	2029668.09	5.2365	A	2.0
4	☐	1000.000	1010.336	4021976.71	10.3699	A	2.5
5	☐	10000.000	9762.702	38435238.59	99.8362	A	1.5
6	☐	20000.000	20117.917	78200948.84	205.6868	A	1.0

y = 0.0102 * x + 0.0423
R = 0.9999
DL = 0.7815
BEC = 4.136

Weight: <None>
Min Conc: <None>

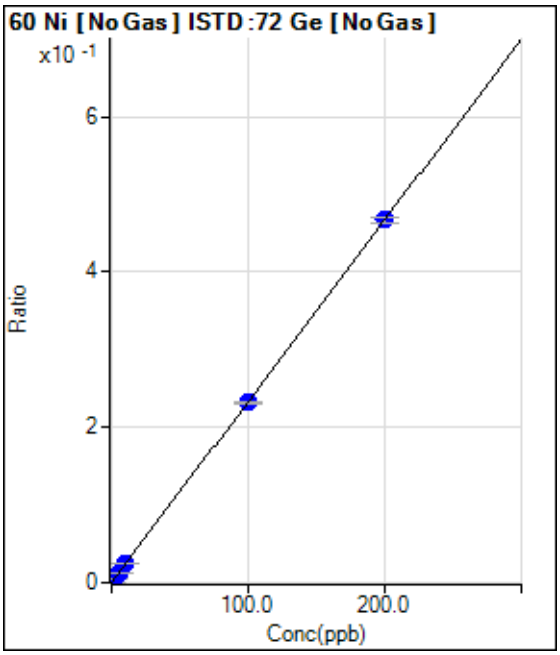
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	146.67	0.0004	P	41.0
2	☐	2.000	1.933	12138.89	0.0307	P	2.3
3	☐	5.000	4.988	30461.20	0.0786	P	2.4
4	☐	10.000	9.939	60571.66	0.1562	P	2.3
5	☐	100.000	97.925	591150.05	1.5355	P	0.9
6	☐	200.000	201.041	1198238.47	3.1520	A	2.8

y = 0.0157 * x + 3.7168E-004
R = 0.9999
DL = 0.02917
BEC = 0.02371

Weight: <None>
Min Conc: <None>

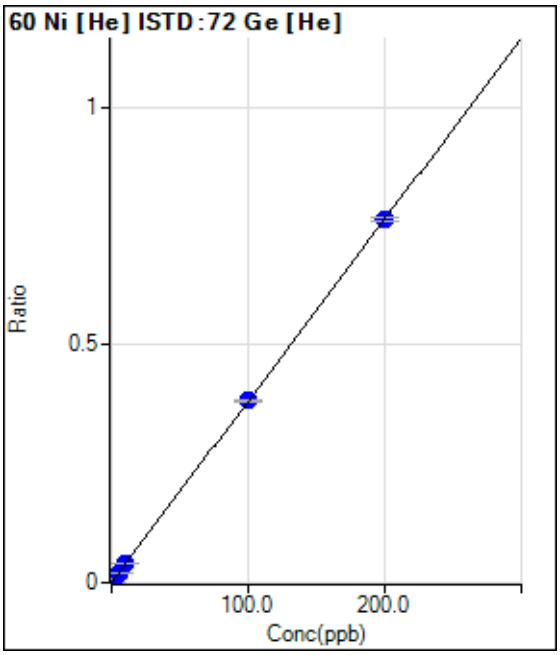


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	340.01	0.0002	P	1.2
2	☐	2.000	1.920	6725.12	0.0047	P	5.2
3	☐	5.000	4.869	16022.97	0.0116	P	4.3
4	☐	10.000	10.174	33170.62	0.0240	P	1.8
5	☐	100.000	99.430	319064.00	0.2320	P	1.6
6	☐	200.000	200.280	626103.82	0.4670	P	1.7

y = 0.0023 * x + 2.4173E-004
R = 1.0000
DL = 0.003679
BEC = 0.1037

Weight: <None>
Min Conc: <None>

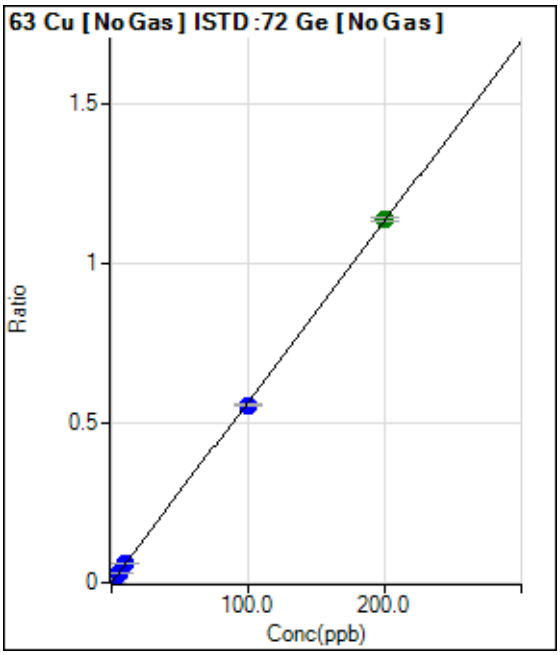
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	140.00	0.0004	P	49.3
2	☐	2.000	2.024	3197.11	0.0081	P	1.8
3	☐	5.000	5.343	8035.86	0.0207	P	2.4
4	☐	10.000	10.205	15235.42	0.0393	P	2.7
5	☐	100.000	100.225	147320.54	0.3826	P	0.6
6	☐	200.000	199.869	289983.22	0.7627	P	1.0

y = 0.0038 * x + 3.5465E-004
R = 1.0000
DL = 0.1376
BEC = 0.09298

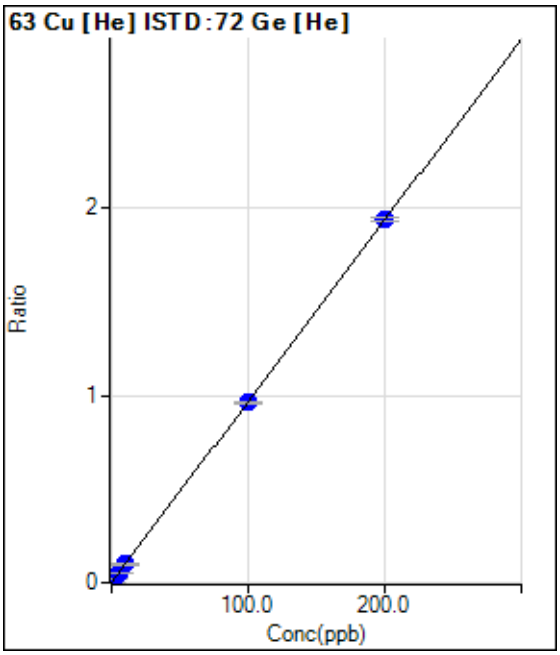
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1106.73	0.0008	P	10.5
2	☐	2.000	1.991	17207.95	0.0121	P	2.9
3	☐	5.000	5.027	40450.76	0.0292	P	1.8
4	☐	10.000	10.127	80488.51	0.0581	P	2.8
5	☐	100.000	98.253	766224.34	0.5571	P	0.6
6	☐	200.000	200.867	1525810.34	1.1381	A	1.1

y = 0.0057 * x + 7.8809E-004
R = 0.9999
DL = 0.04402
BEC = 0.1392

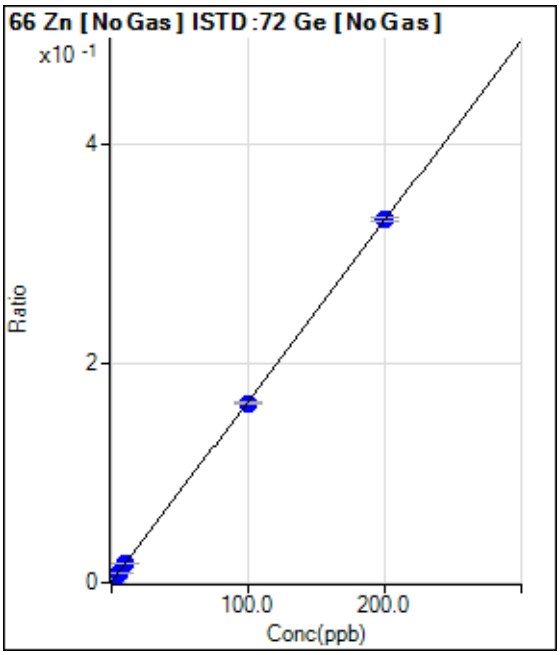
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	586.69	0.0015	P	24.1
2	☐	2.000	1.933	7985.80	0.0202	P	2.0
3	☐	5.000	5.041	19467.58	0.0502	P	2.7
4	☐	10.000	10.009	38100.43	0.0982	P	2.1
5	☐	100.000	99.433	370560.03	0.9625	P	1.0
6	☐	200.000	200.283	736607.51	1.9372	P	1.1

y = 0.0097 * x + 0.0015
R = 1.0000
DL = 0.1113
BEC = 0.1538

Weight: <None>
Min Conc: <None>

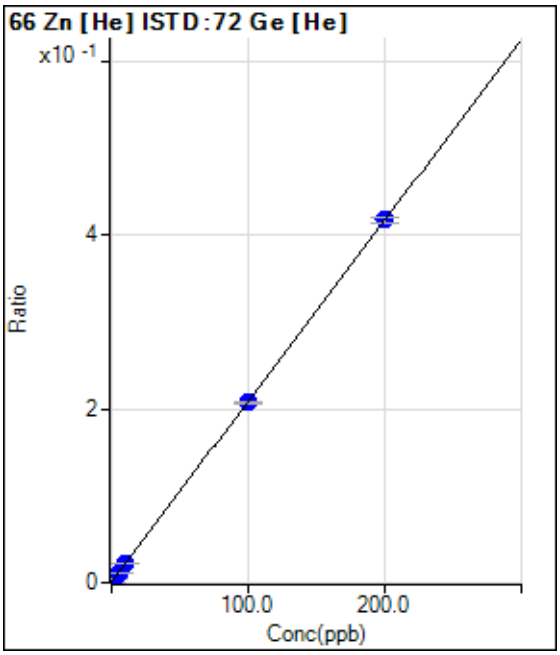


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1013.39	0.0007	P	18.7
2	☐	2.000	1.721	5067.71	0.0036	P	4.8
3	☐	5.000	5.081	12559.36	0.0091	P	1.3
4	☐	10.000	9.984	23737.78	0.0171	P	3.3
5	☐	100.000	98.987	224944.30	0.1635	P	0.8
6	☐	200.000	200.508	443124.23	0.3305	P	1.1

y = 0.0016 * x + 7.2211E-004
R = 1.0000
DL = 0.2467
BEC = 0.439

Weight: <None>
Min Conc: <None>

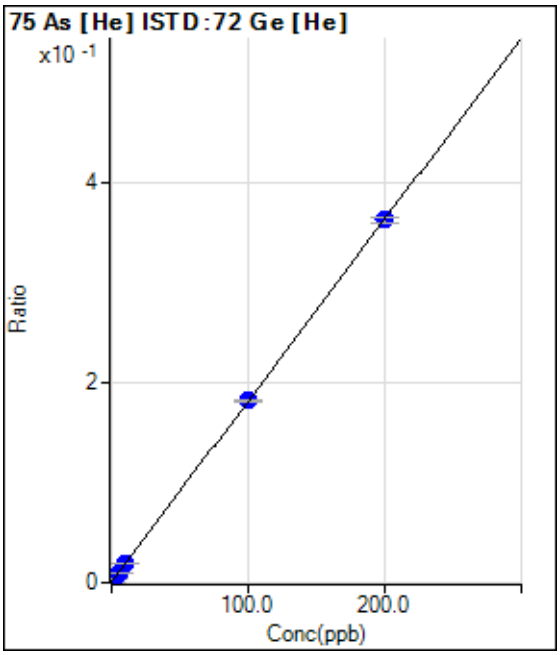
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	323.34	0.0008	P	18.0
2	☐	2.000	2.046	2010.18	0.0051	P	1.8
3	☐	5.000	5.263	4564.18	0.0118	P	5.3
4	☐	10.000	10.168	8522.83	0.0220	P	4.8
5	☐	100.000	99.243	79818.57	0.2073	P	1.2
6	☐	200.000	200.363	158849.26	0.4177	P	1.3

y = 0.0021 * x + 8.1935E-004
R = 1.0000
DL = 0.2127
BEC = 0.3938

Weight: <None>
Min Conc: <None>

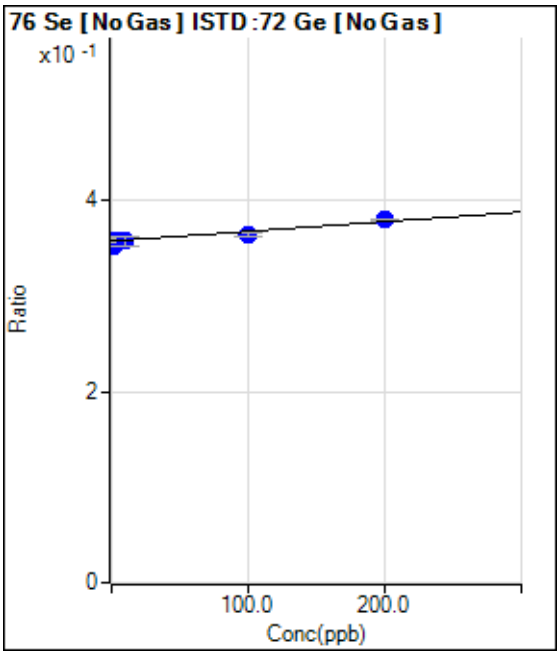


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	176.67	0.0004	P	9.8
2	☐	2.000	1.931	1560.10	0.0039	P	0.6
3	☐	5.000	5.109	3756.10	0.0097	P	0.8
4	☐	10.000	10.108	7263.10	0.0187	P	2.9
5	☐	100.000	100.273	70000.59	0.1818	P	0.7
6	☐	200.000	199.856	137608.92	0.3620	P	1.4

y = 0.0018 * x + 4.4768E-004
R = 1.0000
DL = 0.07276
BEC = 0.2475

Weight: <None>
Min Conc: <None>

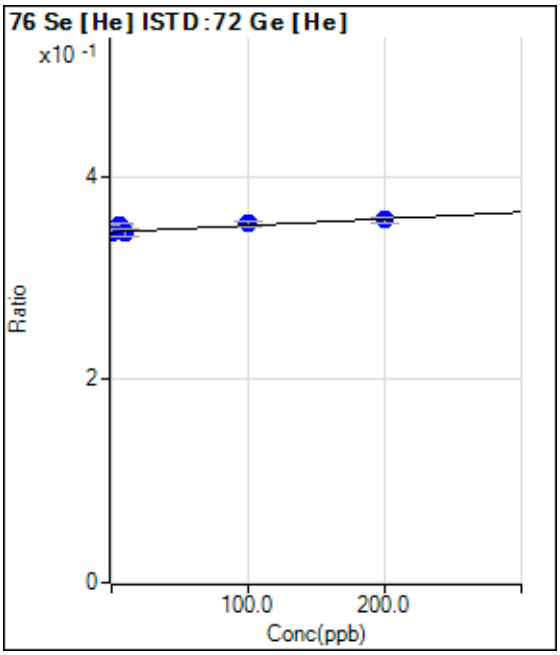
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	502492.94	0.3573	P	1.2
2	☐	2.000	-47.473	502899.13	0.3525	P	0.7
3	☐	5.000	7.338	495259.64	0.3581	P	1.4
4	☐	10.000	-2.255	494454.99	0.3571	P	3.2
5	☐	100.000	67.322	500876.59	0.3642	P	1.0
6	☐	200.000	217.388	508663.81	0.3794	P	0.3

y = 1.0151E-004 * x + 0.3573
R = 0.9705
DL = 122.7
BEC = 3520

Weight: <None>
Min Conc: <None>

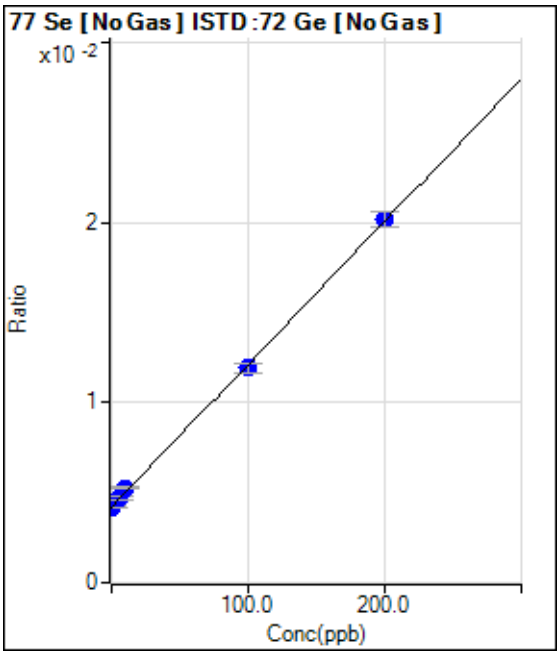


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	136109.24	0.3449	P	0.7
2	☐	2.000	47.000	137752.13	0.3480	P	1.3
3	☐	5.000	118.273	136711.79	0.3527	P	0.6
4	☐	10.000	-0.090	133762.19	0.3449	P	2.4
5	☐	100.000	128.040	136018.31	0.3533	P	1.6
6	☐	200.000	183.203	135689.01	0.3569	P	1.8

y = 6.5382E-005 * x + 0.3449
R = 0.8117
DL = 112
BEC = 5276

Weight: <None>
Min Conc: <None>

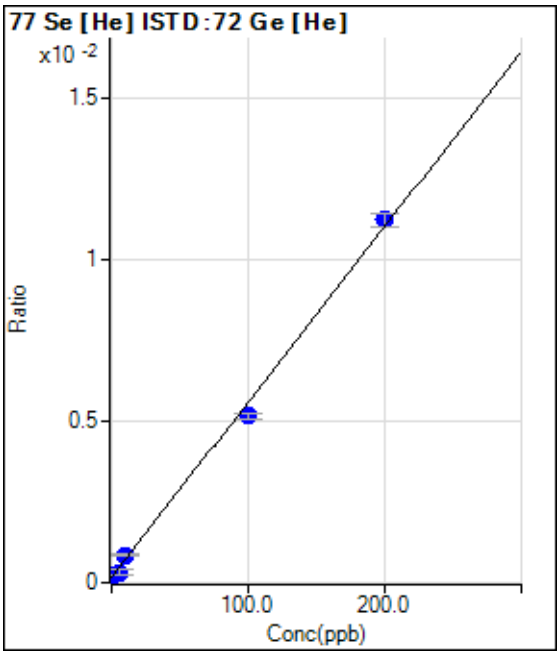
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5918.06	0.0042	P	3.8
2	☐	2.000	1.695	6194.89	0.0043	P	5.9
3	☐	5.000	6.119	6495.02	0.0047	P	4.4
4	☐	10.000	13.280	7288.80	0.0053	P	2.8
5	☐	100.000	97.697	16456.91	0.0120	P	4.5
6	☐	200.000	200.962	27040.89	0.0202	P	4.1

y = 7.9428E-005 * x + 0.0042
R = 0.9998
DL = 6.101
BEC = 52.97

Weight: <None>
Min Conc: <None>

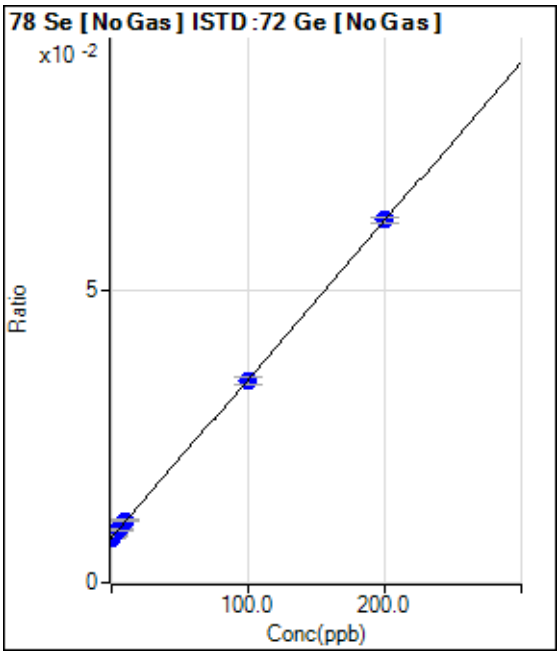


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0002	P	8.8
2	☐	2.000	0.778	83.33	0.0002	P	49.4
3	☐	5.000	2.920	126.67	0.0003	P	37.8
4	☐	10.000	12.727	333.34	0.0009	P	8.1
5	☐	100.000	91.904	1983.51	0.0052	P	3.8
6	☐	200.000	203.976	4267.43	0.0112	P	4.0

y = 5.4212E-005 * x + 1.6897E-004
R = 0.9987
DL = 0.8227
BEC = 3.117

Weight: <None>
Min Conc: <None>

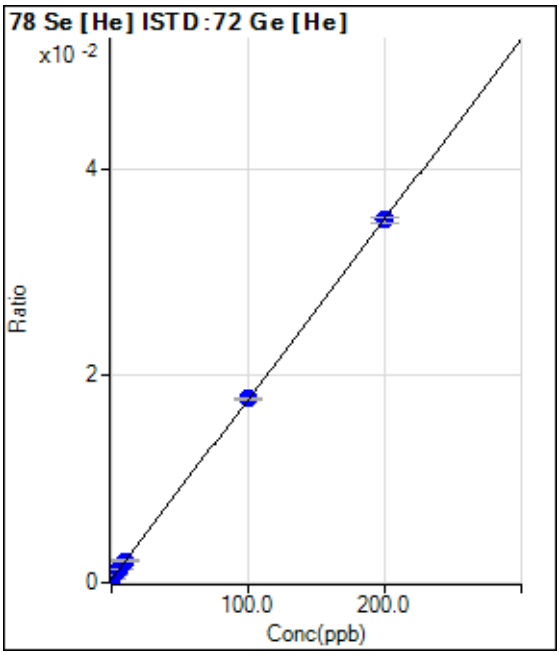
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10814.51	0.0077	P	1.6
2	☐	2.000	1.542	11568.50	0.0081	P	2.9
3	☐	5.000	5.246	12602.77	0.0091	P	2.6
4	☐	10.000	10.622	14638.17	0.0106	P	3.1
5	☐	100.000	98.924	47467.58	0.0345	P	3.1
6	☐	200.000	200.505	83203.44	0.0621	P	1.3

y = 2.7116E-004 * x + 0.0077
R = 1.0000
DL = 1.357
BEC = 28.36

Weight: <None>
Min Conc: <None>

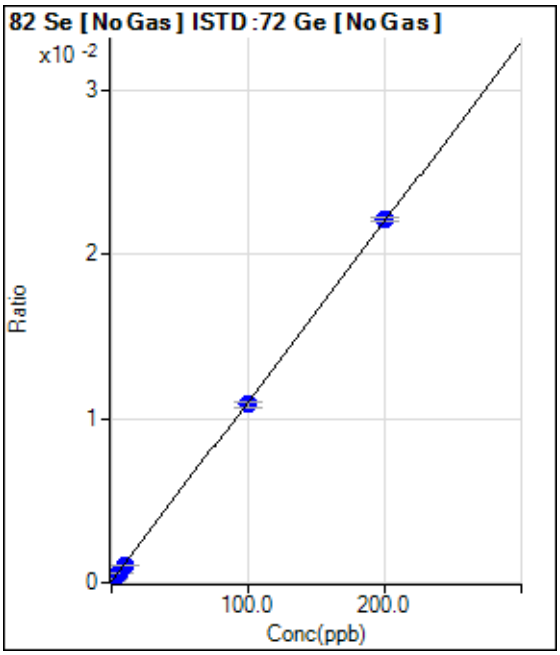


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	121.33	0.0003	P	7.7
2	☐	2.000	2.316	281.33	0.0007	P	8.2
3	☐	5.000	5.543	493.34	0.0013	P	5.0
4	☐	10.000	10.287	814.03	0.0021	P	4.7
5	☐	100.000	100.536	6861.09	0.0178	P	0.7
6	☐	200.000	199.701	13342.63	0.0351	P	1.8

y = 1.7420E-004 * x + 3.0748E-004
R = 1.0000
DL = 0.4075
BEC = 1.765

Weight: <None>
Min Conc: <None>

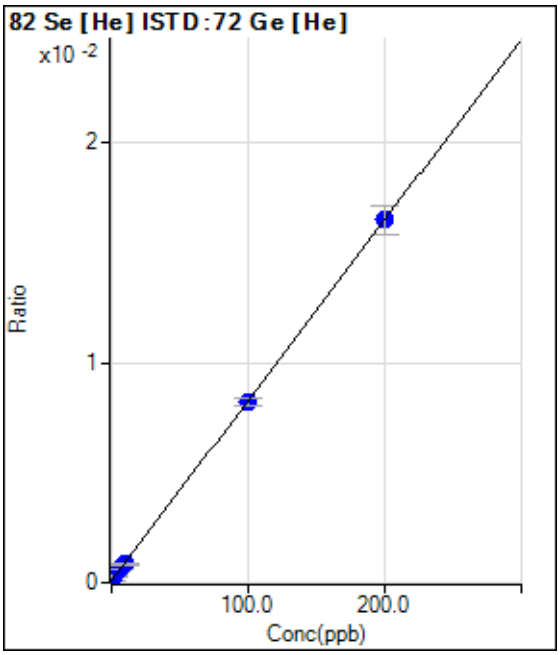
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	118.38	0.0001	P	53.7
2	☐	2.000	1.689	384.73	0.0003	P	25.2
3	☐	5.000	4.413	784.95	0.0006	P	5.5
4	☐	10.000	8.953	1474.88	0.0011	P	4.5
5	☐	100.000	98.178	14897.05	0.0108	P	3.4
6	☐	200.000	200.981	29611.28	0.0221	P	1.1

y = 1.0947E-004 * x + 8.4286E-005
R = 0.9999
DL = 1.241
BEC = 0.7699

Weight: <None>
Min Conc: <None>

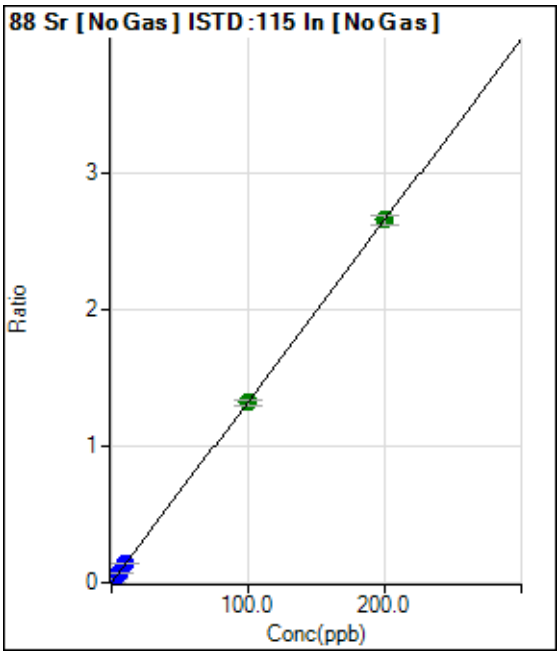


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30.00	0.0001	P	57.6
2	☐	2.000	2.570	113.33	0.0003	P	18.7
3	☐	5.000	6.430	233.34	0.0006	P	10.4
4	☐	10.000	9.573	333.34	0.0009	P	10.5
5	☐	100.000	99.420	3163.77	0.0082	P	3.7
6	☐	200.000	200.270	6261.58	0.0165	P	8.0

y = 8.1900E-005 * x + 7.5946E-005
R = 1.0000
DL = 1.603
BEC = 0.9273

Weight: <None>
Min Conc: <None>

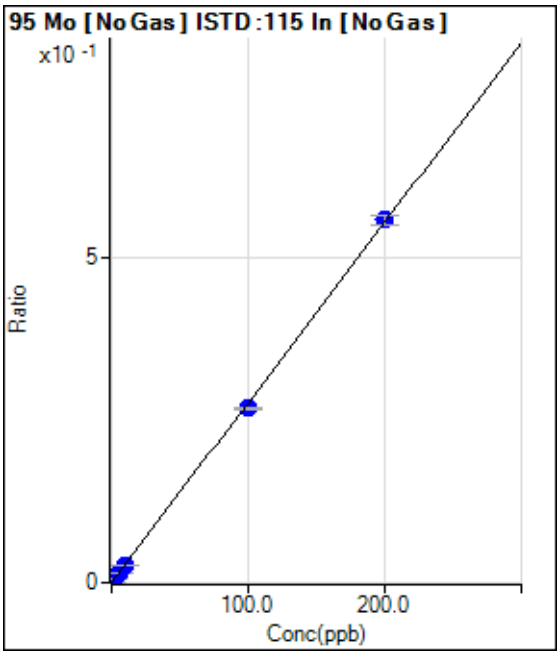
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	846.71	0.0005	P	8.9
2	☐	2.000	1.928	41220.59	0.0261	P	2.8
3	☐	5.000	5.062	103091.90	0.0676	P	0.3
4	☐	10.000	10.322	207094.55	0.1374	P	1.0
5	☐	100.000	99.471	2003804.66	1.3194	A	3.5
6	☐	200.000	200.248	3882817.75	2.6555	A	2.4

y = 0.0133 * x + 5.3367E-004
R = 1.0000
DL = 0.0108
BEC = 0.04025

Weight: <None>
Min Conc: <None>

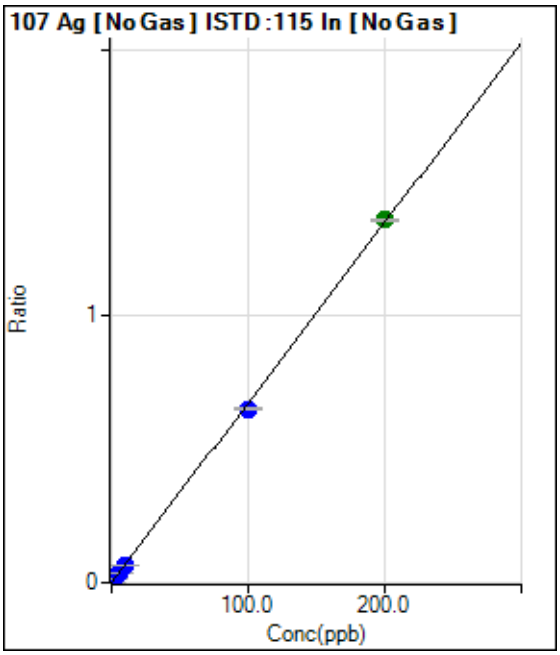


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	156.67	0.0001	P	24.4
2	☐	2.000	1.885	8382.76	0.0053	P	1.8
3	☐	5.000	4.824	20462.65	0.0134	P	1.3
4	☐	10.000	9.686	40481.98	0.0269	P	1.6
5	☐	100.000	96.842	406633.87	0.2676	P	0.4
6	☐	200.000	201.600	814471.86	0.5571	P	2.7

y = 0.0028 * x + 9.8808E-005
R = 0.9998
DL = 0.02614
BEC = 0.03577

Weight: <None>
Min Conc: <None>

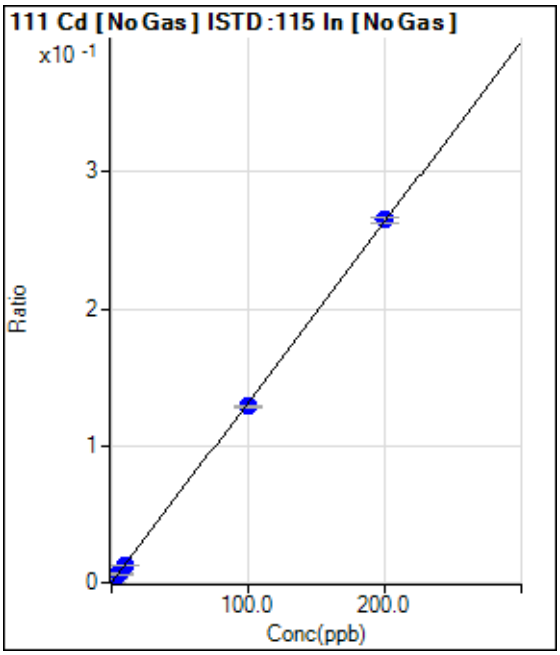
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	146.67	0.0001	P	15.4
2	☐	2.000	1.908	20469.47	0.0130	P	2.4
3	☐	5.000	4.891	50413.10	0.0331	P	1.3
4	☐	10.000	9.862	100356.62	0.0666	P	3.4
5	☐	100.000	96.644	990183.97	0.6518	P	1.6
6	☐	200.000	201.688	1989443.30	1.3602	A	0.6

y = 0.0067 * x + 9.2437E-005
R = 0.9998
DL = 0.006321
BEC = 0.01371

Weight: <None>
Min Conc: <None>

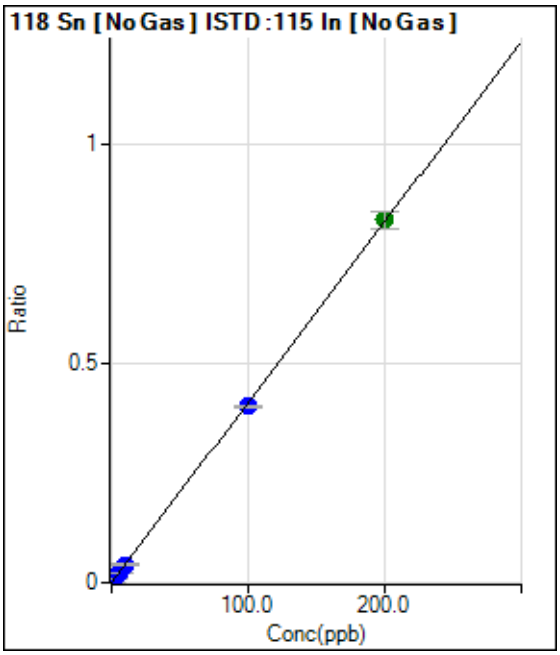


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0000	P	86.6
2	☐	2.000	1.865	3896.48	0.0025	P	5.6
3	☐	5.000	5.010	10074.65	0.0066	P	9.6
4	☐	10.000	9.856	19584.07	0.0130	P	2.3
5	☐	100.000	97.669	195535.52	0.1287	P	1.3
6	☐	200.000	201.174	387665.61	0.2651	P	1.7

y = 0.0013 * x + 8.3862E-006
R = 0.9999
DL = 0.01654
BEC = 0.006365

Weight: <None>
Min Conc: <None>

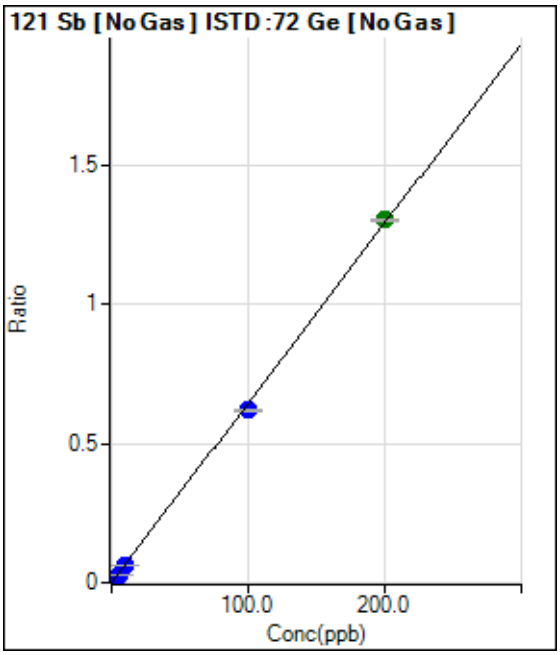
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	500.02	0.0003	P	20.2
2	☐	2.000	1.810	12249.24	0.0078	P	3.4
3	☐	5.000	4.927	31354.43	0.0206	P	1.9
4	☐	10.000	9.938	62043.18	0.0412	P	3.3
5	☐	100.000	97.613	610176.29	0.4016	P	1.0
6	☐	200.000	201.200	1209626.47	0.8275	A	4.5

y = 0.0041 * x + 3.1553E-004
R = 0.9999
DL = 0.04656
BEC = 0.07675

Weight: <None>
Min Conc: <None>

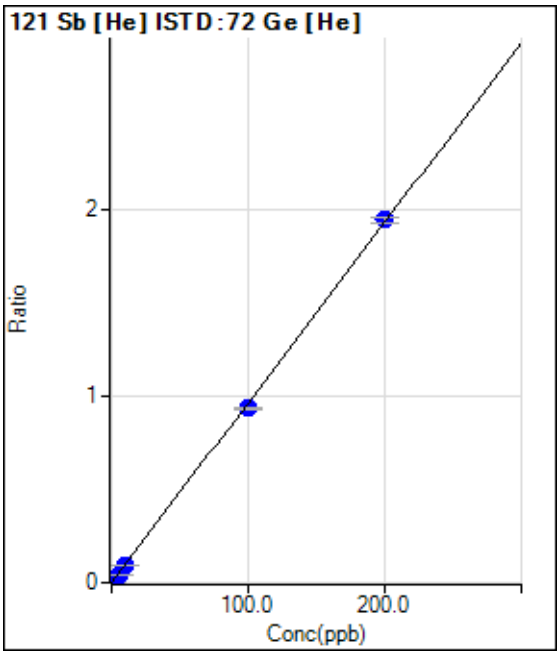


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	76.67	0.0001	P	40.4
2	☐	2.000	1.750	16190.26	0.0113	P	3.1
3	☐	5.000	4.643	41522.80	0.0300	P	1.4
4	☐	10.000	9.287	83083.10	0.0600	P	2.2
5	☐	100.000	96.008	852418.63	0.6197	P	0.7
6	☐	200.000	202.043	1748492.58	1.3042	A	0.5

y = 0.0065 * x + 5.4539E-005
R = 0.9997
DL = 0.01024
BEC = 0.00845

Weight: <None>
Min Conc: <None>

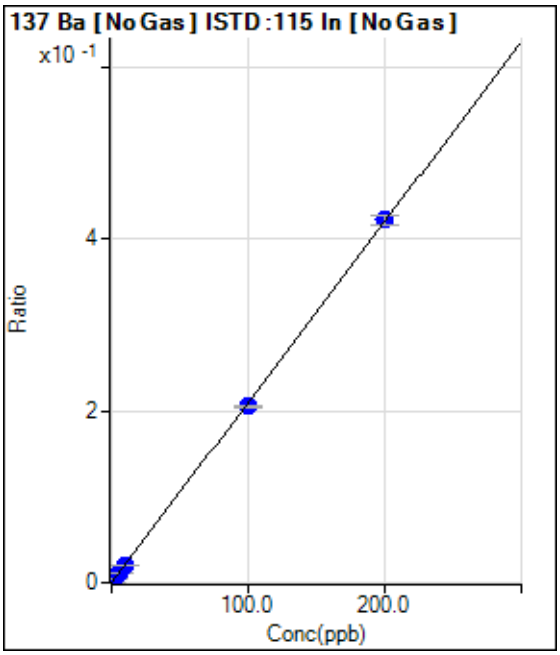
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	46.67	0.0001	P	44.5
2	☐	2.000	1.709	6565.10	0.0166	P	2.0
3	☐	5.000	4.664	17458.56	0.0450	P	1.8
4	☐	10.000	9.354	34980.47	0.0902	P	3.4
5	☐	100.000	96.832	359104.58	0.9328	P	1.2
6	☐	200.000	201.628	738358.97	1.9421	P	1.3

y = 0.0096 * x + 1.1824E-004
R = 0.9998
DL = 0.01638
BEC = 0.01228

Weight: <None>
Min Conc: <None>

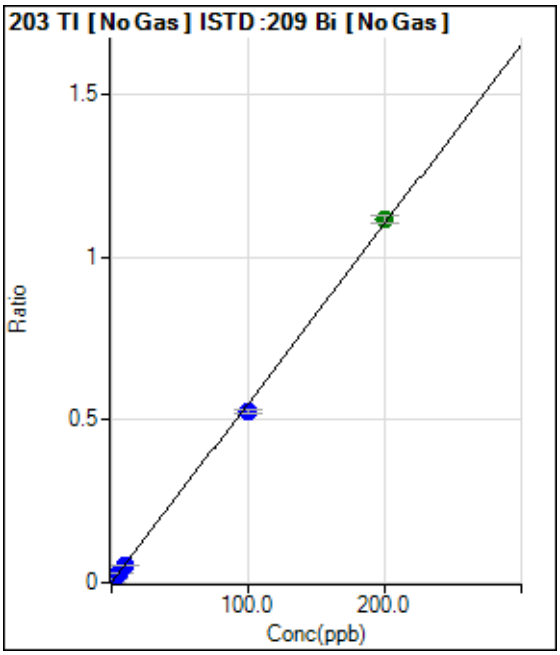


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	96.67	0.0001	P	33.0
2	☐	2.000	1.960	6605.17	0.0042	P	4.5
3	☐	5.000	4.875	15709.79	0.0103	P	3.3
4	☐	10.000	9.941	31585.44	0.0210	P	2.1
5	☐	100.000	97.848	312535.49	0.2057	P	1.3
6	☐	200.000	201.083	618077.87	0.4227	P	2.6

y = 0.0021 * x + 6.0908E-005
R = 0.9999
DL = 0.02866
BEC = 0.02898

Weight: <None>
Min Conc: <None>

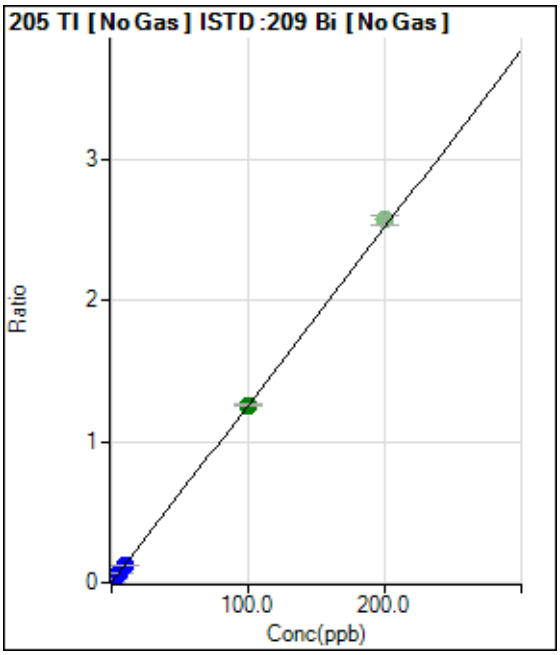
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	296.68	0.0002	P	22.9
2	☐	2.000	1.944	15493.25	0.0109	P	7.6
3	☐	5.000	4.909	37981.47	0.0272	P	2.7
4	☐	10.000	9.679	75810.66	0.0535	P	3.2
5	☐	100.000	95.448	723426.11	0.5254	P	2.5
6	☐	200.000	202.295	1486024.93	1.1134	A	2.1

y = 0.0055 * x + 2.1230E-004
R = 0.9996
DL = 0.02655
BEC = 0.03858

Weight: <None>
Min Conc: <None>

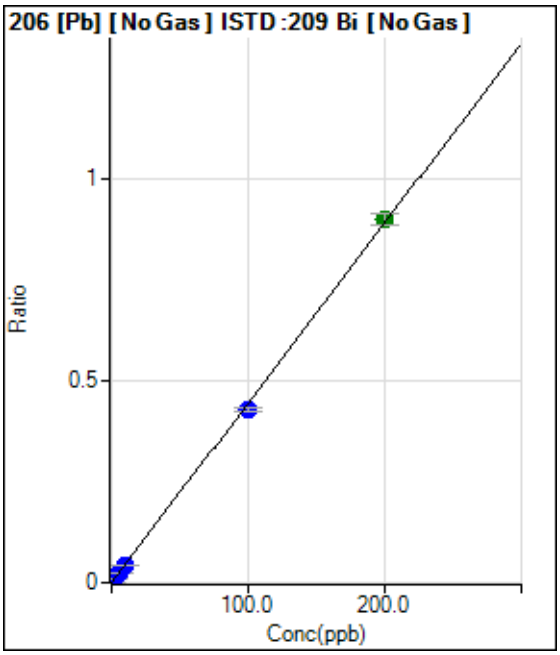


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	623.36	0.0004	P	12.2
2	☐	2.000	2.030	36848.25	0.0260	P	7.5
3	☐	5.000	5.103	90057.90	0.0646	P	4.2
4	☐	10.000	9.994	178693.57	0.1260	P	2.5
5	☐	100.000	99.995	1731015.86	1.2570	A	1.2
6	☑	200.000		3428671.10	2.5693	A	2.7

y = 0.0126 * x + 4.4517E-004
R = 1.0000
DL = 0.01294
BEC = 0.03543

Weight: <None>
Min Conc: <None>

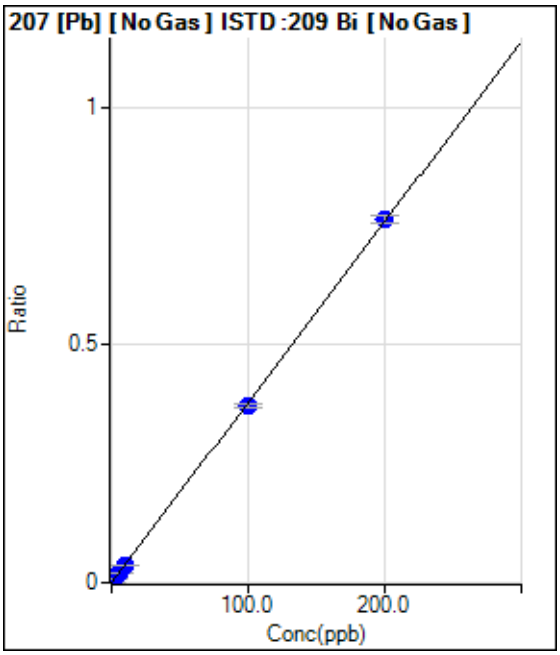
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	110.00	0.0001	P	33.8
2	☐	2.000	1.950	12413.07	0.0087	P	5.0
3	☐	5.000	4.903	30471.00	0.0218	P	3.9
4	☐	10.000	9.769	61595.63	0.0435	P	3.0
5	☐	100.000	96.263	588552.15	0.4275	P	2.1
6	☐	200.000	201.883	1196109.98	0.8964	A	3.2

y = 0.0044 * x + 7.8508E-005
R = 0.9998
DL = 0.01793
BEC = 0.01768

Weight: <None>
Min Conc: <None>

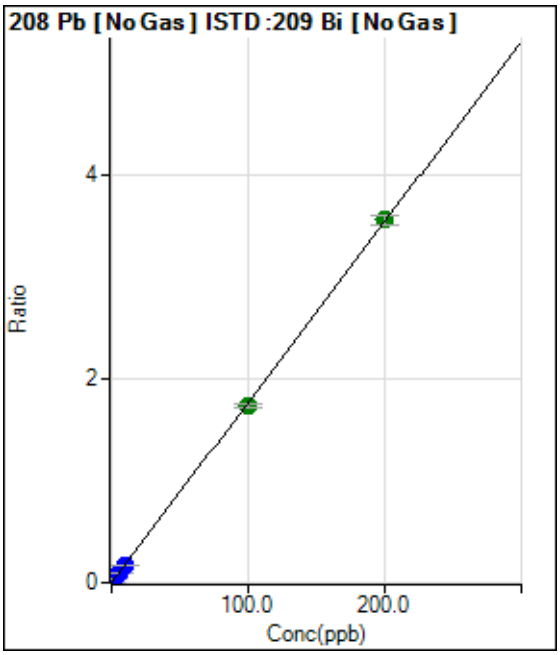


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	136.67	0.0001	P	10.1
2	☐	2.000	1.913	10454.59	0.0074	P	5.2
3	☐	5.000	4.920	26177.96	0.0188	P	3.6
4	☐	10.000	9.850	53096.89	0.0375	P	4.5
5	☐	100.000	97.841	511241.01	0.3713	P	2.3
6	☐	200.000	201.090	1018408.29	0.7631	P	2.1

y = 0.0038 * x + 9.7508E-005
R = 0.9999
DL = 0.00778
BEC = 0.0257

Weight: <None>
Min Conc: <None>

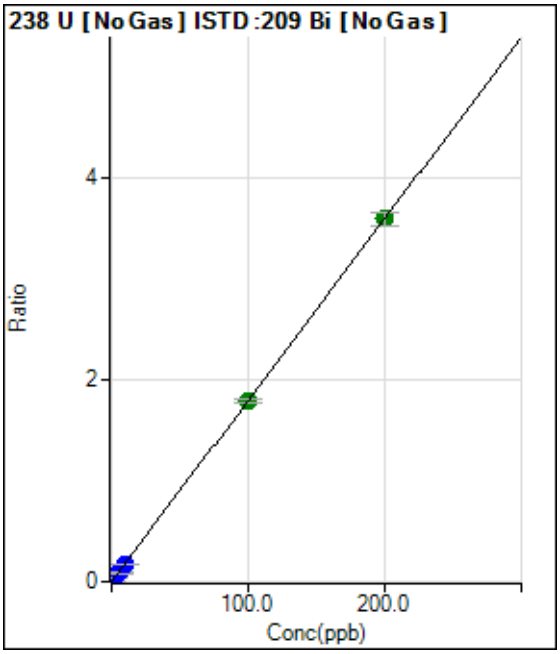
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	516.68	0.0004	P	0.8
2	☐	2.000	1.897	48227.23	0.0339	P	4.6
3	☐	5.000	4.915	121836.17	0.0873	P	3.2
4	☐	10.000	9.793	246125.43	0.1737	P	3.6
5	☐	100.000	97.834	2384131.76	1.7315	A	2.3
6	☐	200.000	201.097	4749532.98	3.5588	A	2.4

y = 0.0177 * x + 3.6821E-004
R = 0.9999
DL = 0.0004827
BEC = 0.02081

Weight: <None>
Min Conc: <None>

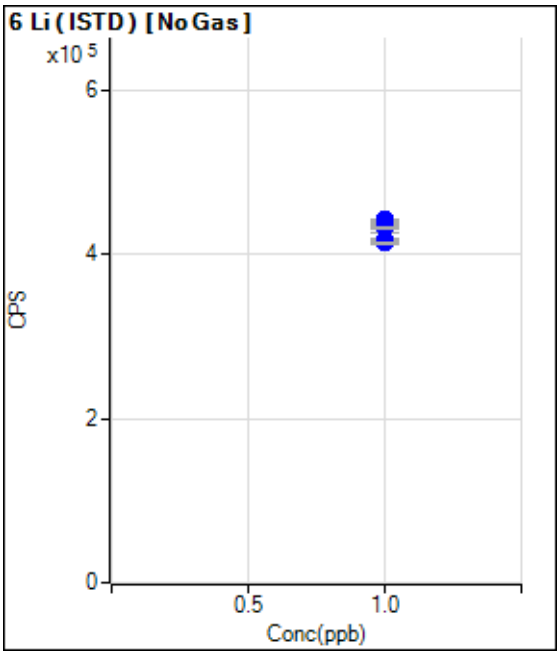


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0000	P	17.5
2	☐	2.000	1.838	46950.51	0.0330	P	3.2
3	☐	5.000	4.780	119732.31	0.0858	P	2.7
4	☐	10.000	9.507	241846.40	0.1707	P	4.4
5	☐	100.000	99.959	2470142.31	1.7941	A	2.3
6	☐	200.000	200.052	4790903.05	3.5905	A	3.5

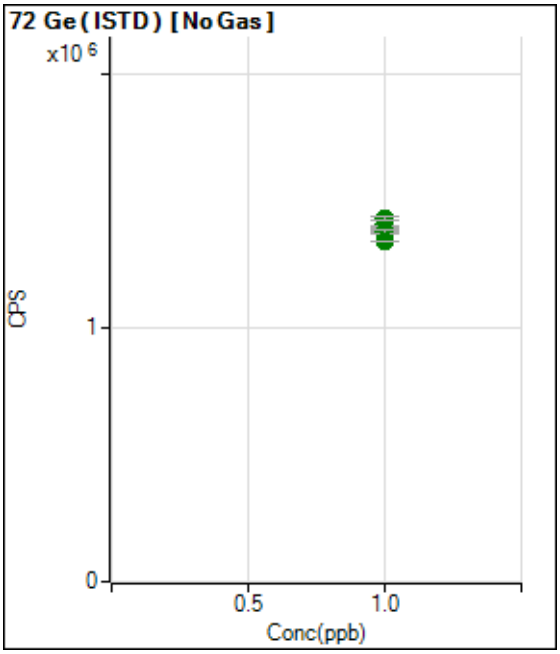
y = 0.0179 * x + 3.5533E-005
R = 1.0000
DL = 0.001042
BEC = 0.00198

Weight: <None>
Min Conc: <None>

Calibration for 019_ICV.d

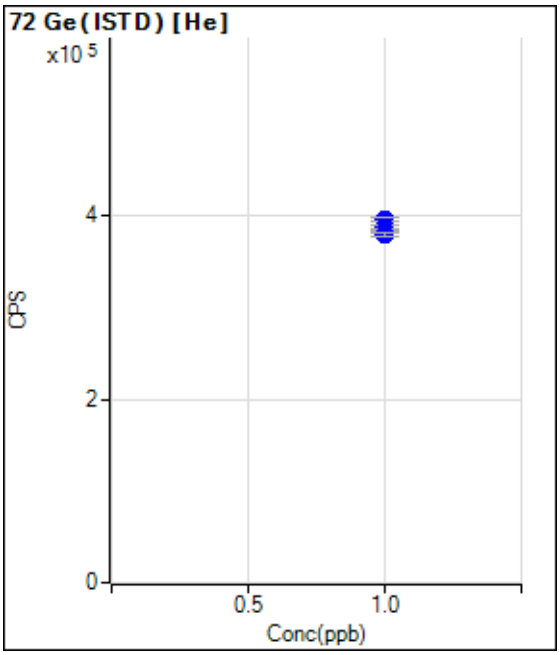


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		441332.77		P	0.7
2	☐	1.000		436404.34		P	0.7
3	☐	1.000		429962.46		P	1.7
4	☐	1.000		431749.18		P	0.5
5	☐	1.000		417280.39		P	0.6
6	☐	1.000		413388.70		P	0.6

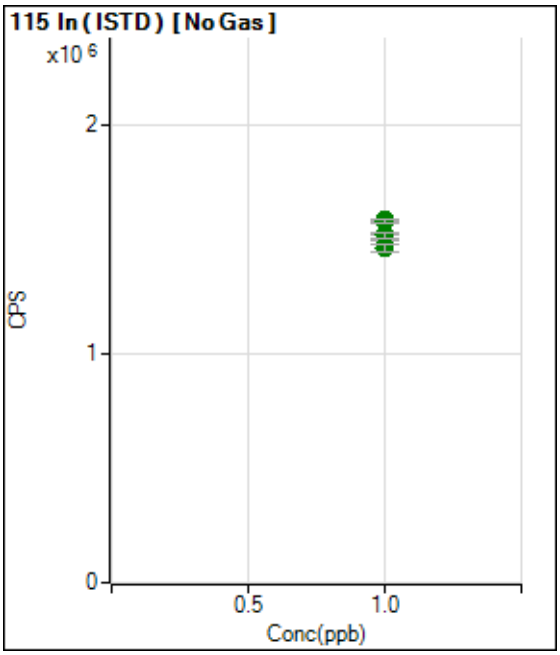


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1406469.67		A	2.3
2	☐	1.000		1426683.05		A	1.1
3	☐	1.000		1383265.81		A	1.8
4	☐	1.000		1385052.74		A	1.6
5	☐	1.000		1375465.76		A	0.7
6	☐	1.000		1340706.44		A	0.1

Calibration for 019_ICV.d

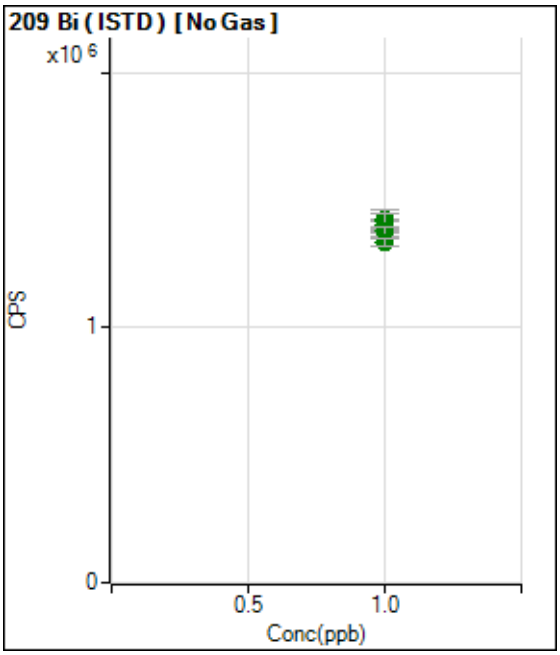


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		394589.33		P	0.3
2	☐	1.000		395867.90		P	1.2
3	☐	1.000		387670.92		P	1.5
4	☐	1.000		387860.39		P	1.2
5	☐	1.000		385003.33		P	0.5
6	☐	1.000		380223.42		P	1.2



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1585990.53		A	0.7
2	☐	1.000		1579802.71		A	0.9
3	☐	1.000		1524106.38		A	0.2
4	☐	1.000		1507474.60		A	1.9
5	☐	1.000		1519389.80		A	1.9
6	☐	1.000		1462706.31		A	2.3

Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1403422.63		A	3.0
2	☐	1.000		1423455.08		A	5.2
3	☐	1.000		1396025.34		A	3.4
4	☐	1.000		1418761.18		A	4.2
5	☐	1.000		1377406.65		A	2.9
6	☐	1.000		1335090.55		A	2.5

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	021LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T10:46:28-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	012CALB.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	1.994	1.994	3.53	42026	0.00	2	
Be	9	1	No Gas	1.818	1.818	3.10	4189	0.04	2	
V	51	2	He	1.649	1.649	2.14	10832	0.02	2	
Cr	52	2	He	1.884	1.884	6.35	16280	0.01	2	
Fe	56	2	He	208.736	208.736	0.73	874927	0.02	200	
Se	78	2	He	2.489	2.489	3.34	298	0.84	2	
As	75	2	He	1.906	1.906	3.20	1566	0.12	2	
Ca	44	2	He	198.191	198.191	3.09	7759	2.55	200	
Na	23	2	He	212.658	212.658	1.16	259300	0.08	200	
Mg	24	2	He	220.953	220.953	1.10	112597	0.20	200	
K	39	2	He	198.559	198.559	2.68	290513	0.07	200	
Mn	55	2	He	2.021	2.021	4.68	8473	0.02	2	
Co	59	2	He	1.981	1.981	2.55	12633	0.02	2	
Ni	60	2	He	2.027	2.027	5.84	3250	0.06	2	
Cu	63	2	He	2.000	2.000	6.83	8366	0.02	2	
Zn	66	2	He	1.830	1.830	17.68	1860	0.10	2	
Al	27	2	He	2.393	2.393	18.32	1880	0.13	2	
B	11	1	No Gas	12.407	12.407	2.68	24039	0.05	10	
Al	27	1	No Gas	1.968	1.968	1.87	45983	0.00	2	
Si	28	1	No Gas	1.275	1.275	106.84	561236	0.00	10	NewName Main CR1 Failed
Ag	107	1	No Gas	1.958	1.958	1.86	21030	0.01	2	
Cd	111	1	No Gas	1.885	1.885	4.55	3943	0.05	2	
Sr	88	1	No Gas	2.009	2.009	1.64	42986	0.00	2	
Mo	95	1	No Gas	1.966	1.966	5.01	8750	0.02	2	
Sn	118	1	No Gas	1.944	1.944	3.93	13140	0.01	2	
Sb	121	1	No Gas	1.869	1.869	3.09	17565	0.01	2	
Ba	137	1	No Gas	1.927	1.927	6.72	6505	0.03	2	
Tl	205	1	No Gas	2.053	2.053	3.46	38496	0.01	2	
Tl	203	1	No Gas	2.008	2.008	6.30	16231	0.01	2	
Pb	208	1	No Gas	1.994	1.994	4.93	51392	0.00	2	
U	238	1	No Gas	1.952	1.952	3.77	50578	0.00	2	
Ca	43	2	He	202.593	202.593	24.17	443	45.70	200	
Sb	121	2	He	1.921	1.921	3.54	7486	0.03	2	
Ti	47	2	He	2.068	2.068	15.14	377	0.55	200	
Cu	63	1	No Gas	1.964	1.964	4.31	17261	0.01	2	
Se	82	1	No Gas	1.569	1.569	30.58	371	0.42	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	454346	0.35	441333	102.95	70	120	
Ge	72	2	He	402087	1.10	394589	101.90	70	120	
Ge	72	1	No Gas	1449789	0.75	1406470	103.08	70	120	
In	115	1	No Gas	1582045	0.47	1585991	99.75	70	120	
Bi	209	1	No Gas	1442860	2.73	1403423	102.81	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	023_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T10:50:48-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	012CALB.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	0.027	129.0	28870	1.3	0.5	
Be	9	1	No Gas	0.007	92.6	28	53.9	0.5	
V	51	2	He	-0.280	-8.3	2544	3.3	2.5	
Cr	52	2	He	-0.064	-60.5	7325	2.1	2.5	
Fe	56	2	He	0.289	23.5	18683	2.3	100	
Se	78	2	He	0.171	73.6	139	7.2	1	
As	75	2	He	-0.060	-56.9	140	18.6	2.5	
Ca	44	2	He	0.311	1129.0	1050	10.8	100	
Na	23	2	He	-5.958	-6.8	80816	0.8	100	
Mg	24	2	He	0.472	32.1	880	8.2	100	
K	39	2	He	-19.359	-15.1	144031	0.7	100	
Mn	55	2	He	0.066	31.2	1343	5.0	2.5	
Co	59	2	He	0.004	147.0	177	19.9	2.5	
Ni	60	2	He	0.074	11.1	263	4.4	2.5	
Cu	63	2	He	0.062	28.0	863	8.8	1	
Zn	66	2	He	0.494	10.4	763	6.6	2.5	
Al	27	2	He	-0.063	-385.5	1027	8.2	5	
B	11	1	No Gas	0.945	12.6	8014	2.6	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-0.184	-70.8	24111	4.3	5	
Si	28	1	No Gas	-8.219	-12.6	505903	0.2	10	
Ag	107	1	No Gas	0.006	40.6	213	11.8	2.5	
Cd	111	1	No Gas	-0.002	-481.1	10	179.7	1	
Sr	88	1	No Gas	0.000	2514.2	860	6.5	2.5	
Mo	95	1	No Gas	0.044	98.7	357	55.1	2.5	
Sn	118	1	No Gas	0.089	7.9	1097	3.8	5	
Sb	121	1	No Gas	0.083	11.5	847	11.8	2.5	
Ba	137	1	No Gas	0.084	20.7	383	15.7	2.5	
Tl	205	1	No Gas	0.014	21.9	910	5.7	1	
Tl	203	1	No Gas	0.006	67.8	363	10.4	1	
Pb	208	1	No Gas	0.009	56.9	767	13.1	2.5	
U	238	1	No Gas	0.010	17.4	313	17.6	2.5	
Ca	43	2	He	0.794	1843.6	37	83.3	100	
Sb	121	2	He	0.063	20.6	300	17.6	2.5	
Ti	47	2	He	0.034	241.8	13	114.6	2.5	
Se	82	1	No Gas	-1.014	-32.2	-39	-133.1	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	455309	1.15	441333	103.17	70	120	
Ge	72	2	He	412974	0.82	394589	104.66	70	120	
Ge	72	1	No Gas	1437457	1.31	1406470	102.20	70	120	
In	115	1	No Gas	1607442	0.52	1585991	101.35	70	120	
Bi	209	1	No Gas	1466422	4.21	1403423	104.49	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	025ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T10:56:51-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	012CALB.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	0.096	33.0	27869	0.8	0	ICSA Main CR1 Failed
Be	9	1	No Gas	0.002	240.4	15	57.7	0	ICSA Main CR1 Failed
V	51	2	He	-0.034	-50.5	3417	2.3	0	ICSA Main CR1 Failed
Cr	52	2	He	1.402	3.5	13524	1.5	0	ICSA Main CR1 Failed
Fe	56	2	He	93149.520	1.9	369379955	1.7	0	
Se	78	2	He	0.295	182.9	139	26.7	0	ICSA Main CR1 Failed
As	75	2	He	0.166	14.1	290	6.1	0	ICSA Main CR1 Failed
Ca	44	2	He	87811.347	2.4	2885209	2.4	0	
Na	23	2	He	94757.273	1.3	75611106	1.0	0	
Mg	24	2	He	94602.369	0.4	46256291	1.0	0	
K	39	2	He	92937.544	0.9	61973814	0.7	0	
Mn	55	2	He	0.631	1.9	3260	1.8	0	ICSA Main CR1 Failed
Co	59	2	He	0.374	5.7	2420	5.1	0	ICSA Main CR1 Failed
Ni	60	2	He	0.810	4.7	1337	5.0	0	ICSA Main CR1 Failed
Cu	63	2	He	0.206	16.7	1350	9.0	0	ICSA Main CR1 Failed
Zn	66	2	He	2.434	9.2	2284	8.6	0	ICSA Main CR1 Failed
Al	27	2	He	90443.573	1.8	31310743	1.4	0	
B	11	1	No Gas	1.083	33.4	7794	5.4	0	
Al	27	1	No Gas	89666.875	0.8	848363267	0.9	0	
Si	28	1	No Gas	16.570	9.7	605046	0.6	0	ICSA Main CR1 Failed
Ag	107	1	No Gas	0.142	11.6	1567	9.1	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	0.502	21.4	1003	22.4	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	4.451	1.2	89052	0.8	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	1828.247	1.2	7554433	1.3	0	
Sn	118	1	No Gas	0.040	39.4	720	13.2	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.257	2.9	2334	4.2	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.652	8.2	2144	9.1	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	-0.006	-73.4	497	18.3	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	-0.002	-190.2	273	5.6	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.159	8.4	4264	4.2	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.009	19.9	253	18.7	0	ICSA Main CR1 Failed
Ca	43	2	He	92299.635	2.0	180247	2.0	0	
Sb	121	2	He	0.235	20.4	923	19.5	0	ICSA Main CR1 Failed
Ti	47	2	He	1957.996	1.8	337709	1.7	0	
Se	82	1	No Gas	-0.676	-14.9	14	107.6	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	432543	1.54	441333	98.01	70	120	
Ge	72	2	He	387934	0.80	394589	98.31	70	120	
Ge	72	1	No Gas	1363567	1.62	1406470	96.95	70	120	
In	115	1	No Gas	1495752	1.45	1585991	94.31	70	120	
Bi	209	1	No Gas	1342033	3.93	1403423	95.63	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	026ICSB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T10:59:04-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	012CALB.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	96.543	0.862	632864	0.40	100	96.5	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	90.122	1.148	193444	0.29	100	90.1	80	120	
V	51	2	He	95.855	1.230	404352	0.66	100	95.9	80	120	
Cr	52	2	He	95.770	0.584	441575	1.06	100	95.8	80	120	
Fe	56	2	He	103855.824	0.760	412276741	1.36	100	103855.8	80	120	
Se	78	2	He	95.766	0.240	6598	0.71	100	95.8	80	120	
As	75	2	He	93.757	1.735	66032	2.11	100	93.8	80	120	
Ca	44	2	He	97087.204	1.197	3193383	1.90	100	97087.2	80	120	
Na	23	2	He	106590.490	1.758	85127865	1.37	100	106590.5	80	120	
Mg	24	2	He	107416.118	2.876	52570699	2.59	100	107416.1	80	120	ICSB Main CR1 Failed
K	39	2	He	105220.650	1.404	70218077	1.56	100	105220.7	80	120	ICSB Main CR1 Failed
Mn	55	2	He	96.068	1.053	341065	0.27	100	96.1	80	120	
Co	59	2	He	92.011	0.805	560240	0.04	100	92.0	80	120	
Ni	60	2	He	90.570	0.810	134286	0.60	100	90.6	80	120	
Cu	63	2	He	91.403	0.637	343639	1.40	100	91.4	80	120	
Zn	66	2	He	93.118	1.251	75564	1.84	100	93.1	80	120	
Al	27	2	He	92324.476	1.580	31994405	1.21	100	92324.5	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	462.287	1.031	610805	0.46	100	462.3	80	120	
Al	27	1	No Gas	90469.201	0.297	861756467	0.75	100	90469.2	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	481.611	2.346	2973191	1.53	100	481.6	80	120	
Ag	107	1	No Gas	89.799	1.384	889650	1.31	100	89.8	80	120	
Cd	111	1	No Gas	91.880	0.729	177844	0.99	100	91.9	80	120	
Sr	88	1	No Gas	101.605	2.188	1979372	1.37	100	101.6	80	120	
Mo	95	1	No Gas	1937.030	2.280	7859987	1.50	100	1937.0	80	120	
Sn	118	1	No Gas	93.927	0.628	567711	0.68	100	93.9	80	120	
Sb	121	1	No Gas	94.229	0.669	834942	0.51	100	94.2	80	120	
Ba	137	1	No Gas	96.488	0.913	298015	1.46	100	96.5	80	120	
Tl	205	1	No Gas	86.355	3.528	1443672	1.05	100	86.4	80	120	
Tl	203	1	No Gas	84.532	2.954	608206	0.43	100	84.5	80	120	
Pb	208	1	No Gas	95.570	2.055	2210950	0.50	100	95.6	80	120	
U	238	1	No Gas	98.711	2.018	2315772	0.51	100	98.7	80	120	
Ca	43	2	He	103553.441	0.333	202431	0.97	100	103553.4	80	120	
Sb	121	2	He	96.741	0.992	361858	0.48	100	96.7	80	120	
Ti	47	2	He	2101.800	0.937	362872	0.16	100	2101.8	80	120	ICSB Main CR1 Failed
Cu	63	1	No Gas	90.100	0.868	701308	0.04	100	90.1	80	120	
Se	82	1	No Gas	91.566	6.300	13872	5.58	100	91.6	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	424571	0.88	441333	96.20	70	120	
Ge	72	2	He	388327	0.78	394589	98.41	70	120	
Ge	72	1	No Gas	1372713	0.84	1406470	97.60	70	120	
In	115	1	No Gas	1468937	0.83	1585991	92.62	70	120	
Bi	209	1	No Gas	1307555	2.52	1403423	93.17	70	120	

Sample Report

Sample Table

Sample Name	LLCCV5
Data File Name	029LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T11:11:33-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	012CALB.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	4.764	4.764	5.65	60637	0.01	5	
Be	9	1	No Gas	4.348	4.348	4.50	9790	0.04	5	
V	51	2	He	4.527	4.527	0.20	24023	0.02	5	
Cr	52	2	He	4.695	4.695	1.56	30414	0.02	5	
Fe	56	2	He	492.723	492.723	1.44	2106804	0.02	500	
Se	78	2	He	5.079	5.079	8.70	495	1.03	5	
As	75	2	He	4.503	4.503	4.12	3563	0.13	5	
Ca	44	2	He	468.986	468.986	1.87	17518	2.68	500	
Na	23	2	He	518.381	518.381	2.05	527991	0.10	500	
Mg	24	2	He	525.003	525.003	0.50	275090	0.19	500	
K	39	2	He	463.482	463.482	2.32	488047	0.09	500	
Mn	55	2	He	5.828	5.828	3.47	23130	0.03	5	
Co	59	2	He	4.702	4.702	3.58	30725	0.02	5	
Ni	60	2	He	4.778	4.778	1.20	7706	0.06	5	
Cu	63	2	He	4.669	4.669	1.38	19337	0.02	5	
Zn	66	2	He	4.874	4.874	3.46	4548	0.11	5	
Al	27	2	He	5.478	5.478	7.23	3084	0.18	5	
B	11	1	No Gas	21.377	21.377	2.72	36225	0.06	25	
Al	27	1	No Gas	5.344	5.344	3.48	80600	0.01	5	
Si	28	1	No Gas	5.980	5.980	52.69	591286	0.00	25	NewName2 Main CR1 Failed
Ag	107	1	No Gas	4.636	4.636	0.39	50932	0.01	5	
Cd	111	1	No Gas	4.597	4.597	3.75	9849	0.05	5	
Sr	88	1	No Gas	4.726	4.726	2.36	102625	0.00	5	
Mo	95	1	No Gas	4.576	4.576	1.81	20693	0.02	5	
Sn	118	1	No Gas	4.652	4.652	1.93	31572	0.01	5	
Sb	121	1	No Gas	4.376	4.376	2.95	41366	0.01	5	
Ba	137	1	No Gas	4.735	4.735	3.58	16260	0.03	5	
Tl	205	1	No Gas	4.649	4.649	3.74	91458	0.01	5	
Tl	203	1	No Gas	4.626	4.626	4.65	39189	0.01	5	
Pb	208	1	No Gas	4.584	4.584	3.59	124431	0.00	5	
U	238	1	No Gas	4.493	4.493	2.98	123214	0.00	5	
Ca	43	2	He	459.045	459.045	2.21	993	46.21	500	
Sb	121	2	He	4.321	4.321	3.08	17312	0.02	5	
Ti	47	2	He	4.521	4.521	10.67	840	0.54	5	
Cu	63	1	No Gas	4.675	4.675	2.05	39849	0.01	5	
Se	82	1	No Gas	4.082	4.082	13.19	778	0.52	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	449817	0.68	441333	101.92	70	120	
Ge	72	2	He	414779	1.47	394589	105.12	70	120	
Ge	72	1	No Gas	1462283	2.59	1406470	103.97	70	120	
In	115	1	No Gas	1624351	1.43	1585991	102.42	70	120	
Bi	209	1	No Gas	1528495	4.04	1403423	108.91	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	031_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T11:21:32-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	012CALB.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	98.459	0.983	656860	1.67	100	98.5	90	110	
Be	9	1	No Gas	93.161	0.597	197747	1.15	100	93.2	90	110	
V	51	2	He	95.819	1.073	429374	1.14	100	95.8	90	110	
Cr	52	2	He	96.104	1.336	470652	1.29	100	96.1	90	110	
Fe	56	2	He	9509.032	1.938	40111692	1.98	10000	95.1	90	110	
Se	78	2	He	93.634	3.320	6855	3.34	100	93.6	90	110	
As	75	2	He	92.340	1.004	69081	1.08	100	92.3	90	110	
Ca	44	2	He	9667.949	0.967	338701	1.05	10000	96.7	90	110	
Na	23	2	He	9832.982	0.222	8419974	0.15	10000	98.3	90	110	
Mg	24	2	He	9764.155	0.958	5076911	0.91	10000	97.6	90	110	
K	39	2	He	9760.422	0.784	7061778	0.84	10000	97.6	90	110	
Mn	55	2	He	96.299	1.200	363175	1.24	100	96.3	90	110	
Co	59	2	He	94.273	1.753	609747	1.77	100	94.3	90	110	
Ni	60	2	He	94.674	1.136	149100	1.05	100	94.7	90	110	
Cu	63	2	He	95.203	0.849	380153	0.76	100	95.2	90	110	
Zn	66	2	He	96.273	0.801	82970	0.86	100	96.3	90	110	
Al	27	2	He	97.127	1.850	36802	1.77	100	97.1	90	110	
B	11	1	No Gas	471.983	1.354	623399	0.83	500	94.4	90	110	
Al	27	1	No Gas	95.385	3.110	947851	2.35	100	95.4	90	110	
Si	28	1	No Gas	461.412	0.829	2916051	2.11	5000	9.2	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	93.894	3.032	992912	1.31	100	93.9	90	110	
Cd	111	1	No Gas	94.554	3.698	195323	1.42	100	94.6	90	110	
Sr	88	1	No Gas	96.985	0.935	2017556	1.55	100	97.0	90	110	
Mo	95	1	No Gas	94.853	2.898	411032	1.36	100	94.9	90	110	
Sn	118	1	No Gas	95.389	1.695	615498	0.68	100	95.4	90	110	
Sb	121	1	No Gas	95.712	2.762	861200	1.03	100	95.7	90	110	
Ba	137	1	No Gas	97.000	1.661	319839	1.19	100	97.0	90	110	
Tl	205	1	No Gas	91.718	3.008	1751594	1.18	100	91.7	90	110	
Tl	203	1	No Gas	89.749	4.580	737263	0.58	100	89.7	90	110	CCV Main CR1-2 Failed
Pb	208	1	No Gas	92.388	3.356	2440836	0.96	100	92.4	90	110	
U	238	1	No Gas	93.544	3.271	2506201	1.02	100	93.5	90	110	
Ca	43	2	He	9874.599	2.029	20536	1.99	10000	98.7	90	110	
Sb	121	2	He	93.148	1.155	370116	1.19	100	93.1	90	110	
Ti	47	2	He	97.175	3.582	17829	3.60	100	97.2	90	110	
Cu	63	1	No Gas	95.393	0.844	754125	1.16	100	95.4	90	110	
Se	82	1	No Gas	92.816	2.892	14290	4.57	100	92.8	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	424519	0.96	441333	96.19	70	120	
Ge	72	2	He	412486	0.09	394589	104.54	70	120	
Ge	72	1	No Gas	1394348	1.73	1406470	99.14	70	120	
In	115	1	No Gas	1568575	2.34	1585991	98.90	70	120	
Bi	209	1	No Gas	1494096	4.21	1403423	106.46	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	032_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T11:23:40-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	012CALB.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	0.134	45.6	28325	1.8	0.5	
Be	9	1	No Gas	0.152	5.4	343	5.1	0.5	
V	51	2	He	-0.112	-13.0	3285	2.2	2.5	
Cr	52	2	He	0.021	319.2	7712	3.6	2.5	
Fe	56	2	He	8.746	18.3	54223	12.1	100	
Se	78	2	He	0.325	37.8	150	6.1	2	
As	75	2	He	0.078	35.0	242	8.8	2.5	
Ca	44	2	He	7.927	10.6	1313	1.8	100	
Na	23	2	He	4.590	63.8	89519	2.3	100	
Mg	24	2	He	9.734	15.9	5685	13.8	100	
K	39	2	He	-20.074	-16.2	143142	1.1	100	
Mn	55	2	He	0.075	15.2	1373	3.6	2.5	
Co	59	2	He	0.083	9.0	690	6.6	2.5	
Ni	60	2	He	0.113	43.4	323	23.6	2.5	
Cu	63	2	He	0.078	30.1	923	9.8	2	
Zn	66	2	He	0.248	37.9	550	14.2	2.5	
Al	27	2	He	0.261	56.3	1143	4.8	5	
B	11	1	No Gas	2.840	8.3	10212	4.4	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.102	-44.2	24575	0.8	5	
Si	28	1	No Gas	-12.570	-11.9	475751	0.5	10	
Ag	107	1	No Gas	0.129	10.7	1570	8.8	2.5	
Cd	111	1	No Gas	0.152	32.8	338	29.6	1	
Sr	88	1	No Gas	0.155	7.4	4214	3.8	2.5	
Mo	95	1	No Gas	0.183	19.8	983	15.6	2.5	
Sn	118	1	No Gas	0.266	2.7	2294	4.1	5	
Sb	121	1	No Gas	0.558	10.6	5178	8.7	2.5	
Ba	137	1	No Gas	0.184	11.0	730	10.3	2.5	
Tl	205	1	No Gas	0.380	16.8	7949	18.8	1	
Tl	203	1	No Gas	0.348	25.6	3190	26.1	1	
Pb	208	1	No Gas	0.158	10.1	4710	6.7	2.5	
U	238	1	No Gas	0.169	3.5	4581	1.5	2.5	
Ca	43	2	He	12.133	79.2	60	33.3	100	
Sb	121	2	He	0.405	6.6	1657	5.9	2.5	
Ti	47	2	He	0.198	62.8	43	53.3	2.5	
Cu	63	1	No Gas	0.190	28.7	2640	15.6	2.5	
Se	82	1	No Gas	-0.261	-117.9	78	59.1	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	435600	1.25	441333	98.70	70	120	
Ge	72	2	He	411865	0.56	394589	104.38	70	120	
Ge	72	1	No Gas	1416779	1.79	1406470	100.73	70	120	
In	115	1	No Gas	1629552	2.63	1585991	102.75	70	120	
Bi	209	1	No Gas	1495259	5.02	1403423	106.54	70	120	

Sample Report

Sample Table

Sample Name	MBLK-198377
Data File Name	033SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T11:27:19-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 198377
ISTD Ref FileName	012CALB.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	-0.044	-0.044	-22.34	27263	0.00	2000	
Be	9	1	No Gas	0.006	0.006	98.01	25	0.02	2000	
V	51	2	He	-0.224	-0.224	-4.15	2791	-0.01	2000	
Cr	52	2	He	-0.154	-0.154	-27.21	6889	0.00	2000	
Fe	56	2	He	1.324	1.324	4.12	23036	0.01	200000	
Se	78	2	He	0.536	0.536	14.71	165	0.32	2000	
As	75	2	He	-0.044	-0.044	-6.85	152	-0.03	2000	
Ca	44	2	He	3.225	3.225	130.39	1153	0.28	200000	
Na	23	2	He	-2.972	-2.972	-47.42	83277	0.00	200000	
Mg	24	2	He	11.598	11.598	4.10	6665	0.17	200000	
K	39	2	He	-26.046	-26.046	-10.32	139182	-0.02	200000	
Mn	55	2	He	0.052	0.052	112.87	1287	0.00	2000	
Co	59	2	He	-0.012	-0.012	-104.23	77	-0.02	2000	
Ni	60	2	He	0.021	0.021	76.35	180	0.01	2000	
Cu	63	2	He	0.033	0.033	73.35	747	0.00	2000	
Zn	66	2	He	0.595	0.595	49.02	847	0.07	2000	
Al	27	2	He	4.969	4.969	4.30	2880	0.17	2000	
B	11	1	No Gas	-0.369	-0.369	-17.83	5926	-0.01	2000	
Al	27	1	No Gas	4.453	4.453	5.54	69675	0.01	2000	
Si	28	1	No Gas	81.023	81.023	1.67	971653	0.01	2000	
Ag	107	1	No Gas	0.013	0.013	12.99	290	0.00	2000	
Cd	111	1	No Gas	0.005	0.005	237.41	23	0.02	2000	
Sr	88	1	No Gas	0.016	0.016	38.63	1203	0.00	2000	
Mo	95	1	No Gas	0.010	0.010	66.03	207	0.01	2000	
Sn	118	1	No Gas	0.029	0.029	26.25	707	0.00	2000	
Sb	121	1	No Gas	0.072	0.072	0.99	737	0.01	2000	
Ba	137	1	No Gas	0.034	0.034	17.96	213	0.02	2000	
Tl	205	1	No Gas	0.003	0.003	124.98	763	0.00	2000	
Tl	203	1	No Gas	0.004	0.004	223.24	370	0.00	2000	
Pb	208	1	No Gas	0.013	0.013	52.33	963	0.00	2000	
U	238	1	No Gas	0.006	0.006	9.39	230	0.00	2000	
Ca	43	2	He	5.572	5.572	173.36	47	11.94	200000	
Sb	121	2	He	0.068	0.068	7.91	320	0.02	2000	
Ti	47	2	He	0.052	0.052	299.93	17	0.31	2000	
Cu	63	1	No Gas	0.031	0.031	87.15	1367	0.00	2000	
Zn	66	1	No Gas	0.565	0.565	7.52	2350	0.02	2000	
Se	82	1	No Gas	-0.511	-0.511	-145.88	41	-1.24	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	437245	0.27	441333	99.07	70	120	
Ge	72	2	He	412678	2.00	394589	104.58	70	120	
Ge	72	1	No Gas	1423834	2.46	1406470	101.23	70	120	
In	115	1	No Gas	1622407	0.32	1585991	102.30	70	120	

Sample Report

Bi	209	1	No Gas	1594844	8.46	1403423	113.64	70	120	

Sample Report

Sample Table

Sample Name	HS23071289-11
Data File Name	035SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T11:31:37-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 198377
ISTD Ref FileName	012CALB.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	3.817	3.817	2.76	51860	0.01	2000	
Be	9	1	No Gas	0.156	0.156	17.28	347	0.05	2000	
V	51	2	He	2.101	2.101	4.10	13204	0.02	2000	
Cr	52	2	He	0.476	0.476	28.56	9984	0.00	2000	
Fe	56	2	He	1223.851	1223.851	0.90	5211325	0.02	200000	
Se	78	2	He	0.585	0.585	13.58	170	0.34	2000	
As	75	2	He	0.916	0.916	9.72	873	0.10	2000	
Ca	44	2	He	6032.848	6032.848	2.07	213100	2.83	200000	
Na	23	2	He	8199.346	8199.346	1.81	7080745	0.12	200000	
Mg	24	2	He	3184.984	3184.984	0.24	1667297	0.19	200000	
K	39	2	He	3354.697	3354.697	1.86	2547116	0.13	200000	
Mn	55	2	He	120.095	120.095	1.46	455566	0.03	2000	
Co	59	2	He	0.804	0.804	9.72	5388	0.01	2000	
Ni	60	2	He	3.375	3.375	12.93	5488	0.06	2000	
Cu	63	2	He	2.408	2.408	2.92	10277	0.02	2000	
Zn	66	2	He	9.398	9.398	2.72	8459	0.11	2000	
Al	27	2	He	378.669	378.669	1.23	141349	0.27	2000	
B	11	1	No Gas	22.563	22.563	4.54	36212	0.06	2000	
Al	27	1	No Gas	367.288	367.288	1.00	3649604	0.01	2000	
Si	28	1	No Gas	4815.701	4815.701	2.84	25905346	0.02	2000	>LDR
Ag	107	1	No Gas	0.053	0.053	27.52	730	0.01	2000	
Cd	111	1	No Gas	0.049	0.049	27.48	119	0.04	2000	
Sr	88	1	No Gas	103.070	103.070	1.32	2215953	0.00	2000	
Mo	95	1	No Gas	0.217	0.217	10.34	1133	0.02	2000	
Sn	118	1	No Gas	0.142	0.142	12.19	1460	0.01	2000	
Sb	121	1	No Gas	0.224	0.224	9.93	2134	0.01	2000	
Ba	137	1	No Gas	78.419	78.419	1.51	267268	0.03	2000	
Tl	205	1	No Gas	0.759	0.759	31.68	15491	0.00	2000	
Tl	203	1	No Gas	0.766	0.766	29.50	6752	0.01	2000	
Pb	208	1	No Gas	1.271	1.271	3.68	34633	0.00	2000	
U	238	1	No Gas	0.245	0.245	6.37	6712	0.00	2000	
Ca	43	2	He	6204.290	6204.290	1.95	13000	47.73	200000	
Sb	121	2	He	0.178	0.178	17.67	760	0.02	2000	
Ti	47	2	He	1.463	1.463	72.51	277	0.53	2000	
Cu	63	1	No Gas	2.456	2.456	0.61	20893	0.01	2000	
Zn	66	1	No Gas	9.402	9.402	1.26	23017	0.04	2000	
Se	82	1	No Gas	-0.635	-0.635	-81.19	21	-2.97	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	430188	0.88	441333	97.47	70	120	
Ge	72	2	He	415178	0.79	394589	105.22	70	120	
Ge	72	1	No Gas	1421991	0.68	1406470	101.10	70	120	
In	115	1	No Gas	1621049	1.37	1585991	102.21	70	120	

Sample Report

Bi	209	1	No Gas	1516184	3.91	1403423	108.03	70	120	

Sample Report

Sample Table

Sample Name	HS23071289-11SD
Data File Name	036SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T11:33:45-05:00
Sample Type	Sample
Dilution	5
Comment	TW DOD B 198377
ISTD Ref FileName	012CALB.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	0.665	3.324	12.04	30994	0.00	2000	
Be	9	1	No Gas	0.031	0.154	3.94	77	0.04	2000	
V	51	2	He	0.542	2.709	7.23	6117	0.01	2000	
Cr	52	2	He	0.191	0.954	36.07	8443	0.00	2000	
Fe	56	2	He	255.077	1275.386	3.75	1079474	0.02	200000	
Se	78	2	He	0.415	2.077	64.16	155	0.27	2000	
As	75	2	He	0.225	1.123	34.80	348	0.06	2000	
Ca	44	2	He	1217.622	6088.108	2.53	43034	2.83	200000	
Na	23	2	He	1691.474	8457.372	0.41	1500967	0.11	200000	
Mg	24	2	He	692.368	3461.842	1.28	356196	0.19	200000	
K	39	2	He	664.314	3321.572	1.28	619809	0.11	200000	
Mn	55	2	He	24.475	122.375	2.01	91979	0.03	2000	
Co	59	2	He	0.158	0.789	1.73	1160	0.01	2000	
Ni	60	2	He	0.639	3.193	6.21	1137	0.06	2000	
Cu	63	2	He	0.509	2.545	1.58	2610	0.02	2000	
Zn	66	2	He	1.805	9.023	8.45	1863	0.10	2000	
Al	27	2	He	78.911	394.556	0.85	29732	0.27	2000	
B	11	1	No Gas	5.245	26.224	2.36	13091	0.04	2000	
Al	27	1	No Gas	76.183	380.913	2.58	753499	0.01	2000	
Si	28	1	No Gas	966.990	4834.948	2.80	5463154	0.02	2000	
Ag	107	1	No Gas	0.007	0.034	58.63	217	0.00	2000	
Cd	111	1	No Gas	0.000	0.000	-4909.78	13	0.00	2000	
Sr	88	1	No Gas	21.489	107.444	1.65	449252	0.00	2000	
Mo	95	1	No Gas	0.045	0.223	54.98	350	0.01	2000	
Sn	118	1	No Gas	0.061	0.304	79.94	890	0.01	2000	
Sb	121	1	No Gas	0.080	0.400	13.22	787	0.01	2000	
Ba	137	1	No Gas	15.888	79.440	2.87	52654	0.03	2000	
Tl	205	1	No Gas	0.086	0.429	20.16	2250	0.00	2000	
Tl	203	1	No Gas	0.077	0.385	8.83	927	0.01	2000	
Pb	208	1	No Gas	0.257	1.285	3.10	7148	0.00	2000	
U	238	1	No Gas	0.045	0.226	9.06	1233	0.00	2000	
Ca	43	2	He	1270.253	6351.267	6.71	2640	48.11	200000	
Sb	121	2	He	0.083	0.414	9.79	373	0.02	2000	
Ti	47	2	He	0.109	0.546	29.88	27	0.41	2000	
Cu	63	1	No Gas	0.512	2.559	3.48	5084	0.01	2000	
Zn	66	1	No Gas	1.877	9.384	2.07	5251	0.04	2000	
Se	82	1	No Gas	-0.705	-3.527	-93.60	12	-6.07	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	424415	0.53	441333	96.17	70	120	
Ge	72	2	He	407467	0.89	394589	103.26	70	120	
Ge	72	1	No Gas	1378927	2.84	1406470	98.04	70	120	
In	115	1	No Gas	1573909	0.48	1585991	99.24	70	120	

Sample Report

Bi	209	1	No Gas	1454708	5.61	1403423	103.65	70	120	

Sample Report

Sample Table

Sample Name	HS23071289-11MS
Data File Name	037SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T11:35:44-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 198377
ISTD Ref FileName	012CALB.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	91.796	91.796	0.70	621044	0.01	2000	
Be	9	1	No Gas	43.301	43.301	1.50	92938	0.05	2000	
V	51	2	He	46.470	46.470	1.52	217032	0.02	2000	
Cr	52	2	He	44.630	44.630	2.08	229904	0.02	2000	
Fe	56	2	He	5671.669	5671.669	2.19	24708858	0.02	200000	
Se	78	2	He	44.032	44.032	2.18	3398	1.30	2000	
As	75	2	He	42.676	42.676	0.44	33071	0.13	2000	
Ca	44	2	He	10523.204	10523.204	1.38	380608	2.76	200000	
Na	23	2	He	12442.447	12442.447	1.54	10977435	0.11	200000	
Mg	24	2	He	7514.192	7514.192	1.51	4034395	0.19	200000	
K	39	2	He	7703.436	7703.436	1.97	5790133	0.13	200000	
Mn	55	2	He	160.956	160.956	1.39	626025	0.03	2000	
Co	59	2	He	45.328	45.328	2.36	302775	0.01	2000	
Ni	60	2	He	48.415	48.415	1.97	78811	0.06	2000	
Cu	63	2	He	47.499	47.499	1.06	196160	0.02	2000	
Zn	66	2	He	54.448	54.448	2.10	48601	0.11	2000	
Al	27	2	He	473.335	473.335	0.38	181011	0.26	2000	
B	11	1	No Gas	459.580	459.580	0.91	613984	0.07	2000	
Al	27	1	No Gas	445.594	445.594	2.44	4529033	0.01	2000	
Si	28	1	No Gas	5163.223	5163.223	2.31	28404122	0.02	2000	>LDR
Ag	107	1	No Gas	43.288	43.288	2.48	479806	0.01	2000	
Cd	111	1	No Gas	44.482	44.482	3.53	96304	0.05	2000	
Sr	88	1	No Gas	187.837	187.837	3.29	4092476	0.00	2000	
Mo	95	1	No Gas	41.831	41.831	3.82	190016	0.02	2000	
Sn	118	1	No Gas	87.977	87.977	1.28	594949	0.01	2000	
Sb	121	1	No Gas	45.451	45.451	1.21	427330	0.01	2000	
Ba	137	1	No Gas	124.066	124.066	2.35	428601	0.03	2000	
Tl	205	1	No Gas	42.259	42.259	3.87	810964	0.01	2000	
Tl	203	1	No Gas	41.111	41.111	3.72	339535	0.01	2000	
Pb	208	1	No Gas	45.361	45.361	3.53	1204157	0.00	2000	
U	238	1	No Gas	86.171	86.171	3.45	2319330	0.00	2000	
Ca	43	2	He	10913.743	10913.743	2.86	23437	46.57	200000	
Sb	121	2	He	44.770	44.770	0.45	183719	0.02	2000	
Ti	47	2	He	136.172	136.172	1.88	25798	0.53	2000	
Cu	63	1	No Gas	47.213	47.213	1.72	390445	0.01	2000	
Zn	66	1	No Gas	54.570	54.570	2.04	131766	0.04	2000	
Se	82	1	No Gas	43.095	43.095	2.28	6993	0.62	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	429261	0.76	441333	97.26	70	120	
Ge	72	2	He	425942	0.97	394589	107.95	70	120	
Ge	72	1	No Gas	1456437	0.71	1406470	103.55	70	120	
In	115	1	No Gas	1643697	2.13	1585991	103.64	70	120	

Sample Report

Bi	209	1	No Gas	1500735	3.49	1403423	106.93	70	120	

Sample Report

Sample Table

Sample Name	HS23071289-11MSD
Data File Name	038SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T11:37:39-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 198377
ISTD Ref FileName	012CALB.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	91.742	91.742	1.29	618380	0.01	2000	
Be	9	1	No Gas	42.864	42.864	0.56	91655	0.05	2000	
V	51	2	He	45.989	45.989	1.13	215016	0.02	2000	
Cr	52	2	He	43.969	43.969	1.68	226815	0.02	2000	
Fe	56	2	He	5560.482	5560.482	1.49	24250166	0.02	200000	
Se	78	2	He	42.633	42.633	5.12	3296	1.29	2000	
As	75	2	He	42.376	42.376	0.78	32870	0.13	2000	
Ca	44	2	He	10310.947	10310.947	0.72	373288	2.76	200000	
Na	23	2	He	12332.166	12332.166	1.97	10892662	0.11	200000	
Mg	24	2	He	7419.529	7419.529	0.76	3987488	0.19	200000	
K	39	2	He	7475.803	7475.803	1.62	5629260	0.13	200000	
Mn	55	2	He	160.891	160.891	0.18	626381	0.03	2000	
Co	59	2	He	44.482	44.482	1.03	297456	0.01	2000	
Ni	60	2	He	47.654	47.654	1.81	77634	0.06	2000	
Cu	63	2	He	46.113	46.113	1.74	190653	0.02	2000	
Zn	66	2	He	53.160	53.160	0.34	47510	0.11	2000	
Al	27	2	He	461.778	461.778	1.25	176780	0.26	2000	
B	11	1	No Gas	468.121	468.121	1.11	622873	0.08	2000	
Al	27	1	No Gas	427.933	427.933	1.05	4399425	0.01	2000	
Si	28	1	No Gas	5097.781	5097.781	1.66	28365610	0.02	2000	>LDR
Ag	107	1	No Gas	43.176	43.176	3.30	476861	0.01	2000	
Cd	111	1	No Gas	44.435	44.435	3.39	95872	0.05	2000	
Sr	88	1	No Gas	188.058	188.058	2.91	4083471	0.00	2000	
Mo	95	1	No Gas	40.982	40.982	2.93	185543	0.02	2000	
Sn	118	1	No Gas	88.113	88.113	2.64	593719	0.01	2000	
Sb	121	1	No Gas	45.238	45.238	1.68	430042	0.01	2000	
Ba	137	1	No Gas	124.459	124.459	3.61	428385	0.03	2000	
Tl	205	1	No Gas	42.383	42.383	4.62	813355	0.01	2000	
Tl	203	1	No Gas	40.881	40.881	4.28	337667	0.01	2000	
Pb	208	1	No Gas	45.062	45.062	4.04	1196391	0.00	2000	
U	238	1	No Gas	86.260	86.260	6.16	2320222	0.00	2000	
Ca	43	2	He	10579.010	10579.010	3.19	22732	46.54	200000	
Sb	121	2	He	44.202	44.202	1.61	181570	0.02	2000	
Ti	47	2	He	136.573	136.573	2.10	25892	0.53	2000	
Cu	63	1	No Gas	46.648	46.648	1.78	390098	0.01	2000	
Zn	66	1	No Gas	53.509	53.509	0.86	130672	0.04	2000	
Se	82	1	No Gas	40.696	40.696	4.24	6683	0.61	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	427622	0.92	441333	96.89	70	120	
Ge	72	2	He	426338	1.19	394589	108.05	70	120	
Ge	72	1	No Gas	1472710	1.28	1406470	104.71	70	120	
In	115	1	No Gas	1638359	3.08	1585991	103.30	70	120	

Sample Report

Bi	209	1	No Gas	1501705	4.96	1403423	107.00	70	120	

Sample Report

Sample Table

Sample Name	HS23071289-11PDS
Data File Name	039SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T11:39:37-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 198377
ISTD Ref FileName	012CALB.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	3.611	3.611	2.74	51374	0.01	2000	
Be	9	1	No Gas	86.779	86.779	2.44	189782	0.05	2000	
V	51	2	He	91.059	91.059	1.24	425246	0.02	2000	
Cr	52	2	He	89.643	89.643	1.53	457865	0.02	2000	
Fe	56	2	He	9940.964	9940.964	2.06	43679091	0.02	200000	
Se	78	2	He	89.360	89.360	0.99	6821	1.31	2000	
As	75	2	He	84.343	84.343	0.91	65747	0.13	2000	
Ca	44	2	He	14218.455	14218.455	1.50	518357	2.74	200000	
Na	23	2	He	16444.678	16444.678	1.02	14609385	0.11	200000	
Mg	24	2	He	11648.998	11648.998	1.98	6309513	0.18	200000	
K	39	2	He	11705.425	11705.425	0.53	8789530	0.13	200000	
Mn	55	2	He	198.758	198.758	1.62	779606	0.03	2000	
Co	59	2	He	89.955	89.955	1.77	606074	0.01	2000	
Ni	60	2	He	92.986	92.986	0.64	152555	0.06	2000	
Cu	63	2	He	91.061	91.061	1.15	378806	0.02	2000	
Zn	66	2	He	98.052	98.052	1.29	88021	0.11	2000	
Al	27	2	He	446.941	446.941	2.27	172482	0.26	2000	
B	11	1	No Gas	24.421	24.421	4.50	39323	0.06	2000	
Al	27	1	No Gas	426.428	426.428	1.57	4340948	0.01	2000	
Si	28	1	No Gas	4571.966	4571.966	1.29	25247708	0.02	2000	>LDR
Ag	107	1	No Gas	89.082	89.082	1.33	979868	0.01	2000	
Cd	111	1	No Gas	91.397	91.397	1.02	196422	0.05	2000	
Sr	88	1	No Gas	98.443	98.443	0.52	2129738	0.00	2000	
Mo	95	1	No Gas	85.879	85.879	0.98	387104	0.02	2000	
Sn	118	1	No Gas	0.233	0.233	13.11	2080	0.01	2000	
Sb	121	1	No Gas	88.249	88.249	0.75	830666	0.01	2000	
Ba	137	1	No Gas	168.187	168.187	1.11	576686	0.03	2000	
Tl	205	1	No Gas	87.392	87.392	3.34	1736981	0.01	2000	
Tl	203	1	No Gas	85.553	85.553	4.30	731503	0.01	2000	
Pb	208	1	No Gas	88.082	88.082	3.51	2421861	0.00	2000	
U	238	1	No Gas	0.278	0.278	1.84	7803	0.00	2000	
Ca	43	2	He	14307.215	14307.215	2.38	30979	46.18	200000	
Sb	121	2	He	84.599	84.599	0.75	350179	0.02	2000	
Ti	47	2	He	90.458	90.458	3.73	17291	0.52	2000	
Cu	63	1	No Gas	92.273	92.273	1.00	762943	0.01	2000	
Zn	66	1	No Gas	99.582	99.582	0.35	239889	0.04	2000	
Se	82	1	No Gas	90.418	90.418	1.53	14556	0.62	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	437487	1.52	441333	99.13	70	120	
Ge	72	2	He	429705	0.89	394589	108.90	70	120	
Ge	72	1	No Gas	1458168	0.13	1406470	103.68	70	120	
In	115	1	No Gas	1631042	1.21	1585991	102.84	70	120	

Sample Report

Bi	209	1	No Gas	1555163	4.63	1403423	110.81	70	120	

Sample Report

Sample Table

Sample Name	LCS-198377
Data File Name	040SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T11:41:43-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 198377
ISTD Ref FileName	012CALB.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	85.337	85.337	1.39	583146	0.01	2000	
Be	9	1	No Gas	49.804	49.804	0.54	107624	0.05	2000	
V	51	2	He	52.732	52.732	0.95	243924	0.02	2000	
Cr	52	2	He	52.442	52.442	1.12	266769	0.02	2000	
Fe	56	2	He	5295.589	5295.589	2.22	22901860	0.02	200000	
Se	78	2	He	51.426	51.426	0.26	3917	1.31	2000	
As	75	2	He	49.357	49.357	1.70	37933	0.13	2000	
Ca	44	2	He	5356.788	5356.788	1.34	192814	2.78	200000	
Na	23	2	He	5329.589	5329.589	1.79	4717540	0.11	200000	
Mg	24	2	He	5459.539	5459.539	0.15	2909718	0.19	200000	
K	39	2	He	5353.658	5353.658	1.32	4042793	0.13	200000	
Mn	55	2	He	51.850	51.850	1.85	200929	0.03	2000	
Co	59	2	He	51.834	51.834	1.49	343676	0.02	2000	
Ni	60	2	He	53.294	53.294	2.93	86088	0.06	2000	
Cu	63	2	He	52.169	52.169	2.05	213792	0.02	2000	
Zn	66	2	He	53.448	53.448	2.48	47363	0.11	2000	
Al	27	2	He	87.050	87.050	4.47	33915	0.26	2000	
B	11	1	No Gas	401.001	401.001	1.04	540157	0.07	2000	
Al	27	1	No Gas	83.576	83.576	2.03	882509	0.01	2000	
Si	28	1	No Gas	435.741	435.741	0.74	2946349	0.01	2000	
Ag	107	1	No Gas	51.516	51.516	1.78	575528	0.01	2000	
Cd	111	1	No Gas	51.147	51.147	1.67	111643	0.05	2000	
Sr	88	1	No Gas	80.786	80.786	0.68	1775041	0.00	2000	
Mo	95	1	No Gas	49.344	49.344	0.99	225951	0.02	2000	
Sn	118	1	No Gas	78.321	78.321	1.65	533851	0.01	2000	
Sb	121	1	No Gas	53.061	53.061	0.84	505562	0.01	2000	
Ba	137	1	No Gas	52.623	52.623	0.98	183307	0.03	2000	
Tl	205	1	No Gas	45.882	45.882	3.66	896203	0.01	2000	
Tl	203	1	No Gas	44.178	44.178	4.01	377872	0.01	2000	
Pb	208	1	No Gas	50.142	50.142	3.88	1378543	0.00	2000	
U	238	1	No Gas	77.957	77.957	3.80	2173075	0.00	2000	
Ca	43	2	He	5291.246	5291.246	2.34	11295	46.85	200000	
Sb	121	2	He	52.039	52.039	0.80	211944	0.02	2000	
Ti	47	2	He	113.035	113.035	1.55	21253	0.53	2000	
Cu	63	1	No Gas	51.874	51.874	0.82	434634	0.01	2000	
Zn	66	1	No Gas	53.518	53.518	0.86	130984	0.04	2000	
Se	82	1	No Gas	50.315	50.315	1.74	8254	0.61	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	432178	1.14	441333	97.93	70	120	
Ge	72	2	He	422761	0.23	394589	107.14	70	120	
Ge	72	1	No Gas	1475938	0.81	1406470	104.94	70	120	
In	115	1	No Gas	1656400	0.96	1585991	104.44	70	120	

Sample Report

Bi	209	1	No Gas	1554596	3.90	1403423	110.77	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	041_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T11:43:40-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	012CALB.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	97.947	1.896	652302	0.80	100	97.9	90	110	
Be	9	1	No Gas	91.269	1.794	193353	0.35	100	91.3	90	110	
V	51	2	He	95.604	0.968	432994	0.49	100	95.6	90	110	
Cr	52	2	He	96.193	1.698	476106	1.16	100	96.2	90	110	
Fe	56	2	He	9732.676	0.226	41495279	0.97	10000	97.3	90	110	
Se	78	2	He	90.341	1.135	6689	0.58	100	90.3	90	110	
As	75	2	He	91.399	0.206	69112	0.61	100	91.4	90	110	
Ca	44	2	He	9723.090	1.067	344269	0.89	10000	97.2	90	110	
Na	23	2	He	9985.205	0.478	8640896	1.20	10000	99.9	90	110	
Mg	24	2	He	9902.993	0.385	5204290	0.64	10000	99.0	90	110	
K	39	2	He	9698.453	1.281	7093622	1.99	10000	97.0	90	110	
Mn	55	2	He	95.141	1.598	362660	1.57	100	95.1	90	110	
Co	59	2	He	95.609	0.703	625009	0.77	100	95.6	90	110	
Ni	60	2	He	97.108	1.723	154562	1.29	100	97.1	90	110	
Cu	63	2	He	94.653	1.513	381992	1.07	100	94.7	90	110	
Zn	66	2	He	93.537	0.533	81484	0.48	100	93.5	90	110	
Al	27	2	He	95.916	1.411	36746	1.27	100	95.9	90	110	
B	11	1	No Gas	459.935	1.718	606508	0.13	500	92.0	90	110	
Al	27	1	No Gas	95.258	1.963	954985	1.26	100	95.3	90	110	
Si	28	1	No Gas	481.226	2.786	3044541	2.46	5000	9.6	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	92.524	0.964	1021394	0.36	100	92.5	90	110	
Cd	111	1	No Gas	91.236	0.901	196782	1.15	100	91.2	90	110	
Sr	88	1	No Gas	96.745	1.540	2100223	0.75	100	96.7	90	110	
Mo	95	1	No Gas	89.090	1.288	402999	0.42	100	89.1	90	110	CCV Main CR1-2 Failed
Sn	118	1	No Gas	93.497	1.554	629666	0.77	100	93.5	90	110	
Sb	121	1	No Gas	99.794	1.857	905974	1.50	100	99.8	90	110	
Ba	137	1	No Gas	96.182	1.361	330993	0.73	100	96.2	90	110	
Tl	205	1	No Gas	96.867	0.684	1820109	2.78	100	96.9	90	110	
Tl	203	1	No Gas	93.318	1.941	767631	1.37	100	93.3	90	110	
Pb	208	1	No Gas	92.283	1.632	2440556	0.60	100	92.3	90	110	
U	238	1	No Gas	91.487	1.685	2453539	0.75	100	91.5	90	110	
Ca	43	2	He	9750.840	1.854	20496	1.71	10000	97.5	90	110	
Sb	121	2	He	95.234	1.991	382426	1.34	100	95.2	90	110	
Ti	47	2	He	98.745	1.967	18309	1.35	100	98.7	90	110	
Cu	63	1	No Gas	96.095	1.209	766289	0.62	100	96.1	90	110	
Se	82	1	No Gas	91.766	3.669	14246	3.15	100	91.8	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	423770	1.57	441333	96.02	70	120	
Ge	72	2	He	416911	0.75	394589	105.66	70	120	
Ge	72	1	No Gas	1406466	0.66	1406470	100.00	70	120	
In	115	1	No Gas	1636833	0.88	1585991	103.21	70	120	
Bi	209	1	No Gas	1494574	2.20	1403423	106.49	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	042_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T11:45:34-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	012CALB.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	0.194	39.8	28581	1.5	0.5	
Be	9	1	No Gas	0.201	10.7	447	11.0	0.5	
V	51	2	He	-0.243	-12.2	2734	4.0	2.5	
Cr	52	2	He	0.142	74.2	8396	6.1	2.5	
Fe	56	2	He	8.804	16.3	55099	10.5	100	
Se	78	2	He	0.604	1.6	172	1.2	2	
As	75	2	He	0.044	126.0	220	19.0	2.5	
Ca	44	2	He	6.917	28.0	1293	5.4	100	
Na	23	2	He	-1.567	-144.3	85303	1.6	100	
Mg	24	2	He	9.659	19.2	5711	16.6	100	
K	39	2	He	-25.210	-12.8	141159	0.9	100	
Mn	55	2	He	0.088	37.7	1440	9.1	2.5	
Co	59	2	He	0.083	14.7	700	11.2	2.5	
Ni	60	2	He	0.091	40.5	293	20.8	2.5	
Cu	63	2	He	0.071	6.2	907	2.3	2	
Zn	66	2	He	0.260	16.1	567	7.1	2.5	
Al	27	2	He	-0.041	-1212.4	1043	16.9	5	
B	11	1	No Gas	7.789	8.6	16768	5.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.009	-868.9	25727	3.4	5	
Si	28	1	No Gas	-9.116	-5.9	498440	1.1	10	
Ag	107	1	No Gas	0.178	10.3	2104	10.5	2.5	
Cd	111	1	No Gas	0.209	18.7	462	19.2	1	
Sr	88	1	No Gas	0.200	18.4	5188	16.2	2.5	
Mo	95	1	No Gas	0.268	30.0	1367	27.5	2.5	
Sn	118	1	No Gas	0.339	10.8	2780	9.7	5	
Sb	121	1	No Gas	0.293	10.1	2784	9.8	2.5	
Ba	137	1	No Gas	0.230	20.0	887	18.5	2.5	
Tl	205	1	No Gas	0.463	12.2	9274	13.7	1	
Tl	203	1	No Gas	0.439	23.4	3897	24.1	1	
Pb	208	1	No Gas	0.203	20.1	5867	20.4	2.5	
U	238	1	No Gas	0.207	17.8	5555	19.7	2.5	
Ca	43	2	He	30.861	53.2	100	34.6	100	
Sb	121	2	He	0.181	12.3	777	10.7	2.5	
Ti	47	2	He	0.052	158.1	17	91.7	2.5	
Cu	63	1	No Gas	0.237	21.8	3047	14.6	2.5	
Se	82	1	No Gas	-0.423	-110.9	55	135.5	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	433496	1.33	441333	98.22	70	120	
Ge	72	2	He	416730	0.82	394589	105.61	70	120	
Ge	72	1	No Gas	1429615	0.90	1406470	101.65	70	120	
In	115	1	No Gas	1626243	1.18	1585991	102.54	70	120	
Bi	209	1	No Gas	1477940	2.43	1403423	105.31	70	120	

Sample Report

Sample Table

Sample Name	HS23071697-01SD
Data File Name	044SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T11:49:42-05:00
Sample Type	Sample
Dilution	5
Comment	TW DOD B 198377
ISTD Ref FileName	012CALB.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	1.646	8.231	2.82	39592	0.00	2000	
Be	9	1	No Gas	0.007	0.033	70.67	27	0.02	2000	
V	51	2	He	1.920	9.598	2.95	12409	0.02	2000	
Cr	52	2	He	0.572	2.862	9.22	10468	0.01	2000	
Fe	56	2	He	10.797	53.987	4.33	63451	0.02	200000	
Se	78	2	He	0.356	1.782	79.38	153	0.23	2000	
As	75	2	He	0.334	1.671	23.03	437	0.08	2000	
Ca	44	2	He	11397.578	56987.888	2.02	402243	2.83	200000	
Na	23	2	He	21219.875	106099.376	3.69	18208400	0.12	200000	
Mg	24	2	He	7497.716	37488.579	2.14	3929272	0.19	200000	
K	39	2	He	744.103	3720.517	3.43	689213	0.11	200000	
Mn	55	2	He	0.888	4.440	9.46	4464	0.02	2000	
Co	59	2	He	0.066	0.329	11.03	583	0.01	2000	
Ni	60	2	He	0.368	1.840	14.53	730	0.05	2000	
Cu	63	2	He	0.399	1.997	2.72	2224	0.02	2000	
Zn	66	2	He	1.755	8.776	9.05	1860	0.09	2000	
Al	27	2	He	7.250	36.250	22.60	3741	0.19	2000	
B	11	1	No Gas	33.194	165.968	2.47	52715	0.06	2000	
Al	27	1	No Gas	7.036	35.180	12.13	97577	0.01	2000	
Si	28	1	No Gas	1239.389	6196.944	4.35	7259089	0.02	2000	
Ag	107	1	No Gas	0.008	0.042	55.26	240	0.00	2000	
Cd	111	1	No Gas	0.004	0.021	236.69	23	0.02	2000	
Sr	88	1	No Gas	69.457	347.284	3.47	1483968	0.00	2000	
Mo	95	1	No Gas	0.211	1.056	20.74	1097	0.02	2000	
Sn	118	1	No Gas	0.035	0.177	63.74	740	0.00	2000	
Sb	121	1	No Gas	0.093	0.467	8.29	960	0.01	2000	
Ba	137	1	No Gas	31.384	156.920	0.71	106395	0.03	2000	
Tl	205	1	No Gas	0.001	0.007	220.43	667	0.00	2000	
Tl	203	1	No Gas	0.001	0.006	794.09	317	0.00	2000	
Pb	208	1	No Gas	0.017	0.085	16.78	963	0.00	2000	
U	238	1	No Gas	0.787	3.933	3.55	20354	0.00	2000	
Ca	43	2	He	11165.708	55828.539	2.19	23400	47.72	200000	
Sb	121	2	He	0.115	0.575	3.42	510	0.02	2000	
Ti	47	2	He	0.322	1.612	25.08	67	0.48	2000	
Cu	63	1	No Gas	0.539	2.694	10.86	5601	0.01	2000	
Zn	66	1	No Gas	1.785	8.923	1.96	5341	0.03	2000	
Se	82	1	No Gas	-0.828	-4.138	-38.53	-9	9.41	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	450807	0.55	441333	102.15	70	120	
Ge	72	2	He	415872	2.64	394589	105.39	70	120	
Ge	72	1	No Gas	1460668	2.14	1406470	103.85	70	120	
In	115	1	No Gas	1611430	2.85	1585991	101.60	70	120	

Sample Report

Bi	209	1	No Gas	1439108	3.56	1403423	102.54	70	120	

Sample Report

Sample Table

Sample Name	HS23071697-01MS
Data File Name	045SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T11:51:54-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 198377
ISTD Ref FileName	012CALB.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	107.464	107.464	1.67	725509	0.01	2000	
Be	9	1	No Gas	46.646	46.646	0.94	100549	0.05	2000	
V	51	2	He	58.089	58.089	1.98	261704	0.02	2000	
Cr	52	2	He	49.980	49.980	1.97	248349	0.02	2000	
Fe	56	2	He	4825.387	4825.387	3.10	20356664	0.02	200000	
Se	78	2	He	49.312	49.312	3.14	3670	1.34	2000	
As	75	2	He	47.175	47.175	1.74	35372	0.13	2000	
Ca	44	2	He	62504.761	62504.761	1.99	2183306	2.86	200000	
Na	23	2	He	113579.969	113579.969	3.38	96313592	0.12	200000	
Mg	24	2	He	43375.297	43375.297	2.07	22543642	0.19	200000	
K	39	2	He	8737.149	8737.149	2.38	6335547	0.14	200000	
Mn	55	2	He	53.709	53.709	2.96	202952	0.03	2000	
Co	59	2	He	47.239	47.239	2.68	305499	0.02	2000	
Ni	60	2	He	48.931	48.931	0.76	77118	0.06	2000	
Cu	63	2	He	47.508	47.508	2.05	189943	0.03	2000	
Zn	66	2	He	51.655	51.655	3.34	44654	0.12	2000	
Al	27	2	He	138.071	138.071	5.75	51835	0.27	2000	
B	11	1	No Gas	631.776	631.776	2.42	845330	0.07	2000	
Al	27	1	No Gas	129.857	129.857	0.87	1339855	0.01	2000	
Si	28	1	No Gas	7128.030	7128.030	0.45	39039018	0.02	2000	>LDR
Ag	107	1	No Gas	45.114	45.114	1.37	488880	0.01	2000	
Cd	111	1	No Gas	46.161	46.161	1.83	97731	0.05	2000	
Sr	88	1	No Gas	457.022	457.022	3.86	9733082	0.00	2000	
Mo	95	1	No Gas	47.139	47.139	2.07	209353	0.02	2000	
Sn	118	1	No Gas	92.273	92.273	1.40	609976	0.02	2000	
Sb	121	1	No Gas	47.907	47.907	0.36	450839	0.01	2000	
Ba	137	1	No Gas	213.987	213.987	2.27	722618	0.03	2000	
Tl	205	1	No Gas	37.813	37.813	0.49	690527	0.01	2000	
Tl	203	1	No Gas	35.982	35.982	1.42	287771	0.01	2000	
Pb	208	1	No Gas	46.219	46.219	0.25	1187949	0.00	2000	
U	238	1	No Gas	98.585	98.585	0.47	2568930	0.00	2000	
Ca	43	2	He	65517.496	65517.496	1.25	136021	48.17	200000	
Sb	121	2	He	48.649	48.649	1.78	193262	0.03	2000	
Ti	47	2	He	148.244	148.244	1.45	27191	0.55	2000	
Cu	63	1	No Gas	48.015	48.015	0.60	397464	0.01	2000	
Zn	66	1	No Gas	51.175	51.175	1.22	123769	0.04	2000	
Se	82	1	No Gas	47.491	47.491	4.15	7701	0.62	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	431090	0.51	441333	97.68	70	120	
Ge	72	2	He	412438	1.75	394589	104.52	70	120	
Ge	72	1	No Gas	1457757	1.37	1406470	103.65	70	120	
In	115	1	No Gas	1606656	1.35	1585991	101.30	70	120	
Bi	209	1	No Gas	1451871	0.43	1403423	103.45	70	120	

Sample Report

Sample Table

Sample Name	HS23071697-01MSD
Data File Name	046SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T11:54:02-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 198377
ISTD Ref FileName	012CALB.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	106.691	106.691	1.11	747075	0.01	2000	
Be	9	1	No Gas	46.030	46.030	1.81	102877	0.04	2000	
V	51	2	He	57.683	57.683	1.24	263964	0.02	2000	
Cr	52	2	He	49.915	49.915	0.41	251923	0.02	2000	
Fe	56	2	He	4834.289	4834.289	0.48	20713481	0.02	200000	
Se	78	2	He	48.816	48.816	4.11	3690	1.32	2000	
As	75	2	He	47.467	47.467	1.71	36144	0.13	2000	
Ca	44	2	He	62856.118	62856.118	1.31	2229901	2.82	200000	
Na	23	2	He	116208.790	116208.790	2.90	100088849	0.12	200000	
Mg	24	2	He	44447.251	44447.251	1.03	23463725	0.19	200000	
K	39	2	He	8913.535	8913.535	0.35	6561841	0.14	200000	
Mn	55	2	He	53.551	53.551	1.16	205538	0.03	2000	
Co	59	2	He	47.450	47.450	1.53	311678	0.02	2000	
Ni	60	2	He	48.566	48.566	0.73	77732	0.06	2000	
Cu	63	2	He	47.818	47.818	1.26	194170	0.02	2000	
Zn	66	2	He	51.450	51.450	3.32	45172	0.11	2000	
Al	27	2	He	141.456	141.456	2.65	53943	0.26	2000	
B	11	1	No Gas	624.580	624.580	0.25	866595	0.07	2000	
Al	27	1	No Gas	134.213	134.213	2.82	1378326	0.01	2000	
Si	28	1	No Gas	7295.755	7295.755	3.08	39780939	0.02	2000	>LDR
Ag	107	1	No Gas	46.616	46.616	1.24	500602	0.01	2000	
Cd	111	1	No Gas	46.980	46.980	0.86	98575	0.05	2000	
Sr	88	1	No Gas	468.902	468.902	3.07	9897826	0.00	2000	
Mo	95	1	No Gas	48.143	48.143	0.90	211906	0.02	2000	
Sn	118	1	No Gas	94.264	94.264	0.60	617536	0.02	2000	
Sb	121	1	No Gas	48.901	48.901	2.23	458382	0.01	2000	
Ba	137	1	No Gas	218.376	218.376	1.69	730825	0.03	2000	
Tl	205	1	No Gas	39.352	39.352	1.15	704950	0.01	2000	
Tl	203	1	No Gas	38.030	38.030	1.81	298347	0.01	2000	
Pb	208	1	No Gas	47.528	47.528	2.64	1198021	0.00	2000	
U	238	1	No Gas	99.905	99.905	2.14	2553473	0.00	2000	
Ca	43	2	He	65977.444	65977.444	0.23	139115	47.43	200000	
Sb	121	2	He	48.378	48.378	0.96	195194	0.02	2000	
Ti	47	2	He	144.241	144.241	2.28	26863	0.54	2000	
Cu	63	1	No Gas	48.667	48.667	1.67	401218	0.01	2000	
Zn	66	1	No Gas	51.486	51.486	1.09	124041	0.04	2000	
Se	82	1	No Gas	48.888	48.888	5.44	7890	0.62	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	447017	0.96	441333	101.29	70	120	
Ge	72	2	He	418819	0.84	394589	106.14	70	120	
Ge	72	1	No Gas	1452205	1.64	1406470	103.25	70	120	
In	115	1	No Gas	1592127	1.20	1585991	100.39	70	120	
Bi	209	1	No Gas	1424569	2.77	1403423	101.51	70	120	

Sample Report

Sample Table

Sample Name	HS23071697-01PDS
Data File Name	047SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T11:55:59-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 198377
ISTD Ref FileName	012CALB.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	9.401	9.401	1.40	94250	0.01	2000	
Be	9	1	No Gas	89.138	89.138	1.70	205180	0.04	2000	
V	51	2	He	104.647	104.647	0.91	479436	0.02	2000	
Cr	52	2	He	95.937	95.937	0.79	480722	0.02	2000	
Fe	56	2	He	9415.067	9415.067	1.83	40636886	0.02	200000	
Se	78	2	He	94.731	94.731	2.71	7093	1.34	2000	
As	75	2	He	93.372	93.372	1.52	71465	0.13	2000	
Ca	44	2	He	66020.611	66020.611	1.45	2360230	2.80	200000	
Na	23	2	He	120013.398	120013.398	1.34	104159112	0.12	200000	
Mg	24	2	He	48077.218	48077.218	0.47	25574375	0.19	200000	
K	39	2	He	13626.314	13626.314	1.43	10022505	0.14	200000	
Mn	55	2	He	98.857	98.857	0.17	381441	0.03	2000	
Co	59	2	He	92.929	92.929	1.19	614988	0.02	2000	
Ni	60	2	He	94.066	94.066	1.30	151578	0.06	2000	
Cu	63	2	He	92.230	92.230	1.43	376814	0.02	2000	
Zn	66	2	He	96.624	96.624	1.87	85190	0.11	2000	
Al	27	2	He	126.948	126.948	2.62	48880	0.26	2000	
B	11	1	No Gas	168.858	168.858	2.39	246202	0.07	2000	
Al	27	1	No Gas	118.972	118.972	1.53	1250416	0.01	2000	
Si	28	1	No Gas	6777.211	6777.211	1.61	37766582	0.02	2000	>LDR
Ag	107	1	No Gas	90.936	90.936	1.02	983325	0.01	2000	
Cd	111	1	No Gas	93.458	93.458	0.21	197457	0.05	2000	
Sr	88	1	No Gas	367.701	367.701	2.22	7816185	0.00	2000	
Mo	95	1	No Gas	92.490	92.490	2.00	409786	0.02	2000	
Sn	118	1	No Gas	0.274	0.274	21.66	2310	0.01	2000	
Sb	121	1	No Gas	90.594	90.594	1.66	866723	0.01	2000	
Ba	137	1	No Gas	263.077	263.077	1.88	886601	0.03	2000	
Tl	205	1	No Gas	98.294	98.294	1.71	1762449	0.01	2000	
Tl	203	1	No Gas	93.203	93.203	2.53	731739	0.01	2000	
Pb	208	1	No Gas	92.657	92.657	3.31	2338430	0.00	2000	
U	238	1	No Gas	4.302	4.302	2.11	110177	0.00	2000	
Ca	43	2	He	69564.812	69564.812	0.95	147805	47.07	200000	
Sb	121	2	He	90.839	90.839	0.91	369290	0.02	2000	
Ti	47	2	He	97.757	97.757	3.89	18346	0.53	2000	
Cu	63	1	No Gas	92.769	92.769	2.04	779625	0.01	2000	
Zn	66	1	No Gas	95.844	95.844	0.90	234752	0.04	2000	
Se	82	1	No Gas	92.387	92.387	5.02	15111	0.61	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	460421	1.29	441333	104.33	70	120	
Ge	72	2	He	422050	1.09	394589	106.96	70	120	
Ge	72	1	No Gas	1482325	1.62	1406470	105.39	70	120	
In	115	1	No Gas	1603397	1.28	1585991	101.10	70	120	
Bi	209	1	No Gas	1426791	2.76	1403423	101.67	70	120	

Sample Report

Sample Table

Sample Name	HS23071289-08
Data File Name	048SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T11:58:52-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 198377
ISTD Ref FileName	012CALB.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	4.121	4.121	1.73	60165	0.01	2000	
Be	9	1	No Gas	0.175	0.175	6.75	433	0.04	2000	
V	51	2	He	2.936	2.936	8.36	17367	0.02	2000	
Cr	52	2	He	1.053	1.053	9.86	13107	0.01	2000	
Fe	56	2	He	1461.390	1461.390	2.18	6378005	0.02	200000	
Se	78	2	He	0.581	0.581	12.84	174	0.33	2000	
As	75	2	He	0.897	0.897	5.09	881	0.10	2000	
Ca	44	2	He	6098.440	6098.440	0.74	220923	2.76	200000	
Na	23	2	He	8316.563	8316.563	1.66	7364103	0.11	200000	
Mg	24	2	He	3237.036	3237.036	0.89	1737709	0.19	200000	
K	39	2	He	3429.503	3429.503	1.51	2666710	0.13	200000	
Mn	55	2	He	119.799	119.799	2.05	466048	0.03	2000	
Co	59	2	He	0.760	0.760	7.47	5231	0.01	2000	
Ni	60	2	He	3.377	3.377	4.98	5635	0.06	2000	
Cu	63	2	He	2.336	2.336	4.22	10244	0.02	2000	
Zn	66	2	He	8.625	8.625	3.52	7989	0.11	2000	
Al	27	2	He	1010.060	1010.060	8.73	384804	0.26	2000	
B	11	1	No Gas	23.369	23.369	3.55	41675	0.06	2000	
Al	27	1	No Gas	1023.843	1023.843	1.19	10613711	0.01	2000	
Si	28	1	No Gas	6504.673	6504.673	7.35	36459329	0.02	2000	>LDR
Ag	107	1	No Gas	0.066	0.066	12.61	900	0.01	2000	
Cd	111	1	No Gas	0.038	0.038	11.26	98	0.04	2000	
Sr	88	1	No Gas	105.053	105.053	0.75	2336494	0.00	2000	
Mo	95	1	No Gas	0.233	0.233	34.03	1243	0.02	2000	
Sn	118	1	No Gas	0.194	0.194	19.20	1864	0.01	2000	
Sb	121	1	No Gas	0.511	0.511	10.19	4998	0.01	2000	
Ba	137	1	No Gas	81.771	81.771	3.95	288367	0.03	2000	
Tl	205	1	No Gas	0.198	0.198	12.98	4591	0.00	2000	
Tl	203	1	No Gas	0.195	0.195	20.84	2020	0.01	2000	
Pb	208	1	No Gas	1.345	1.345	2.44	37626	0.00	2000	
U	238	1	No Gas	0.153	0.153	5.54	4344	0.00	2000	
Ca	43	2	He	6149.265	6149.265	1.57	13213	46.54	200000	
Sb	121	2	He	0.379	0.379	5.12	1603	0.02	2000	
Ti	47	2	He	23.653	23.653	24.34	4487	0.53	2000	
Cu	63	1	No Gas	2.460	2.460	3.34	21928	0.01	2000	
Zn	66	1	No Gas	8.769	8.769	1.33	22569	0.04	2000	
Se	82	1	No Gas	-0.415	-0.415	-166.06	58	-0.72	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	480808	0.43	441333	108.94	70	120	
Ge	72	2	He	425765	0.35	394589	107.90	70	120	
Ge	72	1	No Gas	1490127	0.46	1406470	105.95	70	120	
In	115	1	No Gas	1676894	0.68	1585991	105.73	70	120	

Sample Report

Bi	209	1	No Gas	1558691	5.78	1403423	111.06	70	120	

Sample Report

Sample Table

Sample Name	HS23071289-09
Data File Name	049SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T12:01:02-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 198377
ISTD Ref FileName	012CALB.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	4.172	4.172	3.07	59900	0.01	2000	
Be	9	1	No Gas	0.133	0.133	3.90	330	0.04	2000	
V	51	2	He	2.630	2.630	2.07	15791	0.02	2000	
Cr	52	2	He	0.884	0.884	6.48	12136	0.01	2000	
Fe	56	2	He	1370.948	1370.948	1.96	5919086	0.02	200000	
Se	78	2	He	0.659	0.659	53.05	178	0.37	2000	
As	75	2	He	0.926	0.926	6.58	894	0.10	2000	
Ca	44	2	He	6372.943	6372.943	1.96	228290	2.79	200000	
Na	23	2	He	8930.581	8930.581	2.15	7815009	0.11	200000	
Mg	24	2	He	3413.156	3413.156	2.38	1812200	0.19	200000	
K	39	2	He	3616.898	3616.898	0.75	2773012	0.13	200000	
Mn	55	2	He	126.932	126.932	0.56	488388	0.03	2000	
Co	59	2	He	0.735	0.735	4.07	5011	0.01	2000	
Ni	60	2	He	4.790	4.790	1.79	7846	0.06	2000	
Cu	63	2	He	2.354	2.354	3.54	10207	0.02	2000	
Zn	66	2	He	8.001	8.001	4.43	7355	0.11	2000	
Al	27	2	He	541.588	541.588	3.69	204594	0.26	2000	
B	11	1	No Gas	21.827	21.827	1.73	38974	0.06	2000	
Al	27	1	No Gas	581.563	581.563	15.28	5992960	0.01	2000	
Si	28	1	No Gas	5466.867	5466.867	0.86	30531749	0.02	2000	>LDR
Ag	107	1	No Gas	0.076	0.076	3.49	1027	0.01	2000	
Cd	111	1	No Gas	0.011	0.011	67.16	39	0.03	2000	
Sr	88	1	No Gas	107.857	107.857	1.74	2432594	0.00	2000	
Mo	95	1	No Gas	0.092	0.092	2.78	600	0.02	2000	
Sn	118	1	No Gas	0.054	0.054	26.81	910	0.01	2000	
Sb	121	1	No Gas	0.229	0.229	3.47	2267	0.01	2000	
Ba	137	1	No Gas	81.977	81.977	0.79	293139	0.03	2000	
Tl	205	1	No Gas	0.020	0.020	55.48	1057	0.00	2000	
Tl	203	1	No Gas	0.014	0.014	81.56	437	0.00	2000	
Pb	208	1	No Gas	1.366	1.366	2.83	37009	0.00	2000	
U	238	1	No Gas	0.155	0.155	5.24	4254	0.00	2000	
Ca	43	2	He	6557.917	6557.917	3.30	13934	47.06	200000	
Sb	121	2	He	0.190	0.190	2.87	820	0.02	2000	
Ti	47	2	He	6.046	6.046	48.84	1141	0.53	2000	
Cu	63	1	No Gas	2.448	2.448	0.27	21681	0.01	2000	
Zn	66	1	No Gas	7.933	7.933	1.38	20379	0.04	2000	
Se	82	1	No Gas	0.081	0.081	193.26	138	0.06	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	475736	1.16	441333	107.80	70	120	
Ge	72	2	He	421156	0.95	394589	106.73	70	120	
Ge	72	1	No Gas	1480029	1.14	1406470	105.23	70	120	
In	115	1	No Gas	1700732	1.66	1585991	107.23	70	120	

Sample Report

Bi	209	1	No Gas	1509126	4.48	1403423	107.53	70	120	

Sample Report

Sample Table

Sample Name	HS23071289-10
Data File Name	050SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T12:02:57-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 198377
ISTD Ref FileName	012CALB.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	5.197	5.197	3.30	66557	0.01	2000	
Be	9	1	No Gas	0.130	0.130	16.28	318	0.04	2000	
V	51	2	He	6.177	6.177	3.38	31736	0.02	2000	
Cr	52	2	He	3.044	3.044	4.47	22656	0.01	2000	
Fe	56	2	He	2401.804	2401.804	4.57	10310426	0.02	200000	
Se	78	2	He	0.654	0.654	49.91	177	0.37	2000	
As	75	2	He	1.075	1.075	10.48	1002	0.11	2000	
Ca	44	2	He	5426.754	5426.754	1.13	193734	2.80	200000	
Na	23	2	He	7422.732	7422.732	1.91	6483021	0.11	200000	
Mg	24	2	He	3141.886	3141.886	1.00	1661162	0.19	200000	
K	39	2	He	3326.894	3326.894	1.41	2552557	0.13	200000	
Mn	55	2	He	113.846	113.846	1.52	436270	0.03	2000	
Co	59	2	He	1.010	1.010	4.35	6792	0.01	2000	
Ni	60	2	He	3.994	3.994	2.81	6538	0.06	2000	
Cu	63	2	He	4.530	4.530	2.41	18980	0.02	2000	
Zn	66	2	He	11.622	11.622	2.37	10484	0.11	2000	
Al	27	2	He	3693.630	3693.630	10.04	1384460	0.27	2000	>LDR
B	11	1	No Gas	19.087	19.087	1.60	34603	0.06	2000	
Al	27	1	No Gas	3629.434	3629.434	10.84	38353999	0.01	2000	>LDR
Si	28	1	No Gas	11099.173	11099.173	6.27	63270812	0.02	2000	>LDR
Ag	107	1	No Gas	0.016	0.016	56.52	343	0.00	2000	
Cd	111	1	No Gas	-0.037	-0.037	-20.34	-69	0.05	2000	
Sr	88	1	No Gas	95.654	95.654	4.54	2149602	0.00	2000	
Mo	95	1	No Gas	0.136	0.136	16.83	803	0.02	2000	
Sn	118	1	No Gas	0.141	0.141	8.92	1513	0.01	2000	
Sb	121	1	No Gas	0.170	0.170	6.18	1753	0.01	2000	
Ba	137	1	No Gas	79.335	79.335	3.67	282633	0.03	2000	
Tl	205	1	No Gas	0.021	0.021	7.53	1080	0.00	2000	
Tl	203	1	No Gas	0.009	0.009	32.41	400	0.00	2000	
Pb	208	1	No Gas	1.477	1.477	4.83	40650	0.00	2000	
U	238	1	No Gas	0.190	0.190	3.00	5285	0.00	2000	
Ca	43	2	He	5592.451	5592.451	1.43	11839	47.24	200000	
Sb	121	2	He	0.163	0.163	18.13	707	0.02	2000	
Ti	47	2	He	111.330	111.330	4.30	20771	0.54	2000	
Cu	63	1	No Gas	4.454	4.454	1.39	39625	0.01	2000	
Zn	66	1	No Gas	11.814	11.814	1.34	30705	0.04	2000	
Se	82	1	No Gas	-0.161	-0.161	-64.30	101	-0.16	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	470892	0.51	441333	106.70	70	120	
Ge	72	2	He	419358	1.21	394589	106.28	70	120	
Ge	72	1	No Gas	1523806	2.13	1406470	108.34	70	120	
In	115	1	No Gas	1695406	2.77	1585991	106.90	70	120	

Sample Report

Bi	209	1	No Gas	1534902	2.15	1403423	109.37	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	054_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T12:11:23-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	012CALB.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	0.207	41.0	33720	1.4	0.5	
Be	9	1	No Gas	0.144	17.4	382	16.4	0.5	
V	51	2	He	0.009	342.8	3979	2.7	2.5	
Cr	52	2	He	0.103	48.8	8449	1.9	2.5	
Fe	56	2	He	7.725	16.9	52023	10.8	100	
Se	78	2	He	0.527	20.6	171	3.8	2	
As	75	2	He	0.059	77.7	238	14.0	2.5	
Ca	44	2	He	6.748	53.6	1327	11.0	100	
Na	23	2	He	79.647	10.8	159446	4.3	100	
Mg	24	2	He	9.682	17.5	5895	15.4	100	
K	39	2	He	-23.387	-18.3	146712	1.9	100	
Mn	55	2	He	0.085	27.4	1470	5.3	2.5	
Co	59	2	He	0.071	27.2	633	19.3	2.5	
Ni	60	2	He	0.055	64.1	243	24.8	2.5	
Cu	63	2	He	0.083	21.1	980	6.4	2	
Zn	66	2	He	0.267	11.9	590	4.5	2.5	
Al	27	2	He	0.061	1528.5	1117	33.1	5	
B	11	1	No Gas	5.218	13.8	15689	7.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.055	-66.2	27332	2.4	5	
Si	28	1	No Gas	-0.101	-1758.8	590485	1.1	10	
Ag	107	1	No Gas	0.155	22.0	1930	20.5	2.5	
Cd	111	1	No Gas	0.197	27.1	454	26.4	1	
Sr	88	1	No Gas	0.189	16.3	5148	13.9	2.5	
Mo	95	1	No Gas	0.193	32.9	1070	27.9	2.5	
Sn	118	1	No Gas	0.269	16.8	2404	13.3	5	
Sb	121	1	No Gas	0.208	19.6	2157	18.5	2.5	
Ba	137	1	No Gas	0.187	27.1	770	23.8	2.5	
Tl	205	1	No Gas	0.360	25.3	7516	24.3	1	
Tl	203	1	No Gas	0.334	23.0	3100	21.9	1	
Pb	208	1	No Gas	0.163	17.9	4917	16.6	2.5	
U	238	1	No Gas	0.178	27.3	4891	28.6	2.5	
Ca	43	2	He	-7.580	-104.4	20	86.6	100	
Sb	121	2	He	0.105	12.3	487	11.7	2.5	
Ti	47	2	He	0.085	96.5	23	65.5	2.5	
Cu	63	1	No Gas	0.210	16.1	3050	8.7	2.5	
Se	82	1	No Gas	-0.567	-75.5	35	210.7	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	509980	0.55	441333	115.55	70	120	
Ge	72	2	He	429166	1.21	394589	108.76	70	120	
Ge	72	1	No Gas	1545752	0.97	1406470	109.90	70	120	
In	115	1	No Gas	1692146	0.61	1585991	106.69	70	120	
Bi	209	1	No Gas	1511978	3.49	1403423	107.74	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	057_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T12:21:28-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	012CALB.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	94.424	2.012	720488	2.34	100	94.4	90	110	
Be	9	1	No Gas	90.816	1.622	220082	1.25	100	90.8	90	110	
V	51	2	He	96.834	1.525	462162	1.14	100	96.8	90	110	
Cr	52	2	He	96.335	0.896	502531	0.78	100	96.3	90	110	
Fe	56	2	He	9719.601	1.600	43671804	1.22	10000	97.2	90	110	
Se	78	2	He	92.801	2.003	7238	1.58	100	92.8	90	110	
As	75	2	He	93.030	1.367	74132	0.99	100	93.0	90	110	
Ca	44	2	He	9954.994	1.328	371461	1.05	10000	99.5	90	110	
Na	23	2	He	9962.356	3.653	9085412	3.37	10000	99.6	90	110	
Mg	24	2	He	10103.241	1.222	5595843	1.24	10000	101.0	90	110	
K	39	2	He	9851.862	2.734	7591522	2.89	10000	98.5	90	110	
Mn	55	2	He	96.450	0.683	387465	0.71	100	96.4	90	110	
Co	59	2	He	95.373	1.640	657067	1.27	100	95.4	90	110	
Ni	60	2	He	96.903	1.687	162559	1.53	100	96.9	90	110	
Cu	63	2	He	94.218	1.662	400756	1.38	100	94.2	90	110	
Zn	66	2	He	94.808	1.404	87039	1.01	100	94.8	90	110	
Al	27	2	He	96.616	1.765	39002	1.57	100	96.6	90	110	
B	11	1	No Gas	453.100	1.166	683588	0.81	500	90.6	90	110	
Al	27	1	No Gas	96.483	0.978	1070010	0.50	100	96.5	90	110	
Si	28	1	No Gas	475.561	2.272	3335938	1.22	5000	9.5	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	94.122	1.904	1097070	0.69	100	94.1	90	110	
Cd	111	1	No Gas	92.917	1.361	211610	1.06	100	92.9	90	110	
Sr	88	1	No Gas	97.177	2.084	2227514	0.96	100	97.2	90	110	
Mo	95	1	No Gas	91.042	1.573	434874	1.24	100	91.0	90	110	
Sn	118	1	No Gas	94.626	1.051	672932	0.34	100	94.6	90	110	
Sb	121	1	No Gas	95.805	2.093	962358	1.03	100	95.8	90	110	
Ba	137	1	No Gas	97.804	1.042	355411	0.51	100	97.8	90	110	
Tl	205	1	No Gas	100.641	2.334	1926931	1.26	100	100.6	90	110	
Tl	203	1	No Gas	93.497	2.001	783950	0.17	100	93.5	90	110	
Pb	208	1	No Gas	95.195	1.464	2566400	0.70	100	95.2	90	110	
U	238	1	No Gas	93.623	1.911	2559756	2.14	100	93.6	90	110	
Ca	43	2	He	10112.942	0.760	22402	0.37	10000	101.1	90	110	
Sb	121	2	He	96.183	1.665	407081	1.28	100	96.2	90	110	
Ti	47	2	He	96.881	1.289	18933	0.97	100	96.9	90	110	
Cu	63	1	No Gas	94.487	2.279	833684	1.13	100	94.5	90	110	
Se	82	1	No Gas	91.142	2.071	15661	2.75	100	91.1	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	484684	0.42	441333	109.82	70	120	
Ge	72	2	He	439391	0.39	394589	111.35	70	120	
Ge	72	1	No Gas	1556359	1.15	1406470	110.66	70	120	
In	115	1	No Gas	1728467	1.33	1585991	108.98	70	120	
Bi	209	1	No Gas	1523521	2.08	1403423	108.56	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	058_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T12:23:22-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	012CALB.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	101.959	1.164	693563	1.38	100	102.0	90	110	
Be	9	1	No Gas	95.732	0.817	207501	1.81	100	95.7	90	110	
V	51	2	He	98.675	2.722	450767	2.06	100	98.7	90	110	
Cr	52	2	He	97.983	1.296	489200	1.02	100	98.0	90	110	
Fe	56	2	He	9962.926	0.940	42856726	0.37	10000	99.6	90	110	
Se	78	2	He	96.725	1.066	7217	1.08	100	96.7	90	110	
As	75	2	He	95.910	1.264	73162	0.20	100	95.9	90	110	
Ca	44	2	He	10186.019	2.593	363819	1.79	10000	101.9	90	110	
Na	23	2	He	10014.365	0.292	8743749	0.85	10000	100.1	90	110	
Mg	24	2	He	10125.345	1.916	5368611	1.21	10000	101.3	90	110	
K	39	2	He	10079.953	1.356	7431726	0.25	10000	100.8	90	110	
Mn	55	2	He	98.594	2.023	379129	0.92	100	98.6	90	110	
Co	59	2	He	97.959	1.453	646092	0.51	100	98.0	90	110	
Ni	60	2	He	98.978	2.540	158940	1.59	100	99.0	90	110	
Cu	63	2	He	96.366	1.179	392396	0.35	100	96.4	90	110	
Zn	66	2	He	97.277	2.494	85482	1.56	100	97.3	90	110	
Al	27	2	He	100.854	2.578	38925	1.38	100	100.9	90	110	
B	11	1	No Gas	471.773	1.612	636251	0.79	500	94.4	90	110	
Al	27	1	No Gas	99.367	1.913	1009422	3.02	100	99.4	90	110	
Si	28	1	No Gas	495.944	2.107	3164952	0.28	5000	9.9	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	96.812	0.352	1025423	2.75	100	96.8	90	110	
Cd	111	1	No Gas	97.536	1.585	201836	3.13	100	97.5	90	110	
Sr	88	1	No Gas	99.111	1.320	2064417	2.90	100	99.1	90	110	
Mo	95	1	No Gas	93.266	1.469	404825	3.42	100	93.3	90	110	
Sn	118	1	No Gas	98.201	1.441	634449	2.24	100	98.2	90	110	
Sb	121	1	No Gas	98.460	0.487	906626	1.77	100	98.5	90	110	
Ba	137	1	No Gas	101.160	0.679	334006	2.54	100	101.2	90	110	
Tl	205	1	No Gas	104.182	1.572	1784698	2.03	100	104.2	90	110	
Tl	203	1	No Gas	100.072	2.277	750706	2.48	100	100.1	90	110	
Pb	208	1	No Gas	101.066	1.473	2437414	1.28	100	101.1	90	110	
U	238	1	No Gas	98.769	3.410	2415471	3.14	100	98.8	90	110	
Ca	43	2	He	10213.570	1.359	21661	1.61	10000	102.1	90	110	
Sb	121	2	He	99.426	1.086	402871	0.61	100	99.4	90	110	
Ti	47	2	He	99.153	1.491	18553	2.11	100	99.2	90	110	
Cu	63	1	No Gas	96.723	1.052	782351	2.39	100	96.7	90	110	
Se	82	1	No Gas	93.134	2.641	14667	3.92	100	93.1	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	433537	2.32	441333	98.23	70	120	
Ge	72	2	He	420675	1.13	394589	106.61	70	120	
Ge	72	1	No Gas	1426442	1.48	1406470	101.42	70	120	
In	115	1	No Gas	1570365	2.47	1585991	99.01	70	120	
Bi	209	1	No Gas	1362715	1.02	1403423	97.10	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	069_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T12:50:25-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
n	Fail
ISTD Pass/Fail	Fail

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	92.310	3.623	792239	3.63	100	92.3	90	110	
Be	9	1	No Gas	89.773	0.804	244477	0.98	100	89.8	90	110	CCV Main CR1-2 Failed
V	51	2	He	97.728	0.915	452818	0.30	100	97.7	90	110	
Cr	52	2	He	96.632	0.591	489381	0.10	100	96.6	90	110	
Fe	56	2	He	9951.333	1.445	43410398	0.84	10000	99.5	90	110	
Se	78	2	He	99.731	1.944	7543	2.17	100	99.7	90	110	
As	75	2	He	93.850	1.110	72608	0.68	100	93.9	90	110	
Ca	44	2	He	10196.165	1.692	369352	1.32	10000	102.0	90	110	
Na	23	2	He	9991.542	1.480	8846580	0.81	10000	99.9	90	110	
Mg	24	2	He	9919.512	1.219	5333974	0.75	10000	99.2	90	110	
K	39	2	He	10185.160	1.366	7613834	0.96	10000	101.9	90	110	
Mn	55	2	He	97.288	1.504	379424	0.94	100	97.3	90	110	
Co	59	2	He	95.900	1.799	641445	1.14	100	95.9	90	110	
Ni	60	2	He	97.637	1.879	159018	1.59	100	97.6	90	110	
Cu	63	2	He	94.555	1.923	390466	1.41	100	94.6	90	110	
Zn	66	2	He	95.203	1.291	84855	0.65	100	95.2	90	110	
Al	27	2	He	103.199	2.120	40372	1.91	100	103.2	90	110	
B	11	1	No Gas	426.508	0.261	723556	0.47	500	85.3	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	101.433	2.266	1107620	2.35	100	101.4	90	110	
Si	28	1	No Gas	534.095	0.593	3621654	0.84	5000	10.7	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.778	0.726	1106726	1.63	100	98.8	90	110	
Cd	111	1	No Gas	95.509	0.927	209060	1.24	100	95.5	90	110	
Sr	88	1	No Gas	100.860	1.948	2221916	0.17	100	100.9	90	110	
Mo	95	1	No Gas	93.718	1.113	430242	1.02	100	93.7	90	110	
Sn	118	1	No Gas	96.709	1.871	660922	0.57	100	96.7	90	110	
Sb	121	1	No Gas	95.617	1.385	946973	1.08	100	95.6	90	110	
Ba	137	1	No Gas	101.254	3.024	353537	0.90	100	101.3	90	110	
Tl	205	1	No Gas	99.532	2.671	1819869	1.07	100	99.5	90	110	
Tl	203	1	No Gas	96.054	3.421	768969	0.38	100	96.1	90	110	
Pb	208	1	No Gas	96.016	2.604	2471712	0.62	100	96.0	90	110	
U	238	1	No Gas	94.101	3.943	2455813	0.72	100	94.1	90	110	
Ca	43	2	He	10273.961	1.334	22095	0.73	10000	102.7	90	110	
Sb	121	2	He	98.198	1.229	403513	0.68	100	98.2	90	110	
Ti	47	2	He	101.231	2.180	19207	2.00	100	101.2	90	110	
Cu	63	1	No Gas	97.610	0.748	849126	0.50	100	97.6	90	110	
Se	82	1	No Gas	92.416	2.442	15651	2.09	100	92.4	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	544637	0.22	441333	123.41	70	120	ISTD Failed
Ge	72	2	He	426603	0.65	394589	108.11	70	120	
Ge	72	1	No Gas	1534291	0.35	1406470	109.09	70	120	
In	115	1	No Gas	1661353	2.09	1585991	104.75	70	120	
Bi	209	1	No Gas	1455278	3.17	1403423	103.69	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	070_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T12:52:18-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.105	-36.1	33968	1.0	0.5	
Be	9	1	No Gas	0.010	76.9	42	50.0	0.5	
V	51	2	He	0.031	38.9	4048	1.5	2.5	
Cr	52	2	He	0.146	51.4	8593	4.0	2.5	
Fe	56	2	He	0.756	20.9	21277	3.1	100	
Se	78	2	He	0.133	135.6	141	9.5	2	
As	75	2	He	0.030	100.0	213	10.9	2.5	
Ca	44	2	He	-3.552	-19.1	943	2.2	100	
Na	23	2	He	16.769	8.8	103139	1.0	100	
Mg	24	2	He	0.545	33.5	947	10.6	100	
K	39	2	He	-22.132	-9.6	146389	0.9	100	
Mn	55	2	He	0.019	172.2	1203	10.3	2.5	
Co	59	2	He	-0.003	-4.1	140	0.0	2.5	
Ni	60	2	He	0.049	53.9	230	19.0	2.5	
Cu	63	2	He	-0.035	-22.7	490	7.1	2	
Zn	66	2	He	0.201	88.0	527	29.4	2.5	
Al	27	2	He	-0.348	-75.9	950	11.1	5	
B	11	1	No Gas	2.539	15.2	12449	5.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.278	-29.9	24642	4.0	5	
Si	28	1	No Gas	7.332	17.8	625588	0.7	10	
Ag	107	1	No Gas	0.001	412.0	170	29.4	2.5	
Cd	111	1	No Gas	0.001	735.5	16	95.4	1	
Sr	88	1	No Gas	0.001	335.1	940	10.8	2.5	
Mo	95	1	No Gas	0.049	70.0	400	40.0	2.5	
Sn	118	1	No Gas	0.097	24.1	1220	15.2	5	
Sb	121	1	No Gas	0.044	11.0	513	9.6	2.5	
Ba	137	1	No Gas	0.017	38.1	167	15.1	2.5	
Tl	205	1	No Gas	0.241	30.6	5108	30.3	1	
Tl	203	1	No Gas	0.229	29.1	2160	28.7	1	
Pb	208	1	No Gas	0.008	57.5	740	16.4	2.5	
U	238	1	No Gas	0.029	41.8	827	43.3	2.5	
Ca	43	2	He	-5.919	-90.5	23	49.5	100	
Sb	121	2	He	0.041	41.0	220	31.8	2.5	
Ti	47	2	He	-0.020	-149.4	3	173.2	2.5	
Cu	63	1	No Gas	0.030	59.6	1463	9.4	2.5	
Se	82	1	No Gas	-0.742	-20.4	5	528.8	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	552983	0.08	441333	125.30	70	120	ISTD Failed
Ge	72	2	He	425512	0.53	394589	107.84	70	120	
Ge	72	1	No Gas	1527557	1.16	1406470	108.61	70	120	
In	115	1	No Gas	1707467	1.77	1585991	107.66	70	120	
Bi	209	1	No Gas	1460143	3.74	1403423	104.04	70	120	

Sample Report

Sample Table

Sample Name	HS23071289-11
Data File Name	076SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T13:06:21-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 198377
ISTD Ref FileName	012CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.742	0.742	2.44	42820	0.00	2000	
Be	9	1	No Gas	0.017	0.017	21.53	63	0.03	2000	
V	51	2	He	1.389	1.389	1.00	10404	0.01	2000	
Cr	52	2	He	0.263	0.263	18.88	9293	0.00	2000	
Fe	56	2	He	250.720	250.720	0.46	1123011	0.02	200000	
Se	78	2	He	0.712	0.712	68.42	186	0.38	2000	
As	75	2	He	0.357	0.357	11.34	471	0.08	2000	
Ca	44	2	He	1234.925	1234.925	0.90	46161	2.68	200000	
Na	23	2	He	1711.180	1711.180	1.89	1605407	0.11	200000	
Mg	24	2	He	684.571	684.571	0.26	372608	0.18	200000	
K	39	2	He	691.018	691.018	1.18	675510	0.10	200000	
Mn	55	2	He	24.080	24.080	1.48	95765	0.03	2000	
Co	59	2	He	0.145	0.145	13.52	1140	0.01	2000	
Ni	60	2	He	0.647	0.647	8.06	1217	0.05	2000	
Cu	63	2	He	0.389	0.389	10.53	2260	0.02	2000	
Zn	66	2	He	2.230	2.230	10.09	2354	0.09	2000	
Al	27	2	He	82.769	82.769	2.16	32937	0.25	2000	
B	11	1	No Gas	4.474	4.474	1.99	16431	0.03	2000	
Al	27	1	No Gas	79.358	79.358	4.20	895117	0.01	2000	
Si	28	1	No Gas	1069.567	1069.567	1.42	6838397	0.02	2000	
Ag	107	1	No Gas	-0.003	-0.003	-40.74	120	0.00	2000	
Cd	111	1	No Gas	-0.004	-0.004	-308.46	6	-0.06	2000	
Sr	88	1	No Gas	20.884	20.884	1.53	479216	0.00	2000	
Mo	95	1	No Gas	0.004	0.004	221.65	190	0.00	2000	
Sn	118	1	No Gas	0.000	0.000	-1561.78	543	0.00	2000	
Sb	121	1	No Gas	0.013	0.013	28.53	217	0.01	2000	
Ba	137	1	No Gas	15.560	15.560	2.38	56600	0.03	2000	
Tl	205	1	No Gas	-0.023	-0.023	-9.42	227	-0.01	2000	
Tl	203	1	No Gas	-0.021	-0.021	-9.23	147	-0.01	2000	
Pb	208	1	No Gas	0.249	0.249	1.58	7041	0.00	2000	
U	238	1	No Gas	0.027	0.027	8.96	773	0.00	2000	
Ca	43	2	He	1306.113	1306.113	4.37	2870	45.50	200000	
Sb	121	2	He	0.013	0.013	61.10	103	0.01	2000	
Ti	47	2	He	0.205	0.205	38.59	47	0.44	2000	
Cu	63	1	No Gas	0.480	0.480	1.97	5521	0.01	2000	
Zn	66	1	No Gas	2.260	2.260	3.16	6989	0.03	2000	
Se	82	1	No Gas	-0.320	-0.320	-63.12	78	-0.41	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	577087	0.11	441333	130.76	70	120	ISTD Failed
Ge	72	2	He	431080	0.22	394589	109.25	70	120	
Ge	72	1	No Gas	1574575	1.58	1406470	111.95	70	120	
In	115	1	No Gas	1727660	1.37	1585991	108.93	70	120	

Sample Report

Bi	209	1	No Gas	1476415	0.87	1403423	105.20	70	120	

Sample Report

Sample Table

Sample Name	HS23071289-11SD
Data File Name	077SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T13:08:30-05:00
Sample Type	Sample
Dilution	5
Comment	TW DOD B 198377
ISTD Ref FileName	012CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	-0.021	-0.104	-237.14	35882	0.00	2000	
Be	9	1	No Gas	0.003	0.017	135.29	25	0.01	2000	
V	51	2	He	0.994	4.972	3.17	8653	0.01	2000	
Cr	52	2	He	0.204	1.021	31.12	9083	0.00	2000	
Fe	56	2	He	50.303	251.517	2.57	242142	0.02	200000	
Se	78	2	He	0.381	1.904	17.57	163	0.23	2000	
As	75	2	He	0.141	0.704	23.36	306	0.05	2000	
Ca	44	2	He	242.901	1214.505	7.52	10044	2.42	200000	
Na	23	2	He	391.609	1958.047	1.61	440630	0.09	200000	
Mg	24	2	He	137.946	689.728	1.31	76322	0.18	200000	
K	39	2	He	122.883	614.417	2.82	257918	0.05	200000	
Mn	55	2	He	4.724	23.620	1.27	19891	0.02	2000	
Co	59	2	He	0.028	0.138	5.25	350	0.01	2000	
Ni	60	2	He	0.096	0.480	41.60	313	0.03	2000	
Cu	63	2	He	0.047	0.234	18.24	843	0.01	2000	
Zn	66	2	He	0.751	3.756	30.58	1037	0.07	2000	
Al	27	2	He	17.131	85.653	2.15	7759	0.22	2000	
B	11	1	No Gas	1.173	5.867	39.83	10475	0.01	2000	
Al	27	1	No Gas	16.852	84.258	1.34	210513	0.01	2000	
Si	28	1	No Gas	241.206	1206.031	0.68	1989526	0.01	2000	
Ag	107	1	No Gas	-0.005	-0.026	-58.46	97	-0.01	2000	
Cd	111	1	No Gas	-0.006	-0.032	-71.25	0	2.66	2000	
Sr	88	1	No Gas	4.365	21.827	1.26	98703	0.00	2000	
Mo	95	1	No Gas	-0.012	-0.061	-14.52	110	-0.01	2000	
Sn	118	1	No Gas	-0.014	-0.072	-13.37	433	0.00	2000	
Sb	121	1	No Gas	0.002	0.012	173.78	110	0.00	2000	
Ba	137	1	No Gas	3.121	15.606	4.55	11185	0.03	2000	
Tl	205	1	No Gas	-0.022	-0.108	-19.38	247	-0.01	2000	
Tl	203	1	No Gas	-0.027	-0.135	-4.31	90	-0.03	2000	
Pb	208	1	No Gas	0.049	0.247	9.41	1767	0.00	2000	
U	238	1	No Gas	0.005	0.027	34.11	187	0.00	2000	
Ca	43	2	He	225.107	1125.536	16.89	530	42.47	200000	
Sb	121	2	He	0.001	0.006	444.49	57	0.00	2000	
Ti	47	2	He	0.048	0.242	163.63	17	0.29	2000	
Cu	63	1	No Gas	0.061	0.304	30.23	1767	0.00	2000	
Zn	66	1	No Gas	0.616	3.080	17.26	2707	0.02	2000	
Se	82	1	No Gas	-0.702	-3.509	-25.50	12	-6.05	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	572367	0.97	441333	129.69	70	120	ISTD Failed
Ge	72	2	He	435147	0.56	394589	110.28	70	120	
Ge	72	1	No Gas	1559505	0.60	1406470	110.88	70	120	
In	115	1	No Gas	1689992	1.77	1585991	106.56	70	120	

Sample Report

Bi	209	1	No Gas	1423206	4.13	1403423	101.41	70	120	

Sample Report

Sample Table

Sample Name	HS23071289-11PDS
Data File Name	078SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T13:10:41-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 198377
ISTD Ref FileName	012CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.566	0.566	10.55	40192	0.00	2000	
Be	9	1	No Gas	84.496	84.496	1.13	237353	0.04	2000	
V	51	2	He	93.428	93.428	1.11	440224	0.02	2000	
Cr	52	2	He	91.112	91.112	2.12	469523	0.02	2000	
Fe	56	2	He	9751.610	9751.610	0.70	43243196	0.02	200000	
Se	78	2	He	94.375	94.375	2.34	7263	1.30	2000	
As	75	2	He	88.245	88.245	1.24	69410	0.13	2000	
Ca	44	2	He	10582.300	10582.300	1.24	389643	2.72	200000	
Na	23	2	He	10941.165	10941.165	1.44	9839385	0.11	200000	
Mg	24	2	He	10190.633	10190.633	2.56	5570650	0.18	200000	
K	39	2	He	10317.288	10317.288	2.76	7838397	0.13	200000	
Mn	55	2	He	116.771	116.771	1.34	462726	0.03	2000	
Co	59	2	He	91.908	91.908	0.31	624927	0.01	2000	
Ni	60	2	He	94.105	94.105	1.70	155811	0.06	2000	
Cu	63	2	He	90.662	90.662	0.51	380604	0.02	2000	
Zn	66	2	He	92.869	92.869	1.16	84153	0.11	2000	
Al	27	2	He	175.531	175.531	2.60	69035	0.25	2000	
B	11	1	No Gas	3.023	3.023	4.49	13485	0.02	2000	
Al	27	1	No Gas	179.407	179.407	0.26	1938534	0.01	2000	
Si	28	1	No Gas	1071.965	1071.965	1.59	6679286	0.02	2000	
Ag	107	1	No Gas	92.261	92.261	0.66	1063035	0.01	2000	
Cd	111	1	No Gas	90.147	90.147	1.63	202923	0.04	2000	
Sr	88	1	No Gas	20.864	20.864	1.31	473452	0.00	2000	
Mo	95	1	No Gas	89.068	89.068	1.39	420511	0.02	2000	
Sn	118	1	No Gas	-0.007	-0.007	-26.96	490	0.00	2000	
Sb	121	1	No Gas	88.339	88.339	2.58	874921	0.01	2000	
Ba	137	1	No Gas	109.122	109.122	1.09	391930	0.03	2000	
Tl	205	1	No Gas	95.532	95.532	1.90	1769982	0.01	2000	
Tl	203	1	No Gas	90.763	90.763	2.33	736354	0.01	2000	
Pb	208	1	No Gas	91.324	91.324	2.49	2381993	0.00	2000	
U	238	1	No Gas	0.030	0.030	8.13	857	0.00	2000	
Ca	43	2	He	10465.581	10465.581	1.80	22879	45.74	200000	
Sb	121	2	He	89.521	89.521	0.74	373947	0.02	2000	
Ti	47	2	He	94.280	94.280	2.99	18186	0.52	2000	
Cu	63	1	No Gas	95.412	95.412	1.48	830187	0.01	2000	
Zn	66	1	No Gas	95.773	95.773	1.82	242829	0.04	2000	
Se	82	1	No Gas	91.887	91.887	3.57	15567	0.59	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	561778	0.45	441333	127.29	70	120	ISTD Failed
Ge	72	2	He	433628	0.45	394589	109.89	70	120	
Ge	72	1	No Gas	1534943	2.53	1406470	109.13	70	120	
In	115	1	No Gas	1708359	0.66	1585991	107.72	70	120	

Sample Report

Bi	209	1	No Gas	1474105	1.81	1403423	105.04	70	120	

Sample Report

Sample Table

Sample Name	HS23071289-11MSD
Data File Name	079SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T13:12:36-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 198377
ISTD Ref FileName	012CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	84.508	84.508	1.61	740080	0.01	2000	
Be	9	1	No Gas	40.769	40.769	0.70	112856	0.04	2000	
V	51	2	He	45.943	45.943	1.72	220943	0.02	2000	
Cr	52	2	He	43.746	43.746	1.73	232151	0.02	2000	
Fe	56	2	He	5573.750	5573.750	2.42	24998870	0.02	200000	
Se	78	2	He	45.117	45.117	3.83	3580	1.26	2000	
As	75	2	He	42.512	42.512	2.25	33911	0.13	2000	
Ca	44	2	He	10564.657	10564.657	1.13	393345	2.69	200000	
Na	23	2	He	12344.692	12344.692	2.17	11213122	0.11	200000	
Mg	24	2	He	7407.606	7407.606	2.71	4094195	0.18	200000	
K	39	2	He	7766.563	7766.563	2.15	6007142	0.13	200000	
Mn	55	2	He	160.390	160.390	2.17	642179	0.02	2000	
Co	59	2	He	43.742	43.742	1.56	300828	0.01	2000	
Ni	60	2	He	46.606	46.606	0.65	78113	0.06	2000	
Cu	63	2	He	45.096	45.096	2.60	191745	0.02	2000	
Zn	66	2	He	52.233	52.233	0.71	48019	0.11	2000	
Al	27	2	He	471.221	471.221	2.08	185496	0.25	2000	
B	11	1	No Gas	409.771	409.771	1.55	706845	0.06	2000	
Al	27	1	No Gas	467.493	467.493	3.68	5196165	0.01	2000	
Si	28	1	No Gas	5481.490	5481.490	3.52	32948017	0.02	2000	>LDR
Ag	107	1	No Gas	43.967	43.967	1.34	504748	0.01	2000	
Cd	111	1	No Gas	44.302	44.302	1.89	99354	0.04	2000	
Sr	88	1	No Gas	194.290	194.290	1.47	4384754	0.00	2000	
Mo	95	1	No Gas	42.428	42.428	1.19	199651	0.02	2000	
Sn	118	1	No Gas	88.034	88.034	2.04	616475	0.01	2000	
Sb	121	1	No Gas	43.133	43.133	2.10	443679	0.01	2000	
Ba	137	1	No Gas	122.548	122.548	1.74	438484	0.03	2000	
Tl	205	1	No Gas	43.621	43.621	2.88	794727	0.01	2000	
Tl	203	1	No Gas	41.864	41.864	3.01	334027	0.01	2000	
Pb	208	1	No Gas	45.569	45.569	3.18	1168588	0.00	2000	
U	238	1	No Gas	86.026	86.026	2.92	2236793	0.00	2000	
Ca	43	2	He	10672.481	10672.481	4.90	23587	45.25	200000	
Sb	121	2	He	44.354	44.354	2.86	187362	0.02	2000	
Ti	47	2	He	132.971	132.971	1.80	25931	0.51	2000	
Cu	63	1	No Gas	47.051	47.051	2.34	425709	0.01	2000	
Zn	66	1	No Gas	52.702	52.702	2.12	139267	0.04	2000	
Se	82	1	No Gas	42.858	42.858	2.54	7610	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	553625	1.45	441333	125.44	70	120	ISTD Failed
Ge	72	2	He	438520	1.14	394589	111.13	70	120	
Ge	72	1	No Gas	1593817	2.28	1406470	113.32	70	120	
In	115	1	No Gas	1702050	1.50	1585991	107.32	70	120	

Sample Report

Bi	209	1	No Gas	1449430	2.84	1403423	103.28	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	081_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T13:21:14-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
n	Fail
ISTD Pass/Fail	Fail

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	89.604	2.110	774803	1.97	100	89.6	90	110	CCV Main CR1-2 Failed
Be	9	1	No Gas	88.682	0.854	243023	1.39	100	88.7	90	110	CCV Main CR1-2 Failed
V	51	2	He	98.080	0.356	463589	0.43	100	98.1	90	110	
Cr	52	2	He	96.367	0.969	497869	0.36	100	96.4	90	110	
Fe	56	2	He	10007.360	1.151	44535978	1.47	10000	100.1	90	110	
Se	78	2	He	97.423	2.462	7519	2.54	100	97.4	90	110	
As	75	2	He	93.262	0.921	73607	1.03	100	93.3	90	110	
Ca	44	2	He	10224.399	0.377	377834	0.39	10000	102.2	90	110	
Na	23	2	He	9866.665	1.478	8912975	1.05	10000	98.7	90	110	
Mg	24	2	He	10022.849	1.711	5497795	1.14	10000	100.2	90	110	
K	39	2	He	10295.938	0.176	7850025	0.83	10000	103.0	90	110	
Mn	55	2	He	97.567	1.038	388202	1.64	100	97.6	90	110	
Co	59	2	He	96.770	1.441	660323	1.42	100	96.8	90	110	
Ni	60	2	He	98.112	1.201	163011	1.23	100	98.1	90	110	
Cu	63	2	He	95.110	1.990	400651	1.48	100	95.1	90	110	
Zn	66	2	He	93.901	0.729	85384	0.05	100	93.9	90	110	
Al	27	2	He	100.969	2.186	40319	2.05	100	101.0	90	110	
B	11	1	No Gas	423.601	0.466	723176	0.69	500	84.7	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	99.051	1.803	1127095	1.65	100	99.1	90	110	
Si	28	1	No Gas	518.345	2.403	3678116	0.73	5000	10.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	95.748	3.077	1103117	1.90	100	95.7	90	110	
Cd	111	1	No Gas	94.901	1.372	213645	0.80	100	94.9	90	110	
Sr	88	1	No Gas	99.551	2.264	2255643	0.84	100	99.6	90	110	
Mo	95	1	No Gas	92.196	0.702	435362	1.36	100	92.2	90	110	
Sn	118	1	No Gas	95.458	2.339	670984	1.17	100	95.5	90	110	
Sb	121	1	No Gas	92.866	1.282	957842	0.59	100	92.9	90	110	
Ba	137	1	No Gas	98.565	2.422	354008	0.44	100	98.6	90	110	
Tl	205	1	No Gas	97.776	3.770	1830541	0.74	100	97.8	90	110	
Tl	203	1	No Gas	93.684	4.151	768035	1.00	100	93.7	90	110	
Pb	208	1	No Gas	94.605	4.521	2493204	0.63	100	94.6	90	110	
U	238	1	No Gas	92.122	4.994	2461723	1.46	100	92.1	90	110	
Ca	43	2	He	10292.500	1.191	22582	1.84	10000	102.9	90	110	
Sb	121	2	He	97.142	1.697	407199	1.35	100	97.1	90	110	
Ti	47	2	He	101.571	2.889	19661	3.25	100	101.6	90	110	
Cu	63	1	No Gas	96.135	0.641	871024	1.18	100	96.1	90	110	
Se	82	1	No Gas	89.175	2.740	15738	3.82	100	89.2	90	110	CCV Main CR1-2 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	548048	0.53	441333	124.18	70	120	ISTD Failed
Ge	72	2	He	435183	0.68	394589	110.29	70	120	
Ge	72	1	No Gas	1598068	1.80	1406470	113.62	70	120	
In	115	1	No Gas	1708766	2.04	1585991	107.74	70	120	
Bi	209	1	No Gas	1490714	3.83	1403423	106.22	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	082_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T13:23:10-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.141	-56.0	33903	1.5	0.5	
Be	9	1	No Gas	0.016	77.0	60	58.3	0.5	
V	51	2	He	-0.239	-9.1	2888	3.3	2.5	
Cr	52	2	He	0.135	25.9	8780	1.7	2.5	
Fe	56	2	He	0.825	7.9	22192	0.9	100	
Se	78	2	He	0.632	48.2	183	12.3	2	
As	75	2	He	-0.035	-54.7	168	9.0	2.5	
Ca	44	2	He	-1.655	-192.1	1040	10.8	100	
Na	23	2	He	3.124	18.6	93793	0.5	100	
Mg	24	2	He	0.515	35.1	957	10.5	100	
K	39	2	He	-24.881	-3.7	148474	0.6	100	
Mn	55	2	He	-0.012	-241.2	1113	10.9	2.5	
Co	59	2	He	-0.004	-97.9	133	21.7	2.5	
Ni	60	2	He	0.013	116.2	177	14.2	2.5	
Cu	63	2	He	-0.001	-368.9	647	2.4	2	
Zn	66	2	He	0.130	34.1	477	8.5	2.5	
Al	27	2	He	-0.538	-98.6	903	23.5	5	
B	11	1	No Gas	2.257	5.3	12052	1.5	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.472	-16.8	23520	3.0	5	
Si	28	1	No Gas	6.991	22.4	649630	0.8	10	
Ag	107	1	No Gas	0.007	80.9	243	28.0	2.5	
Cd	111	1	No Gas	0.001	874.7	16	92.6	1	
Sr	88	1	No Gas	0.005	72.9	1057	8.5	2.5	
Mo	95	1	No Gas	0.061	30.6	470	20.3	2.5	
Sn	118	1	No Gas	0.111	17.8	1353	11.3	5	
Sb	121	1	No Gas	0.081	8.1	920	8.2	2.5	
Ba	137	1	No Gas	0.017	70.2	170	27.0	2.5	
Tl	205	1	No Gas	0.253	31.2	5325	27.6	1	
Tl	203	1	No Gas	0.230	38.0	2177	33.1	1	
Pb	208	1	No Gas	0.012	20.8	853	9.1	2.5	
U	238	1	No Gas	0.024	36.6	677	34.7	2.5	
Ca	43	2	He	-1.656	-162.1	33	17.3	100	
Sb	121	2	He	0.092	24.5	440	21.7	2.5	
Ti	47	2	He	-0.004	-772.3	7	86.6	2.5	
Cu	63	1	No Gas	0.018	65.7	1413	7.8	2.5	
Se	82	1	No Gas	-1.033	-13.4	-46	-51.2	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	556862	0.48	441333	126.18	70	120	ISTD Failed
Ge	72	2	He	437565	0.53	394589	110.89	70	120	
Ge	72	1	No Gas	1591185	1.10	1406470	113.13	70	120	
In	115	1	No Gas	1747988	0.98	1585991	110.21	70	120	
Bi	209	1	No Gas	1471309	2.74	1403423	104.84	70	120	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	143CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T15:38:42-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	39664	0.00
Be	9	1	No Gas	17	452.99
V	51	2	He	6160	0.04
Cr	52	2	He	9770	0.03
Fe	56	2	He	20943	0.02
Se	78	2	He	164	6.61
As	75	2	He	256	4.60
Ca	44	2	He	917	1.25
Na	23	2	He	127791	0.00
Mg	24	2	He	727	1.08
K	39	2	He	160837	0.00
Mn	55	2	He	860	1.92
Co	59	2	He	120	24.06
Ni	60	2	He	147	14.94
Cu	63	2	He	490	2.50
Zn	66	2	He	353	2.02
Al	27	2	He	1017	1.11
B	11	1	No Gas	8835	0.02
Al	27	1	No Gas	28439	0.00
Si	28	1	No Gas	851715	0.00
Ag	107	1	No Gas	120	18.37
Sr	88	1	No Gas	937	1.94
Mo	95	1	No Gas	120	31.82
Sn	118	1	No Gas	617	1.69
Sb	121	1	No Gas	40	125.00
Ba	137	1	No Gas	167	16.23
Tl	205	1	No Gas	260	4.44
Tl	203	1	No Gas	113	19.59
Pb	208	1	No Gas	450	0.99
U	238	1	No Gas	27	292.73
Ca	43	2	He	37	42.94
Sb	121	2	He	33	187.35
Ti	47	2	He	7	1299.04
Cu	63	1	No Gas	970	0.46

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	1	No Gas	653055	0.82

Calibration Blank Report

Ge	72	2	He	447320	0.72
Ge	72	1	No Gas	1632976	1.83
In	115	1	No Gas	1755542	1.06
Bi	209	1	No Gas	1469937	4.92

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	144CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T15:40:51-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	143CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	5678	0.06
V	51	2	He	15193	0.01
Cr	52	2	He	19785	0.02
Fe	56	2	He	934723	0.00
Se	78	2	He	336	3.75
As	75	2	He	1743	0.17
Ca	44	2	He	8576	0.06
Na	23	2	He	321330	0.00
Mg	24	2	He	123895	0.00
K	39	2	He	321505	0.00
Mn	55	2	He	8656	0.05
Co	59	2	He	13350	0.02
Ni	60	2	He	3170	0.20
Cu	63	2	He	8509	0.02
Zn	66	2	He	2054	0.52
Al	27	2	He	1817	0.45
B	11	1	No Gas	24852	0.01
Al	27	1	No Gas	52737	0.00
Si	28	1	No Gas	917975	0.00
Ag	107	1	No Gas	22136	0.01
Cd	111	1	No Gas	4254	0.15
Sr	88	1	No Gas	46846	0.00
Mo	95	1	No Gas	9180	0.05
Sn	118	1	No Gas	13817	0.02
Sb	121	1	No Gas	18016	0.01
Ba	137	1	No Gas	7039	0.04
Tl	205	1	No Gas	36139	0.00
Tl	203	1	No Gas	15380	0.01
Pb	208	1	No Gas	48889	0.00
U	238	1	No Gas	47446	0.00
Ca	43	2	He	487	3.41
Sb	121	2	He	7522	0.03
Cu	63	1	No Gas	19147	0.01

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	648034	0.94	653055	99.23	70	120	
Ge	72	2	He	451703	1.48	447320	100.98	70	120	
Ge	72	1	No Gas	1640181	0.95	1632976	100.44	70	120	

Calibration Standard Report

In	115	1	No Gas	1746073	1.53	1755542	99.46	70	120	
Bi	209	1	No Gas	1484017	3.14	1469937	100.96	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	145CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T15:43:02-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	143CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	13982	0.01
V	51	2	He	29092	0.00
Cr	52	2	He	34317	0.00
Fe	56	2	He	2306705	0.00
Se	78	2	He	571	1.69
As	75	2	He	4034	0.07
Ca	44	2	He	20185	0.01
Na	23	2	He	606091	0.00
Mg	24	2	He	303159	0.00
K	39	2	He	566888	0.00
Mn	55	2	He	24756	0.00
Co	59	2	He	32265	0.00
Ni	60	2	He	8229	0.04
Cu	63	2	He	20896	0.01
Zn	66	2	He	4788	0.09
Al	27	2	He	3254	0.19
B	11	1	No Gas	48298	0.00
Al	27	1	No Gas	93580	0.00
Si	28	1	No Gas	999096	0.00
Ag	107	1	No Gas	55748	0.00
Cd	111	1	No Gas	10708	0.04
Sr	88	1	No Gas	116327	0.00
Mo	95	1	No Gas	22469	0.02
Sn	118	1	No Gas	34275	0.01
Sb	121	1	No Gas	44606	0.00
Ba	137	1	No Gas	17806	0.01
Tl	205	1	No Gas	89483	0.00
Tl	203	1	No Gas	37741	0.01
Pb	208	1	No Gas	122505	0.00
U	238	1	No Gas	119579	0.00
Ca	43	2	He	1100	0.43
Sb	121	2	He	19001	0.01
Cu	63	1	No Gas	47008	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	656528	1.83	653055	100.53	70	120	
Ge	72	2	He	446432	0.82	447320	99.80	70	120	
Ge	72	1	No Gas	1599423	1.79	1632976	97.95	70	120	

Calibration Standard Report

In	115	1	No Gas	1781028	1.07	1755542	101.45	70	120	
Bi	209	1	No Gas	1466061	3.12	1469937	99.74	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	146CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T15:44:59-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	143CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	27903	0.01
V	51	2	He	52235	0.00
Cr	52	2	He	59785	0.00
Fe	56	2	He	4492860	0.00
Se	78	2	He	966	0.26
As	75	2	He	7731	0.01
Ca	44	2	He	38992	0.01
Na	23	2	He	1059886	0.00
Mg	24	2	He	609330	0.00
K	39	2	He	963214	0.00
Mn	55	2	He	40771	0.00
Co	59	2	He	66335	0.00
Ni	60	2	He	16367	0.01
Cu	63	2	He	40772	0.00
Zn	66	2	He	9006	0.07
Al	27	2	He	5294	0.07
B	11	1	No Gas	88640	0.00
Al	27	1	No Gas	151721	0.00
Si	28	1	No Gas	1160643	0.00
Ag	107	1	No Gas	110782	0.00
Cd	111	1	No Gas	21072	0.03
Sr	88	1	No Gas	232540	0.00
Mo	95	1	No Gas	45077	0.00
Sn	118	1	No Gas	66709	0.00
Sb	121	1	No Gas	91730	0.00
Ba	137	1	No Gas	34577	0.01
Tl	205	1	No Gas	182987	0.00
Tl	203	1	No Gas	76514	0.00
Pb	208	1	No Gas	246194	0.00
U	238	1	No Gas	241512	0.00
Ca	43	2	He	2307	0.36
Sb	121	2	He	38256	0.01
Cu	63	1	No Gas	93762	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	646998	0.84	653055	99.07	70	120	
Ge	72	2	He	440414	0.47	447320	98.46	70	120	
Ge	72	1	No Gas	1608073	1.56	1632976	98.47	70	120	

Calibration Standard Report

In	115	1	No Gas	1750476	0.43	1755542	99.71	70	120	
Bi	209	1	No Gas	1444358	2.82	1469937	98.26	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	147CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T15:47:09-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	143CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	266907	0.00
V	51	2	He	454579	0.00
Cr	52	2	He	494819	0.00
Fe	56	2	He	42897476	0.00
Se	78	2	He	7639	0.01
As	75	2	He	74732	0.00
Ca	44	2	He	373493	0.00
Na	23	2	He	8868556	0.00
Mg	24	2	He	5403152	0.00
K	39	2	He	7843548	0.00
Mn	55	2	He	390095	0.00
Co	59	2	He	634902	0.00
Ni	60	2	He	154945	0.00
Cu	63	2	He	391726	0.00
Zn	66	2	He	83674	0.00
Al	27	2	He	40680	0.00
B	11	1	No Gas	744498	0.00
Al	27	1	No Gas	1146667	0.00
Si	28	1	No Gas	3797051	0.00
Ag	107	1	No Gas	1064417	0.00
Cd	111	1	No Gas	204904	0.00
Sr	88	1	No Gas	2193870	0.00
Mo	95	1	No Gas	441470	0.00
Sn	118	1	No Gas	645031	0.00
Sb	121	1	No Gas	914132	0.00
Ba	137	1	No Gas	338170	0.00
Tl	205	1	No Gas	1740629	0.00
Tl	203	1	No Gas	716695	0.00
Pb	208	1	No Gas	2364359	0.00
U	238	1	No Gas	2380255	0.00
Ca	43	2	He	22308	0.00
Sb	121	2	He	394061	0.00
Cu	63	1	No Gas	868782	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	608667	0.39	653055	93.20	70	120	
Ge	72	2	He	431806	0.93	447320	96.53	70	120	
Ge	72	1	No Gas	1562880	1.40	1632976	95.71	70	120	

Calibration Standard Report

In	115	1	No Gas	1701262	0.76	1755542	96.91	70	120	
Bi	209	1	No Gas	1417263	3.25	1469937	96.42	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	148CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T15:49:01-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	143CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	506645	0.00
V	51	2	He	880011	0.00
Cr	52	2	He	930127	0.00
Fe	56	2	He	82336195	0.00
Se	78	2	He	14371	0.01
As	75	2	He	144760	0.00
Ca	44	2	He	716654	0.00
Na	23	2	He	16891459	0.00
Mg	24	2	He	10380291	0.00
K	39	2	He	14922578	0.00
Mn	55	2	He	746594	0.00
Co	59	2	He	1221197	0.00
Ni	60	2	He	293655	0.00
Cu	63	2	He	744238	0.00
Zn	66	2	He	160885	0.00
Al	27	2	He	78990	0.00
B	11	1	No Gas	1468936	0.00
Al	27	1	No Gas	2214649	0.00
Si	28	1	No Gas	6598901	0.00
Ag	107	1	No Gas	2064993	0.00
Cd	111	1	No Gas	399017	0.00
Sr	88	1	No Gas	4224831	0.00
Mo	95	1	No Gas	863382	0.00
Sn	118	1	No Gas	1287642	0.00
Sb	121	1	No Gas	1848363	0.00
Ba	137	1	No Gas	662145	0.00
Tl	205	1	No Gas	3352796	0.00
Tl	203	1	No Gas	1410072	0.00
Pb	208	1	No Gas	4574853	0.00
U	238	1	No Gas	4693047	0.00
Ca	43	2	He	43308	0.01
Sb	121	2	He	778361	0.00
Cu	63	1	No Gas	1691918	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	573203	6.11	653055	87.77	70	120	
Ge	72	2	He	425436	0.94	447320	95.11	70	120	
Ge	72	1	No Gas	1582555	1.43	1632976	96.91	70	120	

Calibration Standard Report

In	115	1	No Gas	1690372	2.10	1755542	96.29	70	120	
Bi	209	1	No Gas	1410708	0.96	1469937	95.97	70	120	

Sample Report

Sample Table

Sample Name	LLCCV2
Data File Name	151LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T15:55:05-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	143CALB.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	2.086	2.086	3.15	55584	0.00	2	
Be	9	1	No Gas	1.958	1.958	3.68	5374	0.04	2	
V	51	2	He	1.207	1.207	1.09	11712	0.01	2	NewName Main CR1 Failed
Cr	52	2	He	1.835	1.835	3.07	18713	0.01	2	
Fe	56	2	He	206.282	206.282	1.27	917966	0.02	200	
Se	78	2	He	2.218	2.218	8.07	331	0.67	2	
As	75	2	He	1.810	1.810	4.20	1633	0.11	2	
Ca	44	2	He	193.339	193.339	1.85	8226	2.35	200	
Na	23	2	He	187.498	187.498	2.14	293851	0.06	200	
Mg	24	2	He	214.274	214.274	1.07	118226	0.18	200	
K	39	2	He	192.852	192.852	2.57	311182	0.06	200	
Mn	55	2	He	1.966	1.966	3.98	8610	0.02	2	
Co	59	2	He	2.021	2.021	0.49	13150	0.02	2	
Ni	60	2	He	1.939	1.939	5.68	3160	0.06	2	
Cu	63	2	He	2.049	2.049	1.68	8559	0.02	2	
Zn	66	2	He	1.938	1.938	7.57	1997	0.10	2	
Al	27	2	He	2.242	2.242	16.19	1937	0.12	2	
B	11	1	No Gas	16.383	16.383	4.94	32900	0.05	10	NewName Main CR1 Failed
Al	27	1	No Gas	2.068	2.068	1.20	51017	0.00	2	
Si	28	1	No Gas	9.917	9.917	38.64	894698	0.00	10	
Ag	107	1	No Gas	2.040	2.040	5.16	22035	0.01	2	
Cd	111	1	No Gas	1.989	1.989	4.45	4112	0.05	2	
Sr	88	1	No Gas	2.111	2.111	0.89	47404	0.00	2	
Mo	95	1	No Gas	2.135	2.135	4.48	9694	0.02	2	
Sn	118	1	No Gas	2.087	2.087	0.64	14508	0.01	2	
Sb	121	1	No Gas	2.138	2.138	3.12	20062	0.01	2	
Ba	137	1	No Gas	2.043	2.043	5.99	7189	0.03	2	
Tl	205	1	No Gas	2.335	2.335	3.57	42165	0.01	2	
Tl	203	1	No Gas	2.383	2.383	3.43	18020	0.01	2	
Pb	208	1	No Gas	2.031	2.031	1.92	50100	0.00	2	
U	238	1	No Gas	1.960	1.960	1.24	48988	0.00	2	
Ca	43	2	He	182.532	182.532	18.67	453	40.26	200	
Sb	121	2	He	2.107	2.107	4.62	8643	0.02	2	
Ti	47	2	He	2.167	2.167	1.52	430	0.50	200	
Cu	63	1	No Gas	2.183	2.183	3.71	19801	0.01	2	
Se	82	1	No Gas	1.991	1.991	45.27	418	0.48	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	618865	1.04	653055	94.76	70	120	
Ge	72	2	He	447062	1.32	447320	99.94	70	120	
Ge	72	1	No Gas	1603113	1.03	1632976	98.17	70	120	
In	115	1	No Gas	1750214	0.46	1755542	99.70	70	120	
Bi	209	1	No Gas	1498930	2.05	1469937	101.97	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICCB
Data File Name	153_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T15:59:13-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	143CALB.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	0.028	323.2	37665	0.9	0.5	
Be	9	1	No Gas	0.003	200.9	23	65.5	0.5	
V	51	2	He	-0.646	-5.3	3133	5.2	2.5	
Cr	52	2	He	-0.054	-60.1	9347	1.4	2.5	
Fe	56	2	He	-0.090	-44.7	20212	2.0	100	
Se	78	2	He	0.302	98.3	183	10.7	1	
As	75	2	He	-0.076	-33.2	194	9.4	2.5	
Ca	44	2	He	1.051	223.8	940	9.1	100	
Na	23	2	He	-30.623	-8.3	98939	1.0	100	
Mg	24	2	He	0.078	175.0	757	9.7	100	
K	39	2	He	-6.680	-45.6	152989	0.9	100	
Mn	55	2	He	0.060	49.9	1077	10.8	2.5	
Co	59	2	He	0.007	25.3	160	6.3	2.5	
Ni	60	2	He	0.093	79.2	287	40.3	2.5	
Cu	63	2	He	0.095	19.2	850	9.3	1	
Zn	66	2	He	0.547	14.1	803	8.5	2.5	
Al	27	2	He	0.286	166.4	1113	16.1	5	
B	11	1	No Gas	2.107	14.4	11476	3.0	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	0.090	29.4	28911	1.6	5	
Si	28	1	No Gas	-0.052	-4175.1	835236	1.1	10	
Ag	107	1	No Gas	-0.002	-207.7	97	41.8	2.5	
Cd	111	1	No Gas	0.006	53.8	-4	-173.2	1	
Sr	88	1	No Gas	-0.006	-67.9	787	9.9	2.5	
Mo	95	1	No Gas	0.009	150.6	157	37.4	2.5	
Sn	118	1	No Gas	0.089	19.5	1183	8.8	5	
Sb	121	1	No Gas	0.108	13.4	1053	14.5	2.5	
Ba	137	1	No Gas	0.079	5.8	430	2.3	2.5	
Tl	205	1	No Gas	0.021	29.6	617	18.4	1	
Tl	203	1	No Gas	0.029	20.5	323	13.9	1	
Pb	208	1	No Gas	0.002	42.3	497	2.3	2.5	
U	238	1	No Gas	0.004	23.1	113	20.4	2.5	
Ca	43	2	He	4.862	354.4	47	81.1	100	
Sb	121	2	He	0.085	27.1	377	25.8	2.5	
Ti	47	2	He	0.035	83.4	13	43.3	2.5	
Se	82	1	No Gas	-0.860	-34.3	-29	-162.0	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	616261	1.44	653055	94.37	70	120	
Ge	72	2	He	439812	1.22	447320	98.32	70	120	
Ge	72	1	No Gas	1601942	1.59	1632976	98.10	70	120	
In	115	1	No Gas	1714441	1.35	1755542	97.66	70	120	
Bi	209	1	No Gas	1444464	2.56	1469937	98.27	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICCV
Data File Name	155_ICV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T16:06:26-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	143CALB.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	96.916	2.641	850594	2.51	100	96.9	90	110	
Be	9	1	No Gas	98.110	0.807	261374	0.25	100	98.1	90	110	
V	51	2	He	100.644	2.194	458956	1.43	100	100.6	90	110	
Cr	52	2	He	103.095	2.653	500981	1.98	100	103.1	90	110	
Fe	56	2	He	10310.932	2.364	43855566	1.56	10000	103.1	90	110	
Se	78	2	He	101.662	1.910	7640	1.37	100	101.7	90	110	
As	75	2	He	100.935	0.984	75411	0.34	100	100.9	90	110	
Ca	44	2	He	10201.408	1.822	377947	1.01	10000	102.0	90	110	
Na	23	2	He	10211.859	2.492	8971005	1.71	10000	102.1	90	110	
Mg	24	2	He	10234.725	2.083	5487756	1.77	10000	102.3	90	110	
K	39	2	He	10083.340	1.254	7848360	0.91	10000	100.8	90	110	
Mn	55	2	He	101.955	2.503	393683	1.69	100	102.0	90	110	
Co	59	2	He	101.228	2.445	638225	1.77	100	101.2	90	110	
Ni	60	2	He	103.191	2.999	156964	2.18	100	103.2	90	110	
Cu	63	2	He	102.653	2.134	395579	1.36	100	102.7	90	110	
Zn	66	2	He	103.292	1.562	85925	0.99	100	103.3	90	110	
Al	27	2	He	99.923	2.147	41068	1.47	100	99.9	90	110	
B	11	1	No Gas	509.532	2.248	751103	2.21	500	101.9	90	110	
Al	27	1	No Gas	104.446	3.293	1179968	0.75	100	104.4	90	110	
Si	28	1	No Gas	512.120	2.929	3815474	0.29	500	102.4	90	110	
Ag	107	1	No Gas	105.832	1.057	1104129	0.88	100	105.8	90	110	
Cd	111	1	No Gas	104.236	0.541	209949	0.77	100	104.2	90	110	
Sr	88	1	No Gas	106.281	2.103	2272521	1.97	100	106.3	90	110	
Mo	95	1	No Gas	103.581	1.253	451079	0.99	100	103.6	90	110	
Sn	118	1	No Gas	101.714	1.390	657872	1.28	100	101.7	90	110	
Sb	121	1	No Gas	99.655	3.088	922517	0.97	100	99.7	90	110	
Ba	137	1	No Gas	102.852	0.629	343392	0.87	100	102.9	90	110	
Tl	205	1	No Gas	103.355	2.726	1768676	1.38	100	103.4	90	110	
Tl	203	1	No Gas	101.998	2.378	731007	1.13	100	102.0	90	110	
Pb	208	1	No Gas	103.717	3.270	2419467	1.86	100	103.7	90	110	
U	238	1	No Gas	102.216	0.846	2437347	1.88	100	102.2	90	110	
Ca	43	2	He	10275.462	2.436	22943	1.75	10000	102.8	90	110	
Sb	121	2	He	97.665	1.521	390260	0.74	100	97.7	90	110	
Ti	47	2	He	106.747	2.706	20395	1.89	100	106.7	90	110	
Cu	63	1	No Gas	103.853	3.438	887186	0.98	100	103.9	90	110	
Se	82	1	No Gas	106.240	3.182	16592	2.54	100	106.2	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	602554	0.55	653055	92.27	70	120	
Ge	72	2	He	437071	0.80	447320	97.71	70	120	
Ge	72	1	No Gas	1585165	2.58	1632976	97.07	70	120	
In	115	1	No Gas	1699150	0.26	1755542	96.79	70	120	
Bi	209	1	No Gas	1430491	1.57	1469937	97.32	70	120	

Sample Report

Sample Table

Sample Name	LLCCV5
Data File Name	160LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T16:17:54-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	143CALB.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	5.025	5.025	4.97	78745	0.01	5	
Be	9	1	No Gas	4.761	4.761	3.18	12689	0.04	5	
V	51	2	He	4.263	4.263	2.11	25469	0.02	5	
Cr	52	2	He	5.117	5.117	3.30	34300	0.01	5	
Fe	56	2	He	521.051	521.051	2.54	2259716	0.02	500	
Se	78	2	He	4.951	4.951	12.75	530	0.93	5	
As	75	2	He	4.861	4.861	2.05	3911	0.12	5	
Ca	44	2	He	496.276	496.276	1.19	19444	2.55	500	
Na	23	2	He	496.713	496.713	0.37	561066	0.09	500	
Mg	24	2	He	547.907	547.907	0.40	297580	0.18	500	
K	39	2	He	514.422	514.422	0.70	555355	0.09	500	
Mn	55	2	He	5.736	5.736	1.58	23701	0.02	5	
Co	59	2	He	5.053	5.053	1.74	32312	0.02	5	
Ni	60	2	He	5.239	5.239	3.64	8193	0.06	5	
Cu	63	2	He	5.093	5.093	1.41	20295	0.03	5	
Zn	66	2	He	5.416	5.416	3.47	4884	0.11	5	
Al	27	2	He	6.259	6.259	3.04	3541	0.18	5	
B	11	1	No Gas	26.647	26.647	3.56	46972	0.06	25	
Al	27	1	No Gas	5.539	5.539	1.94	90782	0.01	5	
Si	28	1	No Gas	21.072	21.072	26.21	971456	0.00	25	
Ag	107	1	No Gas	5.086	5.086	1.48	55360	0.01	5	
Cd	111	1	No Gas	4.965	4.965	5.74	10394	0.05	5	
Sr	88	1	No Gas	5.164	5.164	0.24	115849	0.00	5	
Mo	95	1	No Gas	4.987	4.987	2.28	22723	0.02	5	
Sn	118	1	No Gas	4.874	4.874	2.04	33406	0.01	5	
Sb	121	1	No Gas	4.723	4.723	1.40	44780	0.01	5	
Ba	137	1	No Gas	5.024	5.024	1.40	17622	0.03	5	
Tl	205	1	No Gas	5.246	5.246	3.59	90484	0.01	5	
Tl	203	1	No Gas	5.309	5.309	4.27	38346	0.01	5	
Pb	208	1	No Gas	5.176	5.176	3.70	121782	0.00	5	
U	238	1	No Gas	4.924	4.924	3.24	118016	0.00	5	
Ca	43	2	He	562.373	562.373	5.72	1303	43.15	500	
Sb	121	2	He	4.752	4.752	2.82	19221	0.02	5	
Ti	47	2	He	4.872	4.872	12.20	947	0.51	5	
Cu	63	1	No Gas	5.125	5.125	0.55	45717	0.01	5	
Se	82	1	No Gas	5.292	5.292	13.70	948	0.56	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	602392	2.51	653055	92.24	70	120	
Ge	72	2	He	441686	0.55	447320	98.74	70	120	
Ge	72	1	No Gas	1621266	0.91	1632976	99.28	70	120	

Sample Report

In	115	1	No Gas	1768835	0.60	1755542	100.76	70	120	
Bi	209	1	No Gas	1438973	4.49	1469937	97.89	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	161_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T16:19:51-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	143CALB.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	97.718	4.124	837022	3.21	100	97.7	90	110	
Be	9	1	No Gas	97.708	1.770	254172	1.27	100	97.7	90	110	
V	51	2	He	100.642	0.633	461955	1.03	100	100.6	90	110	
Cr	52	2	He	102.178	0.329	499854	0.39	100	102.2	90	110	
Fe	56	2	He	10175.299	1.223	43563939	1.63	10000	101.8	90	110	
Se	78	2	He	100.559	0.282	7608	0.47	100	100.6	90	110	
As	75	2	He	97.903	1.236	73624	0.81	100	97.9	90	110	
Ca	44	2	He	10149.847	0.572	378499	0.92	10000	101.5	90	110	
Na	23	2	He	9959.429	1.264	8809819	1.50	10000	99.6	90	110	
Mg	24	2	He	10116.223	0.248	5459438	0.62	10000	101.2	90	110	
K	39	2	He	9939.574	1.345	7789035	1.72	10000	99.4	90	110	
Mn	55	2	He	98.590	0.898	392017	1.32	100	98.6	90	110	
Co	59	2	He	100.719	0.497	639173	0.76	100	100.7	90	110	
Ni	60	2	He	100.941	1.552	154564	1.97	100	100.9	90	110	
Cu	63	2	He	101.765	0.441	394722	0.67	100	101.8	90	110	
Zn	66	2	He	103.179	0.897	86387	0.90	100	103.2	90	110	
Al	27	2	He	100.871	1.526	41720	1.85	100	100.9	90	110	
B	11	1	No Gas	511.116	1.864	735635	0.99	500	102.2	90	110	
Al	27	1	No Gas	104.441	1.522	1174387	1.97	100	104.4	90	110	
Si	28	1	No Gas	525.128	1.484	3872307	1.05	5000	10.5	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	103.008	1.886	1070943	2.52	100	103.0	90	110	
Cd	111	1	No Gas	102.393	1.511	205483	0.78	100	102.4	90	110	
Sr	88	1	No Gas	104.231	1.057	2220895	1.72	100	104.2	90	110	
Mo	95	1	No Gas	101.968	0.987	442481	1.10	100	102.0	90	110	
Sn	118	1	No Gas	100.236	1.649	645968	0.94	100	100.2	90	110	
Sb	121	1	No Gas	100.375	1.128	924718	0.75	100	100.4	90	110	
Ba	137	1	No Gas	101.742	1.518	338458	1.31	100	101.7	90	110	
Tl	205	1	No Gas	97.833	1.399	1659309	1.00	100	97.8	90	110	
Tl	203	1	No Gas	97.421	0.971	691992	0.88	100	97.4	90	110	
Pb	208	1	No Gas	102.175	0.730	2362514	0.94	100	102.2	90	110	
U	238	1	No Gas	103.158	0.441	2437377	0.93	100	103.2	90	110	
Ca	43	2	He	9973.127	3.067	22415	3.27	10000	99.7	90	110	
Sb	121	2	He	99.203	0.801	398982	0.92	100	99.2	90	110	
Ti	47	2	He	103.021	2.772	19815	3.19	100	103.0	90	110	
Cu	63	1	No Gas	102.574	1.482	872112	0.95	100	102.6	90	110	
Se	82	1	No Gas	105.075	2.721	16328	2.11	100	105.1	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	588390	0.90	653055	90.10	70	120	
Ge	72	2	He	439879	0.42	447320	98.34	70	120	
Ge	72	1	No Gas	1576803	0.59	1632976	96.56	70	120	
In	115	1	No Gas	1693090	0.74	1755542	96.44	70	120	
Bi	209	1	No Gas	1417445	0.50	1469937	96.43	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	162_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T16:21:58-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	143CALB.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	0.064	116.6	37151	1.8	0.5	
Be	9	1	No Gas	0.016	89.4	58	65.5	0.5	
V	51	2	He	-0.726	-8.4	2759	9.5	2.5	
Cr	52	2	He	0.170	26.6	10391	1.7	2.5	
Fe	56	2	He	0.936	18.9	24522	1.7	100	
Se	78	2	He	0.281	75.9	181	7.7	2	
As	75	2	He	-0.084	-39.1	188	12.6	2.5	
Ca	44	2	He	1.364	202.6	950	12.1	100	
Na	23	2	He	-54.020	-4.5	78316	1.3	100	
Mg	24	2	He	0.046	264.0	737	7.5	100	
K	39	2	He	-5.784	-55.8	153232	0.5	100	
Mn	55	2	He	0.021	54.6	923	3.5	2.5	
Co	59	2	He	0.008	46.8	170	15.6	2.5	
Ni	60	2	He	0.037	97.7	200	26.5	2.5	
Cu	63	2	He	0.050	10.4	673	1.7	2	
Zn	66	2	He	0.271	81.9	573	33.0	2.5	
Al	27	2	He	-0.183	-88.4	923	8.4	5	
B	11	1	No Gas	4.612	4.5	14881	1.4	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.348	-12.2	23884	1.5	5	
Si	28	1	No Gas	-22.271	-5.9	700006	0.5	10	
Ag	107	1	No Gas	0.005	14.1	170	5.9	2.5	
Cd	111	1	No Gas	0.009	33.7	3	194.0	1	
Sr	88	1	No Gas	-0.004	-48.3	837	3.0	2.5	
Mo	95	1	No Gas	0.082	28.2	480	19.9	2.5	
Sn	118	1	No Gas	0.094	26.8	1230	14.9	5	
Sb	121	1	No Gas	0.222	11.7	2100	10.9	2.5	
Ba	137	1	No Gas	0.010	45.0	200	8.7	2.5	
Tl	205	1	No Gas	0.633	35.6	11343	36.4	1	
Tl	203	1	No Gas	0.618	36.8	4644	37.6	1	
Pb	208	1	No Gas	0.011	9.0	703	3.0	2.5	
U	238	1	No Gas	0.019	14.1	500	15.1	2.5	
Ca	43	2	He	-7.086	-64.8	20	50.0	100	
Sb	121	2	He	0.174	16.4	730	16.8	2.5	
Ti	47	2	He	0.018	292.3	10	100.0	2.5	
Cu	63	1	No Gas	0.066	30.5	1513	11.9	2.5	
Se	82	1	No Gas	-0.667	-31.1	2	1961.8	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	602806	0.83	653055	92.31	70	120	
Ge	72	2	He	438556	1.37	447320	98.04	70	120	
Ge	72	1	No Gas	1592411	0.84	1632976	97.52	70	120	
In	115	1	No Gas	1735082	2.26	1755542	98.83	70	120	
Bi	209	1	No Gas	1457569	1.73	1469937	99.16	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	173_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T16:45:19-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	143CALB.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	96.801	3.582	809140	3.54	100	96.8	90	110	
Be	9	1	No Gas	97.766	1.524	248054	1.84	100	97.8	90	110	
V	51	2	He	98.997	1.193	443581	1.36	100	99.0	90	110	
Cr	52	2	He	101.824	1.520	486177	1.17	100	101.8	90	110	
Fe	56	2	He	10148.333	1.876	42399129	0.81	10000	101.5	90	110	
Se	78	2	He	100.418	0.843	7415	1.30	100	100.4	90	110	
As	75	2	He	98.098	1.016	72009	2.17	100	98.1	90	110	
Ca	44	2	He	9932.855	1.062	361520	0.99	10000	99.3	90	110	
Na	23	2	He	10197.871	1.578	8801189	1.83	10000	102.0	90	110	
Mg	24	2	He	10190.397	0.805	5368471	2.69	10000	101.9	90	110	
K	39	2	He	9850.713	0.908	7535228	1.23	10000	98.5	90	110	
Mn	55	2	He	98.050	1.416	380479	0.63	100	98.1	90	110	
Co	59	2	He	100.888	2.571	624763	1.34	100	100.9	90	110	
Ni	60	2	He	100.618	0.937	150390	2.58	100	100.6	90	110	
Cu	63	2	He	101.009	1.749	382342	0.39	100	101.0	90	110	
Zn	66	2	He	103.095	1.501	84251	2.18	100	103.1	90	110	
Al	27	2	He	105.323	5.911	42453	4.58	100	105.3	90	110	
B	11	1	No Gas	523.361	2.834	734541	3.10	500	104.7	90	110	
Al	27	1	No Gas	102.805	3.419	1157943	2.91	100	102.8	90	110	
Si	28	1	No Gas	500.091	2.358	3732116	1.18	5000	10.0	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	104.021	4.591	1068221	3.82	100	104.0	90	110	
Cd	111	1	No Gas	101.907	1.711	202059	0.66	100	101.9	90	110	
Sr	88	1	No Gas	103.219	1.088	2173257	2.39	100	103.2	90	110	
Mo	95	1	No Gas	103.128	1.942	442111	0.69	100	103.1	90	110	
Sn	118	1	No Gas	100.341	2.091	638872	0.78	100	100.3	90	110	
Sb	121	1	No Gas	98.381	1.866	907590	0.63	100	98.4	90	110	
Ba	137	1	No Gas	101.728	0.958	334366	0.48	100	101.7	90	110	
Tl	205	1	No Gas	96.458	1.842	1649567	1.50	100	96.5	90	110	
Tl	203	1	No Gas	95.712	3.891	685164	0.66	100	95.7	90	110	
Pb	208	1	No Gas	100.757	4.314	2347665	1.09	100	100.8	90	110	
U	238	1	No Gas	99.891	3.961	2378735	1.73	100	99.9	90	110	
Ca	43	2	He	9843.002	0.596	21594	2.12	10000	98.4	90	110	
Sb	121	2	He	99.022	1.838	388648	0.66	100	99.0	90	110	
Ti	47	2	He	97.850	2.381	18366	2.02	100	97.9	90	110	
Cu	63	1	No Gas	100.284	1.350	853931	1.20	100	100.3	90	110	
Se	82	1	No Gas	97.149	1.359	15127	0.52	100	97.1	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	573825	0.48	653055	87.87	70	120	
Ge	72	2	He	429369	2.03	447320	95.99	70	120	
Ge	72	1	No Gas	1579234	1.72	1632976	96.71	70	120	
In	115	1	No Gas	1672919	1.31	1755542	95.29	70	120	
Bi	209	1	No Gas	1429722	3.31	1469937	97.26	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	174_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq Date Time	2023-08-02T16:47:11-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	143CALB.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	0.137	72.6	36277	1.8	0.5	
Be	9	1	No Gas	0.023	42.8	75	35.3	0.5	
V	51	2	He	-0.772	-3.5	2545	4.5	2.5	
Cr	52	2	He	0.182	44.5	10414	3.9	2.5	
Fe	56	2	He	2.237	5.4	29973	1.9	100	
Se	78	2	He	0.215	75.8	176	6.8	2	
As	75	2	He	-0.082	-30.8	189	10.2	2.5	
Ca	44	2	He	1.220	371.9	940	17.4	100	
Na	23	2	He	-62.653	-2.2	70578	1.3	100	
Mg	24	2	He	0.534	44.0	997	12.7	100	
K	39	2	He	-4.267	-33.8	153869	0.3	100	
Mn	55	2	He	0.035	68.0	977	9.9	2.5	
Co	59	2	He	0.016	87.4	217	39.8	2.5	
Ni	60	2	He	0.081	18.2	267	8.7	2.5	
Cu	63	2	He	0.068	33.0	740	12.0	2	
Zn	66	2	He	0.300	24.1	593	9.6	2.5	
Al	27	2	He	-0.264	-127.2	887	14.7	5	
B	11	1	No Gas	6.068	2.7	16340	1.8	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.329	-10.7	23704	0.5	5	
Si	28	1	No Gas	-22.580	-9.6	686867	0.2	10	
Ag	107	1	No Gas	0.014	22.5	263	12.2	2.5	
Cd	111	1	No Gas	0.020	52.4	26	79.9	1	
Sr	88	1	No Gas	0.002	126.2	967	5.9	2.5	
Mo	95	1	No Gas	0.167	5.9	863	4.4	2.5	
Sn	118	1	No Gas	0.127	9.3	1457	7.4	5	
Sb	121	1	No Gas	0.244	11.4	2267	10.6	2.5	
Ba	137	1	No Gas	0.029	34.9	263	11.6	2.5	
Tl	205	1	No Gas	0.710	28.5	12550	28.9	1	
Tl	203	1	No Gas	0.733	29.1	5431	29.5	1	
Pb	208	1	No Gas	0.020	18.0	910	10.5	2.5	
U	238	1	No Gas	0.032	16.4	793	17.0	2.5	
Ca	43	2	He	0.402	2337.9	37	56.8	100	
Sb	121	2	He	0.188	2.2	783	1.9	2.5	
Ti	47	2	He	0.018	284.9	10	100.0	2.5	
Cu	63	1	No Gas	0.070	17.8	1520	6.3	2.5	
Se	82	1	No Gas	-0.213	-232.8	71	107.7	2	

QC ISTD Table

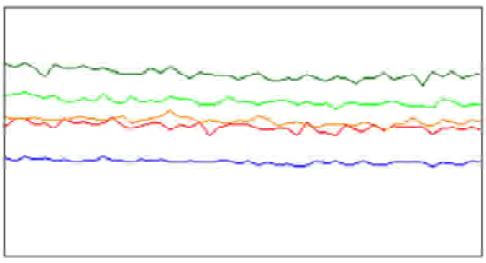
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	579136	0.95	653055	88.68	70	120	
Ge	72	2	He	437019	0.55	447320	97.70	70	120	
Ge	72	1	No Gas	1566807	1.66	1632976	95.95	70	120	
In	115	1	No Gas	1741949	2.43	1755542	99.23	70	120	
Bi	209	1	No Gas	1445317	1.60	1469937	98.33	70	120	

Tune Check Report

Operator Name	ALSHS.NoUser
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\080223A.b
Acq. Date-Time	8/2/2023 9:19:03 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	2612	26120.04		
24	20000	12466	124655.75		
59	50000	18975	189752.69		
115	50000	27221	272212.64		
208	20000	14685	146853.91		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	3.263	5.000	
24	2.517	5.000	
59	2.442	5.000	
115	2.754	5.000	
208	2.793	5.000	

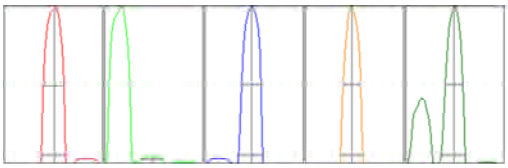
Mass	Background	Background (Required)	Background (Flag)
9	1.000		
24	0.700		
59	0.500		
115	1.600		
208	2.500		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 1.000 %
Doubly Charged	70 / 140 0.729 %

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	2567.93	9.05	8.90 - 9.10	
24	12363.62	24.00	23.90 - 24.10	
59	18781.48	58.95	58.90 - 59.10	
115	27456.98	114.95	114.90 - 115.10	
208	14061.57	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.64	0.740		
24	0.66	0.756		
59	0.59	0.735		
115	0.53	0.686		
208	0.55	0.733		

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	1.0002	QP Bias	-3.0 V
Mass Offset	126	Axis Offset	0.11		

Hardware Settings

Torch

Torch H	1.2 mm	Torch V	-0.9 mm

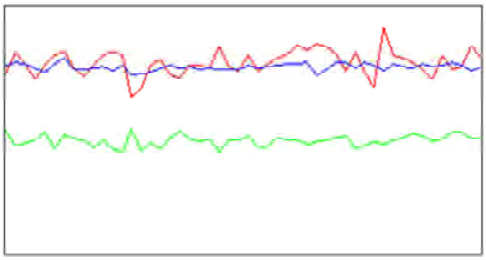
EM

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	155	1545.88		
24	2000	913	9131.97		
59	10000	7557	75565.67		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

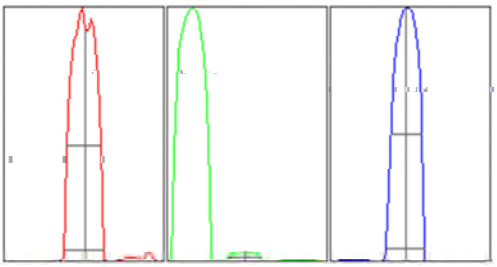
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	6.722	5.000	Fail
24	4.932	5.000	
59	1.893	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.200		
24	0.100		
59	0.200		

Oxide/Doubly Charged Ratio

Oxide 156 / 140 1.382 %
Doubly Charged 70 / 140 0.996 %

Resolution/Axis



Integration Time [sec] 0.1
Acquisition Time [sec] 22.24
Y Axis Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	142.01	9.05	8.90 - 9.10	
24	894.32	24.00	23.90 - 24.10	
59	7471.85	58.95	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.65	0.742		
24	0.65	0.744		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.58	0.732		

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	1.0002	QP Bias	-13.0 V
Mass Offset	126	Axis Offset	0.11		

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

HS23071289 Wetchem TOC_W 5310B

ALS WO# HS23071289

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	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:

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	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

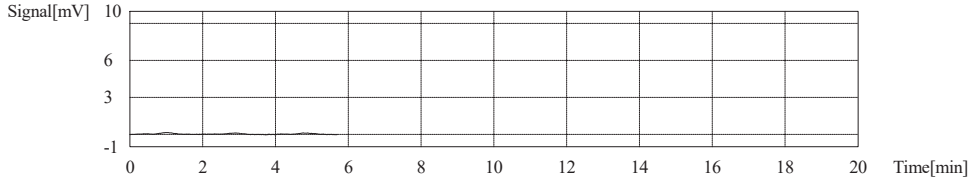
Sample Name:	CALIBRATION
Sample ID:	
Cal. Curve:	06.21.2023.2023_06_21_17_09_26.cal
Status	Completed

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

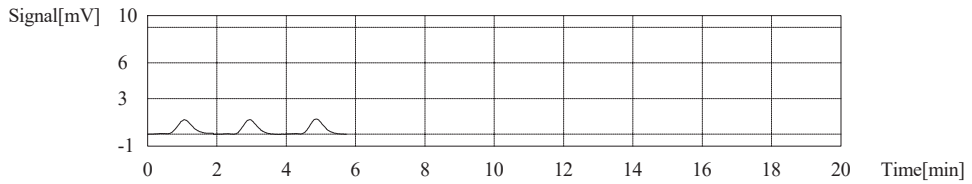
Acid Add.	0.000%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	0.2442



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

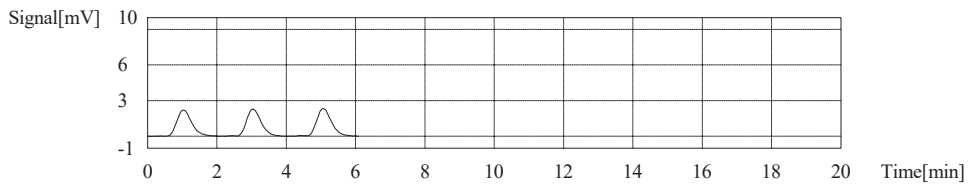
Acid Add.	0.000%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	3.423



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



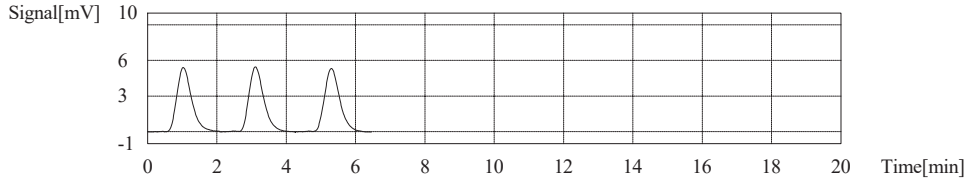
TOC-Control L Report

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

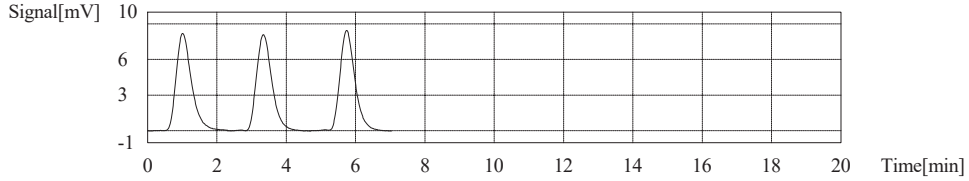
Acid Add. 0.000%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 15.93



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

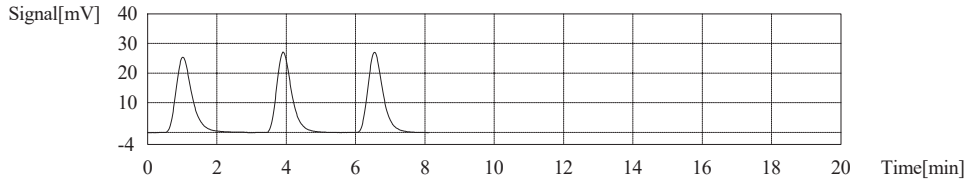
Acid Add. 0.000%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 24.91



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

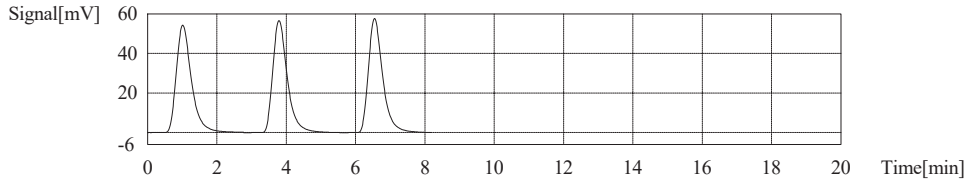
Acid Add. 0.000%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 81.11



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

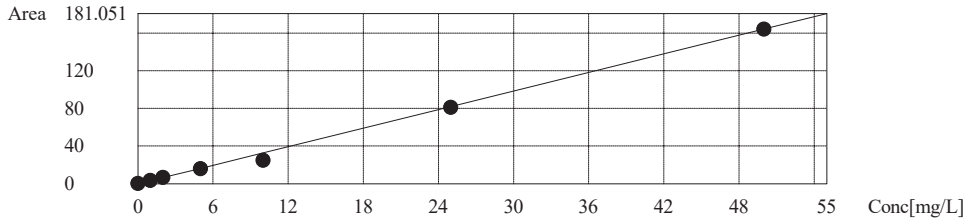
Acid Add. 0.000%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 164.3



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	

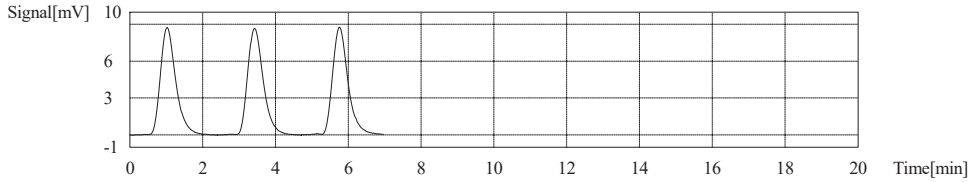
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.778mg/L

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

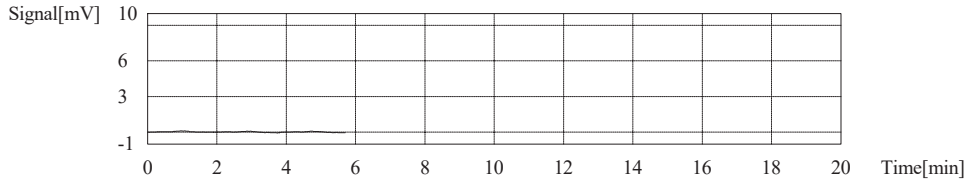
Anal.: NPOC

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_07_31_001.tlx

	Sample Name	Sample ID	Result	Notes	Status	Date / Time	Vial
1	CCV		NPOC:23.5		Completed	7/31/2023 10:53:	1
2	CCB		NPOC:0.11		Completed	7/31/2023 11:05:	2
3	MBLK-07312023		NPOC:0.01		Completed	7/31/2023 11:17:	3
4	LCS-07312023		NPOC:9.70		Completed	7/31/2023 4:56:3	4
5	LCSD-07312023		NPOC:9.51		Completed	7/31/2023 5:10:1	5
6	HS23071289-01DF20	TOC_W 5310B	NPOC:0.18		Completed	7/31/2023 12:17:	6
7	HS23071289-02DF20		NPOC:0.17		Completed	7/31/2023 12:29:	7
8	HS23071289-04		NPOC:8.98		Completed	7/31/2023 12:43:	8
9	HS23071529-01		NPOC:0.52		Completed	7/31/2023 12:55:	9
10	HS23071529-01MS		NPOC:9.99		Completed	7/31/2023 1:42:2	10
11	HS23071529-02		NPOC:2.41		Completed	7/31/2023 1:54:5	11
12	HS23071529-03		NPOC:0.96		Completed	7/31/2023 2:07:1	12
13	CCV		NPOC:24.8		Completed	7/31/2023 2:21:5	1
14	CCB		NPOC:0.09		Completed	7/31/2023 2:33:5	2
15	HS23071529-04		NPOC:0.53		Completed	7/31/2023 2:46:0	13
16	HS23071529-05		NPOC:1.06		Completed	7/31/2023 2:58:1	14
17	HS23071529-06		NPOC:0.57		Completed	7/31/2023 3:10:1	15
18	HS23071634-01		NPOC:28.4		Completed	7/31/2023 3:24:0	16
19	CCV		NPOC:25.5		Completed	7/31/2023 3:37:5	20
20	CCB		NPOC:0.08		Completed	7/31/2023 3:49:5	21
21	MBLK-07312023		NPOC:0.06		Completed	7/31/2023 4:01:5	3
22	LCS-07312023		NPOC:9.44		Completed	7/31/2023 5:24:1	4
23	LCSD-07312023		NPOC:9.36		Completed	7/31/2023 5:37:4	5
24	HS23071165-01	TOC_W 5310B	NPOC:18.6		Completed	7/31/2023 5:51:4	17
25	HS23071165-01MS		NPOC:30.6		Completed	7/31/2023 6:05:3	18
26	HS23071330-04		NPOC:1.65		Completed	7/31/2023 6:17:4	19
27	CCV		NPOC:24.6		Completed	7/31/2023 6:31:3	20
28	CCB		NPOC:0.19		Completed	7/31/2023 6:43:2	21

TOC-Control L Report

Instr.Information

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

Sample

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

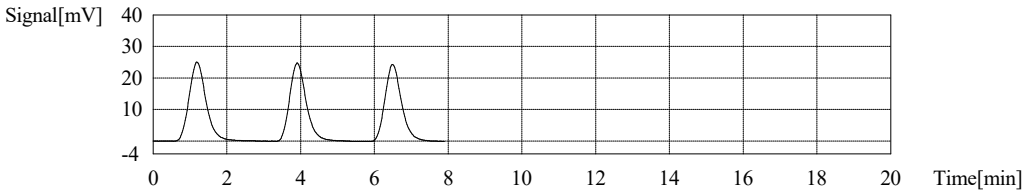
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.58mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	79.37	24.23mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 10:48:10 AM
2	76.71	23.41mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 10:50:59 AM
3	75.67	23.10mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 10:53:48 AM

Mean Area 77.25
Mean Conc. 23.58mg/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:0.1139mg/L

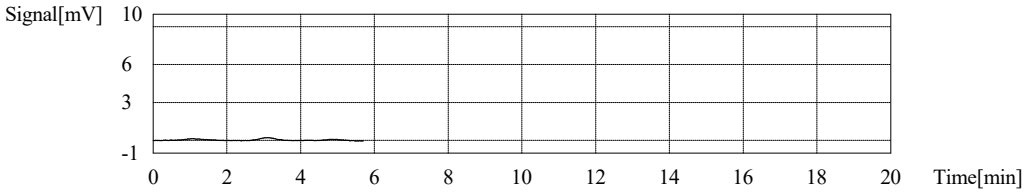
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1788	0.05458mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 11:01:32 AM
2	0.7113	0.2171mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 11:03:39 AM
3	0.2292	0.06996mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 11:05:46 AM

TOC-Control L Report

Mean Area 0.3731
Mean Conc. 0.1139mg/L



Sample

Sample Name: MBLK-07312023
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

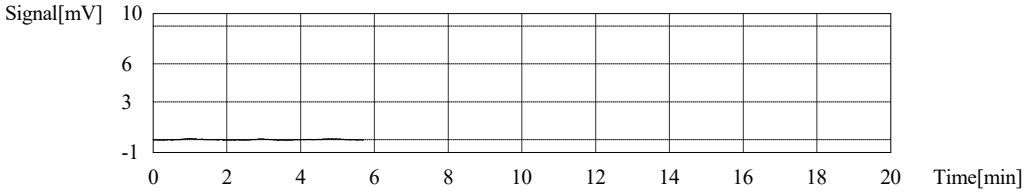
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.01959mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.09790	0.02988mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 11:13:30 AM
2	0.000	0.000mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 11:15:37 AM
3	0.09460	0.02887mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 11:17:44 AM

Mean Area 0.06417
Mean Conc. 0.01959mg/L



Sample

Sample Name: LCS-07312023
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.702mg/L

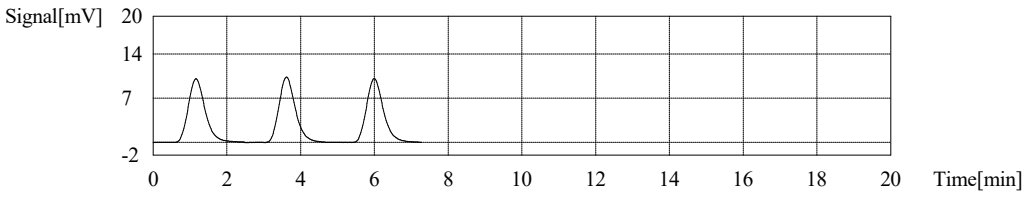
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	31.54	9.627mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 4:51:14 PM
2	31.87	9.728mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 4:53:52 PM
3	31.95	9.752mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 4:56:31 PM

TOC-Control L Report

Mean Area 31.79
Mean Conc. 9.702mg/L



Sample

Sample Name: LCSD-07312023
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

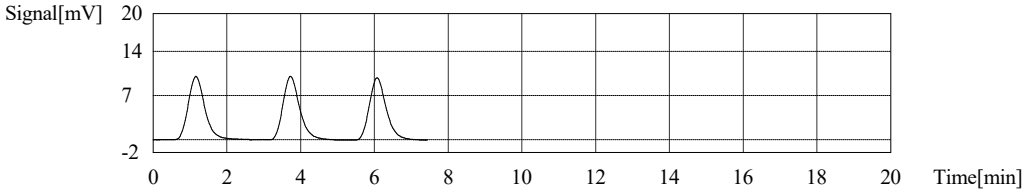
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.514mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	31.05	9.477mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 5:04:57 PM
2	31.20	9.523mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 5:07:31 PM
3	31.26	9.542mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 5:10:15 PM

Mean Area 31.17
Mean Conc. 9.514mg/L



Sample

Sample Name: HS23071289-01DF20
Sample ID: TOC_W 5310B
Origin: 06.21.2023.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1880mg/L

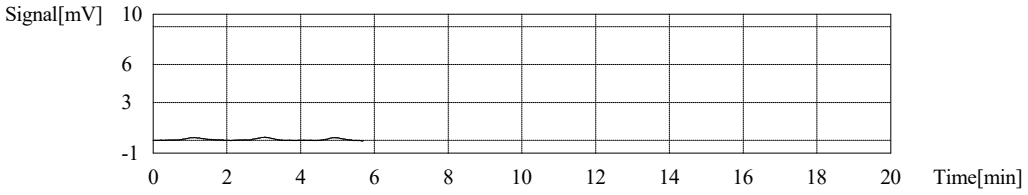
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5662	0.1728mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 12:13:13 PM
2	0.6269	0.1913mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 12:15:22 PM
3	0.6548	0.1999mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 12:17:30 PM

TOC-Control L Report

Mean Area 0.6160
Mean Conc. 0.1880mg/L



Sample

Sample Name: HS23071289-02DF20
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

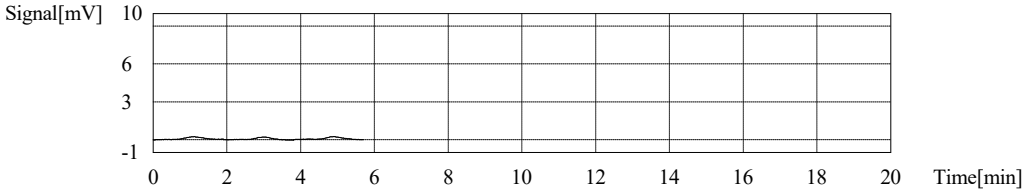
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1760mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5965	0.1821mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 12:25:15 PM
2	0.5607	0.1711mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 12:27:23 PM
3	0.5722	0.1747mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 12:29:31 PM

Mean Area 0.5765
Mean Conc. 0.1760mg/L



Sample

Sample Name: HS23071289-04
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.988mg/L

1. Det

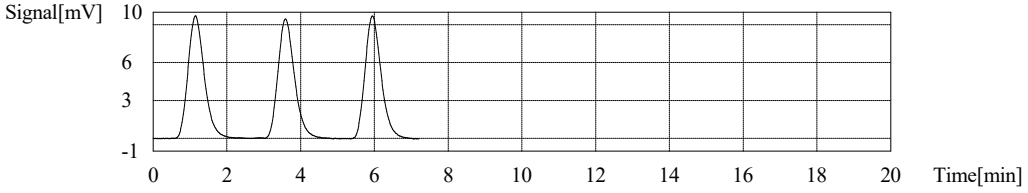
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	29.52	9.010mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 12:37:48 PM
2	29.23	8.922mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 12:40:25 PM
3	29.59	9.032mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 12:43:03 PM

TOC-Control L Report

2023_07_31_001.tlx

Mean Area 29.45
Mean Conc. 8.988mg/L



Sample

Sample Name: HS23071529-01
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

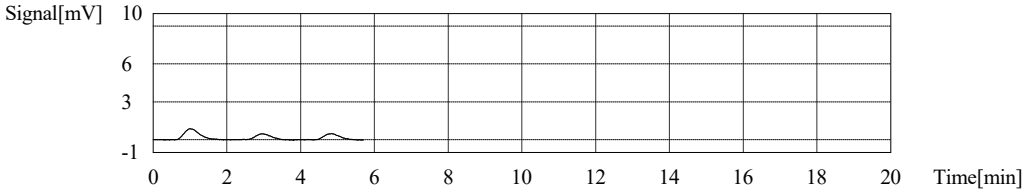
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5296mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.486	0.7588mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 12:50:48 PM
2	1.295	0.3953mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 12:52:56 PM
3	1.424	0.4346mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 12:55:04 PM

Mean Area 1.735
Mean Conc. 0.5296mg/L



Sample

Sample Name: HS23071529-01MS
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.996mg/L

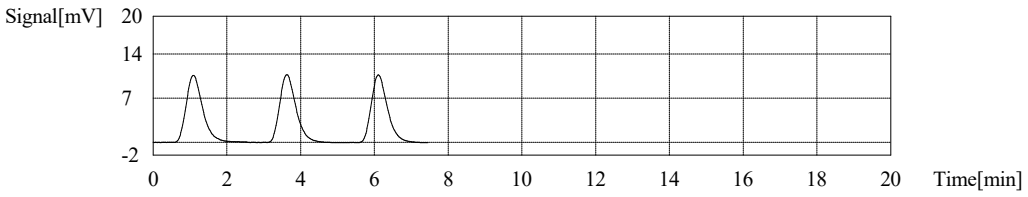
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.67	9.972mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 1:37:05 PM
2	32.96	10.06mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 1:39:49 PM
3	32.62	9.957mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 1:42:29 PM

TOC-Control L Report

Mean Area 32.75
Mean Conc. 9.996mg/L



Sample

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

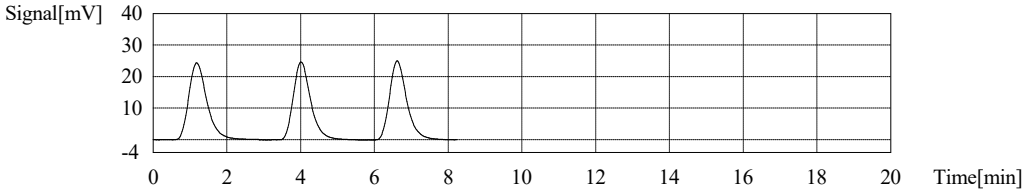
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.86mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.79	25.27mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 2:16:05 PM
2	80.21	24.48mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 2:18:56 PM
3	81.30	24.82mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 2:21:58 PM

Mean Area 81.43
Mean Conc. 24.86mg/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:0.09131mg/L

1. Det

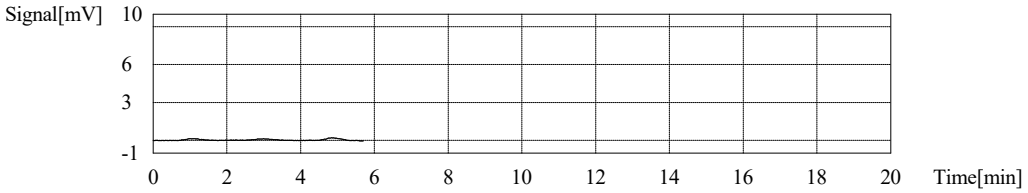
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3401	0.1038mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 2:29:43 PM
2	0.000	0.000mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 2:31:51 PM
3	0.5574	0.1701mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	7/31/2023 2:33:59 PM

TOC-Control L Report

2023_07_31_001.tlx

Mean Area	0.2992
Mean Conc.	0.09131mg/L



HS23071289 Perch Sub Data E2300684-IV

ALS WO# HS23071289

July 27, 2023 Service Request No:E2300684

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

Laboratory Results for: HS23071289

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory July 24, 2023
For your reference, these analyses have been assigned our service request number **E2300684.**

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.:**	E2300684
Project:	HS23071289	**Date Received:**	07/24/2023
Sample Matrix:	GroundWater		

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

Eleven samples were received for analysis at ALS Environmental in Houston on 07/24/2023.

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:

EQ2300358: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in addition to MS/MSD for this extraction batch.

The batch precision (MS/DMS) measurements were determined on an unrelated sample in the extraction batch. The MS/DMS results are not included in this report.

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:**E2300684
Project: HS23071289

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300684-001	16RW09-230718	7/18/2023	0705
E2300684-002	16RW09-230718-FD	7/18/2023	0705
E2300684-003	16RW10-230718	7/18/2023	0750
E2300684-004	16WW40-230718	7/18/2023	0830
E2300684-005	16WW12-230718	7/18/2023	0915
E2300684-006	16WW39-230718	7/18/2023	1010
E2300684-007	16WW49-230718	7/18/2023	1050
E2300684-008	16SW01-230718	7/18/2023	1110
E2300684-009	16SW01-230718-FD	7/18/2023	1100
E2300684-010	16SW02-230718	7/18/2023	1120
E2300684-011	16SW03-230718	7/18/2023	1135

Service Request Summary

Folder #: **E2300684**
Client Name: ALS Environmental - US
Project Name: HS23071289
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: 07/24/23
Internal Due Date: 8/2/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23071289
EDD: BASIC_WQC_CASNo_LOD

13 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300684-001	16RW09-230718	Ground Water	07/18/23 0705	**IV**
E2300684-002	16RW09-230718-FD	Ground Water	07/18/23 0705	**IV**
E2300684-003	16RW10-230718	Ground Water	07/18/23 0750	**IV**
E2300684-004	16WW40-230718	Ground Water	07/18/23 0830	**IV**
E2300684-005	16WW12-230718	Ground Water	07/18/23 0915	**IV**
E2300684-006	16WW39-230718	Ground Water	07/18/23 1010	**IV**
E2300684-007	16WW49-230718	Ground Water	07/18/23 1050	**IV**
E2300684-008	16SW01-230718	Ground Water	07/18/23 1110	**IV**
E2300684-009	16SW01-230718-FD	Ground Water	07/18/23 1100	**IV**
E2300684-010	16SW02-230718	Ground Water	07/18/23 1120	**IV**
E2300684-011	16SW03-230718	Ground Water	07/18/23 1135	**IV**

Service Request Summary

Folder #: **E2300684**
Client Name: ALS Environmental - US
Project Name: HS23071289
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: 07/24/23
Internal Due Date: 8/2/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23071289
EDD: BASIC_WQC_CASNo_LOD

13 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Test Comments:

Group	Test/Method	Samples	Comments
Semivoa GCMS	ClO4 DOD/6850	1	ms/msd

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 2022-2023	7/31/2023
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	7/31/2023
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 Department of Conservation and Natural Resources	TX026932023-1	7/31/2023
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
Utah Department of Health Environmental Laboratory Certification	TX026932022-13	7/31/2023
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
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Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **22466**

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:	HS23071289
TSR:	Holly Tignac

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23071289-01**	**16RW09-230718**	**Groundwater**	**18 Jul 2023 07:05**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
2.	**HS23071289-02**	**16RW09-230718-FD**	**Groundwater**	**18 Jul 2023 07:05**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
3.	**HS23071289-03**	**16RW10-230718**	**Groundwater**	**18 Jul 2023 07:50**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
4.	**HS23071289-04**	**16WW40-230718**	**Groundwater**	**18 Jul 2023 08:30**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
5.	**HS23071289-05**	**16WW12-230718**	**Groundwater**	**18 Jul 2023 09:15**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
6.	**HS23071289-06**	**16WW34-230718**	**Groundwater**	**18 Jul 2023 10:10**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
7.	**HS23071289-07**	**16WW49-230718**	**Groundwater**	**18 Jul 2023 10:50**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
8.	**HS23071289-08**	**16SW01-230718**	**Groundwater**	**18 Jul 2023 11:00**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 22466**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
9.	**HS23071289-09**	**16SW01-230718-FD**	**Groundwater**	**18 Jul 2023 11:00**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
10.	**HS23071289-10**	**16SW02-230718**	**Groundwater**	**18 Jul 2023 11:20**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 Aug 2023
11.	**HS23071289-11**	**16SW03-230718**	**Groundwater**	**18 Jul 2023 11:35**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			02 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: 7-24-23 1119

Cooler ID(s): Temperature(s):

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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

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#: 423609 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 7/25/23 10:47

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300684-001	16RW09-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
2	E2300684-002	16RW09-230718-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
3	E2300684-003	16RW10-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2300684-004	16WW40-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
5	E2300684-005	16WW12-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300684-006	16WW39-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300684-007	16WW49-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300684-008	16SW01-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300684-009	16SW01-230718-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300684-010	16SW02-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300684-011	16SW03-230718	.02	6850/ClO4 DOD			Ground Water	10mL	
12	E2300685-001	16EW01-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2300685-002	16EW08-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
14	E2300685-003	16EW04-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
15	E2300685-004	16RW04-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
16	E2300685-005	16RW05-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
17	E2300685-006	16RW01-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
18	E2300685-007	16WW22-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
19	E2300685-008	16RW12-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
20	EQ2300358-01	MB		6850/ClO4			Liquid	10mL	
21	EQ2300358-02	LCS		6850/ClO4			Liquid	10mL	
22	EQ2300358-03	DLCS		6850/ClO4			Liquid	10mL	
23	EQ2300358-04	16SW03-230718 MS	.02	6850/ClO4 DOD			Liquid	10mL	
24	EQ2300358-05	16SW03-230718 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
25	R2306302-005	2307111341Y 700-E-458	.01	6850/ClO4			Water	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 227236 Logbook Ref: Perchlorate (1st Source) Expires On: 07/31/2023

EQ2300358-02	1.00µL	EQ2300358-02	1.00µL	EQ2300358-03	1.00µL	EQ2300358-03	1.00µL	EQ2300358-04	1.00µL	EQ2300358-05	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 227244 Logbook Ref: Perchlorate Internal Standard Expires On: 07/31/2023

E2300684-001	100.00µL	E2300684-002	100.00µL	E2300684-003	100.00µL	E2300684-004	100.00µL	E2300684-005	100.00µL	E2300684-006	100.00µL
E2300684-007	100.00µL	E2300684-008	100.00µL	E2300684-009	100.00µL	E2300684-010	100.00µL	E2300684-011	100.00µL	E2300685-001	100.00µL
E2300685-002	100.00µL	E2300685-003	100.00µL	E2300685-004	100.00µL	E2300685-005	100.00µL	E2300685-006	100.00µL	E2300685-007	100.00µL

Preparation Information Benchsheet

Prep Run#: 423609 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 7/25/23 10:47

E2300685-008	100.00µL	EQ2300358-01	100.00µL	EQ2300358-01	100.00µL	EQ2300358-02	100.00µL	EQ2300358-02	100.00µL	EQ2300358-03	100.00µL
EQ2300358-03	100.00µL	EQ2300358-04	100.00µL	EQ2300358-05	100.00µL	R2306302-005	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: 7/25/23 10:47
Finished: 7/25/23 15:50
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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Phone (281)530-5656 Fax (281)530-5887
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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 0705
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16RW09-230718	**Units:**	µg/L
Lab Code:	E2300684-001	**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	**0.137**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 10:39	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 0705
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16RW09-230718-FD	**Units:**	µg/L
Lab Code:	E2300684-002	**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	**0.0657**	J	0.100	0.0500	0.0250	1	7/25/23	7/26/23 10:45	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 0750
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16RW10-230718	**Units:**	µg/L
Lab Code:	E2300684-003	**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	**3.11**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 10:50	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 0830
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16WW40-230718	**Units:**	µg/L
Lab Code:	E2300684-004	**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	**0.257**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 10:56	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 0915
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16WW12-230718	**Units:**	µg/L
Lab Code:	E2300684-005	**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	**89.6**		0.500	0.250	0.125	5	7/25/23	7/26/23 11:01	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 1010
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16WW39-230718	**Units:**	µg/L
Lab Code:	E2300684-006	**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	**4.43**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 11:07	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 1050
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16WW49-230718	**Units:**	µg/L
Lab Code:	E2300684-007	**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	**0.184**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 11:13	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 1110
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16SW01-230718	**Units:**	µg/L
Lab Code:	E2300684-008	**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	**0.0840**	J	0.100	0.0500	0.0250	1	7/25/23	7/26/23 11:24	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 1100
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16SW01-230718-FD	**Units:**	µg/L
Lab Code:	E2300684-009	**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	**0.0776**	J	0.100	0.0500	0.0250	1	7/25/23	7/26/23 11:29	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 1120
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16SW02-230718	**Units:**	µg/L
Lab Code:	E2300684-010	**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	**0.162**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 11:35	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 1135
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16SW03-230718	**Units:**	µg/L
Lab Code:	E2300684-011	**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	**0.0306**	J	0.100	0.0500	0.0250	1	7/25/23	7/26/23 14:49	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300358-01	**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	7/25/23	7/26/23 10:34	423609	811888	

Accuracy & Precision

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ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071289
Sample Matrix: Ground Water

Service Request: E2300684
Date Analyzed: 7/26/23

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: 423609

	Lab Control Sample EQ2300358-02			Duplicate Lab Control Sample EQ2300358-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0931	0.100	93	0.0854	0.100	85	84 - 119	9	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:**	E2300684
Project:	HS23071289	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300358-02	**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	**0.0931**	J	0.100	0.0500	0.0250	1	7/25/23	7/26/23 10:23	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300358-03	**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	**0.0854**	J	0.100	0.0500	0.0250	1	7/25/23	7/26/23 10:28	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
		Date Analyzed:	7/26/23

Matrix Spike Summary

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

Sample Name:	16SW03-230718	**Units:**	µg/L
Lab Code:	E2300684-011	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16SW03-230718MS				16SW03-230718DMS					
		Matrix Spike				**Duplicate Matrix Spike**					
		EQ2300358-04				EQ2300358-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0306	0.125	0.100	94		0.126	0.100	95	84 - 119	<1	15

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

Results flagged with a pound (#) indicate the control criteria is not applicable.

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:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 1135
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16SW03-230718	**Units:**	µg/L
Lab Code:	EQ2300358-04	**Basis:**	NA
Run Type:	Matrix Spike		

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	**0.125**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 11:46	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300684
Project:	HS23071289	**Date Collected:**	7/18/23 1135
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16SW03-230718	**Units:**	µg/L
Lab Code:	EQ2300358-05	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

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	**0.126**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 11:51	423609	811888	

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

20230629-809329

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 06/29/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 32103046 **B:**Acetonitrile 226552

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	PERCHLORATE1		20230629-001	Perchlorate6850c.lcm	1x	227245	6/29/2023 12:59
2	PERCHLORATE2		20230629-002	Perchlorate6850c.lcm	1x	227246	6/29/2023 13:05
3	PERCHLORATE3		20230629-003	Perchlorate6850c.lcm	1x	227247	6/29/2023 13:10
4	PERCHLORATE4		20230629-004	Perchlorate6850c.lcm	1x	227248	6/29/2023 13:16
5	PERCHLORATE5		20230629-005	Perchlorate6850c.lcm	1x	227249	6/29/2023 13:21
6	PERCHLORATE6		20230629-006	Perchlorate6850c.lcm	1x	227250	6/29/2023 13:27
7	PERCHLORATE7		20230629-007	Perchlorate6850c.lcm	1x	227251	6/29/2023 13:32
8	PERCHLORATE8		20230629-008	Perchlorate6850c.lcm	1x	227252	6/29/2023 13:38
9	PERCHLORATE9		20230629-009	Perchlorate6850c.lcm	1x	227253	6/29/2023 13:43
10	PERCHLORATE10		20230629-010	Perchlorate6850c.lcm	1x	227254	6/29/2023 13:49
11	PERCHLORATEICV		20230629-011	Perchlorate6850c.lcm	1x	227256	6/29/2023 13:55
12	IB		20230629-012	Perchlorate6850c.lcm	1x		6/29/2023 14:00
13	LODV		20230629-013	Perchlorate6850c.lcm	1x	227501	6/29/2023 14:06
14	ICS		20230629-014	Perchlorate6850c.lcm	1x	32103024	6/29/2023 14:11
15	CCV		20230629-015	Perchlorate6850c.lcm	1x	227251	6/29/2023 14:17
16	EQ2300312-01		20230629-016	Perchlorate6850c.lcm	1x		6/29/2023 14:22
17	EQ2300312-02		20230629-017	Perchlorate6850c.lcm	1x	DNU-RR	6/29/2023 14:28
18	EQ2300312-03		20230629-018	Perchlorate6850c.lcm	1x		6/29/2023 14:33
19	E2300606-001		20230629-019	Perchlorate6850c.lcm	10x		6/29/2023 14:39
20	EQ2300312-04		20230629-020	Perchlorate6850c.lcm	1x		6/29/2023 14:44
21	EQ2300312-05		20230629-021	Perchlorate6850c.lcm	1x		6/29/2023 14:50
22	E2300606-002		20230629-022	Perchlorate6850c.lcm	5x		6/29/2023 14:55
23	E2300606-003		20230629-023	Perchlorate6850c.lcm	10x		6/29/2023 15:01
24	E2300606-004		20230629-024	Perchlorate6850c.lcm	10x		6/29/2023 15:06
25	E2300606-005		20230629-025	Perchlorate6850c.lcm	1x		6/29/2023 15:12
26	CCV		20230629-026	Perchlorate6850c.lcm	1x	227251	6/29/2023 15:17
27	E2300606-006		20230629-027	Perchlorate6850c.lcm	1x		6/29/2023 15:23
28	E2300606-007		20230629-028	Perchlorate6850c.lcm	500x		6/29/2023 15:28
29	E2300606-008		20230629-029	Perchlorate6850c.lcm	100x		6/29/2023 15:34
30	EQ2300312-06		20230629-030	Perchlorate6850c.lcm	100x		6/29/2023 15:40
31	EQ2300312-07		20230629-031	Perchlorate6850c.lcm	100x		6/29/2023 15:45
32	E2300606-009		20230629-032	Perchlorate6850c.lcm	1x		6/29/2023 15:53
33	E2300610-001		20230629-033	Perchlorate6850c.lcm	10000x		6/29/2023 15:58
34	E2300610-002		20230629-034	Perchlorate6850c.lcm	1x		6/29/2023 16:04
35	E2300610-003		20230629-035	Perchlorate6850c.lcm	1x		6/29/2023 16:09
36	E2300610-004		20230629-036	Perchlorate6850c.lcm	1x		6/29/2023 16:15
37	CCV		20230629-037	Perchlorate6850c.lcm	1x	227251	6/29/2023 16:21

20230629-809329

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 06/29/2023
ICAL ID: EC2300011

Mobile Phases : **A:**20mM ammonium acetate in water 32103046 **B:**Acetonitrile 226552

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
38	E2300610-005		20230629-038	Perchlorate6850c.lcm	1x		6/29/2023 16:26
39	E2300610-006		20230629-039	Perchlorate6850c.lcm	1x		6/29/2023 16:32
40	E2300610-007		20230629-040	Perchlorate6850c.lcm	1x		6/29/2023 16:37
41	E2300610-008		20230629-041	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 16:43
42	EQ2300312-08		20230629-042	Perchlorate6850c.lcm	1x		6/29/2023 16:48
43	EQ2300312-09		20230629-043	Perchlorate6850c.lcm	1x		6/29/2023 16:54
44	E2300611-001		20230629-044	Perchlorate6850c.lcm	1x		6/29/2023 16:59
45	E2300611-002		20230629-045	Perchlorate6850c.lcm	1x		6/29/2023 17:05
46	E2300611-003		20230629-046	Perchlorate6850c.lcm	1x		6/29/2023 17:10
47	E2300611-004		20230629-047	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:16
48	CCV		20230629-048	Perchlorate6850c.lcm	1x	227251	6/29/2023 17:21
49	E2300611-005		20230629-049	Perchlorate6850c.lcm	1x		6/29/2023 17:27
50	E2300611-006		20230629-050	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:32
51	E2300611-007		20230629-051	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:38
52	E2300611-008		20230629-052	Perchlorate6850c.lcm	1x		6/29/2023 17:43
53	E2300611-009		20230629-053	Perchlorate6850c.lcm	1x		6/29/2023 17:49
54	E2300611-010		20230629-054	Perchlorate6850c.lcm	1x		6/29/2023 17:55
55	CCV		20230629-055	Perchlorate6850c.lcm	1x	227251	6/29/2023 18:06

Initial Calibration - Detailed Report

Calibration ID: EC2300011 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2300011-01	PERCHLORATE1	20230629-001	06/29/2023 12:59
02	EC2300011-02	PERCHLORATE2	20230629-002	06/29/2023 13:05
03	EC2300011-03	PERCHLORATE3	20230629-003	06/29/2023 13:10
04	EC2300011-04	PERCHLORATE4	20230629-004	06/29/2023 13:16
05	EC2300011-05	PERCHLORATE5	20230629-005	06/29/2023 13:21
06	EC2300011-06	PERCHLORATE6	20230629-006	06/29/2023 13:27
07	EC2300011-07	PERCHLORATE7	20230629-007	06/29/2023 13:32
08	EC2300011-08	PERCHLORATE8	20230629-008	06/29/2023 13:38
09	EC2300011-09	PERCHLORATE9	20230629-009	06/29/2023 13:43
10	EC2300011-10	PERCHLORATE10	20230629-010	06/29/2023 13:49

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

Perchlorate **Average RF** **RSD = 2.809** **Average RF = 0.1625**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.1678	02	0.5000	0.1574	03	0.7000	0.1599	04	1.0000	0.1567
05	2.0000	0.1596	06	5.0000	0.1641	07	10.0000	0.1704	08	20.0000	0.1667
09	30.0000	0.1608	10	50.0000	0.1619						

Analyte

Perchlorate RSE = 2.81

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.103	3.2	02	0.5000	0.484	-3.1	03	0.7000	0.689	-1.6
04	1.0000	0.964	-3.6	05	2.0000	1.96	-1.8	06	5.0000	5.05	1.0
07	10.0000	10.5	4.8	08	20.0000	20.5	2.6	09	30.0000	29.7	-1.1
10	50.0000	49.8	-0.4								

Initial Calibration Verification Summary Report

Calibration ID:	EC2300011	**Instrument ID:**	E-LCMS-01
Datafile ID:	20230629-011	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2300011-11	T	Average RF	10	9.913	ng/mL	-0.9	<= 15

Insight Report

Printed at 6/29/2023 2:17:05 PM

Method File: I:\LCMS01\DATA\20230628\06282023.lcm
Project File: I:\LCMS01\DATA\20230628\06282023.damlp

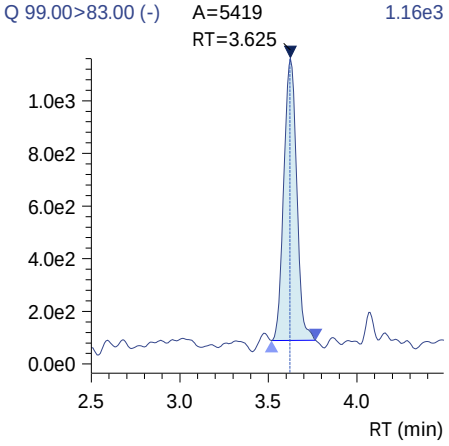
PERCHLORATE1

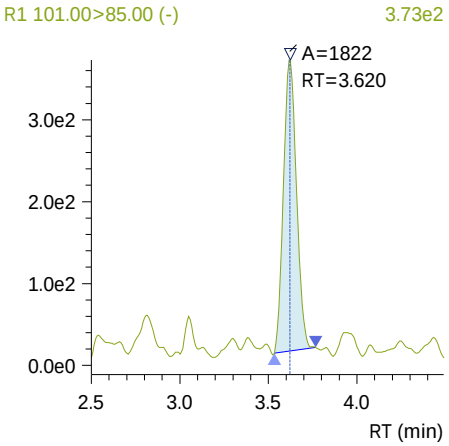
Sample ID: PERCHLORATE1
Date Acquired: 6/29/2023 12:59:40 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-001.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.625	5419	323018	0.1032	ng/mL	101.00 >85.00	33.63	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	323018	323018	1.0000	ng/mL	----	----	

Perchlorate

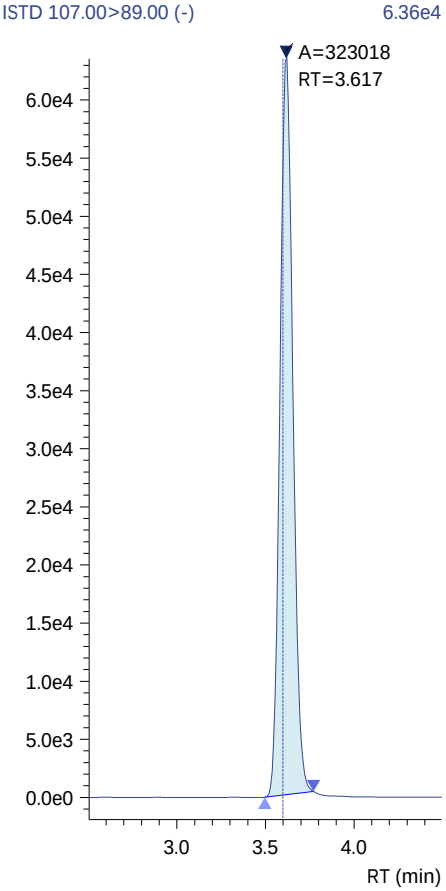
Conc 0.1032
R#1 33.63 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

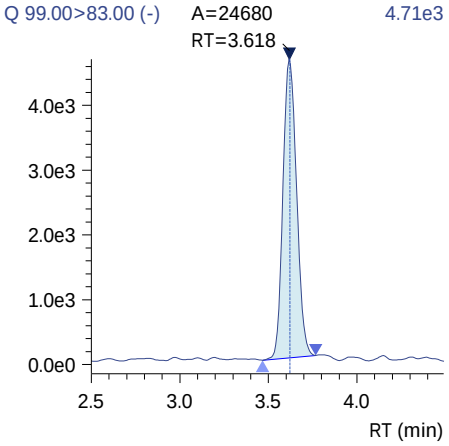
PERCHLORATE2

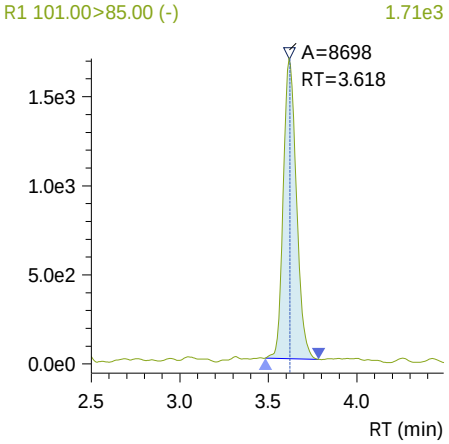
Sample ID: PERCHLORATE2
Date Acquired: 6/29/2023 1:05:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-002.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.618	24680	313519	0.4844	ng/mL	101.00 >85.00	35.24	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	313519	313519	1.0000	ng/mL	----	----	

Perchlorate

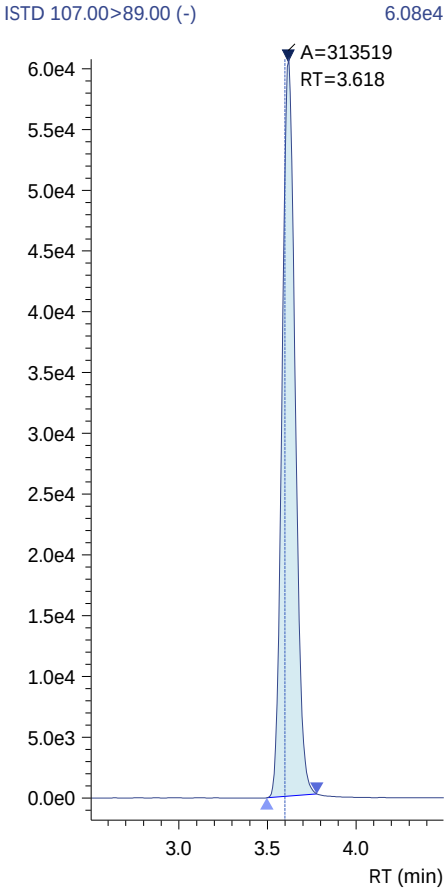
Conc 0.4844
R#1 35.24 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

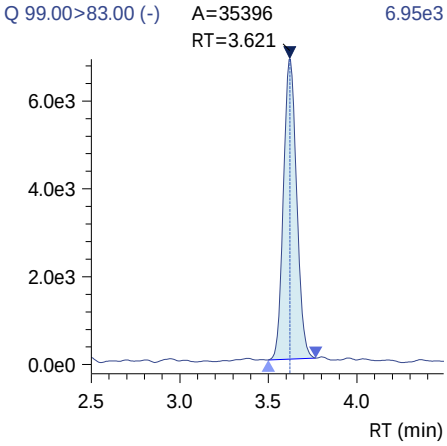
PERCHLORATE3

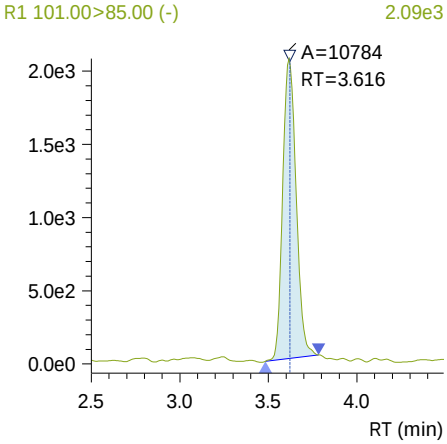
Sample ID: PERCHLORATE3
Date Acquired: 6/29/2023 1:10:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-003.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	35396	316311	0.6886	ng/mL	101.00 >85.00	30.47	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	316311	316311	1.0000	ng/mL	----	----	

Perchlorate

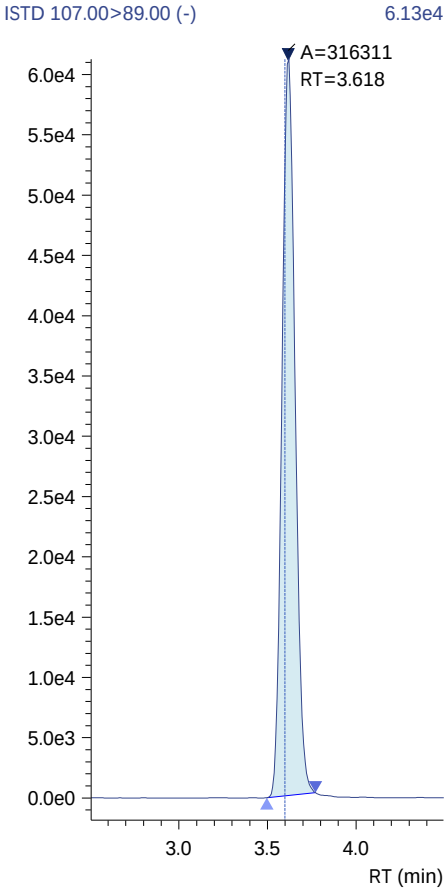
Conc 0.6886
R#1 30.47 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

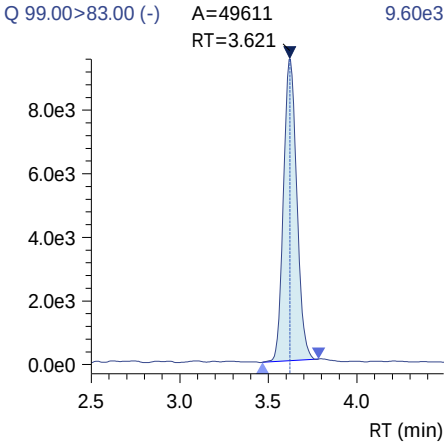
PERCHLORATE4

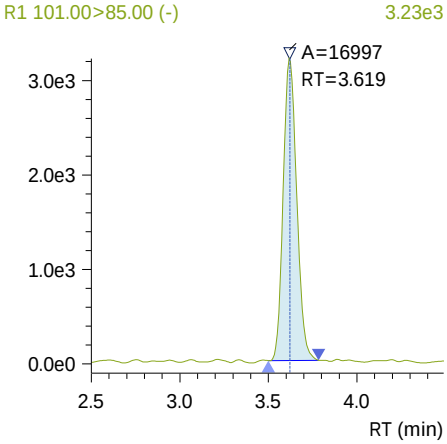
Sample ID: PERCHLORATE4
Date Acquired: 6/29/2023 1:16:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-004.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	49611	316580	0.9643	ng/mL	101.00 >85.00	34.26	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	316580	316580	1.0000	ng/mL	----	----	

Perchlorate

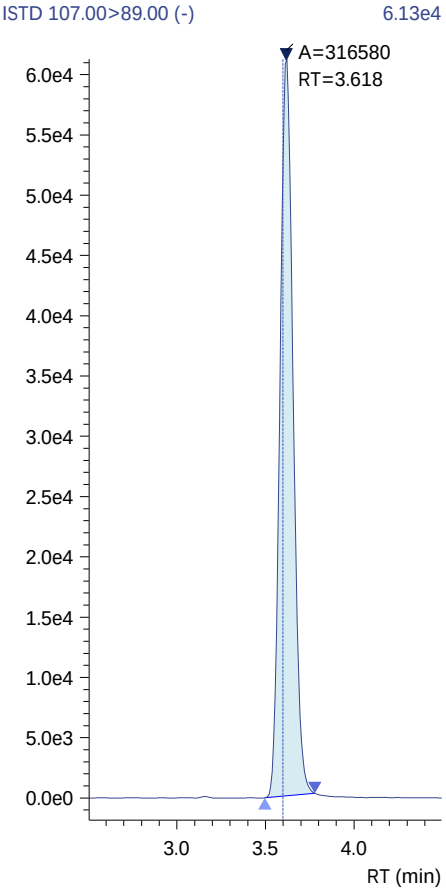
Conc 0.9643
R#1 34.26 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

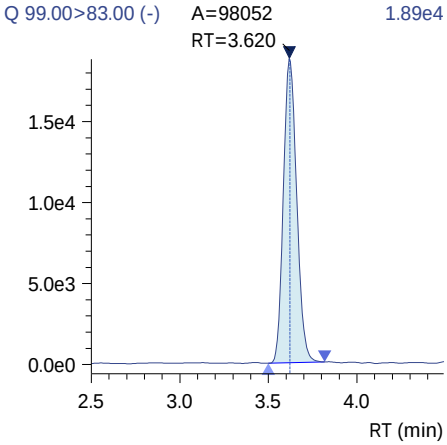
PERCHLORATE5

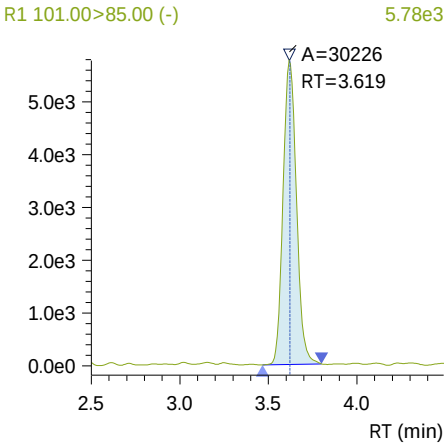
Sample ID: PERCHLORATE5
Date Acquired: 6/29/2023 1:21:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-005.lcd
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	98052	307162	1.9642	ng/mL	101.00 >85.00	30.83	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	307162	307162	1.0000	ng/mL	----	----	

Perchlorate

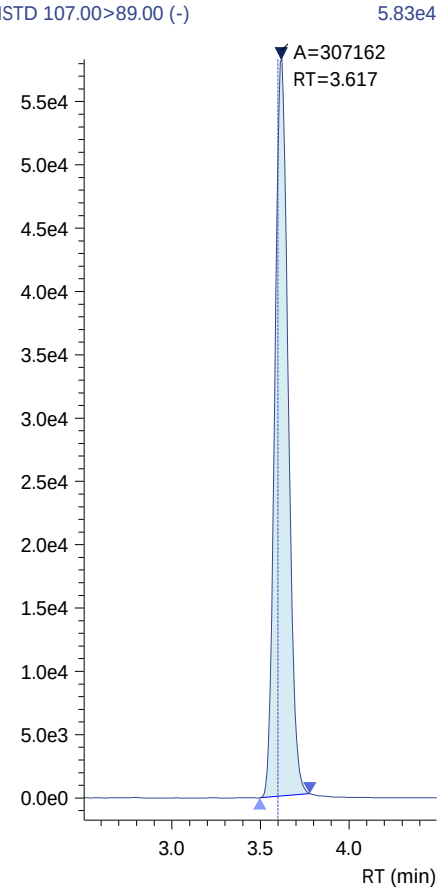
Conc 1.9642
R#1 30.83 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE6

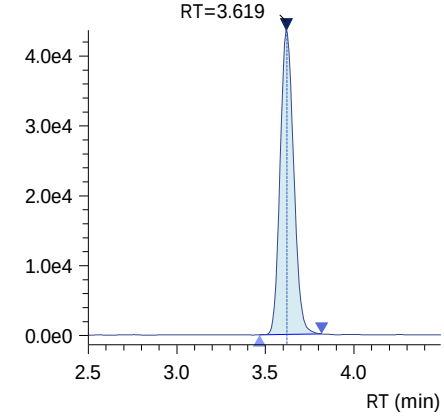
Sample ID: PERCHLORATE6
Date Acquired: 6/29/2023 1:27:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-006.lcd
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.619	232011	282827	5.0477	ng/mL	101.00 >85.00	31.17	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	282827	282827	1.0000	ng/mL	----	----	

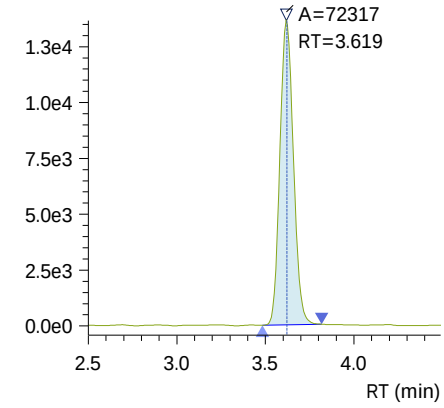
Perchlorate

Conc 5.0477
R#1 31.17 (32.02)

Q 99.00>83.00 (-) A=232011 RT=3.619 4.37e4



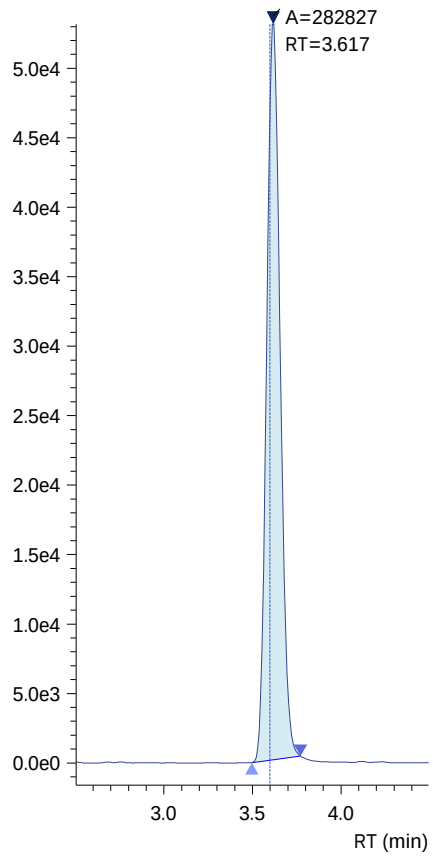
R1 101.00>85.00 (-) 1.37e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.32e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

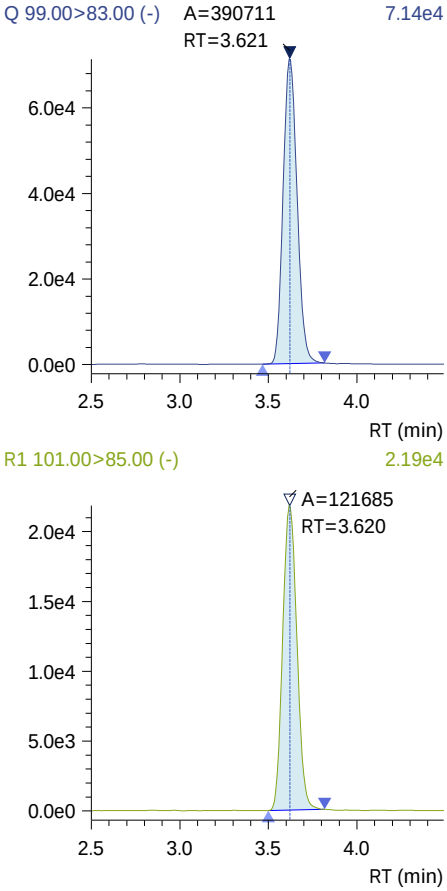
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 6/29/2023 1:32:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-007.lcd
Vial: 3 | 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	3.621	390711	229327	10.48 35	ng/mL	101.00 >85.00	31.14	22.41-41.62
Sodium Perchlorate-18O4_IS	Auto	3.616	229327	229327	1.0000	ng/mL	----	----	

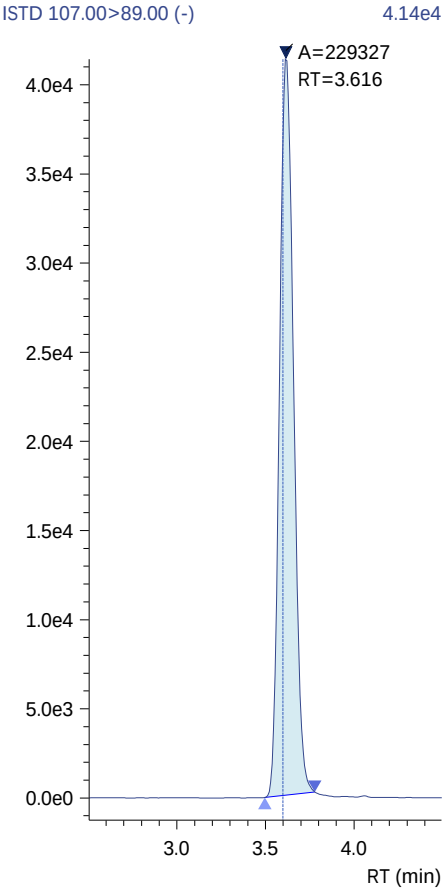
Perchlorate

Conc 10.4835
R#1 31.14 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

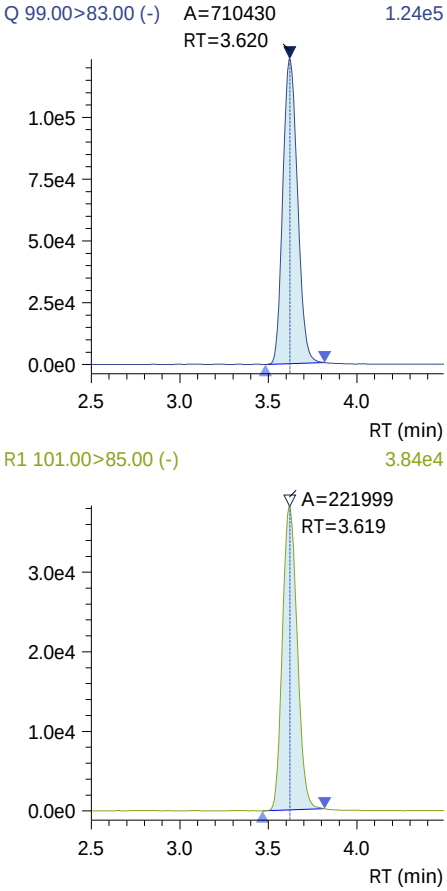
PERCHLORATE8

Sample ID: PERCHLORATE8
Date Acquired: 6/29/2023 1:38:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-008.lcd
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	710430	213093	20.5144	ng/mL	101.00 >85.00	31.25	22.41-41.62
Sodium Perchlorate-18O4_IS	Auto	3.615	213093	213093	1.0000	ng/mL	----	----	

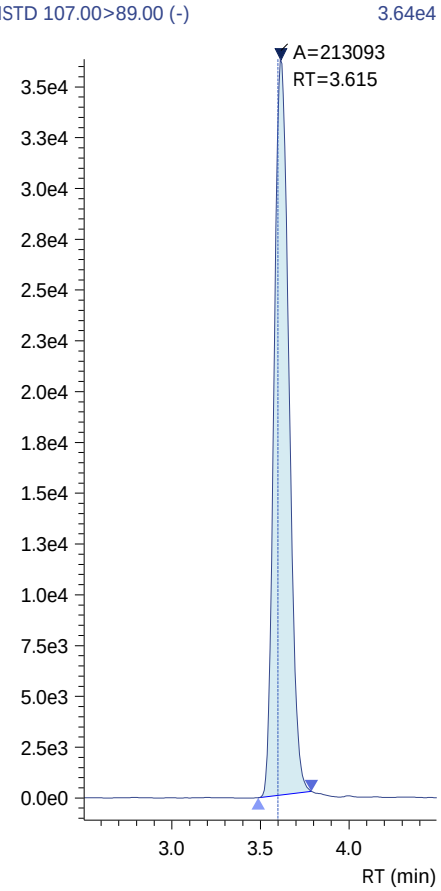
Perchlorate

Conc 20.5144
R#1 31.25 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE9

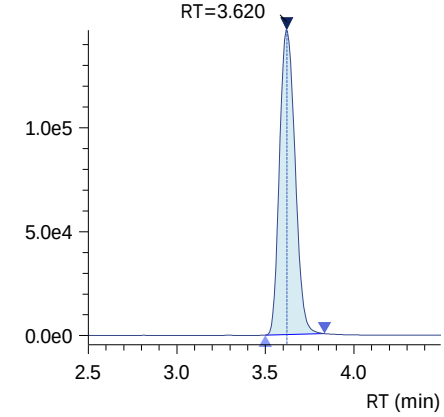
Sample ID: PERCHLORATE9
Date Acquired: 6/29/2023 1:43:53 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-009.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	896468	185851	29.6808	ng/mL	101.00 >85.00	31.06	22.41-41.62
Sodium Perchlorate-18O4_IS	Auto	3.614	185851	185851	1.0000	ng/mL	----	----	

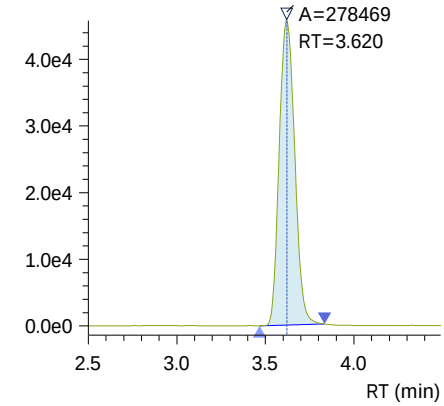
Perchlorate

Conc 29.6808
R#1 31.06 (32.02)

Q 99.00>83.00 (-) A=896468 RT=3.620 1.47e5



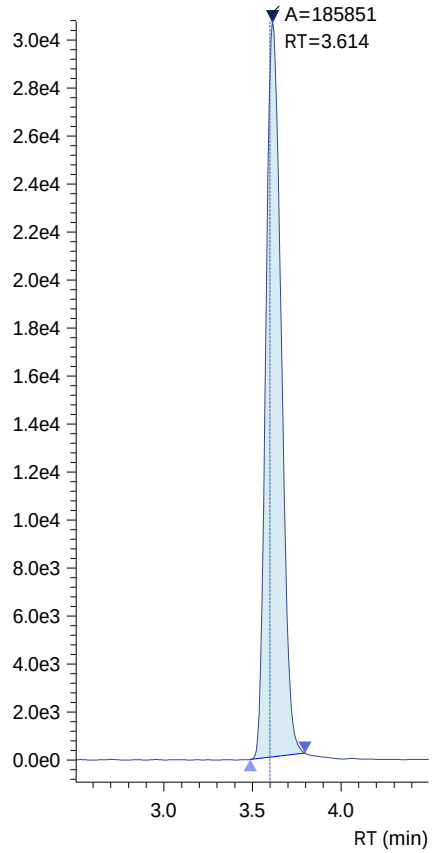
R1 101.00>85.00 (-) 4.58e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.08e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE10

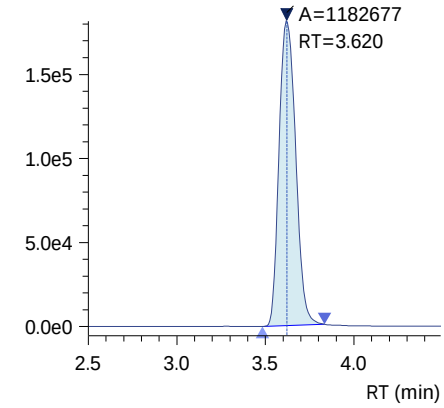
Sample ID: PERCHLORATE10
Date Acquired: 6/29/2023 1:49:27 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-010.lcd
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	1182677	146135	49.79 86	ng/mL	101.00 >85.00	30.89	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.614	146135	146135	1.0000	ng/mL	----	----	

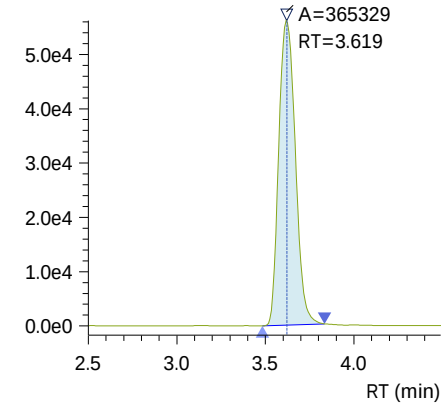
Perchlorate

Conc 49.7986
R#1 30.89 (32.02)

Q 99.00>83.00 (-) 1.82e5



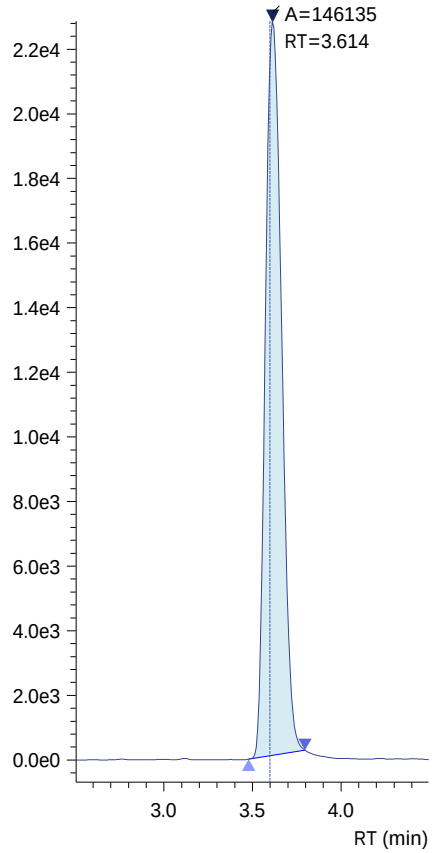
R1 101.00>85.00 (-) 5.62e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.29e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

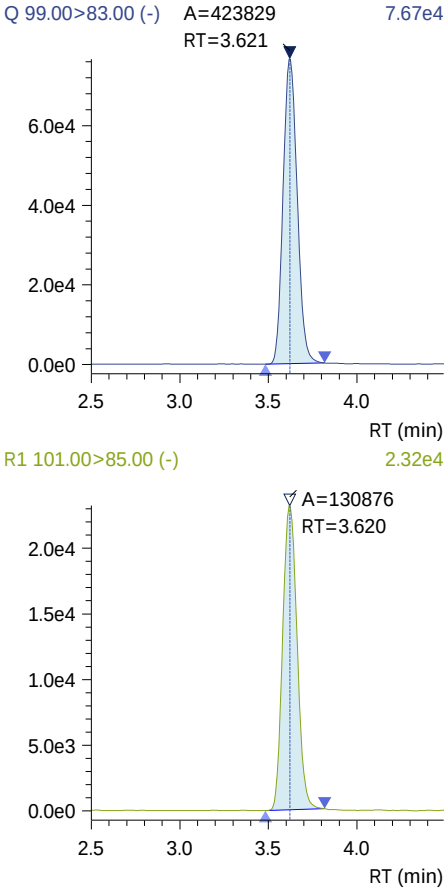
PERCHLORATEICV

Sample ID: PERCHLORATEICV
Date Acquired: 6/29/2023 1:55:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-011.lcd
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	423829	263091	9.9127	ng/mL	101.00 >85.00	30.88	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	263091	263091	1.0000	ng/mL	----	----	

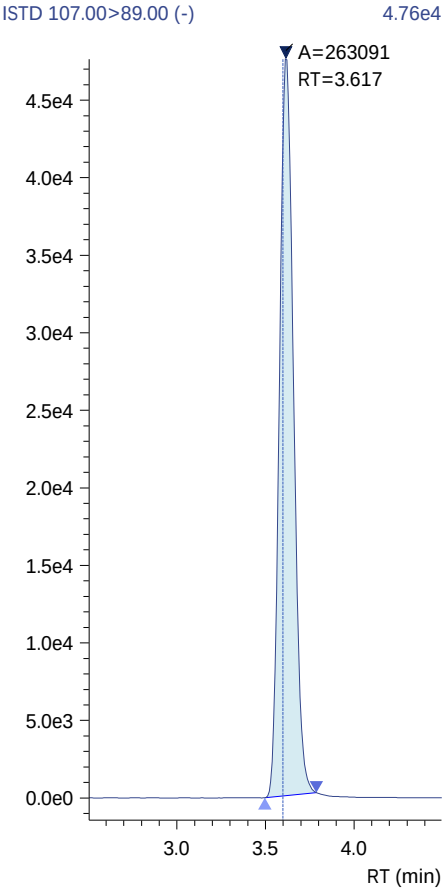
Perchlorate

Conc 9.9127
R#1 30.88 (32.02)



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

20230726-811888

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300011

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

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	IB		20230726-001	Perchlorate6850c.lcm	1x		7/26/2023 8:54
2	LODV		20230726-002	Perchlorate6850c.lcm	1x	230386	7/26/2023 9:00
3	ICS		20230726-003	Perchlorate6850c.lcm	1x	32103024	7/26/2023 9:05
4	CCV		20230726-004	Perchlorate6850c.lcm	1x	227251	7/26/2023 9:44
5	EQ2300358-02		20230726-005	Perchlorate6850c.lcm	1x		7/26/2023 10:23
6	EQ2300358-03		20230726-006	Perchlorate6850c.lcm	1x		7/26/2023 10:28
7	EQ2300358-01		20230726-007	Perchlorate6850c.lcm	1x		7/26/2023 10:34
8	E2300684-001		20230726-008	Perchlorate6850c.lcm	1x		7/26/2023 10:39
9	E2300684-002		20230726-009	Perchlorate6850c.lcm	1x		7/26/2023 10:45
10	E2300684-003		20230726-010	Perchlorate6850c.lcm	1x		7/26/2023 10:50
11	E2300684-004		20230726-011	Perchlorate6850c.lcm	1x		7/26/2023 10:56
12	E2300684-005		20230726-012	Perchlorate6850c.lcm	5x		7/26/2023 11:01
13	E2300684-006		20230726-013	Perchlorate6850c.lcm	1x		7/26/2023 11:07
14	E2300684-007		20230726-014	Perchlorate6850c.lcm	1x		7/26/2023 11:13
15	CCV		20230726-015	Perchlorate6850c.lcm	1x	227251	7/26/2023 11:18
16	E2300684-008		20230726-016	Perchlorate6850c.lcm	1x		7/26/2023 11:24
17	E2300684-009		20230726-017	Perchlorate6850c.lcm	1x		7/26/2023 11:29
18	E2300684-010		20230726-018	Perchlorate6850c.lcm	1x		7/26/2023 11:35
19	E2300684-011		20230726-019	Perchlorate6850c.lcm	1x	DNU-CONFIRM HEAD	7/26/2023 11:40
20	EQ2300358-04		20230726-020	Perchlorate6850c.lcm	1x		7/26/2023 11:46
21	EQ2300358-05		20230726-021	Perchlorate6850c.lcm	1x		7/26/2023 11:51
22	E2300685-001		20230726-022	Perchlorate6850c.lcm	1x		7/26/2023 11:57
23	E2300685-002		20230726-023	Perchlorate6850c.lcm	1x		7/26/2023 12:02
24	E2300685-003		20230726-024	Perchlorate6850c.lcm	1x		7/26/2023 12:08
25	E2300685-004		20230726-025	Perchlorate6850c.lcm	1x		7/26/2023 12:13
26	CCV		20230726-026	Perchlorate6850c.lcm	1x	227251	7/26/2023 12:19
27	E2300685-005		20230726-027	Perchlorate6850c.lcm	1x		7/26/2023 12:25
28	E2300685-006		20230726-028	Perchlorate6850c.lcm	1x		7/26/2023 12:30
29	E2300685-007		20230726-029	Perchlorate6850c.lcm	1x		7/26/2023 12:36
30	E2300685-008		20230726-030	Perchlorate6850c.lcm	1x		7/26/2023 12:41
31	R2306302-005		20230726-031	Perchlorate6850c.lcm	1x		7/26/2023 12:47
32	EQ2300363-01		20230726-032	Perchlorate6850c.lcm	1x		7/26/2023 12:52
33	EQ2300363-02		20230726-033	Perchlorate6850c.lcm	1x	DNU-RR	7/26/2023 12:58
34	EQ2300363-03		20230726-034	Perchlorate6850c.lcm	1x		7/26/2023 13:03
35	E2300677-001		20230726-035	Perchlorate6850c.lcm	1x		7/26/2023 13:09
36	E2300677-002		20230726-036	Perchlorate6850c.lcm	1x		7/26/2023 13:26
37	CCV		20230726-037	Perchlorate6850c.lcm	1x	227251	7/26/2023 13:32

20230726-811888

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300011

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

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
38	E2300677-003		20230726-038	Perchlorate6850c.lcm	10x		7/26/2023 13:37
39	E2300677-004		20230726-039	Perchlorate6850c.lcm	5x		7/26/2023 13:43
40	E2300677-005		20230726-040	Perchlorate6850c.lcm	100x		7/26/2023 13:48
41	E2300677-006		20230726-041	Perchlorate6850c.lcm	1x		7/26/2023 13:54
42	E2300689-001		20230726-042	Perchlorate6850c.lcm	1x		7/26/2023 13:59
43	E2300690-001		20230726-043	Perchlorate6850c.lcm	100x		7/26/2023 14:05
44	K2308280-001		20230726-044	Perchlorate6850c.lcm	1x		7/26/2023 14:10
45	K2308280-002		20230726-045	Perchlorate6850c.lcm	1x		7/26/2023 14:16
46	K2308280-003		20230726-046	Perchlorate6850c.lcm	1x		7/26/2023 14:22
47	K2308280-004		20230726-047	Perchlorate6850c.lcm	1x		7/26/2023 14:27
48	CCV		20230726-048	Perchlorate6850c.lcm	1x	227251	7/26/2023 14:33
49	E2300684-011		20230726-049	Perchlorate6850c.lcm	1x		7/26/2023 14:49
50	EQ2300363-02		20230726-050	Perchlorate6850c.lcm	1x		7/26/2023 14:55
51	CCV		20230726-051	Perchlorate6850c.lcm	1x	227251	7/26/2023 15:02

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071289

Service Request: E2300684
Date Analyzed: 7/26/23 09:44

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

File ID: I:\LCMS01\DATA\20230726\20230726-004
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300366-01
Analysis Lot: 811888
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300366-01	238,907	3.57
Lab Control Sample	EQ2300358-02	320,562	3.55
Duplicate Lab Control Sample	EQ2300358-03	314,182	3.57
Method Blank	EQ2300358-01	313,626	3.58
16RW09-230718	E2300684-001	336,670	3.57
16RW09-230718-FD	E2300684-002	336,508	3.57
16RW10-230718	E2300684-003	325,221	3.57
16WW40-230718	E2300684-004	334,959	3.57
16WW12-230718	E2300684-005	229,322	3.57
16WW39-230718	E2300684-006	300,333	3.57
16WW49-230718	E2300684-007	315,734	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: HS23071289

Service Request: E2300684
Date Analyzed: 7/26/23 11:18

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

File ID: I:\LCMS01\DATA\20230726\20230726-015
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300366-02
Analysis Lot: 811888
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300366-02	222,322	3.57
16SW01-230718	E2300684-008	273,448	3.57
16SW01-230718-FD	E2300684-009	303,488	3.57
16SW02-230718	E2300684-010	297,761	3.57
16SW03-230718MS	EQ2300358-04	291,601	3.57
16SW03-230718DMS	EQ2300358-05	294,015	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:**	E2300684
Project:	HS23071289	**Date Analyzed:**	7/26/23 12:19

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230726\20230726-026	**Lab Code:**	EQ2300366-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811888
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300366-03	220,036	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:**	E2300684
Project:	HS23071289	**Date Analyzed:**	7/26/23 13:32

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

File ID:	I:\LCMS01\DATA\20230726\20230726-037	**Lab Code:**	EQ2300366-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811888
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300366-04	210,109	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:**	E2300684
Project:	HS23071289	**Date Analyzed:**	7/26/23 14:33

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

File ID:	I:\LCMS01\DATA\20230726\20230726-048	**Lab Code:**	EQ2300366-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811888
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300366-05	212,868	3.57
16SW03-230718	E2300684-011	290,182	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:**	E2300684
Project:	HS23071289	**Date Analyzed:**	7/26/23 15:02

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230726\20230726-051	**Lab Code:**	EQ2300366-06
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811888
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300366-06	209,864	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: HS23071289

Service Request: E2300684
Date Analyzed: 7/26/23

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\20230726\20230726-004

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811888
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1625	0.1633	0.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071289

Service Request: E2300684
Date Analyzed: 7/26/23

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\20230726\20230726-015

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811888
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1647	1.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071289

Service Request: E2300684
Date Analyzed: 7/26/23

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\20230726\20230726-026

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811888
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1639	0.8	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071289

Service Request: E2300684
Date Analyzed: 7/26/23

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\20230726\20230726-037

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811888
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.96	0.1625	0.1618	-0.4	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071289

Service Request: E2300684
Date Analyzed: 7/26/23

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\20230726\20230726-048

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811888
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1625	0.1630	0.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071289

Service Request: E2300684
Date Analyzed: 7/26/23

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\20230726\20230726-051

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811888
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.3	0.1625	0.1669	2.7	NA	± 15 %	Average RF

Insight Report

Printed at 7/26/2023 3:21:43 PM

Method File: I:\LCMS01\DATA\20230726\20230726.lcm
Project File: I:\LCMS01\DATA\20230726\20230726.damlp

IB

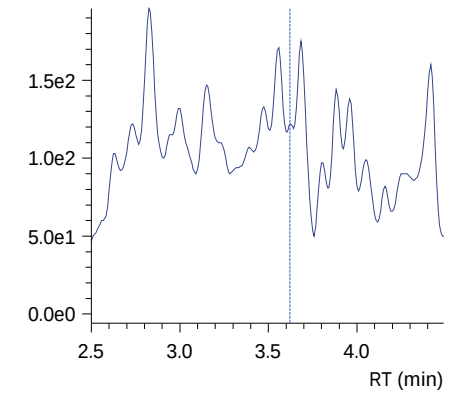
Sample ID: IB
Date Acquired: 7/26/2023 8:54:47 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-001.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	360915	----	ng/mL	101.00 >85.00	0.00	19.41-36.05
Sodium Perchlorate-18O4_IS	Auto	3.575	360915	360915	1.0000	ng/mL	----	----	

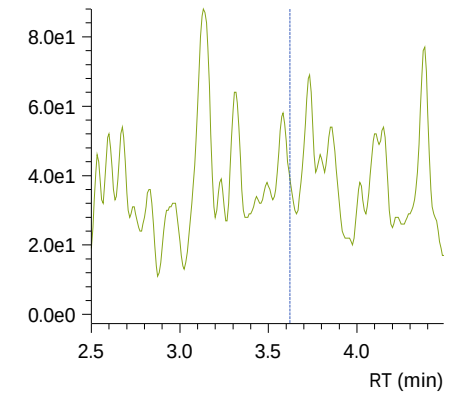
Perchlorate

Conc ----
R#1 0.00 (27.73)

Q 99.00>83.00 (-) 1.96e2



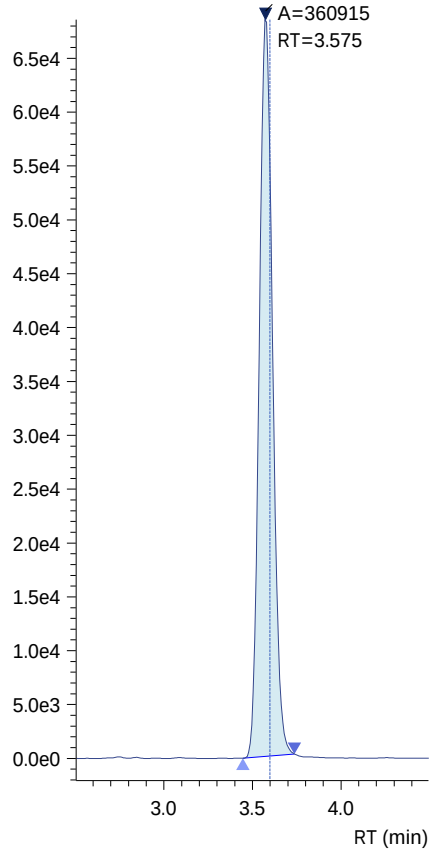
R1 101.00>85.00 (-) 8.80e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.86e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

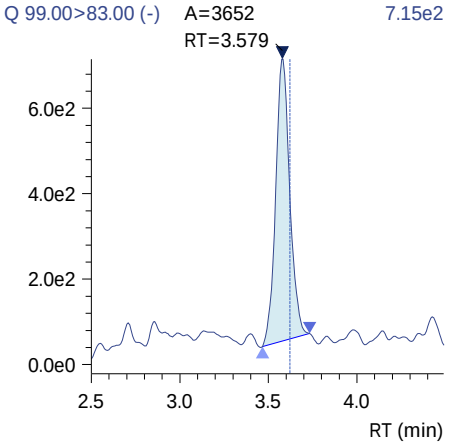
LODV

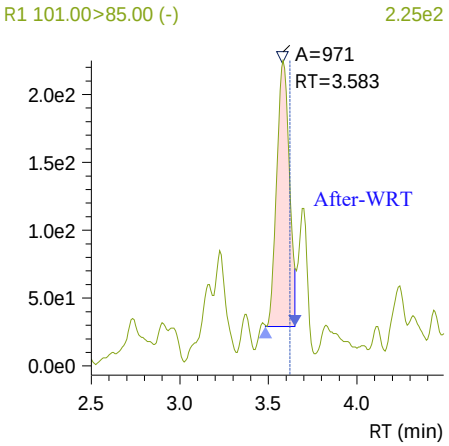
Sample ID: LODV
Date Acquired: 7/26/2023 9:00:17 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-002.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.579	3652	361755	0.0621	ng/mL	101.00 >85.00	26.59	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.577	361755	361755	1.0000	ng/mL	----	----	

Perchlorate

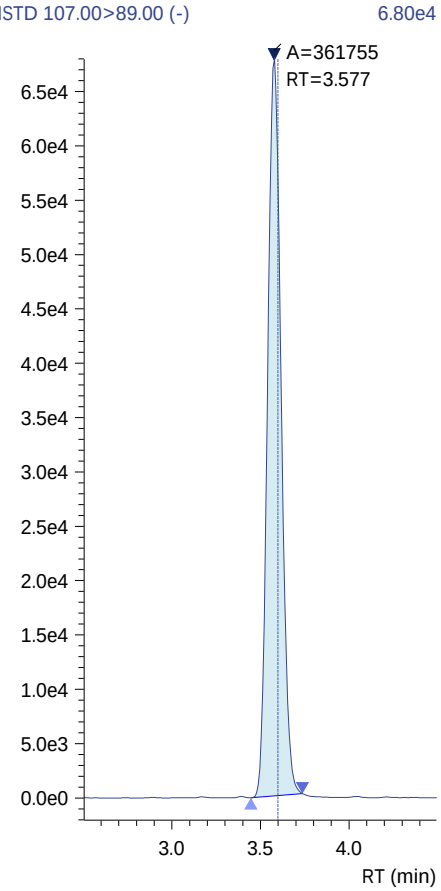
Conc 0.0621
R#1 26.59 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:23:16 PM

Method File: I:\LCMS01\DATA\20230726\20230726.lcm
Project File: I:\LCMS01\DATA\20230726\20230726.damlp

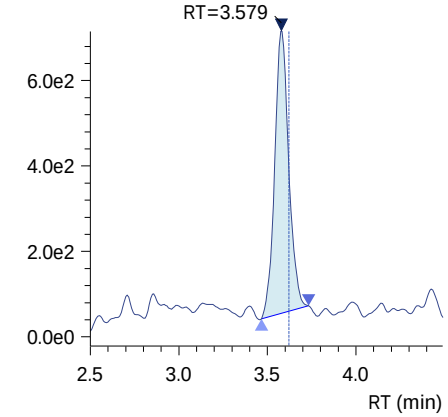
LODV

Sample ID: LODV
Date Acquired: 7/26/2023 9:00:17 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-002.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

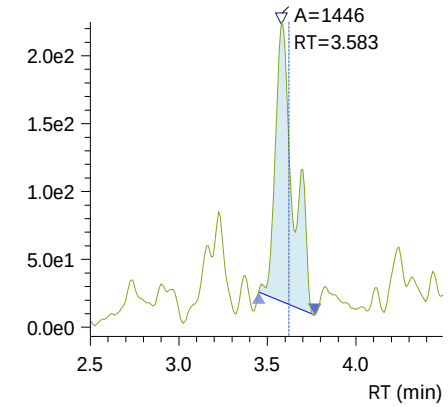
Perchlorate

Conc 0.0621
R#1 39.59 (27.73)

Q 99.00>83.00 (-) A=3652 7.15e2



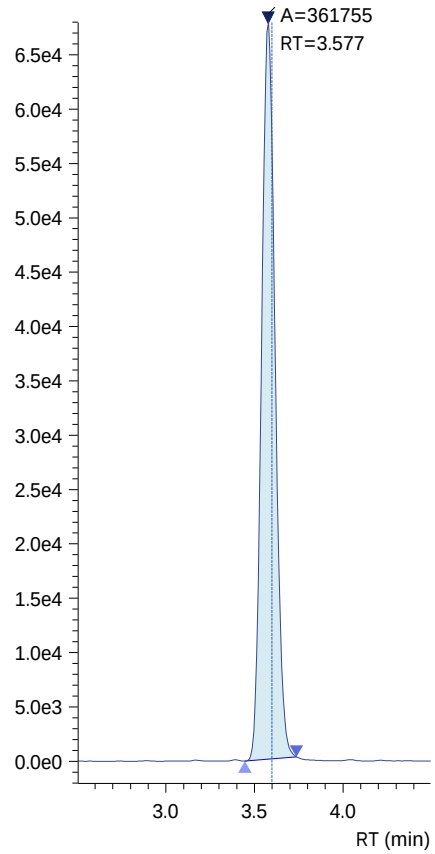
R1 101.00>85.00 (-) 2.25e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.80e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

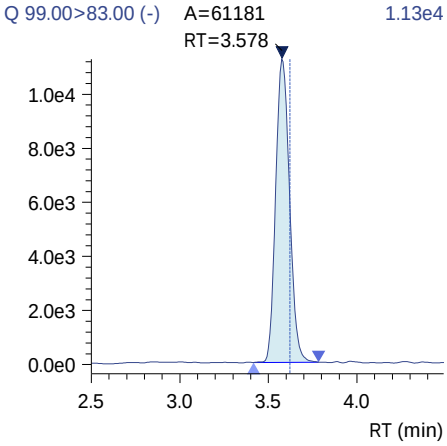
ICS

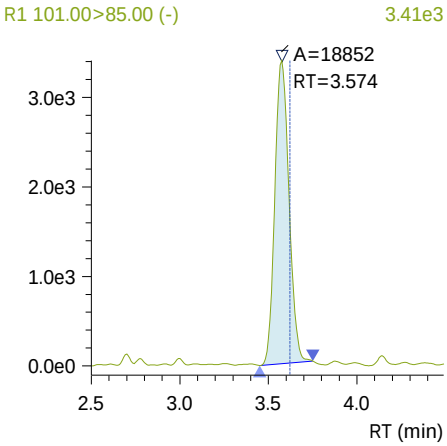
Sample ID: ICS
Date Acquired: 7/26/2023 9:05:46 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-003.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	61181	370783	1.0153	ng/mL	101.00 >85.00	30.81	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.575	370783	370783	1.0000	ng/mL	----	----	

Perchlorate

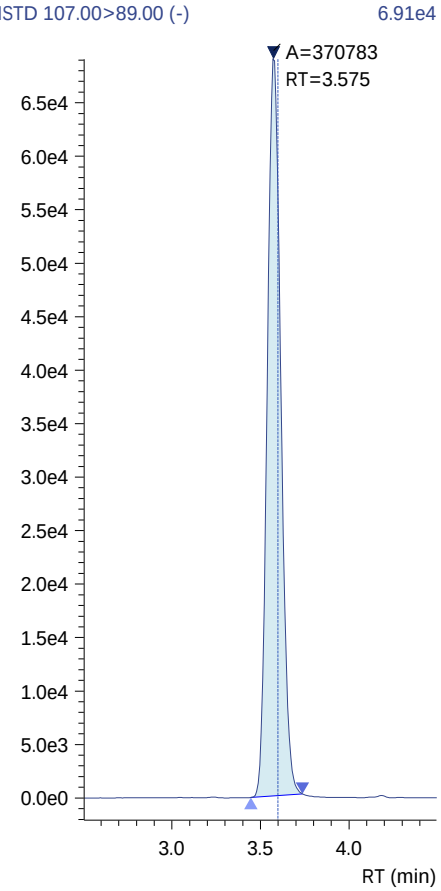
Conc 1.0153
R#1 30.81 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

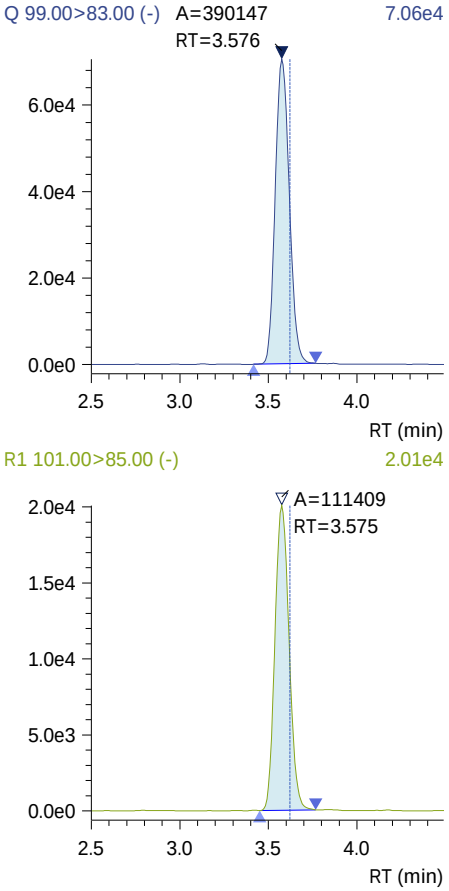
CCV

Sample ID: CCV
Date Acquired: 7/26/2023 9:44:27 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-004.lcd
Vial: 3 | 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	3.576	390147	238907	10.0486	ng/mL	101.00 >85.00	28.56	19.41-36.05
Sodium Perchlorate-18O4_IS	Auto	3.573	238907	238907	1.0000	ng/mL	----	----	

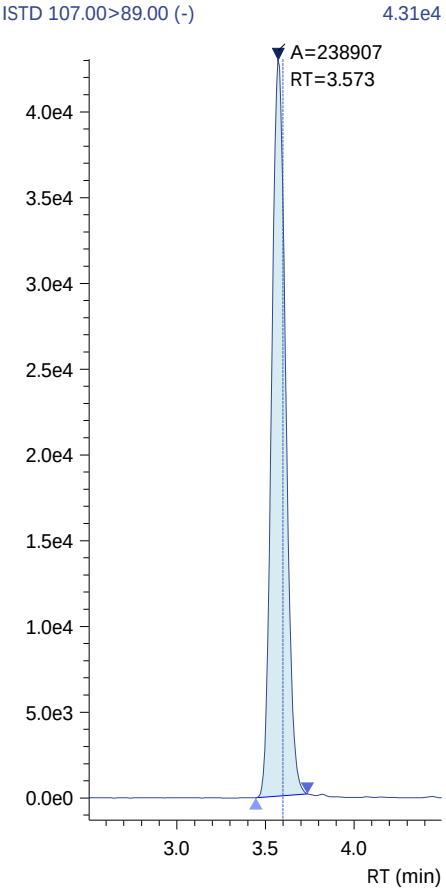
Perchlorate

Conc 10.0486
R#1 28.56 (27.73)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

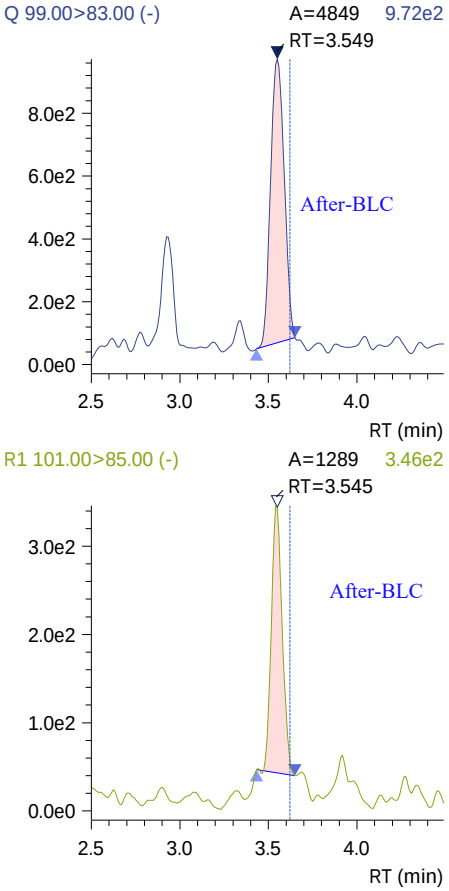
EQ2300358-02

Sample ID: EQ2300358-02
Date Acquired: 7/26/2023 10:23:03 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-005.lcd
Vial: 15 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	3.549	4849	320562	0.0931	ng/mL	101.00 >85.00	26.59	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.546	320562	320562	1.0000	ng/mL	----	----	

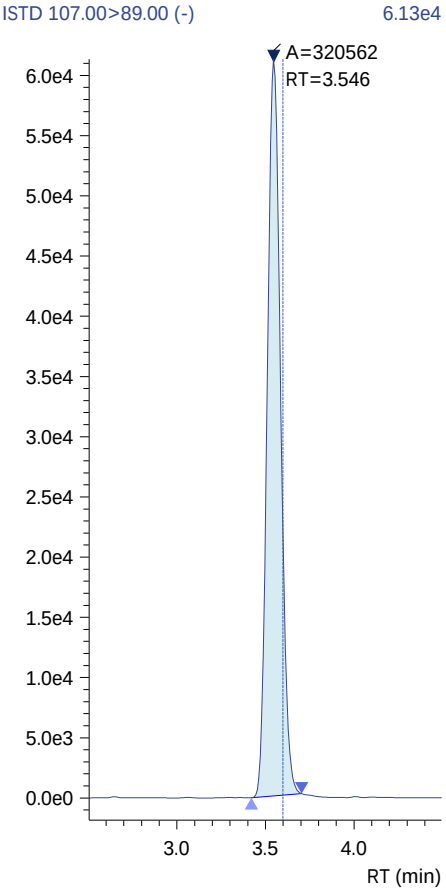
Perchlorate

Conc 0.0931
R#1 26.59 (27.73)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:23:16 PM

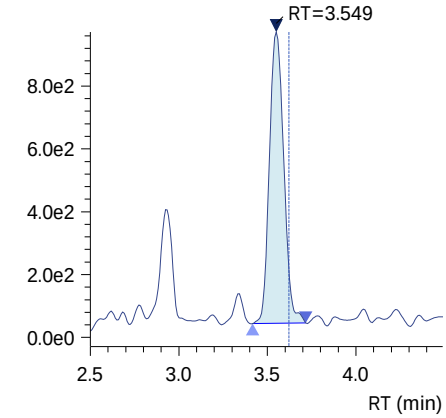
EQ2300358-02

Sample ID: EQ2300358-02
Date Acquired: 7/26/2023 10:23:03 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-005.lcd
Vial: 15 | Inj. Volume: 10.0000uL | Tray: 4

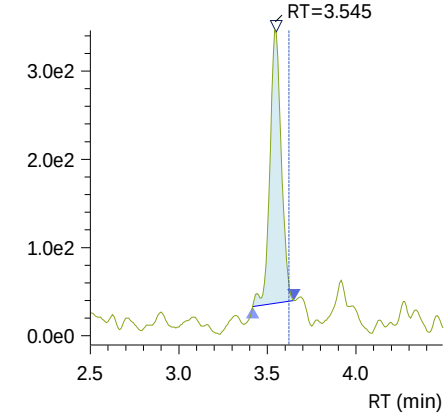
Perchlorate

Conc 0.1008
R#1 26.37 (27.73)

Q 99.00>83.00 (-) A=5250 9.72e2



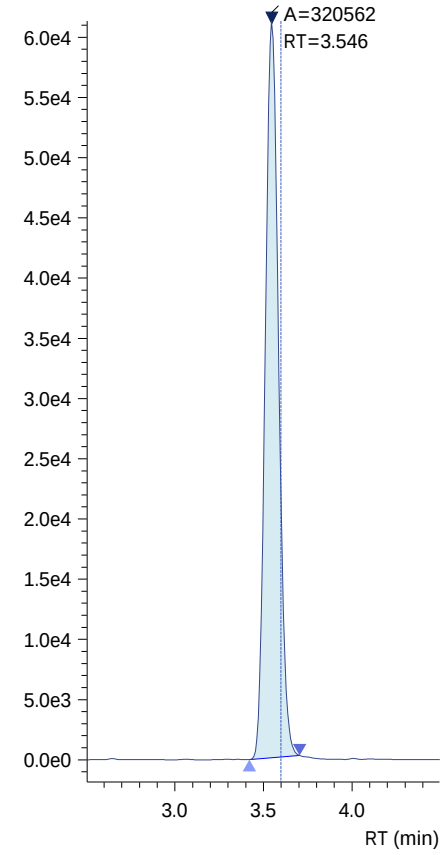
R1 101.00>85.00 (-) A=1384 3.46e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.13e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

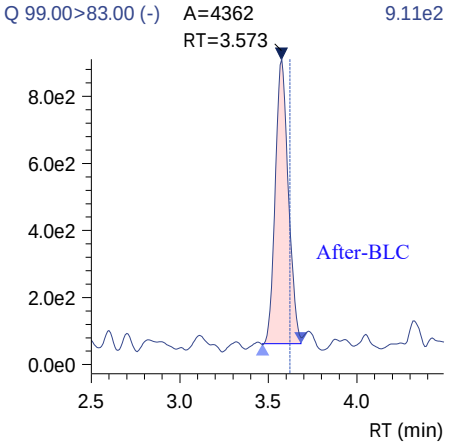
EQ2300358-03

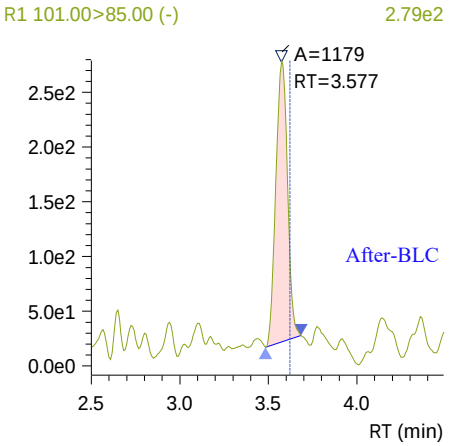
Sample ID: EQ2300358-03
Date Acquired: 7/26/2023 10:28:35 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-006.lcd
Vial: 16 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	3.573	4362	314182	0.0854	ng/mL	101.00 >85.00	27.02	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.571	314182	314182	1.0000	ng/mL	----	----	

Perchlorate

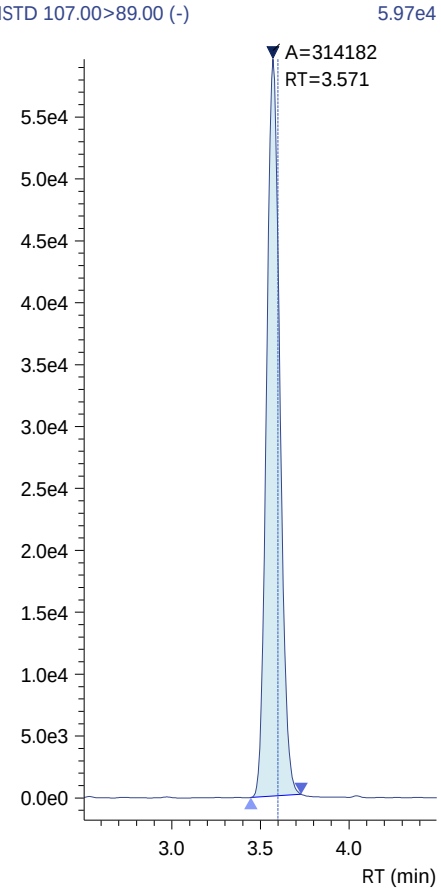
Conc 0.0854
R#1 27.02 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:23:16 PM

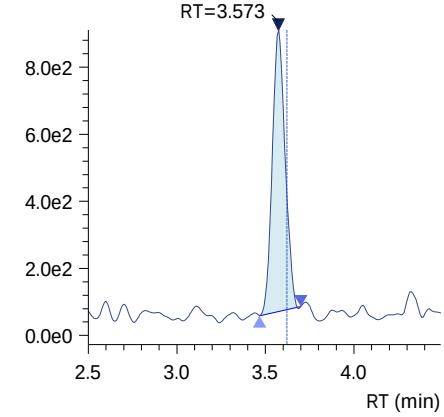
EQ2300358-03

Sample ID: EQ2300358-03
Date Acquired: 7/26/2023 10:28:35 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-006.lcd
Vial: 16 | Inj. Volume: 10.0000uL | Tray: 4

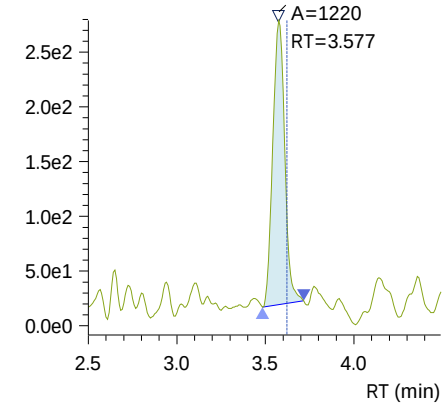
Perchlorate

Conc 0.0829
R#1 28.81 (27.73)

Q 99.00>83.00 (-) A=4235 9.11e2



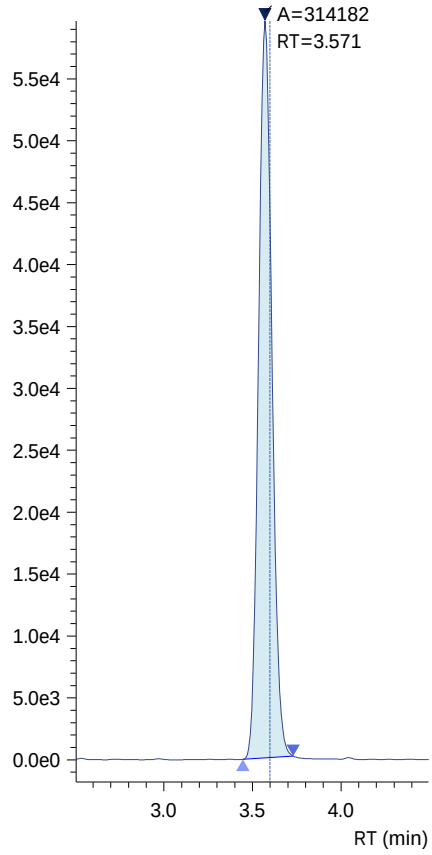
R1 101.00>85.00 (-) 2.79e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.97e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

EQ2300358-01

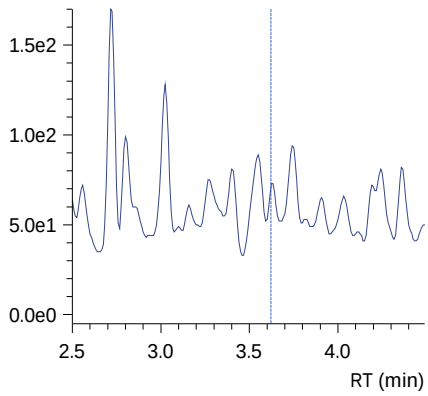
Sample ID: EQ2300358-01
Date Acquired: 7/26/2023 10:34:08 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-007.lcd
Vial: 14 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	313626	----	ng/mL	101.00 >85.00	0.00	19.41-36.05
Sodium Perchlorate-18O4_IS	Auto	3.575	313626	313626	1.0000	ng/mL	----	----	

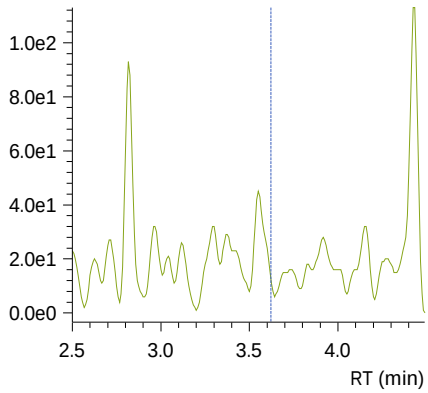
Perchlorate

Conc ----
R#1 0.00 (27.73)

Q 99.00>83.00 (-) 1.70e2



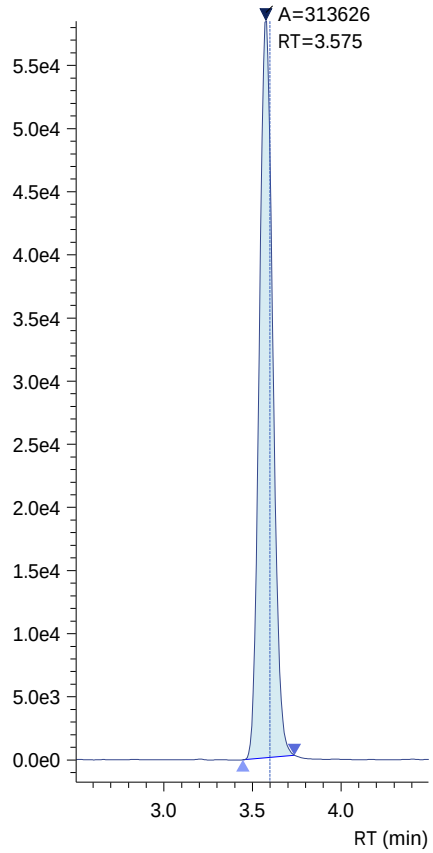
R1 101.00>85.00 (-) 1.13e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.85e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

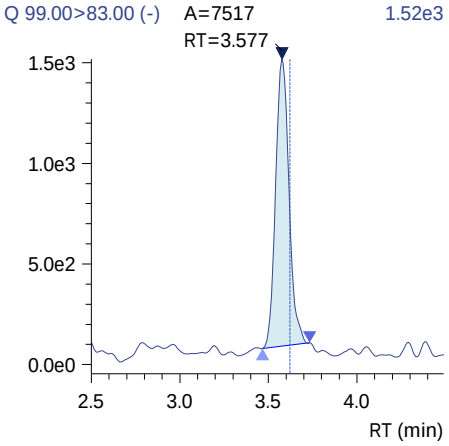
E2300684-001

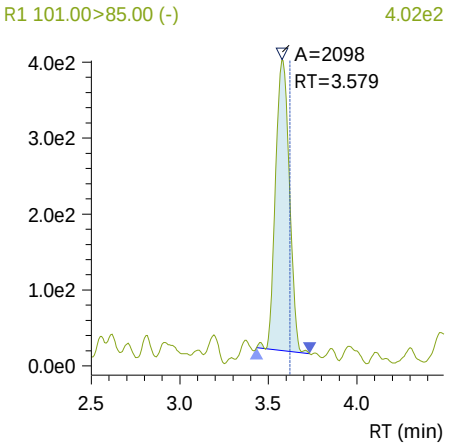
Sample ID: E2300684-001
Date Acquired: 7/26/2023 10:39:41 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-008.lcd
Vial: 33 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	7517	336670	0.1374	ng/mL	101.00 >85.00	27.91	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.574	336670	336670	1.0000	ng/mL	----	----	

Perchlorate

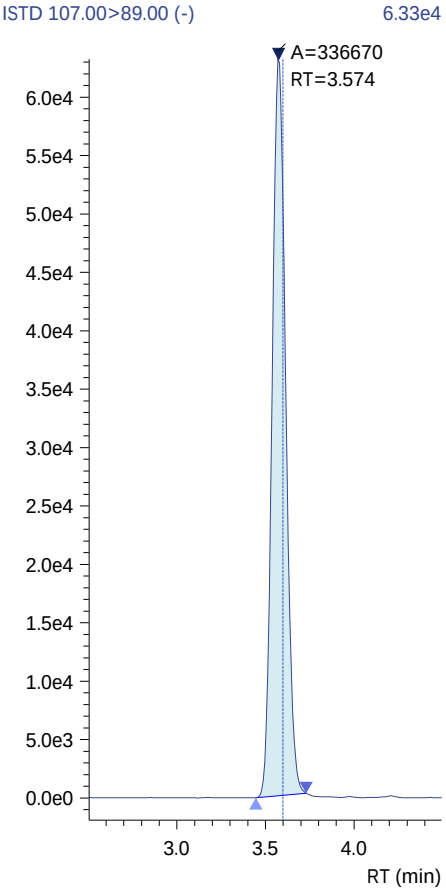
Conc 0.1374
R#1 27.91 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

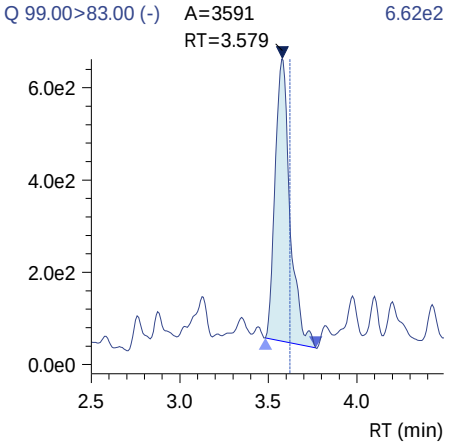
E2300684-002

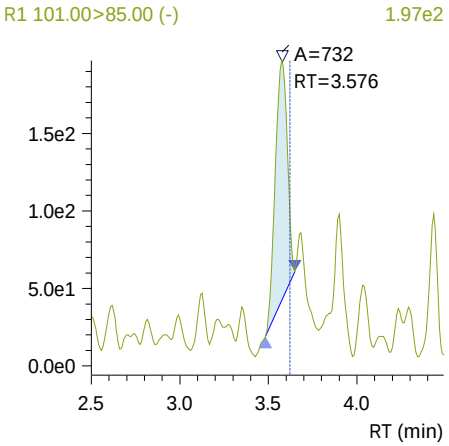
Sample ID: E2300684-002
Date Acquired: 7/26/2023 10:45:16 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-009.lcd
Vial: 34 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.579	3591	336508	0.0657	ng/mL	101.00 >85.00	20.37	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.572	336508	336508	1.0000	ng/mL	----	----	

Perchlorate

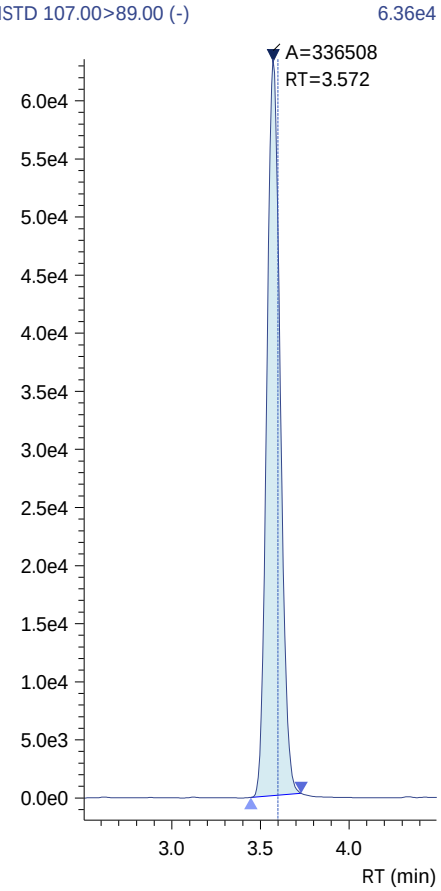
Conc 0.0657
R#1 20.37 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

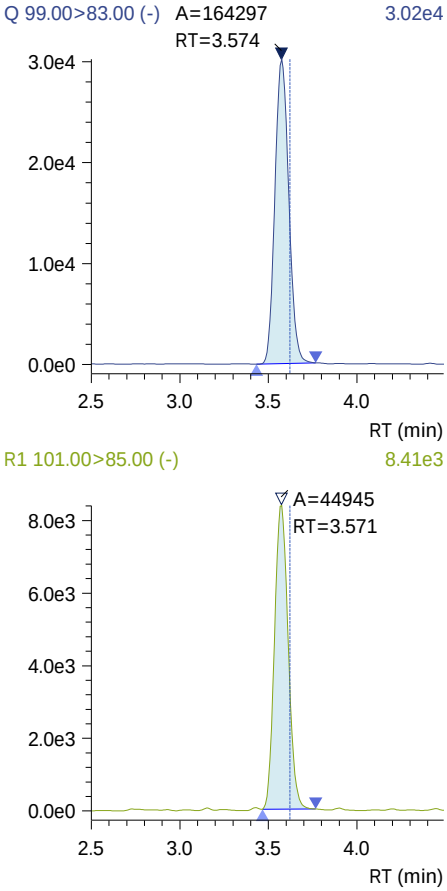
E2300684-003

Sample ID: E2300684-003
Date Acquired: 7/26/2023 10:50:49 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-010.lcd
Vial: 35 | 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	3.574	164297	325221	3.1085	ng/mL	101.00 >85.00	27.36	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.571	325221	325221	1.0000	ng/mL	----	----	

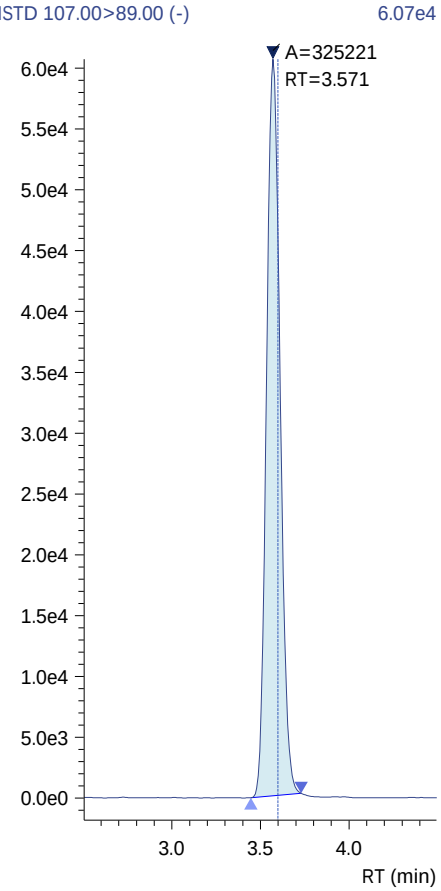
Perchlorate

Conc 3.1085
R#1 27.36 (27.73)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

E2300684-004

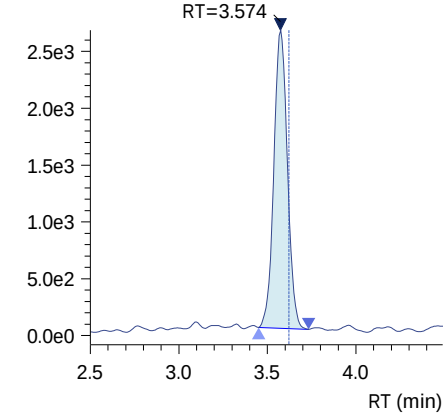
Sample ID: E2300684-004
Date Acquired: 7/26/2023 10:56:24 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-011.lcd
Vial: 36 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.574	13990	334959	0.2570	ng/mL	101.00 >85.00	26.98	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.570	334959	334959	1.0000	ng/mL	----	----	

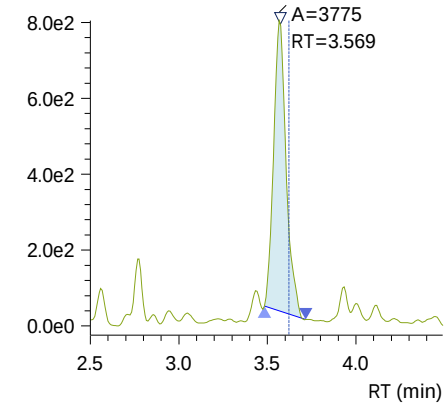
Perchlorate

Conc 0.2570
R#1 26.98 (27.73)

Q 99.00>83.00 (-) A=13990 2.69e3



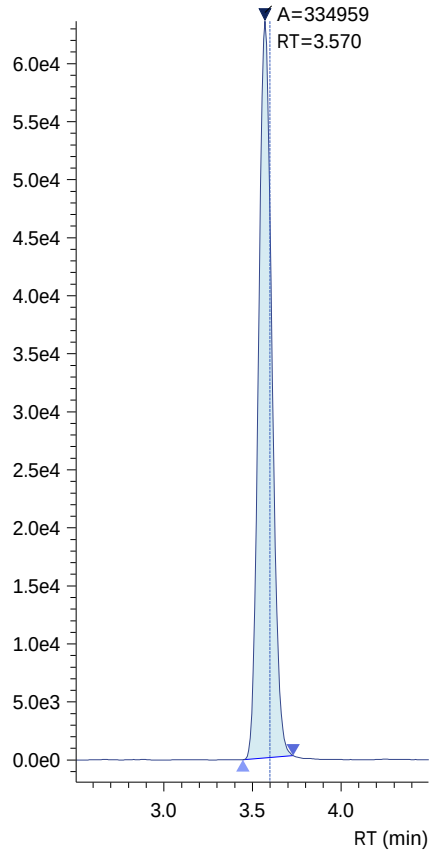
R1 101.00>85.00 (-) 8.05e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.37e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

E2300684-005x5

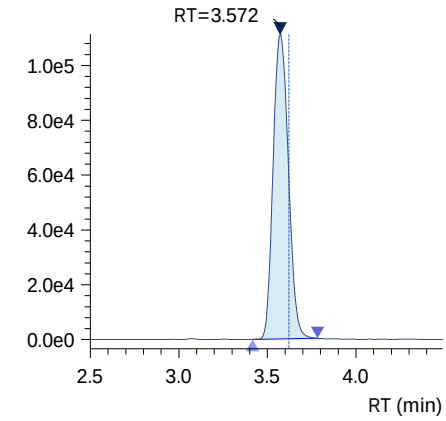
Sample ID: E2300684-005
Date Acquired: 7/26/2023 11:01:55 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-012.lcd
Vial: 37 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.572	667910	229322	17.92 16	ng/mL	101.00 >85.00	28.60	19.41-36.05
Sodium Perchlorate-18O4_IS	Auto	3.569	229322	229322	1.0000	ng/mL	----	----	

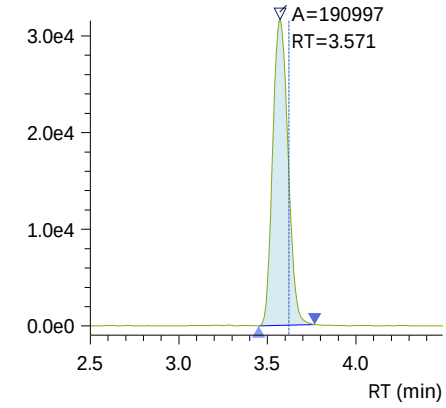
Perchlorate

Conc 17.9216
R#1 28.60 (27.73)

Q 99.00>83.00 (-) A=667910 1.11e5



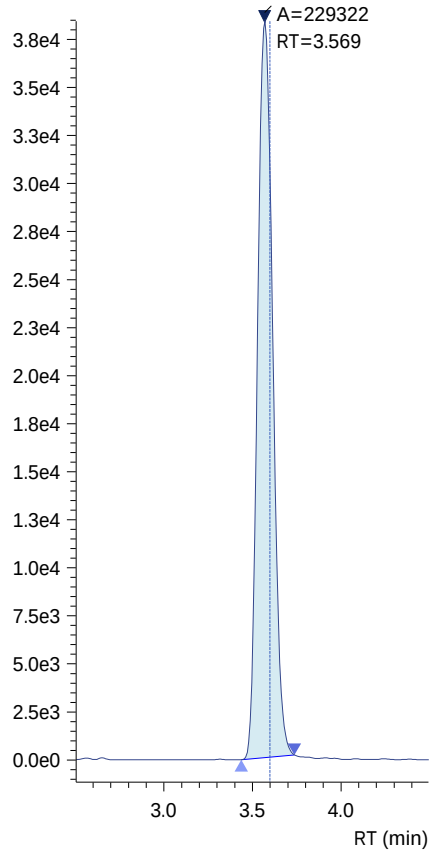
R1 101.00>85.00 (-) 3.16e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.84e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

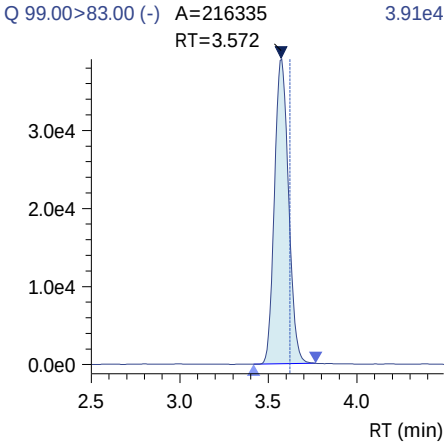
E2300684-006

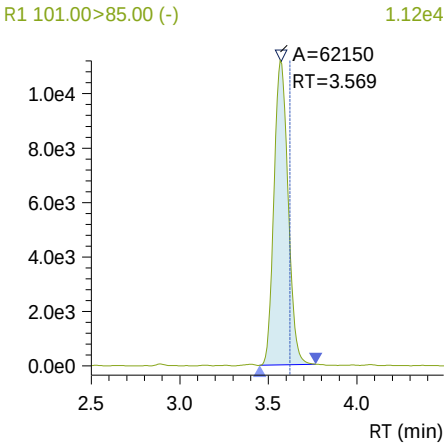
Sample ID: E2300684-006
Date Acquired: 7/26/2023 11:07:29 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-013.lcd
Vial: 38 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.572	216335	300333	4.4323	ng/mL	101.00 >85.00	28.73	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.568	300333	300333	1.0000	ng/mL	----	----	

Perchlorate

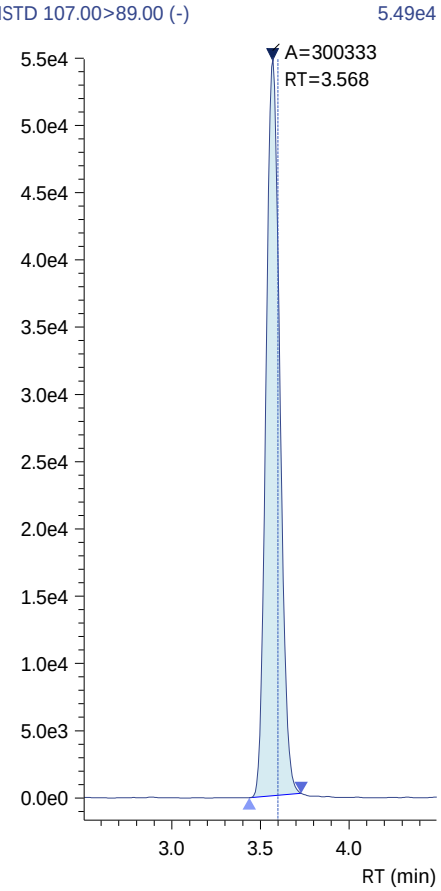
Conc 4.4323
R#1 28.73 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

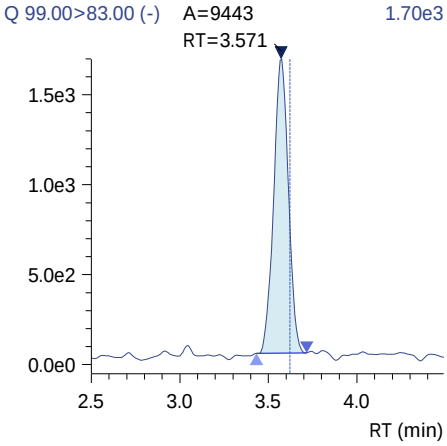
E2300684-007

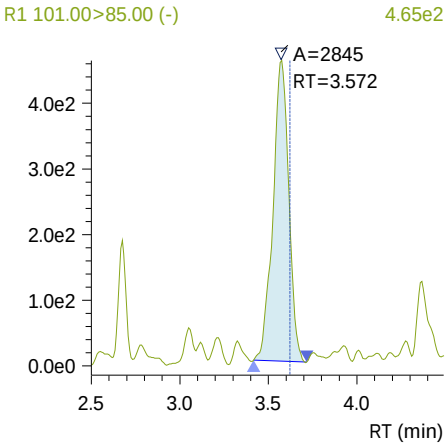
Sample ID: E2300684-007
Date Acquired: 7/26/2023 11:13:04 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-014.lcd
Vial: 39 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.571	9443	315734	0.1840	ng/mL	101.00 >85.00	30.13	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.568	315734	315734	1.0000	ng/mL	----	----	

Perchlorate

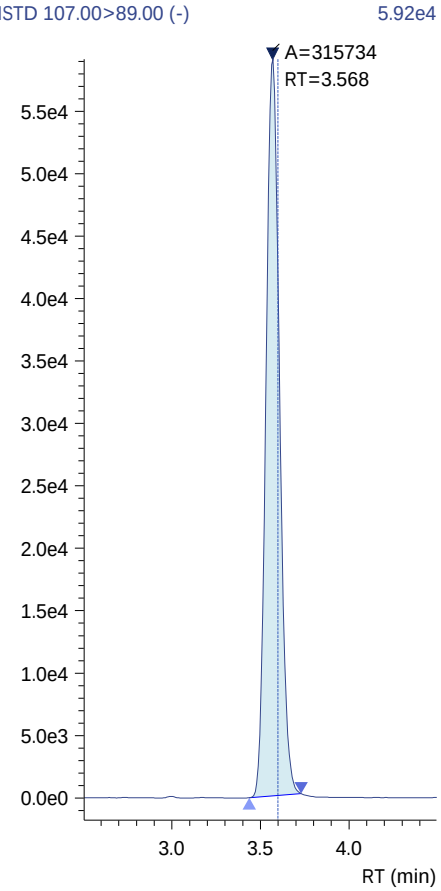
Conc 0.1840
R#1 30.13 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

CCV

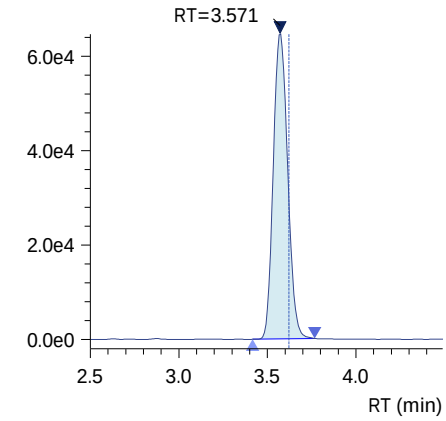
Sample ID: CCV
Date Acquired: 7/26/2023 11:18:36 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-015.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.571	366119	222322	10.13 32	ng/mL	101.00 >85.00	27.95	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.568	222322	222322	1.0000	ng/mL	----	----	

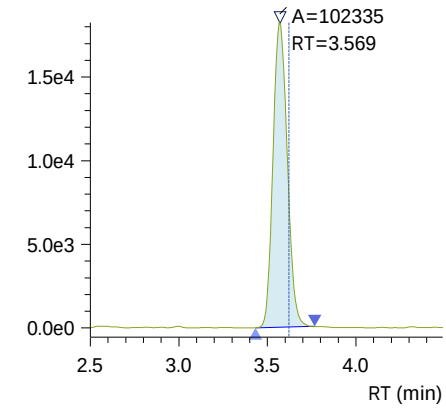
Perchlorate

Conc 10.1332
R#1 27.95 (27.73)

Q 99.00>83.00 (-) A=366119 6.47e4



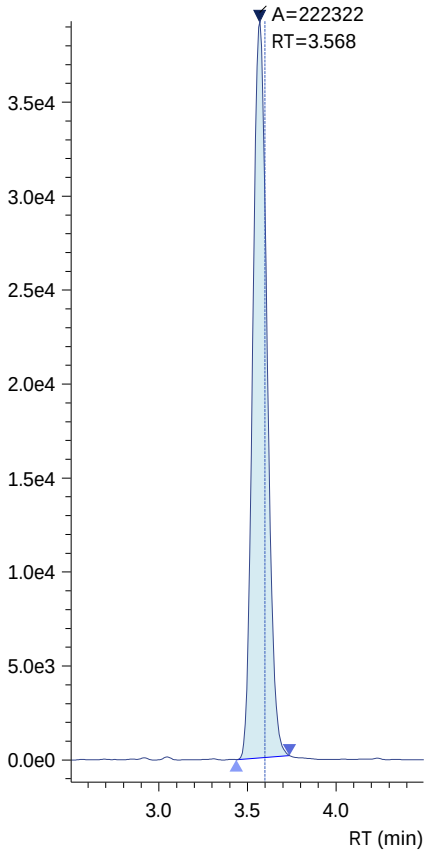
R1 101.00>85.00 (-) 1.83e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.93e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

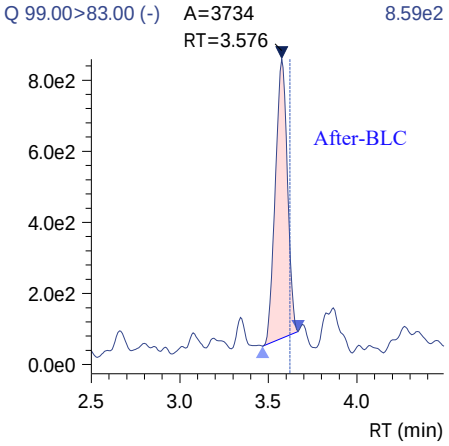
E2300684-008

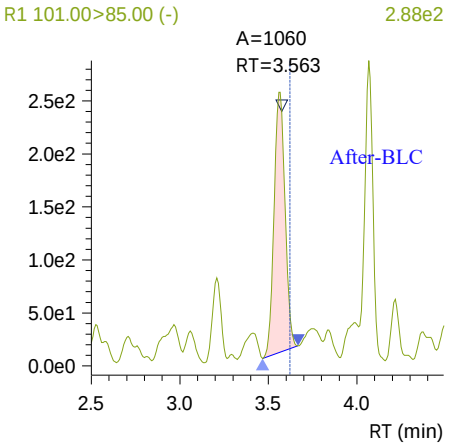
Sample ID: E2300684-008
Date Acquired: 7/26/2023 11:24:06 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-016.lcd
Vial: 40 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	3.576	3734	273448	0.0840	ng/mL	101.00 >85.00	28.39	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.567	273448	273448	1.0000	ng/mL	----	----	

Perchlorate

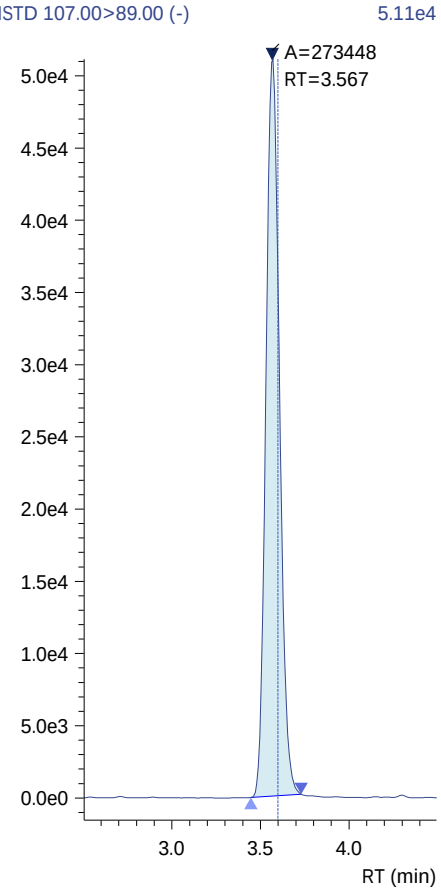
Conc 0.0840
R#1 28.39 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:23:16 PM

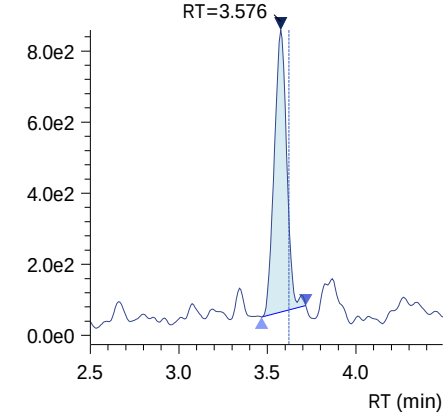
E2300684-008

Sample ID: E2300684-008
Date Acquired: 7/26/2023 11:24:06 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-016.lcd
Vial: 40 | Inj. Volume: 10.0000uL | Tray: 3

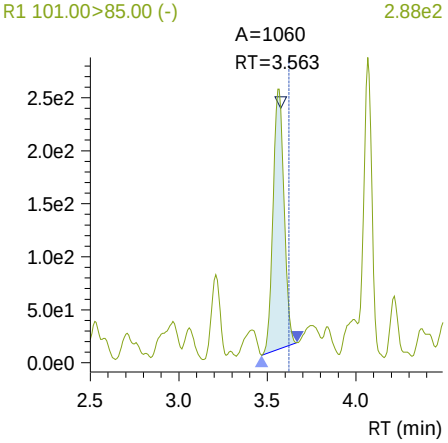
Perchlorate

Conc 0.0876
R#1 27.23 (27.73)

Q 99.00>83.00 (-) A=3893 8.59e2



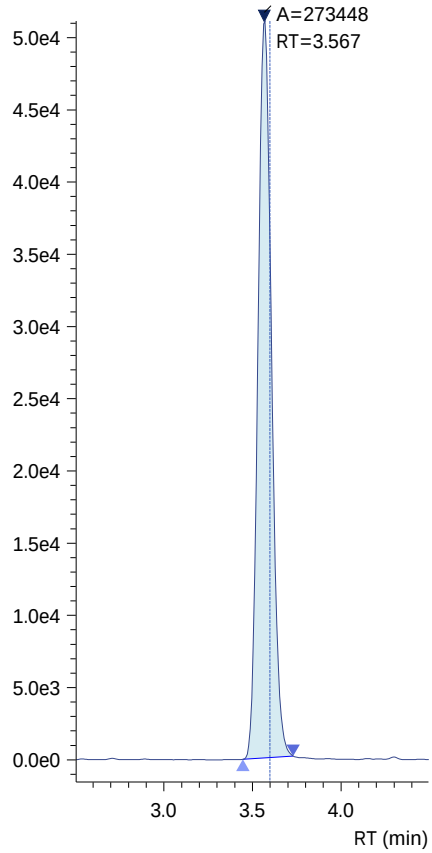
R1 101.00>85.00 (-) 2.88e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.11e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

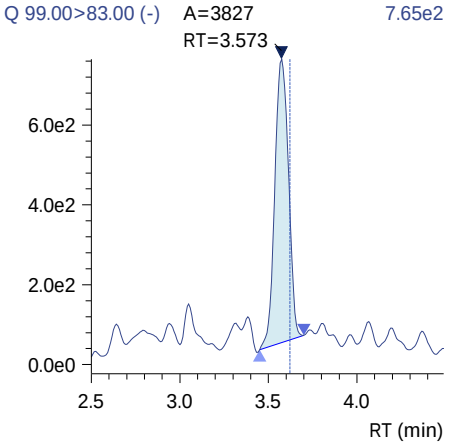
E2300684-009

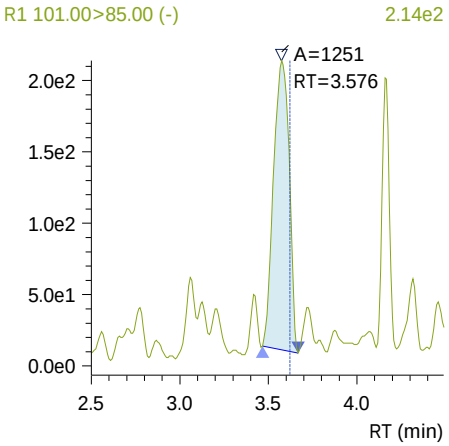
Sample ID: E2300684-009
Date Acquired: 7/26/2023 11:29:40 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-017.lcd
Vial: 41 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	3827	303488	0.0776	ng/mL	101.00 >85.00	32.70	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.568	303488	303488	1.0000	ng/mL	----	----	

Perchlorate

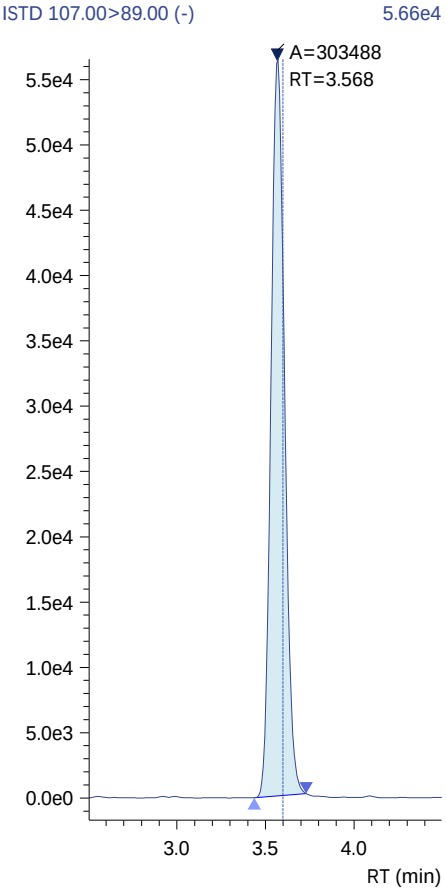
Conc 0.0776
R#1 32.70 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

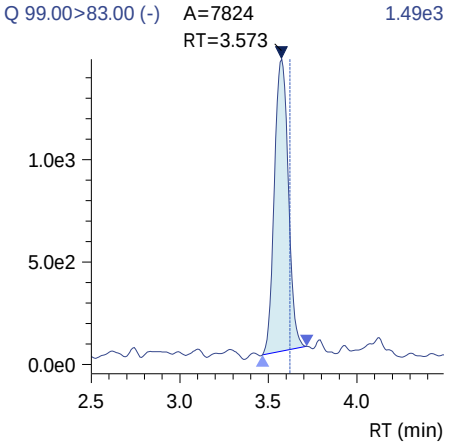
E2300684-010

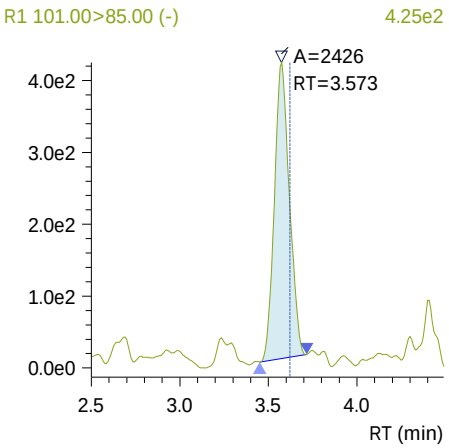
Sample ID: E2300684-010
Date Acquired: 7/26/2023 11:35:09 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-018.lcd
Vial: 42 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	7824	297761	0.1617	ng/mL	101.00 >85.00	31.01	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.567	297761	297761	1.0000	ng/mL	----	----	

Perchlorate

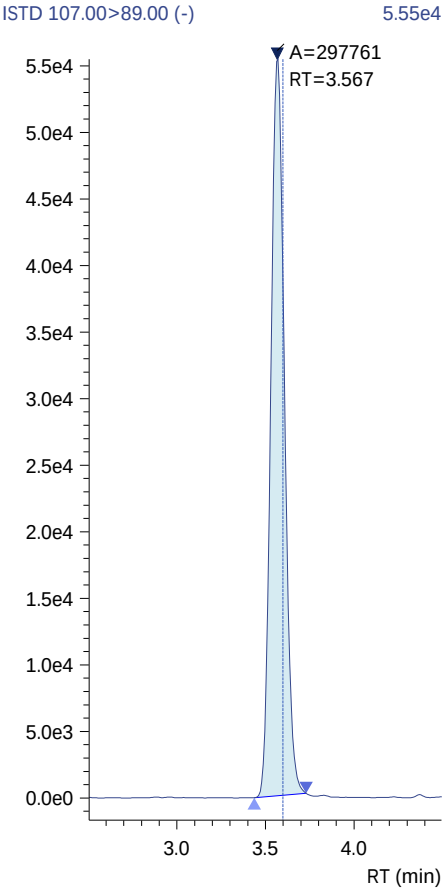
Conc 0.1617
R#1 31.01 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

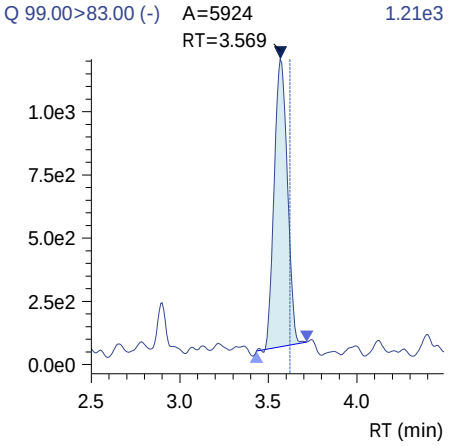
EQ2300358-04

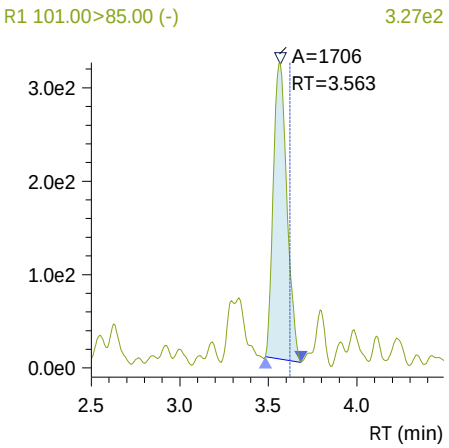
Sample ID: EQ2300358-04
Date Acquired: 7/26/2023 11:46:13 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-020.lcd
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.569	5924	291601	0.1250	ng/mL	101.00 >85.00	28.80	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.567	291601	291601	1.0000	ng/mL	----	----	

Perchlorate

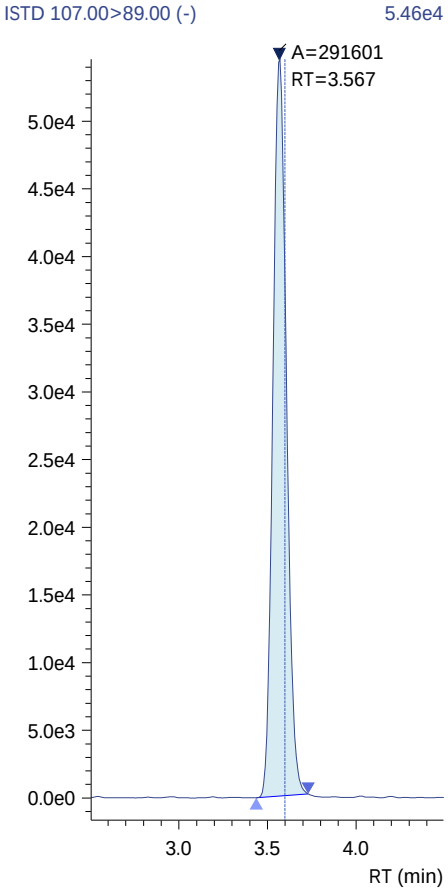
Conc 0.1250
R#1 28.80 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

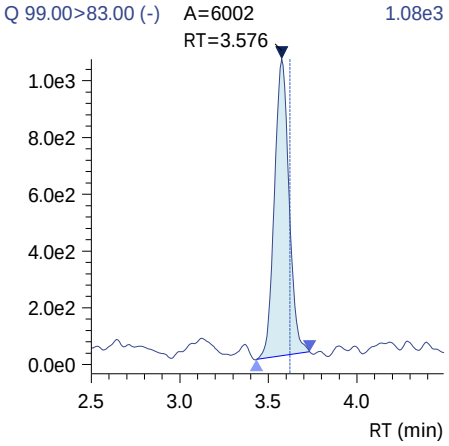
EQ2300358-05

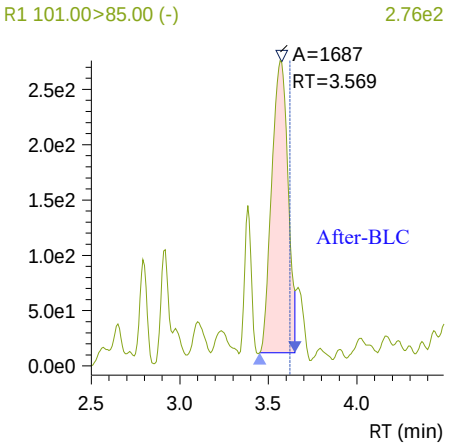
Sample ID: EQ2300358-05
Date Acquired: 7/26/2023 11:51:46 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-021.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.576	6002	294015	0.1256	ng/mL	101.00 >85.00	28.11	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.567	294015	294015	1.0000	ng/mL	----	----	

Perchlorate

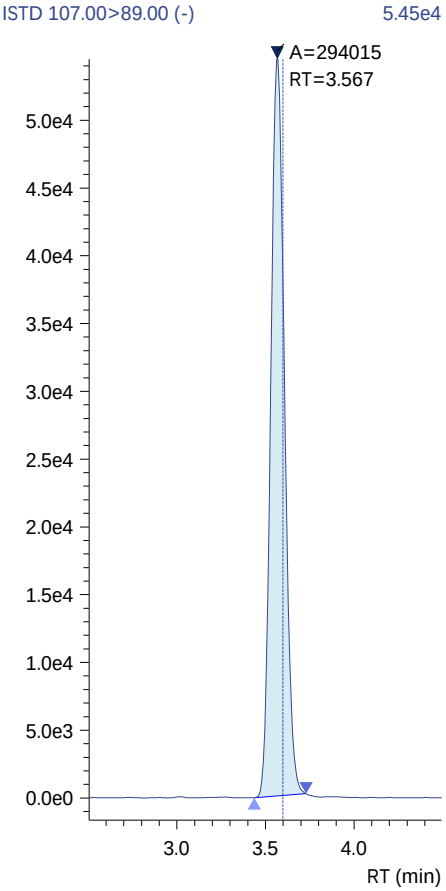
Conc 0.1256
R#1 28.11 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:23:16 PM

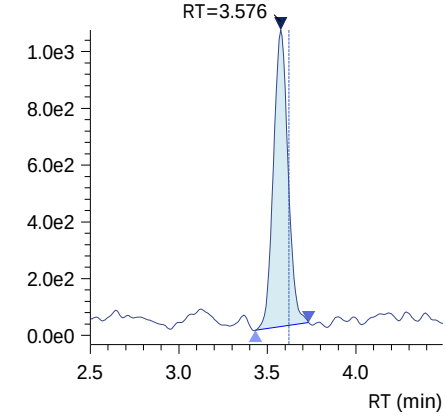
EQ2300358-05

Sample ID: EQ2300358-05
Date Acquired: 7/26/2023 11:51:46 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-021.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 4

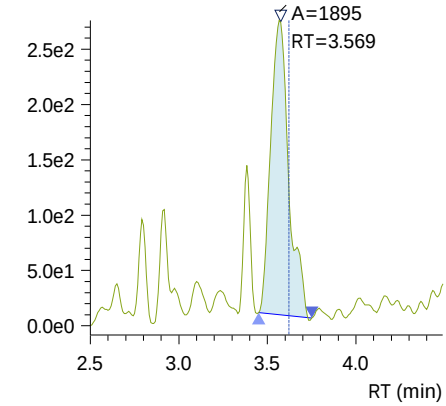
Perchlorate

Conc 0.1256
R#1 31.58 (27.73)

Q 99.00>83.00 (-) A=6002 1.08e3



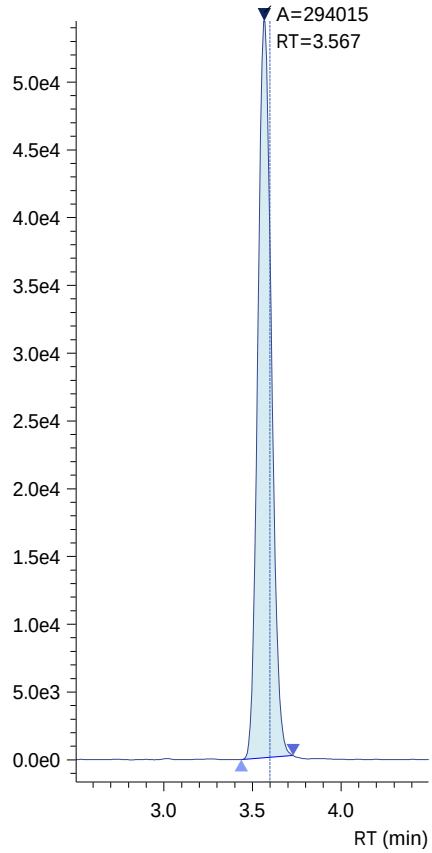
R1 101.00>85.00 (-) 2.76e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.45e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

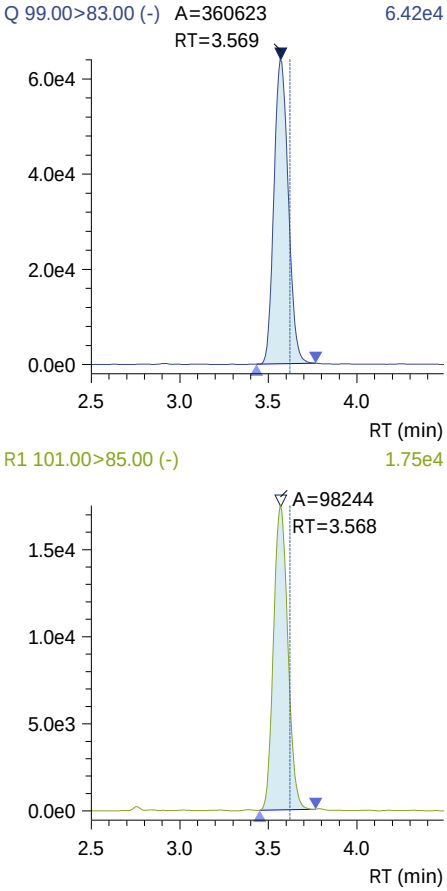
CCV

Sample ID: CCV
Date Acquired: 7/26/2023 12:19:30 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-026.lcd
Vial: 3 | 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	3.569	360623	220036	10.0848	ng/mL	101.00 >85.00	27.24	19.41-36.05
Sodium Perchlorate-18O4_IS	Auto	3.566	220036	220036	1.0000	ng/mL	----	----	

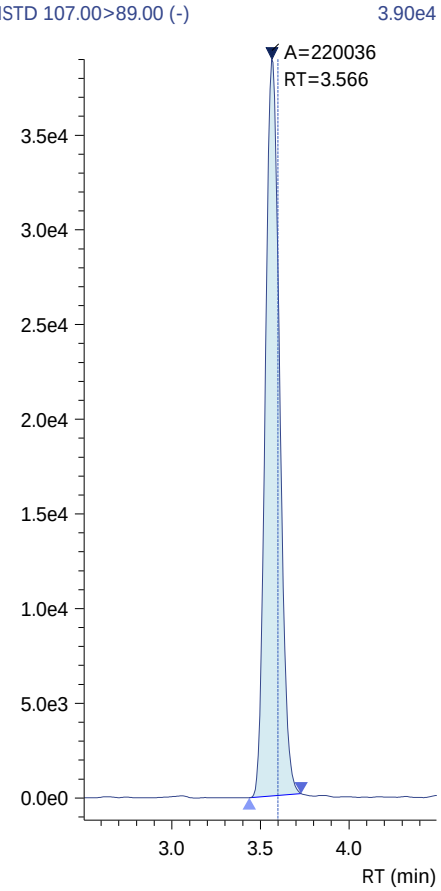
Perchlorate

Conc 10.0848
R#1 27.24 (27.73)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

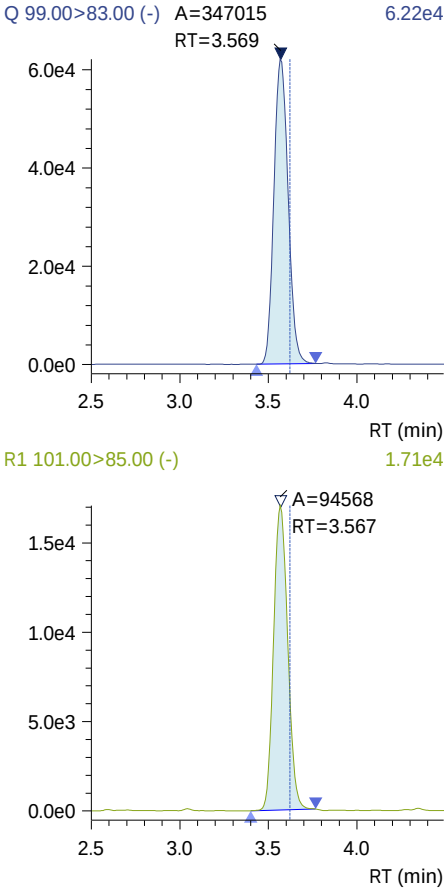
CCV

Sample ID: CCV
Date Acquired: 7/26/2023 2:33:09 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-048.lcd
Vial: 3 | 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	3.569	347015	212868	10.03 10	ng/mL	101.00 >85.00	27.25	19.41-36.05
Sodium Perchlorate-18O4_IS	Auto	3.566	212868	212868	1.0000	ng/mL	----	----	

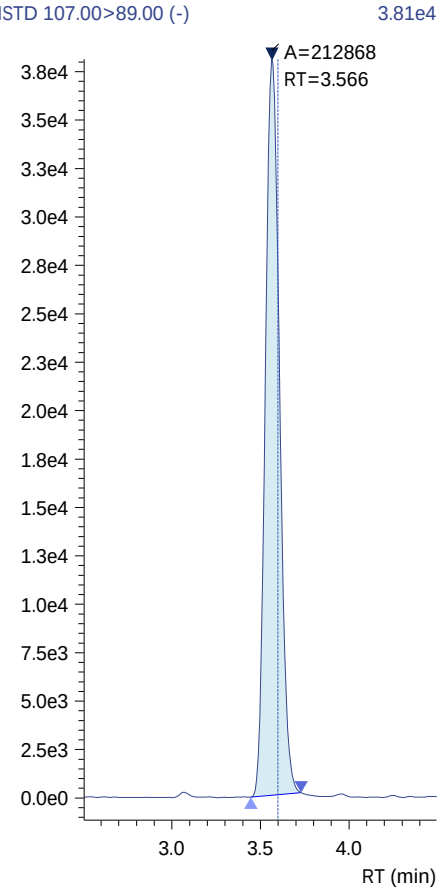
Perchlorate

Conc 10.0310
R#1 27.25 (27.73)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:21:43 PM

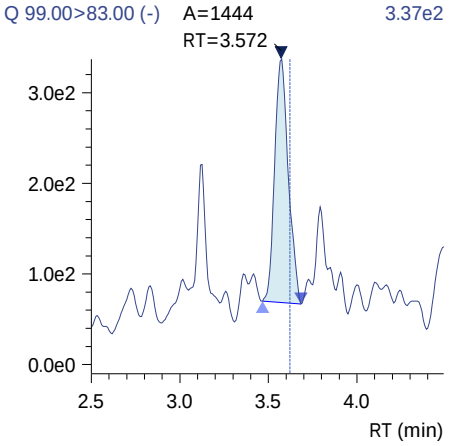
E2300684-011

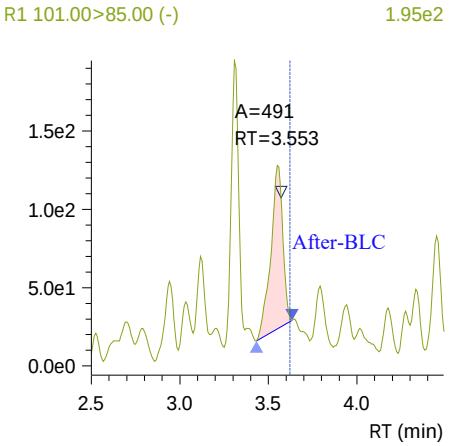
Sample ID: E2300684-011
Date Acquired: 7/26/2023 2:49:43 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-049.lcd
Vial: 43 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.572	1444	290182	0.0306	ng/mL	101.00 >85.00	33.99	19.41-36.05
Sodium Perchlorate-18O4 _IS	Auto	3.565	290182	290182	1.0000	ng/mL	----	----	

Perchlorate

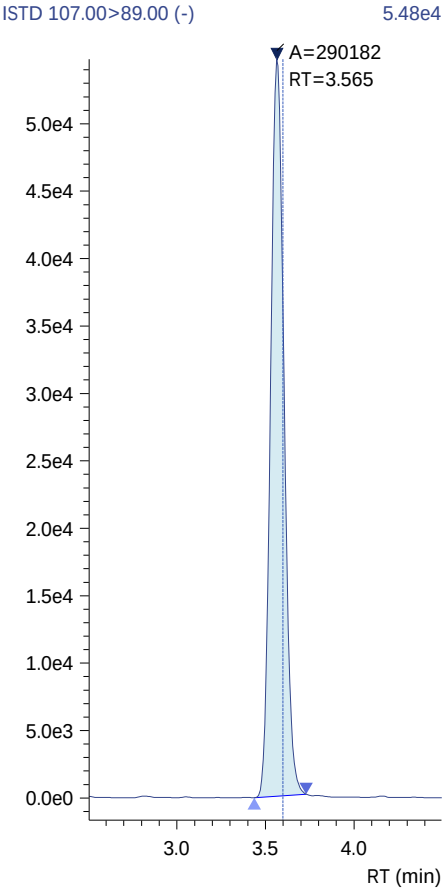
Conc 0.0306
R#1 33.99 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/26/2023 3:23:16 PM

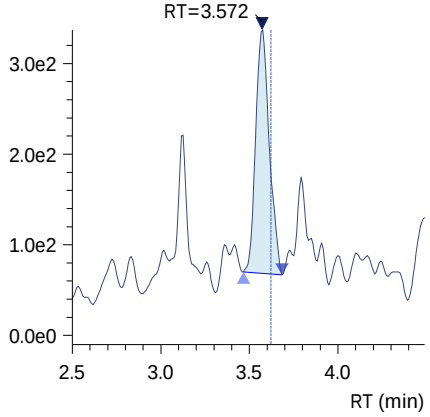
E2300684-011

Sample ID: E2300684-011
Date Acquired: 7/26/2023 2:49:43 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-049.lcd
Vial: 43 | Inj. Volume: 10.0000uL | Tray: 3

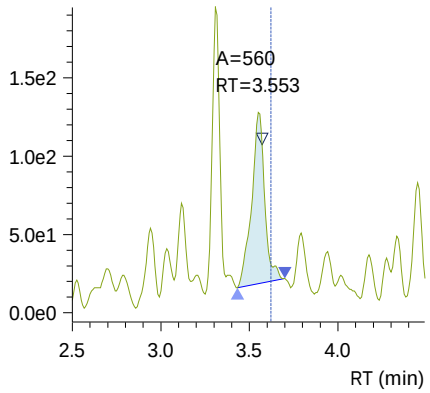
Perchlorate

Conc 0.0306
R#1 38.75 (27.73)

Q 99.00>83.00 (-) A=1444 3.37e2



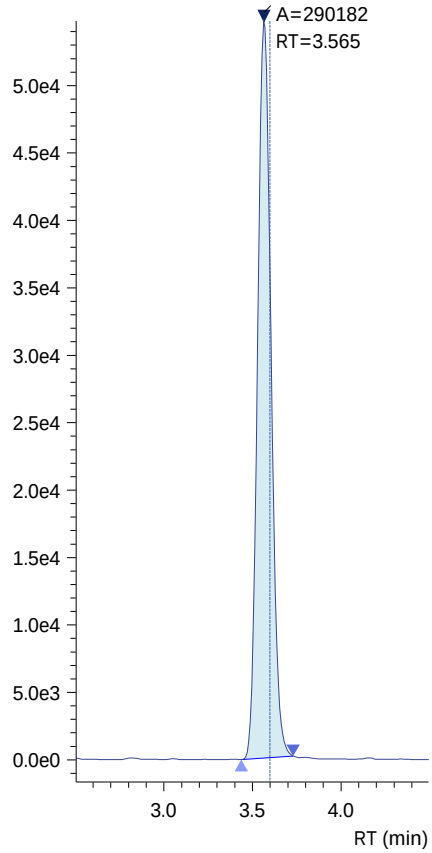
R1 101.00>85.00 (-) 1.95e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.48e4



Insight Report

Printed at 7/26/2023 3:21:43 PM

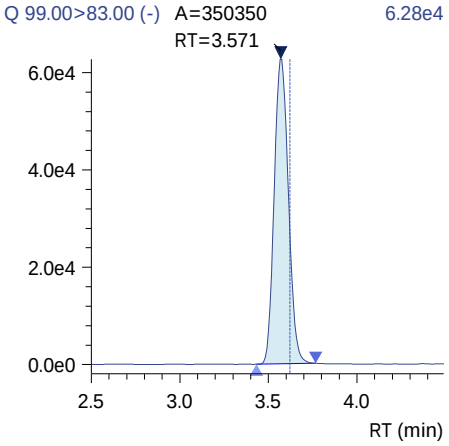
CCV

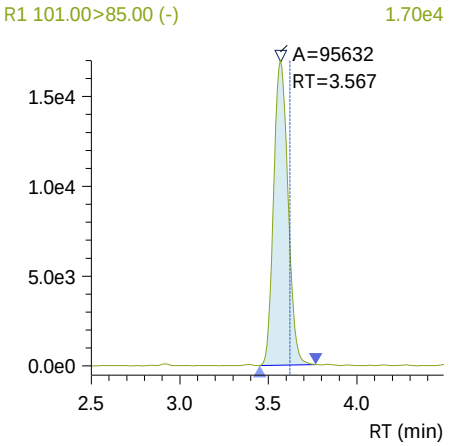
Sample ID: CCV
Date Acquired: 7/26/2023 3:02:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230726\20230726-051.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.571	350350	209864	10.2724	ng/mL	101.00 >85.00	27.30	19.41-36.05
Sodium Perchlorate-18O4_IS	Auto	3.566	209864	209864	1.0000	ng/mL	----	----	

Perchlorate

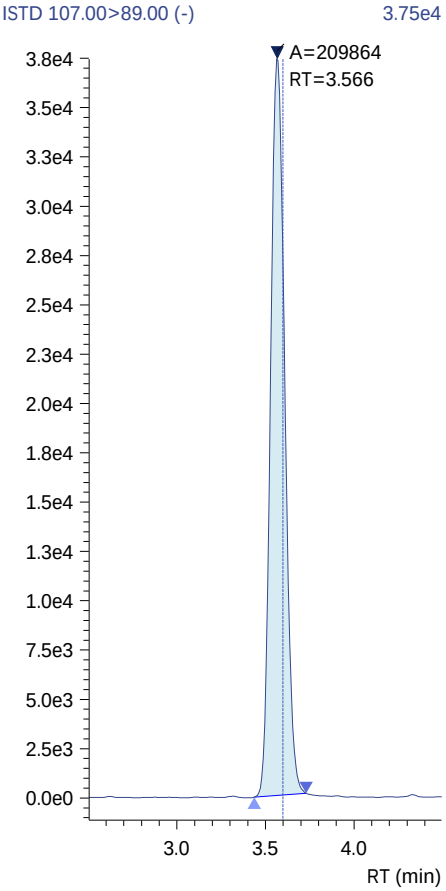
Conc 10.2724
R#1 27.30 (27.73)





Sodium Perchlorate-18O4_IS

Conc 1.0000



HS24010538 LHAAP Site 16 Cover Page

ALS WO# HS24010538

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Table of Contents

HS24010538 LHAAP Site 16 Cover Page
- CoverPage
- HS24010538 LHAAP Site 16 Final REV01
  - CoverLetter
  - Sample Summary
  - CaseNarrative
  - 16WW58-240110
  - 16WW57-240110
  - 16IW09-240110
  - 16IW26-240110
  - 16WW32-240110
  - 16WW31-240110
  - 16WW46-240110
  - 16IW03-240110
  - 16IW03-240110-FD
  - Trip Blank-240110
  - 16EW02-240111
  - 16IW10-240111
  - 16IW20-240111
  - Dates Report
  - QC
  - Acronyms

Table of Contents (continued)

Certifications

SampleReceiptCheckList

COC

HS24010538 E2400035 Perch Level II Report

HS24010538 Eurofin Lab J157387-1 UDS Level 2 Report Rev(1) Final Report

HS24010538 Microbial Insights Lab Report

HS24010538-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

Form 6I - ICV

Form 7 - CCV

Form 8 - ISTD

Run Log

Raw Data VOA9_453430 U231206

Raw Data VOA9_456454 U240112

Raw Data VOA9_456549 U240117

HS24010538-GCSEMI-RSK-175

Form 1 - Sample Results

Form 3A - MS/MSD

Form 3B - LCS/LCSD

Form 4 - MB Assoc

Form 6 - ICAL

Form 6I - ICV

Form 7 - CCV

Run Log

Raw Data FID_4_322102 170124

Raw Data FID_4_456717 240115

HS24010538 Wetchem 9056_W

Sequence Overview

121423 ICAL 2

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alsglobal.com

right solutions.
right partner.

WorkOrder: HS24010538

LHAAP Site 16

Bhate Environmental Associates, Inc.

Marcia Olive
445 Union Blvd Ste 129
Lakewood CO 80228

29-Jan-2024

HS24010538 LHAAP Site 16 Final REV01

ALS WO# HS24010538

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
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January 30, 2024

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

Work Order: **HS24010538**

Laboratory Results for: **LHAAP Site 16**

Dear Marcia Olive,

ALS Environmental received 13 sample(s) on Jan 11, 2024 for the analysis presented in the following report.

This is a REVISED REPORT. Please see the Case Narrative for discussion concerning this revision.

Regards,

Generated By: JUMOKE.LAWAL
James Guin

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Work Order: HS24010538

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS24010538-01	16WW58-240110	Groundwater		10-Jan-2024 07:05	11-Jan-2024 10:00	☐
HS24010538-02	16WW57-240110	Groundwater		10-Jan-2024 08:05	11-Jan-2024 10:00	☐
HS24010538-03	16IW09-240110	Groundwater		10-Jan-2024 09:00	11-Jan-2024 10:00	☐
HS24010538-04	16IW26-240110	Groundwater		10-Jan-2024 09:50	11-Jan-2024 10:00	☐
HS24010538-05	16WW32-240110	Groundwater		10-Jan-2024 10:40	11-Jan-2024 10:00	☐
HS24010538-06	16WW31-240110	Groundwater		10-Jan-2024 11:20	11-Jan-2024 10:00	☐
HS24010538-07	16WW46-240110	Groundwater		10-Jan-2024 12:00	11-Jan-2024 10:00	☐
HS24010538-08	16IW03-240110	Groundwater		10-Jan-2024 12:45	11-Jan-2024 10:00	☐
HS24010538-09	16IW03-240110-FD	Groundwater		10-Jan-2024 12:45	11-Jan-2024 10:00	☐
HS24010538-10	Trip Blank-240110	Water	CG-111123-638	10-Jan-2024 00:00	11-Jan-2024 10:00	☐
HS24010538-11	16EW02-240111	Groundwater		11-Jan-2024 08:05	11-Jan-2024 10:00	☐
HS24010538-12	16IW10-240111	Groundwater		11-Jan-2024 07:05	11-Jan-2024 10:00	☐
HS24010538-13	16IW20-240111	Groundwater		11-Jan-2024 09:05	11-Jan-2024 10:00	☐

Revision:1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc. **CASE NARRATIVE**
Project: LHAAP Site 16
Work Order: HS24010538

Work Order Comments

- This report was revised 01/30/24 to update the Eurofins subcontract report and update the sample IDs to include dashes rather than underscores per client request.

Work Order Comments

- The analysis for Perchlorate was subcontracted to our ALS Houston TX, High Resolution Lab. Final report attached.
- The analysis for Carbon Dioxide was subcontracted to Eurofins in Lancaster, PA. Final report attached.
- The analysis for DHC Interpretation was subcontracted to Microbial Insights in Knoxville, TN. Final report attached.

Work Order Comments

- Login Notes:16IW03-240110 2nd sample logged in as FD

GC Semivolatiles by Method RSK-175

Batch ID: R456717

Sample ID: HS24010611-01MS, HS24010611-02MS

- MS and MSD are for unrelated samples

GCMS Volatiles by Method SW8260

Batch ID: R456549

Sample ID: 16IW03_240110 (HS24010538-08)

- Lowest practical dilution due to matrix. Surrogate failed outside control limits high. There are no hits associated with this surrogate.

Batch ID: R456454

Sample ID: 16IW03_240110-FD (HS24010538-09)

- Lowest practical dilution due to matrix.

Sample ID: 16WW57_240110 (HS24010538-02)

- Lowest practical dilution due to matrix.

Sample ID: 16WW58_240110 (HS24010538-01)

- Lowest practical dilution due to matrix.

WetChemistry by Method SM5310B

Batch ID: R456821

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

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Work Order: HS24010538

CASE NARRATIVE

WetChemistry by Method SW9056

Batch ID: R456322

Sample ID: 16WW57_240110 (HS24010538-02)

- The reporting limit is elevated due to dilution for high concentrations of non-target analytes. (Nitrogen, Nitrate (As N),Nitrogen, Nitrite (As N))

Sample ID: HS24010519-03MS, HS24010519-09MS

- MS and MSD are for unrelated samples

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW58-240110
Collection Date: 10-Jan-2024 07:05

ANALYTICAL REPORT
WorkOrder:HS24010538
Lab ID:HS24010538-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	50	U	15	50	50	ug/L	50	12-Jan-2024 19:21
1,1-Dichloroethene	50	U	10	50	50	ug/L	50	12-Jan-2024 19:21
1,2-Dichloroethane	50	U	10	50	50	ug/L	50	12-Jan-2024 19:21
cis-1,2-Dichloroethene	**250**		**10**	**50**	**50**	**ug/L**	50	12-Jan-2024 19:21
Methylene chloride	50	U	20	50	100	ug/L	50	12-Jan-2024 19:21
Trichloroethene	**4,500**		**10**	**50**	**50**	**ug/L**	50	12-Jan-2024 19:21
Vinyl chloride	50	U	10	50	50	ug/L	50	12-Jan-2024 19:21
Surr: 1,2-Dichloroethane-d4	*94.7*			**0**	*81-118*	*%REC*	*50*	*12-Jan-2024 19:21*
Surr: 4-Bromofluorobenzene	*88.6*			**0**	*85-114*	*%REC*	*50*	*12-Jan-2024 19:21*
Surr: Dibromofluoromethane	*102*			**0**	*80-119*	*%REC*	*50*	*12-Jan-2024 19:21*
Surr: Toluene-d8	*99.4*			**0**	*89-112*	*%REC*	*50*	*12-Jan-2024 19:21*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: E.H.
Ethane	**0.000787**	J	**0.000144**	**0.000500**	**0.00100**	**mg/L**	1	15-Jan-2024 11:44
Ethene	0.000500	U	0.000234	0.000500	0.00100	mg/L	1	15-Jan-2024 11:44
Methane	**0.00595**		**0.000107**	**0.000500**	**0.000500**	**mg/L**	1	15-Jan-2024 11:44
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**5.90**		**0.500**	**1.00**	**1.00**	**mg/L**	1	21-Jan-2024 22:08
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate (As N)	0.0500	U	0.0300	0.0500	0.100	mg/L	1	11-Jan-2024 17:56
Nitrogen, Nitrite (As N)	0.100	U	0.0300	0.100	0.100	mg/L	1	11-Jan-2024 17:56
Sulfate	**734**		**4.00**	**5.00**	**10.0**	**mg/L**	20	11-Jan-2024 18:31
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	25-Jan-2024 11:40
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	19-Jan-2024 15:51

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW57-240110
Collection Date: 10-Jan-2024 08:05

ANALYTICAL REPORT
WorkOrder:HS24010538
Lab ID:HS24010538-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	12-Jan-2024 18:59
1,1-Dichloroethene	5.0	U	1.0	5.0	5.0	ug/L	5	12-Jan-2024 18:59
1,2-Dichloroethane	5.0	U	1.0	5.0	5.0	ug/L	5	12-Jan-2024 18:59
cis-1,2-Dichloroethene	**6.2**		**1.0**	**5.0**	**5.0**	**ug/L**	5	12-Jan-2024 18:59
Methylene chloride	5.0	U	2.0	5.0	10	ug/L	5	12-Jan-2024 18:59
Trichloroethene	**140**		**1.0**	**5.0**	**5.0**	**ug/L**	5	12-Jan-2024 18:59
Vinyl chloride	5.0	U	1.0	5.0	5.0	ug/L	5	12-Jan-2024 18:59
Surr: 1,2-Dichloroethane-d4	*92.7*			**0**	*81-118*	*%REC*	*5*	*12-Jan-2024 18:59*
Surr: 4-Bromofluorobenzene	*86.5*			**0**	*85-114*	*%REC*	*5*	*12-Jan-2024 18:59*
Surr: Dibromofluoromethane	*98.2*			**0**	*80-119*	*%REC*	*5*	*12-Jan-2024 18:59*
Surr: Toluene-d8	*95.8*			**0**	*89-112*	*%REC*	*5*	*12-Jan-2024 18:59*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: E.H.
Ethane	**0.000520**	J	**0.000144**	**0.000500**	**0.00100**	**mg/L**	1	15-Jan-2024 11:35
Ethene	**0.000785**	J	**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	15-Jan-2024 11:35
Methane	**0.00431**		**0.000107**	**0.000500**	**0.000500**	**mg/L**	1	15-Jan-2024 11:35
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**19.1**		**0.500**	**1.00**	**1.00**	**mg/L**	1	21-Jan-2024 22:40
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate (As N)	0.100	U	0.0600	0.100	0.200	mg/L	2	11-Jan-2024 18:02
Nitrogen, Nitrite (As N)	0.200	U	0.0600	0.200	0.200	mg/L	2	11-Jan-2024 18:02
Sulfate	**3,180**		**10.0**	**12.5**	**25.0**	**mg/L**	50	11-Jan-2024 18:37
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	25-Jan-2024 11:40
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	19-Jan-2024 15:51

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16IW09-240110
Collection Date: 10-Jan-2024 09:00

ANALYTICAL REPORT
WorkOrder:HS24010538
Lab ID:HS24010538-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	12-Jan-2024 16:23
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 16:23
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 16:23
cis-1,2-Dichloroethene	**1.4**		**0.20**	**1.0**	**1.0**	**ug/L**	1	12-Jan-2024 16:23
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	12-Jan-2024 16:23
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 16:23
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 16:23
Surr: 1,2-Dichloroethane-d4	*89.7*			**0**	*81-118*	*%REC*	*1*	*12-Jan-2024 16:23*
Surr: 4-Bromofluorobenzene	*86.9*			**0**	*85-114*	*%REC*	*1*	*12-Jan-2024 16:23*
Surr: Dibromofluoromethane	*95.6*			**0**	*80-119*	*%REC*	*1*	*12-Jan-2024 16:23*
Surr: Toluene-d8	*96.8*			**0**	*89-112*	*%REC*	*1*	*12-Jan-2024 16:23*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: E.H.
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	15-Jan-2024 12:04
Ethene	0.000500	U	0.000234	0.000500	0.00100	mg/L	1	15-Jan-2024 12:04
Methane	**7.99**		**0.0535**	**0.250**	**0.250**	**mg/L**	500	15-Jan-2024 13:39
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**112**		**5.00**	**10.0**	**10.0**	**mg/L**	10	21-Jan-2024 22:56
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate (As N)	**0.0413**	J	**0.0300**	**0.0500**	**0.100**	**mg/L**	1	11-Jan-2024 18:08
Nitrogen, Nitrite (As N)	**0.208**		**0.0300**	**0.100**	**0.100**	**mg/L**	1	11-Jan-2024 18:08
Sulfate	**9.55**		**0.200**	**0.250**	**0.500**	**mg/L**	1	11-Jan-2024 18:08
SUBCONTRACT ANALYSIS - DHC/DHB		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	19-Jan-2024 09:24
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	25-Jan-2024 11:40
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	19-Jan-2024 15:51

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16IW26-240110
Collection Date: 10-Jan-2024 09:50

ANALYTICAL REPORT
WorkOrder:HS24010538
Lab ID:HS24010538-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	12-Jan-2024 18:37
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 18:37
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 18:37
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 18:37
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	12-Jan-2024 18:37
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 18:37
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 18:37
Surr: 1,2-Dichloroethane-d4	*105*			**0**	*81-118*	*%REC*	*1*	*12-Jan-2024 18:37*
Surr: 4-Bromofluorobenzene	*89.5*			**0**	*85-114*	*%REC*	*1*	*12-Jan-2024 18:37*
Surr: Dibromofluoromethane	*108*			**0**	*80-119*	*%REC*	*1*	*12-Jan-2024 18:37*
Surr: Toluene-d8	*94.1*			**0**	*89-112*	*%REC*	*1*	*12-Jan-2024 18:37*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: E.H.
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	15-Jan-2024 12:13
Ethene	**0.0266**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	15-Jan-2024 12:13
Methane	**3.94**		**0.0214**	**0.100**	**0.100**	**mg/L**	200	15-Jan-2024 14:11
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**80.5**		**5.00**	**10.0**	**10.0**	**mg/L**	10	21-Jan-2024 23:11
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate (As N)	0.0500	U	0.0300	0.0500	0.100	mg/L	1	11-Jan-2024 18:14
Nitrogen, Nitrite (As N)	0.100	U	0.0300	0.100	0.100	mg/L	1	11-Jan-2024 18:14
Sulfate	**1.53**		**0.200**	**0.250**	**0.500**	**mg/L**	1	11-Jan-2024 18:14
SUBCONTRACT ANALYSIS - DHC/DHB		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	19-Jan-2024 09:24
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	25-Jan-2024 11:40
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	19-Jan-2024 15:51

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW32-240110
Collection Date: 10-Jan-2024 10:40

ANALYTICAL REPORT
WorkOrder:HS24010538
Lab ID:HS24010538-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	12-Jan-2024 16:46
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 16:46
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 16:46
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 16:46
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	12-Jan-2024 16:46
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 16:46
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 16:46
Surr: 1,2-Dichloroethane-d4	*92.1*			**0**	*81-118*	*%REC*	*1*	*12-Jan-2024 16:46*
Surr: 4-Bromofluorobenzene	*88.7*			**0**	*85-114*	*%REC*	*1*	*12-Jan-2024 16:46*
Surr: Dibromofluoromethane	*97.6*			**0**	*80-119*	*%REC*	*1*	*12-Jan-2024 16:46*
Surr: Toluene-d8	*100*			**0**	*89-112*	*%REC*	*1*	*12-Jan-2024 16:46*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	25-Jan-2024 11:40

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW31-240110
Collection Date: 10-Jan-2024 11:20

ANALYTICAL REPORT
WorkOrder:HS24010538
Lab ID:HS24010538-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	12-Jan-2024 17:08
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 17:08
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 17:08
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 17:08
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	12-Jan-2024 17:08
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 17:08
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 17:08
Surr: 1,2-Dichloroethane-d4	*90.4*			**0**	*81-118*	*%REC*	*1*	*12-Jan-2024 17:08*
Surr: 4-Bromofluorobenzene	*89.1*			**0**	*85-114*	*%REC*	*1*	*12-Jan-2024 17:08*
Surr: Dibromofluoromethane	*97.2*			**0**	*80-119*	*%REC*	*1*	*12-Jan-2024 17:08*
Surr: Toluene-d8	*98.3*			**0**	*89-112*	*%REC*	*1*	*12-Jan-2024 17:08*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	25-Jan-2024 11:40

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW46-240110
Collection Date: 10-Jan-2024 12:00

ANALYTICAL REPORT
WorkOrder:HS24010538
Lab ID:HS24010538-07
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	12-Jan-2024 17:30
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 17:30
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 17:30
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 17:30
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	12-Jan-2024 17:30
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 17:30
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 17:30
Surr: 1,2-Dichloroethane-d4	*94.4*			**0**	*81-118*	*%REC*	*1*	*12-Jan-2024 17:30*
Surr: 4-Bromofluorobenzene	*91.4*			**0**	*85-114*	*%REC*	*1*	*12-Jan-2024 17:30*
Surr: Dibromofluoromethane	*99.4*			**0**	*80-119*	*%REC*	*1*	*12-Jan-2024 17:30*
Surr: Toluene-d8	*100*			**0**	*89-112*	*%REC*	*1*	*12-Jan-2024 17:30*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	25-Jan-2024 11:40

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16IW03-240110
Collection Date: 10-Jan-2024 12:45

ANALYTICAL REPORT
WorkOrder:HS24010538
Lab ID:HS24010538-08
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	50	U	15	50	50	ug/L	50	17-Jan-2024 13:10
1,1-Dichloroethene	50	U	10	50	50	ug/L	50	17-Jan-2024 13:10
1,2-Dichloroethane	50	U	10	50	50	ug/L	50	17-Jan-2024 13:10
cis-1,2-Dichloroethene	**1,500**		**10**	**50**	**50**	**ug/L**	50	17-Jan-2024 13:10
Methylene chloride	50	U	20	50	100	ug/L	50	17-Jan-2024 13:10
Trichloroethene	**890**		**10**	**50**	**50**	**ug/L**	50	17-Jan-2024 13:10
Vinyl chloride	**390**		**10**	**50**	**50**	**ug/L**	50	17-Jan-2024 13:10
Surr: 1,2-Dichloroethane-d4	*100*		**0**		*81-118*	*%REC*	*50*	*17-Jan-2024 13:10*
Surr: 4-Bromofluorobenzene	*104*		**0**		*85-114*	*%REC*	*50*	*17-Jan-2024 13:10*
Surr: Dibromofluoromethane	*112*		**0**		*80-119*	*%REC*	*50*	*17-Jan-2024 13:10*
Surr: Toluene-d8	*114*	*S*	**0**		*89-112*	*%REC*	*50*	*17-Jan-2024 13:10*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: E.H.
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	15-Jan-2024 12:25
Ethene	**2.49**		**0.0468**	**0.100**	**0.200**	**mg/L**	200	15-Jan-2024 14:19
Methane	**7.22**		**0.0214**	**0.100**	**0.100**	**mg/L**	200	15-Jan-2024 14:19
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**555**		**50.0**	**100**	**100**	**mg/L**	100	21-Jan-2024 23:58
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate (As N)	0.0500	U	0.0300	0.0500	0.100	mg/L	1	11-Jan-2024 18:20
Nitrogen, Nitrite (As N)	0.100	U	0.0300	0.100	0.100	mg/L	1	11-Jan-2024 18:20
Sulfate	**0.362**	J	**0.200**	**0.250**	**0.500**	**mg/L**	1	11-Jan-2024 18:20
SUBCONTRACT ANALYSIS - DHC/DHB		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	19-Jan-2024 09:24
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	25-Jan-2024 11:40
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	19-Jan-2024 15:51

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16IW03-240110-FD
Collection Date: 10-Jan-2024 12:45

ANALYTICAL REPORT
WorkOrder:HS24010538
Lab ID:HS24010538-09
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	50	U	15	50	50	ug/L	50	12-Jan-2024 20:28
1,1-Dichloroethene	50	U	10	50	50	ug/L	50	12-Jan-2024 20:28
1,2-Dichloroethane	50	U	10	50	50	ug/L	50	12-Jan-2024 20:28
cis-1,2-Dichloroethene	**3,200**		**10**	**50**	**50**	**ug/L**	50	12-Jan-2024 20:28
Methylene chloride	50	U	20	50	100	ug/L	50	12-Jan-2024 20:28
Trichloroethene	**670**		**10**	**50**	**50**	**ug/L**	50	12-Jan-2024 20:28
Vinyl chloride	**530**		**10**	**50**	**50**	**ug/L**	50	12-Jan-2024 20:28
Surr: 1,2-Dichloroethane-d4	*89.7*			**0**	*81-118*	*%REC*	*50*	*12-Jan-2024 20:28*
Surr: 4-Bromofluorobenzene	*86.1*			**0**	*85-114*	*%REC*	*50*	*12-Jan-2024 20:28*
Surr: Dibromofluoromethane	*96.2*			**0**	*80-119*	*%REC*	*50*	*12-Jan-2024 20:28*
Surr: Toluene-d8	*95.2*			**0**	*89-112*	*%REC*	*50*	*12-Jan-2024 20:28*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: E.H.
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	15-Jan-2024 12:33
Ethene	**1.39**		**0.0468**	**0.100**	**0.200**	**mg/L**	200	15-Jan-2024 14:27
Methane	**5.05**		**0.0214**	**0.100**	**0.100**	**mg/L**	200	15-Jan-2024 14:27
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**650**		**50.0**	**100**	**100**	**mg/L**	100	22-Jan-2024 00:15
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate (As N)	0.0500	U	0.0300	0.0500	0.100	mg/L	1	11-Jan-2024 18:25
Nitrogen, Nitrite (As N)	0.100	U	0.0300	0.100	0.100	mg/L	1	11-Jan-2024 18:25
Sulfate	**0.481**	J	**0.200**	**0.250**	**0.500**	**mg/L**	1	11-Jan-2024 18:25
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	25-Jan-2024 11:40
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	19-Jan-2024 15:51

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: Trip Blank-240110
Collection Date: 10-Jan-2024 00:00

ANALYTICAL REPORT
WorkOrder:HS24010538
Lab ID:HS24010538-10
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	12-Jan-2024 16:01
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 16:01
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 16:01
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 16:01
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	12-Jan-2024 16:01
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 16:01
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 16:01
Surr: 1,2-Dichloroethane-d4	*96.4*			**0**	*81-118*	*%REC*	*1*	*12-Jan-2024 16:01*
Surr: 4-Bromofluorobenzene	*94.3*			**0**	*85-114*	*%REC*	*1*	*12-Jan-2024 16:01*
Surr: Dibromofluoromethane	*106*			**0**	*80-119*	*%REC*	*1*	*12-Jan-2024 16:01*
Surr: Toluene-d8	*107*			**0**	*89-112*	*%REC*	*1*	*12-Jan-2024 16:01*

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16EW02-240111
Collection Date: 11-Jan-2024 08:05

ANALYTICAL REPORT
WorkOrder:HS24010538
Lab ID:HS24010538-11
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
SUBCONTRACT ANALYSIS - DHC/DHB	**Method:NA**							Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	19-Jan-2024 09:24

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16IW10-240111
Collection Date: 11-Jan-2024 07:05

ANALYTICAL REPORT
WorkOrder:HS24010538
Lab ID:HS24010538-12
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
SUBCONTRACT ANALYSIS - DHC/DHB	**Method:NA**							Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	19-Jan-2024 09:24

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16IW20-240111
Collection Date: 11-Jan-2024 09:05

ANALYTICAL REPORT
WorkOrder:HS24010538
Lab ID:HS24010538-13
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
SUBCONTRACT ANALYSIS - DHC/DHB	**Method:NA**							Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	19-Jan-2024 09:24

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010538

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R456322 (0)	**Test Name :** ANIONS BY SW9056A				**Matrix:** Groundwater	
HS24010538-01	16WW58-240110	10 Jan 2024 07:05			11 Jan 2024 18:31	20
HS24010538-01	16WW58-240110	10 Jan 2024 07:05			11 Jan 2024 17:56	1
HS24010538-02	16WW57-240110	10 Jan 2024 08:05			11 Jan 2024 18:37	50
HS24010538-02	16WW57-240110	10 Jan 2024 08:05			11 Jan 2024 18:02	2
HS24010538-03	16IW09-240110	10 Jan 2024 09:00			11 Jan 2024 18:08	1
HS24010538-04	16IW26-240110	10 Jan 2024 09:50			11 Jan 2024 18:14	1
HS24010538-08	16IW03-240110	10 Jan 2024 12:45			11 Jan 2024 18:20	1
HS24010538-09	16IW03-240110-FD	10 Jan 2024 12:45			11 Jan 2024 18:25	1
Batch ID: R456454 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS24010538-10	Trip Blank-240110	10 Jan 2024 00:00			12 Jan 2024 16:01	1
Batch ID: R456454 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS24010538-01	16WW58-240110	10 Jan 2024 07:05			12 Jan 2024 19:21	50
HS24010538-02	16WW57-240110	10 Jan 2024 08:05			12 Jan 2024 18:59	5
HS24010538-03	16IW09-240110	10 Jan 2024 09:00			12 Jan 2024 16:23	1
HS24010538-04	16IW26-240110	10 Jan 2024 09:50			12 Jan 2024 18:37	1
HS24010538-05	16WW32-240110	10 Jan 2024 10:40			12 Jan 2024 16:46	1
HS24010538-06	16WW31-240110	10 Jan 2024 11:20			12 Jan 2024 17:08	1
HS24010538-07	16WW46-240110	10 Jan 2024 12:00			12 Jan 2024 17:30	1
HS24010538-09	16IW03-240110-FD	10 Jan 2024 12:45			12 Jan 2024 20:28	50
Batch ID: R456549 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS24010538-08	16IW03-240110	10 Jan 2024 12:45			17 Jan 2024 13:10	50
Batch ID: R456717 (0)	**Test Name :** DISSOLVED GASES BY RSK-175				**Matrix:** Groundwater	
HS24010538-01	16WW58-240110	10 Jan 2024 07:05			15 Jan 2024 11:44	1
HS24010538-02	16WW57-240110	10 Jan 2024 08:05			15 Jan 2024 11:35	1
HS24010538-03	16IW09-240110	10 Jan 2024 09:00			15 Jan 2024 13:39	500
HS24010538-03	16IW09-240110	10 Jan 2024 09:00			15 Jan 2024 12:04	1
HS24010538-04	16IW26-240110	10 Jan 2024 09:50			15 Jan 2024 14:11	200
HS24010538-04	16IW26-240110	10 Jan 2024 09:50			15 Jan 2024 12:13	1
HS24010538-08	16IW03-240110	10 Jan 2024 12:45			15 Jan 2024 14:19	200
HS24010538-08	16IW03-240110	10 Jan 2024 12:45			15 Jan 2024 12:25	1
HS24010538-09	16IW03-240110-FD	10 Jan 2024 12:45			15 Jan 2024 14:27	200
HS24010538-09	16IW03-240110-FD	10 Jan 2024 12:45			15 Jan 2024 12:33	1

Revision: 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010538

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R456721 (0)	**Test Name :** SUBCONTRACT ANALYSIS - DHC/DHB				**Matrix:** Groundwater	
HS24010538-03	16IW09-240110	10 Jan 2024 09:00			19 Jan 2024 09:24	1
HS24010538-04	16IW26-240110	10 Jan 2024 09:50			19 Jan 2024 09:24	1
HS24010538-08	16IW03-240110	10 Jan 2024 12:45			19 Jan 2024 09:24	1
HS24010538-11	16EW02-240111	11 Jan 2024 08:05			19 Jan 2024 09:24	1
HS24010538-12	16IW10-240111	11 Jan 2024 07:05			19 Jan 2024 09:24	1
HS24010538-13	16IW20-240111	11 Jan 2024 09:05			19 Jan 2024 09:24	1
Batch ID: R456783 (0)	**Test Name :** SUBCONTRACT ANALYSIS - RSK				**Matrix:** Groundwater	
HS24010538-01	16WW58-240110	10 Jan 2024 07:05			19 Jan 2024 15:51	1
HS24010538-02	16WW57-240110	10 Jan 2024 08:05			19 Jan 2024 15:51	1
HS24010538-03	16IW09-240110	10 Jan 2024 09:00			19 Jan 2024 15:51	1
HS24010538-04	16IW26-240110	10 Jan 2024 09:50			19 Jan 2024 15:51	1
HS24010538-08	16IW03-240110	10 Jan 2024 12:45			19 Jan 2024 15:51	1
HS24010538-09	16IW03-240110-FD	10 Jan 2024 12:45			19 Jan 2024 15:51	1
Batch ID: R456821 (0)	**Test Name :** TOTAL ORGANIC CARBON - SM5310B-2011				**Matrix:** Groundwater	
HS24010538-01	16WW58-240110	10 Jan 2024 07:05			21 Jan 2024 22:08	1
HS24010538-02	16WW57-240110	10 Jan 2024 08:05			21 Jan 2024 22:40	1
HS24010538-03	16IW09-240110	10 Jan 2024 09:00			21 Jan 2024 22:56	10
HS24010538-04	16IW26-240110	10 Jan 2024 09:50			21 Jan 2024 23:11	10
HS24010538-08	16IW03-240110	10 Jan 2024 12:45			21 Jan 2024 23:58	100
HS24010538-09	16IW03-240110-FD	10 Jan 2024 12:45			22 Jan 2024 00:15	100
Batch ID: R457161 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Groundwater	
HS24010538-01	16WW58-240110	10 Jan 2024 07:05			25 Jan 2024 11:40	1
HS24010538-02	16WW57-240110	10 Jan 2024 08:05			25 Jan 2024 11:40	1
HS24010538-03	16IW09-240110	10 Jan 2024 09:00			25 Jan 2024 11:40	1
HS24010538-04	16IW26-240110	10 Jan 2024 09:50			25 Jan 2024 11:40	1
HS24010538-05	16WW32-240110	10 Jan 2024 10:40			25 Jan 2024 11:40	1
HS24010538-06	16WW31-240110	10 Jan 2024 11:20			25 Jan 2024 11:40	1
HS24010538-07	16WW46-240110	10 Jan 2024 12:00			25 Jan 2024 11:40	1
HS24010538-08	16IW03-240110	10 Jan 2024 12:45			25 Jan 2024 11:40	1
HS24010538-09	16IW03-240110-FD	10 Jan 2024 12:45			25 Jan 2024 11:40	1

Revision: 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010538

QC BATCH REPORT

Batch ID: R456717 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MBLK Sample ID: **MBLK-240115** Units: **mg/L** Analysis Date: **15-Jan-2024 08:45**
Client ID: Run ID: **FID-4_456717** SeqNo: **7785579** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.000500	0.00100								U
Ethene	0.000500	0.00100								U
Methane	0.000500	0.000500								U

LCS Sample ID: **LCS-240115** Units: **mg/L** Analysis Date: **15-Jan-2024 08:55**
Client ID: Run ID: **FID-4_456717** SeqNo: **7785580** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0205	0.00100	0.01804	0	114	75 - 125				
Ethene	0.0154	0.00100	0.0168	0	91.8	75 - 125				
Methane	0.0110	0.000500	0.009647	0	114	75 - 125				

LCSD Sample ID: **LCSD-240115** Units: **mg/L** Analysis Date: **15-Jan-2024 09:05**
Client ID: Run ID: **FID-4_456717** SeqNo: **7785581** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0172	0.00100	0.01804	0	95.2	75 - 125	0.02051	17.7	30	
Ethene	0.0144	0.00100	0.0168	0	85.9	75 - 125	0.01542	6.62	30	
Methane	0.0100	0.000500	0.009647	0	104	75 - 125	0.01103	9.49	30	

MS Sample ID: **HS24010611-02MS** Units: **mg/L** Analysis Date: **18-Jan-2024 15:11**
Client ID: Run ID: **FID-4_456717** SeqNo: **7785607** PrepDate: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	1.33	0.0500	0.01804	0	7350	75 - 125				S
Ethene	2.26	0.0500	0.0168	1.088	7000	75 - 125				SO
Methane	1.97	0.0250	0.009647	1.253	7430	75 - 125				SEO

Revision: 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010538

QC BATCH REPORT

Batch ID: R456717 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MS Sample ID: **HS24010611-02MS** Units: **mg/L** Analysis Date: **15-Jan-2024 09:56**
Client ID: Run ID: **FID-4_456717** SeqNo: **7785586** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.000500	0.00100	0.01804	0	0	75 - 125				S U
Ethene	0.995	0.00100	0.0168	1.038	-258	75 - 125				SEO
Methane	1.22	0.000500	0.009647	1.252	-309	75 - 125				SEO

MS Sample ID: **HS24010611-01MS** Units: **mg/L** Analysis Date: **15-Jan-2024 09:29**
Client ID: Run ID: **FID-4_456717** SeqNo: **7785583** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0257	0.00100	0.01804	0.002635	128	75 - 125				S
Ethene	0.0331	0.00100	0.0168	0.02267	61.9	75 - 125				S
Methane	3.73	0.000500	0.009647	3.435	3050	75 - 125				SEO

MSD Sample ID: **HS24010611-02MSD** Units: **mg/L** Analysis Date: **15-Jan-2024 10:04**
Client ID: Run ID: **FID-4_456717** SeqNo: **7785587** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.000500	0.00100	0.01804	0	0	75 - 125	0	0	30	S U
Ethene	0.990	0.00100	0.0168	1.038	-289	75 - 125	0.9950	0.521	30	SEO
Methane	1.21	0.000500	0.009647	1.252	-469	75 - 125	1.223	1.27	30	SEO

MSD Sample ID: **HS24010611-02MSD** Units: **mg/L** Analysis Date: **18-Jan-2024 15:19**
Client ID: Run ID: **FID-4_456717** SeqNo: **7785608** PrepDate: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	1.30	0.0500	0.01804	0	7210	75 - 125	1.326	1.93	30	S
Ethene	2.22	0.0500	0.0168	1.088	6720	75 - 125	2.264	2.15	30	SO
Methane	1.95	0.0250	0.009647	1.253	7230	75 - 125	1.969	0.955	30	SEO

Revision: 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010538

QC BATCH REPORT

Batch ID: R456717 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MSD Sample ID: **HS24010611-01MSD** Units: **mg/L** Analysis Date: **15-Jan-2024 09:38**
Client ID: Run ID: **FID-4_456717** SeqNo: **7785584** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0245	0.00100	0.01804	0.002635	121	75 - 125	0.02568	4.8	30	
Ethene	0.0342	0.00100	0.0168	0.02267	68.5	75 - 125	0.03308	3.28	30	S
Methane	3.69	0.000500	0.009647	3.435	2660	75 - 125	3.730	1.03	30	SEO

The following samples were analyzed in this batch: HS24010538-01 HS24010538-02 HS24010538-03 HS24010538-04 HS24010538-08 HS24010538-09

Revision: 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010538

QC BATCH REPORT

Batch ID: R456454 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-240112** Units: **ug/L** Analysis Date: **12-Jan-2024 13:03**
Client ID: Run ID: **VOA9_456454** SeqNo: **7779881** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1.0	1.0								U
1,1-Dichloroethene	1.0	1.0								U
1,2-Dichloroethane	1.0	1.0								U
cis-1,2-Dichloroethene	1.0	1.0								U
Methylene chloride	1.0	2.0								U
Trichloroethene	1.0	1.0								U
Vinyl chloride	1.0	1.0								U
Surr: 1,2-Dichloroethane-d4	*47.15*	*35*	*50*	*0*	*94.3*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*47.21*	*35*	*50*	*0*	*94.4*	*85 - 114*				
Surr: Dibromofluoromethane	*50.75*	*35*	*50*	*0*	*101*	*80 - 119*				
Surr: Toluene-d8	*51.98*	*35*	*50*	*0*	*104*	*89 - 112*				

LCS Sample ID: **VLCSW-240112** Units: **ug/L** Analysis Date: **12-Jan-2024 12:18**
Client ID: Run ID: **VOA9_456454** SeqNo: **7779880** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	20.08	1.0	20	0	100	80 - 119				
1,1-Dichloroethene	21.49	1.0	20	0	107	71 - 131				
1,2-Dichloroethane	18.35	1.0	20	0	91.7	73 - 128				
cis-1,2-Dichloroethene	18.3	1.0	20	0	91.5	78 - 123				
Methylene chloride	21.45	2.0	20	0	107	74 - 124				
Trichloroethene	19.36	1.0	20	0	96.8	79 - 123				
Vinyl chloride	19.78	1.0	20	0	98.9	58 - 137				
Surr: 1,2-Dichloroethane-d4	*48.36*	*35*	*50*	*0*	*96.7*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.4*	*35*	*50*	*0*	*101*	*85 - 114*				
Surr: Dibromofluoromethane	*51.68*	*35*	*50*	*0*	*103*	*80 - 119*				
Surr: Toluene-d8	*51.84*	*35*	*50*	*0*	*104*	*89 - 112*				

Revision: 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010538

QC BATCH REPORT

Batch ID: R456454 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS24010519-09MS** Units: **ug/L** Analysis Date: **12-Jan-2024 14:32**
Client ID: Run ID: **VOA9_456454** SeqNo: **7779884** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	16.93	1.0	20	0	84.6	80 - 119				
1,1-Dichloroethene	19.7	1.0	20	0	98.5	71 - 131				
1,2-Dichloroethane	16.55	1.0	20	0	82.8	73 - 128				
cis-1,2-Dichloroethene	16.43	1.0	20	0	82.1	78 - 123				
Methylene chloride	18.7	2.0	20	0	93.5	74 - 124				
Trichloroethene	17.86	1.0	20	0	89.3	79 - 123				
Vinyl chloride	17.54	1.0	20	0	87.7	58 - 137				
Surr: 1,2-Dichloroethane-d4	*48.3*	*35*	*50*	*0*	*96.6*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.02*	*35*	*50*	*0*	*102*	*85 - 114*				
Surr: Dibromofluoromethane	*51.72*	*35*	*50*	*0*	*103*	*80 - 119*				
Surr: Toluene-d8	*54.14*	*35*	*50*	*0*	*108*	*89 - 112*				

MSD Sample ID: **HS24010519-09MSD** Units: **ug/L** Analysis Date: **12-Jan-2024 14:54**
Client ID: Run ID: **VOA9_456454** SeqNo: **7779885** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	18.04	1.0	20	0	90.2	80 - 119	16.93	6.39	20	
1,1-Dichloroethene	20.25	1.0	20	0	101	71 - 131	19.7	2.78	20	
1,2-Dichloroethane	16.92	1.0	20	0	84.6	73 - 128	16.55	2.23	20	
cis-1,2-Dichloroethene	16.79	1.0	20	0	84.0	78 - 123	16.43	2.19	20	
Methylene chloride	19.27	2.0	20	0	96.3	74 - 124	18.7	2.97	20	
Trichloroethene	18.3	1.0	20	0	91.5	79 - 123	17.86	2.44	20	
Vinyl chloride	17.56	1.0	20	0	87.8	58 - 137	17.54	0.137	20	
Surr: 1,2-Dichloroethane-d4	*49.01*	*35*	*50*	*0*	*98.0*	*81 - 118*	*48.3*	*1.45*	*20*	
Surr: 4-Bromofluorobenzene	*51.16*	*35*	*50*	*0*	*102*	*85 - 114*	*51.02*	*0.261*	*20*	
Surr: Dibromofluoromethane	*52.56*	*35*	*50*	*0*	*105*	*80 - 119*	*51.72*	*1.63*	*20*	
Surr: Toluene-d8	*53.09*	*35*	*50*	*0*	*106*	*89 - 112*	*54.14*	*1.96*	*20*	

The following samples were analyzed in this batch: HS24010538-01, HS24010538-02, HS24010538-03, HS24010538-04, HS24010538-05, HS24010538-06, HS24010538-07, HS24010538-09, HS24010538-10

Revision: 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010538

QC BATCH REPORT

Batch ID: R456549 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-240117** Units: **ug/L** Analysis Date: **17-Jan-2024 08:42**
Client ID: Run ID: **VOA9_456549** SeqNo: **7781704** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1.0	1.0								U
1,1-Dichloroethene	1.0	1.0								U
1,2-Dichloroethane	1.0	1.0								U
cis-1,2-Dichloroethene	1.0	1.0								U
Methylene chloride	1.0	2.0								U
Trichloroethene	1.0	1.0								U
Vinyl chloride	1.0	1.0								U
Surr: 1,2-Dichloroethane-d4	*41.22*	*35*	*50*	*0*	*82.4*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*48.52*	*35*	*50*	*0*	*97.0*	*85 - 114*				
Surr: Dibromofluoromethane	*42.43*	*35*	*50*	*0*	*84.9*	*80 - 119*				
Surr: Toluene-d8	*52.95*	*35*	*50*	*0*	*106*	*89 - 112*				

LCS Sample ID: **VLCSW-240117** Units: **ug/L** Analysis Date: **17-Jan-2024 07:58**
Client ID: Run ID: **VOA9_456549** SeqNo: **7781703** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	20.02	1.0	20	0	100	80 - 119				
1,1-Dichloroethene	21.78	1.0	20	0	109	71 - 131				
1,2-Dichloroethane	17.95	1.0	20	0	89.7	73 - 128				
cis-1,2-Dichloroethene	19.05	1.0	20	0	95.2	78 - 123				
Methylene chloride	21.8	2.0	20	0	109	74 - 124				
Trichloroethene	20.37	1.0	20	0	102	79 - 123				
Vinyl chloride	17.22	1.0	20	0	86.1	58 - 137				
Surr: 1,2-Dichloroethane-d4	*47.69*	*35*	*50*	*0*	*95.4*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.99*	*35*	*50*	*0*	*104*	*85 - 114*				
Surr: Dibromofluoromethane	*52.69*	*35*	*50*	*0*	*105*	*80 - 119*				
Surr: Toluene-d8	*54.68*	*35*	*50*	*0*	*109*	*89 - 112*				

Revision: 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010538

QC BATCH REPORT

Batch ID: R456549 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS24010611-01MS** Units: **ug/L** Analysis Date: **17-Jan-2024 12:03**
Client ID: Run ID: **VOA9_456549** SeqNo: **7781706** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	21.33	1.0	20	0	107	80 - 119				
1,1-Dichloroethene	23.2	1.0	20	0	116	71 - 131				
1,2-Dichloroethane	18.4	1.0	20	0	92.0	73 - 128				
cis-1,2-Dichloroethene	26.87	1.0	20	7.33	97.7	78 - 123				
Methylene chloride	22.74	2.0	20	0	114	74 - 124				
Trichloroethene	22.36	1.0	20	0.9797	107	79 - 123				
Vinyl chloride	21.83	1.0	20	0	109	58 - 137				
Surr: 1,2-Dichloroethane-d4	*43.08*	*35*	*50*	*0*	*86.2*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*47.87*	*35*	*50*	*0*	*95.7*	*85 - 114*				
Surr: Dibromofluoromethane	*47.92*	*35*	*50*	*0*	*95.8*	*80 - 119*				
Surr: Toluene-d8	*49.37*	*35*	*50*	*0*	*98.7*	*89 - 112*				

MSD Sample ID: **HS24010611-01MSD** Units: **ug/L** Analysis Date: **17-Jan-2024 12:25**
Client ID: Run ID: **VOA9_456549** SeqNo: **7781707** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	20.74	1.0	20	0	104	80 - 119	21.33	2.78	20	
1,1-Dichloroethene	23.39	1.0	20	0	117	71 - 131	23.2	0.79	20	
1,2-Dichloroethane	18.56	1.0	20	0	92.8	73 - 128	18.4	0.845	20	
cis-1,2-Dichloroethene	26.31	1.0	20	7.33	94.9	78 - 123	26.87	2.11	20	
Methylene chloride	22.73	2.0	20	0	114	74 - 124	22.74	0.0165	20	
Trichloroethene	22.39	1.0	20	0.9797	107	79 - 123	22.36	0.119	20	
Vinyl chloride	22.04	1.0	20	0	110	58 - 137	21.83	0.951	20	
Surr: 1,2-Dichloroethane-d4	*42.81*	*35*	*50*	*0*	*85.6*	*81 - 118*	*43.08*	*0.628*	*20*	
Surr: 4-Bromofluorobenzene	*47.28*	*35*	*50*	*0*	*94.6*	*85 - 114*	*47.87*	*1.23*	*20*	
Surr: Dibromofluoromethane	*48.67*	*35*	*50*	*0*	*97.3*	*80 - 119*	*47.92*	*1.56*	*20*	
Surr: Toluene-d8	*49.23*	*35*	*50*	*0*	*98.5*	*89 - 112*	*49.37*	*0.292*	*20*	

The following samples were analyzed in this batch: HS24010538-08

Revision: 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010538

QC BATCH REPORT

Batch ID: R456322 (0) **Instrument: ICS-Integrion** **Method: ANIONS BY SW9056A**

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **11-Jan-2024 12:06**
Client ID: Run ID: **ICS-Integrion_456322** SeqNo: **7776782** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate (As N)	0.0500	0.100								U
Nitrogen, Nitrite (As N)	0.100	0.100								U
Sulfate	0.250	0.500								U

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **11-Jan-2024 12:12**
Client ID: Run ID: **ICS-Integrion_456322** SeqNo: **7776783** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate (As N)	3.963	0.100	4	0	99.1	80 - 120				
Nitrogen, Nitrite (As N)	3.895	0.100	4	0	97.4	80 - 120				
Sulfate	21.03	0.500	20	0	105	80 - 120				

MS Sample ID: **HS24010519-09MS** Units: **mg/L** Analysis Date: **11-Jan-2024 17:03**
Client ID: Run ID: **ICS-Integrion_456322** SeqNo: **7776804** PrepDate: DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate (As N)	55.82	2.00	40	18.63	93.0	80 - 120				
Nitrogen, Nitrite (As N)	30	2.00	40	0	75.0	80 - 120				S
Sulfate	4487	10.0	200	4528	-20.4	80 - 120				SEO

MS Sample ID: **HS24010519-03MS** Units: **mg/L** Analysis Date: **11-Jan-2024 15:18**
Client ID: Run ID: **ICS-Integrion_456322** SeqNo: **7776789** PrepDate: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate (As N)	19.84	1.00	20	0.464	96.9	80 - 120				
Nitrogen, Nitrite (As N)	15.2	1.00	20	0	76.0	80 - 120				S
Sulfate	4384	5.00	100	4359	24.5	80 - 120				SEO

Revision: 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010538

QC BATCH REPORT

Batch ID: R456322 (0) **Instrument: ICS-Integrion** **Method: ANIONS BY SW9056A**

MSD Sample ID: **HS24010519-09MSD** Units: **mg/L** Analysis Date: **11-Jan-2024 17:09**
Client ID: Run ID: **ICS-Integrion_456322** SeqNo: **7776805** PrepDate: DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate (As N)	56.18	2.00	40	18.63	93.9	80 - 120	55.82	0.657	20	
Nitrogen, Nitrite (As N)	30.01	2.00	40	0	75.0	80 - 120	30	0.04	20	S
Sulfate	4490	10.0	200	4528	-19.0	80 - 120	4487	0.0622	20	SEO

MSD Sample ID: **HS24010519-03MSD** Units: **mg/L** Analysis Date: **11-Jan-2024 15:24**
Client ID: Run ID: **ICS-Integrion_456322** SeqNo: **7776790** PrepDate: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate (As N)	20.06	1.00	20	0.464	98.0	80 - 120	19.84	1.11	20	
Nitrogen, Nitrite (As N)	15.1	1.00	20	0	75.5	80 - 120	15.2	0.713	20	S
Sulfate	4384	5.00	100	4359	24.4	80 - 120	4384	0	20	SEO

The following samples were analyzed in this batch: HS24010538-01 HS24010538-02 HS24010538-03 HS24010538-04 HS24010538-08 HS24010538-09

Revision: 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010538

QC BATCH REPORT

Batch ID: R456821 (0) **Instrument:** TOC_05 **Method:** TOTAL ORGANIC CARBON - SM5310B-2011

MBLK Sample ID: **MBLK-01212024** Units: **mg/L** Analysis Date: **21-Jan-2024 20:54**
Client ID: Run ID: **TOC_05_456821** SeqNo: **7788048** 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-01212024** Units: **mg/L** Analysis Date: **21-Jan-2024 21:10**
Client ID: Run ID: **TOC_05_456821** SeqNo: **7788049** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.725	1.00	10	0	97.2	85 - 115				

LCSD Sample ID: **LCSD-01212024** Units: **mg/L** Analysis Date: **21-Jan-2024 21:25**
Client ID: Run ID: **TOC_05_456821** SeqNo: **7788050** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.939	1.00	10	0	99.4	85 - 115	9.725	2.18	20	

MS Sample ID: **HS24010538-01MS** Units: **mg/L** Analysis Date: **21-Jan-2024 22:24**
Client ID: **16WW58-240110** Run ID: **TOC_05_456821** SeqNo: **7788054** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	16.43	1.00	10	5.904	105	80 - 120				

The following samples were analyzed in this batch: HS24010538-01 HS24010538-02 HS24010538-03 HS24010538-04 HS24010538-08 HS24010538-09

Revision: 1

ALS Houston, US Date: 30-Jan-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: **HS24010538**

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 - 2024	31-Dec-2024
North Dakota	R-193 2023-2024	30-Apr-2024
Oklahoma	2023-140	31-Aug-2024
Texas	T104704231-23-32	30-Apr-2024
Utah	TX026932023-14	31-Jul-2024

ALS Houston, US Date: 30-Jan-24

Sample Receipt Checklist

Work Order ID: HS24010538 **Date/Time Received:** 11-Jan-2024 10:00

Client Name: Bhate Environmental **Received by:** Si Ma

Completed By:	/S/ Paresh M. Giga	11-Jan-2024 15:56	**Reviewed by:**	/S/ Nieka.Carson	12-Jan-2024 09:36
	eSignature	Date/Time		eSignature	Date/Time

Matrices: **GW/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):	3.9C/3.8C U/c	IR31	
Cooler(s)/Kit(s):	47394		
Date/Time sample(s) sent to storage:	1/11/24 16:25		
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: 16IW03-240110 2nd sample logged in as FD

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

bhate

Page: ____ of ____

Project/Phase

No: JVPCiBH.0001

COC Number(1):

LIMS Number: ____

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205

Chain of Custody and Analytical Request

Facility/Base I.D.: LHAAP / BILL to PCI

Project/Site Name: LHAAP / Site 16

Client Name:

Collected by: Scott Beesinger

Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	VOC	Dissolved Gases	TOC	Carbon Dioxide	Anions	Perchlorate					Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
16MW58_240110	10 Jan 2024	0705	-	N		WG	13	X	X	X	X	X	X								
16MW57_240110	10 Jan 2024	0805	-	N		WG	13	X	X	X	X	X	X								
16IW09_240110	10 Jan 2024	0910	-	N		WG	13	X	X	X	X	X	X								
16IW26_240110	10 Jan 2024	0950		N		WG	13	X	X	X	X	X	X								
16MW32_240110	10 Jan 2024	1040		N		WG	4	X					X								
16MW31_240110	10 Jan 2024	1120	-	N		WG	4	X					X								
16MW46_240110	10 Jan 2024	1200	-	N		WG	4	X					X								
16IW03_240110	10 Jan 2024	1245	-	N		WG	13	X	X	X	X	X	X								
16IW03_240110	10 Jan 2024	1245	-	FD		WG	13	X	X	X	X	X	X								
TripBlank_240110	10 Jan 2024		-	TB		W	2	X													
			-																		

Sample Analysis Requested (5) | Quality Assurance Samples (6)

HS24010538

Bhate Environmental Associates, Inc.
LHAAP Site 16

COMMENTS: STANDARD TAT Cooler # 47394 Temp 4.6 3-9 Jan 31 CF=0.1

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (signed)	Date	Time	Received by (signed)	Date	Time
1. Scott Beesinger	1/10/24	1330	1.		
2.			2.		
3.			3.		
			4PM	01/11/24	10:00

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: ____ Shipped ____ No.:

Method of Shipment: ____

Fed Ex ____ Airbill Number: ____

Analytical Lab: ALS 10450 Stanciff Rd. Suite 210 Houston, TX 77099 (281) 530-5656

ATTN: Dane Wacasey Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5856
Fax. +1 281 530 5887

47394

CUSTODY SEAL
Date: 1/10/24 Time: 1330
Name: Scott Beesinger
Company: Shate

Seal Broken By:
Date: 01/11/24

47394 JAN 11 2024

Must Deliver Next Business Day
Time and Tempature Sensitive!

47394

ORIGIN ID:SGRA (903) 930-6193
SCOTT BEESINER
SHATE ENVIRONMENTAL ASSOCIATES
1203-B EAST GRAND AVE. PMB202
MARSHALL, TX 75670
UNITED STATES US

SHIP DATE: 21DEC23
ACTWGT: 1.00 LB MAN
CAD: 0221247/CAFE3755
DIMS: 26x14x14 IN

TO SAMPLE RECEIVING
ALS GROUP USA,CORP
10450 STANCLIFF ROAD
SUITE 210
HOUSTON TX 77099
(281) 530-5868
REF: LHAAP=16-BO 97804-JG

RMA:

FedEx Express

FedEx
TRK# 6862 6800 5392
THU - 11 JAN AA
PRIORITY OVERNIGHT

AB SGRA

77099
TX-US
IAH

4238674 10Jan2024 GGGA 5810J/B014/C0BB

January 24, 2024 Service Request No:E2400035

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

Laboratory Results for: HS24010538

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory January 11, 2024
For your reference, these analyses have been assigned our service request number **E2400035.**

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 2190. You may also contact me via email at hussam.kelany@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

H Kelany

Hussam Kelany
Project Manager

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental

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

Client:	ALS Environmental - US	**Service Request No.:**	E2400035
Project:	HS24010538	**Date Received:**	01/11/24
Sample Matrix:	Ground Water / 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

Nine samples were received for analysis at ALS Environmental in Houston on 01/11/24.

The samples were received in good condition and are 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:

EQ2400031: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of a 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:**E2400035
Project: HS24010538

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2400035-001	16WW58-240110	1/10/2024	0705
E2400035-002	16WW57-240110	1/10/2024	0805
E2400035-003	16IW09-240110	1/10/2024	0900
E2400035-004	16IW26-240110	1/10/2024	0950
E2400035-005	16WW32-240110	1/10/2024	1040
E2400035-006	16WW31-240110	1/10/2024	1120
E2400035-007	16WW46-240110	1/10/2024	1200
E2400035-008	16IW03-240110	1/10/2024	1245
E2400035-009	16IW03-240110-FD	1/10/2024	1245

Service Request Summary

Folder #: **E2400035**
Client Name: ALS Environmental - US
Project Name: HS24010538
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: Hussam Kelany
Originating Lab: HOUSTON
Logged By: JCORONADO2
Date Received: 01/11/24
Internal Due Date: 1/23/2024
QAP: LAB QAP
Qualifier Set: DOD
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number:
EDD: EQUIS APTIM
LONGHORN EFWEDD

9 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-WIC 4A
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	Semivoa GCMS ClO4 DOD/6850
E2400035-001	16WW58-240110	Ground Water	01/10/24 0705	**IV**
E2400035-002	16WW57-240110	Ground Water	01/10/24 0805	**IV**
E2400035-003	16IW09-240110	Ground Water	01/10/24 0900	**IV**
E2400035-004	16IW26-240110	Ground Water	01/10/24 0950	**IV**
E2400035-005	16WW32-240110	Ground Water	01/10/24 1040	**IV**
E2400035-006	16WW31-240110	Ground Water	01/10/24 1120	**IV**
E2400035-007	16WW46-240110	Ground Water	01/10/24 1200	**IV**
E2400035-008	16IW03-240110	Ground Water	01/10/24 1245	**IV**
E2400035-009	16IW03-240110-FD	Ground Water	01/10/24 1245	**IV**

Service Request Summary

Folder #: **E2400035**
Client Name: ALS Environmental - US
Project Name: HS24010538
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: Hussam Kelany
Originating Lab: HOUSTON
Logged By: JCORONADO2
Date Received: 01/11/24
Internal Due Date: 1/23/2024
QAP: LAB QAP
Qualifier Set: DOD
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number:
EDD: EQUIS APTIM
LONGHORN EFWEDD

9 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-WIC 4A
Pressure Gas:

Data Qualifiers

DOD

B	Analyte found in the associated method blank as well as in the sample.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
E	Estimated value. Concentration above calibration range.
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.
I	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
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	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.
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.
Q	Pesticide/Aroclor target is not confirmed, >= 100% difference for the detected concentrations between the two GC columns
U	Compound was analyzed for, but was not detected (ND).
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	LA028-2024	12/31/2024
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	2645386	12/31/2024
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	2023-140	8/31/2024
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	C819-23	11/14/2024

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

E2400035 5
ALS Group USA, Corp.
24010538

10450 Stancliff Rd, Ste 210
Houston, TX 77099
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F: +1 281 530 5887
www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 24458

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:	HS24010538
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24010538-01**	**16WW58-240110**	**Groundwater**	**10 Jan 2024 07:05**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			25 Jan 2024
2.	**HS24010538-02**	**16WW57-240110**	**Groundwater**	**10 Jan 2024 08:05**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			25 Jan 2024
3.	**HS24010538-03**	**16IW09-240110**	**Groundwater**	**10 Jan 2024 09:00**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			25 Jan 2024
4.	**HS24010538-04**	**16IW26-240110**	**Groundwater**	**10 Jan 2024 09:50**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			25 Jan 2024
5.	**HS24010538-05**	**16WW32-240110**	**Groundwater**	**10 Jan 2024 10:40**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			25 Jan 2024
6.	**HS24010538-06**	**16WW31-240110**	**Groundwater**	**10 Jan 2024 11:20**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			25 Jan 2024
7.	**HS24010538-07**	**16WW46-240110**	**Groundwater**	**10 Jan 2024 12:00**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			25 Jan 2024
8.	**HS24010538-08**	**16IW03-240110**	**Groundwater**	**10 Jan 2024 12:45**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 24458**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			25 Jan 2024
9.	**HS24010538-09**	**16IW03-240110-FD**	**Groundwater**	**10 Jan 2024 12:45**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			25 Jan 2024

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

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: JC Date/Time: 1/11/24 5:56

Cooler ID(s): _____ Temperature(s): _____

E2400035 5
ALS Group USA, Corp.
24010538

10450 Stancliff Rd, Ste 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

Sample Receipt Checklist

Work Order ID: HS24010538 **Date/Time received:** 11 Jan 2024 10:00

Client name: Bhate Environmental Associates, Inc. **Received by:** Si Ma

Completed/By: 11 Jan 2024 15:56 (Date/Time) Paresh M. Giga (eSignature) **Reviewed/By:** (Date/Time) (eSignature)

Matrices: GW/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 ID(s): 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): 3.9C/3.8C U/c IR31

Cooler Information: 1 Cooler(s), 47394

Date/Time sample(s) sent to storage: 1/11/24 16:25

Water - VOA vials have zero headspace?	☑ Yes	☐ No	☐ No VOA vials submitted
Water - pH acceptable upon receipt?	☐ Yes	☐ No	☑ Not Applicable
pH adjusted?	☐ Yes	☐ No	☑ Not Applicable

pH adjusted by:

Login notes: 16IW03-240110 2nd sample logged in as FD

Client contacted: **Date contacted:** **Person contacted:**

Contacted by: **Regarding:**

Comments:

Corrective action:

REPRODUCTION PROHIBITED

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#: 432774 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/19/24 08:43

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2400035-001	16WW58-240110	.01	6850/ClO4 DOD			Ground Water	10mL	
2	E2400035-002	16WW57-240110	.01	6850/ClO4 DOD			Ground Water	10mL	
3	E2400035-003	16IW09-240110	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2400035-004	16IW26-240110	.01	6850/ClO4 DOD			Ground Water	10mL	
5	E2400035-005	16WW32-240110	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2400035-006	16WW31-240110	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2400035-007	16WW46-240110	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2400035-008	16IW03-240110	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2400035-009	16IW03-240110-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2400038-001	CTC-50_0124	.02	6850/ClO4 DOD			Water	10mL	
11	E2400038-002	MS-1_0124	.02	6850/ClO4 DOD			Water	10mL	
12	E2400038-003	East Side Shaft_0124	.02	6850/ClO4 DOD			Water	10mL	
13	E2400038-004	MN-1_0124	.02	6850/ClO4 DOD			Water	10mL	
14	E2400038-005	MN-2_0124	.02	6850/ClO4 DOD			Water	10mL	
15	E2400038-006	CTC-52_0124	.02	6850/ClO4 DOD			Water	10mL	
16	E2400038-007	CTC-53_0124	.02	6850/ClO4 DOD			Water	10mL	
17	E2400038-008	CTC- 46_0124	.02	6850/ClO4 DOD			Water	10mL	
18	E2400038-009	EA-32_0124	.02	6850/ClO4 DOD			Water	10mL	
19	E2400048-001	2401091020C 100-G-223	.01	6850/ClO4			Water	10mL	
20	E2400048-002	2401091410A 300-F-175	.01	6850/ClO4			Water	10mL	
21	EQ2400031-01	MB		6850/ClO4 DOD			Liquid	10mL	
22	EQ2400031-02	LCS		6850/ClO4			Liquid	10mL	
23	EQ2400031-03	DLCS		6850/ClO4			Liquid	10mL	
24	EQ2400031-04	ICS		6850/ClO4			Liquid	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock 2 Inventory ID 230345 Logbook Ref: Perchlorate INT. Stock2 Expires On: 03/07/2024

EQ2400031-02	10.00µL	EQ2400031-02	10.00µL	EQ2400031-03	10.00µL	EQ2400031-03	10.00µL	EQ2400031-04	10.00µL	EQ2400031-04	10.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 232015 Logbook Ref: Perchlorate Internal Standard Expires On: 04/30/2024

E2400035-001	100.00µL	E2400035-002	100.00µL	E2400035-003	100.00µL	E2400035-004	100.00µL	E2400035-005	100.00µL	E2400035-006	100.00µL
E2400035-007	100.00µL	E2400035-008	100.00µL	E2400035-009	100.00µL	E2400038-001	100.00µL	E2400038-002	100.00µL	E2400038-003	100.00µL
E2400038-004	100.00µL	E2400038-005	100.00µL	E2400038-006	100.00µL	E2400038-007	100.00µL	E2400038-008	100.00µL	E2400038-009	100.00µL
E2400048-001	100.00µL	E2400048-002	100.00µL	EQ2400031-01	100.00µL	EQ2400031-01	100.00µL	EQ2400031-02	100.00µL	EQ2400031-02	100.00µL

Preparation Information Benchsheet

Prep Run#: 432774 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/19/24 08:43

EQ2400031-03 100.00µL EQ2400031-03 100.00µL EQ2400031-04 100.00µL EQ2400031-04 100.00µL

Name: Perchlorate Anion Spiking Soln. 25,000 ppm Inventory ID 233096 Logbook Ref: Expires On: 02/04/2024

EQ2400031-04 20.00µL EQ2400031-04 20.00µL

Preparation Materials

Water HPLC Grade	HPLC water 083124 (233144)	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 Lok Syringes (231696)				

Preparation Steps

Step: Preparation
Started: 1/19/24 08:43
Finished: 1/19/24 13:54
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:**	E2400035
Project:	HS24010538	**Date Collected:**	1/10/24 0705
Sample Matrix:	Ground Water	**Date Received:**	1/11/24
Sample Name:	16WW58-240110	**Units:**	µg/L
Lab Code:	E2400035-001	**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	ND	U	0.100	0.0500	0.0250	1	1/19/24	1/23/24 13:34	432774	830415	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	1/10/24 0805
Sample Matrix:	Ground Water	**Date Received:**	1/11/24
Sample Name:	16WW57-240110	**Units:**	µg/L
Lab Code:	E2400035-002	**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	**0.0435**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 12:55	432774	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	1/10/24 0900
Sample Matrix:	Ground Water	**Date Received:**	1/11/24
Sample Name:	16IW09-240110	**Units:**	µg/L
Lab Code:	E2400035-003	**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	**0.152**		0.100	0.0500	0.0250	1	1/19/24	1/22/24 13:01	432774	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	1/10/24 0950
Sample Matrix:	Ground Water	**Date Received:**	1/11/24
Sample Name:	16IW26-240110	**Units:**	µg/L
Lab Code:	E2400035-004	**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	**0.0968**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 13:06	432774	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	1/10/24 1040
Sample Matrix:	Ground Water	**Date Received:**	1/11/24
Sample Name:	16WW32-240110	**Units:**	µg/L
Lab Code:	E2400035-005	**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	**0.0349**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 13:12	432774	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	1/10/24 1120
Sample Matrix:	Ground Water	**Date Received:**	1/11/24
Sample Name:	16WW31-240110	**Units:**	µg/L
Lab Code:	E2400035-006	**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	1/19/24	1/22/24 13:17	432774	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	1/10/24 1200
Sample Matrix:	Ground Water	**Date Received:**	1/11/24
Sample Name:	16WW46-240110	**Units:**	µg/L
Lab Code:	E2400035-007	**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	1/19/24	1/22/24 13:34	432774	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	1/10/24 1245
Sample Matrix:	Ground Water	**Date Received:**	1/11/24
Sample Name:	16IW03-240110	**Units:**	µg/L
Lab Code:	E2400035-008	**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	**0.0633**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 13:39	432774	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	1/10/24 1245
Sample Matrix:	Ground Water	**Date Received:**	1/11/24
Sample Name:	16IW03-240110-FD	**Units:**	µg/L
Lab Code:	E2400035-009	**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	**0.0393**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 13:45	432774	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2400031-01	**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	1/19/24	1/22/24 12:27	432774	830337	

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: HS24010538
Sample Matrix: Ground Water

Service Request: E2400035
Date Analyzed: 1/22/24

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: 432774

	Lab Control Sample EQ2400031-02			Duplicate Lab Control Sample EQ2400031-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0910	0.100	91	0.0877	0.100	88	84 - 119	4	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:**	E2400035
Project:	HS24010538	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2400031-02	**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	**0.0910**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 12:33	432774	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2400031-03	**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	**0.0877**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 12:38	432774	830337	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jumoke Lawal
ALS Group USA, Corp
10450 Stancliff Rd.
Suite 210
Houston, Texas 77099

Generated 1/30/2024 2:01:43 PM Revision 1

JOB DESCRIPTION

HS24010538

JOB NUMBER

410-157387-1

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster PA 17601

See page two for job notes and contact information.

my EOL

Eurofins Lancaster Laboratories Environment Testing, LLC

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

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Revision 1

Authorized for release by
Kelly Bauer, Project Manager
Kelly.Bauer@et.eurofinsus.com
(717)556-7262

Eurofins Lancaster Laboratories Environment Testing, LLC

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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Kelly Bauer

Table of Contents

Cover Page 1
Table of Contents 4
Definitions/Glossary 5
Case Narrative 6
Detection Summary 7
Client Sample Results 8
QC Sample Results 9
QC Association Summary 10
Lab Chronicle 11
Certification Summary 12
Method Summary 13
Sample Summary 14
Chain of Custody 15
Receipt Checklists 19

Definitions/Glossary

Client: ALS Group USA, Corp
Project/Site: HS24010538

Job ID: 410-157387-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
D	The reported value is from a dilution.
M	Manual integrated compound.
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ALS Group USA, Corp
Project: HS24010538

Job ID: 410-157387-1

Job ID: 410-157387-1 — Eurofins Lancaster Laboratories Environment

Job Narrative
410-157387-1

REVISION

The report being provided is a revision of the original report sent on 1/19/2024. The report (revision 1) is being revised due to sample IDs were updated per the client's request.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 1/12/2024 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.2°C

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: ALS Group USA, Corp
Project/Site: HS24010538

Job ID: 410-157387-1

Client Sample ID: 16WW58-240110 — Lab Sample ID: 410-157387-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	270000	M	12000	5600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16WW57-240110 — Lab Sample ID: 410-157387-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	220000	M	12000	5600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16IW09-240110 — Lab Sample ID: 410-157387-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	210000	M	12000	5600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16IW26-240110 — Lab Sample ID: 410-157387-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	760000	D	120000	56000	ug/L	10		RSK-175	Total/NA

Client Sample ID: 16IW03-240110 — Lab Sample ID: 410-157387-5

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	230000	M	12000	5600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16IW03-240110-FD — Lab Sample ID: 410-157387-6

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	250000	M	12000	5600	ug/L	1		RSK-175	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ALS Group USA, Corp
Project/Site: HS24010538

Job ID: 410-157387-1

Client Sample ID: 16WW58-240110
Lab Sample ID: 410-157387-1
Date Collected: 01/10/24 07:05
Matrix: Water
Date Received: 01/12/24 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	270000	M	12000	5600	ug/L		01/16/24 12:03	01/16/24 14:01	1

Client Sample ID: 16WW57-240110
Lab Sample ID: 410-157387-2
Date Collected: 01/10/24 08:05
Matrix: Water
Date Received: 01/12/24 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	220000	M	12000	5600	ug/L		01/16/24 12:03	01/16/24 14:08	1

Client Sample ID: 16IW09-240110
Lab Sample ID: 410-157387-3
Date Collected: 01/10/24 09:00
Matrix: Water
Date Received: 01/12/24 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	210000	M	12000	5600	ug/L		01/16/24 12:03	01/16/24 14:16	1

Client Sample ID: 16IW26-240110
Lab Sample ID: 410-157387-4
Date Collected: 01/10/24 09:50
Matrix: Water
Date Received: 01/12/24 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	760000	D	120000	56000	ug/L		01/18/24 09:58	01/18/24 15:40	10

Client Sample ID: 16IW03-240110
Lab Sample ID: 410-157387-5
Date Collected: 01/10/24 12:45
Matrix: Water
Date Received: 01/12/24 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	230000	M	12000	5600	ug/L		01/16/24 12:03	01/16/24 14:31	1

Client Sample ID: 16IW03-240110-FD
Lab Sample ID: 410-157387-6
Date Collected: 01/10/24 12:45
Matrix: Water
Date Received: 01/12/24 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	250000	M	12000	5600	ug/L		01/16/24 12:03	01/16/24 14:47	1

QC Sample Results

Client: ALS Group USA, Corp
Project/Site: HS24010538

Job ID: 410-157387-1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 410-463746/1-A
Matrix: Water
Analysis Batch: 463730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 463746

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	5600	U M	12000	5600	ug/L		01/16/24 12:03	01/16/24 12:15	1

Lab Sample ID: LCS 410-463746/2-A
Matrix: Water
Analysis Batch: 463730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 463746

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	35800	36600		ug/L		102	80 - 122

Lab Sample ID: LCSD 410-463746/3-A
Matrix: Water
Analysis Batch: 463730

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 463746

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon dioxide	35800	37900		ug/L		106	80 - 122	4	20

Lab Sample ID: MB 410-464737/1-A
Matrix: Water
Analysis Batch: 464516

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 464737

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	5600	U M	12000	5600	ug/L		01/18/24 09:58	01/18/24 10:00	1

Lab Sample ID: LCS 410-464737/2-A
Matrix: Water
Analysis Batch: 464516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 464737

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	35800	38200		ug/L		107	80 - 122

Lab Sample ID: LCSD 410-464737/3-A
Matrix: Water
Analysis Batch: 464516

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 464737

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon dioxide	35800	38900		ug/L		109	80 - 122	2	20

QC Association Summary

Client: ALS Group USA, Corp
Project/Site: HS24010538

Job ID: 410-157387-1

GC VOA

Analysis Batch: 463730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-157387-1	16WW58-240110	Total/NA	Water	RSK-175	463746
410-157387-2	16WW57-240110	Total/NA	Water	RSK-175	463746
410-157387-3	16IW09-240110	Total/NA	Water	RSK-175	463746
410-157387-5	16IW03-240110	Total/NA	Water	RSK-175	463746
410-157387-6	16IW03-240110-FD	Total/NA	Water	RSK-175	463746
MB 410-463746/1-A	Method Blank	Total/NA	Water	RSK-175	463746
LCS 410-463746/2-A	Lab Control Sample	Total/NA	Water	RSK-175	463746
LCSD 410-463746/3-A	Lab Control Sample Dup	Total/NA	Water	RSK-175	463746

Prep Batch: 463746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-157387-1	16WW58-240110	Total/NA	Water	RSK-175	
410-157387-2	16WW57-240110	Total/NA	Water	RSK-175	
410-157387-3	16IW09-240110	Total/NA	Water	RSK-175	
410-157387-5	16IW03-240110	Total/NA	Water	RSK-175	
410-157387-6	16IW03-240110-FD	Total/NA	Water	RSK-175	
MB 410-463746/1-A	Method Blank	Total/NA	Water	RSK-175	
LCS 410-463746/2-A	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 410-463746/3-A	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 464516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-157387-4	16IW26-240110	Total/NA	Water	RSK-175	464737
MB 410-464737/1-A	Method Blank	Total/NA	Water	RSK-175	464737
LCS 410-464737/2-A	Lab Control Sample	Total/NA	Water	RSK-175	464737
LCSD 410-464737/3-A	Lab Control Sample Dup	Total/NA	Water	RSK-175	464737

Prep Batch: 464737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-157387-4	16IW26-240110	Total/NA	Water	RSK-175	
MB 410-464737/1-A	Method Blank	Total/NA	Water	RSK-175	
LCS 410-464737/2-A	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 410-464737/3-A	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Lab Chronicle

Client: ALS Group USA, Corp
Project/Site: HS24010538

Job ID: 410-157387-1

Client Sample ID: 16WW58-240110
Date Collected: 01/10/24 07:05
Date Received: 01/12/24 10:00

Lab Sample ID: 410-157387-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			463746	HQR6	ELLE	01/16/24 12:03
Total/NA	Analysis	RSK-175		1	463730	LXF2	ELLE	01/16/24 14:01

Client Sample ID: 16WW57-240110
Date Collected: 01/10/24 08:05
Date Received: 01/12/24 10:00

Lab Sample ID: 410-157387-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			463746	HQR6	ELLE	01/16/24 12:03
Total/NA	Analysis	RSK-175		1	463730	LXF2	ELLE	01/16/24 14:08

Client Sample ID: 16IW09-240110
Date Collected: 01/10/24 09:00
Date Received: 01/12/24 10:00

Lab Sample ID: 410-157387-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			463746	HQR6	ELLE	01/16/24 12:03
Total/NA	Analysis	RSK-175		1	463730	LXF2	ELLE	01/16/24 14:16

Client Sample ID: 16IW26-240110
Date Collected: 01/10/24 09:50
Date Received: 01/12/24 10:00

Lab Sample ID: 410-157387-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			464737	HQR6	ELLE	01/18/24 09:58
Total/NA	Analysis	RSK-175		10	464516	LXF2	ELLE	01/18/24 15:40

Client Sample ID: 16IW03-240110
Date Collected: 01/10/24 12:45
Date Received: 01/12/24 10:00

Lab Sample ID: 410-157387-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			463746	HQR6	ELLE	01/16/24 12:03
Total/NA	Analysis	RSK-175		1	463730	LXF2	ELLE	01/16/24 14:31

Client Sample ID: 16IW03-240110-FD
Date Collected: 01/10/24 12:45
Date Received: 01/12/24 10:00

Lab Sample ID: 410-157387-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			463746	HQR6	ELLE	01/16/24 12:03
Total/NA	Analysis	RSK-175		1	463730	LXF2	ELLE	01/16/24 14:47

Laboratory References:
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: ALS Group USA, Corp
Project/Site: HS24010538

Job ID: 410-157387-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24

Method Summary

Client: ALS Group USA, Corp
Project/Site: HS24010538

Job ID: 410-157387-1

Method	Method Description	Protocol	Laboratory
RSK-175	Dissolved Gases (GC)	RSK	ELLE
RSK-175	Dissolved Gases Prep	RSK	ELLE

Protocol References:

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: ALS Group USA, Corp
Project/Site: HS24010538

Job ID: 410-157387-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-157387-1	16WW58-240110	Water	01/10/24 07:05	01/12/24 10:00
410-157387-2	16WW57-240110	Water	01/10/24 08:05	01/12/24 10:00
410-157387-3	16IW09-240110	Water	01/10/24 09:00	01/12/24 10:00
410-157387-4	16IW26-240110	Water	01/10/24 09:50	01/12/24 10:00
410-157387-5	16IW03-240110	Water	01/10/24 12:45	01/12/24 10:00
410-157387-6	16IW03-240110-FD	Water	01/10/24 12:45	01/12/24 10:00

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410-157387 Chain of Custody

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **24457**

SUBCONTRACT TO:

Eurofins Lancaster Laboratories Envt Testing
2425 New Holland Pike
Lancaster, PA 17601

Phone: +1 717 656 2300

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	James Guin
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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:	HS24010538
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24010538-01**	**16WW58-240110**	**Groundwater**	**10 Jan 2024 07:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
2.	**HS24010538-02**	**16WW57-240110**	**Groundwater**	**10 Jan 2024 08:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
3.	**HS24010538-03**	**16IW09-240110**	**Groundwater**	**10 Jan 2024 09:00**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
4.	**HS24010538-04**	**16IW26-240110**	**Groundwater**	**10 Jan 2024 09:50**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
5.	**HS24010538-08**	**16IW03-240110**	**Groundwater**	**10 Jan 2024 12:45**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
6.	**HS24010538-09**	**16IW03-240110-FD**	**Groundwater**	**10 Jan 2024 12:45**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024

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

QC Level: DOD IV (DoD Data Package)

NS

R:1.2 C:1.2

Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 24457

Relinquished By: _____ Date/Time: 1/11/24 1800

Received By: _____ Date/Time: 1/12/24 10:00

Cooler ID(s): _____ Temperature(s): _____

ND

R:1.2 C:1.2

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Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **24457**

SUBCONTRACT TO:

Eurofins Lancaster Laboratories Envt Testing
2425 New Holland Pike
Lancaster, PA 17601

Phone: +1 717 656 2300

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:	HS24010538
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24010538-01**	**16WW58-240110**	**Groundwater**	**10 Jan 2024 07:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
2.	**HS24010538-02**	**16WW57-240110**	**Groundwater**	**10 Jan 2024 08:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
3.	**HS24010538-03**	**16IW09-240110**	**Groundwater**	**10 Jan 2024 09:00**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
4.	**HS24010538-04**	**16IW26-240110**	**Groundwater**	**10 Jan 2024 09:50**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
5.	**HS24010538-08**	**16IW03-240110**	**Groundwater**	**10 Jan 2024 12:45**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
6.	**HS24010538-09**	**16IW03-240110-FD**	**Groundwater**	**10 Jan 2024 12:45**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024

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

QC Level: DOD IV (DoD Data Package)

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **24457**

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

Cooler ID(s): _____ Temperature(s): _____

Login Sample Receipt Checklist

Client: ALS Group USA, Corp

Job Number: 410-157387-1

Login Number: 157387
List Number: 1
Creator: Santiago, Nathaniel

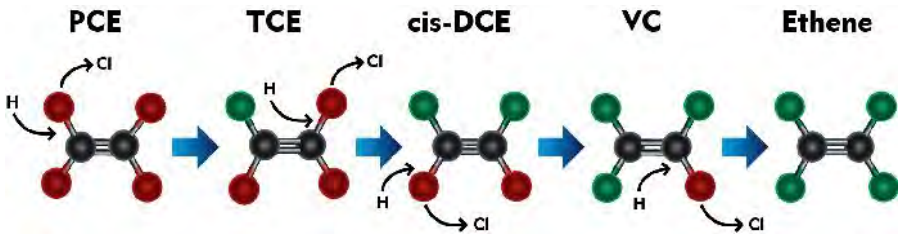
List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	

DHC Interpretation

Dehalococcoides 16S rRNA gene (qDHC)

Under anaerobic conditions, tetrachloroethene (PCE) and trichloroethene (TCE) can undergo sequential reductive dechlorination through the daughter products *cis*-dichloroethene (*cis*-DCE) and vinyl chloride to nontoxic ethene (1,2).



While a number of bacterial cultures capable of utilizing PCE and TCE as growth supporting electron acceptors have been isolated (3-7), *Dehalococcoides* spp. may be the most important because they are the only bacterial group that has been isolated to date which is capable of complete reductive dechlorination of PCE to ethene (8). In fact, the presence of *Dehalococcoides* spp. has been associated with complete dechlorination to ethene at sites across North America and Europe (9).

Status	*Dehalococcoides spp.*	Observation
	≥ 10^4 (cells/mL)	Lu et al. proposed that a concentration of 1 x 10^4 DHC cells/mL could be used as a screening criterion to identify sites where reductive dechlorination will yield a generally useful biodegradation rate (10). Similarly, in an internal study conducted with nearly 1000 groundwater samples obtained from sites across the US, ethene production was observed in approximately 80% of samples in which CENSUS® qDHC results were greater than or equal to 10^4 DHC cells/mL.
	10^1 to < 10^4 (cells/mL)	When vinyl chloride reductase genes (See DHC functional genes discussion below) are also detected, complete reductive dechlorination of PCE and TCE to ethene may still occur even with moderate DHC concentrations. When the DHC population is below the 10^4 cells/mL criterion proposed by Lu et al. (10), project managers should carefully consider other site-specific data to determine whether subsurface conditions may be limiting reductive dechlorination. For example, the addition of an electron donor may be able to stimulate DHC growth and enhance anaerobic bioremediation.
	< 10^1 (cells/mL)	DHC concentrations are low suggesting that complete reductive dechlorination of PCE and TCE to ethene is unlikely to occur under existing conditions. Enhanced anaerobic bioremediation options (biostimulation or bioaugmentation) may need to be considered.

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DHC Functional Genes (*tce*A, *bvc*A, *vcr*A)

A "stall" where daughter products *cis*-DCE and vinyl chloride accumulate can occur at PCE- and TCE-impacted sites especially under MNA conditions. The accumulation of vinyl chloride, generally considered more carcinogenic than the parent compounds, is particularly problematic. Although elevated *Dehalococcoides* concentrations correspond to ethene production in numerous studies, the range of chlorinated ethenes metabolized and cometabolized varies among species and strains within the *Dehalococcoides* genus. For example, *Dehalococcoides ethenogenes* str. 195 metabolizes PCE, TCE, and *cis*-DCE and cometabolizes vinyl chloride (8) to produce ethene. Conversely, *Dehalococcoides* sp. CBDB1 utilizes PCE and TCE but does not cometabolize additional chloroethenes (11). Other *Dehalococcoides* strains, such as BAV1, GT and VS, are known to fully dechlorinate cis-DCE and VC to ethene (14,16,19). Quantification of reductive dehalogenase genes is used to more definitively confirm the potential for reductive dechlorination of TCE, cis-DCE, and vinyl chloride (12-15).

Functional Gene	Observation
TCE Reductase	
***tce*A gene**	The *tce*A gene encodes the enzyme responsible for reductive dechlorination of TCE to *cis*-DCE in some strains of *Dehalococcoides*. Absence of *tce*A does not preclude the potential for reductive dechlorination of TCE in the field since the *tce*A gene is not universally distributed among all DHC and is not present in other microorganisms capable of reductive dechlorination of TCE (e.g. *Dehalobacter*). Detection of the *tce*A gene provides an additional line of evidence indicating the potential for dechlorination of TCE.
Vinyl Chloride Reductase	
***bvc*A gene**	The *bvc*A gene encodes the vinyl chloride reductase enzyme responsible for reductive dechlorination of vinyl chloride to ethene by *Dehalococcoides* sp. str. BAV1 (16). Presence of *bvc*A gene indicates the potential for reductive dechlorination of VC to ethene. Absence of both *bvc*A and *vcr*A genes suggests VC may accumulate. An internal study with ~1,000 samples showed ethene production was observed in 80% of the samples that the DHC population was greater than or equal to 10^4 cells/mL. The *bvc*A gene was detected in over 50% of these samples. Van Der Zaan et al (17) noted that the bvcA gene was the only VC reductase gene detected at three of their sites. Alfred Spormann's laboratory at Stanford University (18) reported that the *bvc*A gene was the most abundant and active at the outflow of a PCE fed column study. This section of the column was in the DCE to VC stages of reductive dechlorination thus confirming the importance of the *bvc*A gene for complete reductive dechlorination.
***vcr*A gene**	The *vcr*A gene encodes the vinyl chloride reductase enzyme responsible for reductive dechlorination of *cis*-DCE and vinyl chloride by *Dehalococcoides* sp. strain VS (14). Presence of *vcr*A gene indicates the potential for reductive dechlorination of DCE and/or VC to ethene. Absence of both *bvc*A and *vcr*A genes suggest VC may accumulate. As with the *bvc*A gene, detection of the *vcr*A gene is associated with ethene production in internal studies (67%) and vinyl chloride reduction in independent studies (14, 17).

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microbialinsights

DHC Interpretation

Reporting

Microbial Insights can provide a variety of data packages and reporting levels to suit the needs of any project. Data packages range from simple analytical reports with results only to more complex data packages that include a report narrative, analytical results, QC data, and supporting materials including all raw data and chain-of-custody documentation. The figure below shows our standard report and explains the way values are reported.

Microbial Insights, Inc.

2340 Stock Creek Blvd. Rockford, TN 37853-3044
Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: Company Name
Project: Your Project Name

MI Project Number: Unique Laboratory Identifier
Date Received: Date Samples Arrived

Sample Information

Client Sample ID:		Sample A	Sample B	Sample C
Sample Date:		00/00/0000	00/00/0000	00/00/0000
Units:		cells/mL	cells/mL	cells/mL
Analyst:		Intials	Intials	Intials
Dechlorinating Bacteria				
Dehalococcoides spp.	DHC	**1.84E+05**	**2.76E+02**	**2.28E+01 (J)**
Functional Genes				
tceA Reductase	TCE	**6.00E+01**	**3.23E+01**	<4.00E-01
bvcA Reductase	BVC	**1.17E+04**	**1.81E+01**	<4.00E-01
vcrA Reducatase	VCR	**8.42E+04**	**1.74E+02**	<4.00E-01

"J" value
Result is an estimated value. This data qualifier (flag) is used when the target gene is detected but at a concentration or abundance below the practical quantification limit (PQL).

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

< value
The target gene was not detected at the limit of quantitation (LOQ) reported for that sample.

"I" value
QA Procedure indicated that the sample may have exhibited PCR inhibition. Although relatively rare, PCR inhibition can occur due to the presence of metals or humic acids at high concentrations in the sample.

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Quality Assurance

Microbial Insights' comprehensive Quality Assurance (QA) Program is the foundation of all laboratory analyses, ensuring that our clients receive high-quality analytical services that are timely, reliable, and meet their intended purpose in a cost effective manner. MI is committed to providing quality data that surpasses regulatory and industry standards, thus enabling the client to make well-informed decisions. MI maintains strict standard operating procedures and QA/QC measures throughout all of the analyses offered. The following Table details specific QA/QC procedures that are used for CENSUS.

QA/QC	Description
Date of Extraction	DNA and RNA extractions are performed the day the samples are received by MI to minimize the possibility of any changes to the microbial community prior to analysis.
Laboratory Method Blanks	An extraction blank (no sample added) is processed alongside each set of field samples from DNA extraction through CENSUS® analysis to ensure that cross contamination has not occurred. Although MI has never experienced this issue, the detection of the CENSUS® target (e.g. *Dehalococcoides*) in an extraction blank is direct evidence of cross contamination with a sample or contamination of a reagent and would invalidate the results. If this were to occur, MI would re-extract the sample. If not possible to re-extract, MI would contact the client immediately and notate it on the laboratory report.
Laboratory Control Samples (LCS)	A laboratory control sample (LCS) or positive control (target DNA) is included with each CENSUS® plate to confirm amplification and as a continuing calibration check.
Negative Controls	A negative control (no DNA) is included with each CENSUS plate to ensure that cross contamination has not occurred during amplification. As with the extraction blank, detection of CENSUS target (e.g. DHC) in a negative control is direct evidence of contamination and would invalidate the results. If this were to occur, MI would rerun the analysis.

References

1. Freedman, D. L. and J. M. Gossett. 1989. Biological reductive dechlorination of tetrachloroethylene and trichloroethylene to ethylene under methanogenic conditions. Applied and Environmental Microbiology 55(9): 2144-2151.

2. DiStefano, T. D., J.M. Gossett, and S.H. Zinder. 1991. Reductive dechlorination of high concentrations of tetrachlorethene to ethene by an anaerobic enrichment culture in the absence of methanogenesis. Applied and Environmental Microbiology 57(8): 2287-2292.

3. Gerritse, J., V. Renard, T. M. Pedro Gomes, P. A. Lawson, M. D. Collins, and J. C. Gottschal. 1996. *Desulfitobacterium* sp. Strain PCE1, an anaerobic bacterium that can grow by reductive dechlorination of tetrachloroethene or ortho-chlorinated phenols. Archives of Microbiology 165(2): 132-140.

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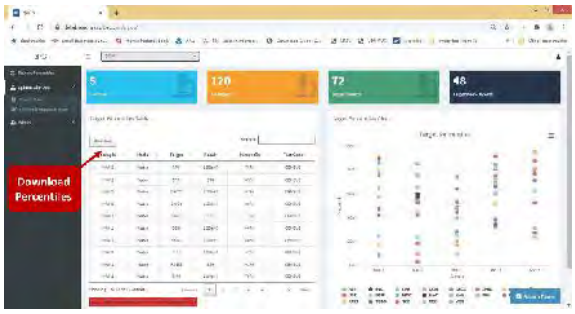
How to Retrieve and Use Percentile Ranks from the Microbial Insights Database

The MI Database

The Microbial Insights Database is the largest collection of field concentrations of key microorganisms and functional genes currently containing qPCR and QuantArray results for more than 100,000 unique groundwater, soil, and sediment samples from all 50 states and 33 countries worldwide.

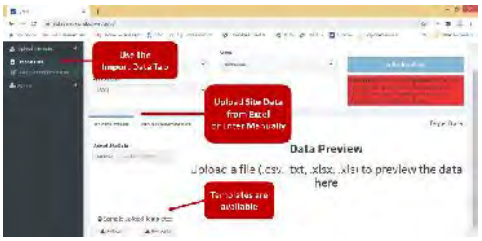
Is that low, medium or high?

In practice, biodegradation depends not just on the presence but the actual concentrations of the contaminant degrading microorganisms. The percentile ranks retrieved from the MI Database answer the question "Is that low, medium or high?" by comparing your results to those of the literally thousands of other environmental samples submitted to MI for analysis.



Retrieving Estimated Percentile Ranks

When you receive your report, you will be emailed a link enabling you to login to the Microbial Insights Database. Click the link and use the Upload Site Data Tab to enter basic information about the sample (e.g. contaminant concentrations) to aid in understanding the links between environmental conditions and microbial populations. Once the site data is entered, you will be able to retrieve the percentile ranks of your results based on those compiled in the MI database at no additional charge.



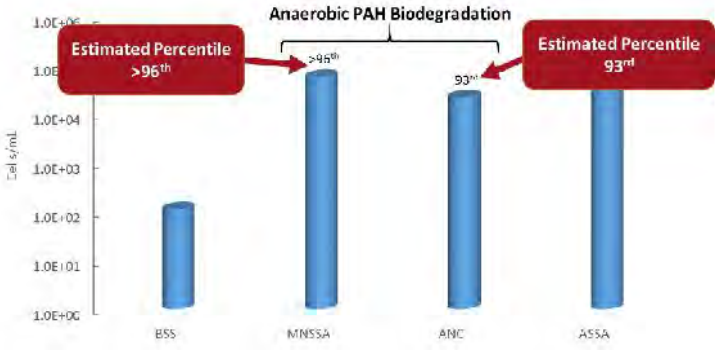
All site specific data is treated as confidential and uploading is easy.

You can even upload chemical and geochemical data from EDDs. Just save as a Tab Delimited text file.

Example - Using Estimated Percentile for MNA Assessment at an MGP Site

CENSUS® qPCR was performed to quantify anaerobic naphthalene carboxylase (ANC) and naphthyl-2-methylsuccinate synthase (MNSSA) to assess anaerobic biodegradation of naphthalene and methyl-naphthalene under existing site conditions.

- Not only were ANC and MNSSA genes detected, but these functional genes responsible for anaerobic biodegradation of PAHs were present at high concentrations based on the percentile ranks.
- Demonstrating high concentrations of ANC and MNSSA gave an additional line of evidence indicating growth substantial populations of anaerobic PAH degraders and suggested a greater probability that monitored natural attenuation (MNA) will be successful.



How to Use Estimated Percentile Ranks from the Microbial Insights Database

The MI Database and Client Portal

The Microbial Insights Database is the largest collection of field concentrations of key microorganisms and functional genes currently containing qPCR and QuantArray results for more than 100,000 unique groundwater, soil, and sediment samples from all 50 states and 33 countries worldwide. Driven by field samples, the database reflects the impacts of common contaminants, geochemical conditions, and site management practices on critical microbial populations.

With your report, you received a passcode enabling you to retrieve estimates of the percentile ranks of your results based on those compiled in the MI database at no additional charge. When accessing the database, you will be asked to provide background information about the sample (e.g. contaminant concentrations) to aid in understanding the links between environmental conditions and microbial populations. As with all client information provided to MI, site specific data will be treated as confidential.

Is that low, medium or high?

In practice, biodegradation depends not just on the presence but the actual concentrations of the contaminant degrading microorganisms. Simply put, qPCR and QuantArray results demonstrating high concentrations of target microorganisms or functional genes suggest in situ selection, enrichment and growth of those specific contaminant degraders and therefore a greater probability that monitored natural attenuation (MNA) or bioremediation will be successful.

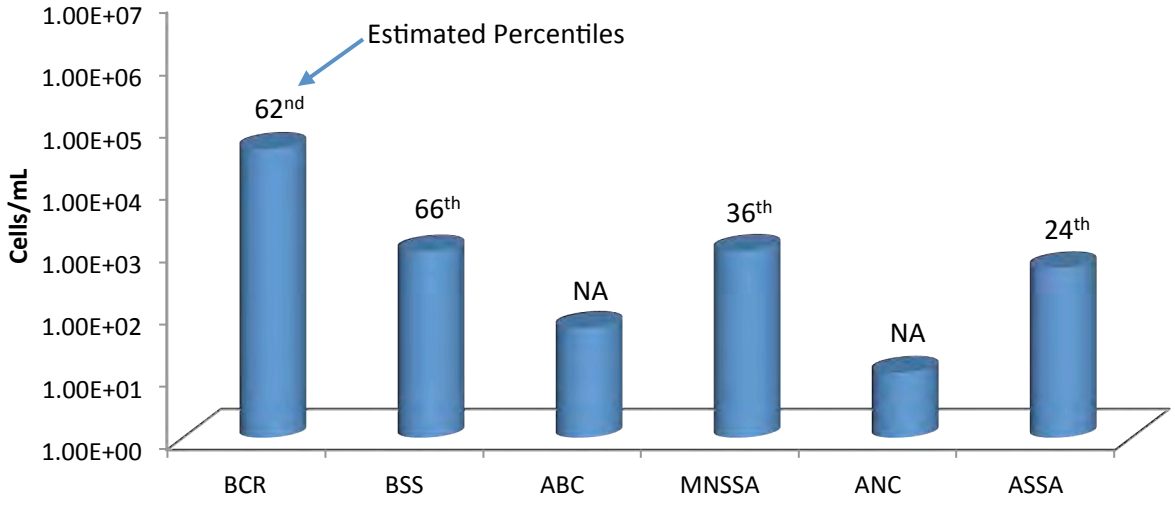
Is that a low, medium, or high concentration? The estimated percentile ranks retrieved from the MI Database answer that question by comparing your qPCR and QuantArray results to those of the literally thousands of other environmental samples submitted to MI for analysis over the last 20+ years.

Using the Estimated Percentile - Interpretation Examples

MNA Assessment – Petroleum Hydrocarbon Site:

Whenever possible, interpretation of qPCR and QuantArray results should include comparisons between samples obtained from background and impacted wells. The estimated percentile ranks however provide an additional avenue for comparison and evaluation of treatment options as shown below.

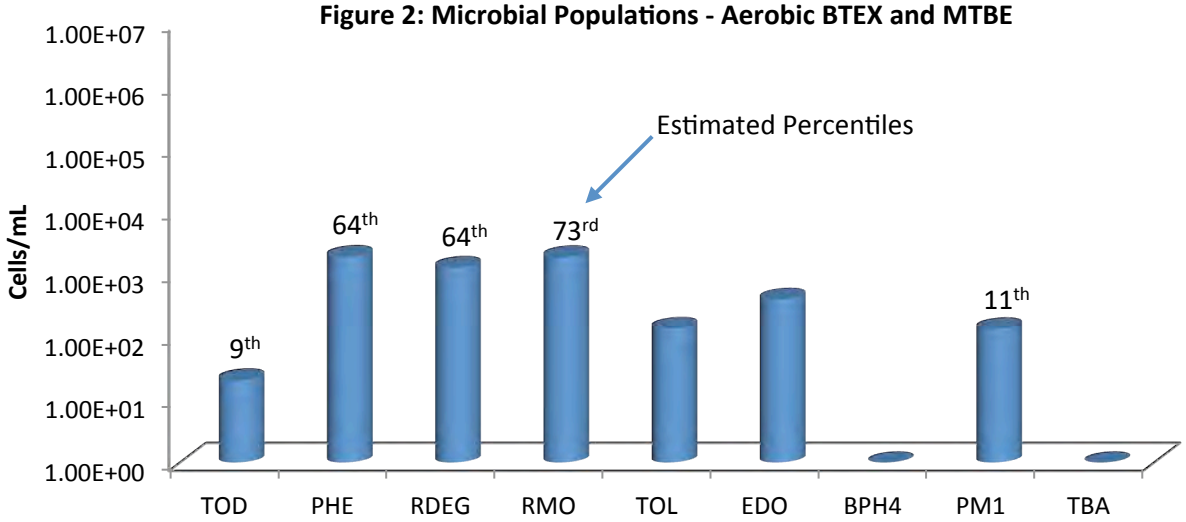
Figure 1: Microbial Populations - Anaerobic BTEX and PAHs



Anaerobic BTEX and PAH Biodegradation (Figure 1):

- With moderate concentrations of functional genes involved in anaerobic BTEX metabolism detected, the QuantArray-Petro® results were encouraging in terms of evaluating biodegradation potential under existing site conditions.
- More specifically, benzylsuccinate synthase (BSS) was detected on the order of nearly 10^3 cells/mL indicating the presence of a substantial population (66^{th} percentile) capable of anaerobic biodegradation of toluene and other alkyl substituted benzenes.
- Naphthyl-2-methylsuccinate synthase (MNSSA) and alkylsuccinate synthase (ASSA) genes were also detected indicating the potential for anaerobic biodegradation of 2-methylnaphthalene and normal alkanes.
- The concentration of MNSSA genes would be considered modest with an estimated percentile of 36^{th}.
- While the percentile rank for MNSSA would be "below average", a number of additional factors should be considered.
    - First, anaerobic hydrocarbon degraders are less prevalent than aerobic BTEX degraders and overall detection frequencies for many genes involved in anaerobic hydrocarbon biodegradation are less than 50%.
    - Therefore, the detection of genes like BSS, MNSSA, ASSA, anaerobic benzene carboxylase (ABC), and anaerobic naphthalene carboxylase (ANC) even at low concentrations is certainly noteworthy and inherently "better than average".
    - The estimated percentiles for all assays are based only on samples where the concentration of the target gene was greater than the practical quantitation limit (PQL).
    - For less commonly detected targets like many of the genes involved in anaerobic hydrocarbon biodegradation this is an especially important consideration.
    - Excluding samples where a gene target is below the PQL ensured that the median concentrations of less commonly detected targets would not be unduly biased low by the fact that the gene is not detected in most samples.
- Anaerobic benzene carboxylase (ABC) and naphthalene carboxylase (ANC) genes were also detected indicating the presence of bacterial populations capable of anaerobic biodegradation of benzene and naphthalene.
- For newly identified genes like ABC and ANC, estimated percentile ranks are not yet available due to the limited number of field samples that have been analyzed to date.
- However, like MNSSA and other genes involved in anaerobic hydrocarbon biodegradation, ABC and ANC detection frequencies are relatively low so the detection of these genes even at low concentrations should be considered when evaluating biodegradation potential under existing site conditions.

Figure 2: Microbial Populations - Aerobic BTEX and MTBE



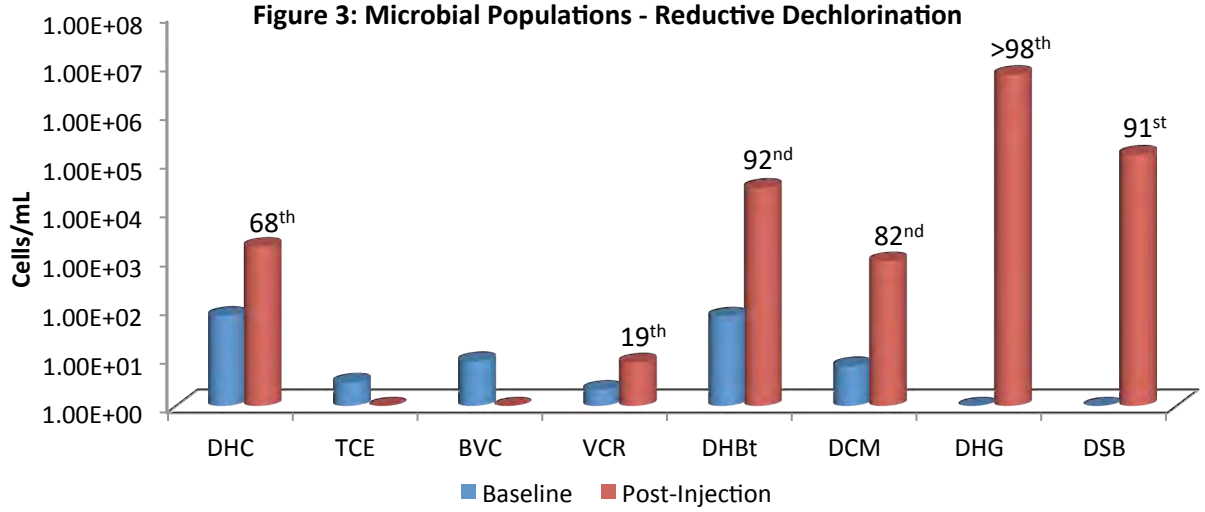
Aerobic BTEX and MTBE Biodegradation (Figure 2):

- With growing evidence that aromatic oxygenases function at low dissolved oxygen concentrations, aerobic BTEX biodegradation pathways should also be evaluated when considering MNA.
- Again, the QuantArray-Petro results were encouraging – genes encoding the first step in multiple pathways for aerobic BTEX biodegradation were detected indicating the presence of a diverse population of aerobic BTEX degraders.
- However, aerobic BTEX degraders are often considered ubiquitous. Therefore answering the question "Is that low, medium or high?" becomes especially important when evaluating aerobic BTEX biodegradation at petroleum hydrocarbon sites.
- In this case, the estimated percentile ranks of the concentrations of toluene/benzene monooxygenase (RMO and RDEG) and phenol hydroxylase (PHE) genes ranged from the 64th to 73rd percentile.
- In other words, the concentrations of RMO, RDEG, and PHE detected in this groundwater sample were greater than the concentrations detected in 64% to 73% of all other groundwater samples where these genes were analyzed and detected above the PQL.
- Aerobic BTEX degraders are common in the environment, but in this sample concentrations of toluene/benzene monooxygenase genes could be viewed as "better than average" when compared to the MI Database.

Biostimulation – Chlorinated Solvent Site:

Whenever possible, interpretation of qPCR and QuantArray results should include comparisons between baseline and post-injection monitoring events as shown below (Figure 3). The estimated percentile ranks however provide an additional avenue for comparison and evaluation of remedy performance.

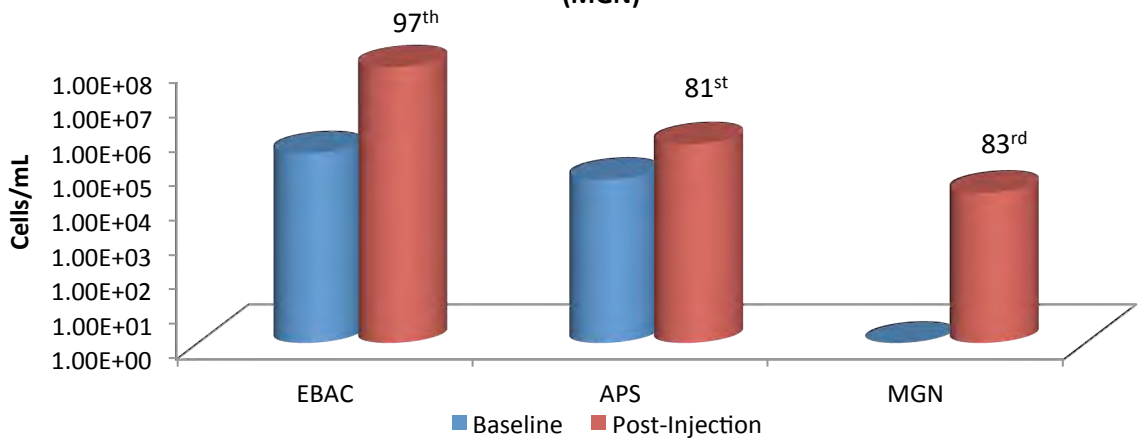
Figure 3: Microbial Populations - Reductive Dechlorination



- During the baseline groundwater sampling event, *Dehalococcoides* and vinyl chloride reductase genes were detected indicating the potential for complete reductive dechlorination of PCE and TCE to ethene.
- However, the *Dehalococcoides* concentration was well below the 10^4 cells/mL recommended by Lu et al. (2006) for generally effective rates of reductive dechlorination.
- Based on qPCR results as well as traditional groundwater monitoring, biostimulation with electron donor addition was selected as the site management plan.
- By the first monitoring event after injection, populations of halorespiring bacteria had increased substantially in response to electron donor addition.
    - *Dehalobacter* populations increased by more than two orders of magnitude to post-injection concentrations greater than 10^4 cells/mL (92^{nd} percentile).
    - *Dehalogenimonas* (10^6 cells/mL) and *Desulfitobacterium* (10^5 cells/mL) which had not been detected prior electron donor addition were present at concentrations greater than observed in over 90% of other groundwater samples where these halorespiring bacteria were detected.
- After injection, *Dehalococcoides* populations increased by more than an order of magnitude to a concentration of over 10^3 cells/mL (68^{th} percentile) demonstrating growth of this key group of halorespiring bacteria.
- Despite a substantial increase and a "better than average" concentration, the *Dehalococcoides* population was still below the 10^4 cells/mL threshold and vinyl chloride reductase gene copies were low (19^{th} percentile).
    - In terms of electron donors and acceptors, the metabolic capabilities of *Dehalococcoides* are rather specialized (hydrogen utilizing obligate halorespiring bacteria) so the median concentration is low. With a low median concentration across the database, a "better than average" *Dehalococcoides* concentration in a given sample may not exceed the 10^4 cells/mL threshold established for effective reductive dechlorination (Lu et al. 2006) and ethene production (Microbial Insights, unpublished data).

- In this case, the initial growth of *Dehalococcoides* was substantial but may have been somewhat hindered by competition with sulfate reducing bacteria (Figure 4 below).
    - The baseline population of sulfate reducing bacteria was moderate (10^4 cells/mL; 63rd percentile). Consistent with an observed decreased in dissolved sulfate concentrations, populations of sulfate reducing bacteria increased and were detected at a relatively high concentration (81st percentile) after electron donor addition.
    - After injection, methanogen populations also increased to a relatively high concentration (83rd percentile) suggesting generation of methanogenic conditions.
- With sulfate depletion and generation of highly anaerobic conditions more conducive to reductive dechlorination, *Dehalococcoides* populations may continue to increase and exceed the 10^4 *Dehalococcoides* cells/mL threshold in subsequent monitoring events.
- Overall, QuantArray analysis conclusively demonstrated that electron donor addition stimulated growth of halorespiring bacteria with the estimated percentiles retrieved from the MI Database providing the "low, medium or high" perspective to the observed changes in microbial populations.

Figure 4: Total Bacteria (EBAC), Sulfate Reducering Bacteria (APS) and Methanogens (MGN)



References

Lu, X., J.T. Wilson, and D.H. Kampbell. 2006. Relationship between *Dehalococcoides* DNA in ground water and rates of reductive dechlorination at field scale. *Water Research* 40 no. 16: 3131-3140.

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Client: James Guin
ALS Laboratory Group
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Houston, TX 77099

Phone:

Fax:

Identifier: 021VA **Date Rec:** 01/12/2024 **Report Date:** 01/19/2024

Client Project #: JVPCIBH.0001 **Client Project Name:** LHAAP/Site 16

Purchase Order #:

Test results provided for: CENSUS

Reviewed By:

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Results relate only to the items tested and the sample(s) as received by the laboratory.

MICROBIAL INSIGHTS, INC.

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CENSUS

Client: **ALS Laboratory Group**
Project: LHAAP/Site 16

MI Project Number: **021VA**
Date Received: 01/12/2024

Sample Information

Client Sample ID:		**16IW09_240110**	**16IW26_240110**	**16IW03_240110**	**16EW02_240111**	**16IW10_240111**
Sample Date:		01/10/2024	01/10/2024	01/10/2024	01/11/2024	01/11/2024
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst/Reviewer:		AP/SR	AP/SR	AP/SR	AP/SR	AP/SR
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	**4.60E+00 (J)**	**3.64E+05**	**6.86E+05**	**1.02E+04**	**3.60E+03**

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

MICROBIAL INSIGHTS, INC.

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CENSUS

Client: **ALS Laboratory Group**
Project: LHAAP/Site 16

MI Project Number: **021VA**
Date Received: 01/12/2024

Sample Information

Client Sample ID:	**16IW20_240111**
Sample Date:	01/11/2024
Units:	cells/mL
Analyst/Reviewer:	AP/SR

Dechlorinating Bacteria

Dehalococcoides	*DHC*	**6.11E+03**

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

Quality Assurance/Quality Control Data

Samples Received **1/12/2024**

Component	Date Prepared	Date Analyzed	Arrival Temperature	Positive Control	Extraction Blank	Negative Control
DHC	01/12/2024	01/19/2024	0 °C	101%	non-detect	non-detect

bhate ENVIRONMENTAL CONSTRUCTION GROUP

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

Page: _____ of _____

Project/Phase No: JVPCIBH.0001

COC Number(1): _____

LIMS Number: _____

Facility/Base I.D.: LHAAP / **BILL to PCI**

Project/Site Name: LHAAP / Site 16

Client Name:

Collected by: Scott Beesinger

Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Analysis Requested (5): Number of containers	DHC										Quality Assurance Samples (6): Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
1 16IW09_240110	10 JAN 2024	0900	-	N		WG	1	X													
2 16IW26_240110	10 JAN 2024	0950	-	N		WG	1	X													
3 16IW03_240110	10 JAN 2024	1245	-	N		WG	1	X													
4 16EW02_240111	11 JAN 2024	0805		N		WG	1	X													
5 16IW10_240111	11 JAN 2024	0705		N		WG	1	X													
6 16IW20_240111	11 JAN 2024	0905	-	N		WG	1	X													
			-																		
			-																		
			-																		
			-																		
			-																		

COMMENTS: STANDARD TAT

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Scott Beesinger	1/11/24	1430	1. Shawna Thomas	01/12/24	
2.			2.		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: _____ Shipped No.:

Method of Shipment: _____

_____ Fed Ex _____ Airbill Number:

_____ Analytical Lab: ALS 10450 Stanciff Rd. Suite 210 Houston, TX 77099 (281) 530-5656

ATTN _____ Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

HS24010538-MSVOA-SW8260

ALS WO# HS24010538

right solutions.
right partner.

Form 1

Organic Analysis Data Sheet

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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	LHAAP Site 16	**HS24010538**	

Volatiles by EPA Volatiles Organics by Method 8260C

16WW58_240110	Collected	Received	Matrix	Basis
HS24010538-01	01/10/24 07:05	01/11/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	50	U	15	50	50	50	01/12/24 19:21	VOA9_456454	U011224.D
1,1-Dichloroethene	ug/L	50	U	10	50	50	50	01/12/24 19:21	VOA9_456454	U011224.D
1,2-Dichloroethane	ug/L	50	U	10	50	50	50	01/12/24 19:21	VOA9_456454	U011224.D
cis-1,2-Dichloroethene	ug/L	250		10	50	50	50	01/12/24 19:21	VOA9_456454	U011224.D
Methylene chloride	ug/L	100	U	20	100	100	50	01/12/24 19:21	VOA9_456454	U011224.D
Trichloroethene	ug/L	4,500		10	50	50	50	01/12/24 19:21	VOA9_456454	U011224.D
Vinyl chloride	ug/L	50	U	10	50	50	50	01/12/24 19:21	VOA9_456454	U011224.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010538

Volatiles by EPA Volatiles Organics by Method 8260C

16WW57_240110	Collected	Received	Matrix	Basis
HS24010538-02	01/10/24 08:05	01/11/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	5.0	U	1.5	5.0	5.0	5	01/12/24 18:59	VOA9_456454	U011223.D
1,1-Dichloroethene	ug/L	5.0	U	1.0	5.0	5.0	5	01/12/24 18:59	VOA9_456454	U011223.D
1,2-Dichloroethane	ug/L	5.0	U	1.0	5.0	5.0	5	01/12/24 18:59	VOA9_456454	U011223.D
cis-1,2-Dichloroethene	ug/L	6.2		1.0	5.0	5.0	5	01/12/24 18:59	VOA9_456454	U011223.D
Methylene chloride	ug/L	10	U	2.0	10	10	5	01/12/24 18:59	VOA9_456454	U011223.D
Trichloroethene	ug/L	140		1.0	5.0	5.0	5	01/12/24 18:59	VOA9_456454	U011223.D
Vinyl chloride	ug/L	5.0	U	1.0	5.0	5.0	5	01/12/24 18:59	VOA9_456454	U011223.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24010538**	

Volatiles by EPA Volatiles Organics by Method 8260C

16IW09_240110	Collected	Received	Matrix	Basis
HS24010538-03	01/10/24 09:00	01/11/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/12/24 16:23	VOA9_456454	U011216.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 16:23	VOA9_456454	U011216.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 16:23	VOA9_456454	U011216.D
cis-1,2-Dichloroethene	ug/L	1.4		0.20	1.0	1.0	1	01/12/24 16:23	VOA9_456454	U011216.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/12/24 16:23	VOA9_456454	U011216.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 16:23	VOA9_456454	U011216.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 16:23	VOA9_456454	U011216.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24010538**	

Volatiles by EPA Volatiles Organics by Method 8260C

16IW26_240110	Collected	Received	Matrix	Basis
HS24010538-04	01/10/24 09:50	01/11/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/12/24 18:37	VOA9_456454	U011222.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 18:37	VOA9_456454	U011222.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 18:37	VOA9_456454	U011222.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 18:37	VOA9_456454	U011222.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/12/24 18:37	VOA9_456454	U011222.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 18:37	VOA9_456454	U011222.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 18:37	VOA9_456454	U011222.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24010538**	

Volatiles by EPA Volatiles Organics by Method 8260C

16WW32_240110	Collected	Received	Matrix	Basis
HS24010538-05	01/10/24 10:40	01/11/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/12/24 16:46	VOA9_456454	U011217.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 16:46	VOA9_456454	U011217.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 16:46	VOA9_456454	U011217.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 16:46	VOA9_456454	U011217.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/12/24 16:46	VOA9_456454	U011217.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 16:46	VOA9_456454	U011217.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 16:46	VOA9_456454	U011217.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24010538**	

Volatiles by EPA Volatiles Organics by Method 8260C

16WW31_240110	Collected	Received	Matrix	Basis
HS24010538-06	01/10/24 11:20	01/11/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/12/24 17:08	VOA9_456454	U011218.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 17:08	VOA9_456454	U011218.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 17:08	VOA9_456454	U011218.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 17:08	VOA9_456454	U011218.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/12/24 17:08	VOA9_456454	U011218.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 17:08	VOA9_456454	U011218.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 17:08	VOA9_456454	U011218.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24010538**	

Volatiles by EPA Volatiles Organics by Method 8260C

16WW46_240110	Collected	Received	Matrix	Basis
HS24010538-07	01/10/24 12:00	01/11/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/12/24 17:30	VOA9_456454	U011219.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 17:30	VOA9_456454	U011219.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 17:30	VOA9_456454	U011219.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 17:30	VOA9_456454	U011219.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/12/24 17:30	VOA9_456454	U011219.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 17:30	VOA9_456454	U011219.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 17:30	VOA9_456454	U011219.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24010538**	

Volatiles by EPA Volatiles Organics by Method 8260C

16IW03_240110	Collected	Received	Matrix	Basis
HS24010538-08	01/10/24 12:45	01/11/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	50	U	15	50	50	50	01/17/24 13:10	VOA9_456549	U011717.D
1,1-Dichloroethene	ug/L	50	U	10	50	50	50	01/17/24 13:10	VOA9_456549	U011717.D
1,2-Dichloroethane	ug/L	50	U	10	50	50	50	01/17/24 13:10	VOA9_456549	U011717.D
cis-1,2-Dichloroethene	ug/L	1,500		10	50	50	50	01/17/24 13:10	VOA9_456549	U011717.D
Methylene chloride	ug/L	100	U	20	100	100	50	01/17/24 13:10	VOA9_456549	U011717.D
Trichloroethene	ug/L	890		10	50	50	50	01/17/24 13:10	VOA9_456549	U011717.D
Vinyl chloride	ug/L	390		10	50	50	50	01/17/24 13:10	VOA9_456549	U011717.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24010538**	

Volatiles by EPA Volatiles Organics by Method 8260C

16IW03_240110-FD	Collected	Received	Matrix	Basis
HS24010538-09	01/10/24 12:45	01/11/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	50	U	15	50	50	50	01/12/24 20:28	VOA9_456454	U011227.D
1,1-Dichloroethene	ug/L	50	U	10	50	50	50	01/12/24 20:28	VOA9_456454	U011227.D
1,2-Dichloroethane	ug/L	50	U	10	50	50	50	01/12/24 20:28	VOA9_456454	U011227.D
cis-1,2-Dichloroethene	ug/L	3,200		10	50	50	50	01/12/24 20:28	VOA9_456454	U011227.D
Methylene chloride	ug/L	100	U	20	100	100	50	01/12/24 20:28	VOA9_456454	U011227.D
Trichloroethene	ug/L	670		10	50	50	50	01/12/24 20:28	VOA9_456454	U011227.D
Vinyl chloride	ug/L	530		10	50	50	50	01/12/24 20:28	VOA9_456454	U011227.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010538

Volatiles by EPA Volatiles Organics by Method 8260C

Trip Blank_240110

	Collected	Received	Matrix	Basis
HS24010538-10	01/10/24 00:00	01/11/24 10:00	Water	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/12/24 16:01	VOA9_456454	U011215.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 16:01	VOA9_456454	U011215.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 16:01	VOA9_456454	U011215.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 16:01	VOA9_456454	U011215.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/12/24 16:01	VOA9_456454	U011215.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 16:01	VOA9_456454	U011215.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 16:01	VOA9_456454	U011215.D

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Form 2

System Monitoring Compound Recovery

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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 LHAAP Site 16

Workorder **HS24010538**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456454

CCB

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	CCB	Aqueous	01/12/24 11:56	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011204.D	39.69	50	79.4		80-120
4-Bromofluorobenzene	U011204.D	49.19	50	98.4		80-120
Dibromofluoromethane	U011204.D	42.62	50	85.2		80-120
Toluene-d8	U011204.D	53.08	50	106		80-120

CCV

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	CCV U011203.D	Aqueous	01/12/24 11:34	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011203.D	50.98	50	102		80-120
4-Bromofluorobenzene	U011203.D	51.28	50	103		80-120
Dibromofluoromethane	U011203.D	54.65	50	109		80-120
Toluene-d8	U011203.D	51.51	50	103		80-120

BatchQC

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010519-09MS	Aqueous	01/12/24 14:32	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011211.D	48.3	50	96.6		81-118
4-Bromofluorobenzene	U011211.D	51.02	50	102		85-114
Dibromofluoromethane	U011211.D	51.72	50	103		80-119
Toluene-d8	U011211.D	54.14	50	108		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24010538**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456454

BatchQC

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010519-09MSD	Aqueous	01/12/24 14:54	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011212.D	49.01	50	98.0		81-118
4-Bromofluorobenzene	U011212.D	51.16	50	102		85-114
Dibromofluoromethane	U011212.D	52.56	50	105		80-119
Toluene-d8	U011212.D	53.09	50	106		89-112

16WW58_240110

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010538-01	Groundwater	01/12/24 19:21	%REC	50
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011224.D	2400	2500	94.7		81-118
4-Bromofluorobenzene	U011224.D	2200	2500	88.6		85-114
Dibromofluoromethane	U011224.D	2500	2500	102		80-119
Toluene-d8	U011224.D	2500	2500	99.4		89-112

16WW57_240110

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010538-02	Groundwater	01/12/24 18:59	%REC	5
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011223.D	230	250	92.7		81-118
4-Bromofluorobenzene	U011223.D	220	250	86.5		85-114
Dibromofluoromethane	U011223.D	250	250	98.2		80-119
Toluene-d8	U011223.D	240	250	95.8		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24010538**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456454

16IW09_240110

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010538-03	Groundwater	01/12/24 16:23	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011216.D	45	50	89.7		81-118
4-Bromofluorobenzene	U011216.D	43	50	86.9		85-114
Dibromofluoromethane	U011216.D	48	50	95.6		80-119
Toluene-d8	U011216.D	48	50	96.8		89-112

16IW26_240110

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010538-04	Groundwater	01/12/24 18:37	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011222.D	52	50	105		81-118
4-Bromofluorobenzene	U011222.D	45	50	89.5		85-114
Dibromofluoromethane	U011222.D	54	50	108		80-119
Toluene-d8	U011222.D	47	50	94.1		89-112

16WW32_240110

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010538-05	Groundwater	01/12/24 16:46	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011217.D	46	50	92.1		81-118
4-Bromofluorobenzene	U011217.D	44	50	88.7		85-114
Dibromofluoromethane	U011217.D	49	50	97.6		80-119
Toluene-d8	U011217.D	50	50	100		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24010538**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456454

16WW31_240110

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010538-06	Groundwater	01/12/24 17:08	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011218.D	45	50	90.4		81-118
4-Bromofluorobenzene	U011218.D	45	50	89.1		85-114
Dibromofluoromethane	U011218.D	49	50	97.2		80-119
Toluene-d8	U011218.D	49	50	98.3		89-112

16WW46_240110

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010538-07	Groundwater	01/12/24 17:30	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011219.D	47	50	94.4		81-118
4-Bromofluorobenzene	U011219.D	46	50	91.4		85-114
Dibromofluoromethane	U011219.D	50	50	99.4		80-119
Toluene-d8	U011219.D	50	50	100		89-112

16IW03_240110-FD

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010538-09	Groundwater	01/12/24 20:28	%REC	50
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011227.D	2200	2500	89.7		81-118
4-Bromofluorobenzene	U011227.D	2200	2500	86.1		85-114
Dibromofluoromethane	U011227.D	2400	2500	96.2		80-119
Toluene-d8	U011227.D	2400	2500	95.2		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010538

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456454

Trip Blank_240110

Matrix	Analysis Date	Conc Units	Dilution
Water	01/12/24 16:01	%REC	1

Lab Sample ID HS24010538-10

Instrument ID VOA9

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011215.D	48	50	96.4		81-118
4-Bromofluorobenzene	U011215.D	47	50	94.3		85-114
Dibromofluoromethane	U011215.D	53	50	106		80-119
Toluene-d8	U011215.D	53	50	107		89-112

VBLKW-240112

Matrix	Analysis Date	Conc Units	Dilution
Aqueous	01/12/24 13:03	%REC	1

Lab Sample ID VBLKW-240112

Instrument ID VOA9

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011207.D	47.15	50	94.3		81-118
4-Bromofluorobenzene	U011207.D	47.21	50	94.4		85-114
Dibromofluoromethane	U011207.D	50.75	50	101		80-119
Toluene-d8	U011207.D	51.98	50	104		89-112

VLCSW-240112

Matrix	Analysis Date	Conc Units	Dilution
Aqueous	01/12/24 12:18	%REC	1

Lab Sample ID VLCSW-240112

Instrument ID VOA9

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011205.D	48.36	50	96.7		81-118
4-Bromofluorobenzene	U011205.D	50.4	50	101		85-114
Dibromofluoromethane	U011205.D	51.68	50	103		80-119
Toluene-d8	U011205.D	51.84	50	104		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24010538**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456549

CCV

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	CCV U011702.D	Aqueous	01/17/24 07:36	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011702.D	48.08	50	96.2		80-120
4-Bromofluorobenzene	U011702.D	51.95	50	104		80-120
Dibromofluoromethane	U011702.D	54.17	50	108		80-120
Toluene-d8	U011702.D	53.62	50	107		80-120

16IW03_240110

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010538-08	Groundwater	01/17/24 13:10	%REC	50
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011717.D	2500	2500	100		81-118
4-Bromofluorobenzene	U011717.D	2600	2500	104		85-114
Dibromofluoromethane	U011717.D	2800	2500	112		80-119
Toluene-d8	U011717.D	2900	2500	114		89-112

BatchQC

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010611-01MS	Aqueous	01/17/24 12:03	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011714.D	43.08	50	86.2		81-118
4-Bromofluorobenzene	U011714.D	47.87	50	95.7		85-114
Dibromofluoromethane	U011714.D	47.92	50	95.8		80-119
Toluene-d8	U011714.D	49.37	50	98.7		89-112

Form 2 - System Monitoring Compound Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Workorder: HS24010538

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID: VOA9-456549

BatchQC

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010611-01MSD	Aqueous	01/17/24 12:25	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011715.D	42.81	50	85.6		81-118
4-Bromofluorobenzene	U011715.D	47.28	50	94.6		85-114
Dibromofluoromethane	U011715.D	48.67	50	97.3		80-119
Toluene-d8	U011715.D	49.23	50	98.5		89-112

VBLKW-240117

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	VBLKW-240117	Aqueous	01/17/24 08:42	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011705.D	41.22	50	82.4		81-118
4-Bromofluorobenzene	U011705.D	48.52	50	97.0		85-114
Dibromofluoromethane	U011705.D	42.43	50	84.9		80-119
Toluene-d8	U011705.D	52.95	50	106		89-112

VLCSW-240117

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	VLCSW-240117	Aqueous	01/17/24 07:58	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011703.D	47.69	50	95.4		81-118
4-Bromofluorobenzene	U011703.D	51.99	50	104		85-114
Dibromofluoromethane	U011703.D	52.69	50	105		80-119
Toluene-d8	U011703.D	54.68	50	109		89-112

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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 LHAAP Site 16

Workorder HS24010538

SAMPLENUM HS24010519-09MS

Volatiles by EPA Volatiles Organics by Method 8260C

BatchQC (HS24010519-09)				HS24010519-09MS				HS24010519-09MSD						
Spike Matrix Aqueous	Result Units ug/L			Run Date 01/12/24				Run Date 01/12/24						
Instrument ID VOA9				Run Time 14:32				Run Time 14:54						
				Data File U011211.D				Data File U011212.D						
Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
1,1,2-Trichloroethane	80-119	1	0	16.9274	20	85		18.0449	20	90		20	6.39	
1,1-Dichloroethene	71-131	1	0	19.6951	20	98		20.2512	20	101		20	2.78	
1,2-Dichloroethane	73-128	1	0	16.5505	20	83		16.9244	20	85		20	2.23	
cis-1,2-Dichloroethene	78-123	1	0	16.4266	20	82		16.7903	20	84		20	2.19	
Methylene chloride	74-124	1	0	18.7044	20	94		19.2680	20	96		20	2.97	
Trichloroethene	79-123	1	0	17.8629	20	89		18.3050	20	92		20	2.44	
Vinyl chloride	58-137	1	0	17.5376	20	88		17.5617	20	88		20	0.137	

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: LHAAP Site 16

Workorder: HS24010538

Volatiles by EPA Volatiles Organics by Method 8260C

SAMPLENUM: HS24010611-01MS

BatchQC (HS24010611-01)				HS24010611-01MS				HS24010611-01MSD						
Spike Matrix: Aqueous	Result Units: ug/L			Run Date: 01/17/24				Run Date: 01/17/24						
Instrument ID: VOA9				Run Time: 12:03				Run Time: 12:25						
				Data File: U011714.D				Data File: U011715.D						
Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
1,1,2-Trichloroethane	80-119	1	0	21.3272	20	107		20.7434	20	104		20	2.78	
1,1-Dichloroethene	71-131	1	0	23.2042	20	116		23.3883	20	117		20	0.79	
1,2-Dichloroethane	73-128	1	0	18.4041	20	92		18.5602	20	93		20	0.845	
cis-1,2-Dichloroethene	78-123	1	7.33	26.8738	20	98		26.3123	20	95		20	2.11	
Methylene chloride	74-124	1	0	22.7355	20	114		22.7317	20	114		20	0.0165	
Trichloroethene	79-123	1	0.9797	22.3606	20	107		22.3873	20	107		20	0.119	
Vinyl chloride	58-137	1	0	21.8309	20	109		22.0395	20	110		20	0.951	

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 Volatiles Organics by Method 8260C

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010538

SAMPLENUM VLCSW-240112

Volatiles by EPA Volatiles Organics by Method 8260C

VOA9_456454			VLCSW-240112				
Spike Matrix Aqueous	Result Units ug/L		Run Date 01/12/24 Run Time 12:18				
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q		
1,1,2-Trichloroethane	80-119	20	20.08	100			
1,1-Dichloroethene	71-131	20	21.49	107			
1,2-Dichloroethane	73-128	20	18.35	91.7			
cis-1,2-Dichloroethene	78-123	20	18.3	91.5			
Methylene chloride	74-124	20	21.45	107			
Trichloroethene	79-123	20	19.36	96.8			
Vinyl chloride	58-137	20	19.78	98.9			

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010538

SAMPLENUM VLCSW-240117

Volatiles by EPA Volatiles Organics by Method 8260C

VOA9_456549			VLCSW-240117				
Spike Matrix Aqueous	Result Units ug/L		Run Date 01/17/24 Run Time 07:58				
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q		
1,1,2-Trichloroethane	80-119	20	20.02	100			
1,1-Dichloroethene	71-131	20	21.78	109			
1,2-Dichloroethane	73-128	20	17.95	89.7			
cis-1,2-Dichloroethene	78-123	20	19.05	95.2			
Methylene chloride	74-124	20	21.8	109			
Trichloroethene	79-123	20	20.37	102			
Vinyl chloride	58-137	20	17.22	86.1			

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Form 4

Method Blank Summary

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010538

Volatiles by EPA Volatiles Organics by Method 8260C

METHOD BLANK	Matrix	Analysis Date	Analysis Batch	Inst ID
VBLKW-240112	Aqueous	01/12/24 13:03	R456454	VOA9

Client Sample ID	Lab Sample ID	Type	Analysis Date	Analysis Batch	Inst ID	FileID
VLCSW-240112	VLCSW-240112	LCS	01/12/24 12:18	R456454	VOA9	U011205.D
BatchQC	HS24010519-09MS	MS	01/12/24 14:32	R456454	VOA9	U011211.D
BatchQC	HS24010519-09MSD	MSD	01/12/24 14:54	R456454	VOA9	U011212.D
Trip Blank_240110	HS24010538-10	SAMP	01/12/24 16:01	R456454	VOA9	U011215.D
16IW09_240110	HS24010538-03	SAMP	01/12/24 16:23	R456454	VOA9	U011216.D
16WW32_240110	HS24010538-05	SAMP	01/12/24 16:46	R456454	VOA9	U011217.D
16WW31_240110	HS24010538-06	SAMP	01/12/24 17:08	R456454	VOA9	U011218.D
16WW46_240110	HS24010538-07	SAMP	01/12/24 17:30	R456454	VOA9	U011219.D
16IW26_240110	HS24010538-04	SAMP	01/12/24 18:37	R456454	VOA9	U011222.D
16WW57_240110	HS24010538-02	SAMP	01/12/24 18:59	R456454	VOA9	U011223.D
16WW58_240110	HS24010538-01	SAMP	01/12/24 19:21	R456454	VOA9	U011224.D
16IW03_240110-FD	HS24010538-09	SAMP	01/12/24 20:28	R456454	VOA9	U011227.D

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010538

Volatiles by EPA Volatiles Organics by Method 8260C

METHOD BLANK	Matrix	Analysis Date	Analysis Batch	Inst ID
VBLKW-240117	Aqueous	01/17/24 08:42	R456549	VOA9

Client Sample ID	Lab Sample ID	Type	Analysis Date	Analysis Batch	Inst ID	FileID
VLCSW-240117	VLCSW-240117	LCS	01/17/24 07:58	R456549	VOA9	U011703.D
BatchQC	HS24010611-01MS	MS	01/17/24 12:03	R456549	VOA9	U011714.D
BatchQC	HS24010611-01MSD	MSD	01/17/24 12:25	R456549	VOA9	U011715.D
16IW03_240110	HS24010538-08	SAMP	01/17/24 13:10	R456549	VOA9	U011717.D

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Form 5

Instrument Performance Check

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: V9

Lab File ID: U120601 DFTPP Injection Date: 12/06/23

Instrument ID: VOA9 DFTPP Injection Time: 1114

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.3
75	30.0 - 60.0% of mass 95	48.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	88.4
175	5.0 - 9.0% of mass 174	7.4 (8.3)1
176	95.0 - 101.0% of mass 174	87.8 (99.3)1
177	5.0 - 9.0% of mass 176	5.6 (6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD000.25	VSTD000.25	U120602	12/06/23	1136
02	VSTD000.5	VSTD000.5	U120603	12/06/23	1158
03	VSTD001	VSTD001	U120604	12/06/23	1243
04	VSTD002	VSTD002	U120605	12/06/23	1305
05	VSTD005	VSTD005	U120606	12/06/23	1327
06	VSTD020	VSTD020	U120607	12/06/23	1349
07	VSTD050	VSTD050	U120608	12/06/23	1411
08	VSTD100	VSTD100	U120609	12/06/23	1434
09	VSTD150	VSTD150	U120610	12/06/23	1456
10	VSTD200	VSTD200	U120611	12/06/23	1518
11	ICV	ICV	U120614	12/06/23	1625
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Form 5 - Instrument Performance Check

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24010538**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456454

Tune File U011201.D 01/12/24 1/12/2024

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	15.5 (15.5)
75	30.0 - 60.0% of mass 95	46.6 (46.6)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.8 (6.78)
173	Less than 2.0% of mass 174	0 (0) 1
174	greater than 50.0% of mass 95	99.4 (99.4) 1
175	5.0 - 9.0% of mass 174	8.5 (8.56) 1
176	> 95% but < 101% of mass 174	95 (95.5) 1
177	5.0 - 9.0% of mass 176	5.8 (6.13) 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	1/12/2024	U011203	CCV
2	CCB	CCB	1/12/2024	U011204	CCB
3	VLCSW-	LCS	1/12/2024	U011205	VLCSW-240112
4	VBLKW-	MBLK	1/12/2024	U011207	VBLKW-240112
5	HS24010519-	MS	1/12/2024	U011211	ZZZZZZMS
6	HS24010519-	MSD	1/12/2024	U011212	ZZZZZZMSD
7	HS24010538-	SAMP	1/12/2024	U011215	Trip Blank_240110
8	HS24010538-	SAMP	1/12/2024	U011216	16IW09_240110
9	HS24010538-	SAMP	1/12/2024	U011217	16WW32_240110
10	HS24010538-	SAMP	1/12/2024	U011218	16WW31_240110
11	HS24010538-	SAMP	1/12/2024	U011219	16WW46_240110
12	HS24010538-	SAMP	1/12/2024	U011222	16IW26_240110
13	HS24010538-	SAMP	1/12/2024	U011223	16WW57_240110
14	HS24010538-	SAMP	1/12/2024	U011224	16WW58_240110
15	HS24010538-	SAMP	1/12/2024	U011227	16IW03_240110-FD
16	CCV-END	CCV_EN	1/12/2024	U011230	CCV-END

Form 5 - Instrument Performance Check

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24010538**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456549

Tune File U011701.D 01/17/24 1/17/2024

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	17.1 (17.1)
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	7.1 (7.06)
173	Less than 2.0% of mass 174	0 (0) 1
174	greater than 50.0% of mass 95	92.1 (92.1) 1
175	5.0 - 9.0% of mass 174	8.2 (8.9) 1
176	> 95% but < 101% of mass 174	89.8 (97.5) 1
177	5.0 - 9.0% of mass 176	6 (6.66) 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	1/17/2024	U011702	CCV
2	VLCSW-	LCS	1/17/2024	U011703	VLCSW-240117
3	VBLKW-	MBLK	1/17/2024	U011705	VBLKW-240117
4	HS24010611-	MS	1/17/2024	U011714	ZZZZZZMS
5	HS24010611-	MSD	1/17/2024	U011715	ZZZZZZMSD
6	HS24010538-	SAMP	1/17/2024	U011717	16IW03_240110
7	CCV-END	CCV_EN	1/17/2024	U011728	CCV-END

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Form 6

Initial Calibration Data

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Report Date : 14-Dec-2023 15:02 Page 1

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Calibration File Names:
Level 1: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120602.D
Level 2: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603A.D
Level 3: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Level 4: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Level 5: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120606.D
Level 6: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120607.D
Level 7: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D
Level 8: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120609.D
Level 9: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120610.D
Level 10: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120611.D

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
2 Dichlorodifluoromethane	+++++ / 137759	1356 / 297342	2370 / 450623	5944 / 628396	11260	61984	LINR	0.01736	0.41016		0.99952
3 Chloromethane	+++++ / 0.54210	0.60765 / 0.55111	0.67529 / 0.55358	0.58774 / 0.58002	0.51372	0.55086	AVRG		0.57356		8.21079
4 Propionitrile	+++++ / 0.08620	0.08042 / 0.08206	0.08383 / 0.08100	0.08835 / 0.08011	0.08153	0.08261	AVRG		0.08290		3.34979

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
5 Vinyl Chloride	+++++	0.55587	0.61723	0.56266	0.46518	0.53420					
	0.52469	0.55584	0.55083	0.56486			AVRG		0.54793		7.36189
6 Bromomethane	+++++	1430	3158	6114	12339	41799					
	101286	220567	359673	+++++			QUAD	-0.01874	3.83540	-0.74314	0.99990
7 Chloroethane	+++++	0.35816	0.41332	0.39749	0.34723	0.36477					
	0.35630	0.35791	0.36028	0.36484			AVRG		0.36892		5.87872
8 Trichlorofluoromethane	+++++	0.63268	0.75900	0.78293	0.59845	0.71196					
	0.64859	0.70858	0.69884	0.70980			AVRG		0.69454		8.50131
9 Acrolein	+++++	0.03144	0.03185	0.02874	0.03295	0.03051					
	0.02630	0.02379	0.02495	0.02593			AVRG		0.02849		11.76525
10 Acetone	+++++	3182	5741	7963	15039	64015					
	141600	236750	361348	496605			LINR	-0.12178	0.16045		0.99800
11 1,1-Dichloroethene	+++++	0.41876	0.43897	0.39233	0.32202	0.38924					
	0.36693	0.37803	0.37669	0.38779			AVRG		0.38564		8.47183

Report Date : 14-Dec-2023 15:02 Page 3

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
12 Isobutyl Alcohol	+++++	0.06025	0.09256	0.07598	0.06825	0.07045					
	0.07489	0.07672	0.07767	0.07812			AVRG		0.07499		11.67336
13 Acetonitrile	+++++	0.05343	0.05964	0.05843	0.04799	0.05018					
	0.05492	0.05526	0.05365	0.05081			AVRG		0.05381		7.04201
14 Allyl Chloride	+++++	1.37916	1.14075	1.27746	1.18123	1.17505					
	1.24952	1.23822	1.22682	1.19586			AVRG		1.22934		5.71471
15 Iodomethane	+++++	1035	2707	6285	19119	127779					
	363885	780690	+++++	+++++			QUAD	0.04619	2.10790	-0.11445	0.99961
16 Acrylonitrile	+++++	0.21421	0.19581	0.20958	0.18176	0.18548					
	0.19652	0.19516	0.19399	0.19267			AVRG		0.19613		5.24118
17 Methylene Chloride	+++++	2348	5310	9102	16803	72366					
	178723	355722	541571	738924			LINR	-0.00530	0.48410		0.99998
18 Methyl tert-butyl ether	+++++	1.40135	1.40371	1.49933	1.37308	1.28423					
	1.37244	1.36043	1.36592	1.37596			AVRG		1.38183		4.05374

Report Date : 14-Dec-2023 15:02 Page 4

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
19 Carbon Disulfide	+++++	1.20122	1.11116	1.15935	0.92147	1.13379					
	1.13229	1.18462	1.18369	1.19921			AVRG		1.13631		7.62721
20 trans-1,2-Dichloroethene	+++++	0.55417	0.48054	0.47607	0.38501	0.44304					
	0.44920	0.45332	0.45240	0.45533			AVRG		0.46101		9.60667
21 Vinyl Acetate	+++++	1.25328	1.34805	1.39014	1.24374	1.35438					
	1.47594	1.52209	1.49580	1.46306			AVRG		1.39405		7.36501
22 1,1-Dichloroethane	+++++	1.06054	1.01956	0.93556	0.78304	0.95745					
	0.84206	0.96296	0.95773	0.94403			AVRG		0.94033		8.91915
23 Chloroprene	+++++	0.21279	0.20645	0.15987	0.13265	0.16426					
	0.15437	0.16624	0.16487	0.17350			AVRG		0.17056		14.63520
24 2-Butanone	+++++	0.29856	0.26092	0.23769	0.22713	0.24239					
	0.24034	0.23130	0.23227	0.23375			AVRG		0.24493		9.12891
25 Methacrylonitrile	+++++	0.37978	0.37485	0.30519	0.37643	0.31505					
	0.36911	0.37184	0.36480	0.35604			AVRG		0.35701		7.72693

Report Date : 14-Dec-2023 15:02 Page 5

ALS Laboratory Group

INITIAL CALIBRATION DATA

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End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
26 2,2-Dichloropropane	+++++ / 0.63940	0.75017 / 0.67045	0.70489 / 0.67783	0.65761 / 0.67647	0.53723	0.63563	AVRG		0.66108		8.77671
27 cis-1,2-Dichloroethene	+++++ / 0.60755	0.68190 / 0.59702	0.71757 / 0.58954	0.62535 / 0.58574	0.54538	0.60802	AVRG		0.61756		8.45747
28 Chloroform	+++++ / 0.99055	1.15926 / 0.98078	1.14653 / 0.96783	1.06171 / 0.95407	0.95147	0.99951	AVRG		1.02352		7.84830
29 Bromochloromethane	+++++ / 0.32533	0.33967 / 0.29495	0.35061 / 0.28692	0.35688 / 0.28037	0.30868	0.33246	AVRG		0.31954		8.77237
31 1,1,1-Trichloroethane	+++++ / 0.75539	0.78915 / 0.80529	0.84496 / 0.78969	0.79505 / 0.80003	0.63694	0.78391	AVRG		0.77782		7.42854
32 1,1-Dichloropropene	+++++ / 0.40996	0.44487 / 0.43410	0.43049 / 0.41847	0.42755 / 0.42504	0.34161	0.43259	AVRG		0.41830		7.26595
33 1,2-Dichloroethane	+++++ / 0.46886	0.58135 / 0.45322	0.52767 / 0.45366	0.51067 / 0.44116	0.46133	0.48650	AVRG		0.48716		9.31080

Report Date : 14-Dec-2023 15:02 Page 6

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
34 Carbon Tetrachloride	+++++	0.39672	0.45767	0.39224	0.33753	0.41734					
	0.39493	0.42983	0.42163	0.42951			AVRG		0.40860		8.29467
37 Benzene	+++++	1.49959	1.51995	1.41790	1.21619	1.36147					
	1.32095	1.32039	1.30062	1.29293			AVRG		1.36111		7.35672
38 Trichloroethene	+++++	0.37972	0.45421	0.40167	0.32349	0.36997					
	0.36192	0.36121	0.36296	0.36115			AVRG		0.37514		9.60373
39 Bromodichloromethane	+++++	0.45336	0.49916	0.43009	0.38071	0.43558					
	0.43840	0.45561	0.46078	0.45784			AVRG		0.44572		7.10034
40 Methyl Methacrylate	+++++	0.52031	0.44827	0.47454	0.44740	0.47358					
	0.52375	0.52048	0.51476	0.51861			AVRG		0.49352		6.55463
41 2-Chloroethylvinyl ether	+++++	81.00000	104	254	541	2163					
	5248	10683	18550	+++++			QUAD	-0.04260	253	-1858	0.99946
42 1,2-Dichloropropane	+++++	0.41867	0.40704	0.40057	0.33347	0.35856					
	0.34891	0.34499	0.34342	0.34246			AVRG		0.36645		8.92774

Report Date : 14-Dec-2023 15:02 Page 7

ALS Laboratory Group

INITIAL CALIBRATION DATA

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End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
43 2-Nitropropane	+++++	0.14167	0.11626	0.12567	0.10299	0.10058					
	0.13041	0.14058	0.14668	0.15042			AVRG		0.12836		14.37086
44 Dibromomethane	+++++	0.26713	0.26757	0.24110	0.22142	0.23729					
	0.22832	0.22304	0.22591	0.22202			AVRG		0.23709		7.77658
45 4-Methyl-2-Pentanone	+++++	3489	12410	19058	39833	166511					
	421109	859659	1318627	1806407			LINR	-0.00723	0.35923		0.99998
46 cis-1,3-Dichloropropene	+++++	2180	5439	10504	23865	118570					
	322591	679057	1050675	1454685			LINR	0.02964	0.59198		0.99966
49 Ethyl Methacrylate	+++++	0.50010	0.40117	0.44873	0.43130	0.49595					
	0.52014	0.53221	0.54465	0.54247			AVRG		0.49075		10.58856
50 Toluene	+++++	1.38634	1.45148	1.44979	1.23806	1.47768					
	1.41053	1.41726	1.36843	1.34761			AVRG		1.39413		5.16093
51 trans-1,3-Dichloropropene	+++++	2266	4518	8323	17262	97024					
	270774	568417	892559	1229242			LINR	0.03548	0.50131		0.99949

ALS Laboratory Group

INITIAL CALIBRATION DATA

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Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
52 2-Hexanone	+++++	0.19074	0.33417	0.26694	0.25356	0.23853					
	0.24270	0.24796	0.24725	0.24908			AVRG		0.25232		14.72591
53 1,1,2-Trichloroethane	+++++	2006	4469	8230	16200	66320					
	162935	317502	484173	649485			LINR	-0.02681	0.25967		0.99953
54 1,3-Dichloropropane	+++++	0.66111	0.73799	0.66410	0.60686	0.60856					
	0.59336	0.57967	0.56769	0.55191			AVRG		0.61903		9.48176
55 Dibromochloromethane	+++++	0.33963	0.45232	0.35917	0.31150	0.36231					
	0.37800	0.38087	0.38047	0.38247			AVRG		0.37186		10.29053
56 Tetrachloroethene	+++++	0.29059	0.34342	0.30956	0.27133	0.31315					
	0.28334	0.30241	0.28648	0.28543			AVRG		0.29841		7.22277
57 1,2-Dibromoethane	+++++	0.36208	0.42827	0.34077	0.32354	0.33501					
	0.34185	0.33780	0.33076	0.32649			AVRG		0.34740		9.30532
58 1-Chlorohexane	+++++	0.28855	0.29093	0.26773	0.28175	0.29467					
	0.25374	0.28126	0.27997	0.28476			AVRG		0.28037		4.50058

ALS Laboratory Group

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59 Chlorobenzene	+++++	1.10957	1.22903	1.07699	0.96363	0.98188						
	0.94781	0.96126	0.94213	0.92789			AVRG		1.01558		10.00694	
60 1,1,1,2-Tetrachloroethane	+++++	0.33873	0.44133	0.36066	0.31390	0.34234						
	0.34697	0.35254	0.35322	0.34757			AVRG		0.35525		9.81558	
61 Ethylbenzene	+++++	0.48007	0.54531	0.46591	0.43254	0.47942						
	0.45768	0.48300	0.46636	0.46842			AVRG		0.47541		6.37788	
62 m,p-Xylenes	+++++	0.50154	0.60732	0.58642	0.49297	0.60487						
	0.58273	0.60104	0.58875	0.57858			AVRG		0.57158		7.58280	
63 o-Xylene	+++++	0.59556	0.62855	0.58371	0.51224	0.60261						
	0.59041	0.60351	0.58930	0.58458			AVRG		0.58783		5.35695	
64 Styrene	+++++	0.78935	1.08436	0.90647	0.88164	1.01677						
	1.02881	1.05023	1.03863	1.01139			AVRG		0.97863		9.91987	
65 cis-1,4-Dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-

ALS Laboratory Group

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66 Bromoform	+++++	1087	4009	6134	11348	53027					
	142982	300664	473849	654088			LINR	0.02144	0.25997		0.99969
67 Isopropylbenzene	+++++	1.19291	1.55895	1.40871	1.25947	1.50283					
	1.42863	1.51293	1.46161	1.46886			AVRG		1.42166		8.48620
68 1,1,2,2-Tetrachloroethane	+++++	3009	10887	14293	29212	105283					
	257467	527580	793984	1074429			LINR	-0.01327	0.80423		0.99997
71 1,2,3-Trichloropropane	+++++	1.06504	1.23583	1.06778	0.90332	0.80942					
	0.84393	0.85703	0.86699	0.89310			AVRG		0.94916		14.93509
72 trans-1,4-Dichloro-2-butene	+++++	0.09411	0.11284	0.09420	0.07871	0.07378					
	0.08178	0.09027	0.09035	0.09379			AVRG		0.08998		12.60136
73 n-Propylbenzene	+++++	2.44617	3.17741	3.04405	2.48717	3.08001					
	2.97454	3.04690	3.01187	3.15565			AVRG		2.93597		9.32667
74 Bromobenzene	+++++	0.87913	1.10344	0.89377	0.77536	0.79883					
	0.76626	0.77704	0.78092	0.78209			AVRG		0.83965		13.04238

ALS Laboratory Group

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Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
75 1,3,5-Trimethylbenzene	+++++	1.62596	2.31173	1.97542	1.78154	2.18793					
	2.14069	2.24707	2.24730	2.26279			AVRG		2.08671		11.54251
76 2-Chlorotoluene	+++++	2.04577	2.24827	2.09143	1.77115	1.98187					
	1.90659	1.91474	1.91198	1.91322			AVRG		1.97611		6.95069
77 4-Chlorotoluene	+++++	2.05600	2.60285	2.38619	2.04351	2.22527					
	2.17608	2.23431	2.21857	2.22731			AVRG		2.24112		7.57307
78 tert-Butylbenzene	+++++	1.54482	2.24160	1.95673	1.59955	1.94971					
	1.79347	1.92357	1.90181	1.95742			AVRG		1.87430		11.12860
79 1,2,4-Trimethylbenzene	+++++	1.89372	2.20037	1.91031	1.76757	2.16007					
	2.13960	2.25445	2.23745	2.25842			AVRG		2.09133		8.80822
80 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000
81 sec-Butylbenzene	+++++	2.23274	2.53512	2.44268	2.01107	2.51642					
	2.32125	2.57767	2.52711	2.58782			AVRG		2.41688		8.00580

ALS Laboratory Group

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82 p-Isopropyltoluene	+++++	1.87926	2.15830	1.93821	1.62936	2.18469						
	2.11330	2.31696	2.28462	2.31975			AVRG		2.09160		11.16096	
83 1,3-Dichlorobenzene	+++++	1.43511	2.01188	1.68894	1.34744	1.37432						
	1.35633	1.39171	1.38658	1.39878			AVRG		1.48790		14.93705	
84 1,4-Dichlorobenzene	+++++	1.71098	2.01222	1.83319	1.52092	1.44982						
	1.40118	1.42219	1.41950	1.41709			AVRG		1.57634		14.14203	
85 bis(2-Chloro-isopropyl)ether	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-
86 Benzyl Chloride	+++++	2261	5233	7328	16152	72751						
	237947	584421	972103	1459086			QUAD	0.03984	2.26566	-0.24382	0.99891	
87 n-Butylbenzene	+++++	1.43652	1.83912	1.73595	1.39700	1.79287						
	1.74072	1.94638	1.92894	1.98002			AVRG		1.75528		12.02126	
88 1,2-Dichlorobenzene	+++++	1.55329	1.93525	1.69985	1.47123	1.38200						
	1.35094	1.35333	1.36083	1.36534			AVRG		1.49690		13.52933	

ALS Laboratory Group

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89 1,2-Dibromo-3-Chloropropane	+++++	428	1017	1816	3694	16207					
	43056	92967	145211	206083			LINR	0.04238	0.15275		0.99804
90 1,2,4-Trichlorobenzene	+++++	0.92569	1.08308	0.85656	0.79800	0.86470					
	0.89220	0.96152	0.95503	0.97449			AVRG		0.92347		8.99319
91 Hexachlorobutadiene	+++++	0.34890	0.42882	0.40756	0.30282	0.37226					
	0.32013	0.38729	0.37877	0.38504			AVRG		0.37018		10.85772
92 Naphthalene	+++++	1.86091	2.22757	2.26807	1.96835	2.18835					
	2.26601	2.36539	2.41669	2.48309			AVRG		2.22716		9.06851
93 1,2,3-Trichlorobenzene	+++++	0.97967	1.09694	0.95938	0.83934	0.87236					
	0.87022	0.91485	0.92546	0.92308			AVRG		0.93126		8.19533
130 Ethyl Acetate	+++++	0.62557	0.61371	0.67147	0.56728	0.60482					
	0.60823	0.59929	0.59188	0.58416			AVRG		0.60738		4.84861
131 Methyl Acrylate	+++++	0.73652	0.53324	0.69780	0.60751	0.63203					
	0.68830	0.68196	0.66471	0.66876			AVRG		0.65676		9.03626

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
132 n-Butanol	+++++	0.01364	0.01979	0.01808	0.01500	0.01427					
	0.01509	0.01624	0.01690	0.01726			AVRG		0.01625		12.09636
133 Ethyl Acrylate	+++++	1.11772	1.05874	1.09383	1.07275	1.17503					
	1.29451	1.31755	1.32718	1.35926			AVRG		1.20184		10.15103
134 Cyclohexanone	+++++	0.02875	0.03105	0.03362	0.03260	0.03709					
	0.03771	0.03092	0.03209	0.03391			AVRG		0.03308		8.76064
135 1,4-Dioxane	0.00804	0.00898	0.00918	0.00891	0.00796	0.00688					
	0.00745	0.00744	0.00729	0.00721			AVRG		0.00793		10.42422
136 n-Hexane	+++++	0.43383	0.49449	0.50226	0.36293	0.47223					
	0.37581	0.46104	0.52901	0.55140			AVRG		0.46478		13.86740
137 n-Pentane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000
138 Freon TF	+++++	1239	3267	6155	11826	58269					
	124522	287842	434378	+++++			QUAD	-0.00009	2.78976	-0.20425	0.99882

ALS Laboratory Group

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End Cal Date : 06-DEC-2023 15:18
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Integrator : HP RTE
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Last Edit : 12-Dec-2023 09:44 VOA9.i

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146 Methyl Acetate	+++++	0.52117	0.57158	0.57924	0.48951	0.46823					
	0.47002	0.46297	0.46059	0.45532			AVRG		0.49762		9.72555
147 Methylcyclohexane	+++++	0.61021	0.66741	0.68546	0.66253	0.74881					
	0.80628	0.82105	0.82621	0.84188			AVRG		0.74109		11.67899
149 Isopropyl alcohol	+++++	2543	6719	10615	26635	91067					
	232846	469315	695746	961491			LINR	-0.14984	0.03141		0.99991
152 Amyl alcohol	+++++	0.01034	0.01304	0.01216	0.00963	0.01033					
	0.01037	0.01106	0.01137	0.01152			AVRG		0.01109		9.55870
150 Allyl alcohol	+++++	0.02169	0.02472	0.02511	0.01815	0.02361					
	0.01879	0.02305	0.02645	0.02757			AVRG		0.02324		13.86740
151 4-Methyl-2-pentanol	+++++	6106	13189	29170	71142	354355					
	842831	1866546	2986592	4203138			LINR	0.91650	0.08489		0.99821
148 Tert-butyl alcohol	+++++	0.06200	0.07026	0.06171	0.06116	0.04926					
	0.04918	0.04947	0.04996	0.05076			AVRG		0.05597		14.08200

ALS Laboratory Group

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End Cal Date : 06-DEC-2023 15:18
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Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
139 Diethyl ether	+++++	0.48276	0.48928	0.41428	0.38267	0.36248					
	0.38572	0.38297	0.38509	0.38402			AVRG		0.40770		11.36338
140 1,3-Butadiene	+++++	0.41221	0.53663	0.52386	0.40076	0.52984					
	0.50196	0.52814	0.53350	0.55265			AVRG		0.50217		11.13281
141 Cyclohexane	+++++	0.79825	0.75111	0.72553	0.61284	0.78917					
	0.62773	0.73383	0.70638	0.73926			AVRG		0.72046		8.86716
142 Tetrahydrofuran	+++++	0.11792	0.11386	0.11240	0.09243	0.10246					
	0.10330	0.10503	0.10453	0.10326			AVRG		0.10613		7.13800
143 1-Chlorobutane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000
144 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000
145 alpha-Methylstyrene	+++++	1854	5330	9651	22203	117007					
	305757	661584	1011695	1395978			LINR	0.03189	1.04682		0.99950

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
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Last Edit : 12-Dec-2023 09:44 VOA9.i

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153 Tetraethyl lead	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
154 2,3-Dichlorobutane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
155 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
156 Diisopropyl ether	+++++	1.62808	1.86889	1.82207	1.63111	1.70121						
	1.80364	1.77527	1.72880	1.71760			AVRG		1.74185		4.76567	
157 n-Heptane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-
158 Dichlorofluoromethane	+++++	0.71262	0.76027	0.83963	0.70697	0.72365						
	0.77598	0.77716	0.77693	0.78551			AVRG		0.76208		5.52222	
159 Propylene oxide	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	

Report Date : 14-Dec-2023 15:02 Page 18

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
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Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
160 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
161 3-Methyl-1-butanol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-
162 Butyl acrylate	+++++	3857	5594	11163	26306	122126						
	370735	863117	1392486	1960531			LINR	0.06515	0.77905		0.99783	
163 Butyl methacrylate	+++++	1360	3261	5931	14661	67770						
	193469	444124	721496	+++++			LINR	0.05411	0.72714		0.99595	
164 Dicyclopentadiene	+++++	2.72946	2.69453	2.56436	2.53492	2.56821						
	2.73472	2.72122	2.68006	2.76120			AVRG		2.66541		3.22053	
165 4-Vinyl-1-cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
166 1,2,3-Trimethylbenzene	+++++	1.98121	1.76129	1.98244	1.91315	2.06886						
	2.23196	2.19460	2.21027	2.22652			AVRG		2.06337		8.05498	

ALS Laboratory Group

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167 Ethanol	+++++	607	1513	2381	4835	18524					
	43069	94197	138963	190910			LINR	-0.03562	0.00626		0.99966
168 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000
170 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000
172 tert-Butyl formate	+++++	3000	9583	14033	27533	98771					
	251714	544871	860896	1234680			LINR	0.07759	0.39833		0.99750
173 3,3-Dimethyl-1-butanol	+++++	0.05000	0.04183	0.03818	0.03775	0.04352					
	0.03893	0.03901	0.04057	0.04146			AVRG		0.04125		9.17845
174 tert-Amyl methyl ether	+++++	1.61272	1.51687	1.52629	1.38191	1.41417					
	1.61464	1.57896	1.65588	1.65737			AVRG		1.55098		6.44933
175 tert-Butyl ethyl ether	+++++	1.61386	1.41485	1.54322	1.45188	1.50913					
	1.61704	1.60248	1.60761	1.61532			AVRG		1.55282		5.01161

Report Date : 14-Dec-2023 15:02 Page 20

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
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Quant Method : ISTD
Target Version : 4.14
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Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
176 tert-Amyl alcohol	+++++ / 251714	2851 / 544871	7701 / 860896	13541 / 1234680	26979	98771	LINR	0.81461	0.03986		0.99756	
177 Dimethyl ether	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
178 Ethylene oxide	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
179 Hexachloroethane	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
180 1-Methylnaphthalene	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
181 2-Furfural	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
182 Epichlorohydrin	+++++ / 0.01974	0.01859 / 0.02141	0.01839 / 0.02245	0.01955 / 0.02316	0.01516	0.01638	AVRG		0.01942		13.65916	

Report Date : 14-Dec-2023 15:02 Page 21

ALS Laboratory Group

INITIAL CALIBRATION DATA

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End Cal Date : 06-DEC-2023 15:18
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Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
183 2-Methylpropane(1)	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
(2)	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
184 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
185 Isoprene	+++++	0.13996	0.11386	0.13786	0.08333	0.11191	AVRG		0.11641		14.21949	
	0.10943	0.11738	0.11526	0.11867								
186 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
187 n-Amyl acetate	+++++	0.64243	0.74648	0.65955	0.60868	0.55039	AVRG		0.63374		9.29581	
	0.56050	0.62075	0.65114	0.66375								
188 Isopropyl acetate	+++++	0.77254	0.98712	0.96350	0.84720	0.91226	AVRG		0.92241		7.56797	
	0.93292	0.95616	0.96722	0.96278								

ALS Laboratory Group

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189 n-Butyl acetate	+++++	0.44792	0.68327	0.54490	0.45289	0.50694						
	0.55982	0.58857	0.61312	0.61507			AVRG		0.55694		14.03179	
190 Propanal	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
191 n-Buteraldehyde	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
192 Isobuteraldehyde	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
193 2-Ethyl-1-hexanol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-
194 Acetaldehyde	+++++	+++++	2896	4778	9848	39619						
	100656	193437	282615	374059			LINR	-0.16413	0.06195		0.99880	
195 Methyl Amyl Ketone	+++++	2985	6964	13384	33337	161533						
	428305	919603	1471834	2078117			LINR	0.04093	0.82075		0.99897	

ALS Laboratory Group

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196 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
197 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
198 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
199 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
200 Dimethyl Disulfide	+++++	1052	2485	4131	12085	62736						
	226129	585738	980385	1440923			QUAD	0.06177	2.22322	-0.22531	0.99800	
201 1-Butene(1)	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
(2)	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-

ALS Laboratory Group

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Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
202 Isobutylene	+++++	+++++	0.04566	0.05176	0.04652	0.05009					
	0.04408	0.04670	0.04517	0.06006			AVRG		0.04875		10.74761
203 2-Ethylhexyl Acrylate	+++++	1980	3114	6502	13697	62447					
	216994	503534	747072	1026590			LINR	0.05074	0.77800		0.99868
M 94 1,2-Dichloroethylene (total)	+++++	0.61803	0.59905	0.55071	0.46519	0.52553					
	0.52838	0.52517	0.52097	0.52053			AVRG		0.53928		8.44393
M 95 Xylenes (total)	+++++	0.52524	0.61044	0.58477	0.49867	0.60624					
	0.58168	0.60420	0.60137	0.59436			AVRG		0.57855		6.82802
$ 30 Dibromofluoromethane	+++++	2084	3773	6940	19773	78610					
	189455	396102	564100	753738			LINR	-0.02057	0.50139		0.99878
$ 35 1,2-Dichloroethane-d4	+++++	2783	4689	9346	23056	89394					
	211870	468113	+++++	+++++			QUAD	-0.01166	1.84255	-0.20170	0.99973
$ 48 Toluene-d8	+++++	1.03145	1.17985	1.12144	1.21360	1.21729					
	1.17569	1.22155	1.11180	1.08646			AVRG		1.15101		5.79578

Report Date : 14-Dec-2023 15:02 Page 25

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
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Compound	0.2500000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	150.0000 Level 9	200.0000 Level 10							
$ 69 4-Bromofluorobenzene	+++++ 257187	4583 539241	5567 784122	12602 1059633	28295	106137	LINR	-0.02595	0.42479		0.99901

ALS Laboratory Group

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Last Edit : 12-Dec-2023 09:44 VOA9.i

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

right solutions.
right partner.

Form 6I

Initial Calibration Verification (ICV)

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Form 6I Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID U120614.D

Volatiles by EPA Volatiles Organics by Method 8260C

Sample Matrix LIQUID
Lab Smp Id ICV
Data Type MS DATA
File ID U120614.D

Fraction VOA
Client Smp ID ICV
SampleType METHSPIKE
Inj Date 06-DEC-2023 1625

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
1,1,1,2-Tetrachloroethane	50.0	48.4	96.7	80-120	
1,1,1-Trichloroethane	50.0	46.7	93.3	80-120	
1,1,2,2-Tetrachloroethane	50.0	49.8	99.5	80-120	
Freon TF	50.0	49.8	99.6	80-120	
Methyl Acetate	50.0	45.8	91.6	80-120	
Cyclohexane	50.0	47.4	94.9	80-120	
Methylcyclohexane	50.0	50.6	101	80-120	
Carbon Disulfide	100	97.7	97.7	80-120	
2-Hexanone	100	96.9	96.9	80-120	
1,1,2-Trichloroethane	50.0	49.7	99.5	80-120	
1,1-Dichloroethane	50.0	47.9	95.9	80-120	
1,1-Dichloroethene	50.0	45.8	91.5	80-120	
1,1-Dichloropropene	50.0	48.3	96.6	80-120	
1,2,3-Trichlorobenzene	50.0	49.4	98.8	80-120	
1,2,3-Trichloropropane	50.0	44.0	87.9	80-120	
1,2,4-Trichlorobenzene	50.0	51.9	104	80-120	
1,2,4-Trimethylbenzene	50.0	52.8	106	80-120	
1,2-Dibromo-3-Chloropropane	50.0	47.5	95.1	80-120	
1,2-Dibromoethane	50.0	48.8	97.6	80-120	
Acrolein	100	85.4	85.4	80-120	
Acrylonitrile	100	94.8	94.8	80-120	
1,2-Dichlorobenzene	50.0	45.1	90.2	80-120	
1,2-Dichloroethane	50.0	44.5	89.0	80-120	
1,2-Dichloropropane	50.0	46.2	92.5	80-120	
1,3,5-Trimethylbenzene	50.0	52.2	104	80-120	
1,3-Dichlorobenzene	50.0	45.8	91.5	80-120	
1,3-Dichloropropane	50.0	46.4	92.8	80-120	
1,4-Dichlorobenzene	50.0	45.2	90.4	80-120	
1-Chlorohexane	50.0	45.9	91.8	80-120	
2,2-Dichloropropane	50.0	49.6	99.2	80-120	
2-Butanone	100	94.4	94.4	80-120	
2-Chloroethylvinyl ether	100	103	103	80-120	
2-Chlorotoluene	50.0	48.0	95.9	80-120	
4-Chlorotoluene	50.0	49.0	98.1	80-120	

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RunID U120614.D

Volatiles by EPA Volatiles Organics by Method 8260C

Sample Matrix	LIQUID	**Fraction**	VOA
Lab Smp Id	ICV	**Client Smp ID**	ICV
Data Type	MS DATA	**SampleType**	METHSPIKE
File ID	U120614.D	**Inj Date**	06-DEC-2023 1625

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
p-Isopropyltoluene	50.0	53.0	106	80-120	
4-Methyl-2-Pentanone	100	99.2	99.2	80-120	
Acetone	100	107	107	80-120	
Acetonitrile	500	454	90.9	80-120	
Allyl Chloride	50.0	47.1	94.1	80-120	
Benzene	50.0	46.3	92.7	80-120	
Bromobenzene	50.0	46.0	91.9	80-120	
Bromochloromethane	50.0	48.3	96.6	80-120	
Bromodichloromethane	50.0	47.6	95.3	80-120	
Bromoform	50.0	47.7	95.4	80-120	
Bromomethane	50.0	56.4	113	80-120	
Carbon Tetrachloride	50.0	47.3	94.7	80-120	
Chlorobenzene	50.0	45.9	91.8	80-120	
Chloroethane	50.0	44.7	89.5	80-120	
Chloroform	50.0	45.0	90.1	80-120	
Chloromethane	50.0	47.2	94.5	80-120	
Chloroprene	50.0	44.7	89.5	80-120	
cis-1,2-Dichloroethene	50.0	46.1	92.1	80-120	
cis-1,3-Dichloropropene	50.0	47.6	95.3	80-120	
Dibromochloromethane	50.0	49.6	99.3	80-120	
Dibromomethane	50.0	46.1	92.3	80-120	
Dichlorodifluoromethane	50.0	46.8	93.7	80-120	
Ethylbenzene	50.0	48.2	96.4	80-120	
Ethyl Methacrylate	50.0	50.3	101	80-120	
Iodomethane	100	86.0	86.0	80-120	
Isobutyl Alcohol	1000	962	96.2	70-130	
Propionitrile	500	474	94.7	70-130	
Hexachlorobutadiene	50.0	54.5	109	80-120	
Isopropylbenzene	50.0	49.6	99.3	80-120	
m,p-Xylenes	100	102	102	80-120	
Methyl tert-butyl ether	50.0	46.7	93.4	80-120	
Methylene Chloride	50.0	48.4	96.9	80-120	
Methacrylonitrile	50.0	49.0	98.1	80-120	
Methyl Methacrylate	50.0	48.9	97.8	80-120	

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Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID U120614.D

Volatiles by EPA Volatiles Organics by Method 8260C

Sample Matrix	LIQUID	**Fraction**	VOA
Lab Smp Id	ICV	**Client Smp ID**	ICV
Data Type	MS DATA	**SampleType**	METHSPIKE
File ID	U120614.D	**Inj Date**	06-DEC-2023 1625

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
n-Butylbenzene	50.0	53.6	107	80-120	
n-Propylbenzene	50.0	51.3	103	80-120	
Naphthalene	50.0	53.1	106	80-120	
o-Xylene	50.0	49.2	98.5	80-120	
sec-Butylbenzene	50.0	50.2	101	80-120	
Styrene	50.0	52.5	105	80-120	
tert-Butylbenzene	50.0	48.3	96.6	80-120	
Tetrachloroethene	50.0	48.2	96.5	80-120	
Toluene	50.0	49.2	98.4	80-120	
trans-1,2-Dichloroethene	50.0	47.0	94.0	80-120	
trans-1,3-Dichloropropene	50.0	47.4	94.8	80-120	
trans-1,4-Dichloro-2-butene	50.0	48.5	96.9	80-120	
Trichloroethene	50.0	45.9	91.8	80-120	
Trichlorofluoromethane	50.0	46.1	92.2	80-120	
Vinyl Acetate	100	103	103	80-120	
Vinyl Chloride	50.0	45.9	91.9	80-120	
Methyl Acrylate	50.0	48.6	97.2	80-120	
Ethyl Acrylate	50.0	49.8	99.7	80-120	
Butyl acrylate	50.0	44.8	89.6	80-120	
2-Ethylhexyl Acrylate	50.0	49.2	98.3	80-120	
1,2-Dichloroethylene (total)	100	92.9	92.9	80-120	
Xylenes (total)	150	147	98.0	80-120	
1,4-Dioxane	1000	866	86.6	80-120	
Dibromofluoromethane	50.0	50.8	102	71-125	
1,2-Dichloroethane-d4	50.0	49.0	98.0	70-125	
Toluene-d8	50.0	53.6	107	75-125	
4-Bromofluorobenzene	50.0	52.7	105	72-125	

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Form 7

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Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

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Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID U011203.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011203.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 12-JAN-2024 1134
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Dichlorodifluoromethane	50.0	46.8	0.377	0.100	6.36	20.0	Linear	
Chloromethane	0.574	0.481	0.481	0.100	16.1	20.0	Averaged	
Vinyl Chloride	0.548	0.510	0.510	0.100	7.01	20.0	Averaged	
Bromomethane	50.0	56.1	0.317	0.100	-12.145	20.0	Quadratic	
Chloroethane	0.369	0.356	0.356	0.100	3.64	20.0	Averaged	
Trichlorofluoromethane	0.695	0.691	0.691	0.100	0.474	20.0	Averaged	
Acrolein	0.028	0.023	0.023	0.010	18.1	20.0	Averaged	
Acetone	100	93.8	0.160	0.100	6.21	20.0	Linear	
1,1-Dichloroethene	0.386	0.405	0.405	0.100	-5.042	20.0	Averaged	
Iodomethane	100	109	0.537	0.100	-8.959	20.0	Quadratic	
Acrylonitrile	0.196	0.209	0.209	0.050	-6.733	20.0	Averaged	
Methylene Chloride	50.0	55.0	0.535	0.100	-9.905	20.0	Linear	
Methyl tert-butyl ether	1.38	1.50	1.50	0.100	-8.305	20.0	Averaged	
Carbon Disulfide	1.14	1.23	1.23	0.100	-8.399	20.0	Averaged	
trans-1,2-Dichloroethene	0.461	0.490	0.490	0.100	-6.273	20.0	Averaged	
Vinyl Acetate	1.39	1.41	1.41	0.010	-1.484	20.0	Averaged	
1,1-Dichloroethane	0.940	0.887	0.887	0.200	5.66	20.0	Averaged	
2-Butanone	0.245	0.217	0.217	0.100	11.2	20.0	Averaged	
2,2-Dichloropropane	0.661	0.675	0.675	0.100	-2.035	20.0	Averaged	
cis-1,2-Dichloroethene	0.618	0.589	0.589	0.100	4.59	20.0	Averaged	
Chloroform	1.02	0.973	0.973	0.200	4.96	20.0	Averaged	
Bromochloromethane	0.320	0.328	0.328	0.100	-2.717	20.0	Averaged	
30 Dibromofluoromethane	50.0	54.6	0.558	0.100	-9.292	20.0	Linear	
1,1,1-Trichloroethane	0.778	0.747	0.747	0.100	3.93	20.0	Averaged	
1,1-Dichloropropene	0.418	0.389	0.389	0.100	7.10	20.0	Averaged	
1,2-Dichloroethane	0.487	0.456	0.456	0.100	6.30	20.0	Averaged	
Carbon Tetrachloride	0.409	0.397	0.397	0.100	2.93	20.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	51.0	0.599	0.100	-1.963	20.0	Quadratic	
Benzene	1.36	1.26	1.26	0.500	7.45	20.0	Averaged	
Trichloroethene	0.375	0.363	0.363	0.200	3.19	20.0	Averaged	
Bromodichloromethane	0.446	0.454	0.454	0.200	-1.879	20.0	Averaged	
2-Chloroethylvinyl ether	100	133	0.006	0.001	-33.208	20.0	Quadratic	*
1,2-Dichloropropane	0.366	0.340	0.340	0.100	7.29	20.0	Averaged	
Dibromomethane	0.237	0.229	0.229	0.100	3.21	20.0	Averaged	

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Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID U011203.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011203.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 12-JAN-2024 1134
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
4-Methyl-2-Pentanone	100	92.8	0.335	0.100	7.21	20.0	Linear	
cis-1,3-Dichloropropene	50.0	48.1	0.552	0.200	3.86	20.0	Linear	
48 Toluene-d8	1.15	1.19	1.19	0.100	-3.024	20.0	Averaged	
Toluene	1.39	1.35	1.35	0.400	2.99	20.0	Averaged	
trans-1,3-Dichloropropene	50.0	48.5	0.468	0.100	3.05	20.0	Linear	
2-Hexanone	0.252	0.224	0.224	0.100	11.2	20.0	Averaged	
1,1,2-Trichloroethane	50.0	51.5	0.274	0.100	-2.989	20.0	Linear	
1,3-Dichloropropane	0.619	0.580	0.580	0.100	6.39	20.0	Averaged	
Dibromochloromethane	0.372	0.387	0.387	0.100	-4.016	20.0	Averaged	
Tetrachloroethene	0.298	0.300	0.300	0.200	-0.649	20.0	Averaged	
1,2-Dibromoethane	0.347	0.349	0.349	0.100	-0.595	20.0	Averaged	
1-Chlorohexane	0.280	0.257	0.257	0.100	8.45	20.0	Averaged	
Chlorobenzene	1.02	0.963	0.963	0.500	5.15	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.355	0.358	0.358	0.100	-0.730	20.0	Averaged	
Ethylbenzene	0.475	0.455	0.455	0.100	4.29	20.0	Averaged	
m,p-Xylenes	0.572	0.583	0.583	0.100	-1.996	20.0	Averaged	
o-Xylene	0.588	0.593	0.593	0.300	-0.825	20.0	Averaged	
Styrene	0.979	1.03	1.03	0.300	-5.370	20.0	Averaged	
Bromoform	50.0	50.1	0.255	0.100	-0.147	20.0	Linear	
Isopropylbenzene	1.42	1.42	1.42	0.100	0.256	20.0	Averaged	
1,1,2,2-Tetrachloroethane	50.0	48.7	0.794	0.300	2.59	20.0	Linear	
69 4-Bromofluorobenzene	50.0	51.3	0.447	0.100	-2.555	20.0	Linear	
1,2,3-Trichloropropane	0.949	0.838	0.838	0.100	11.7	20.0	Averaged	
n-Propylbenzene	2.94	2.81	2.81	0.100	4.24	20.0	Averaged	
Bromobenzene	0.840	0.785	0.785	0.100	6.57	20.0	Averaged	
1,3,5-Trimethylbenzene	2.09	2.09	2.09	0.100	-0.253	20.0	Averaged	
2-Chlorotoluene	1.98	1.81	1.81	0.100	8.62	20.0	Averaged	
4-Chlorotoluene	2.24	2.11	2.11	0.100	5.72	20.0	Averaged	
tert-Butylbenzene	1.87	1.82	1.82	0.100	2.88	20.0	Averaged	
1,2,4-Trimethylbenzene	2.09	2.14	2.14	0.100	-2.498	20.0	Averaged	
sec-Butylbenzene	2.42	2.38	2.38	0.100	1.44	20.0	Averaged	
p-Isopropyltoluene	2.09	2.20	2.20	0.100	-5.124	20.0	Averaged	
1,3-Dichlorobenzene	1.49	1.38	1.38	0.600	7.18	20.0	Averaged	
1,4-Dichlorobenzene	1.58	1.43	1.43	0.400	9.30	20.0	Averaged	

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Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID U011203.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011203.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 12-JAN-2024 1134
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
n-Butylbenzene	1.76	1.79	1.79	0.500	-2.031	20.0	Averaged	
1,2-Dichlorobenzene	1.50	1.38	1.38	0.400	7.53	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	47.0	0.137	0.050	6.10	20.0	Linear	
1,2,4-Trichlorobenzene	0.923	0.932	0.932	0.200	-0.957	20.0	Averaged	
Hexachlorobutadiene	0.370	0.382	0.382	0.100	-3.268	20.0	Averaged	
Naphthalene	2.23	2.30	2.30	0.200	-3.220	20.0	Averaged	
1,2,3-Trichlorobenzene	0.931	0.894	0.894	0.100	4.00	20.0	Averaged	
94 1,2-Dichloroethylene (total	0.539	0.540	0.540	0.200	-0.056	20.0	Averaged	
95 Xylenes (total)	0.579	0.593	0.593	0.100	-2.522	20.0	Averaged	
1,4-Dioxane	0.008	0.007	0.007	0.001	6.72	20.0	Averaged	
Cyclohexane	0.720	0.601	0.601	0.100	16.6	20.0	Averaged	
Freon TF	50.0	57.8	0.428	0.100	-15.539	20.0	Quadratic	
1,3-Butadiene	0.502	0.442	0.442	0.100	12.0	20.0	Averaged	
Methylcyclohexane	0.741	0.742	0.742	0.100	-0.070	20.0	Averaged	
Methyl Acetate	0.498	0.496	0.496	0.100	0.347	20.0	Averaged	
Tert-butyl alcohol	0.056	0.059	0.059	0.005	-5.612	20.0	Averaged	
Isopropyl alcohol	1000	1138	0.036	0.005	-13.824	20.0	Linear	
trans-1,4-Dichloro-2-butene	0.090	0.090	0.090	0.050	-0.107	20.0	Averaged	
Isobutyl Alcohol	0.075	0.069	0.069	0.005	7.67	20.0	Averaged	
Acetonitrile	0.054	0.058	0.058	0.005	-6.864	20.0	Averaged	
Allyl Chloride	1.23	1.32	1.32	0.100	-6.978	20.0	Averaged	
Methacrylonitrile	0.357	0.333	0.333	0.100	6.86	20.0	Averaged	
Methyl Methacrylate	0.494	0.457	0.457	0.100	7.34	20.0	Averaged	
Propionitrile	0.083	0.078	0.078	0.010	6.02	20.0	Averaged	
n-Hexane	0.465	0.456	0.456	0.100	1.87	20.0	Averaged	
Acetaldehyde	200	183	0.059	0.001	8.33	20.0	Linear	
Methyl Acrylate	0.657	0.647	0.647	0.100	1.48	20.0	Averaged	
Chloroprene	0.171	0.158	0.158	0.100	7.42	20.0	Averaged	
Ethyl Methacrylate	0.491	0.500	0.500	0.100	-1.858	20.0	Averaged	
1,2,3-Trimethylbenzene	2.06	2.00	2.00	0.100	2.85	20.0	Averaged	
Ethanol	1000	1083	0.007	0.001	-8.267	20.0	Linear	
Dicyclopentadiene	2.67	2.41	2.41	0.100	9.44	20.0	Averaged	
alpha-Methylstyrene	50.0	47.1	0.952	0.100	5.87	20.0	Linear	
Tetrahydrofuran	0.106	0.095	0.095	0.001	10.1	20.0	Averaged	

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Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID U011203.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011203.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 12-JAN-2024 1134
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Diisopropyl ether	1.74	1.59	1.59	0.100	8.73	20.0	Averaged	
Butyl acrylate	50.0	40.0	0.573	0.100	20.0	20.0	Linear	
2-Ethylhexyl Acrylate	50.0	41.5	0.606	0.100	17.1	20.0	Linear	
Ethyl Acetate	0.607	0.568	0.568	0.100	6.52	20.0	Averaged	
n-Butyl acetate	0.557	0.526	0.526	0.100	5.52	20.0	Averaged	
Epichlorohydrin	0.019	0.018	0.018	0.001	6.87	20.0	Averaged	
n-Butanol	0.016	0.015	0.015	0.005	7.14	20.0	Averaged	
Ethyl Acrylate	1.20	1.17	1.17	0.100	2.99	20.0	Averaged	
Butyl methacrylate	50.0	43.9	0.600	0.100	12.1	20.0	Linear	
n-Amyl acetate	0.634	0.523	0.523	0.100	17.4	20.0	Averaged	
Isopropyl acetate	0.922	0.882	0.882	0.100	4.42	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID U011230.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011230.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 12-JAN-2024 2134
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Dichlorodifluoromethane	50.0	52.8	0.426	0.100	-5.541	50.0	Linear	
Chloromethane	0.574	0.505	0.505	0.100	12.0	50.0	Averaged	
Vinyl Chloride	0.548	0.550	0.550	0.100	-0.341	50.0	Averaged	
Bromomethane	50.0	56.3	0.318	0.100	-12.502	50.0	Quadratic	
Chloroethane	0.369	0.399	0.399	0.100	-8.236	50.0	Averaged	
Trichlorofluoromethane	0.695	0.774	0.774	0.100	-11.409	50.0	Averaged	
Acrolein	0.028	0.019	0.019	0.010	32.3	50.0	Averaged	
Acetone	100	100	0.171	0.100	-0.359	50.0	Linear	
1,1-Dichloroethene	0.386	0.428	0.428	0.100	-11.037	50.0	Averaged	
Iodomethane	100	110	0.544	0.100	-10.271	50.0	Quadratic	
Acrylonitrile	0.196	0.206	0.206	0.050	-5.172	50.0	Averaged	
Methylene Chloride	50.0	57.0	0.554	0.100	-13.972	50.0	Linear	
Methyl tert-butyl ether	1.38	1.43	1.43	0.100	-3.198	50.0	Averaged	
Carbon Disulfide	1.14	1.32	1.32	0.100	-16.351	50.0	Averaged	
trans-1,2-Dichloroethene	0.461	0.513	0.513	0.100	-11.214	50.0	Averaged	
Vinyl Acetate	1.39	1.38	1.38	0.010	1.20	50.0	Averaged	
1,1-Dichloroethane	0.940	0.920	0.920	0.200	2.18	50.0	Averaged	
2-Butanone	0.245	0.213	0.213	0.100	12.9	50.0	Averaged	
2,2-Dichloropropane	0.661	0.577	0.577	0.100	12.8	50.0	Averaged	
cis-1,2-Dichloroethene	0.618	0.621	0.621	0.100	-0.489	50.0	Averaged	
Chloroform	1.02	1.02	1.02	0.200	0.756	50.0	Averaged	
Bromochloromethane	0.320	0.339	0.339	0.100	-6.237	50.0	Averaged	
30 Dibromofluoromethane	50.0	55.8	0.570	0.100	-11.551	50.0	Linear	
1,1,1-Trichloroethane	0.778	0.808	0.808	0.100	-3.881	50.0	Averaged	
1,1-Dichloropropene	0.418	0.422	0.422	0.100	-0.947	50.0	Averaged	
1,2-Dichloroethane	0.487	0.464	0.464	0.100	4.79	50.0	Averaged	
Carbon Tetrachloride	0.409	0.436	0.436	0.100	-6.806	50.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	50.3	0.590	0.100	-0.556	50.0	Quadratic	
Benzene	1.36	1.33	1.33	0.500	2.33	50.0	Averaged	
Trichloroethene	0.375	0.388	0.388	0.200	-3.322	50.0	Averaged	
Bromodichloromethane	0.446	0.469	0.469	0.200	-5.113	50.0	Averaged	
2-Chloroethylvinyl ether	100	139	0.006	0.001	-38.866	50.0	Quadratic	
1,2-Dichloropropane	0.366	0.350	0.350	0.100	4.38	50.0	Averaged	
Dibromomethane	0.237	0.235	0.235	0.100	0.840	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID U011230.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011230.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 12-JAN-2024 2134
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
4-Methyl-2-Pentanone	100	94.1	0.339	0.100	5.91	50.0	Linear	
cis-1,3-Dichloropropene	50.0	47.2	0.541	0.200	5.61	50.0	Linear	
48 Toluene-d8	1.15	1.21	1.21	0.100	-5.400	50.0	Averaged	
Toluene	1.39	1.43	1.43	0.400	-2.241	50.0	Averaged	
trans-1,3-Dichloropropene	50.0	47.4	0.457	0.100	5.23	50.0	Linear	
2-Hexanone	0.252	0.227	0.227	0.100	9.93	50.0	Averaged	
1,1,2-Trichloroethane	50.0	51.7	0.275	0.100	-3.405	50.0	Linear	
1,3-Dichloropropane	0.619	0.588	0.588	0.100	4.99	50.0	Averaged	
Dibromochloromethane	0.372	0.405	0.405	0.100	-8.864	50.0	Averaged	
Tetrachloroethene	0.298	0.314	0.314	0.200	-5.245	50.0	Averaged	
1,2-Dibromoethane	0.347	0.349	0.349	0.100	-0.527	50.0	Averaged	
1-Chlorohexane	0.280	0.275	0.275	0.100	2.03	50.0	Averaged	
Chlorobenzene	1.02	0.999	0.999	0.500	1.65	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.355	0.369	0.369	0.100	-3.933	50.0	Averaged	
Ethylbenzene	0.475	0.479	0.479	0.100	-0.797	50.0	Averaged	
m,p-Xylenes	0.572	0.614	0.614	0.100	-7.469	50.0	Averaged	
o-Xylene	0.588	0.613	0.613	0.300	-4.259	50.0	Averaged	
Styrene	0.979	1.07	1.07	0.300	-9.239	50.0	Averaged	
Bromoform	50.0	50.7	0.258	0.100	-1.428	50.0	Linear	
Isopropylbenzene	1.42	1.49	1.49	0.100	-5.155	50.0	Averaged	
1,1,2,2-Tetrachloroethane	50.0	49.7	0.809	0.300	0.699	50.0	Linear	
69 4-Bromofluorobenzene	50.0	52.5	0.457	0.100	-5.036	50.0	Linear	
1,2,3-Trichloropropane	0.949	0.815	0.815	0.100	14.1	50.0	Averaged	
n-Propylbenzene	2.94	2.85	2.85	0.100	2.99	50.0	Averaged	
Bromobenzene	0.840	0.796	0.796	0.100	5.17	50.0	Averaged	
1,3,5-Trimethylbenzene	2.09	2.15	2.15	0.100	-2.795	50.0	Averaged	
2-Chlorotoluene	1.98	1.83	1.83	0.100	7.25	50.0	Averaged	
4-Chlorotoluene	2.24	2.15	2.15	0.100	4.09	50.0	Averaged	
tert-Butylbenzene	1.87	1.89	1.89	0.100	-0.883	50.0	Averaged	
1,2,4-Trimethylbenzene	2.09	2.14	2.14	0.100	-2.406	50.0	Averaged	
sec-Butylbenzene	2.42	2.41	2.41	0.100	0.210	50.0	Averaged	
p-Isopropyltoluene	2.09	2.20	2.20	0.100	-5.206	50.0	Averaged	
1,3-Dichlorobenzene	1.49	1.42	1.42	0.600	4.88	50.0	Averaged	
1,4-Dichlorobenzene	1.58	1.46	1.46	0.400	7.41	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID U011230.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011230.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 12-JAN-2024 2134
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
n-Butylbenzene	1.76	1.74	1.74	0.500	0.695	50.0	Averaged	
1,2-Dichlorobenzene	1.50	1.40	1.40	0.400	6.40	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	47.0	0.137	0.050	5.91	50.0	Linear	
1,2,4-Trichlorobenzene	0.923	0.903	0.903	0.200	2.17	50.0	Averaged	
Hexachlorobutadiene	0.370	0.356	0.356	0.100	3.85	50.0	Averaged	
Naphthalene	2.23	2.25	2.25	0.200	-1.172	50.0	Averaged	
1,2,3-Trichlorobenzene	0.931	0.887	0.887	0.100	4.80	50.0	Averaged	
94 1,2-Dichloroethylene (total	0.539	0.567	0.567	0.200	-5.073	50.0	Averaged	
95 Xylenes (total)	0.579	0.630	0.630	0.100	-8.828	50.0	Averaged	
1,4-Dioxane	0.008	0.008	0.008	0.001	5.03	50.0	Averaged	
Cyclohexane	0.720	0.648	0.648	0.100	10.1	50.0	Averaged	
Freon TF	50.0	59.5	0.441	0.100	-19.079	50.0	Quadratic	
1,3-Butadiene	0.502	0.473	0.473	0.100	5.87	50.0	Averaged	
Methylcyclohexane	0.741	0.721	0.721	0.100	2.75	50.0	Averaged	
Methyl Acetate	0.498	0.477	0.477	0.100	4.07	50.0	Averaged	
Tert-butyl alcohol	0.056	0.059	0.059	0.005	-4.791	50.0	Averaged	
Isopropyl alcohol	1000	1135	0.036	0.005	-13.483	50.0	Linear	
trans-1,4-Dichloro-2-butene	0.090	0.089	0.089	0.050	1.19	50.0	Averaged	
Isobutyl Alcohol	0.075	0.069	0.069	0.005	7.62	50.0	Averaged	
Acetonitrile	0.054	0.056	0.056	0.005	-3.444	50.0	Averaged	
Allyl Chloride	1.23	1.27	1.27	0.100	-3.505	50.0	Averaged	
Methacrylonitrile	0.357	0.324	0.324	0.100	9.25	50.0	Averaged	
Methyl Methacrylate	0.494	0.459	0.459	0.100	6.99	50.0	Averaged	
Propionitrile	0.083	0.077	0.077	0.010	7.38	50.0	Averaged	
n-Hexane	0.465	0.413	0.413	0.100	11.1	50.0	Averaged	
Acetaldehyde	200	175	0.057	0.001	12.7	50.0	Linear	
Methyl Acrylate	0.657	0.624	0.624	0.100	4.92	50.0	Averaged	
Chloroprene	0.171	0.172	0.172	0.100	-0.847	50.0	Averaged	
Ethyl Methacrylate	0.491	0.490	0.490	0.100	0.067	50.0	Averaged	
1,2,3-Trimethylbenzene	2.06	1.96	1.96	0.100	4.86	50.0	Averaged	
Ethanol	1000	1031	0.006	0.001	-3.089	50.0	Linear	
Dicyclopentadiene	2.67	2.37	2.37	0.100	11.3	50.0	Averaged	
alpha-Methylstyrene	50.0	47.7	0.965	0.100	4.65	50.0	Linear	
Tetrahydrofuran	0.106	0.088	0.088	0.001	17.0	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID U011230.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011230.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 12-JAN-2024 2134
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Diisopropyl ether	1.74	1.54	1.54	0.100	11.5	50.0	Averaged	
Butyl acrylate	50.0	39.4	0.562	0.100	21.3	50.0	Linear	
2-Ethylhexyl Acrylate	50.0	38.6	0.560	0.100	22.9	50.0	Linear	
Ethyl Acetate	0.607	0.552	0.552	0.100	9.09	50.0	Averaged	
n-Butyl acetate	0.557	0.529	0.529	0.100	5.05	50.0	Averaged	
Epichlorohydrin	0.019	0.018	0.018	0.001	7.71	50.0	Averaged	
n-Butanol	0.016	0.015	0.015	0.005	7.52	50.0	Averaged	
Ethyl Acrylate	1.20	1.14	1.14	0.100	5.23	50.0	Averaged	
Butyl methacrylate	50.0	37.1	0.500	0.100	25.8	50.0	Linear	
n-Amyl acetate	0.634	0.533	0.533	0.100	15.9	50.0	Averaged	
Isopropyl acetate	0.922	0.878	0.878	0.100	4.77	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID U011702.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011702.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 17-JAN-2024 0736
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Dichlorodifluoromethane	50.0	28.0	0.223	0.100	43.9	20.0	Linear	*
Chloromethane	0.574	0.396	0.396	0.100	30.9	20.0	Averaged	*
Propionitrile	0.083	0.068	0.068	0.010	18.1	20.0	Averaged	
Vinyl Chloride	0.548	0.494	0.494	0.100	9.92	20.0	Averaged	
Bromomethane	50.0	55.9	0.316	0.100	-11.843	20.0	Quadratic	
Chloroethane	0.369	0.376	0.376	0.100	-1.793	20.0	Averaged	
Trichlorofluoromethane	0.695	0.782	0.782	0.100	-12.530	20.0	Averaged	
Acrolein	0.028	0.023	0.023	0.010	18.5	20.0	Averaged	
Acetone	100	101	0.172	0.100	-1.344	20.0	Linear	
1,1-Dichloroethene	0.386	0.438	0.438	0.100	-13.642	20.0	Averaged	
Isobutyl Alcohol	0.075	0.065	0.065	0.005	13.2	20.0	Averaged	
Acetonitrile	0.054	0.056	0.056	0.005	-4.100	20.0	Averaged	
Allyl Chloride	1.23	1.25	1.25	0.100	-1.321	20.0	Averaged	
Iodomethane	100	114	0.564	0.100	-13.973	20.0	Quadratic	
Acrylonitrile	0.196	0.187	0.187	0.050	4.72	20.0	Averaged	
Methylene Chloride	50.0	57.2	0.556	0.100	-14.397	20.0	Linear	
Methyl tert-butyl ether	1.38	1.39	1.39	0.100	-0.708	20.0	Averaged	
Carbon Disulfide	1.14	1.35	1.35	0.100	-18.384	20.0	Averaged	
trans-1,2-Dichloroethene	0.461	0.535	0.535	0.100	-16.149	20.0	Averaged	
Vinyl Acetate	1.39	1.34	1.34	0.010	4.00	20.0	Averaged	
1,1-Dichloroethane	0.940	0.930	0.930	0.200	1.07	20.0	Averaged	
Chloroprene	0.171	0.173	0.173	0.100	-1.657	20.0	Averaged	
2-Butanone	0.245	0.196	0.196	0.100	19.9	20.0	Averaged	
Methacrylonitrile	0.357	0.359	0.359	0.100	-0.466	20.0	Averaged	
2,2-Dichloropropane	0.661	0.746	0.746	0.100	-12.782	20.0	Averaged	
cis-1,2-Dichloroethene	0.618	0.622	0.622	0.100	-0.642	20.0	Averaged	
Chloroform	1.02	1.01	1.01	0.200	1.33	20.0	Averaged	
Bromochloromethane	0.320	0.335	0.335	0.100	-4.887	20.0	Averaged	
30 Dibromofluoromethane	50.0	54.2	0.553	0.100	-8.333	20.0	Linear	
1,1,1-Trichloroethane	0.778	0.815	0.815	0.100	-4.782	20.0	Averaged	
1,1-Dichloropropene	0.418	0.460	0.460	0.100	-9.999	20.0	Averaged	
1,2-Dichloroethane	0.487	0.465	0.465	0.100	4.47	20.0	Averaged	
Carbon Tetrachloride	0.409	0.480	0.480	0.100	-17.472	20.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	48.1	0.563	0.100	3.84	20.0	Quadratic	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID U011702.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011702.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 17-JAN-2024 0736
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Benzene	1.36	1.38	1.38	0.500	-1.307	20.0	Averaged	
Trichloroethene	0.375	0.411	0.411	0.200	-9.438	20.0	Averaged	
Bromodichloromethane	0.446	0.489	0.489	0.200	-9.633	20.0	Averaged	
Methyl Methacrylate	0.494	0.416	0.416	0.100	15.8	20.0	Averaged	
2-Chloroethylvinyl ether	100	104	0.005	0.001	-4.335	20.0	Quadratic	
1,2-Dichloropropane	0.366	0.362	0.362	0.100	1.30	20.0	Averaged	
2-Nitropropane	0.128	0.109	0.109	0.000	14.8	20.0	Averaged	
Dibromomethane	0.237	0.237	0.237	0.100	0.094	20.0	Averaged	
4-Methyl-2-Pentanone	100	87.6	0.316	0.100	12.4	20.0	Linear	
cis-1,3-Dichloropropene	50.0	52.1	0.599	0.200	-4.208	20.0	Linear	
48 Toluene-d8	1.15	1.23	1.23	0.100	-7.234	20.0	Averaged	
Ethyl Methacrylate	0.491	0.473	0.473	0.100	3.55	20.0	Averaged	
Toluene	1.39	1.51	1.51	0.400	-8.323	20.0	Averaged	
trans-1,3-Dichloropropene	50.0	52.3	0.506	0.100	-4.576	20.0	Linear	
2-Hexanone	0.252	0.210	0.210	0.100	16.9	20.0	Averaged	
1,1,2-Trichloroethane	50.0	53.2	0.283	0.100	-6.363	20.0	Linear	
1,3-Dichloropropane	0.619	0.602	0.602	0.100	2.82	20.0	Averaged	
Dibromochloromethane	0.372	0.416	0.416	0.100	-11.740	20.0	Averaged	
Tetrachloroethene	0.298	0.345	0.345	0.200	-15.724	20.0	Averaged	
1,2-Dibromoethane	0.347	0.347	0.347	0.100	-0.017	20.0	Averaged	
1-Chlorohexane	0.280	0.305	0.305	0.100	-8.857	20.0	Averaged	
Chlorobenzene	1.02	1.08	1.08	0.500	-5.919	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.355	0.391	0.391	0.100	-9.956	20.0	Averaged	
Ethylbenzene	0.475	0.514	0.514	0.100	-8.094	20.0	Averaged	
m,p-Xylenes	0.572	0.653	0.653	0.100	-14.283	20.0	Averaged	
o-Xylene	0.588	0.653	0.653	0.300	-11.159	20.0	Averaged	
Styrene	0.979	1.13	1.13	0.300	-15.961	20.0	Averaged	
Bromoform	50.0	53.2	0.271	0.100	-6.414	20.0	Linear	
Isopropylbenzene	1.42	1.64	1.64	0.100	-15.207	20.0	Averaged	
1,1,2,2-Tetrachloroethane	50.0	49.5	0.807	0.300	1.03	20.0	Linear	
69 4-Bromofluorobenzene	50.0	51.9	0.452	0.100	-3.898	20.0	Linear	
1,2,3-Trichloropropane	0.949	0.822	0.822	0.100	13.4	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.090	0.086	0.086	0.050	4.13	20.0	Averaged	
n-Propylbenzene	2.94	3.32	3.32	0.100	-13.028	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID U011702.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011702.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 17-JAN-2024 0736
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Bromobenzene	0.840	0.844	0.844	0.100	-0.479	20.0	Averaged	
1,3,5-Trimethylbenzene	2.09	2.40	2.40	0.100	-15.050	20.0	Averaged	
2-Chlorotoluene	1.98	2.02	2.02	0.100	-2.126	20.0	Averaged	
4-Chlorotoluene	2.24	2.36	2.36	0.100	-5.316	20.0	Averaged	
tert-Butylbenzene	1.87	2.09	2.09	0.100	-11.696	20.0	Averaged	
1,2,4-Trimethylbenzene	2.09	2.39	2.39	0.100	-14.377	20.0	Averaged	
sec-Butylbenzene	2.42	2.80	2.80	0.100	-15.814	20.0	Averaged	
p-Isopropyltoluene	2.09	2.44	2.44	0.100	-16.751	20.0	Averaged	
1,3-Dichlorobenzene	1.49	1.55	1.55	0.600	-3.937	20.0	Averaged	
1,4-Dichlorobenzene	1.58	1.60	1.60	0.400	-1.203	20.0	Averaged	
Benzyl Chloride	50.0	53.8	0.482	0.010	-7.540	20.0	Quadratic	
n-Butylbenzene	1.76	2.09	2.09	0.500	-18.965	20.0	Averaged	
1,2-Dichlorobenzene	1.50	1.50	1.50	0.400	-0.482	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	46.1	0.134	0.050	7.86	20.0	Linear	
1,2,4-Trichlorobenzene	0.923	1.00	1.00	0.200	-8.637	20.0	Averaged	
Hexachlorobutadiene	0.370	0.449	0.449	0.100	-21.389	20.0	Averaged	*
Naphthalene	2.23	2.26	2.26	0.200	-1.392	20.0	Averaged	
1,2,3-Trichlorobenzene	0.931	0.933	0.933	0.100	-0.155	20.0	Averaged	
Methyl Acetate	0.498	0.449	0.449	0.100	9.81	20.0	Averaged	
Freon TF	50.0	65.6	0.488	0.100	-31.171	20.0	Quadratic	*
Cyclohexane	0.720	0.688	0.688	0.100	4.45	20.0	Averaged	
Tetrahydrofuran	0.106	0.087	0.087	0.001	17.8	20.0	Averaged	
Methylcyclohexane	0.741	0.758	0.758	0.100	-2.291	20.0	Averaged	
1,4-Dioxane	0.008	0.007	0.007	0.001	15.0	20.0	Averaged	
n-Butanol	0.016	0.014	0.014	0.005	16.5	20.0	Averaged	
n-Hexane	0.465	0.540	0.540	0.100	-16.282	20.0	Averaged	
Diethyl ether	0.408	0.395	0.395	0.100	3.23	20.0	Averaged	
Tert-butyl alcohol	0.056	0.050	0.050	0.005	11.2	20.0	Averaged	
Isopropyl alcohol	1000	981	0.031	0.005	1.92	20.0	Linear	
Amyl alcohol	0.011	0.009	0.009	0.005	19.7	20.0	Averaged	
Diisopropyl ether	1.74	1.57	1.57	0.100	10.1	20.0	Averaged	
Butyl acrylate	50.0	40.2	0.576	0.100	19.6	20.0	Linear	
n-Amyl acetate	0.634	0.531	0.531	0.100	16.2	20.0	Averaged	
Dicyclopentadiene	2.67	2.54	2.54	0.100	4.85	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID U011702.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011702.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 17-JAN-2024 0736
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
1,2,3-Trimethylbenzene	2.06	2.09	2.09	0.100	-1.084	20.0	Averaged	
Ethanol	1000	957	0.006	0.001	4.32	20.0	Linear	
tert-Butyl formate	100	86.0	0.327	0.100	14.0	20.0	Linear	
3,3-Dimethyl-1-butanol	0.041	0.032	0.032	0.005	23.4	20.0	Averaged	*
tert-Amyl methyl ether	1.55	1.44	1.44	0.005	7.22	20.0	Averaged	
tert-Butyl ethyl ether	1.55	1.45	1.45	0.100	6.93	20.0	Averaged	
tert-Amyl alcohol	1000	862	0.033	0.005	13.8	20.0	Linear	
4-Methyl-2-pentanol	1000	745	0.059	0.005	25.5	20.0	Linear	*
1,3-Butadiene	0.502	0.428	0.428	0.100	14.8	20.0	Averaged	
Dichlorofluoromethane	0.762	0.853	0.853	0.100	-11.913	20.0	Averaged	
Epichlorohydrin	0.019	0.017	0.017	0.001	14.5	20.0	Averaged	
94 1,2-Dichloroethylene (total	0.539	0.578	0.578	0.200	-7.270	20.0	Averaged	
95 Xylenes (total)	0.579	0.664	0.664	0.100	-14.736	20.0	Averaged	
alpha-Methylstyrene	50.0	53.5	1.09	0.100	-6.905	20.0	Linear	
Ethyl Acetate	0.607	0.498	0.498	0.100	18.0	20.0	Averaged	
Methyl Acrylate	0.657	0.552	0.552	0.100	16.0	20.0	Averaged	
n-Butyl acetate	0.557	0.496	0.496	0.100	10.9	20.0	Averaged	
Cyclohexanone	0.033	0.030	0.030	0.005	10.5	20.0	Averaged	
Isoprene	0.116	0.139	0.139	0.010	-19.207	20.0	Averaged	
Isopropyl acetate	0.922	0.857	0.857	0.100	7.05	20.0	Averaged	
Allyl alcohol	0.023	0.027	0.027	0.004	-16.282	20.0	Averaged	
Acetaldehyde	200	180	0.058	0.001	10.0	20.0	Linear	
Methyl Amyl Ketone	50.0	35.4	0.548	0.100	29.2	20.0	Linear	*
Dimethyl Disulfide	50.0	51.7	0.459	0.020	-3.429	20.0	Quadratic	
Isobutylene	0.049	0.052	0.052	0.010	-6.731	20.0	Averaged	
2-Ethylhexyl Acrylate	50.0	41.2	0.602	0.100	17.6	20.0	Linear	
Ethyl Acrylate	1.20	1.15	1.15	0.100	4.18	20.0	Averaged	
Butyl methacrylate	50.0	40.6	0.552	0.100	18.7	20.0	Linear	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID U011728.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011728.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 17-JAN-2024 1716
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Dichlorodifluoromethane	50.0	26.3	0.209	0.100	47.4	50.0	Linear	
Chloromethane	0.574	0.359	0.359	0.100	37.3	50.0	Averaged	
Propionitrile	0.083	0.072	0.072	0.010	13.1	50.0	Averaged	
Vinyl Chloride	0.548	0.474	0.474	0.100	13.5	50.0	Averaged	
Bromomethane	50.0	51.5	0.290	0.100	-3.072	50.0	Quadratic	
Chloroethane	0.369	0.357	0.357	0.100	3.28	50.0	Averaged	
Trichlorofluoromethane	0.695	0.767	0.767	0.100	-10.417	50.0	Averaged	
Acrolein	0.028	0.026	0.026	0.010	7.88	50.0	Averaged	
Acetone	100	88.5	0.152	0.100	11.5	50.0	Linear	
1,1-Dichloroethene	0.386	0.421	0.421	0.100	-9.069	50.0	Averaged	
Isobutyl Alcohol	0.075	0.065	0.065	0.005	12.8	50.0	Averaged	
Acetonitrile	0.054	0.054	0.054	0.005	-0.874	50.0	Averaged	
Allyl Chloride	1.23	1.24	1.24	0.100	-1.196	50.0	Averaged	
Iodomethane	100	113	0.561	0.100	-13.281	50.0	Quadratic	
Acrylonitrile	0.196	0.198	0.198	0.050	-0.859	50.0	Averaged	
Methylene Chloride	50.0	55.7	0.542	0.100	-11.467	50.0	Linear	
Methyl tert-butyl ether	1.38	1.41	1.41	0.100	-1.932	50.0	Averaged	
Carbon Disulfide	1.14	1.26	1.26	0.100	-10.716	50.0	Averaged	
trans-1,2-Dichloroethene	0.461	0.517	0.517	0.100	-12.079	50.0	Averaged	
Vinyl Acetate	1.39	1.22	1.22	0.010	12.6	50.0	Averaged	
1,1-Dichloroethane	0.940	0.896	0.896	0.200	4.74	50.0	Averaged	
Chloroprene	0.171	0.159	0.159	0.100	6.52	50.0	Averaged	
2-Butanone	0.245	0.204	0.204	0.100	16.6	50.0	Averaged	
Methacrylonitrile	0.357	0.499	0.499	0.100	-39.891	50.0	Averaged	
2,2-Dichloropropane	0.661	0.634	0.634	0.100	4.09	50.0	Averaged	
cis-1,2-Dichloroethene	0.618	0.611	0.611	0.100	1.01	50.0	Averaged	
Chloroform	1.02	0.977	0.977	0.200	4.51	50.0	Averaged	
Bromochloromethane	0.320	0.330	0.330	0.100	-3.330	50.0	Averaged	
30 Dibromofluoromethane	50.0	51.7	0.529	0.100	-3.486	50.0	Linear	
1,1,1-Trichloroethane	0.778	0.792	0.792	0.100	-1.805	50.0	Averaged	
1,1-Dichloropropene	0.418	0.435	0.435	0.100	-3.983	50.0	Averaged	
1,2-Dichloroethane	0.487	0.448	0.448	0.100	8.10	50.0	Averaged	
Carbon Tetrachloride	0.409	0.449	0.449	0.100	-10.006	50.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	46.2	0.539	0.100	7.63	50.0	Quadratic	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID U011728.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011728.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 17-JAN-2024 1716
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Benzene	1.36	1.32	1.32	0.500	3.29	50.0	Averaged	
Trichloroethene	0.375	0.403	0.403	0.200	-7.331	50.0	Averaged	
Bromodichloromethane	0.446	0.459	0.459	0.200	-3.023	50.0	Averaged	
Methyl Methacrylate	0.494	0.424	0.424	0.100	14.0	50.0	Averaged	
2-Chloroethylvinyl ether	100	142	0.006	0.001	-42.137	50.0	Quadratic	
1,2-Dichloropropane	0.366	0.345	0.345	0.100	5.80	50.0	Averaged	
2-Nitropropane	0.128	0.108	0.108	0.000	16.2	50.0	Averaged	
Dibromomethane	0.237	0.232	0.232	0.100	2.33	50.0	Averaged	
4-Methyl-2-Pentanone	100	91.5	0.330	0.100	8.47	50.0	Linear	
cis-1,3-Dichloropropene	50.0	47.9	0.550	0.200	4.18	50.0	Linear	
48 Toluene-d8	1.15	1.17	1.17	0.100	-1.942	50.0	Averaged	
Ethyl Methacrylate	0.491	0.474	0.474	0.100	3.38	50.0	Averaged	
Toluene	1.39	1.46	1.46	0.400	-4.382	50.0	Averaged	
trans-1,3-Dichloropropene	50.0	47.9	0.462	0.100	4.27	50.0	Linear	
2-Hexanone	0.252	0.217	0.217	0.100	14.0	50.0	Averaged	
1,1,2-Trichloroethane	50.0	51.2	0.273	0.100	-2.449	50.0	Linear	
1,3-Dichloropropane	0.619	0.594	0.594	0.100	4.05	50.0	Averaged	
Dibromochloromethane	0.372	0.405	0.405	0.100	-8.824	50.0	Averaged	
Tetrachloroethene	0.298	0.336	0.336	0.200	-12.494	50.0	Averaged	
1,2-Dibromoethane	0.347	0.356	0.356	0.100	-2.551	50.0	Averaged	
1-Chlorohexane	0.280	0.288	0.288	0.100	-2.603	50.0	Averaged	
Chlorobenzene	1.02	1.02	1.02	0.500	-0.630	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.355	0.373	0.373	0.100	-4.981	50.0	Averaged	
Ethylbenzene	0.475	0.498	0.498	0.100	-4.785	50.0	Averaged	
m,p-Xylenes	0.572	0.630	0.630	0.100	-10.272	50.0	Averaged	
o-Xylene	0.588	0.639	0.639	0.300	-8.648	50.0	Averaged	
Styrene	0.979	1.09	1.09	0.300	-11.305	50.0	Averaged	
Bromoform	50.0	51.5	0.262	0.100	-2.972	50.0	Linear	
Isopropylbenzene	1.42	1.58	1.58	0.100	-11.329	50.0	Averaged	
1,1,2,2-Tetrachloroethane	50.0	49.2	0.803	0.300	1.52	50.0	Linear	
69 4-Bromofluorobenzene	50.0	49.7	0.433	0.100	0.645	50.0	Linear	
1,2,3-Trichloropropane	0.949	0.830	0.830	0.100	12.5	50.0	Averaged	
trans-1,4-Dichloro-2-butene	0.090	0.087	0.087	0.050	3.82	50.0	Averaged	
n-Propylbenzene	2.94	3.04	3.04	0.100	-3.706	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID U011728.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011728.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 17-JAN-2024 1716
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Bromobenzene	0.840	0.823	0.823	0.100	2.02	50.0	Averaged	
1,3,5-Trimethylbenzene	2.09	2.26	2.26	0.100	-8.333	50.0	Averaged	
2-Chlorotoluene	1.98	1.90	1.90	0.100	3.91	50.0	Averaged	
4-Chlorotoluene	2.24	2.23	2.23	0.100	0.703	50.0	Averaged	
tert-Butylbenzene	1.87	2.04	2.04	0.100	-8.640	50.0	Averaged	
1,2,4-Trimethylbenzene	2.09	2.23	2.23	0.100	-6.661	50.0	Averaged	
sec-Butylbenzene	2.42	2.62	2.62	0.100	-8.460	50.0	Averaged	
p-Isopropyltoluene	2.09	2.37	2.37	0.100	-13.220	50.0	Averaged	
1,3-Dichlorobenzene	1.49	1.47	1.47	0.600	1.41	50.0	Averaged	
1,4-Dichlorobenzene	1.58	1.54	1.54	0.400	2.58	50.0	Averaged	
Benzyl Chloride	50.0	48.0	0.426	0.010	3.91	50.0	Quadratic	
n-Butylbenzene	1.76	1.91	1.91	0.500	-8.837	50.0	Averaged	
1,2-Dichlorobenzene	1.50	1.47	1.47	0.400	1.58	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	47.6	0.139	0.050	4.84	50.0	Linear	
1,2,4-Trichlorobenzene	0.923	0.938	0.938	0.200	-1.623	50.0	Averaged	
Hexachlorobutadiene	0.370	0.393	0.393	0.100	-6.109	50.0	Averaged	
Naphthalene	2.23	2.31	2.31	0.200	-3.627	50.0	Averaged	
1,2,3-Trichlorobenzene	0.931	0.916	0.916	0.100	1.61	50.0	Averaged	
Methyl Acetate	0.498	0.469	0.469	0.100	5.74	50.0	Averaged	
Freon TF	50.0	63.4	0.470	0.100	-26.717	50.0	Quadratic	
Cyclohexane	0.720	0.677	0.677	0.100	6.03	50.0	Averaged	
Tetrahydrofuran	0.106	0.088	0.088	0.001	17.4	50.0	Averaged	
Methylcyclohexane	0.741	0.750	0.750	0.100	-1.268	50.0	Averaged	
1,4-Dioxane	0.008	0.007	0.007	0.001	7.95	50.0	Averaged	
n-Butanol	0.016	0.015	0.015	0.005	9.87	50.0	Averaged	
n-Hexane	0.465	0.457	0.457	0.100	1.62	50.0	Averaged	
Diethyl ether	0.408	0.387	0.387	0.100	5.11	50.0	Averaged	
Tert-butyl alcohol	0.056	0.057	0.057	0.005	-1.003	50.0	Averaged	
Isopropyl alcohol	1000	1083	0.034	0.005	-8.318	50.0	Linear	
Amyl alcohol	0.011	0.010	0.010	0.005	11.6	50.0	Averaged	
Diisopropyl ether	1.74	1.53	1.53	0.100	12.0	50.0	Averaged	
Butyl acrylate	50.0	38.3	0.545	0.100	23.5	50.0	Linear	
n-Amyl acetate	0.634	0.523	0.523	0.100	17.5	50.0	Averaged	
Dicyclopentadiene	2.67	2.51	2.51	0.100	5.72	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID U011728.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011728.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 17-JAN-2024 1716
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
1,2,3-Trimethylbenzene	2.06	2.01	2.01	0.100	2.70	50.0	Averaged	
Ethanol	1000	991	0.006	0.001	0.877	50.0	Linear	
tert-Butyl formate	100	95.4	0.364	0.100	4.61	50.0	Linear	
3,3-Dimethyl-1-butanol	0.041	0.034	0.034	0.005	16.4	50.0	Averaged	
tert-Amyl methyl ether	1.55	1.41	1.41	0.005	9.18	50.0	Averaged	
tert-Butyl ethyl ether	1.55	1.42	1.42	0.100	8.31	50.0	Averaged	
tert-Amyl alcohol	1000	955	0.036	0.005	4.48	50.0	Linear	
4-Methyl-2-pentanol	1000	834	0.067	0.005	16.6	50.0	Linear	
1,3-Butadiene	0.502	0.402	0.402	0.100	19.9	50.0	Averaged	
Dichlorofluoromethane	0.762	0.843	0.843	0.100	-10.591	50.0	Averaged	
Epichlorohydrin	0.019	0.019	0.019	0.001	3.29	50.0	Averaged	
94 1,2-Dichloroethylene (total	0.539	0.564	0.564	0.200	-4.582	50.0	Averaged	
95 Xylenes (total)	0.579	0.640	0.640	0.100	-10.633	50.0	Averaged	
alpha-Methylstyrene	50.0	50.7	1.03	0.100	-1.367	50.0	Linear	
Ethyl Acetate	0.607	0.513	0.513	0.100	15.5	50.0	Averaged	
Methyl Acrylate	0.657	0.583	0.583	0.100	11.2	50.0	Averaged	
n-Butyl acetate	0.557	0.514	0.514	0.100	7.64	50.0	Averaged	
Cyclohexanone	0.033	0.023	0.023	0.005	31.4	50.0	Averaged	
Isoprene	0.116	0.129	0.129	0.010	-10.951	50.0	Averaged	
Isopropyl acetate	0.922	0.852	0.852	0.100	7.69	50.0	Averaged	
Allyl alcohol	0.023	0.023	0.023	0.004	1.62	50.0	Averaged	
Acetaldehyde	++++	++++	2.973e+68	0.001	++++	50.0	Linear	*
Methyl Amyl Ketone	50.0	36.9	0.572	0.100	26.2	50.0	Linear	
Dimethyl Disulfide	50.0	46.5	0.407	0.020	7.06	50.0	Quadratic	
Isobutylene	0.049	++++	2.973e+68	0.010	++++	50.0	Averaged	*
2-Ethylhexyl Acrylate	50.0	38.7	0.563	0.100	22.6	50.0	Linear	
Ethyl Acrylate	1.20	1.16	1.16	0.100	3.68	50.0	Averaged	
Butyl methacrylate	50.0	38.5	0.521	0.100	23.0	50.0	Linear	

right solutions.
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Form 8

Internal Standard Area and RT Summary

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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 LHAAP Site 16

Workorder HS24010538

EPA SW8260

VOA9_456454		Pentafluorobenzene				1,4 Difluorobenzene				Chlorobenzene d5				1,4-Dichlorobenzene d4			
Sample ID	File ID	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12-HOUR STD (CCV)	U011203.D	306195	#	4.82	#	481399	#	5.55	#	487086	#	8.19	#	271110	#	10.17	#
HS24010538-01	U011224.D	365638		4.82		568444		5.55		568854		8.19		293173		10.17	
HS24010538-02	U011223.D	361918		4.82		574844		5.55		562858		8.19		302352		10.17	
HS24010538-03	U011216.D	386761		4.82		588680		5.55		599892		8.19		315299		10.17	
HS24010538-04	U011222.D	227831		4.82		363970		5.55		378343		8.19		202173		10.17	
HS24010538-05	U011217.D	375694		4.82		588766		5.55		578638		8.19		298820		10.17	
HS24010538-06	U011218.D	376829		4.82		582687		5.55		571977		8.19		295011		10.17	
HS24010538-07	U011219.D	370057		4.81		582725		5.55		569172		8.19		293855		10.17	
HS24010538-09	U011227.D	372900		4.81		585184		5.55		576675		8.19		294452		10.17	
HS24010538-10	U011215.D	362077		4.82		561917		5.55		547569		8.19		277397		10.17	
VBLKW-240112	U011207.D	379364		4.82		587698		5.55		571579		8.19		297476		10.17	
VLCSW-240112	U011205.D	321090		4.82		497003		5.55		504161		8.19		283593		10.17	
MS-ZZZZZZMS	U011211.D	377626		4.82		575693		5.55		571441		8.19		314865		10.17	
ZZZZZZMSD	U011212.D	365053		4.82		556044		5.55		561962		8.19		305514		10.17	

AREA UPPER LIMIT = +100% of STD IS Area
AREA LOWER LIMIT = - 50% of STD IS Area
RT - Retention IS - Internal StandardTime

RT UPPER LIMIT = + 0.50 of STD IS RT
RT LOWER LIMIT = - 0.50 of STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

Form 8 - Internal Standard Area and RT Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010538

EPA SW8260

VOA9_456549		Pentafluorobenzene				1,4 Difluorobenzene				Chlorobenzene d5				1,4-Dichlorobenzene d4			
Sample ID	File ID	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12-HOUR STD (CCV)	U011702.D	306651	#	4.82	#	465856	#	5.55	#	473358	#	8.19	#	262624	#	10.17	#
HS24010538-08	U011717.D	279747		4.82		437477		5.56		428607		8.19		221617		10.17	
VBLKW-240117	U011705.D	382509		4.82		534494		5.55		486876		8.19		249463		10.17	
VLCSW-240117	U011703.D	322070		4.82		492661		5.55		487887		8.19		273131		10.17	
MS-ZZZZZZMS	U011714.D	292268		4.82		449762		5.55		450536		8.19		251189		10.17	
ZZZZZZMSD	U011715.D	289585		4.82		446969		5.55		449402		8.19		246852		10.17	

AREA UPPER LIMIT = +100% of STD IS Area
AREA LOWER LIMIT = - 50% of STD IS Area
RT - Retention IS - Internal StandardTime

RT UPPER LIMIT = + 0.50 of STD IS RT
RT LOWER LIMIT = - 0.50 of STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

right solutions.
right partner.

Analysis Run Log

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

MSVOA09 -Logbook

Batch: 57869 **Analyst:** Presenta Cabascango

Date: 12-06-2023 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	12-06-2023 11:14 am	1.00	50 mL	50 mL	U120601.D	Liquid	Y	NA
2	VSTD000.25	ICAL1	12-06-2023 11:36 am	1.00	50 mL	50 mL	U120602.D	Liquid	Y	NA
3	VSTD000.5	ICAL2	12-06-2023 11:58 am	1.00	50 mL	50 mL	U120603.D	Liquid	Y	NA
4	VSTD001	ICAL3	12-06-2023 12:43 pm	1.00	50 mL	50 mL	U120604.D	Liquid	Y	NA
5	VSTD002	ICAL4	12-06-2023 01:05 pm	1.00	50 mL	50 mL	U120605.D	Liquid	Y	NA
6	VSTD005	ICAL5	12-06-2023 01:27 pm	1.00	50 mL	50 mL	U120606.D	Liquid	Y	NA
7	VSTD020	ICAL6	12-06-2023 01:49 pm	1.00	50 mL	50 mL	U120607.D	Liquid	Y	NA
8	VSTD050	ICAL7	12-06-2023 02:11 pm	1.00	50 mL	50 mL	U120608.D	Liquid	Y	NA
9	VSTD100	ICAL8	12-06-2023 02:34 pm	1.00	50 mL	50 mL	U120609.D	Liquid	Y	NA
10	VSTD150	ICAL9	12-06-2023 02:56 pm	1.00	50 mL	50 mL	U120610.D	Liquid	Y	NA
11	VSTD200	ICAL	12-06-2023 03:18 pm	1.00	50 mL	50 mL	U120611.D	Liquid	Y	NA
12	BLANK	SAMP	12-06-2023 03:40 pm	1.00	50 mL	50 mL	U120612.D	Liquid	Y	NA
13	BLANK	SAMP	12-06-2023 04:03 pm	1.00	50 mL	50 mL	U120613.D	Liquid	Y	NA
14	ICV	ICV	12-06-2023 04:25 pm	1.00	50 mL	50 mL	U120614.D	Liquid	Y	NA
15	CCB	SAMP	12-06-2023 04:47 pm	1.00	50 mL	50 mL	U120615.D	Liquid	Y	NA
16	VLCSW-231206	LCS	12-06-2023 05:10 pm	1.00	50 mL	50 mL	U120616.D	Liquid	Y	NA
17	BLANK	SAMP	12-06-2023 05:32 pm	1.00	50 mL	50 mL	U120617.D	Liquid	Y	NA
18	VBLKW-231206	MBLK	12-06-2023 05:54 pm	1.00	50 mL	50 mL	U120618.D	Liquid	Y	NA
19	HS23111879-07	SAMP	12-06-2023 06:17 pm	25.00	2 mL	50 mL	U120619.D	Liquid	Y	<2
20	HS23111879-08	SAMP	12-06-2023 06:39 pm	5.00	10 mL	50 mL	U120620.D	Liquid	Y	<2
21	HS23111879-08	SAMP	12-06-2023 07:02 pm	25.00	2 mL	50 mL	U120621.D	Liquid	Y	<2
22	HS23111879-09	SAMP	12-06-2023 07:24 pm	10.00	5 mL	50 mL	U120622.D	Liquid	Y	<2
23	HS23111879-09	SAMP	12-06-2023 07:46 pm	50.00	1 mL	50 mL	U120623.D	Liquid	Y	<2
24	HS23111879-12	SAMP	12-06-2023 08:09 pm	25.00	2 mL	50 mL	U120624.D	Liquid	Y	<2
25	HS23111879-12	SAMP	12-06-2023 08:31 pm	100.0(	500 µL	50 mL	U120625.D	Liquid	Y	<2
26	HS23120168-01	SAMP	12-06-2023 08:53 pm	100.0(	500 µL	50 mL	U120626.D	Liquid	Y	<2
27	HS23111879-07MS	MS	12-06-2023 09:16 pm	25.00	2 mL	50 mL	U120627.D	Liquid	Y	<2
28	HS23111879-07MSD	MSD	12-06-2023 09:38 pm	25.00	2 mL	50 mL	U120628.D	Liquid	Y	<2
29	CCV-END	CCV	12-06-2023 10:00 pm	1.00	50 mL	50 mL	U120629.D	Liquid	Y	NA
30	HS23120168-01	SAMP	12-06-2023 10:23 pm	2000.0	25 µL	50 mL	U120630.D	Liquid	Y	<2
31	HS23120230-01	SAMP	12-06-2023 10:45 pm	100.0(	500 µL	50 mL	U120631.D	Liquid	Y	<2
32	HS23120233-01	SAMP	12-06-2023 11:08 pm	100.0(	500 µL	50 mL	U120632.D	Liquid	Y	<2
33	BLANK	SAMP	12-06-2023 11:30 pm	1.00	50 mL	50 mL	U120633.D	Liquid	Y	NA
34	BFB	TUNE	12-06-2023 11:52 pm	1.00	50 mL	50 mL	V120601.D	Liquid	Y	NA
35	CCV	CCV	12-07-2023 12:15 am	1.00	50 mL	50 mL	V120602a.D	Liquid	Y	NA
36	CCV	CCV	12-07-2023 12:37 am	1.00	50 mL	50 mL	V120603.D	Liquid	Y	NA
37	CCB	SAMP	12-07-2023 12:59 am	1.00	50 mL	50 mL	V120604.D	Liquid	Y	NA
38	VLCSW-231206	LCS	12-07-2023 01:21 am	1.00	50 mL	50 mL	V120605.D	Liquid	Y	NA
39	BLANK	SAMP	12-07-2023 01:44 am	1.00	50 mL	50 mL	V120606.D	Liquid	Y	NA
40	VBLKW-231206	MBLK	12-07-2023 02:06 am	1.00	50 mL	50 mL	V120607.D	Liquid	Y	NA
41	HS23111910-01	SAMP	12-07-2023 02:29 am	1.00	50 mL	50 mL	V120608.D	Liquid	Y	<2

MSVOA09 -Logbook

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
42	HS23111910-02	SAMP	12-07-2023 02:51 am	1.00	50 mL	50 mL	V120609.D	Liquid	Y	<2
43	HS23111910-03	SAMP	12-07-2023 03:14 am	1.00	50 mL	50 mL	V120610.D	Liquid	Y	<2
44	HS23111910-04	SAMP	12-07-2023 03:36 am	1.00	50 mL	50 mL	V120611.D	Liquid	Y	<2
45	HS23111910-16	SAMP	12-07-2023 03:58 am	1.00	50 mL	50 mL	V120612.D	Liquid	Y	<2
46	HS23111910-06	SAMP	12-07-2023 04:21 am	1.00	50 mL	50 mL	V120613.D	Liquid	Y	<2
47	HS23111910-16MS	MS	12-07-2023 04:43 am	1.00	50 mL	50 mL	V120614.D	Liquid	Y	<2
48	HS23111910-16MSD	MSD	12-07-2023 05:06 am	1.00	50 mL	50 mL	V120615.D	Liquid	Y	<2
49	BLANK	SAMP	12-07-2023 05:28 am	1.00	50 mL	50 mL	V120616.D	Liquid	Y	NA
50	HS23111910-05	SAMP	12-07-2023 05:50 am	1.00	50 mL	50 mL	V120617.D	Liquid	Y	<2
51	HS23111910-08	SAMP	12-07-2023 06:13 am	1.00	50 mL	50 mL	V120618.D	Liquid	Y	<2
52	HS23111910-09	SAMP	12-07-2023 06:35 am	1.00	50 mL	50 mL	V120619.D	Liquid	Y	<2
53	HS23111910-10	SAMP	12-07-2023 06:58 am	1.00	50 mL	50 mL	V120620.D	Liquid	Y	<2
54	HS23111910-11	SAMP	12-07-2023 07:20 am	1.00	50 mL	50 mL	V120621.D	Liquid	Y	<2
55	HS23111910-12	SAMP	12-07-2023 07:43 am	1.00	50 mL	50 mL	V120622.D	Liquid	Y	<2
56	HS23111910-20	SAMP	12-07-2023 08:05 am	1.00	50 mL	50 mL	V120623.D	Liquid	Y	<2
57	HS23111910-21	SAMP	12-07-2023 08:27 am	1.00	50 mL	50 mL	V120624.D	Liquid	Y	<2
58	HS23111910-13	SAMP	12-07-2023 08:50 am	1.00	50 mL	50 mL	V120625.D	Liquid	Y	<2
59	HS23111910-17	SAMP	12-07-2023 09:12 am	1.00	50 mL	50 mL	V120626.D	Liquid	Y	<2
60	HS23111910-18	SAMP	12-07-2023 09:34 am	1.00	50 mL	50 mL	V120627.D	Liquid	Y	<2
61	HS23111910-19	SAMP	12-07-2023 09:57 am	1.00	50 mL	50 mL	V120628.D	Liquid	Y	<2
62	HS23111910-07	SAMP	12-07-2023 10:19 am	5.00	10 mL	50 mL	V120629.D	Liquid	Y	<2
63	HS23111910-07	SAMP	12-07-2023 10:42 am	25.00	2 mL	50 mL	V120630.D	Liquid	Y	<2
64	CCV-END	CCV	12-07-2023 11:04 am	1.00	50 mL	50 mL	V120631.D	Liquid	Y	NA

Chemical	Value
pH Paper	634-64-10

MSVOA09 -Logbook

Batch: 58467 **Analyst:** Presenta Cabascango

Date: 01-12-2024 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	01-12-2024 10:49 am	1.00	50 mL	50 mL	U011201.D	Liquid	Y	NA
2	CCV	CCV	01-12-2024 11:11 am	1.00	50 mL	50 mL	U011202a.D	Liquid	Y	NA
3	CCV	CCV	01-12-2024 11:34 am	1.00	50 mL	50 mL	U011203.D	Liquid	Y	NA
4	CCB	SAMP	01-12-2024 11:56 am	1.00	50 mL	50 mL	U011204.D	Liquid	Y	NA
5	VLCSW-240112	LCS	01-12-2024 12:18 pm	1.00	50 mL	50 mL	U011205.D	Liquid	Y	NA
6	BLANK	SAMP	01-12-2024 12:40 pm	1.00	50 mL	50 mL	U011206.D	Liquid	Y	NA
7	VBLKW-240112	MBLK	01-12-2024 01:03 pm	1.00	50 mL	50 mL	U011207.D	Liquid	Y	NA
8	HS24010519-10	SAMP	01-12-2024 01:25 pm	1.00	50 mL	50 mL	U011208.D	Liquid	Y	<2
9	HS24010519-09	SAMP	01-12-2024 01:47 pm	1.00	50 mL	50 mL	U011209.D	Liquid	Y	<2
10	HS24010423-01	SAMP	01-12-2024 02:09 pm	1.00	50 mL	50 mL	U011210.D	Liquid	Y	<2
11	HS24010519-09MS	MS	01-12-2024 02:32 pm	1.00	50 mL	50 mL	U011211.D	Liquid	Y	<2
12	HS24010519-09MSD	MSD	01-12-2024 02:54 pm	1.00	50 mL	50 mL	U011212.D	Liquid	Y	<2
13	HS24010423-01	SAMP	01-12-2024 03:16 pm	20.00	2.5 mL	50 mL	U011213.D	Liquid	Y	<2
14	HS24010551-01	SAMP	01-12-2024 03:39 pm	1.00	50 mL	50 mL	U011214.D	Liquid	Y	NA
	neat sample									
15	HS24010538-10	SAMP	01-12-2024 04:01 pm	1.00	50 mL	50 mL	U011215.D	Liquid	Y	<2
16	HS24010538-03	SAMP	01-12-2024 04:23 pm	1.00	50 mL	50 mL	U011216.D	Liquid	Y	<2
17	HS24010538-05	SAMP	01-12-2024 04:46 pm	1.00	50 mL	50 mL	U011217.D	Liquid	Y	<2
18	HS24010538-06	SAMP	01-12-2024 05:08 pm	1.00	50 mL	50 mL	U011218.D	Liquid	Y	<2
19	HS24010538-07	SAMP	01-12-2024 05:30 pm	1.00	50 mL	50 mL	U011219.D	Liquid	Y	<2
20	HS24010611-03	SAMP	01-12-2024 05:52 pm	1.00	50 mL	50 mL	U011220.D	Liquid	Y	<2
21	HS24010611-05	SAMP	01-12-2024 06:15 pm	1.00	50 mL	50 mL	U011221.D	Liquid	Y	<2
22	HS24010538-04	SAMP	01-12-2024 06:37 pm	1.00	50 mL	50 mL	U011222.D	Liquid	Y	<2
23	HS24010538-02	SAMP	01-12-2024 06:59 pm	5.00	10 mL	50 mL	U011223.D	Liquid	Y	<2
24	HS24010538-01	SAMP	01-12-2024 07:21 pm	50.00	1 mL	50 mL	U011224.D	Liquid	Y	<2
25	HS24010538-08n/r	SAMP	01-12-2024 07:43 pm	50.00	1 mL	50 mL	U011225.D	Liquid	Y	<2
26	HS24010538-08n/r	SAMP	01-12-2024 08:06 pm	250.0(	200 µL	50 mL	U011226.D	Liquid	Y	<2
27	HS24010538-09	SAMP	01-12-2024 08:28 pm	50.00	1 mL	50 mL	U011227.D	Liquid	Y	<2
28	HS24010538-09n/r	SAMP	01-12-2024 08:50 pm	250.0(	200 µL	50 mL	U011228.D	Liquid	Y	<2
29	HS24010611-04	SAMP	01-12-2024 09:12 pm	1.00	50 mL	50 mL	U011229.D	Liquid	Y	<2
30	CCV-END	CCV	01-12-2024 09:34 pm	1.00	50 mL	50 mL	U011230.D	Liquid	Y	NA
31	BLANK	SAMP	01-12-2024 09:57 pm	1.00	50 mL	50 mL	U011231.D	Liquid	Y	<2
32	BLANK	SAMP	01-12-2024 10:19 pm	1.00	50 mL	50 mL	U011232.D	Liquid	Y	<2

Chemical	Value
pH Paper	624-64-10

MSVOA09 -Logbook

Batch: 58517 **Analyst:** Presenta Cabascango

Date: 01-17-2024 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	01-17-2024 06:52 am	1.00	50 mL	50 mL	U011701.D	Liquid	Y	NA
2	CCV	CCV	01-17-2024 07:36 am	1.00	50 mL	50 mL	U011702.D	Liquid	Y	NA
3	VLCSW-240117	LCS	01-17-2024 07:58 am	1.00	50 mL	50 mL	U011703.D	Liquid	Y	NA
4	VBLKM-240117	MBLK	01-17-2024 08:20 am	50.00	1 mL	50 mL	U011704.D	Liquid	Y	NA
5	VBLKW-240117	MBLK	01-17-2024 08:42 am	1.00	50 mL	50 mL	U011705.D	Liquid	Y	NA
6	HS24010627-12	SAMP	01-17-2024 09:05 am	1.00	50 mL	50 mL	U011706.D	Liquid	Y	NA
7	HS24010606-01	SAMP	01-17-2024 09:27 am	1.00	50 mL	50 mL	U011707.D	Liquid	Y	<2
8	HS24010606-02	SAMP	01-17-2024 09:49 am	5.00	10 mL	50 mL	U011708.D	Liquid	Y	<2
9	HS24010606-03	SAMP	01-17-2024 10:12 am	1.00	50 mL	50 mL	U011709.D	Liquid	Y	<2
10	HS24010606-04	SAMP	01-17-2024 10:34 am	1.00	50 mL	50 mL	U011710.D	Liquid	Y	<2
11	HS24010606-05	SAMP	01-17-2024 10:56 am	1.00	50 mL	50 mL	U011711.D	Liquid	Y	<2
12	HS24010606-06	SAMP	01-17-2024 11:19 am	1.00	50 mL	50 mL	U011712.D	Liquid	Y	<2
13	HS24010611-01	SAMP	01-17-2024 11:41 am	1.00	50 mL	50 mL	U011713.D	Liquid	Y	<2
14	HS24010611-01MS	MS	01-17-2024 12:03 pm	1.00	50 mL	50 mL	U011714.D	Liquid	Y	<2
15	HS24010611-01MSD	MSD	01-17-2024 12:25 pm	1.00	50 mL	50 mL	U011715.D	Liquid	Y	<2
16	HS24010491-05	SAMP	01-17-2024 12:48 pm	500.0(	100 µL	50 mL	U011716.D	Liquid	Y	<2
17	HS24010538-08	SAMP	01-17-2024 01:10 pm	50.00	1 mL	50 mL	U011717.D	Liquid	Y	<2
18	HS24010611-04	SAMP	01-17-2024 01:32 pm	10.00	5 mL	50 mL	U011718.D	Liquid	Y	<2
19	HS24010625-01	SAMP	01-17-2024 01:54 pm	1.00	50 mL	50 mL	U011719.D	Liquid	Y	<2
20	HS24010595-05	SAMP	01-17-2024 02:17 pm	1.00	50 mL	50 mL	U011720.D	Liquid	Y	<2
21	HS24010595-01	SAMP	01-17-2024 02:39 pm	1.00	50 mL	50 mL	U011721.D	Liquid	Y	<2
22	HS24010595-02	SAMP	01-17-2024 03:02 pm	1.00	50 mL	50 mL	U011722.D	Liquid	Y	<2
23	HS24010595-03	SAMP	01-17-2024 03:24 pm	1.00	50 mL	50 mL	U011723.D	Liquid	Y	<2
24	HS24010595-04	SAMP	01-17-2024 03:46 pm	1.00	50 mL	50 mL	U011724.D	Liquid	Y	<2
25	HS24010766-01	SAMP	01-17-2024 04:09 pm	100.0(	500 µL	50 mL	U011725.D	Liquid	Y	<2
26	HS24010699-01	SAMP	01-17-2024 04:31 pm	1.00	50 mL	50 mL	U011726.D	Liquid	Y	<2
27	HS24010699-02	SAMP	01-17-2024 04:54 pm	1.00	50 mL	50 mL	U011727.D	Liquid	Y	<2
28	CCV-END	CCV	01-17-2024 05:16 pm	1.00	50 mL	50 mL	U011728.D	Liquid	Y	NA
29	BLANK	SAMP	01-17-2024 05:38 pm	1.00	50 mL	50 mL	U011729.D	Liquid	Y	NA
30	BLANK	SAMP	01-17-2024 06:01 pm	1.00	50 mL	50 mL	U011730.D	Liquid	Y	NA
31	BFB	TUNE	01-17-2024 06:23 pm	1.00	50 mL	50 mL	V011701.D	Liquid	Y	NA
32	CCV	CCV	01-17-2024 07:07 pm	1.00	50 mL	50 mL	V011702.D	Liquid	Y	NA
33	VLCSW-240117	LCS	01-17-2024 07:29 pm	1.00	50 mL	50 mL	V011703.D	Liquid	Y	NA
34	VLCSDW-240117	LCSD	01-17-2024 07:52 pm	1.00	50 mL	50 mL	V011704.D	Liquid	Y	NA
35	BLANK	SAMP	01-17-2024 08:14 pm	1.00	50 mL	50 mL	V011705.D	Liquid	Y	NA
36	VBLKW-240117	MBLK	01-17-2024 08:36 pm	1.00	50 mL	50 mL	V011706.D	Liquid	Y	NA
37	HS24010734-19	SAMP	01-17-2024 08:58 pm	1.00	50 mL	50 mL	V011707.D	Liquid	Y	<2
38	HS24010643-02	SAMP	01-17-2024 09:21 pm	1.00	50 mL	50 mL	V011708.D	Liquid	Y	<2
39	HS24010711-02	SAMP	01-17-2024 09:43 pm	1.00	50 mL	50 mL	V011709.D	Liquid	Y	<2
40	HS24010812-08	SAMP	01-17-2024 10:06 pm	1.00	50 mL	50 mL	V011710.D	Liquid	Y	<2
41	HS24010749-14	SAMP	01-17-2024 10:28 pm	1.00	50 mL	50 mL	V011711.D	Liquid	Y	<2

MSVOA09 -Logbook

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
42	HS24010699-04	SAMP	01-17-2024 10:50 pm	1.00	50 mL	50 mL	V011712.D	Liquid	Y	<2
43	HS24010705-04	SAMP	01-17-2024 11:13 pm	1.00	50 mL	50 mL	V011713.D	Liquid	Y	<2
44	HS24010732-06	SAMP	01-17-2024 11:35 pm	1.00	50 mL	50 mL	V011714.D	Liquid	Y	<2
45	HS24010732-07	SAMP	01-17-2024 11:57 pm	1.00	50 mL	50 mL	V011715.D	Liquid	Y	<2
46	HS24010699-03	SAMP	01-18-2024 12:20 am	1.00	50 mL	50 mL	V011716.D	Liquid	Y	<2
47	HS24010705-01	SAMP	01-18-2024 12:42 am	1.00	50 mL	50 mL	V011717.D	Liquid	Y	<2
48	HS24010705-02	SAMP	01-18-2024 01:05 am	1.00	50 mL	50 mL	V011718.D	Liquid	Y	<2
49	HS24010705-03	SAMP	01-18-2024 01:27 am	1.00	50 mL	50 mL	V011719.D	Liquid	Y	<2
50	HS24010812-01	SAMP	01-18-2024 01:49 am	1.00	50 mL	50 mL	V011720.D	Liquid	Y	<2
51	HS24010812-02	SAMP	01-18-2024 02:12 am	1.00	50 mL	50 mL	V011721.D	Liquid	Y	<2
52	HS24010812-03	SAMP	01-18-2024 02:36 am	10.00	5 mL	50 mL	V011722.D	Liquid	Y	<2
53	HS24010812-04	SAMP	01-18-2024 03:01 am	10.00	5 mL	50 mL	V011723.D	Liquid	Y	<2
54	HS24010812-05	SAMP	01-18-2024 03:26 am	10.00	5 mL	50 mL	V011724.D	Liquid	Y	<2
55	HS24010812-06	SAMP	01-18-2024 03:51 am	10.00	5 mL	50 mL	V011725.D	Liquid	Y	<2
56	HS24010812-07	SAMP	01-18-2024 04:16 am	10.00	5 mL	50 mL	V011726.D	Liquid	Y	<2
57	BLK	SAMP	01-18-2024 04:38 am	1.00	50 mL	50 mL	V011727.D	Liquid	Y	NA
58	BLK	SAMP	01-18-2024 05:01 am	1.00	50 mL	50 mL	V011728.D	Liquid	Y	NA

Chemical	Value
pH Paper	634-64-10

right solutions.
right partner.

RawData

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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\voa9.i\U231206.b\U120601.D Page 1
Report Date: 07-Dec-2023 10:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120601.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 06-DEC-2023 11:14
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\U231206.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	
9.197	9.180	(0.000)	95	70800			0.00- 100.00	100.00
9.197	9.180	(0.000)	50	12933			15.00- 40.00	18.27
9.197	9.180	(0.000)	75	34640			30.00- 60.00	48.93
9.197	9.180	(0.000)	96	4799			5.00- 9.00	6.78
9.197	9.180	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
9.197	9.180	(0.000)	174	62608			50.00- 0.00	88.43
9.197	9.180	(0.000)	175	5227			5.00- 9.00	8.35
9.197	9.180	(0.000)	176	62160			95.00- 101.00	99.28
9.197	9.180	(0.000)	177	3938			5.00- 9.00	6.34

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.27
75	30.00 - 60.00% of mass 95	48.93
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	88.43
175	5.00 - 9.00% of mass 174	7.38 (8.35)
176	95.00 - 101.00% of mass 174	87.80 (99.28)
177	5.00 - 9.00% of mass 176	5.56 (6.34)

Data File: U120601.D
Spectrum: Scan 2294 (9.19)
Location of Maximum: 95.10
Number of points: 109

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	672	64.00	389	95.10	70800	143.00	651
37.10	3196	65.00	563	96.10	4799	143.80	56
38.10	3144	65.90	92	97.00	209	144.90	127
39.10	1362	67.20	312	104.00	312	145.80	165
40.00	711	68.10	6883	104.60	133	147.00	102
41.20	184	69.00	7438	105.90	338	147.90	161
42.00	128	70.00	506	107.00	124	148.90	82
42.80	102	70.90	89	108.00	52	149.90	109
44.00	800	72.00	494	110.30	59	151.90	72
45.10	619	73.10	2968	111.90	52	153.00	96
45.80	184	74.10	12043	113.00	61	153.90	108
47.10	1050	75.10	34640	114.90	108	155.00	258
48.00	459	76.10	3228	116.00	230	158.80	121
49.10	2929	77.10	500	116.90	767	160.70	72
50.10	12933	78.00	528	117.90	289	169.60	61
51.10	3950	79.00	1680	118.90	454	171.00	127
52.10	292	79.90	570	123.90	81	171.90	699
52.80	140	80.90	1880	126.80	90	174.00	62608
53.90	84	81.90	317	127.90	321	175.00	5227
55.10	167	83.30	77	128.90	112	176.00	62160
56.00	930	86.10	145	129.80	309	177.00	3938
57.00	1888	87.00	3421	130.80	118	177.90	135
58.00	106	88.00	2987	132.10	62	218.50	58
58.80	66	90.30	87	134.90	141	262.20	52
60.10	741	91.00	213	136.90	95	328.30	63
61.00	3325	92.10	1915	140.20	85		
62.10	2880	93.00	3307	140.90	647		
63.10	2110	94.10	8223	141.90	133		

Data File: \\NAHSTWS005\Target\chem\voa9.i\u231206.b\u120601.d Page 1

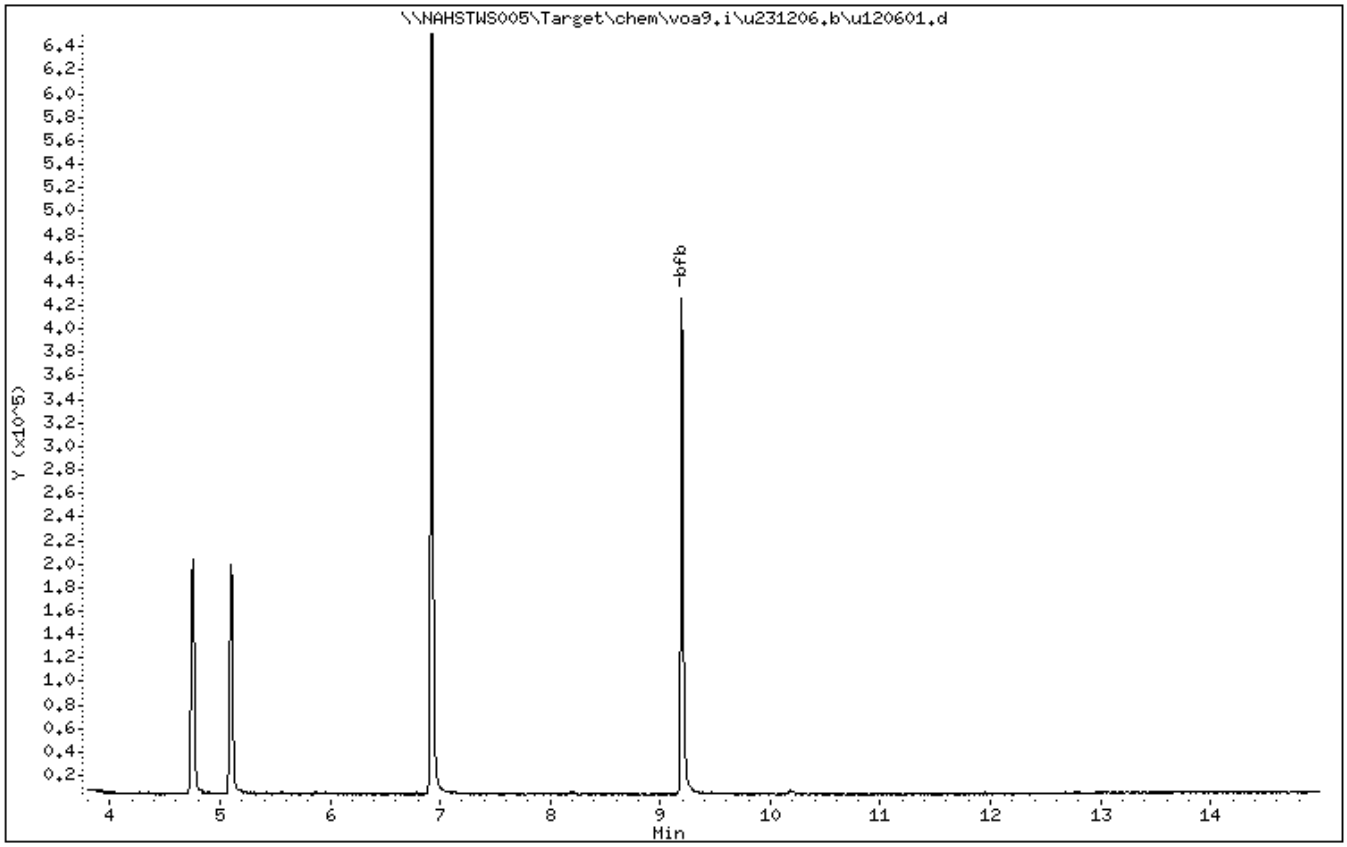
Date : 06-DEC-2023 11:14

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\u231206.b\u120601.d
Inj Date : 06-DEC-2023 11:14
InstruID : VOA9.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120602.D Page 1
Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120602.D
Lab Smp Id: VSTD000.25 Client Smp ID: VSTD000.25
Inj Date : 06-DEC-2023 11:36
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\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 11:36 Cal File: U120602.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	4.815	4.815	(1.000)	385732	50.0000	
	2 Dichlorodifluoromethane	85	1.164	1.164	(0.242)	431	0.25000	1.00(M)
	3 Chloromethane	50	1.303	1.303	(0.271)	2053	0.25000	0.46
	5 Vinyl Chloride	62	1.378	1.378	(0.286)	867	0.25000	0.20
	6 Bromomethane	94	1.625	1.625	(0.338)	1498	0.25000	
	8 Trichlorofluoromethane	101	1.899	1.899	(0.394)	1165	0.25000	0.21
	10 Acetone	43	2.416	2.416	(0.502)	3178	0.50000	
	16 Acrylonitrile	53	3.068	3.068	(0.637)	1135	0.50000	0.75
	17 Methylene Chloride	84	2.799	2.799	(0.581)	2929	0.25000	0.51
	18 Methyl tert-butyl ether	73	3.076	3.076	(0.639)	3667	0.25000	0.34
	19 Carbon Disulfide	76	2.525	2.525	(0.524)	5260	0.50000	0.60
	20 trans-1,2-Dichloroethene	96	3.061	3.061	(0.636)	1120	0.25000	0.31
	24 2-Butanone	43	4.283	4.283	(0.889)	936	0.50000	0.49
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	1520	0.25000	0.31
	28 Chloroform	83	4.572	4.572	(0.949)	2329	0.25000	0.29
	29 Bromochloromethane	128	4.474	4.474	(0.929)	609	0.25000	0.24
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	1739	0.25000	
	31 1,1,1-Trichloroethane	97	4.748	4.748	(0.986)	1675	0.25000	0.27
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	1316	0.25000	0.25
	33 1,2-Dichloroethane	62	5.183	5.183	(0.933)	1828	0.25000	0.30

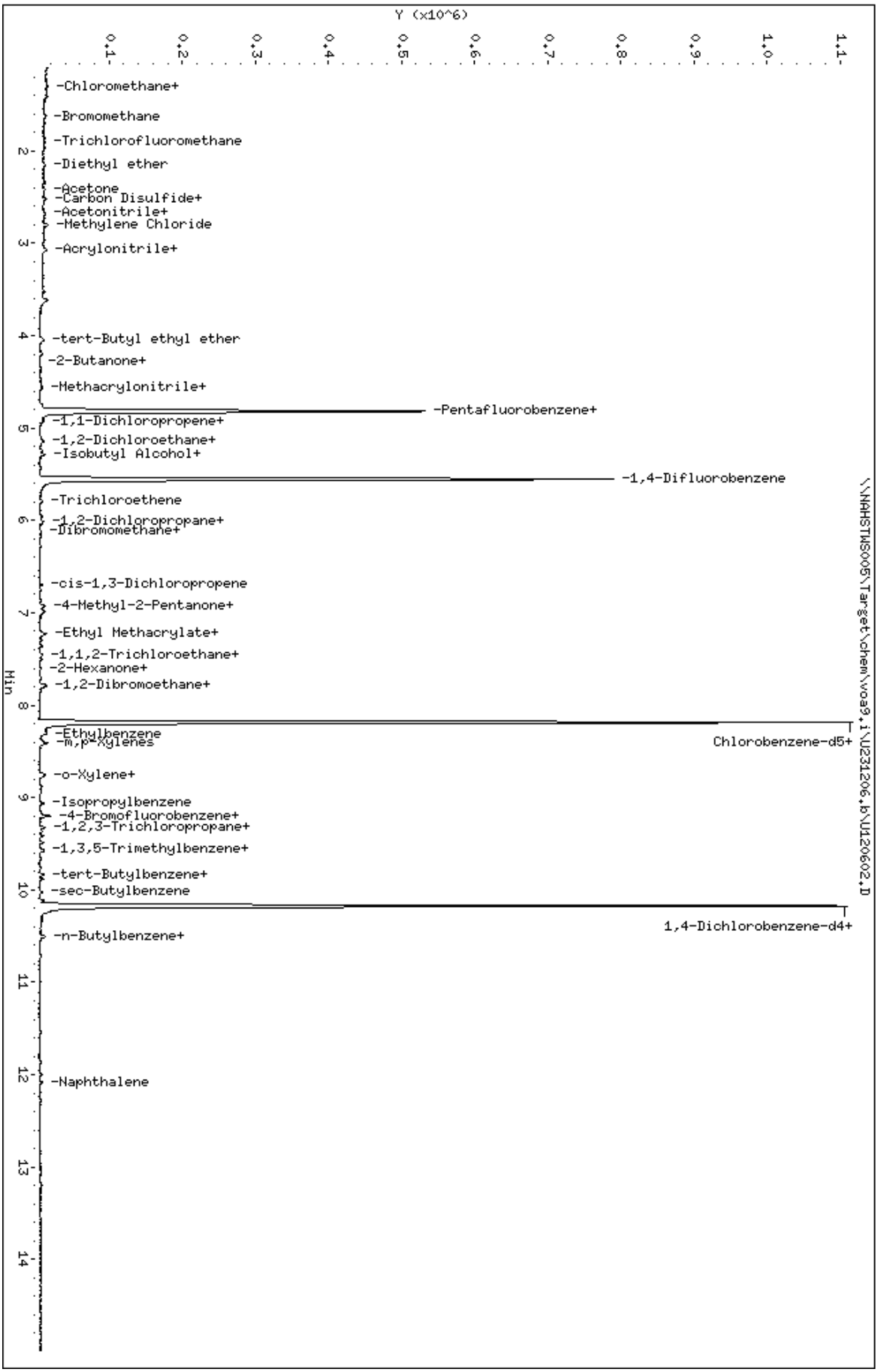
	34 Carbon Tetrachloride	117	4.913	4.913 (0.885)	1572	0.25000	0.31	
$	35 1,2-Dichloroethane-d4	65	5.104	5.104 (1.060)	2115	0.25000		(T)

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120602.D Page 2
Report Date: 12-Dec-2023 09:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	611357	50.0000	
	37 Benzene	78	5.141	5.141	(0.926)	4276	0.25000	0.25
	38 Trichloroethene	130	5.786	5.786	(1.042)	1217	0.25000	0.26
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	1844	0.25000	0.41
	44 Dibromomethane	93	6.120	6.120	(1.102)	775	0.25000	0.26
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	2194	0.50000	0.13
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	1656	0.25000	1.71
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	612188	50.0000	
$	48 Toluene-d8	98	6.926	6.926	(0.846)	5221	0.25000	0.37
	50 Toluene	91	6.982	6.982	(0.853)	4306	0.25000	0.25
	52 2-Hexanone	43	7.604	7.604	(0.929)	1088	0.50000	0.35
	53 1,1,2-Trichloroethane	83	7.361	7.361	(0.899)	1038	0.25000	
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	2254	0.25000	0.29
	55 Dibromochloromethane	129	7.694	7.694	(0.940)	1150	0.25000	0.25
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	1235	0.25000	0.29
	58 1-Chlorohexane	55	8.185	8.185	(1.474)	5798	0.25000	1.69
	59 Chlorobenzene	112	8.212	8.212	(1.003)	3583	0.25000	0.28
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	921	0.25000	0.21
	61 Ethylbenzene	106	8.309	8.309	(1.015)	1260	0.25000	0.21
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	3411	0.50000	0.48
	63 o-Xylene	106	8.748	8.748	(1.069)	1710	0.25000	0.23
	64 Styrene	104	8.763	8.763	(1.071)	2054	0.25000	0.17
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	3678	0.25000	0.21
$	69 4-Bromofluorobenzene	95	9.198	9.198	(1.124)	4792	0.25000	
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	309166	50.0000	
	71 1,2,3-Trichloropropane	75	9.363	9.363	(0.920)	1327	0.25000	0.22
	73 n-Propylbenzene	91	9.415	9.415	(0.926)	3390	0.25000	0.18
	74 Bromobenzene	156	9.321	9.321	(0.916)	1380	0.25000	0.26
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	2587	0.25000	0.20
	76 2-Chlorotoluene	91	9.486	9.486	(0.933)	3123	0.25000	0.25
	77 4-Chlorotoluene	91	9.580	9.580	(0.942)	2503	0.25000	0.18
	78 tert-Butylbenzene	119	9.839	9.839	(0.967)	2572	0.25000	0.22
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	2489	0.25000	0.19
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	2815	0.25000	0.18
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	2942	0.25000	0.22
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	2076	0.25000	0.22
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	2623	0.25000	0.26
	87 n-Butylbenzene	91	10.495	10.495	(1.032)	2309	0.25000	0.21
	88 1,2-Dichlorobenzene	146	10.510	10.510	(1.033)	2334	0.25000	0.25
	92 Naphthalene	128	12.080	12.080	(1.188)	2335	0.25000	0.16
M	94 1,2-Dichloroethylene (total)	96				2640	0.50000	
M	95 Xylenes (total)	106				5121	0.75000	
	135 1,4-Dioxane	88	6.180	6.180	(1.283)	310	5.00000	5.06(M)
	141 Cyclohexane	56	4.819	4.819	(1.001)	8134	0.25000	1.46
	147 Methylcyclohexane	55	5.955	5.955	(1.072)	1890	0.25000	0.20

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa9,i\U231206,b\U120602,D
Date : 06-DEC-2023 11:36
Client ID: VSTD000,25
Sample Info: VSTD000,25;VSTD000,25;1;1;
Purge Volume: 5.0
Column phase: DB624

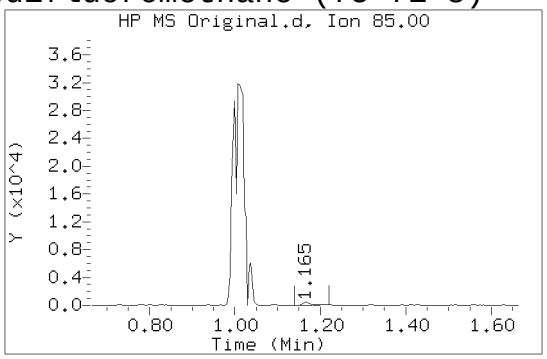
Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120602.D
Inj Date : 06-DEC-2023 11:36
InstruID : VOA9.i
LabSampID : VSTD000.25

Dichlorodifluoromethane (75-71-8)

Reason Code:

BEFORE
MASS
85
AREA
431
HEIGHT
467
11-Dec-2023
17:18
linh
pham



AFTER
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431
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467
12-Dec-2023
09:43
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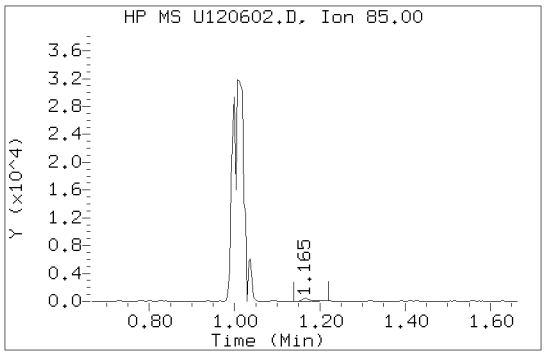

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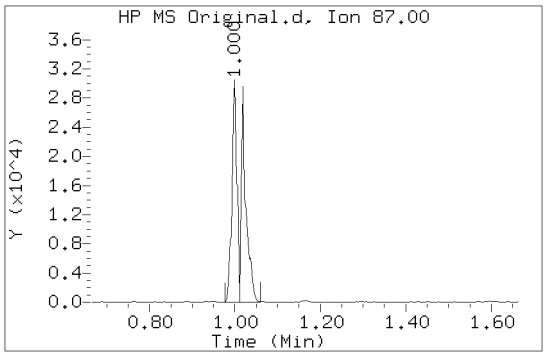

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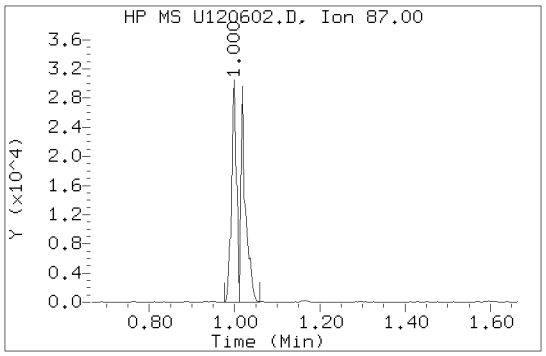

1,4-Dioxane ()

Reason Code:

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17:18
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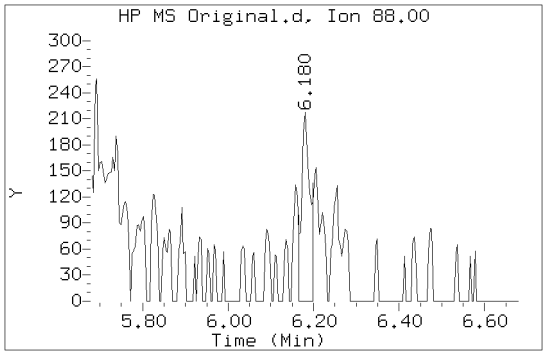

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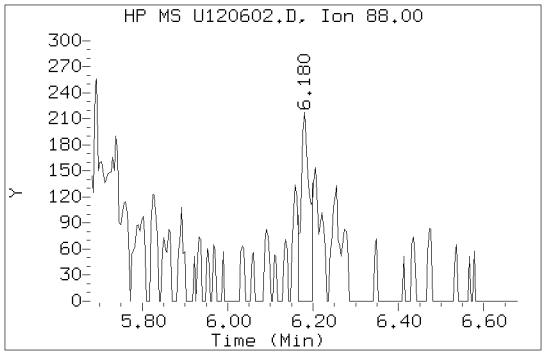

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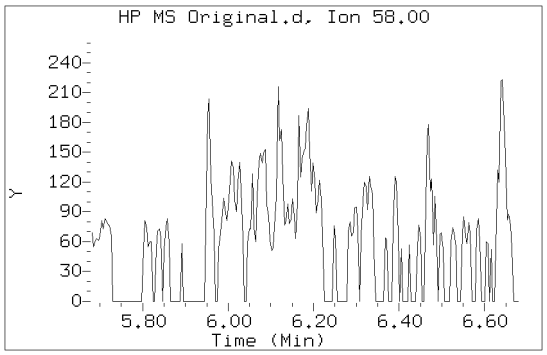

AFTER
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12-Dec-2023
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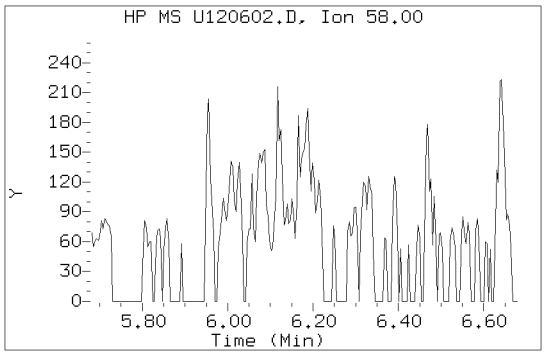

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603.D Page 1
Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603.D
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Inj Date : 06-DEC-2023 11:58
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD000.5;VSTD000.5;1;2;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 11:36 Cal File: U120602.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	4.819	4.819	(1.000)	351518	50.0000	
2	Dichlorodifluoromethane	85	1.164	1.164	(0.242)	1356	0.50000	1.33(M)
3	Chloromethane	50	1.303	1.303	(0.270)	2136	0.50000	0.52(M)
5	Vinyl Chloride	62	1.378	1.378	(0.286)	1954	0.50000	0.50
6	Bromomethane	94	1.625	1.625	(0.337)	1430	0.50000	(M)
7	Chloroethane	64	1.704	1.704	(0.354)	1259	0.50000	0.48(M)
8	Trichlorofluoromethane	101	1.899	1.899	(0.394)	2224	0.50000	0.45
9	Acrolein	56	2.277	2.277	(0.473)	221	1.00000	1.10(M)
10	Acetone	43	2.412	2.412	(0.501)	3182	1.00000	(M)
11	1,1-Dichloroethene	96	2.337	2.337	(0.485)	1472	0.50000	0.54
15	Iodomethane	142	2.472	2.472	(0.513)	1035	1.00000	2.61(T)
16	Acrylonitrile	53	3.072	3.072	(0.638)	1506	1.00000	1.09
17	Methylene Chloride	84	2.798	2.798	(0.581)	2348	0.50000	0.42(M)
18	Methyl tert-butyl ether	73	3.087	3.087	(0.641)	4926	0.50000	0.50
19	Carbon Disulfide	76	2.525	2.525	(0.524)	8445	1.00000	1.05
20	trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	1948	0.50000	0.60(M)
21	Vinyl Acetate	43	3.616	3.616	(0.750)	8811	1.00000	0.89
22	1,1-Dichloroethane	63	3.522	3.522	(0.731)	3728	0.50000	0.56(TM)
24	2-Butanone	43	4.283	4.283	(0.889)	2099	1.00000	1.21(M)
26	2,2-Dichloropropane	77	4.185	4.185	(0.869)	2637	0.50000	0.56

27 cis-1,2-Dichloroethene	96	4.200	4.200 (0.872)	2397	0.50000	0.55
28 Chloroform	83	4.575	4.575 (0.949)	4075	0.50000	0.56

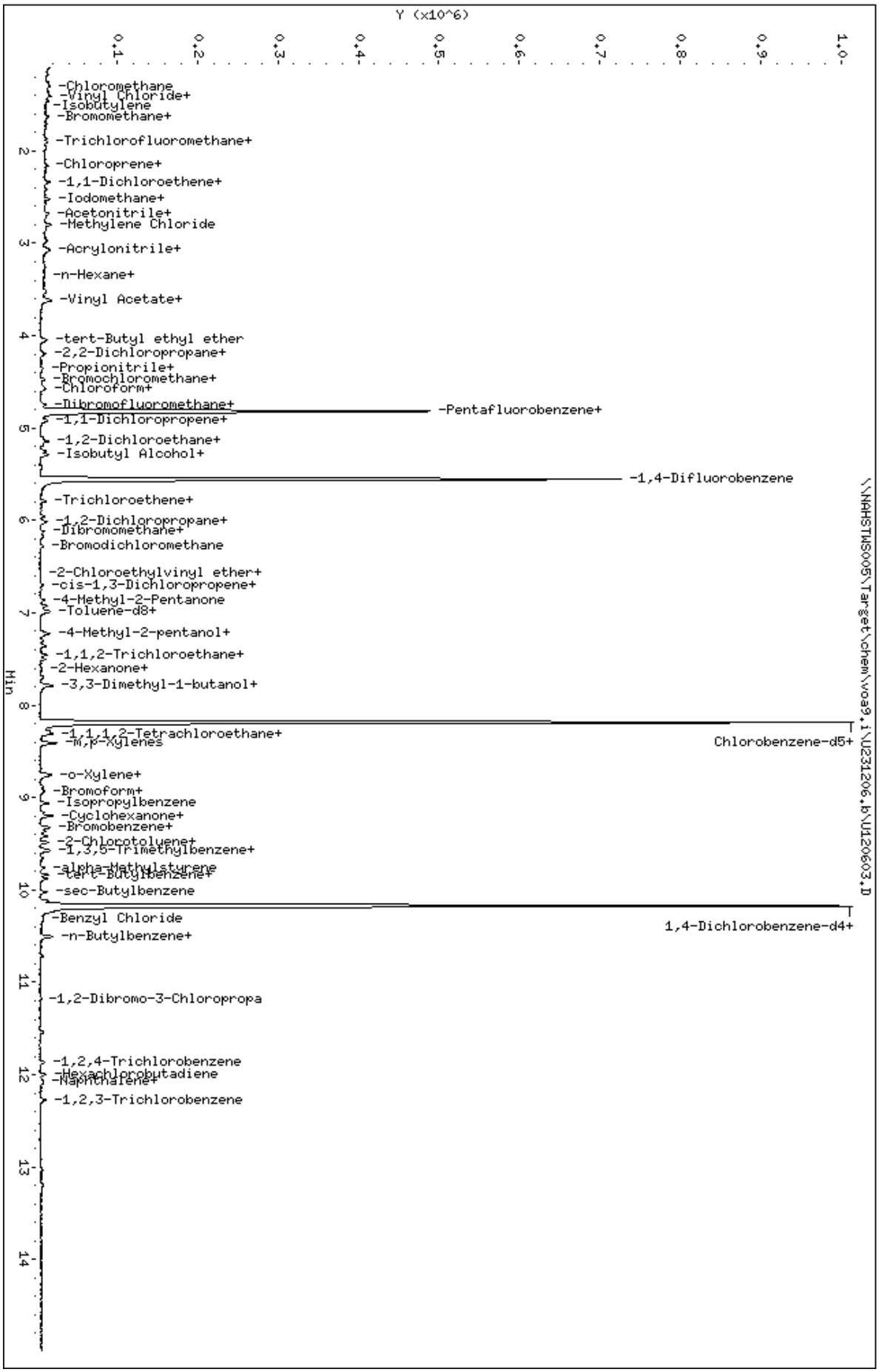
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	1194	0.50000	0.53
$	30 Dibromofluoromethane	113	4.748	4.748	(0.985)	2084	0.50000	
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.984)	2774	0.50000	0.50
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	2513	0.50000	0.53(M)
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	3284	0.50000	0.59
	34 Carbon Tetrachloride	117	4.916	4.916	(0.885)	2241	0.50000	0.48(M)
$	35 1,2-Dichloroethane-d4	65	5.108	5.108	(1.060)	2783	0.50000	0.14(M)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	564889	50.0000	
	37 Benzene	78	5.145	5.145	(0.926)	8471	0.50000	0.55
	38 Trichloroethene	130	5.790	5.790	(1.043)	2145	0.50000	0.50
	39 Bromodichloromethane	83	6.281	6.281	(1.131)	2561	0.50000	0.50(M)
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	81	1.00000	(M)
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	2365	0.50000	0.57
	44 Dibromomethane	93	6.120	6.120	(1.102)	1509	0.50000	0.56
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	3489	1.00000	0.51
	46 cis-1,3-Dichloropropene	75	6.697	6.697	(1.206)	2180	0.50000	1.80
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	556790	50.0000	
$	48 Toluene-d8	98	6.926	6.926	(0.846)	5743	0.50000	0.44
	50 Toluene	91	6.982	6.982	(0.853)	7719	0.50000	0.49
	51 trans-1,3-Dichloropropene	75	7.203	7.203	(1.297)	2266	0.50000	2.17(M)
	52 2-Hexanone	43	7.604	7.604	(0.929)	2124	1.00000	0.75
	53 1,1,2-Trichloroethane	83	7.361	7.361	(0.899)	2006	0.50000	
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	3681	0.50000	0.53
	55 Dibromochloromethane	129	7.694	7.694	(0.940)	1891	0.50000	0.45
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	1618	0.50000	0.48
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	2016	0.50000	0.52(M)
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	1630	0.50000	0.51(M)
	59 Chlorobenzene	112	8.212	8.212	(1.003)	6178	0.50000	0.54
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	1886	0.50000	0.47
	61 Ethylbenzene	106	8.309	8.309	(1.015)	2673	0.50000	0.50(M)
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	5585	1.00000	0.87
	63 o-Xylene	106	8.748	8.748	(1.069)	3316	0.50000	0.50
	64 Styrene	104	8.770	8.770	(1.071)	4395	0.50000	0.40(M)
	66 Bromoform	173	8.920	8.920	(1.090)	1087	0.50000	1.44(T)
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	6642	0.50000	0.41
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	3009	0.50000	(M)
$	69 4-Bromofluorobenzene	95	9.197	9.197	(1.124)	4583	0.50000	(M)
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	283463	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	3019	0.50000	0.56(M)
	73 n-Propylbenzene	91	9.415	9.415	(0.926)	6934	0.50000	0.41(M)
	74 Bromobenzene	156	9.321	9.321	(0.916)	2492	0.50000	0.52
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	4609	0.50000	0.38
	76 2-Chlorotoluene	91	9.486	9.486	(0.933)	5799	0.50000	0.51
	77 4-Chlorotoluene	91	9.580	9.580	(0.942)	5828	0.50000	0.45
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	4379	0.50000	0.41
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	5368	0.50000	0.45(M)
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	6329	0.50000	0.46(M)
	82 p-Isopropyltoluene	119	10.150	10.150	(0.998)	5327	0.50000	0.44(M)
	83 1,3-Dichlorobenzene	146	10.120	10.120	(0.995)	4068	0.50000	0.48(M)
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	4850	0.50000	0.54
	87 n-Butylbenzene	91	10.498	10.498	(1.032)	4072	0.50000	0.40
	88 1,2-Dichlorobenzene	146	10.510	10.510	(1.033)	4403	0.50000	0.51

89	1,2-Dibromo-3-Chloropropane	155	11.184	11.184 (1.099)	428	0.50000	2.61(M)
90	1,2,4-Trichlorobenzene	180	11.867	11.867 (1.167)	2624	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	11.994	11.994	(1.179)	989	0.50000	0.47
	92 Naphthalene	128	12.076	12.076	(1.187)	5275	0.50000	0.41(M)
	93 1,2,3-Trichlorobenzene	180	12.271	12.271	(1.206)	2777	0.50000	0.52(M)
M	94 1,2-Dichloroethylene (total)	96				4345	1.00000	
M	95 Xylenes (total)	106				8901	1.50000	
	131 Methyl Acrylate	55	4.407	4.407	(0.914)	2589	0.50000	0.56(aM)
	135 1,4-Dioxane	88	6.176	6.176	(1.282)	631	10.0000	11.31(M)
	141 Cyclohexane	56	4.804	4.804	(0.997)	2806	0.50000	0.55(M)
	138 Freon TF	101	2.341	2.341	(0.486)	1239	0.50000	0.48
	140 1,3-Butadiene	54	1.408	1.408	(0.292)	1449	0.50000	0.41
	147 Methylcyclohexane	55	5.959	5.959	(1.073)	3447	0.50000	0.41
	146 Methyl Acetate	43	2.723	2.723	(0.565)	1832	0.50000	0.52(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.



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Client ID: VSTD000.5
Sample Info: VSTD000.5;VSTD000.5;1;2;
Purge Volume: 5.0
Column phase: DB624

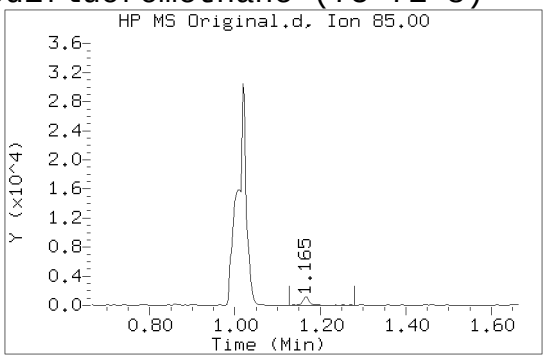
Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603.D
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

Dichlorodifluoromethane (75-71-8)

Reason Code:

BEFORE
MASS
62
AREA
1954
HEIGHT
1706
06-Dec-2023
23:21



AFTER
MASS
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AREA
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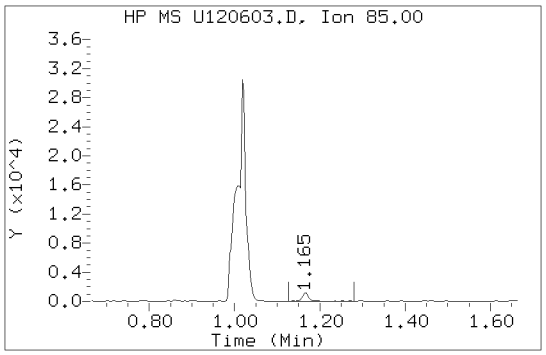
HEIGHT
1119
12-Dec-2023
09:43



BEFORE
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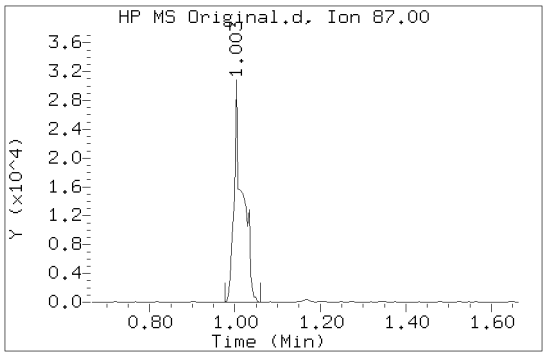
06-Dec-2023
23:21



AFTER
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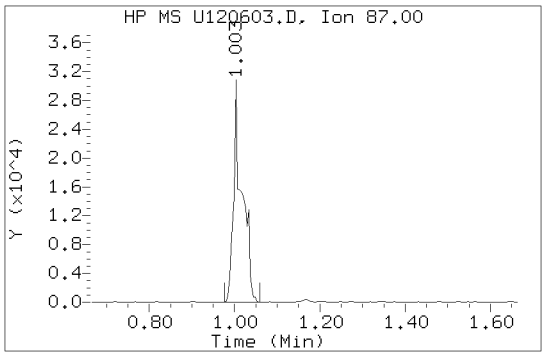
12-Dec-2023
09:43



Chloromethane (74-87-3)

Reason Code:

BEFORE
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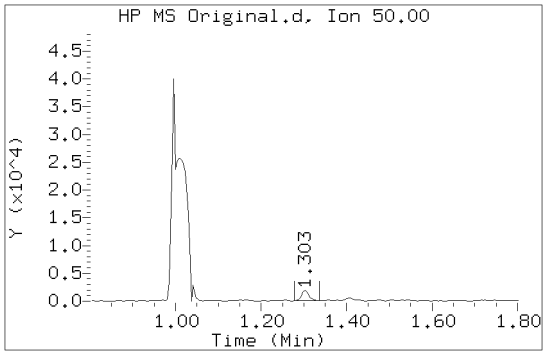
AREA
1430
HEIGHT
1441
06-Dec-2023
23:21



AFTER
MASS
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AREA
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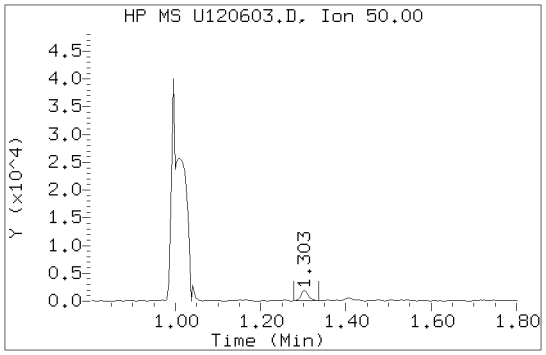
HEIGHT
1846
12-Dec-2023
09:43



BEFORE
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HEIGHT
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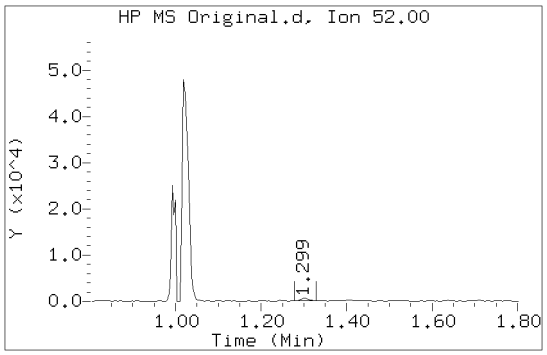
06-Dec-2023
23:21



AFTER
MASS
52
AREA
810
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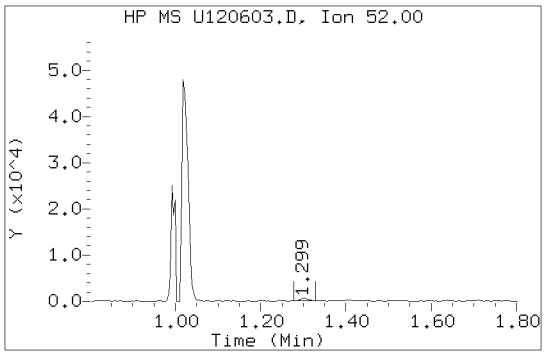
12-Dec-2023
09:43



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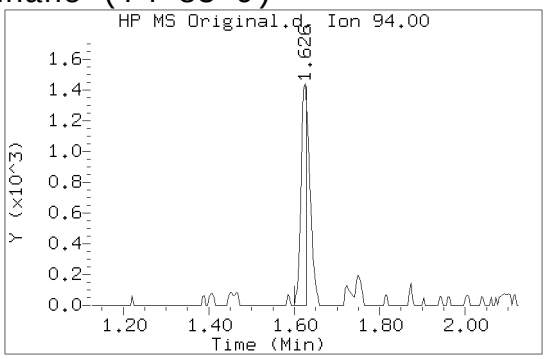
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

Bromomethane (74-83-9)

Reason Code:

BEFORE

MASS
101
AREA
2224
HEIGHT
1410
06-Dec-2023
23:21



AFTER

MASS
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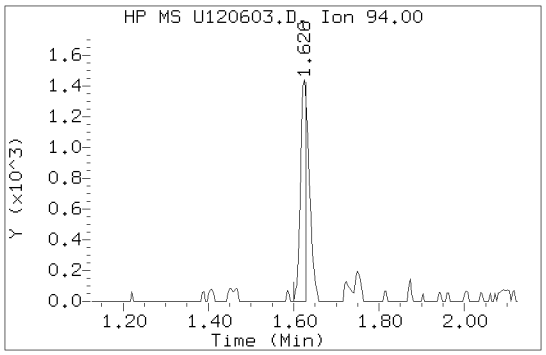
12-Dec-2023
09:43



BEFORE

MASS
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AREA
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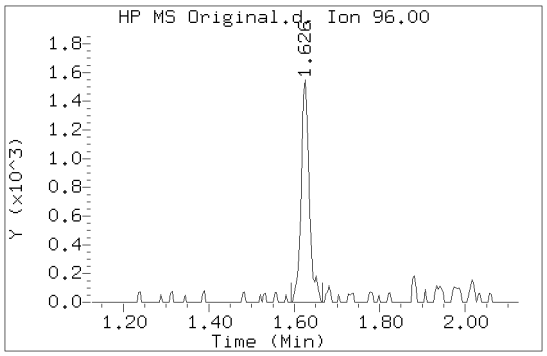
06-Dec-2023
23:21



AFTER

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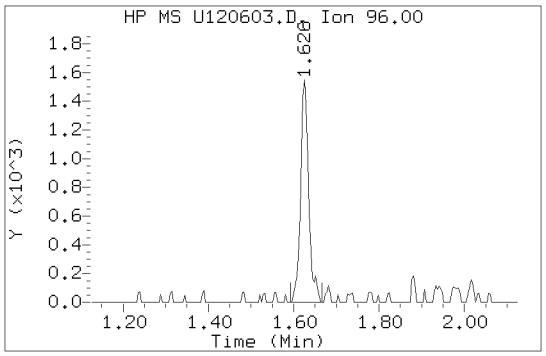
12-Dec-2023
09:43

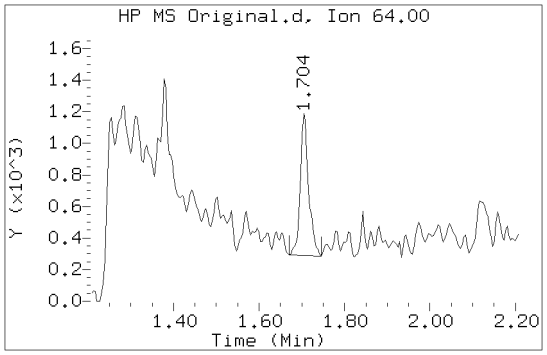


Chloroethane (75-00-3)

Reason Code:

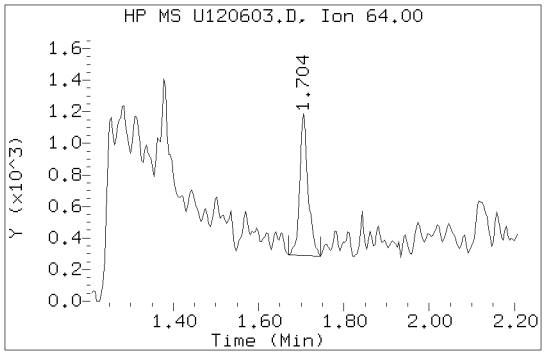
BEFORE

MASS
43
AREA
3182
HEIGHT
1596
06-Dec-2023
23:21



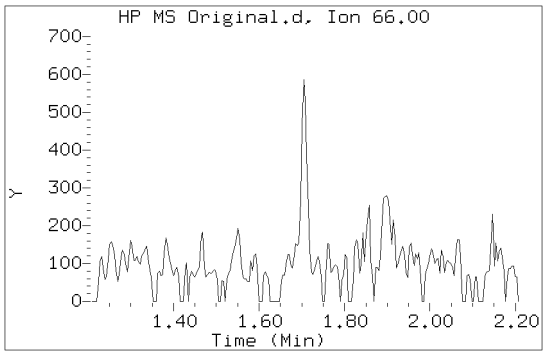
AFTER

MASS
64
AREA
1259
HEIGHT
899
12-Dec-2023
09:43



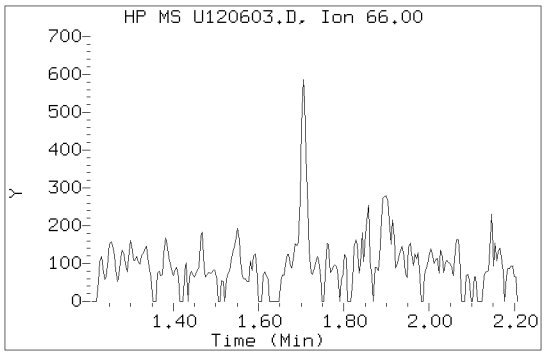
BEFORE

MASS
58
AREA
1171
HEIGHT
620
06-Dec-2023
23:21



AFTER

MASS
66
AREA
0
HEIGHT
0
12-Dec-2023
09:43



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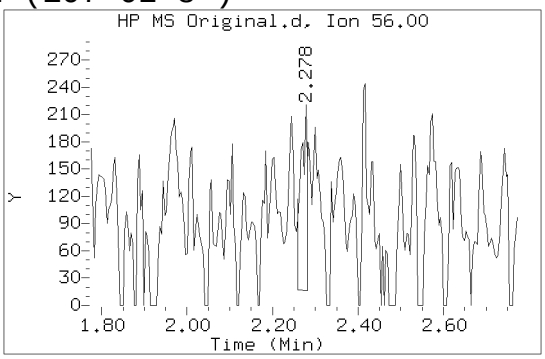
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

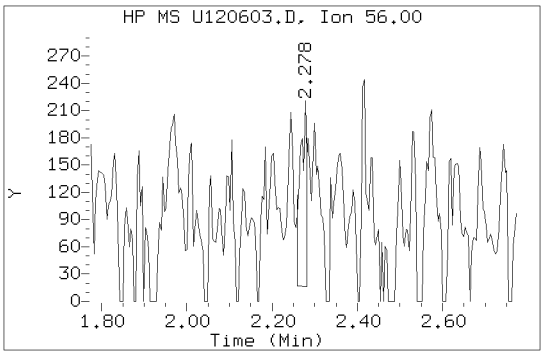
Acrolein (107-02-8)

Reason Code:

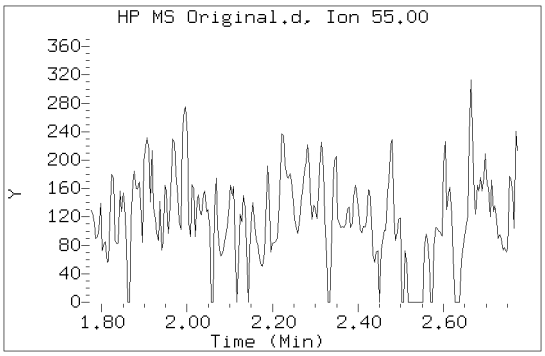
BEFORE
MASS
142
AREA
1035
HEIGHT
550
06-Dec-2023
23:21



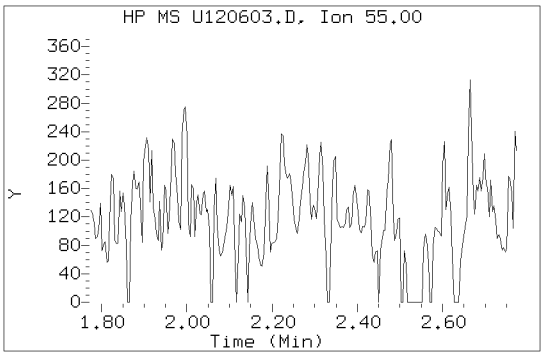
AFTER
MASS
56
AREA
221
HEIGHT
204
12-Dec-2023
09:43



BEFORE
MASS
127
AREA
625
HEIGHT
328
06-Dec-2023
23:21



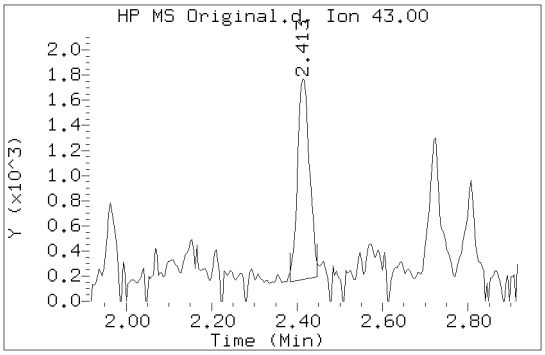
AFTER
MASS
55
AREA
0
HEIGHT
0
12-Dec-2023
09:43



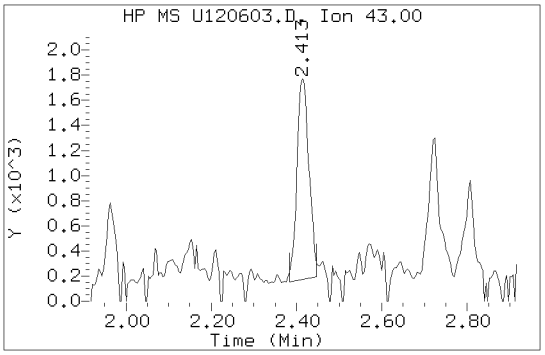
Acetone (67-64-1)

Reason Code:

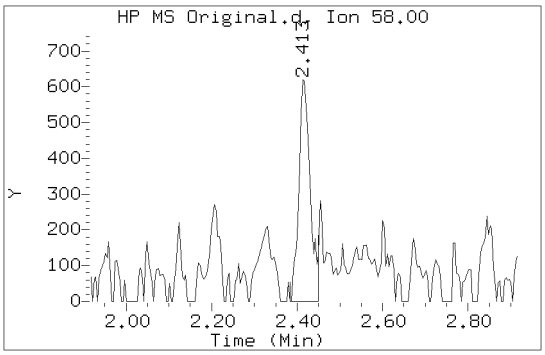
BEFORE
MASS
53
AREA
1506
HEIGHT
573
06-Dec-2023
23:21



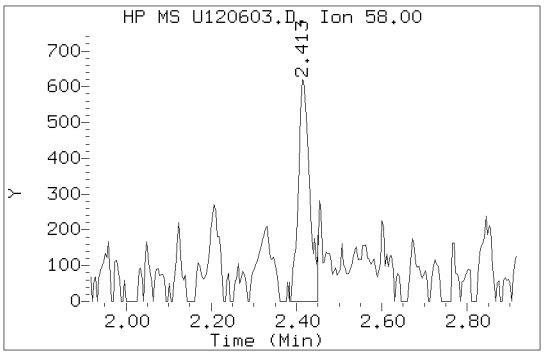
AFTER
MASS
43
AREA
3182
HEIGHT
1596
12-Dec-2023
09:43



BEFORE
MASS
52
AREA
1399
HEIGHT
626
06-Dec-2023
23:21



AFTER
MASS
58
AREA
1171
HEIGHT
620
12-Dec-2023
09:43



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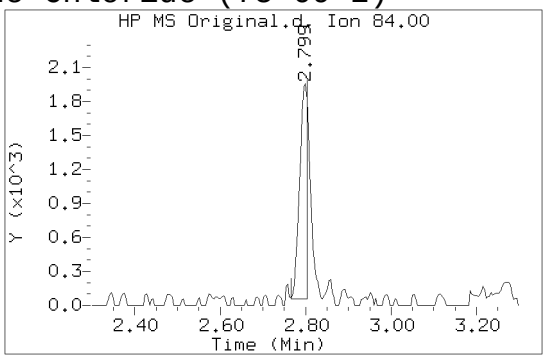
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

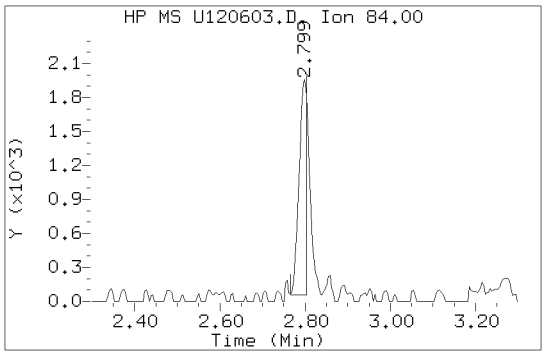
Methylene Chloride (75-09-2)

Reason Code:

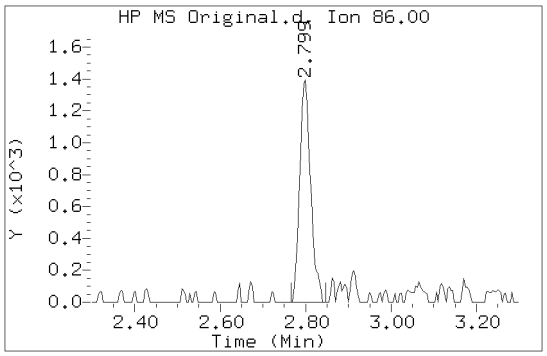
BEFORE
MASS
96
AREA
1948
HEIGHT
1118
06-Dec-2023
23:21



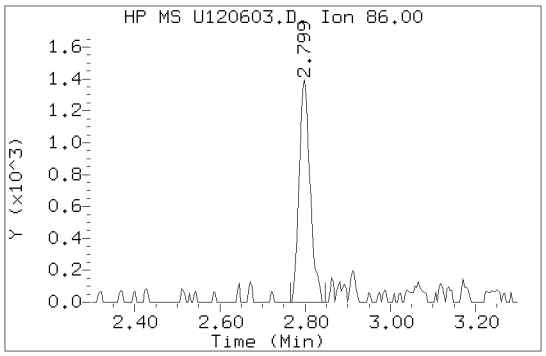
AFTER
MASS
84
AREA
2348
HEIGHT
1904
12-Dec-2023
09:43



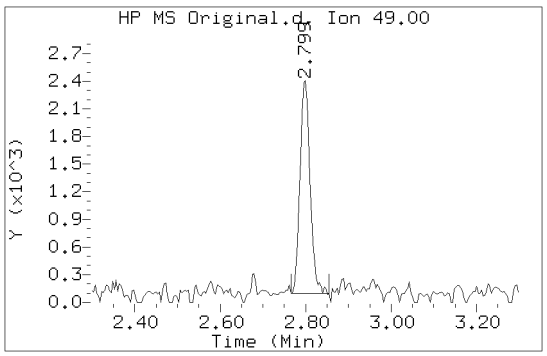
BEFORE
MASS
61
AREA
2182
HEIGHT
1143
06-Dec-2023
23:21



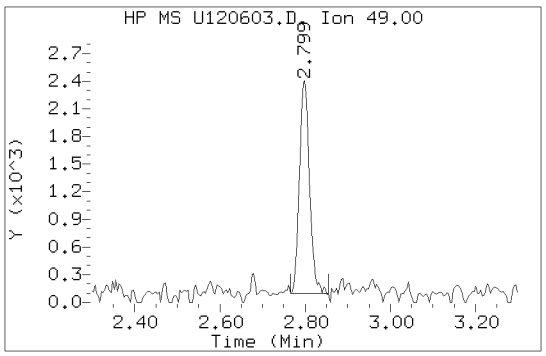
AFTER
MASS
86
AREA
2533
HEIGHT
1394
12-Dec-2023
09:43



BEFORE
MASS
98
AREA
1022
HEIGHT
586
06-Dec-2023
23:21



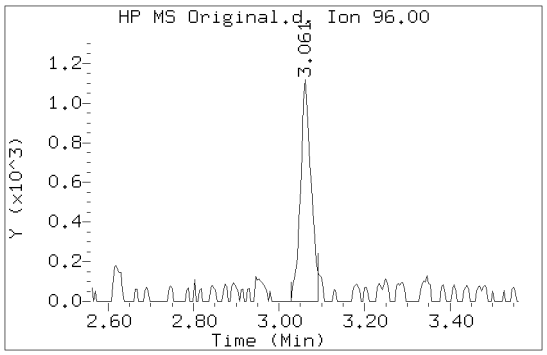
AFTER
MASS
49
AREA
3879
HEIGHT
2311
12-Dec-2023
09:43



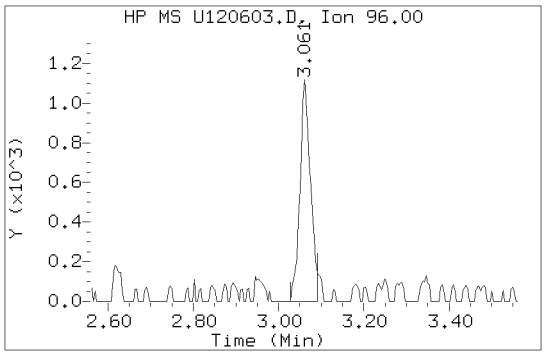
trans-1,2-Dichloroethene (156-60-5)

Reason Code:

BEFORE
MASS
77
AREA
2637
HEIGHT
1068
06-Dec-2023
23:21



AFTER
MASS
96
AREA
1948
HEIGHT
1118
12-Dec-2023
09:43



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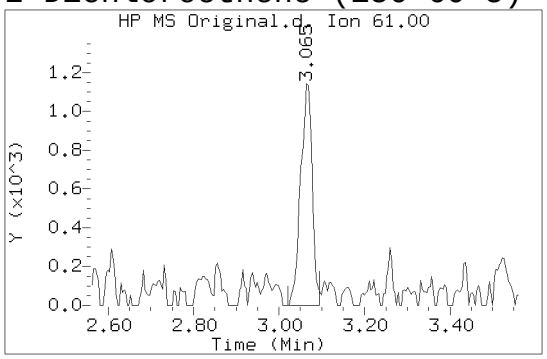
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

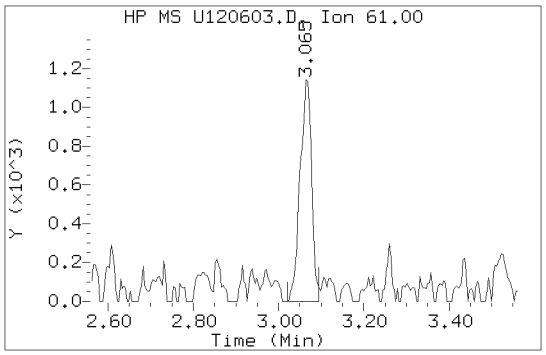
trans-1,2-Dichloroethene (156-60-5)

Reason Code:

BEFORE
MASS
97
AREA
675
HEIGHT
294
06-Dec-2023
23:21



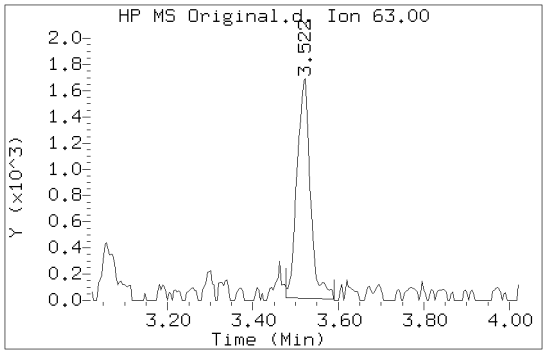
AFTER
MASS
61
AREA
2182
HEIGHT
1143
12-Dec-2023
09:43



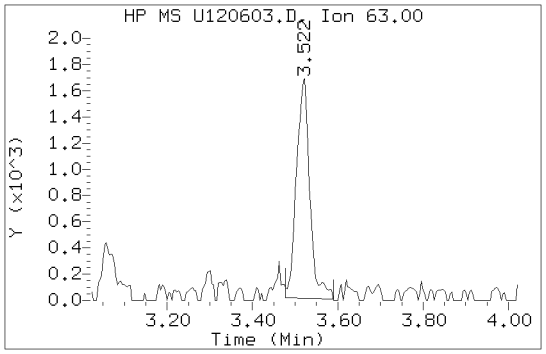
1,1-Dichloroethane (75-34-3)

Reason Code:

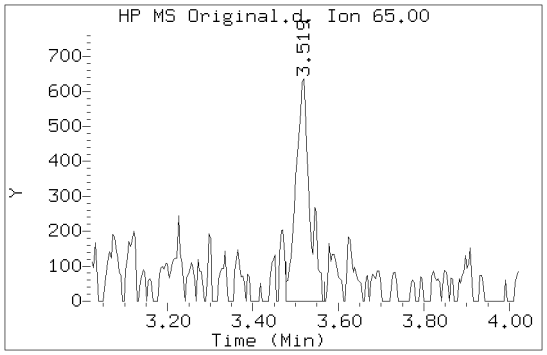
BEFORE
MASS
83
AREA
4075
HEIGHT
1886
06-Dec-2023
23:21



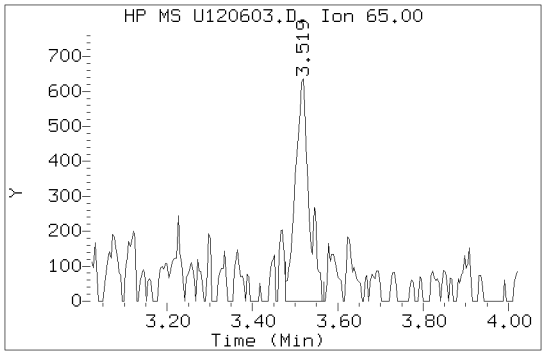
AFTER
MASS
63
AREA
3728
HEIGHT
1675
12-Dec-2023
09:43



BEFORE
MASS
85
AREA
2646
HEIGHT
1265
06-Dec-2023
23:21



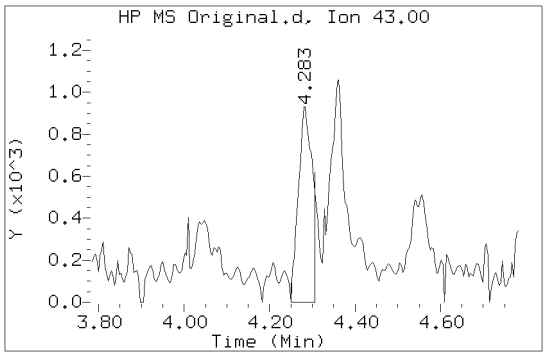
AFTER
MASS
65
AREA
1459
HEIGHT
636
12-Dec-2023
09:43



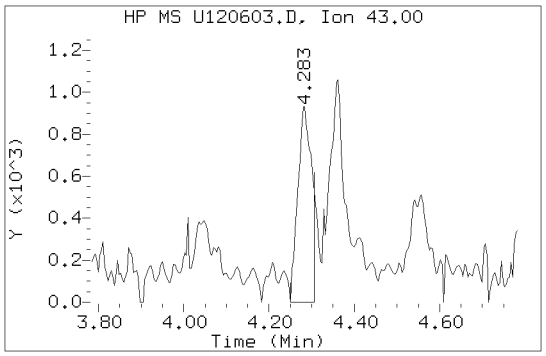
2-Butanone (78-93-3)

Reason Code:

BEFORE
MASS
128
AREA
1194
HEIGHT
533
06-Dec-2023
23:21



AFTER
MASS
43
AREA
2099
HEIGHT
932
12-Dec-2023
09:43



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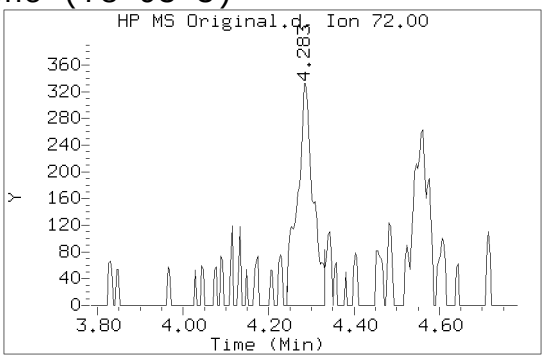
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

2-Butanone (78-93-3)

Reason Code:

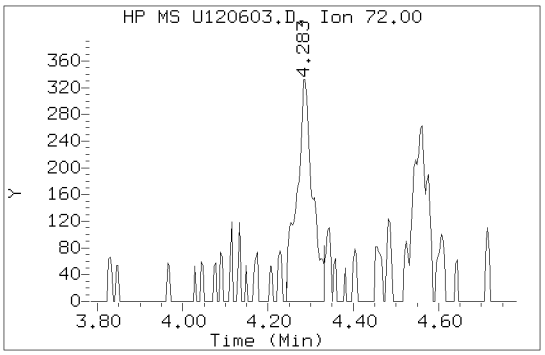
BEFORE

MASS
49
AREA
2419
HEIGHT
1056
06-Dec-2023
23:21



AFTER

MASS
72
AREA
868
HEIGHT
332
12-Dec-2023
09:43

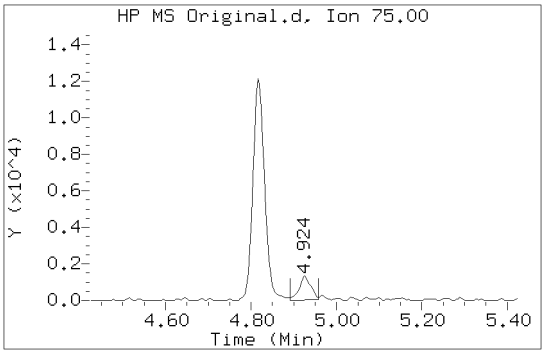


1,1-Dichloropropene (563-58-6)

Reason Code:

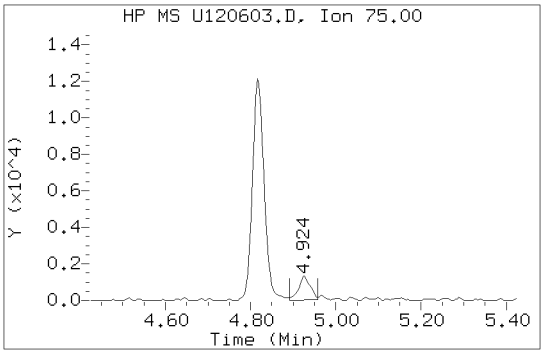
BEFORE

MASS
78
AREA
8471
HEIGHT
4567
06-Dec-2023
23:21



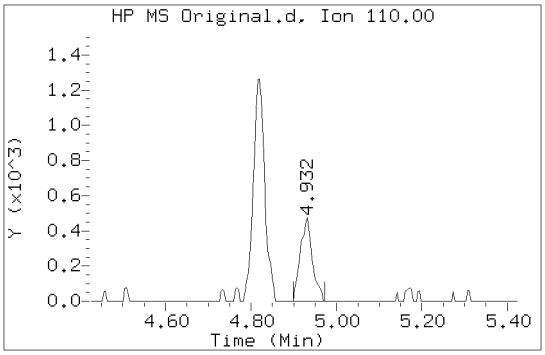
AFTER

MASS
75
AREA
2513
HEIGHT
1297
12-Dec-2023
09:43



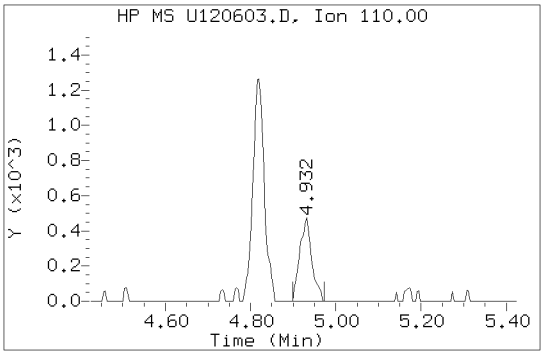
BEFORE

MASS
77
AREA
2577
HEIGHT
1507
06-Dec-2023
23:21



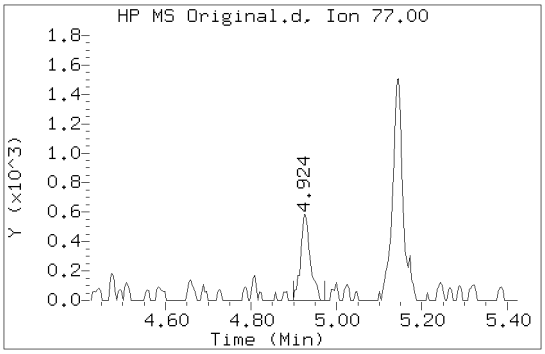
AFTER

MASS
110
AREA
946
HEIGHT
475
12-Dec-2023
09:43



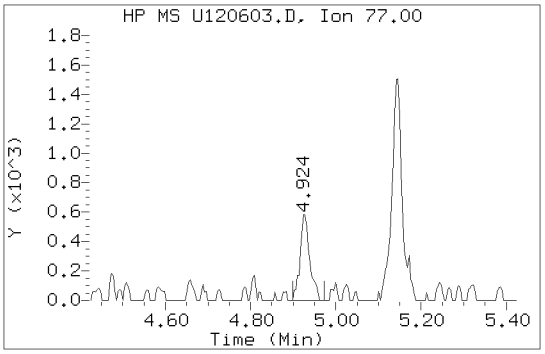
BEFORE

MASS
51
AREA
1201
HEIGHT
702
06-Dec-2023
23:21



AFTER

MASS
77
AREA
945
HEIGHT
584
12-Dec-2023
09:43

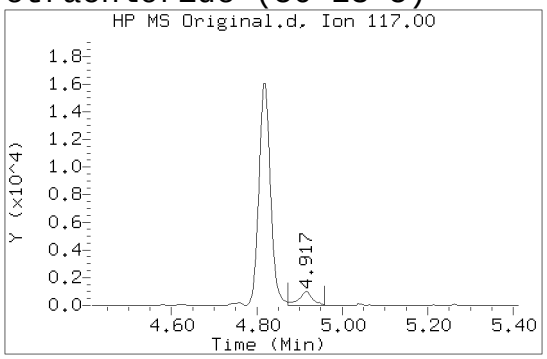


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603.D
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

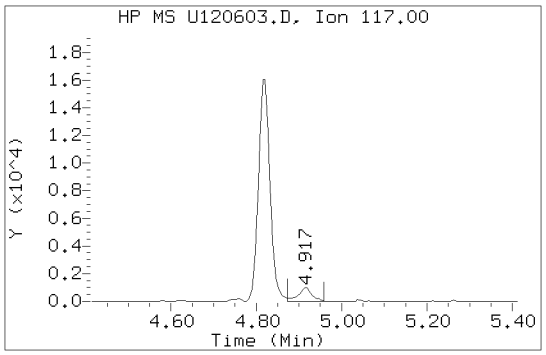
Carbon Tetrachloride (56-23-5)

Reason Code:

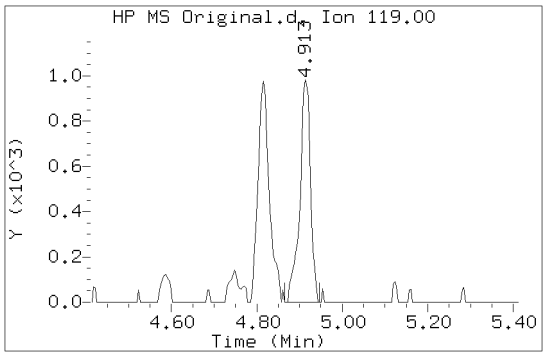
BEFORE
MASS
83
AREA
2561
HEIGHT
1370
06-Dec-2023
23:21



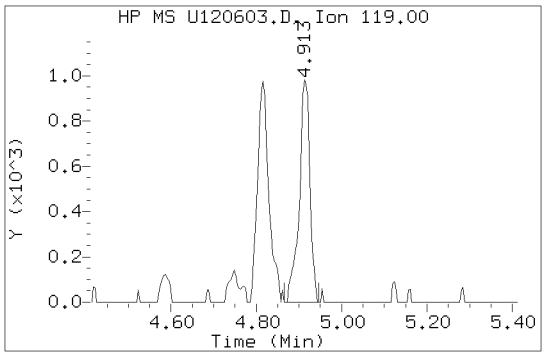
AFTER
MASS
117
AREA
2241
HEIGHT
1012
12-Dec-2023
09:43



BEFORE
MASS
85
AREA
0
HEIGHT
0
06-Dec-2023
23:21



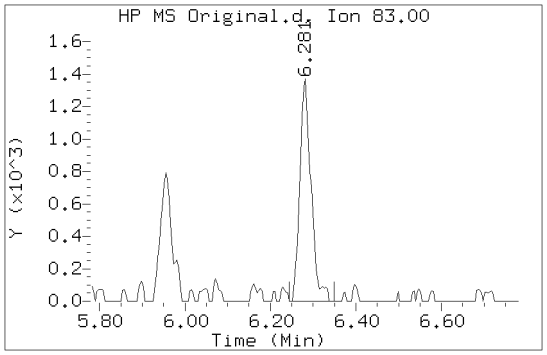
AFTER
MASS
119
AREA
1738
HEIGHT
982
12-Dec-2023
09:43



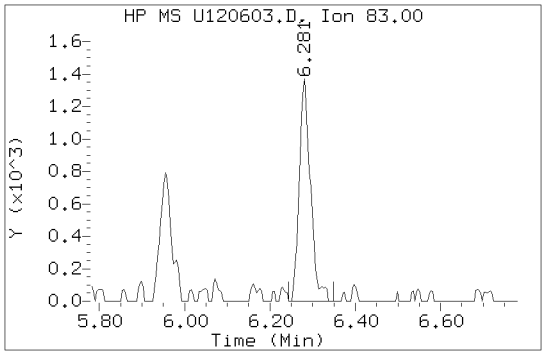
Bromodichloromethane (75-27-4)

Reason Code:

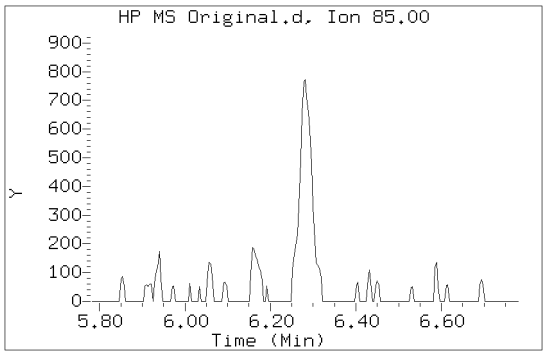
BEFORE
MASS
75
AREA
2180
HEIGHT
1317
06-Dec-2023
23:21



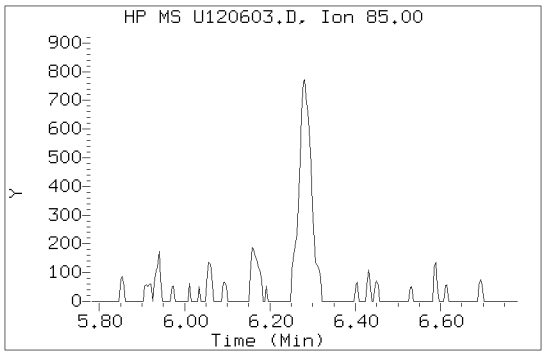
AFTER
MASS
83
AREA
2561
HEIGHT
1370
12-Dec-2023
09:43



BEFORE
MASS
77
AREA
894
HEIGHT
610
06-Dec-2023
23:21



AFTER
MASS
85
AREA
0
HEIGHT
0
12-Dec-2023
09:43



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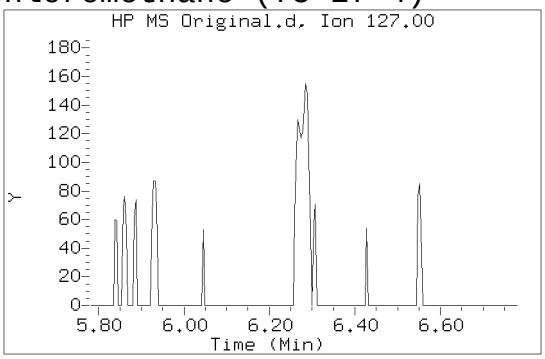
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

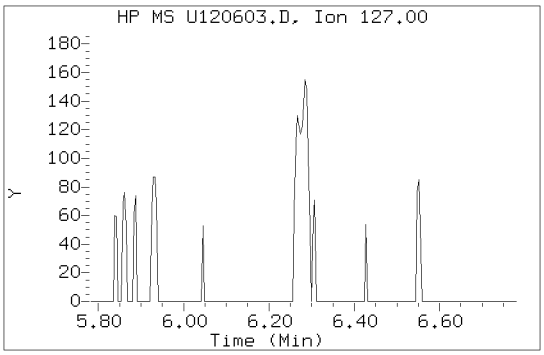
Bromodichloromethane (75-27-4)

Reason Code:

BEFORE
MASS
39
AREA
987
HEIGHT
625
06-Dec-2023
23:21



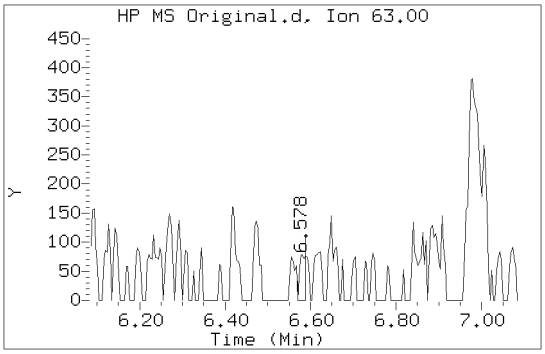
AFTER
MASS
127
AREA
0
HEIGHT
0
12-Dec-2023
09:43



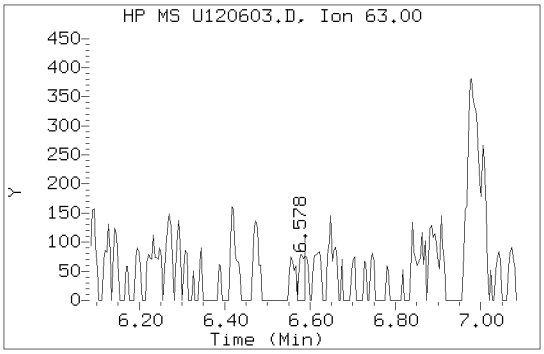
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

BEFORE
MASS
117
AREA
556790
HEIGHT
357308
06-Dec-2023
23:21



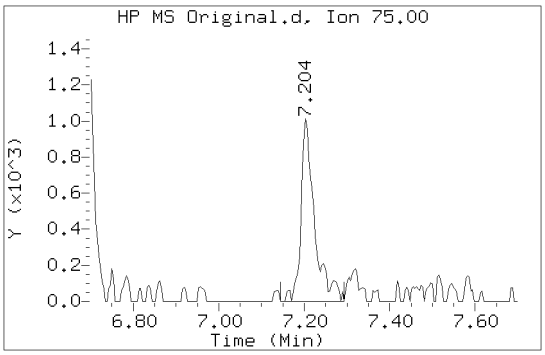
AFTER
MASS
63
AREA
81
HEIGHT
78
12-Dec-2023
09:43



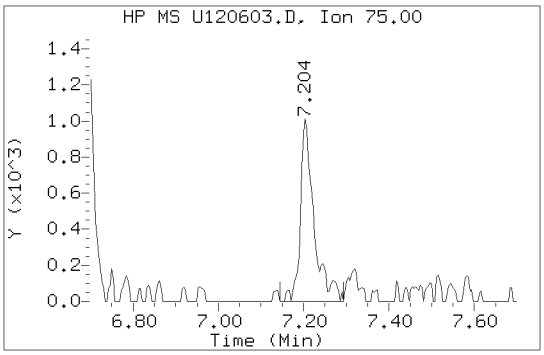
trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

BEFORE
MASS
43
AREA
8811
HEIGHT
3579
06-Dec-2023
23:21



AFTER
MASS
75
AREA
2266
HEIGHT
1013
12-Dec-2023
09:43

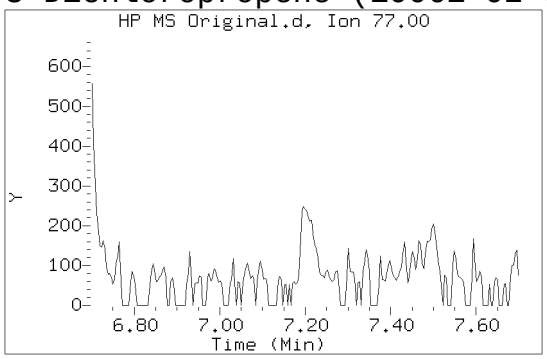


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603.D
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

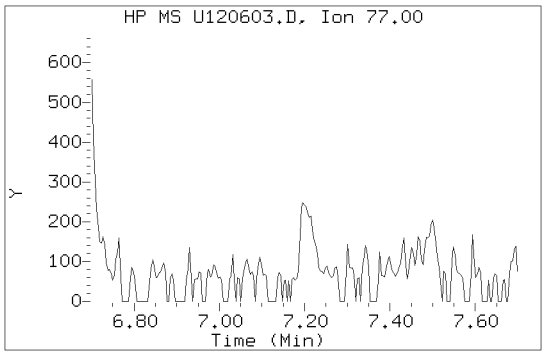
trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

BEFORE
MASS
86
AREA
811
HEIGHT
369
06-Dec-2023
23:21



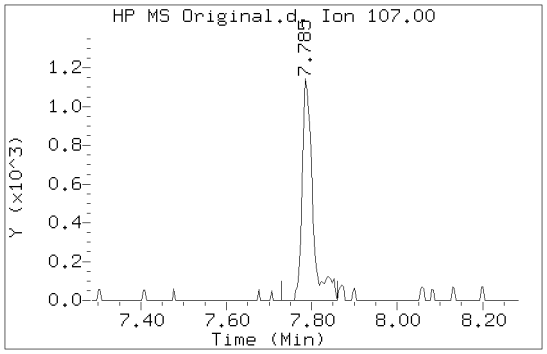
AFTER
MASS
77
AREA
0
HEIGHT
0
12-Dec-2023
09:43



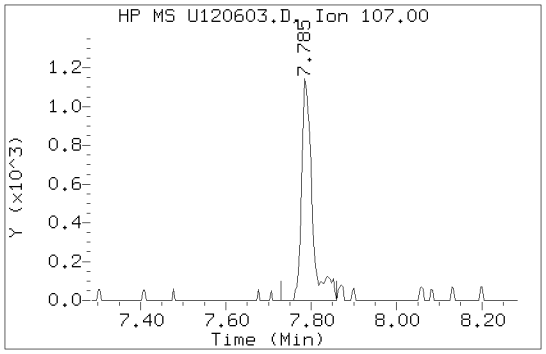
1,2-Dibromoethane (106-93-4)

Reason Code:

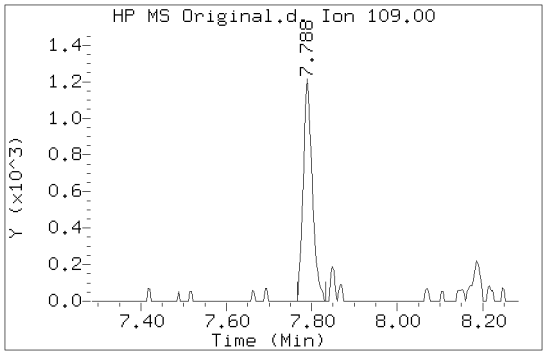
BEFORE
MASS
112
AREA
6178
HEIGHT
3872
06-Dec-2023
23:21



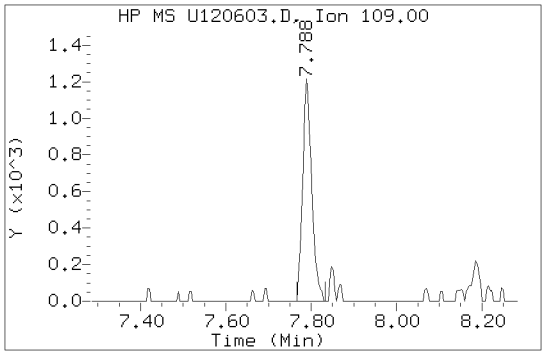
AFTER
MASS
107
AREA
2016
HEIGHT
1144
12-Dec-2023
09:43



BEFORE
MASS
77
AREA
8323
HEIGHT
3106
06-Dec-2023
23:21



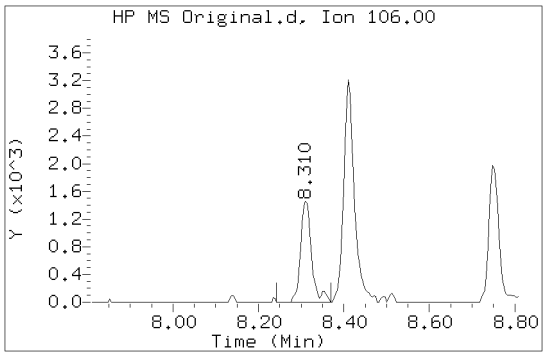
AFTER
MASS
109
AREA
1841
HEIGHT
1216
12-Dec-2023
09:43



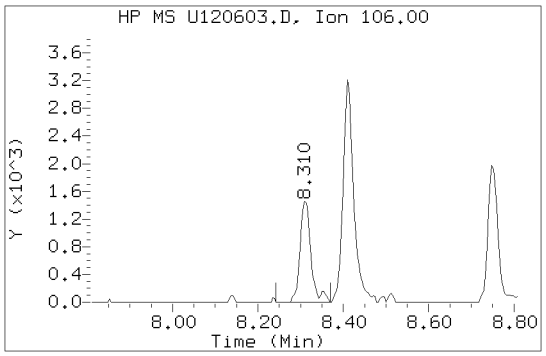
Ethylbenzene (100-41-4)

Reason Code:

BEFORE
MASS
106
AREA
5585
HEIGHT
3210
06-Dec-2023
23:21



AFTER
MASS
106
AREA
2673
HEIGHT
1461
12-Dec-2023
09:43



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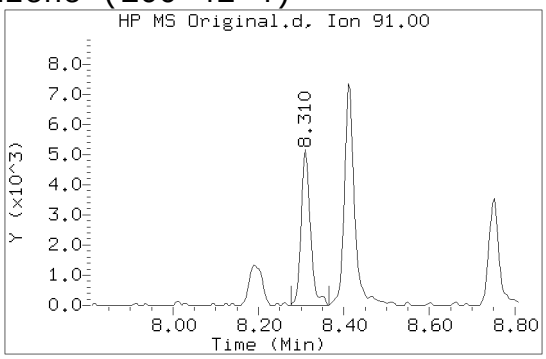
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

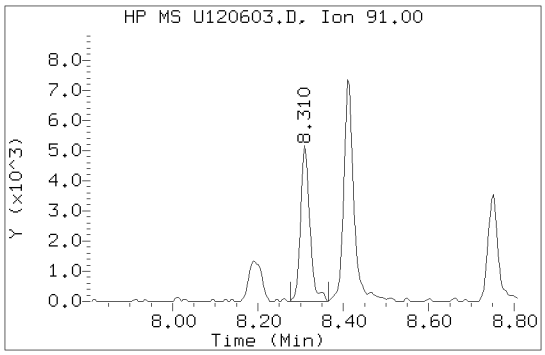
Ethylbenzene (100-41-4)

Reason Code:

BEFORE
MASS
91
AREA
11651
HEIGHT
7349
06-Dec-2023
23:21



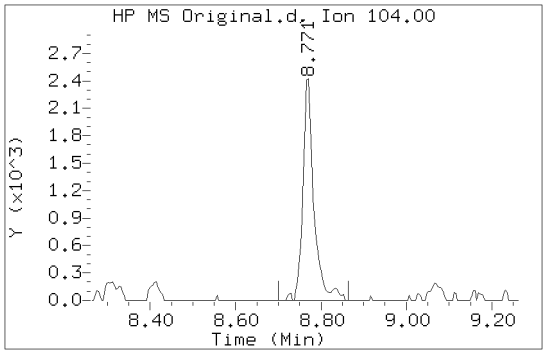
AFTER
MASS
91
AREA
7965
HEIGHT
5156
12-Dec-2023
09:43



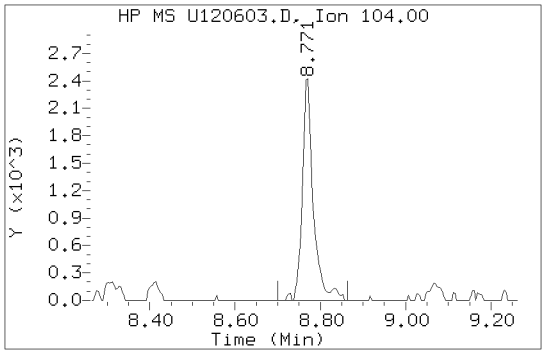
Styrene (100-42-5)

Reason Code:

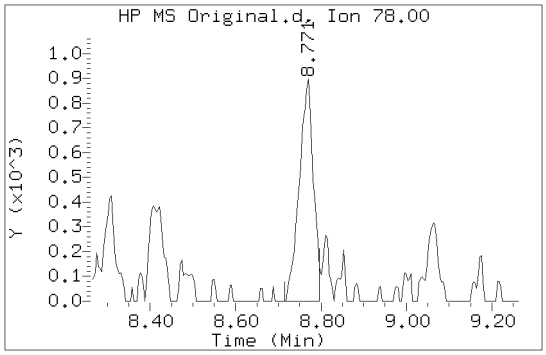
BEFORE
MASS
39
AREA
1878
HEIGHT
895
06-Dec-2023
23:21



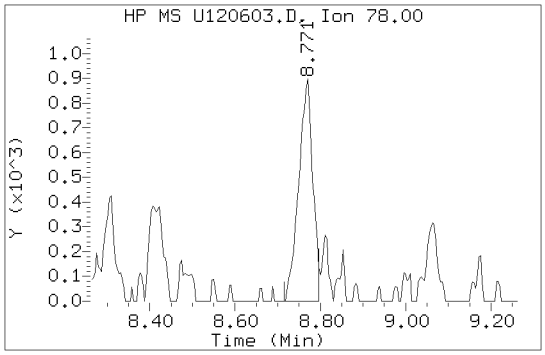
AFTER
MASS
104
AREA
4395
HEIGHT
2424
12-Dec-2023
09:43



BEFORE
MASS
40
AREA
2702
HEIGHT
1000
06-Dec-2023
23:21



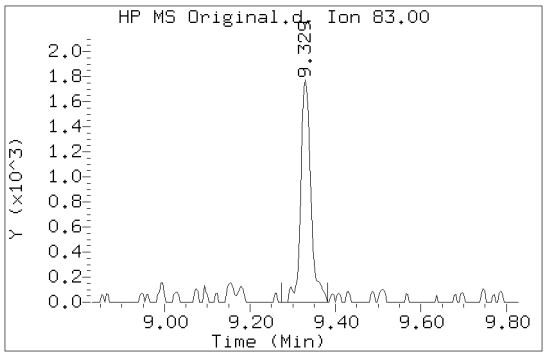
AFTER
MASS
78
AREA
2092
HEIGHT
898
12-Dec-2023
09:43



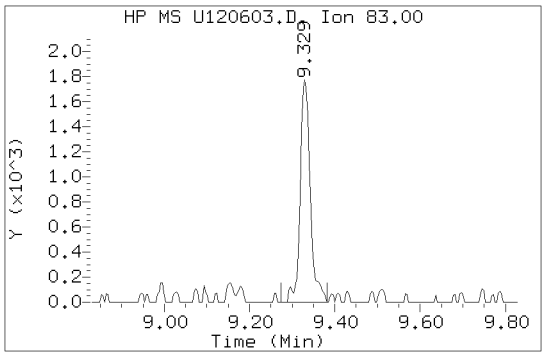
1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

BEFORE
MASS
105
AREA
6642
HEIGHT
4223
06-Dec-2023
23:21



AFTER
MASS
83
AREA
3009
HEIGHT
1774
12-Dec-2023
09:43



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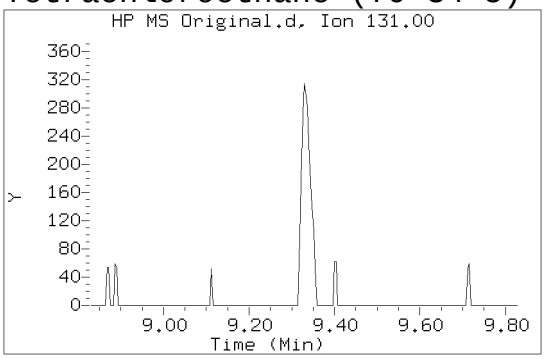
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

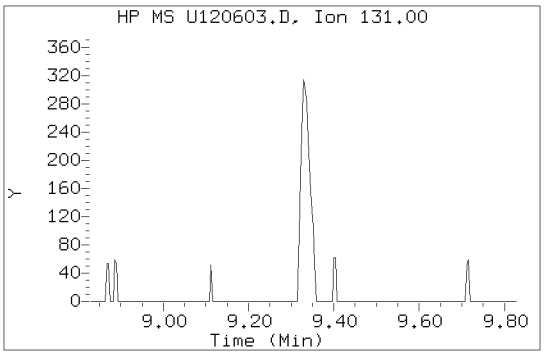
1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

BEFORE
MASS
120
AREA
1897
HEIGHT
1147
06-Dec-2023
23:21



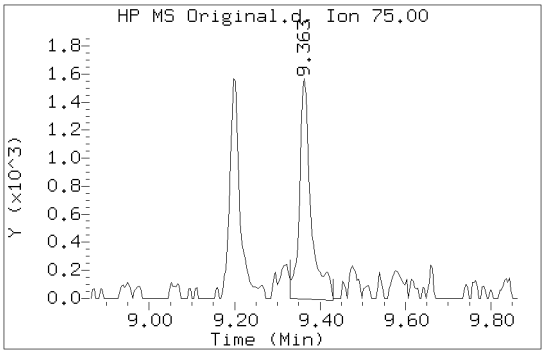
AFTER
MASS
131
AREA
0
HEIGHT
0
12-Dec-2023
09:43



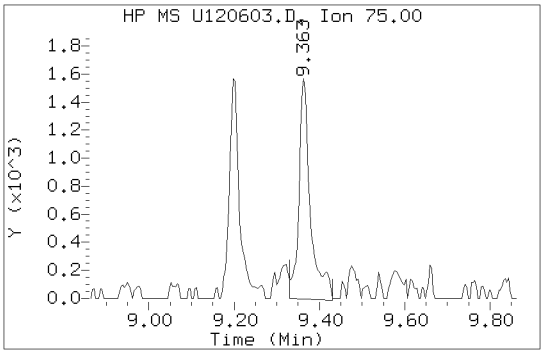
1,2,3-Trichloropropane (96-18-4)

Reason Code:

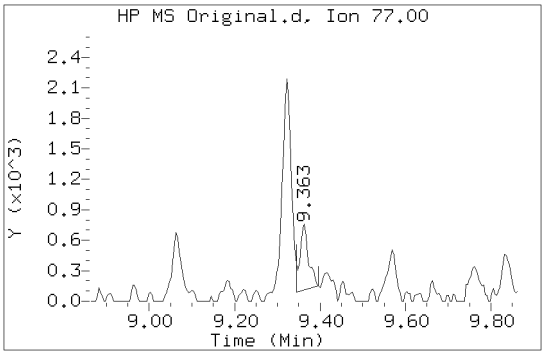
BEFORE
MASS
152
AREA
283463
HEIGHT
182528
06-Dec-2023
23:21



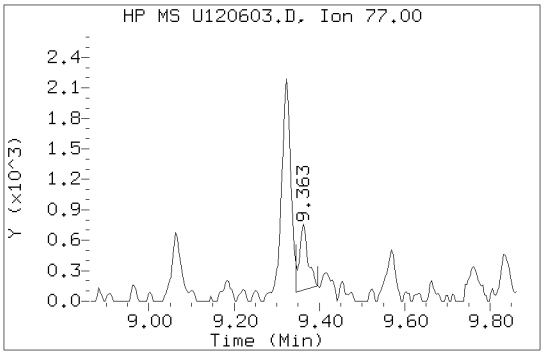
AFTER
MASS
75
AREA
3019
HEIGHT
1574
12-Dec-2023
09:43



BEFORE
MASS
115
AREA
153211
HEIGHT
96264
06-Dec-2023
23:21



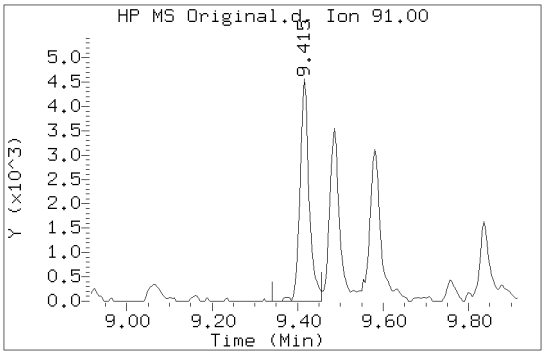
AFTER
MASS
77
AREA
958
HEIGHT
648
12-Dec-2023
09:43



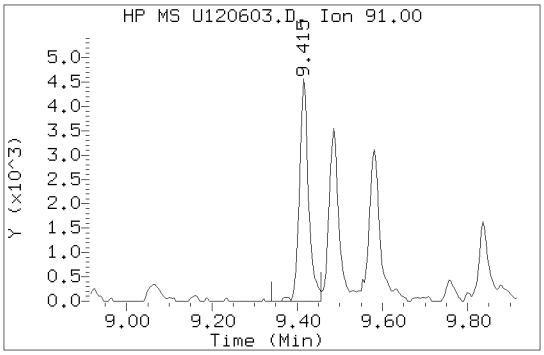
n-Propylbenzene (106-65-1)

Reason Code:

BEFORE
MASS
41
AREA
1335
HEIGHT
556
06-Dec-2023
23:21



AFTER
MASS
91
AREA
6934
HEIGHT
4565
12-Dec-2023
09:43



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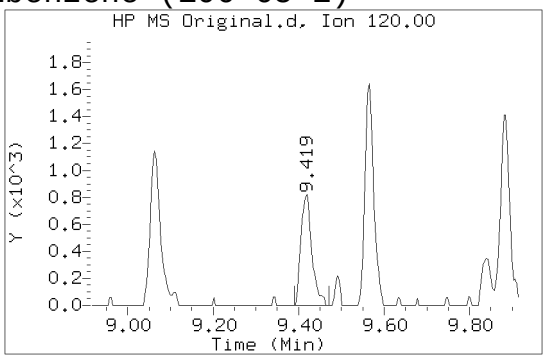
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

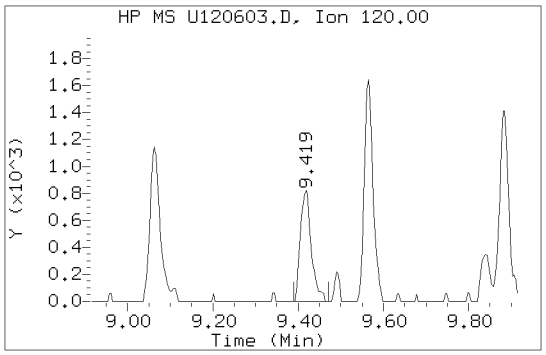
n-Propylbenzene (106-65-1)

Reason Code:

BEFORE
MASS
67
AREA
870
HEIGHT
457
06-Dec-2023
23:21



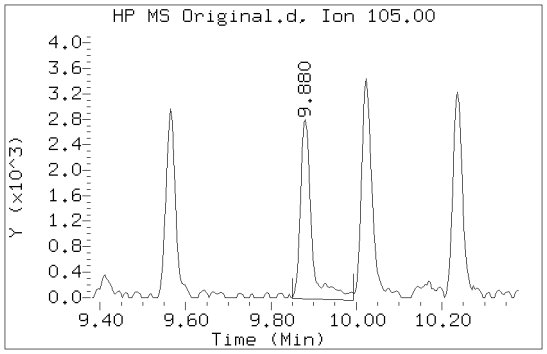
AFTER
MASS
120
AREA
1497
HEIGHT
820
12-Dec-2023
09:43



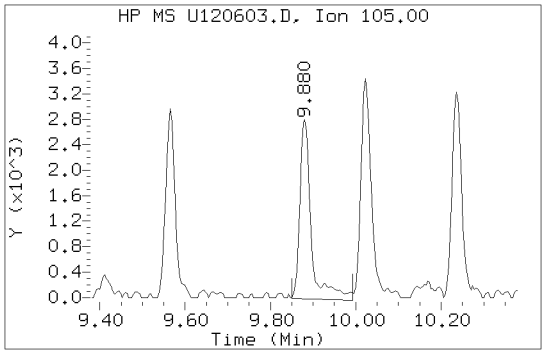
1,2,4-Trimethylbenzene (95-63-6)

Reason Code:

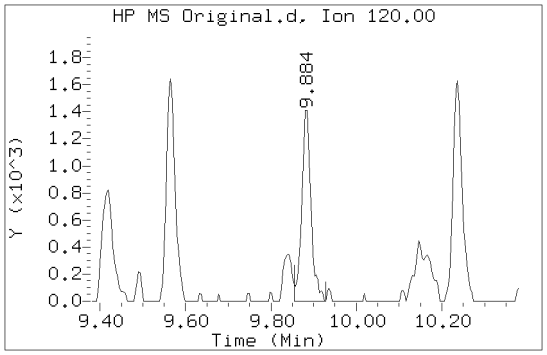
BEFORE
MASS
91
AREA
5799
HEIGHT
3547
06-Dec-2023
23:21



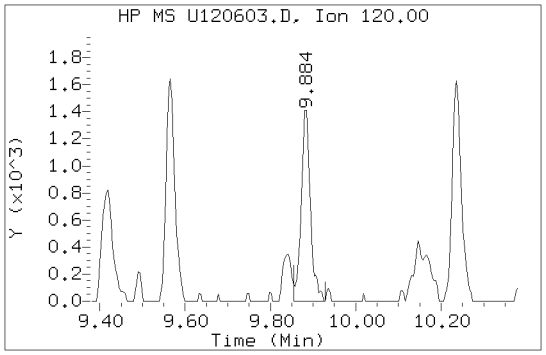
AFTER
MASS
105
AREA
5368
HEIGHT
2820
12-Dec-2023
09:43



BEFORE
MASS
126
AREA
1923
HEIGHT
1114
06-Dec-2023
23:21



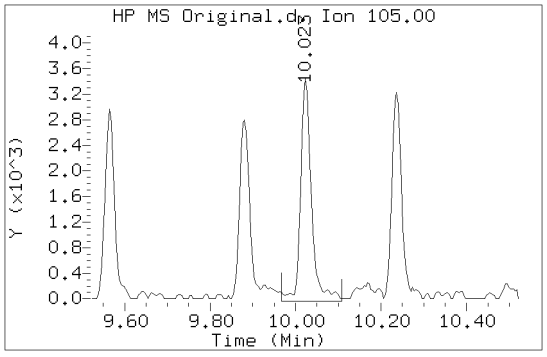
AFTER
MASS
120
AREA
2194
HEIGHT
1412
12-Dec-2023
09:43



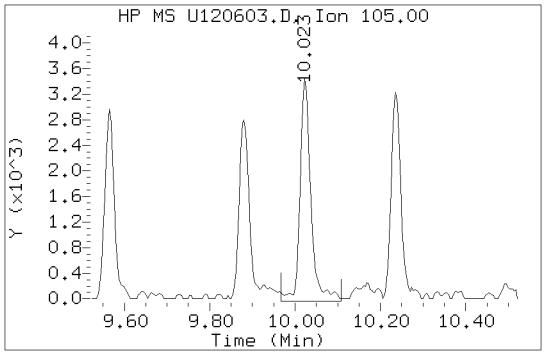
sec-Butylbenzene (135-98-8)

Reason Code:

BEFORE
MASS
91
AREA
5828
HEIGHT
3113
06-Dec-2023
23:21



AFTER
MASS
105
AREA
6329
HEIGHT
3475
12-Dec-2023
09:43



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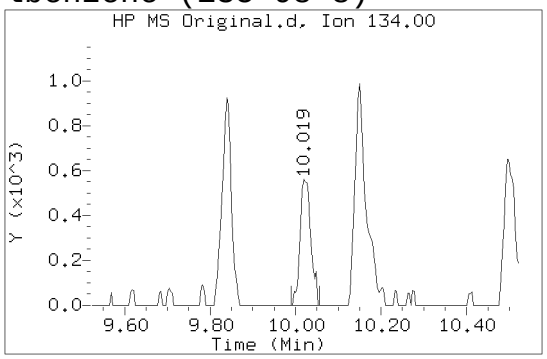
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

sec-Butylbenzene (135-98-8)

Reason Code:

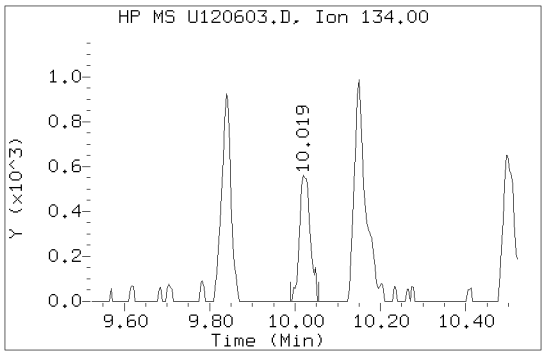
BEFORE

MASS
126
AREA
1785
HEIGHT
845
06-Dec-2023
23:21



AFTER

MASS
134
AREA
1010
HEIGHT
562
12-Dec-2023
09:43

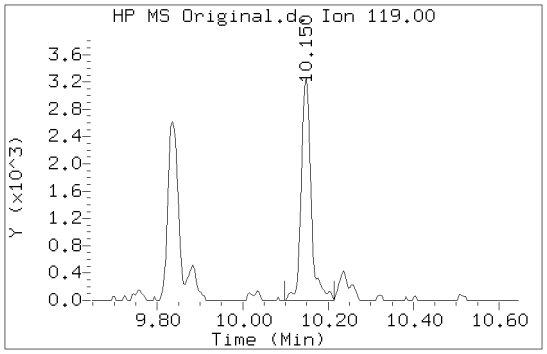


p-Isopropyltoluene (99-87-6)

Reason Code:

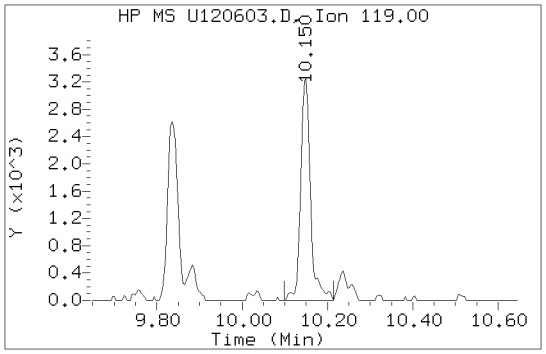
BEFORE

MASS
54
AREA
2827
HEIGHT
1063
06-Dec-2023
23:21



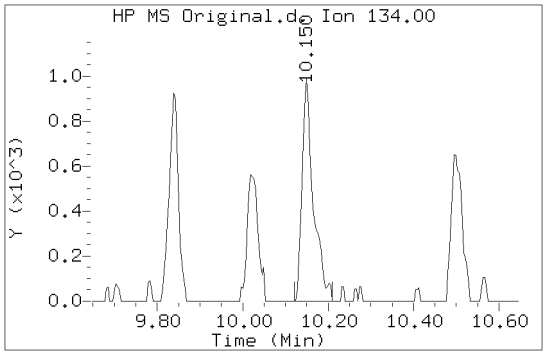
AFTER

MASS
119
AREA
5327
HEIGHT
3247
12-Dec-2023
09:43



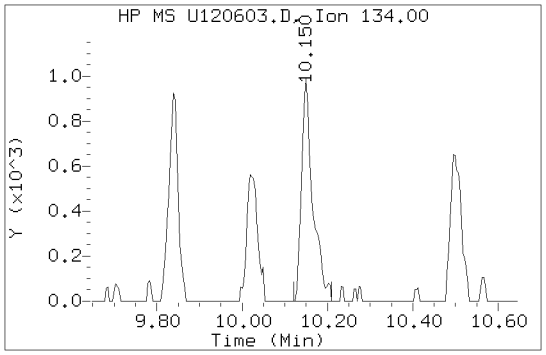
BEFORE

MASS
52
AREA
1029
HEIGHT
355
06-Dec-2023
23:21



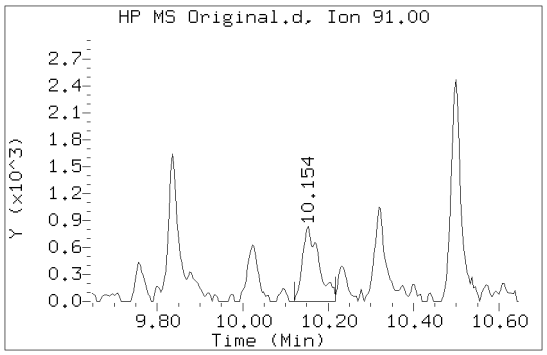
AFTER

MASS
134
AREA
1845
HEIGHT
988
12-Dec-2023
09:43



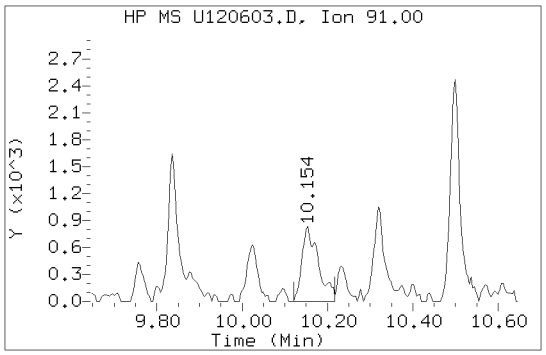
BEFORE

MASS
55
AREA
926
HEIGHT
557
06-Dec-2023
23:21



AFTER

MASS
91
AREA
2242
HEIGHT
834
12-Dec-2023
09:43



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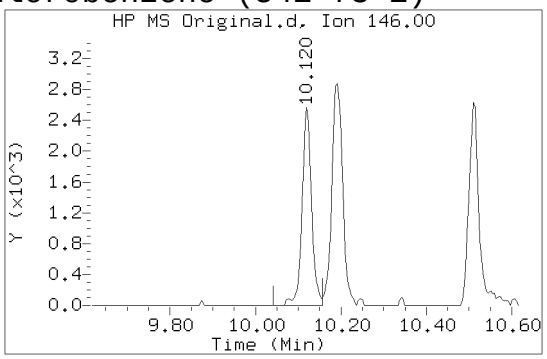
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

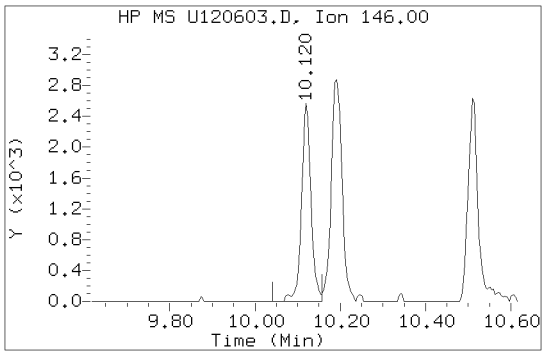
1,3-Dichlorobenzene (541-73-1)

Reason Code:

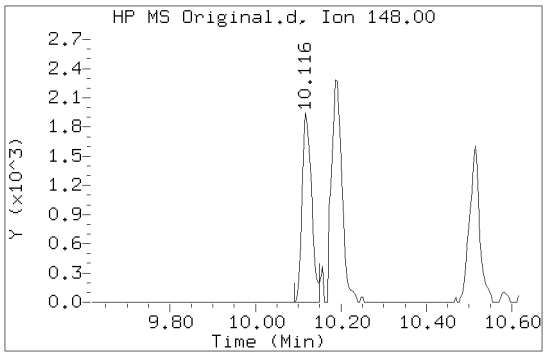
BEFORE
MASS
119
AREA
4379
HEIGHT
2623
06-Dec-2023
23:21



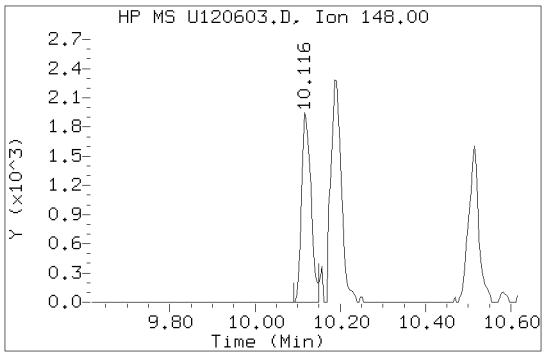
AFTER
MASS
146
AREA
4068
HEIGHT
2569
12-Dec-2023
09:43



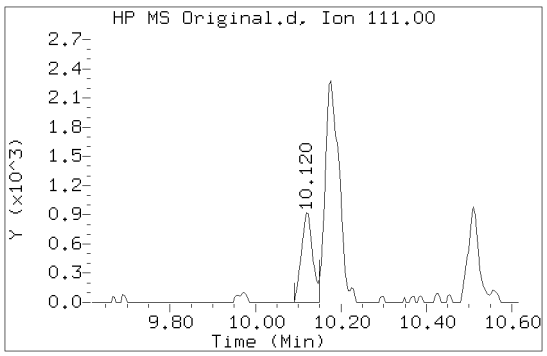
BEFORE
MASS
91
AREA
2568
HEIGHT
1643
06-Dec-2023
23:21



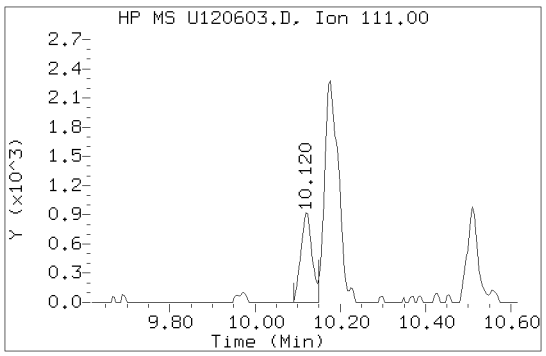
AFTER
MASS
148
AREA
3074
HEIGHT
1946
12-Dec-2023
09:43



BEFORE
MASS
134
AREA
1399
HEIGHT
925
06-Dec-2023
23:21



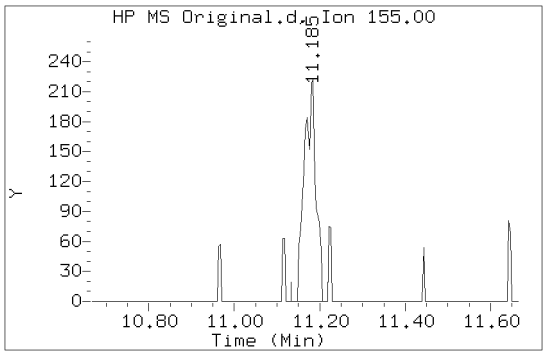
AFTER
MASS
111
AREA
1758
HEIGHT
922
12-Dec-2023
09:43



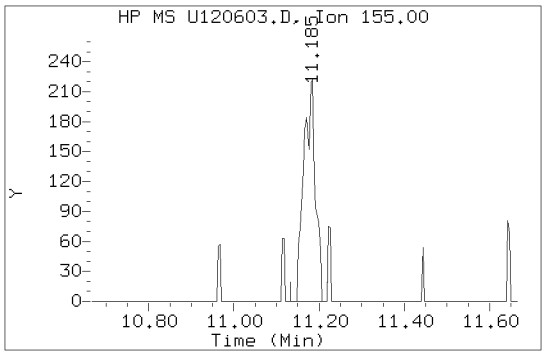
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

BEFORE
MASS
119
AREA
5327
HEIGHT
3247
06-Dec-2023
23:21



AFTER
MASS
155
AREA
428
HEIGHT
222
12-Dec-2023
09:43



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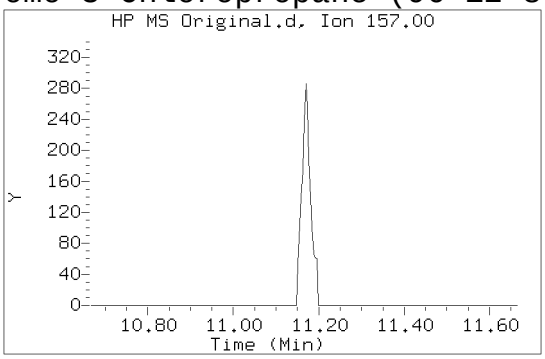
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

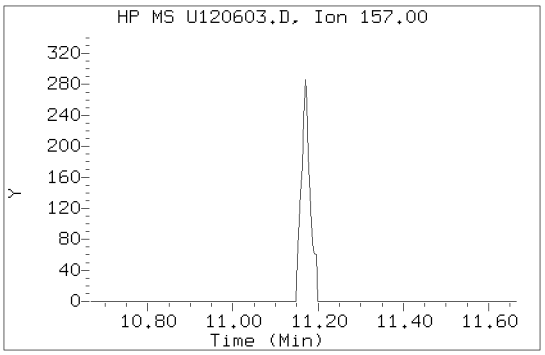
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

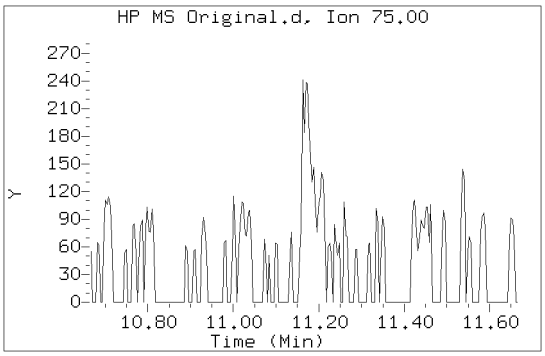
BEFORE
MASS
134
AREA
1845
HEIGHT
988
06-Dec-2023
23:21



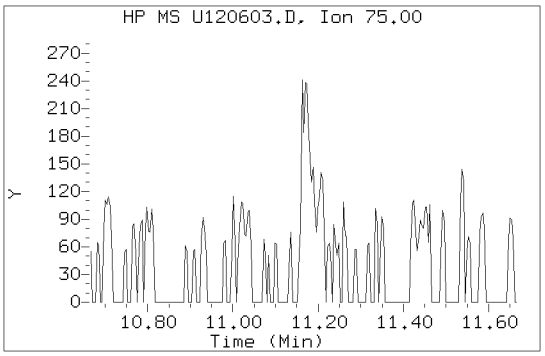
AFTER
MASS
157
AREA
0
HEIGHT
0
12-Dec-2023
09:43



BEFORE
MASS
91
AREA
2242
HEIGHT
834
06-Dec-2023
23:21



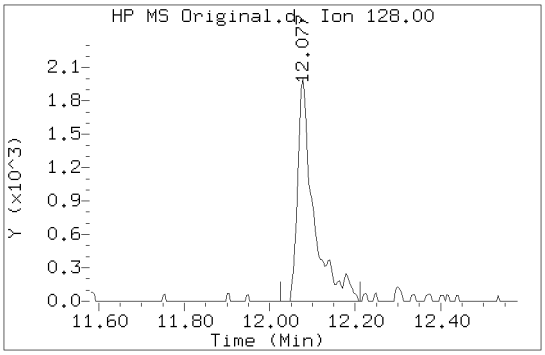
AFTER
MASS
75
AREA
0
HEIGHT
0
12-Dec-2023
09:43



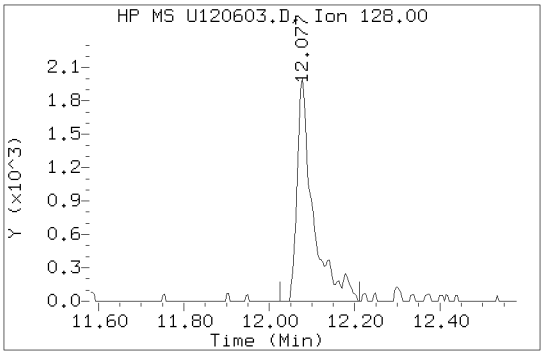
Naphthalene (91-20-3)

Reason Code:

BEFORE
MASS
43
AREA
498
HEIGHT
226
06-Dec-2023
23:21



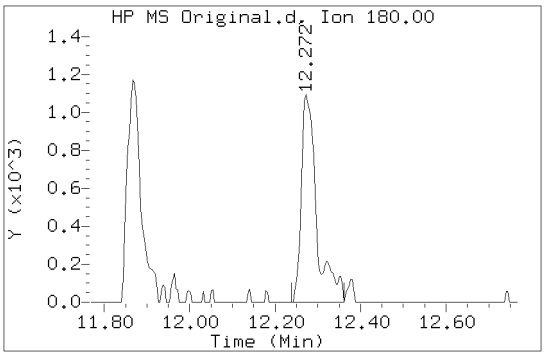
AFTER
MASS
128
AREA
5275
HEIGHT
1997
12-Dec-2023
09:43



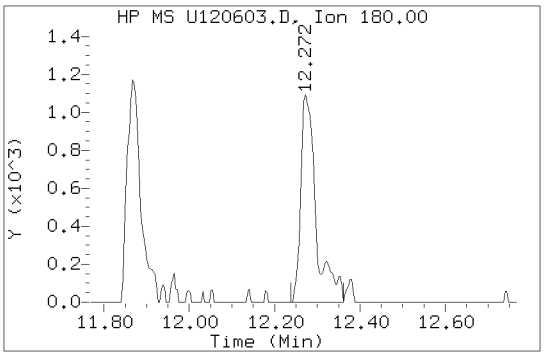
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

BEFORE
MASS
69
AREA
2825
HEIGHT
1091
06-Dec-2023
23:21



AFTER
MASS
180
AREA
2777
HEIGHT
1094
12-Dec-2023
09:43



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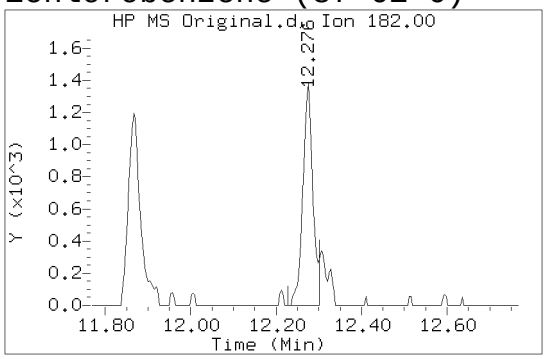
InstruID : VOA9.i
LabSampID : VSTD000.5

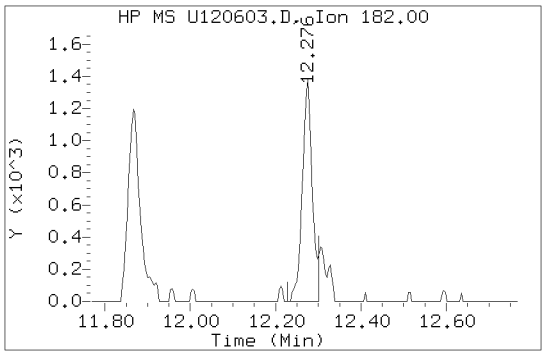
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

BEFORE
MASS
41
AREA
1454
HEIGHT
807
06-Dec-2023
23:21



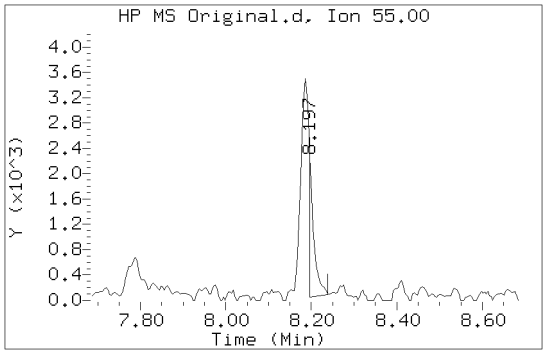
AFTER
MASS
182
AREA
2320
HEIGHT
1379
12-Dec-2023
09:43



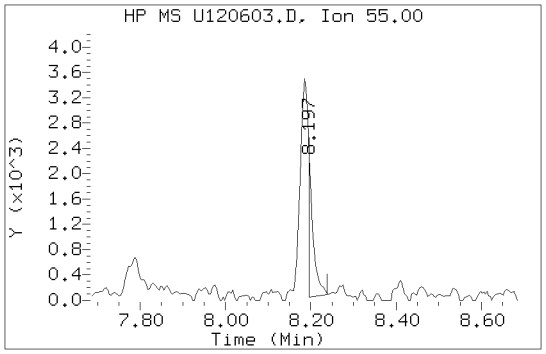
1-Chlorohexane (544-10-5)

Reason Code:

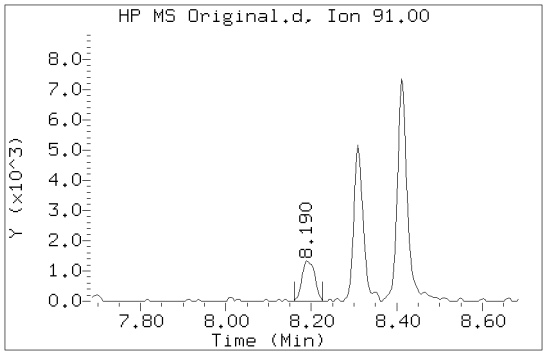
BEFORE
MASS
91
AREA
4072
HEIGHT
2467
06-Dec-2023
23:21



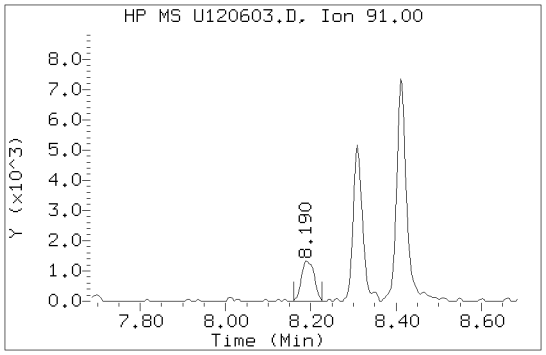
AFTER
MASS
55
AREA
1630
HEIGHT
2213
12-Dec-2023
09:43



BEFORE
MASS
92
AREA
2324
HEIGHT
1337
06-Dec-2023
23:21



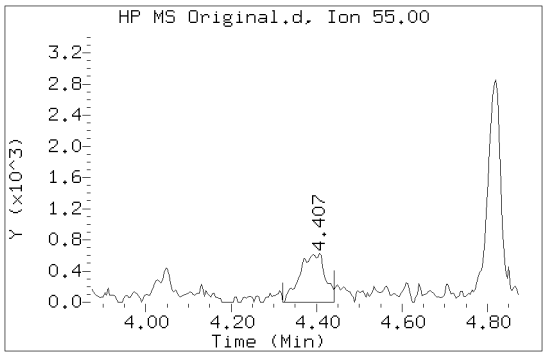
AFTER
MASS
91
AREA
2810
HEIGHT
1343
12-Dec-2023
09:43



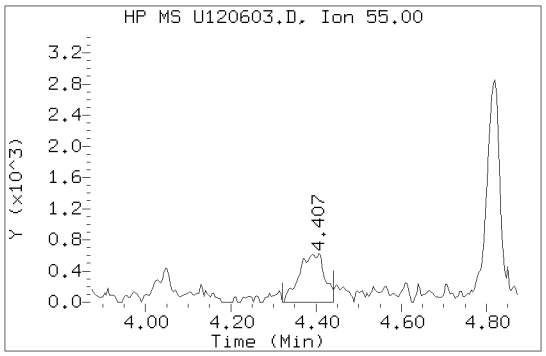
Methyl Acrylate (96-33-3)

Reason Code:

BEFORE
MASS
146
AREA
4403
HEIGHT
2638
06-Dec-2023
23:21



AFTER
MASS
55
AREA
2589
HEIGHT
625
12-Dec-2023
09:43



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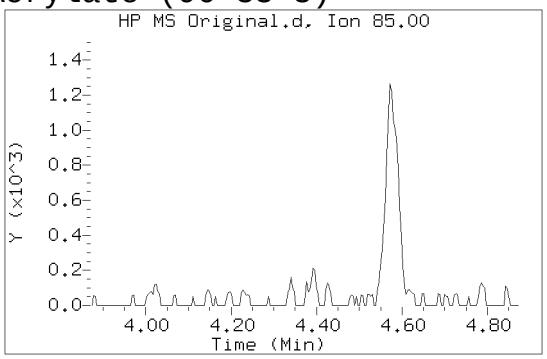
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

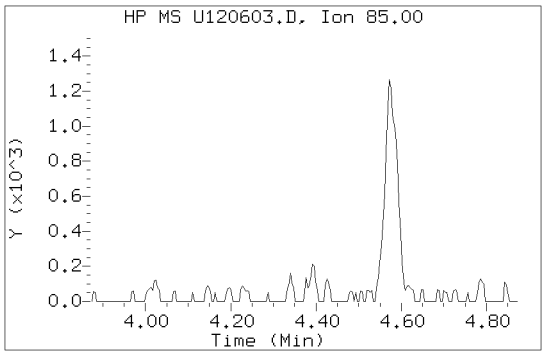
Methyl Acrylate (96-33-3)

Reason Code:

BEFORE
MASS
111
AREA
1683
HEIGHT
980
06-Dec-2023
23:21



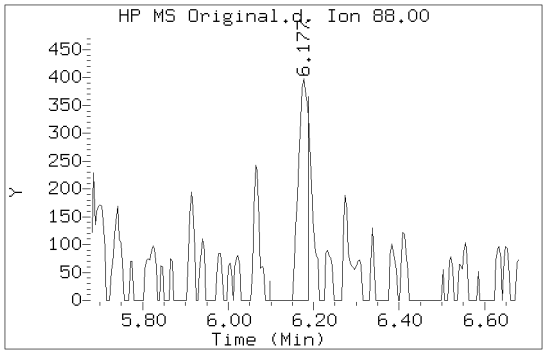
AFTER
MASS
85
AREA
0
HEIGHT
0
12-Dec-2023
09:43



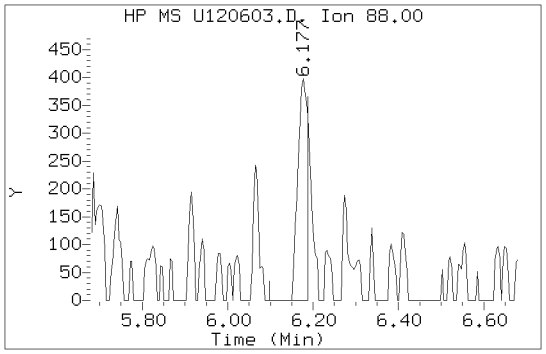
1,4-Dioxane ()

Reason Code:

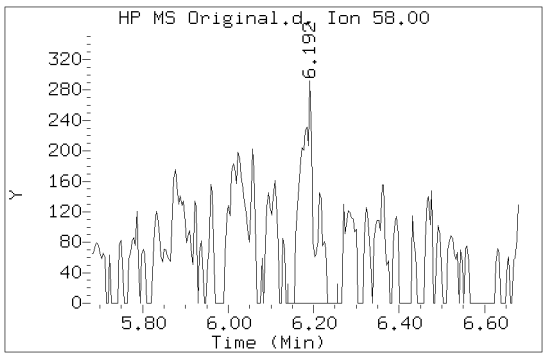
BEFORE
MASS
155
AREA
428
HEIGHT
222
06-Dec-2023
23:21



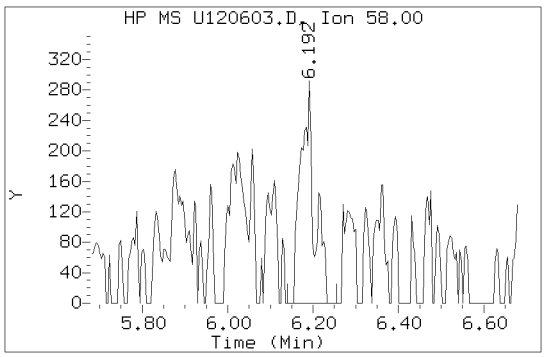
AFTER
MASS
88
AREA
631
HEIGHT
398
12-Dec-2023
09:43



BEFORE
MASS
157
AREA
0
HEIGHT
0
06-Dec-2023
23:21



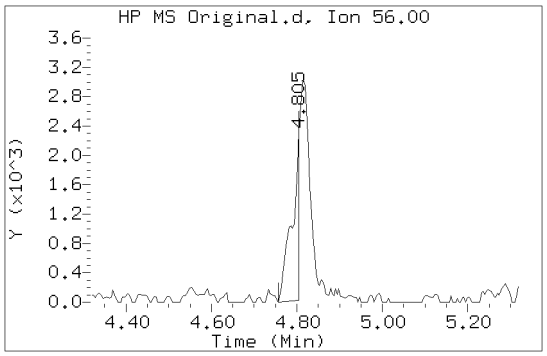
AFTER
MASS
58
AREA
659
HEIGHT
292
12-Dec-2023
09:43



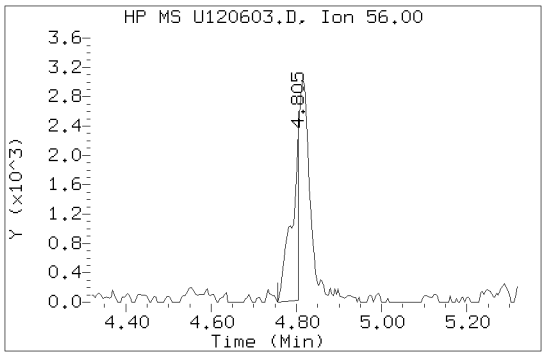
Cyclohexane (110-82-7)

Reason Code:

BEFORE
MASS
225
AREA
989
HEIGHT
632
06-Dec-2023
23:21



AFTER
MASS
56
AREA
2806
HEIGHT
2314
12-Dec-2023
09:43



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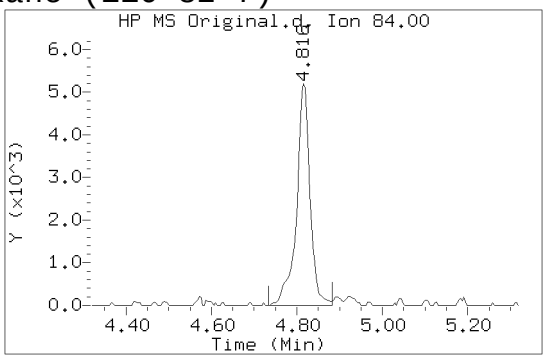
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

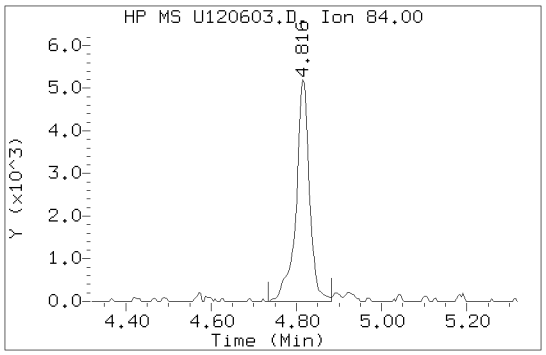
Cyclohexane (110-82-7)

Reason Code:

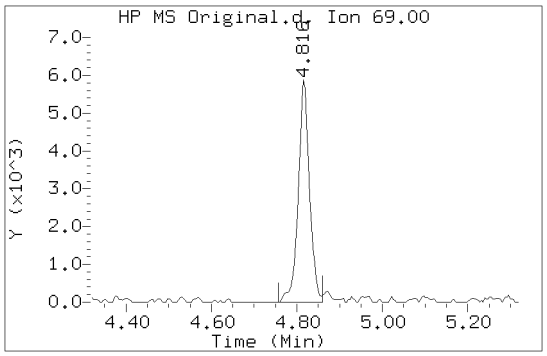
BEFORE
MASS
223
AREA
804
HEIGHT
596
06-Dec-2023
23:21



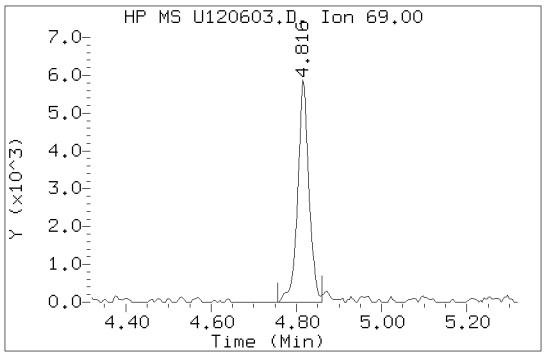
AFTER
MASS
84
AREA
11638
HEIGHT
5200
12-Dec-2023
09:43



BEFORE
MASS
227
AREA
867
HEIGHT
483
06-Dec-2023
23:21



AFTER
MASS
69
AREA
10984
HEIGHT
5878
12-Dec-2023
09:43



Methyl Acetate (79-20-9)

Reason Code:

BEFORE
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96
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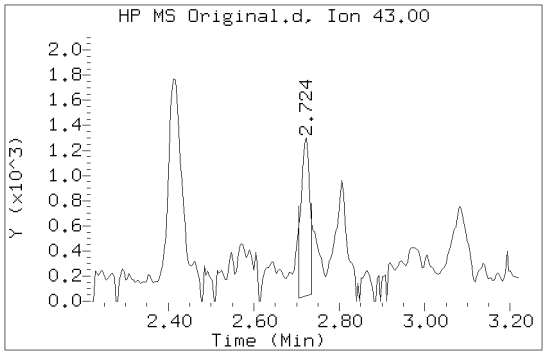
06-Dec-2023
23:21



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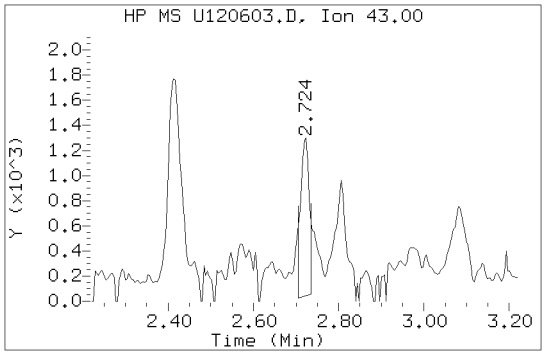
12-Dec-2023
09:43



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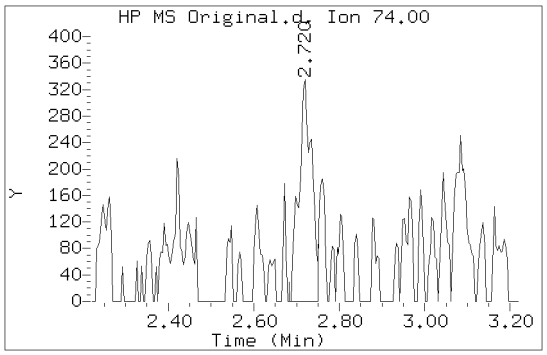
06-Dec-2023
23:21



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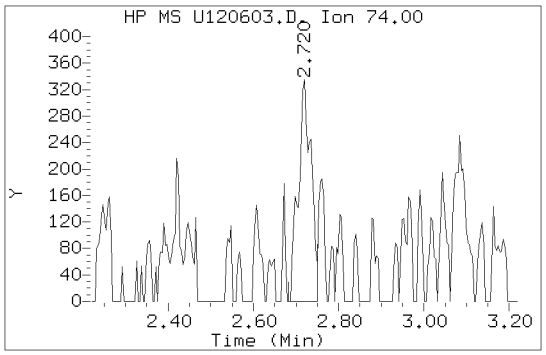
12-Dec-2023
09:43



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Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

Tert-Butyl alcohol (75-65-0)

Reason Code:

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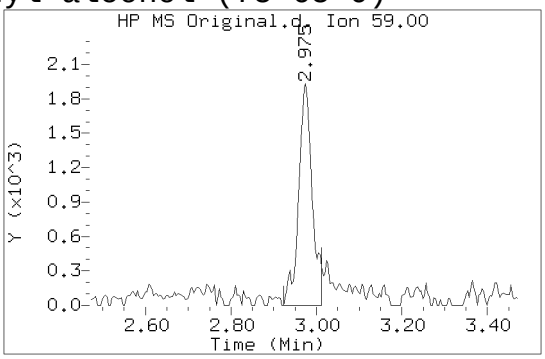
06-Dec-2023
23:21



AFTER
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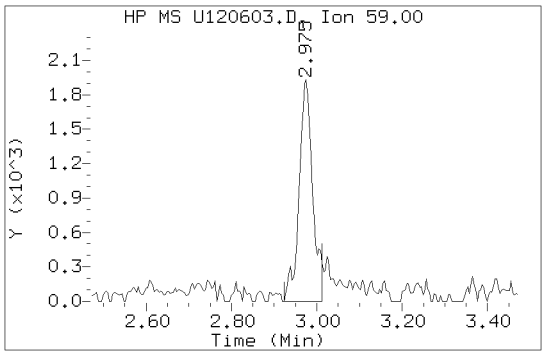
12-Dec-2023
09:43



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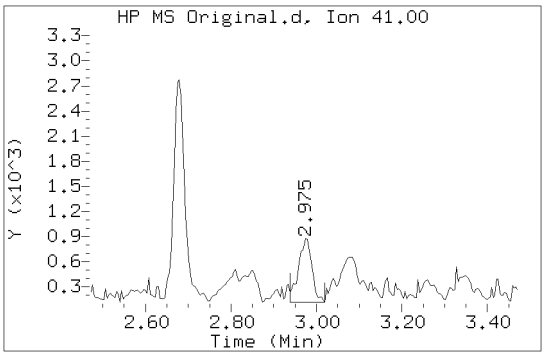
06-Dec-2023
23:21



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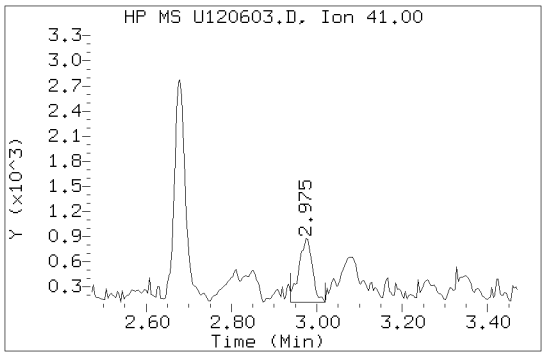
09:43



1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

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06-Dec-2023
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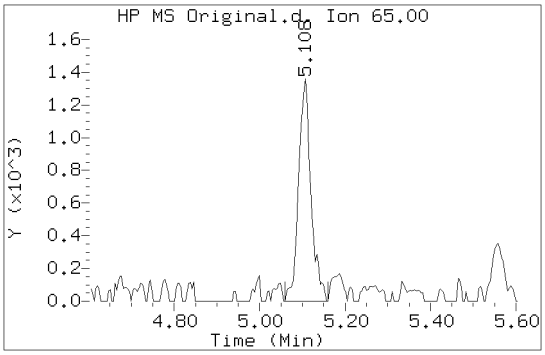

AFTER
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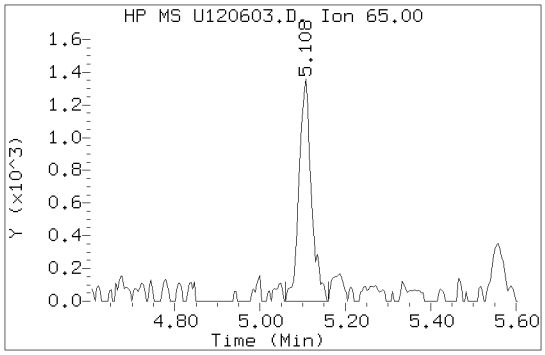
12-Dec-2023
09:43



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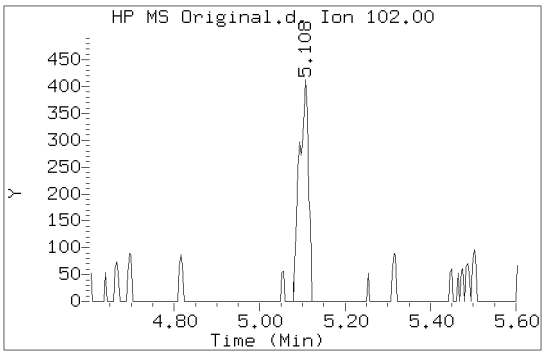
06-Dec-2023
23:21



AFTER
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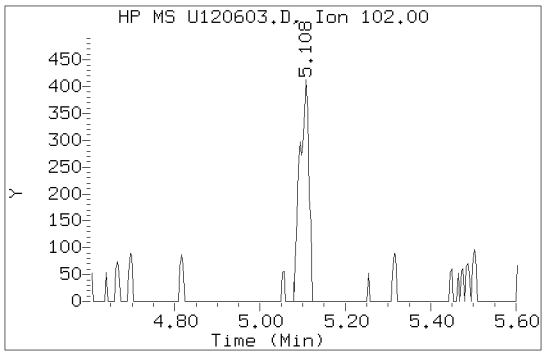
12-Dec-2023
09:43



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Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

MASS
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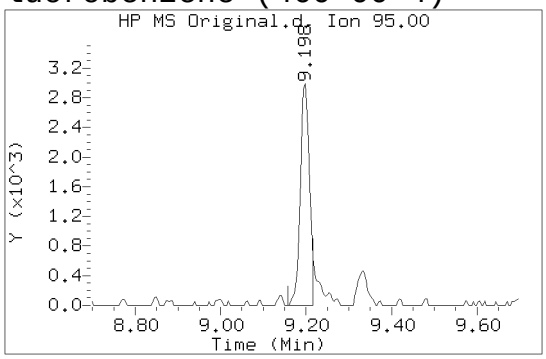
06-Dec-2023
23:21



AFTER

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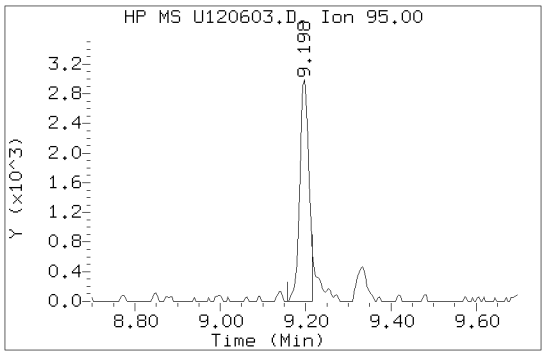
12-Dec-2023
09:43



BEFORE

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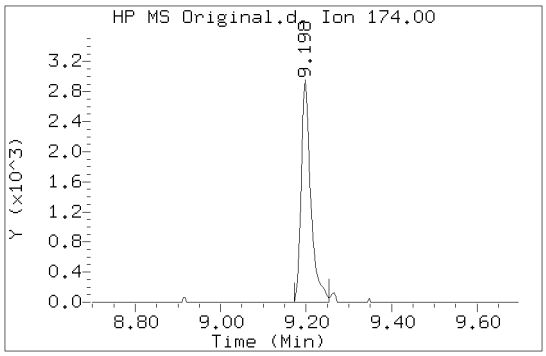
06-Dec-2023
23:21



AFTER

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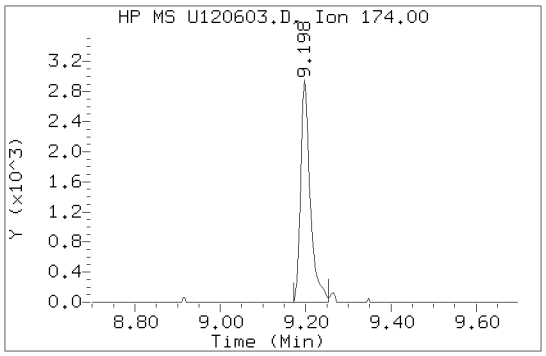
12-Dec-2023
09:43



Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D Page 1
Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
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Inj Date : 06-DEC-2023 12:43
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD001;VSTD001;1;3;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 12:20 Cal File: U120603A.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	4.823	4.823	(1.000)	354809	50.0000	
2	Dichlorodifluoromethane	85	1.172	1.172	(0.243)	2370	1.00000	1.68(M)
3	Chloromethane	50	1.310	1.310	(0.272)	4792	1.00000	1.17(M)
5	Vinyl Chloride	62	1.385	1.385	(0.287)	4380	1.00000	1.12
6	Bromomethane	94	1.633	1.633	(0.339)	3158	1.00000	0.76(M)
7	Chloroethane	64	1.711	1.711	(0.355)	2933	1.00000	1.12
8	Trichlorofluoromethane	101	1.906	1.906	(0.395)	5386	1.00000	1.09
9	Acrolein	56	2.274	2.274	(0.471)	452	2.00000	2.23(M)
10	Acetone	43	2.420	2.420	(0.502)	5741	2.00000	
11	1,1-Dichloroethene	96	2.341	2.341	(0.485)	3115	1.00000	1.13
15	Iodomethane	142	2.480	2.480	(0.514)	2707	2.00000	3.11(T)
16	Acrylonitrile	53	3.072	3.072	(0.637)	2779	2.00000	1.99
17	Methylene Chloride	84	2.806	2.806	(0.582)	5310	1.00000	1.28(M)
18	Methyl tert-butyl ether	73	3.091	3.091	(0.641)	9961	1.00000	1.01
19	Carbon Disulfide	76	2.532	2.532	(0.525)	15770	2.00000	1.95
20	trans-1,2-Dichloroethene	96	3.072	3.072	(0.637)	3410	1.00000	1.04
21	Vinyl Acetate	43	3.619	3.619	(0.751)	19132	2.00000	1.93
22	1,1-Dichloroethane	63	3.522	3.522	(0.730)	7235	1.00000	1.08
24	2-Butanone	43	4.283	4.283	(0.888)	3703	2.00000	2.13(M)
26	2,2-Dichloropropane	77	4.197	4.197	(0.870)	5002	1.00000	1.06

27 cis-1,2-Dichloroethene	96	4.204	4.204 (0.872)	5092	1.00000	1.16
28 Chloroform	83	4.583	4.583 (0.950)	8136	1.00000	1.12

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D Page 2
Report Date: 12-Dec-2023 09:43

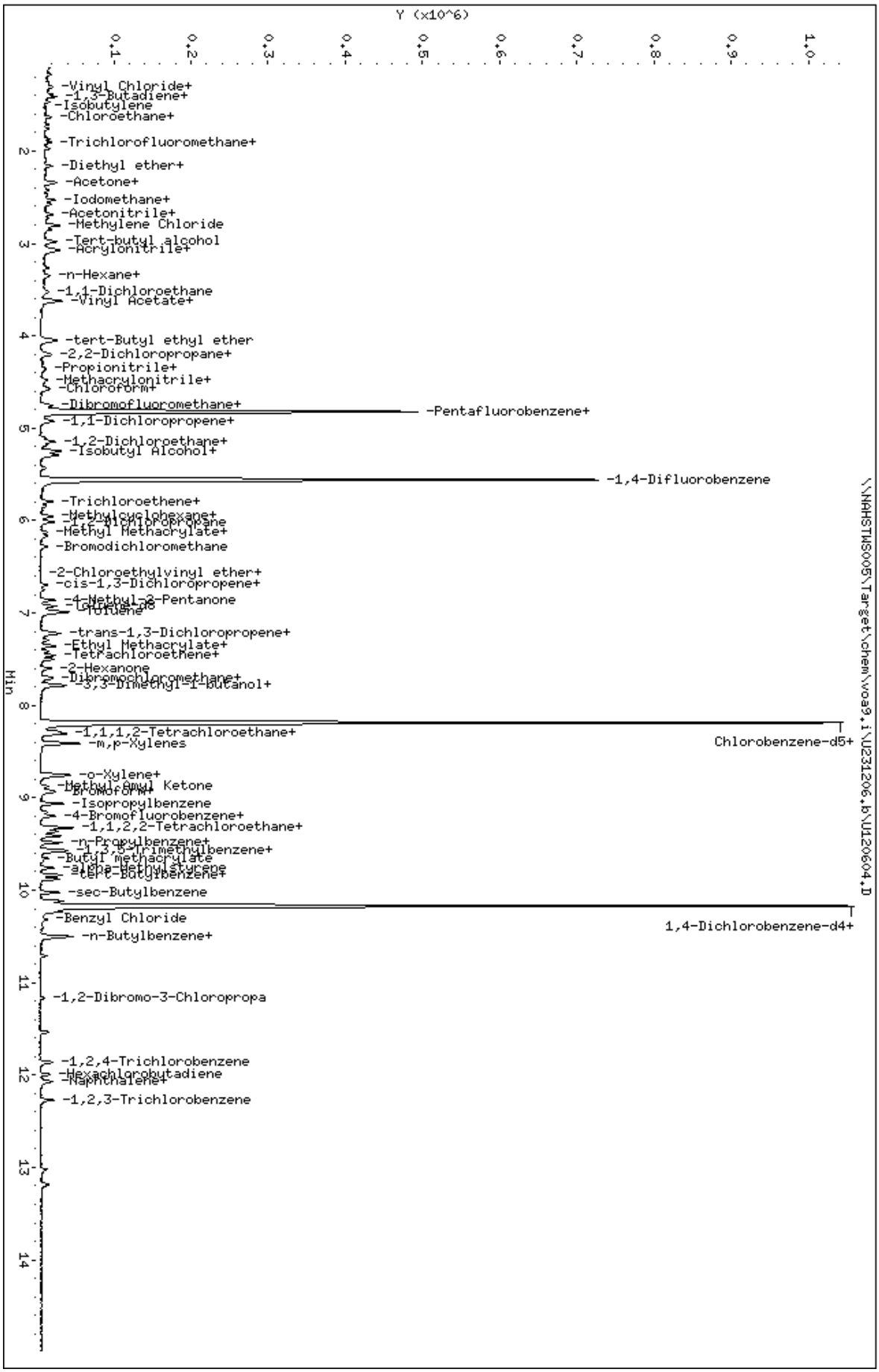
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.474	4.474	(0.928)	2488	1.00000	1.09
$	30 Dibromofluoromethane	113	4.755	4.755	(0.986)	3773	1.00000	0.03
	31 1,1,1-Trichloroethane	97	4.748	4.748	(0.984)	5996	1.00000	1.08
	32 1,1-Dichloropropene	75	4.928	4.928	(0.887)	4846	1.00000	1.02
	33 1,2-Dichloroethane	62	5.183	5.183	(0.933)	5940	1.00000	1.08
	34 Carbon Tetrachloride	117	4.920	4.920	(0.885)	5152	1.00000	1.12
$	35 1,2-Dichloroethane-d4	65	5.104	5.104	(1.058)	4689	1.00000	0.63(M)
*	36 1,4-Difluorobenzene	114	5.558	5.558	(1.000)	562847	50.0000	
	37 Benzene	78	5.145	5.145	(0.926)	17110	1.00000	1.11
	38 Trichloroethene	130	5.797	5.797	(1.043)	5113	1.00000	1.21(M)
	39 Bromodichloromethane	83	6.281	6.281	(1.130)	5619	1.00000	1.11(M)
	41 2-Chloroethylvinyl ether	63	6.573	6.573	(1.183)	104	2.00000	0.20(M)
	42 1,2-Dichloropropane	63	6.015	6.015	(1.082)	4582	1.00000	1.11(M)
	44 Dibromomethane	93	6.127	6.127	(1.103)	3012	1.00000	1.12
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	12410	2.00000	2.72(M)
	46 cis-1,3-Dichloropropene	75	6.697	6.697	(1.205)	5439	1.00000	2.29
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	559222	50.0000	
$	48 Toluene-d8	98	6.926	6.926	(0.846)	13196	1.00000	1.02
	50 Toluene	91	6.986	6.986	(0.853)	16234	1.00000	1.04
	51 trans-1,3-Dichloropropene	75	7.203	7.203	(1.296)	4518	1.00000	2.57
	52 2-Hexanone	43	7.601	7.601	(0.929)	7475	2.00000	2.64(M)
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	4469	1.00000	0.19
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	8254	1.00000	1.19(M)
	55 Dibromochloromethane	129	7.694	7.694	(0.940)	5059	1.00000	1.21(M)
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	3841	1.00000	1.15
	57 1,2-Dibromoethane	107	7.788	7.788	(0.951)	4790	1.00000	1.23(M)
	58 1-Chlorohexane	55	8.197	8.197	(1.475)	3275	1.00000	1.03(M)
	59 Chlorobenzene	112	8.212	8.212	(1.003)	13746	1.00000	1.21(M)
	60 1,1,1,2-Tetrachloroethane	131	8.287	8.287	(1.012)	4936	1.00000	1.24
	61 Ethylbenzene	106	8.305	8.305	(1.015)	6099	1.00000	1.14
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	13585	2.00000	2.12
	63 o-Xylene	106	8.748	8.748	(1.069)	7030	1.00000	1.06
	64 Styrene	104	8.766	8.766	(1.071)	12128	1.00000	1.10
	66 Bromoform	173	8.924	8.924	(1.090)	4009	1.00000	2.45(TM)
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	17436	1.00000	1.09
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	10887	1.00000	1.65
$	69 4-Bromofluorobenzene	95	9.198	9.198	(1.124)	5567	1.00000	
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	292314	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	7225	1.00000	1.30(M)
	73 n-Propylbenzene	91	9.415	9.415	(0.926)	18576	1.00000	1.08
	74 Bromobenzene	156	9.321	9.321	(0.916)	6451	1.00000	1.31(M)
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	13515	1.00000	1.10
	76 2-Chlorotoluene	91	9.486	9.486	(0.933)	13144	1.00000	1.13(M)
	77 4-Chlorotoluene	91	9.580	9.580	(0.942)	15217	1.00000	1.16(M)
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	13105	1.00000	1.19
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	12864	1.00000	1.05
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	14821	1.00000	1.04
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	12618	1.00000	1.03
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	11762	1.00000	1.35(M)
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	11764	1.00000	1.27(M)
	87 n-Butylbenzene	91	10.495	10.495	(1.032)	10752	1.00000	1.04
	88 1,2-Dichlorobenzene	146	10.510	10.510	(1.033)	11314	1.00000	1.29(M)

89	1,2-Dibromo-3-Chloropropane	155	11.169	11.169 (1.098)	1017	1.00000	3.25(M)
90	1,2,4-Trichlorobenzene	180	11.863	11.863 (1.166)	6332	1.00000	1.17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.994	11.994	(1.179)	2507	1.00000	1.15
	92 Naphthalene	128	12.073	12.073	(1.187)	13023	1.00000	1.00(M)
	93 1,2,3-Trichlorobenzene	180	12.271	12.271	(1.206)	6413	1.00000	1.17(M)
M	94 1,2-Dichloroethylene (total)	96				8502	2.00000	
M	95 Xylenes (total)	106				20615	3.00000	
	131 Methyl Acrylate	55	4.388	4.388	(0.910)	3784	1.00000	0.81(a)
	135 1,4-Dioxane	88	6.172	6.172	(1.280)	1303	20.0000	23.14(M)
	141 Cyclohexane	56	4.797	4.797	(0.995)	5330	1.00000	1.04(M)
	138 Freon TF	101	2.345	2.345	(0.486)	3267	1.00000	1.27
	140 1,3-Butadiene	54	1.411	1.411	(0.293)	3808	1.00000	1.06
	147 Methylcyclohexane	55	5.955	5.955	(1.071)	7513	1.00000	0.90
	146 Methyl Acetate	43	2.724	2.724	(0.565)	4056	1.00000	1.14
	148 Tert-Butyl alcohol	59	2.982	2.982	(0.618)	9972	20.0000	25.10(aM)
	149 Isopropyl Alcohol	45	2.577	2.577	(0.534)	6719	20.0000	22.65(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.



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Client ID: VSTD001
Sample Info: VSTD001;VSTD001;1;3;
Purge Volume: 5.0
Column phase: DB624

\\NAHSTMS005\Target\chem\voa9.i\U231206.b\U120604.D

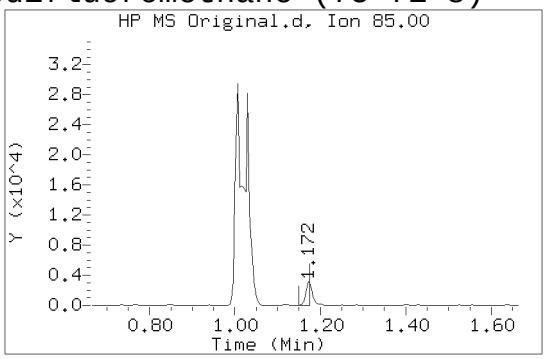
Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

Dichlorodifluoromethane (75-71-8)

Reason Code:

BEFORE
MASS
62
AREA
4380
HEIGHT
4000
06-Dec-2023
23:21



AFTER
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12-Dec-2023
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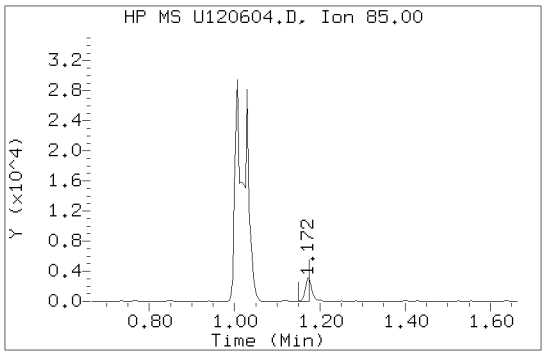

BEFORE
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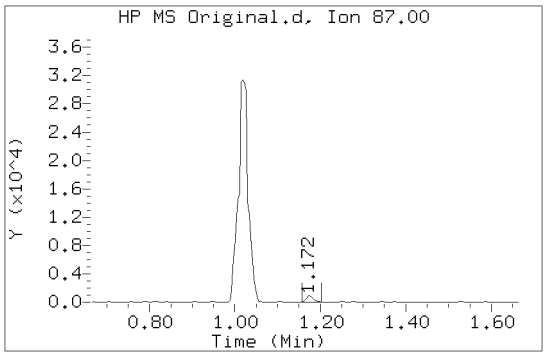
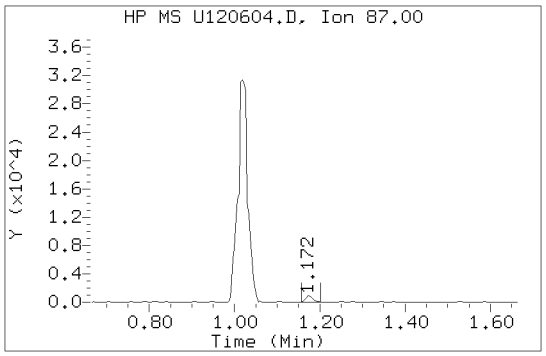
06-Dec-2023
23:21



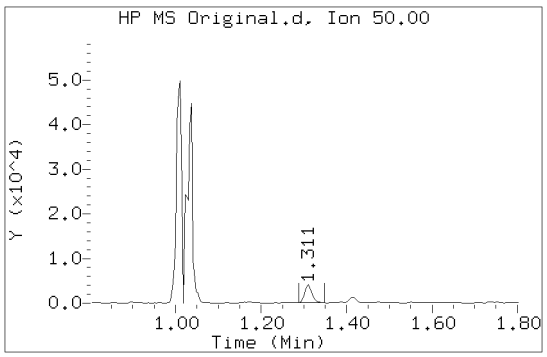
AFTER
MASS
87
AREA
1076
HEIGHT
877
12-Dec-2023
09:43



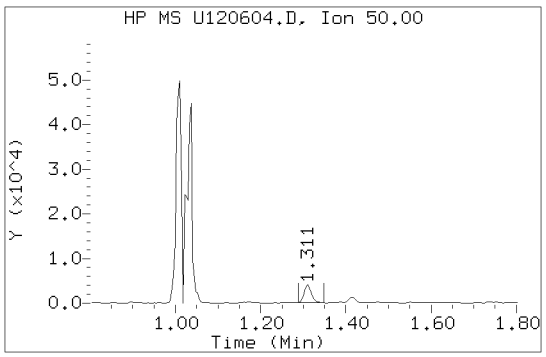
Chloromethane (74-87-3)

Reason Code:

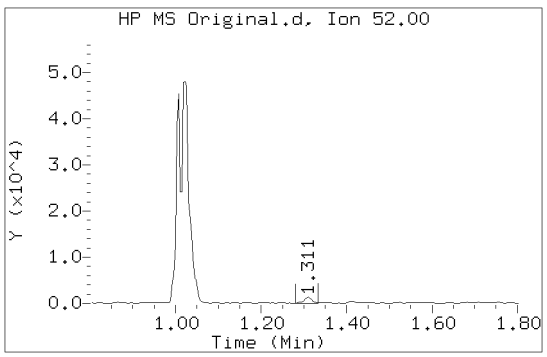
BEFORE
MASS
94
AREA
3158
HEIGHT
2771
06-Dec-2023
23:21



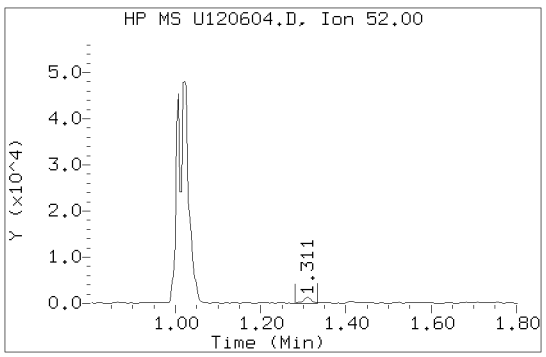
AFTER
MASS
50
AREA
4792
HEIGHT
4016
12-Dec-2023
09:43



BEFORE
MASS
96
AREA
4098
HEIGHT
3099
06-Dec-2023
23:21



AFTER
MASS
52
AREA
1772
HEIGHT
1412
12-Dec-2023
09:43



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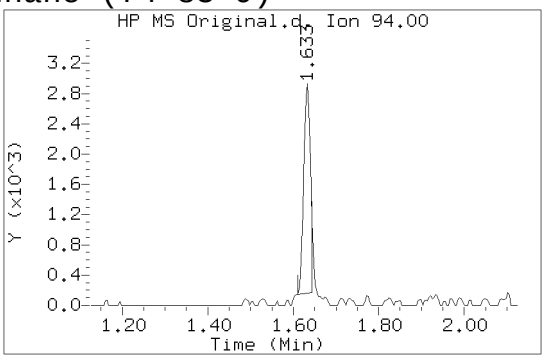
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

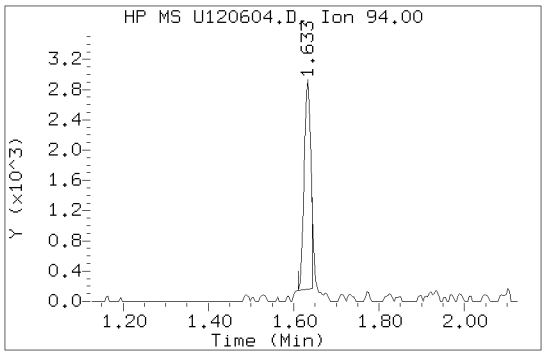
Bromomethane (74-83-9)

Reason Code:

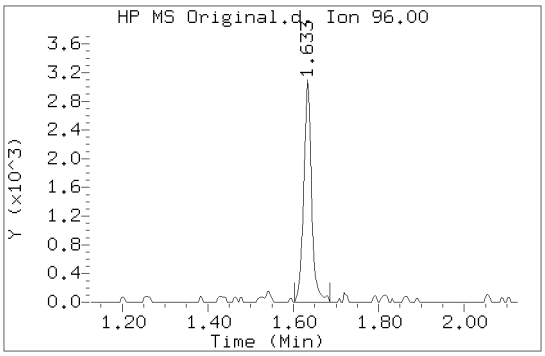
BEFORE
MASS
101
AREA
5386
HEIGHT
3672
06-Dec-2023
23:21



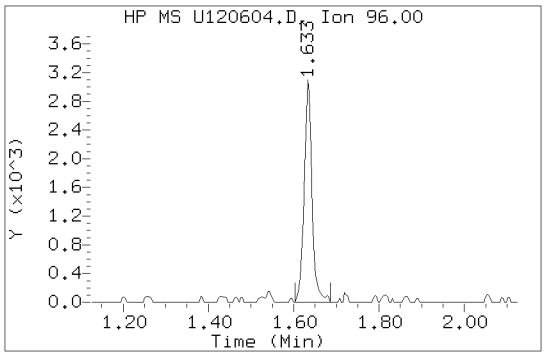
AFTER
MASS
94
AREA
3158
HEIGHT
2771
12-Dec-2023
09:43



BEFORE
MASS
103
AREA
3551
HEIGHT
2271
06-Dec-2023
23:21



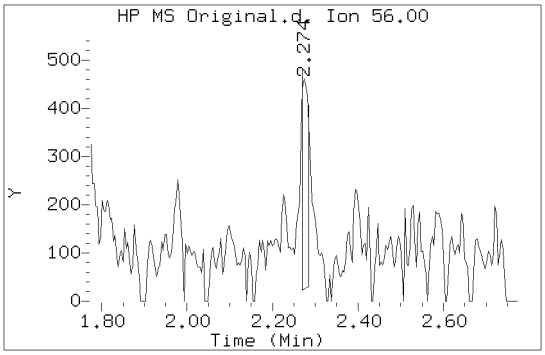
AFTER
MASS
96
AREA
4098
HEIGHT
3099
12-Dec-2023
09:43



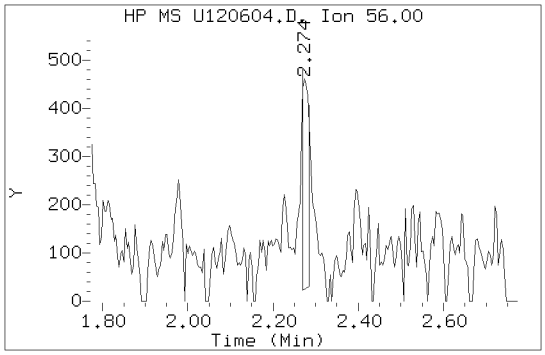
Acrolein (107-02-8)

Reason Code:

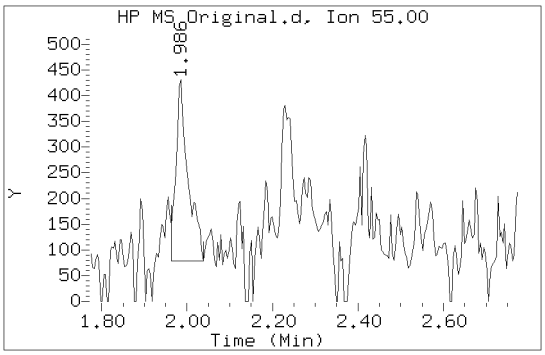
BEFORE
MASS
142
AREA
2707
HEIGHT
1556
06-Dec-2023
23:21



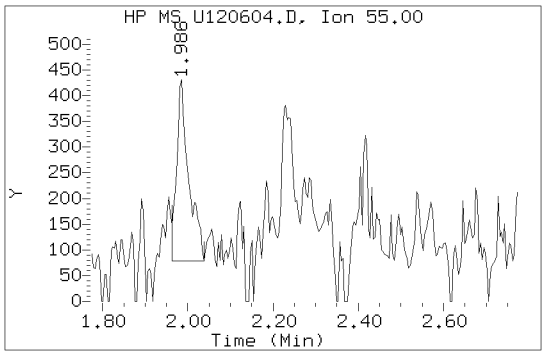
AFTER
MASS
56
AREA
452
HEIGHT
436
12-Dec-2023
09:43



BEFORE
MASS
127
AREA
1345
HEIGHT
757
06-Dec-2023
23:21



AFTER
MASS
55
AREA
701
HEIGHT
352
12-Dec-2023
09:43



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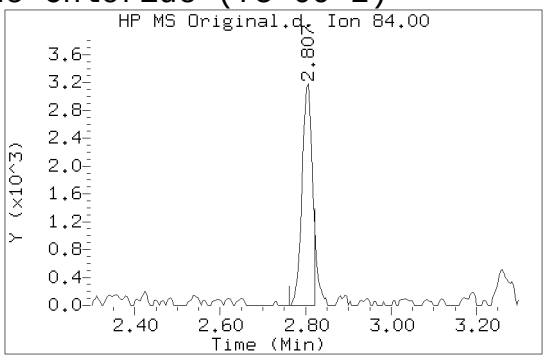
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

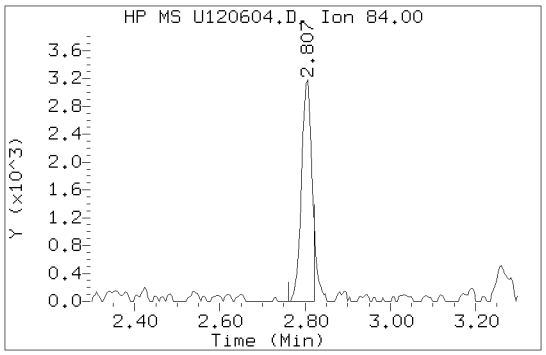
Methylene Chloride (75-09-2)

Reason Code:

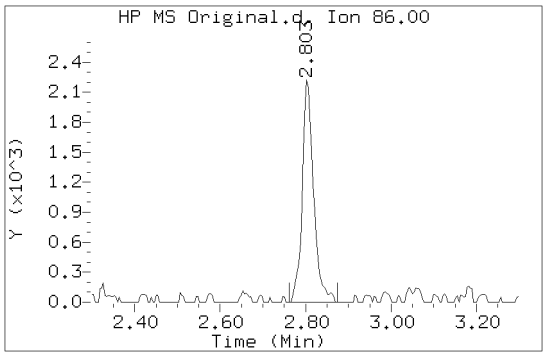
BEFORE
MASS
96
AREA
3410
HEIGHT
1769
06-Dec-2023
23:21



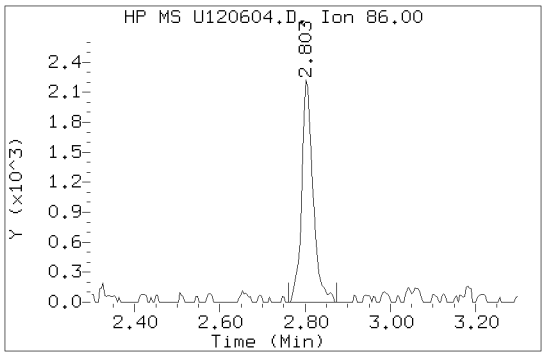
AFTER
MASS
84
AREA
5310
HEIGHT
3183
12-Dec-2023
09:43



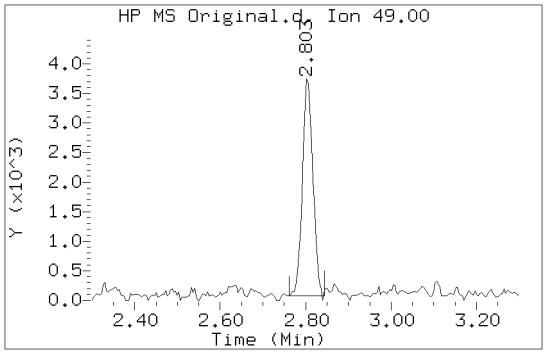
BEFORE
MASS
61
AREA
4667
HEIGHT
2499
06-Dec-2023
23:21



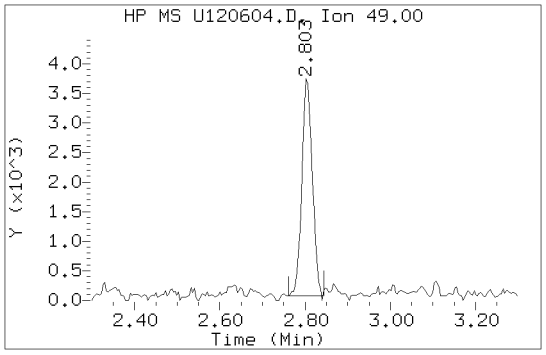
AFTER
MASS
86
AREA
4161
HEIGHT
2223
12-Dec-2023
09:43



BEFORE
MASS
98
AREA
2308
HEIGHT
1305
06-Dec-2023
23:21



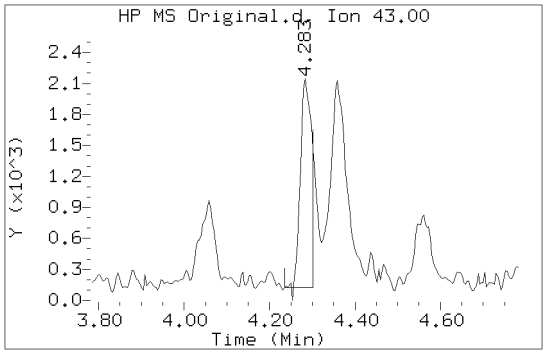
AFTER
MASS
49
AREA
6329
HEIGHT
3671
12-Dec-2023
09:43



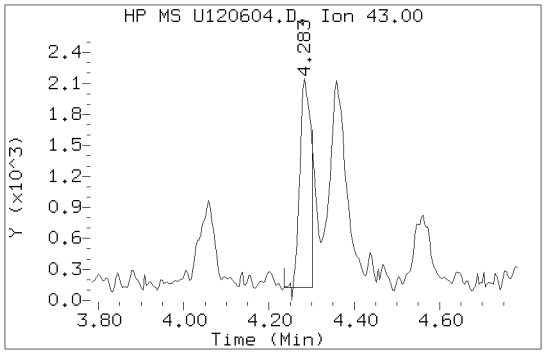
2-Butanone (78-93-3)

Reason Code:

BEFORE
MASS
128
AREA
2488
HEIGHT
1332
06-Dec-2023
23:21



AFTER
MASS
43
AREA
3703
HEIGHT
2024
12-Dec-2023
09:43



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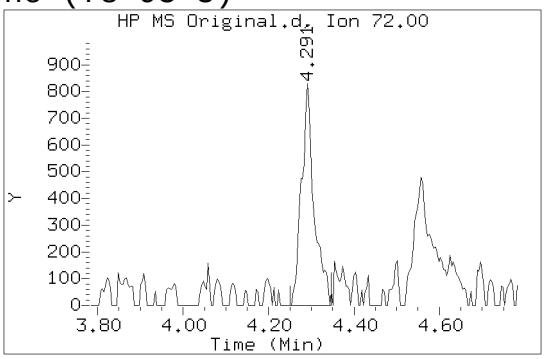
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

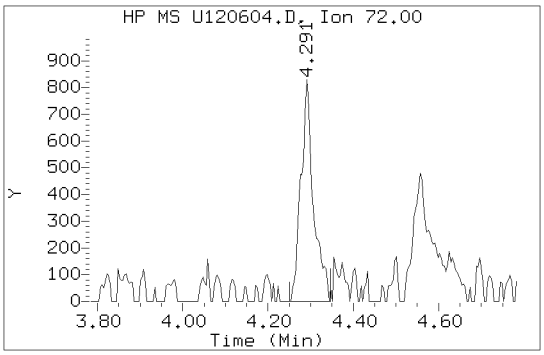
2-Butanone (78-93-3)

Reason Code:

BEFORE
MASS
49
AREA
4566
HEIGHT
2024
06-Dec-2023
23:21



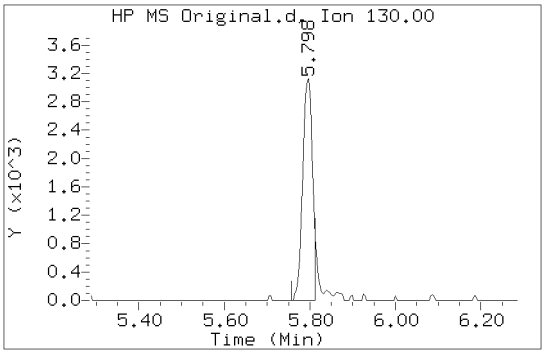
AFTER
MASS
72
AREA
1726
HEIGHT
829
12-Dec-2023
09:43



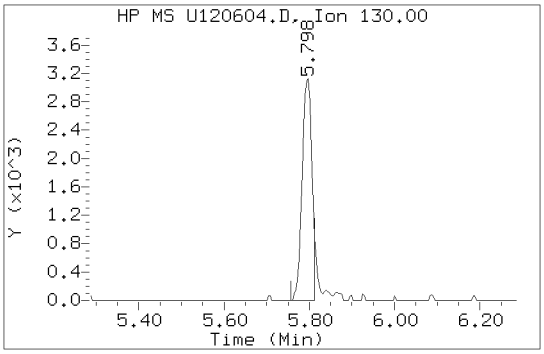
Trichloroethene (79-01-6)

Reason Code:

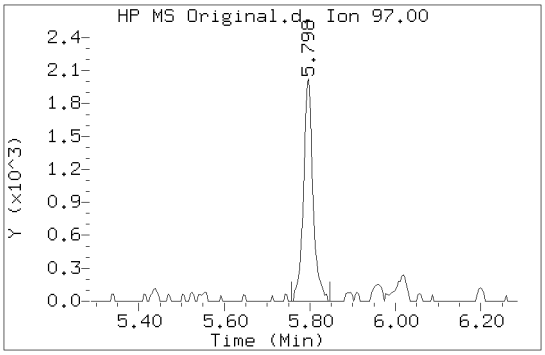
BEFORE
MASS
43
AREA
12410
HEIGHT
7604
06-Dec-2023
23:21



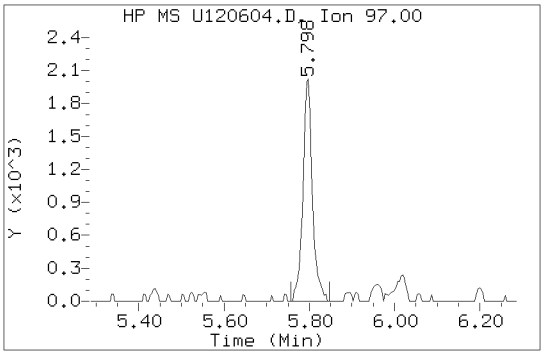
AFTER
MASS
130
AREA
5113
HEIGHT
3126
12-Dec-2023
09:43



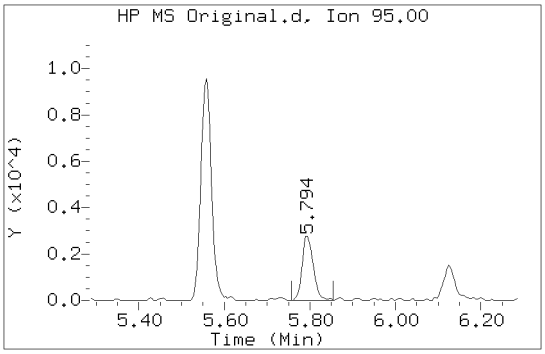
BEFORE
MASS
58
AREA
5581
HEIGHT
2850
06-Dec-2023
23:21



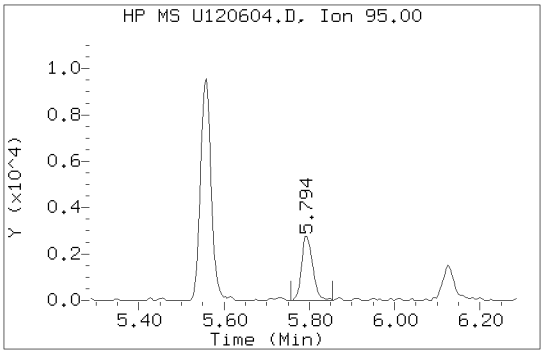
AFTER
MASS
97
AREA
3184
HEIGHT
2024
12-Dec-2023
09:43



BEFORE
MASS
100
AREA
2108
HEIGHT
1166
06-Dec-2023
23:21



AFTER
MASS
95
AREA
5146
HEIGHT
2773
12-Dec-2023
09:43



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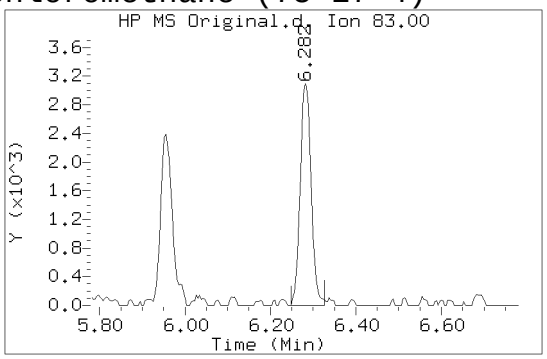
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

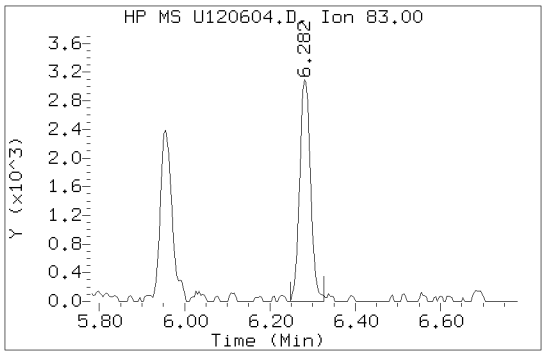
Bromodichloromethane (75-27-4)

Reason Code:

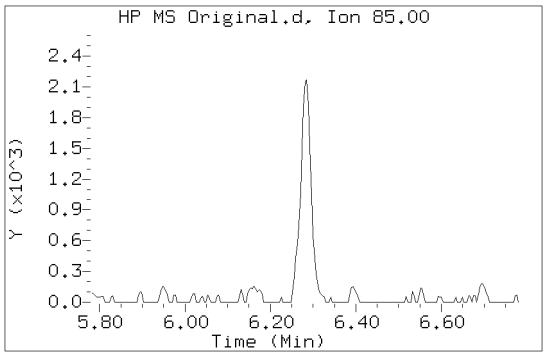
BEFORE
MASS
75
AREA
5439
HEIGHT
2909
06-Dec-2023
23:21



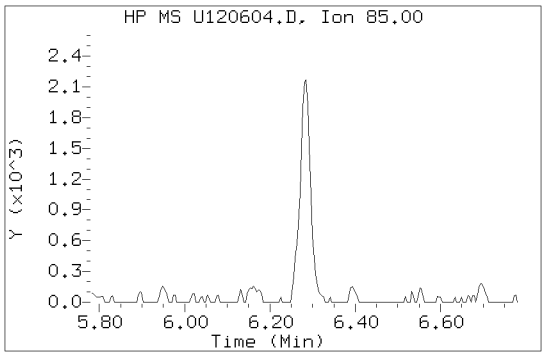
AFTER
MASS
83
AREA
5619
HEIGHT
3095
12-Dec-2023
09:43



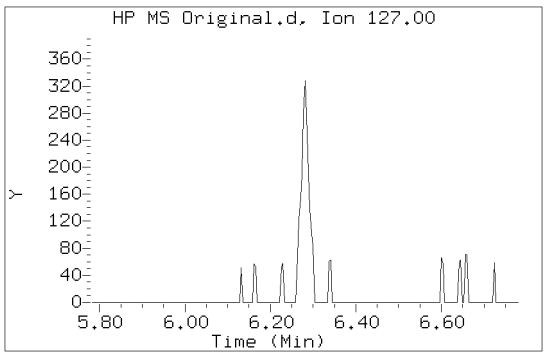
BEFORE
MASS
77
AREA
1996
HEIGHT
1030
06-Dec-2023
23:21



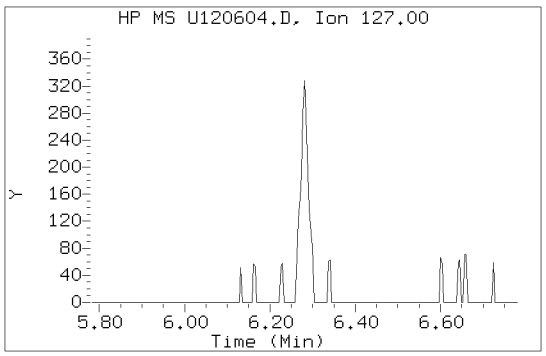
AFTER
MASS
85
AREA
0
HEIGHT
0
12-Dec-2023
09:43



BEFORE
MASS
39
AREA
2491
HEIGHT
1211
06-Dec-2023
23:21



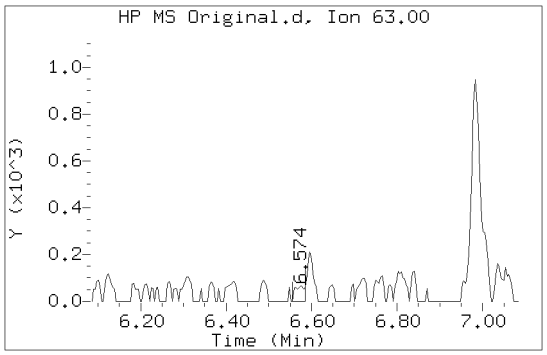
AFTER
MASS
127
AREA
0
HEIGHT
0
12-Dec-2023
09:43



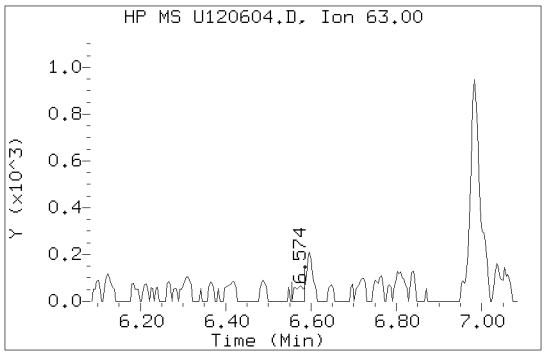
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

BEFORE
MASS
117
AREA
559222
HEIGHT
361794
06-Dec-2023
23:21



AFTER
MASS
63
AREA
104
HEIGHT
66
12-Dec-2023
09:43



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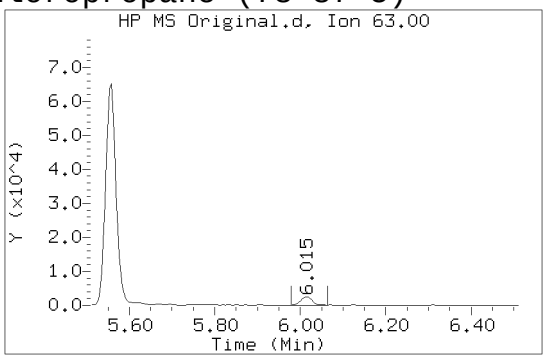
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

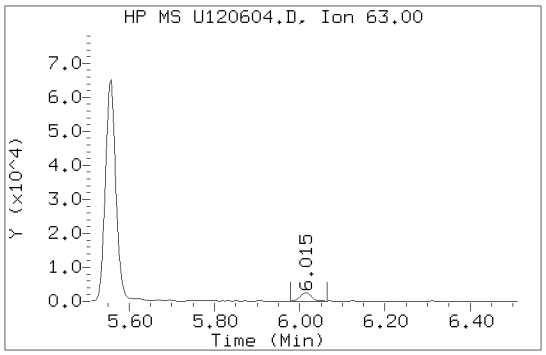
1,2-Dichloropropane (78-87-5)

Reason Code:

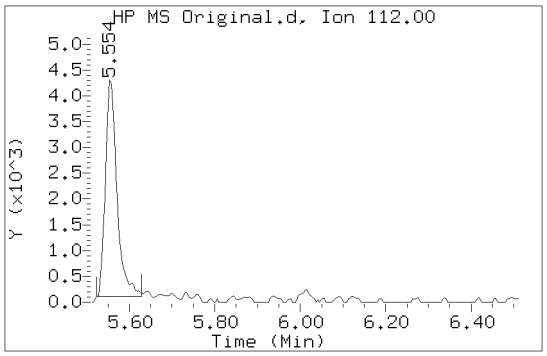
BEFORE
MASS
91
AREA
16234
HEIGHT
9383
06-Dec-2023
23:21



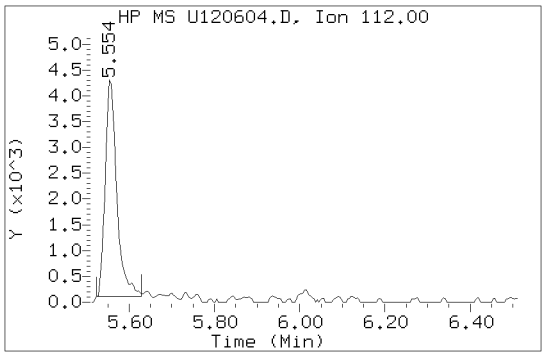
AFTER
MASS
63
AREA
4582
HEIGHT
2449
12-Dec-2023
09:43



BEFORE
MASS
92
AREA
9713
HEIGHT
5645
06-Dec-2023
23:21



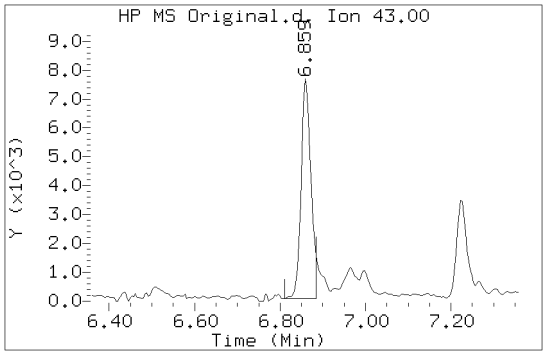
AFTER
MASS
112
AREA
7920
HEIGHT
4197
12-Dec-2023
09:43



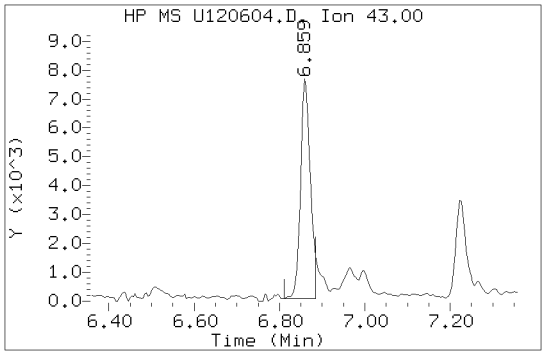
4-Methyl-2-Pentanone (108-10-1)

Reason Code:

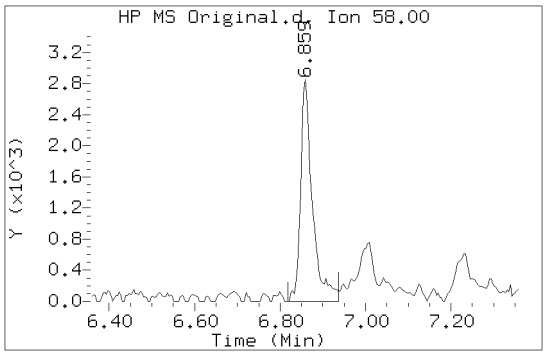
BEFORE
MASS
43
AREA
7475
HEIGHT
5102
06-Dec-2023
23:21



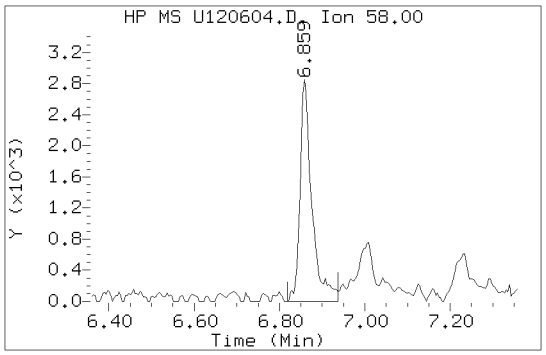
AFTER
MASS
43
AREA
12410
HEIGHT
7604
12-Dec-2023
09:43



BEFORE
MASS
58
AREA
5297
HEIGHT
2649
06-Dec-2023
23:21



AFTER
MASS
58
AREA
5581
HEIGHT
2850
12-Dec-2023
09:43



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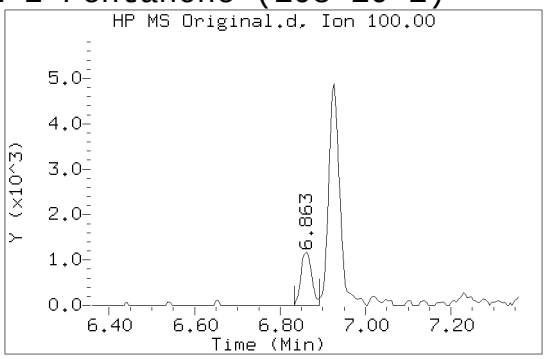
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

4-Methyl-2-Pentanone (108-10-1)

Reason Code:

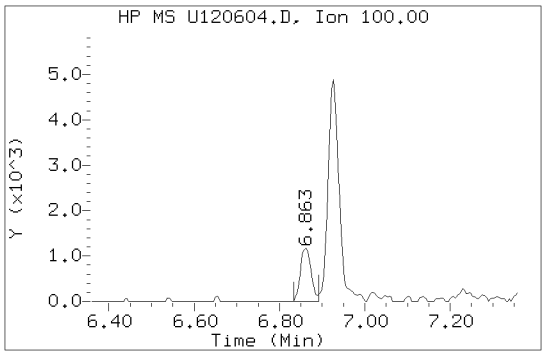
BEFORE

MASS
57
AREA
1979
HEIGHT
942
06-Dec-2023
23:21



AFTER

MASS
100
AREA
2108
HEIGHT
1166
12-Dec-2023
09:43

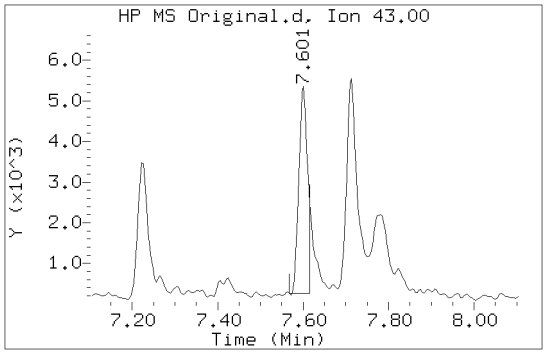


2-Hexanone (591-78-6)

Reason Code:

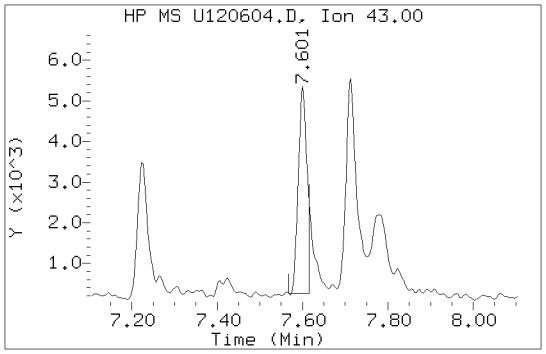
BEFORE

MASS
164
AREA
3841
HEIGHT
2495
06-Dec-2023
23:21



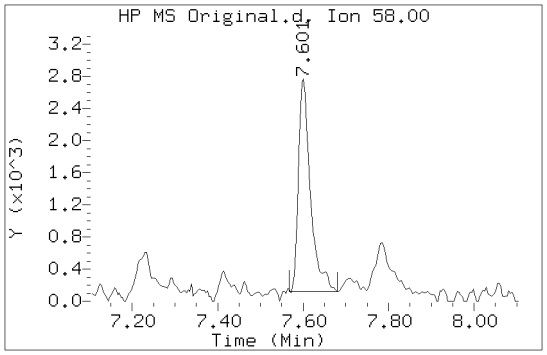
AFTER

MASS
43
AREA
7475
HEIGHT
5102
12-Dec-2023
09:43



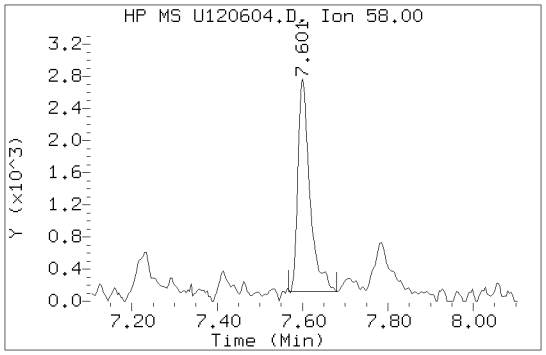
BEFORE

MASS
129
AREA
3164
HEIGHT
2200
06-Dec-2023
23:21



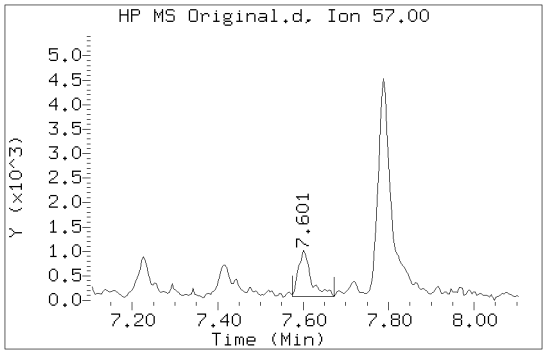
AFTER

MASS
58
AREA
5297
HEIGHT
2649
12-Dec-2023
09:43



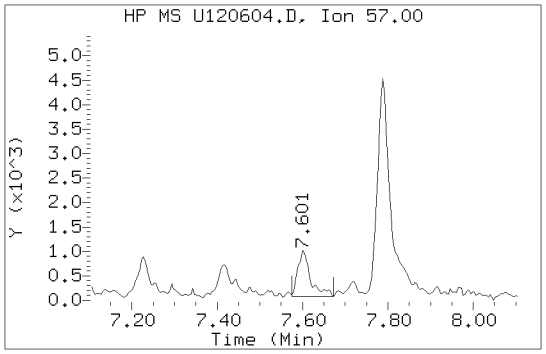
BEFORE

MASS
131
AREA
3251
HEIGHT
2212
06-Dec-2023
23:21



AFTER

MASS
57
AREA
1979
HEIGHT
942
12-Dec-2023
09:43

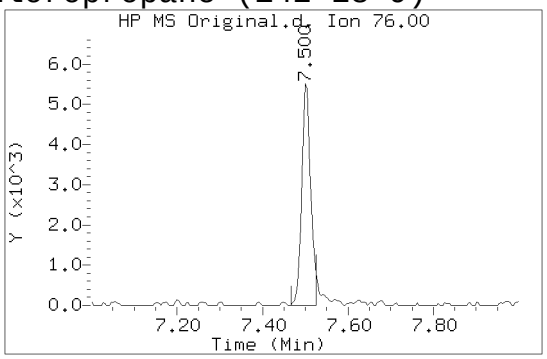


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

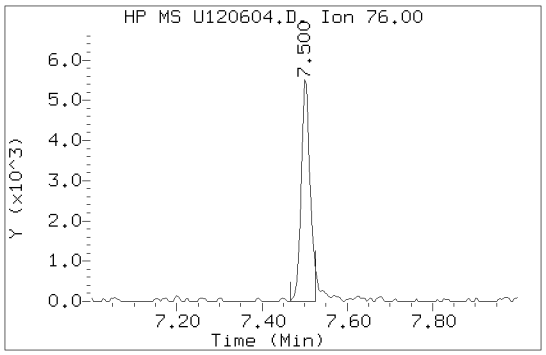
1,3-Dichloropropane (142-28-9)

Reason Code:

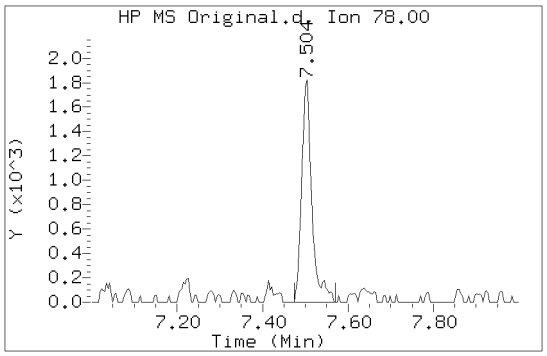
BEFORE
MASS
56
AREA
452
HEIGHT
436
06-Dec-2023
23:21



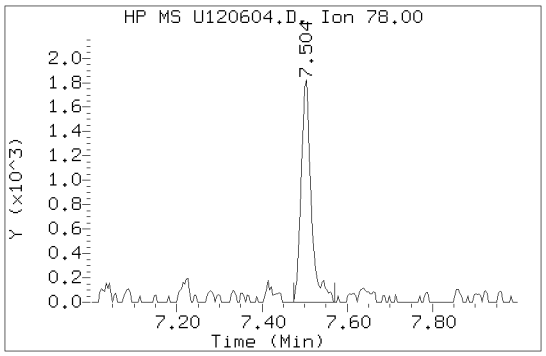
AFTER
MASS
76
AREA
8254
HEIGHT
5512
12-Dec-2023
09:43



BEFORE
MASS
55
AREA
701
HEIGHT
352
06-Dec-2023
23:21



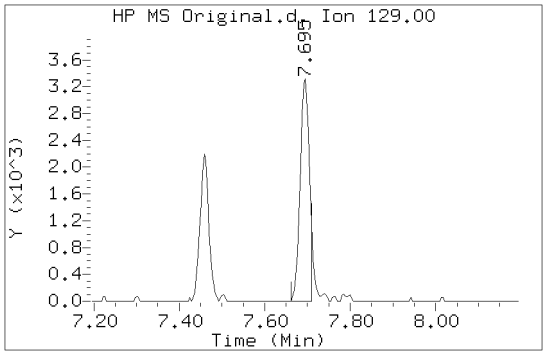
AFTER
MASS
78
AREA
3088
HEIGHT
1823
12-Dec-2023
09:43



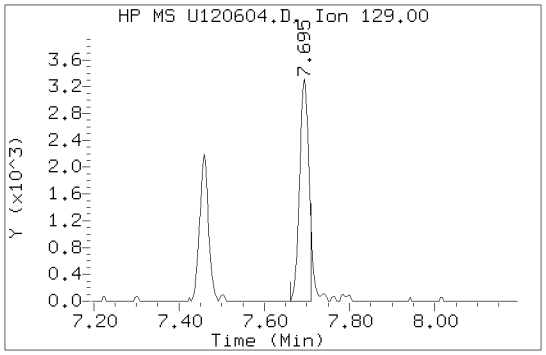
Dibromochloromethane (124-48-1)

Reason Code:

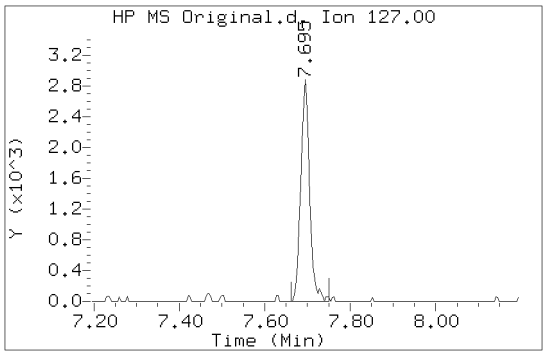
BEFORE
MASS
63
AREA
104
HEIGHT
66
06-Dec-2023
23:21



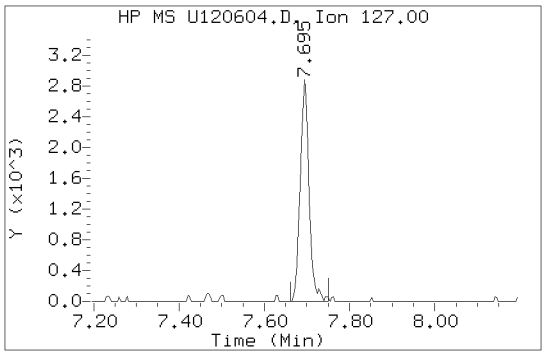
AFTER
MASS
129
AREA
5059
HEIGHT
3317
12-Dec-2023
09:43



BEFORE
MASS
65
AREA
0
HEIGHT
0
06-Dec-2023
23:21



AFTER
MASS
127
AREA
4291
HEIGHT
2880
12-Dec-2023
09:43



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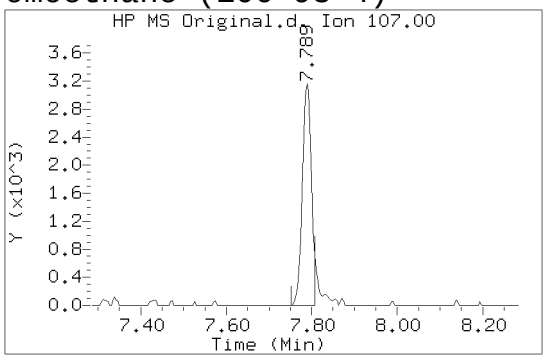
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

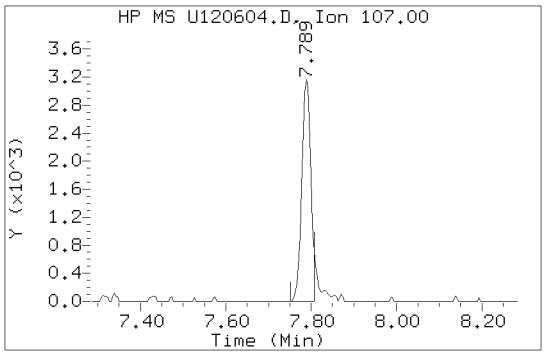
1,2-Dibromoethane (106-93-4)

Reason Code:

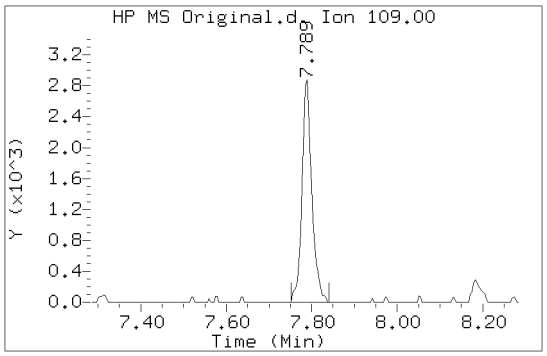
BEFORE
MASS
112
AREA
13746
HEIGHT
9169
06-Dec-2023
23:21



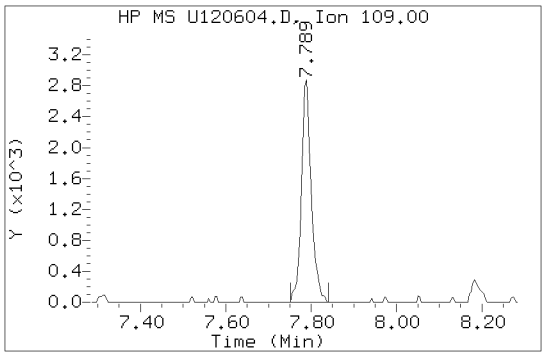
AFTER
MASS
107
AREA
4790
HEIGHT
3163
12-Dec-2023
09:43



BEFORE
MASS
77
AREA
14266
HEIGHT
5843
06-Dec-2023
23:21



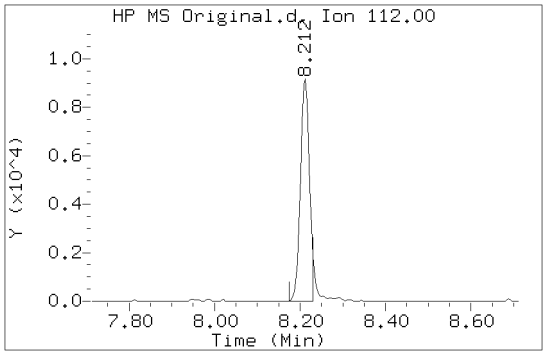
AFTER
MASS
109
AREA
4725
HEIGHT
2876
12-Dec-2023
09:43



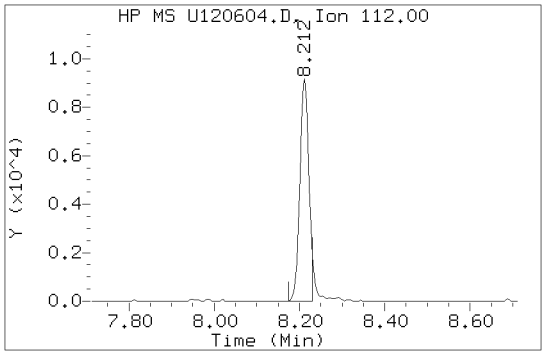
Chlorobenzene (108-90-7)

Reason Code:

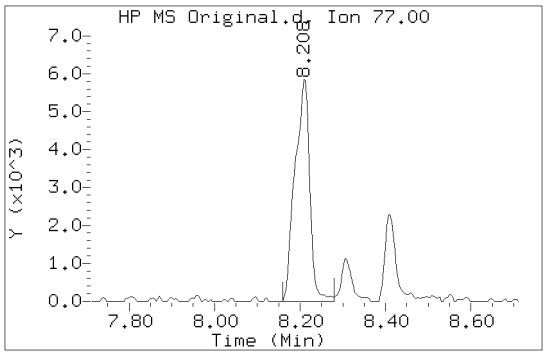
BEFORE
MASS
131
AREA
4936
HEIGHT
3097
06-Dec-2023
23:21



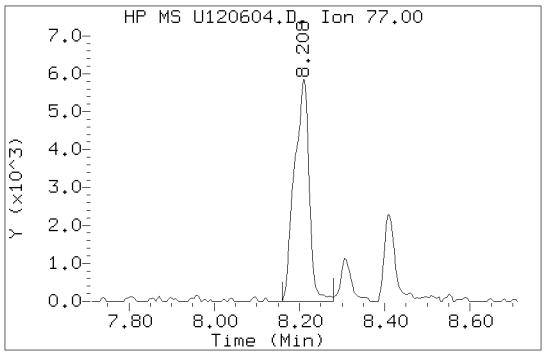
AFTER
MASS
112
AREA
13746
HEIGHT
9169
12-Dec-2023
09:43



BEFORE
MASS
133
AREA
5045
HEIGHT
3220
06-Dec-2023
23:21



AFTER
MASS
77
AREA
14266
HEIGHT
5843
12-Dec-2023
09:43

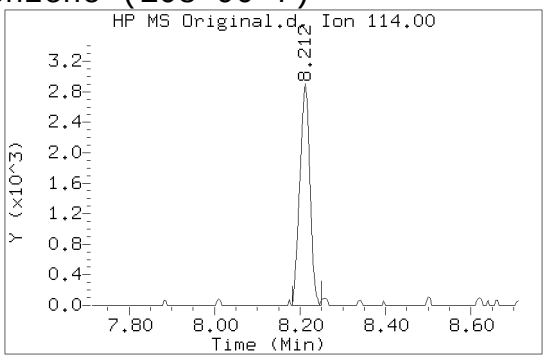


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

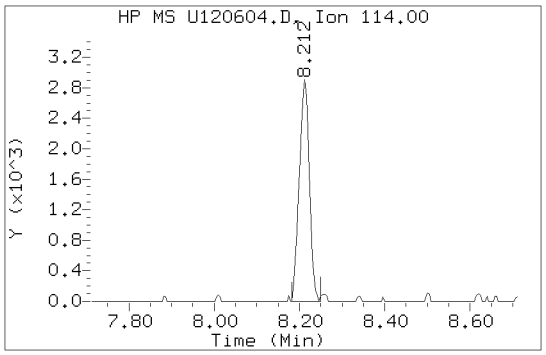
Chlorobenzene (108-90-7)

Reason Code:

BEFORE
MASS
119
AREA
4987
HEIGHT
2688
06-Dec-2023
23:21



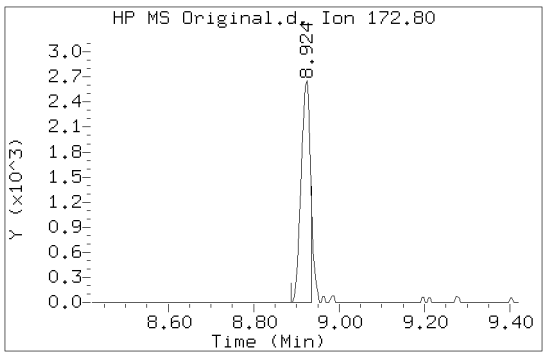
AFTER
MASS
114
AREA
4887
HEIGHT
2906
12-Dec-2023
09:43



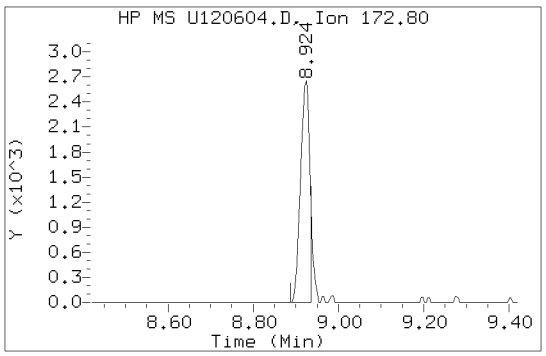
Bromoform (75-25-2)

Reason Code:

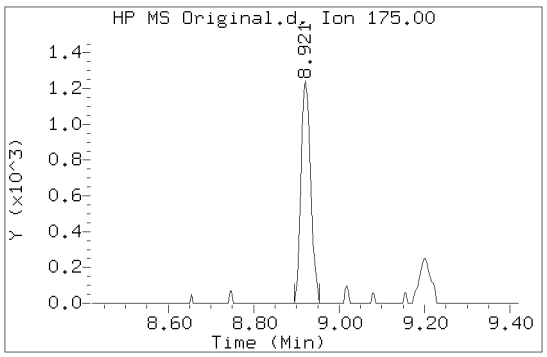
BEFORE
MASS
172.8
AREA
4009
HEIGHT
2655
06-Dec-2023
23:21



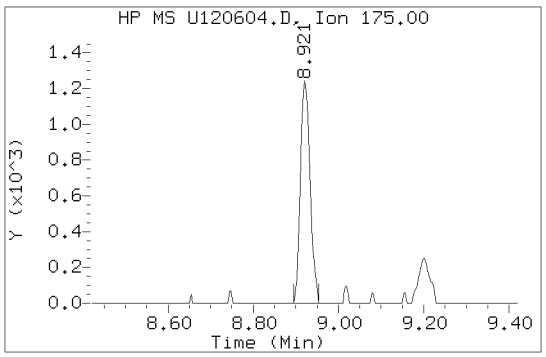
AFTER
MASS
172.8
AREA
4009
HEIGHT
2655
12-Dec-2023
09:43



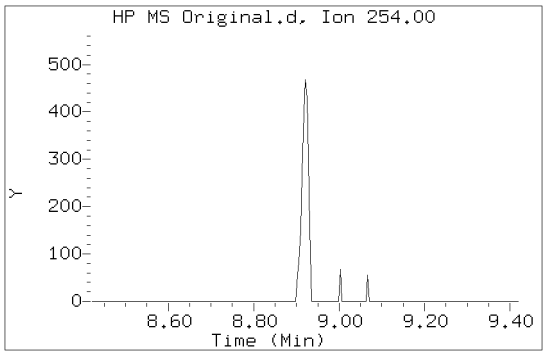
BEFORE
MASS
175
AREA
2010
HEIGHT
1243
06-Dec-2023
23:21



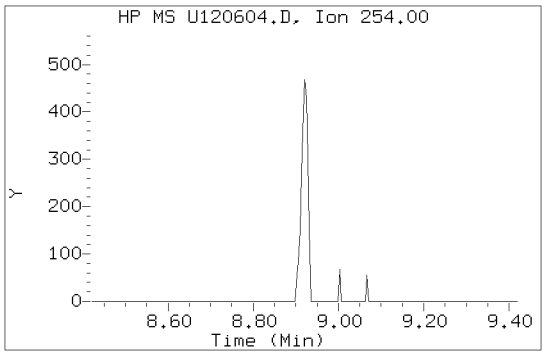
AFTER
MASS
175
AREA
2010
HEIGHT
1243
12-Dec-2023
09:43



BEFORE
MASS
254
AREA
0
HEIGHT
0
06-Dec-2023
23:21



AFTER
MASS
254
AREA
0
HEIGHT
0
12-Dec-2023
09:43

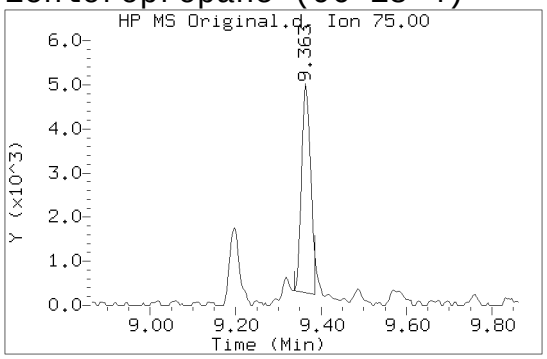


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

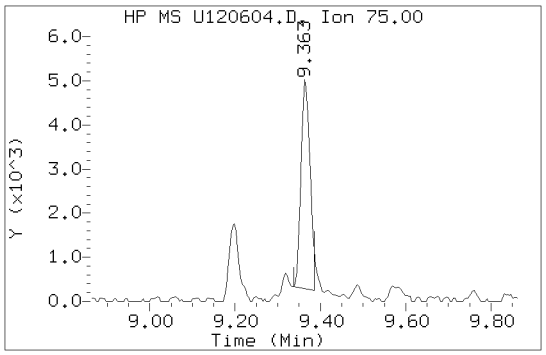
1,2,3-Trichloropropane (96-18-4)

Reason Code:

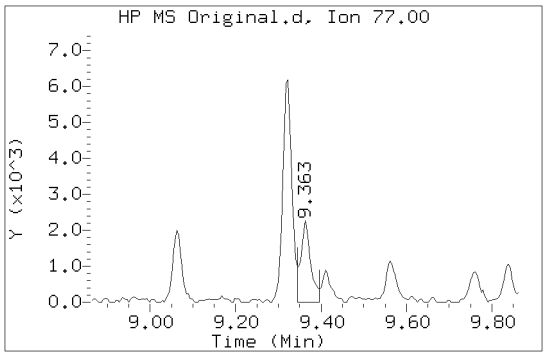
BEFORE
MASS
152
AREA
292314
HEIGHT
188877
06-Dec-2023
23:21



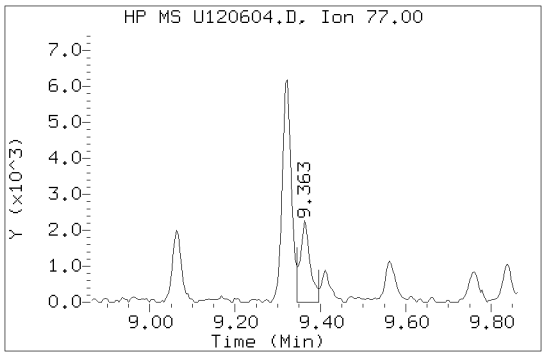
AFTER
MASS
75
AREA
7225
HEIGHT
4742
12-Dec-2023
09:43



BEFORE
MASS
115
AREA
159675
HEIGHT
100656
06-Dec-2023
23:21



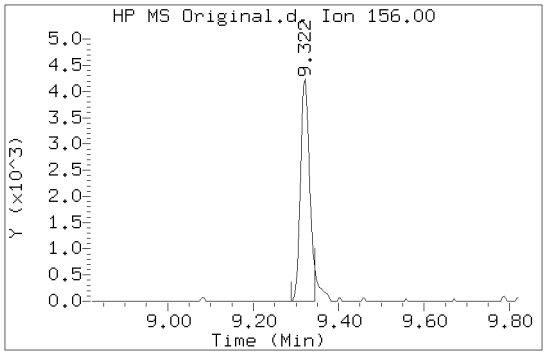
AFTER
MASS
77
AREA
3895
HEIGHT
2276
12-Dec-2023
09:43



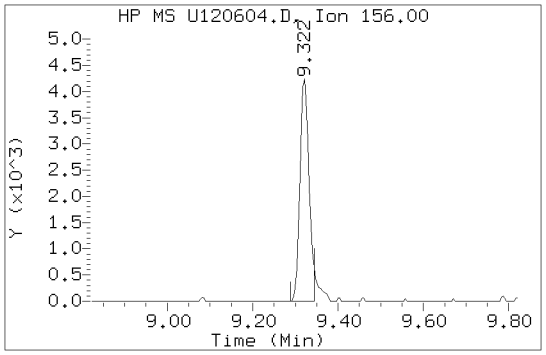
Bromobenzene (108-86-1)

Reason Code:

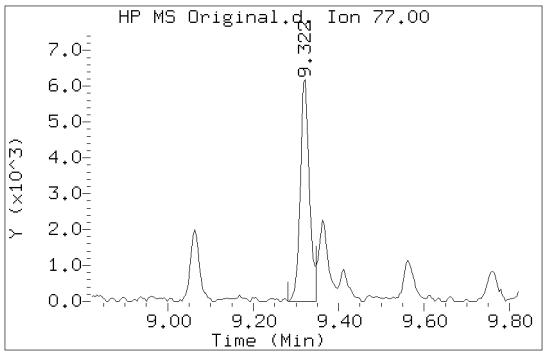
BEFORE
MASS
75
AREA
7225
HEIGHT
4742
06-Dec-2023
23:21



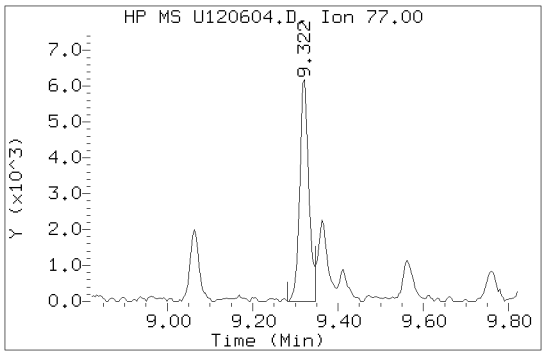
AFTER
MASS
156
AREA
6451
HEIGHT
4241
12-Dec-2023
09:43



BEFORE
MASS
77
AREA
3895
HEIGHT
2276
06-Dec-2023
23:21



AFTER
MASS
77
AREA
9489
HEIGHT
6181
12-Dec-2023
09:43



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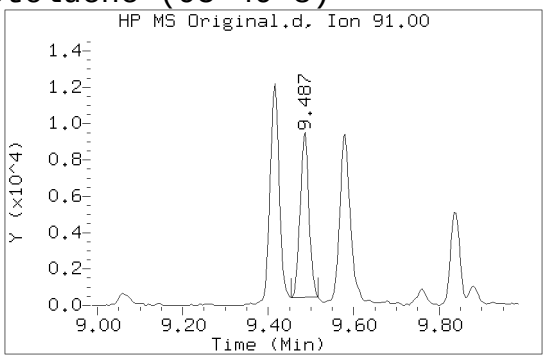
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

2-Chlorotoluene (95-49-8)

Reason Code:

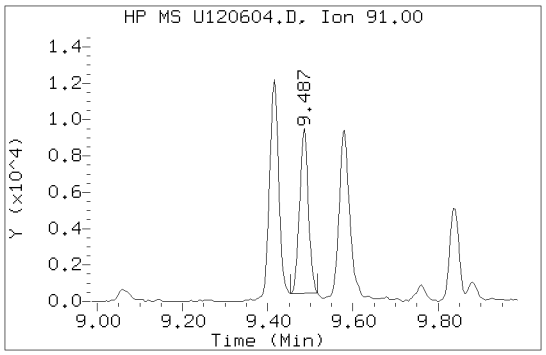
BEFORE

MASS
91
AREA
18576
HEIGHT
12131
06-Dec-2023
23:21



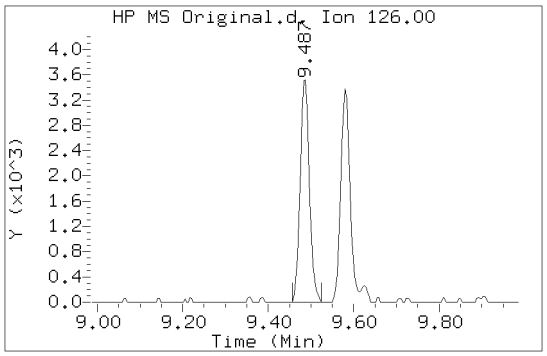
AFTER

MASS
91
AREA
13144
HEIGHT
9069
12-Dec-2023
09:43



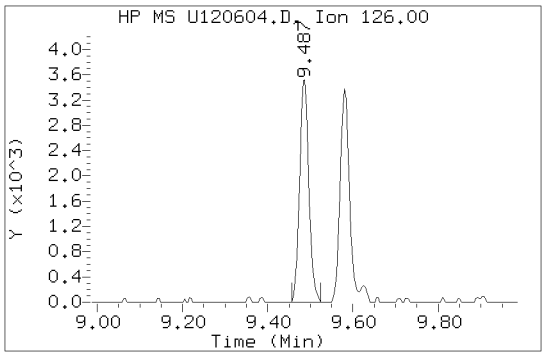
BEFORE

MASS
120
AREA
4175
HEIGHT
2622
06-Dec-2023
23:21



AFTER

MASS
126
AREA
5403
HEIGHT
3519
12-Dec-2023
09:43

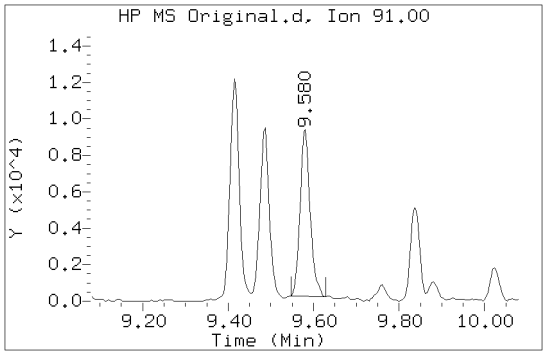


4-Chlorotoluene (106-43-4)

Reason Code:

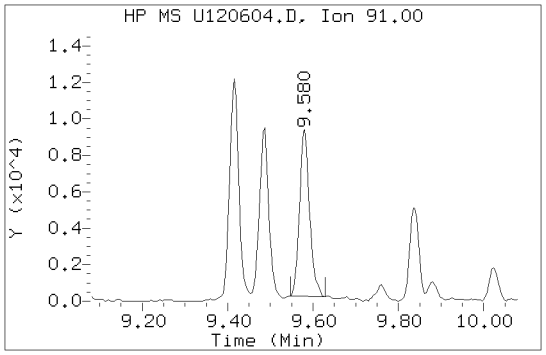
BEFORE

MASS
156
AREA
6451
HEIGHT
4241
06-Dec-2023
23:21



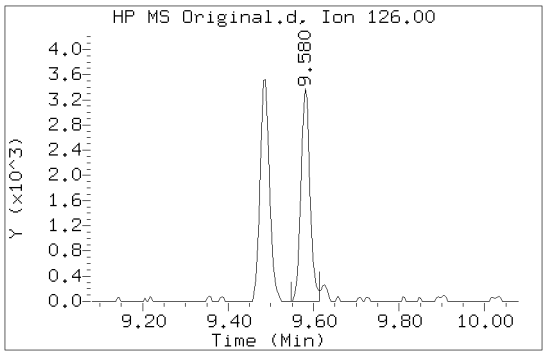
AFTER

MASS
91
AREA
15217
HEIGHT
9149
12-Dec-2023
09:43



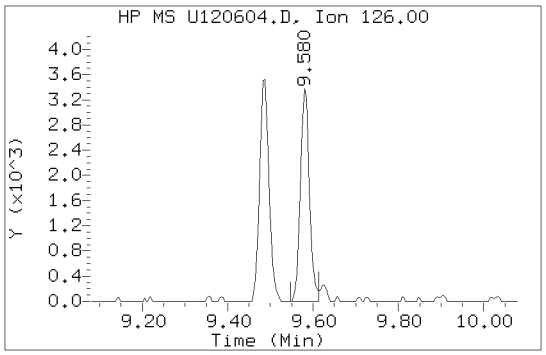
BEFORE

MASS
77
AREA
9489
HEIGHT
6181
06-Dec-2023
23:21



AFTER

MASS
126
AREA
5101
HEIGHT
3378
12-Dec-2023
09:43



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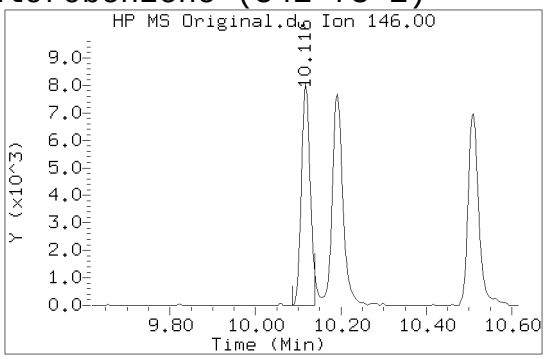
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

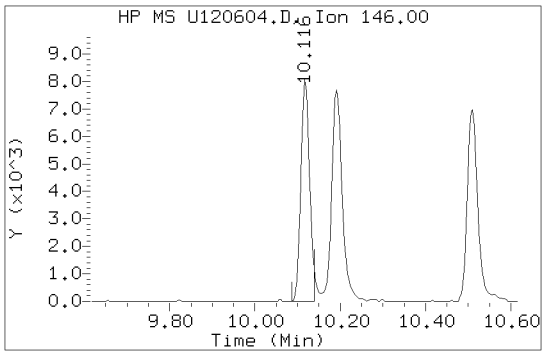
1,3-Dichlorobenzene (541-73-1)

Reason Code:

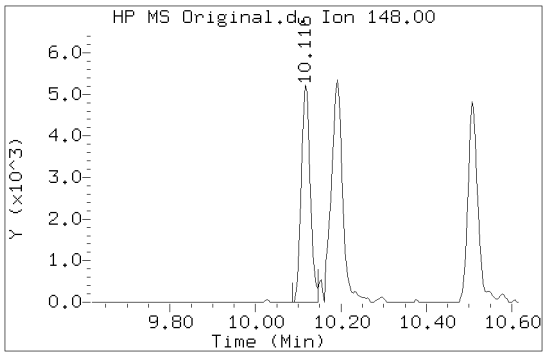
BEFORE
MASS
119
AREA
13105
HEIGHT
8645
06-Dec-2023
23:21



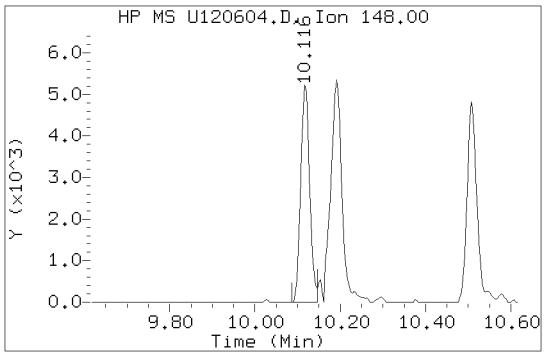
AFTER
MASS
146
AREA
11762
HEIGHT
8063
12-Dec-2023
09:43



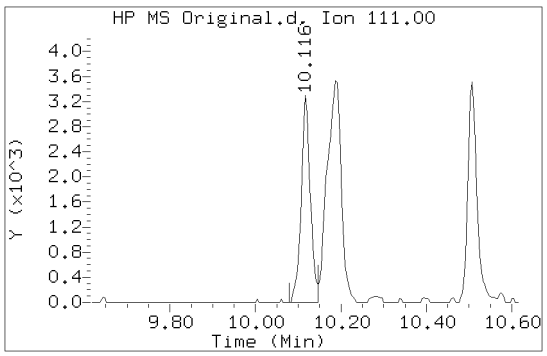
BEFORE
MASS
91
AREA
7970
HEIGHT
5113
06-Dec-2023
23:21



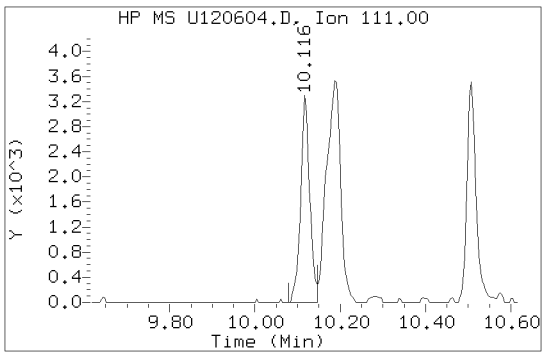
AFTER
MASS
148
AREA
7837
HEIGHT
5232
12-Dec-2023
09:43



BEFORE
MASS
134
AREA
3501
HEIGHT
2543
06-Dec-2023
23:21



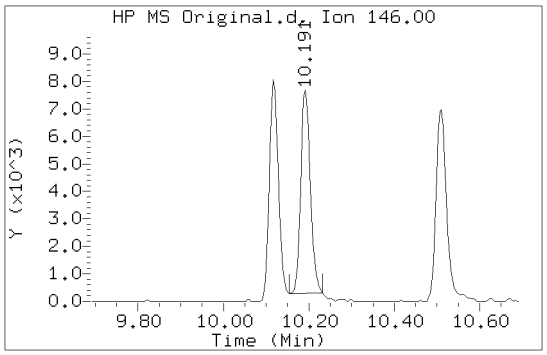
AFTER
MASS
111
AREA
4991
HEIGHT
3301
12-Dec-2023
09:43



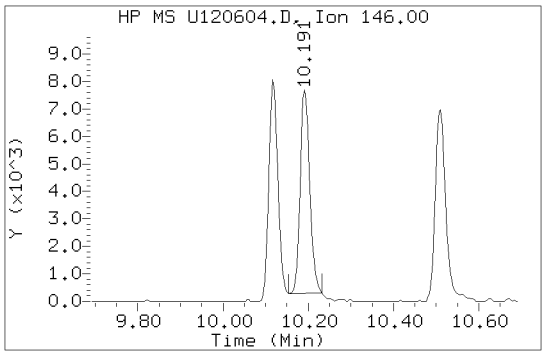
1,4-Dichlorobenzene (106-46-7)

Reason Code:

BEFORE
MASS
105
AREA
12864
HEIGHT
8289
06-Dec-2023
23:21



AFTER
MASS
146
AREA
11764
HEIGHT
7398
12-Dec-2023
09:43



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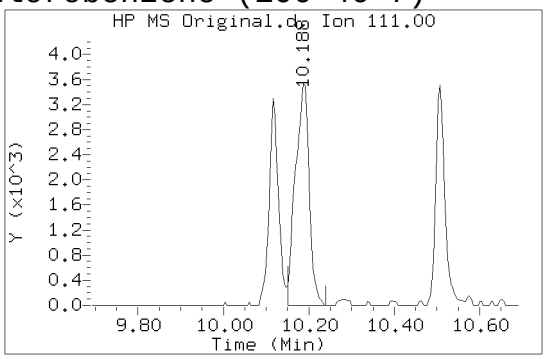
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

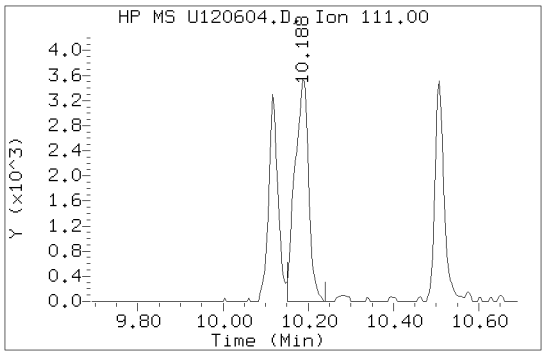
1,4-Dichlorobenzene (106-46-7)

Reason Code:

BEFORE
MASS
120
AREA
6131
HEIGHT
4307
06-Dec-2023
23:21



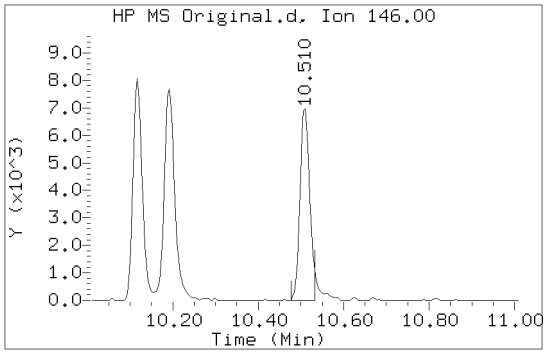
AFTER
MASS
111
AREA
8078
HEIGHT
3533
12-Dec-2023
09:43



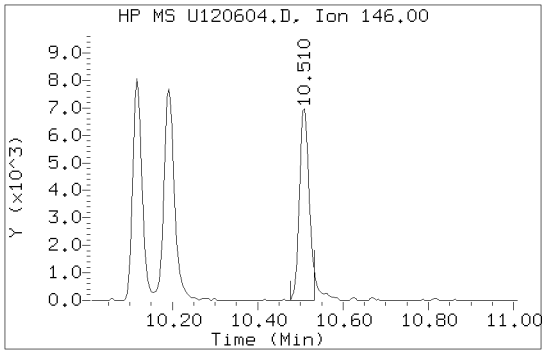
1,2-Dichlorobenzene (95-50-1)

Reason Code:

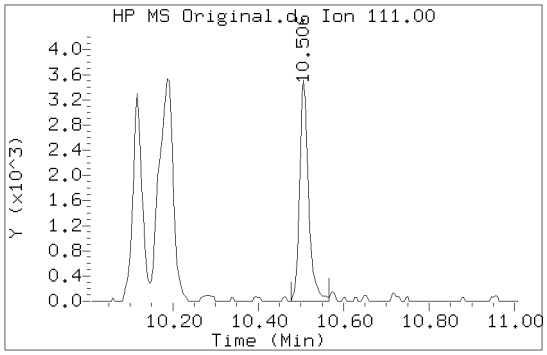
BEFORE
MASS
41
AREA
3181
HEIGHT
1500
06-Dec-2023
23:21



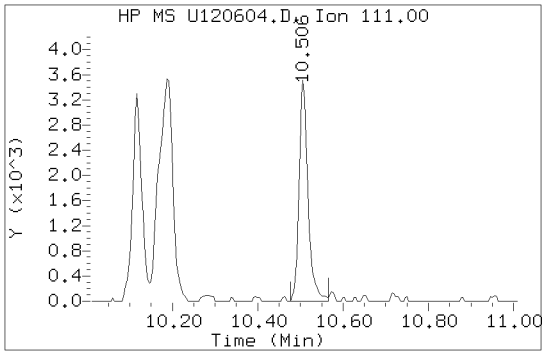
AFTER
MASS
146
AREA
11314
HEIGHT
6978
12-Dec-2023
09:43



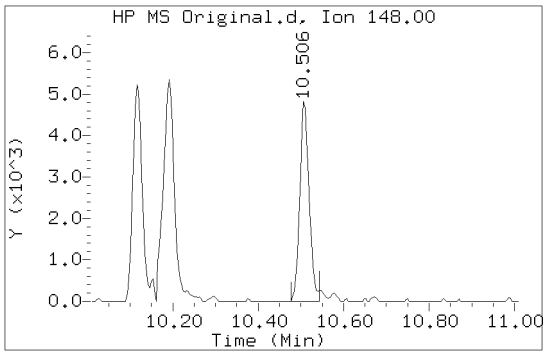
BEFORE
MASS
69
AREA
3138
HEIGHT
1288
06-Dec-2023
23:21



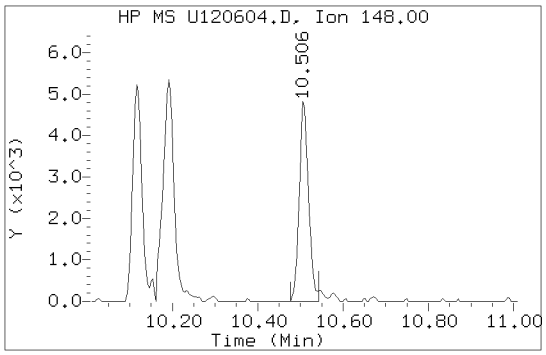
AFTER
MASS
111
AREA
5243
HEIGHT
3519
12-Dec-2023
09:43



BEFORE
MASS
100
AREA
1391
HEIGHT
767
06-Dec-2023
23:21



AFTER
MASS
148
AREA
7512
HEIGHT
4827
12-Dec-2023
09:43



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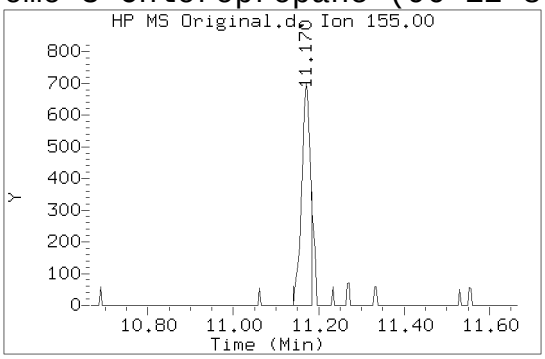
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

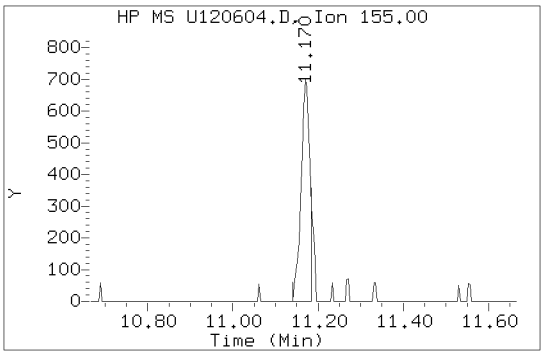
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

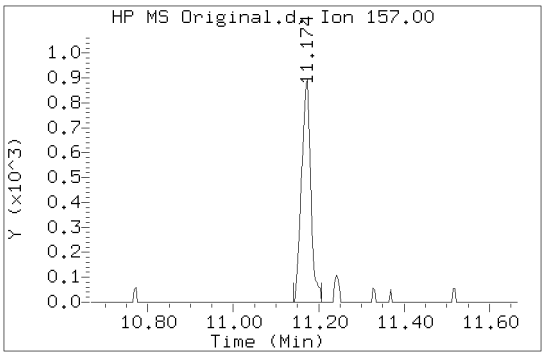
BEFORE
MASS
119
AREA
12618
HEIGHT
8526
06-Dec-2023
23:21



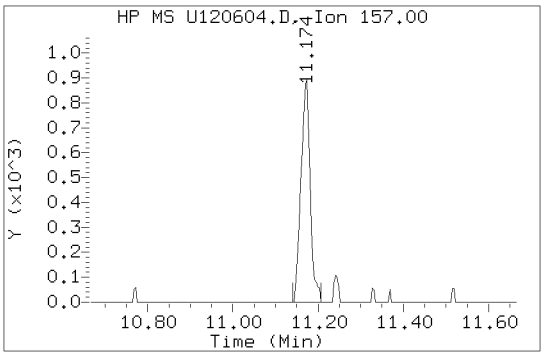
AFTER
MASS
155
AREA
1017
HEIGHT
699
12-Dec-2023
09:43



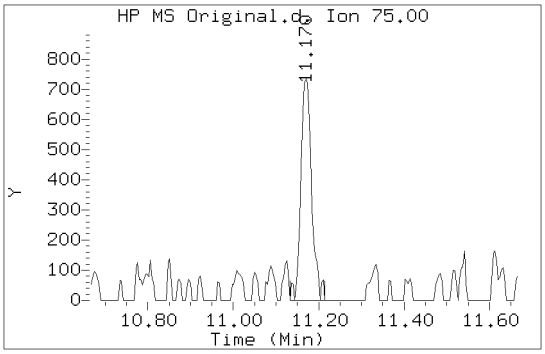
BEFORE
MASS
134
AREA
3443
HEIGHT
2049
06-Dec-2023
23:21



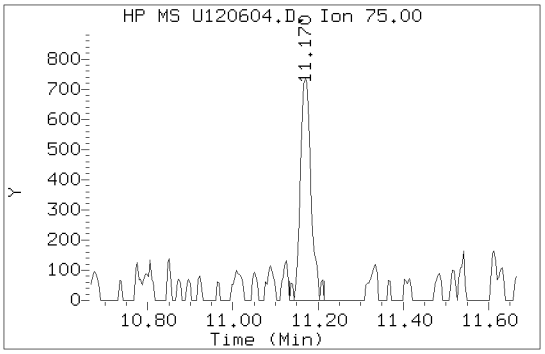
AFTER
MASS
157
AREA
1379
HEIGHT
892
12-Dec-2023
09:43



BEFORE
MASS
91
AREA
3724
HEIGHT
1712
06-Dec-2023
23:21



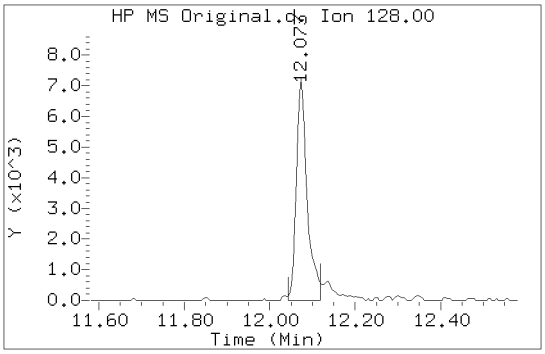
AFTER
MASS
75
AREA
1331
HEIGHT
735
12-Dec-2023
09:43



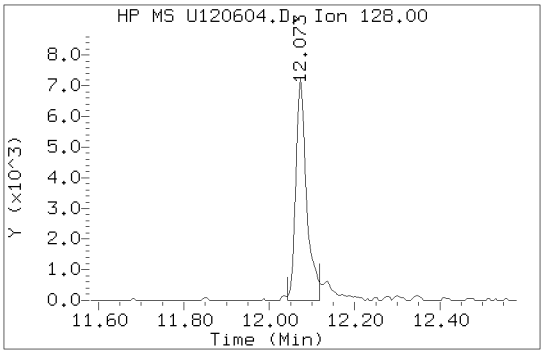
Naphthalene (91-20-3)

Reason Code:

BEFORE
MASS
43
AREA
825
HEIGHT
395
06-Dec-2023
23:21



AFTER
MASS
128
AREA
13023
HEIGHT
7233
12-Dec-2023
09:43



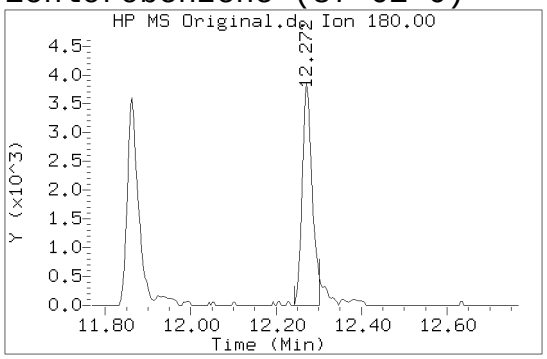
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

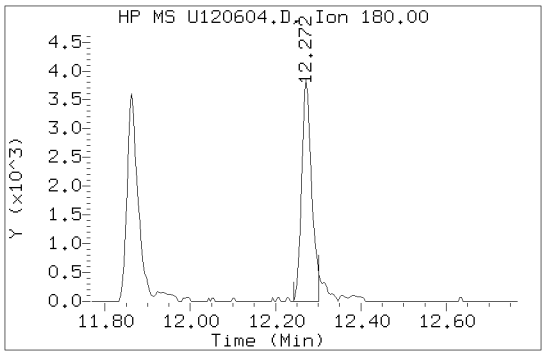
BEFORE

MASS
69
AREA
4516
HEIGHT
2548
06-Dec-2023
23:21



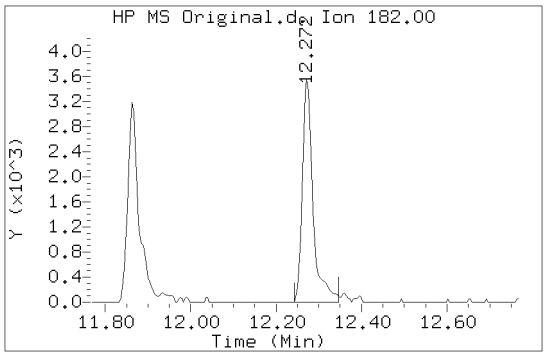
AFTER

MASS
180
AREA
6413
HEIGHT
3848
12-Dec-2023
09:43



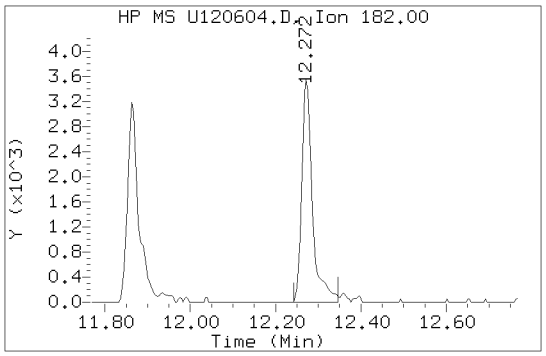
BEFORE

MASS
41
AREA
3380
HEIGHT
1662
06-Dec-2023
23:21



AFTER

MASS
182
AREA
6322
HEIGHT
3544
12-Dec-2023
09:43

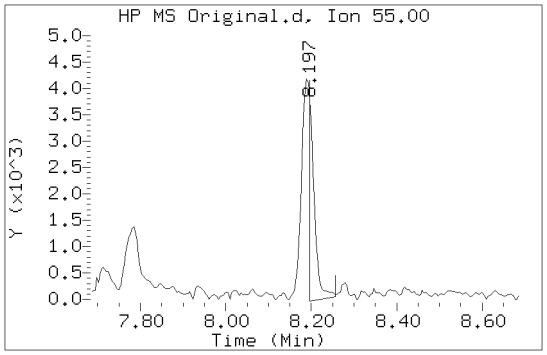


1-Chlorohexane (544-10-5)

Reason Code:

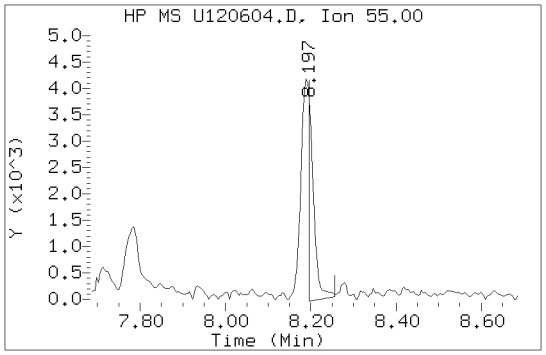
BEFORE

MASS
91
AREA
10752
HEIGHT
5764
06-Dec-2023
23:21



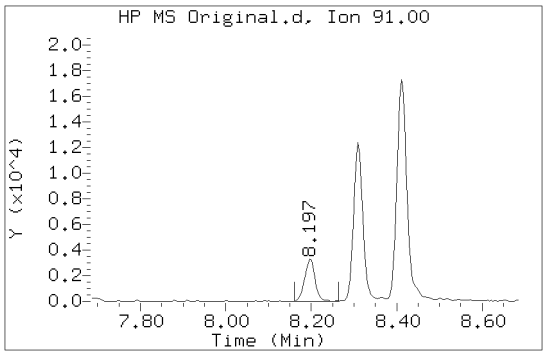
AFTER

MASS
55
AREA
3275
HEIGHT
3828
12-Dec-2023
09:43



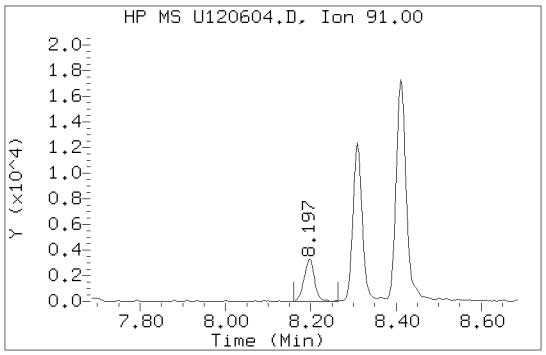
BEFORE

MASS
92
AREA
5866
HEIGHT
3298
06-Dec-2023
23:21



AFTER

MASS
91
AREA
5624
HEIGHT
3288
12-Dec-2023
09:43



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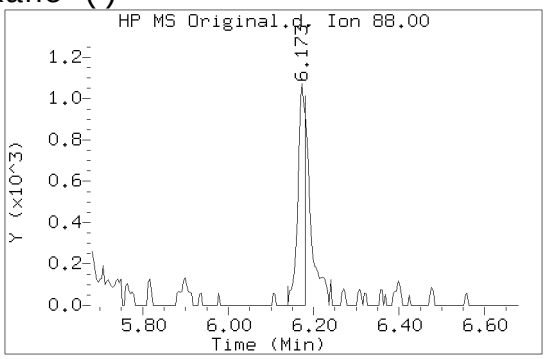
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

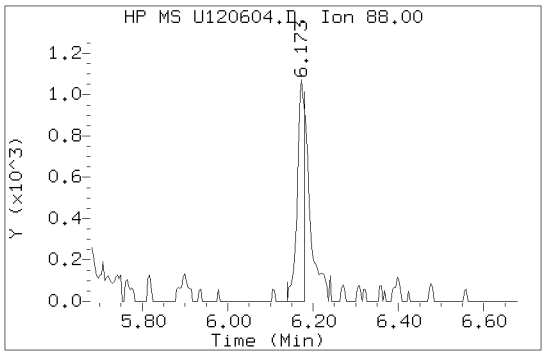
1,4-Dioxane ()

Reason Code:

BEFORE
MASS
155
AREA
1017
HEIGHT
699
06-Dec-2023
23:21



AFTER
MASS
88
AREA
1303
HEIGHT
1072
12-Dec-2023
09:43



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06-Dec-2023
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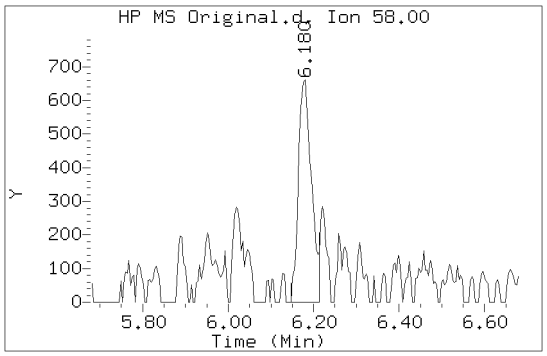

AFTER
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58
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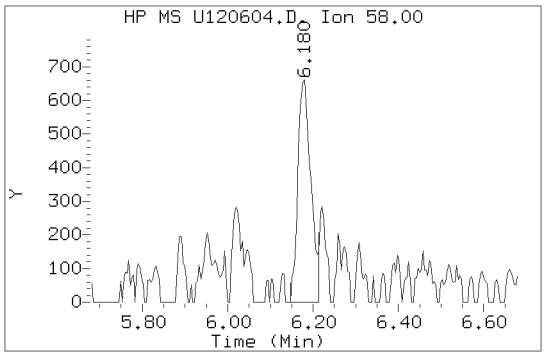
12-Dec-2023
09:43



Cyclohexane (110-82-7)

Reason Code:

BEFORE
MASS
225
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HEIGHT
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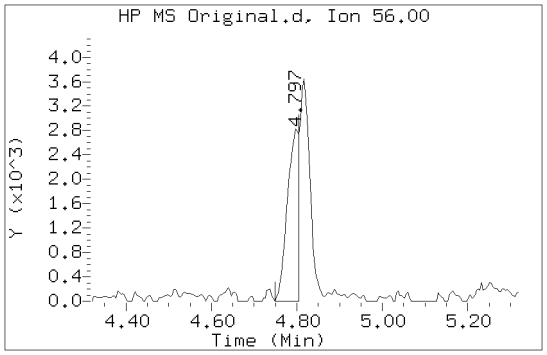
06-Dec-2023
23:21



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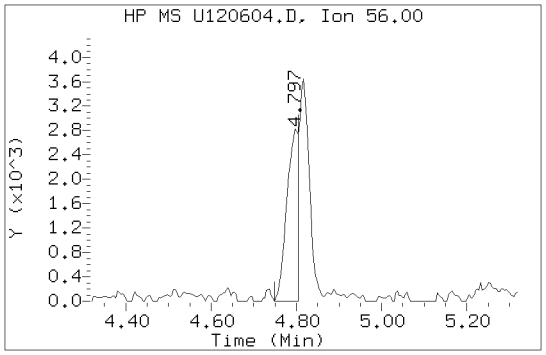
12-Dec-2023
09:43



BEFORE
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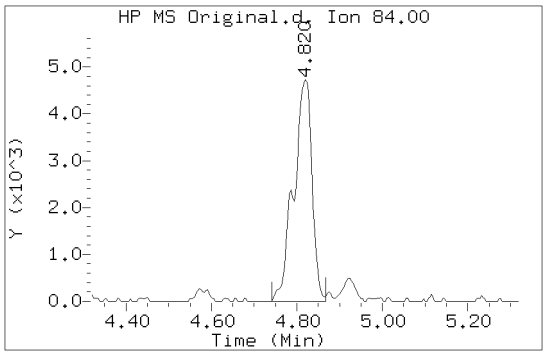
1179
06-Dec-2023
23:21



AFTER
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AREA
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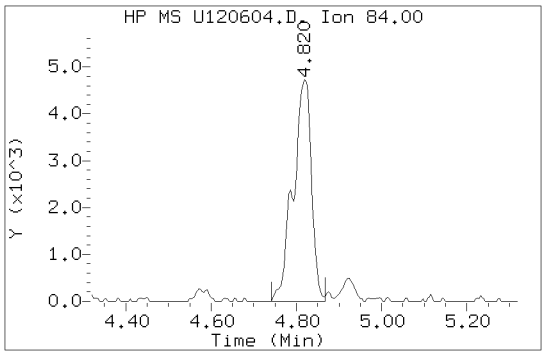
12-Dec-2023
09:43



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Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

Cyclohexane (110-82-7)

Reason Code:

BEFORE

MASS
227
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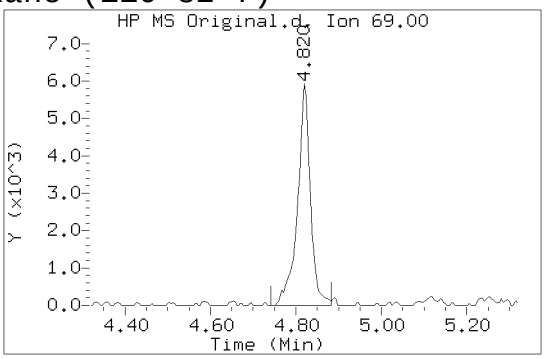
927
06-Dec-2023
23:21



AFTER

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69
AREA
12632
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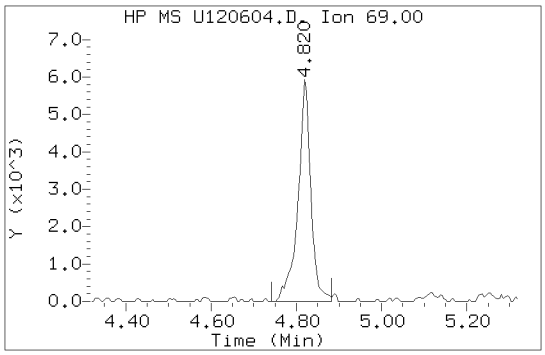
5931
12-Dec-2023
09:43

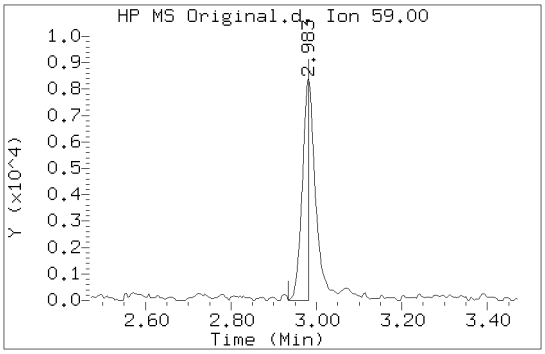


Tert-Butyl alcohol (75-65-0)

Reason Code:

BEFORE

MASS
106
AREA
20615
HEIGHT
12759
06-Dec-2023
23:21



AFTER

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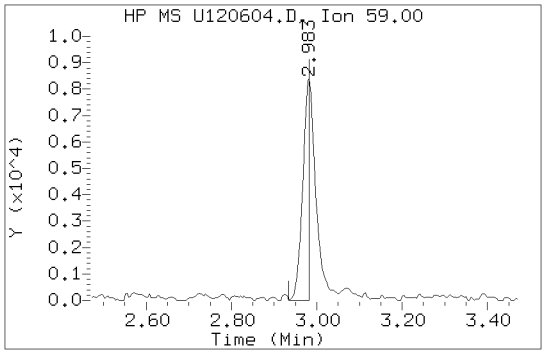
12-Dec-2023
09:43



BEFORE

MASS
91
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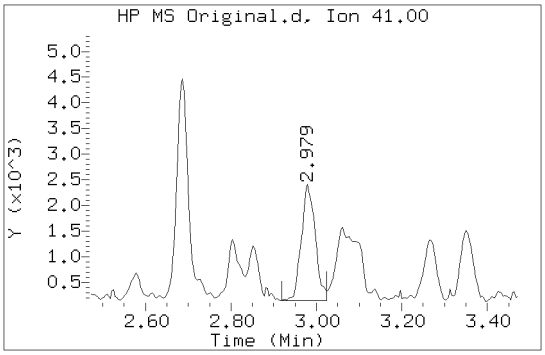
0
HEIGHT
0
06-Dec-2023
23:21



AFTER

MASS
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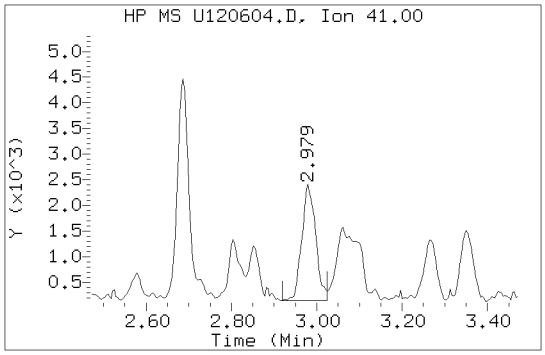
AREA
5197
HEIGHT
2262
12-Dec-2023
09:43



Isopropyl Alcohol (67-63-0)

Reason Code:

BEFORE

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AREA
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HEIGHT
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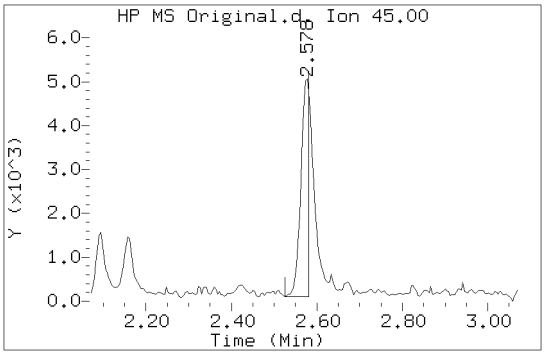
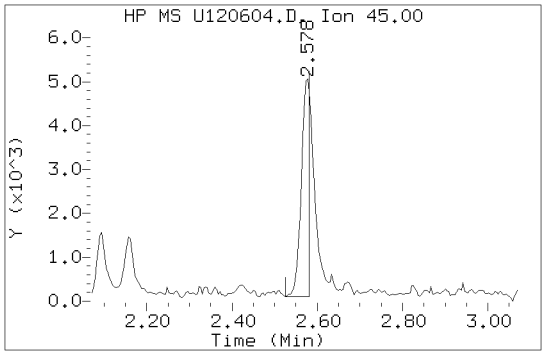
06-Dec-2023
23:21



AFTER

MASS
45
AREA
6719
HEIGHT
4957
12-Dec-2023
09:43



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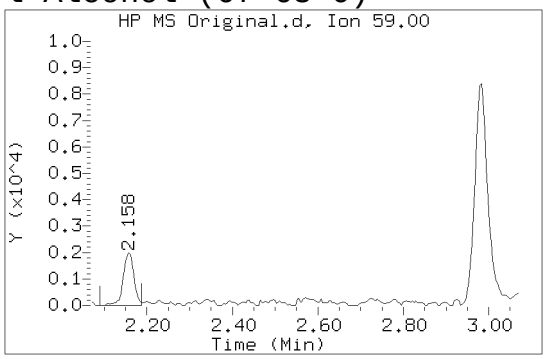
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

Isopropyl Alcohol (67-63-0)

Reason Code:

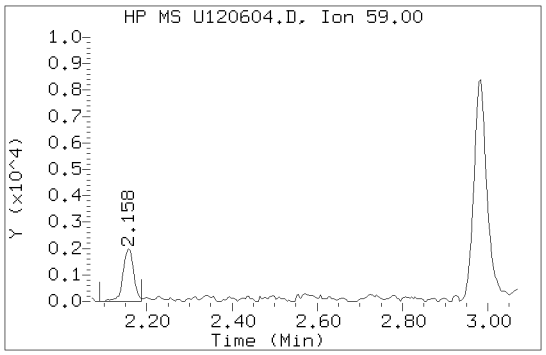
BEFORE

MASS
126
AREA
1016
HEIGHT
673
06-Dec-2023
23:21



AFTER

MASS
59
AREA
3472
HEIGHT
1986
12-Dec-2023
09:43



1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

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53
AREA
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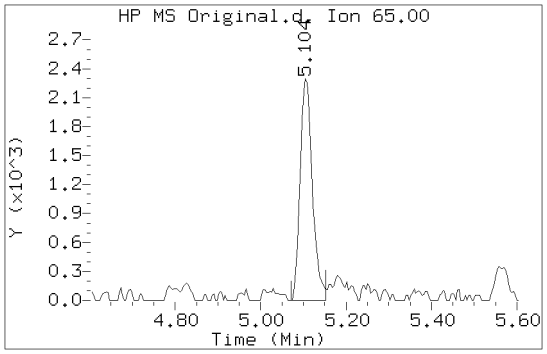
HEIGHT
972
06-Dec-2023
23:21



AFTER

MASS
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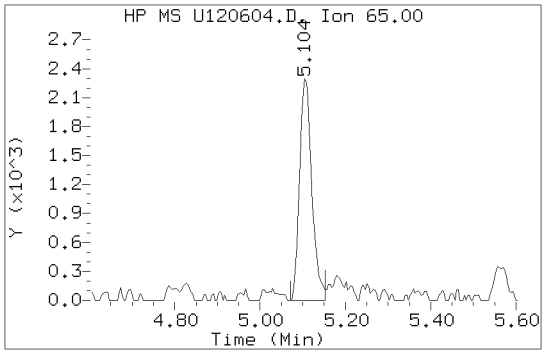
12-Dec-2023
09:43



BEFORE

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AREA
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HEIGHT
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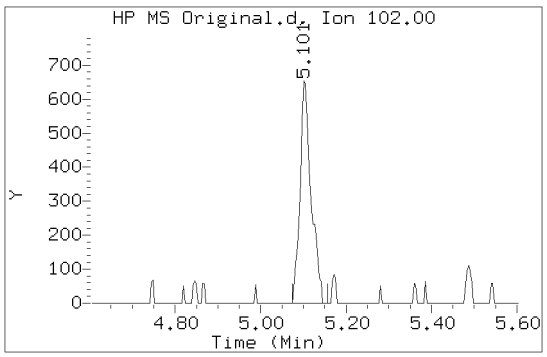
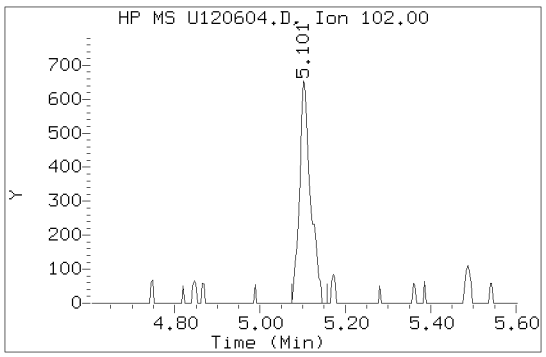
06-Dec-2023
23:21



AFTER

MASS
102
AREA
1197
HEIGHT
654
12-Dec-2023
09:43



Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D Page 1
Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
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Inj Date : 06-DEC-2023 13:05
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\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 12:43 Cal File: U120604.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	4.815	4.815	(1.000)	358877	50.0000	
2	Dichlorodifluoromethane	85	1.160	1.160	(0.241)	5944	2.00000	2.88
3	Chloromethane	50	1.295	1.295	(0.269)	8437	2.00000	2.04
5	Vinyl Chloride	62	1.374	1.374	(0.285)	8077	2.00000	2.05
6	Bromomethane	94	1.617	1.617	(0.336)	6114	2.00000	2.31(M)
7	Chloroethane	64	1.696	1.696	(0.352)	5706	2.00000	2.15
8	Trichlorofluoromethane	101	1.895	1.895	(0.394)	11239	2.00000	2.25
9	Acrolein	56	2.266	2.266	(0.471)	825	4.00000	4.03(M)
10	Acetone	43	2.408	2.408	(0.500)	7963	4.00000	0.82(M)
11	1,1-Dichloroethene	96	2.326	2.326	(0.483)	5632	2.00000	2.03
15	Iodomethane	142	2.465	2.465	(0.512)	6285	4.00000	4.15
16	Acrylonitrile	53	3.068	3.068	(0.637)	6017	4.00000	4.27
17	Methylene Chloride	84	2.791	2.791	(0.580)	9102	2.00000	2.35
18	Methyl tert-butyl ether	73	3.079	3.079	(0.640)	21523	2.00000	2.17
19	Carbon Disulfide	76	2.517	2.517	(0.523)	33285	4.00000	4.08
20	trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	6834	2.00000	2.06
21	Vinyl Acetate	43	3.612	3.612	(0.750)	39911	4.00000	3.98
22	1,1-Dichloroethane	63	3.507	3.507	(0.728)	13430	2.00000	1.98
24	2-Butanone	43	4.275	4.275	(0.888)	6824	4.00000	3.88(M)
26	2,2-Dichloropropane	77	4.181	4.181	(0.868)	9440	2.00000	1.98

27 cis-1,2-Dichloroethene	96	4.196	4.196 (0.872)	8977	2.00000	2.02
28 Chloroform	83	4.571	4.571 (0.949)	15241	2.00000	2.07

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D Page 2
Report Date: 12-Dec-2023 09:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.466	4.466	(0.928)	5123	2.00000	2.23
$	30 Dibromofluoromethane	113	4.747	4.747	(0.986)	6940	2.00000	0.90
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	11413	2.00000	2.04
	32 1,1-Dichloropropene	75	4.920	4.920	(0.886)	9794	2.00000	2.04
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	11698	2.00000	2.09
	34 Carbon Tetrachloride	117	4.909	4.909	(0.884)	8985	2.00000	1.91
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.059)	9346	2.00000	1.80(M)
*	36 1,4-Difluorobenzene	114	5.553	5.553	(1.000)	572677	50.0000	
	37 Benzene	78	5.137	5.137	(0.925)	32480	2.00000	2.08
	38 Trichloroethene	130	5.790	5.790	(1.043)	9201	2.00000	2.14(M)
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	9852	2.00000	1.92
	41 2-Chloroethylvinyl ether	63	6.584	6.584	(1.186)	254	4.00000	3.45(M)
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	9176	2.00000	2.18
	44 Dibromomethane	93	6.119	6.119	(1.102)	5523	2.00000	2.03
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	19058	4.00000	4.27
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	10504	2.00000	3.03
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	571943	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	25656	2.00000	1.94
	50 Toluene	91	6.982	6.982	(0.853)	33168	2.00000	2.07
	51 trans-1,3-Dichloropropene	75	7.199	7.199	(1.296)	8323	2.00000	3.22
	52 2-Hexanone	43	7.596	7.596	(0.928)	12214	4.00000	4.23(M)
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	8230	2.00000	1.43
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	15193	2.00000	2.14
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	8217	2.00000	1.93
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	7082	2.00000	2.07
	57 1,2-Dibromoethane	107	7.788	7.788	(0.951)	7796	2.00000	1.96
	58 1-Chlorohexane	55	8.193	8.193	(1.475)	6133	2.00000	1.90(M)
	59 Chlorobenzene	112	8.211	8.211	(1.003)	24639	2.00000	2.12
	60 1,1,1,2-Tetrachloroethane	131	8.282	8.282	(1.012)	8251	2.00000	2.03
	61 Ethylbenzene	106	8.309	8.309	(1.015)	10659	2.00000	1.96
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	26832	4.00000	4.10
	63 o-Xylene	106	8.747	8.747	(1.069)	13354	2.00000	1.98
	64 Styrene	104	8.766	8.766	(1.071)	20738	2.00000	1.85
	66 Bromoform	173	8.920	8.920	(1.090)	6134	2.00000	3.13
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	32228	2.00000	1.98
	68 1,1,2,2-Tetrachloroethane	83	9.328	9.328	(0.917)	14293	2.00000	2.34(M)
$	69 4-Bromofluorobenzene	95	9.197	9.197	(1.124)	12602	2.00000	1.29
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	295659	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	12628	2.00000	2.24(M)
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	36000	2.00000	2.07
	74 Bromobenzene	156	9.317	9.317	(0.916)	10570	2.00000	2.12(M)
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	23362	2.00000	1.89
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	24734	2.00000	2.11
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	28220	2.00000	2.12
	78 tert-Butylbenzene	119	9.838	9.838	(0.967)	23141	2.00000	2.08
	79 1,2,4-Trimethylbenzene	105	9.879	9.879	(0.971)	22592	2.00000	1.82
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	28888	2.00000	2.02
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	22922	2.00000	1.85
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	19974	2.00000	2.27
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	21680	2.00000	2.32(M)
	87 n-Butylbenzene	91	10.494	10.494	(1.032)	20530	2.00000	1.97
	88 1,2-Dichlorobenzene	146	10.509	10.509	(1.033)	20103	2.00000	2.27(M)

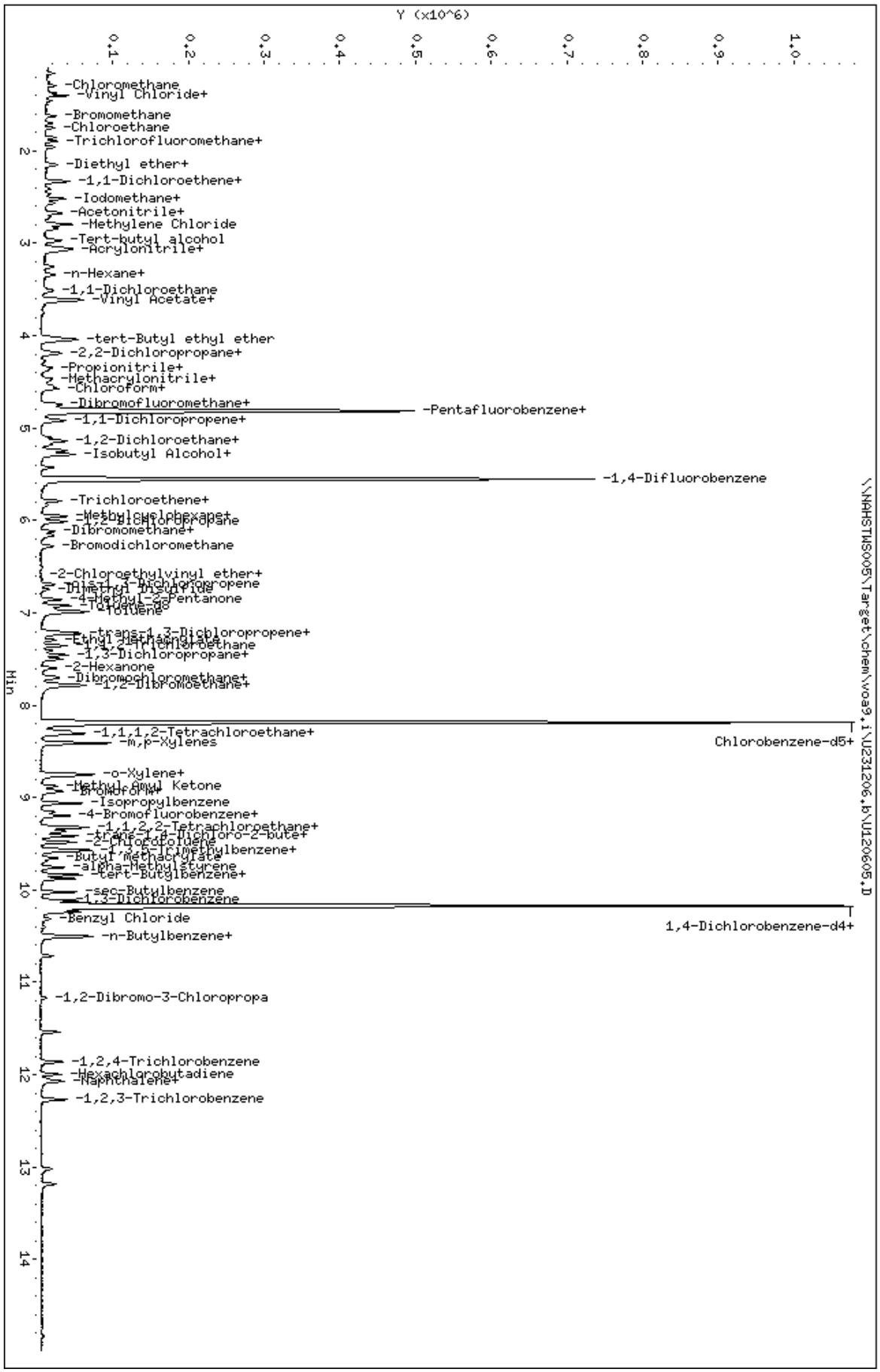
89	1,2-Dibromo-3-Chloropropane	155	11.169	11.169 (1.098)	1816	2.00000	4.12(M)
90	1,2,4-Trichlorobenzene	180	11.859	11.859 (1.166)	10130	2.00000	1.85

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D Page 3
Report Date: 12-Dec-2023 09:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.997	11.997	(1.179)	4820	2.00000	2.20
	92 Naphthalene	128	12.072	12.072	(1.187)	26823	2.00000	2.03
	93 1,2,3-Trichlorobenzene	180	12.271	12.271	(1.206)	11346	2.00000	2.06
M	94 1,2-Dichloroethylene (total)	96				15811	4.00000	
M	95 Xylenes (total)	106				40186	6.00000	
	131 Methyl Acrylate	55	4.376	4.376	(0.909)	10017	2.00000	2.12(a)
	135 1,4-Dioxane	88	6.172	6.172	(1.282)	2559	40.0000	44.94(M)
	141 Cyclohexane	56	4.785	4.785	(0.994)	10415	2.00000	2.01(M)
	138 Freon TF	101	2.333	2.333	(0.485)	6155	2.00000	2.38(M)
	140 1,3-Butadiene	54	1.400	1.400	(0.291)	7520	2.00000	2.08
	147 Methylcyclohexane	55	5.951	5.951	(1.072)	15702	2.00000	1.84
	146 Methyl Acetate	43	2.716	2.716	(0.564)	8315	2.00000	2.32
	148 Tert-Butyl alcohol	59	2.971	2.971	(0.617)	17716	40.0000	44.09(aM)
	149 Isopropyl Alcohol	45	2.562	2.562	(0.532)	10615	40.0000	39.59(TM)

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.


Y (x10^6)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Min
2
3
4
5
6
7
8
9
10
11
12
13
14
-Chloromethane
-Vinyl Chloride+
-Bromomethane
-Chloroethane
-Trichlorofluoromethane+
-Diethyl ether+
-1,1-Dichloroethene+
-Iodomethane+
-Acetonitrile+
-Methylene Chloride
-Tert-butyl alcohol
-Acrylonitrile+
-n-Hexane+
-1,1-Dichloroethane
-Vinyl Acetate+
-tert-Butyl ethyl ether
-2,2-Dichloropropane+
-Propionitrile+
-Methacrylonitrile+
-Chloroform+
-Dibromofluoromethane+
-Pentafluorobenzene+
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane+
-1,2-Dichloropropane
-Dibromomethane+
-Bromodichloromethane
-2-Chloroethylvinyl ether+
-cis-1,3-Dichloropropene
-Dimethyl Disulfide
-4-Methyl-2-Pentanone
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-Ethyl Methacrylate
-1,1,2-Trichloroethane
-1,3-Dichloropropane+
-2-Hexanone
-Dibromochloromethane+
-1,2-Dibromoethane+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
Chlorobenzene-d5+
-o-Xylene+
-Methyl Amyl Ketone
-Bromoform+
-Isopropylbenzene
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-trans-1,4-Dichloro-2-bute+
-2-Chlorotoluene
-1,2,3-Trimethylbenzene+
-Butyl Methacrylate
-alpha-Methylstyrene
-tert-Butylbenzene+
-sec-Butylbenzene
-1,3-Dichlorobenzene
-Benzyl Chloride
1,4-Dichlorobenzene-d4+
-n-Butylbenzene+
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene+
-1,2,3-Trichlorobenzene
\\NAHSTWS005\Target\chem\voa9,i\U231206,b\U120605,D
Data File: \\NAHSTWS005\Target\chem\voa9,i\U231206,b\U120605,D
Date : 06-DEC-2023 13:05
Client ID: VSTD002
Sample Info: VSTD002;VSTD002;1;4;
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9,i
Operator: PC
Column diameter: 0.18
Page 1

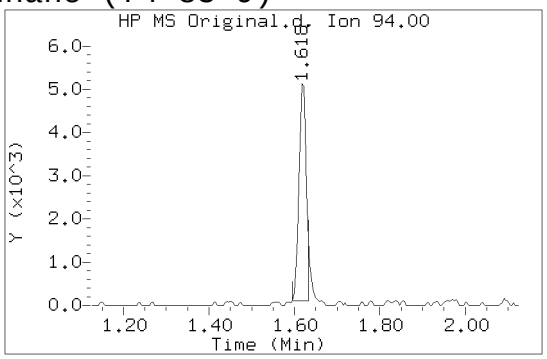
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

Bromomethane (74-83-9)

Reason Code:

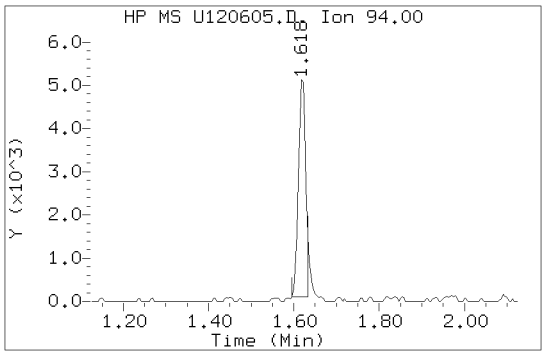
BEFORE

MASS
94
AREA
6114
HEIGHT
5031
11-Dec-2023
17:18
linh
pham



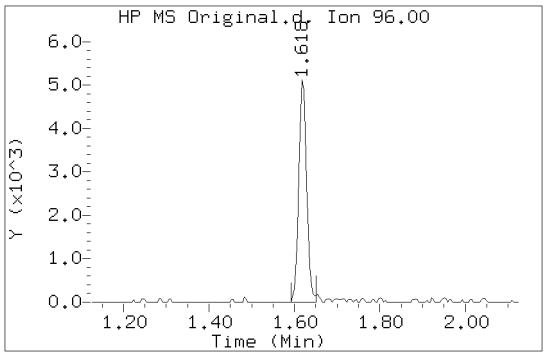
AFTER

MASS
94
AREA
6114
HEIGHT
5031
12-Dec-2023
09:43
linh
pham



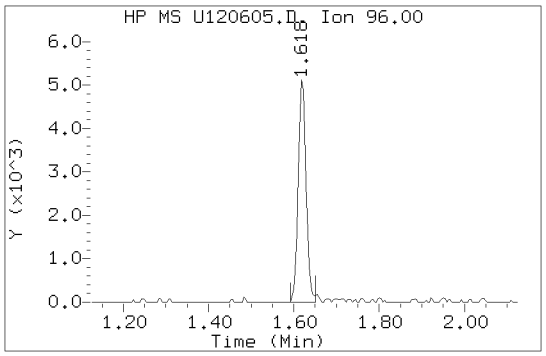
BEFORE

MASS
96
AREA
6766
HEIGHT
5123
11-Dec-2023
17:18
linh
pham



AFTER

MASS
96
AREA
6766
HEIGHT
5123
12-Dec-2023
09:43
linh
pham

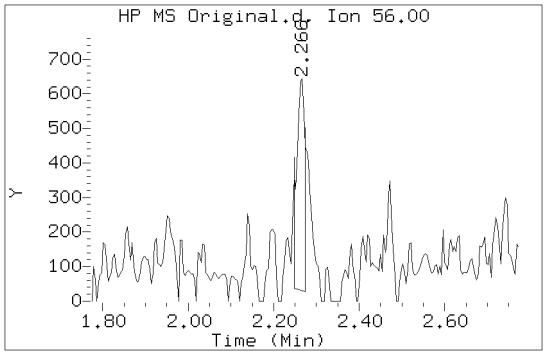


Acrolein (107-02-8)

Reason Code:

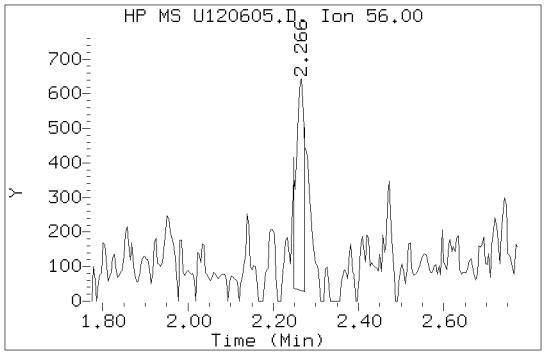
BEFORE

MASS
56
AREA
825
HEIGHT
612
11-Dec-2023
17:18
linh
pham



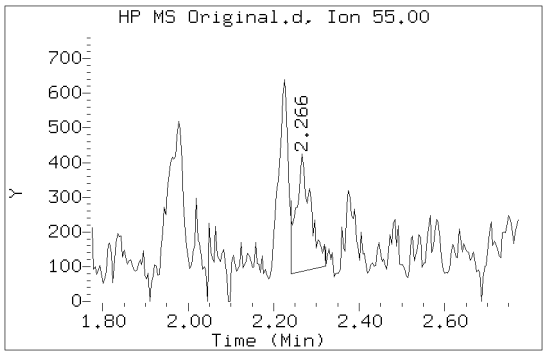
AFTER

MASS
56
AREA
825
HEIGHT
612
12-Dec-2023
09:43
linh
pham



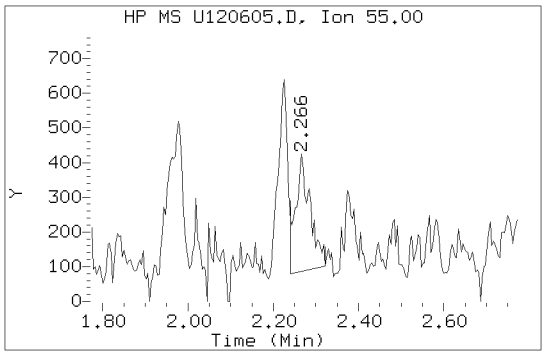
BEFORE

MASS
55
AREA
819
HEIGHT
339
11-Dec-2023
17:18
linh
pham



AFTER

MASS
55
AREA
819
HEIGHT
339
12-Dec-2023
09:43
linh
pham



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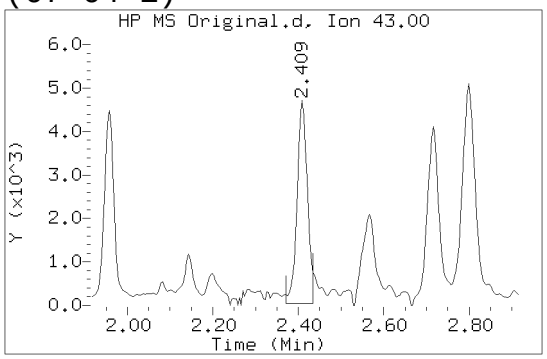
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

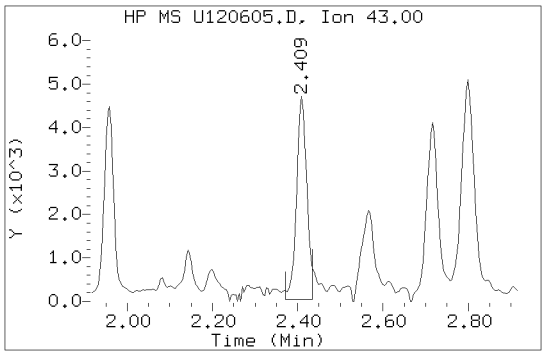
Acetone (67-64-1)

Reason Code:

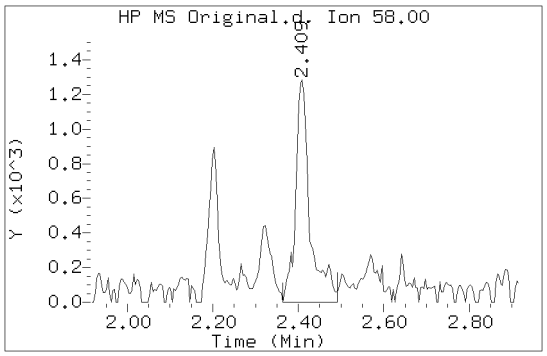
BEFORE
MASS
43
AREA
7963
HEIGHT
4678
11-Dec-2023
17:18
linh
pham



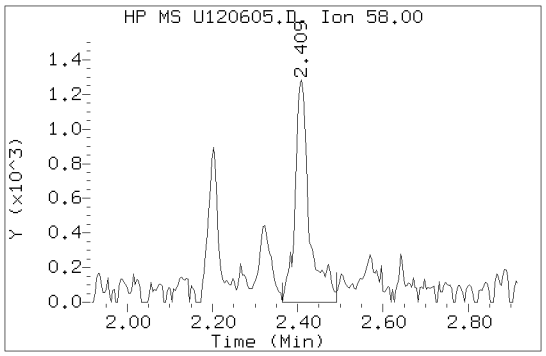
AFTER
MASS
43
AREA
7963
HEIGHT
4678
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
58
AREA
3033
HEIGHT
1284
11-Dec-2023
17:18
linh
pham



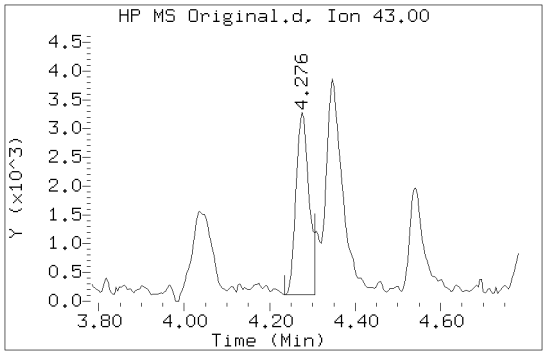
AFTER
MASS
58
AREA
3033
HEIGHT
1284
12-Dec-2023
09:43
linh
pham



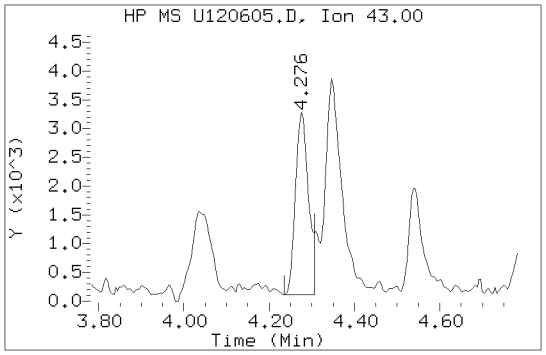
2-Butanone (78-93-3)

Reason Code:

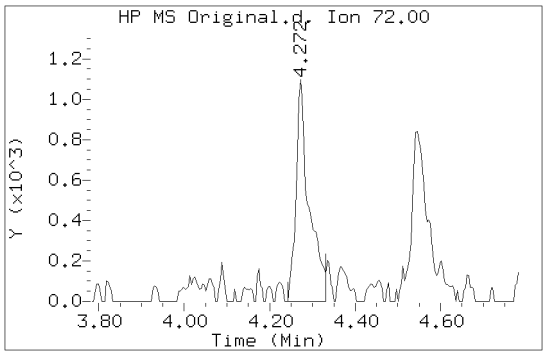
BEFORE
MASS
43
AREA
6824
HEIGHT
3175
11-Dec-2023
17:18
linh
pham



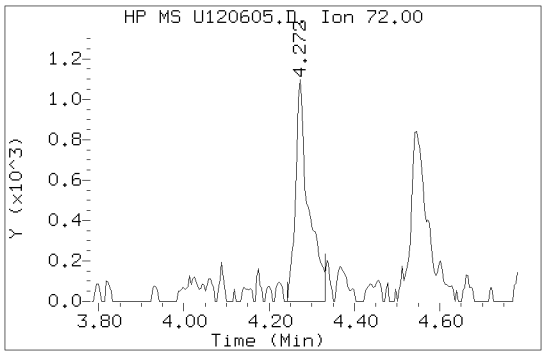
AFTER
MASS
43
AREA
6824
HEIGHT
3175
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
72
AREA
2350
HEIGHT
1097
11-Dec-2023
17:18
linh
pham



AFTER
MASS
72
AREA
2350
HEIGHT
1097
12-Dec-2023
09:43
linh
pham



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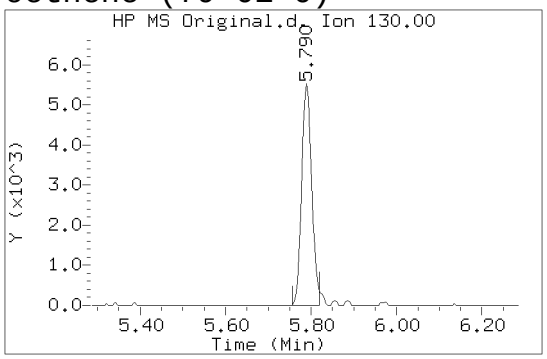
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

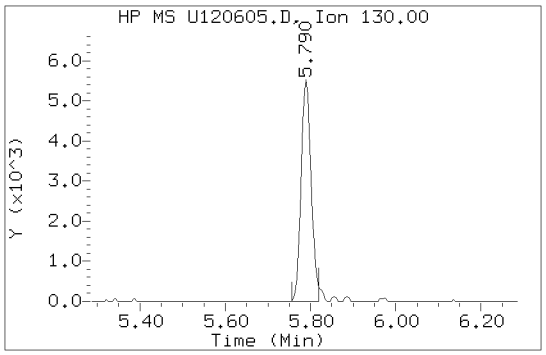
Trichloroethene (79-01-6)

Reason Code:

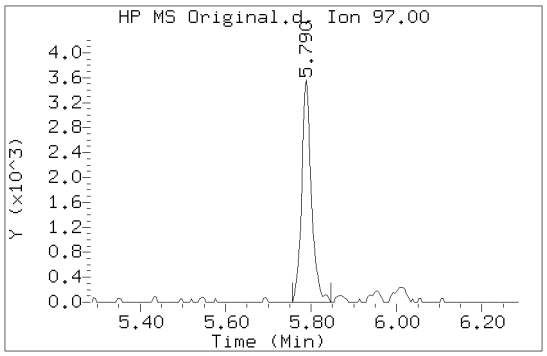
BEFORE
MASS
130
AREA
9201
HEIGHT
5527
11-Dec-2023
17:18
linh
pham



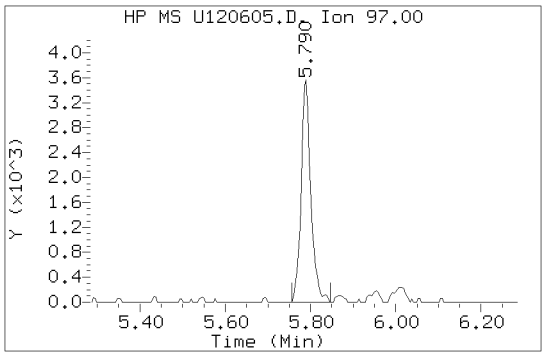
AFTER
MASS
130
AREA
9201
HEIGHT
5527
12-Dec-2023
09:43
linh
pham



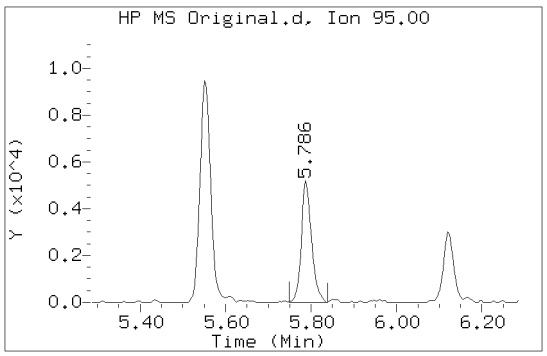
BEFORE
MASS
97
AREA
5731
HEIGHT
3565
11-Dec-2023
17:18
linh
pham



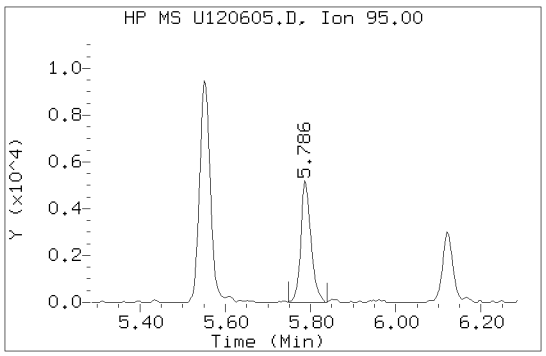
AFTER
MASS
97
AREA
5731
HEIGHT
3565
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
95
AREA
8757
HEIGHT
5211
11-Dec-2023
17:18
linh
pham



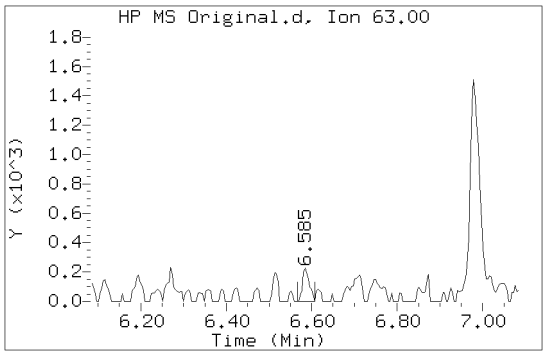
AFTER
MASS
95
AREA
8757
HEIGHT
5211
12-Dec-2023
09:43
linh
pham



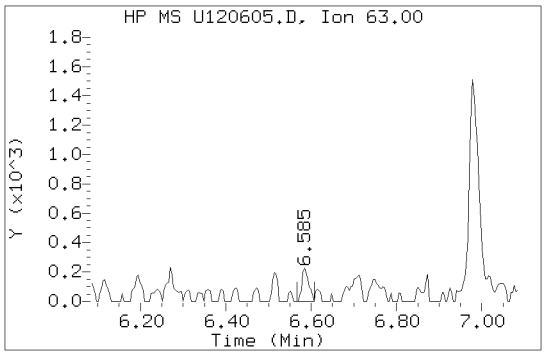
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

BEFORE
MASS
63
AREA
254
HEIGHT
229
11-Dec-2023
17:18
linh
pham



AFTER
MASS
63
AREA
254
HEIGHT
229
12-Dec-2023
09:43
linh
pham



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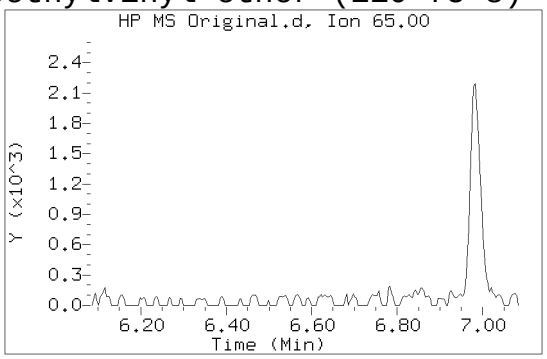
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

BEFORE
MASS
65
AREA
0
HEIGHT
0
11-Dec-2023
17:18
linh
pham



AFTER
MASS
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AREA
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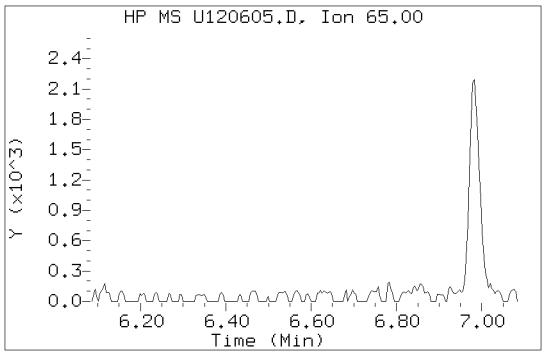
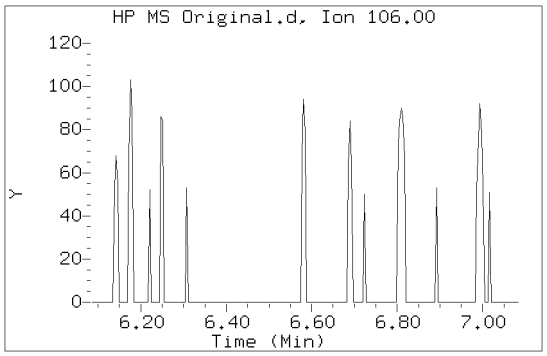
HEIGHT
0
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
106
AREA
0
HEIGHT
0
11-Dec-2023
17:18
linh
pham



AFTER
MASS
106
AREA
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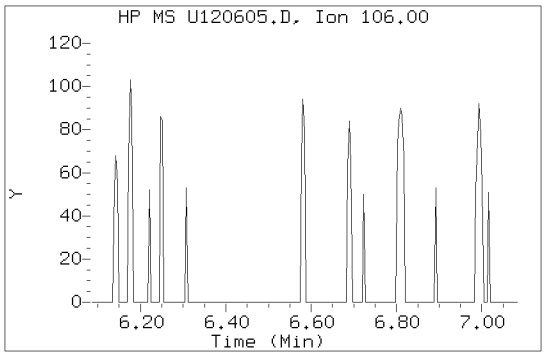
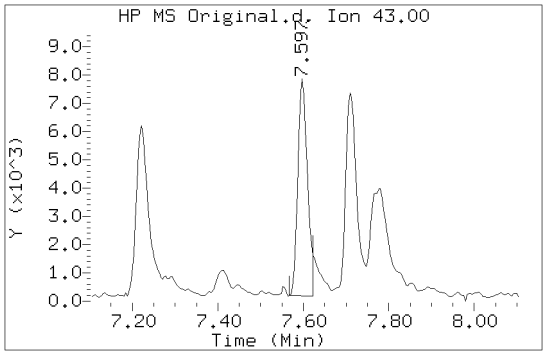
HEIGHT
0
12-Dec-2023
09:43
linh
pham



2-Hexanone (591-78-6)

Reason Code:

BEFORE
MASS
43
AREA
12214
HEIGHT
7667
11-Dec-2023
17:18
linh
pham



AFTER
MASS
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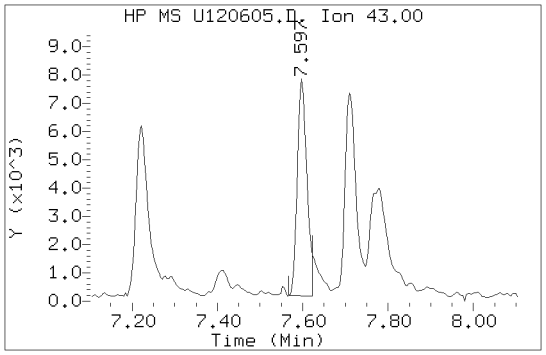
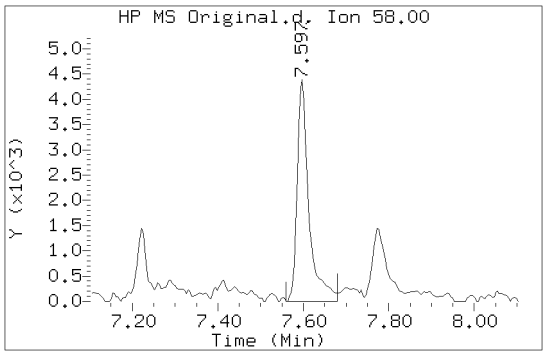
AREA
12214
HEIGHT
7667
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
58
AREA
8438
HEIGHT
4388
11-Dec-2023
17:18
linh
pham



AFTER
MASS
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AREA
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HEIGHT
4388
12-Dec-2023
09:43
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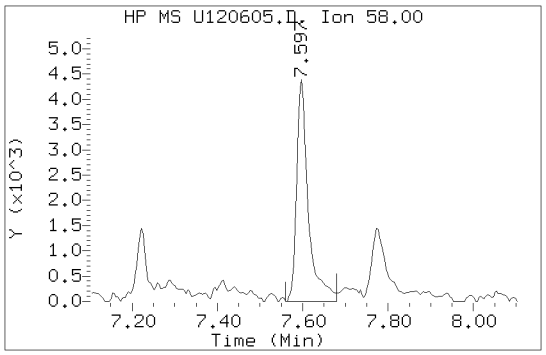

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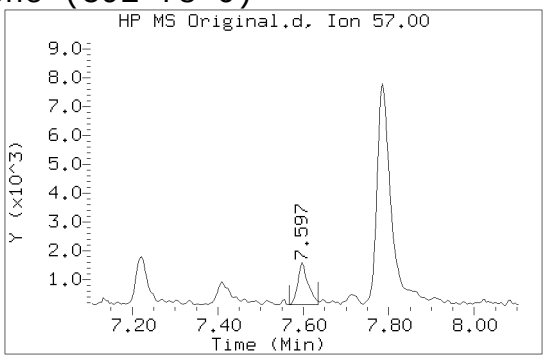
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

2-Hexanone (591-78-6)

Reason Code:

BEFORE

MASS
57
AREA
2459
HEIGHT
1463
11-Dec-2023
17:18
linh
pham



AFTER

MASS
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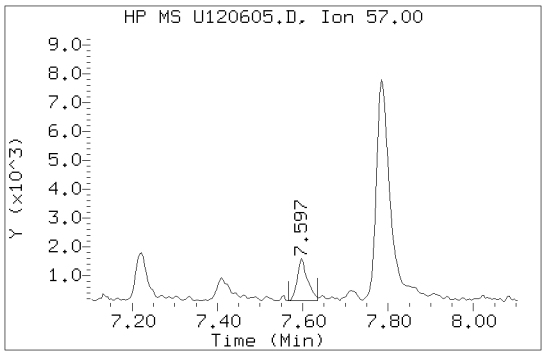
AREA
2459
HEIGHT
1463
12-Dec-2023
09:43
linh
pham

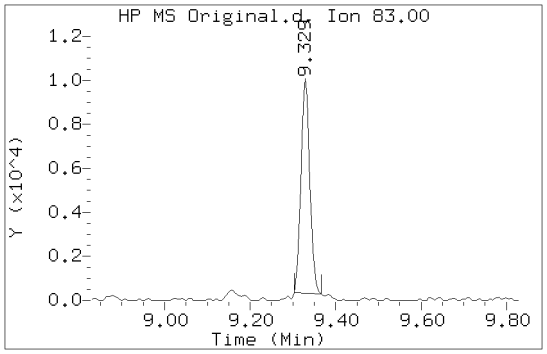


1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

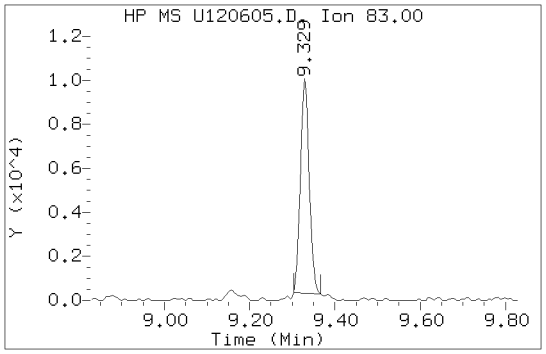
BEFORE

MASS
83
AREA
14293
HEIGHT
9756
11-Dec-2023
17:18
linh
pham



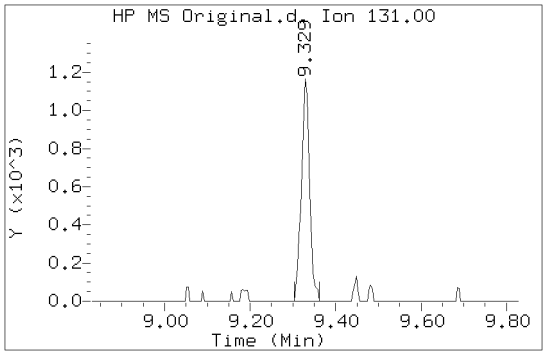
AFTER

MASS
83
AREA
14293
HEIGHT
9756
12-Dec-2023
09:43
linh
pham



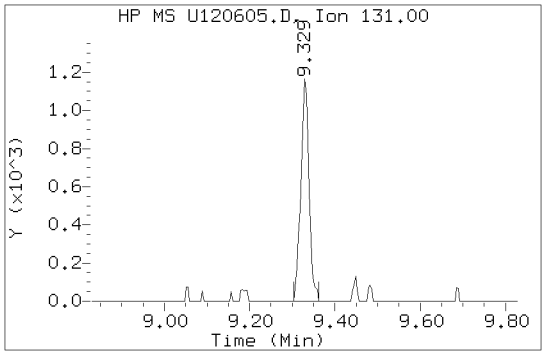
BEFORE

MASS
131
AREA
1599
HEIGHT
1165
11-Dec-2023
17:18
linh
pham



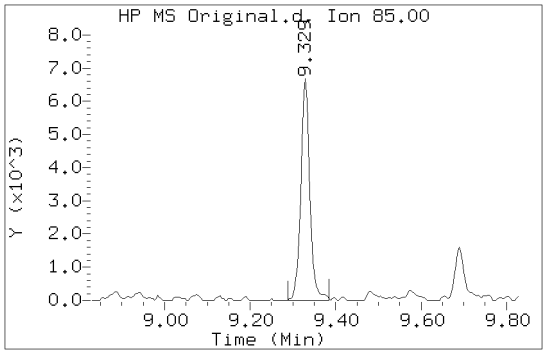
AFTER

MASS
131
AREA
1599
HEIGHT
1165
12-Dec-2023
09:43
linh
pham



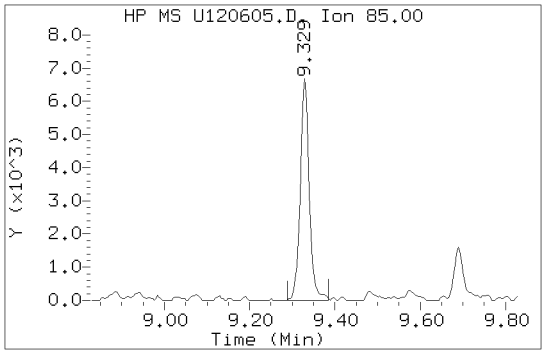
BEFORE

MASS
85
AREA
9975
HEIGHT
6679
11-Dec-2023
17:18
linh
pham



AFTER

MASS
85
AREA
9975
HEIGHT
6679
12-Dec-2023
09:43
linh
pham



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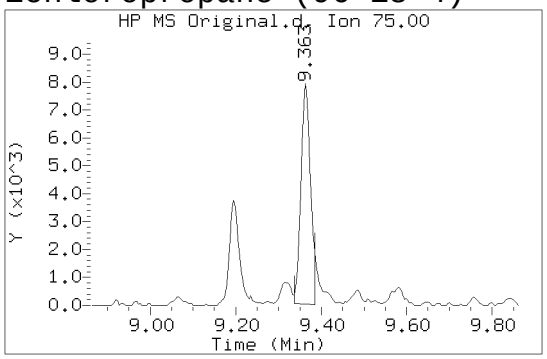
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

1,2,3-Trichloropropane (96-18-4)

Reason Code:

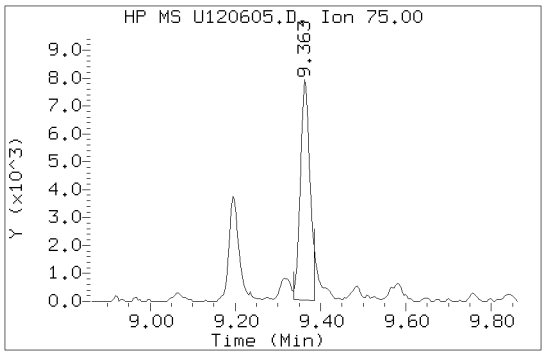
BEFORE

MASS
75
AREA
12628
HEIGHT
7893
11-Dec-2023
17:18
linh
pham



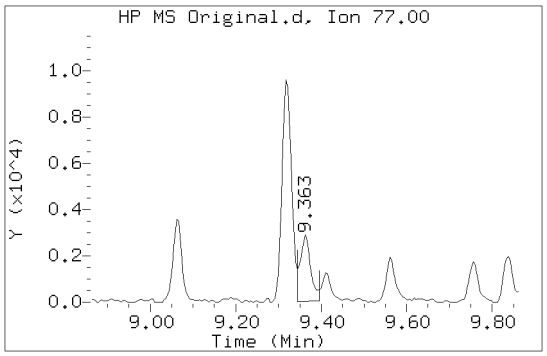
AFTER

MASS
75
AREA
12628
HEIGHT
7893
12-Dec-2023
09:43
linh
pham



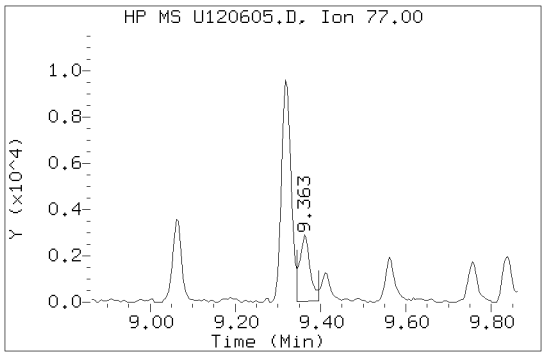
BEFORE

MASS
77
AREA
5160
HEIGHT
2862
11-Dec-2023
17:18
linh
pham



AFTER

MASS
77
AREA
5160
HEIGHT
2862
12-Dec-2023
09:43
linh
pham

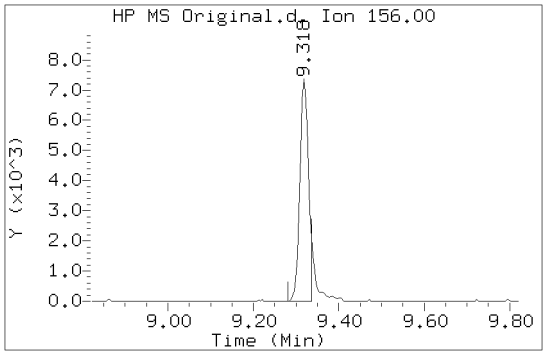


Bromobenzene (108-86-1)

Reason Code:

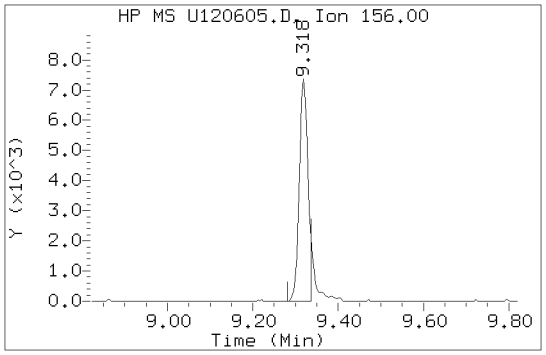
BEFORE

MASS
156
AREA
10570
HEIGHT
7371
11-Dec-2023
17:18
linh
pham



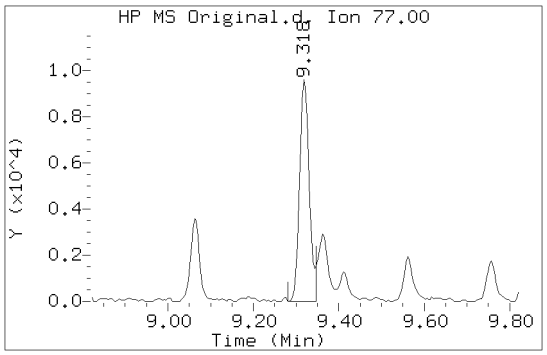
AFTER

MASS
156
AREA
10570
HEIGHT
7371
12-Dec-2023
09:43
linh
pham



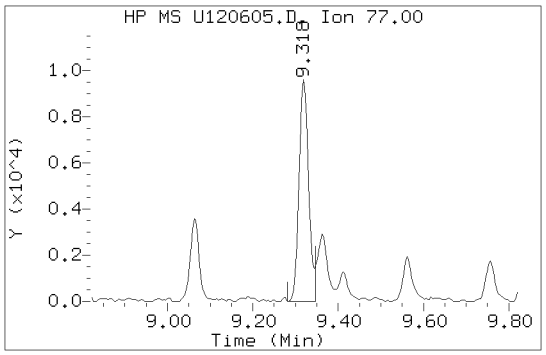
BEFORE

MASS
77
AREA
15530
HEIGHT
9603
11-Dec-2023
17:18
linh
pham



AFTER

MASS
77
AREA
15530
HEIGHT
9603
12-Dec-2023
09:43
linh
pham



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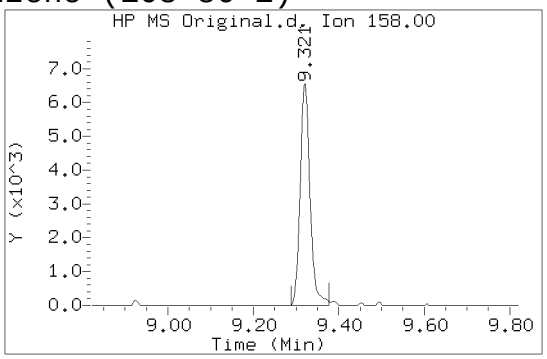
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

Bromobenzene (108-86-1)

Reason Code:

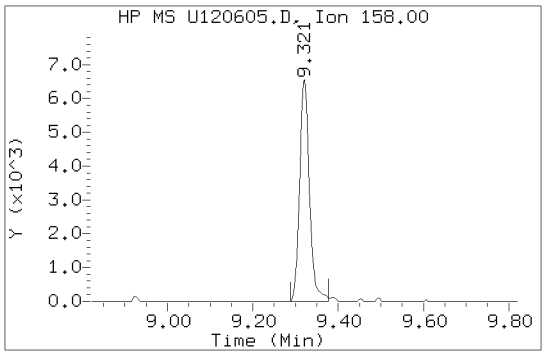
BEFORE

MASS
158
AREA
10716
HEIGHT
6555
11-Dec-2023
17:18
linh
pham



AFTER

MASS
158
AREA
10716
HEIGHT
6555
12-Dec-2023
09:43
linh
pham

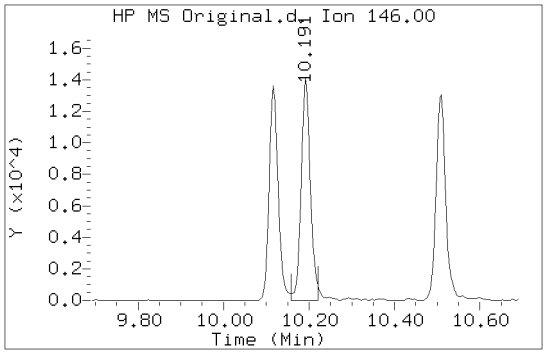


1,4-Dichlorobenzene (106-46-7)

Reason Code:

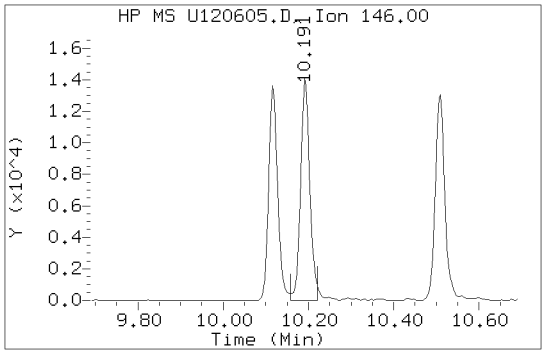
BEFORE

MASS
146
AREA
21680
HEIGHT
14068
11-Dec-2023
17:18
linh
pham



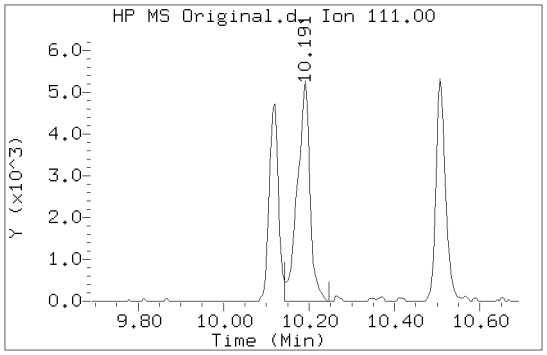
AFTER

MASS
146
AREA
21680
HEIGHT
14068
12-Dec-2023
09:43
linh
pham



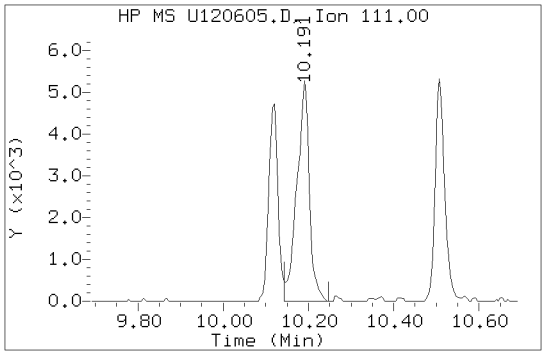
BEFORE

MASS
111
AREA
11017
HEIGHT
5266
11-Dec-2023
17:18
linh
pham



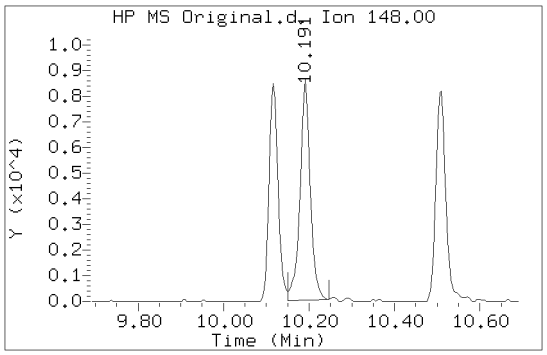
AFTER

MASS
111
AREA
11017
HEIGHT
5266
12-Dec-2023
09:43
linh
pham



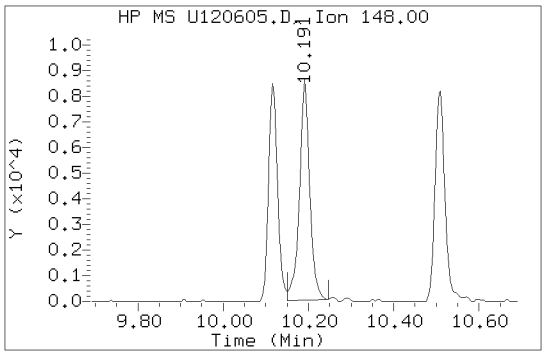
BEFORE

MASS
148
AREA
14680
HEIGHT
8595
11-Dec-2023
17:18
linh
pham



AFTER

MASS
148
AREA
14680
HEIGHT
8595
12-Dec-2023
09:43
linh
pham



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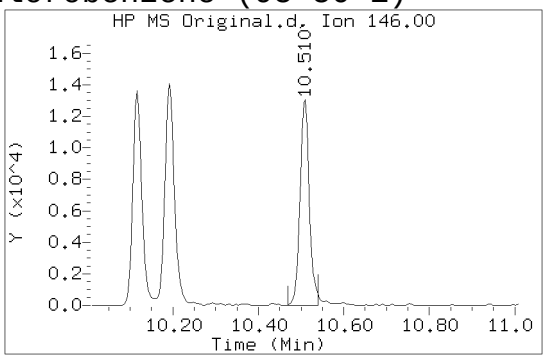
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

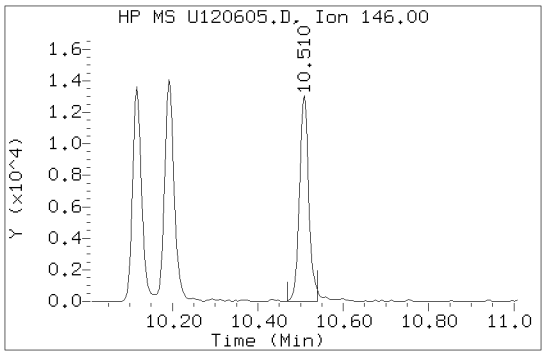
1,2-Dichlorobenzene (95-50-1)

Reason Code:

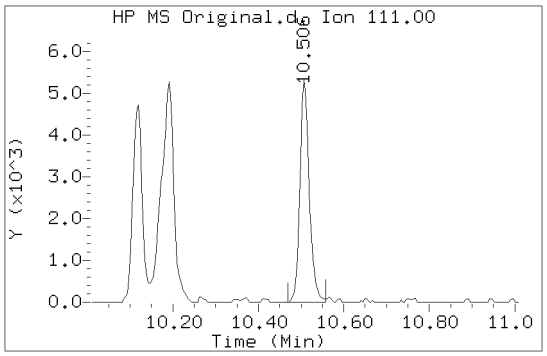
BEFORE
MASS
146
AREA
20103
HEIGHT
13043
11-Dec-2023
17:18
linh
pham



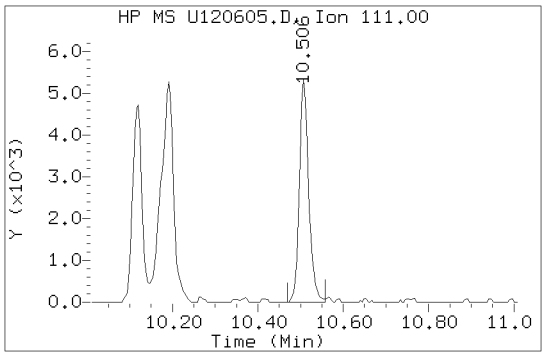
AFTER
MASS
146
AREA
20103
HEIGHT
13043
12-Dec-2023
09:43
linh
pham



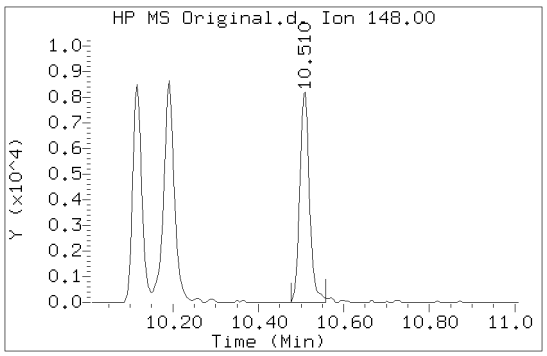
BEFORE
MASS
111
AREA
8235
HEIGHT
5315
11-Dec-2023
17:18
linh
pham



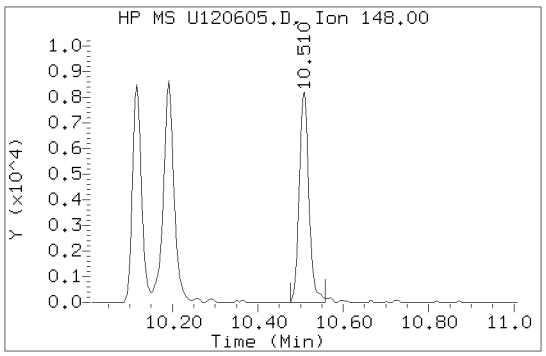
AFTER
MASS
111
AREA
8235
HEIGHT
5315
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
148
AREA
13168
HEIGHT
8208
11-Dec-2023
17:18
linh
pham



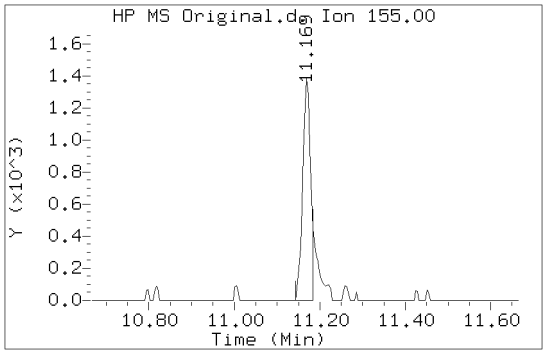
AFTER
MASS
148
AREA
13168
HEIGHT
8208
12-Dec-2023
09:43
linh
pham



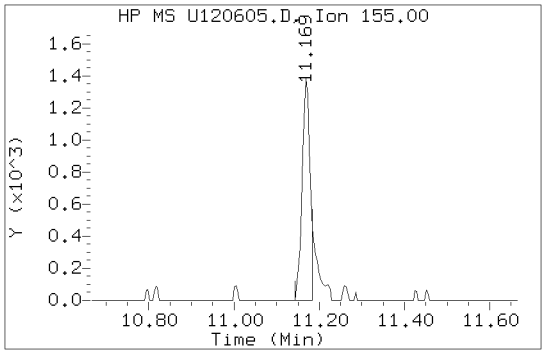
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

BEFORE
MASS
155
AREA
1816
HEIGHT
1383
11-Dec-2023
17:18
linh
pham



AFTER
MASS
155
AREA
1816
HEIGHT
1383
12-Dec-2023
09:43
linh
pham



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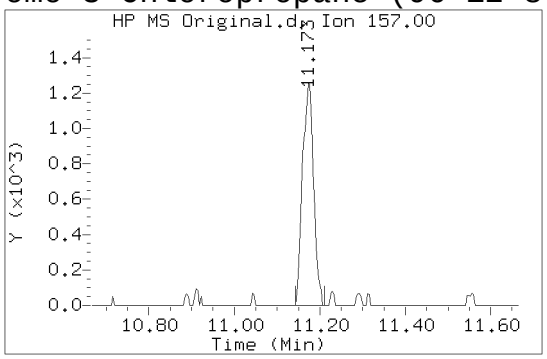
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

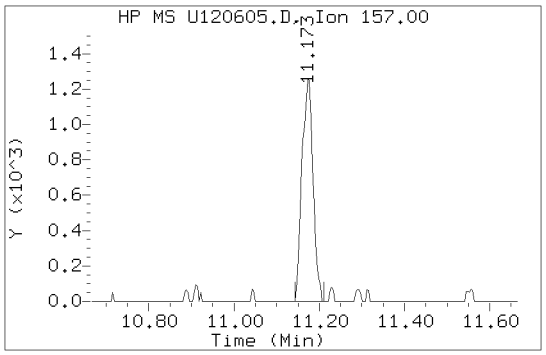
BEFORE

MASS
157
AREA
2298
HEIGHT
1253
11-Dec-2023
17:18
linh
pham



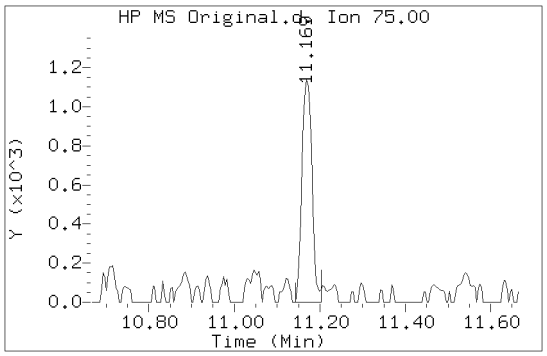
AFTER

MASS
157
AREA
2298
HEIGHT
1253
12-Dec-2023
09:43
linh
pham



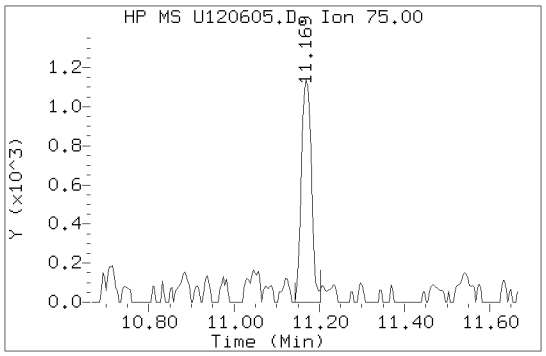
BEFORE

MASS
75
AREA
1901
HEIGHT
1137
11-Dec-2023
17:18
linh
pham



AFTER

MASS
75
AREA
1901
HEIGHT
1137
12-Dec-2023
09:43
linh
pham

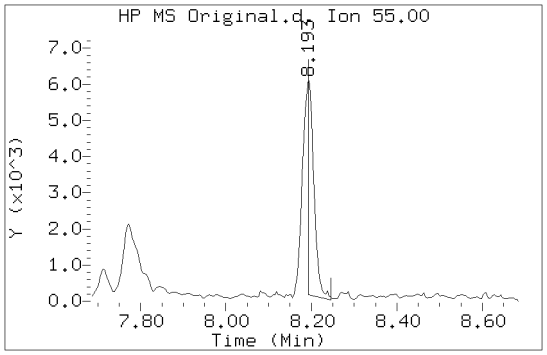


1-Chlorohexane (544-10-5)

Reason Code:

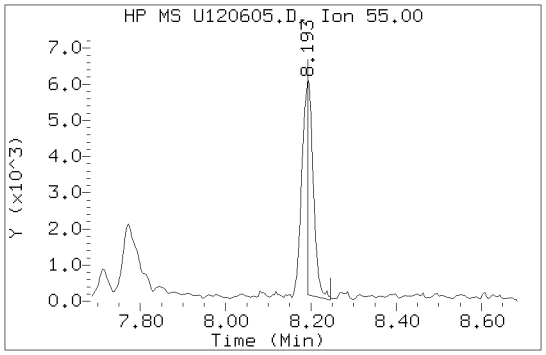
BEFORE

MASS
55
AREA
6133
HEIGHT
5975
11-Dec-2023
17:18
linh
pham



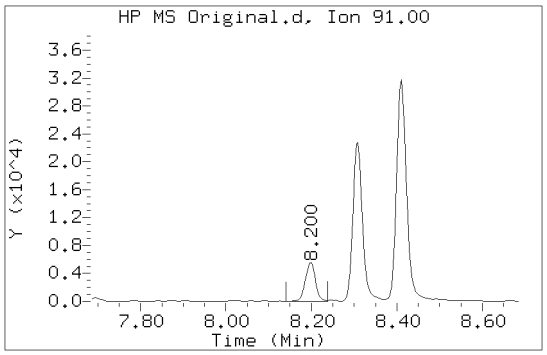
AFTER

MASS
55
AREA
6133
HEIGHT
5975
12-Dec-2023
09:43
linh
pham



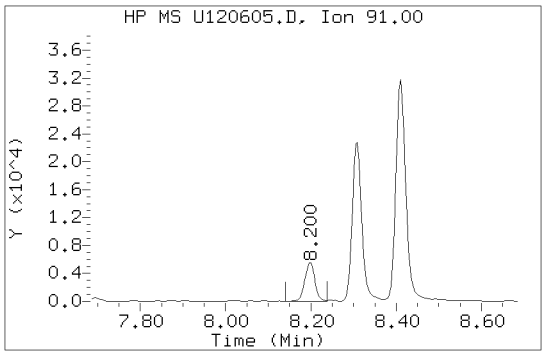
BEFORE

MASS
91
AREA
9348
HEIGHT
5551
11-Dec-2023
17:18
linh
pham



AFTER

MASS
91
AREA
9348
HEIGHT
5551
12-Dec-2023
09:43
linh
pham



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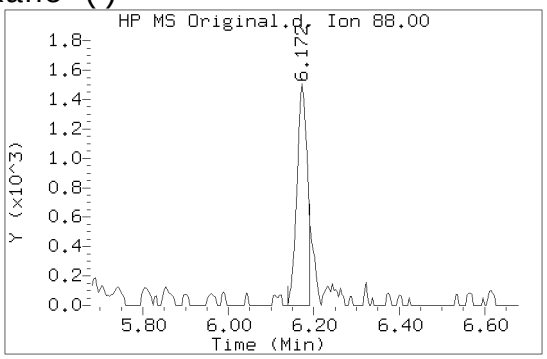
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

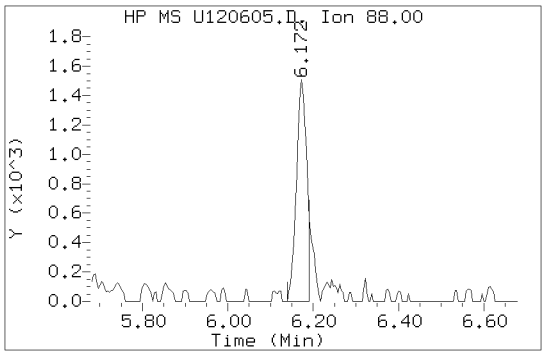
1,4-Dioxane ()

Reason Code:

BEFORE
MASS
88
AREA
2559
HEIGHT
1508
11-Dec-2023
17:18
linh
pham



AFTER
MASS
88
AREA
2559
HEIGHT
1508
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
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AREA
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HEIGHT
890
11-Dec-2023
17:18
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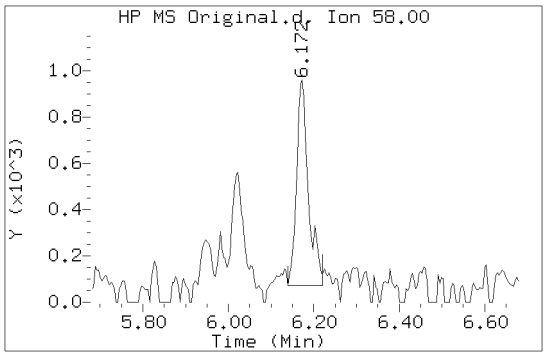

AFTER
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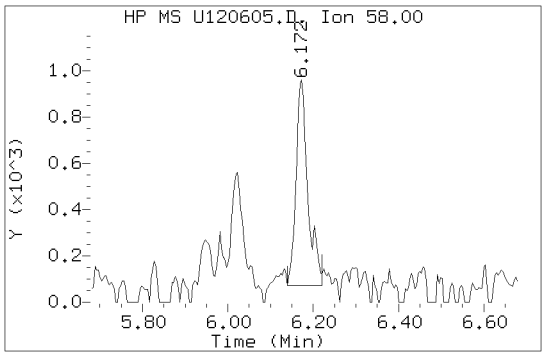
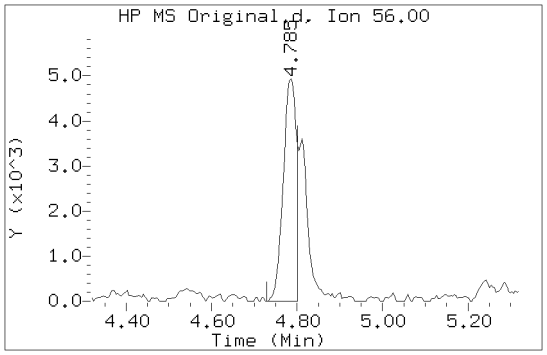
HEIGHT
890
12-Dec-2023
09:43
linh
pham



Cyclohexane (110-82-7)

Reason Code:

BEFORE
MASS
56
AREA
10415
HEIGHT
4933
11-Dec-2023
17:18
linh
pham



AFTER
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HEIGHT
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12-Dec-2023
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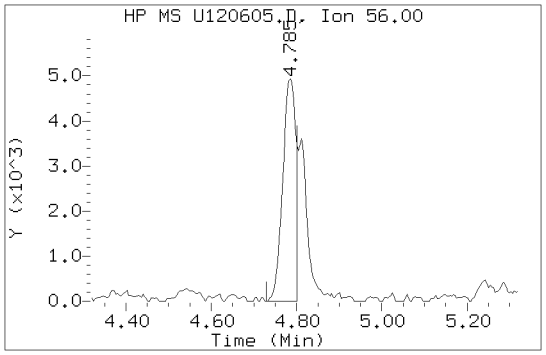
pham



BEFORE
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AREA
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HEIGHT
4977
11-Dec-2023
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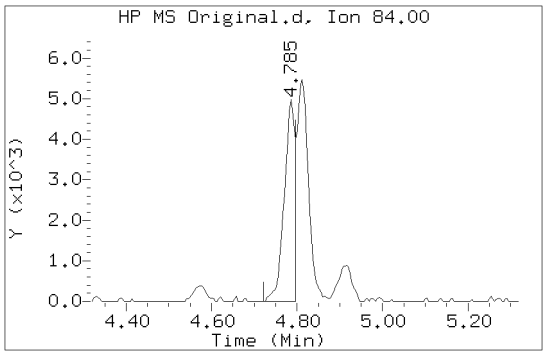
pham



AFTER
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HEIGHT
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12-Dec-2023
09:43
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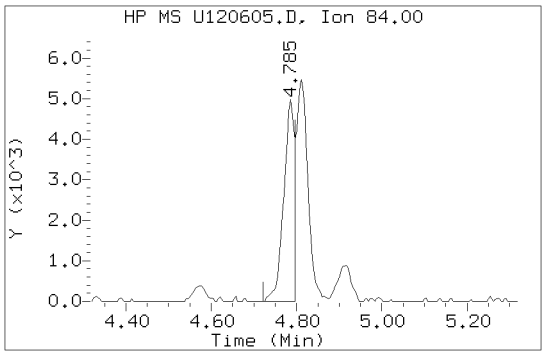

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Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

Cyclohexane (110-82-7)

BEFORE

MASS
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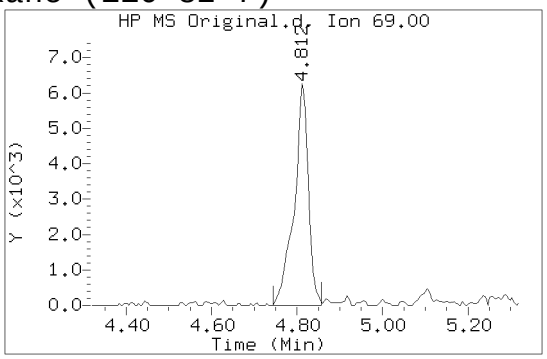
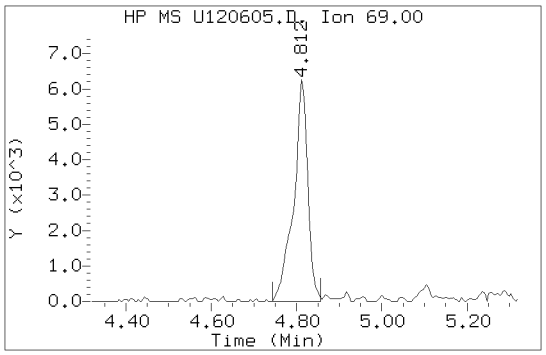
HEIGHT
6260
11-Dec-2023
17:18
linh
pham



AFTER

MASS
69
AREA
14726
HEIGHT
6260
12-Dec-2023
09:43
linh
pham

Reason Code:



Freon TF (76-13-1)

BEFORE

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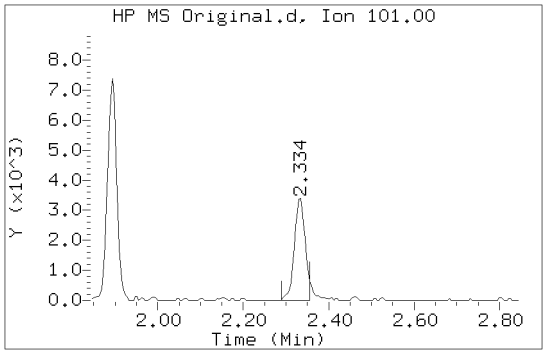
101
AREA
6155
HEIGHT
3393
11-Dec-2023
17:18
linh
pham



AFTER

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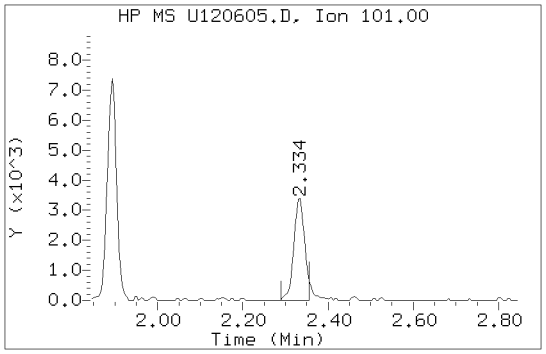
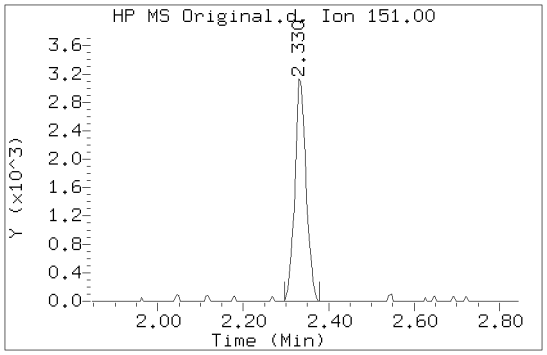
12-Dec-2023
09:43
linh
pham

Reason Code:



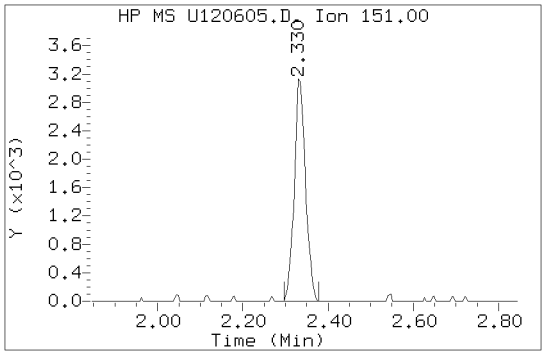
BEFORE

MASS
151
AREA
5851
HEIGHT
3131
11-Dec-2023
17:18
linh
pham



AFTER

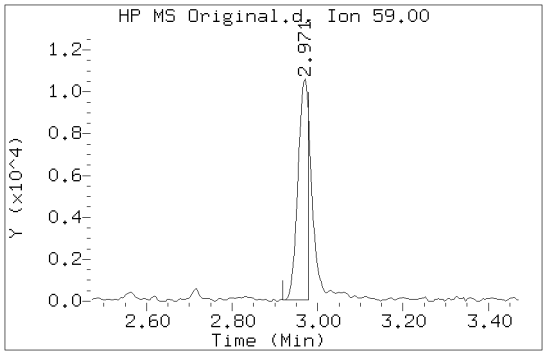
MASS
151
AREA
5851
HEIGHT
3131
12-Dec-2023
09:43
linh
pham



Tert-Butyl alcohol (75-65-0)

BEFORE

MASS
59
AREA
17716
HEIGHT
10555
11-Dec-2023
17:18
linh
pham



AFTER

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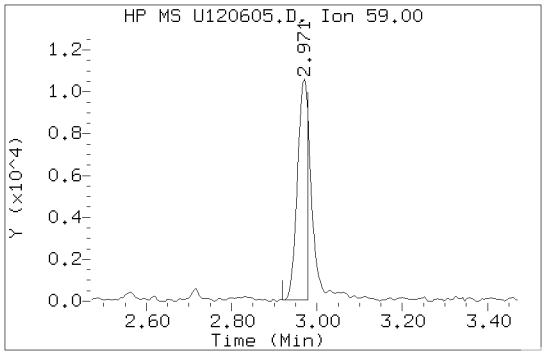
17716
HEIGHT
10555
12-Dec-2023
09:43
linh
pham

Reason Code:



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Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

Tert-Butyl alcohol (75-65-0)

Reason Code:

BEFORE

MASS
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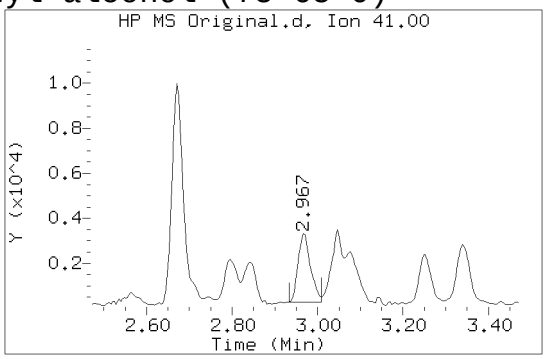
AREA
6290
HEIGHT
3044
11-Dec-2023
17:18
linh
pham



AFTER

MASS
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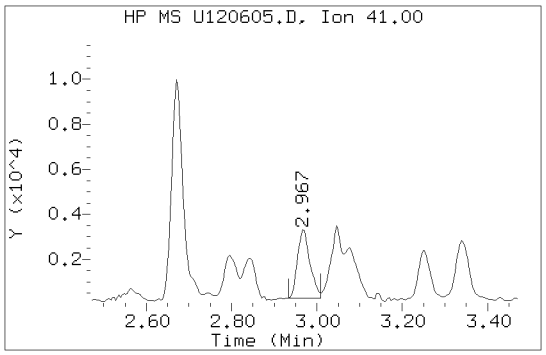
3044
12-Dec-2023
09:43
linh
pham

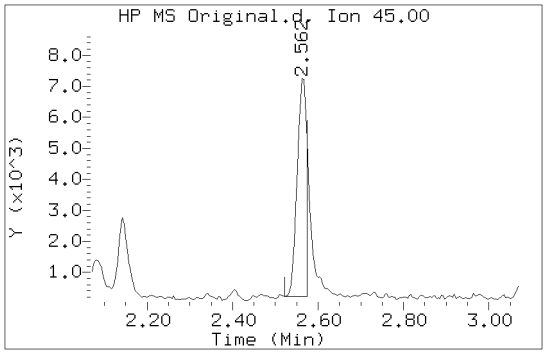


Isopropyl Alcohol (67-63-0)

Reason Code:

BEFORE

MASS
45
AREA
10615
HEIGHT
7018
11-Dec-2023
17:18
linh
pham



AFTER

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12-Dec-2023
09:43
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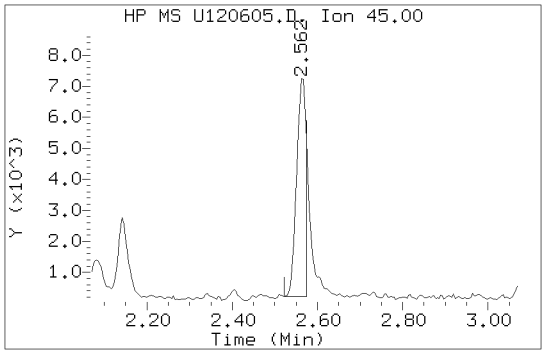
pham



BEFORE

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AREA
946
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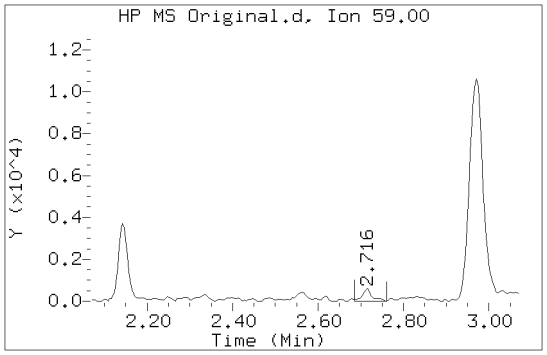
599
11-Dec-2023
17:18
linh
pham



AFTER

MASS
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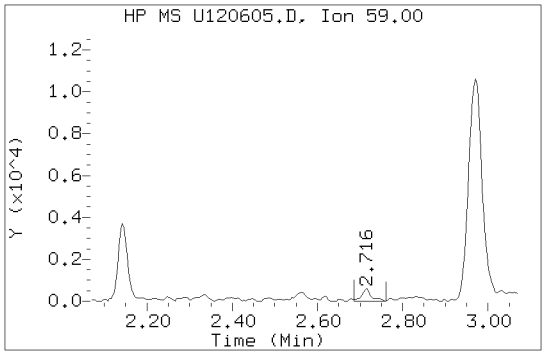
AREA
946
HEIGHT
599
12-Dec-2023
09:43
linh
pham



1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

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HEIGHT
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11-Dec-2023
17:18
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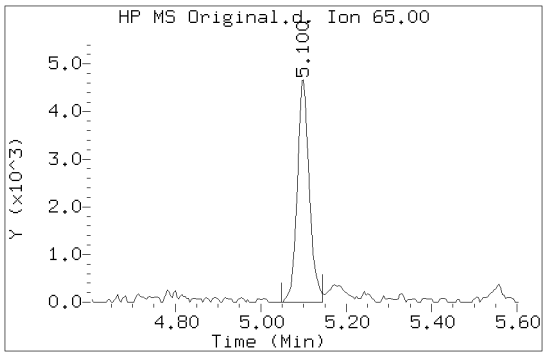
pham



AFTER

MASS
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HEIGHT
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12-Dec-2023
09:43
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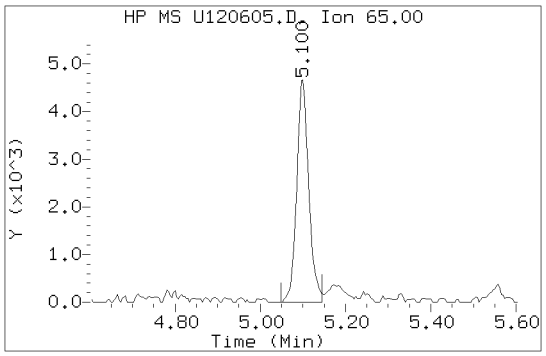

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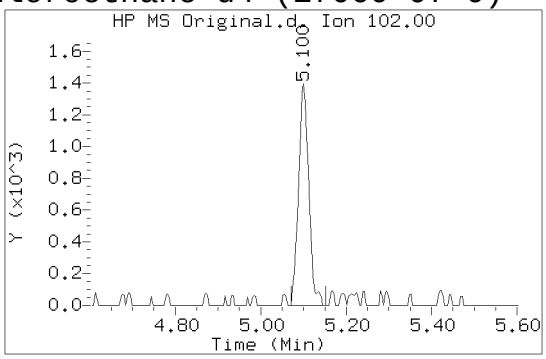
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

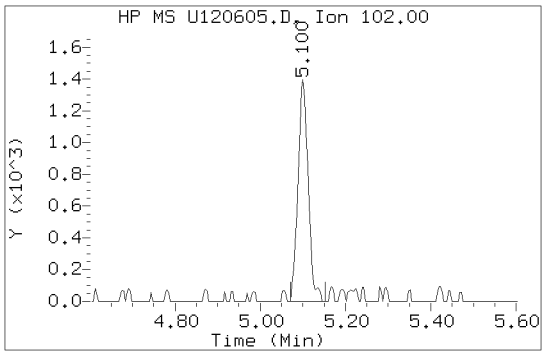
BEFORE

MASS
102
AREA
2382
HEIGHT
1396
11-Dec-2023
17:18
linh
pham



AFTER

MASS
102
AREA
2382
HEIGHT
1396
12-Dec-2023
09:43
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120606.D Page 1
Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120606.D
Lab Smp Id: VSTD005 Client Smp ID: VSTD005
Inj Date : 06-DEC-2023 13:27
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\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 13:05 Cal File: U120605.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	4.819	4.819	(1.000)	351006	50.0000	
2	Dichlorodifluoromethane	85	1.171	1.171	(0.243)	11260	5.00000	4.77
3	Chloromethane	50	1.306	1.306	(0.271)	18032	5.00000	4.47
5	Vinyl Chloride	62	1.385	1.385	(0.288)	16328	5.00000	4.24
6	Bromomethane	94	1.629	1.629	(0.338)	12339	5.00000	5.75
7	Chloroethane	64	1.708	1.708	(0.354)	12188	5.00000	4.70
8	Trichlorofluoromethane	101	1.906	1.906	(0.396)	21006	5.00000	4.30
9	Acrolein	56	2.274	2.274	(0.472)	2313	10.0000	11.56(M)
10	Acetone	43	2.420	2.420	(0.502)	15039	10.0000	7.26
11	1,1-Dichloroethene	96	2.341	2.341	(0.486)	11303	5.00000	4.17
15	Iodomethane	142	2.476	2.476	(0.514)	19119	10.0000	8.03
16	Acrylonitrile	53	3.076	3.076	(0.638)	12760	10.0000	9.26
17	Methylene Chloride	84	2.802	2.802	(0.582)	16803	5.00000	4.67
18	Methyl tert-butyl ether	73	3.087	3.087	(0.641)	48196	5.00000	4.96
19	Carbon Disulfide	76	2.528	2.528	(0.525)	64688	10.0000	8.10
20	trans-1,2-Dichloroethene	96	3.068	3.068	(0.637)	13514	5.00000	4.17
21	Vinyl Acetate	43	3.616	3.616	(0.750)	87312	10.0000	8.92
22	1,1-Dichloroethane	63	3.522	3.522	(0.731)	27485	5.00000	4.16
24	2-Butanone	43	4.279	4.279	(0.888)	15945	10.0000	9.27
26	2,2-Dichloropropane	77	4.189	4.189	(0.869)	18857	5.00000	4.06

27 cis-1,2-Dichloroethene	96	4.204	4.204 (0.872)	19143	5.00000	4.41
28 Chloroform	83	4.579	4.579 (0.950)	33397	5.00000	4.64

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120606.D Page 2
Report Date: 12-Dec-2023 09:43

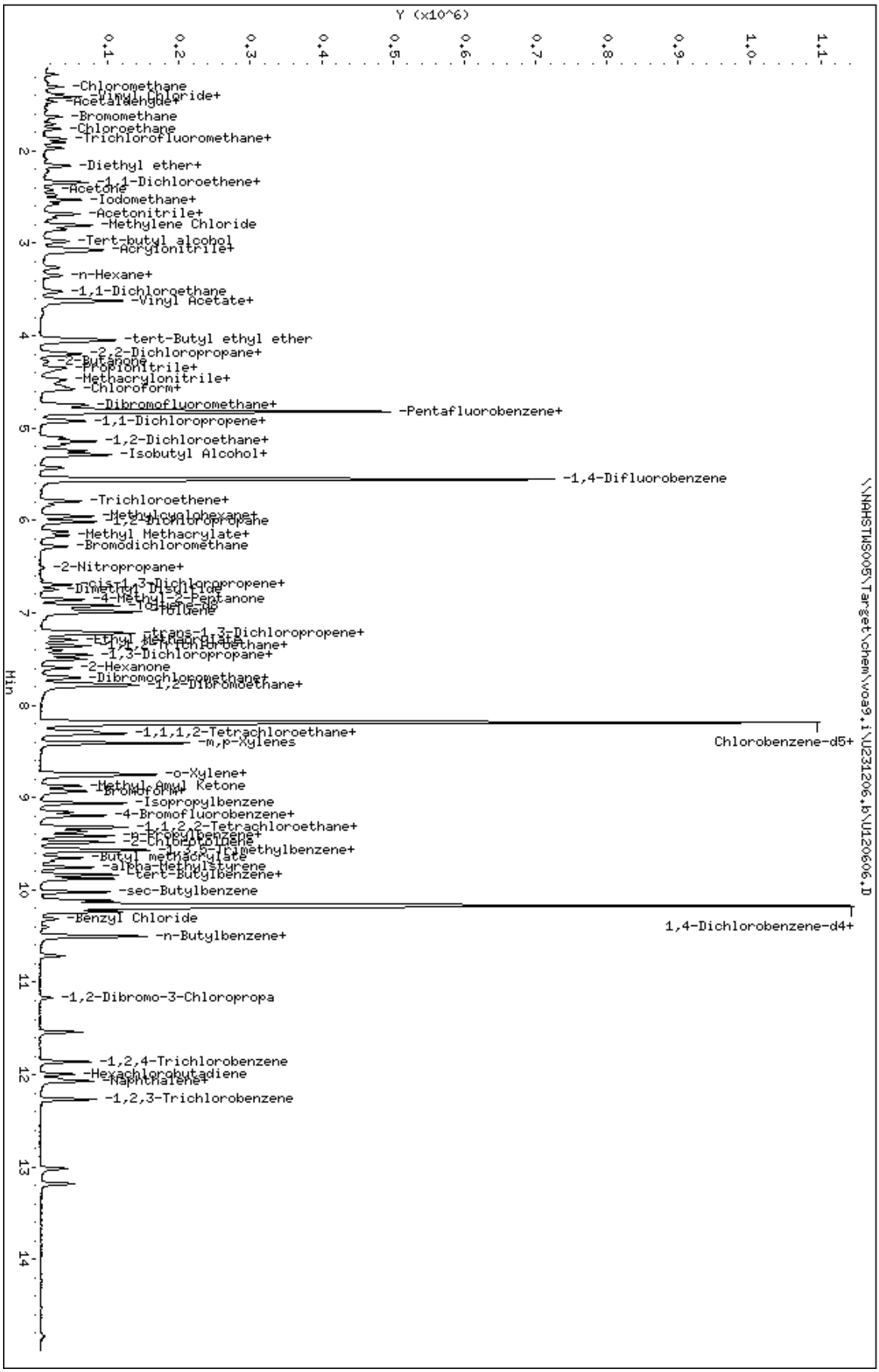
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.478	4.478	(0.929)	10835	5.00000	4.83
$	30 Dibromofluoromethane	113	4.755	4.755	(0.987)	19773	5.00000	4.58
	31 1,1,1-Trichloroethane	97	4.748	4.748	(0.985)	22357	5.00000	4.09
	32 1,1-Dichloropropene	75	4.928	4.928	(0.887)	19415	5.00000	4.08
	33 1,2-Dichloroethane	62	5.183	5.183	(0.933)	26219	5.00000	4.73
	34 Carbon Tetrachloride	117	4.913	4.913	(0.884)	19183	5.00000	4.13
$	35 1,2-Dichloroethane-d4	65	5.104	5.104	(1.059)	23056	5.00000	5.42(M)
*	36 1,4-Difluorobenzene	114	5.557	5.557	(1.000)	568334	50.0000	
	37 Benzene	78	5.141	5.141	(0.925)	69120	5.00000	4.46
	38 Trichloroethene	130	5.794	5.794	(1.042)	18385	5.00000	4.31
	39 Bromodichloromethane	83	6.281	6.281	(1.130)	21637	5.00000	4.27
	41 2-Chloroethylvinyl ether	63	6.581	6.581	(1.184)	541	10.0000	9.82(M)
	42 1,2-Dichloropropane	63	6.015	6.015	(1.082)	18952	5.00000	4.54
	44 Dibromomethane	93	6.123	6.123	(1.102)	12584	5.00000	4.66
	45 4-Methyl-2-Pentanone	43	6.854	6.854	(0.837)	39833	10.0000	9.40
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.204)	23865	5.00000	5.02
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	567509	50.0000	
$	48 Toluene-d8	98	6.926	6.926	(0.846)	68873	5.00000	5.27
	50 Toluene	91	6.982	6.982	(0.853)	70261	5.00000	4.44
	51 trans-1,3-Dichloropropene	75	7.199	7.199	(1.295)	17262	5.00000	4.80
	52 2-Hexanone	43	7.597	7.597	(0.928)	28780	10.0000	10.04
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	16200	5.00000	4.15
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	34440	5.00000	4.90
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	17678	5.00000	4.18
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	15398	5.00000	4.54
	57 1,2-Dibromoethane	107	7.788	7.788	(0.951)	18361	5.00000	4.65
	58 1-Chlorohexane	55	8.196	8.196	(1.475)	16013	5.00000	5.02
	59 Chlorobenzene	112	8.211	8.211	(1.003)	54687	5.00000	4.74
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	17814	5.00000	4.41
	61 Ethylbenzene	106	8.309	8.309	(1.015)	24547	5.00000	4.54
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	55953	10.0000	8.62
	63 o-Xylene	106	8.748	8.748	(1.069)	29070	5.00000	4.35
	64 Styrene	104	8.763	8.763	(1.071)	50034	5.00000	4.50
	66 Bromoform	173	8.920	8.920	(1.090)	11348	5.00000	4.91
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	71476	5.00000	4.42
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	29212	5.00000	5.30
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	28295	5.00000	4.57
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	304310	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	27489	5.00000	4.75
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	75687	5.00000	4.23
	74 Bromobenzene	156	9.317	9.317	(0.916)	23595	5.00000	4.61
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	54214	5.00000	4.26
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	53898	5.00000	4.48
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	62186	5.00000	4.55
	78 tert-Butylbenzene	119	9.838	9.838	(0.967)	48676	5.00000	4.26
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	53789	5.00000	4.22
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	61199	5.00000	4.16
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	49583	5.00000	3.89
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	41004	5.00000	4.52
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	46283	5.00000	4.82
	87 n-Butylbenzene	91	10.494	10.494	(1.032)	42512	5.00000	3.97
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	44771	5.00000	4.91

89	1,2-Dibromo-3-Chloropropane	155	11.169	11.169 (1.098)	3694	5.00000	6.09
90	1,2,4-Trichlorobenzene	180	11.859	11.859 (1.166)	24284	5.00000	4.32

	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)	9215	5.00000	4.09
	92 Naphthalene	128	12.069	12.069	(1.186)	59899	5.00000	4.41
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	25542	5.00000	4.50
M	94 1,2-Dichloroethylene (total)	96				32657	10.0000	
M	95 Xylenes (total)	106				85023	15.0000	
	131 Methyl Acrylate	55	4.380	4.380	(0.909)	21324	5.00000	4.62(a)
	135 1,4-Dioxane	88	6.172	6.172	(1.281)	5590	100.000	100.37
	141 Cyclohexane	56	4.789	4.789	(0.994)	21511	5.00000	4.25(M)
	138 Freon TF	101	2.345	2.345	(0.487)	11826	5.00000	4.68
	140 1,3-Butadiene	54	1.411	1.411	(0.293)	14067	5.00000	3.99
	147 Methylcyclohexane	55	5.951	5.951	(1.071)	37654	5.00000	4.46
	146 Methyl Acetate	43	2.723	2.723	(0.565)	17182	5.00000	4.91
	148 Tert-Butyl alcohol	59	2.978	2.978	(0.618)	42933	100.000	109.25
	149 Isopropyl Alcohol	45	2.573	2.573	(0.534)	26635	100.000	113.30(T)

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.



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Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;5;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120606.D
Inj Date : 06-DEC-2023 13:27
InstruID : VOA9.i
LabSampID : VSTD005

Acrolein (107-02-8)

Reason Code:

BEFORE

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56
AREA
2313
HEIGHT
1131
11-Dec-2023
17:18
linh
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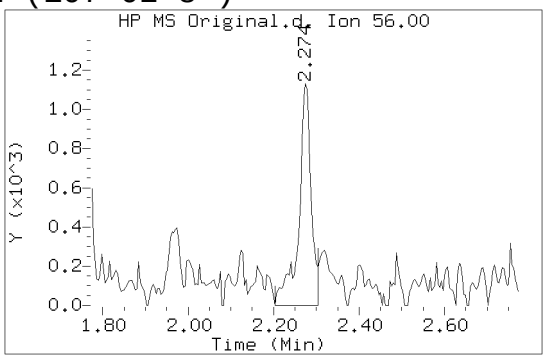

AFTER

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HEIGHT
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12-Dec-2023
09:43
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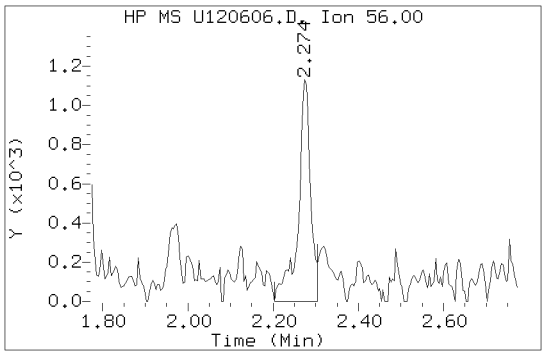

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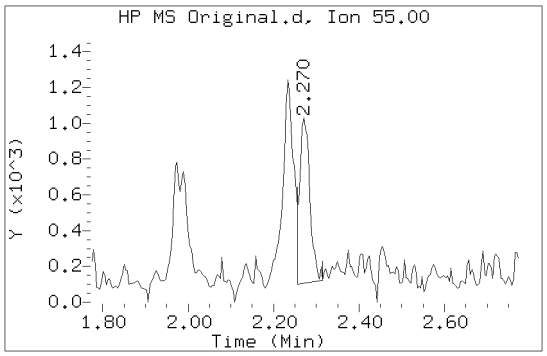

AFTER

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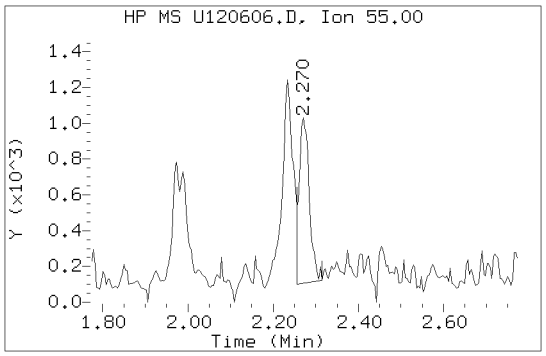

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

BEFORE

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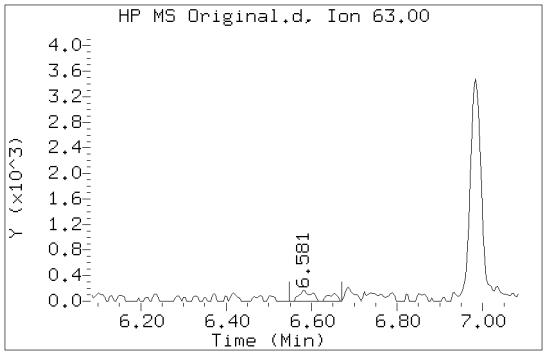

AFTER

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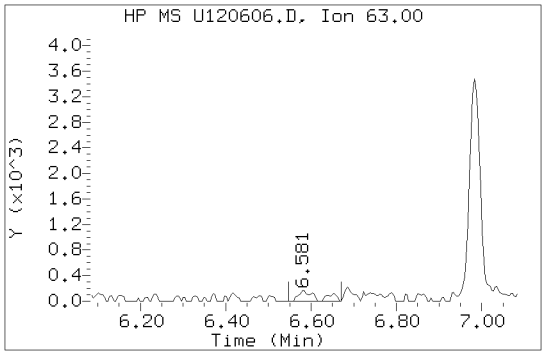

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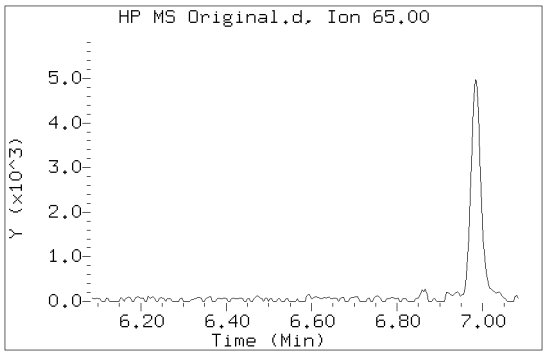

AFTER

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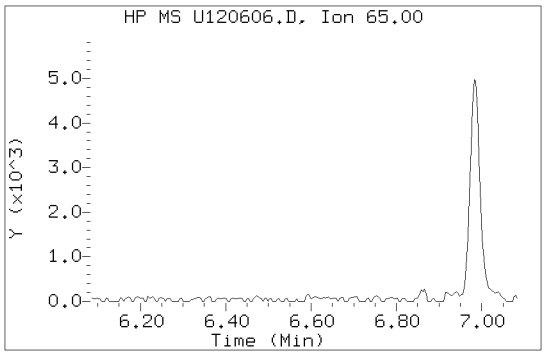

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Inj Date : 06-DEC-2023 13:27
InstruID : VOA9.i
LabSampID : VSTD005

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

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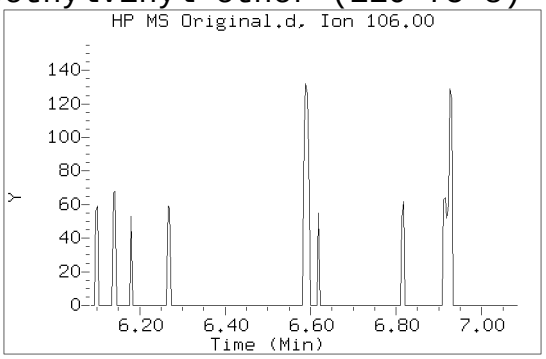

AFTER

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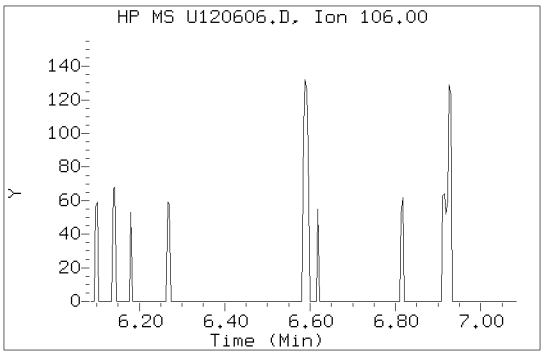

Cyclohexane (110-82-7)

Reason Code:

BEFORE

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AREA
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11-Dec-2023
17:18
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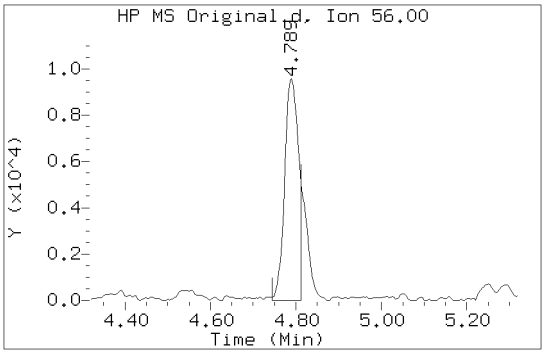

AFTER

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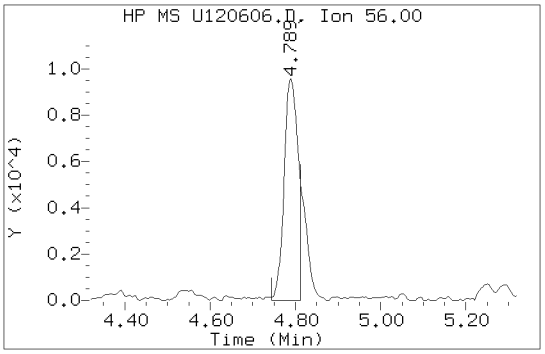

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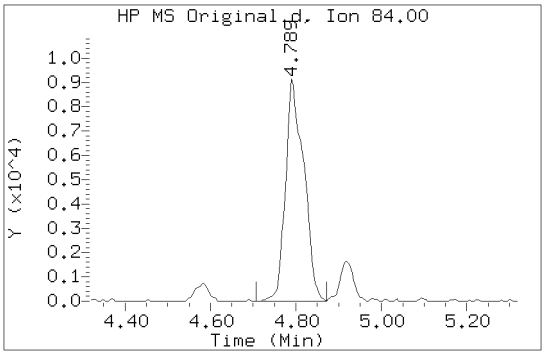

AFTER

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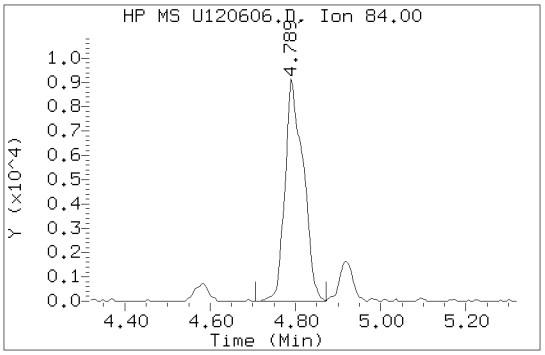

BEFORE

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11-Dec-2023
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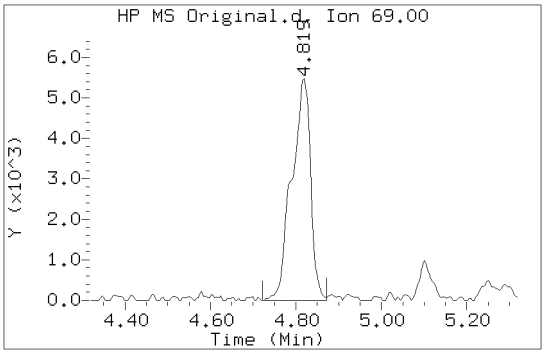

AFTER

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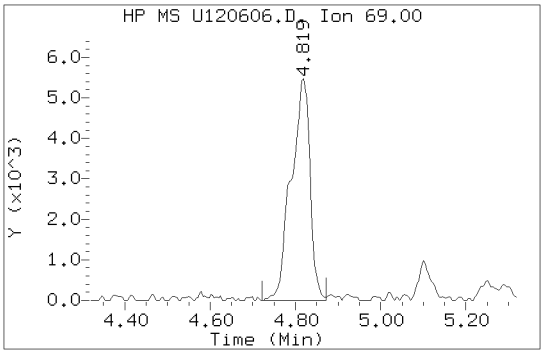

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Inj Date : 06-DEC-2023 13:27
InstruID : VOA9.i
LabSampID : VSTD005

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

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17:18
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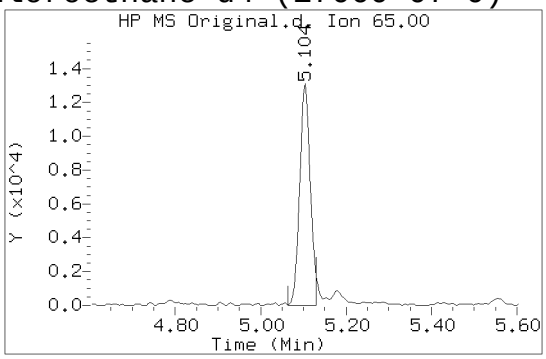

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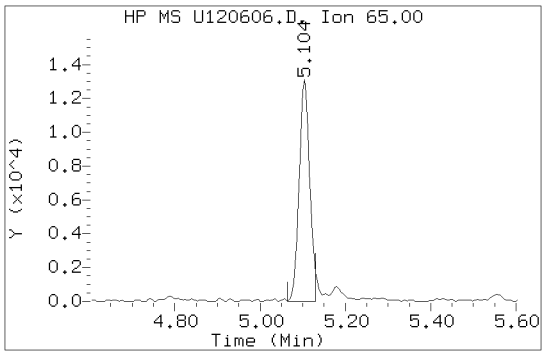

BEFORE

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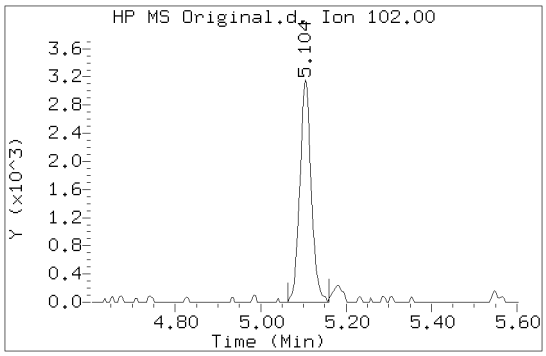

AFTER

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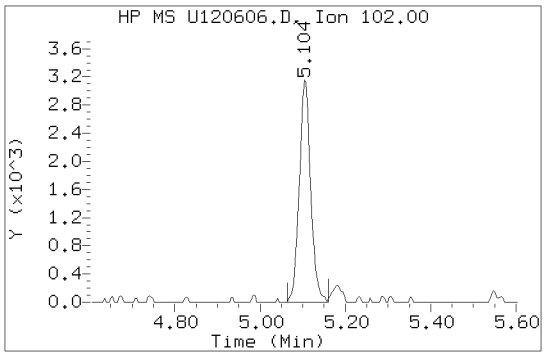

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120607.D Page 1
Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120607.D
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Inj Date : 06-DEC-2023 13:49
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\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 13:27 Cal File: U120606.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	4.819	4.819	(1.000)	369517	50.0000	
2 Dichlorodifluoromethane	85	1.168	1.168	(0.242)	61984	20.0000	21.31
3 Chloromethane	50	1.303	1.303	(0.270)	81421	20.0000	19.20
5 Vinyl Chloride	62	1.378	1.378	(0.286)	78958	20.0000	19.49
6 Bromomethane	94	1.625	1.625	(0.337)	41799	20.0000	20.28
7 Chloroethane	64	1.704	1.704	(0.354)	53915	20.0000	19.77
8 Trichlorofluoromethane	101	1.899	1.899	(0.394)	105233	20.0000	20.50
9 Acrolein	56	2.270	2.270	(0.471)	9018	40.0000	42.82(M)
10 Acetone	43	2.412	2.412	(0.501)	64015	40.0000	47.89
11 1,1-Dichloroethene	96	2.337	2.337	(0.485)	57533	20.0000	20.18
15 Iodomethane	142	2.472	2.472	(0.513)	127779	40.0000	38.07
16 Acrylonitrile	53	3.068	3.068	(0.637)	54831	40.0000	37.82
17 Methylene Chloride	84	2.798	2.798	(0.581)	72366	20.0000	19.96
18 Methyl tert-butyl ether	73	3.083	3.083	(0.640)	189818	20.0000	18.58
19 Carbon Disulfide	76	2.525	2.525	(0.524)	335164	40.0000	39.91
20 trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	65484	20.0000	19.22
21 Vinyl Acetate	43	3.612	3.612	(0.750)	400374	40.0000	38.86
22 1,1-Dichloroethane	63	3.514	3.514	(0.729)	141518	20.0000	20.36
24 2-Butanone	43	4.268	4.268	(0.886)	71654	40.0000	39.58
26 2,2-Dichloropropane	77	4.185	4.185	(0.869)	93951	20.0000	19.23

27 cis-1,2-Dichloroethene	96	4.200	4.200 (0.872)	89869	20.0000	19.69
28 Chloroform	83	4.575	4.575 (0.949)	147735	20.0000	19.53

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120607.D Page 2
Report Date: 12-Dec-2023 09:43

	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)	49140	20.0000	20.80
$	30 Dibromofluoromethane	113	4.752	4.752	(0.986)	78610	20.0000	20.18
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.984)	115867	20.0000	20.15
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	100335	20.0000	20.68
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	112838	20.0000	19.97
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	96798	20.0000	20.42
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.058)	89394	20.0000	21.11(M)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	579849	50.0000	
	37 Benzene	78	5.141	5.141	(0.926)	315779	20.0000	20.00
	38 Trichloroethene	130	5.790	5.790	(1.043)	85810	20.0000	19.72
	39 Bromodichloromethane	83	6.281	6.281	(1.131)	101029	20.0000	19.54
	41 2-Chloroethylvinyl ether	63	6.585	6.585	(1.186)	2163	40.0000	43.74(M)
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	83165	20.0000	19.56
	44 Dibromomethane	93	6.120	6.120	(1.102)	55037	20.0000	20.01
	45 4-Methyl-2-Pentanone	43	6.855	6.855	(0.837)	166511	40.0000	39.46
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	118570	20.0000	18.75
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	581885	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	283330	20.0000	21.15
	50 Toluene	91	6.982	6.982	(0.853)	343935	20.0000	21.19
	51 trans-1,3-Dichloropropene	75	7.199	7.199	(1.296)	97024	20.0000	18.46
	52 2-Hexanone	43	7.593	7.593	(0.928)	111036	40.0000	37.81
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	66320	20.0000	20.60
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	141645	20.0000	19.66
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	84329	20.0000	19.48
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	72888	20.0000	20.98
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	77975	20.0000	19.28
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	68345	20.0000	21.01
	59 Chlorobenzene	112	8.208	8.208	(1.003)	228536	20.0000	19.33
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	79680	20.0000	19.27
	61 Ethylbenzene	106	8.305	8.305	(1.015)	111588	20.0000	20.16
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	281574	40.0000	42.32
	63 o-Xylene	106	8.748	8.748	(1.069)	140260	20.0000	20.50
	64 Styrene	104	8.763	8.763	(1.071)	236657	20.0000	20.77
	66 Bromoform	173	8.920	8.920	(1.090)	53027	20.0000	18.59
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	349789	20.0000	21.14
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	105283	20.0000	19.75
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	106137	20.0000	20.17
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	320589	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	103797	20.0000	17.05
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	394967	20.0000	20.98
	74 Bromobenzene	156	9.317	9.317	(0.916)	102438	20.0000	19.02
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	280571	20.0000	20.97
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	254146	20.0000	20.05
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	285359	20.0000	19.85
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	250022	20.0000	20.80
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.972)	276998	20.0000	20.65
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	322694	20.0000	20.82
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	280155	20.0000	20.89
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	176237	20.0000	18.47
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	185919	20.0000	18.39
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	229910	20.0000	20.42
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	177221	20.0000	18.46

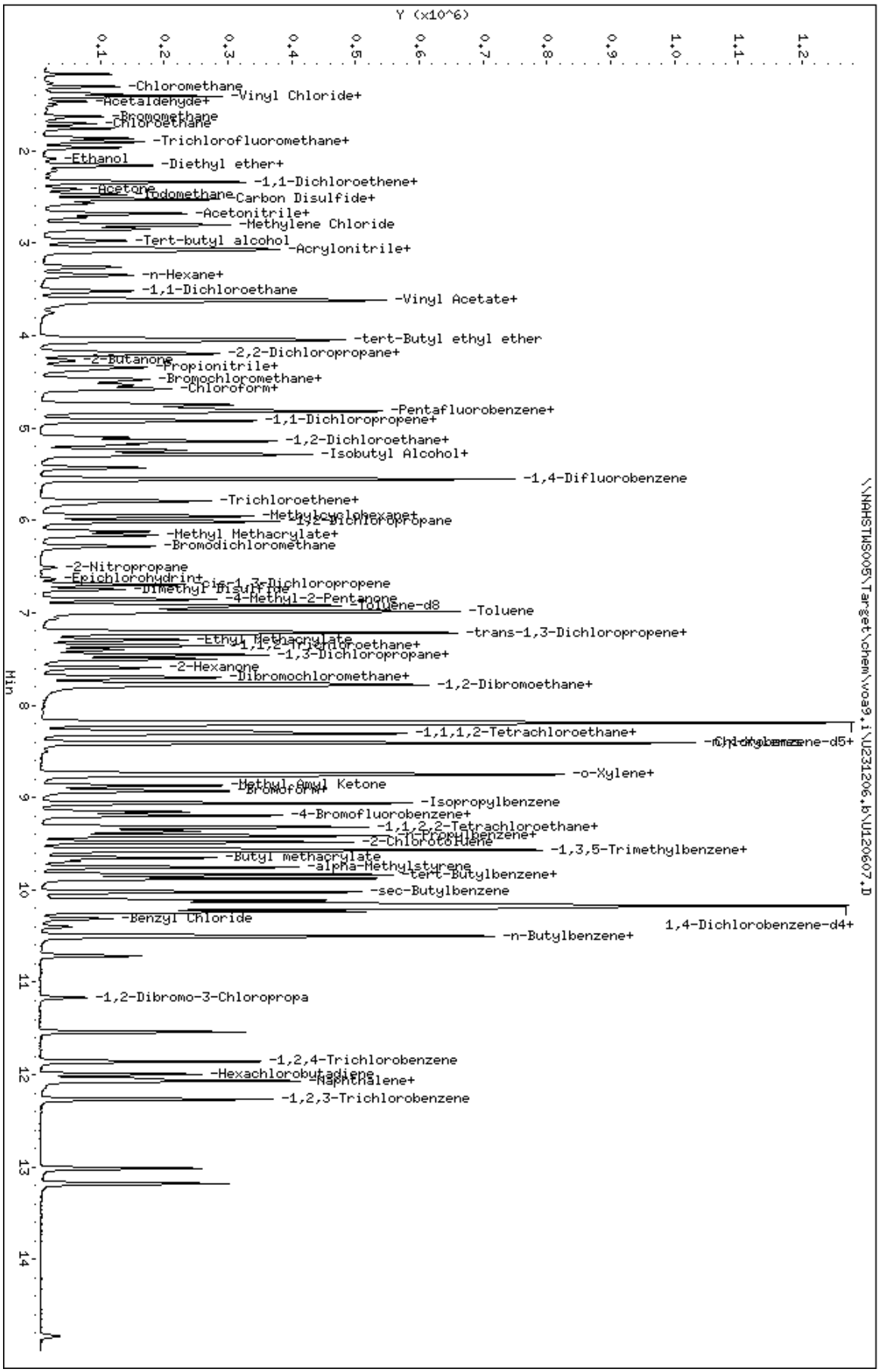
89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166 (1.098)	16207	20.0000	18.66
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.166)	110885	20.0000	18.72

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120607.D Page 3
Report Date: 12-Dec-2023 09:43

	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	(1.180)	47737	20.0000	20.11
	92 Naphthalene	128	12.065	12.065	(1.187)	280624	20.0000	19.65
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	111868	20.0000	18.73
M	94 1,2-Dichloroethylene (total)	96				155353	40.0000	
M	95 Xylenes (total)	106				421834	60.0000	
	131 Methyl Acrylate	55	4.373	4.373	(0.907)	93419	20.0000	19.24
	135 1,4-Dioxane	88	6.169	6.169	(1.280)	20324	400.000	346.66
	141 Cyclohexane	56	4.785	4.785	(0.993)	116645	20.0000	21.90
	138 Freon TF	101	2.337	2.337	(0.485)	58269	20.0000	21.73
	140 1,3-Butadiene	54	1.408	1.408	(0.292)	78314	20.0000	21.10
	147 Methylcyclohexane	55	5.947	5.947	(1.071)	173678	20.0000	20.20
	146 Methyl Acetate	43	2.716	2.716	(0.564)	69207	20.0000	18.81
	148 Tert-Butyl alcohol	59	2.971	2.971	(0.617)	145628	400.000	352.04
	149 Isopropyl Alcohol	45	2.566	2.566	(0.533)	91067	400.000	384.83

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa9,i\U231206,b\U120607,D
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Client ID: VSTD020
Sample Info: VSTD020;VSTD020;16;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120607.D
Inj Date : 06-DEC-2023 13:49
InstruID : VOA9.i
LabSampID : VSTD020

Acrolein (107-02-8)

Reason Code:

BEFORE

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4629
11-Dec-2023
17:18
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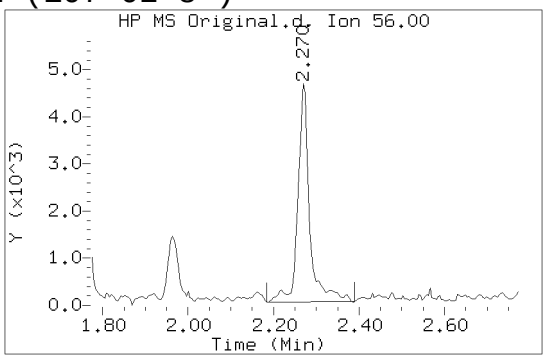
pham



AFTER

MASS
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12-Dec-2023
09:43
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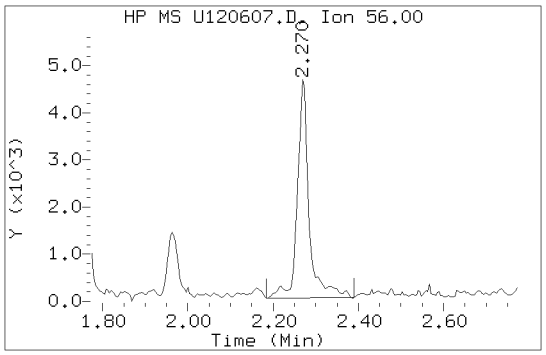

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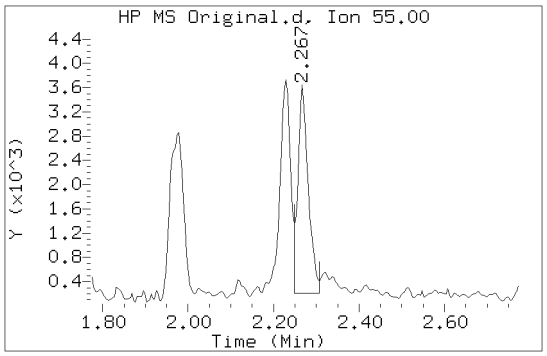

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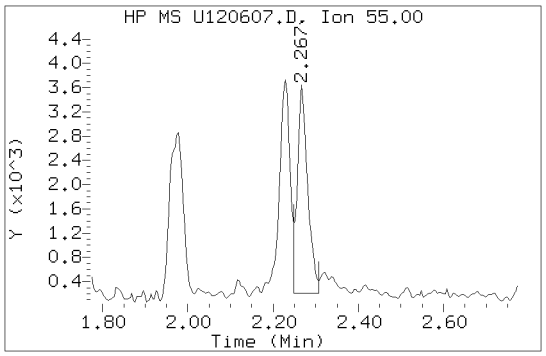

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

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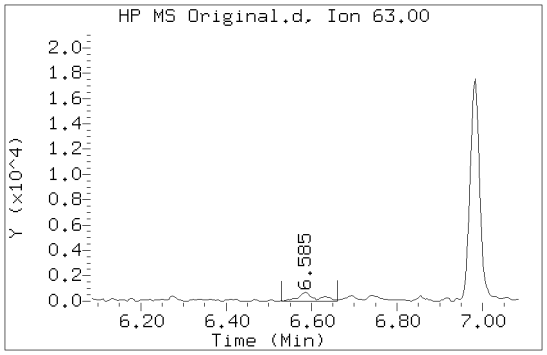

AFTER

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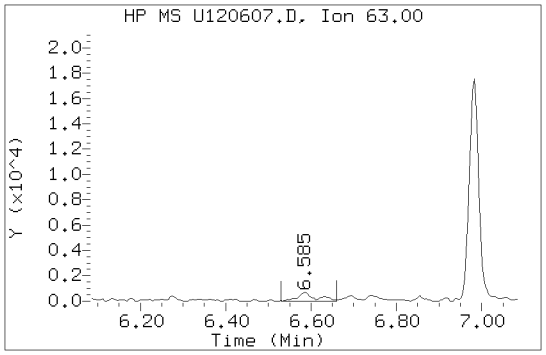

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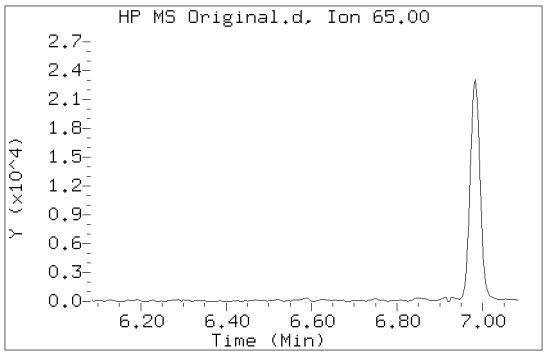

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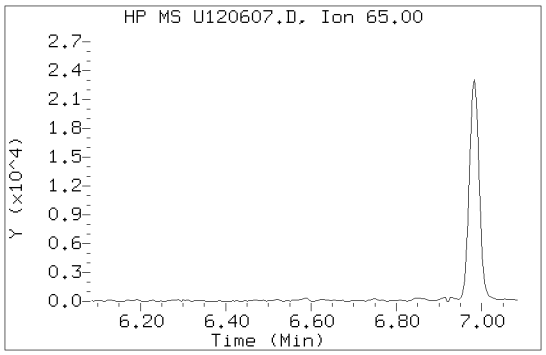

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Inj Date : 06-DEC-2023 13:49
InstruID : VOA9.i
LabSampID : VSTD020

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

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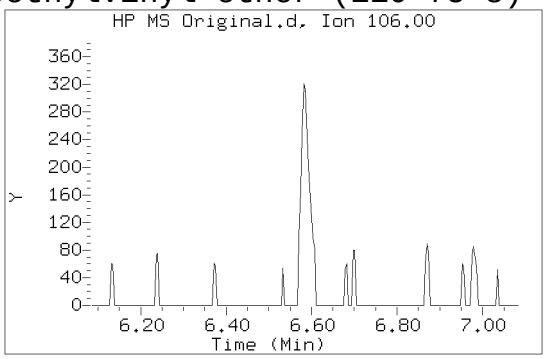

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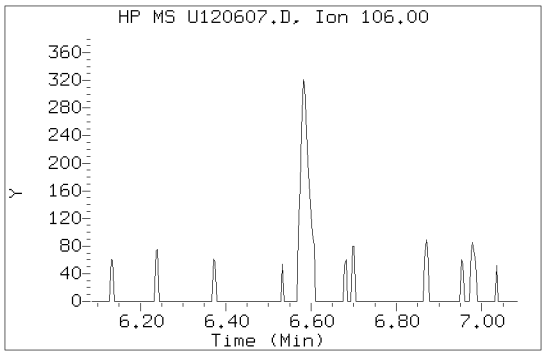

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

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11-Dec-2023
17:18
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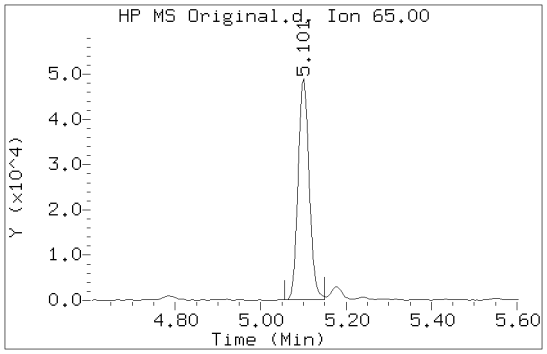

AFTER

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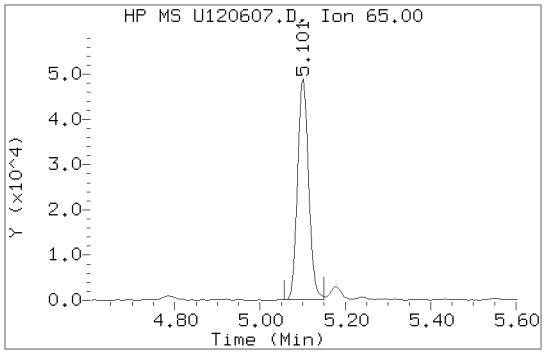

BEFORE

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11-Dec-2023
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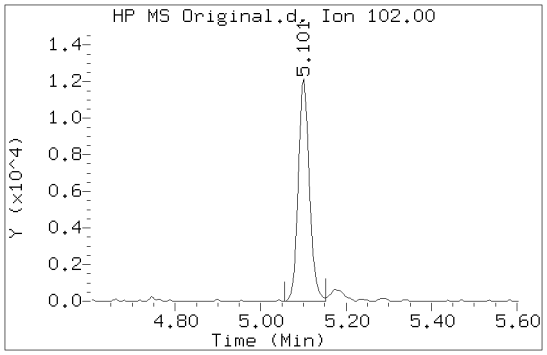

AFTER

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12-Dec-2023
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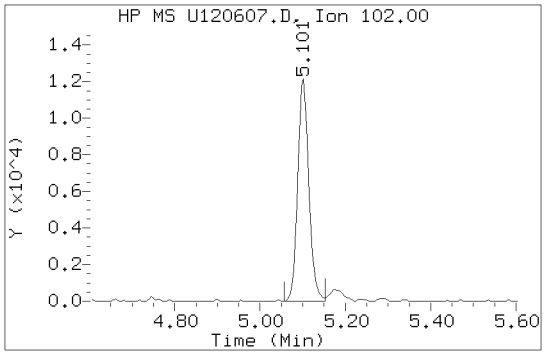

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D Page 1
Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D
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Inj Date : 06-DEC-2023 14:11
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD050;VSTD050;1;7;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 13:49 Cal File: U120607.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	4.815	4.815	(1.000)	366831	50.0000	
2	Dichlorodifluoromethane	85	1.160	1.160	(0.241)	137759	50.0000	46.64
3	Chloromethane	50	1.295	1.295	(0.269)	198858	50.0000	47.25
5	Vinyl Chloride	62	1.374	1.374	(0.285)	192474	50.0000	47.87
6	Bromomethane	94	1.617	1.617	(0.336)	101286	50.0000	49.17
7	Chloroethane	64	1.696	1.696	(0.352)	130701	50.0000	48.28
8	Trichlorofluoromethane	101	1.895	1.895	(0.394)	237922	50.0000	46.69
9	Acrolein	56	2.262	2.262	(0.470)	19296	100.000	92.30
10	Acetone	43	2.405	2.405	(0.499)	141600	100.000	114.20
11	1,1-Dichloroethene	96	2.330	2.330	(0.484)	134600	50.0000	47.57
15	Iodomethane	142	2.465	2.465	(0.512)	363885	100.000	101.22
16	Acrylonitrile	53	3.064	3.064	(0.636)	144182	100.000	100.19
17	Methylene Chloride	84	2.791	2.791	(0.580)	178723	50.0000	50.05
18	Methyl tert-butyl ether	73	3.079	3.079	(0.640)	503453	50.0000	49.66
19	Carbon Disulfide	76	2.517	2.517	(0.523)	830715	100.000	99.64
20	trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	164779	50.0000	48.71
21	Vinyl Acetate	43	3.604	3.604	(0.749)	1082843	100.000	105.87
22	1,1-Dichloroethane	63	3.511	3.511	(0.729)	308894	50.0000	44.77
24	2-Butanone	43	4.260	4.260	(0.885)	176331	100.000	98.12
26	2,2-Dichloropropane	77	4.182	4.182	(0.868)	234552	50.0000	48.36

27 cis-1,2-Dichloroethene	96	4.193	4.193 (0.871)	222870	50.0000	49.18
28 Chloroform	83	4.571	4.571 (0.949)	363364	50.0000	48.38

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D Page 2
Report Date: 12-Dec-2023 09:43

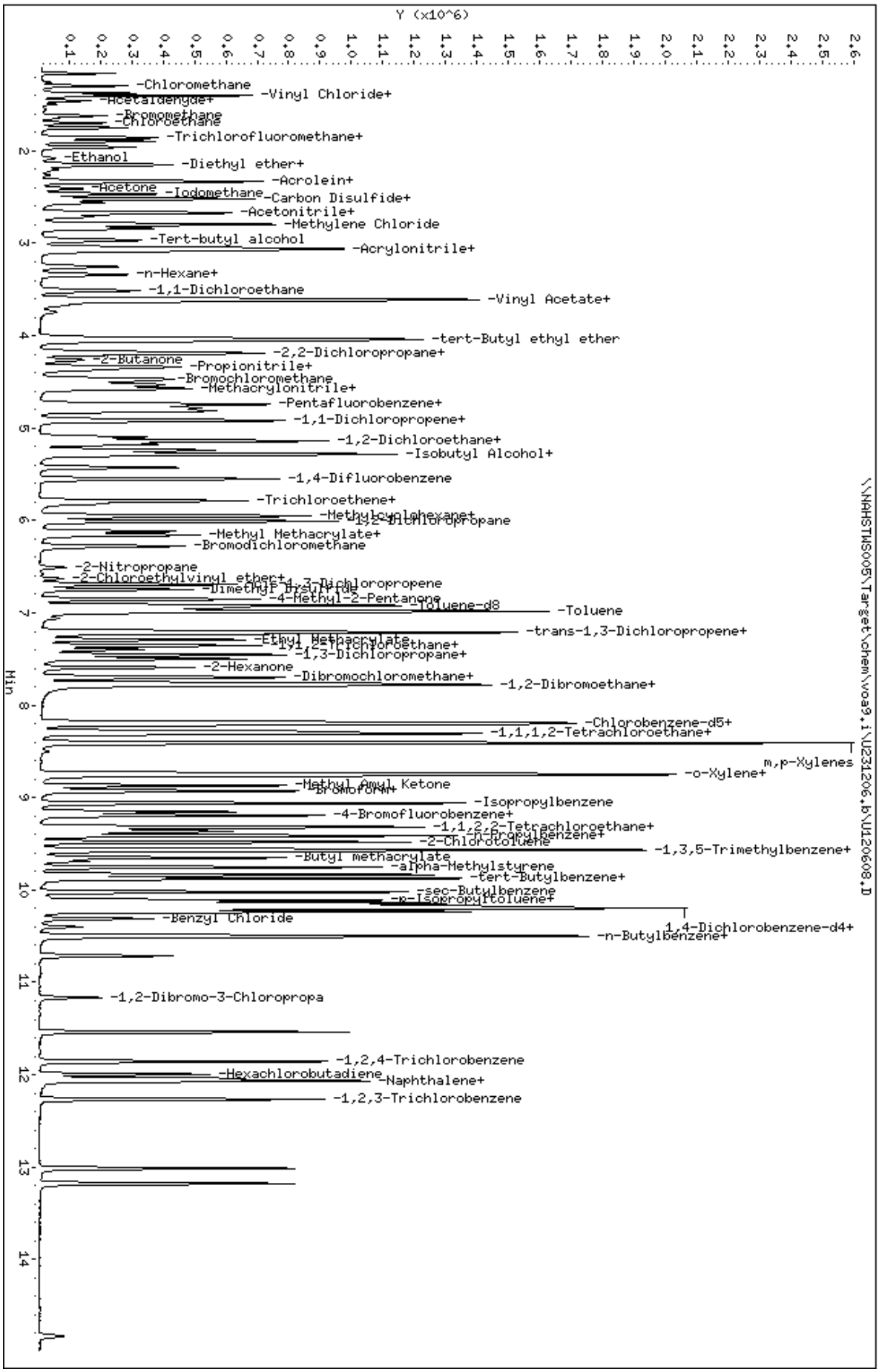
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
29	Bromochloromethane	128	4.467	4.467	(0.928)	119341	50.0000	50.90
$ 30	Dibromofluoromethane	113	4.748	4.748	(0.986)	189455	50.0000	50.47
31	1,1,1-Trichloroethane	97	4.740	4.740	(0.984)	277100	50.0000	48.55
32	1,1-Dichloropropene	75	4.920	4.920	(0.887)	241449	50.0000	49.00
33	1,2-Dichloroethane	62	5.175	5.175	(0.932)	276143	50.0000	48.12
34	Carbon Tetrachloride	117	4.909	4.909	(0.885)	232598	50.0000	48.32
$ 35	1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	211870	50.0000	49.26(M)
* 36	1,4-Difluorobenzene	114	5.550	5.550	(1.000)	588962	50.0000	
37	Benzene	78	5.138	5.138	(0.926)	777989	50.0000	48.52
38	Trichloroethene	130	5.786	5.786	(1.043)	213155	50.0000	48.23
39	Bromodichloromethane	83	6.277	6.277	(1.131)	258199	50.0000	49.17
41	2-Chloroethylvinyl ether	63	6.581	6.581	(1.186)	5248	100.000	103.15
42	1,2-Dichloropropane	63	6.007	6.007	(1.082)	205492	50.0000	47.60
44	Dibromomethane	93	6.120	6.120	(1.103)	134471	50.0000	48.15
45	4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	421109	100.000	99.77
46	cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	322591	50.0000	47.74
* 47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	585326	50.0000	
$ 48	Toluene-d8	98	6.922	6.922	(0.846)	688161	50.0000	51.07
50	Toluene	91	6.978	6.978	(0.853)	825618	50.0000	50.58
51	trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	270774	50.0000	47.62
52	2-Hexanone	43	7.589	7.589	(0.927)	284123	100.000	96.18
53	1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	162935	50.0000	52.25
54	1,3-Dichloropropane	76	7.499	7.499	(0.916)	347309	50.0000	47.92
55	Dibromochloromethane	129	7.690	7.690	(0.940)	221256	50.0000	50.82
56	Tetrachloroethene	164	7.454	7.454	(0.911)	165847	50.0000	47.47
57	1,2-Dibromoethane	107	7.784	7.784	(0.951)	200095	50.0000	49.20
58	1-Chlorohexane	55	8.196	8.196	(1.477)	149444	50.0000	45.25
59	Chlorobenzene	112	8.208	8.208	(1.003)	554780	50.0000	46.66
60	1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	203091	50.0000	48.83
61	Ethylbenzene	106	8.305	8.305	(1.015)	267891	50.0000	48.13
62	m,p-Xylenes	106	8.406	8.406	(1.027)	682174	100.000	101.95
63	o-Xylene	106	8.748	8.748	(1.069)	345583	50.0000	50.21
64	Styrene	104	8.759	8.759	(1.070)	602189	50.0000	52.56
66	Bromoform	173	8.920	8.920	(1.090)	142982	50.0000	48.05
67	Isopropylbenzene	105	9.062	9.062	(1.107)	836214	50.0000	50.24
68	1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	257467	50.0000	49.42
$ 69	4-Bromofluorobenzene	95	9.194	9.194	(1.123)	257187	50.0000	50.42
* 70	1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	319548	50.0000	
71	1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	269676	50.0000	44.45
73	n-Propylbenzene	91	9.411	9.411	(0.926)	950507	50.0000	50.65
74	Bromobenzene	156	9.317	9.317	(0.916)	244856	50.0000	45.62
75	1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	684053	50.0000	51.29
76	2-Chlorotoluene	91	9.482	9.482	(0.933)	609247	50.0000	48.24
77	4-Chlorotoluene	91	9.576	9.576	(0.942)	695361	50.0000	48.54
78	tert-Butylbenzene	119	9.835	9.835	(0.967)	573100	50.0000	47.84
79	1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	683706	50.0000	51.15
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	741751	50.0000	48.02
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	675300	50.0000	50.51
83	1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	433413	50.0000	45.57
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	447745	50.0000	44.44
87	n-Butylbenzene	91	10.491	10.491	(1.032)	556242	50.0000	49.58
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	431690	50.0000	45.12

89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	43056	50.0000	46.22
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.166)	285101	50.0000	48.30

	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	(1.180)	102297	50.0000	43.24
	92 Naphthalene	128	12.065	12.065	(1.187)	724100	50.0000	50.87
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	278076	50.0000	46.72
M	94 1,2-Dichloroethylene (total)	96				387649	100.000	
M	95 Xylenes (total)	106				1027757	150.000	
	131 Methyl Acrylate	55	4.365	4.365	(0.907)	252491	50.0000	52.40
	135 1,4-Dioxane	88	6.165	6.165	(1.280)	54651	1000.00	939.00
	141 Cyclohexane	56	4.785	4.785	(0.994)	230272	50.0000	43.56
	138 Freon TF	101	2.333	2.333	(0.485)	124522	50.0000	46.16
	140 1,3-Butadiene	54	1.400	1.400	(0.291)	184133	50.0000	49.97
	147 Methylcyclohexane	55	5.947	5.947	(1.072)	474867	50.0000	54.39
	146 Methyl Acetate	43	2.712	2.712	(0.563)	172417	50.0000	47.22
	148 Tert-Butyl alcohol	59	2.963	2.963	(0.615)	360815	1000.00	878.61
	149 Isopropyl Alcohol	45	2.558	2.558	(0.531)	232846	1000.00	1002.97

QC Flag Legend

M - Compound response manually integrated.



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Client ID: VSTD050
Sample Info: VSTD050;VSTD050;1;7;
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9.i
Operator: PC
Column diameter: 0.18
Page 1

Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D
Inj Date : 06-DEC-2023 14:11
InstruID : VOA9.i
LabSampID : VSTD050

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE
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HEIGHT
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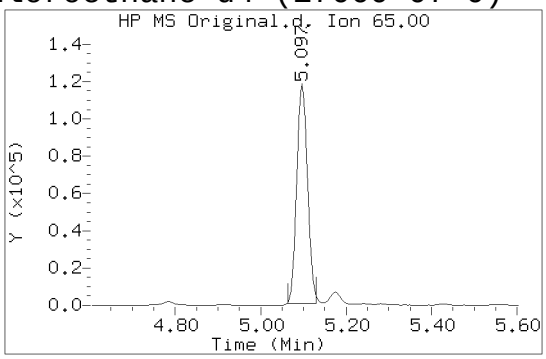
06-Dec-2023
23:48



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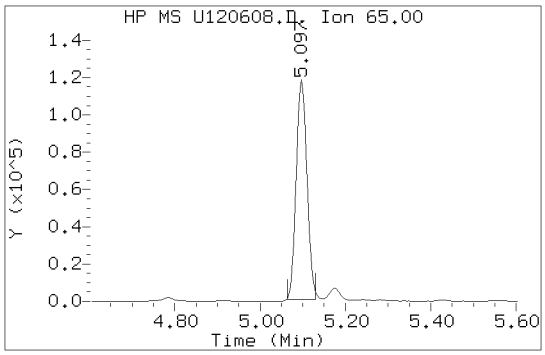
12-Dec-2023
09:43



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06-Dec-2023
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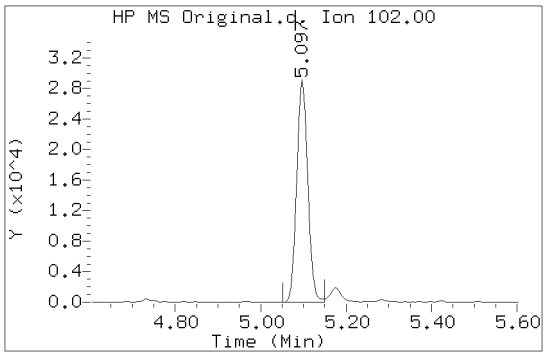

AFTER
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AREA
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HEIGHT
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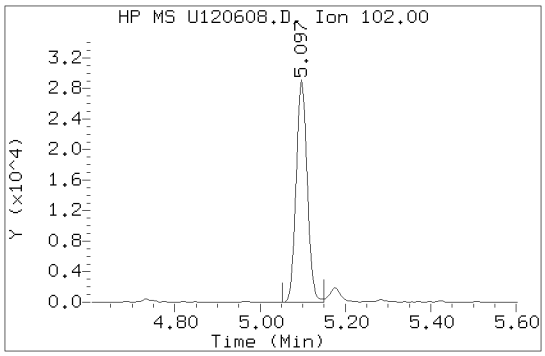
12-Dec-2023
09:43



Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120609.D Page 1
Report Date: 12-Dec-2023 09:44

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120609.D
Lab Smp Id: VSTD100 Client Smp ID: VSTD100
Inj Date : 06-DEC-2023 14:34
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\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:44 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.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	4.815	4.815	(1.000)	368772	50.0000	
2	Dichlorodifluoromethane	85	1.164	1.164	(0.242)	297342	100.000	99.16
3	Chloromethane	50	1.299	1.299	(0.270)	406471	100.000	96.08
5	Vinyl Chloride	62	1.378	1.378	(0.286)	409953	100.000	101.44
6	Bromomethane	94	1.617	1.617	(0.336)	220567	100.000	100.47
7	Chloroethane	64	1.700	1.700	(0.353)	263977	100.000	97.01
8	Trichlorofluoromethane	101	1.899	1.899	(0.394)	522606	100.000	102.02
9	Acrolein	56	2.266	2.266	(0.471)	35096	200.000	167.00
10	Acetone	43	2.408	2.408	(0.500)	236750	200.000	193.97
11	1,1-Dichloroethene	96	2.333	2.333	(0.485)	278813	100.000	98.02
15	Iodomethane	142	2.468	2.468	(0.513)	780690	200.000	199.78
16	Acrylonitrile	53	3.064	3.064	(0.636)	287882	200.000	199.01
17	Methylene Chloride	84	2.795	2.795	(0.580)	355722	100.000	99.36
18	Methyl tert-butyl ether	73	3.083	3.083	(0.640)	1003375	100.000	98.45
19	Carbon Disulfide	76	2.521	2.521	(0.524)	1747418	200.000	208.50
20	trans-1,2-Dichloroethene	96	3.061	3.061	(0.636)	334344	100.000	98.33
21	Vinyl Acetate	43	3.608	3.608	(0.749)	2245220	200.000	218.36
22	1,1-Dichloroethane	63	3.514	3.514	(0.730)	710227	100.000	102.40
24	2-Butanone	43	4.264	4.264	(0.886)	341195	200.000	188.87
26	2,2-Dichloropropane	77	4.185	4.185	(0.869)	494484	100.000	101.41

27 cis-1,2-Dichloroethene	96	4.197	4.197 (0.872)	440325	100.000	96.67
28 Chloroform	83	4.575	4.575 (0.950)	723369	100.000	95.82

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120609.D Page 2
Report Date: 12-Dec-2023 09:44

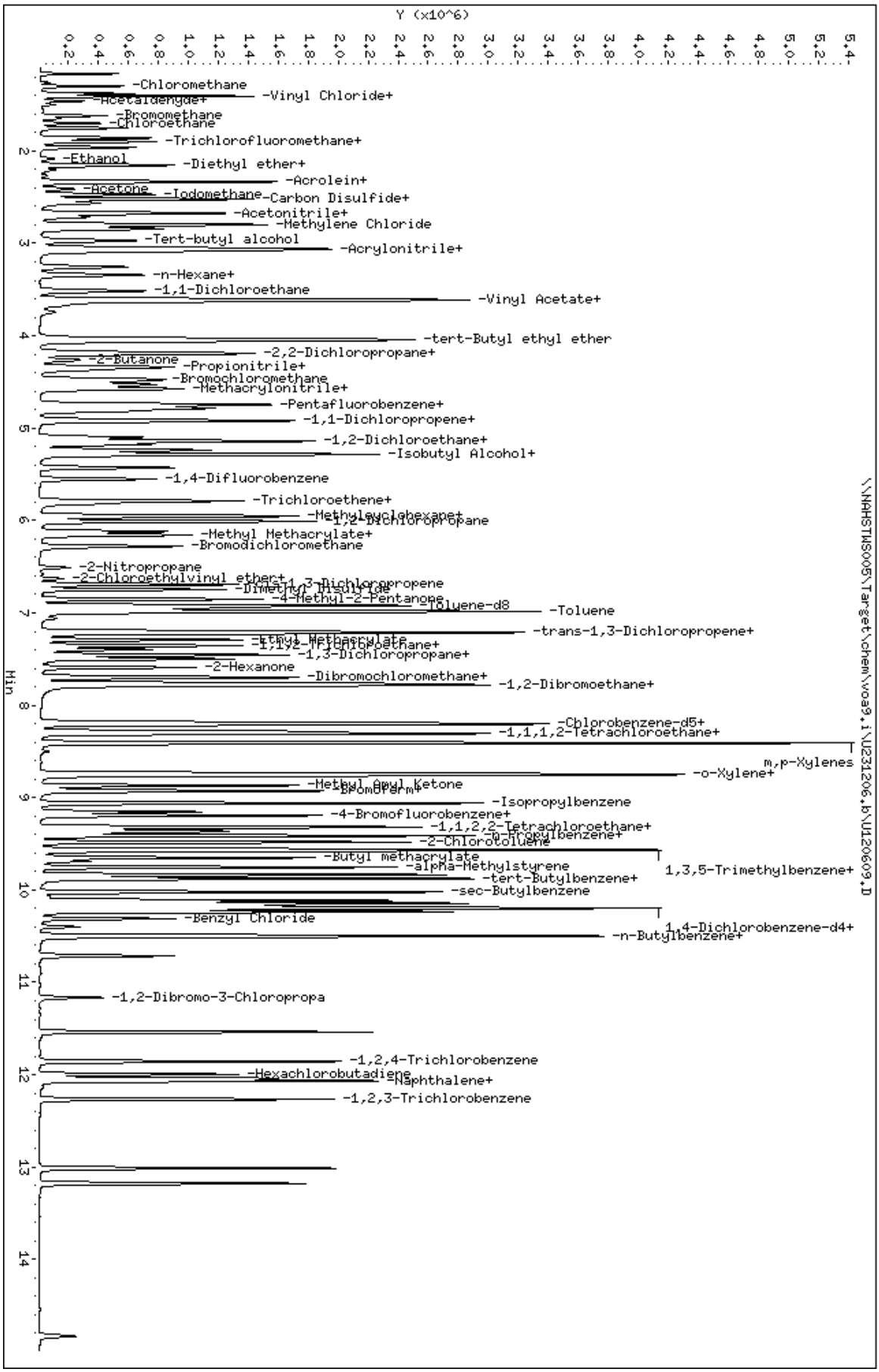
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
29	Bromochloromethane	128	4.470	4.470	(0.928)	217538	100.000	92.30
$ 30	Dibromofluoromethane	113	4.748	4.748	(0.986)	396102	100.000	106.08
31	1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	593935	100.000	103.53
32	1,1-Dichloropropene	75	4.924	4.924	(0.887)	513783	100.000	103.77
33	1,2-Dichloroethane	62	5.175	5.175	(0.932)	536406	100.000	93.03
34	Carbon Tetrachloride	117	4.913	4.913	(0.885)	508728	100.000	105.19
$ 35	1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	468113	100.000	100.11(M)
* 36	1,4-Difluorobenzene	114	5.554	5.554	(1.000)	591773	50.0000	
37	Benzene	78	5.137	5.137	(0.925)	1562743	100.000	97.00
38	Trichloroethene	130	5.790	5.790	(1.043)	427509	100.000	96.28
39	Bromodichloromethane	83	6.277	6.277	(1.130)	539233	100.000	102.21
41	2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	10683	200.000	195.84
42	1,2-Dichloropropane	63	6.011	6.011	(1.082)	408313	100.000	94.14
44	Dibromomethane	93	6.120	6.120	(1.102)	263977	100.000	94.07
45	4-Methyl-2-Pentanone	43	6.854	6.854	(0.837)	859659	200.000	201.05
46	cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	679057	100.000	98.40
* 47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	594065	50.0000	
$ 48	Toluene-d8	98	6.922	6.922	(0.846)	1451360	100.000	106.12
50	Toluene	91	6.982	6.982	(0.853)	1683894	100.000	101.65
51	trans-1,3-Dichloropropene	75	7.195	7.195	(1.296)	568417	100.000	97.57
52	2-Hexanone	43	7.589	7.589	(0.927)	589218	200.000	196.54
53	1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	317502	100.000	101.57
54	1,3-Dichloropropane	76	7.499	7.499	(0.916)	688725	100.000	93.64
55	Dibromochloromethane	129	7.690	7.690	(0.940)	452519	100.000	102.42
56	Tetrachloroethene	164	7.458	7.458	(0.911)	359308	100.000	101.34
57	1,2-Dibromoethane	107	7.784	7.784	(0.951)	401348	100.000	97.23
58	1-Chlorohexane	55	8.196	8.196	(1.476)	332886	100.000	100.31
59	Chlorobenzene	112	8.208	8.208	(1.003)	1142106	100.000	94.65
60	1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	418859	100.000	99.23
61	Ethylbenzene	106	8.305	8.305	(1.015)	573872	100.000	101.59
62	m,p-Xylenes	106	8.410	8.410	(1.027)	1428236	200.000	210.30
63	o-Xylene	106	8.747	8.747	(1.069)	717054	100.000	102.66
64	Styrene	104	8.762	8.762	(1.071)	1247814	100.000	107.31
66	Bromoform	173	8.920	8.920	(1.090)	300664	100.000	98.41
67	Isopropylbenzene	105	9.062	9.062	(1.107)	1797558	100.000	106.42
68	1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	527580	100.000	99.75
$ 69	4-Bromofluorobenzene	95	9.194	9.194	(1.123)	539241	100.000	105.54
* 70	1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	326639	50.0000	
71	1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	559877	100.000	90.29
73	n-Propylbenzene	91	9.411	9.411	(0.925)	1990476	100.000	103.77
74	Bromobenzene	156	9.317	9.317	(0.916)	507624	100.000	92.54
75	1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	1467962	100.000	107.68
76	2-Chlorotoluene	91	9.482	9.482	(0.932)	1250856	100.000	96.89
77	4-Chlorotoluene	91	9.576	9.576	(0.941)	1459624	100.000	99.69
78	tert-Butylbenzene	119	9.838	9.838	(0.967)	1256628	100.000	102.62
79	1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	1472785	100.000	107.79
81	sec-Butylbenzene	105	10.022	10.022	(0.985)	1683936	100.000	106.65
82	p-Isopropyltoluene	119	10.146	10.146	(0.997)	1513618	100.000	110.77
83	1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	909175	100.000	93.53
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	929084	100.000	90.22
87	n-Butylbenzene	91	10.491	10.491	(1.031)	1271526	100.000	110.88
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	884103	100.000	90.40

89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	92967	100.000	95.28
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.165)	628138	100.000	104.11

	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)	253011	100.000	104.62
	92 Naphthalene	128	12.065	12.065	(1.186)	1545256	100.000	106.20
	93 1,2,3-Trichlorobenzene	180	12.267	12.267	(1.206)	597649	100.000	98.23
M	94 1,2-Dichloroethylene (total)	96				774669	200.000	
M	95 Xylenes (total)	106				2145290	300.000	
	131 Methyl Acrylate	55	4.369	4.369	(0.907)	502976	100.000	103.83
	135 1,4-Dioxane	88	6.165	6.165	(1.280)	109750	2000.00	1875.79
	141 Cyclohexane	56	4.785	4.785	(0.994)	541235	100.000	101.85
	138 Freon TF	101	2.337	2.337	(0.485)	287842	100.000	102.64
	140 1,3-Butadiene	54	1.404	1.404	(0.292)	389528	100.000	105.17
	147 Methylcyclohexane	55	5.943	5.943	(1.070)	971750	100.000	110.78(A)
	146 Methyl Acetate	43	2.716	2.716	(0.564)	341463	100.000	93.03
	148 Tert-Butyl alcohol	59	2.967	2.967	(0.616)	729703	2000.00	1767.54
	149 Isopropyl Alcohol	45	2.566	2.566	(0.533)	469315	2000.00	2018.44

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.



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Client ID: VSTD100
Sample Info: VSTD100;VSTD100;18;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120609.D
Inj Date : 06-DEC-2023 14:34
InstruID : VOA9.i
LabSampID : VSTD100

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

MASS
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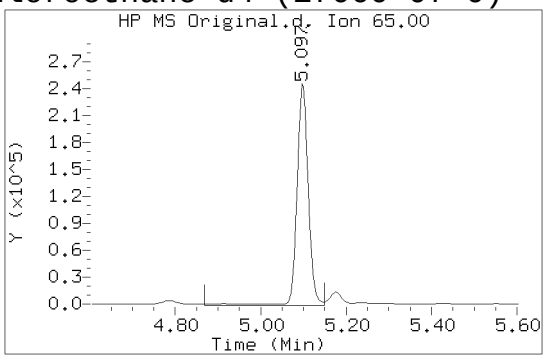
HEIGHT
246960
11-Dec-2023
17:18
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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12-Dec-2023
09:43
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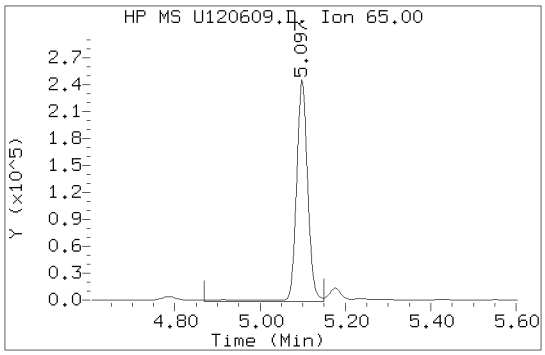

BEFORE

MASS
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11-Dec-2023
17:18
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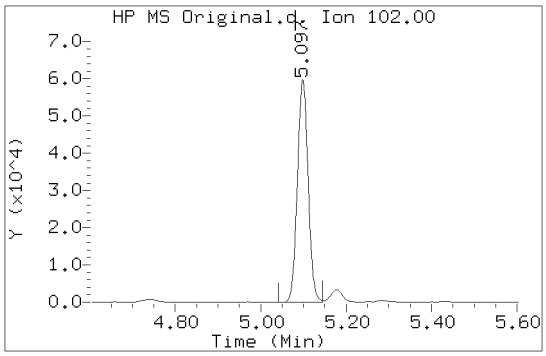

AFTER

MASS
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HEIGHT
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12-Dec-2023
09:43
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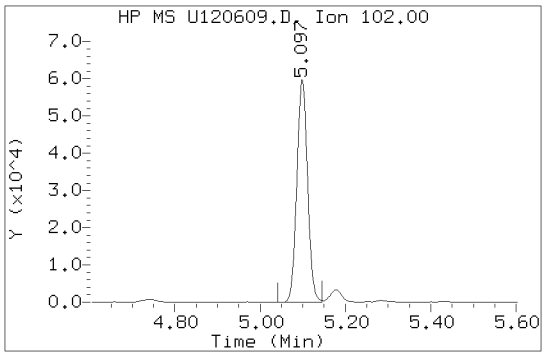


Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120610.D Page 1
Report Date: 12-Dec-2023 09:44

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120610.D
Lab Smp Id: VSTD150 Client Smp ID: VSTD150
Inj Date : 06-DEC-2023 14:56
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\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:44 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:34 Cal File: U120609.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	4.819	4.819	(1.000)	371554	50.0000	
2	Dichlorodifluoromethane	85	1.168	1.168	(0.242)	450623	150.000	148.71
3	Chloromethane	50	1.303	1.303	(0.270)	617058	150.000	144.77
5	Vinyl Chloride	62	1.378	1.378	(0.286)	613994	150.000	150.79
6	Bromomethane	94	1.618	1.618	(0.336)	359673	150.000	149.88
7	Chloroethane	64	1.700	1.700	(0.353)	401590	150.000	146.48
8	Trichlorofluoromethane	101	1.899	1.899	(0.394)	778971	150.000	150.92
9	Acrolein	56	2.270	2.270	(0.471)	55618	300.000	262.67
10	Acetone	43	2.412	2.412	(0.501)	361348	300.000	296.97(A)
11	1,1-Dichloroethene	96	2.337	2.337	(0.485)	419885	150.000	146.51
15	Iodomethane	142	2.472	2.472	(0.513)	1175487	300.000	278.47
16	Acrylonitrile	53	3.068	3.068	(0.637)	432456	300.000	296.71
17	Methylene Chloride	84	2.798	2.798	(0.581)	541571	150.000	150.28
18	Methyl tert-butyl ether	73	3.083	3.083	(0.640)	1522542	150.000	148.27
19	Carbon Disulfide	76	2.525	2.525	(0.524)	2638818	300.000	312.50
20	trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	504274	150.000	147.19
21	Vinyl Acetate	43	3.608	3.608	(0.749)	3334632	300.000	321.89
22	1,1-Dichloroethane	63	3.518	3.518	(0.730)	1067547	150.000	152.77
24	2-Butanone	43	4.264	4.264	(0.885)	517812	300.000	284.49
26	2,2-Dichloropropane	77	4.185	4.185	(0.869)	755555	150.000	153.80

27 cis-1,2-Dichloroethene	96	4.200	4.200 (0.872)	657135	150.000	143.19
28 Chloroform	83	4.575	4.575 (0.949)	1078801	150.000	141.83

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120610.D Page 2
Report Date: 12-Dec-2023 09:44

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.474	4.474	(0.928)	319815	150.000	134.68
$	30 Dibromofluoromethane	113	4.752	4.752	(0.986)	564100	150.000	150.37
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.984)	880243	150.000	152.28
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	749286	150.000	150.06
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	812291	150.000	139.68
	34 Carbon Tetrachloride	117	4.916	4.916	(0.885)	754939	150.000	154.78
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.058)	659973	150.000	131.23(M)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	596844	50.0000	
	37 Benzene	78	5.141	5.141	(0.926)	2328803	150.000	143.33
	38 Trichloroethene	130	5.790	5.790	(1.043)	649892	150.000	145.12
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	825035	150.000	155.06
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	18550	300.000	301.08
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	614902	150.000	140.57
	44 Dibromomethane	93	6.120	6.120	(1.102)	404505	150.000	142.92
	45 4-Methyl-2-Pentanone	43	6.855	6.855	(0.837)	1318627	300.000	300.79
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	1050675	150.000	150.16
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	609445	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	2032738	150.000	144.88
	50 Toluene	91	6.982	6.982	(0.853)	2501955	150.000	147.23
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	892559	150.000	150.93
	52 2-Hexanone	43	7.593	7.593	(0.928)	904101	300.000	293.96
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	484173	150.000	151.63
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	1037923	150.000	137.55
	55 Dibromochloromethane	129	7.694	7.694	(0.940)	695620	150.000	153.47
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	523779	150.000	144.00
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	604749	150.000	142.81
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	501293	150.000	149.78
	59 Chlorobenzene	112	8.208	8.208	(1.003)	1722533	150.000	139.15
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	645812	150.000	149.14
	61 Ethylbenzene	106	8.305	8.305	(1.015)	852658	150.000	147.14
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	2152882	300.000	309.01
	63 o-Xylene	106	8.748	8.748	(1.069)	1077436	150.000	150.37
	64 Styrene	104	8.763	8.763	(1.071)	1898957	150.000	159.19
	66 Bromoform	173	8.920	8.920	(1.090)	473849	150.000	150.60
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	2672319	150.000	154.21
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	793984	150.000	149.98
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	784122	150.000	150.14
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	327679	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	852287	150.000	137.01
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	2960780	150.000	153.87
	74 Bromobenzene	156	9.317	9.317	(0.916)	767672	150.000	139.50
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	2209178	150.000	161.54
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	1879546	150.000	145.13
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	2180934	150.000	148.49
	78 tert-Butylbenzene	119	9.839	9.839	(0.967)	1869552	150.000	152.20
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	2199500	150.000	160.48
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	2484245	150.000	156.84
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	2245867	150.000	163.84
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	1363061	150.000	139.78
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	1395425	150.000	135.07
	87 n-Butylbenzene	91	10.491	10.491	(1.031)	1896222	150.000	164.84
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	1337751	150.000	136.36

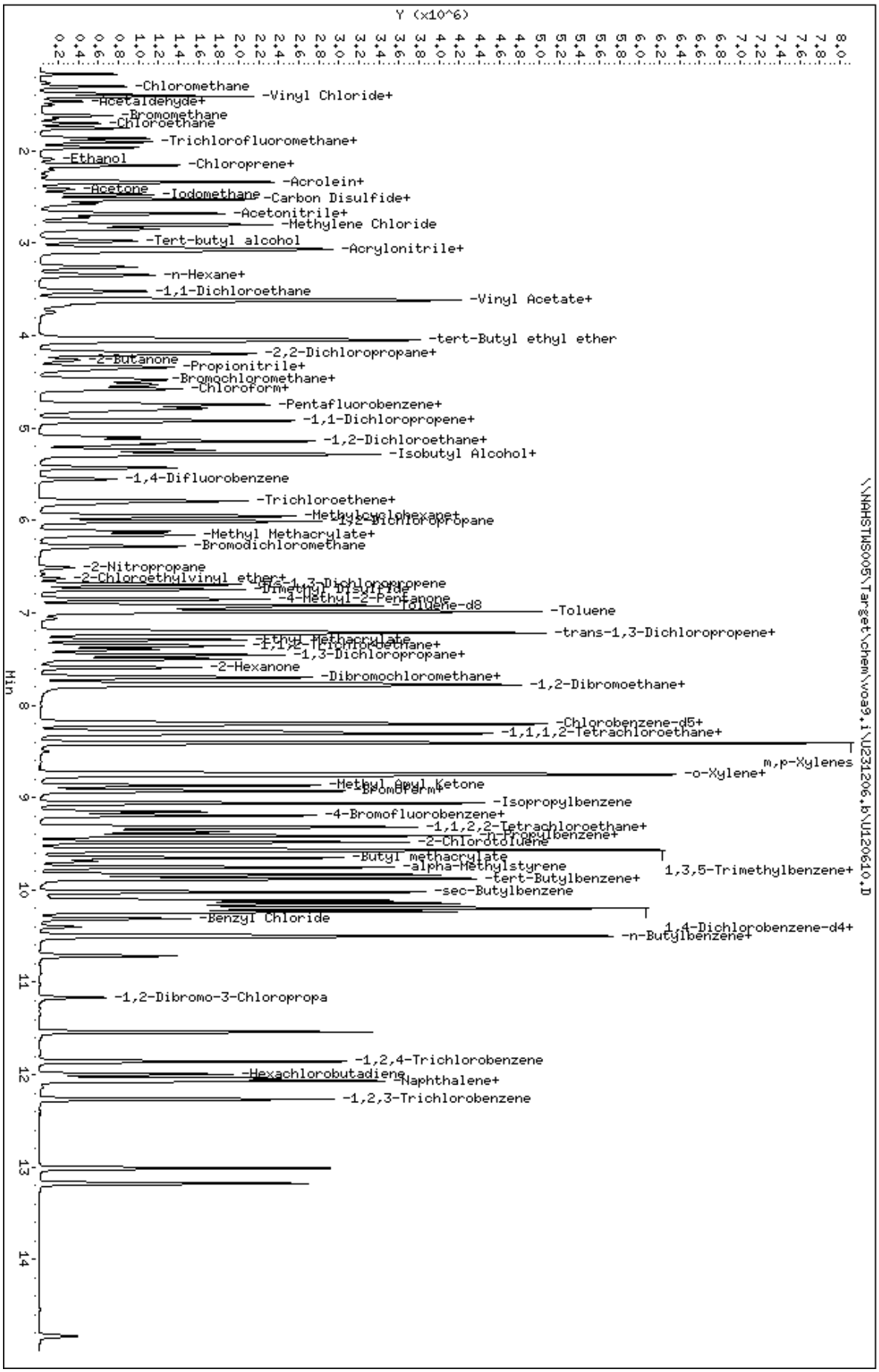
89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166 (1.098)	145211	150.000	147.17
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.165)	938825	150.000	155.12

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120610.D Page 3
Report Date: 12-Dec-2023 09:44

	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)	372344	150.000	153.48
	92 Naphthalene	128	12.065	12.065	(1.186)	2375691	150.000	162.76
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	909761	150.000	149.06
M	94 1,2-Dichloroethylene (total)	96				1161409	300.000	
M	95 Xylenes (total)	106				3230318	450.000	
	131 Methyl Acrylate	55	4.369	4.369	(0.907)	740924	150.000	151.81
	135 1,4-Dioxane	88	6.165	6.165	(1.279)	162429	3000.00	2755.36
	141 Cyclohexane	56	4.789	4.789	(0.994)	787373	150.000	147.06
	138 Freon TF	101	2.337	2.337	(0.485)	434378	150.000	149.11
	140 1,3-Butadiene	54	1.408	1.408	(0.292)	594677	150.000	159.35
	147 Methylcyclohexane	55	5.944	5.944	(1.070)	1479356	150.000	167.22(A)
	146 Methyl Acetate	43	2.716	2.716	(0.564)	513402	150.000	138.83
	148 Tert-Butyl alcohol	59	2.975	2.975	(0.617)	1113820	3000.00	2677.78
	149 Isopropyl Alcohol	45	2.570	2.570	(0.533)	695746	3000.00	2973.41

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.



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Client ID: VSTD150
Sample Info: VSTD150;VSTD150;1;9;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120610.D
Inj Date : 06-DEC-2023 14:56
InstruID : VOA9.i
LabSampID : VSTD150

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

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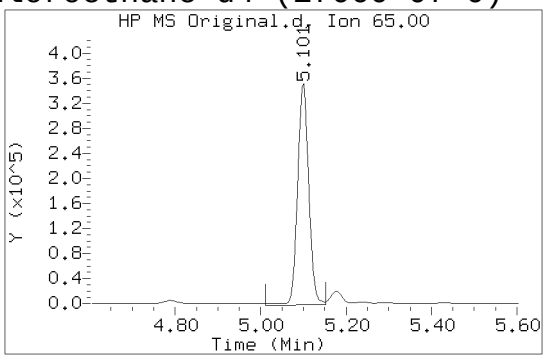
06-Dec-2023
23:21



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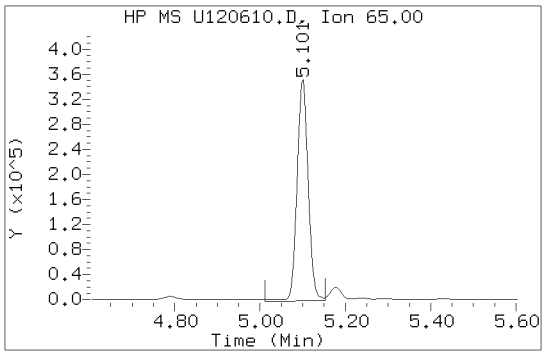
12-Dec-2023
09:43



BEFORE

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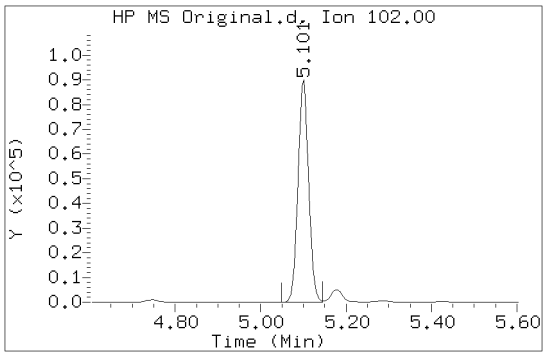
06-Dec-2023
23:21



AFTER

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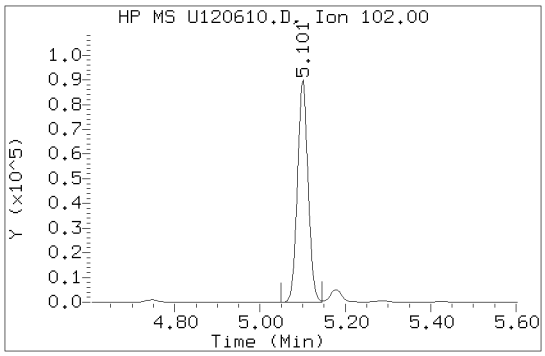
12-Dec-2023
09:43



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Report Date: 12-Dec-2023 09:44

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120611.D
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Inj Date : 06-DEC-2023 15:18
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\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:44 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:56 Cal File: U120610.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	4.815	4.815	(1.000)	380914	50.0000	
2	Dichlorodifluoromethane	85	1.160	1.160	(0.241)	628396	200.000	201.97(A)
3	Chloromethane	50	1.295	1.295	(0.269)	883747	200.000	202.25(A)
5	Vinyl Chloride	62	1.374	1.374	(0.285)	860659	200.000	206.18(A)
6	Bromomethane	94	1.606	1.606	(0.334)	471847	200.000	179.59
7	Chloroethane	64	1.692	1.692	(0.352)	555887	200.000	197.78
8	Trichlorofluoromethane	101	1.895	1.895	(0.394)	1081489	200.000	204.39(A)
9	Acrolein	56	2.262	2.262	(0.470)	79016	400.000	364.00
10	Acetone	43	2.408	2.408	(0.500)	496605	400.000	400.18(A)
11	1,1-Dichloroethene	96	2.330	2.330	(0.484)	590858	200.000	201.11(A)
15	Iodomethane	142	2.465	2.465	(0.512)	1628376	400.000	348.28
16	Acrylonitrile	53	3.065	3.065	(0.636)	587140	400.000	392.94
17	Methylene Chloride	84	2.791	2.791	(0.580)	738924	200.000	200.09(A)
18	Methyl tert-butyl ether	73	3.080	3.080	(0.640)	2096496	200.000	199.15
19	Carbon Disulfide	76	2.517	2.517	(0.523)	3654371	400.000	422.14(A)
20	trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	693764	200.000	197.53
21	Vinyl Acetate	43	3.604	3.604	(0.749)	4458413	400.000	419.80(A)
22	1,1-Dichloroethane	63	3.514	3.514	(0.730)	1438381	200.000	200.78(A)
24	2-Butanone	43	4.260	4.260	(0.885)	712304	400.000	381.74
26	2,2-Dichloropropane	77	4.182	4.182	(0.868)	1030705	200.000	204.65(A)

27 cis-1,2-Dichloroethene	96	4.197	4.197 (0.872)	892465	200.000	189.69
28 Chloroform	83	4.571	4.571 (0.949)	1453677	200.000	186.42

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120611.D Page 2
Report Date: 12-Dec-2023 09:44

	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)	427192	200.000	175.48
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	753738	200.000	196.29
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	1218967	200.000	205.70(A)
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	1045608	200.000	203.22(A)
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	1085267	200.000	181.11
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	1056613	200.000	210.23(A)
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	912175	200.000	162.20(M)
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	615006	50.0000	
	37 Benzene	78	5.138	5.138	(0.926)	3180639	200.000	189.98
	38 Trichloroethene	130	5.786	5.786	(1.043)	888439	200.000	192.54
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	1126302	200.000	205.43(A)
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.185)	30429	400.000	395.98
	42 1,2-Dichloropropane	63	6.011	6.011	(1.083)	842465	200.000	186.90
	44 Dibromomethane	93	6.120	6.120	(1.103)	546179	200.000	187.28
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	1806407	400.000	398.98
	46 cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	1454685	200.000	201.26(A)
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	629604	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	2736153	200.000	188.78
	50 Toluene	91	6.982	6.982	(0.853)	3393847	200.000	193.32
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	1229242	200.000	201.12(A)
	52 2-Hexanone	43	7.589	7.589	(0.927)	1254549	400.000	394.84
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	649485	200.000	197.29
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	1389929	200.000	178.31
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	963212	200.000	205.70(A)
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	718830	200.000	191.29
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	822228	200.000	187.96
	58 1-Chlorohexane	55	8.196	8.196	(1.477)	700515	200.000	203.12(A)
	59 Chlorobenzene	112	8.208	8.208	(1.003)	2336824	200.000	182.73
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	875335	200.000	195.67
	61 Ethylbenzene	106	8.305	8.305	(1.015)	1179673	200.000	197.05
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	2914224	400.000	404.89(A)
	63 o-Xylene	106	8.748	8.748	(1.069)	1472211	200.000	198.89
	64 Styrene	104	8.763	8.763	(1.071)	2547109	200.000	206.69(A)
	66 Bromoform	173	8.916	8.916	(1.089)	654088	200.000	200.87(A)
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	3699203	200.000	206.64(A)
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	1074429	200.000	200.28(A)
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	1059633	200.000	196.80
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	332422	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	1187540	200.000	188.18
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	4196032	200.000	214.96(A)
	74 Bromobenzene	156	9.317	9.317	(0.916)	1039931	200.000	186.28
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	3008803	200.000	216.87(A)
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	2543988	200.000	193.63
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	2961628	200.000	198.76
	78 tert-Butylbenzene	119	9.838	9.838	(0.967)	2602752	200.000	208.86(A)
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	3002995	200.000	215.97(A)
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	3440992	200.000	214.14(A)
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	3084546	200.000	221.81(A)
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	1859943	200.000	188.02
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	1884290	200.000	179.79
	87 n-Butylbenzene	91	10.491	10.491	(1.031)	2632815	200.000	225.60(A)
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	1815480	200.000	182.42

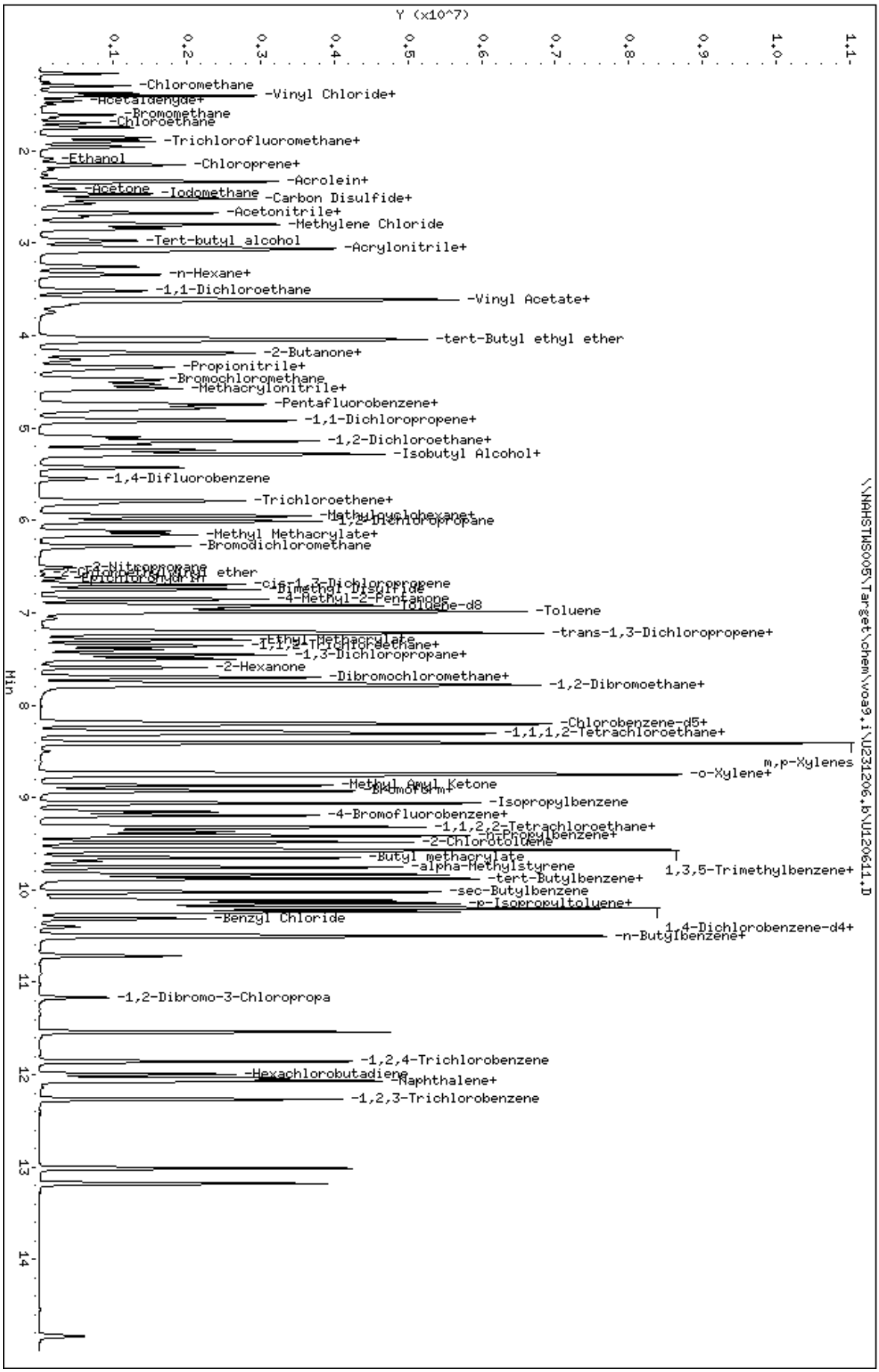
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	206083	200.000	205.05(A)
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.165)	1295767	200.000	211.04(A)

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120611.D Page 3
Report Date: 12-Dec-2023 09:44

	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)	511979	200.000	208.02(A)
	92 Naphthalene	128	12.065	12.065	(1.186)	3301739	200.000	222.98(A)
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	1227408	200.000	198.24
M	94 1,2-Dichloroethylene (total)	96				1586229	400.000	
M	95 Xylenes (total)	106				4386435	600.000	
	131 Methyl Acrylate	55	4.365	4.365	(0.907)	1018956	200.000	203.65(A)
	135 1,4-Dioxane	88	6.165	6.165	(1.280)	219695	4000.00	3635.22
	141 Cyclohexane	56	4.785	4.785	(0.994)	1126383	200.000	205.22(A)
	138 Freon TF	101	2.334	2.334	(0.485)	605416	200.000	195.89
	140 1,3-Butadiene	54	1.400	1.400	(0.291)	842048	200.000	220.10(A)
	147 Methylcyclohexane	55	5.943	5.943	(1.071)	2071040	200.000	227.19(A)
	146 Methyl Acetate	43	2.712	2.712	(0.563)	693752	200.000	182.99
	148 Tert-Butyl alcohol	59	2.971	2.971	(0.617)	1546963	4000.00	3627.73
	149 Isopropyl Alcohol	45	2.566	2.566	(0.533)	961491	4000.00	4010.76(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.



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Client ID: VSTD200
Sample Info: VSTD200;VSTD200;1;10;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

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Inj Date : 06-DEC-2023 15:18
InstruID : VOA9.i
LabSampID : VSTD200

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

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11-Dec-2023
17:18
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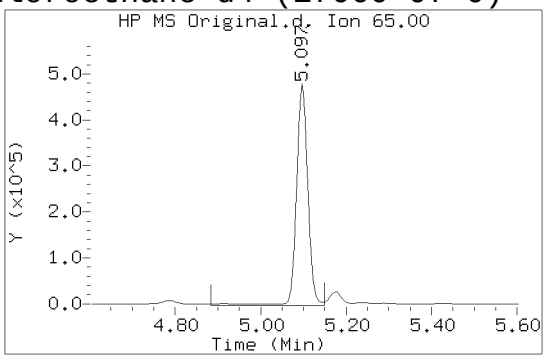

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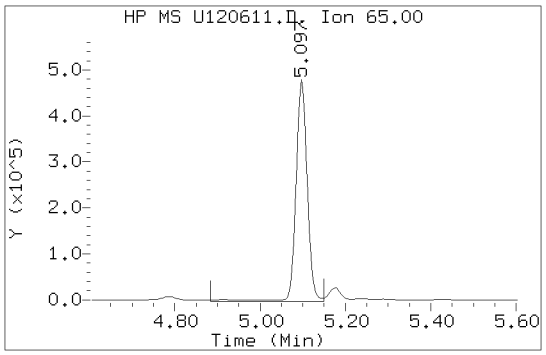

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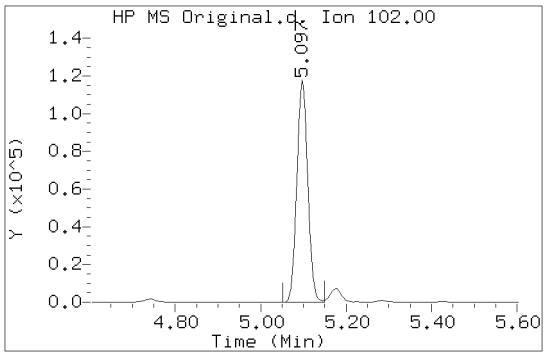

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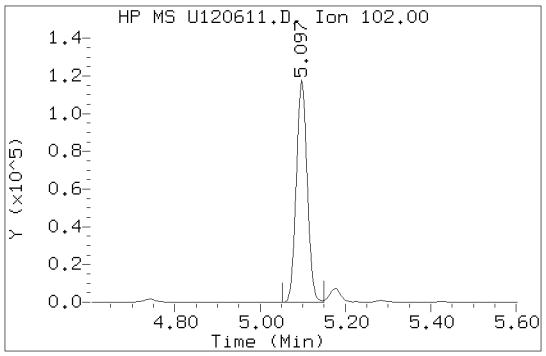

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120614.D Page 1
Report Date: 12-Dec-2023 09:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120614.D
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Inj Date : 06-DEC-2023 16:25
Operator : PC Inst ID: VOA9.i
Smp Info : CCV;CCV;2;;;ICV
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:44 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 15:18 Cal File: U120611.D
Als bottle: 15 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	4.815	(1.000)	408062	50.0000	
2	Dichlorodifluoromethane	85	1.156	1.160	(0.240)	153882	46.8387	46.83
3	Chloromethane	50	1.291	1.295	(0.268)	221088	47.2310	47.23
5	Vinyl Chloride	62	1.370	1.374	(0.285)	205467	45.9474	45.94
6	Bromomethane	94	1.614	1.606	(0.335)	130015	56.3919	56.39
7	Chloroethane	64	1.693	1.692	(0.352)	134691	44.7351	44.73
8	Trichlorofluoromethane	101	1.891	1.895	(0.393)	261297	46.0981	46.09
9	Acrolein	56	2.259	2.262	(0.469)	19859	85.3986	85.39(M)
10	Acetone	43	2.401	2.408	(0.499)	147958	106.902	106.90
11	1,1-Dichloroethene	96	2.326	2.330	(0.483)	144034	45.7643	45.76
15	Iodomethane	142	2.461	2.465	(0.512)	339458	86.0249	86.02
16	Acrylonitrile	53	3.061	3.065	(0.636)	151744	94.7995	94.79
17	Methylene Chloride	84	2.787	2.791	(0.579)	192401	48.4339	48.43
18	Methyl tert-butyl ether	73	3.076	3.080	(0.639)	526684	46.7025	46.70
19	Carbon Disulfide	76	2.513	2.517	(0.522)	906444	97.7436	97.74
20	trans-1,2-Dichloroethene	96	3.053	3.057	(0.635)	176798	46.9908	46.99
21	Vinyl Acetate	43	3.601	3.604	(0.748)	1168224	102.681	102.68
22	1,1-Dichloroethane	63	3.507	3.514	(0.729)	367877	47.9367	47.93
24	2-Butanone	43	4.257	4.260	(0.885)	188684	94.3930	94.39
26	2,2-Dichloropropane	77	4.178	4.182	(0.868)	267597	49.5991	49.59

27 cis-1,2-Dichloroethene	96	4.193	4.197 (0.871)	232174	46.0656	46.06
28 Chloroform	83	4.568	4.571 (0.949)	376137	45.0290	45.02

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120614.D Page 2
Report Date: 12-Dec-2023 09:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	29 Bromochloromethane	128	4.467	4.470	(0.928)	126029	48.3267	48.32
$	30 Dibromofluoromethane	113	4.744	4.748	(0.986)	212050	50.7925	50.79
	31 1,1,1-Trichloroethane	97	4.740	4.744	(0.985)	296257	46.6693	46.66
	32 1,1-Dichloropropene	75	4.920	4.924	(0.887)	263335	48.3103	48.31
	33 1,2-Dichloroethane	62	5.171	5.175	(0.932)	282600	44.5162	44.51
	34 Carbon Tetrachloride	117	4.909	4.913	(0.885)	252028	47.3333	47.33
$	35 1,2-Dichloroethane-d4	65	5.093	5.096	(1.058)	234260	48.9815	48.98
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	651558	50.0000	
	37 Benzene	78	5.138	5.138	(0.926)	821891	46.3381	46.33
	38 Trichloroethene	130	5.786	5.786	(1.043)	224485	45.9206	45.92
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	276726	47.6431	47.64
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.185)	5811	103.247	103.24
	42 1,2-Dichloropropane	63	6.007	6.011	(1.082)	220882	46.2549	46.25
	44 Dibromomethane	93	6.116	6.120	(1.102)	142540	46.1361	46.13
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	452788	99.1894	99.18
	46 cis-1,3-Dichloropropene	75	6.690	6.689	(1.205)	356213	47.6587	47.65
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	633070	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	781172	53.6024	53.60
	50 Toluene	91	6.978	6.982	(0.853)	868457	49.1997	49.19
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	297987	47.3890	47.38
	52 2-Hexanone	43	7.589	7.589	(0.927)	309490	96.8734	96.87
	53 1,1,2-Trichloroethane	83	7.353	7.357	(0.898)	167965	49.7473	49.74
	54 1,3-Dichloropropane	76	7.495	7.499	(0.916)	363727	46.4071	46.40
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	233779	49.6529	49.65
	56 Tetrachloroethene	164	7.454	7.458	(0.911)	182310	48.2514	48.25
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	214656	48.8018	48.80
	58 1-Chlorohexane	55	8.196	8.196	(1.477)	167790	45.9245	45.92
	59 Chlorobenzene	112	8.208	8.208	(1.003)	590294	45.9064	45.90
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	217493	48.3537	48.35
	61 Ethylbenzene	106	8.305	8.305	(1.015)	290277	48.2236	48.22
	62 m,p-Xylenes	106	8.406	8.410	(1.027)	741658	102.481	102.48
	63 o-Xylene	106	8.748	8.748	(1.069)	366609	49.2572	49.25
	64 Styrene	104	8.759	8.763	(1.070)	650099	52.4662	52.46
	66 Bromoform	173	8.916	8.916	(1.089)	153541	47.7179	47.71
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	893697	49.6494	49.64
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	277471	49.7603	49.76
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	290567	52.7272	52.72
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.172	(1.000)	342118	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	285518	43.9630	43.96
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	1029983	51.2710	51.27
	74 Bromobenzene	156	9.317	9.317	(0.916)	264090	45.9673	45.96
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	745042	52.1809	52.18
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	648634	47.9714	47.97
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	751896	49.0328	49.03
	78 tert-Butylbenzene	119	9.835	9.838	(0.967)	619611	48.3142	48.31
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.972)	755000	52.7616	52.76
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	831153	50.2598	50.25
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	758796	53.0200	53.01
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	465795	45.7526	45.75
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	487796	45.2253	45.22
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	643723	53.5978	53.59
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	462064	45.1133	45.11

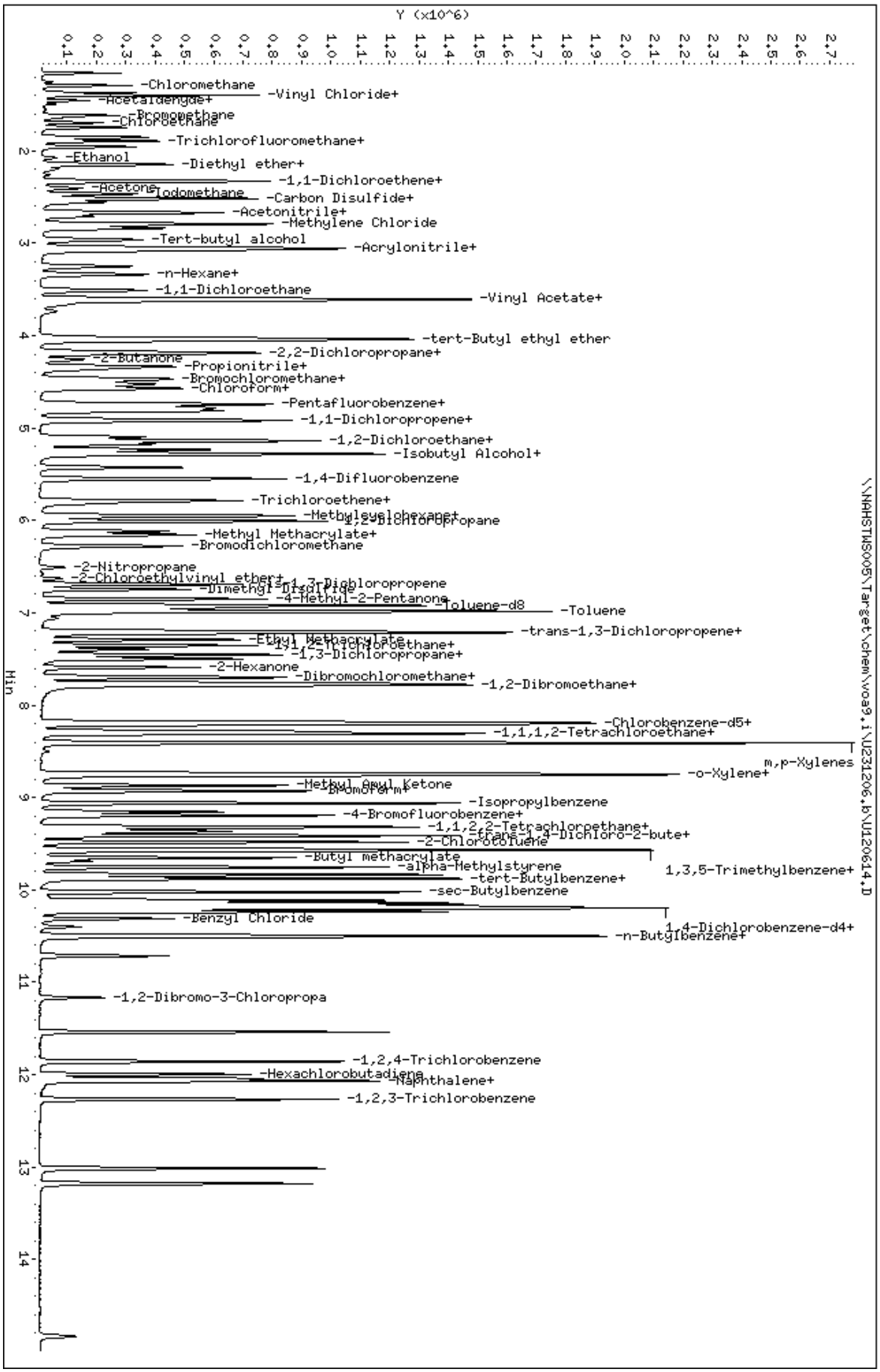
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	47469	47.5374	47.53
90	1,2,4-Trichlorobenzene	180	11.859	11.855 (1.166)	327888	51.8913	51.89

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120614.D Page 3
Report Date: 12-Dec-2023 09:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.180)	137978	54.4747	54.47
	92 Naphthalene	128	12.065	12.065	(1.187)	809405	53.1140	53.11
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	314925	49.4234	49.42
M	94 1,2-Dichloroethylene (total)	96				408972	92.9221	92.92
M	95 Xylenes (total)	106				1108267	147.001	147.00
	131 Methyl Acrylate	55	4.365	4.365	(0.907)	260350	48.5730	48.57
	135 1,4-Dioxane	88	6.161	6.165	(1.280)	56072	866.079	866.07
	141 Cyclohexane	56	4.781	4.785	(0.994)	278993	47.4493	47.44
	138 Freon TF	101	2.330	2.334	(0.484)	149791	49.8225	49.82
	140 1,3-Butadiene	54	1.396	1.400	(0.290)	203286	49.6019	49.60
	147 Methylcyclohexane	55	5.944	5.943	(1.071)	488868	50.6216	50.62
	146 Methyl Acetate	43	2.708	2.712	(0.563)	186103	45.8243	45.82
	148 Tert-Butyl alcohol	59	2.960	2.971	(0.615)	390492	854.807	854.80
	149 Isopropyl Alcohol	45	2.555	2.566	(0.531)	249113	964.336	964.33

QC Flag Legend

M - Compound response manually integrated.


Y (x10^6)
Min
-Chloromethane
-Vinyl Chloride+
-Acetaldehyde+
-Bromomethane
-Chloroethane
-Trichlorofluoromethane+
-Ethanol
-Diethyl ether+
-1,1-Dichloroethene+
-Acetone
-Iodomethane
-Carbon Disulfide+
-Acetonitrile+
-Methylene Chloride
-Tert-butyl alcohol
-Acrylonitrile+
-n-Hexane+
-1,1-Dichloroethane
-Vinyl Acetate+
-tert-Butyl ethyl ether
-2,2-Dichloropropane+
-2-Butanone
-Propionitrile+
-Bromochloromethane+
-Chloroform+
-Pentafluorobenzene+
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane+
1,2-Dichloropropane
-Methyl Methacrylate+
-Bromodichloromethane
-2-Nitropropane
-2-Chloroethylvinyl ether+
cis-1,3-Dichloropropene
-Dimethyl Disulfide
-4-Methyl-2-Pentanone
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-Ethyl Methacrylate
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
-2-Hexanone
-Dibromochloromethane+
-1,2-Dibromoethane+
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
m,p-Xylenes
-o-Xylene+
-Methyl Amyl Ketone
-Bromoform+
-Isopropylbenzene
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
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-2-Chlorotoluene
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1,4-Dichlorobenzene-d4+
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-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene+
-1,2,3-Trichlorobenzene
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Client ID: ICV
Sample Info: CCV;CCV;2;;;ICV
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9.i
Operator: PC
Column diameter: 0.18
Page 1

Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120614.D
Inj Date : 06-DEC-2023 16:25
InstruID : VOA9.i
LabSampID : ICV

Acrolein (107-02-8)

Reason Code:

BEFORE

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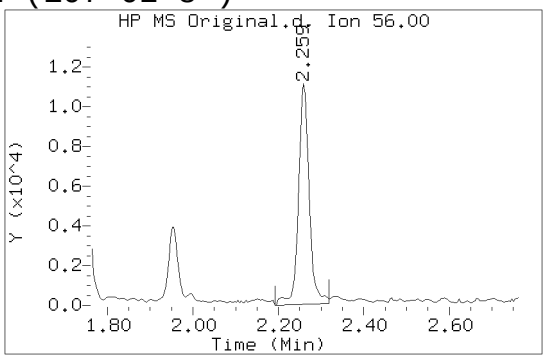
06-Dec-2023
23:36



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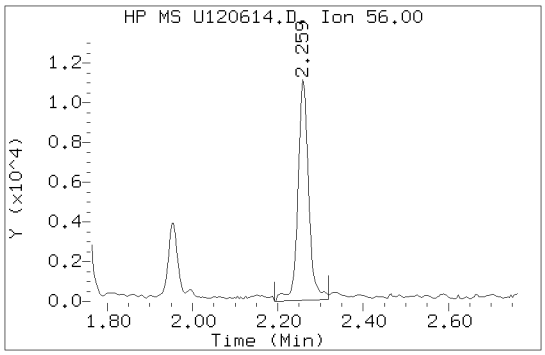

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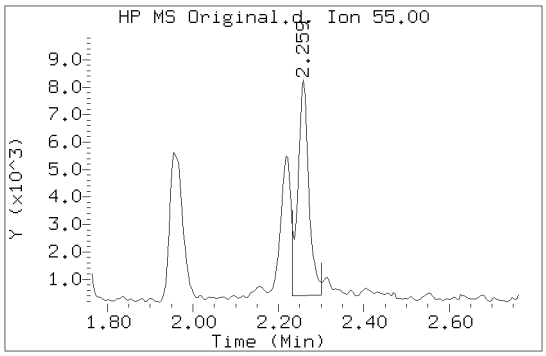

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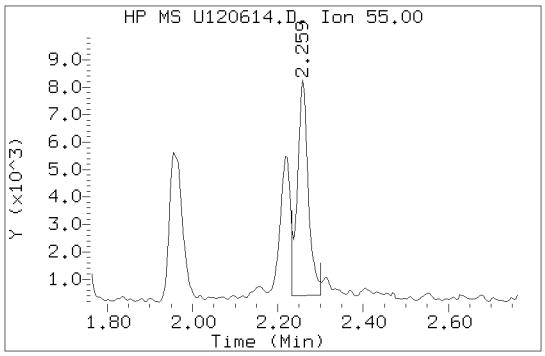
09:51



right solutions.
right partner.

RawData

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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\voa9.i\U240112.b\U011201.D Page 1
Report Date: 12-Jan-2024 11:13

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011201.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 12-JAN-2024 10:49
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\U240112.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	131968			0.00- 100.00	100.00
9.194	9.180	(0.000)	50	20520			15.00- 40.00	15.55
9.194	9.180	(0.000)	75	61560			30.00- 60.00	46.65
9.194	9.180	(0.000)	96	8954			5.00- 9.00	6.78
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	131200			50.00- 0.00	99.42
9.194	9.180	(0.000)	175	11236			5.00- 9.00	8.56
9.194	9.180	(0.000)	176	125312			95.00- 101.00	95.51
9.194	9.180	(0.000)	177	7681			5.00- 9.00	6.13

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.55
75	30.00 - 60.00% of mass 95	46.65
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	99.42
175	5.00 - 9.00% of mass 174	8.51 (8.56)
176	95.00 - 101.00% of mass 174	94.96 (95.51)
177	5.00 - 9.00% of mass 176	5.82 (6.13)

Data File: U011201.D
Spectrum: Scan 2295 (9.19)
Location of Maximum: 95.05
Number of points: 102

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35.20	72	63.00	4100	94.10	15760	141.90	140
36.10	1013	64.00	468	95.10	131968	142.90	1576
37.10	5333	65.00	628	96.10	8954	143.90	210
38.10	4684	68.00	11425	97.10	277	144.90	297
39.00	2275	69.00	12784	103.90	405	145.90	224
40.00	356	70.00	863	104.90	202	146.80	133
40.90	126	71.30	53	105.90	413	148.00	382
42.20	70	72.00	705	106.90	144	148.80	102
42.50	71	73.10	4980	109.90	71	150.00	168
43.10	95	74.10	21296	110.80	100	152.80	100
44.00	780	75.10	61560	111.90	75	154.20	124
45.00	1125	76.00	5312	112.90	170	154.90	354
47.10	1652	77.00	918	114.90	148	155.90	113
48.10	656	78.00	447	116.00	324	156.90	314
49.10	4752	78.90	2890	116.90	871	158.90	189
50.10	20520	80.00	1028	118.00	412	160.90	158
51.10	6405	81.00	3323	118.90	561	169.90	64
52.00	384	82.00	762	121.90	56	171.20	236
52.90	172	83.00	71	127.90	507	172.00	1254
54.90	262	86.20	369	129.00	251	174.00	131200
56.00	1798	87.00	5425	130.00	569	175.10	11236
57.10	2954	88.00	5103	131.00	118	176.00	125312
58.00	171	90.20	56	134.80	240	177.00	7681
60.10	1206	91.00	459	136.00	51	178.00	250
61.10	5937	92.00	3306	136.90	262		
62.00	5661	93.10	5472	141.00	1337		

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011201.d Page 1

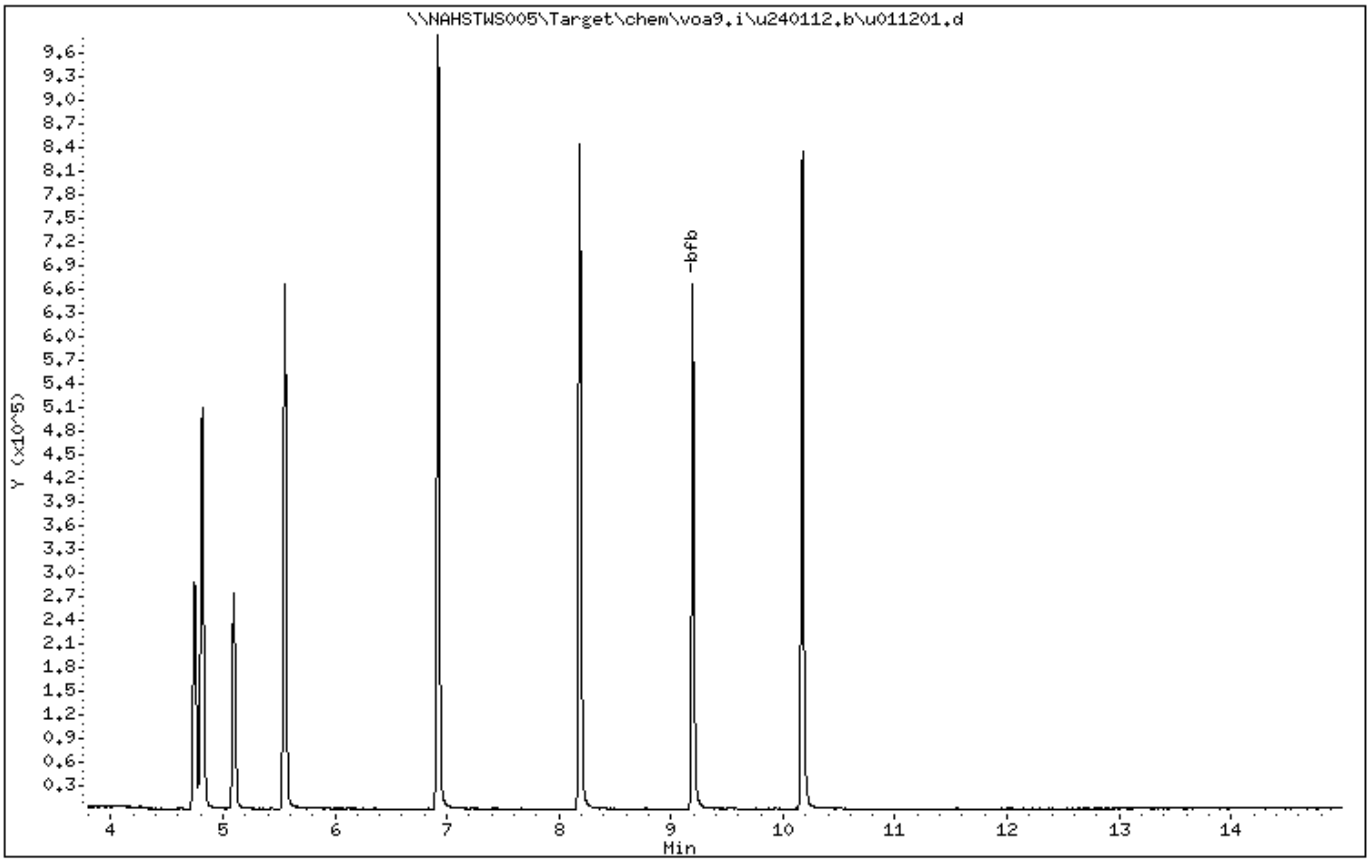
Date : 12-JAN-2024 10:49

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



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Inj Date : 12-JAN-2024 10:49
InstruID : VOA9.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011203.D Page 1
Report Date: 17-Jan-2024 14:06

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011203.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 12-JAN-2024 11:34
Operator : PC Inst ID: VOA9.i
Smp Info : CCV;CCV;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.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)	306195	50.0000	
2	Dichlorodifluoromethane	85	1.164	1.164	(0.242)	115422	50.0000	46.82
3	Chloromethane	50	1.299	1.299	(0.270)	147362	50.0000	41.95
5	Vinyl Chloride	62	1.378	1.378	(0.286)	156009	50.0000	46.49
6	Bromomethane	94	1.621	1.621	(0.337)	96977	50.0000	56.07
7	Chloroethane	64	1.700	1.700	(0.353)	108852	50.0000	48.18
8	Trichlorofluoromethane	101	1.895	1.895	(0.394)	211656	50.0000	49.76
9	Acrolein	56	2.266	2.266	(0.471)	14291	100.000	81.89
10	Acetone	43	2.409	2.409	(0.500)	98139	100.000	93.79
11	1,1-Dichloroethene	96	2.334	2.334	(0.485)	124035	50.0000	52.52
15	Iodomethane	142	2.469	2.469	(0.513)	329040	100.000	108.95
16	Acrylonitrile	53	3.065	3.065	(0.636)	128197	100.000	106.73
17	Methylene Chloride	84	2.795	2.795	(0.580)	163696	50.0000	54.95
18	Methyl tert-butyl ether	73	3.080	3.080	(0.640)	458247	50.0000	54.15
19	Carbon Disulfide	76	2.521	2.521	(0.524)	754309	100.000	108.39
20	trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	150013	50.0000	53.13
21	Vinyl Acetate	43	3.604	3.604	(0.749)	866373	100.000	101.48
22	1,1-Dichloroethane	63	3.514	3.514	(0.730)	271639	50.0000	47.17
24	2-Butanone	43	4.260	4.260	(0.885)	133147	100.000	88.76
26	2,2-Dichloropropane	77	4.182	4.182	(0.868)	206537	50.0000	51.01

27 cis-1,2-Dichloroethene	96	4.197	4.197 (0.872)	180423	50.0000	47.70
28 Chloroform	83	4.572	4.572 (0.949)	297852	50.0000	47.51

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011203.D Page 2
Report Date: 17-Jan-2024 14:06

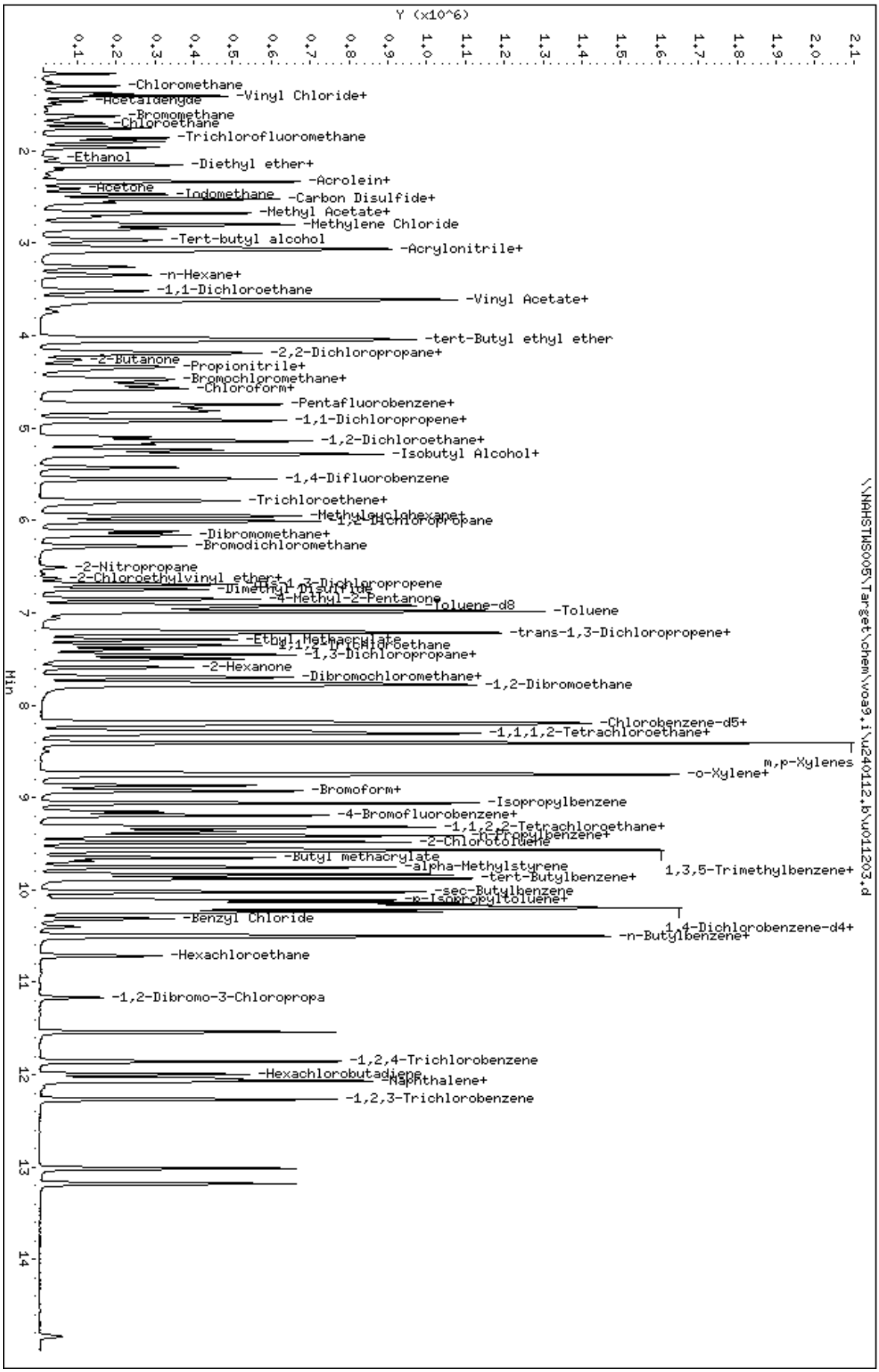
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	100500	50.0000	51.35
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	170947	50.0000	54.64
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	228815	50.0000	48.03
	32 1,1-Dichloropropene	75	4.920	4.920	(0.886)	187074	50.0000	46.45
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	219736	50.0000	46.84
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	190942	50.0000	48.53
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	183406	50.0000	50.98
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	481399	50.0000	
	37 Benzene	78	5.138	5.138	(0.925)	606443	50.0000	46.27
	38 Trichloroethene	130	5.786	5.786	(1.042)	174841	50.0000	48.40
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	218603	50.0000	50.93
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	5638	100.000	133.20
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	163545	50.0000	46.35
	44 Dibromomethane	93	6.120	6.120	(1.102)	110469	50.0000	48.39
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	325974	100.000	92.78
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	265519	50.0000	48.06
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	487086	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	577597	50.0000	51.51
	50 Toluene	91	6.978	6.978	(0.853)	658738	50.0000	48.50
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	225411	50.0000	48.47
	52 2-Hexanone	43	7.589	7.589	(0.927)	218171	100.000	88.75
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	133652	50.0000	51.49
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	282267	50.0000	46.80
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	188402	50.0000	52.00
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	146297	50.0000	50.32
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	170218	50.0000	50.29
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	123566	50.0000	45.77
	59 Chlorobenzene	112	8.208	8.208	(1.003)	469196	50.0000	47.42
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	174300	50.0000	50.36
	61 Ethylbenzene	106	8.305	8.305	(1.015)	221643	50.0000	47.85
	62 m,p-Xylenes	106	8.406	8.406	(1.027)	567932	100.000	101.99
	63 o-Xylene	106	8.748	8.748	(1.069)	288685	50.0000	50.41
	64 Styrene	104	8.759	8.759	(1.070)	502273	50.0000	52.68
	66 Bromoform	173	8.916	8.916	(1.089)	124101	50.0000	50.07
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	690698	50.0000	49.87
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	215268	50.0000	48.70
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	217563	50.0000	51.27
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	271110	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	227163	50.0000	44.13
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	762190	50.0000	47.87
	74 Bromobenzene	156	9.317	9.317	(0.916)	212690	50.0000	46.71
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	567163	50.0000	50.12
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	489554	50.0000	45.68
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	572820	50.0000	47.13
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	493521	50.0000	48.56
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	581144	50.0000	51.24
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	645809	50.0000	49.28
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	596113	50.0000	52.56
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	374413	50.0000	46.40
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	387616	50.0000	45.34
	87 n-Butylbenzene	91	10.491	10.491	(1.031)	485539	50.0000	51.01
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	375257	50.0000	46.23

89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	37131	50.0000	46.95
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.165)	252758	50.0000	50.47

	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)	103638	50.0000	51.63
92	Naphthalene	128	12.065	12.065	(1.186)	623248	50.0000	51.61
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	242373	50.0000	47.99
M 94	1,2-Dichloroethylene (total)	96				330436	100.000	(a)
135	1,4-Dioxane	88	6.165	6.165	(1.280)	45316	1000.00	932.80
141	Cyclohexane	56	4.785	4.785	(0.994)	184008	50.0000	41.70
138	Freon TF	101	2.337	2.337	(0.485)	130920	50.0000	57.76
140	1,3-Butadiene	54	1.404	1.404	(0.292)	135368	50.0000	44.01
147	Methylcyclohexane	55	5.944	5.944	(1.070)	357012	50.0000	50.03
146	Methyl Acetate	43	2.712	2.712	(0.563)	151841	50.0000	49.82
148	Tert-Butyl alcohol	59	2.963	2.963	(0.615)	362017	1000.00	1056.11
149	Isopropyl Alcohol	45	2.558	2.558	(0.531)	220375	1000.00	1138.24
72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	43875	50.0000	50.05
12	Isobutyl Alcohol	43	5.284	5.284	(1.097)	424007	1000.00	923.31
13	Acetonitrile	39	2.671	2.671	(0.555)	176080	500.000	534.31
14	Allyl Chloride	41	2.671	2.671	(0.555)	402685	50.0000	53.48
25	Methacrylonitrile	41	4.493	4.493	(0.933)	101816	50.0000	46.57(M)
40	Methyl Methacrylate	41	6.153	6.153	(1.278)	140017	50.0000	46.32
4	Propionitrile	54	4.335	4.335	(0.900)	238561	500.000	469.90
136	n-Hexane	57	3.342	3.342	(0.694)	139650	50.0000	49.06
194	Acetaldehyde	44	1.460	1.460	(0.303)	72673	200.000	183.33(M)
131	Methyl Acrylate	55	4.369	4.369	(0.907)	198111	50.0000	49.25
23	Chloroprene	53	2.157	2.157	(0.448)	48346	50.0000	46.28(M)
49	Ethyl Methacrylate	69	7.289	7.289	(1.312)	240634	50.0000	50.92
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	543438	50.0000	48.57
167	Ethanol	45	2.079	2.079	(0.432)	41548	1000.00	1082.67
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	654411	50.0000	45.28
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	258108	50.0000	47.06
142	Tetrahydrofuran	42	4.542	4.542	(0.943)	58398	100.000	89.85
156	Diisopropyl ether	45	3.619	3.619	(0.752)	486776	50.0000	45.63
162	Butyl acrylate	55	8.733	8.733	(1.067)	279024	50.0000	40.02
203	2-Ethylhexyl Acrylate	55	12.043	12.043	(1.184)	164181	50.0000	41.45
130	Ethyl Acetate	43	4.339	4.339	(0.901)	173860	50.0000	46.74
189	n-Butyl acetate	43	7.705	7.705	(0.941)	256293	50.0000	47.23
182	Epichlorohydrin	57	6.630	6.630	(1.194)	34834	200.000	186.26
132	n-Butanol	56	5.820	5.820	(1.209)	92408	1000.00	928.58
133	Ethyl Acrylate	55	5.944	5.944	(1.234)	357012	50.0000	48.50
163	Butyl methacrylate	41	9.647	9.647	(0.948)	162567	50.0000	43.93(M)
187	n-Amyl acetate	43	8.931	8.931	(1.091)	254979	50.0000	41.30
188	Isopropyl acetate	43	5.284	5.284	(0.951)	424400	50.0000	47.78

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.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Min
1 2 3 4 5 6 7 8 9 10 11 12 13 14
-Chloromethane
-Vinyl Chloride+
-Acetaldehyde
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Ethanol
-Diethyl ether+
-Acrolein+
-Acetone
-Iodomethane
-Carbon Disulfide+
-Methyl Acetate+
-Methylene Chloride
-Tert-butyl alcohol
-Acrylonitrile+
-n-Hexane+
-1,1-Dichloroethane
-Vinyl Acetate+
-tert-Butyl ethyl ether
-2,2-Dichloropropane+
-2-Butanone
-Propionitrile+
-Bromochloromethane+
-Chloroform+
-Pentafluorobenzene+
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane+
-1,2-Dichloropropane
-Dibromomethane+
-Bromodichloromethane
-2-Nitropropane
-2-Chloroethylvinyl ether+
-cis-1,3-Dichloropropene
-Dimethyl Disulfide
-4-Methyl-2-Pentanone
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
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-sec-Butylbenzene
-p-Isopropyltoluene+
-Benzyl Chloride
1,4-Dichlorobenzene-d4+
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-Hexachloroethane
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
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-Naphthalene+
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Date : 12-JAN-2024 11:34
Client ID: CCV
Sample Info: CCV;CCV;2;;;
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9.i
Operator: PC
Column diameter: 0.18
Page 1

Data File : \\nahstws005\target\chem\voa9.i\u240112.b\u011203.d
Inj Date : 12-JAN-2024 11:34
InstruID : VOA9.i
LabSampID : CCV

Methacrylonitrile (126-98-7)

Reason Code:

BEFORE

MASS
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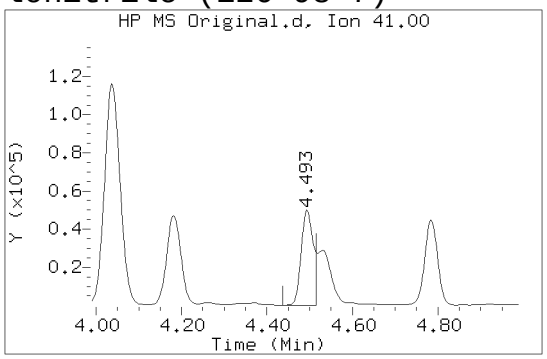
HEIGHT
49987
17-Jan-2024
14:06
linh
pham



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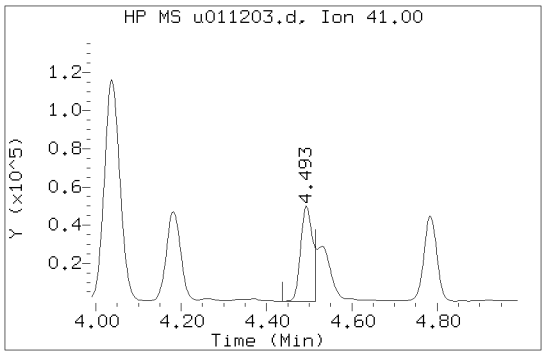

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17-Jan-2024
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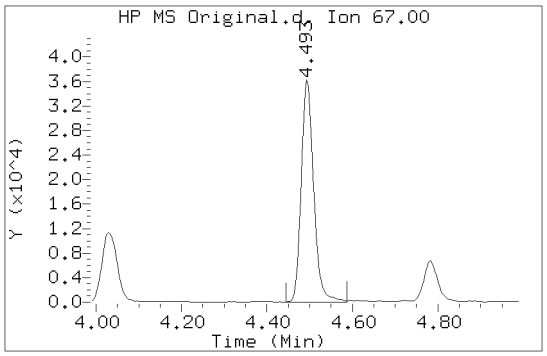

AFTER

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36256
17-Jan-2024
14:06
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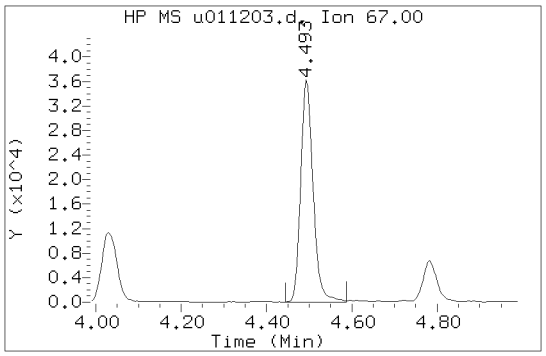

BEFORE

MASS
39
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HEIGHT
25339
17-Jan-2024
14:06
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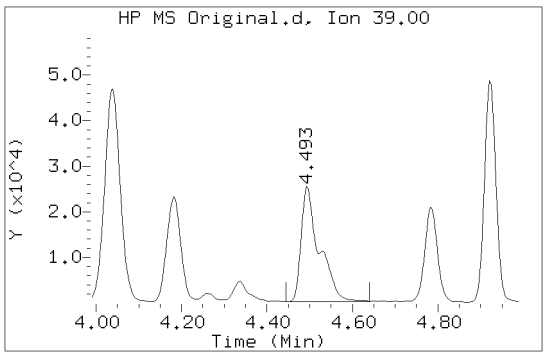

AFTER

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17-Jan-2024
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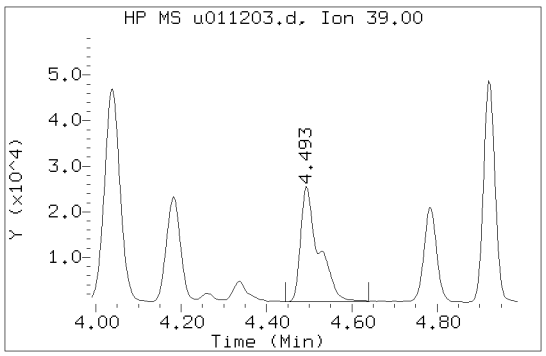

Chloroprene (126-99-8)

Reason Code:

BEFORE

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14:06
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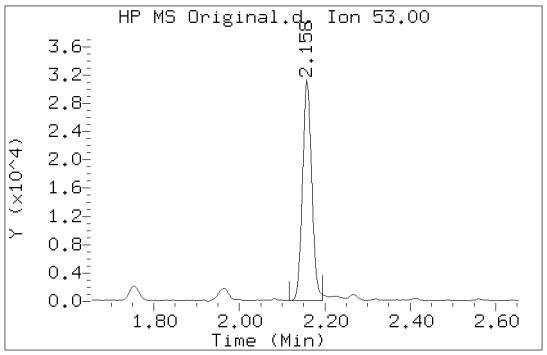

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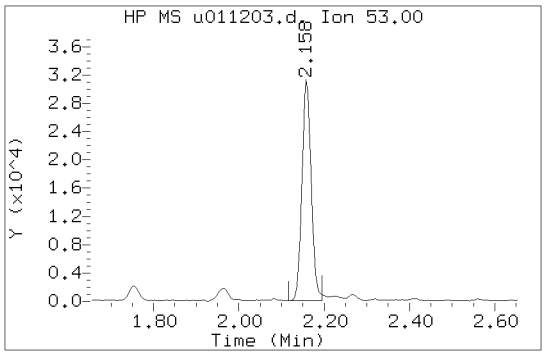

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Inj Date : 12-JAN-2024 11:34
InstruID : VOA9.i
LabSampID : CCV

Chloroprene (126-99-8)

Reason Code:

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14:06
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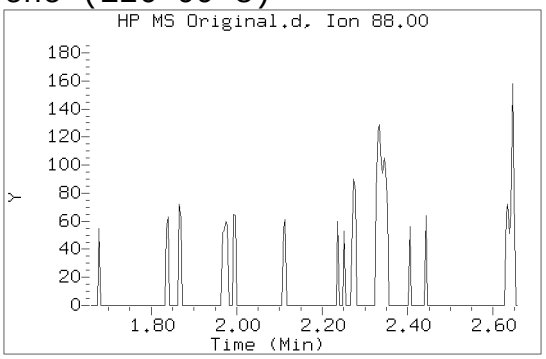

AFTER

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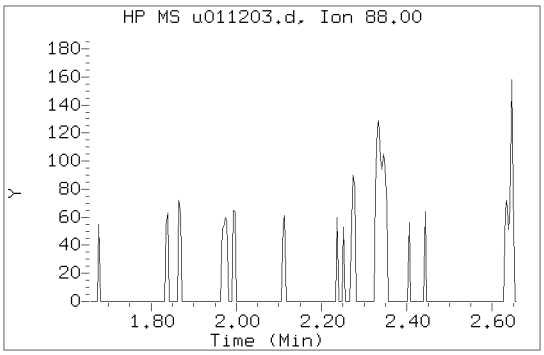

Butyl methacrylate (97-88-1)

Reason Code:

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14:06
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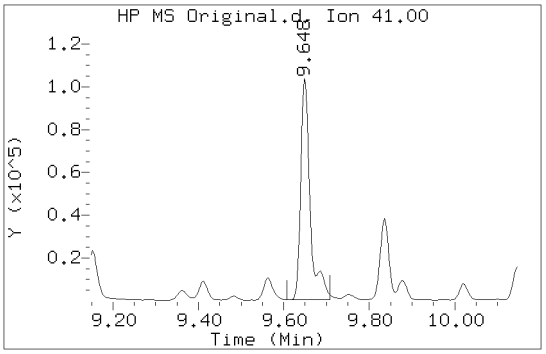

AFTER

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17-Jan-2024
14:06
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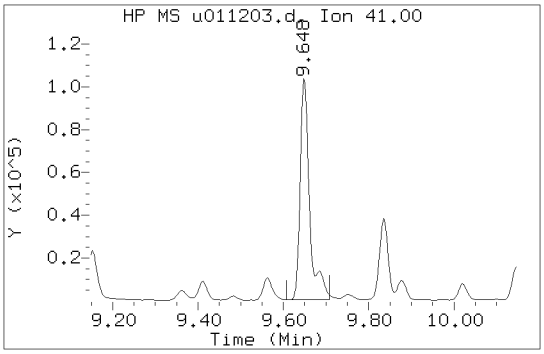

BEFORE

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AREA
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HEIGHT
142596
17-Jan-2024
14:06
linh
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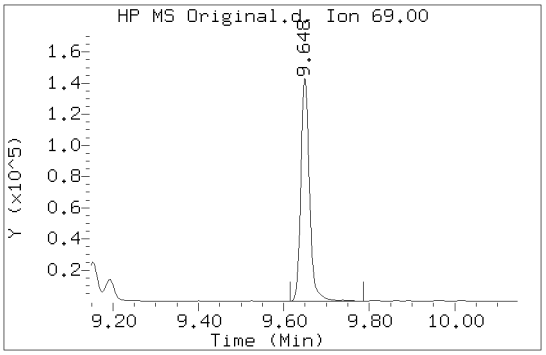

AFTER

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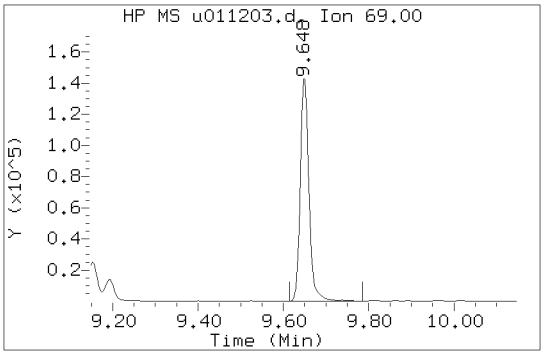

BEFORE

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17-Jan-2024
14:06
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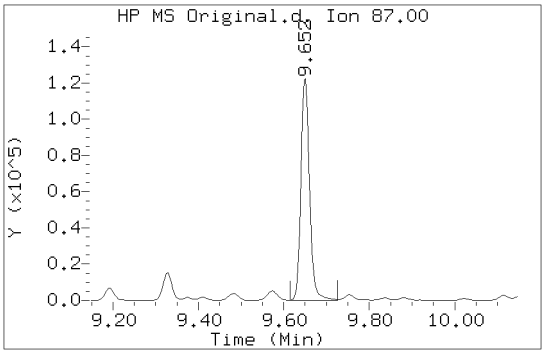

AFTER

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17-Jan-2024
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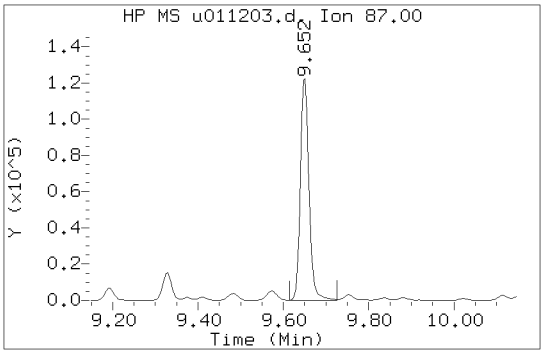

Data File : \\nahstws005\target\chem\voa9.i\u240112.b\u011203.d
Inj Date : 12-JAN-2024 11:34
InstruID : VOA9.i
LabSampID : CCV

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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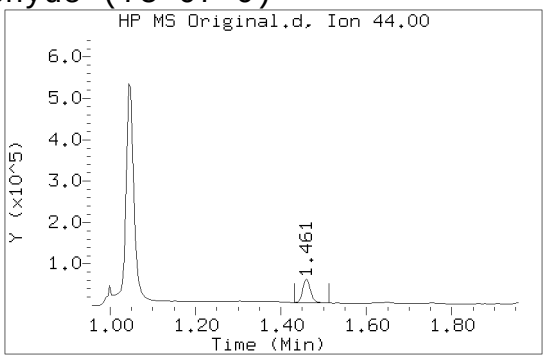
44
AREA
72673
HEIGHT
57784
17-Jan-2024
14:06
linh
pham



AFTER

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17-Jan-2024
14:06
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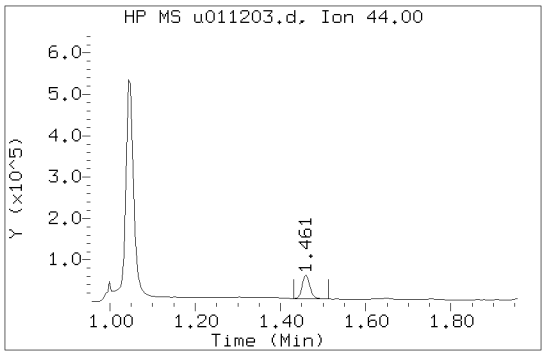

BEFORE

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HEIGHT
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17-Jan-2024
14:06
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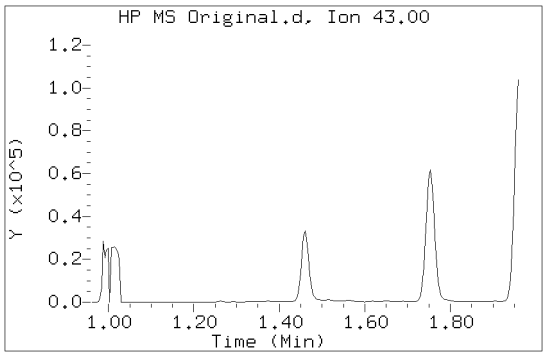
pham



AFTER

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14:06
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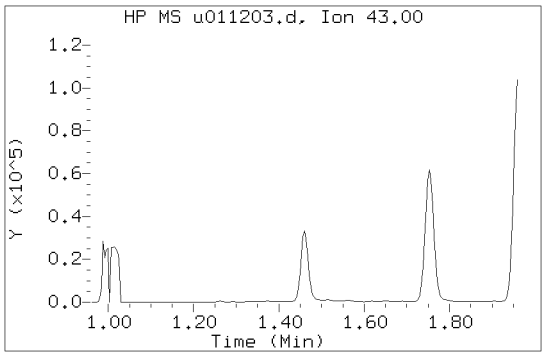

BEFORE

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HEIGHT
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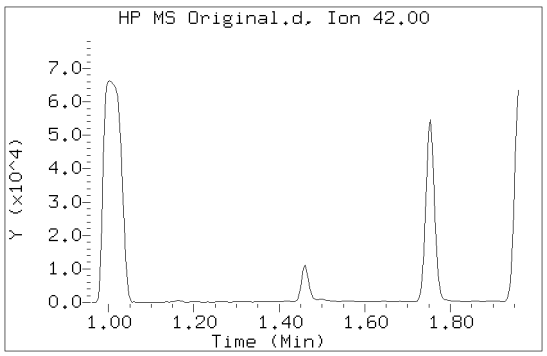
17-Jan-2024
14:06
linh
pham



AFTER

MASS
42
AREA
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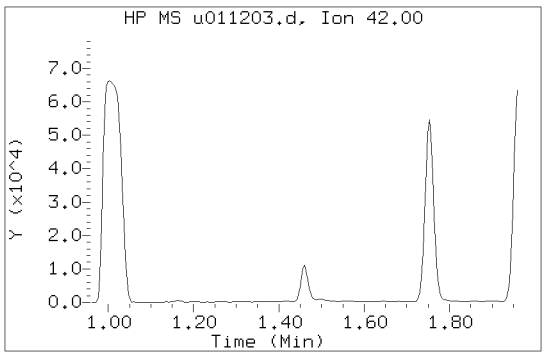
HEIGHT
0
17-Jan-2024
14:06
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011204.D Page 1
Report Date: 17-Jan-2024 14:06

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011204.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 12-JAN-2024 11:56
Operator : PC Inst ID: VOA9.i
Smp Info : CCB;CCB;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

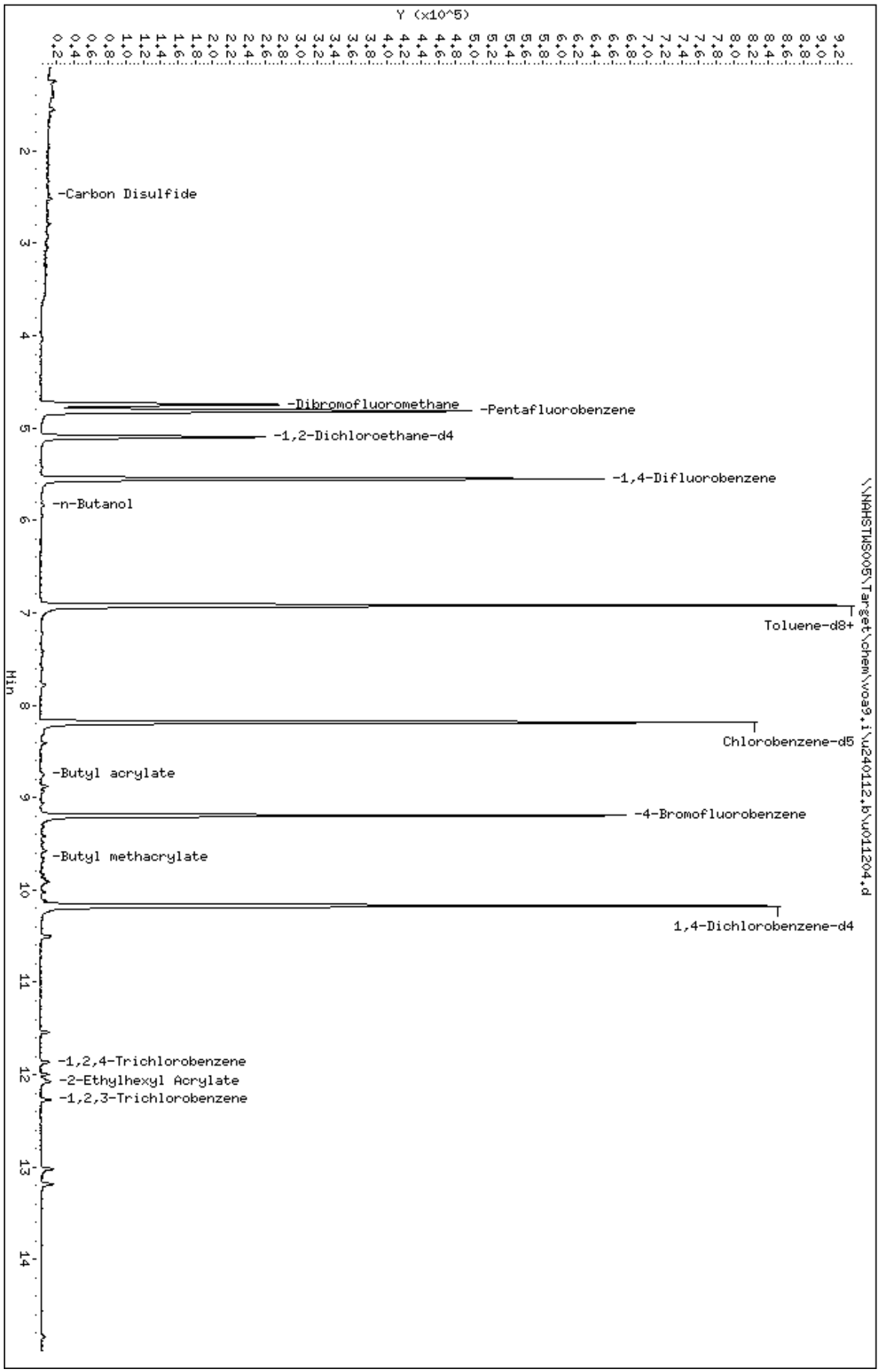
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	372673	50.0000	
19 Carbon Disulfide	76	2.517	2.521	(0.523)	7895	0.93218	0.93(a)
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.985)	163130	42.6231	42.62
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	171542	39.6864	39.68
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	518261	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	469230	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	573331	53.0773	53.07
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	201277	49.1927	49.19
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	240159	50.0000	
90 1,2,4-Trichlorobenzene	180	11.863	11.855	(1.166)	4240	0.95590	0.95(a)
93 1,2,3-Trichlorobenzene	180	12.275	12.268	(1.207)	4605	1.02951	1.02(a)
162 Butyl acrylate	55	8.744	8.733	(1.068)	2011	3.53259	3.53(a)
203 2-Ethylhexyl Acrylate	55	12.046	12.043	(1.184)	2796	3.28508	3.28(a)
132 n-Butanol	56	5.835	5.820	(1.212)	2301	18.9976	18.99(a)
163 Butyl methacrylate	41	9.655	9.647	(0.949)	1725	3.19956	3.19(a)

QC Flag Legend

a - Target compound detected but, quantitated amount

Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTMS005\Target\chem\voa9.i\u240112.b\u011204.d
Date : 12-JAN-2024 11:56
Client ID: CCB
Sample Info: CCB;CCB;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011204.d Page 2

Date : 12-JAN-2024 11:56

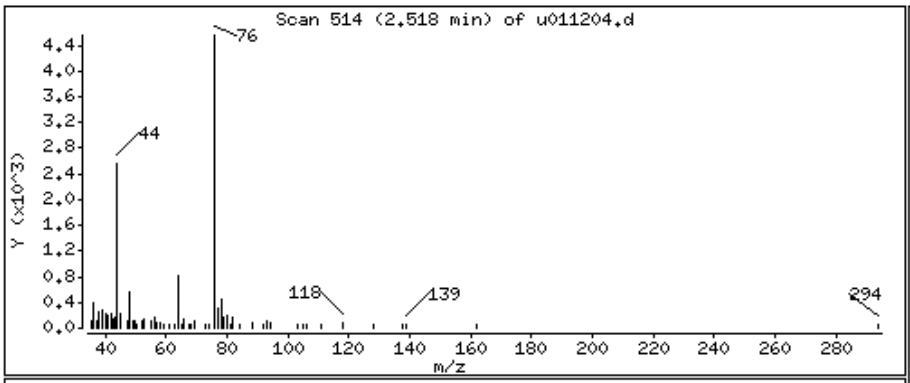
Client ID: CCB Instrument: VOA9.i

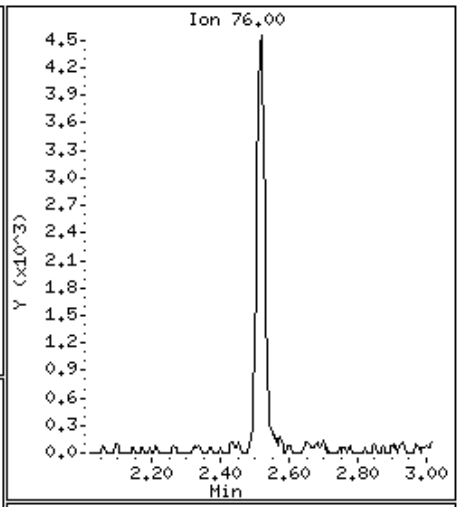
Sample Info: CCB;CCB;;;

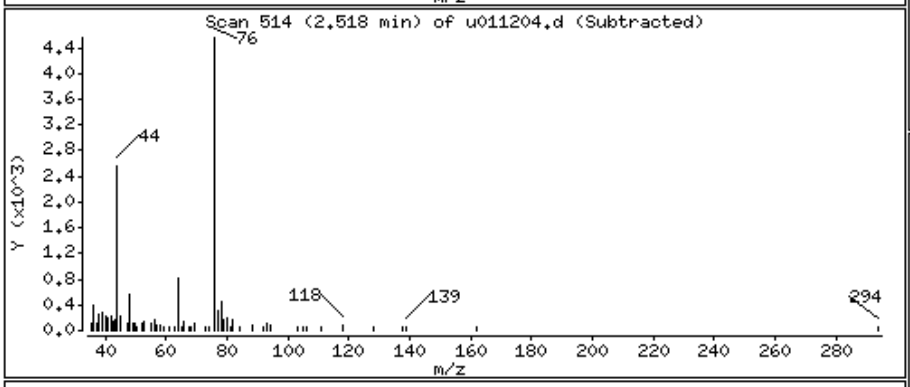
Purge Volume: 5.0 Operator: PC

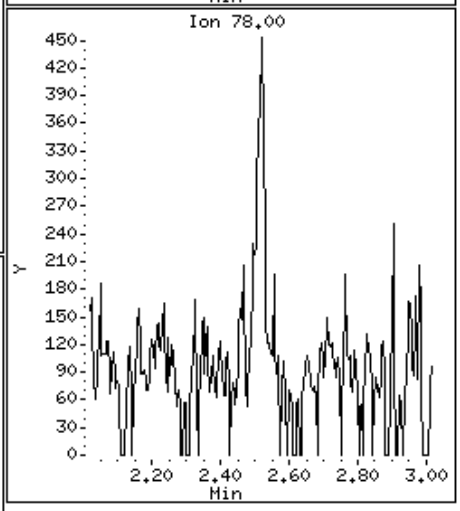
Column phase: DB624 Column diameter: 0.18

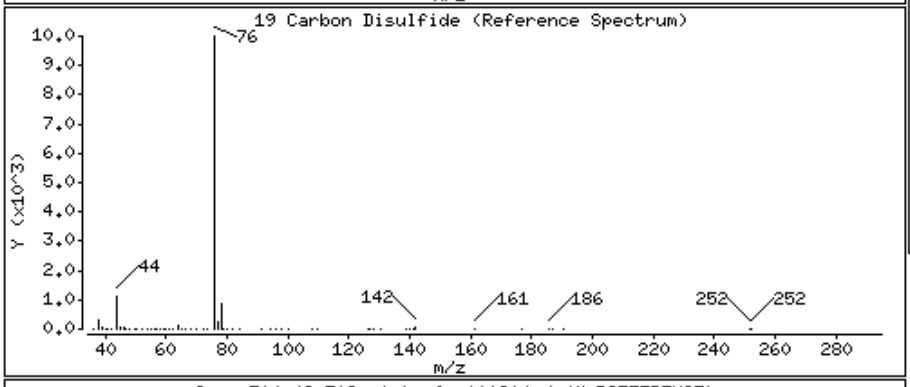
19 Carbon Disulfide Concentration: 0.93 ug/l

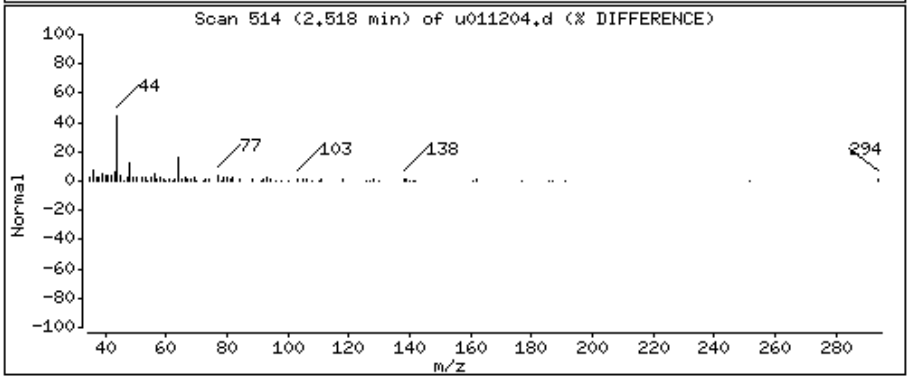












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011204.d Page 3

Date : 12-JAN-2024 11:56

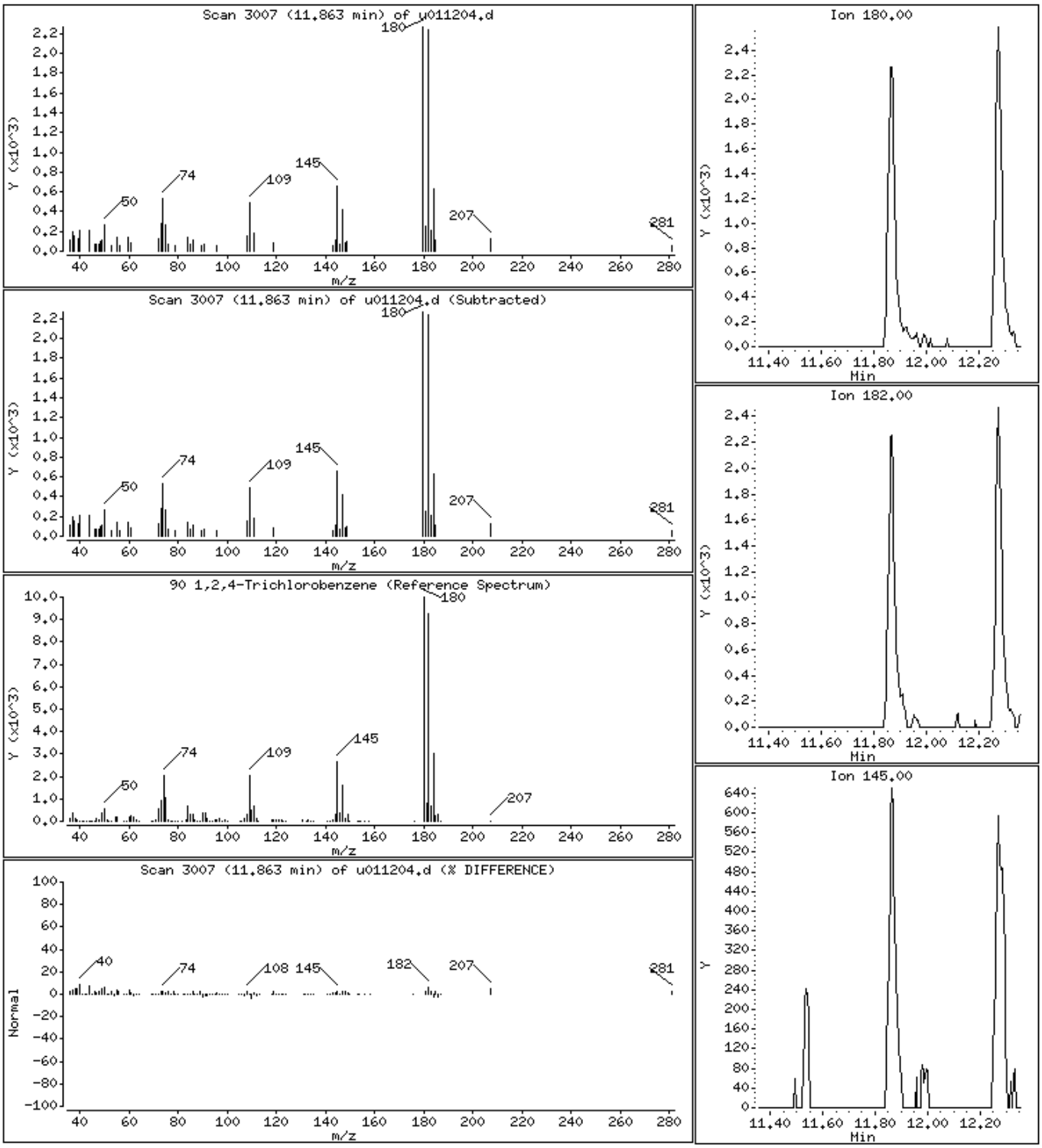
Client ID: CCB Instrument: VOA9.i

Sample Info: CCB;CCB;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

90 1,2,4-Trichlorobenzene Concentration: 0.95 ug/l



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011204.d Page 4

Date : 12-JAN-2024 11:56

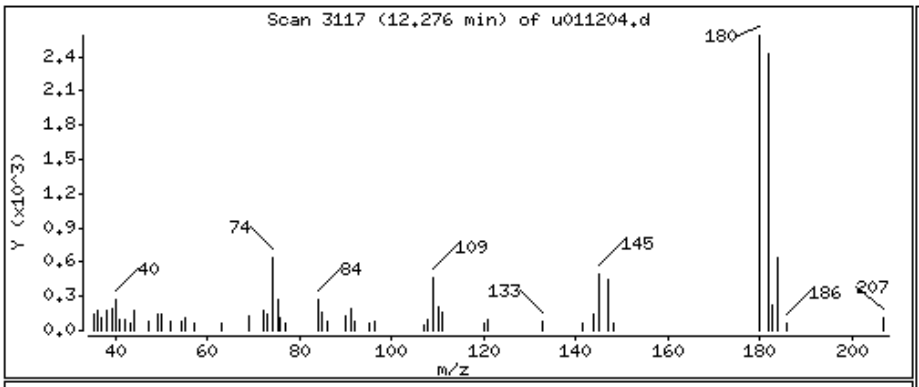
Client ID: CCB Instrument: VOA9.i

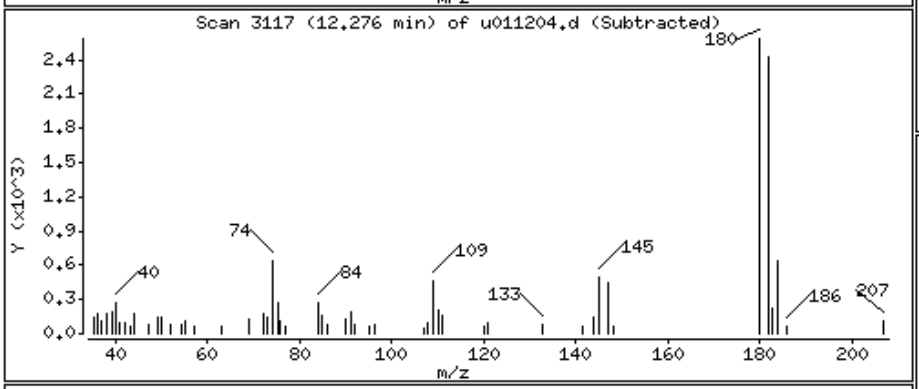
Sample Info: CCB;CCB;;;

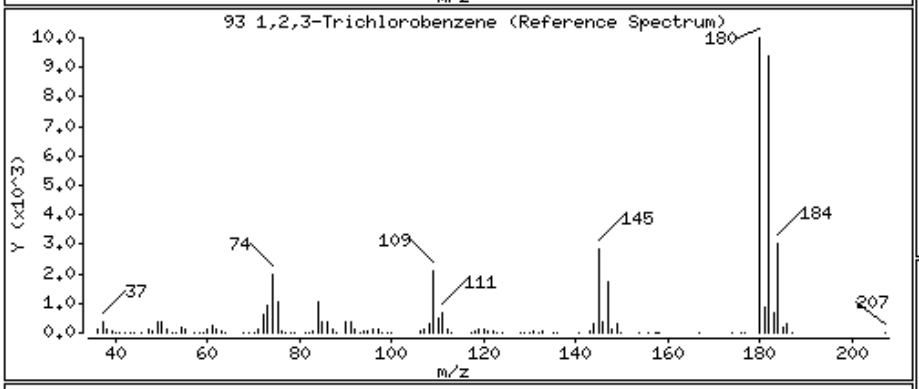
Purge Volume: 5.0 Operator: PC

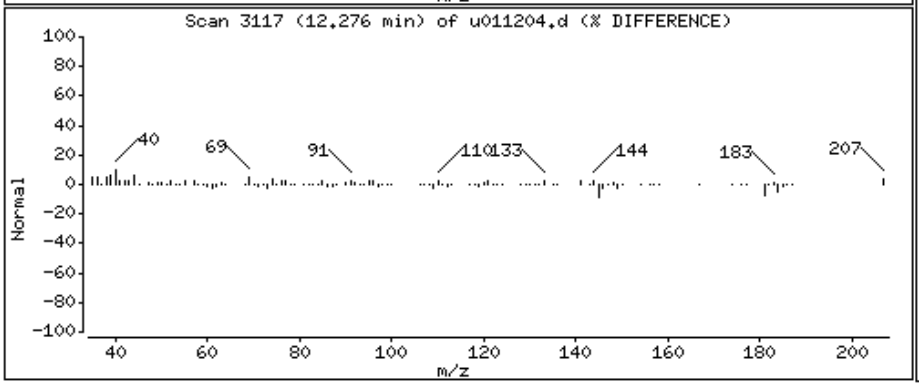
Column phase: DB624 Column diameter: 0.18

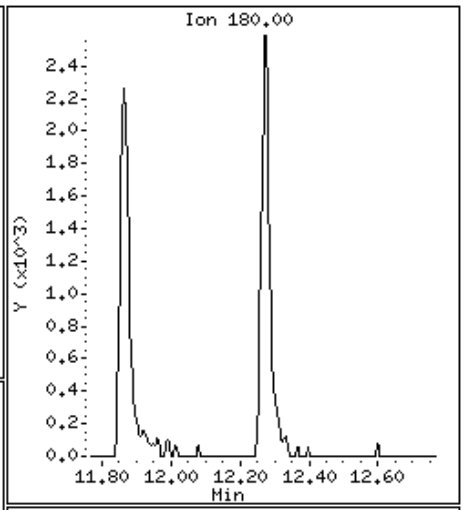
93 1,2,3-Trichlorobenzene Concentration: 1.02 ug/l

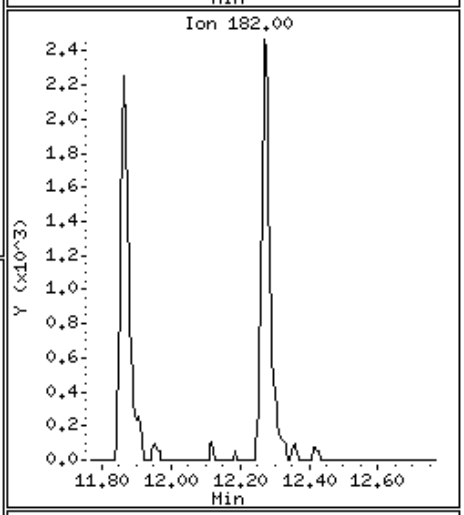


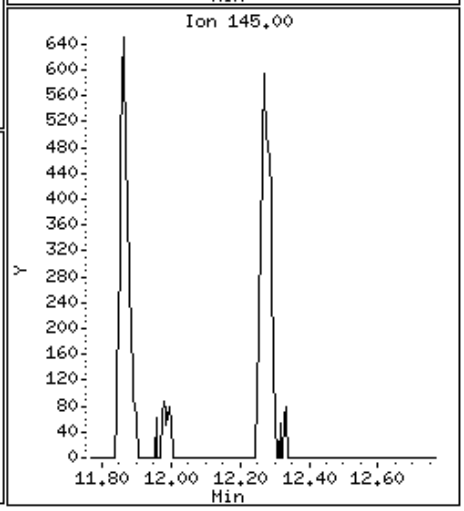












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011204.d Page 5

Date : 12-JAN-2024 11:56

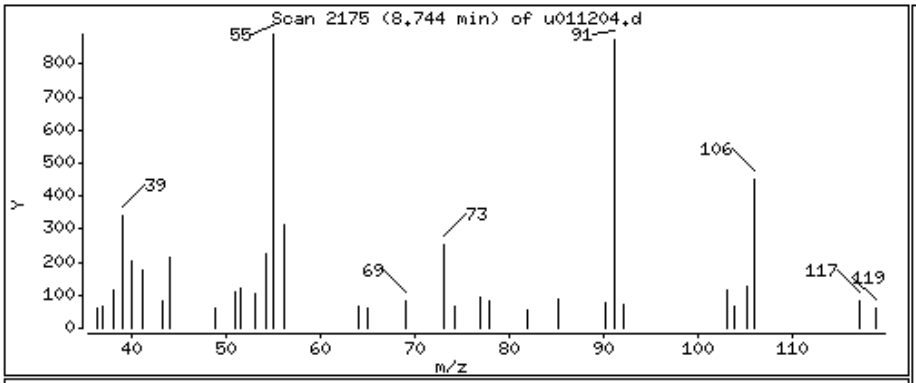
Client ID: CCB Instrument: VOA9.i

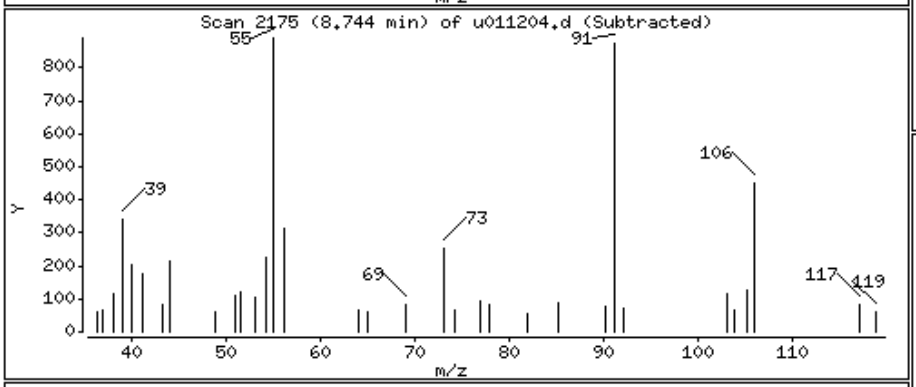
Sample Info: CCB;CCB;;;

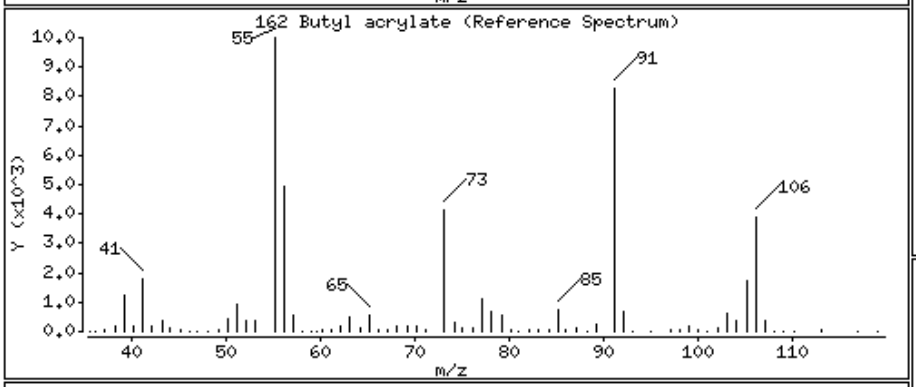
Purge Volume: 5.0 Operator: PC

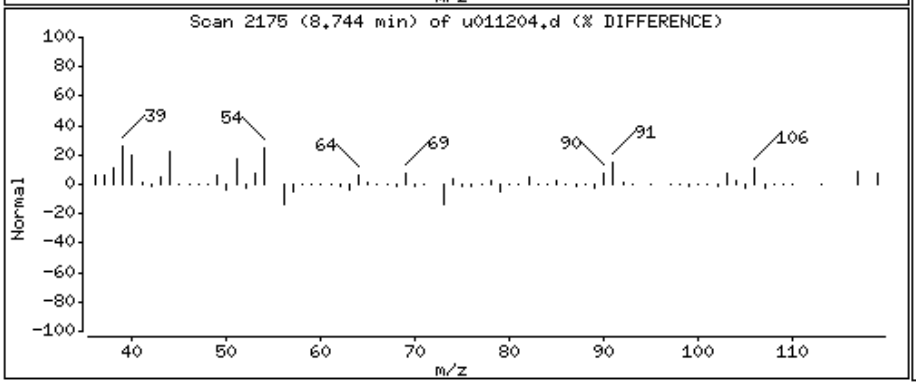
Column phase: DB624 Column diameter: 0.18

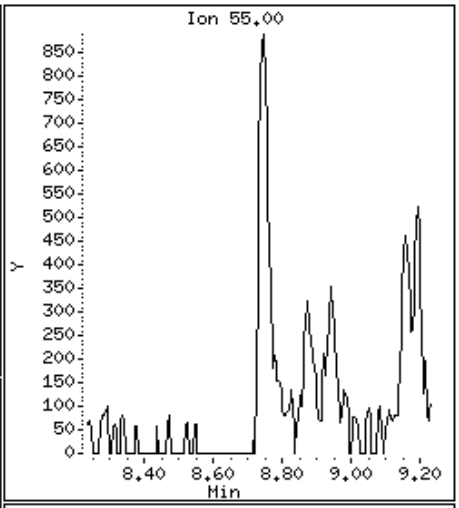
162 Butyl acrylate Concentration: 3.53 ug/l

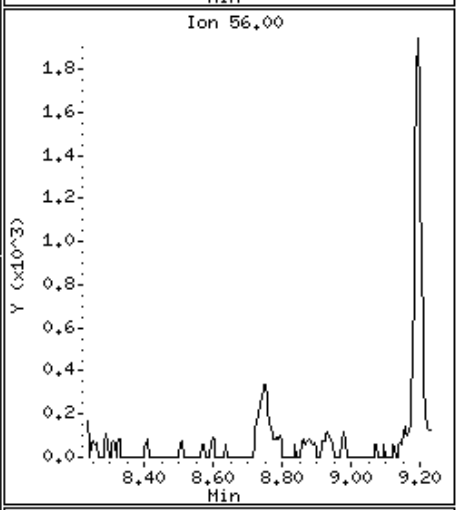


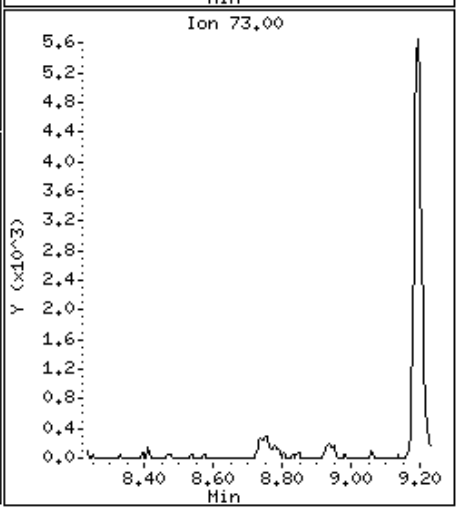












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011204.d Page 6

Date : 12-JAN-2024 11:56

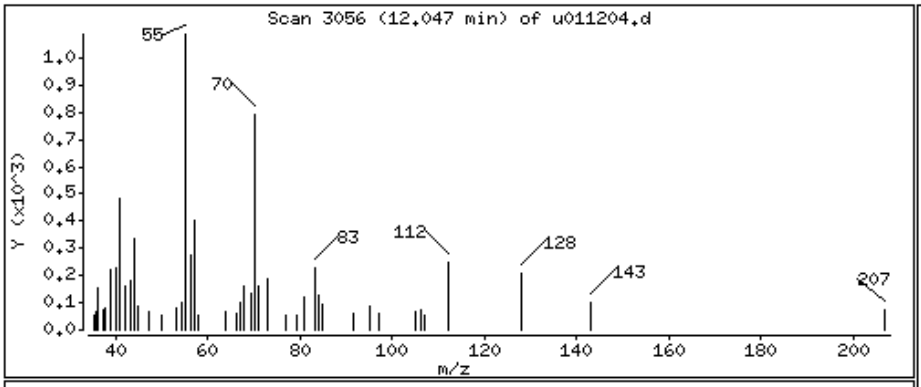
Client ID: CCB Instrument: VOA9.i

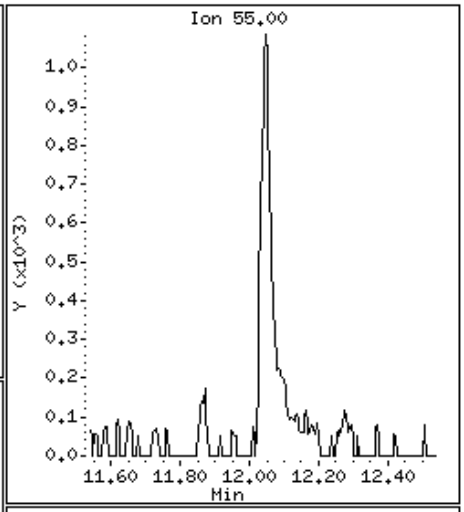
Sample Info: CCB;CCB;;;

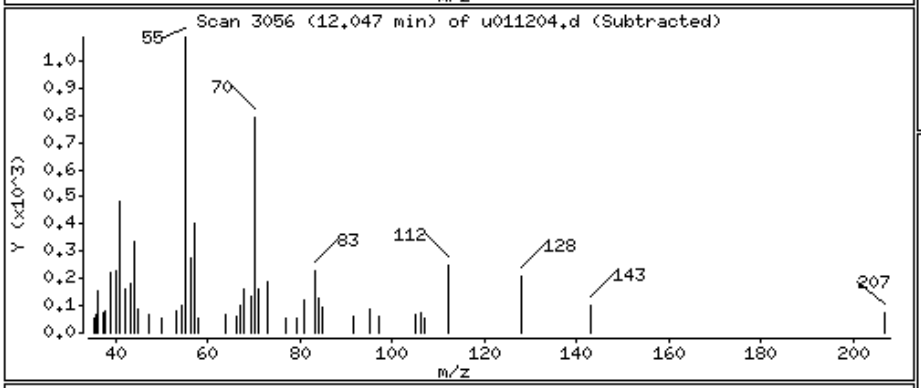
Purge Volume: 5.0 Operator: PC

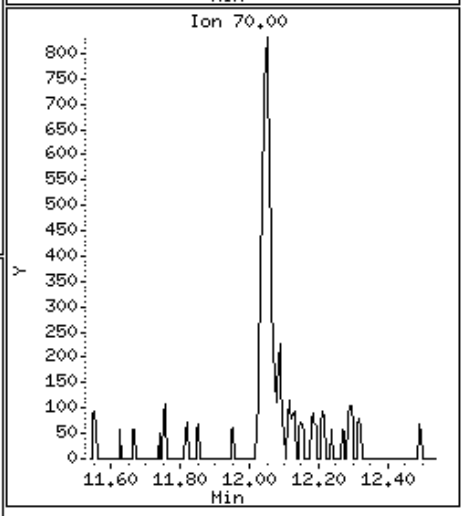
Column phase: DB624 Column diameter: 0.18

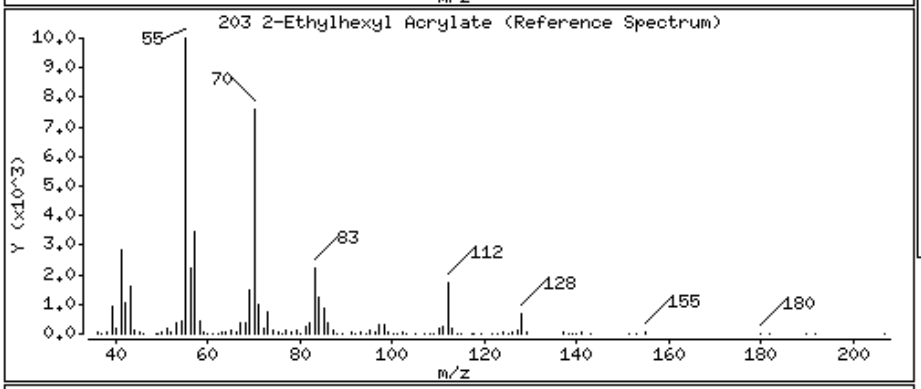
203 2-Ethylhexyl Acrylate Concentration: 3.28 ug/l

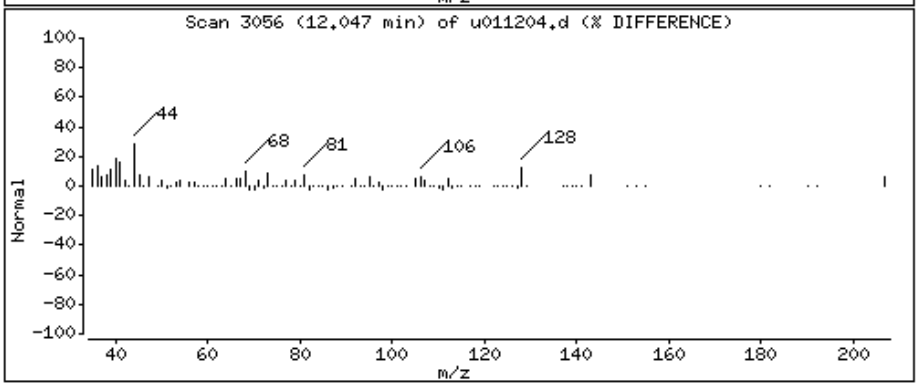












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011204.d Page 7

Date : 12-JAN-2024 11:56

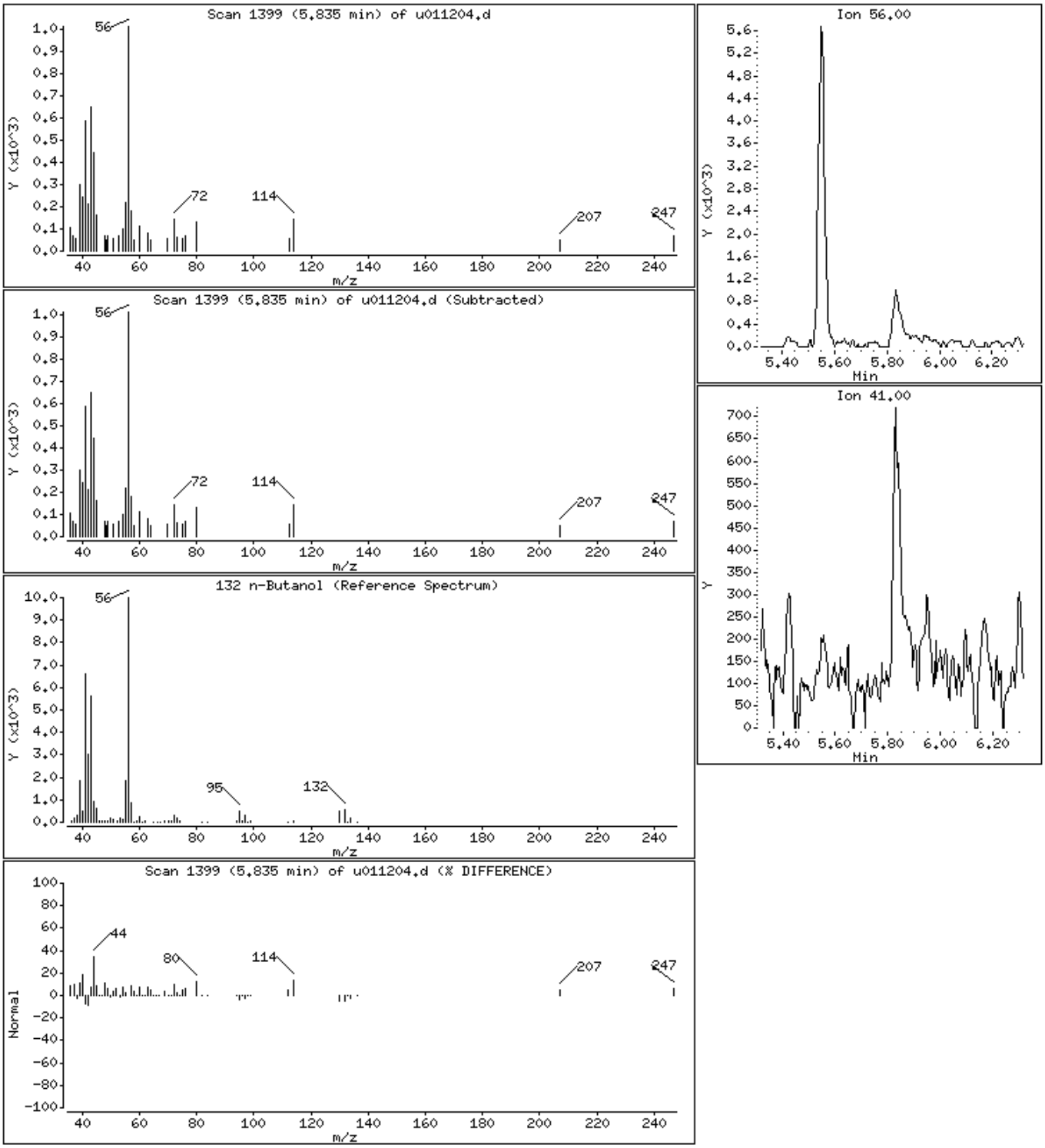
Client ID: CCB Instrument: VOA9.i

Sample Info: CCB;CCB;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

132 n-Butanol Concentration: 18.99 ug/l



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011204.d Page 8

Date : 12-JAN-2024 11:56

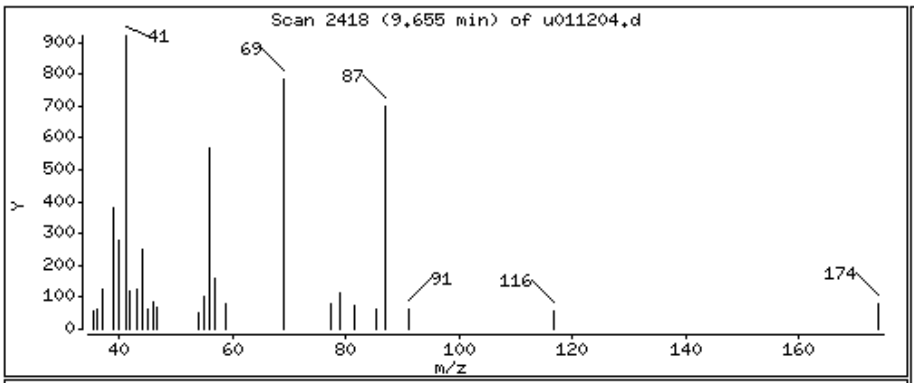
Client ID: CCB Instrument: VOA9.i

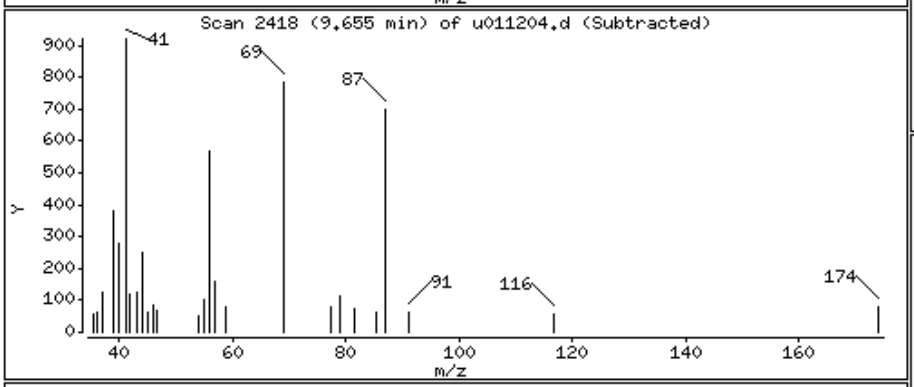
Sample Info: CCB;CCB;;;

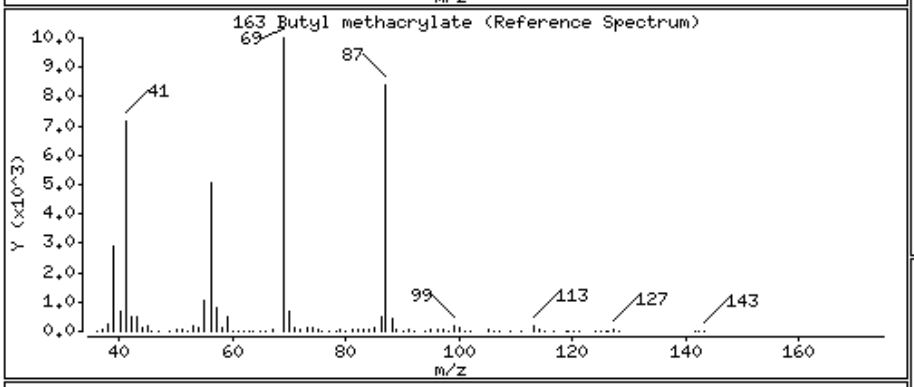
Purge Volume: 5.0 Operator: PC

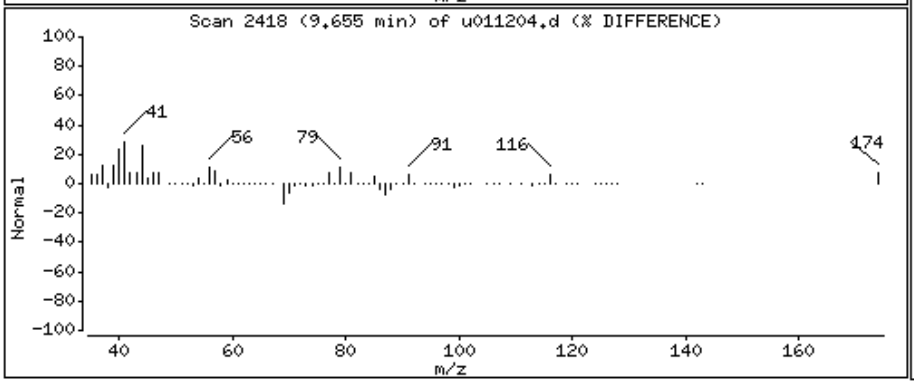
Column phase: DB624 Column diameter: 0.18

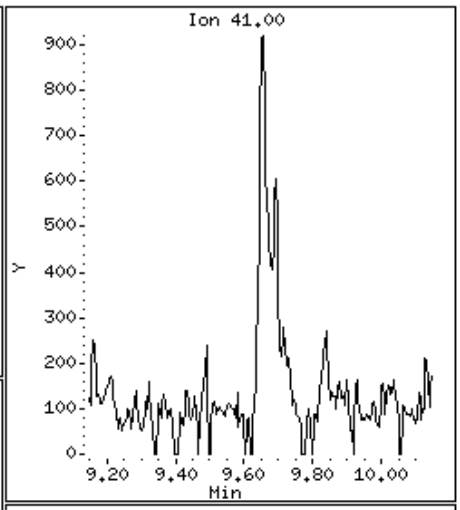
163 Butyl methacrylate Concentration: 3.19 ug/l

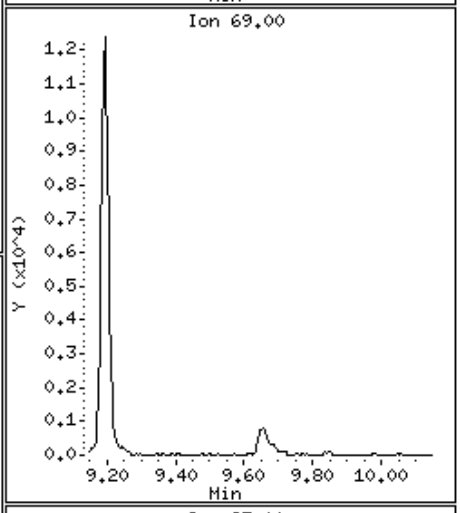


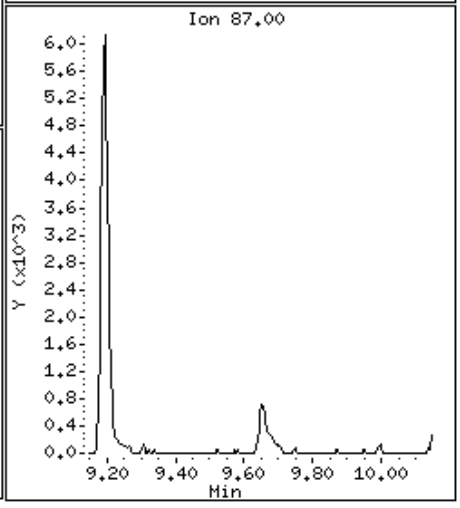












Data File : \\nahstws005\target\chem\voa9.i\u240112.b\u011204.d
Inj Date : 12-JAN-2024 11:56
InstruID : VOA9.i
LabSampID : CCB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011205.D Page 1
Report Date: 17-Jan-2024 14:06

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011205.D
Lab Smp Id: VLCSW-240112 Client Smp ID: VLCSW-240112
Inj Date : 12-JAN-2024 12:18
Operator : PC Inst ID: VOA9.i
Smp Info : VLCSW-240112;VLCSW-240112;3;;LCS
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.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: 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	4.815	4.815	(1.000)	321090	50.0000	
2 Dichlorodifluoromethane	85	1.164	1.164	(0.242)	52202	20.6868	20.68
3 Chloromethane	50	1.299	1.299	(0.270)	66160	17.9621	17.96
5 Vinyl Chloride	62	1.378	1.378	(0.286)	69609	19.7826	19.78
6 Bromomethane	94	1.621	1.621	(0.337)	47391	26.5577	26.55
7 Chloroethane	64	1.700	1.700	(0.353)	47890	20.2141	20.21
8 Trichlorofluoromethane	101	1.895	1.895	(0.394)	94798	21.2543	21.25
9 Acrolein	56	2.266	2.266	(0.471)	5657	30.9157	30.91
10 Acetone	43	2.409	2.409	(0.500)	40413	33.1325	33.13
11 1,1-Dichloroethene	96	2.334	2.334	(0.485)	53224	21.4916	21.49
15 Iodomethane	142	2.469	2.469	(0.513)	115047	39.3378	39.33
16 Acrylonitrile	53	3.065	3.065	(0.636)	49162	39.0322	39.03
17 Methylene Chloride	84	2.795	2.795	(0.580)	67504	21.4490	21.44
18 Methyl tert-butyl ether	73	3.080	3.080	(0.640)	171936	19.3756	19.37
19 Carbon Disulfide	76	2.521	2.521	(0.524)	329890	45.2081	45.20
20 trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	63746	21.5322	21.53
21 Vinyl Acetate	43	3.605	3.604	(0.749)	337061	37.6506	37.65
22 1,1-Dichloroethane	63	3.511	3.514	(0.729)	112522	18.6338	18.63
24 2-Butanone	43	4.264	4.260	(0.886)	50716	32.2440	32.24
26 2,2-Dichloropropane	77	4.182	4.182	(0.868)	83701	19.7162	19.71

27 cis-1,2-Dichloroethene	96	4.197	4.197 (0.872)	72569	18.2984	18.29
28 Chloroform	83	4.572	4.572 (0.949)	122306	18.6077	18.60

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011205.D Page 2
Report Date: 17-Jan-2024 14:06

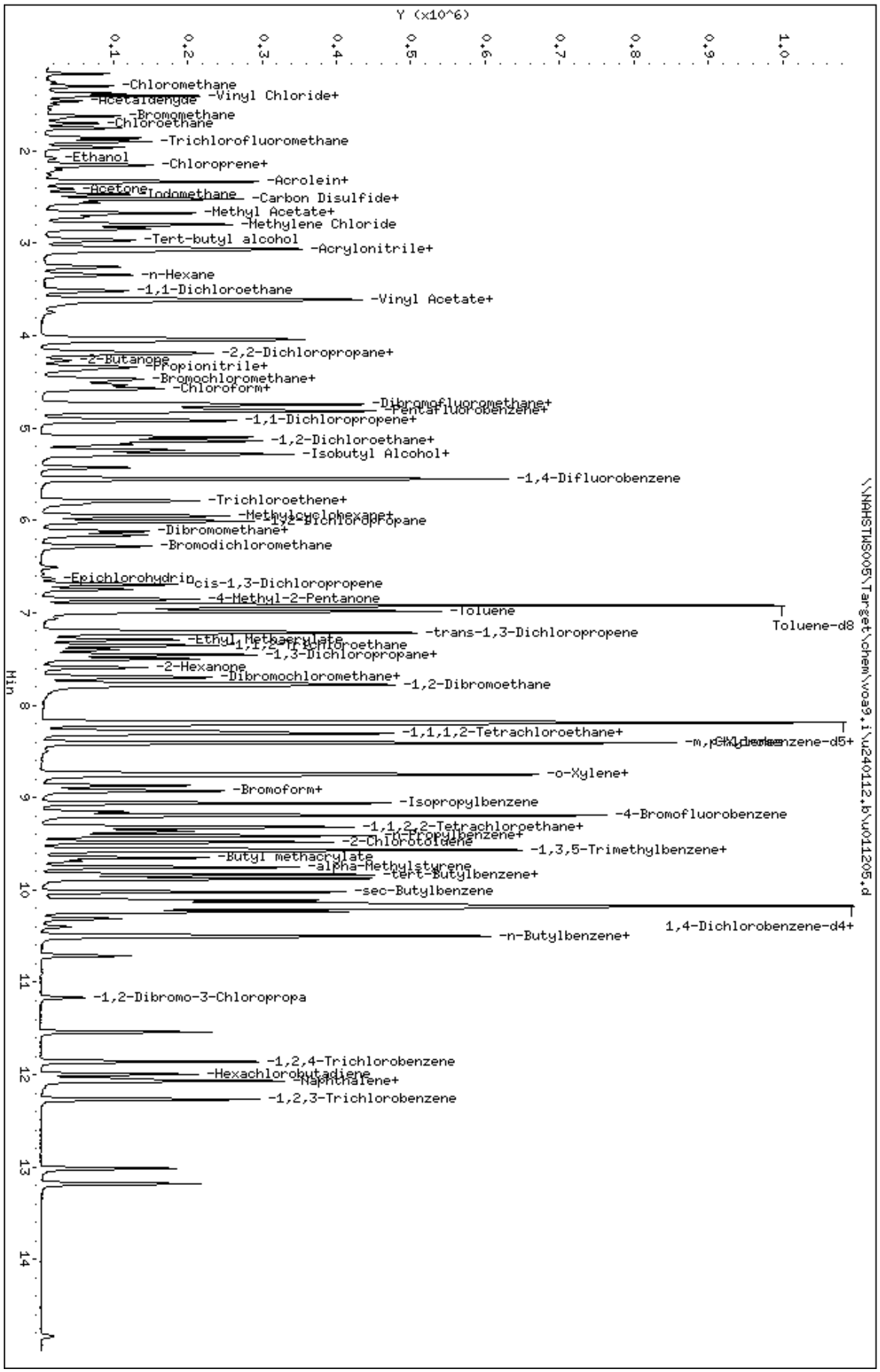
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	40971	19.9661	19.96
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	169700	51.6761	51.67
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	95919	19.2029	19.20
	32 1,1-Dichloropropene	75	4.924	4.920	(0.887)	81848	19.6849	19.68
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	88855	18.3494	18.34
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	83030	20.4431	20.44
$	35 1,2-Dichloroethane-d4	65	5.097	5.096	(1.058)	181840	48.3560	48.35
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	497003	50.0000	
	37 Benzene	78	5.138	5.138	(0.925)	257267	19.0152	19.01
	38 Trichloroethene	130	5.790	5.786	(1.043)	72200	19.3620	19.36
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	86438	19.5096	19.50
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	68111	18.6986	18.69
	44 Dibromomethane	93	6.116	6.120	(1.101)	44721	18.9762	18.97
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	126402	34.5353	34.53
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.204)	100139	18.5002	18.50
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	504161	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	601692	51.8435	51.84
	50 Toluene	91	6.978	6.978	(0.853)	278705	19.8263	19.82
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	82537	18.3374	18.33
	52 2-Hexanone	43	7.593	7.589	(0.928)	83005	32.6246	32.62
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	56087	20.0806	20.08
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	114707	18.3773	18.37
	55 Dibromochloromethane	129	7.691	7.690	(0.940)	73802	19.6829	19.68
	56 Tetrachloroethene	164	7.454	7.458	(0.911)	64397	21.4017	21.40
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	69499	19.8406	19.84
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	52922	18.9893	18.98
	59 Chlorobenzene	112	8.208	8.208	(1.003)	199466	19.4785	19.47
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	70939	19.8039	19.80
	61 Ethylbenzene	106	8.305	8.305	(1.015)	91484	19.0842	19.08
	62 m,p-Xylenes	106	8.407	8.406	(1.027)	232972	40.4228	40.42
	63 o-Xylene	106	8.748	8.748	(1.069)	117591	19.8391	19.83
	64 Styrene	104	8.763	8.759	(1.071)	202932	20.5652	20.56
	66 Bromoform	173	8.920	8.916	(1.090)	46808	18.9284	18.92
	67 Isopropylbenzene	105	9.063	9.062	(1.107)	286801	20.0072	20.00
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	89276	18.9086	18.90
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	221445	50.4030	50.40
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.172	(1.000)	283593	50.0000	
	71 1,2,3-Trichloropropane	75	9.363	9.362	(0.921)	85927	15.9612	15.96
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	322819	19.3857	19.38
	74 Bromobenzene	156	9.318	9.317	(0.916)	88548	18.5933	18.59
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	236413	19.9748	19.97
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	206741	18.4455	18.44
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	238534	18.7655	18.76
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	205531	19.3336	19.33
	79 1,2,4-Trimethylbenzene	105	9.876	9.880	(0.971)	238371	20.0958	20.09
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	265247	19.3495	19.34
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	235642	19.8631	19.86
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	155895	18.4728	18.47
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	162526	18.1780	18.17
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	190101	19.0947	19.09
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	157070	18.5002	18.50
	89 1,2-Dibromo-3-Chloropropane	155	11.166	11.165	(1.098)	13159	17.3080	17.30

90 1,2,4-Trichlorobenzene	180	11.859	11.855 (1.166)	95049	18.1467	18.14
91 Hexachlorobutadiene	225	11.998	11.998 (1.180)	41362	19.7000	19.70

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	92 Naphthalene	128	12.065	12.065	(1.187)	237611	18.8100	18.81
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	95986	18.1725	18.17
M	94 1,2-Dichloroethylene (total)	96				136315	39.3612	39.36
M	95 Xylenes (total)	106				350563	60.9587	60.95
	135 1,4-Dioxane	88	6.165	6.165	(1.280)	17494	343.400	343.39
	141 Cyclohexane	56	4.785	4.785	(0.994)	82057	17.7358	17.73
	138 Freon TF	101	2.334	2.337	(0.485)	55890	23.9658	23.96
	140 1,3-Butadiene	54	1.404	1.404	(0.292)	58845	18.2474	18.24
	147 Methylcyclohexane	55	5.947	5.944	(1.071)	134895	18.3119	18.31
	146 Methyl Acetate	43	2.712	2.712	(0.563)	61457	19.2315	19.23
	148 Tert-Butyl alcohol	59	2.967	2.963	(0.616)	140181	389.982	389.98
	149 Isopropyl Alcohol	45	2.559	2.558	(0.531)	83695	407.454	407.45
	72 trans-1,4-Dichloro-2-butene	53	9.378	9.377	(1.146)	16528	18.2169	18.21
	12 Isobutyl Alcohol	43	5.284	5.284	(1.097)	165782	344.261	344.26
	13 Acetonitrile	39	2.671	2.671	(0.555)	66911	193.624	193.62
	14 Allyl Chloride	41	2.671	2.671	(0.555)	156372	19.8075	19.80
	25 Methacrylonitrile	41	4.493	4.493	(0.933)	37358	16.2947	16.29
	40 Methyl Methacrylate	41	6.154	6.153	(1.278)	51657	16.2992	16.29
	4 Propionitrile	54	4.336	4.335	(0.900)	93153	174.975	174.97(a)
	136 n-Hexane	57	3.342	3.342	(0.694)	58925	19.7423	19.74
	194 Acetaldehyde	44	1.460	1.460	(0.303)	29732	66.5232	66.52(M)
	131 Methyl Acrylate	55	4.369	4.369	(0.907)	76439	18.1239	18.12
	23 Chloroprene	53	2.158	2.157	(0.448)	22001	20.0871	20.08(M)
	49 Ethyl Methacrylate	69	7.289	7.289	(1.312)	90629	18.5790	18.57
	166 1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	211589	18.0797	18.07
	167 Ethanol	45	2.079	2.079	(0.432)	15348	380.237	380.23
	164 Dicyclopentadiene	66	10.198	10.198	(1.003)	247576	16.3764	16.37
	145 alpha-Methylstyrene	118	9.752	9.752	(0.959)	101492	18.6879	18.68
	142 Tetrahydrofuran	42	4.542	4.542	(0.943)	22633	33.2077	33.20
	156 Diisopropyl ether	45	3.620	3.619	(0.752)	192072	17.1710	17.17
	162 Butyl acrylate	55	8.733	8.733	(1.067)	96346	15.5226	15.52
	203 2-Ethylhexyl Acrylate	55	12.039	12.043	(1.184)	50630	14.0106	14.01(M)
	130 Ethyl Acetate	43	4.339	4.339	(0.901)	67377	17.2740	17.27
	189 n-Butyl acetate	43	7.706	7.705	(0.941)	95116	16.9373	16.93
	182 Epichlorohydrin	57	6.630	6.630	(1.194)	11556	59.8536	59.85
	132 n-Butanol	56	5.824	5.820	(1.209)	33992	325.731	325.73(a)
	133 Ethyl Acrylate	55	5.947	5.944	(1.235)	134895	17.4780	17.47
	163 Butyl methacrylate	41	9.651	9.647	(0.949)	54249	15.8593	15.85
	187 n-Amyl acetate	43	8.931	8.931	(1.091)	98418	15.4015	15.40
	188 Isopropyl acetate	43	5.284	5.284	(0.951)	166451	18.1540	18.15

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.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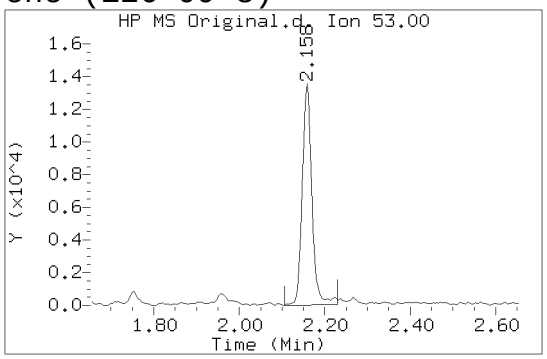
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Min
1
2
3
4
5
6
7
8
9
10
11
12
13
14
-Chloromethane
-Vinyl Chloride+
-Acetaldehyde
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Ethanol
-Chloroprene+
-Acrolein+
-Acetone
-Iodomethane
-Carbon Disulfide+
-Methyl Acetate+
-Methylene Chloride
-Tert-butyl alcohol
-Acrylonitrile+
-n-Hexane
-1,1-Dichloroethane
-Vinyl Acetate+
-2,2-Dichloropropane+
-2-Butanone
-Propionitrile+
-Bromochloromethane+
-Chloroform+
-Dibromofluoromethane+
-Pentafluorobenzene+
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane+
-1,2-Dichloropropane
-Dibromomethane+
-Bromodichloromethane
-Epichlorohydrin
cis-1,3-Dichloropropene
-4-Methyl-2-Pentanone
-Toluene
Toluene-d8
-Ethyl Methacrylate
-trans-1,3-Dichloropropene
1,1,2-Trichloroethane
-1,3-Dichloropropane+
-2-Hexanone
-Dibromochloromethane+
-1,2-Dibromoethane
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
-o-Xylene
-Bromoform+
-Isopropylbenzene
-4-Bromofluorobenzene
-1,1,2,2-Tetrachloroethane+
-n-Propylbenzene+
-2-Chlorotoluene
-1,3,5-Trimethylbenzene+
-Butyl methacrylate
-alpha-Methylstyrene
-tert-Butylbenzene+
-sec-Butylbenzene
1,4-Dichlorobenzene-d4+
-n-Butylbenzene+
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene+
-1,2,3-Trichlorobenzene
\\NAHSTMS005\Target\chem\voa9.i\u240112.b\u011205.d
Data File: \\NAHSTMS005\Target\chem\voa9.i\u240112.b\u011205.d
Date : 12-JAN-2024 12:18
Client ID: VLCSW-240112
Sample Info: VLCSW-240112;VLCSW-240112;3;;LCS
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9.i
Operator: PC
Column diameter: 0.18
Page 1

Data File : \\nahstws005\target\chem\voa9.i\u240112.b\u011205.d
Inj Date : 12-JAN-2024 12:18
InstruID : VOA9.i
LabSampID : VLCSW-240112

Chloroprene (126-99-8)

Reason Code:

BEFORE
MASS
53
AREA
22001
HEIGHT
13569
17-Jan-2024
14:06
linh
pham



AFTER
MASS
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AREA
22001
HEIGHT
13569
17-Jan-2024
14:06
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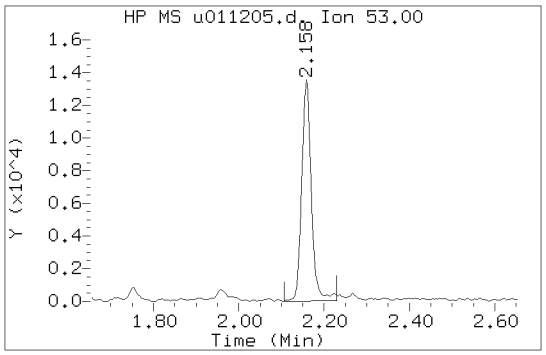

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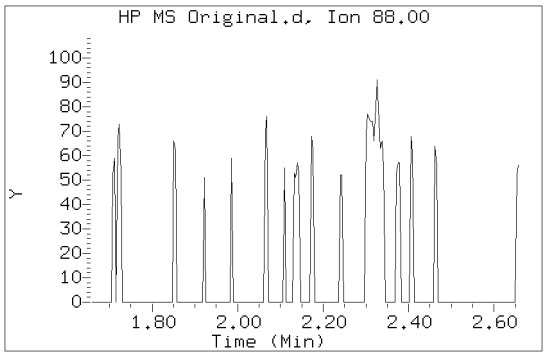

AFTER
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AREA
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HEIGHT
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17-Jan-2024
14:06
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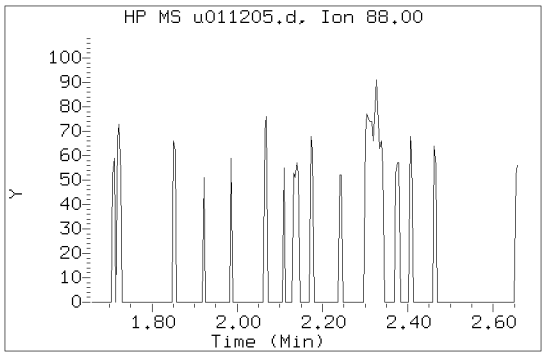

Acetaldehyde (75-07-0)

Reason Code:

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AREA
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HEIGHT
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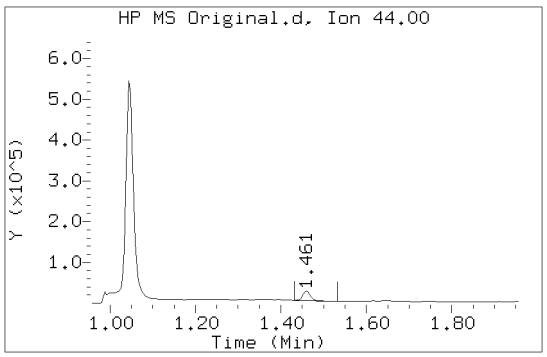
17-Jan-2024
14:06
linh
pham



AFTER
MASS
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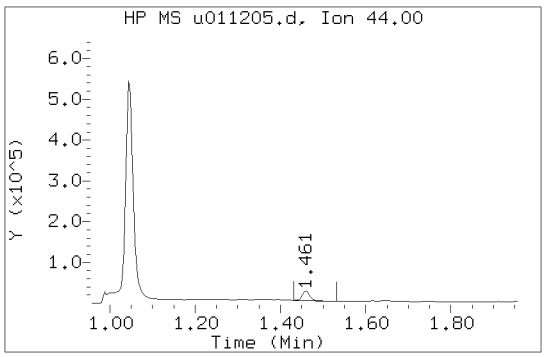
AREA
29732
HEIGHT
23917
17-Jan-2024
14:06
linh
pham



BEFORE
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AREA
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HEIGHT
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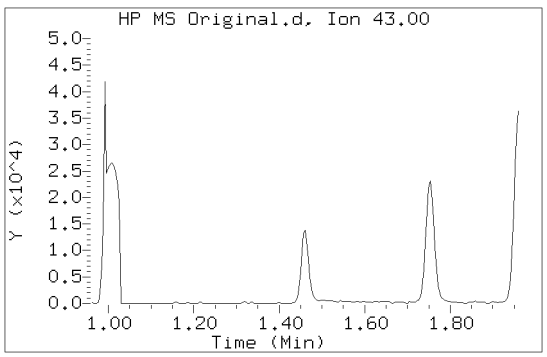
17-Jan-2024
14:06
linh
pham



AFTER
MASS
43
AREA
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HEIGHT
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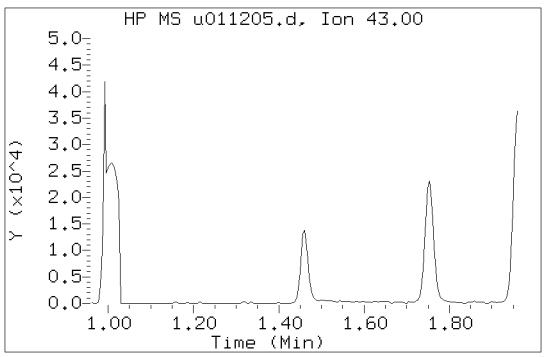
17-Jan-2024
14:06
linh
pham



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Inj Date : 12-JAN-2024 12:18
InstruID : VOA9.i
LabSampID : VLCSW-240112

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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AREA
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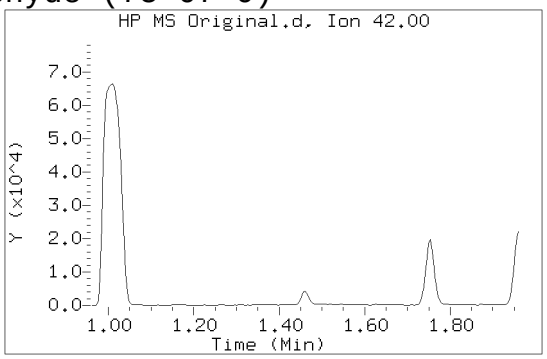
HEIGHT
0
17-Jan-2024
14:06
linh
pham



AFTER

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17-Jan-2024
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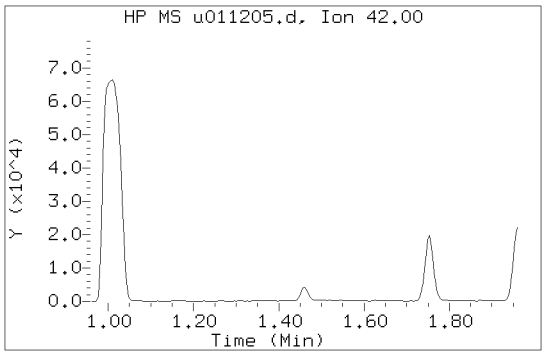

2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

BEFORE

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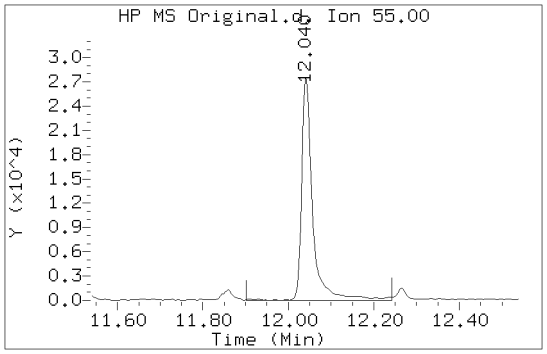
AREA
50630
HEIGHT
27405
17-Jan-2024
14:06
linh
pham



AFTER

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AREA
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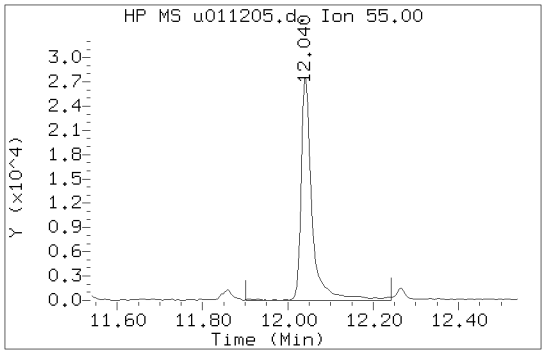
HEIGHT
27405
17-Jan-2024
14:06
linh
pham



BEFORE

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AREA
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HEIGHT
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17-Jan-2024
14:06
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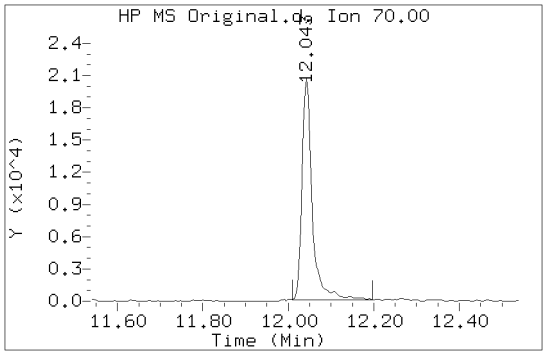
pham



AFTER

MASS
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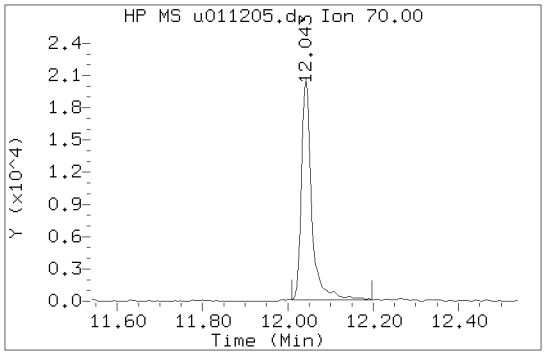
AREA
34926
HEIGHT
20553
17-Jan-2024
14:06
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011207.D Page 1
Report Date: 17-Jan-2024 14:06

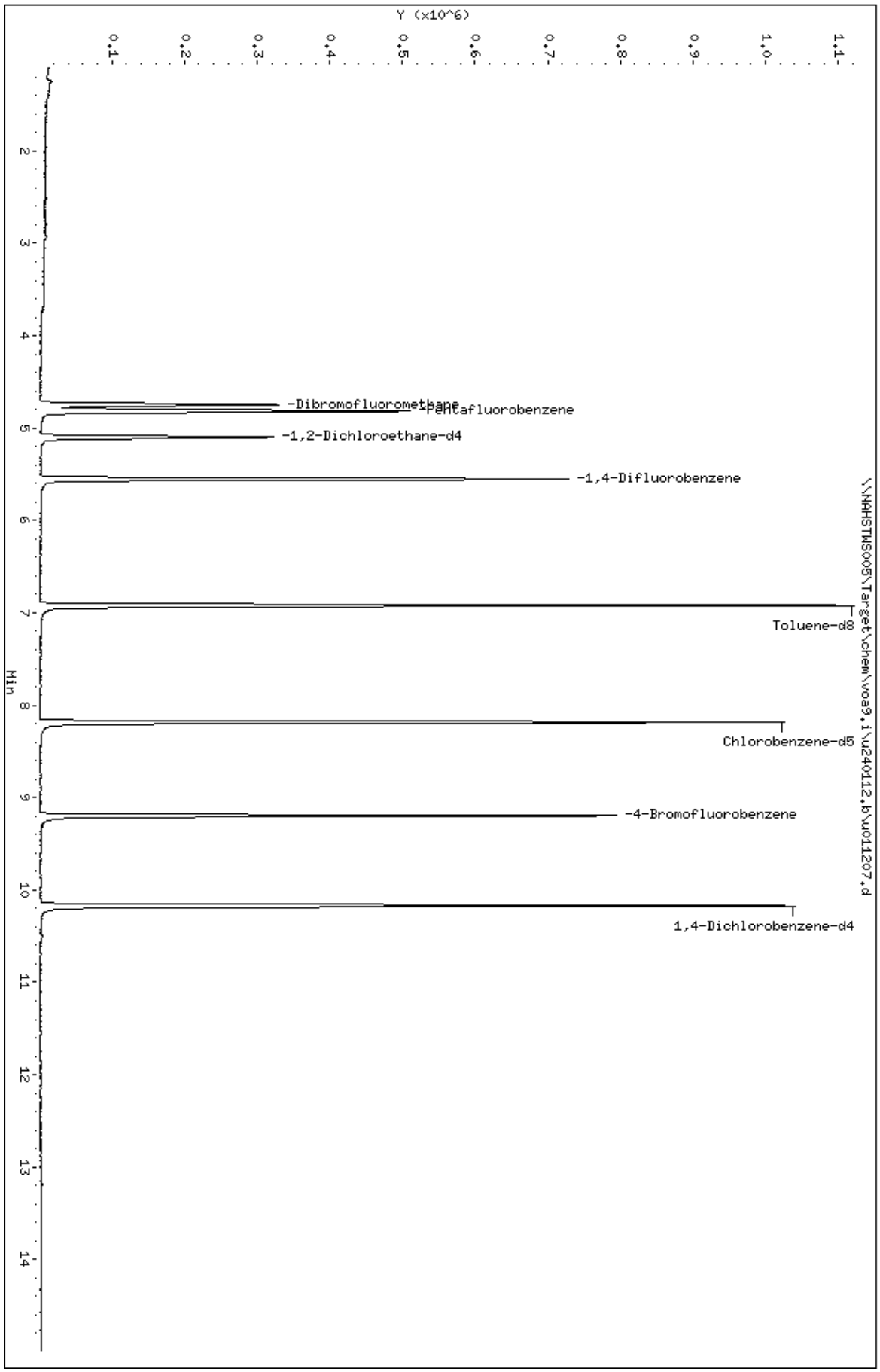
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011207.D
Lab Smp Id: VBLKW-240112 Client Smp ID: VBLKW-240112
Inj Date : 12-JAN-2024 13:03
Operator : PC Inst ID: VOA9.i
Smp Info : VBLKW-240112;VBLKW-240112;3;;BLANK
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.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: 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	4.815	4.815	(1.000)	379364	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	196968	50.7481	50.74
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	209172	47.1476	47.14
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	587698	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	571579	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	683985	51.9828	51.98
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	235572	47.2141	47.21
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	297476	50.0000	


Data File: \\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011207.d
Date : 12-JAN-2024 13:03
Client ID: VBLKW-240112
Sample Info: VBLKW-240112;VBLKW-240112;3;;BLANK
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9.i
Operator: PC
Column diameter: 0.18
Page 1
Y (x10^6)
Min
-Dibromofluoromethane
Pentafluorobenzene
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene
Toluene-d8
Chlorobenzene-d5
-4-Bromofluorobenzene
1,4-Dichlorobenzene-d4
\\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011207.d

Data File : \\nahstws005\target\chem\voa9.i\u240112.b\u011207.d
Inj Date : 12-JAN-2024 13:03
InstruID : VOA9.i
LabSampID : VBLKW-240112

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011211.D Page 1
Report Date: 17-Jan-2024 14:06

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011211.D
Lab Smp Id: HS24010519-09MS Client Smp ID: HS24010519-09MS
Inj Date : 12-JAN-2024 14:32
Operator : PC Inst ID: VOA9.i
Smp Info : HS24010519-09MS;HS24010519-09MS;3;;MS
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 10 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.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	4.815	4.815	(1.000)	377626	50.0000	
2 Dichlorodifluoromethane	85	1.164	1.164	(0.242)	43576	14.9350	14.93
3 Chloromethane	50	1.299	1.299	(0.270)	64914	14.9853	14.98
5 Vinyl Chloride	62	1.378	1.378	(0.286)	72575	17.5376	17.53
6 Bromomethane	94	1.621	1.621	(0.337)	48362	23.0133	23.01
7 Chloroethane	64	1.700	1.700	(0.353)	51665	18.5426	18.54
8 Trichlorofluoromethane	101	1.899	1.895	(0.394)	108377	20.6609	20.66
9 Acrolein	56	2.266	2.266	(0.471)	6112	28.4015	28.40
10 Acetone	43	2.409	2.409	(0.500)	46057	31.9180	31.91
11 1,1-Dichloroethene	96	2.334	2.334	(0.485)	57363	19.6951	19.69
15 Iodomethane	142	2.469	2.469	(0.513)	120956	35.4809	35.48
16 Acrylonitrile	53	3.068	3.065	(0.637)	57265	38.6588	38.65
17 Methylene Chloride	84	2.795	2.795	(0.580)	69355	18.7044	18.70
18 Methyl tert-butyl ether	73	3.080	3.080	(0.640)	200588	19.2202	19.22
19 Carbon Disulfide	76	2.521	2.521	(0.524)	363609	42.3688	42.36
20 trans-1,2-Dichloroethene	96	3.061	3.057	(0.636)	67293	19.3272	19.32
21 Vinyl Acetate	43	3.608	3.604	(0.749)	353479	33.5731	33.57
22 1,1-Dichloroethane	63	3.514	3.514	(0.730)	119051	16.7634	16.76
24 2-Butanone	43	4.264	4.260	(0.886)	58674	31.7186	31.71
26 2,2-Dichloropropane	77	4.182	4.182	(0.868)	89164	17.8586	17.85

27 cis-1,2-Dichloroethene	96	4.197	4.197 (0.872)	76616	16.4266	16.42
28 Chloroform	83	4.572	4.572 (0.949)	125254	16.2032	16.20

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011211.D Page 2
Report Date: 17-Jan-2024 14:06

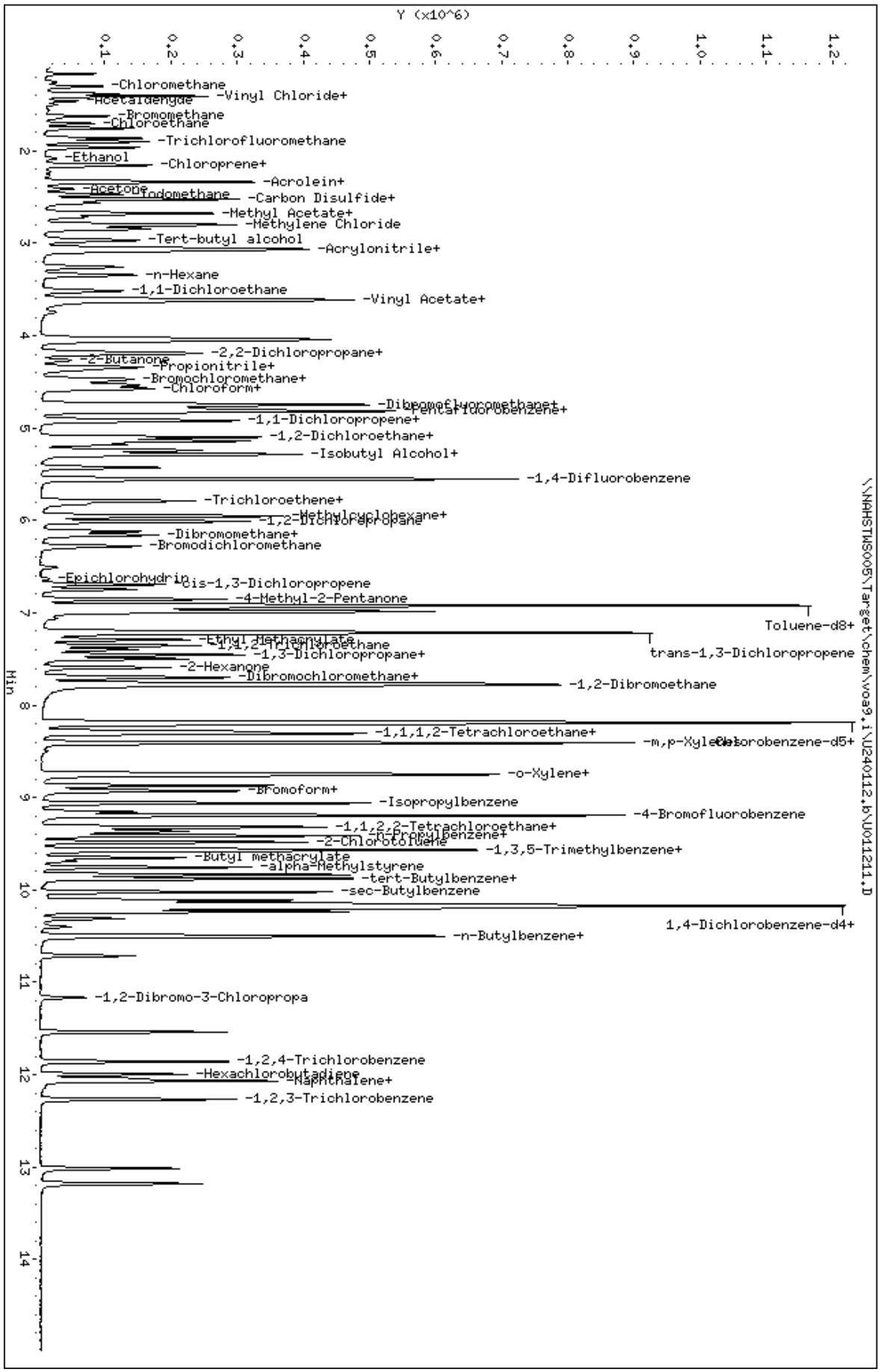
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	41362	17.1389	17.13
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	199729	51.7155	51.71
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	106142	18.0682	18.06
	32 1,1-Dichloropropene	75	4.924	4.920	(0.887)	88831	18.4441	18.44
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	92833	16.5505	16.55
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	91637	19.4783	19.47
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	213595	48.2999	48.29
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	575693	50.0000	
	37 Benzene	78	5.138	5.138	(0.925)	273216	17.4338	17.43
	38 Trichloroethene	130	5.790	5.786	(1.043)	77156	17.8629	17.86
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	86961	16.9448	16.94
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	68462	16.2259	16.22
	44 Dibromomethane	93	6.120	6.120	(1.102)	45940	16.8290	16.82
	45 4-Methyl-2-Pentanone	43	6.855	6.851	(0.837)	164190	39.6308	39.63
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.204)	99358	16.0595	16.05
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	571441	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	712152	54.1365	54.13
	50 Toluene	91	6.978	6.978	(0.853)	295262	18.5311	18.53
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	87239	16.8880	16.88
	52 2-Hexanone	43	7.593	7.589	(0.928)	113197	39.2530	39.25
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	54214	16.9274	16.92
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	119989	16.9602	16.96
	55 Dibromochloromethane	129	7.691	7.690	(0.940)	75279	17.7131	17.71
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	68616	20.1190	20.11
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	71717	18.0632	18.06
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	60829	18.8431	18.84
	59 Chlorobenzene	112	8.208	8.208	(1.003)	207387	17.8676	17.86
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	70249	17.3023	17.30
	61 Ethylbenzene	106	8.305	8.305	(1.015)	94995	17.4835	17.48
	62 m,p-Xylenes	106	8.407	8.406	(1.027)	247001	37.8111	37.81
	63 o-Xylene	106	8.748	8.748	(1.069)	121799	18.1297	18.12
	64 Styrene	104	8.763	8.759	(1.071)	205530	18.3762	18.37
	66 Bromoform	173	8.916	8.916	(1.089)	50228	17.9771	17.97
	67 Isopropylbenzene	105	9.063	9.062	(1.107)	309061	19.0217	19.02
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	95228	18.1400	18.13
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	254014	51.0245	51.02
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.172	(1.000)	314865	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	97252	16.2706	16.27
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	331835	17.9480	17.94
	74 Bromobenzene	156	9.317	9.317	(0.916)	89797	16.9829	16.98
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	241296	18.3625	18.36
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	210972	16.9535	16.95
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	243964	17.2865	17.28
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	216498	18.3426	18.34
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.972)	241555	18.3417	18.34
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	277768	18.2504	18.25
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	245608	18.6470	18.64
	83 1,3-Dichlorobenzene	146	10.112	10.116	(0.994)	157695	16.8302	16.83
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	164970	16.6188	16.61
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	196094	17.7404	17.74
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	154842	16.4264	16.42
	89 1,2-Dibromo-3-Chloropropane	155	11.166	11.165	(1.098)	15661	18.4005	18.40

90 1,2,4-Trichlorobenzene	180	11.859	11.855 (1.166)	92975	15.9877	15.98
91 Hexachlorobutadiene	225	11.998	11.998 (1.180)	42978	18.4367	18.43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	92 Naphthalene	128	12.065	12.065	(1.187)	257763	18.3787	18.37
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	95312	16.2527	16.25
M	94 1,2-Dichloroethylene (total)	96				143909	35.3328	35.33
M	95 Xylenes (total)	106				368800	55.3641	55.36
	135 1,4-Dioxane	88	6.165	6.165	(1.280)	18626	310.882	310.88
	141 Cyclohexane	56	4.785	4.785	(0.994)	98171	18.0420	18.04
	138 Freon TF	101	2.337	2.337	(0.485)	63775	23.2615	23.26
	140 1,3-Butadiene	54	1.404	1.404	(0.292)	68961	18.1827	18.18
	147 Methylcyclohexane	55	5.947	5.944	(1.071)	179738	21.0643	21.06
	146 Methyl Acetate	43	2.716	2.712	(0.564)	68612	18.2561	18.25
	148 Tert-Butyl alcohol	59	2.967	2.963	(0.616)	169986	402.100	402.09
	149 Isopropyl Alcohol	45	2.562	2.558	(0.532)	96155	397.857	397.85
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	19439	18.9027	18.90
	12 Isobutyl Alcohol	43	5.284	5.284	(1.097)	195509	345.209	345.20
	13 Acetonitrile	39	2.671	2.671	(0.555)	86020	211.654	211.65
	14 Allyl Chloride	41	2.675	2.671	(0.556)	191035	20.5754	20.57
	25 Methacrylonitrile	41	4.497	4.493	(0.934)	40433	14.9956	14.99
	40 Methyl Methacrylate	41	6.157	6.153	(1.279)	66201	17.7610	17.76
	4 Propionitrile	54	4.339	4.335	(0.901)	111525	178.121	178.12(a)
	136 n-Hexane	57	3.342	3.342	(0.694)	69475	19.7921	19.79
	194 Acetaldehyde	44	1.460	1.460	(0.303)	29492	54.8222	54.82(M)
	131 Methyl Acrylate	55	4.369	4.369	(0.907)	84165	16.9681	16.96
	23 Chloroprene	53	2.157	2.157	(0.448)	22419	17.4043	17.40(M)
	49 Ethyl Methacrylate	69	7.289	7.289	(1.312)	108866	19.2671	19.26
	166 1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	241926	18.6188	18.61
	167 Ethanol	45	2.082	2.079	(0.433)	18487	389.477	389.47
	164 Dicyclopentadiene	66	10.198	10.198	(1.003)	277217	16.5159	16.51
	145 alpha-Methylstyrene	118	9.752	9.752	(0.959)	91524	15.4781	15.47
	142 Tetrahydrofuran	42	4.542	4.542	(0.943)	27116	33.8288	33.82
	156 Diisopropyl ether	45	3.623	3.619	(0.752)	207863	15.8006	15.80
	162 Butyl acrylate	55	8.733	8.733	(1.067)	115251	16.2019	16.20
	203 2-Ethylhexyl Acrylate	55	12.039	12.043	(1.184)	52488	13.2503	13.25
	130 Ethyl Acetate	43	4.343	4.339	(0.902)	80460	17.5399	17.53
	189 n-Butyl acetate	43	7.706	7.705	(0.941)	127626	20.0506	20.05
	182 Epichlorohydrin	57	6.633	6.630	(1.194)	11310	50.5724	50.57
	132 n-Butanol	56	5.824	5.820	(1.209)	41900	341.398	341.39(a)
	133 Ethyl Acrylate	55	5.947	5.944	(1.235)	179738	19.8016	19.80
	163 Butyl methacrylate	41	9.651	9.647	(0.949)	53347	14.3559	14.35
	187 n-Amyl acetate	43	8.931	8.931	(1.091)	129663	17.9020	17.90
	188 Isopropyl acetate	43	5.284	5.284	(0.951)	195375	18.3960	18.39

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



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Sample Info: HS24010519-09MS;HS24010519-09MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

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Inj Date : 12-JAN-2024 14:32
InstruID : VOA9.i
LabSampID : HS24010519-09MS

Chloroprene (126-99-8)

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17-Jan-2024
14:06
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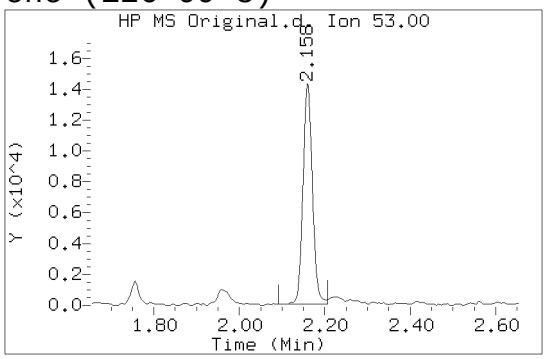

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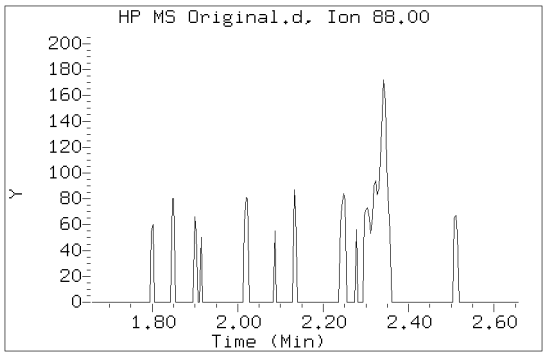

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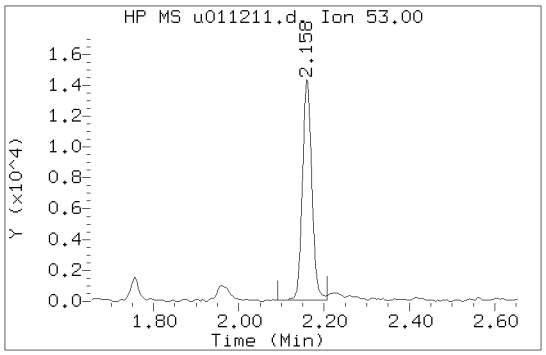

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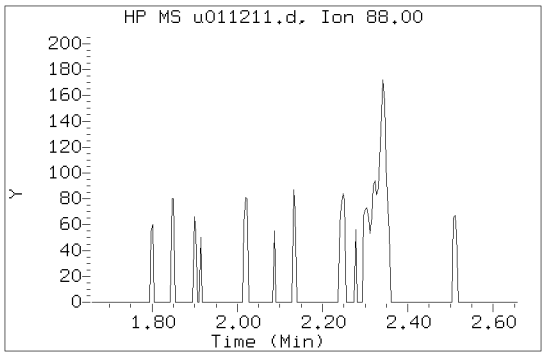

Acetaldehyde (75-07-0)

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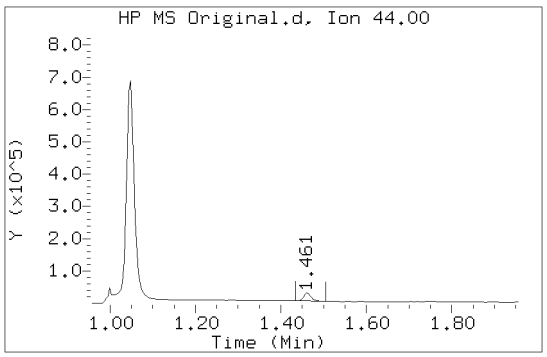

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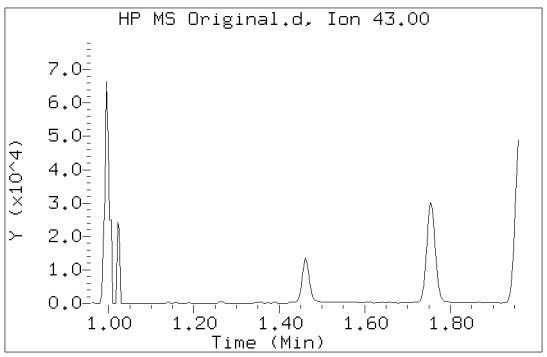

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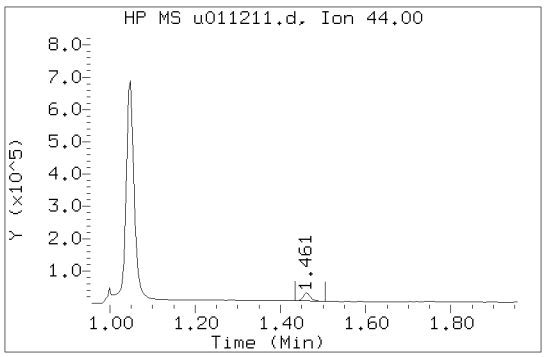

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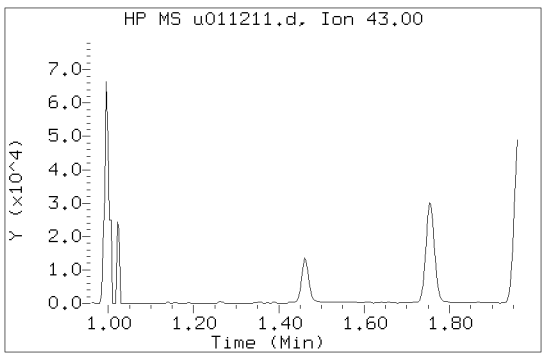

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InstruID : VOA9.i
LabSampID : HS24010519-09MS

Acetaldehyde (75-07-0)

Reason Code:

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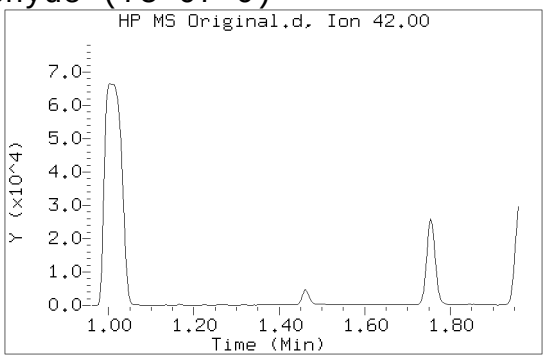

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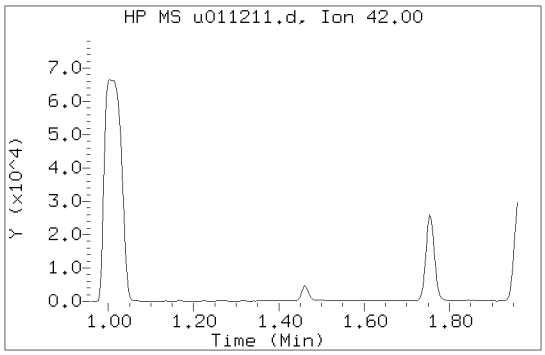

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Report Date: 17-Jan-2024 14:06

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011212.D
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Inj Date : 12-JAN-2024 14:54
Operator : PC Inst ID: VOA9.i
Smp Info : HS24010519-09MSD;HS24010519-09MSD;3;;MSD
Misc Info : V9;WATER;0;1;
Comment   :
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Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 10 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.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	4.819	4.815	(1.000)	365053	50.0000	
2 Dichlorodifluoromethane	85	1.168	1.164	(0.242)	44869	15.8513	15.85
3 Chloromethane	50	1.303	1.299	(0.270)	63522	15.1690	15.16
5 Vinyl Chloride	62	1.381	1.378	(0.287)	70255	17.5617	17.56
6 Bromomethane	94	1.625	1.621	(0.337)	45746	22.5108	22.51
7 Chloroethane	64	1.704	1.700	(0.354)	51986	19.3004	19.30
8 Trichlorofluoromethane	101	1.903	1.895	(0.395)	102499	20.2134	20.21
9 Acrolein	56	2.270	2.266	(0.471)	5727	27.5290	27.52
10 Acetone	43	2.412	2.409	(0.501)	45980	33.1613	33.16
11 1,1-Dichloroethene	96	2.337	2.334	(0.485)	57019	20.2512	20.25
15 Iodomethane	142	2.472	2.469	(0.513)	125109	37.7576	37.75
16 Acrylonitrile	53	3.068	3.065	(0.637)	55901	39.0377	39.03
17 Methylene Chloride	84	2.798	2.795	(0.581)	69038	19.2680	19.26
18 Methyl tert-butyl ether	73	3.083	3.080	(0.640)	203682	20.1889	20.18
19 Carbon Disulfide	76	2.525	2.521	(0.524)	351699	42.3925	42.39
20 trans-1,2-Dichloroethene	96	3.065	3.057	(0.636)	66956	19.8928	19.89
21 Vinyl Acetate	43	3.612	3.604	(0.750)	352679	34.6509	34.65
22 1,1-Dichloroethane	63	3.518	3.514	(0.730)	115309	16.7957	16.79
24 2-Butanone	43	4.268	4.260	(0.886)	58298	32.6008	32.60
26 2,2-Dichloropropane	77	4.185	4.182	(0.869)	85772	17.7709	17.77

27 cis-1,2-Dichloroethene	96	4.200	4.197 (0.872)	75705	16.7903	16.79
28 Chloroform	83	4.575	4.572 (0.949)	124494	16.6596	16.65

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011212.D Page 2
Report Date: 17-Jan-2024 14:06

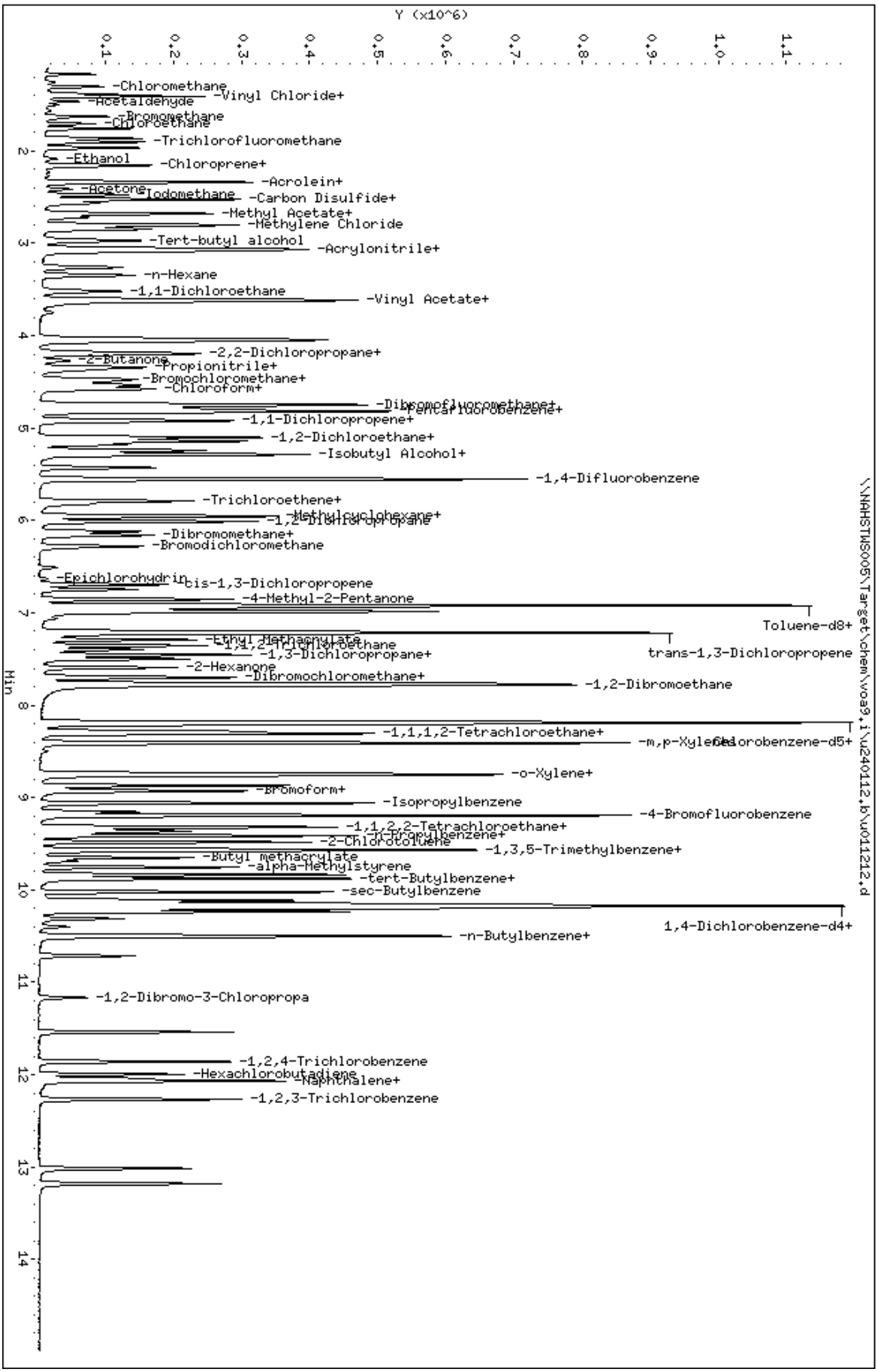
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
29	Bromochloromethane	128	4.470	4.470	(0.928)	41349	17.7236	17.72
$ 30	Dibromofluoromethane	113	4.752	4.748	(0.986)	196188	52.5648	52.56
31	1,1,1-Trichloroethane	97	4.744	4.744	(0.984)	102883	18.1166	18.11
32	1,1-Dichloropropene	75	4.924	4.920	(0.887)	87459	18.8009	18.80
33	1,2-Dichloroethane	62	5.179	5.175	(0.933)	91690	16.9244	16.92
34	Carbon Tetrachloride	117	4.913	4.913	(0.885)	89470	19.6897	19.68
$ 35	1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	209687	49.0075	49.00
* 36	1,4-Difluorobenzene	114	5.554	5.554	(1.000)	556044	50.0000	
37	Benzene	78	5.141	5.138	(0.926)	265022	17.5085	17.50
38	Trichloroethene	130	5.790	5.786	(1.043)	76367	18.3050	18.30
39	Bromodichloromethane	83	6.277	6.277	(1.130)	84908	17.1294	17.12
42	1,2-Dichloropropane	63	6.011	6.007	(1.082)	67930	16.6688	16.66
44	Dibromomethane	93	6.120	6.120	(1.102)	46284	17.5541	17.55
45	4-Methyl-2-Pentanone	43	6.855	6.851	(0.837)	166232	40.8111	40.81
46	cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	102386	17.0346	17.03
* 47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	561962	50.0000	
$ 48	Toluene-d8	98	6.922	6.922	(0.846)	686769	53.0876	53.08
50	Toluene	91	6.982	6.978	(0.853)	285169	18.1996	18.19
51	trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	85398	17.0918	17.09
52	2-Hexanone	43	7.593	7.589	(0.928)	116816	41.1913	41.19
53	1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	56576	18.0449	18.04
54	1,3-Dichloropropane	76	7.499	7.499	(0.916)	116303	16.7165	16.71
55	Dibromochloromethane	129	7.690	7.690	(0.940)	74622	17.8546	17.85
56	Tetrachloroethene	164	7.458	7.458	(0.911)	68909	20.5457	20.54
57	1,2-Dibromoethane	107	7.784	7.784	(0.951)	72133	18.4745	18.47
58	1-Chlorohexane	55	8.197	8.197	(1.476)	58811	18.8617	18.86
59	Chlorobenzene	112	8.208	8.208	(1.003)	201361	17.6411	17.64
60	1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	72314	18.1114	18.11
61	Ethylbenzene	106	8.305	8.305	(1.015)	95446	17.8628	17.86
62	m,p-Xylenes	106	8.406	8.406	(1.027)	243845	37.9576	37.95
63	o-Xylene	106	8.748	8.748	(1.069)	121934	18.4559	18.45
64	Styrene	104	8.763	8.759	(1.071)	200433	18.2228	18.22
66	Bromoform	173	8.920	8.916	(1.090)	48725	17.7478	17.74
67	Isopropylbenzene	105	9.063	9.062	(1.107)	299066	18.7170	18.71
68	1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	95286	18.7273	18.72
$ 69	4-Bromofluorobenzene	95	9.194	9.194	(1.123)	250436	51.1576	51.15
* 70	1,4-Dichlorobenzene-d4	152	10.168	10.172	(1.000)	305514	50.0000	
71	1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	97364	16.7879	16.78
73	n-Propylbenzene	91	9.411	9.411	(0.926)	322583	17.9816	17.98
74	Bromobenzene	156	9.317	9.317	(0.916)	87103	16.9776	16.97
75	1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	235828	18.4957	18.49
76	2-Chlorotoluene	91	9.482	9.482	(0.933)	208443	17.2629	17.26
77	4-Chlorotoluene	91	9.576	9.576	(0.942)	236091	17.2406	17.24
78	tert-Butylbenzene	119	9.835	9.835	(0.967)	208990	18.2484	18.24
79	1,2,4-Trimethylbenzene	105	9.880	9.880	(0.972)	243938	19.0895	19.08
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	274064	18.5582	18.55
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	244352	19.1194	19.11
83	1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	154937	17.0420	17.04
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	162304	16.8507	16.85
87	n-Butylbenzene	91	10.491	10.491	(1.032)	195129	18.1934	18.19
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	154249	16.8644	16.86
89	1,2-Dibromo-3-Chloropropane	155	11.166	11.165	(1.098)	16042	19.3071	19.30

90 1,2,4-Trichlorobenzene	180	11.859	11.855 (1.166)	95773	16.9729	16.97
91 Hexachlorobutadiene	225	11.998	11.998 (1.180)	41596	18.3900	18.38

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	92 Naphthalene	128	12.065	12.065	(1.187)	266199	19.5611	19.56
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	95383	16.7626	16.76
M	94 1,2-Dichloroethylene (total)	96				142661	36.2327	36.23
M	95 Xylenes (total)	106				365779	56.8510	56.85
	135 1,4-Dioxane	88	6.169	6.165	(1.280)	17981	310.453	310.45
	141 Cyclohexane	56	4.785	4.785	(0.993)	94945	18.0501	18.05
	138 Freon TF	101	2.341	2.337	(0.486)	61298	23.1297	23.12
	140 1,3-Butadiene	54	1.408	1.404	(0.292)	65597	17.8914	17.89
	147 Methylcyclohexane	55	5.947	5.944	(1.071)	171272	20.7814	20.78
	146 Methyl Acetate	43	2.716	2.712	(0.564)	69616	19.1612	19.16
	148 Tert-Butyl alcohol	59	2.971	2.963	(0.617)	166240	406.782	406.78
	149 Isopropyl Alcohol	45	2.566	2.558	(0.533)	93561	400.506	400.50
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	19674	19.4540	19.45
	12 Isobutyl Alcohol	43	5.288	5.284	(1.097)	197192	360.172	360.17
	13 Acetonitrile	39	2.675	2.671	(0.555)	84878	216.037	216.03
	14 Allyl Chloride	41	2.675	2.671	(0.555)	187382	20.8771	20.87
	25 Methacrylonitrile	41	4.497	4.493	(0.933)	44071	16.9078	16.90(M)
	40 Methyl Methacrylate	41	6.157	6.153	(1.278)	62420	17.3233	17.32
	4 Propionitrile	54	4.339	4.335	(0.900)	111439	184.114	184.11(a)
	136 n-Hexane	57	3.346	3.342	(0.694)	68006	20.0409	20.04
	194 Acetaldehyde	44	1.464	1.460	(0.304)	29267	56.4956	56.49(M)
	131 Methyl Acrylate	55	4.373	4.369	(0.907)	85681	17.8687	17.86
	23 Chloroprene	53	2.161	2.157	(0.449)	20793	16.6980	16.69(M)
	49 Ethyl Methacrylate	69	7.289	7.289	(1.312)	110948	20.3294	20.32
	166 1,2,3-Trimethylbenzene	105	10.236	10.232	(1.007)	234007	18.5606	18.56
	167 Ethanol	45	2.086	2.079	(0.433)	18010	392.510	392.51
	164 Dicyclopentadiene	66	10.198	10.198	(1.003)	266181	16.3438	16.34
	145 alpha-Methylstyrene	118	9.752	9.752	(0.959)	85822	15.0116	15.01
	142 Tetrahydrofuran	42	4.545	4.542	(0.943)	28510	36.7930	36.79
	156 Diisopropyl ether	45	3.623	3.619	(0.752)	209130	16.4444	16.44
	162 Butyl acrylate	55	8.733	8.733	(1.067)	119686	16.9267	16.92
	203 2-Ethylhexyl Acrylate	55	12.043	12.043	(1.184)	52139	13.5048	13.50
	130 Ethyl Acetate	43	4.343	4.339	(0.901)	78794	17.7683	17.76
	189 n-Butyl acetate	43	7.705	7.705	(0.941)	128658	20.5536	20.55
	182 Epichlorohydrin	57	6.633	6.630	(1.194)	9236	42.7579	42.75
	132 n-Butanol	56	5.824	5.820	(1.208)	42068	354.573	354.57(a)
	133 Ethyl Acrylate	55	5.947	5.944	(1.234)	171272	19.5188	19.51
	163 Butyl methacrylate	41	9.647	9.647	(0.949)	63153	16.9196	16.91
	187 n-Amyl acetate	43	8.931	8.931	(1.091)	127103	17.8446	17.84
	188 Isopropyl acetate	43	5.288	5.284	(0.952)	197750	19.2776	19.27

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



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Date : 12-JAN-2024 14:54
Client ID: HS24010519-09MSD
Sample Info: HS24010519-09MSD;HS24010519-09MSD;3;;MSD
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240112.b\u011212.d
Inj Date : 12-JAN-2024 14:54
InstruID : VOA9.i
LabSampID : HS24010519-09MSD

Methacrylonitrile (126-98-7)

Reason Code:

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17-Jan-2024
14:06
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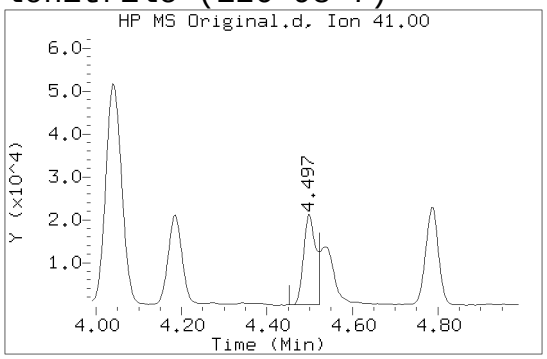
pham



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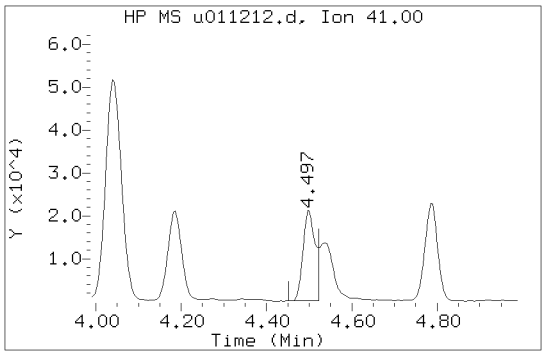

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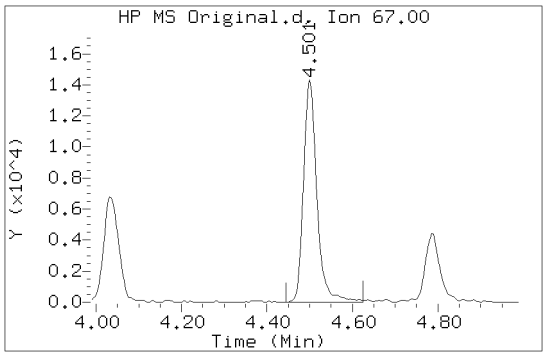

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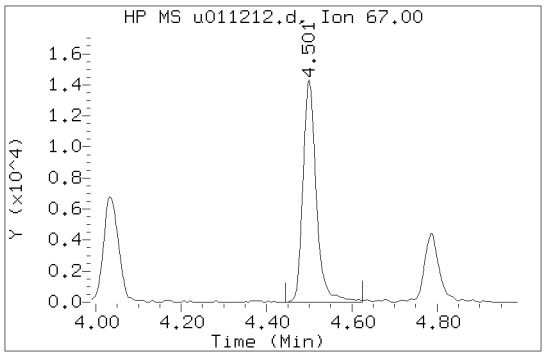

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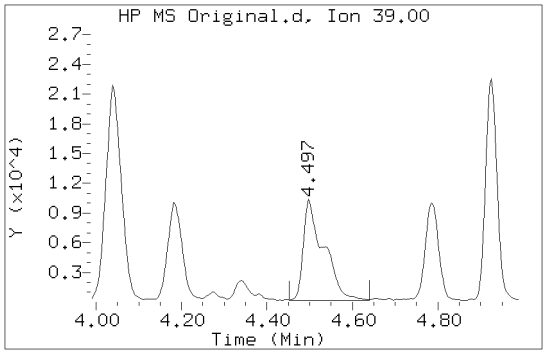

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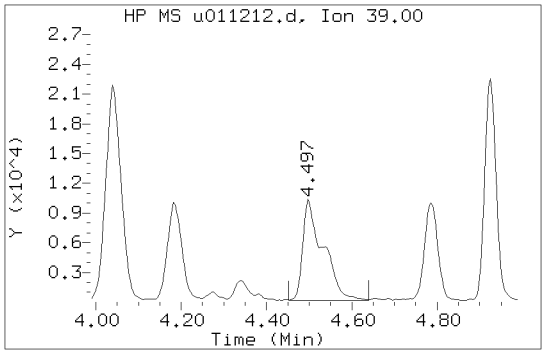

Chloroprene (126-99-8)

Reason Code:

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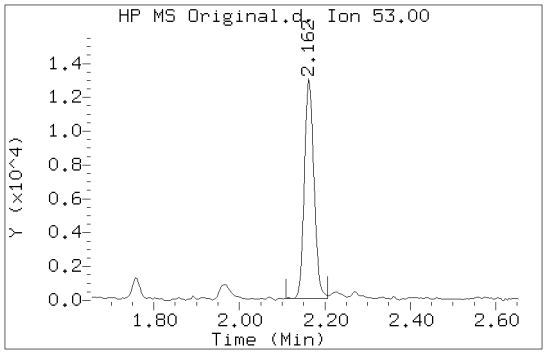

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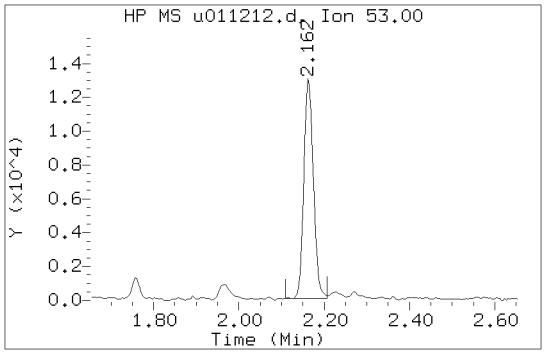

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Inj Date : 12-JAN-2024 14:54
InstruID : VOA9.i
LabSampID : HS24010519-09MSD

Chloroprene (126-99-8)

Reason Code:

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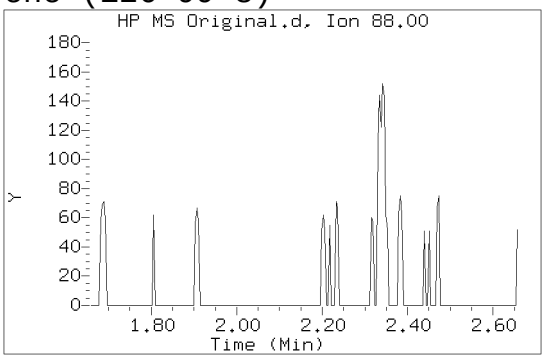

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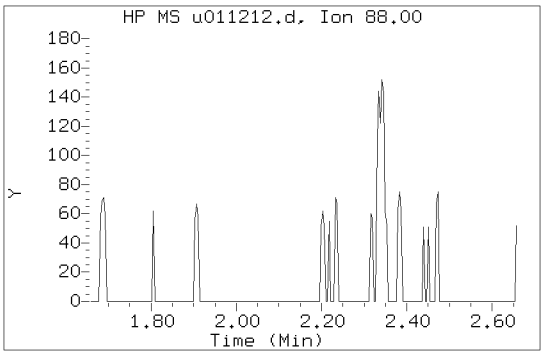

Acetaldehyde (75-07-0)

Reason Code:

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17-Jan-2024
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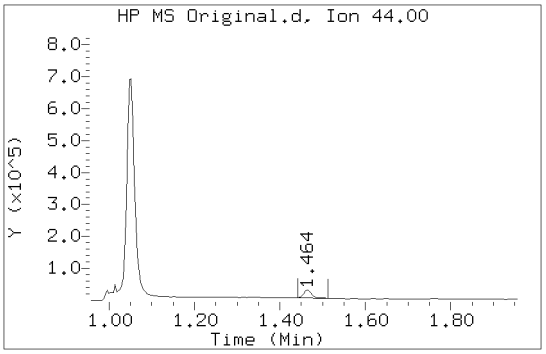

AFTER

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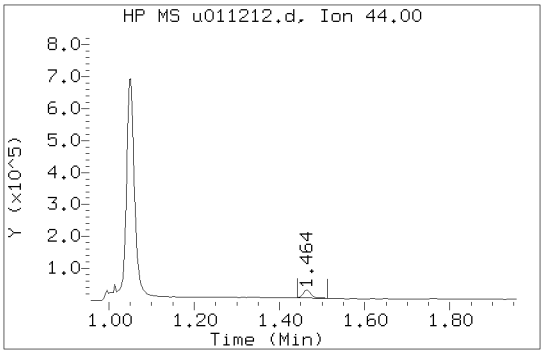

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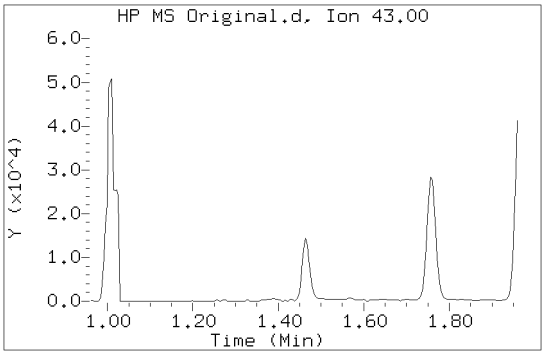

AFTER

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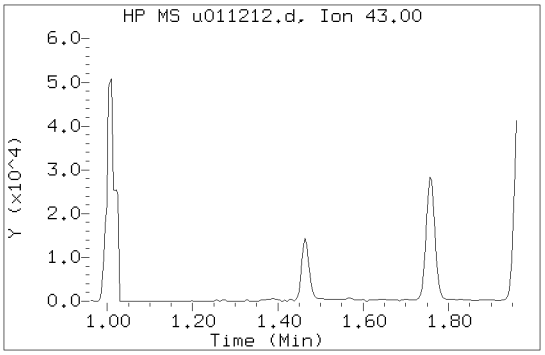

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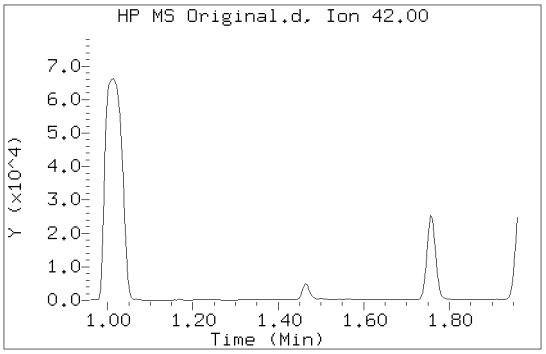

AFTER

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17-Jan-2024
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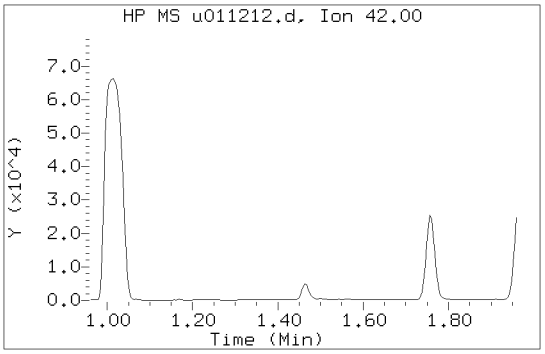


Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011215.D Page 1
Report Date: 17-Jan-2024 14:06

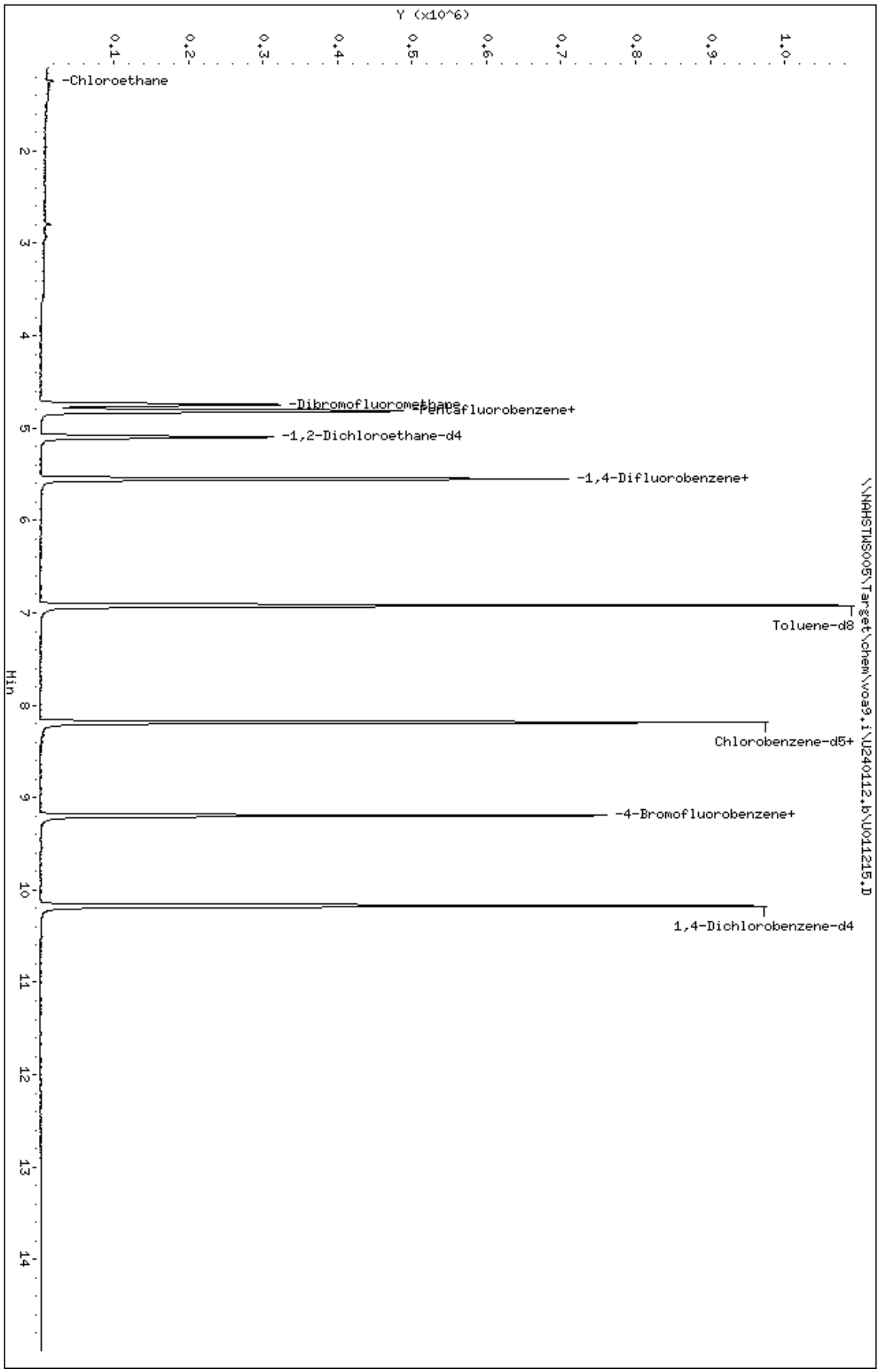
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011215.D
Lab Smp Id: HS24010538-10 Client Smp ID: HS24010538-10
Inj Date : 12-JAN-2024 16:01
Operator : PC Inst ID: VOA9.i
Smp Info : HS24010538-10;HS24010538-10;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0538-dod.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	4.815	4.815	(1.000)	362077	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	195410	52.7910	52.79
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	204398	48.2102	48.21
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	561917	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	547569	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	671896	53.3031	53.30
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	225409	47.1566	47.15
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	277397	50.0000	



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Date : 12-JAN-2024 16:01
Client ID: HS24010538-10
Sample Info: HS24010538-10;HS24010538-10;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011215.D
Inj Date : 12-JAN-2024 16:01
InstruID : VOA9.i
LabSampID : HS24010538-10

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011216.D Page 1
Report Date: 17-Jan-2024 14:06

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011216.D
Lab Smp Id: HS24010538-03 Client Smp ID: HS24010538-03
Inj Date : 12-JAN-2024 16:23
Operator : PC Inst ID: VOA9.i
Smp Info : HS24010538-03;HS24010538-03;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0538-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

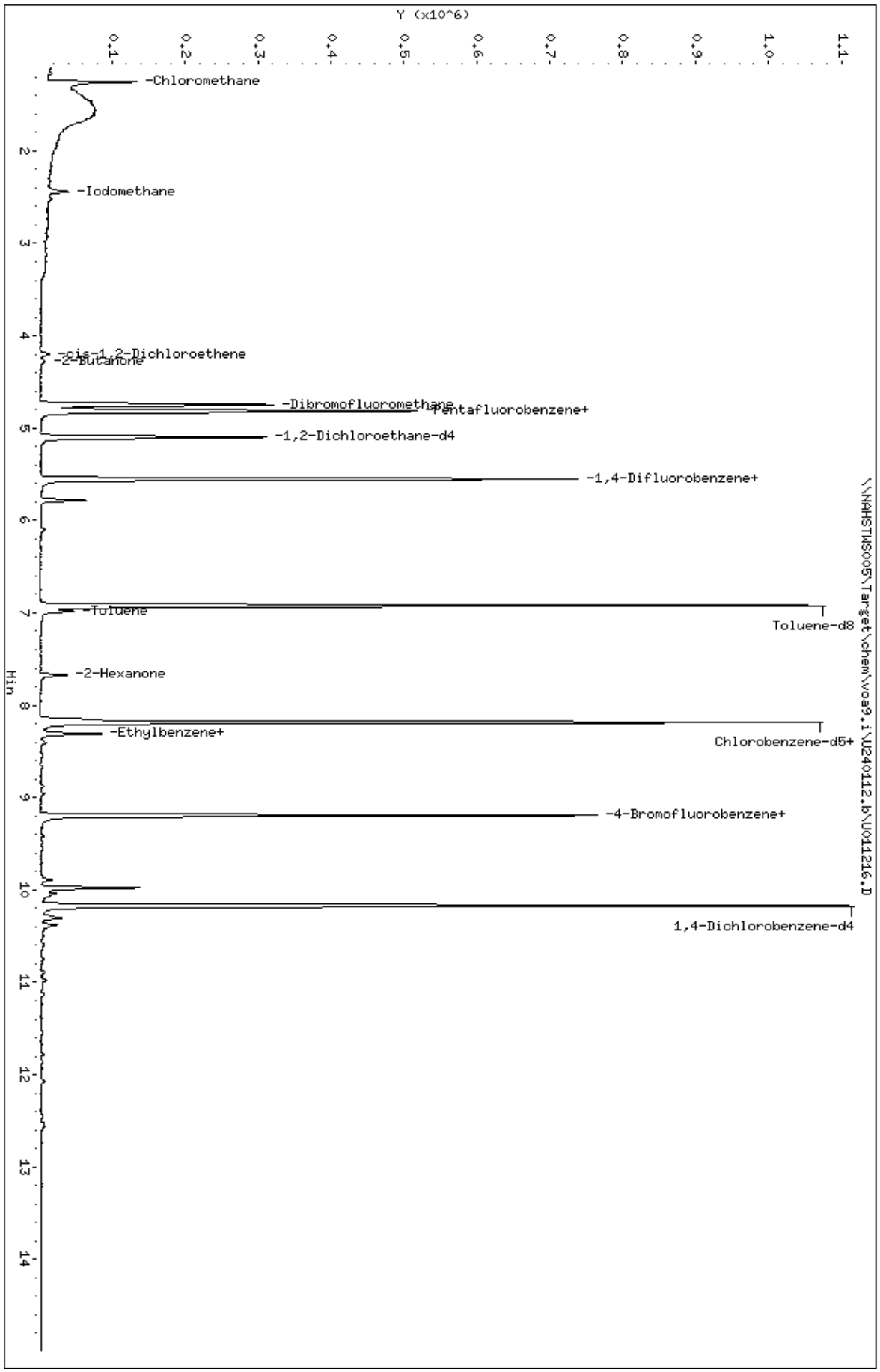
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.815	4.815	(1.000)	386761	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	189359	47.7959	47.79
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	202242	44.8337	44.83
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	588680	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	599892	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	668238	48.3891	48.38
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	228065	43.4516	43.45
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	315299	50.0000	
27 cis-1,2-Dichloroethene	96	4.200	4.197	(0.872)	6926	1.44987	1.44(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



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Client ID: HS24010538-03
Sample Info: HS24010538-03;HS24010538-03;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011216.D Page 2

Date : 12-JAN-2024 16:23

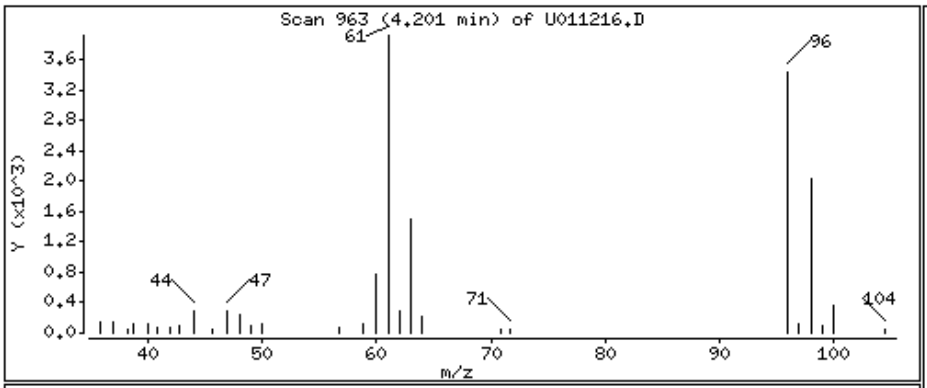
Client ID: HS24010538-03 Instrument: VOA9.i

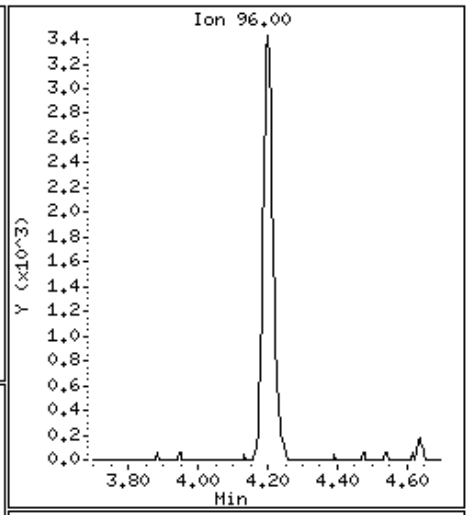
Sample Info: HS24010538-03;HS24010538-03;;;

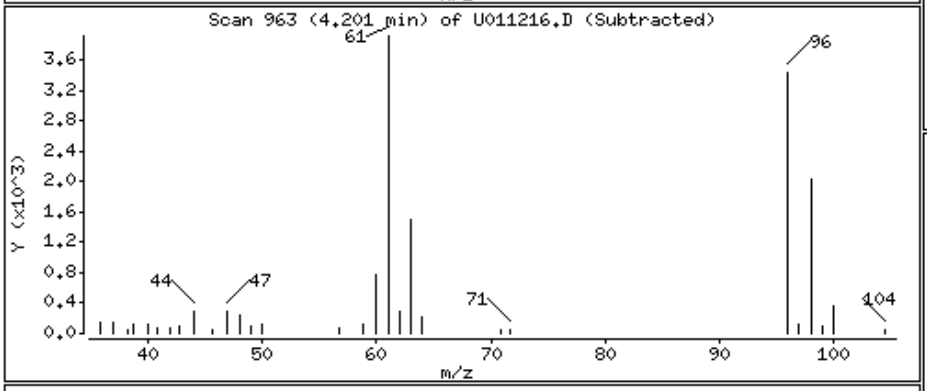
Purge Volume: 5.0 Operator: PC

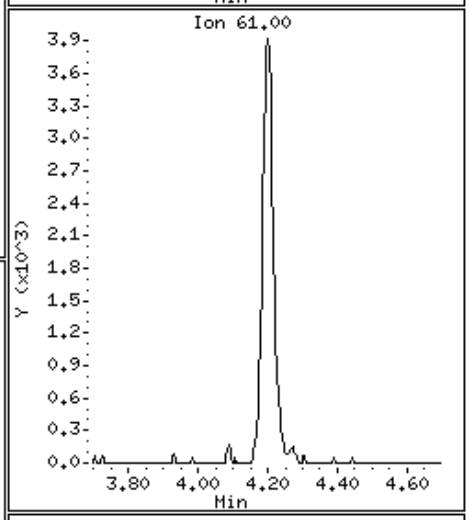
Column phase: DB624 Column diameter: 0.18

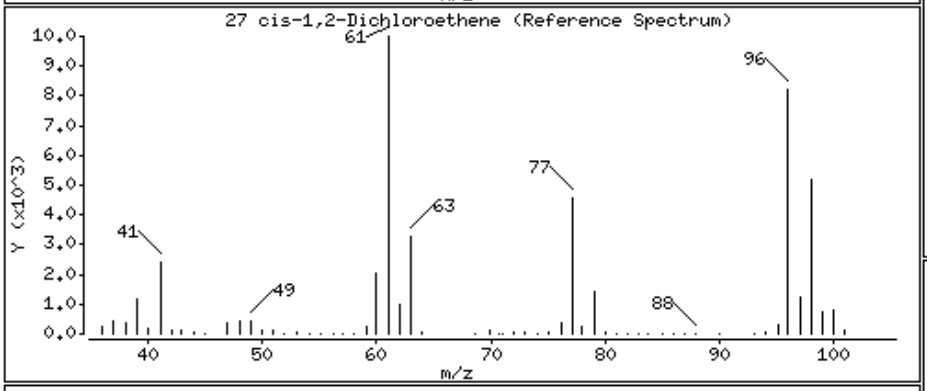
27 cis-1,2-Dichloroethene Concentration: 1.44 ug/l

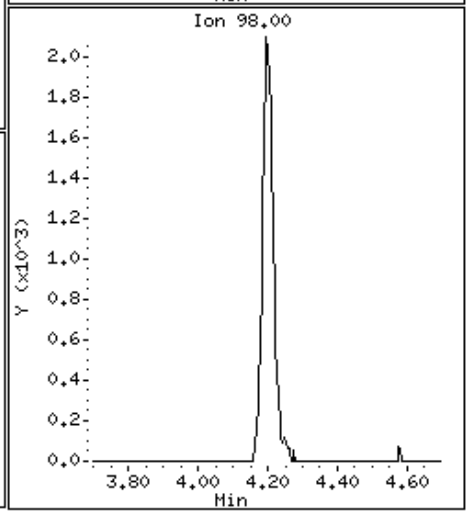


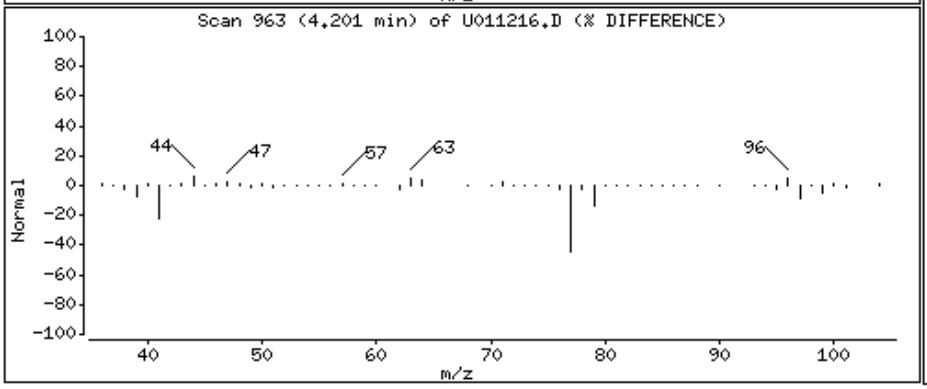












Data File : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011216.D
Inj Date : 12-JAN-2024 16:23
InstruID : VOA9.i
LabSampID : HS24010538-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011217.D Page 1
Report Date: 17-Jan-2024 14:06

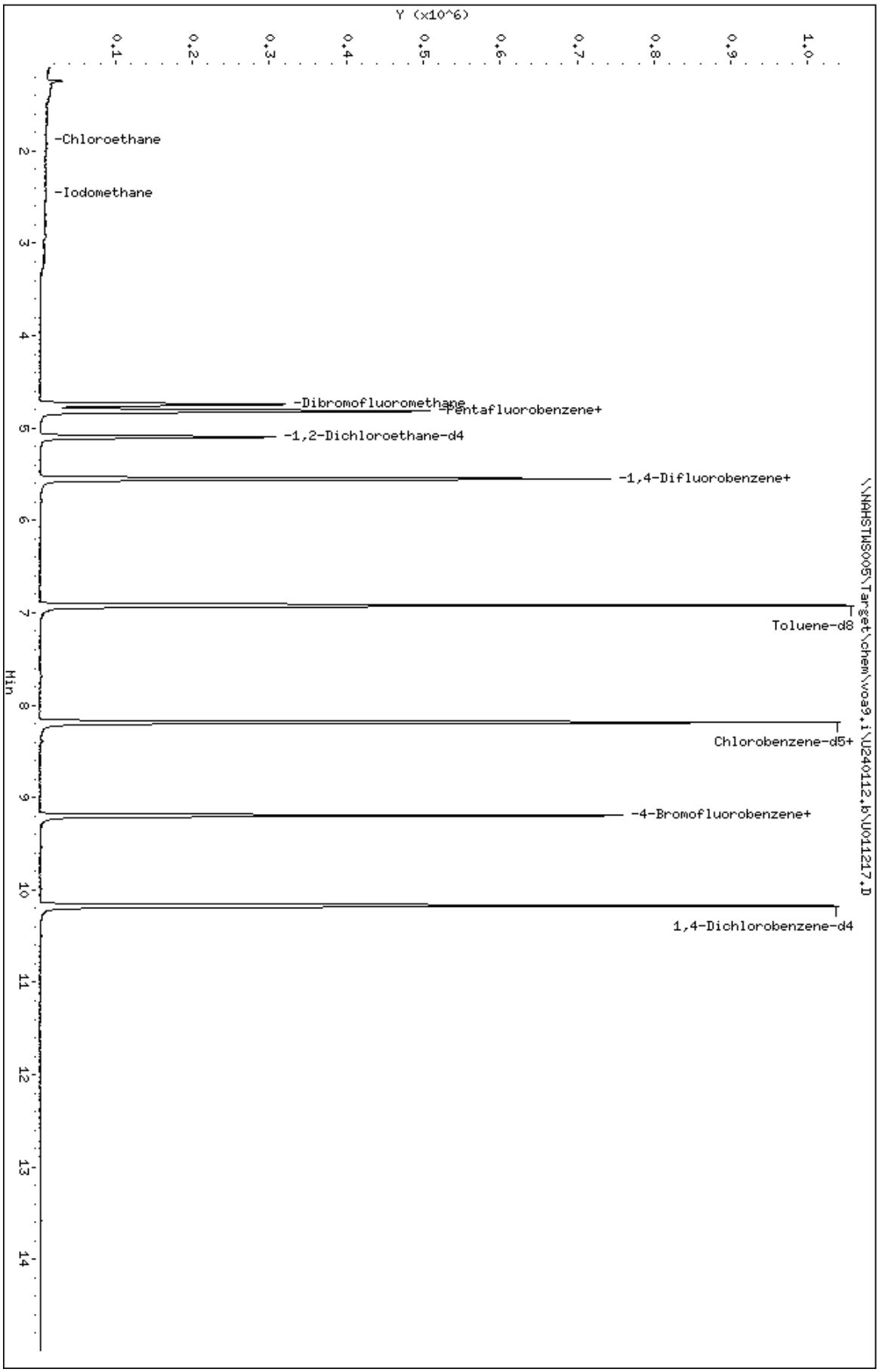
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011217.D
Lab Smp Id: HS24010538-05 Client Smp ID: HS24010538-05
Inj Date : 12-JAN-2024 16:46
Operator : PC Inst ID: VOA9.i
Smp Info : HS24010538-05;HS24010538-05;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0538-dod.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	4.815	4.815	(1.000)	375694	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.985)	187715	48.7978	48.79
$ 35 1,2-Dichloroethane-d4	65	5.093	5.096	(1.058)	202134	46.0646	46.06
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	588766	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	578638	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	666874	50.0641	50.06
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	224448	44.3595	44.35
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	298820	50.0000	



Data File: \\NAHSTWS005\Target\chem\voa9,i\U240112,b\U011217.D
Date : 12-JAN-2024 16:46
Client ID: HS24010538-05
Sample Info: HS24010538-05;HS24010538-05;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011217.D
Inj Date : 12-JAN-2024 16:46
InstruID : VOA9.i
LabSampID : HS24010538-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011218.D Page 1
Report Date: 17-Jan-2024 14:06

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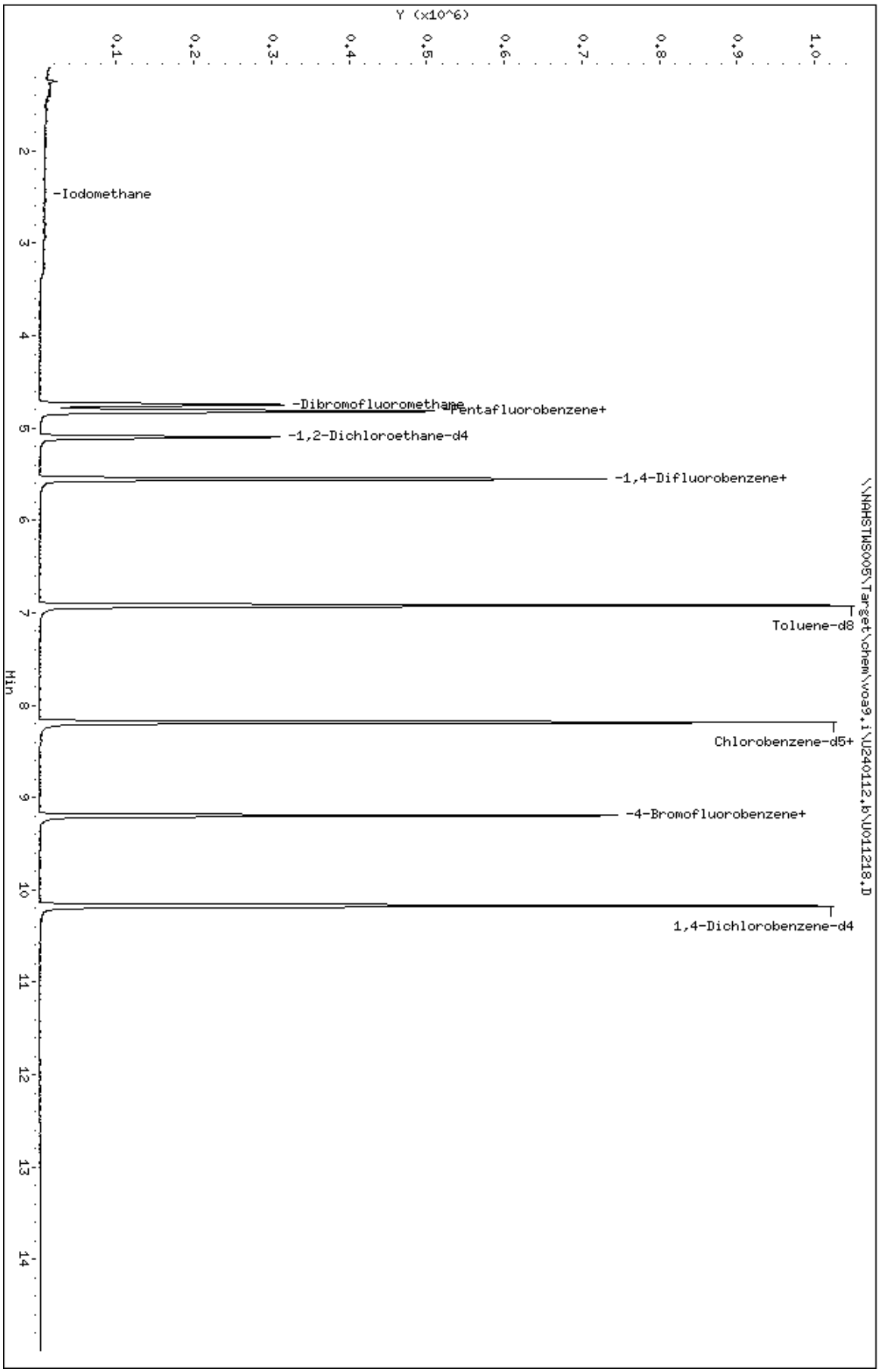
Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011218.D
Lab Smp Id: HS24010538-06 Client Smp ID: HS24010538-06
Inj Date : 12-JAN-2024 17:08
Operator : PC Inst ID: VOA9.i
Smp Info : HS24010538-06;HS24010538-06;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0538-dod.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	4.815	4.815	(1.000)	376829	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	187563	48.6075	48.60
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	198629	45.1757	45.17
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	582687	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	571977	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	647325	49.1624	49.16
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	222821	44.5564	44.55
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	295011	50.0000	



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Date : 12-JAN-2024 17:08
Client ID: HS24010538-06
Sample Info: HS24010538-06;HS24010538-06;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Page 1

Data File : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011218.D
Inj Date : 12-JAN-2024 17:08
InstruID : VOA9.i
LabSampID : HS24010538-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011219.D Page 1
Report Date: 17-Jan-2024 14:06

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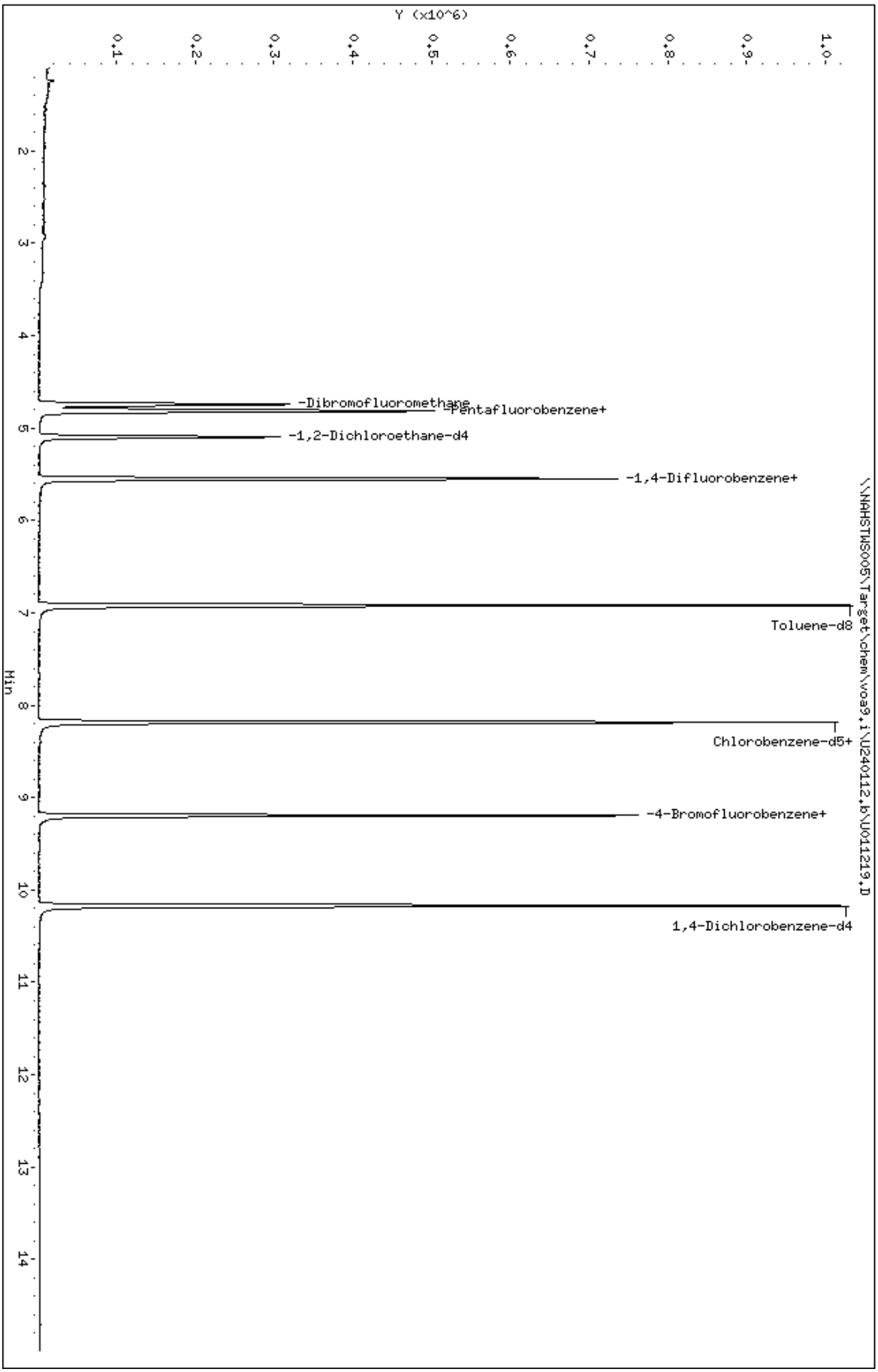
Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011219.D
Lab Smp Id: HS24010538-07 Client Smp ID: HS24010538-07
Inj Date : 12-JAN-2024 17:30
Operator : PC Inst ID: VOA9.i
Smp Info : HS24010538-07;HS24010538-07;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0538-dod.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	4.815	(1.000)	370057	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.986)	188202	49.6880	49.68
$ 35 1,2-Dichloroethane-d4	65	5.093	5.096	(1.058)	204266	47.1970	47.19
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	582725	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	569172	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	658347	50.2459	50.24
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	227306	45.7099	45.70
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	293855	50.0000	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Date : 12-JAN-2024 17:30
Client ID: HS24010538-07
Sample Info: HS24010538-07;HS24010538-07;;;
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9.i
Operator: PC
Column diameter: 0.18
Page 1
Y (x10^6)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
2
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7
8
9
10
11
12
13
14
Min
-Dibromofluoromethane
-Pentafluorobenzene+
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene+
Toluene-d8
Chlorobenzene-d5+
-4-Bromofluorobenzene+
1,4-Dichlorobenzene-d4
\\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011219.D

Data File : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011219.D
Inj Date : 12-JAN-2024 17:30
InstruID : VOA9.i
LabSampID : HS24010538-07

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011222.D Page 1
Report Date: 17-Jan-2024 14:07

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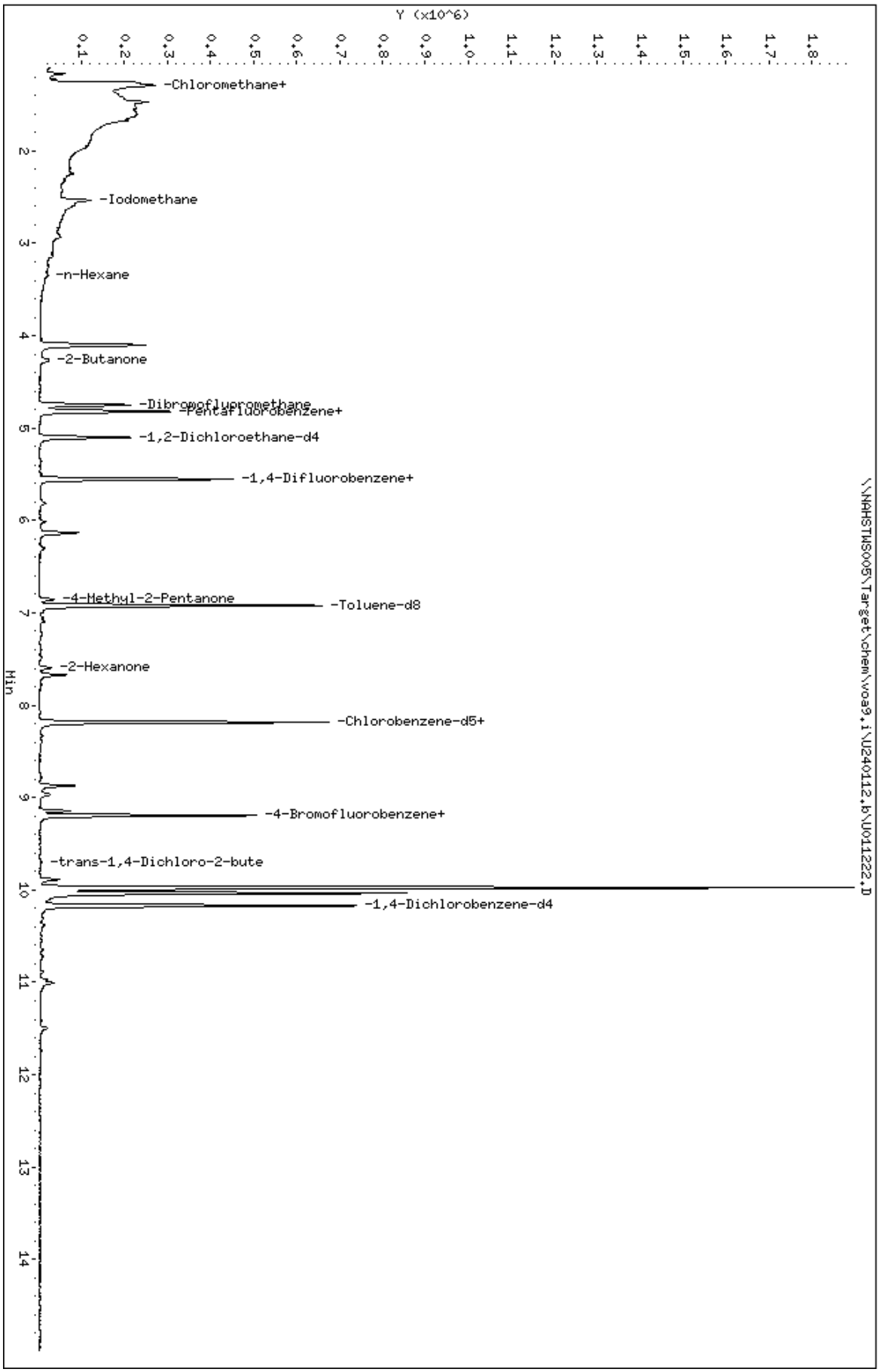
Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011222.D
Lab Smp Id: HS24010538-04 Client Smp ID: HS24010538-04
Inj Date : 12-JAN-2024 18:37
Operator : PC Inst ID: VOA9.i
Smp Info : HS24010538-04;HS24010538-04;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0538-dod.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	4.815	4.815	(1.000)	227831	50.0000	
$ 30 Dibromofluoromethane	113	4.751	4.748	(0.987)	125657	53.9721	53.97
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.059)	140782	52.4936	52.49
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	363970	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	378343	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	409780	47.0494	47.04
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	147970	44.7373	44.73
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	202173	50.0000	



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Date : 12-JAN-2024 18:37
Client ID: HS24010538-04
Sample Info: HS24010538-04;HS24010538-04;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011222.D
Inj Date : 12-JAN-2024 18:37
InstruID : VOA9.i
LabSampID : HS24010538-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011223.D Page 1
Report Date: 17-Jan-2024 14:07

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Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011223.D
Lab Smp Id: HS24010538-02 Client Smp ID: HS24010538-02
Inj Date : 12-JAN-2024 18:59
Operator : PC Inst ID: VOA9.i
Smp Info : HS24010538-02;HS24010538-02;;;
Misc Info : V9;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 21
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0538-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

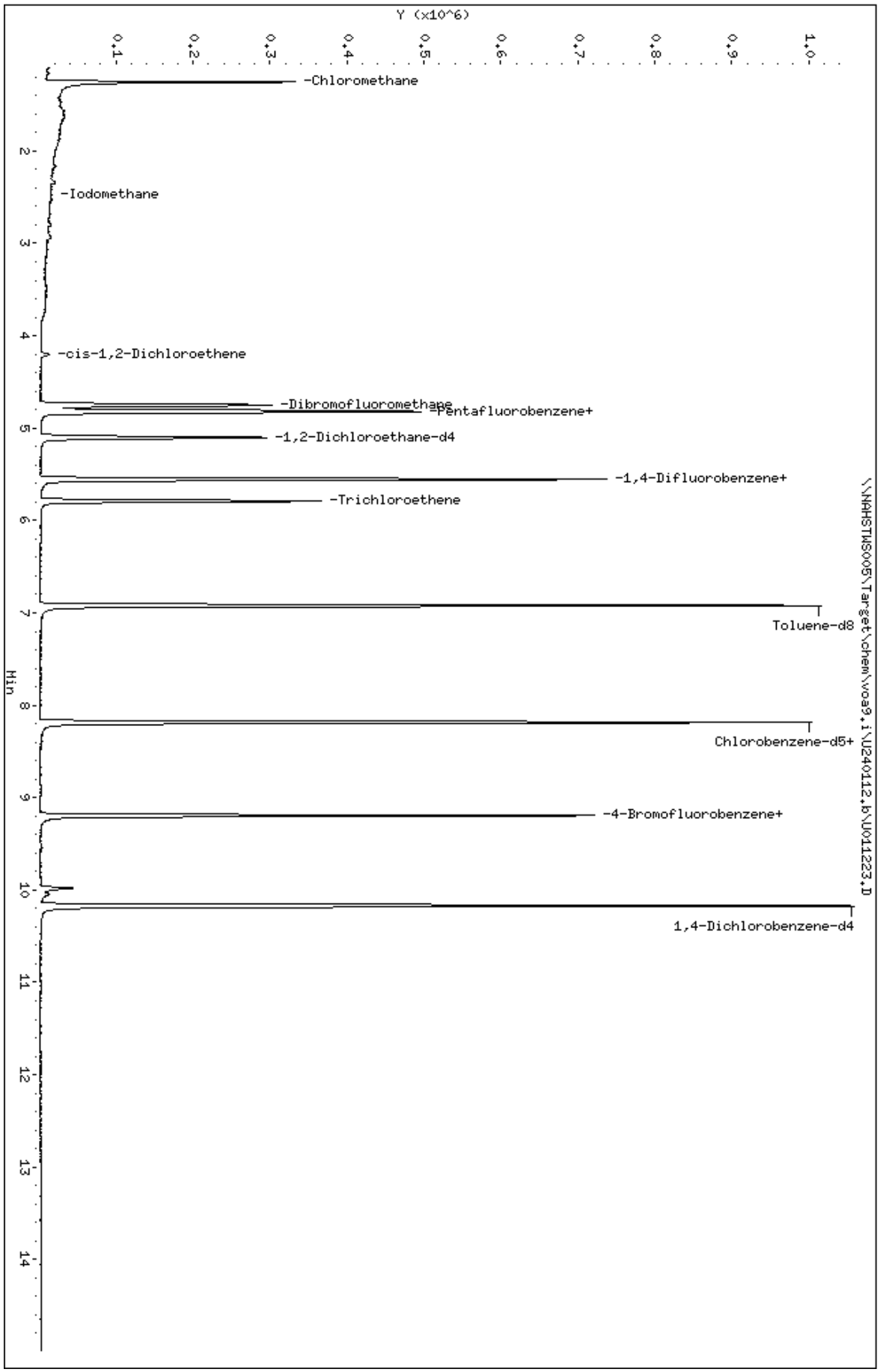
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	5.000	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	4.819	4.815	(1.000)	361918	50.0000	
$	30 Dibromofluoromethane	113	4.751	4.748	(0.986)	181992	49.1174	49.11
$	35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	195902	46.3294	46.32
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	574844	50.0000	
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	562858	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	620703	47.9043	47.90
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	213063	43.2587	43.25
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	302352	50.0000	
	27 cis-1,2-Dichloroethene	96	4.204	4.197	(0.872)	5500	1.23039	6.15(a)
	38 Trichloroethene	130	5.790	5.786	(1.043)	122603	28.4265	142.13

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011223.D
Date : 12-JAN-2024 18:59
Client ID: HS24010538-02
Sample Info: HS24010538-02;HS24010538-02;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011223.D Page 2

Date : 12-JAN-2024 18:59

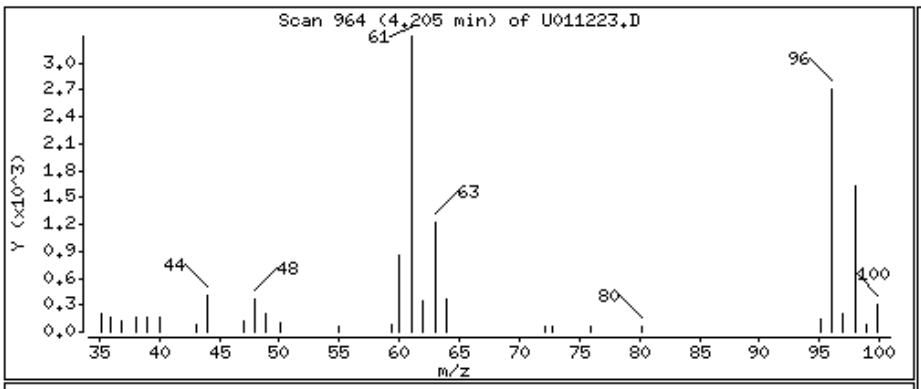
Client ID: HS24010538-02 Instrument: VOA9.i

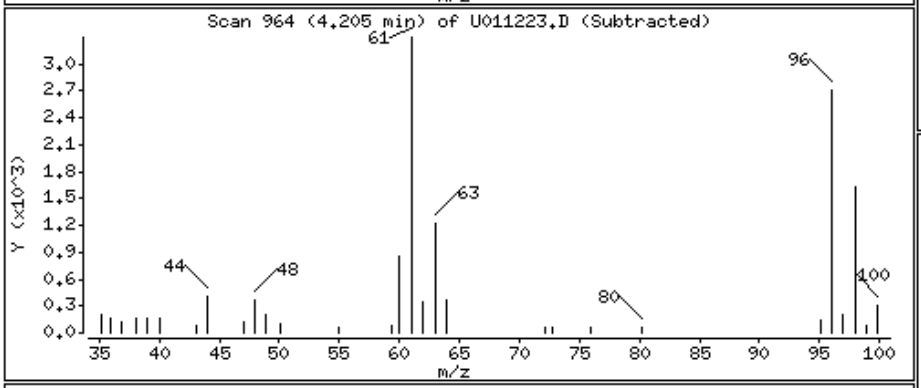
Sample Info: HS24010538-02;HS24010538-02;;;

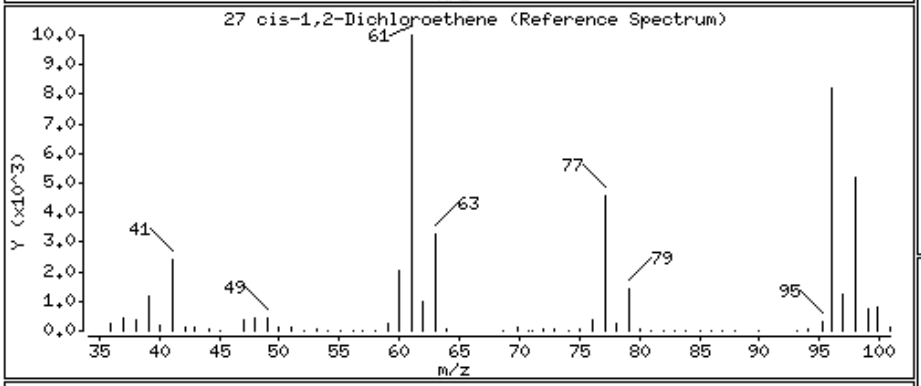
Purge Volume: 5.0 Operator: PC

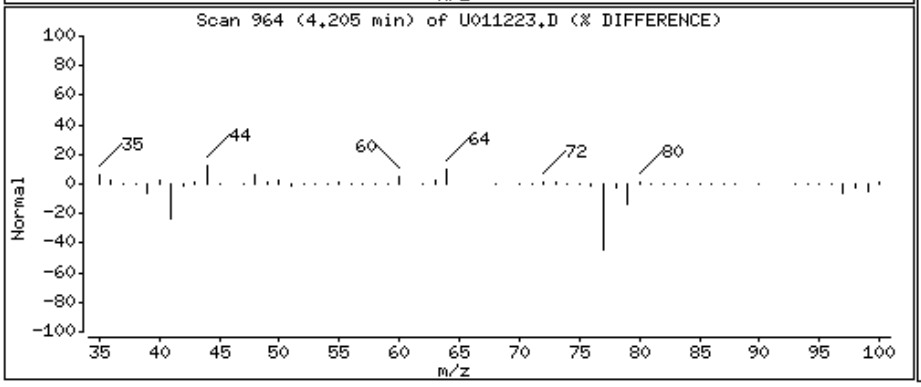
Column phase: DB624 Column diameter: 0.18

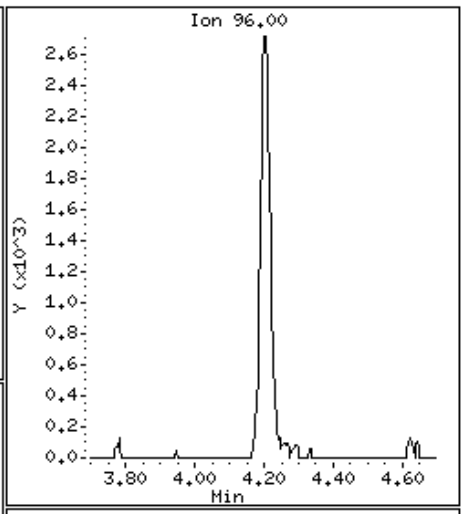
27 cis-1,2-Dichloroethene Concentration: 6.15 ug/l

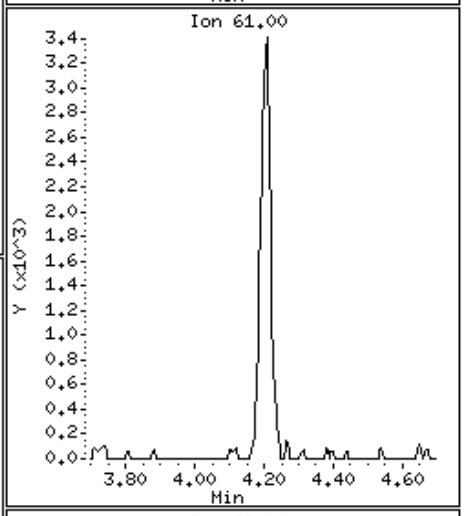


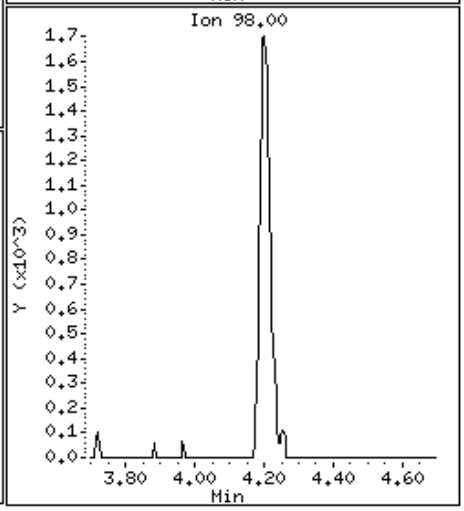












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011223.D Page 3

Date : 12-JAN-2024 18:59

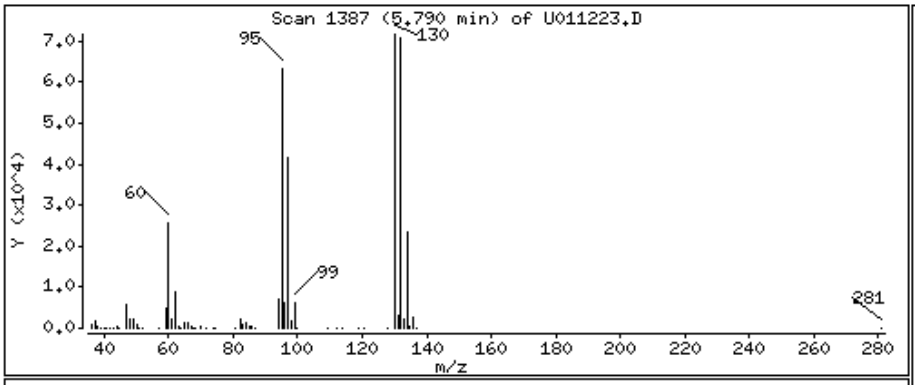
Client ID: HS24010538-02 Instrument: VOA9.i

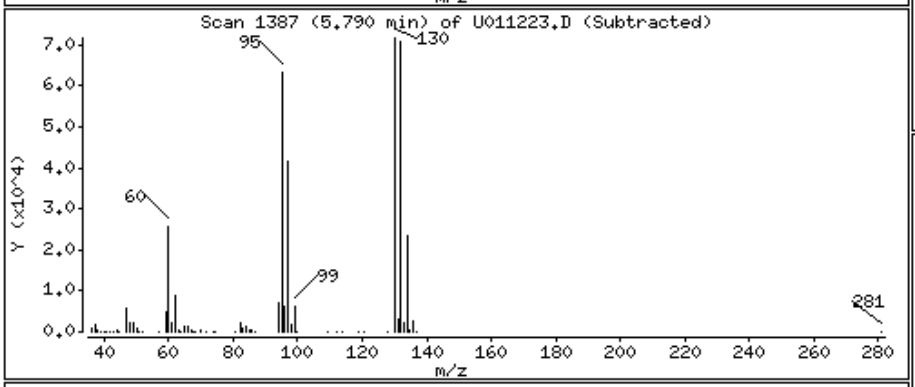
Sample Info: HS24010538-02;HS24010538-02;;;

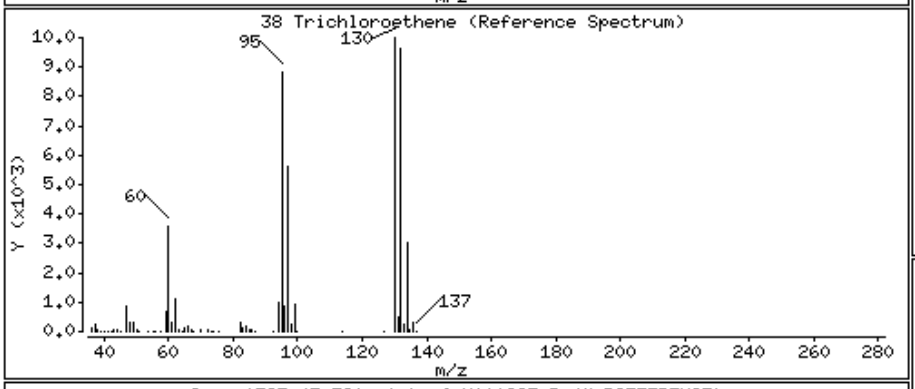
Purge Volume: 5.0 Operator: PC

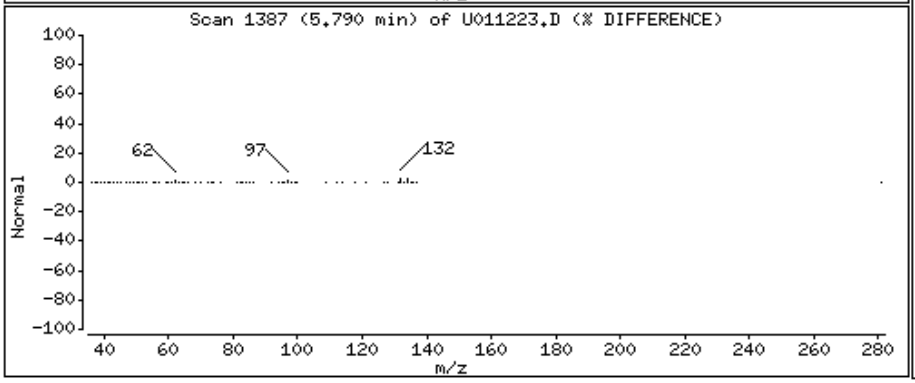
Column phase: DB624 Column diameter: 0.18

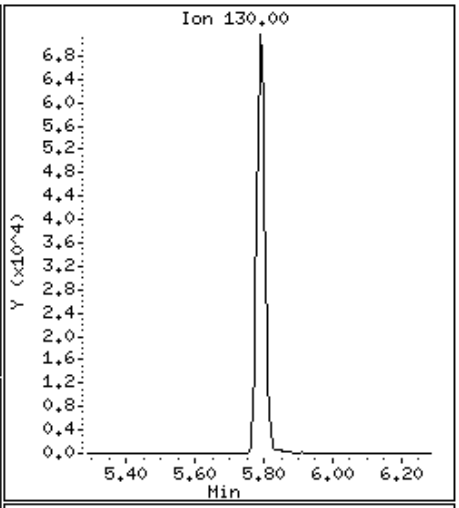
38 Trichloroethene Concentration: 142.13 ug/l

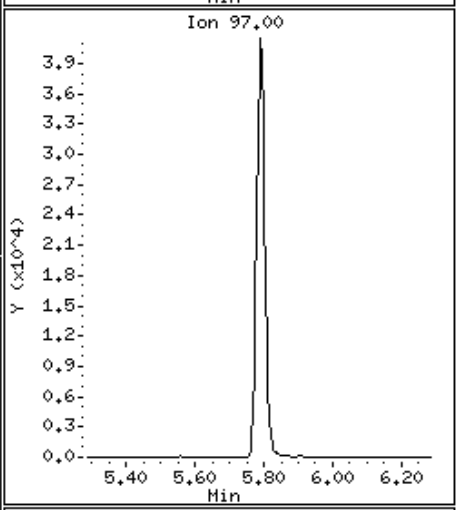


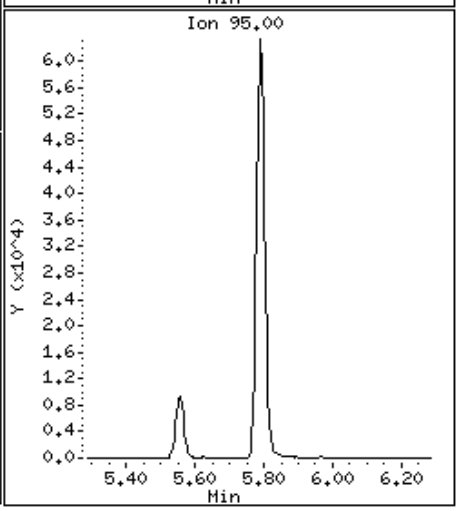












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Inj Date : 12-JAN-2024 18:59
InstruID : VOA9.i
LabSampID : HS24010538-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011224.D Page 1
Report Date: 17-Jan-2024 14:07

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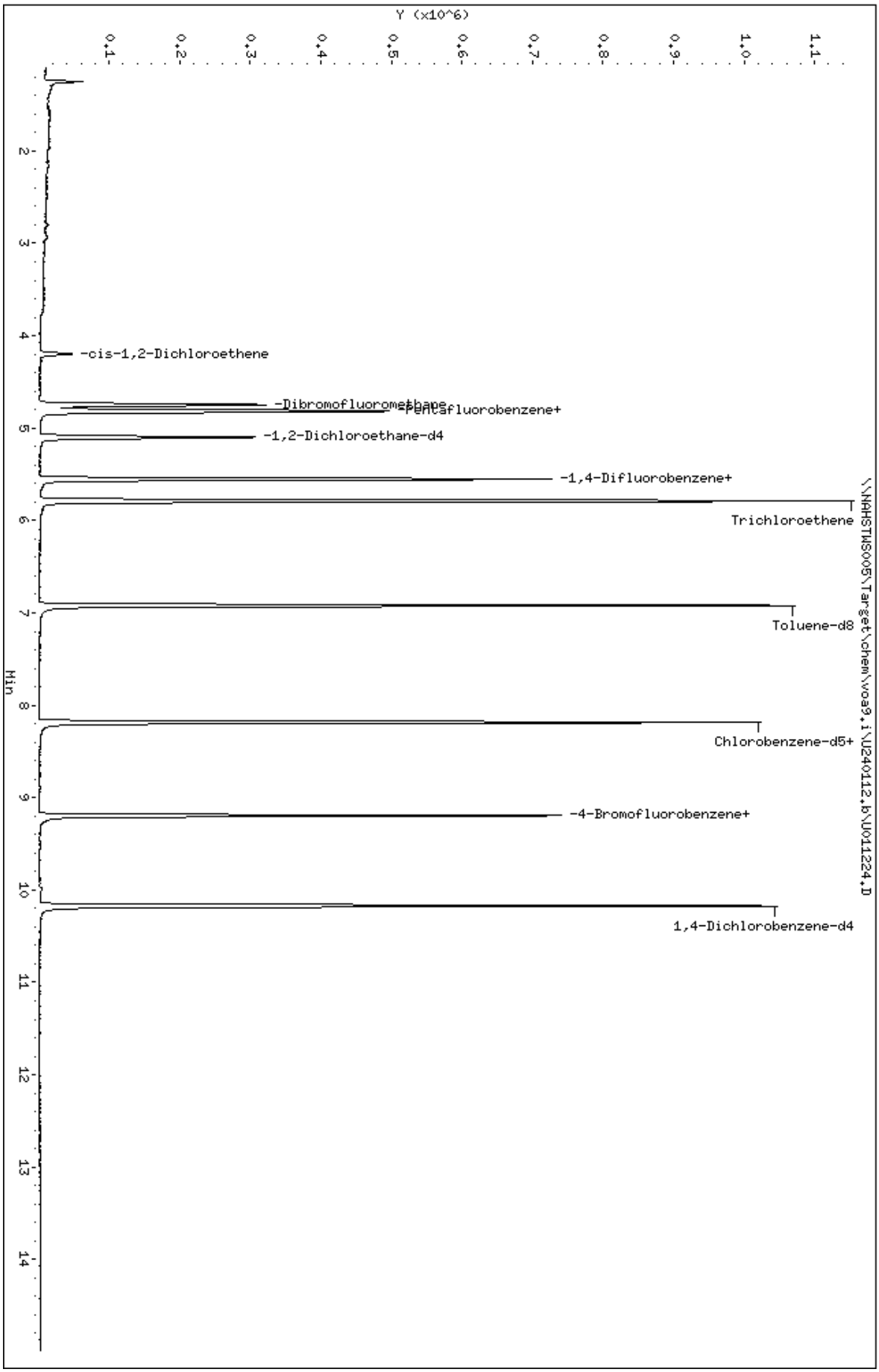
Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011224.D
Lab Smp Id: HS24010538-01 Client Smp ID: HS24010538-01
Inj Date : 12-JAN-2024 19:21
Operator : PC Inst ID: VOA9.i
Smp Info : HS24010538-01;HS24010538-01;;;
Misc Info : V9;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 22
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: 0538-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	50.000	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	4.815	(1.000)	365638	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	190624	50.9615	50.96
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	202443	47.3334	47.33
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	568444	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	568854	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	650753	49.6941	49.69
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	220261	44.2784	44.27
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	293173	50.0000	
27 cis-1,2-Dichloroethene	96	4.200	4.197	(0.872)	22962	5.08449	254.22
38 Trichloroethene	130	5.790	5.786	(1.043)	386174	90.5458	4527.28



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Date : 12-JAN-2024 19:21
Client ID: HS24010538-01
Sample Info: HS24010538-01;HS24010538-01;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011224.D Page 2

Date : 12-JAN-2024 19:21

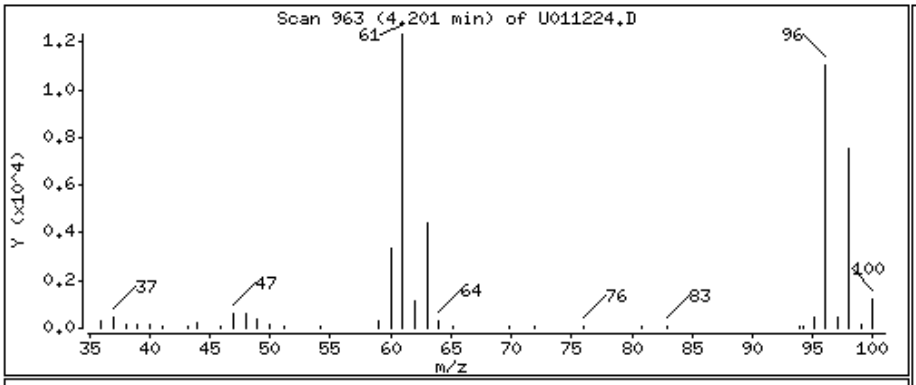
Client ID: HS24010538-01 Instrument: VOA9.i

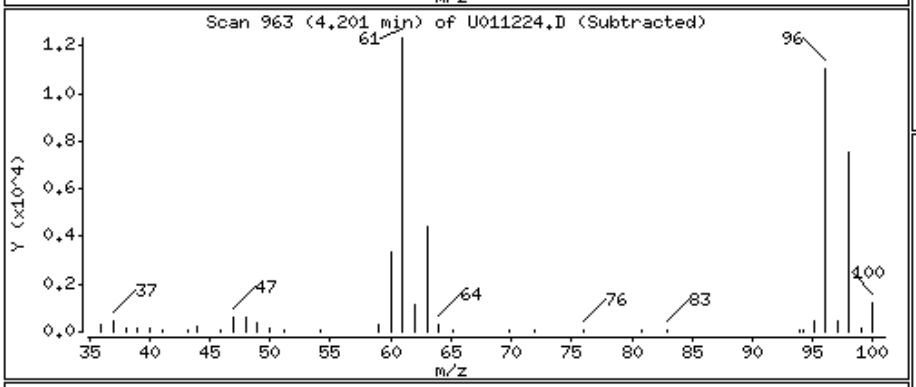
Sample Info: HS24010538-01;HS24010538-01;;;

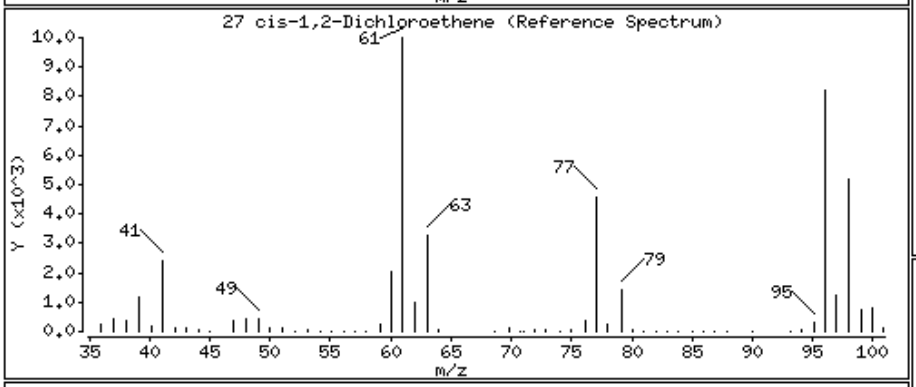
Purge Volume: 5.0 Operator: PC

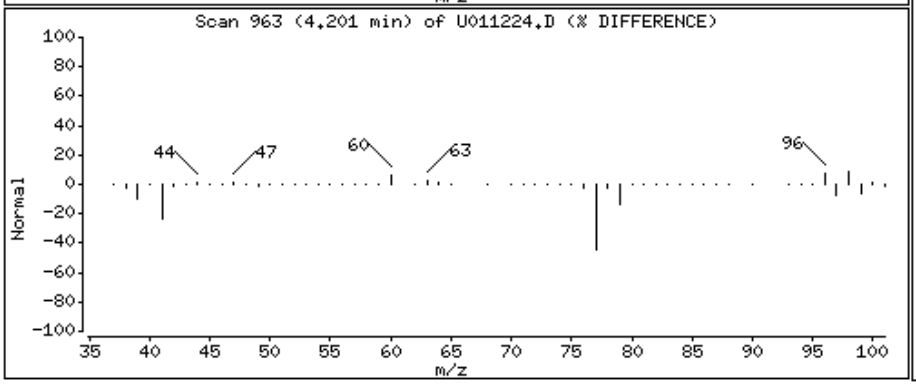
Column phase: DB624 Column diameter: 0.18

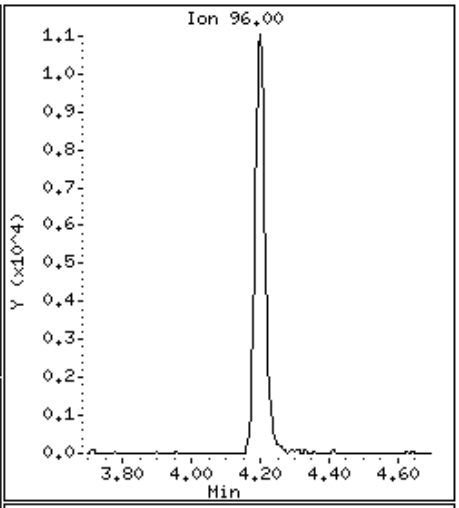
27 cis-1,2-Dichloroethene Concentration: 254.22 ug/l

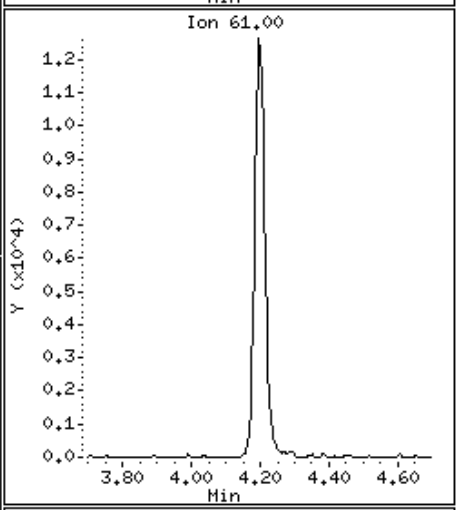


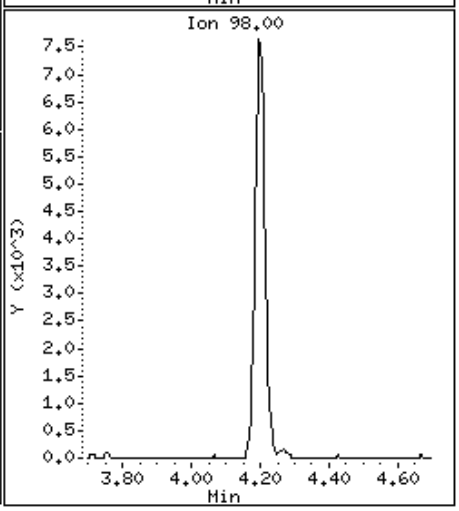












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011224.D Page 3

Date : 12-JAN-2024 19:21

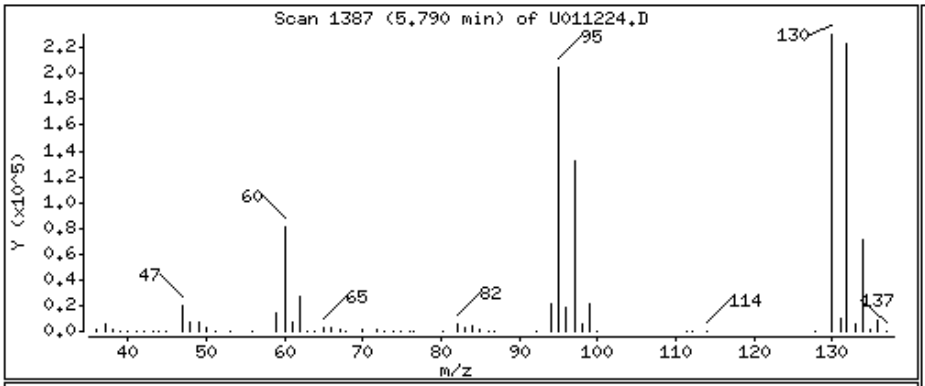
Client ID: HS24010538-01 Instrument: VOA9.i

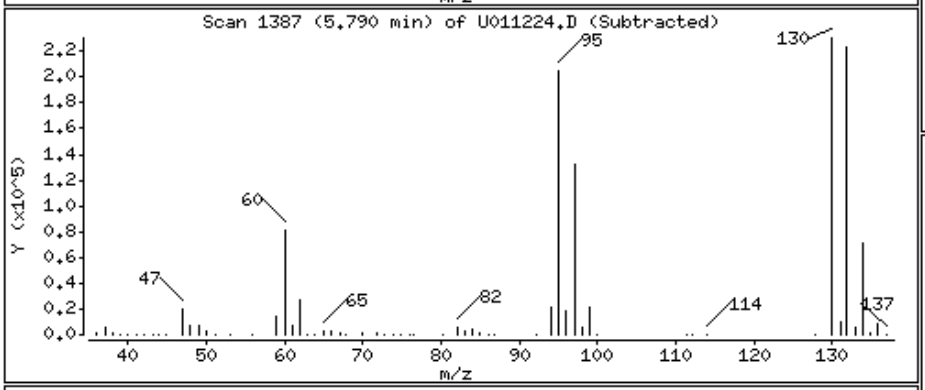
Sample Info: HS24010538-01;HS24010538-01;;;

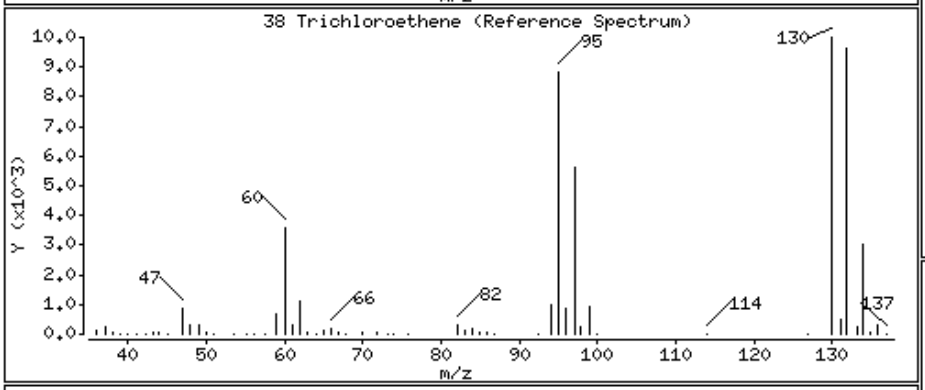
Purge Volume: 5.0 Operator: PC

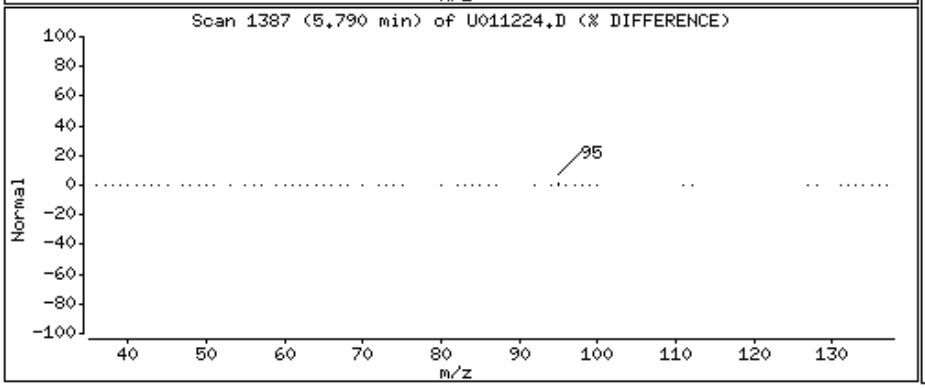
Column phase: DB624 Column diameter: 0.18

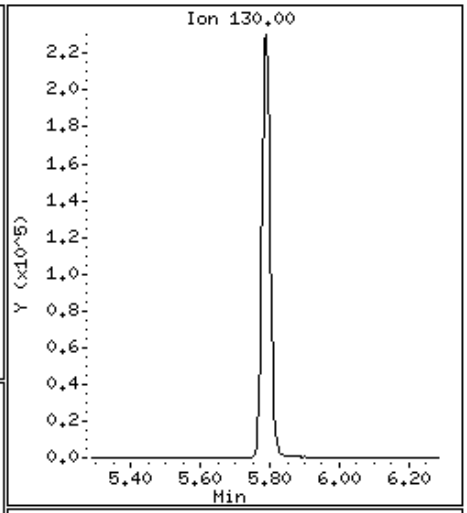
38 Trichloroethene Concentration: 4527.28 ug/l

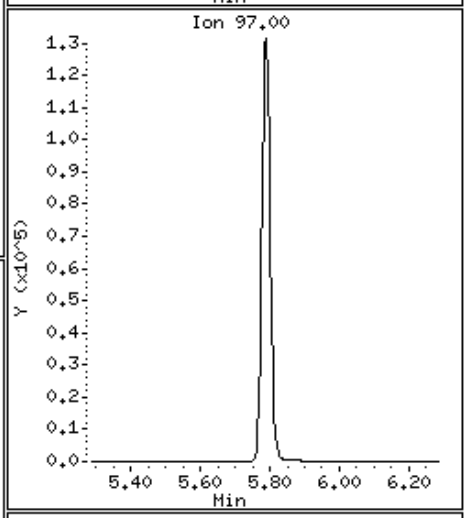


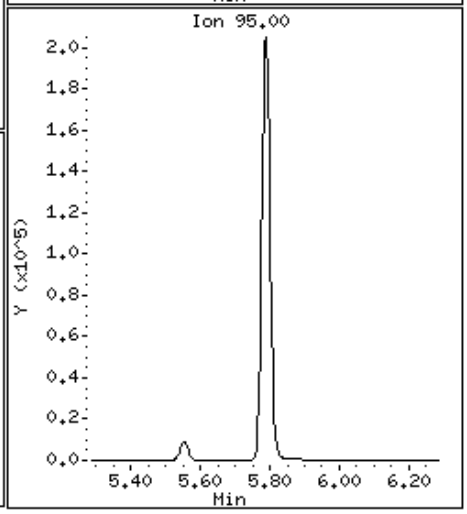












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Inj Date : 12-JAN-2024 19:21
InstruID : VOA9.i
LabSampID : HS24010538-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011227.D Page 1
Report Date: 17-Jan-2024 14:07

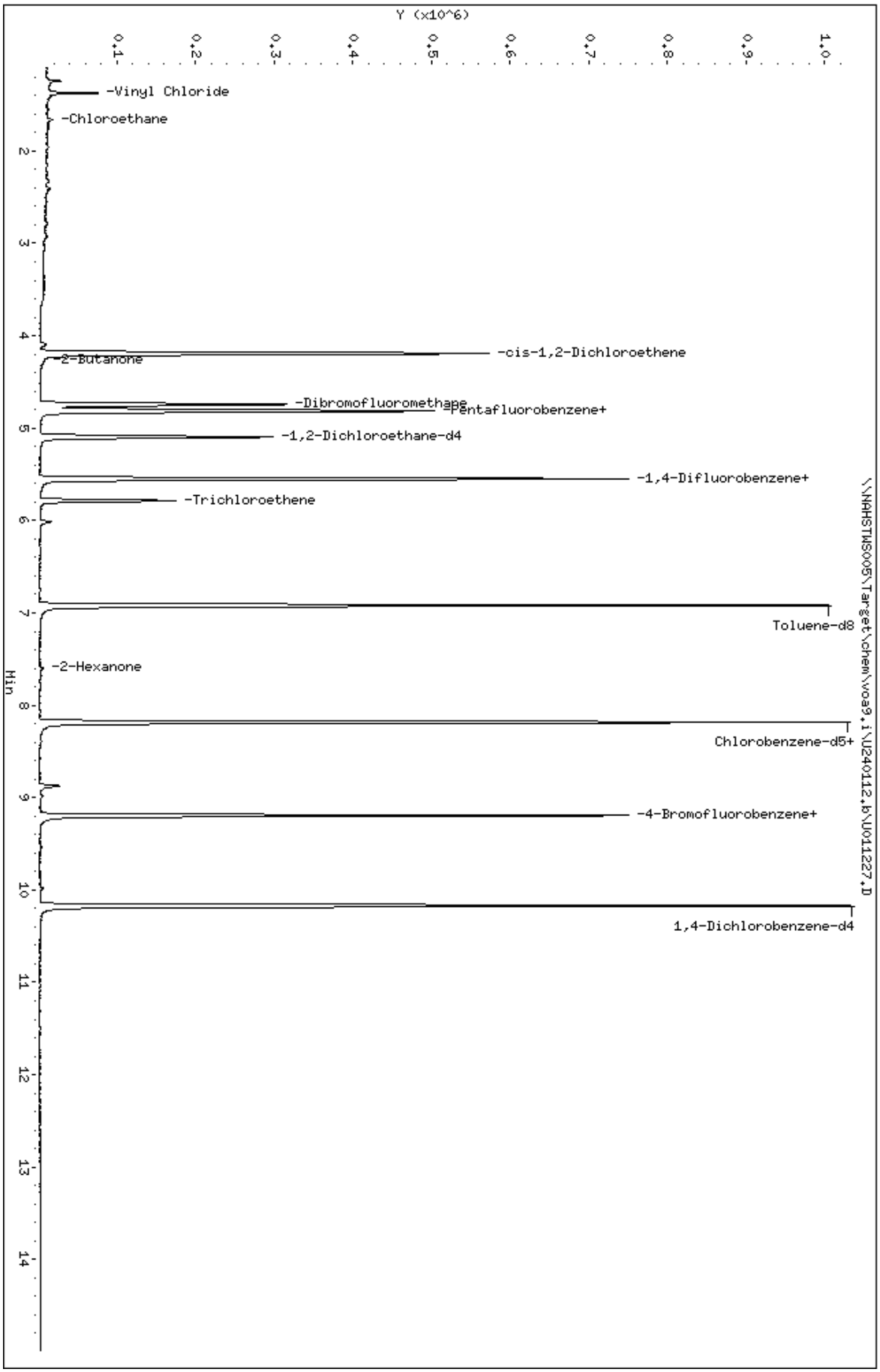
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011227.D
Lab Smp Id: HS24010538-09 Client Smp ID: HS24010538-09
Inj Date : 12-JAN-2024 20:28
Operator : PC Inst ID: VOA9.i
Smp Info : HS24010538-09;HS24010538-09;;;
Misc Info : V9;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 25
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: 0538-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	50.000	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	4.815	(1.000)	372900	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.986)	183621	48.0763	48.07
$ 35 1,2-Dichloroethane-d4	65	5.093	5.096	(1.058)	194960	44.8263	44.82
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	585184	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	576675	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	631697	47.5846	47.58
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	217283	43.0525	43.05
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	294452	50.0000	
5 Vinyl Chloride	62	1.370	1.378	(0.285)	43346	10.6072	530.36
27 cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	294305	63.8991	3194.95
38 Trichloroethene	130	5.786	5.786	(1.043)	58922	13.4202	671.00



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Date : 12-JAN-2024 20:28
Client ID: HS24010538-09
Sample Info: HS24010538-09;HS24010538-09;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011227.D Page 2

Date : 12-JAN-2024 20:28

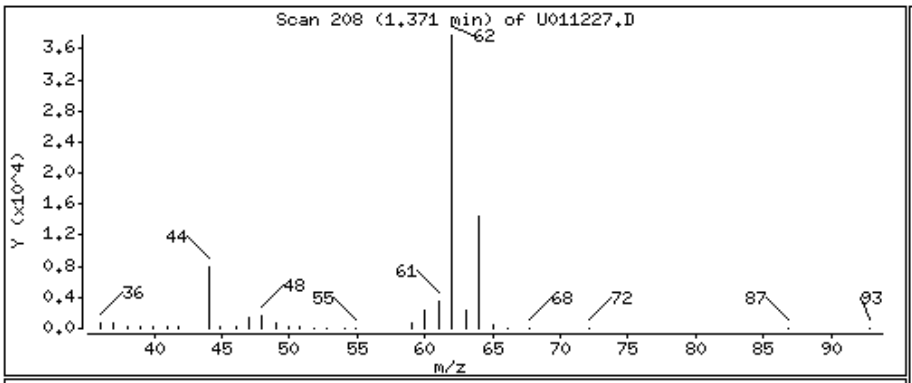
Client ID: HS24010538-09 Instrument: VOA9.i

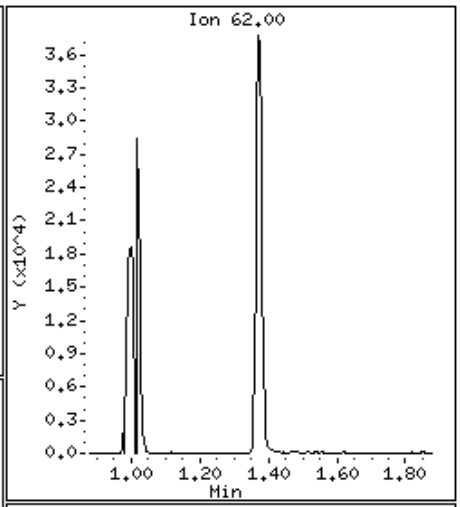
Sample Info: HS24010538-09;HS24010538-09;;;

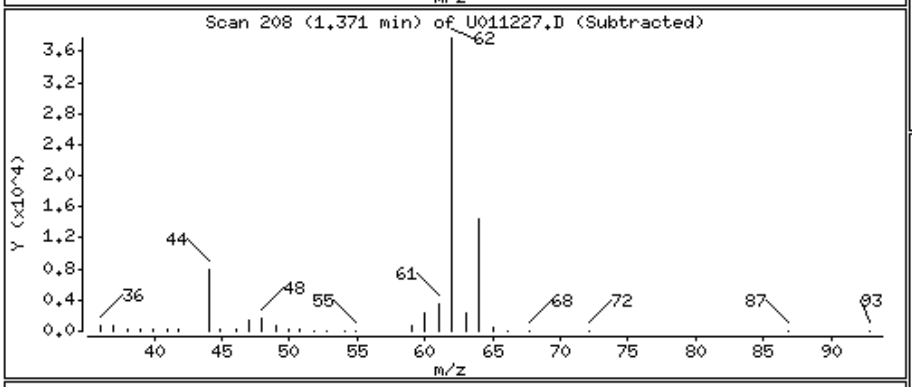
Purge Volume: 5.0 Operator: PC

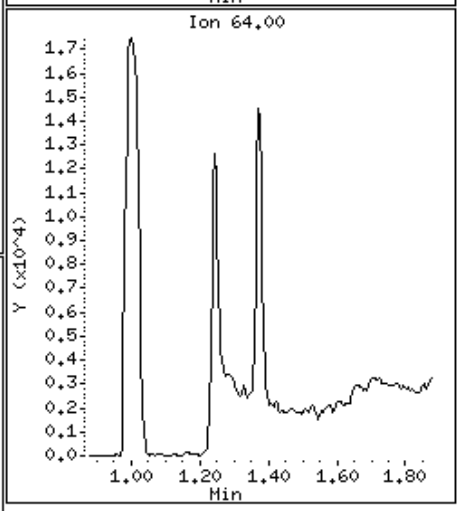
Column phase: DB624 Column diameter: 0.18

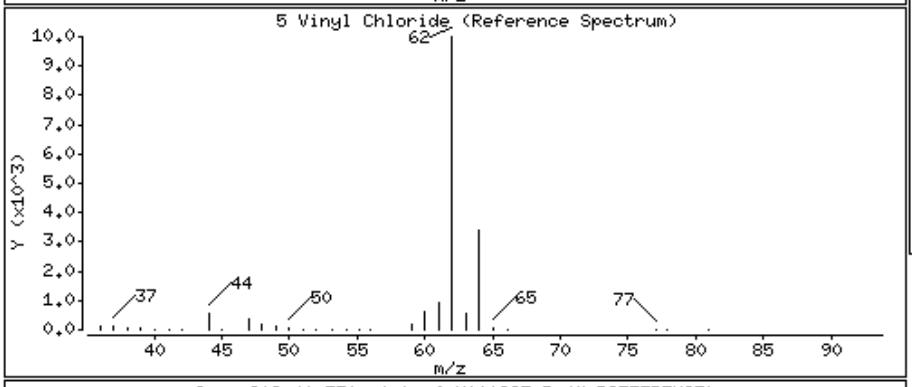
5 Vinyl Chloride Concentration: 530.36 ug/l

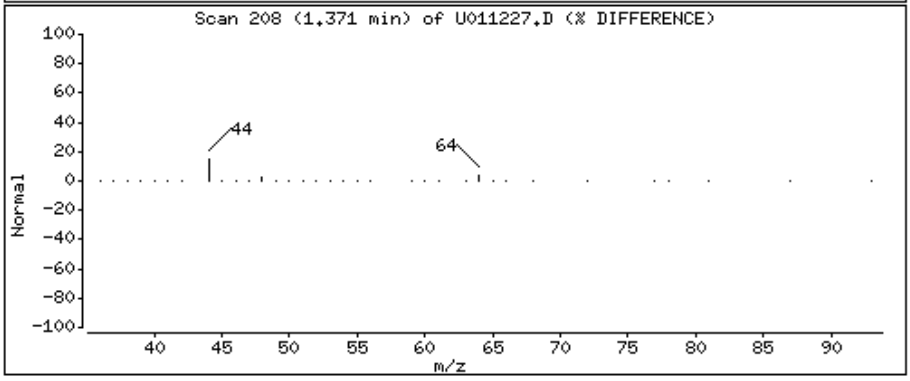












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011227.D Page 3

Date : 12-JAN-2024 20:28

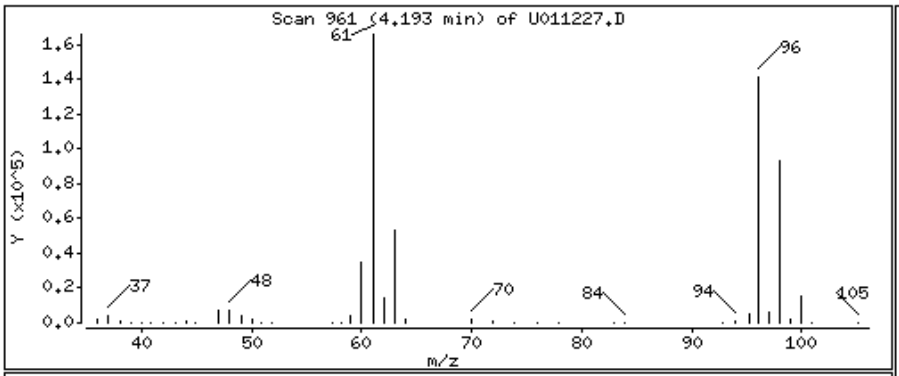
Client ID: HS24010538-09 Instrument: VOA9.i

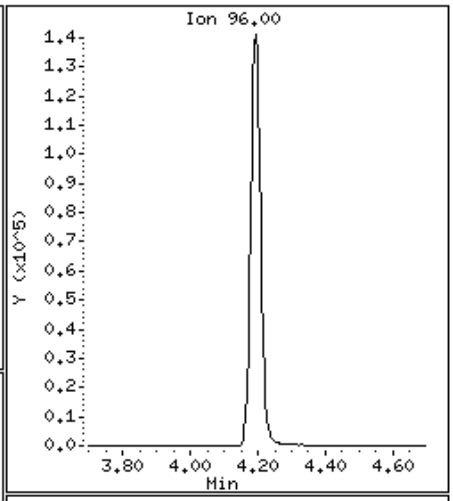
Sample Info: HS24010538-09;HS24010538-09;;;

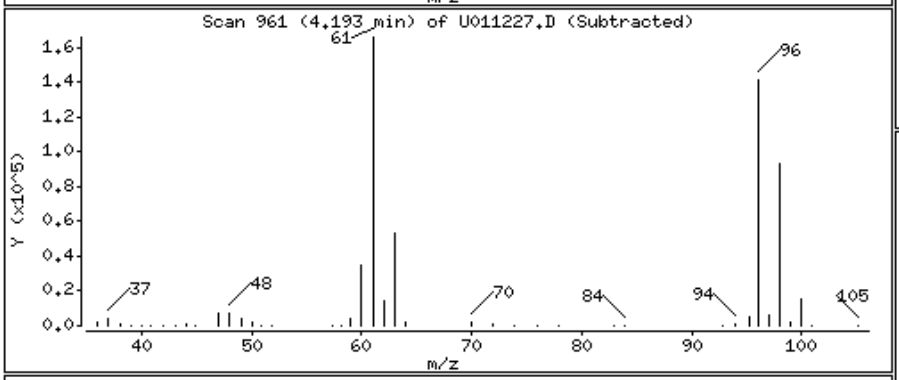
Purge Volume: 5.0 Operator: PC

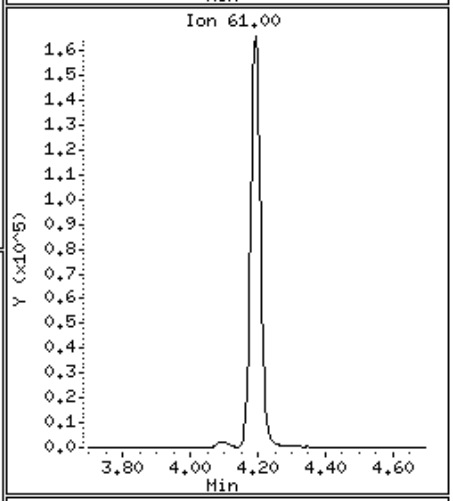
Column phase: DB624 Column diameter: 0.18

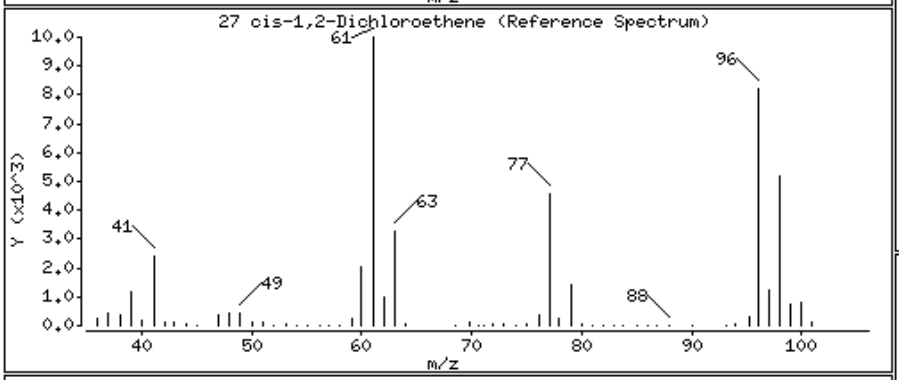
27 cis-1,2-Dichloroethene Concentration: 3194.95 ug/l

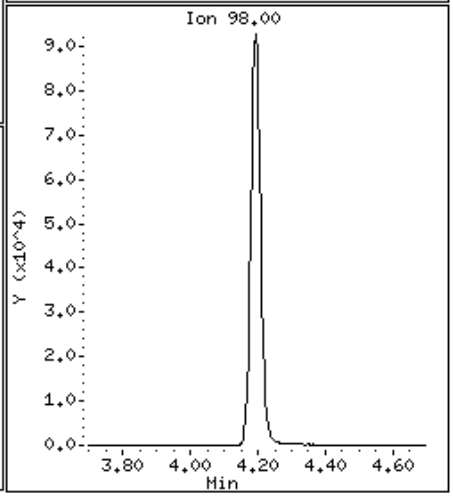


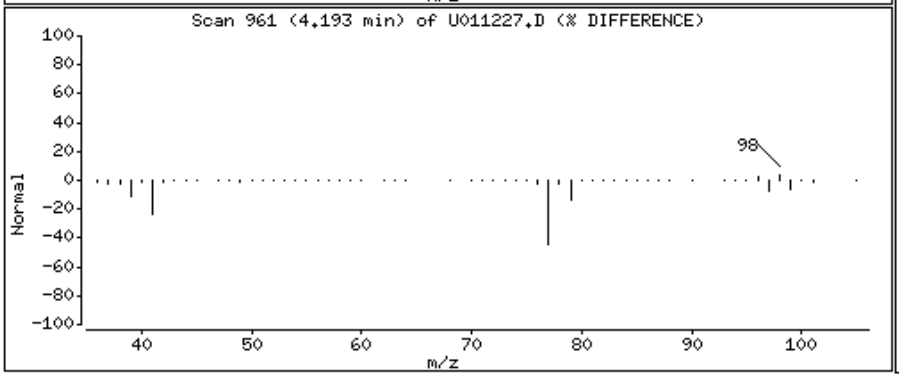












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011227.D Page 4

Date : 12-JAN-2024 20:28

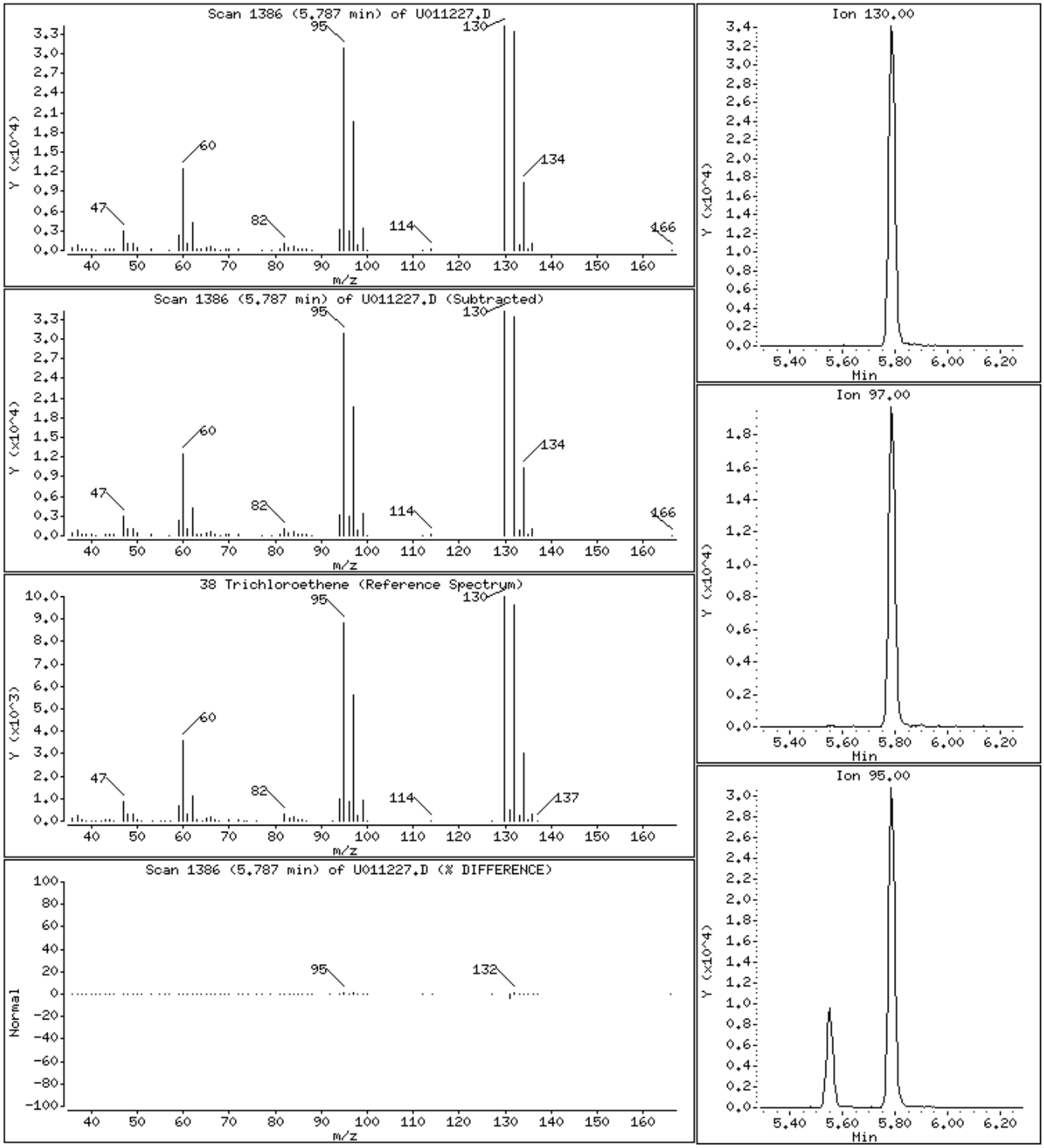
Client ID: HS24010538-09 Instrument: VOA9.i

Sample Info: HS24010538-09;HS24010538-09;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

38 Trichloroethene Concentration: 671.00 ug/l



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Inj Date : 12-JAN-2024 20:28
InstruID : VOA9.i
LabSampID : HS24010538-09

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011230.D Page 1
Report Date: 17-Jan-2024 14:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011230.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 12-JAN-2024 21:34
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\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:07 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 28 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.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)	294184	50.0000	
2 Dichlorodifluoromethane	85	1.160	1.160	(0.241)	125253	50.0000	52.77
3 Chloromethane	50	1.295	1.295	(0.269)	148433	50.0000	43.98
5 Vinyl Chloride	62	1.374	1.374	(0.286)	161742	50.0000	50.17
6 Bromomethane	94	1.614	1.614	(0.335)	93485	50.0000	56.25
7 Chloroethane	64	1.696	1.696	(0.353)	117469	50.0000	54.11
8 Trichlorofluoromethane	101	1.891	1.891	(0.393)	227632	50.0000	55.70
9 Acrolein	56	2.259	2.259	(0.469)	11356	100.000	67.73
10 Acetone	43	2.405	2.405	(0.500)	100491	100.000	100.35
11 1,1-Dichloroethene	96	2.330	2.330	(0.484)	125971	50.0000	55.51
15 Iodomethane	142	2.465	2.465	(0.512)	320282	100.000	110.27
16 Acrylonitrile	53	3.061	3.061	(0.636)	121367	100.000	105.17
17 Methylene Chloride	84	2.791	2.791	(0.580)	163066	50.0000	56.98
18 Methyl tert-butyl ether	73	3.076	3.076	(0.639)	419514	50.0000	51.59
19 Carbon Disulfide	76	2.517	2.517	(0.523)	777886	100.000	116.35
20 trans-1,2-Dichloroethene	96	3.053	3.053	(0.635)	150830	50.0000	55.60
21 Vinyl Acetate	43	3.601	3.601	(0.748)	810346	100.000	98.79
22 1,1-Dichloroethane	63	3.511	3.511	(0.730)	270607	50.0000	48.91
24 2-Butanone	43	4.260	4.260	(0.885)	125545	100.000	87.11
26 2,2-Dichloropropane	77	4.178	4.178	(0.868)	169616	50.0000	43.60

27 cis-1,2-Dichloroethene	96	4.193	4.193 (0.871)	182565	50.0000	50.24
28 Chloroform	83	4.568	4.568 (0.949)	298829	50.0000	49.62

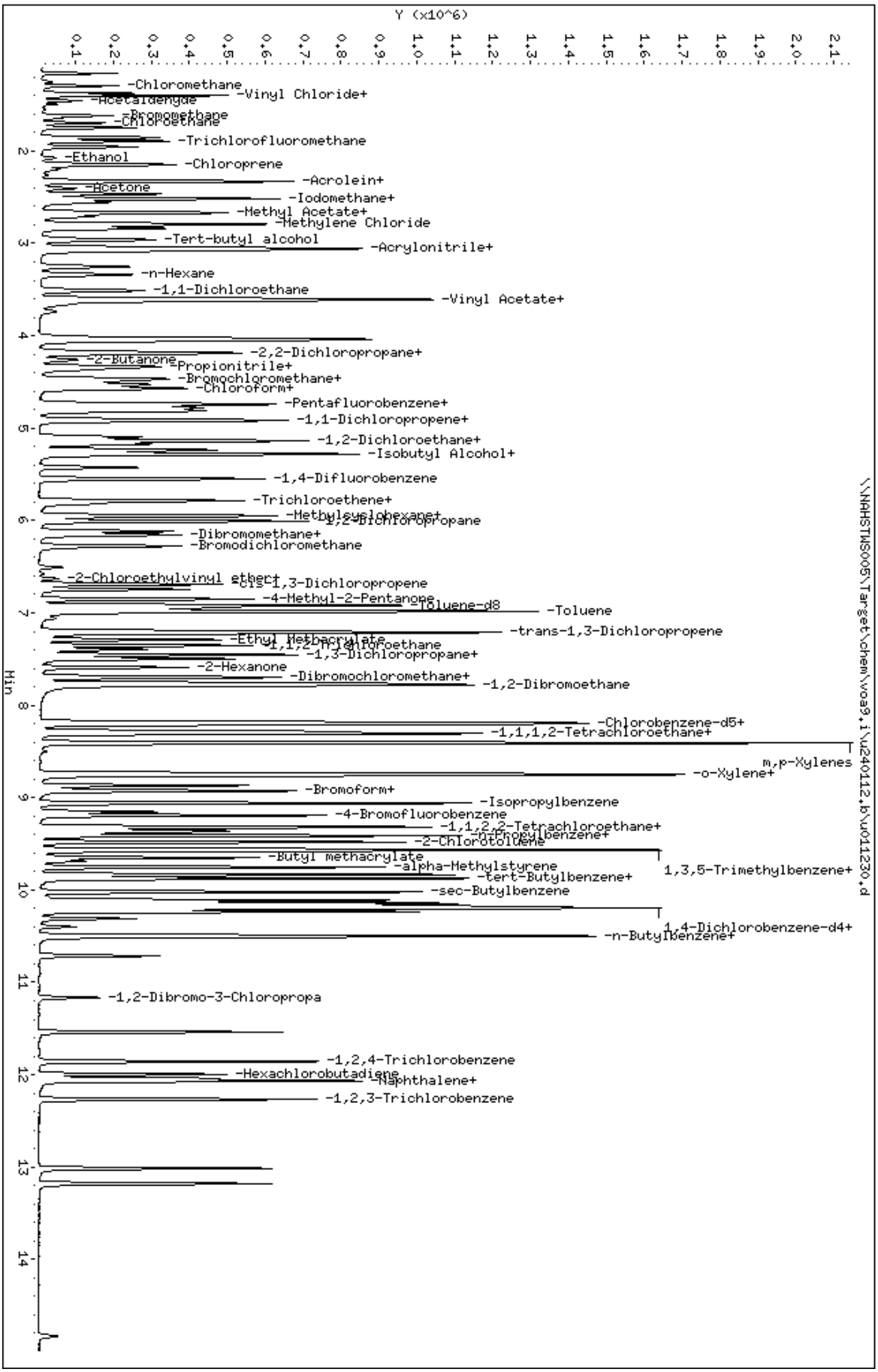
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
29	Bromochloromethane	128	4.466	4.466	(0.928)	99867	50.0000	53.11
$ 30	Dibromofluoromethane	113	4.744	4.744	(0.986)	167573	50.0000	55.77
31	1,1,1-Trichloroethane	97	4.740	4.740	(0.985)	237704	50.0000	51.94
32	1,1-Dichloropropene	75	4.920	4.920	(0.887)	196333	50.0000	50.47
33	1,2-Dichloroethane	62	5.171	5.171	(0.932)	215661	50.0000	47.60
34	Carbon Tetrachloride	117	4.909	4.909	(0.885)	202913	50.0000	53.40
$ 35	1,2-Dichloroethane-d4	65	5.096	5.096	(1.059)	173630	50.0000	50.27
* 36	1,4-Difluorobenzene	114	5.550	5.550	(1.000)	464959	50.0000	
37	Benzene	78	5.138	5.138	(0.926)	618086	50.0000	48.83
38	Trichloroethene	130	5.786	5.786	(1.043)	180221	50.0000	51.66
39	Bromodichloromethane	83	6.277	6.277	(1.131)	217840	50.0000	52.55
41	2-Chloroethylvinyl ether	63	6.577	6.577	(1.185)	5698	100.000	138.86
42	1,2-Dichloropropane	63	6.007	6.007	(1.082)	162919	50.0000	47.80
44	Dibromomethane	93	6.116	6.116	(1.102)	109311	50.0000	49.58
45	4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	323659	100.000	94.09
46	cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	251643	50.0000	47.19
* 47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	476945	50.0000	
$ 48	Toluene-d8	98	6.918	6.918	(0.845)	578617	50.0000	52.70
50	Toluene	91	6.978	6.978	(0.853)	679825	50.0000	51.12
51	trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	212618	50.0000	47.38
52	2-Hexanone	43	7.589	7.589	(0.927)	216791	100.000	90.07
53	1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	131385	50.0000	51.70
54	1,3-Dichloropropane	76	7.495	7.495	(0.916)	280495	50.0000	47.50
55	Dibromochloromethane	129	7.690	7.690	(0.940)	193077	50.0000	54.43
56	Tetrachloroethene	164	7.454	7.454	(0.911)	149792	50.0000	52.62
57	1,2-Dibromoethane	107	7.784	7.784	(0.951)	166562	50.0000	50.26
58	1-Chlorohexane	55	8.196	8.196	(1.477)	127714	50.0000	48.98
59	Chlorobenzene	112	8.208	8.208	(1.003)	476406	50.0000	49.17
60	1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	176098	50.0000	51.96
61	Ethylbenzene	106	8.305	8.305	(1.015)	228553	50.0000	50.39
62	m,p-Xylenes	106	8.406	8.406	(1.027)	585949	100.000	107.46
63	o-Xylene	106	8.747	8.747	(1.069)	292304	50.0000	52.12
64	Styrene	104	8.759	8.759	(1.070)	509873	50.0000	54.61
66	Bromoform	173	8.916	8.916	(1.089)	123105	50.0000	50.71
67	Isopropylbenzene	105	9.062	9.062	(1.107)	713007	50.0000	52.57
68	1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	218211	50.0000	49.65
$ 69	4-Bromofluorobenzene	95	9.194	9.194	(1.123)	218061	50.0000	52.51
* 70	1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	269638	50.0000	
71	1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	219755	50.0000	42.93
73	n-Propylbenzene	91	9.411	9.411	(0.926)	767986	50.0000	48.50
74	Bromobenzene	156	9.317	9.317	(0.916)	214704	50.0000	47.41
75	1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	578381	50.0000	51.39
76	2-Chlorotoluene	91	9.482	9.482	(0.933)	494197	50.0000	46.37
77	4-Chlorotoluene	91	9.576	9.576	(0.942)	579554	50.0000	47.95
78	tert-Butylbenzene	119	9.835	9.835	(0.967)	509846	50.0000	50.44
79	1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	577471	50.0000	51.20
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	650310	50.0000	49.89
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	593335	50.0000	52.60
83	1,3-Dichlorobenzene	146	10.112	10.112	(0.994)	381613	50.0000	47.55
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	393528	50.0000	46.29
87	n-Butylbenzene	91	10.491	10.491	(1.032)	470000	50.0000	49.65
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	377773	50.0000	46.79

89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	37005	50.0000	47.04
90	1,2,4-Trichlorobenzene	180	11.859	11.859 (1.166)	243600	50.0000	48.91

	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	(1.180)	95968	50.0000	48.07
92	Naphthalene	128	12.065	12.065	(1.187)	607567	50.0000	50.58
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	239057	50.0000	47.60
M 94	1,2-Dichloroethylene (total)	96				333395	100.000	(a)
135	1,4-Dioxane	88	6.161	6.161	(1.280)	44327	1000.00	949.70
141	Cyclohexane	56	4.781	4.781	(0.994)	190515	50.0000	44.94
138	Freon TF	101	2.330	2.330	(0.484)	129771	50.0000	59.53
140	1,3-Butadiene	54	1.400	1.400	(0.291)	139064	50.0000	47.06
147	Methylcyclohexane	55	5.943	5.943	(1.071)	335085	50.0000	48.62
146	Methyl Acetate	43	2.708	2.708	(0.563)	140440	50.0000	47.96
148	Tert-Butyl alcohol	59	2.960	2.960	(0.615)	345111	1000.00	1047.90
149	Isopropyl Alcohol	45	2.555	2.555	(0.531)	211100	1000.00	1134.82
72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	42405	50.0000	49.40
12	Isobutyl Alcohol	43	5.284	5.284	(1.098)	407577	1000.00	923.77
13	Acetonitrile	39	2.667	2.667	(0.554)	163759	500.000	517.22
14	Allyl Chloride	41	2.667	2.667	(0.554)	374329	50.0000	51.75
25	Methacrylonitrile	41	4.489	4.489	(0.933)	95317	50.0000	45.37(M)
40	Methyl Methacrylate	41	6.153	6.153	(1.279)	135033	50.0000	46.50
4	Propionitrile	54	4.332	4.332	(0.900)	225882	500.000	463.09
136	n-Hexane	57	3.338	3.338	(0.694)	121571	50.0000	44.45
194	Acetaldehyde	44	1.456	1.456	(0.303)	66616	200.000	174.54(M)
131	Methyl Acrylate	55	4.365	4.365	(0.907)	183696	50.0000	47.53
23	Chloroprene	53	2.154	2.154	(0.448)	50600	50.0000	50.42(M)
49	Ethyl Methacrylate	69	7.289	7.289	(1.313)	228024	50.0000	49.96
166	1,2,3-Trimethylbenzene	105	10.236	10.236	(1.007)	529300	50.0000	47.56
167	Ethanol	45	2.075	2.075	(0.431)	38012	1000.00	1030.88
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	637821	50.0000	44.37
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	260147	50.0000	47.67
142	Tetrahydrofuran	42	4.538	4.538	(0.943)	51816	100.000	82.97
156	Diisopropyl ether	45	3.616	3.616	(0.751)	453563	50.0000	44.25
162	Butyl acrylate	55	8.732	8.732	(1.067)	268252	50.0000	39.35
203	2-Ethylhexyl Acrylate	55	12.039	12.039	(1.184)	151098	50.0000	38.55
130	Ethyl Acetate	43	4.335	4.335	(0.901)	162435	50.0000	45.45
189	n-Butyl acetate	43	7.705	7.705	(0.941)	252218	50.0000	47.47
182	Epichlorohydrin	57	6.629	6.629	(1.195)	33340	200.000	184.58
132	n-Butanol	56	5.820	5.820	(1.210)	88423	1000.00	924.81
133	Ethyl Acrylate	55	5.943	5.943	(1.235)	335085	50.0000	47.38
163	Butyl methacrylate	41	9.647	9.647	(0.949)	134817	50.0000	37.08
187	n-Amyl acetate	43	8.931	8.931	(1.091)	254176	50.0000	42.04
188	Isopropyl acetate	43	5.284	5.284	(0.952)	408447	50.0000	47.61

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



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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\u240112.b\u011230.d
Inj Date : 12-JAN-2024 21:34
InstruID : VOA9.i
LabSampID : CCV-END

Methacrylonitrile (126-98-7)

Reason Code:

BEFORE

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17-Jan-2024
14:06
linh
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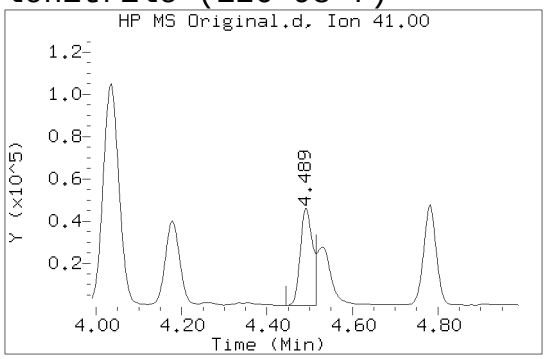

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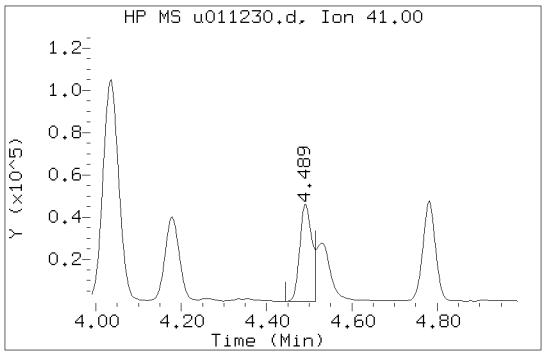

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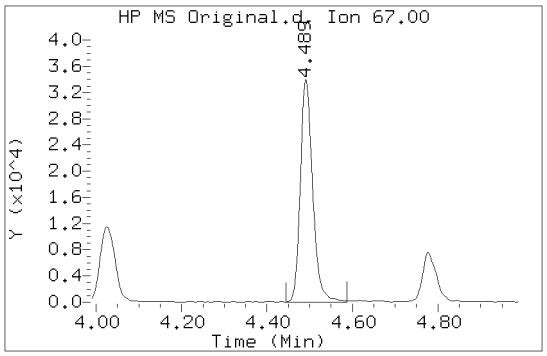

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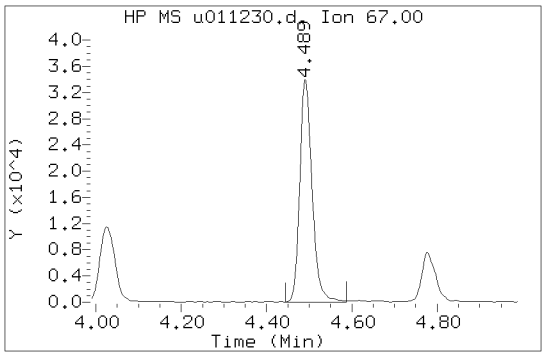

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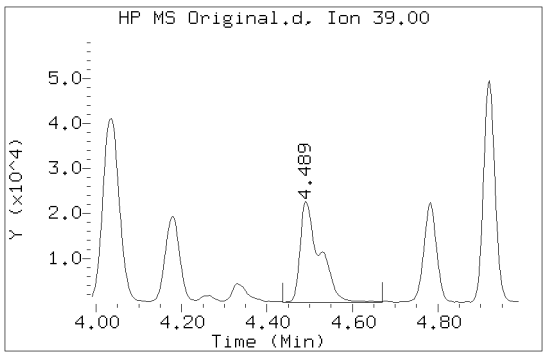

AFTER

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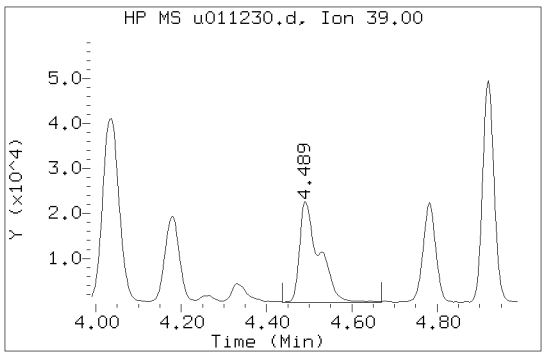

Chloroprene (126-99-8)

Reason Code:

BEFORE

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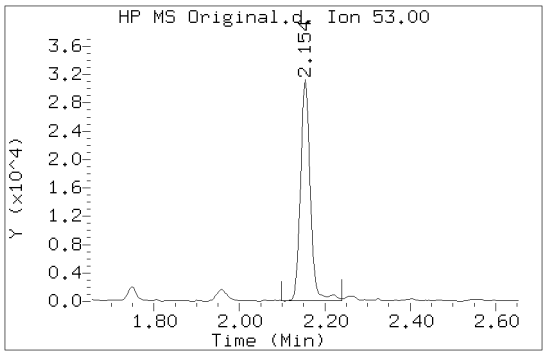

AFTER

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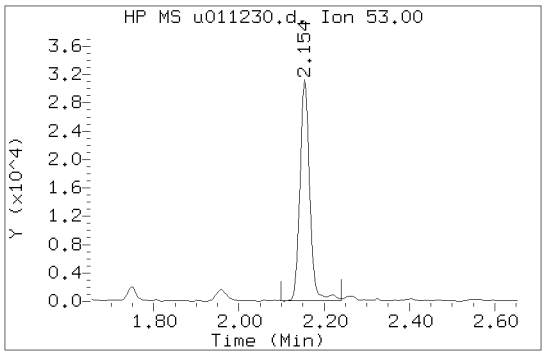

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Inj Date : 12-JAN-2024 21:34
InstruID : VOA9.i
LabSampID : CCV-END

Chloroprene (126-99-8)

Reason Code:

BEFORE

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17-Jan-2024
14:06
linh
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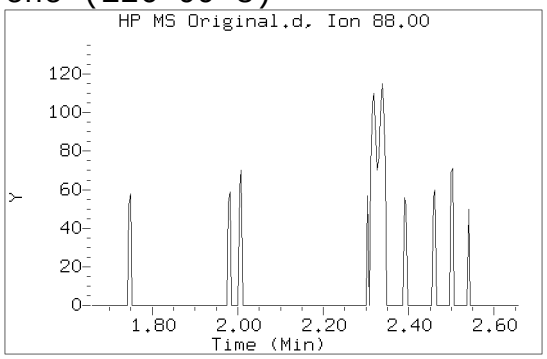

AFTER

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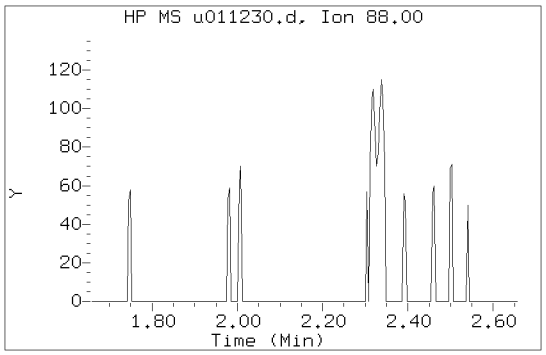

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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17-Jan-2024
14:06
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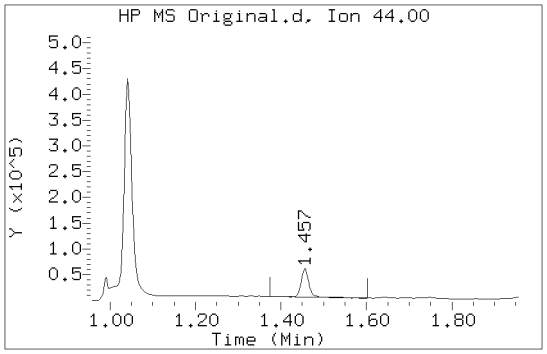

AFTER

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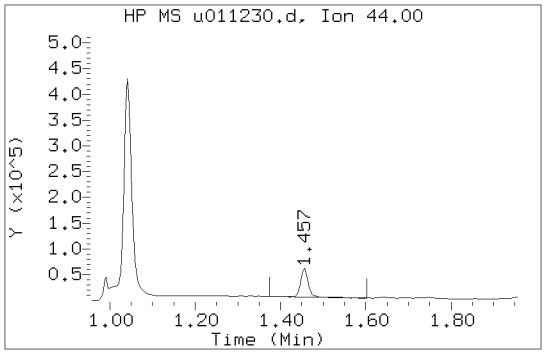

BEFORE

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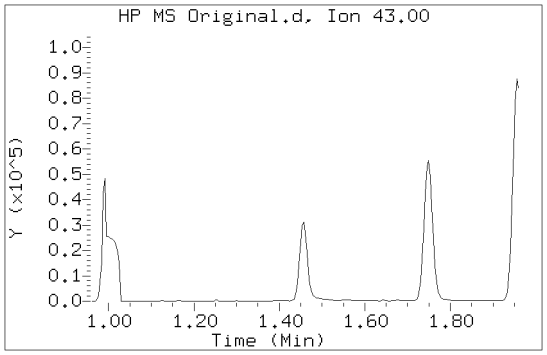

AFTER

MASS
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14:06
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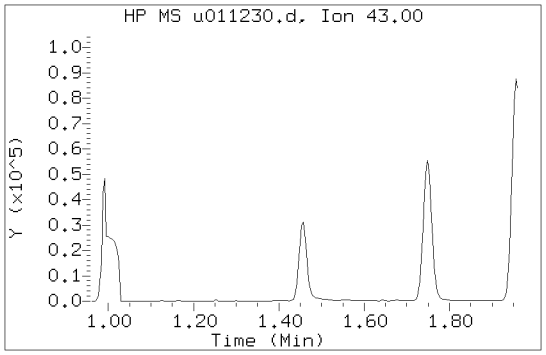

BEFORE

MASS
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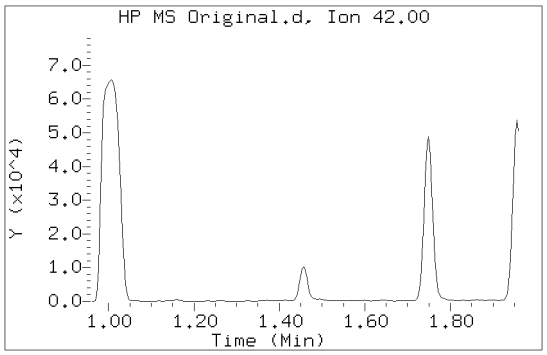
17-Jan-2024
14:06
linh
pham



AFTER

MASS
42
AREA
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HEIGHT
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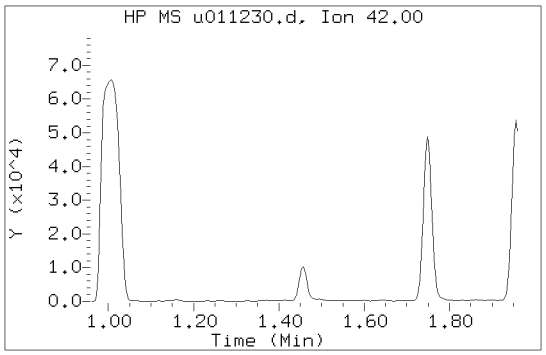
17-Jan-2024
14:06
linh
pham



right solutions.
right partner.

RawData

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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\voa9.i\U240117.b\U011701.D Page 1
Report Date: 17-Jan-2024 07:31

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240117.b\U011701.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 17-JAN-2024 06:52
Operator : FT Inst ID: VOA9.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240117.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: NAHSTW7066

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	120920			0.00- 100.00	100.00
9.194	9.180	(0.000)	50	20664			15.00- 40.00	17.09
9.194	9.180	(0.000)	75	58048			30.00- 60.00	48.01
9.194	9.180	(0.000)	96	8541			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	111368			50.00- 0.00	92.10
9.194	9.180	(0.000)	175	9916			5.00- 9.00	8.90
9.194	9.180	(0.000)	176	108600			95.00- 101.00	97.51
9.194	9.180	(0.000)	177	7237			5.00- 9.00	6.66

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.09
75	30.00 - 60.00% of mass 95	48.01
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	92.10
175	5.00 - 9.00% of mass 174	8.20 (8.90)
176	95.00 - 101.00% of mass 174	89.81 (97.51)
177	5.00 - 9.00% of mass 176	5.98 (6.66)

Data File: U011701.D
Spectrum: Scan 2293 (9.19)
Location of Maximum: 95.05
Number of points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2178	65.10	769	96.10	8541	136.80	178
37.10	5478	66.00	63	97.00	313	141.00	1349
38.10	5045	67.10	518	103.90	395	142.90	1259
39.00	2028	68.00	10685	104.90	165	143.90	102
40.00	261	69.10	11048	105.90	537	144.90	265
40.90	60	70.00	929	106.90	186	146.00	246
41.90	84	71.20	66	109.90	89	146.90	124
43.20	165	72.00	631	110.70	53	147.90	352
44.00	821	73.10	5390	111.30	55	149.80	81
45.10	992	74.10	19832	112.00	129	153.00	51
46.00	202	75.10	58048	113.00	130	154.10	115
47.00	1505	76.00	5600	114.90	124	155.00	375
47.90	704	77.00	703	116.10	353	156.80	262
49.10	4684	78.10	482	117.00	780	158.80	115
50.10	20664	79.00	2792	117.80	421	161.00	96
51.00	6134	79.90	1051	118.90	631	167.50	67
52.00	296	81.00	2919	119.80	65	170.10	79
52.90	122	81.90	756	122.80	85	172.00	1707
55.00	312	83.00	117	123.90	87	174.00	111368
56.10	1628	84.60	67	127.00	62	175.10	9916
57.10	2755	87.00	4943	127.90	331	176.00	108600
58.10	179	88.00	5375	128.90	193	177.00	7237
60.00	1138	91.00	433	129.90	427	178.00	139
61.10	5300	92.00	3391	130.90	144		
62.10	4612	93.00	5836	131.80	80		
63.00	3847	94.10	15037	134.00	105		
64.10	580	95.10	120920	135.00	244		

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240117.b\u011701.d Page 1

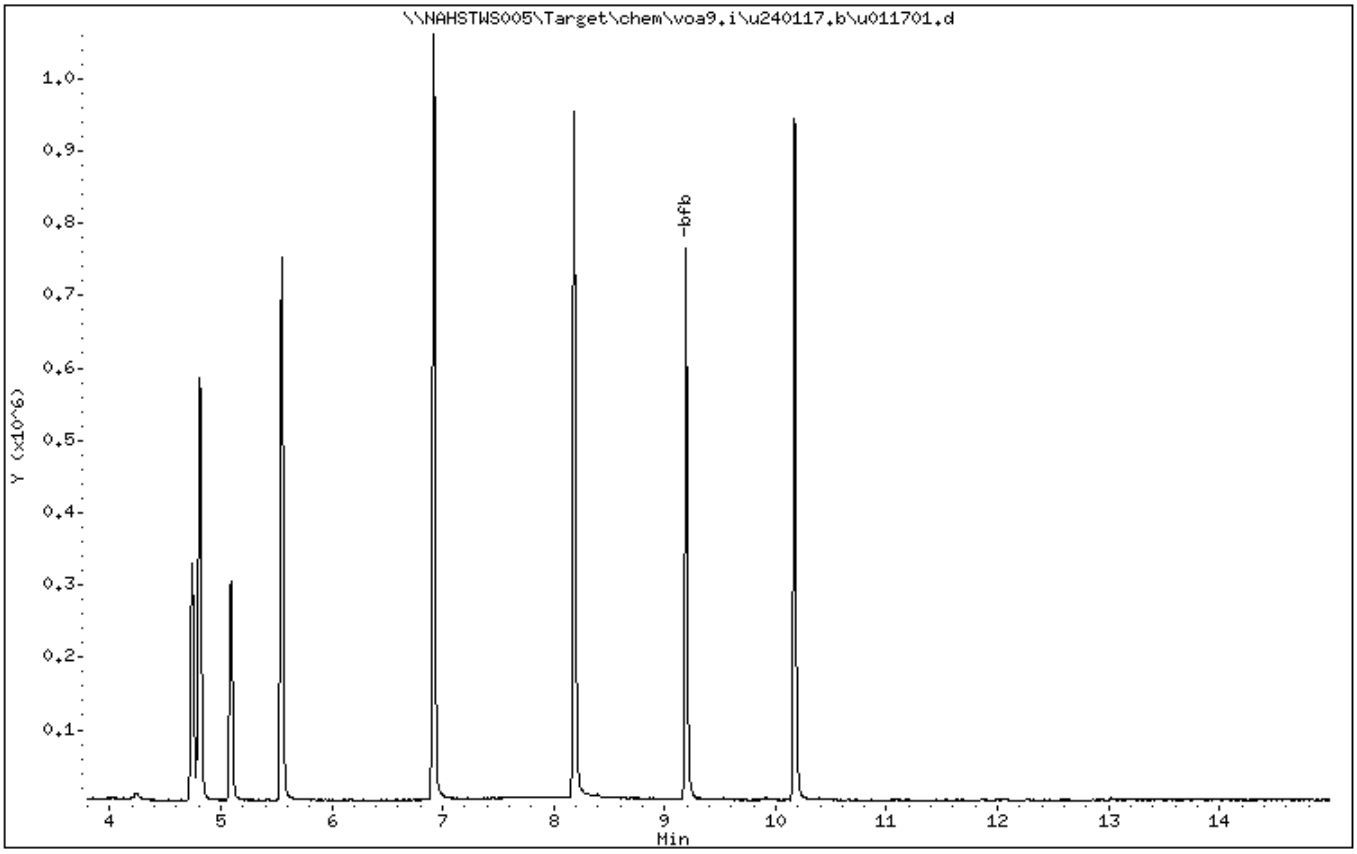
Date : 17-JAN-2024 06:52

Client ID: BFB Instrument: VOA9.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: FT

Column phase: DB624 Column diameter: 0.25



Data File : \\nahstws005\target\chem\voa9.i\u240117.b\u011701.d
Inj Date : 17-JAN-2024 06:52
InstruID : VOA9.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011702.D Page 1
Report Date: 22-Jan-2024 17:33

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011702.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 17-JAN-2024 07:36
Operator : FT Inst ID: VOA9.i
Smp Info : CCV;CCV;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\8260C.m
Meth Date : 22-Jan-2024 17:33 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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)	306651	50.0000	
2 Dichlorodifluoromethane	85	1.168	1.168	(0.243)	68342	50.0000	28.03
3 Chloromethane	50	1.303	1.303	(0.271)	121541	50.0000	34.55
4 Propionitrile	54	4.335	4.335	(0.900)	208162	500.000	409.41
5 Vinyl Chloride	62	1.381	1.381	(0.287)	151362	50.0000	45.04
6 Bromomethane	94	1.625	1.625	(0.338)	96846	50.0000	55.92
7 Chloroethane	64	1.704	1.704	(0.354)	115159	50.0000	50.89
8 Trichlorofluoromethane	101	1.899	1.899	(0.394)	239666	50.0000	56.26
9 Acrolein	56	2.266	2.266	(0.471)	14247	100.000	81.52(M)
10 Acetone	43	2.409	2.409	(0.500)	105718	100.000	101.34
11 1,1-Dichloroethene	96	2.337	2.337	(0.485)	134389	50.0000	56.82
12 Isobutyl Alcohol	43	5.284	5.284	(1.097)	399397	1000.00	868.43
13 Acetonitrile	39	2.675	2.675	(0.556)	171782	500.000	520.50
14 Allyl Chloride	41	2.675	2.675	(0.556)	381960	50.0000	50.66
15 Iodomethane	142	2.472	2.472	(0.513)	346099	100.000	113.97
16 Acrylonitrile	53	3.065	3.065	(0.636)	114610	100.000	95.27
17 Methylene Chloride	84	2.798	2.798	(0.581)	170607	50.0000	57.19
18 Methyl tert-butyl ether	73	3.080	3.080	(0.640)	426741	50.0000	50.35
19 Carbon Disulfide	76	2.525	2.525	(0.524)	825016	100.000	118.38
20 trans-1,2-Dichloroethene	96	3.061	3.061	(0.636)	164198	50.0000	58.07

21 Vinyl Acetate	43	3.608	3.608 (0.749)	820776	100.000	95.99
22 1,1-Dichloroethane	63	3.514	3.514 (0.730)	285274	50.0000	49.46

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011702.D Page 2
Report Date: 22-Jan-2024 17:33

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	2.161	2.161	(0.449)	53168	50.0000	50.82(M)
	24 2-Butanone	43	4.260	4.260	(0.885)	120338	100.000	80.11
	25 Methacrylonitrile	41	4.493	4.493	(0.933)	109988	50.0000	50.23(aM)
	26 2,2-Dichloropropane	77	4.185	4.185	(0.869)	228632	50.0000	56.39
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	190592	50.0000	50.32
	28 Chloroform	83	4.572	4.572	(0.949)	309697	50.0000	49.33
	29 Bromochloromethane	128	4.470	4.470	(0.928)	102776	50.0000	52.44
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	169727	50.0000	54.16
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	249926	50.0000	52.39
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	214352	50.0000	54.99
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	216791	50.0000	47.76
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	223606	50.0000	58.73
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	172623	50.0000	48.08
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	465856	50.0000	
	37 Benzene	78	5.141	5.141	(0.926)	642367	50.0000	50.65
	38 Trichloroethene	130	5.786	5.786	(1.042)	191257	50.0000	54.71
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	227645	50.0000	54.81
	40 Methyl Methacrylate	41	6.154	6.154	(1.278)	127415	50.0000	42.09
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	4201	100.000	104.33(M)
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	168501	50.0000	49.35
	43 2-Nitropropane	43	6.506	6.506	(1.351)	33535	50.0000	42.59
	44 Dibromomethane	93	6.120	6.120	(1.102)	110346	50.0000	49.95
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	299165	100.000	87.60
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	279205	50.0000	52.10
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	473358	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	584257	50.0000	53.61
	49 Ethyl Methacrylate	69	7.289	7.289	(1.312)	220491	50.0000	48.22
	50 Toluene	91	6.978	6.978	(0.853)	714849	50.0000	54.16
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	235939	50.0000	52.28
	52 2-Hexanone	43	7.589	7.589	(0.927)	198455	100.000	83.07
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	134033	50.0000	53.18
	54 1,3-Dichloropropane	76	7.496	7.496	(0.916)	284760	50.0000	48.59
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	196688	50.0000	55.87
	56 Tetrachloroethene	164	7.454	7.454	(0.911)	163468	50.0000	57.86
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	164471	50.0000	50.00
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	142182	50.0000	54.42
	59 Chlorobenzene	112	8.208	8.208	(1.003)	509188	50.0000	52.95
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	184903	50.0000	54.97
	61 Ethylbenzene	106	8.305	8.305	(1.015)	243255	50.0000	54.04
	62 m,p-Xylenes	106	8.407	8.407	(1.027)	618413	100.000	114.28
	63 o-Xylene	106	8.744	8.744	(1.068)	309305	50.0000	55.57
	64 Styrene	104	8.759	8.759	(1.070)	537178	50.0000	57.98
	66 Bromoform	173	8.916	8.916	(1.089)	128316	50.0000	53.20
	67 Isopropylbenzene	105	9.059	9.059	(1.107)	775285	50.0000	57.60
	68 1,1,2,2-Tetrachloroethane	83	9.325	9.325	(0.917)	211832	50.0000	49.48
$	69 4-Bromofluorobenzene	95	9.190	9.190	(1.123)	214133	50.0000	51.94
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	262624	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	215823	50.0000	43.29
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	40835	50.0000	47.93
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	871510	50.0000	56.51
	74 Bromobenzene	156	9.314	9.314	(0.916)	221568	50.0000	50.23
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	630501	50.0000	57.52

76	2-Chlorotoluene	91	9.482	9.482 (0.933)	530007	50.0000	51.06
77	4-Chlorotoluene	91	9.572	9.572 (0.941)	619860	50.0000	52.65

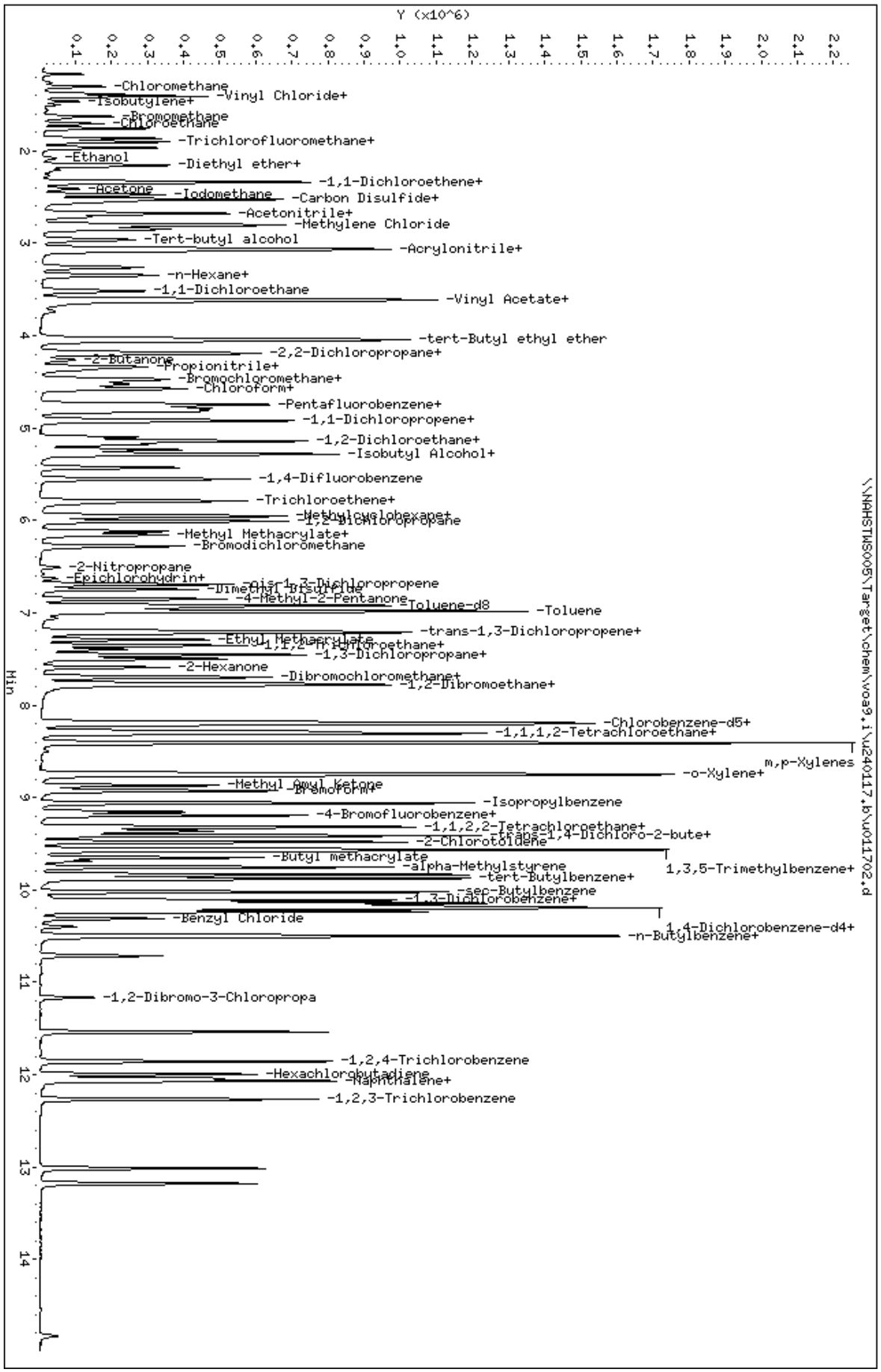
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.835	9.835	(0.967)	549806	50.0000	55.84
79	1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	628198	50.0000	57.18
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	735105	50.0000	57.90
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	641321	50.0000	58.37(M)
83	1,3-Dichlorobenzene	146	10.112	10.112	(0.994)	406143	50.0000	51.96
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	418968	50.0000	50.60
86	Benzyl Chloride	91	10.311	10.311	(1.260)	228194	50.0000	53.76
87	n-Butylbenzene	91	10.491	10.491	(1.032)	548404	50.0000	59.48
88	1,2-Dichlorobenzene	146	10.502	10.502	(1.033)	395015	50.0000	50.24
89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166	(1.098)	35260	50.0000	46.06
90	1,2,4-Trichlorobenzene	180	11.855	11.855	(1.166)	263474	50.0000	54.31
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	118011	50.0000	60.69(M)
92	Naphthalene	128	12.065	12.065	(1.187)	593046	50.0000	50.69
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	244949	50.0000	50.07
146	Methyl acetate	43	2.712	2.712	(0.563)	137626	50.0000	45.09
138	Freon TF	101	2.341	2.341	(0.486)	149532	50.0000	65.58
141	Cyclohexane	56	4.785	4.785	(0.994)	211099	50.0000	47.77
142	Tetrahydrofuran	42	4.538	4.538	(0.942)	53487	100.000	82.17(M)
147	Methylcyclohexane	55	5.947	5.947	(1.071)	353151	50.0000	51.14
135	1,4-Dioxane	88	6.165	6.165	(1.280)	41345	1000.00	849.79(M)
132	n-Butanol	56	5.816	5.816	(1.208)	83246	1000.00	835.27
136	n-Hexane	57	3.346	3.346	(0.695)	165730	50.0000	58.14
139	Diethyl ether	59	2.146	2.146	(0.446)	120983	50.0000	48.38
148	Tert-butyl alcohol	59	2.960	2.960	(0.615)	304949	1000.00	888.31
149	Isopropyl alcohol	45	2.559	2.559	(0.531)	190370	1000.00	980.77
152	Amyl alcohol	42	7.394	7.394	(0.903)	84317	1000.00	803.06
156	Diisopropyl ether	45	3.619	3.619	(0.752)	480090	50.0000	44.94
162	Butyl acrylate	55	8.733	8.733	(1.067)	272421	50.0000	40.19(M)
187	n-Amyl acetate	43	8.931	8.931	(1.091)	251372	50.0000	41.89
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	666058	50.0000	47.57
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	547761	50.0000	50.54
167	Ethanol	45	2.079	2.079	(0.432)	36781	1000.00	956.82
172	tert-Butyl formate	59	5.235	5.235	(1.087)	200646	100.000	86.01
173	3,3-Dimethyl-1-butanol	57	7.777	7.777	(0.950)	298995	1000.00	765.62
174	tert-Amyl methyl ether	73	5.284	5.284	(1.097)	441284	50.0000	46.39
175	tert-Butyl ethyl ether	59	4.051	4.051	(0.841)	443165	50.0000	46.53
176	tert-Amyl alcohol	59	5.235	5.235	(1.087)	200646	1000.00	861.53
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	552728	1000.00	744.68
140	1,3-Butadiene	54	1.408	1.408	(0.292)	131245	50.0000	42.61
158	Dichlorofluoromethane	67	1.861	1.861	(0.387)	261533	50.0000	55.95
182	Epichlorohydrin	57	6.630	6.630	(1.194)	30947	200.000	171.00
M 94	1,2-Dichloroethylene (total)	96				354790	100.000	(a)
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	285139	50.0000	53.45
130	Ethyl Acetate	43	4.339	4.339	(0.901)	152648	50.0000	40.97
131	Methyl Acrylate	55	4.369	4.369	(0.907)	169262	50.0000	42.02
189	n-Butyl acetate	43	7.702	7.702	(0.941)	234826	50.0000	44.53
134	Cyclohexanone	55	9.153	9.153	(0.900)	155506	1000.00	894.94
185	Isoprene	39	2.161	2.161	(0.449)	42553	50.0000	59.60
188	Isopropyl acetate	43	5.284	5.284	(0.951)	399397	50.0000	46.47
150	Allyl alcohol	57	3.346	3.346	(0.695)	165730	1000.00	1162.81
194	Acetaldehyde	44	1.464	1.464	(0.304)	71503	200.000	179.97(M)
195	Methyl Amyl Ketone	43	8.868	8.868	(1.083)	259243	50.0000	35.41

200 Dimethyl Disulfide	94	6.746	6.746 (0.824)	217161	50.0000	51.71
202 Isobutylene	41	1.501	1.501 (0.312)	15957	50.0000	53.36(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
203 2-Ethylhexyl Acrylate	55	12.039	12.039	(1.184)	158035	50.0000	41.21
133 Ethyl Acrylate	55	5.947	5.947	(1.235)	353151	50.0000	47.91
163 Butyl methacrylate	41	9.647	9.647	(0.949)	144897	50.0000	40.64

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTMS005\Target\chem\voa9.i\u240117.b\u011702.d
Date : 17-JAN-2024 07:36
Client ID: CCV
Sample Info: CCV,CCV,2,,,
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: FT
Column diameter: 0.18

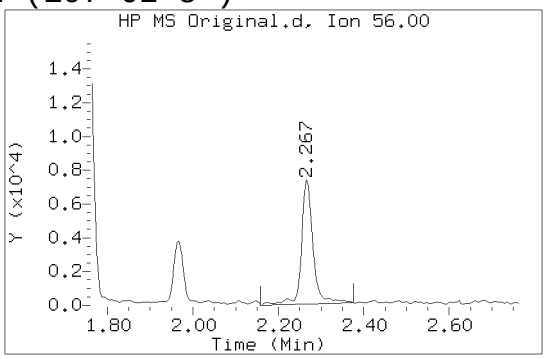
Data File : \\nahstws005\target\chem\voa9.i\u240117.b\u011702.d
Inj Date : 17-JAN-2024 07:36
InstruID : VOA9.i
LabSampID : CCV

Acrolein (107-02-8)

Reason Code:

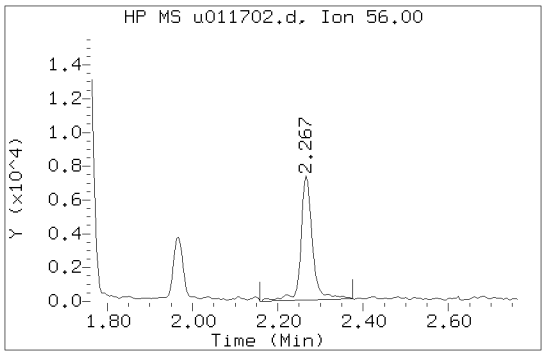
BEFORE

MASS
56
AREA
14247
HEIGHT
7387
22-Jan-2024
17:33
linh
pham



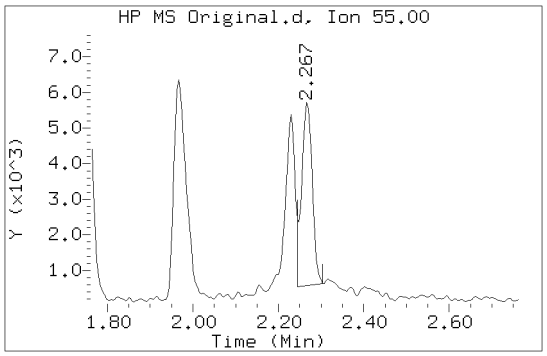
AFTER

MASS
56
AREA
14247
HEIGHT
7387
22-Jan-2024
17:33
linh
pham



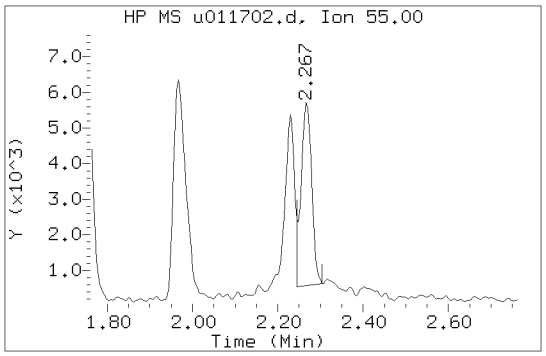
BEFORE

MASS
55
AREA
9227
HEIGHT
5148
22-Jan-2024
17:33
linh
pham



AFTER

MASS
55
AREA
9227
HEIGHT
5148
22-Jan-2024
17:33
linh
pham

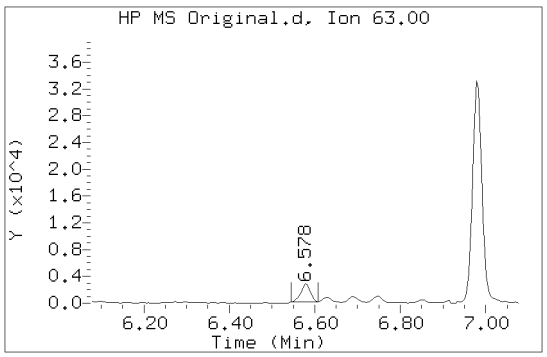


2-Chloroethylvinyl ether (110-75-8)

Reason Code:

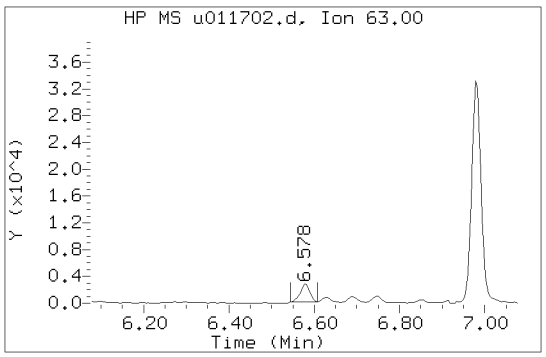
BEFORE

MASS
63
AREA
4201
HEIGHT
2651
22-Jan-2024
17:33
linh
pham



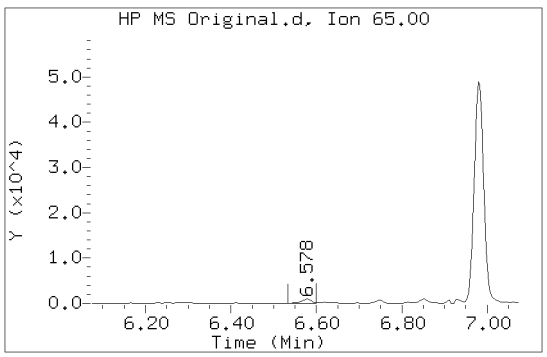
AFTER

MASS
63
AREA
4201
HEIGHT
2651
22-Jan-2024
17:33
linh
pham



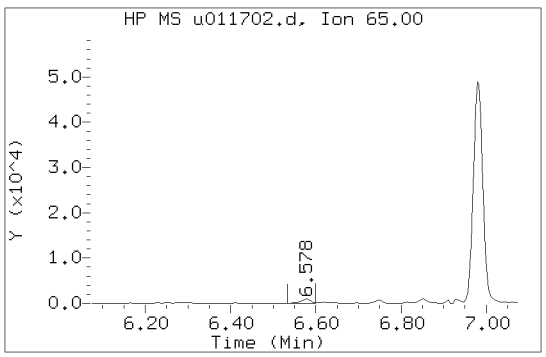
BEFORE

MASS
65
AREA
1606
HEIGHT
958
22-Jan-2024
17:33
linh
pham



AFTER

MASS
65
AREA
1606
HEIGHT
958
22-Jan-2024
17:33
linh
pham



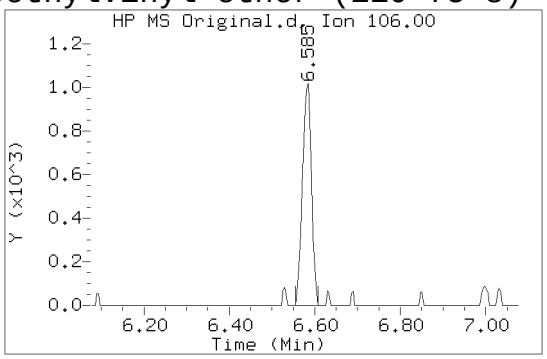
Data File : \\nahstws005\target\chem\voa9.i\u240117.b\u011702.d
Inj Date : 17-JAN-2024 07:36
InstruID : VOA9.i
LabSampID : CCV

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

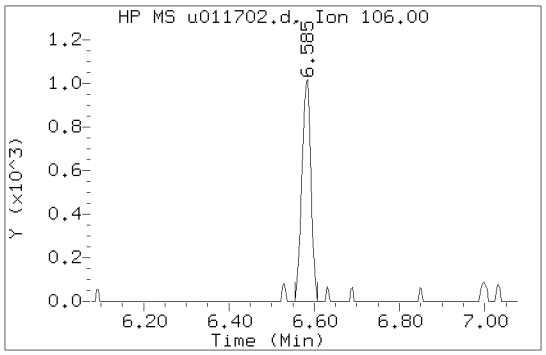
BEFORE

MASS
106
AREA
1537
HEIGHT
1016
22-Jan-2024
17:33
linh
pham



AFTER

MASS
106
AREA
1537
HEIGHT
1016
22-Jan-2024
17:33
linh
pham

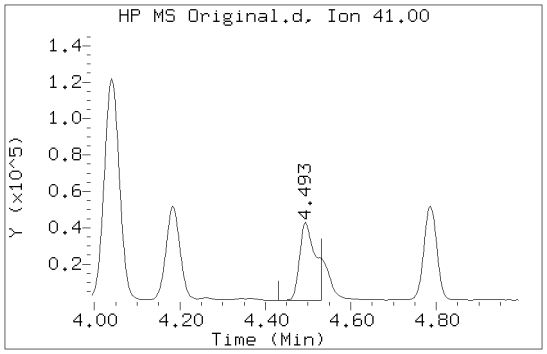


Methacrylonitrile (126-98-7)

Reason Code:

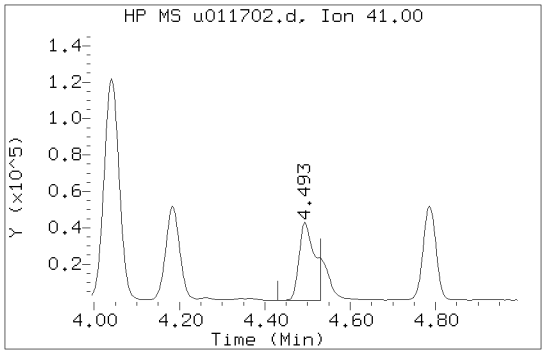
BEFORE

MASS
41
AREA
109988
HEIGHT
42904
22-Jan-2024
17:33
linh
pham



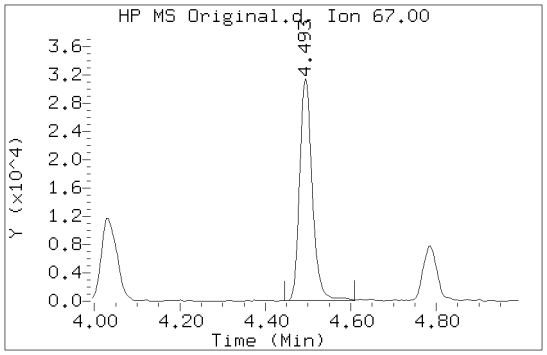
AFTER

MASS
41
AREA
109988
HEIGHT
42904
22-Jan-2024
17:33
linh
pham



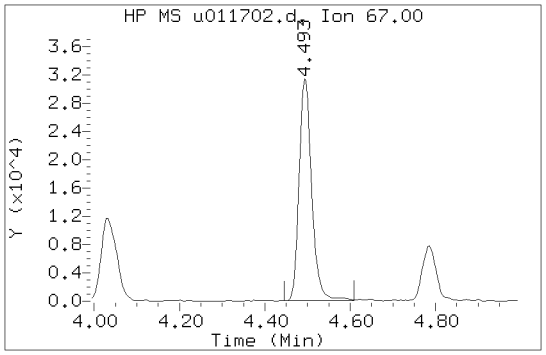
BEFORE

MASS
67
AREA
65776
HEIGHT
31396
22-Jan-2024
17:33
linh
pham



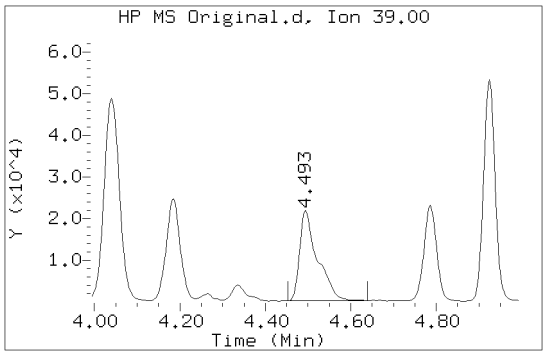
AFTER

MASS
67
AREA
65776
HEIGHT
31396
22-Jan-2024
17:33
linh
pham



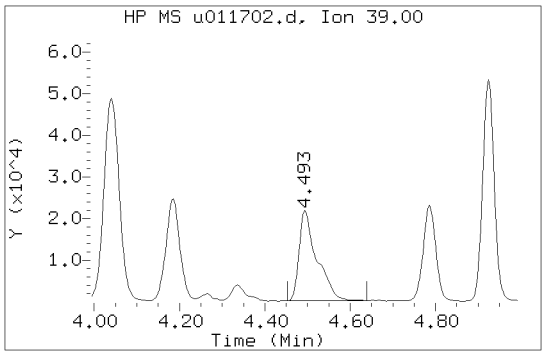
BEFORE

MASS
39
AREA
63718
HEIGHT
21777
22-Jan-2024
17:33
linh
pham



AFTER

MASS
39
AREA
63718
HEIGHT
21777
22-Jan-2024
17:33
linh
pham



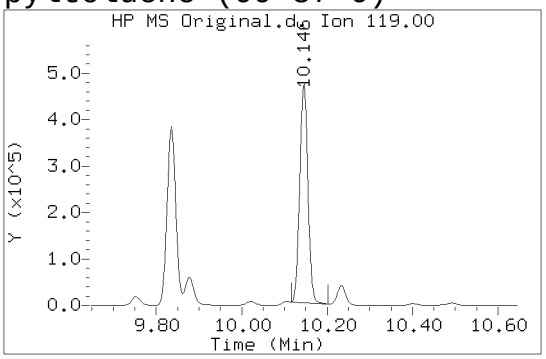
Data File : \\nahstws005\target\chem\voa9.i\u240117.b\u011702.d
Inj Date : 17-JAN-2024 07:36
InstruID : VOA9.i
LabSampID : CCV

p-Isopropyltoluene (99-87-6)

Reason Code:

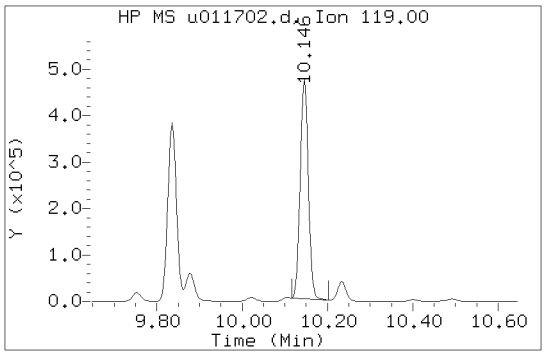
BEFORE

MASS
119
AREA
641321
HEIGHT
472542
22-Jan-2024
17:33
linh
pham



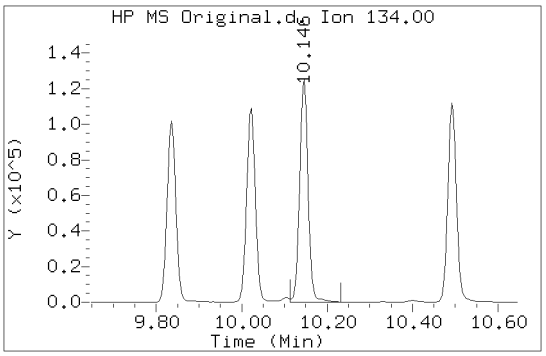
AFTER

MASS
119
AREA
641321
HEIGHT
472542
22-Jan-2024
17:33
linh
pham



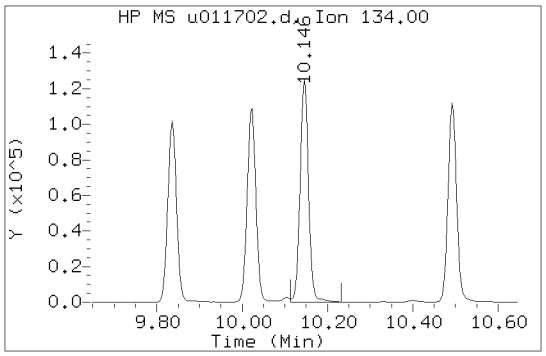
BEFORE

MASS
134
AREA
174824
HEIGHT
124845
22-Jan-2024
17:33
linh
pham



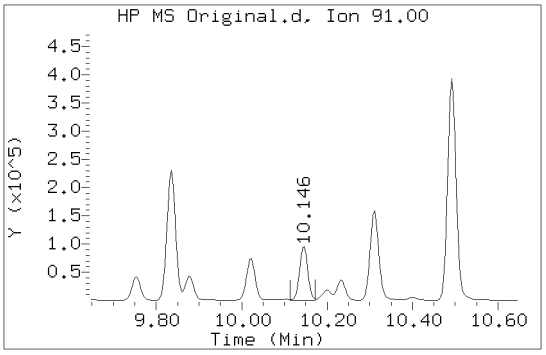
AFTER

MASS
134
AREA
174824
HEIGHT
124845
22-Jan-2024
17:33
linh
pham



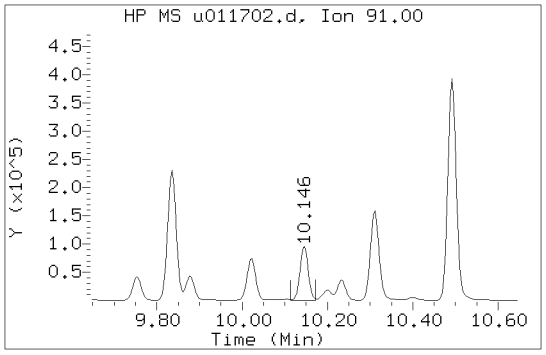
BEFORE

MASS
91
AREA
130558
HEIGHT
95386
22-Jan-2024
17:33
linh
pham



AFTER

MASS
91
AREA
130558
HEIGHT
95386
22-Jan-2024
17:33
linh
pham

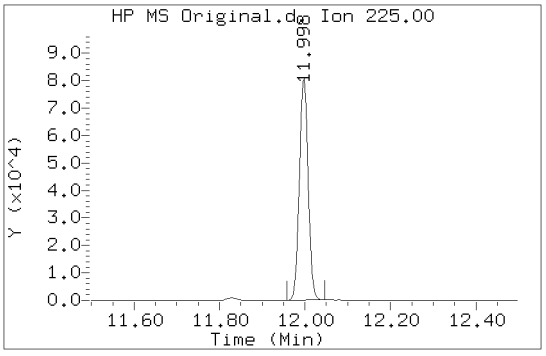


Hexachlorobutadiene (87-68-3)

Reason Code:

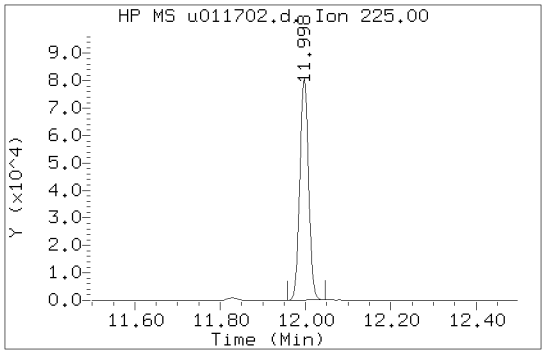
BEFORE

MASS
225
AREA
118011
HEIGHT
80663
22-Jan-2024
17:33
linh
pham



AFTER

MASS
225
AREA
118011
HEIGHT
80663
22-Jan-2024
17:33
linh
pham



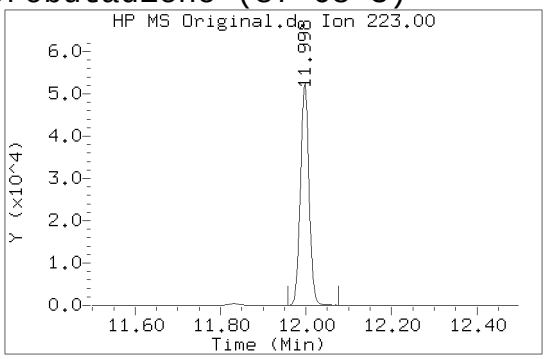
Data File : \\nahstws005\target\chem\voa9.i\u240117.b\u011702.d
Inj Date : 17-JAN-2024 07:36
InstruID : VOA9.i
LabSampID : CCV

Hexachlorobutadiene (87-68-3)

Reason Code:

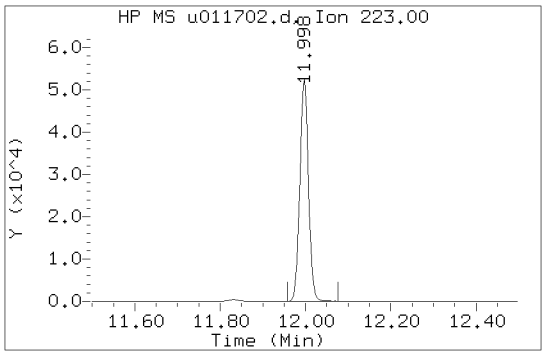
BEFORE

MASS
223
AREA
75276
HEIGHT
52408
22-Jan-2024
17:33
linh
pham



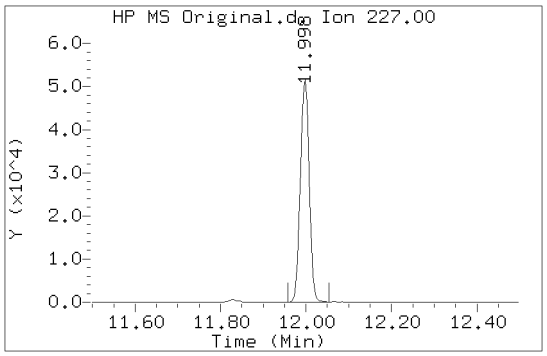
AFTER

MASS
223
AREA
75276
HEIGHT
52408
22-Jan-2024
17:33
linh
pham



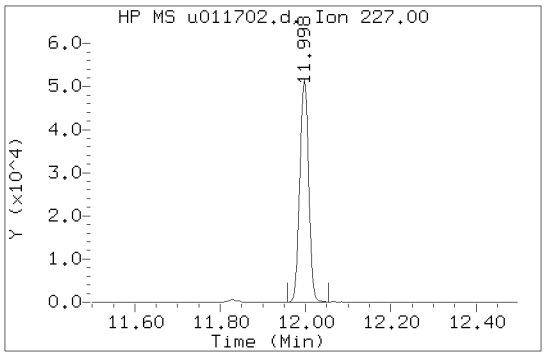
BEFORE

MASS
227
AREA
76304
HEIGHT
51528
22-Jan-2024
17:33
linh
pham



AFTER

MASS
227
AREA
76304
HEIGHT
51528
22-Jan-2024
17:33
linh
pham

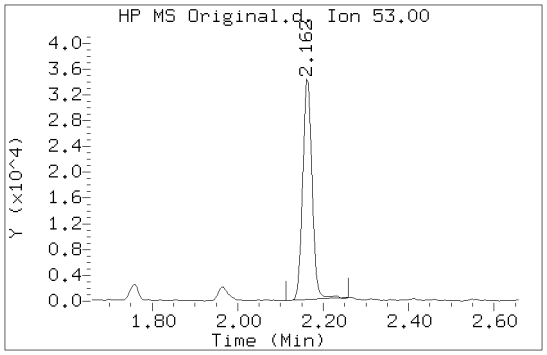


Chloroprene (126-99-8)

Reason Code:

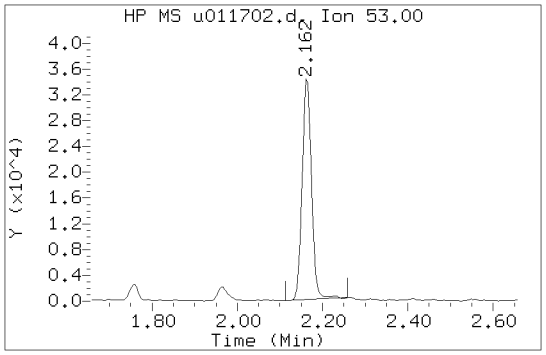
BEFORE

MASS
53
AREA
53168
HEIGHT
34200
22-Jan-2024
17:33
linh
pham



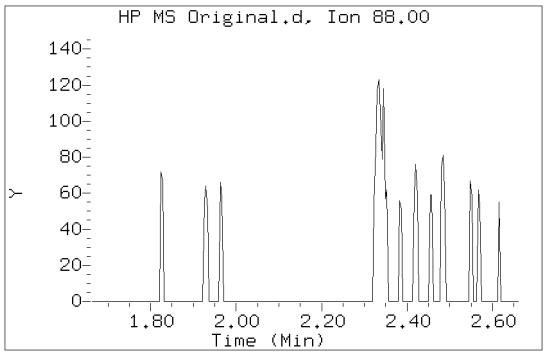
AFTER

MASS
53
AREA
53168
HEIGHT
34200
22-Jan-2024
17:33
linh
pham



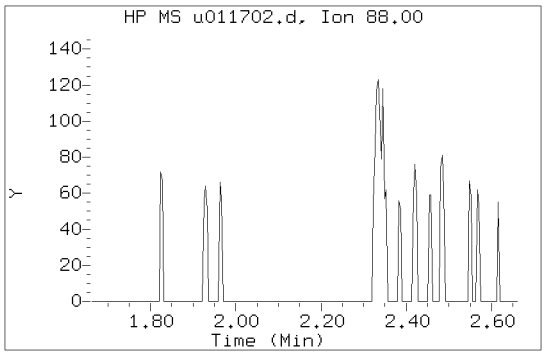
BEFORE

MASS
88
AREA
0
HEIGHT
0
22-Jan-2024
17:33
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
22-Jan-2024
17:33
linh
pham



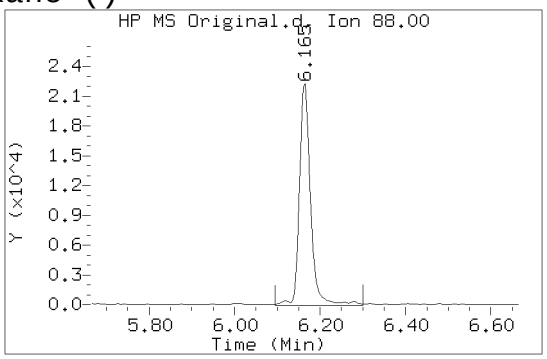
Data File : \\nahstws005\target\chem\voa9.i\u240117.b\u011702.d
Inj Date : 17-JAN-2024 07:36
InstruID : VOA9.i
LabSampID : CCV

1,4-Dioxane ()

Reason Code:

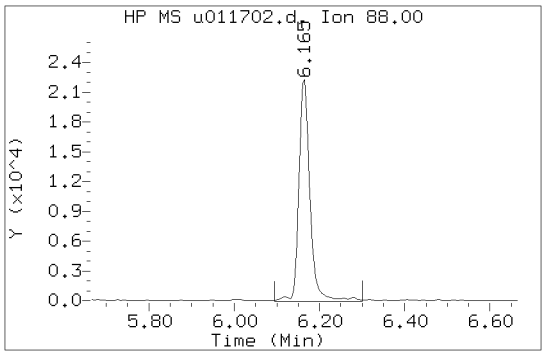
BEFORE

MASS
88
AREA
41345
HEIGHT
22307
22-Jan-2024
17:33
linh
pham



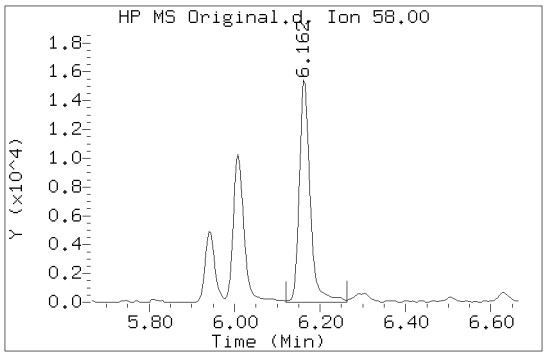
AFTER

MASS
88
AREA
41345
HEIGHT
22307
22-Jan-2024
17:33
linh
pham



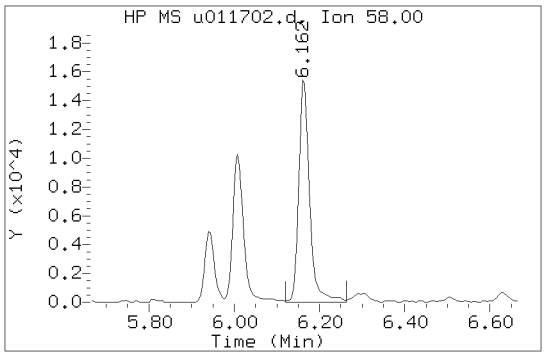
BEFORE

MASS
58
AREA
27875
HEIGHT
15433
22-Jan-2024
17:33
linh
pham



AFTER

MASS
58
AREA
27875
HEIGHT
15433
22-Jan-2024
17:33
linh
pham

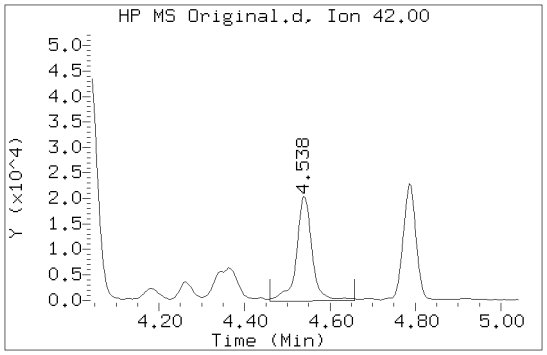


Tetrahydrofuran (109-99-9)

Reason Code:

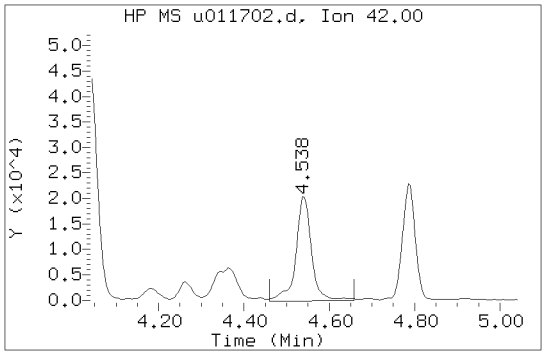
BEFORE

MASS
42
AREA
53487
HEIGHT
20481
22-Jan-2024
17:33
linh
pham



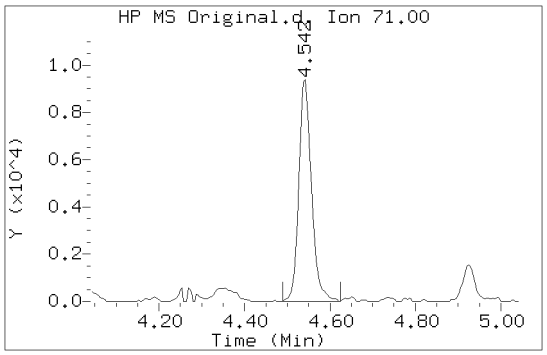
AFTER

MASS
42
AREA
53487
HEIGHT
20481
22-Jan-2024
17:33
linh
pham



BEFORE

MASS
71
AREA
19716
HEIGHT
9385
22-Jan-2024
17:33
linh
pham



AFTER

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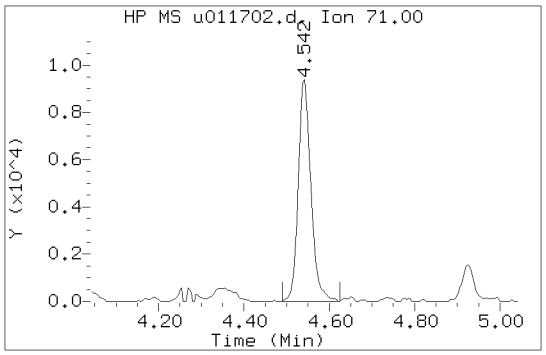

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Inj Date : 17-JAN-2024 07:36
InstruID : VOA9.i
LabSampID : CCV

Butyl acrylate (141-32-2)

Reason Code:

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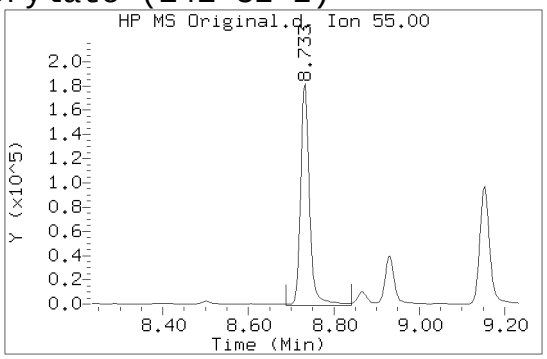

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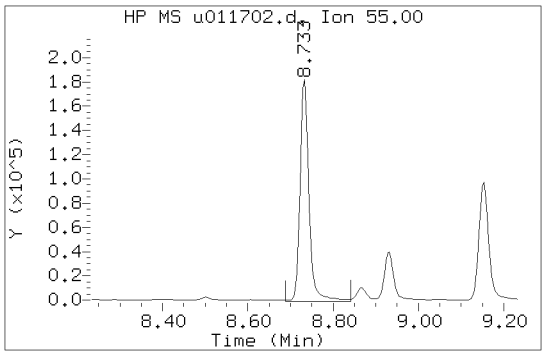

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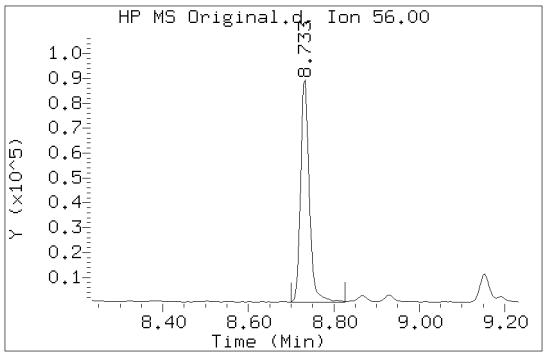

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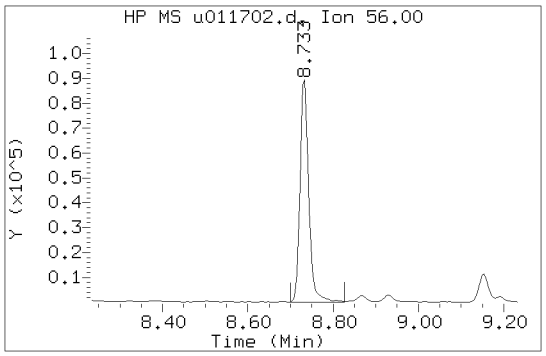

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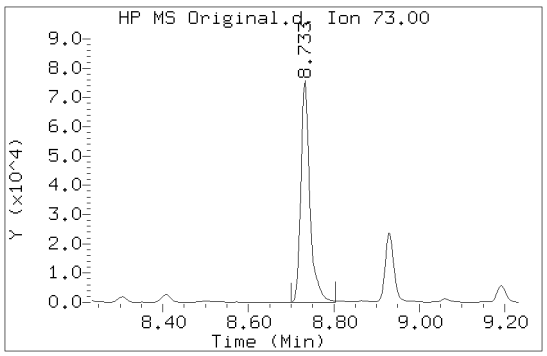

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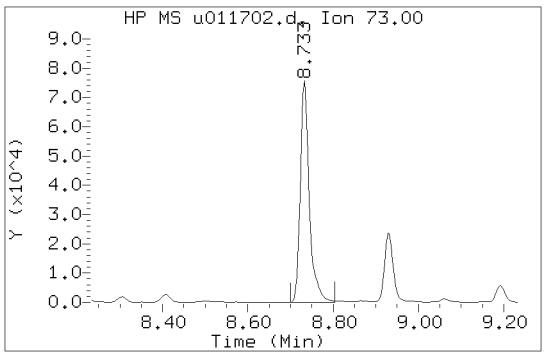

Acetaldehyde (75-07-0)

Reason Code:

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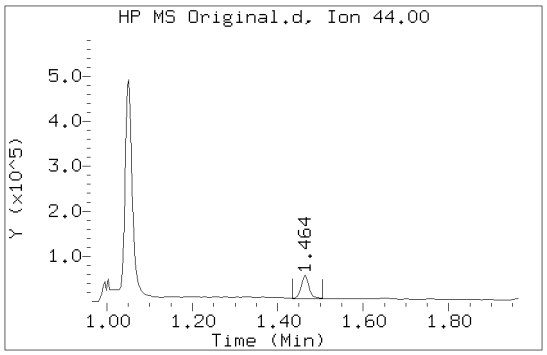

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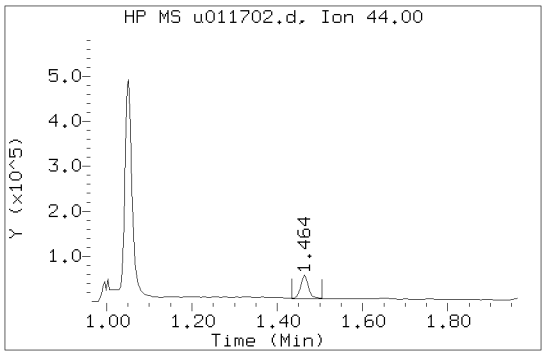

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Inj Date : 17-JAN-2024 07:36
InstruID : VOA9.i
LabSampID : CCV

Acetaldehyde (75-07-0)

Reason Code:

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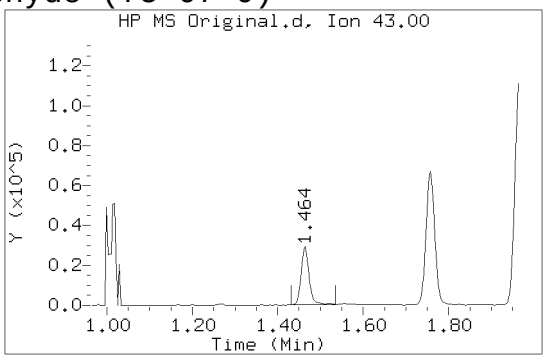

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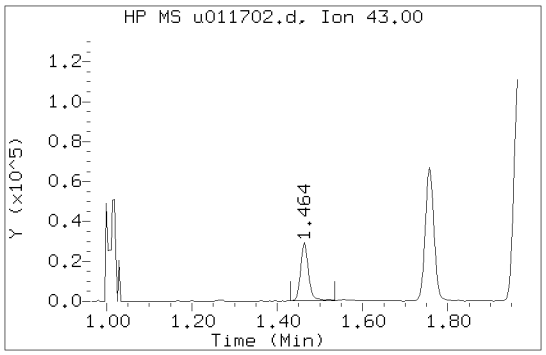

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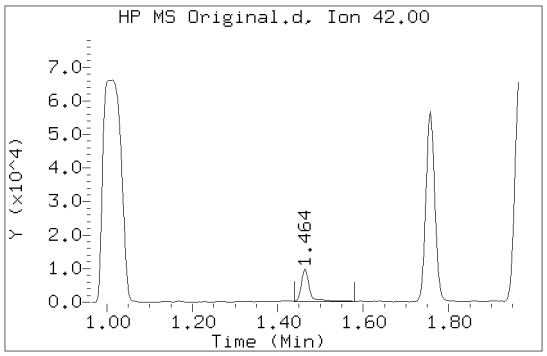

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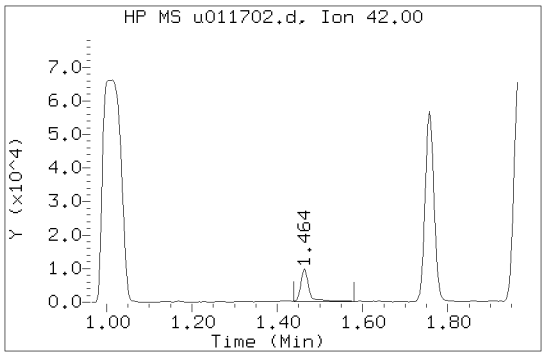

Isobutylene (115-11-7)

Reason Code:

BEFORE

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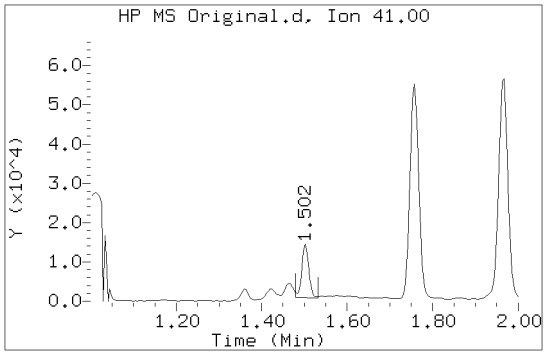

AFTER

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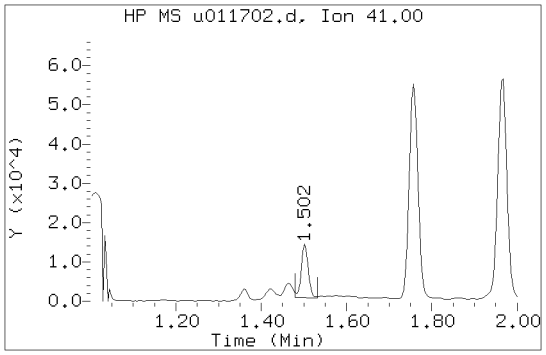

BEFORE

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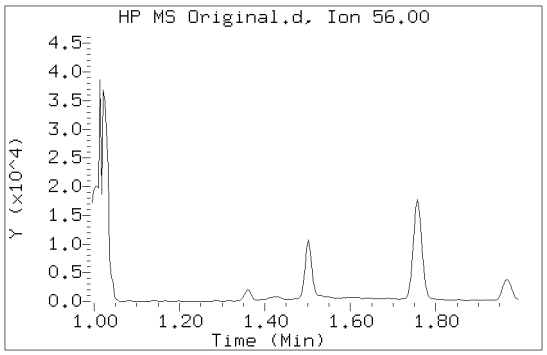

AFTER

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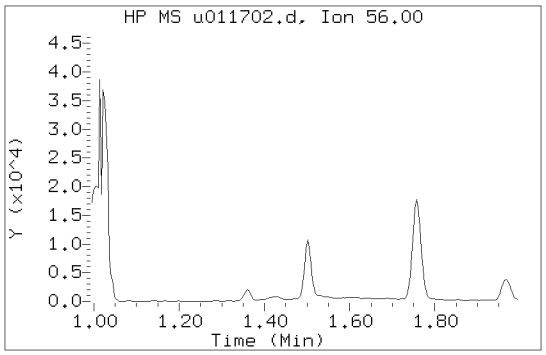

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Inj Date : 17-JAN-2024 07:36
InstruID : VOA9.i
LabSampID : CCV

Isobutylene (115-11-7)

Reason Code:

BEFORE

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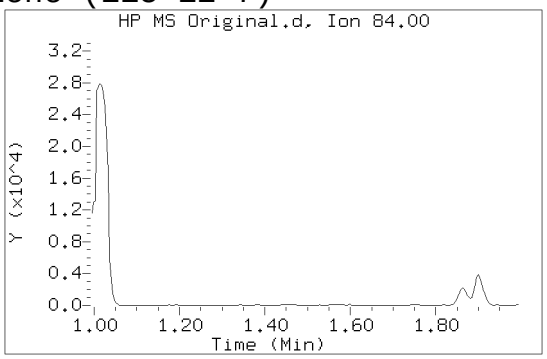

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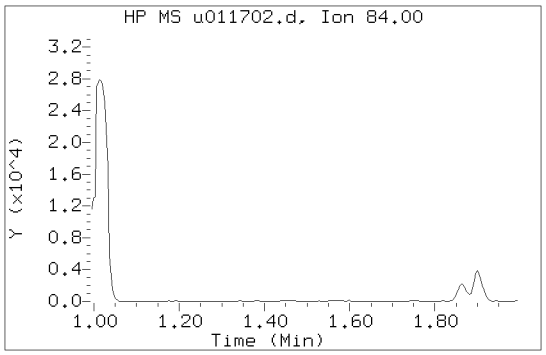

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Report Date: 22-Jan-2024 17:33

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011703.D
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Inj Date : 17-JAN-2024 07:58
Operator : FT Inst ID: VOA9.i
Smp Info : VLCSW-240117;VLCSW-240117;3;;LCS
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\8260C.m
Meth Date : 22-Jan-2024 17:33 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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	4.815	4.815	(1.000)	322070	50.0000	
2	Dichlorodifluoromethane	85	1.164	1.168	(0.242)	26048	10.7271	10.72
3	Chloromethane	50	1.299	1.303	(0.270)	50114	13.5643	13.56
4	Propionitrile	54	4.332	4.335	(0.900)	96917	181.491	181.49(a)
5	Vinyl Chloride	62	1.378	1.381	(0.286)	60768	17.2175	17.21
6	Bromomethane	94	1.621	1.625	(0.337)	42495	23.7189	23.71
7	Chloroethane	64	1.700	1.704	(0.353)	46424	19.5356	19.53
8	Trichlorofluoromethane	101	1.895	1.899	(0.394)	96005	21.4594	21.45
9	Acrolein	56	2.262	2.266	(0.470)	5556	30.2713	30.27
10	Acetone	43	2.405	2.409	(0.499)	41734	34.2913	34.29
11	1,1-Dichloroethene	96	2.333	2.337	(0.485)	54108	21.7821	21.78
12	Isobutyl Alcohol	43	5.284	5.284	(1.097)	163579	338.652	338.65(a)
13	Acetonitrile	39	2.671	2.675	(0.555)	77798	224.444	224.44(a)
14	Allyl Chloride	41	2.671	2.675	(0.555)	175584	22.1734	22.17(a)
15	Iodomethane	142	2.468	2.472	(0.513)	113329	38.6868	38.68
16	Acrylonitrile	53	3.064	3.065	(0.636)	51600	40.8432	40.84
17	Methylene Chloride	84	2.795	2.798	(0.580)	68800	21.7986	21.79
18	Methyl tert-butyl ether	73	3.076	3.080	(0.639)	198179	22.2650	22.26
19	Carbon Disulfide	76	2.521	2.525	(0.524)	328646	44.9005	44.90
20	trans-1,2-Dichloroethene	96	3.057	3.061	(0.635)	64148	21.6020	21.60

21 Vinyl Acetate	43	3.604	3.608 (0.749)	334600	37.2620	37.26
22 1,1-Dichloroethane	63	3.514	3.514 (0.730)	114481	18.9006	18.90

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011703.D Page 2
Report Date: 22-Jan-2024 17:33

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	23 Chloroprene	53	2.157	2.161	(0.448)	21293	19.3816	19.38(M)
	24 2-Butanone	43	4.264	4.260	(0.886)	48035	30.4466	30.44
	25 Methacrylonitrile	41	4.493	4.493	(0.933)	38428	16.7104	16.71(aM)
	26 2,2-Dichloropropane	77	4.182	4.185	(0.868)	86866	20.3995	20.39
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	75775	19.0487	19.04
	28 Chloroform	83	4.571	4.572	(0.949)	122315	18.5525	18.55
	29 Bromochloromethane	128	4.466	4.470	(0.928)	41228	20.0302	20.03
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	173481	52.6865	52.68
	31 1,1,1-Trichloroethane	97	4.740	4.744	(0.984)	97382	19.4365	19.43
	32 1,1-Dichloropropene	75	4.920	4.924	(0.887)	85065	20.6389	20.63
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	86144	17.9463	17.94
	34 Carbon Tetrachloride	117	4.909	4.913	(0.885)	85502	21.2373	21.23
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	179741	47.6903	47.69
*	36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	492661	50.0000	
	37 Benzene	78	5.137	5.141	(0.926)	257292	19.1847	19.18
	38 Trichloroethene	130	5.786	5.786	(1.043)	75279	20.3657	20.36
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	87441	19.9099	19.90
	40 Methyl Methacrylate	41	6.153	6.154	(1.278)	53837	16.9353	16.93(a)
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	68938	19.0924	19.09
	43 2-Nitropropane	43	6.506	6.506	(1.351)	13489	16.3141	16.31
	44 Dibromomethane	93	6.120	6.120	(1.103)	44341	18.9808	18.98
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	115860	32.6918	32.69
	46 cis-1,3-Dichloropropene	75	6.689	6.690	(1.205)	103171	19.1700	19.17
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	487887	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	614136	54.6808	54.68
	49 Ethyl Methacrylate	69	7.289	7.289	(1.313)	96103	19.8748	19.87(a)
	50 Toluene	91	6.978	6.978	(0.853)	282726	20.7832	20.78
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.297)	84743	18.9300	18.92
	52 2-Hexanone	43	7.589	7.589	(0.927)	78970	32.0740	32.07
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	54132	20.0236	20.02
	54 1,3-Dichloropropane	76	7.495	7.496	(0.916)	112641	18.6482	18.64
	55 Dibromochloromethane	129	7.690	7.691	(0.940)	73441	20.2400	20.23
	56 Tetrachloroethene	164	7.454	7.454	(0.911)	66726	22.9154	22.91
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	64830	19.1250	19.12
	58 1-Chlorohexane	55	8.196	8.197	(1.477)	58784	21.2786	21.27
	59 Chlorobenzene	112	8.208	8.208	(1.003)	201947	20.3786	20.37
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	70118	20.2277	20.22
	61 Ethylbenzene	106	8.305	8.305	(1.015)	96500	20.8021	20.80
	62 m,p-Xylenes	106	8.406	8.407	(1.027)	238940	42.8412	42.84
	63 o-Xylene	106	8.747	8.744	(1.069)	120734	21.0489	21.04
	64 Styrene	104	8.759	8.759	(1.070)	202835	21.2410	21.24
	66 Bromoform	173	8.916	8.916	(1.089)	46459	19.3864	19.38
	67 Isopropylbenzene	105	9.062	9.059	(1.107)	301513	21.7351	21.73
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.325	(0.917)	84812	18.6421	18.64
$	69 4-Bromofluorobenzene	95	9.190	9.190	(1.123)	220890	51.9936	51.99
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	273131	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	81928	15.8013	15.80
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	15030	17.1184	17.11(a)
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	335626	20.9268	20.92
	74 Bromobenzene	156	9.317	9.314	(0.916)	86543	18.8684	18.86
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	240968	21.1395	21.13
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	208872	19.3494	19.34

77 4-Chlorotoluene	91	9.576	9.572 (0.942)	237648	19.4119	19.41
78 tert-Butylbenzene	119	9.835	9.835 (0.967)	215826	21.0797	21.07

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011703.D Page 3
Report Date: 22-Jan-2024 17:33

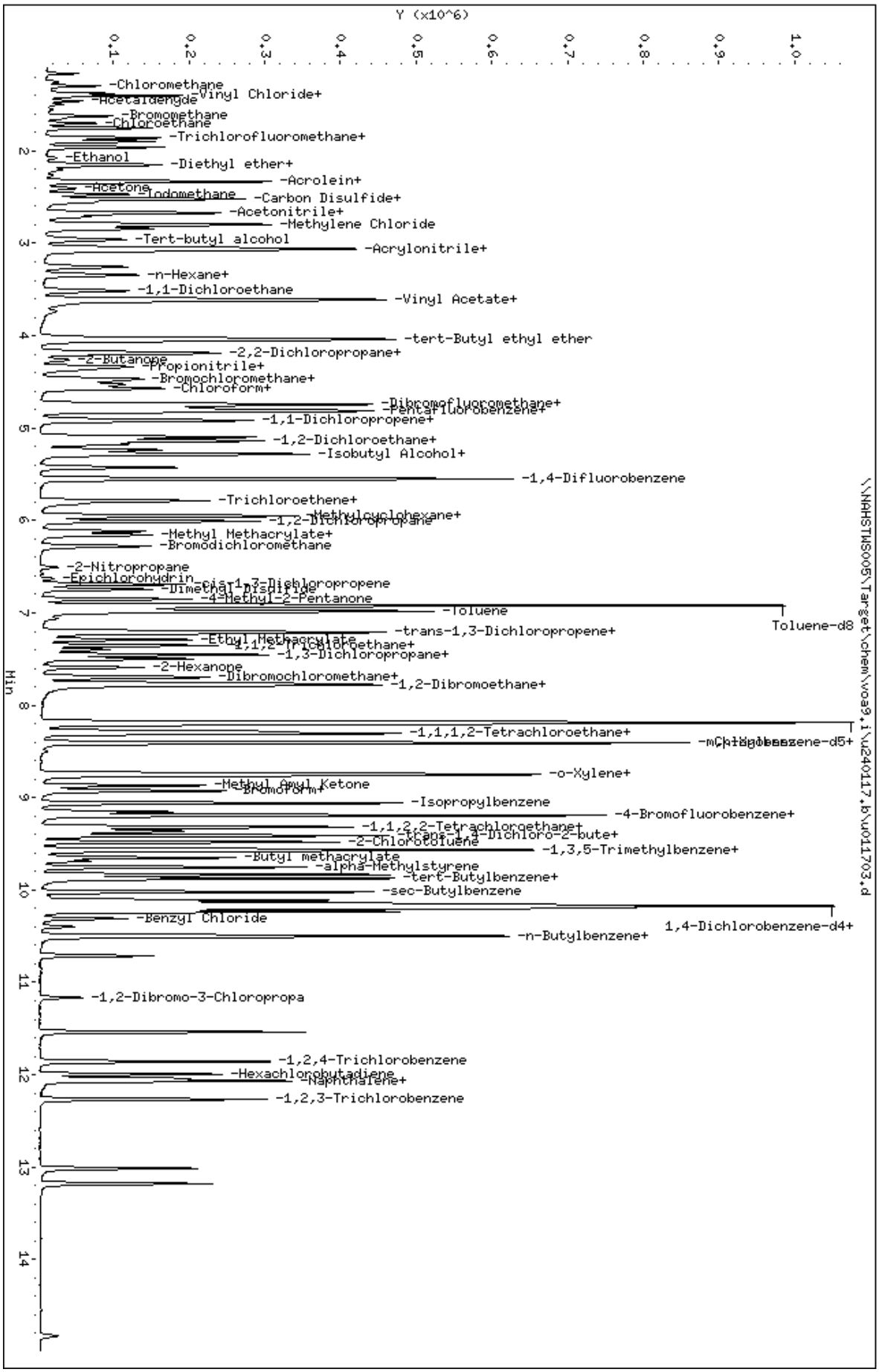
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
79	1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	250519	21.9289	21.92
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	283840	21.4990	21.49
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	251041	21.9717	21.97
83	1,3-Dichlorobenzene	146	10.116	10.112	(0.995)	156510	19.2561	19.25
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	168659	19.5865	19.58
86	Benzyl Chloride	91	10.311	10.311	(1.260)	77368	19.6497	19.64
87	n-Butylbenzene	91	10.491	10.491	(1.032)	211639	22.0723	22.07
88	1,2-Dichlorobenzene	146	10.506	10.502	(1.033)	156729	19.1671	19.16
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.166	(1.098)	13117	17.8394	17.83
90	1,2,4-Trichlorobenzene	180	11.859	11.855	(1.166)	101402	20.1011	20.10
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	46216	22.8551	22.85
92	Naphthalene	128	12.065	12.065	(1.187)	241127	19.8195	19.81
93	1,2,3-Trichlorobenzene	180	12.267	12.268	(1.206)	98823	19.4262	19.42
146	Methyl acetate	43	2.712	2.712	(0.563)	56632	17.6677	17.66
138	Freon TF	101	2.337	2.341	(0.485)	61352	26.1963	26.19
141	Cyclohexane	56	4.781	4.785	(0.993)	87478	18.8500	18.84
142	Tetrahydrofuran	42	4.541	4.538	(0.943)	23862	34.9044	34.90
147	Methylcyclohexane	55	5.947	5.947	(1.072)	162823	22.2979	22.29
135	1,4-Dioxane	88	6.165	6.165	(1.280)	14629	286.287	286.28
132	n-Butanol	56	5.820	5.816	(1.209)	32789	313.247	313.24(a)
136	n-Hexane	57	3.342	3.346	(0.694)	67315	22.4847	22.48
139	Diethyl ether	59	2.142	2.146	(0.445)	55137	20.9955	20.99
148	Tert-butyl alcohol	59	2.959	2.960	(0.615)	130641	362.336	362.33
149	Isopropyl alcohol	45	2.555	2.559	(0.531)	77743	376.772	376.77
152	Amyl alcohol	42	7.398	7.394	(0.904)	34155	315.617	315.61
156	Diisopropyl ether	45	3.619	3.619	(0.752)	217403	19.3764	19.37
162	Butyl acrylate	55	8.732	8.733	(1.067)	106147	17.2211	17.22
187	n-Amyl acetate	43	8.931	8.931	(1.091)	96926	15.6740	15.67
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	316940	21.7677	21.76
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	251314	22.2966	22.29
167	Ethanol	45	2.075	2.079	(0.431)	14649	361.729	361.72
172	tert-Butyl formate	59	5.239	5.235	(1.088)	81319	35.5730	35.57
173	3,3-Dimethyl-1-butanol	57	7.780	7.777	(0.951)	148669	369.355	369.35
174	tert-Amyl methyl ether	73	5.284	5.284	(1.097)	206873	20.7070	20.70
175	tert-Butyl ethyl ether	59	4.047	4.051	(0.840)	202959	20.2912	20.29
176	tert-Amyl alcohol	59	5.239	5.235	(1.088)	81319	357.464	357.46
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.300)	262128	359.221	359.22
140	1,3-Butadiene	54	1.400	1.408	(0.291)	50959	15.7539	15.75
158	Dichlorofluoromethane	67	1.857	1.861	(0.386)	122486	24.9520	24.95
182	Epichlorohydrin	57	6.633	6.630	(1.195)	13243	69.1959	69.19
M 94	1,2-Dichloroethylene (total)	96				139923	40.2801	40.28
M 95	Xylenes (total)	106				359674	63.0942	63.09
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	105162	19.9844	19.98
130	Ethyl Acetate	43	4.339	4.339	(0.901)	61755	15.7845	15.78
131	Methyl Acrylate	55	4.365	4.369	(0.907)	76497	18.0825	18.08
189	n-Butyl acetate	43	7.705	7.702	(0.941)	90152	16.5888	16.58
134	Cyclohexanone	55	9.152	9.153	(0.900)	69272	383.327	383.32(a)
185	Isoprene	39	2.157	2.161	(0.448)	19873	26.5033	26.50
188	Isopropyl acetate	43	5.284	5.284	(0.952)	165955	18.2594	18.25
150	Allyl alcohol	57	3.342	3.346	(0.694)	67315	449.694	449.69
194	Acetaldehyde	44	1.460	1.464	(0.303)	31377	70.4178	70.41(M)
195	Methyl Amyl Ketone	43	8.867	8.868	(1.083)	117506	16.7187	16.71

200 Dimethyl Disulfide	94	6.746	6.746 (0.824)	76520	20.2459	20.24
203 2-Ethylhexyl Acrylate	55	12.039	12.039 (1.184)	65226	17.8845	17.88

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
133 Ethyl Acrylate	55	5.947	5.947	(1.235)	162823	21.0324	21.03
163 Butyl methacrylate	41	9.647	9.647	(0.949)	62716	18.4948	18.49

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



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Client ID: VLCSW-240117
Sample Info: VLCSW-240117;VLCSW-240117;3;;LCS
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: FT
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240117.b\u011703.d
Inj Date : 17-JAN-2024 07:58
InstruID : VOA9.i
LabSampID : VLCSW-240117

Methacrylonitrile (126-98-7)

Reason Code:

BEFORE
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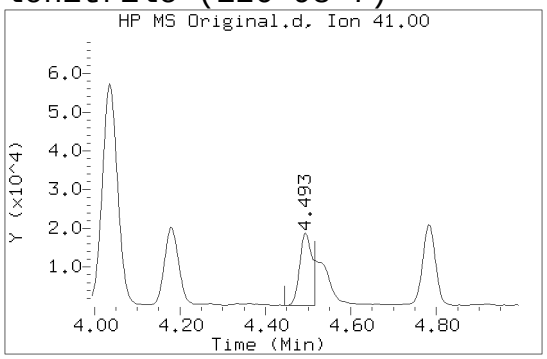
38428
HEIGHT
18605
22-Jan-2024
17:33
linh
pham



AFTER
MASS
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38428
HEIGHT
18605
22-Jan-2024
17:33
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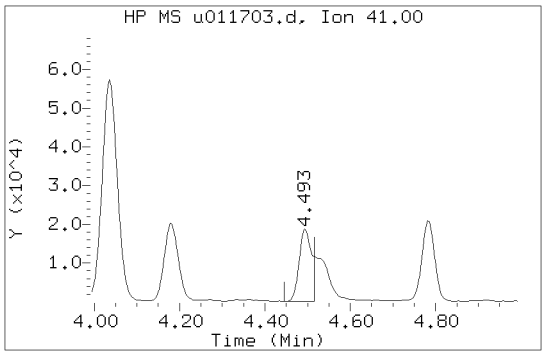
pham



BEFORE
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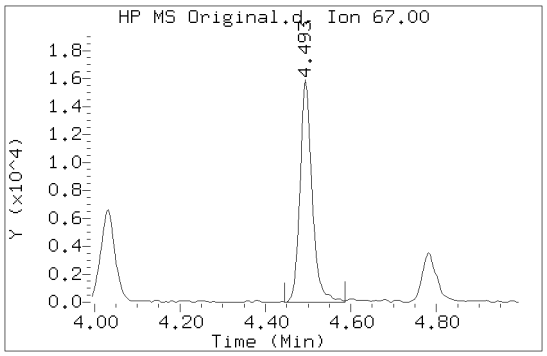
67
AREA
31897
HEIGHT
15903
22-Jan-2024
17:33
linh
pham



AFTER
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22-Jan-2024
17:33
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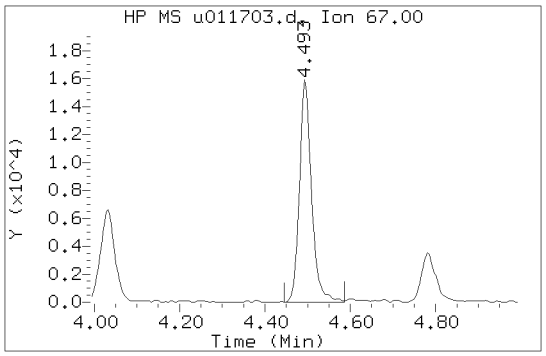

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22-Jan-2024
17:33
linh
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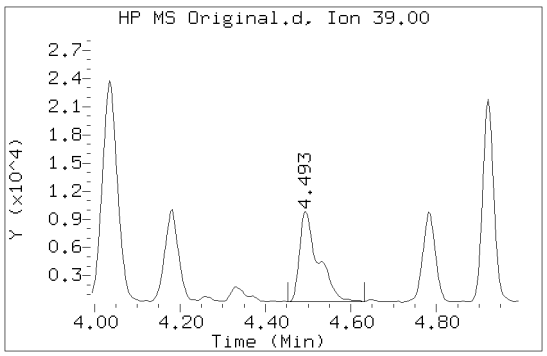

AFTER
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22-Jan-2024
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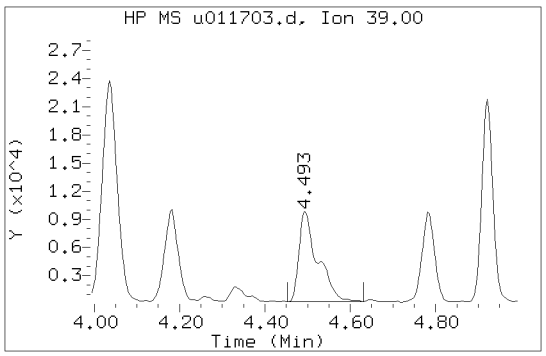

Chloroprene (126-99-8)

Reason Code:

BEFORE
MASS
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AREA
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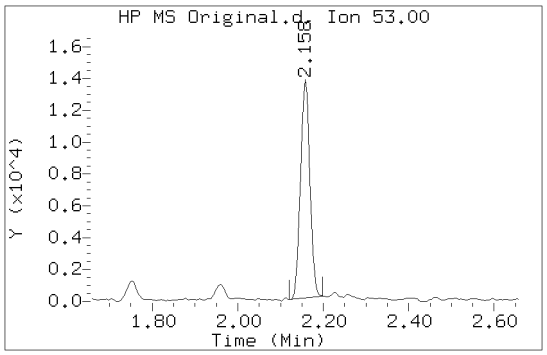
HEIGHT
13698
22-Jan-2024
17:33
linh
pham



AFTER
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22-Jan-2024
17:33
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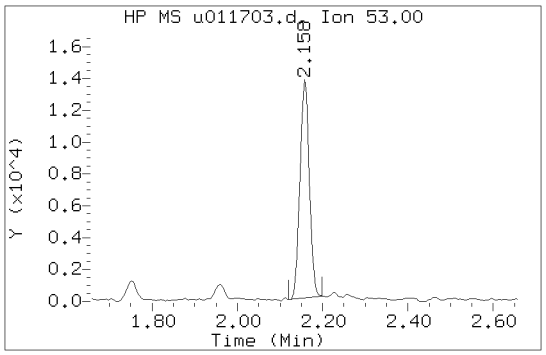

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Inj Date : 17-JAN-2024 07:58
InstruID : VOA9.i
LabSampID : VLCSW-240117

Chloroprene (126-99-8)

Reason Code:

BEFORE

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AREA
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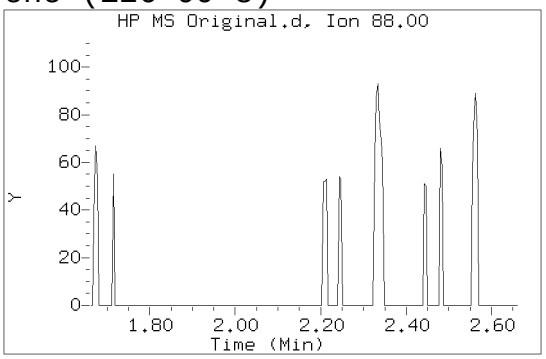
HEIGHT
0
22-Jan-2024
17:33
linh
pham



AFTER

MASS
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HEIGHT
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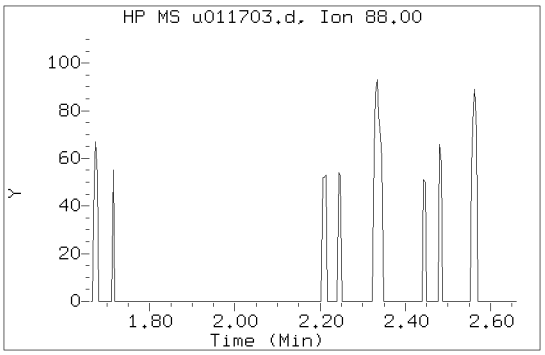
22-Jan-2024
17:33
linh
pham



Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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AREA
31377
HEIGHT
23590
22-Jan-2024
17:33
linh
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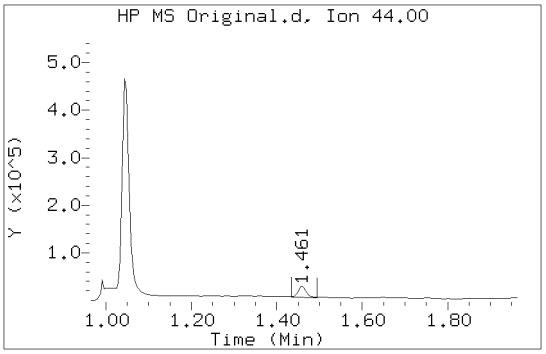

AFTER

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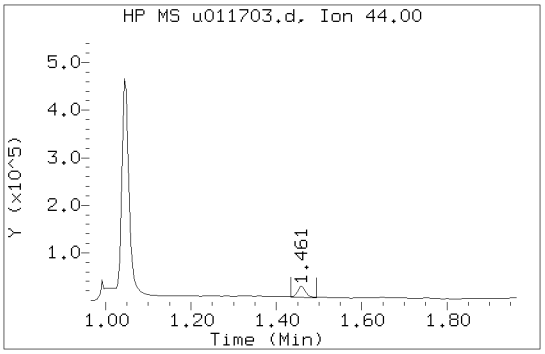

BEFORE

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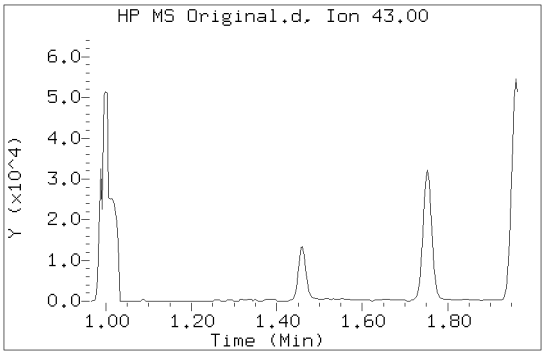
22-Jan-2024
17:33
linh
pham



AFTER

MASS
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AREA
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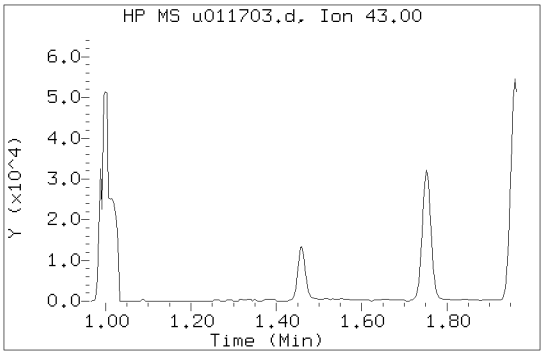
22-Jan-2024
17:33
linh
pham



BEFORE

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22-Jan-2024
17:33
linh
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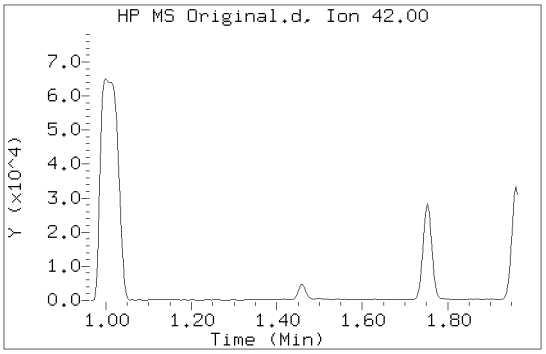

AFTER

MASS
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AREA
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HEIGHT
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22-Jan-2024
17:33
linh
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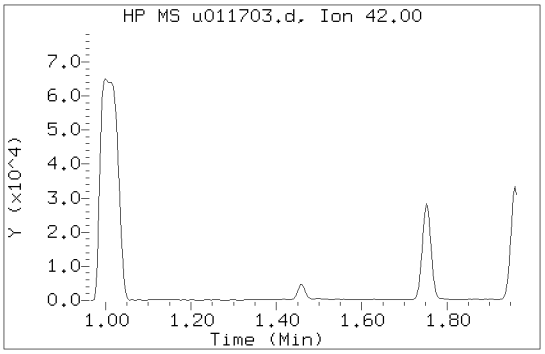


Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011705.D Page 1
Report Date: 22-Jan-2024 17:33

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011705.D
Lab Smp Id: VBLKW-240117 Client Smp ID: VBLKW-240117
Inj Date : 17-JAN-2024 08:42
Operator : FT Inst ID: VOA9.i
Smp Info : VBLKW-240117;VBLKW-240117;3;;BLANK
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\8260C.m
Meth Date : 22-Jan-2024 17:33 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

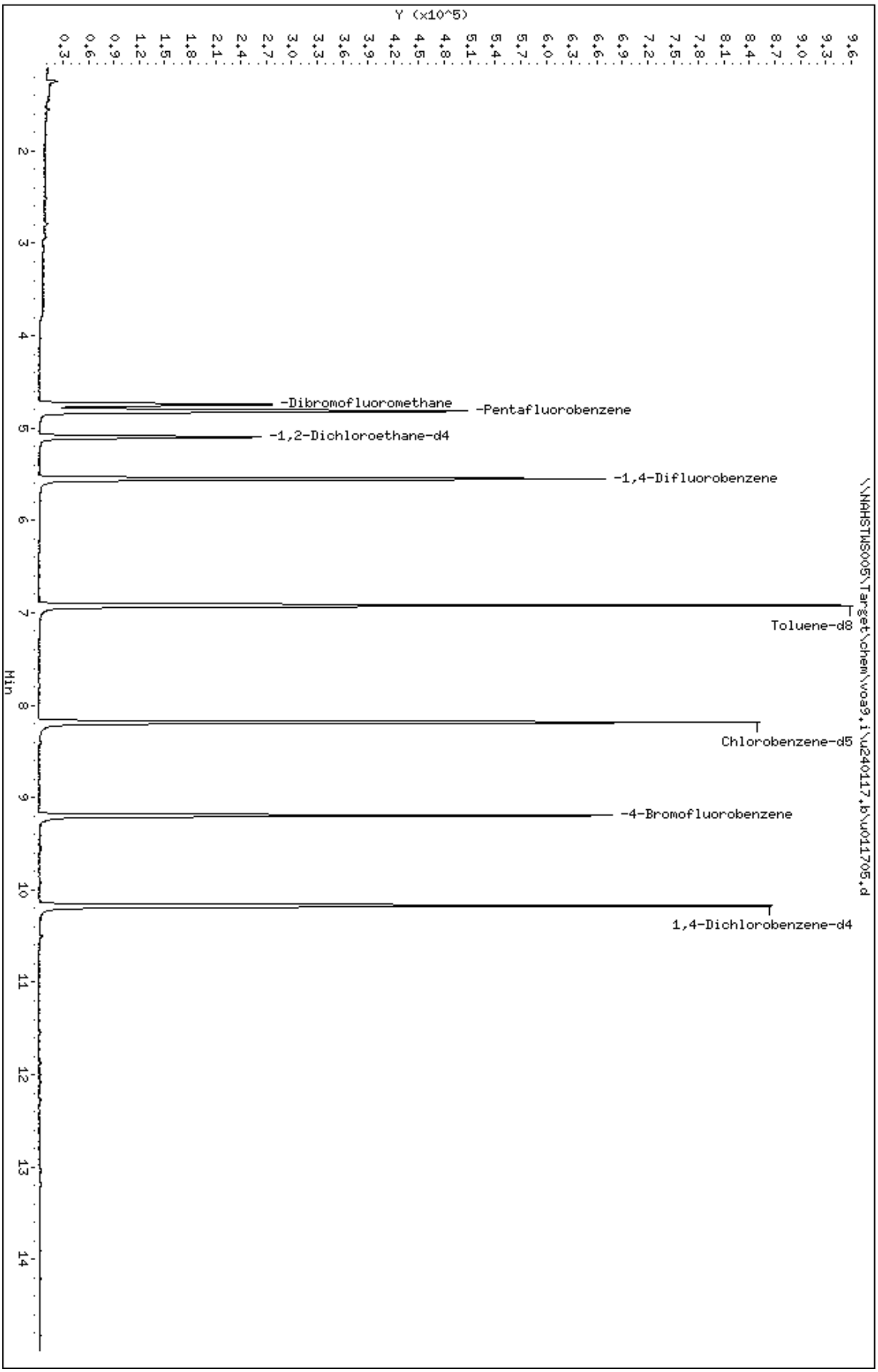
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.815	4.815	(1.000)	382509	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.985)	166690	42.4287	42.42
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	183180	41.2229	41.22(M)
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	534494	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	486876	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	593417	52.9457	52.94
$ 69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	206056	48.5181	48.51
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	249463	50.0000	

QC Flag Legend

M - Compound response manually integrated.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Date : 17-JAN-2024 08:42
Client ID: VBLKW-240117
Sample Info: VBLKW-240117;VBLKW-240117;3;;BLANK
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9.i
Operator: FT
Column diameter: 0.18
Page 1
Y (x10^5)
Min
-Dibromofluoromethane
-Pentafluorobenzene
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene
Toluene-d8
Chlorobenzene-d5
-4-Bromofluorobenzene
1,4-Dichlorobenzene-d4
\\NAHSTWS005\Target\chem\voa9.i\u240117.b\u011705.d

Data File : \\nahstws005\target\chem\voa9.i\u240117.b\u011705.d
Inj Date : 17-JAN-2024 08:42
InstruID : VOA9.i
LabSampID : VBLKW-240117

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

MASS
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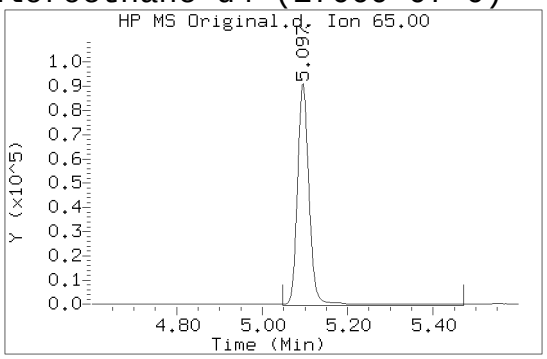
AREA
183180
HEIGHT
91450
22-Jan-2024
17:33
linh
pham



AFTER

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17:33
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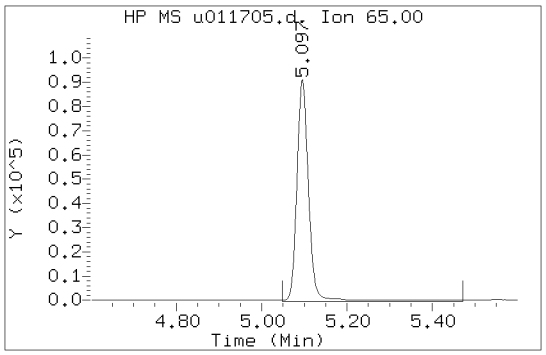

BEFORE

MASS
102
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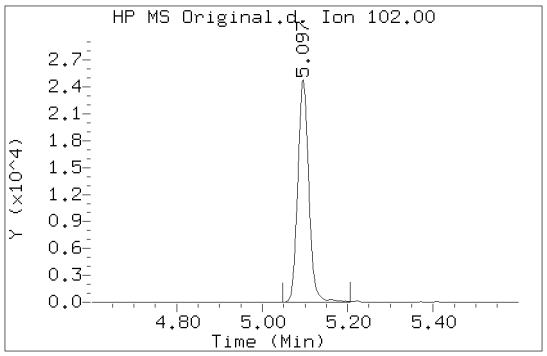
24784
22-Jan-2024
17:33
linh
pham



AFTER

MASS
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HEIGHT
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22-Jan-2024
17:33
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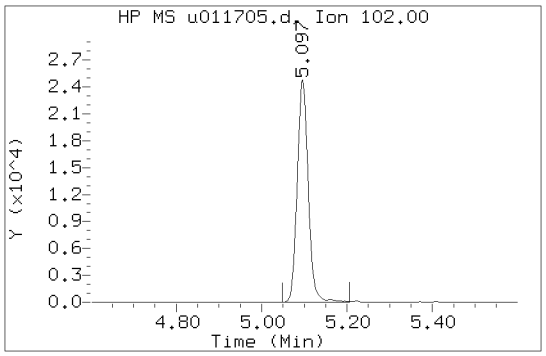

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011714.D Page 1
Report Date: 22-Jan-2024 17:34

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011714.D
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Inj Date : 17-JAN-2024 12:03
Operator : FT Inst ID: VOA9.i
Smp Info : HS24010611-01MS;HS24010611-01MS;3;;MS
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\8260C.m
Meth Date : 22-Jan-2024 17:33 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 14 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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	4.815	4.815	(1.000)	292268	50.0000	
2 Dichlorodifluoromethane	85	1.164	1.168	(0.242)	25573	11.5343	11.53
3 Chloromethane	50	1.299	1.303	(0.270)	48248	14.3908	14.39
4 Propionitrile	54	4.335	4.335	(0.900)	82218	169.665	169.66(a)
5 Vinyl Chloride	62	1.378	1.381	(0.286)	69921	21.8309	21.83
6 Bromomethane	94	1.621	1.625	(0.337)	41517	25.5544	25.55
7 Chloroethane	64	1.666	1.704	(0.346)	2779	1.28867	1.28
8 Trichlorofluoromethane	101	1.895	1.899	(0.394)	91838	22.6212	22.62
9 Acrolein	56	2.262	2.266	(0.470)	4629	27.7923	27.79
10 Acetone	43	2.408	2.409	(0.500)	35839	32.1234	32.12
11 1,1-Dichloroethene	96	2.333	2.337	(0.485)	52307	23.2042	23.20
12 Isobutyl Alcohol	43	5.284	5.284	(1.097)	152122	347.046	347.04(a)
13 Acetonitrile	39	2.671	2.675	(0.555)	63888	203.108	203.10(a)
14 Allyl Chloride	41	2.671	2.675	(0.555)	145099	20.1921	20.19(a)
15 Iodomethane	142	2.468	2.472	(0.513)	115229	42.9726	42.97
16 Acrylonitrile	53	3.064	3.065	(0.636)	44456	38.7766	38.77
17 Methylene Chloride	84	2.795	2.798	(0.580)	65085	22.7355	22.73
18 Methyl tert-butyl ether	73	3.079	3.080	(0.640)	163478	20.2392	20.23
19 Carbon Disulfide	76	2.521	2.525	(0.524)	327616	49.3239	49.32
20 trans-1,2-Dichloroethene	96	3.057	3.061	(0.635)	62398	23.1554	23.15

21 Vinyl Acetate	43	3.608	3.608 (0.749)	291639	35.7894	35.78
22 1,1-Dichloroethane	63	3.511	3.514 (0.729)	107926	19.6352	19.63

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011714.D Page 2
Report Date: 22-Jan-2024 17:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	23 Chloroprene	53	2.157	2.161	(0.448)	18890	18.9476	18.94(M)
	24 2-Butanone	43	4.264	4.260	(0.886)	45605	31.8538	31.85
	25 Methacrylonitrile	41	4.496	4.493	(0.934)	54240	25.9913	25.99(a)
	26 2,2-Dichloropropane	77	4.182	4.185	(0.868)	78231	20.2449	20.24
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	97011	26.8738	26.87
	28 Chloroform	83	4.571	4.572	(0.949)	117538	19.6458	19.64
	29 Bromochloromethane	128	4.470	4.470	(0.928)	38732	20.7363	20.73
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	143445	47.9153	47.91
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	96946	21.3225	21.32
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	83256	22.1267	22.12
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	80649	18.4041	18.40
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	82759	22.5167	22.51
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	146572	43.0822	43.08
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	449762	50.0000	
	37 Benzene	78	5.137	5.141	(0.925)	253092	20.6715	20.67
	38 Trichloroethene	130	5.790	5.786	(1.043)	75456	22.3606	22.36
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	80478	20.0723	20.07
	40 Methyl Methacrylate	41	6.157	6.154	(1.279)	50606	17.5422	17.54(a)
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	61323	18.6034	18.60
	43 2-Nitropropane	43	6.510	6.506	(1.352)	11915	15.8799	15.87
	44 Dibromomethane	93	6.120	6.120	(1.102)	42023	19.7043	19.70
	45 4-Methyl-2-Pentanone	43	6.854	6.851	(0.837)	125141	38.2993	38.29
	46 cis-1,3-Dichloropropene	75	6.689	6.690	(1.205)	94244	19.1807	19.18
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	450536	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	512090	49.3749	49.37
	49 Ethyl Methacrylate	69	7.289	7.289	(1.312)	86915	19.6891	19.68(a)
	50 Toluene	91	6.982	6.978	(0.853)	838292	66.7317	66.73
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	76517	18.7422	18.74
	52 2-Hexanone	43	7.593	7.589	(0.928)	84440	37.1389	37.13
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	53038	21.3272	21.32
	54 1,3-Dichloropropane	76	7.499	7.496	(0.916)	107088	19.1987	19.19
	55 Dibromochloromethane	129	7.690	7.691	(0.940)	70022	20.8976	20.89
	56 Tetrachloroethene	164	7.458	7.454	(0.911)	65455	24.3425	24.34
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	65254	20.8460	20.84
	58 1-Chlorohexane	55	8.196	8.197	(1.476)	56156	22.2661	22.26
	59 Chlorobenzene	112	8.208	8.208	(1.003)	197251	21.5549	21.55
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	68255	21.3226	21.32
	61 Ethylbenzene	106	8.305	8.305	(1.015)	93121	21.7379	21.73
	62 m,p-Xylenes	106	8.410	8.407	(1.027)	239001	46.4047	46.40
	63 o-Xylene	106	8.747	8.744	(1.069)	118469	22.3663	22.36
	64 Styrene	104	8.762	8.759	(1.071)	198787	22.5429	22.54
	66 Bromoform	173	8.920	8.916	(1.090)	45371	20.4403	20.44
	67 Isopropylbenzene	105	9.062	9.059	(1.107)	296955	23.1812	23.18
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.325	(0.917)	89174	21.4081	21.40
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	188192	47.8691	47.86
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	251189	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	84895	17.8038	17.80
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	15516	19.1369	19.13(a)
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	335414	22.7404	22.74
	74 Bromobenzene	156	9.317	9.314	(0.916)	84145	19.9481	19.94
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	237003	22.6079	22.60
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	204585	20.6078	20.60

77 4-Chlorotoluene	91	9.576	9.572 (0.941)	231954	20.6018	20.60
78 tert-Butylbenzene	119	9.835	9.835 (0.967)	213748	22.7004	22.70

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011714.D Page 3
Report Date: 22-Jan-2024 17:34

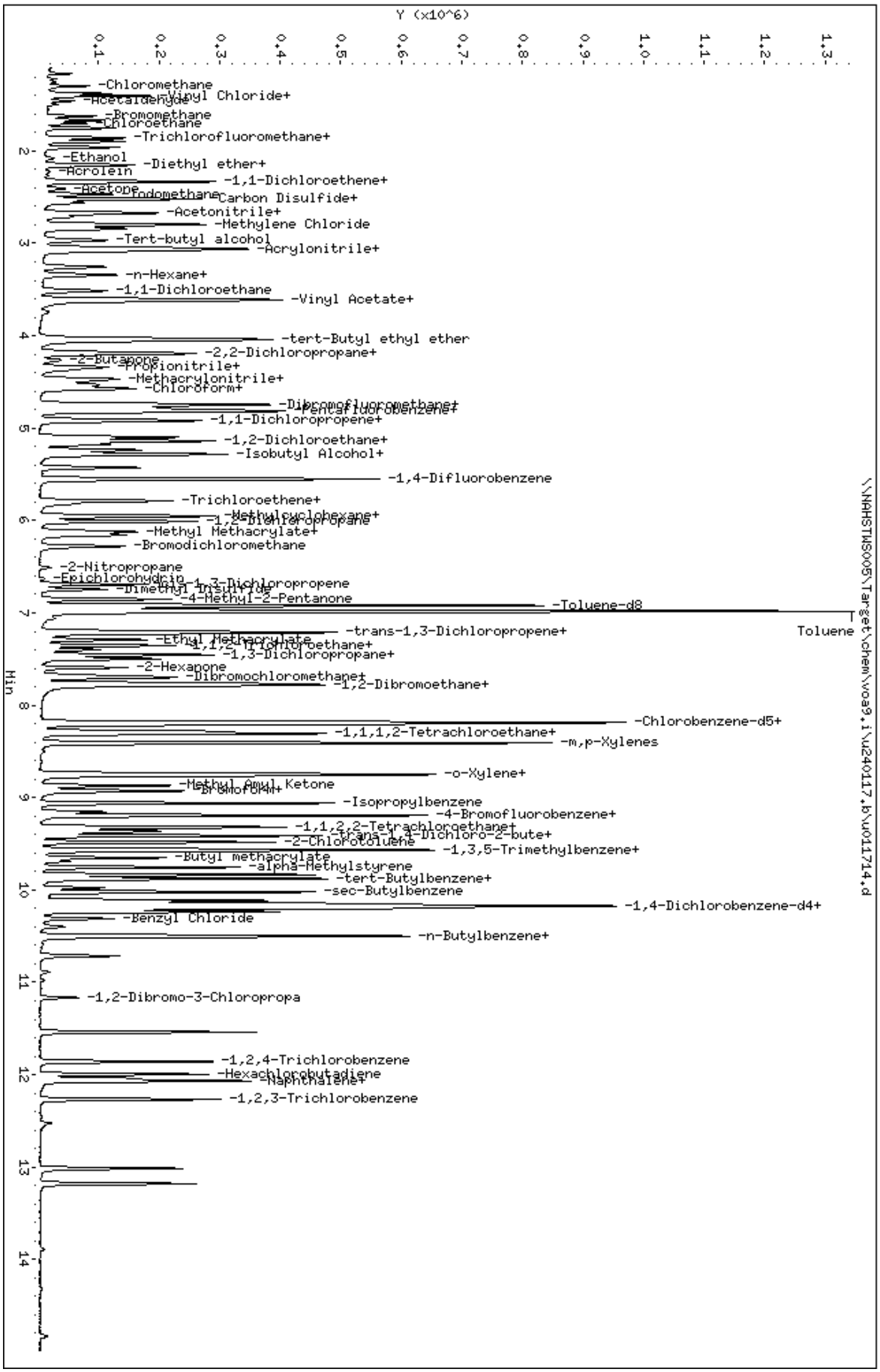
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
79	1,2,4-Trimethylbenzene	105	9.880	9.876	(0.971)	236214	22.4829	22.48
81	sec-Butylbenzene	105	10.022	10.022	(0.985)	289606	23.8519	23.85
82	p-Isopropyltoluene	119	10.146	10.146	(0.997)	253412	24.1166	24.11
83	1,3-Dichlorobenzene	146	10.116	10.112	(0.994)	152406	20.3891	20.38
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	158731	20.0438	20.04
86	Benzyl Chloride	91	10.311	10.311	(1.260)	70164	19.3385	19.33
87	n-Butylbenzene	91	10.491	10.491	(1.031)	207739	23.5581	23.55
88	1,2-Dichlorobenzene	146	10.506	10.502	(1.033)	152887	20.3305	20.33
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.166	(1.098)	14050	20.4285	20.42
90	1,2,4-Trichlorobenzene	180	11.859	11.855	(1.166)	96768	20.8582	20.85
91	Hexachlorobutadiene	225	11.998	11.998	(1.179)	52748	28.3639	28.36
92	Naphthalene	128	12.065	12.065	(1.186)	261182	23.3433	23.34
93	1,2,3-Trichlorobenzene	180	12.267	12.268	(1.206)	96092	20.5394	20.53
146	Methyl acetate	43	2.712	2.712	(0.563)	51117	17.5733	17.57
138	Freon TF	101	2.333	2.341	(0.485)	56413	26.5387	26.53
141	Cyclohexane	56	4.785	4.785	(0.994)	87068	20.6747	20.67
142	Tetrahydrofuran	42	4.541	4.538	(0.943)	20665	33.3102	33.31
147	Methylcyclohexane	55	5.947	5.947	(1.071)	139023	20.8546	20.85
135	1,4-Dioxane	88	6.165	6.165	(1.280)	16207	349.510	349.50
132	n-Butanol	56	5.820	5.816	(1.209)	31627	332.955	332.95(a)
136	n-Hexane	57	3.342	3.346	(0.694)	60815	22.3849	22.38
139	Diethyl ether	59	2.142	2.146	(0.445)	45055	18.9058	18.90
148	Tert-butyl alcohol	59	2.967	2.960	(0.616)	128642	393.173	393.17
149	Isopropyl alcohol	45	2.558	2.559	(0.531)	77272	413.390	413.38
152	Amyl alcohol	42	7.398	7.394	(0.904)	36145	361.696	361.69
156	Diisopropyl ether	45	3.619	3.619	(0.752)	180638	17.7413	17.74
162	Butyl acrylate	55	8.732	8.733	(1.067)	92835	16.4823	16.48
187	n-Amyl acetate	43	8.931	8.931	(1.091)	97769	17.1210	17.12
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	260336	19.4420	19.44
166	1,2,3-Trimethylbenzene	105	10.236	10.232	(1.006)	214709	20.7130	20.71
167	Ethanol	45	2.082	2.079	(0.433)	13338	362.947	362.94
172	tert-Butyl formate	59	5.239	5.235	(1.088)	83919	39.9214	39.92
173	3,3-Dimethyl-1-butanol	57	7.780	7.777	(0.951)	155554	418.499	418.49
174	tert-Amyl methyl ether	73	5.284	5.284	(1.097)	165830	18.2913	18.29
175	tert-Butyl ethyl ether	59	4.050	4.051	(0.841)	164828	18.1593	18.15
176	tert-Amyl alcohol	59	5.239	5.235	(1.088)	83919	400.921	400.92
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	270225	399.717	399.71
140	1,3-Butadiene	54	1.400	1.408	(0.291)	50028	17.0431	17.04
158	Dichlorofluoromethane	67	1.857	1.861	(0.386)	103071	23.1379	23.13
182	Epichlorohydrin	57	6.633	6.630	(1.194)	6910	39.5492	39.54
M 94	1,2-Dichloroethylene (total)	96				159409	50.5689	50.56
M 95	Xylenes (total)	106				357470	68.6887	68.68
145	alpha-Methylstyrene	118	9.756	9.752	(0.959)	96932	20.0259	20.02
130	Ethyl Acetate	43	4.339	4.339	(0.901)	60239	16.9670	16.96
131	Methyl Acrylate	55	4.369	4.369	(0.907)	67248	17.5171	17.51
189	n-Butyl acetate	43	7.705	7.702	(0.941)	91932	18.3188	18.31
134	Cyclohexanone	55	9.152	9.153	(0.900)	42691	256.873	256.87(a)
185	Isoprene	39	2.157	2.161	(0.448)	13596	19.9809	19.98
188	Isopropyl acetate	43	5.284	5.284	(0.951)	152809	18.4167	18.41
150	Allyl alcohol	57	3.342	3.346	(0.694)	60815	447.698	447.69
194	Acetaldehyde	44	1.460	1.464	(0.303)	27428	67.5306	67.53(M)
195	Methyl Amyl Ketone	43	8.867	8.868	(1.083)	115605	17.6780	17.67

200 Dimethyl Disulfide	94	6.746	6.746 (0.824)	55856	16.6968	16.69
203 2-Ethylhexyl Acrylate	55	12.043	12.039 (1.184)	53143	16.1337	16.13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
133 Ethyl Acrylate	55	5.947	5.947	(1.235)	139023	19.7892	19.78
163 Butyl methacrylate	41	9.651	9.647	(0.949)	49364	16.2189	16.21

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



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Sample Info: HS24010611-01MS;HS24010611-01MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: FT
Column diameter: 0.18

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Inj Date : 17-JAN-2024 12:03
InstruID : VOA9.i
LabSampID : HS24010611-01MS

Chloroprene (126-99-8)

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22-Jan-2024
17:33
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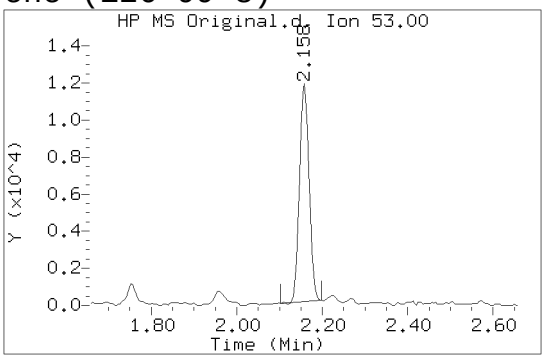

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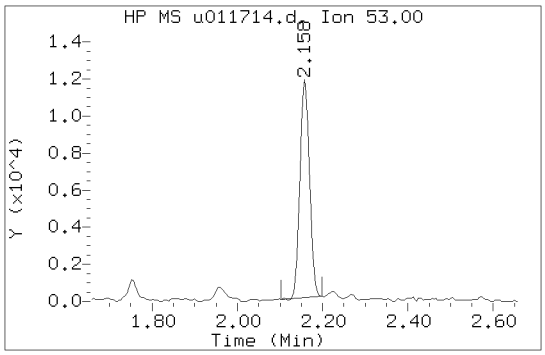

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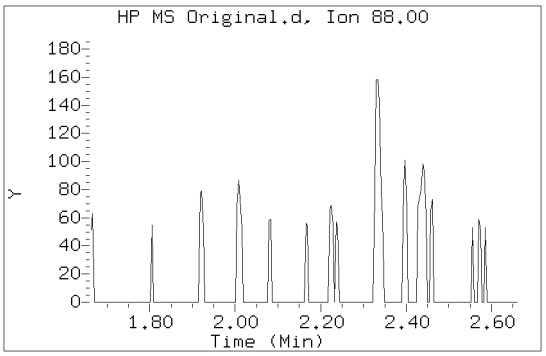

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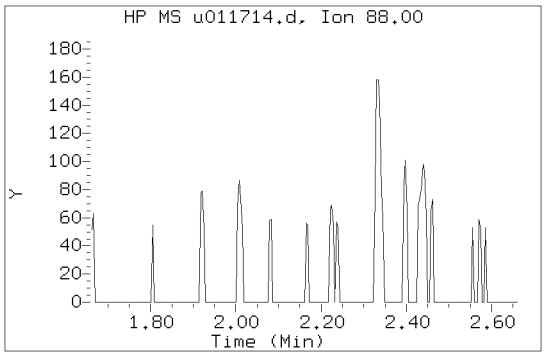

Acetaldehyde (75-07-0)

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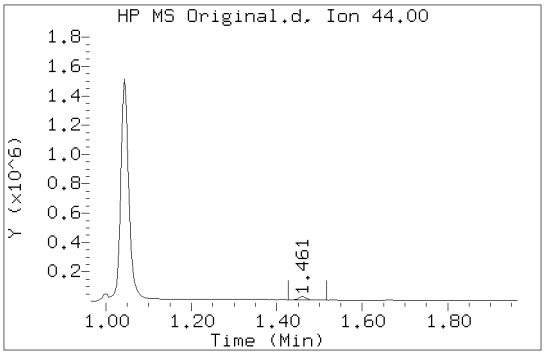

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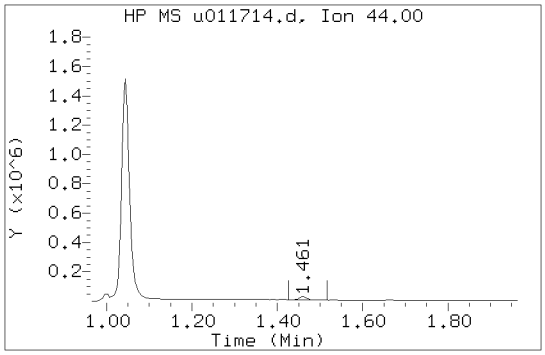

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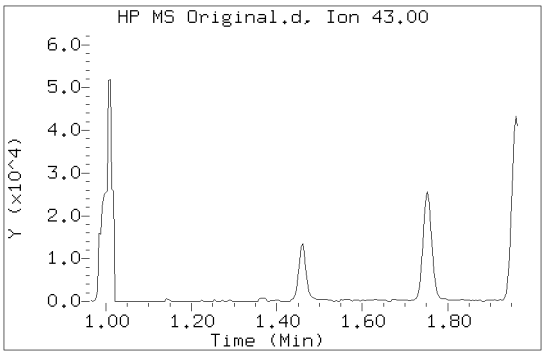

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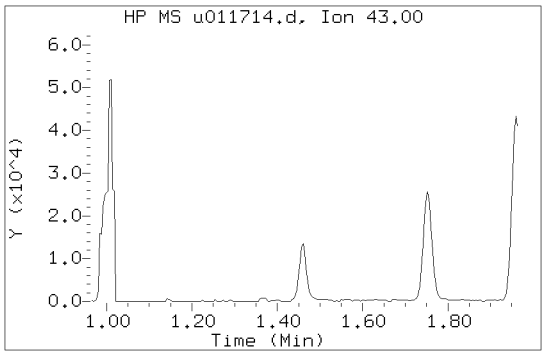

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InstruID : VOA9.i
LabSampID : HS24010611-01MS

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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22-Jan-2024
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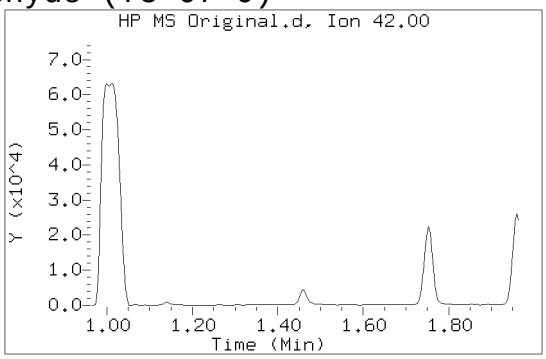

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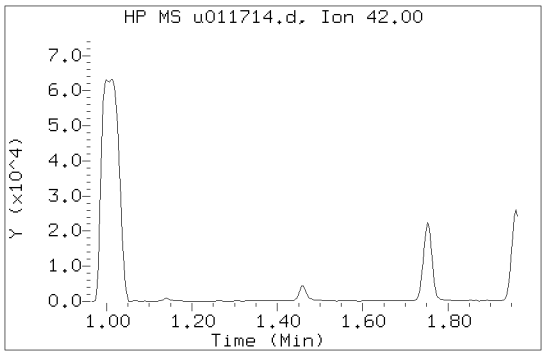

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Report Date: 22-Jan-2024 17:34

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011715.D
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Operator : FT Inst ID: VOA9.i
Smp Info : HS24010611-01MSD;HS24010611-01MSD;3;;MSD
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\8260C.m
Meth Date : 22-Jan-2024 17:33 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 14 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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	4.819	4.815	(1.000)	289585	50.0000	
2 Dichlorodifluoromethane	85	1.168	1.168	(0.242)	25367	11.5464	11.54
3 Chloromethane	50	1.303	1.303	(0.270)	46580	14.0221	14.02
4 Propionitrile	54	4.339	4.335	(0.900)	80339	167.323	167.32(a)
5 Vinyl Chloride	62	1.378	1.381	(0.286)	69941	22.0395	22.03
6 Bromomethane	94	1.625	1.625	(0.337)	39328	24.4216	24.42
7 Chloroethane	64	1.704	1.704	(0.354)	47862	22.4001	22.40
8 Trichlorofluoromethane	101	1.899	1.899	(0.394)	87967	21.8685	21.86
9 Acrolein	56	2.266	2.266	(0.470)	5057	30.6433	30.64
10 Acetone	43	2.409	2.409	(0.500)	35538	32.1536	32.15
11 1,1-Dichloroethene	96	2.337	2.337	(0.485)	52238	23.3883	23.38
12 Isobutyl Alcohol	43	5.284	5.284	(1.096)	149728	344.750	344.74(a)
13 Acetonitrile	39	2.675	2.675	(0.555)	61715	198.018	198.01(a)
14 Allyl Chloride	41	2.675	2.675	(0.555)	145167	20.3887	20.38(a)
15 Iodomethane	142	2.472	2.472	(0.513)	127199	47.4995	47.49
16 Acrylonitrile	53	3.068	3.065	(0.637)	45523	40.0752	40.07
17 Methylene Chloride	84	2.795	2.798	(0.580)	64477	22.7317	22.73
18 Methyl tert-butyl ether	73	3.083	3.080	(0.640)	163166	20.3878	20.38
19 Carbon Disulfide	76	2.525	2.525	(0.524)	329615	50.0846	50.08
20 trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	62254	23.3160	23.31

21 Vinyl Acetate	43	3.608	3.608 (0.749)	292281	36.2005	36.20
22 1,1-Dichloroethane	63	3.514	3.514 (0.729)	110099	20.2162	20.21

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011715.D Page 2
Report Date: 22-Jan-2024 17:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	23 Chloroprene	53	2.161	2.161	(0.449)	19757	20.0008	20.00(M)
	24 2-Butanone	43	4.268	4.260	(0.886)	45044	31.7535	31.75
	25 Methacrylonitrile	41	4.497	4.493	(0.933)	54312	26.2669	26.26(a)
	26 2,2-Dichloropropane	77	4.185	4.185	(0.869)	77640	20.2782	20.27
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.871)	94112	26.3123	26.31
	28 Chloroform	83	4.575	4.572	(0.949)	117398	19.8042	19.80
	29 Bromochloromethane	128	4.470	4.470	(0.928)	39417	21.2986	21.29
$	30 Dibromofluoromethane	113	4.748	4.748	(0.985)	144315	48.6684	48.66
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.984)	94182	20.9065	20.90
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	80990	21.6590	21.65
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	80828	18.5602	18.56
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	82585	22.6097	22.60
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	144275	42.8126	42.81
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	446969	50.0000	
	37 Benzene	78	5.141	5.141	(0.926)	253192	20.8089	20.80
	38 Trichloroethene	130	5.790	5.786	(1.043)	75077	22.3873	22.38
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	81230	20.3865	20.38
	40 Methyl Methacrylate	41	6.157	6.154	(1.278)	49400	17.2828	17.28(a)
	42 1,2-Dichloropropane	63	6.011	6.007	(1.082)	63956	19.5234	19.52
	43 2-Nitropropane	43	6.510	6.506	(1.351)	12416	16.7009	16.70
	44 Dibromomethane	93	6.120	6.120	(1.102)	42112	19.8694	19.86
	45 4-Methyl-2-Pentanone	43	6.855	6.851	(0.837)	120169	36.8569	36.85
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	95568	19.5415	19.54
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	449402	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	509314	49.2311	49.23
	49 Ethyl Methacrylate	69	7.289	7.289	(1.312)	85033	19.3831	19.38(a)
	50 Toluene	91	6.982	6.978	(0.853)	844147	67.3673	67.36
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	78462	19.2822	19.28
	52 2-Hexanone	43	7.593	7.589	(0.928)	84882	37.4275	37.42
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	51542	20.7434	20.74
	54 1,3-Dichloropropane	76	7.499	7.496	(0.916)	107491	19.3196	19.31
	55 Dibromochloromethane	129	7.690	7.691	(0.940)	69469	20.7849	20.78
	56 Tetrachloroethene	164	7.458	7.454	(0.911)	66015	24.6127	24.61
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	65823	21.0808	21.08
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	53887	21.5000	21.49
	59 Chlorobenzene	112	8.208	8.208	(1.003)	198033	21.6950	21.69
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	67766	21.2233	21.22
	61 Ethylbenzene	106	8.305	8.305	(1.015)	92771	21.7108	21.71
	62 m,p-Xylenes	106	8.410	8.407	(1.027)	238821	46.4868	46.48
	63 o-Xylene	106	8.748	8.744	(1.069)	120604	22.8268	22.82
	64 Styrene	104	8.763	8.759	(1.071)	201578	22.9171	22.91
	66 Bromoform	173	8.920	8.916	(1.090)	45882	20.7078	20.70
	67 Isopropylbenzene	105	9.063	9.059	(1.107)	294594	23.0550	23.05
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.325	(0.917)	88024	21.5063	21.50
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	185488	47.2849	47.28
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	246852	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	81915	17.4806	17.48
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	15028	18.5818	18.58(a)
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	322682	22.2616	22.26
	74 Bromobenzene	156	9.317	9.314	(0.916)	86780	20.9342	20.93
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	237319	23.0358	23.03
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	204378	20.9486	20.94

77 4-Chlorotoluene	91	9.576	9.572 (0.942)	232194	20.9855	20.98
78 tert-Butylbenzene	119	9.835	9.835 (0.967)	213164	23.0361	23.03

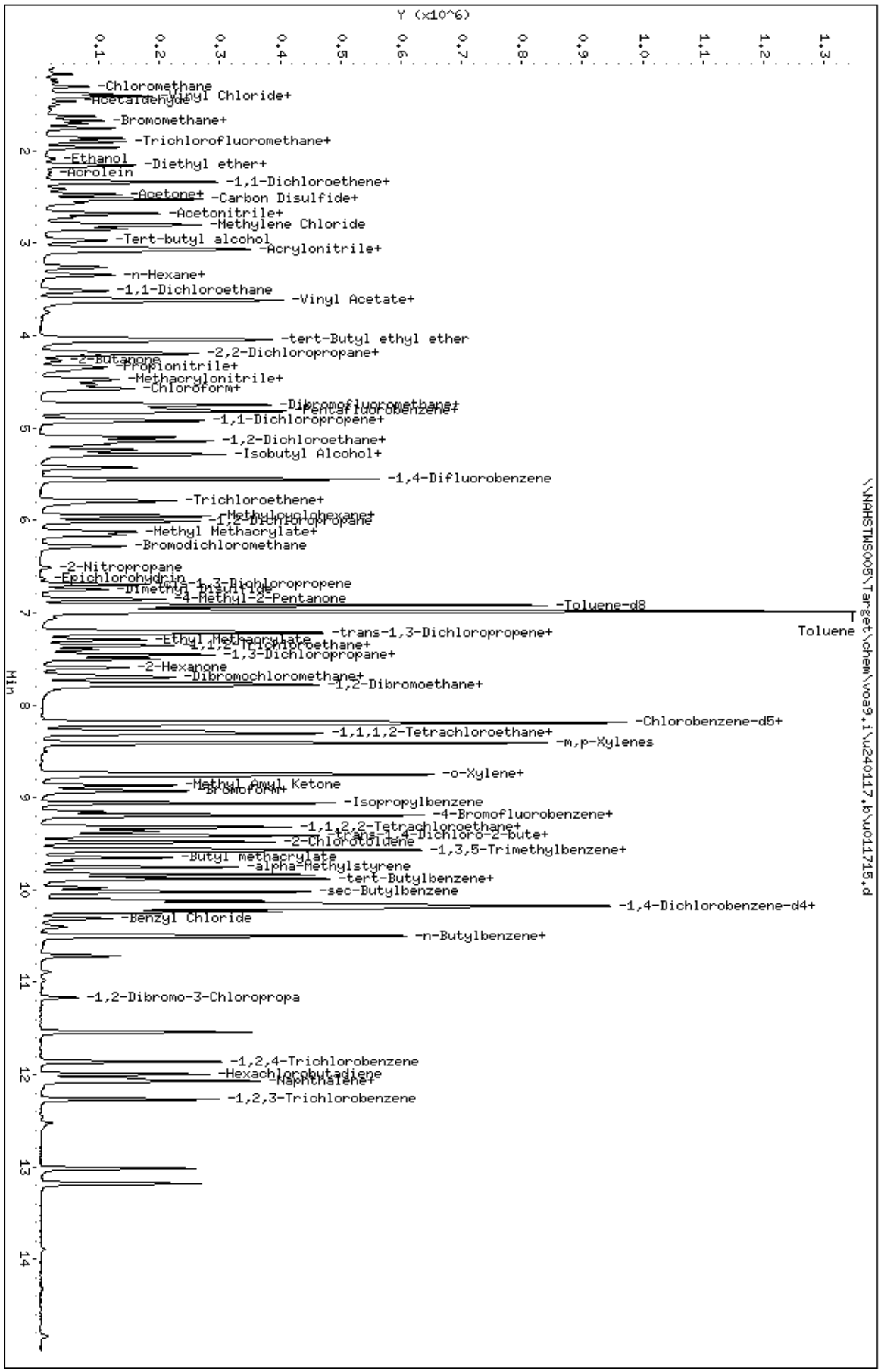
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
79	1,2,4-Trimethylbenzene	105	9.880	9.876	(0.972)	235433	22.8023	22.80
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	285832	23.9547	23.95
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	250740	24.2816	24.28
83	1,3-Dichlorobenzene	146	10.116	10.112	(0.995)	153064	20.8369	20.83
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	160633	20.6403	20.64
86	Benzyl Chloride	91	10.311	10.311	(1.260)	66408	18.4657	18.46
87	n-Butylbenzene	91	10.491	10.491	(1.032)	207028	23.8900	23.89
88	1,2-Dichlorobenzene	146	10.506	10.502	(1.033)	154672	20.9292	20.92
89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166	(1.098)	14644	21.5378	21.53
90	1,2,4-Trichlorobenzene	180	11.859	11.855	(1.166)	95527	20.9524	20.95
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	53971	29.5314	29.53
92	Naphthalene	128	12.065	12.065	(1.187)	268908	24.4560	24.45
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	96658	21.0234	21.02
146	Methyl acetate	43	2.716	2.712	(0.564)	52055	18.0616	18.06
138	Freon TF	101	2.337	2.341	(0.485)	57221	27.1591	27.15
141	Cyclohexane	56	4.785	4.785	(0.993)	84170	20.1718	20.17
142	Tetrahydrofuran	42	4.542	4.538	(0.942)	17380	28.2746	28.27
147	Methylcyclohexane	55	5.947	5.947	(1.071)	134270	20.2674	20.26
135	1,4-Dioxane	88	6.169	6.165	(1.280)	16050	349.331	349.33
132	n-Butanol	56	5.820	5.816	(1.208)	30566	324.767	324.76(a)
136	n-Hexane	57	3.342	3.346	(0.694)	60878	22.6157	22.61
139	Diethyl ether	59	2.146	2.146	(0.445)	45486	19.2634	19.26
148	Tert-butyl alcohol	59	2.967	2.960	(0.616)	125028	385.668	385.66
149	Isopropyl alcohol	45	2.562	2.559	(0.532)	70899	382.255	382.25
152	Amyl alcohol	42	7.398	7.394	(0.904)	36027	361.425	361.42
156	Diisopropyl ether	45	3.623	3.619	(0.752)	180726	17.9144	17.91
162	Butyl acrylate	55	8.733	8.733	(1.067)	99142	17.4164	17.41
187	n-Amyl acetate	43	8.931	8.931	(1.091)	96897	17.0111	17.01
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	250207	19.0138	19.01
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	216524	21.2551	21.25
167	Ethanol	45	2.082	2.079	(0.432)	14494	398.229	398.22
172	tert-Butyl formate	59	5.239	5.235	(1.087)	77481	37.4647	37.46
173	3,3-Dimethyl-1-butanol	57	7.780	7.777	(0.951)	149742	403.879	403.87
174	tert-Amyl methyl ether	73	5.288	5.284	(1.097)	162684	18.1106	18.11
175	tert-Butyl ethyl ether	59	4.051	4.051	(0.841)	164168	18.2542	18.25
176	tert-Amyl alcohol	59	5.239	5.235	(1.087)	77481	376.369	376.36
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	260833	389.552	389.55
140	1,3-Butadiene	54	1.404	1.408	(0.291)	48482	16.6695	16.66
158	Dichlorofluoromethane	67	1.861	1.861	(0.386)	102271	23.1711	23.17
182	Epichlorohydrin	57	6.633	6.630	(1.194)	6355	36.5999	36.59
M 94	1,2-Dichloroethylene (total)	96				156366	50.0631	50.06
M 95	Xylenes (total)	106				359425	69.4959	69.49
145	alpha-Methylstyrene	118	9.756	9.752	(0.959)	97307	20.4223	20.42
130	Ethyl Acetate	43	4.343	4.339	(0.901)	59251	16.8434	16.84
131	Methyl Acrylate	55	4.373	4.369	(0.907)	65974	17.3444	17.34
189	n-Butyl acetate	43	7.705	7.702	(0.941)	88905	17.7603	17.76
134	Cyclohexanone	55	9.152	9.153	(0.900)	41109	251.700	251.69(a)
185	Isoprene	39	2.161	2.161	(0.449)	14809	21.9652	21.96
188	Isopropyl acetate	43	5.284	5.284	(0.951)	149728	18.1581	18.15
150	Allyl alcohol	57	3.342	3.346	(0.694)	60878	452.314	452.31
194	Acetaldehyde	44	1.460	1.464	(0.303)	28393	70.9216	70.92(M)
195	Methyl Amyl Ketone	43	8.868	8.868	(1.083)	120900	18.4353	18.43

200 Dimethyl Disulfide	94	6.746	6.746 (0.824)	55671	16.6861	16.68
203 2-Ethylhexyl Acrylate	55	12.043	12.039 (1.184)	53533	16.4741	16.47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
133 Ethyl Acrylate	55	5.947	5.947	(1.234)	134270	19.2897	19.28
163 Butyl methacrylate	41	9.651	9.647	(0.949)	52467	17.3207	17.32

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



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Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: FT
Column diameter: 0.18

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Inj Date : 17-JAN-2024 12:25
InstruID : VOA9.i
LabSampID : HS24010611-01MSD

Chloroprene (126-99-8)

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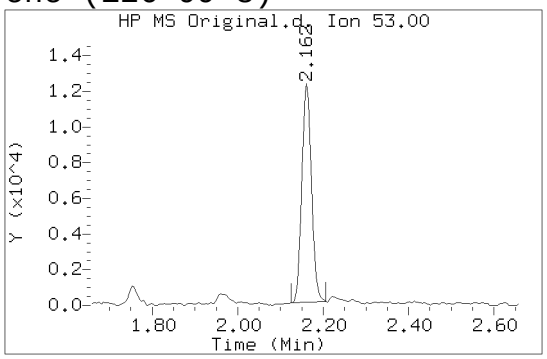

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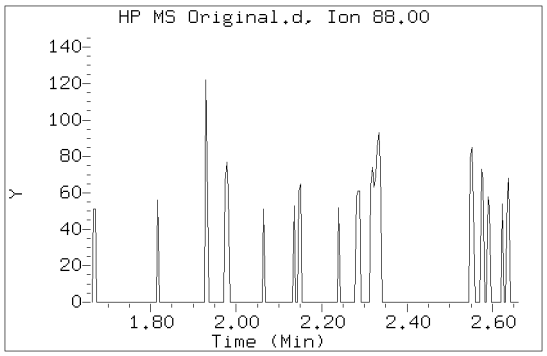

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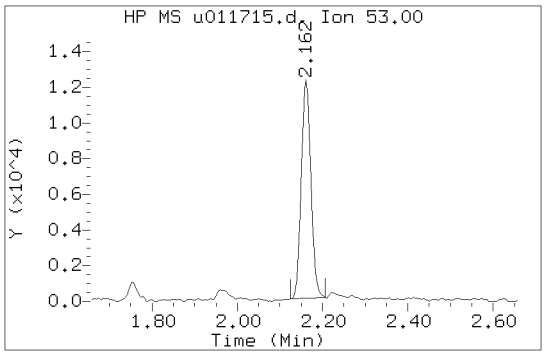

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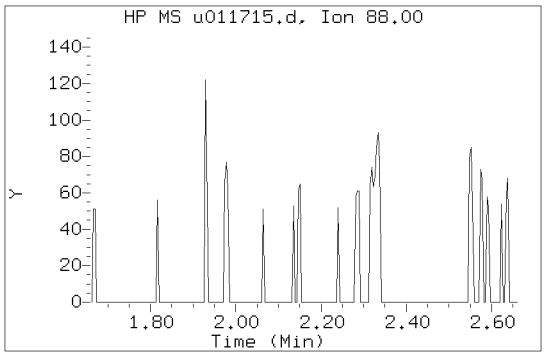

Acetaldehyde (75-07-0)

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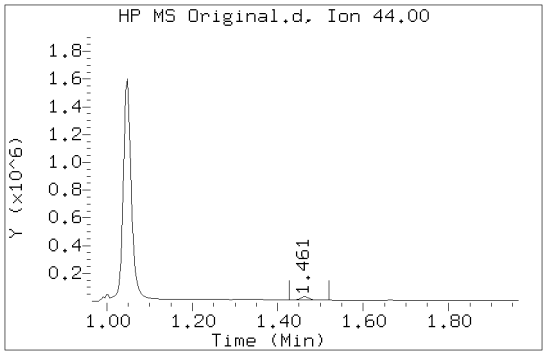

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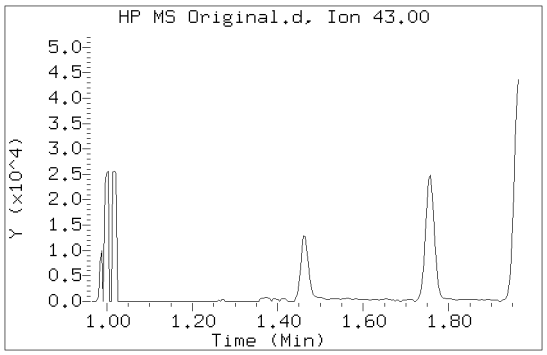

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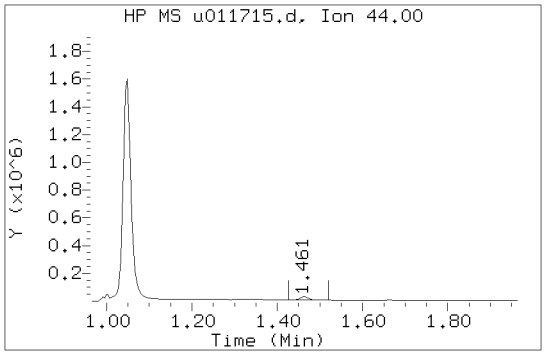

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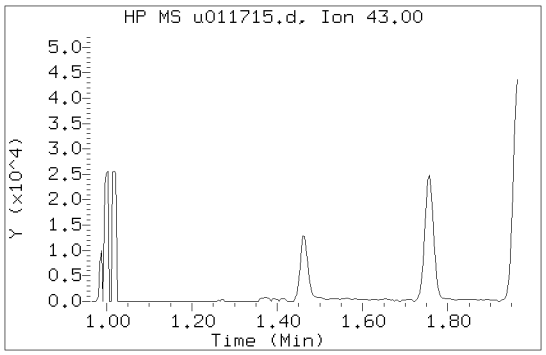

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InstruID : VOA9.i
LabSampID : HS24010611-01MSD

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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22-Jan-2024
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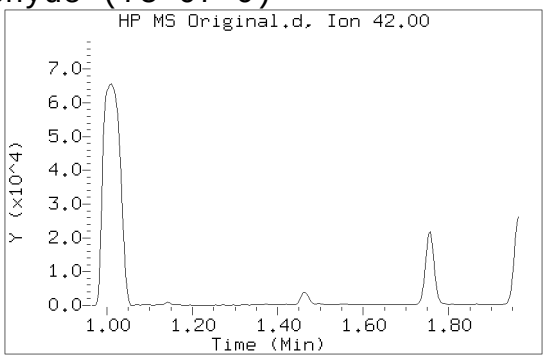

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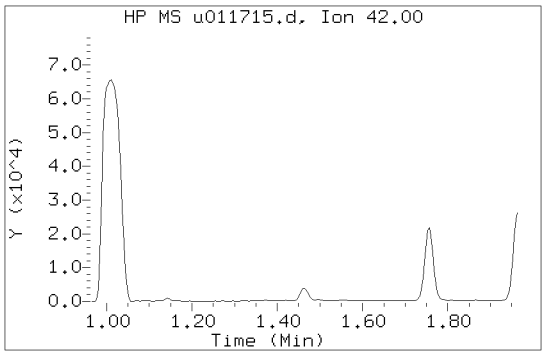

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Report Date: 22-Jan-2024 17:34

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011717.D
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Inj Date : 17-JAN-2024 13:10
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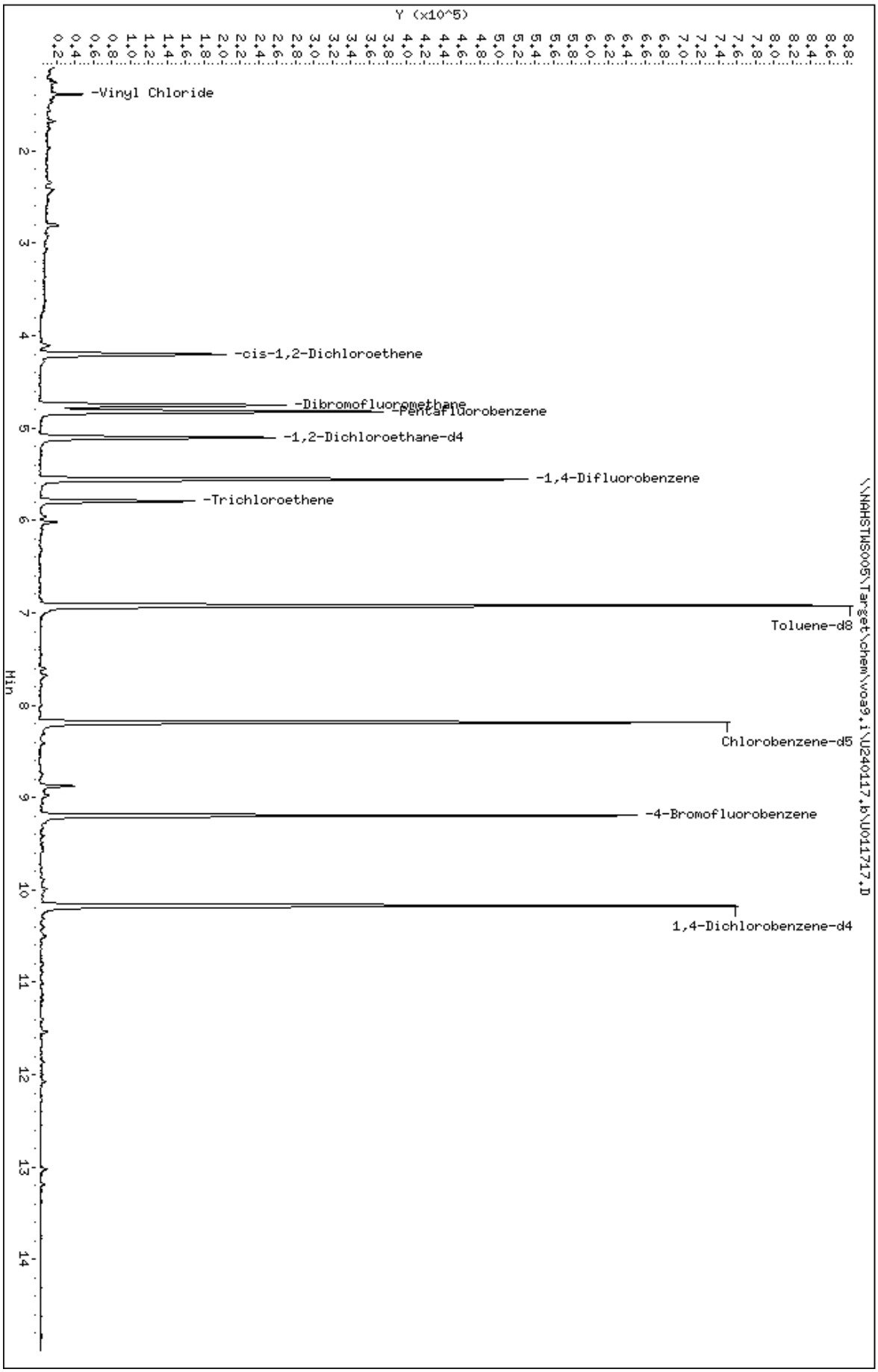
Smp Info : HS24010538-08
Misc Info : V9;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\8260C.m
Meth Date : 22-Jan-2024 17:33 VOA9.i   Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 16
Dil Factor: 50.00000
Integrator: HP RTE   Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	50.000	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	4.819	4.815	(1.000)	279747	50.0000	
	5 Vinyl Chloride	62	1.385	1.381	(0.288)	24025	7.83688	391.84
	27 cis-1,2-Dichloroethene	96	4.204	4.197	(0.872)	106452	30.8090	1540.44
$	30 Dibromofluoromethane	113	4.755	4.748	(0.987)	159786	55.9311	55.93
$	35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	164215	50.0216	50.02
*	36 1,4-Difluorobenzene	114	5.557	5.554	(1.000)	437477	50.0000	
	38 Trichloroethene	130	5.790	5.786	(1.042)	58692	17.8812	894.05
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	428607	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	562776	57.0382	57.03
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	194919	52.2320	52.23
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	221617	50.0000	
M	94 1,2-Dichloroethylene (total)	96				106452	35.2809	1764.04



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Date : 17-JAN-2024 13:10
Client ID:
Sample Info: HS24010538-08
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: FT
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011717.D Page 2

Date : 17-JAN-2024 13:10

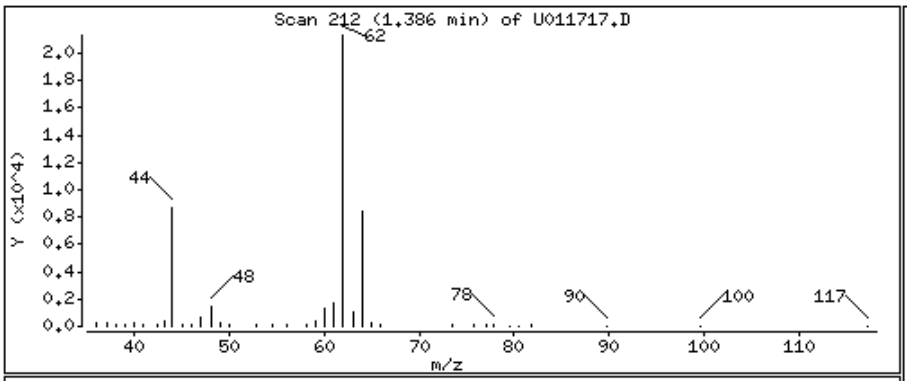
Client ID: Instrument: VOA9.i

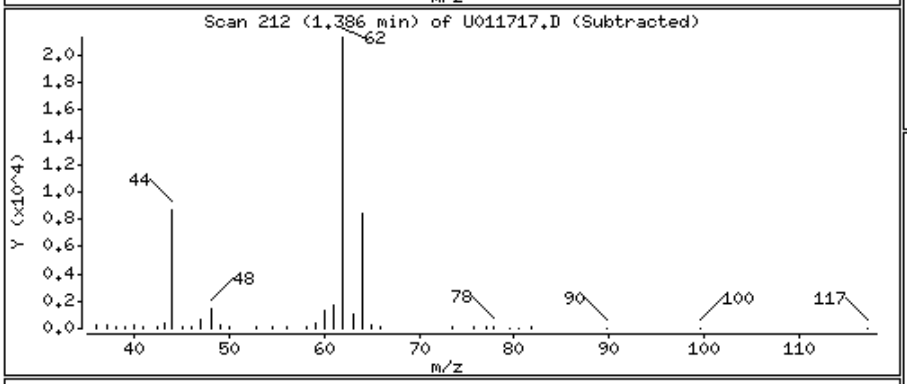
Sample Info: HS24010538-08

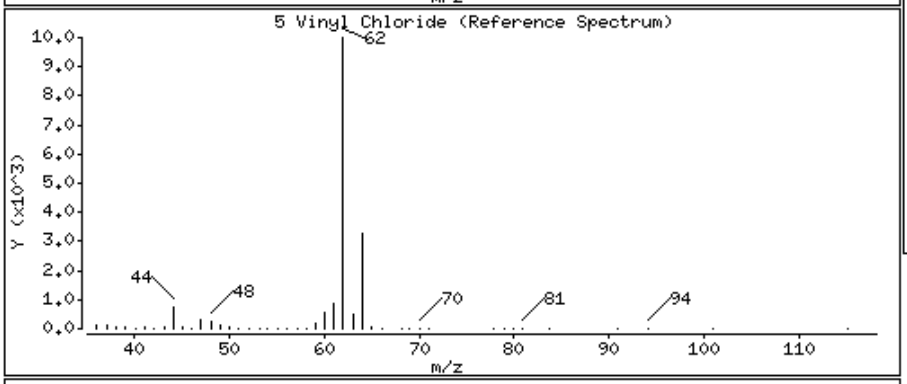
Purge Volume: 5.0 Operator: FT

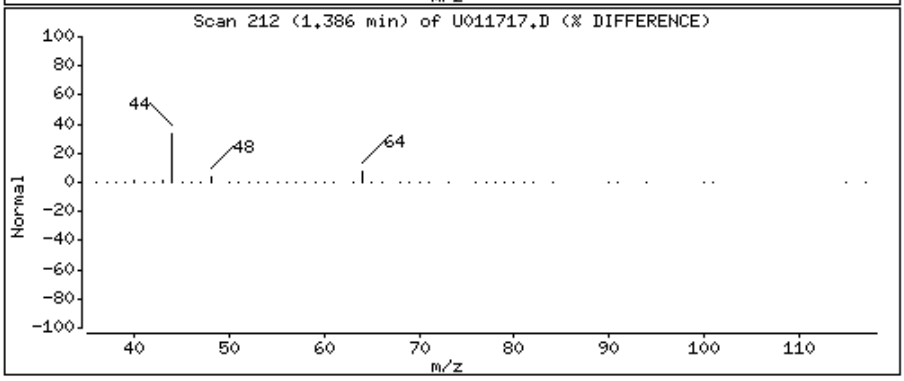
Column phase: DB624 Column diameter: 0.18

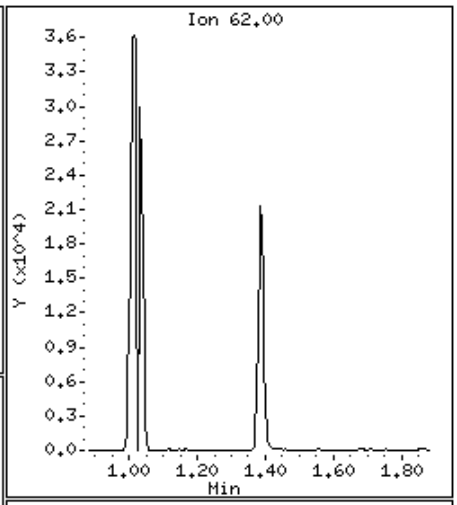
5 Vinyl Chloride Concentration: 391.84 ug/l

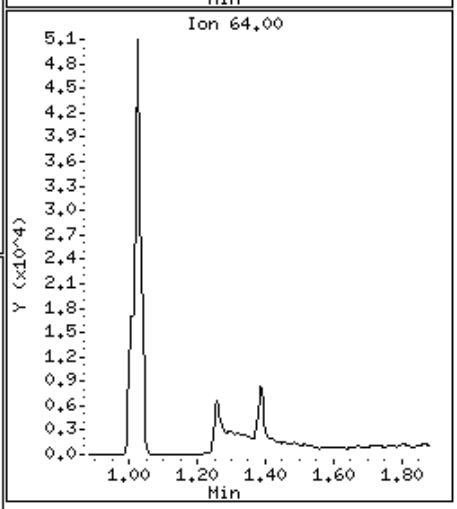












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011717.D Page 3

Date : 17-JAN-2024 13:10

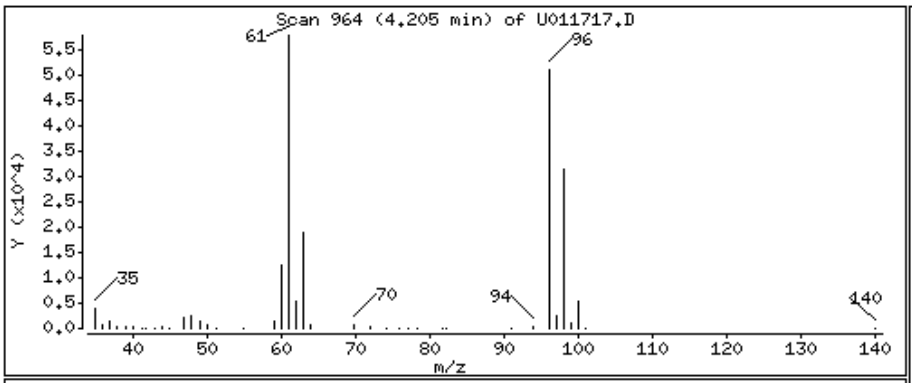
Client ID: Instrument: VOA9.i

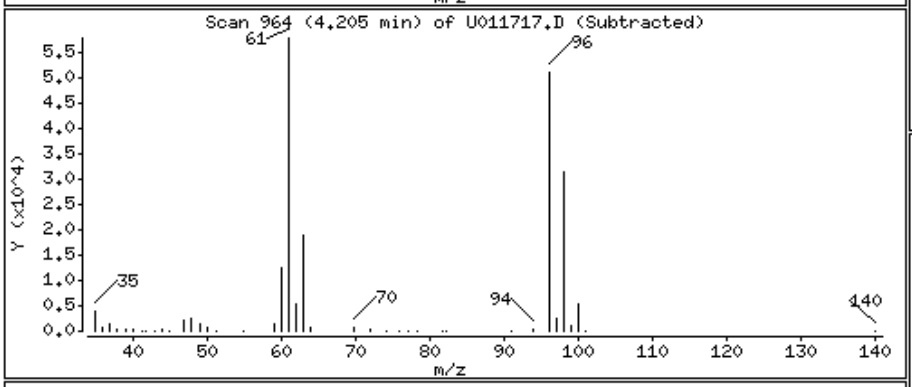
Sample Info: HS24010538-08

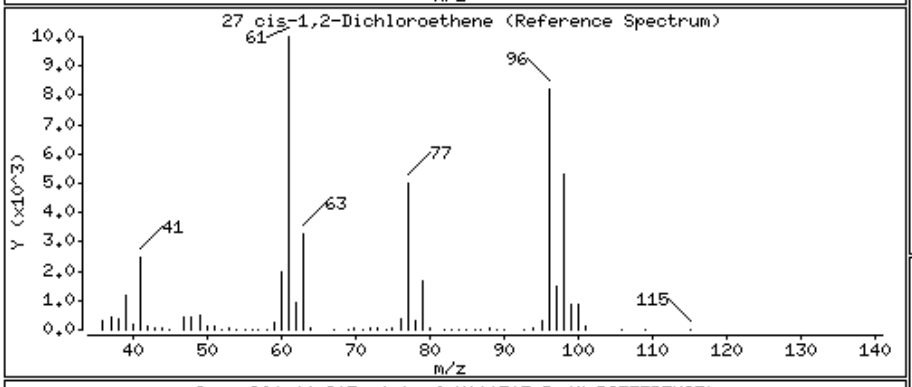
Purge Volume: 5.0 Operator: FT

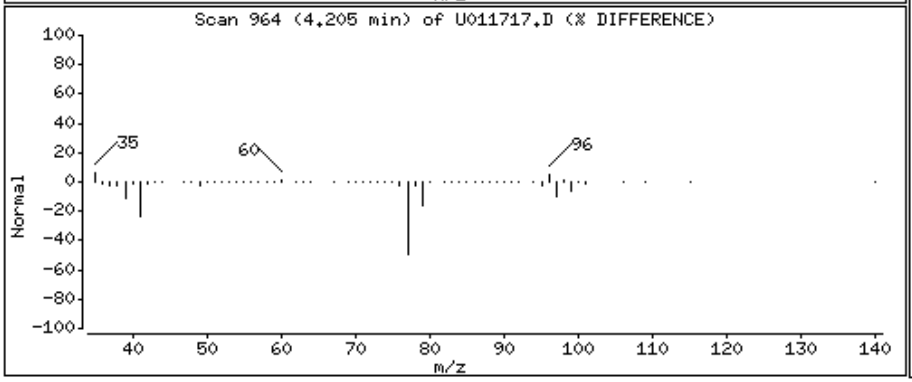
Column phase: DB624 Column diameter: 0.18

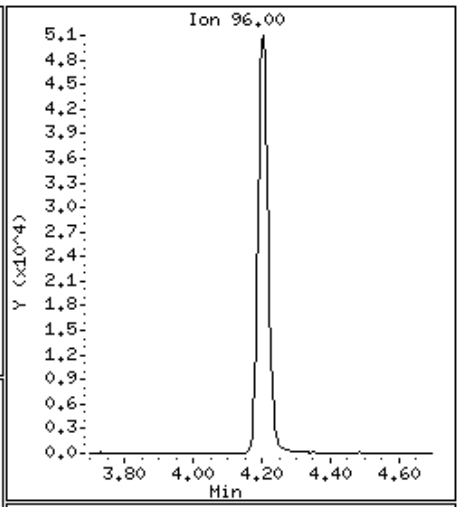
27 cis-1,2-Dichloroethene Concentration: 1540.44 ug/l

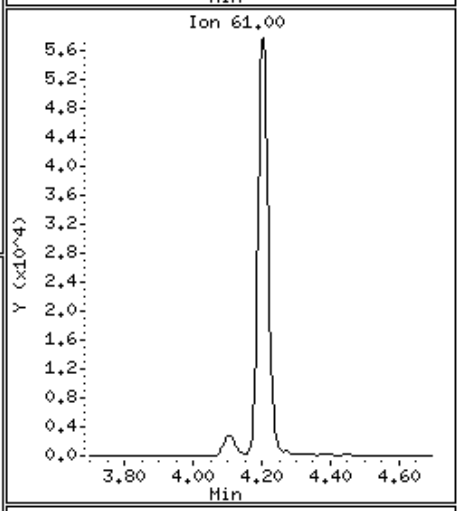


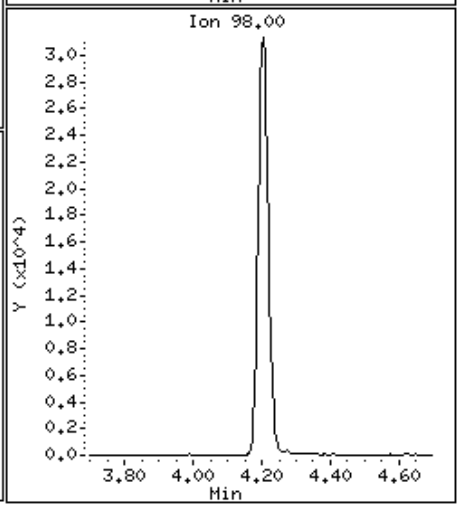












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011717.D Page 4

Date : 17-JAN-2024 13:10

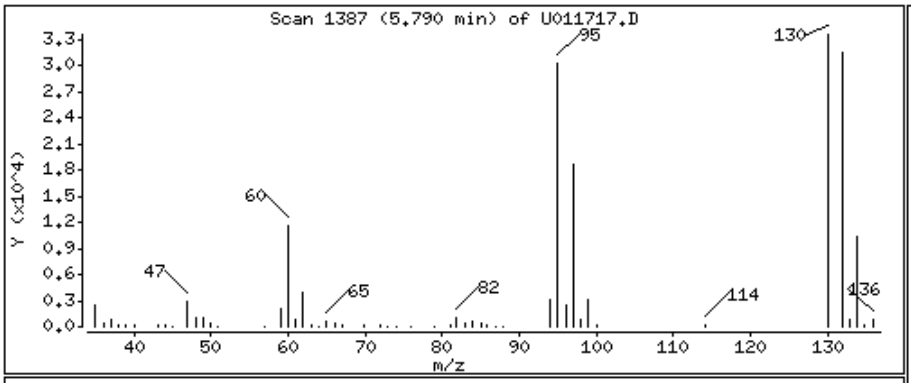
Client ID: Instrument: VOA9.i

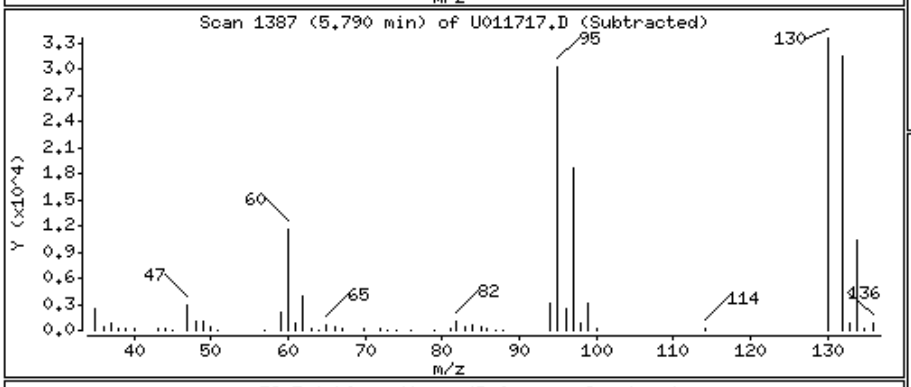
Sample Info: HS24010538-08

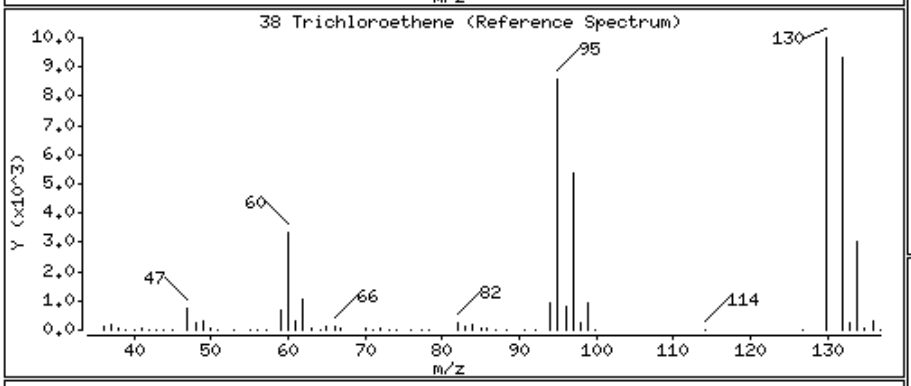
Purge Volume: 5.0 Operator: FT

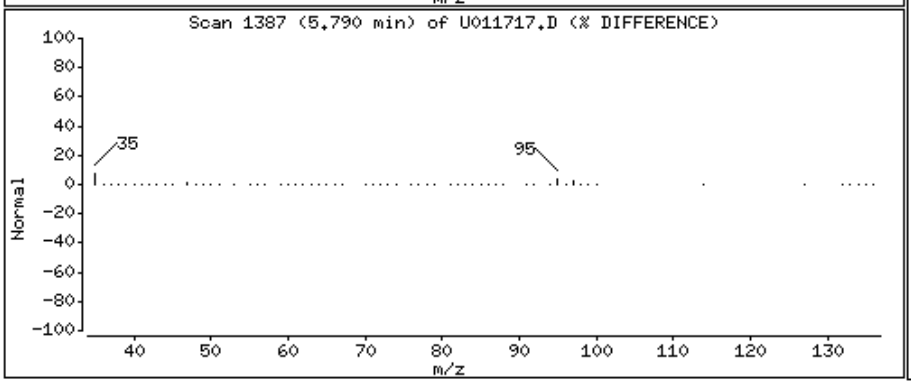
Column phase: DB624 Column diameter: 0.18

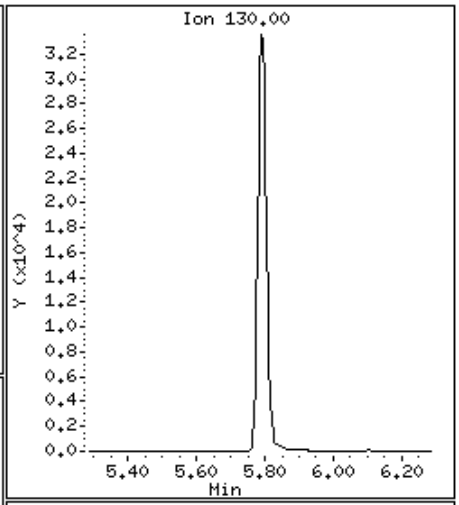
38 Trichloroethene Concentration: 894.05 ug/l

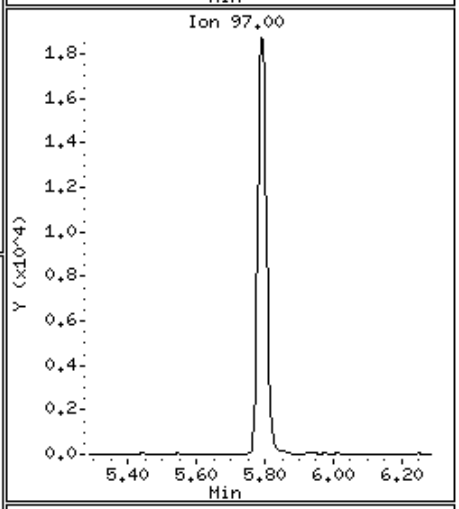


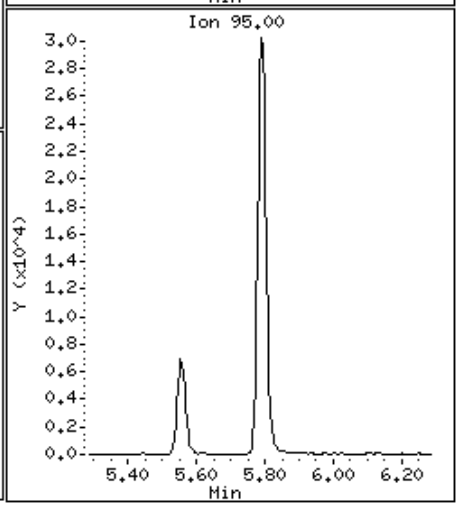












Data File : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011717.D
Inj Date : 17-JAN-2024 13:10
InstruID : VOA9.i
LabSampID : HS24010538-08

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011728.D Page 1
Report Date: 22-Jan-2024 17:34

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011728.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 17-JAN-2024 17:16
Operator : FT Inst ID: VOA9.i
Smp Info : CCV-END;CCV-END;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\8260C.m
Meth Date : 22-Jan-2024 17:34 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 27 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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)	301643	50.0000	
2 Dichlorodifluoromethane	85	1.164	1.164	(0.242)	62905	50.0000	26.29
3 Chloromethane	50	1.299	1.299	(0.270)	108432	50.0000	31.33
4 Propionitrile	54	4.335	4.335	(0.900)	217187	500.000	434.25
5 Vinyl Chloride	62	1.378	1.378	(0.286)	142957	50.0000	43.24
6 Bromomethane	94	1.618	1.618	(0.336)	87449	50.0000	51.53
7 Chloroethane	64	1.700	1.700	(0.353)	107631	50.0000	48.35
8 Trichlorofluoromethane	101	1.895	1.895	(0.394)	231325	50.0000	55.20
9 Acrolein	56	2.262	2.262	(0.470)	15836	100.000	92.12
10 Acetone	43	2.405	2.405	(0.499)	91536	100.000	88.47
11 1,1-Dichloroethene	96	2.330	2.330	(0.484)	126875	50.0000	54.53
12 Isobutyl Alcohol	43	5.284	5.284	(1.097)	394470	1000.00	871.96
13 Acetonitrile	39	2.671	2.671	(0.555)	163739	500.000	504.36
14 Allyl Chloride	41	2.671	2.671	(0.555)	375256	50.0000	50.59
15 Iodomethane	142	2.469	2.469	(0.513)	338193	100.000	113.28
16 Acrylonitrile	53	3.065	3.065	(0.636)	119340	100.000	100.85
17 Methylene Chloride	84	2.791	2.791	(0.580)	163543	50.0000	55.73
18 Methyl tert-butyl ether	73	3.080	3.080	(0.640)	424871	50.0000	50.96
19 Carbon Disulfide	76	2.521	2.521	(0.524)	758980	100.000	110.71
20 trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	155857	50.0000	56.03

21 Vinyl Acetate	43	3.604	3.604 (0.749)	734787	100.000	87.36
22 1,1-Dichloroethane	63	3.511	3.511 (0.729)	270191	50.0000	47.62

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011728.D Page 2
Report Date: 22-Jan-2024 17:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	2.157	2.157	(0.448)	48091	50.0000	46.73(M)
	24 2-Butanone	43	4.260	4.260	(0.885)	123163	100.000	83.35
	25 Methacrylonitrile	41	4.493	4.493	(0.933)	150648	50.0000	69.94(a)
	26 2,2-Dichloropropane	77	4.182	4.182	(0.868)	191246	50.0000	47.95
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	184394	50.0000	49.49
	28 Chloroform	83	4.572	4.572	(0.949)	294818	50.0000	47.74
	29 Bromochloromethane	128	4.467	4.467	(0.928)	99597	50.0000	51.66
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	159625	50.0000	51.74
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.984)	238860	50.0000	50.90
	32 1,1-Dichloropropene	75	4.920	4.920	(0.887)	202373	50.0000	51.99
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	208305	50.0000	45.95
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	209130	50.0000	55.00
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	162734	50.0000	46.18
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	465267	50.0000	
	37 Benzene	78	5.138	5.138	(0.926)	612426	50.0000	48.35
	38 Trichloroethene	130	5.786	5.786	(1.043)	187338	50.0000	53.66
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	213651	50.0000	51.51
	40 Methyl Methacrylate	41	6.154	6.154	(1.278)	127976	50.0000	42.98
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.185)	5849	100.000	142.13
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	160608	50.0000	47.09
	43 2-Nitropropane	43	6.506	6.506	(1.351)	32439	50.0000	41.88
	44 Dibromomethane	93	6.120	6.120	(1.103)	107744	50.0000	48.83
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	310546	100.000	91.52
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	255738	50.0000	47.90
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	470401	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	551952	50.0000	50.97
	49 Ethyl Methacrylate	69	7.289	7.289	(1.313)	220608	50.0000	48.30
	50 Toluene	91	6.978	6.978	(0.853)	684536	50.0000	52.19
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	215014	50.0000	47.86
	52 2-Hexanone	43	7.589	7.589	(0.927)	204215	100.000	86.02
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	128415	50.0000	51.22
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	279389	50.0000	47.97
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	190358	50.0000	54.41
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	157912	50.0000	56.24
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	167585	50.0000	51.27
	58 1-Chlorohexane	55	8.197	8.197	(1.477)	133844	50.0000	51.30
	59 Chlorobenzene	112	8.208	8.208	(1.003)	480737	50.0000	50.31
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	175434	50.0000	52.49
	61 Ethylbenzene	106	8.305	8.305	(1.015)	234335	50.0000	52.39
	62 m,p-Xylenes	106	8.407	8.407	(1.027)	592980	100.000	110.27
	63 o-Xylene	106	8.744	8.744	(1.068)	300429	50.0000	54.32
	64 Styrene	104	8.759	8.759	(1.070)	512390	50.0000	55.65
	66 Bromoform	173	8.916	8.916	(1.089)	123305	50.0000	51.48
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	744508	50.0000	55.66
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	210022	50.0000	49.23
$	69 4-Bromofluorobenzene	95	9.190	9.190	(1.123)	203717	50.0000	49.67
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	261657	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	217237	50.0000	43.73
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	40711	50.0000	48.09
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	796689	50.0000	51.85
	74 Bromobenzene	156	9.317	9.317	(0.916)	215256	50.0000	48.98
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	591501	50.0000	54.16

76	2-Chlorotoluene	91	9.482	9.482 (0.933)	496865	50.0000	48.04
77	4-Chlorotoluene	91	9.576	9.576 (0.942)	582282	50.0000	49.64

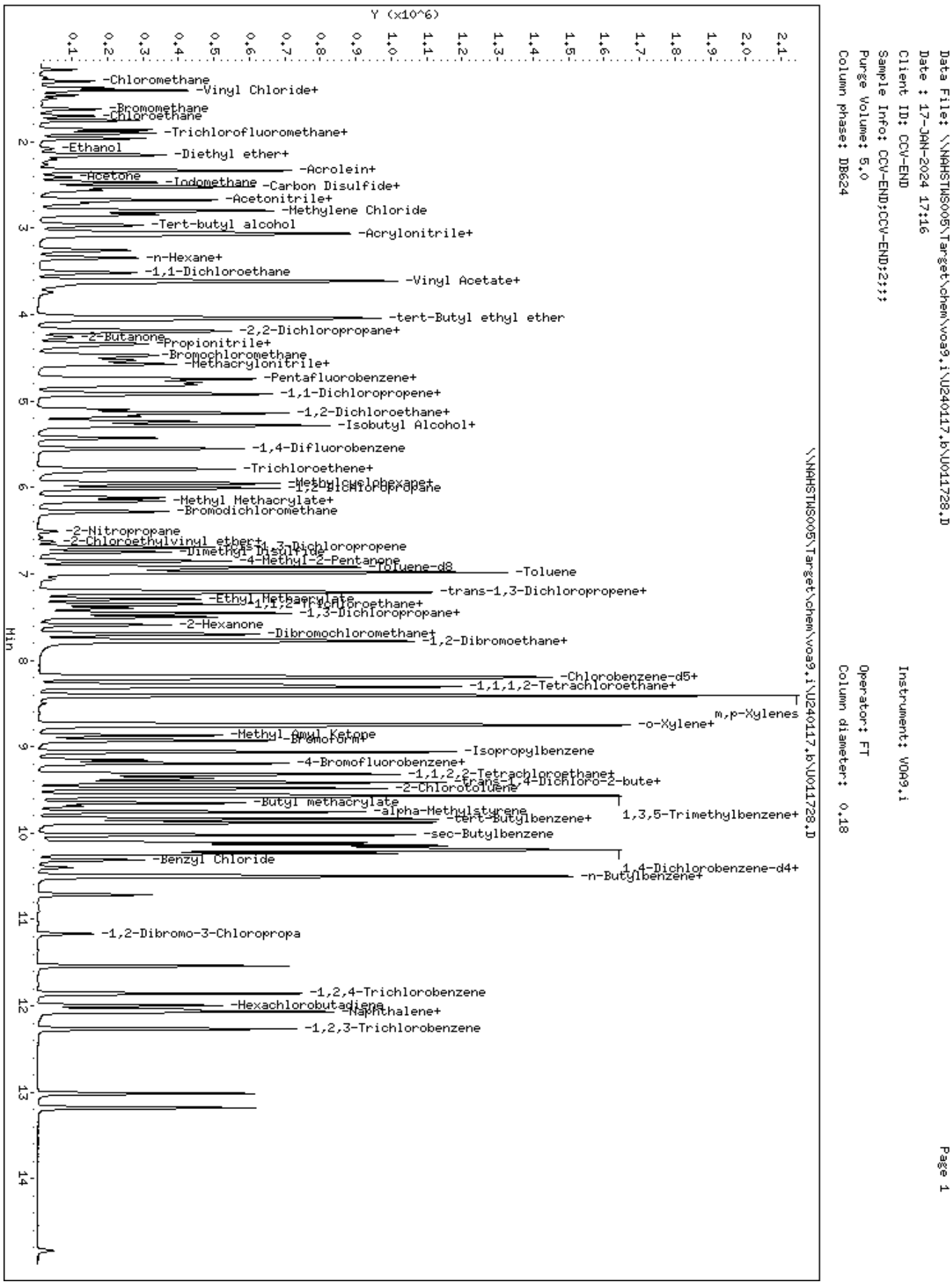
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
78	tert-Butylbenzene	119	9.835	9.835	(0.967)	532797	50.0000	54.32	
79	1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	583662	50.0000	53.33	
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	685896	50.0000	54.23	
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	619635	50.0000	56.61	
83	1,3-Dichlorobenzene	146	10.112	10.112	(0.994)	383833	50.0000	49.29	
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	401812	50.0000	48.70	
86	Benzyl Chloride	91	10.311	10.311	(1.260)	200424	50.0000	48.04	
87	n-Butylbenzene	91	10.491	10.491	(1.032)	499868	50.0000	54.41	
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	385492	50.0000	49.21	
89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166	(1.098)	36338	50.0000	47.57	
90	1,2,4-Trichlorobenzene	180	11.859	11.859	(1.166)	245555	50.0000	50.81	
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	102776	50.0000	53.05	
92	Naphthalene	128	12.065	12.065	(1.187)	603886	50.0000	51.81	
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	239744	50.0000	49.19	
146	Methyl acetate	43	2.712	2.712	(0.563)	141489	50.0000	47.13	
138	Freon TF	101	2.334	2.334	(0.485)	141911	50.0000	63.35	
141	Cyclohexane	56	4.785	4.785	(0.994)	204226	50.0000	46.98	
142	Tetrahydrofuran	42	4.542	4.542	(0.943)	52881	100.000	82.59	
147	Methylcyclohexane	55	5.947	5.947	(1.072)	349178	50.0000	50.63	
135	1,4-Dioxane	88	6.165	6.165	(1.280)	44055	1000.00	920.53	
132	n-Butanol	56	5.816	5.816	(1.208)	88357	1000.00	901.27	
136	n-Hexane	57	3.342	3.342	(0.694)	137925	50.0000	49.18	
139	Diethyl ether	59	2.142	2.142	(0.445)	116698	50.0000	47.44	
148	Tert-butyl alcohol	59	2.963	2.963	(0.615)	341070	1000.00	1010.02	
149	Isopropyl alcohol	45	2.559	2.559	(0.531)	206666	1000.00	1083.18	
152	Amyl alcohol	42	7.394	7.394	(0.903)	92264	1000.00	884.27	
156	Diisopropyl ether	45	3.619	3.619	(0.752)	462307	50.0000	43.99	
162	Butyl acrylate	55	8.733	8.733	(1.067)	256547	50.0000	38.26	
187	n-Amyl acetate	43	8.931	8.931	(1.091)	245839	50.0000	41.23	
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	657500	50.0000	47.13	
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	525291	50.0000	48.64	
167	Ethanol	45	2.079	2.079	(0.432)	37479	1000.00	991.22	
172	tert-Butyl formate	59	5.239	5.239	(1.088)	219897	100.000	95.38	
173	3,3-Dimethyl-1-butanol	57	7.780	7.780	(0.951)	324334	1000.00	835.73	
174	tert-Amyl methyl ether	73	5.284	5.284	(1.097)	424908	50.0000	45.41	
175	tert-Butyl ethyl ether	59	4.047	4.047	(0.840)	429465	50.0000	45.84	
176	tert-Amyl alcohol	59	5.239	5.239	(1.088)	219897	1000.00	955.22	
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.300)	622880	1000.00	834.37	
140	1,3-Butadiene	54	1.404	1.404	(0.292)	121316	50.0000	40.04	
158	Dichlorofluoromethane	67	1.858	1.858	(0.386)	254222	50.0000	55.29	
182	Epichlorohydrin	57	6.630	6.630	(1.195)	34960	200.000	193.42	
M 94	1,2-Dichloroethylene (total)	96				340251	100.000	(a)	
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	268919	50.0000	50.68	
130	Ethyl Acetate	43	4.339	4.339	(0.901)	154814	50.0000	42.24	
131	Methyl Acrylate	55	4.369	4.369	(0.907)	175956	50.0000	44.40	
189	n-Butyl acetate	43	7.706	7.706	(0.941)	241969	50.0000	46.17	
134	Cyclohexanone	55	9.152	9.152	(0.900)	118733	1000.00	685.83	
185	Isoprene	39	2.157	2.157	(0.448)	38959	50.0000	55.47	
188	Isopropyl acetate	43	5.284	5.284	(0.952)	396181	50.0000	46.15	
150	Allyl alcohol	57	3.342	3.342	(0.694)	137925	1000.00	983.79	
195	Methyl Amyl Ketone	43	8.868	8.868	(1.083)	269031	50.0000	36.88	
200	Dimethyl Disulfide	94	6.746	6.746	(0.824)	191472	50.0000	46.46	

203 2-Ethylhexyl Acrylate	55	12.039	12.039 (1.184)	147185	50.0000	38.68
133 Ethyl Acrylate	55	5.947	5.947 (1.235)	349178	50.0000	48.15

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
163 Butyl methacrylate	41	9.647	9.647	(0.949)	136265	50.0000	38.51

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.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Date : 17-JAN-2024 17:16
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;;
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9,i
Operator: FT
Column diameter: 0.18
Page 1
Y (x10^6)
Min
\\NAHSTWS005\Target\chem\voa9,i\U240117,b\U011728,D
-Chloromethane
-Vinyl Chloride+
-Bromomethane
-Chloroethane
-Trichlorofluoromethane+
-Ethanol
-Diethyl ether+
-Acrolein+
-Acetone
-Iodomethane
-Carbon Disulfide+
-Acetonitrile+
-Methylene Chloride
-Tert-butyl alcohol
-Acrylonitrile+
-n-Hexane+
-1,1-Dichloroethane
-Vinyl Acetate+
-tert-Butyl ethyl ether
-2,2-Dichloropropane+
-2-Butanone
-Propionitrile+
-Bromochloromethane
-Methacrylonitrile+
-Pentafluorobenzene+
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane+
-1,2-Dichloropropane
-Methyl Methacrylate+
-Bromodichloromethane
-2-Nitropropane
-2-Chloroethylvinyl ether+
-cis-1,3-Dichloropropene
-Dimethyl Disulfide
-4-Methyl-2-Pentanone
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-Ethyl Methacrylate
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
-2-Hexanone
-Dibromochloromethane+
-1,2-Dibromoethane+
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
m,p-Xylenes
-o-Xylene+
-Methyl Amyl Ketone
-Bromoform+
-Isopropylbenzene
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-trans-1,4-Dichloro-2-bute+
-2-Chlorotoluene
-Butyl methacrylate
-alpha-Methylstyrene
-tert-Butylbenzene+
1,3,5-Trimethylbenzene+
-sec-Butylbenzene
-Benzyl Chloride
1,4-Dichlorobenzene-d4+
-n-Butylbenzene+
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene+
-1,2,3-Trichlorobenzene

Data File : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011728.D
Inj Date : 17-JAN-2024 17:16
InstruID : VOA9.i
LabSampID : CCV-END

Chloroprene (126-99-8)

Reason Code:

BEFORE

MASS
53
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48091
HEIGHT
32110
22-Jan-2024
17:33
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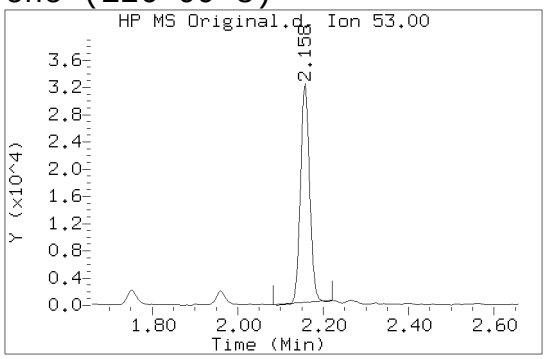

AFTER

MASS
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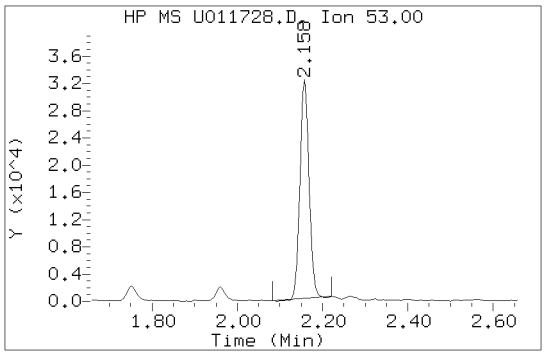

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22-Jan-2024
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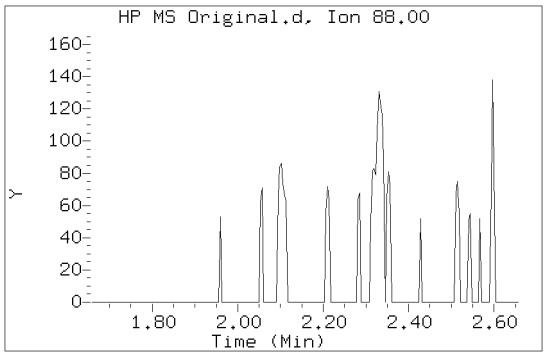

AFTER

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22-Jan-2024
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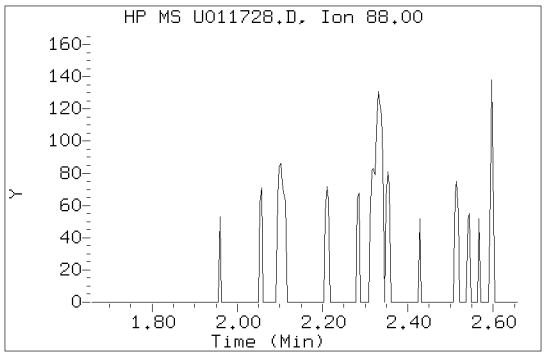

HS24010538-GCSEMI-RSK-175

ALS WO# HS24010538

right solutions.
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Form 1

Organic Analysis Data Sheet

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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	LHAAP Site 16	**HS24010538**	

Dissolved Gasses by Dissolved Gases by RSK-175

16WW58_240110	Collected	Received	Matrix	Basis
HS24010538-01	01/10/24 07:05	01/11/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.000787	J	0.00014	0.00100	0.00100	1	01/15/24 11:44	FID-4_456717	017.D
Ethene	mg/L	0.00100	U	0.00023	0.00100	0.00100	1	01/15/24 11:44	FID-4_456717	017.D
Methane	mg/L	0.00595		0.00010	0.000500	0.000500	1	01/15/24 11:44	FID-4_456717	017.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24010538**	

Dissolved Gasses by Dissolved Gases by RSK-175

16WW57_240110	Collected	Received	Matrix	Basis
HS24010538-02	01/10/24 08:05	01/11/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.000520	J	0.00014	0.00100	0.00100	1	01/15/24 11:35	FID-4_456717	016.D
Ethene	mg/L	0.000785	J	0.00023	0.00100	0.00100	1	01/15/24 11:35	FID-4_456717	016.D
Methane	mg/L	0.00431		0.00010	0.000500	0.000500	1	01/15/24 11:35	FID-4_456717	016.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010538

Dissolved Gasses by Dissolved Gases by RSK-175

16IW09_240110	Collected	Received	Matrix	Basis
HS24010538-03	01/10/24 09:00	01/11/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.00014	0.00100	0.00100	1	01/15/24 12:04	FID-4_456717	018.D
Ethene	mg/L	0.00100	U	0.00023	0.00100	0.00100	1	01/15/24 12:04	FID-4_456717	018.D
Methane	mg/L	7.99		0.0535	0.250	0.250	500	01/15/24 13:39	FID-4_456717	023.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010538

Dissolved Gasses by Dissolved Gases by RSK-175

16IW26_240110	Collected	Received	Matrix	Basis
HS24010538-04	01/10/24 09:50	01/11/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.00014	0.00100	0.00100	1	01/15/24 12:13	FID-4_456717	019.D
Ethene	mg/L	0.0266		0.00023	0.00100	0.00100	1	01/15/24 12:13	FID-4_456717	019.D
Methane	mg/L	3.94		0.0214	0.100	0.100	200	01/15/24 14:11	FID-4_456717	024.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24010538**	

Dissolved Gasses by Dissolved Gases by RSK-175

16IW03_240110	Collected	Received	Matrix	Basis
HS24010538-08	01/10/24 12:45	01/11/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.00014	0.00100	0.00100	1	01/15/24 12:25	FID-4_456717	020.D
Ethene	mg/L	2.49		0.0468	0.200	0.200	200	01/15/24 14:19	FID-4_456717	025.D
Methane	mg/L	7.22		0.0214	0.100	0.100	200	01/15/24 14:19	FID-4_456717	025.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010538

Dissolved Gasses by Dissolved Gases by RSK-175

16IW03_240110-FD	Collected	Received	Matrix	Basis
HS24010538-09	01/10/24 12:45	01/11/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.00014	0.00100	0.00100	1	01/15/24 12:33	FID-4_456717	021.D
Ethene	mg/L	1.39		0.0468	0.200	0.200	200	01/15/24 14:27	FID-4_456717	026.D
Methane	mg/L	5.05		0.0214	0.100	0.100	200	01/15/24 14:27	FID-4_456717	026.D

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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: LHAAP Site 16

Workorder: HS24010538

Dissolved Gasses by Dissolved Gases by RSK-175

SAMPLENUM: HS24010611-01MS

BatchQC (HS24010611-01)				HS24010611-01MS				HS24010611-01MSD						
Spike Matrix: Aqueous		Result Units: mg/L		Run Date: 01/15/24				Run Date: 01/15/24						
Instrument ID: FID4				Run Time: 09:29				Run Time: 09:38						
				Data File: 006.D				Data File: 007.D						
Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
Ethane	75-125	1	0.002635	0.025680	0.0180	128		0.024477	0.0180	121		20	4.8	
Ethene	75-125	1	0.02267	0.033080	0.0168	62		0.034182	0.0168	68		20	3.28	
Methane	75-125	1	3.435	3.72980	0.0096	3050		3.69162	0.0096	2660		20	1.03	

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 LHAAP Site 16

Workorder **HS24010538**

SAMPLENUM HS24010611-02MS

Dissolved Gasses by Dissolved Gases by RSK-175

BatchQC (HS24010611-02)				HS24010611-02MS				HS24010611-02MSD						
Spike Matrix Aqueous	Result Units mg/L			Run Date 01/15/24				Run Date 01/15/24						
Instrument ID FID4				Run Time 09:56				Run Time 10:04						
				Data File 009.D				Data File 010.D						
Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
Ethane	75-125	1	0	0	0.0180	0		0	0.0180	0		20	0	
Ethane	75-125	50	0	1.32559	0.0180	7350		0	0.0180	0		20	0	
Ethene	75-125	1	1.038	0.994984	0.0168	-258		0.989809	0.0168	-289		20	0.521	
Ethene	75-125	50	1.088	2.26415	0.0168	7000		0.989809	0.0168	-289		20	0.521	
Methane	75-125	1	1.252	1.22269	0.0096	-309		1.20730	0.0096	-469		20	1.27	
Methane	75-125	50	1.253	1.96930	0.0096	7430		1.20730	0.0096	-469		20	1.27	

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

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

ALS Environmental–Houston Laboratory
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