LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

ADMINISTRATIVE RECORD

Volume 2

2023

Bate Stamp Numbers
01133814 – 01135832

Prepared for

Department of the Army
Longhorn Army Ammunition Plant

1976–2023

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

VOLUME 2

2023

A.	Title:	(Cont'd) Appendix F, File 1, Level IV DoD Labs to Report—Quarterly Evaluation Report, 3rd Quarter (July–September) 2022, Groundwater Treatment Plant, Longhorn Army Ammunition Plant, Karnack, Texas, January 2023
	Author(s):	Department of the Army
	Recipient:	Environmental Protection Agency and Texas Commission on Environmental Quality
	Date:	January 6, 2023
	Bate Stamp:	01133814 – 01135832

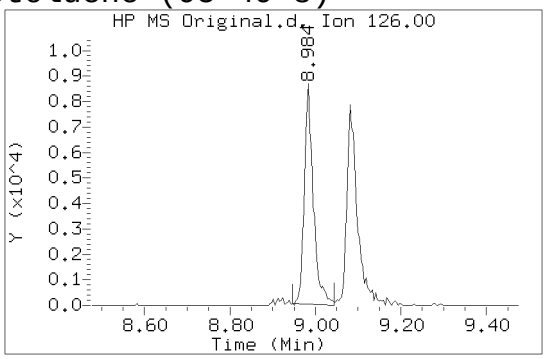
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

2-Chlorotoluene (95-49-8)

Reason Code:

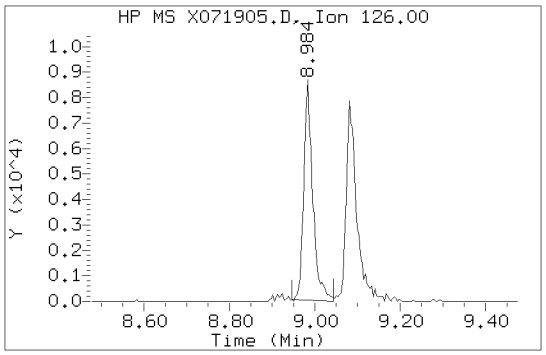
BEFORE

MASS
129
AREA
10743
HEIGHT
6687
25-Jul-2022
09:00
linh
pham



AFTER

MASS
126
AREA
12835
HEIGHT
8653
19-Aug-2022
10:59
linh
pham

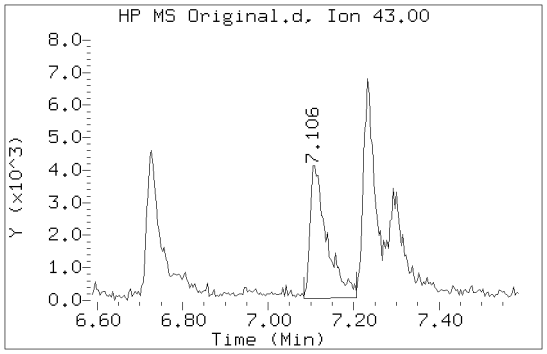


2-Hexanone (591-78-6)

Reason Code:

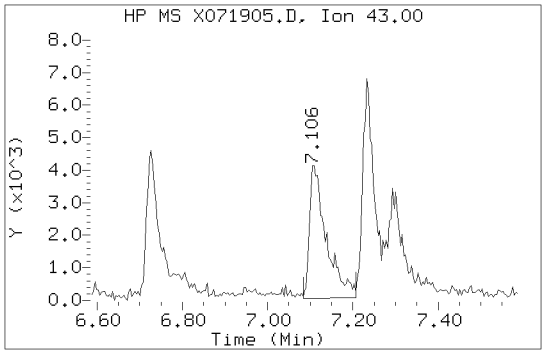
BEFORE

MASS
97
AREA
18665
HEIGHT
7822
25-Jul-2022
09:00
linh
pham



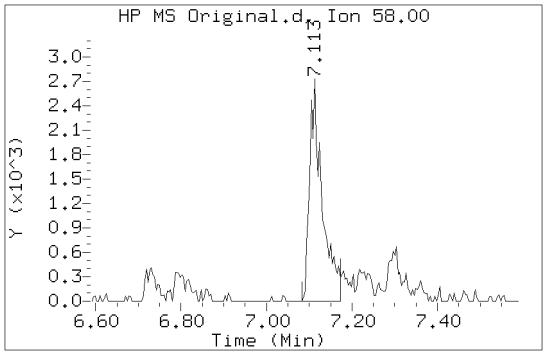
AFTER

MASS
43
AREA
11235
HEIGHT
4065
19-Aug-2022
10:59
linh
pham



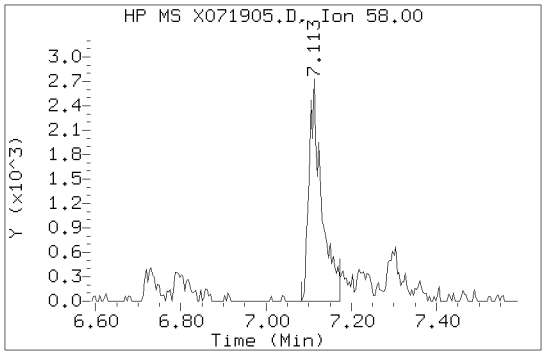
BEFORE

MASS
99
AREA
11761
HEIGHT
5110
25-Jul-2022
09:00
linh
pham



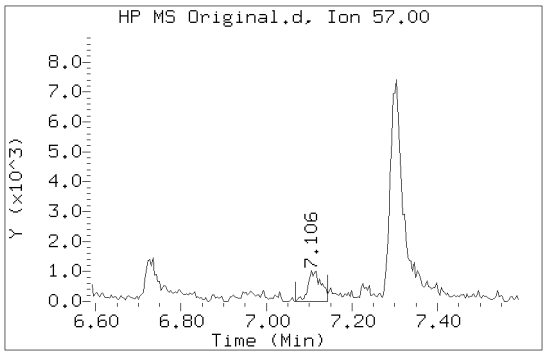
AFTER

MASS
58
AREA
5567
HEIGHT
2731
19-Aug-2022
10:59
linh
pham



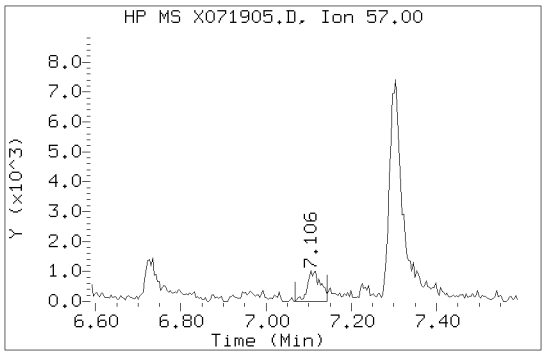
BEFORE

MASS
61
AREA
8134
HEIGHT
3813
25-Jul-2022
09:00
linh
pham



AFTER

MASS
57
AREA
2199
HEIGHT
1027
19-Aug-2022
10:59
linh
pham

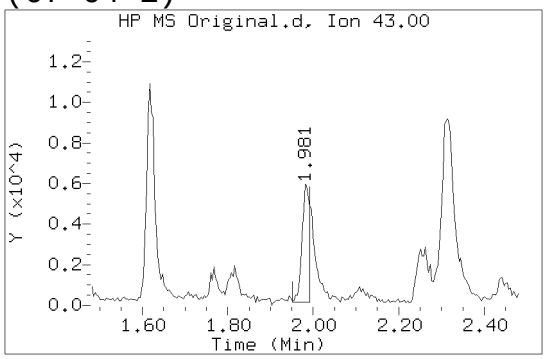


Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

Acetone (67-64-1)

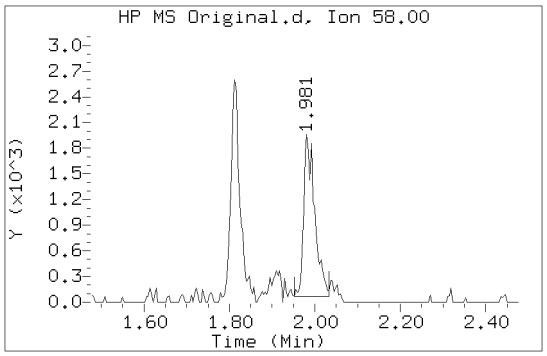
BEFORE

MASS
62
AREA
14813
HEIGHT
12919
25-Jul-2022
09:00
linh
pham



BEFORE

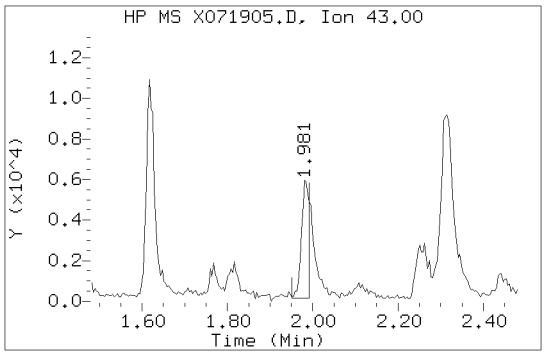
MASS
64
AREA
4927
HEIGHT
4173
25-Jul-2022
09:00
linh
pham



Reason Code:

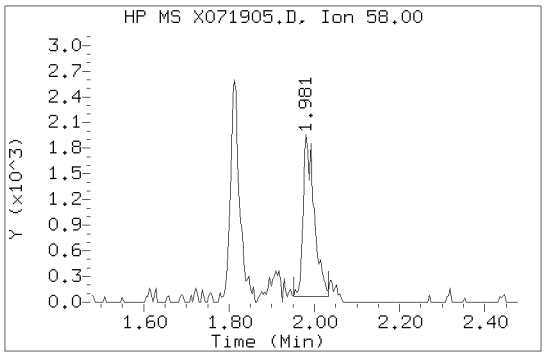
AFTER

MASS
43
AREA
7337
HEIGHT
5791
19-Aug-2022
10:59
linh
pham



AFTER

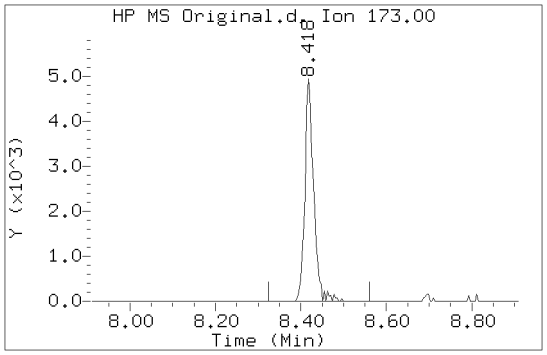
MASS
58
AREA
3464
HEIGHT
1894
19-Aug-2022
10:59
linh
pham



Bromoform (75-25-2)

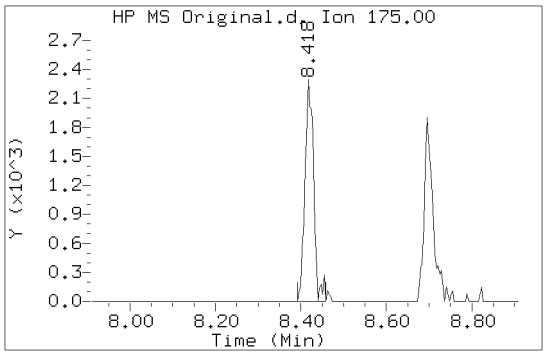
BEFORE

MASS
64
AREA
9295
HEIGHT
7022
25-Jul-2022
09:00
linh
pham



BEFORE

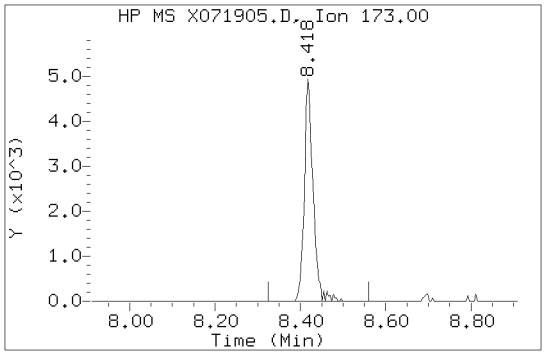
MASS
66
AREA
2894
HEIGHT
2425
25-Jul-2022
09:00
linh
pham



Reason Code:

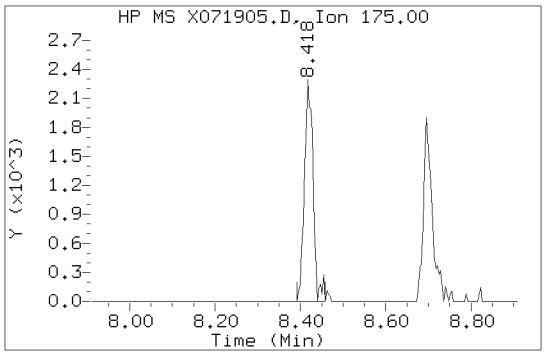
AFTER

MASS
173
AREA
7169
HEIGHT
4944
19-Aug-2022
10:59
linh
pham



AFTER

MASS
175
AREA
3299
HEIGHT
2294
19-Aug-2022
10:59
linh
pham

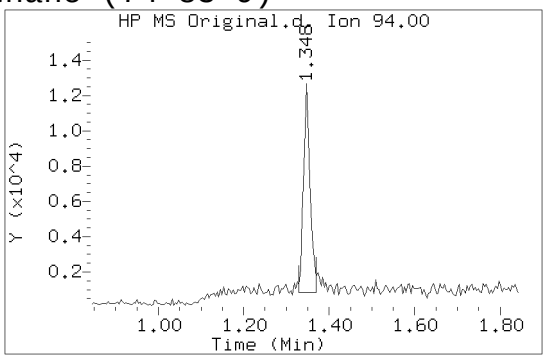


Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

Bromomethane (74-83-9)

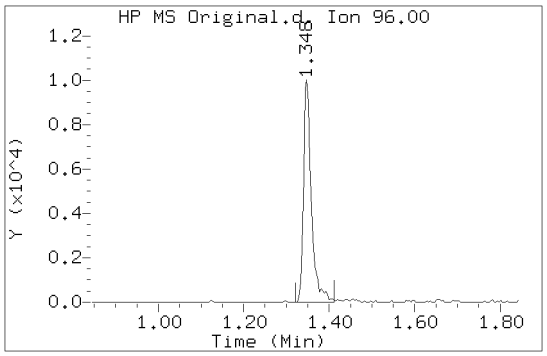
BEFORE

MASS
83
AREA
22862
HEIGHT
9582
25-Jul-2022
09:00
linh
pham



BEFORE

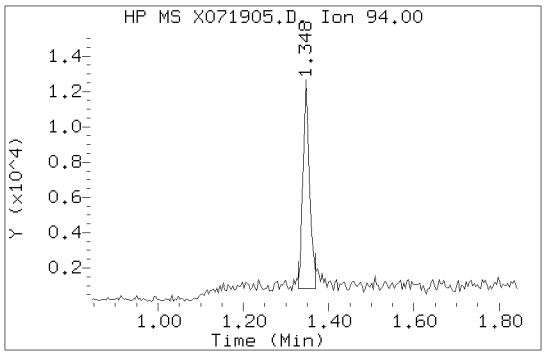
MASS
85
AREA
13889
HEIGHT
5732
25-Jul-2022
09:00
linh
pham



Reason Code:

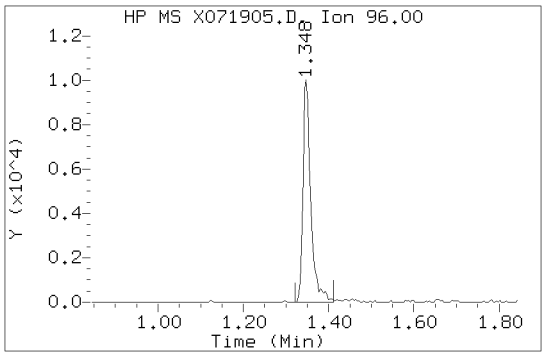
AFTER

MASS
94
AREA
13133
HEIGHT
11831
19-Aug-2022
10:59
linh
pham



AFTER

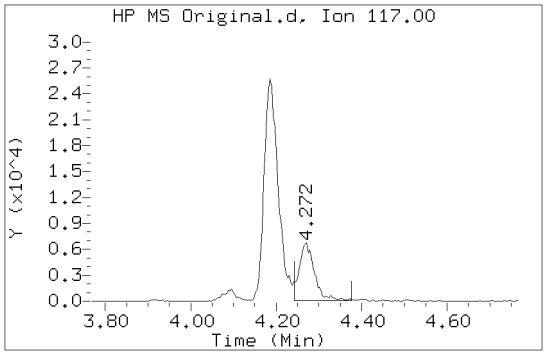
MASS
96
AREA
13187
HEIGHT
10014
19-Aug-2022
10:59
linh
pham



Carbon Tetrachloride (56-23-5)

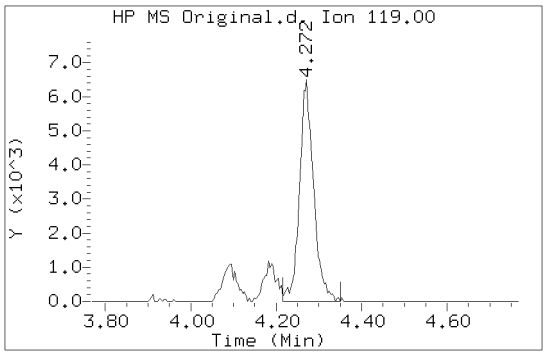
BEFORE

MASS
96
AREA
12905
HEIGHT
5109
25-Jul-2022
09:00
linh
pham



BEFORE

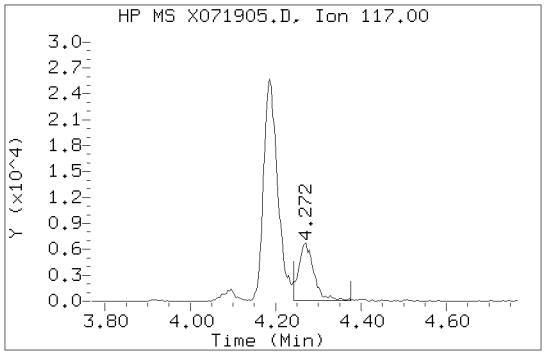
MASS
61
AREA
18838
HEIGHT
7221
25-Jul-2022
09:00
linh
pham



Reason Code:

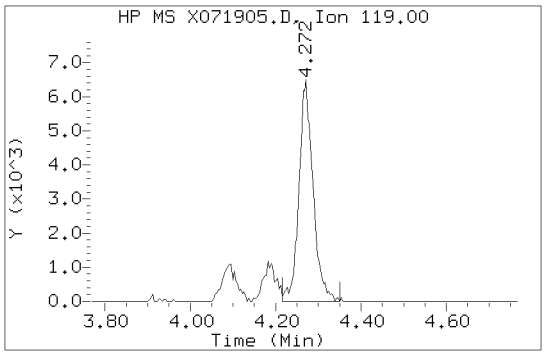
AFTER

MASS
117
AREA
17025
HEIGHT
6726
19-Aug-2022
10:59
linh
pham



AFTER

MASS
119
AREA
15166
HEIGHT
6498
19-Aug-2022
10:59
linh
pham



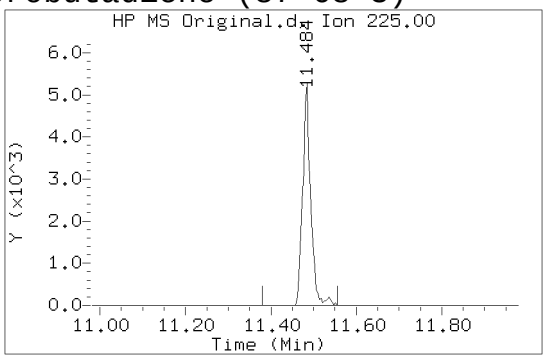
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

Hexachlorobutadiene (87-68-3)

Reason Code:

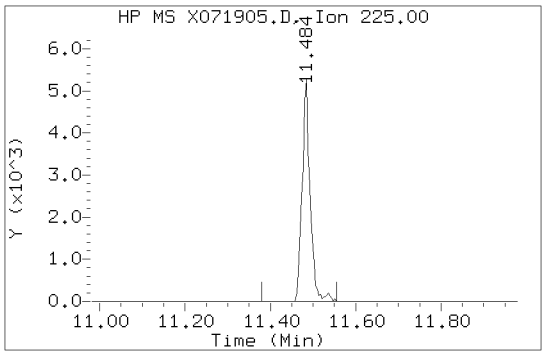
BEFORE

MASS
91
AREA
53786
HEIGHT
35911
25-Jul-2022
09:00
linh
pham



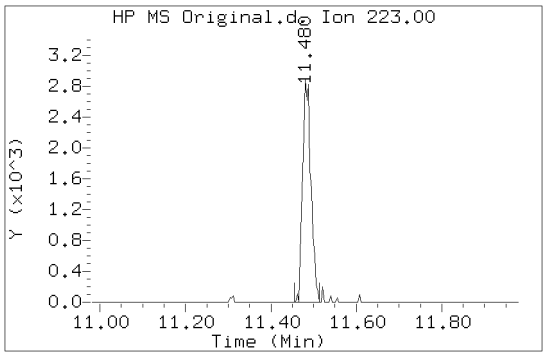
AFTER

MASS
225
AREA
6994
HEIGHT
5264
19-Aug-2022
10:59
linh
pham



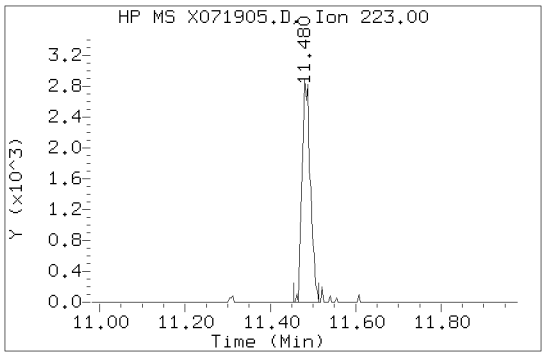
BEFORE

MASS
120
AREA
13286
HEIGHT
8412
25-Jul-2022
09:00
linh
pham



AFTER

MASS
223
AREA
4036
HEIGHT
2879
19-Aug-2022
10:59
linh
pham

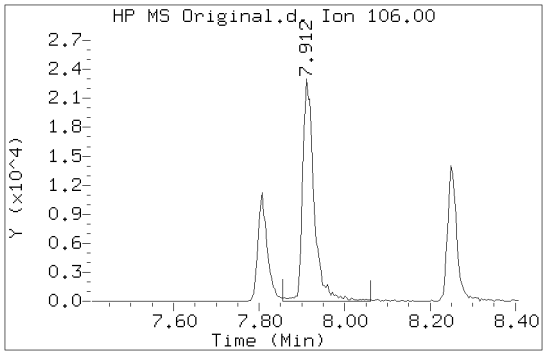


m,p-Xylenes ()

Reason Code:

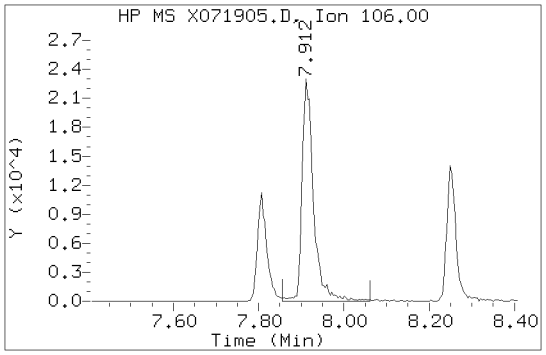
BEFORE

MASS
105
AREA
40980
HEIGHT
28240
25-Jul-2022
09:00
linh
pham



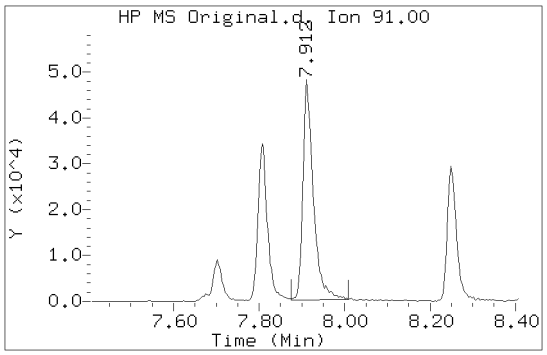
AFTER

MASS
106
AREA
44013
HEIGHT
23003
19-Aug-2022
10:59
linh
pham



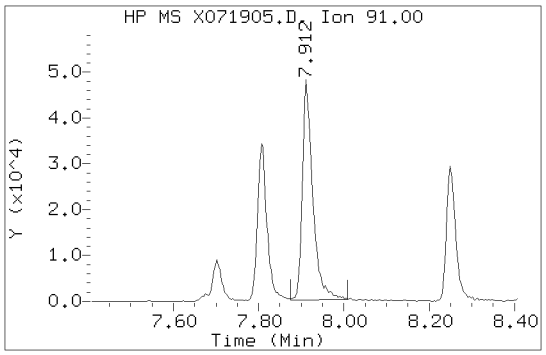
BEFORE

MASS
120
AREA
20601
HEIGHT
14139
25-Jul-2022
09:00
linh
pham



AFTER

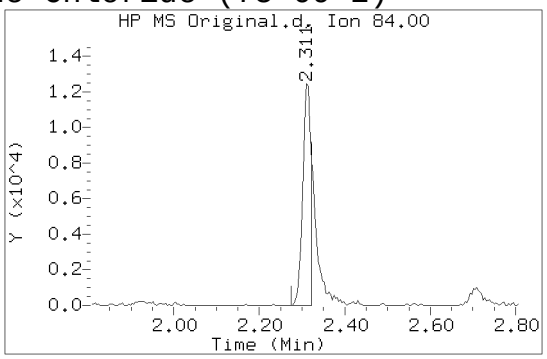
MASS
91
AREA
83080
HEIGHT
48028
19-Aug-2022
10:59
linh
pham



Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

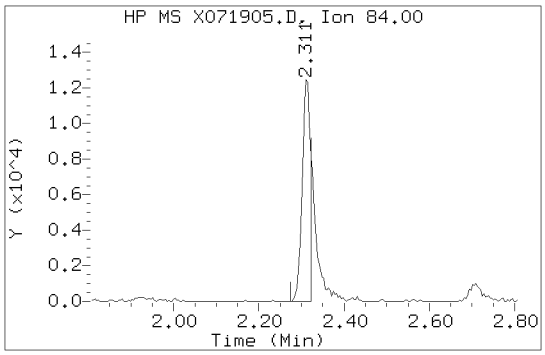
Methylene Chloride (75-09-2)

BEFORE
MASS
91
AREA
40205
HEIGHT
22168
25-Jul-2022
09:00
linh
pham

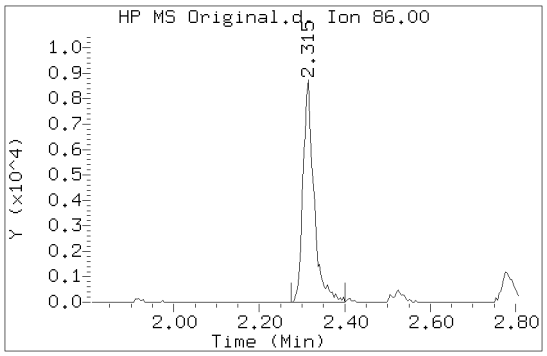


Reason Code:

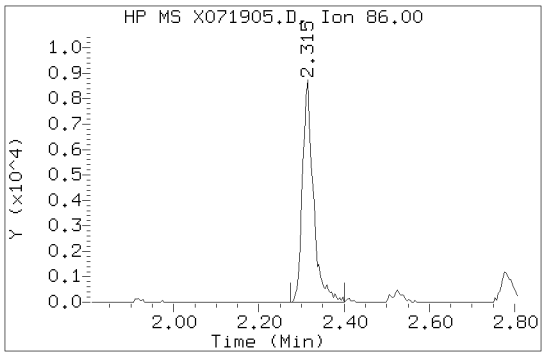
AFTER
MASS
84
AREA
16740
HEIGHT
12461
19-Aug-2022
10:59
linh
pham



BEFORE
MASS
126
AREA
12421
HEIGHT
7742
25-Jul-2022
09:00
linh
pham

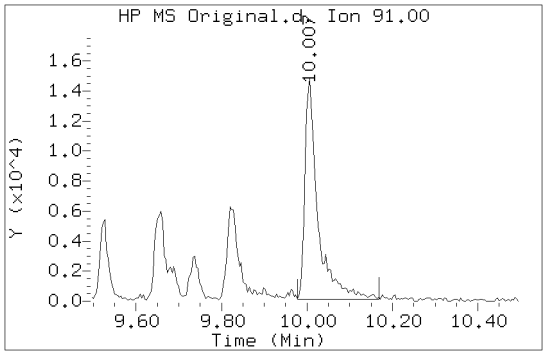


AFTER
MASS
86
AREA
15829
HEIGHT
8738
19-Aug-2022
10:59
linh
pham



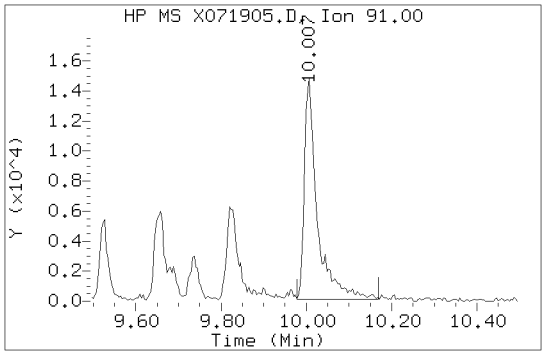
n-Butylbenzene (104-51-8)

BEFORE
MASS
119
AREA
33676
HEIGHT
24527
25-Jul-2022
09:00
linh
pham

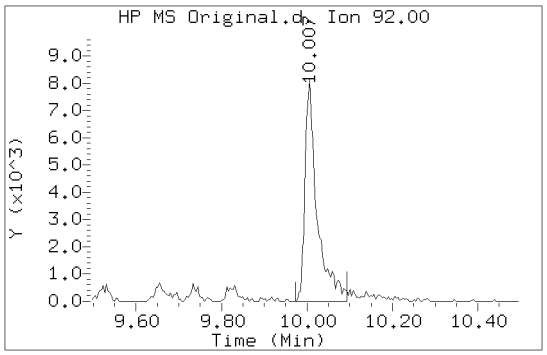


Reason Code:

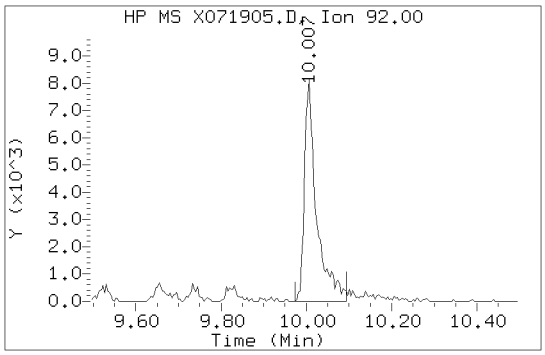
AFTER
MASS
91
AREA
31547
HEIGHT
14685
19-Aug-2022
10:59
linh
pham



BEFORE
MASS
91
AREA
22780
HEIGHT
15724
25-Jul-2022
09:00
linh
pham



AFTER
MASS
92
AREA
16277
HEIGHT
8132
19-Aug-2022
10:59
linh
pham



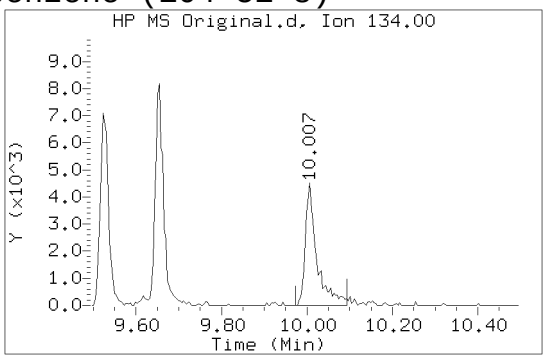
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

n-Butylbenzene (104-51-8)

Reason Code:

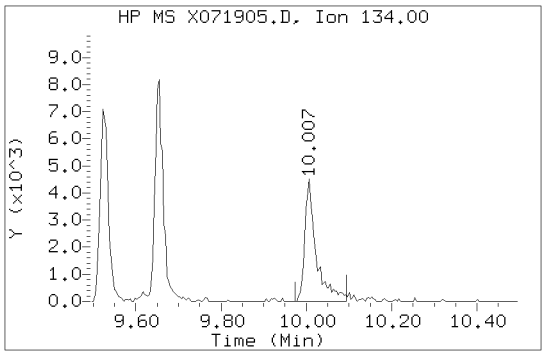
BEFORE

MASS
134
AREA
8589
HEIGHT
6039
25-Jul-2022
09:00
linh
pham



AFTER

MASS
134
AREA
8536
HEIGHT
4525
19-Aug-2022
10:59
linh
pham

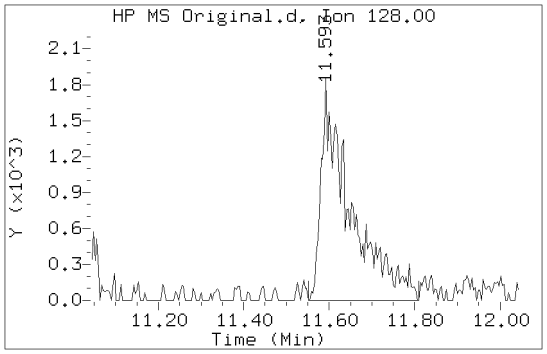


Naphthalene (91-20-3)

Reason Code:

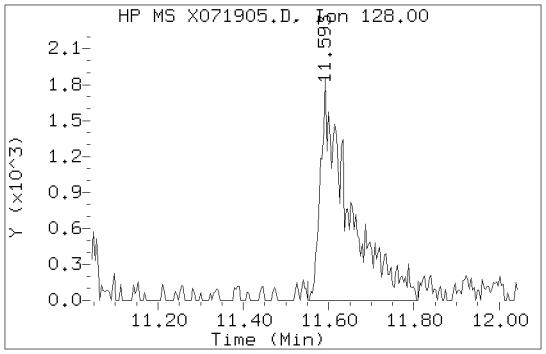
BEFORE

MASS
105
AREA
46135
HEIGHT
33982
25-Jul-2022
09:00
linh
pham



AFTER

MASS
128
AREA
8600
HEIGHT
1850
19-Aug-2022
10:59
linh
pham

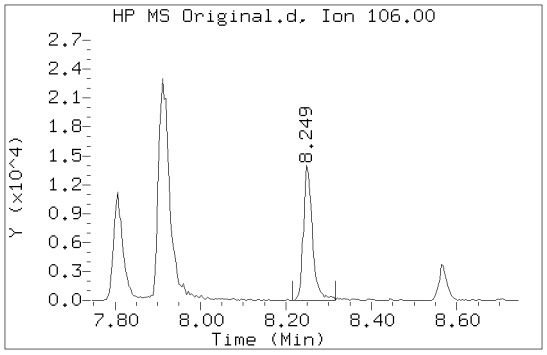


o-Xylene (95-47-6)

Reason Code:

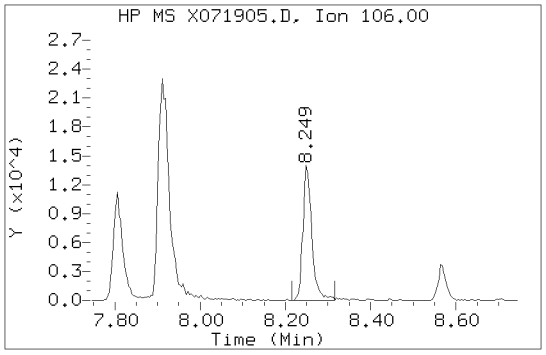
BEFORE

MASS
119
AREA
37293
HEIGHT
26906
25-Jul-2022
09:00
linh
pham



AFTER

MASS
106
AREA
20993
HEIGHT
14051
19-Aug-2022
10:59
linh
pham

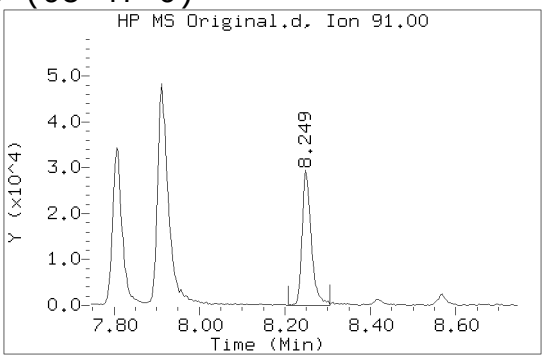


Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

o-Xylene (95-47-6)

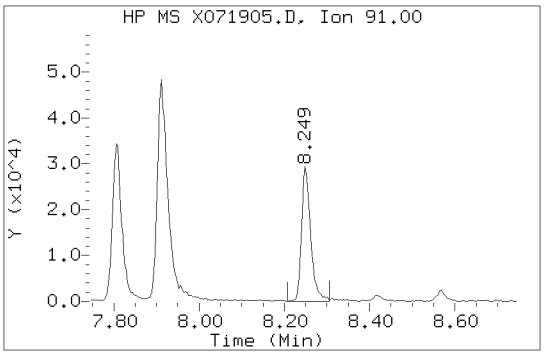
BEFORE

MASS
134
AREA
11044
HEIGHT
8181
25-Jul-2022
09:00
linh
pham



AFTER

MASS
91
AREA
44875
HEIGHT
29536
19-Aug-2022
10:59
linh
pham

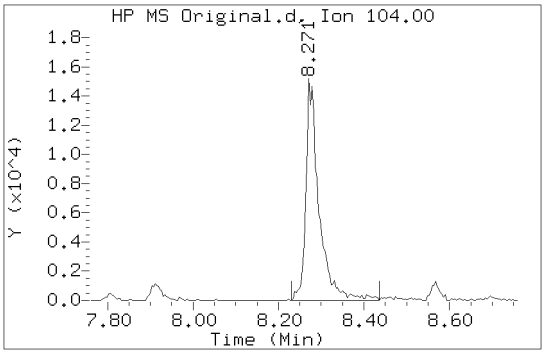


Reason Code:

Styrene (100-42-5)

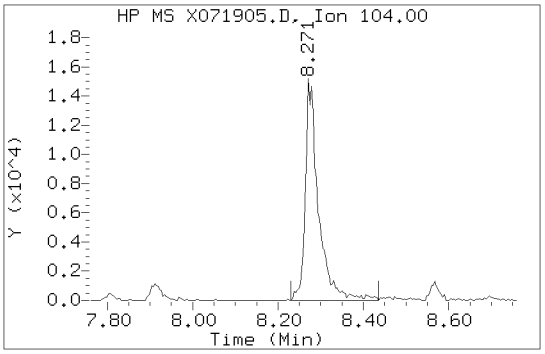
BEFORE

MASS
225
AREA
6994
HEIGHT
5264
25-Jul-2022
09:00
linh
pham



AFTER

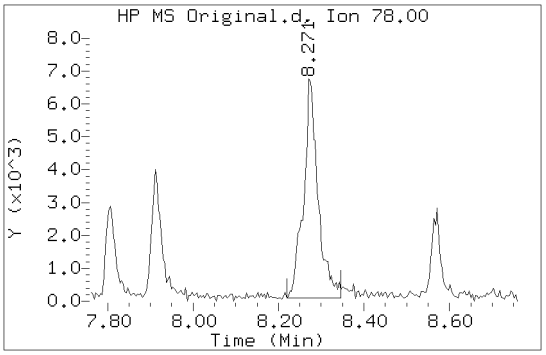
MASS
104
AREA
32495
HEIGHT
15189
19-Aug-2022
10:59
linh
pham



Reason Code:

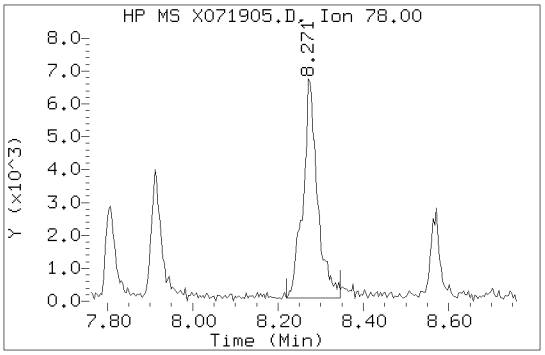
BEFORE

MASS
223
AREA
4036
HEIGHT
2879
25-Jul-2022
09:00
linh
pham



AFTER

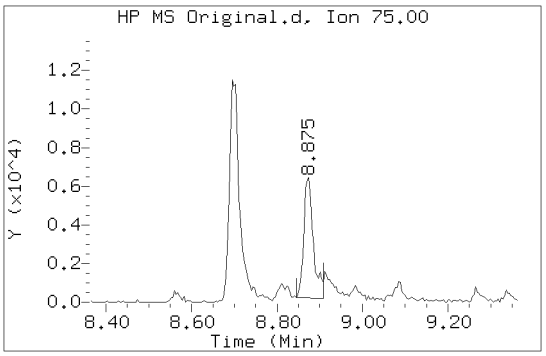
MASS
78
AREA
15931
HEIGHT
6670
19-Aug-2022
10:59
linh
pham



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

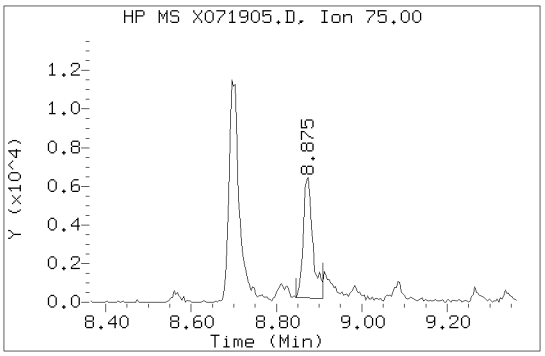
BEFORE

MASS
180
AREA
4350
HEIGHT
1674
25-Jul-2022
09:00
linh
pham



AFTER

MASS
75
AREA
9920
HEIGHT
6237
19-Aug-2022
10:59
linh
pham



Reason Code:

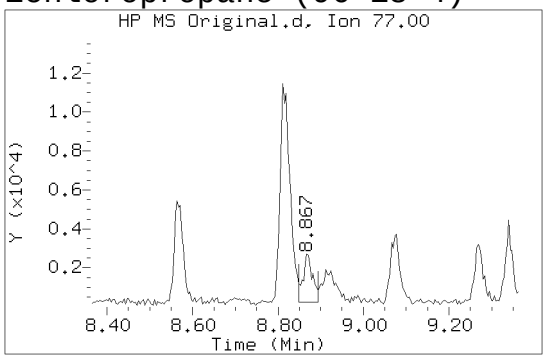
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

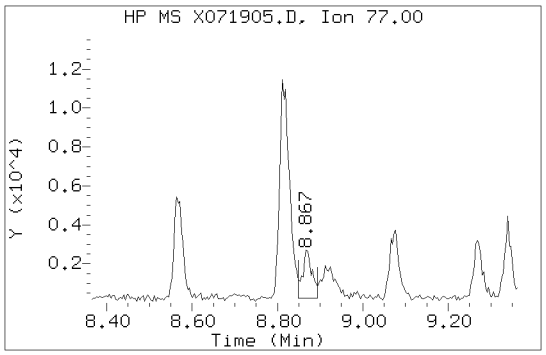
BEFORE

MASS
182
AREA
1686
HEIGHT
2516
25-Jul-2022
09:00
linh
pham



AFTER

MASS
77
AREA
4022
HEIGHT
2476
19-Aug-2022
10:59
linh
pham

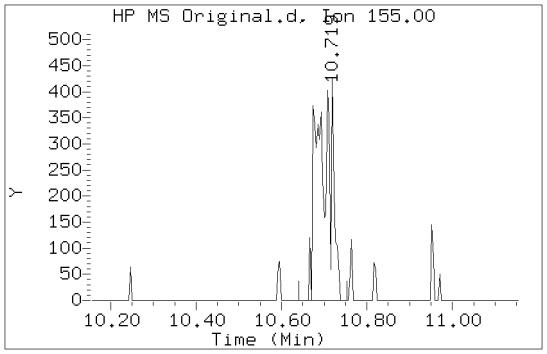


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

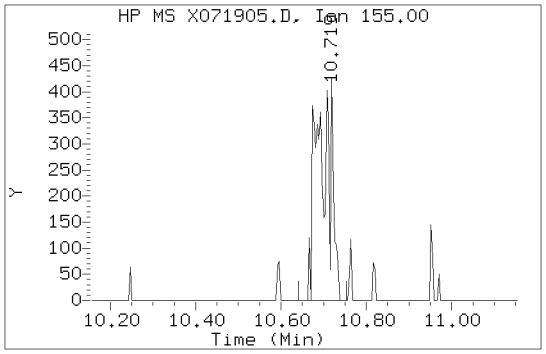
BEFORE

MASS
73
AREA
36818
HEIGHT
16808
25-Jul-2022
09:00
linh
pham



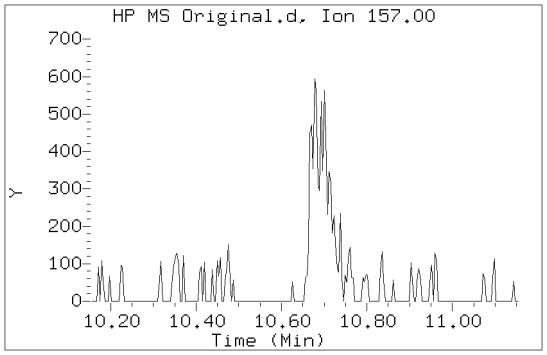
AFTER

MASS
155
AREA
994
HEIGHT
425
19-Aug-2022
10:59
linh
pham



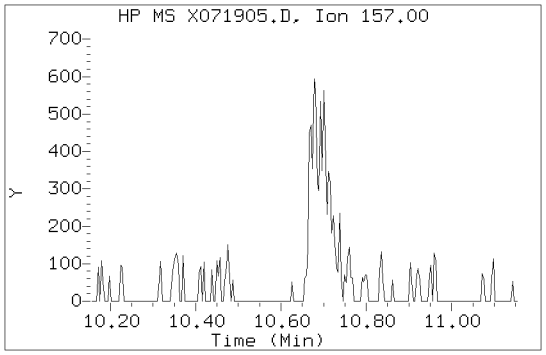
BEFORE

MASS
57
AREA
25396
HEIGHT
9800
25-Jul-2022
09:00
linh
pham



AFTER

MASS
157
AREA
0
HEIGHT
0
19-Aug-2022
10:59
linh
pham

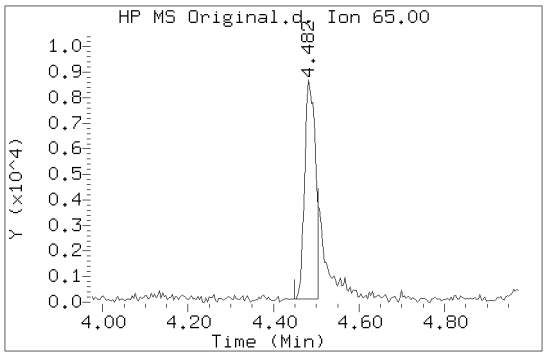


1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

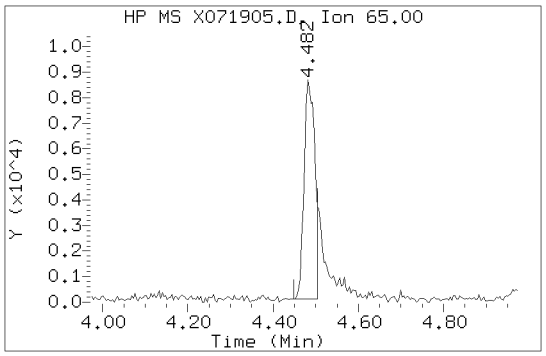
BEFORE

MASS
113
AREA
18364
HEIGHT
8101
25-Jul-2022
09:00
linh
pham



AFTER

MASS
65
AREA
15130
HEIGHT
8575
19-Aug-2022
10:59
linh
pham



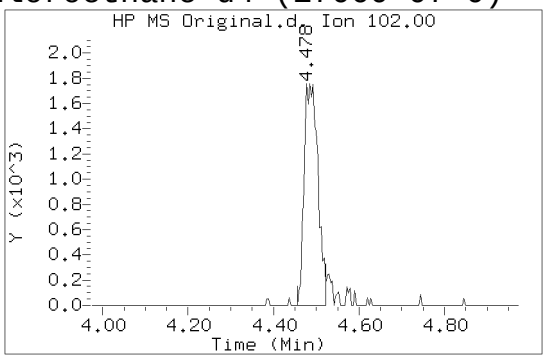
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

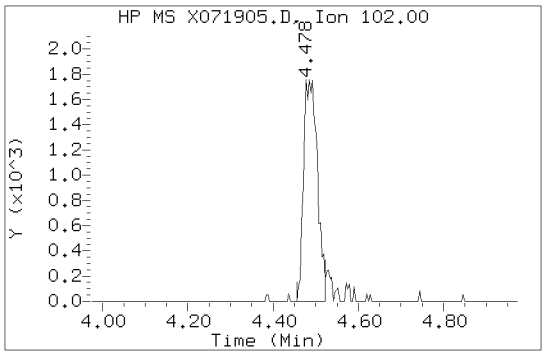
BEFORE

MASS
111
AREA
18785
HEIGHT
8137
25-Jul-2022
09:00
linh
pham



AFTER

MASS
102
AREA
4011
HEIGHT
1757
19-Aug-2022
10:59
linh
pham

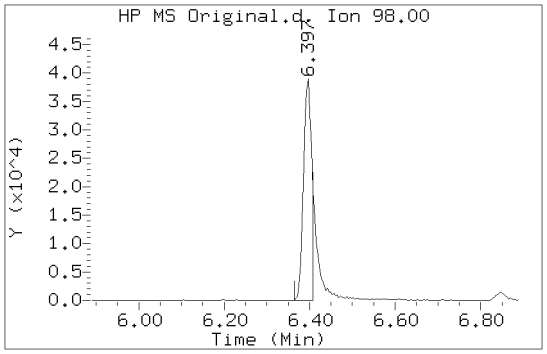


Toluene-d8 (2037-26-5)

Reason Code:

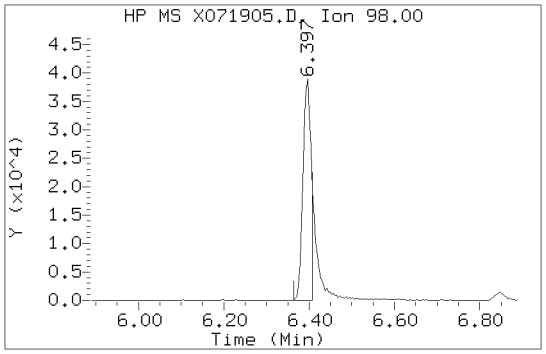
BEFORE

MASS
65
AREA
15130
HEIGHT
8575
25-Jul-2022
09:00
linh
pham



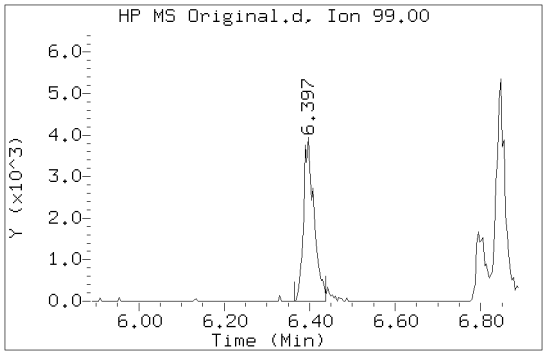
AFTER

MASS
98
AREA
53011
HEIGHT
39000
19-Aug-2022
10:59
linh
pham



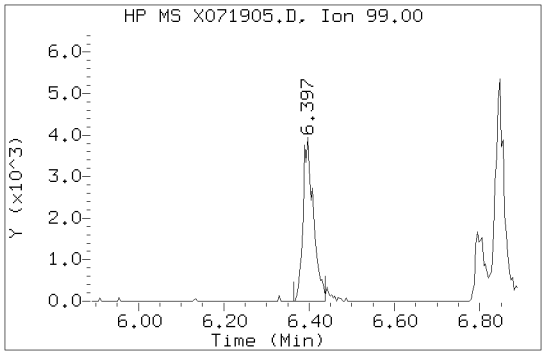
BEFORE

MASS
102
AREA
4011
HEIGHT
1757
25-Jul-2022
09:00
linh
pham



AFTER

MASS
99
AREA
6827
HEIGHT
3949
19-Aug-2022
10:59
linh
pham

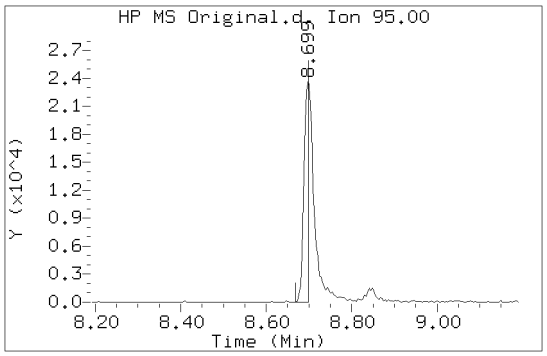


4-Bromofluorobenzene (460-00-4)

Reason Code:

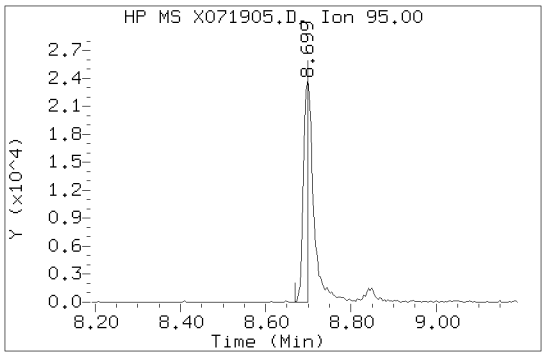
BEFORE

MASS
95
AREA
19061
HEIGHT
23832
25-Jul-2022
09:00
linh
pham



AFTER

MASS
95
AREA
19061
HEIGHT
23832
19-Aug-2022
10:59
linh
pham



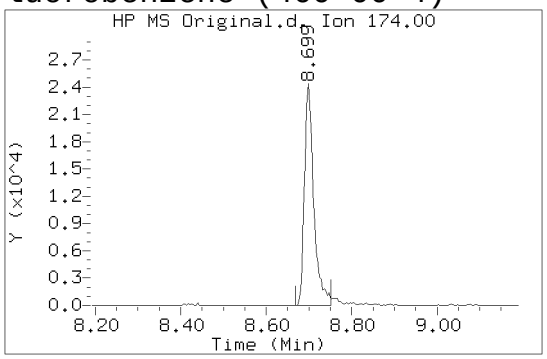
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

4-Bromofluorobenzene (460-00-4)

Reason Code:

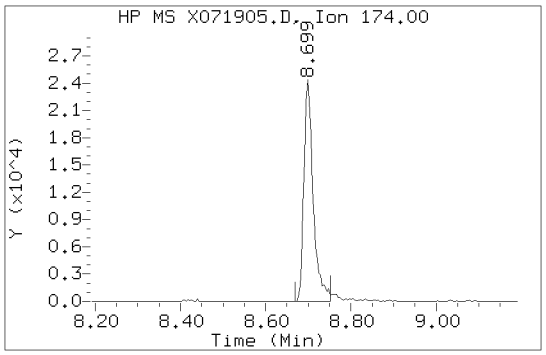
BEFORE

MASS
174
AREA
37206
HEIGHT
24384
25-Jul-2022
09:00
linh
pham



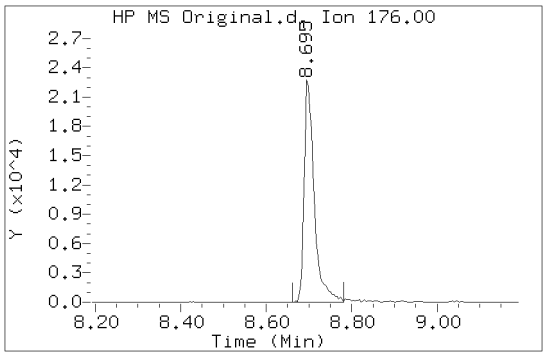
AFTER

MASS
174
AREA
37206
HEIGHT
24384
19-Aug-2022
10:59
linh
pham



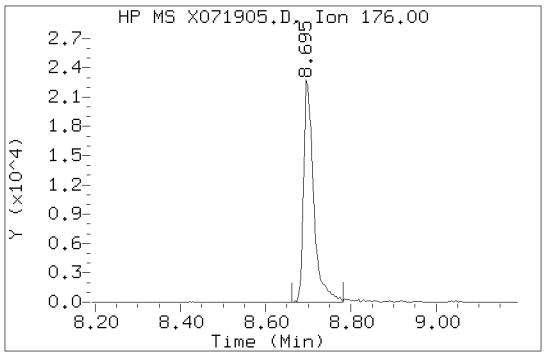
BEFORE

MASS
176
AREA
37461
HEIGHT
22760
25-Jul-2022
09:00
linh
pham



AFTER

MASS
176
AREA
37461
HEIGHT
22760
19-Aug-2022
10:59
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D Page 1
Report Date: 19-Aug-2022 11:00

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D
Lab Smp Id: VSTD005 Client Smp ID: VSTD005
Inj Date : 19-JUL-2022 13:11
Operator : PC Inst ID: voa6.i
Smp Info : VSTD005;VSTD005;1;5;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\8260W.m
Meth Date : 19-Aug-2022 11:00 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 12:50 Cal File: X071905.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.189	4.189	(1.000)	701809	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	1041373	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	950052	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	449830	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.106	(0.980)	40606	5.00000	5.49
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.069)	40441	5.00000	5.28(M)
$ 48 Toluene-d8	98	6.393	6.393	(0.833)	110927	5.00000	4.67(aM)
$ 69 4-Bromofluorobenzene	95	8.695	8.695	(1.133)	56818	5.00000	5.98
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	34241	5.00000	5.12
31 1,1,1-Trichloroethane	97	4.091	4.091	(0.977)	54582	5.00000	5.48
68 1,1,2,2-Tetrachloroethane	83	8.844	8.844	(0.915)	31785	5.00000	5.03
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	25929	5.00000	5.30
22 1,1-Dichloroethane	63	2.929	2.929	(0.699)	57114	5.00000	5.28
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	31142	5.00000	5.31
32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	43023	5.00000	5.11
93 1,2,3-Trichlorobenzene	180	11.757	11.757	(1.216)	10995	5.00000	4.70(aM)
71 1,2,3-Trichloropropane	75	8.867	8.867	(0.917)	24185	5.00000	4.96(aM)
90 1,2,4-Trichlorobenzene	180	11.352	11.352	(1.175)	19881	5.00000	4.85(aM)
79 1,2,4-Trimethylbenzene	105	9.384	9.384	(0.971)	113753	5.00000	5.27
89 1,2-Dibromo-3-Chloropropane	155	10.670	10.670	(1.104)	2347	5.00000	5.47

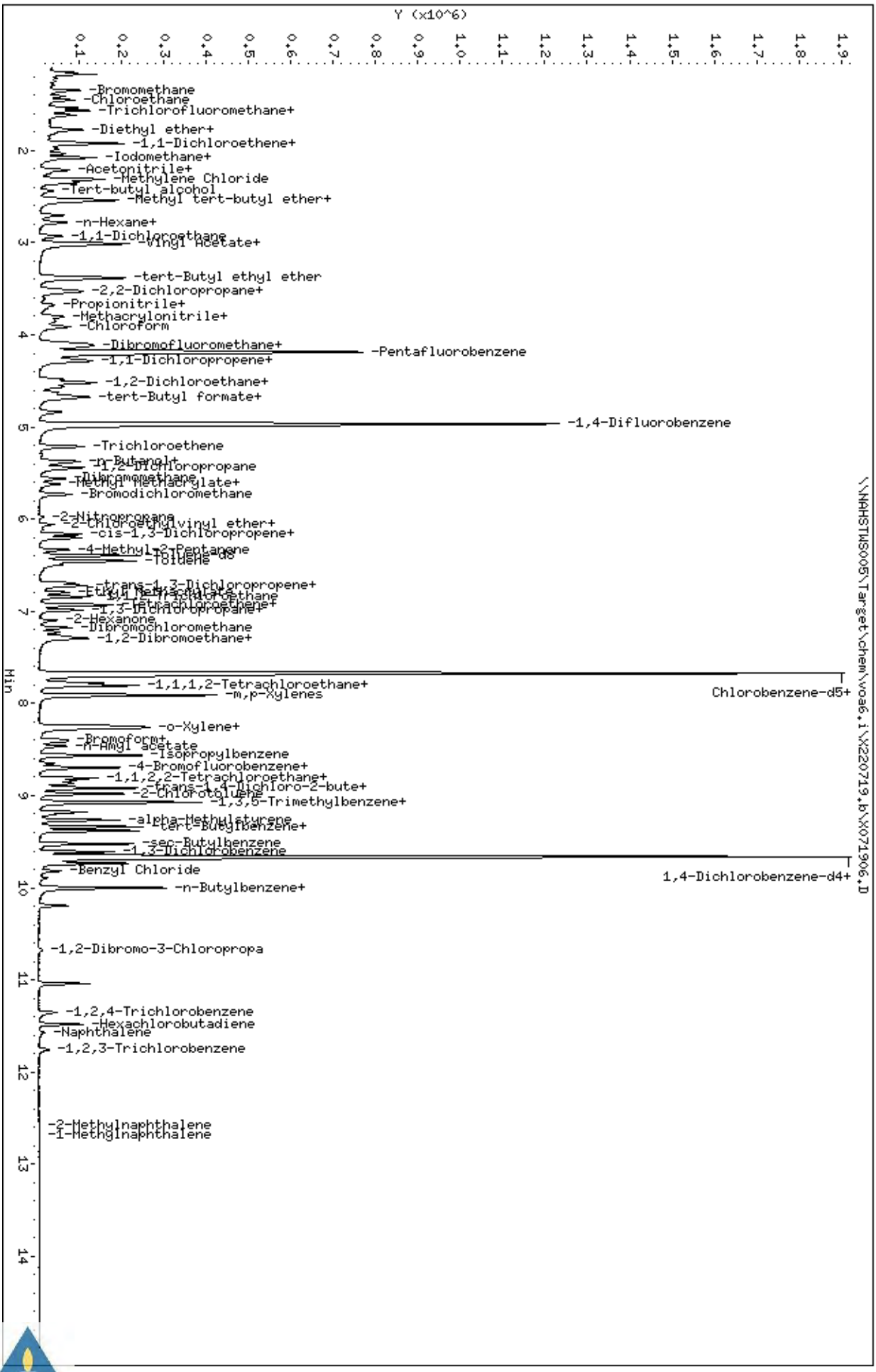
57	1,2-Dibromoethane	107	7.266	7.266 (0.947)	32305	5.00000	5.21
88	1,2-Dichlorobenzene	146	10.003	10.003 (1.035)	59846	5.00000	5.31

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D Page 2
Report Date: 19-Aug-2022 11:00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.567	4.567	(0.919)	49225	5.00000	5.38
42	1,2-Dichloropropane	63	5.441	5.441	(1.095)	33483	5.00000	5.22
75	1,3,5-Trimethylbenzene	105	9.069	9.069	(0.938)	116506	5.00000	5.33
83	1,3-Dichlorobenzene	146	9.609	9.609	(0.994)	66139	5.00000	5.29
54	1,3-Dichloropropane	76	6.985	6.985	(0.911)	52966	5.00000	5.33
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	66130	5.00000	4.99(a)
26	2,2-Dichloropropane	77	3.518	3.518	(0.840)	53750	5.00000	5.38
24	2-Butanone	43	3.604	3.604	(0.860)	16349	10.0000	9.28(M)
76	2-Chlorotoluene	91	8.979	8.979	(0.929)	103950	5.00000	5.39
52	2-Hexanone	43	7.098	7.098	(0.925)	28998	10.0000	9.70
77	4-Chlorotoluene	91	9.077	9.077	(0.939)	111787	5.00000	5.19
82	p-Isopropyltoluene	119	9.654	9.654	(0.999)	113315	5.00000	5.16
45	4-Methyl-2-Pentanone	43	6.333	6.333	(0.826)	47780	10.0000	10.32
10	Acetone	43	1.984	1.984	(0.474)	20021	10.0000	8.35(M)
37	Benzene	78	4.519	4.519	(0.909)	129783	5.00000	5.25
74	Bromobenzene	156	8.811	8.811	(0.912)	41026	5.00000	5.34
29	Bromochloromethane	128	3.799	3.799	(0.907)	20367	5.00000	5.14
39	Bromodichloromethane	83	5.729	5.729	(1.153)	45668	5.00000	5.19
66	Bromoform	173	8.417	8.417	(1.097)	20344	5.00000	5.54
6	Bromomethane	94	1.347	1.347	(0.322)	30861	5.00000	5.24(M)
19	Carbon Disulfide	76	2.078	2.078	(0.496)	165186	10.0000	10.65
34	Carbon Tetrachloride	117	4.271	4.271	(0.860)	46328	5.00000	5.15(H)
59	Chlorobenzene	112	7.697	7.697	(1.003)	95602	5.00000	5.30
7	Chloroethane	64	1.411	1.411	(0.337)	25153	5.00000	5.58
28	Chloroform	83	3.915	3.915	(0.935)	63536	5.00000	5.36
3	Chloromethane	50	1.085	1.085	(0.259)	37005	5.00000	5.74
27	cis-1,2-Dichloroethene	96	3.536	3.536	(0.844)	36563	5.00000	5.24
46	cis-1,3-Dichloropropene	75	6.164	6.164	(1.241)	54926	5.00000	5.08
55	Dibromochloromethane	129	7.180	7.180	(0.936)	33754	5.00000	4.78(a)
44	Dibromomethane	93	5.557	5.557	(1.118)	22085	5.00000	5.13
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	38222	5.00000	5.56
61	Ethylbenzene	106	7.806	7.806	(1.018)	49041	5.00000	5.38
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	18025	5.00000	4.76(a)
67	Isopropylbenzene	105	8.563	8.563	(1.116)	146541	5.00000	5.35
62	m,p-Xylenes	106	7.911	7.911	(1.031)	120491	10.0000	10.64
17	Methylene Chloride	84	2.311	2.311	(0.552)	40888	5.00000	5.57(M)
87	n-Butylbenzene	91	9.999	9.999	(1.035)	89804	5.00000	4.92(a)
73	n-Propylbenzene	91	8.916	8.916	(0.922)	160743	5.00000	5.41
92	Naphthalene	128	11.570	11.570	(1.197)	21849	5.00000	4.76(aM)
63	o-Xylene	106	8.248	8.248	(1.075)	57923	5.00000	5.26
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	133745	5.00000	5.27
64	Styrene	104	8.271	8.271	(1.078)	92709	5.00000	5.11
78	tert-Butylbenzene	119	9.339	9.339	(0.966)	102197	5.00000	5.51
56	Tetrachloroethene	164	6.929	6.929	(0.903)	33865	5.00000	5.49
50	Toluene	91	6.453	6.453	(0.841)	142561	5.00000	5.33
20	trans-1,2-Dichloroethene	96	2.539	2.539	(0.606)	33550	5.00000	5.43
51	trans-1,3-Dichloropropene	75	6.689	6.689	(1.346)	42573	5.00000	4.75(a)
38	Trichloroethene	130	5.216	5.216	(1.050)	38945	5.00000	5.32
8	Trichlorofluoromethane	101	1.568	1.568	(0.375)	59958	5.00000	5.42
5	Vinyl Chloride	62	1.149	1.149	(0.274)	39892	5.00000	5.42

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.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D
Date : 19-JUL-2022 13:11
Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;5;
Purge Volume: 5.0
Column phase: DB624

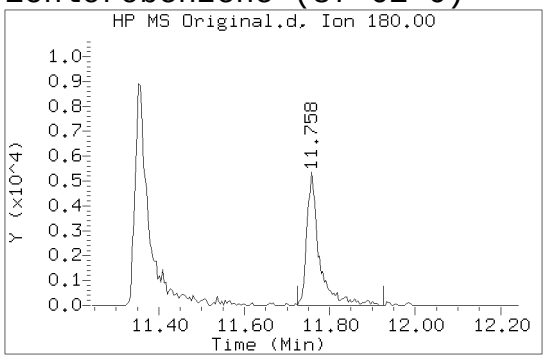
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D
Inj Date : 19-JUL-2022 13:11
InstruID : voa6.i
LabSampID : VSTD005

1,2,3-Trichlorobenzene (87-61-6)

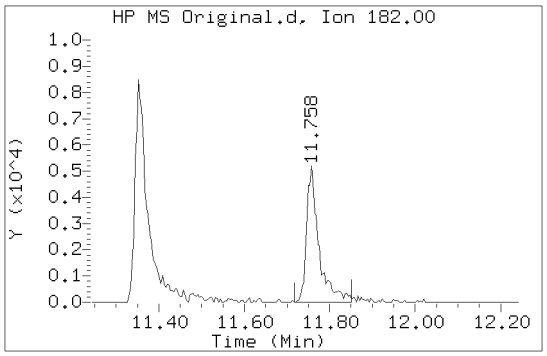
BEFORE

MASS
77
AREA
53750
HEIGHT
21214
25-Jul-2022
09:00
linh
pham



BEFORE

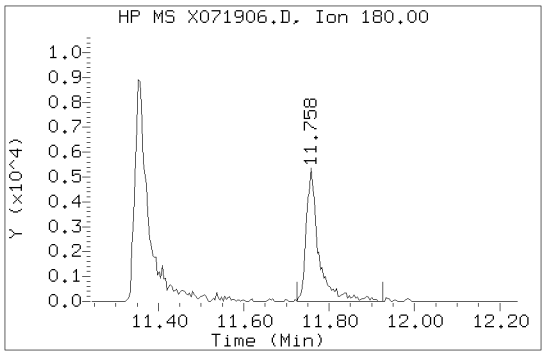
MASS
97
AREA
12044
HEIGHT
4815
25-Jul-2022
09:00
linh
pham



Reason Code:

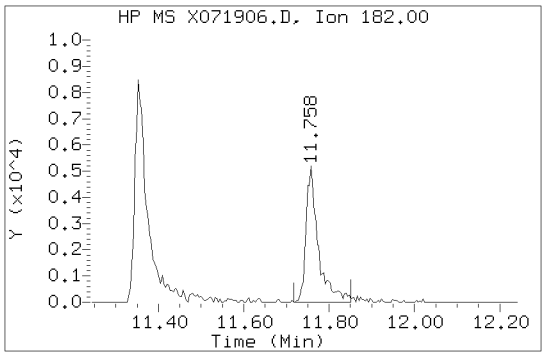
AFTER

MASS
180
AREA
10995
HEIGHT
5351
19-Aug-2022
10:59
linh
pham



AFTER

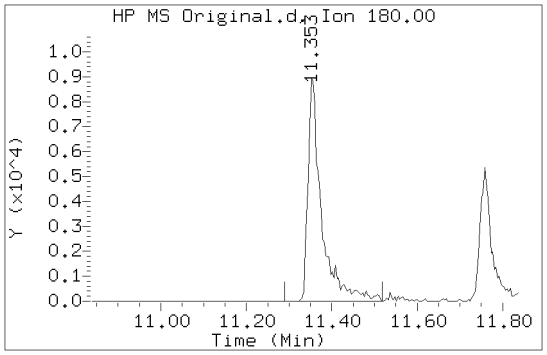
MASS
182
AREA
10507
HEIGHT
5207
19-Aug-2022
10:59
linh
pham



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

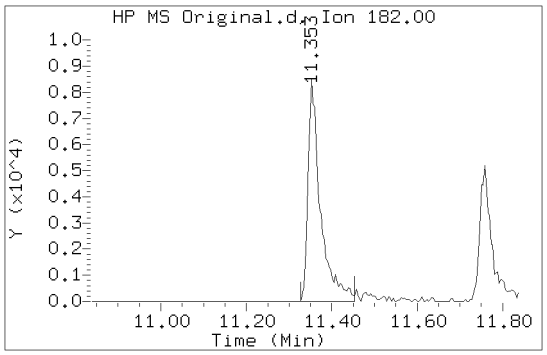
BEFORE

MASS
93
AREA
22085
HEIGHT
11803
25-Jul-2022
09:00
linh
pham



BEFORE

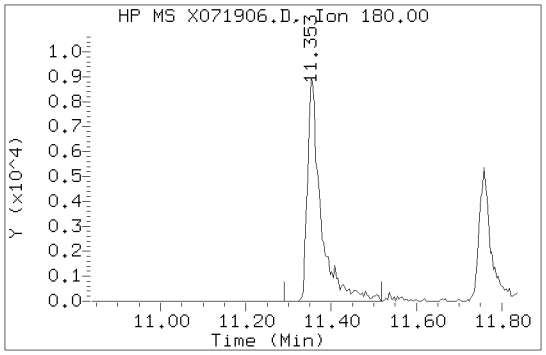
MASS
95
AREA
18493
HEIGHT
9552
25-Jul-2022
09:00
linh
pham



Reason Code:

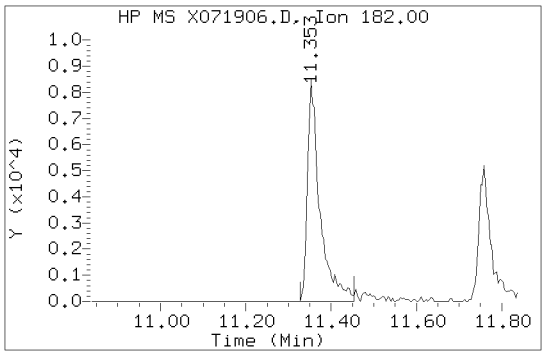
AFTER

MASS
180
AREA
19881
HEIGHT
8916
19-Aug-2022
10:59
linh
pham



AFTER

MASS
182
AREA
17243
HEIGHT
8485
19-Aug-2022
10:59
linh
pham



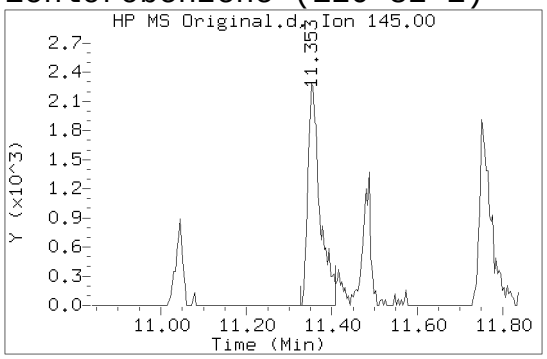
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D
Inj Date : 19-JUL-2022 13:11
InstruID : voa6.i
LabSampID : VSTD005

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

Reason Code:

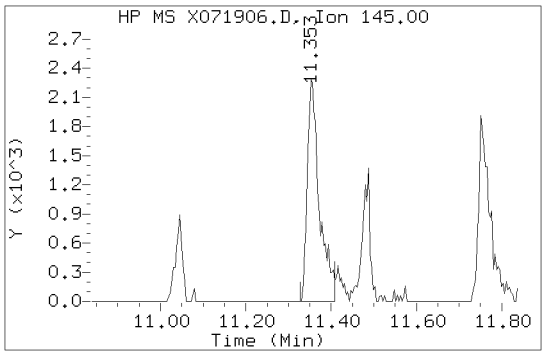
BEFORE

MASS
174
AREA
26074
HEIGHT
14180
25-Jul-2022
09:00
linh
pham



AFTER

MASS
145
AREA
4517
HEIGHT
2282
19-Aug-2022
10:59
linh
pham

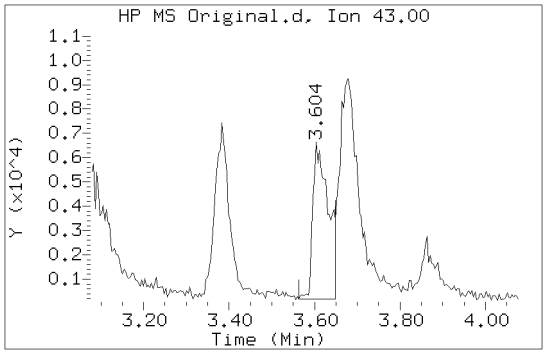


2-Butanone (78-93-3)

Reason Code:

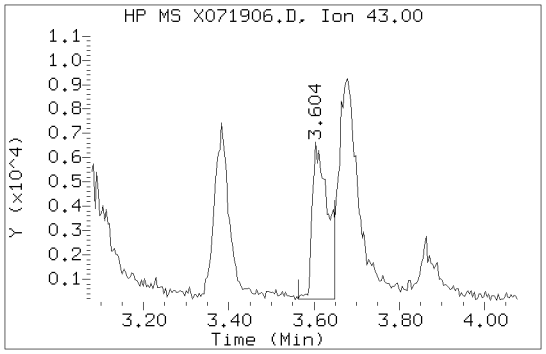
BEFORE

MASS
83
AREA
31785
HEIGHT
21915
25-Jul-2022
09:00
linh
pham



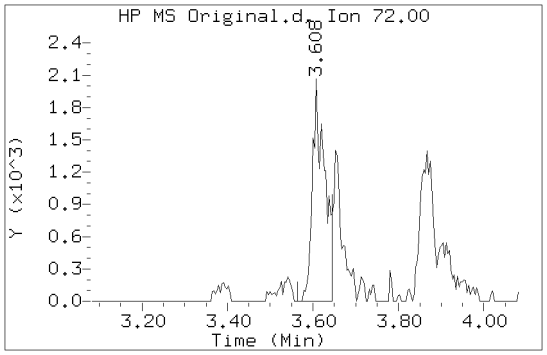
AFTER

MASS
43
AREA
16349
HEIGHT
6447
19-Aug-2022
10:59
linh
pham



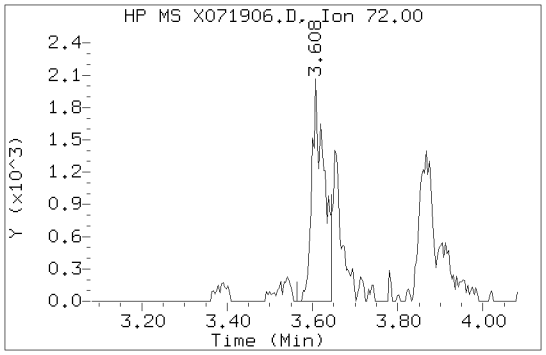
BEFORE

MASS
131
AREA
3365
HEIGHT
2107
25-Jul-2022
09:00
linh
pham



AFTER

MASS
72
AREA
4154
HEIGHT
2067
19-Aug-2022
10:59
linh
pham

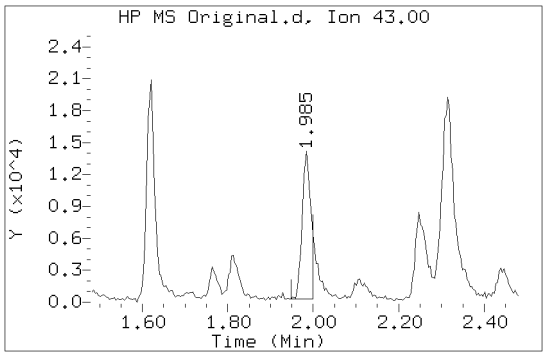


Acetone (67-64-1)

Reason Code:

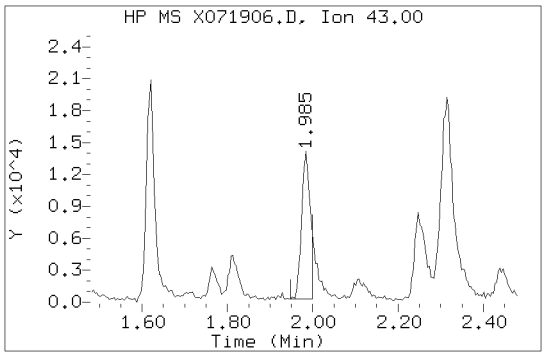
BEFORE

MASS
62
AREA
39892
HEIGHT
32857
25-Jul-2022
09:00
linh
pham



AFTER

MASS
43
AREA
20021
HEIGHT
13907
19-Aug-2022
10:59
linh
pham



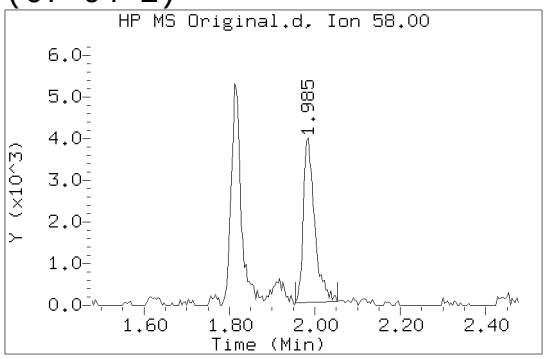
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D
Inj Date : 19-JUL-2022 13:11
InstruID : voa6.i
LabSampID : VSTD005

Acetone (67-64-1)

Reason Code:

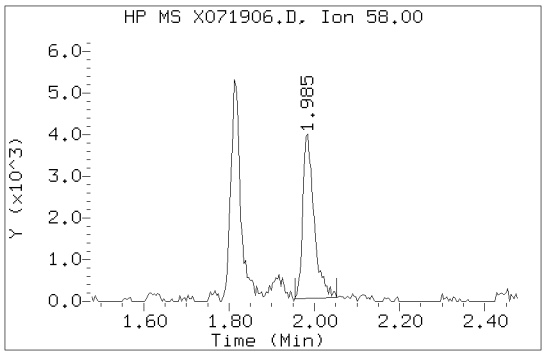
BEFORE

MASS
64
AREA
14366
HEIGHT
11106
25-Jul-2022
09:00
linh
pham



AFTER

MASS
58
AREA
7398
HEIGHT
3945
19-Aug-2022
10:59
linh
pham

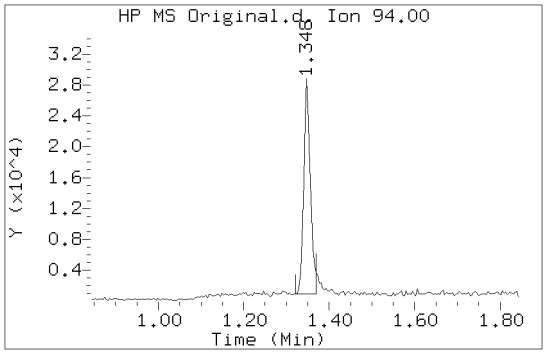


Bromomethane (74-83-9)

Reason Code:

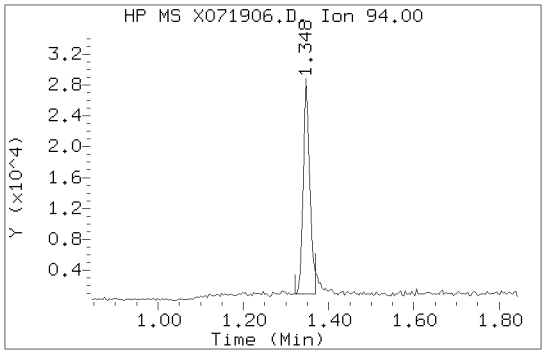
BEFORE

MASS
83
AREA
63536
HEIGHT
25192
25-Jul-2022
09:00
linh
pham



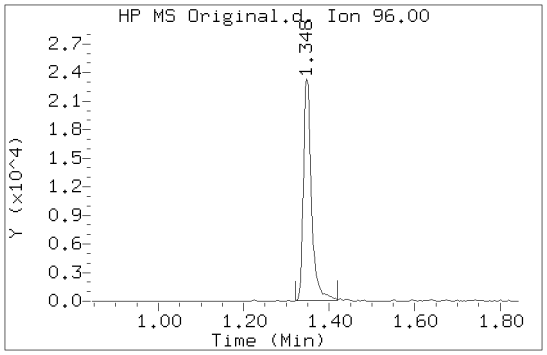
AFTER

MASS
94
AREA
30861
HEIGHT
27868
19-Aug-2022
10:59
linh
pham



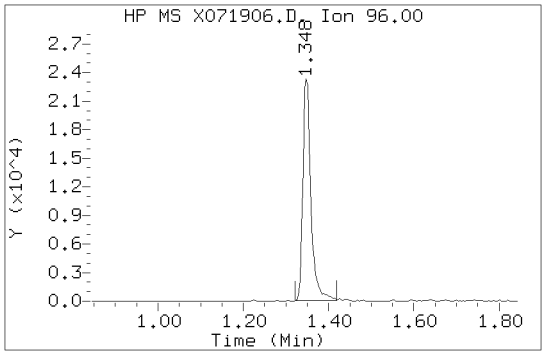
BEFORE

MASS
85
AREA
39697
HEIGHT
16538
25-Jul-2022
09:00
linh
pham



AFTER

MASS
96
AREA
31710
HEIGHT
23276
19-Aug-2022
10:59
linh
pham

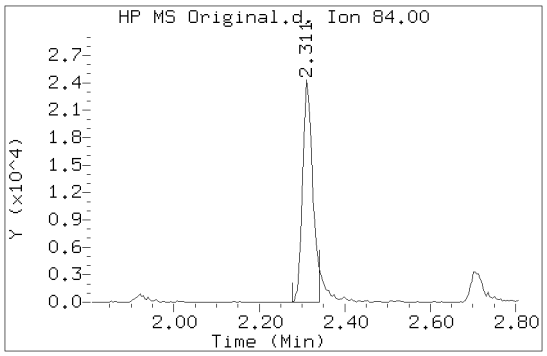


Methylene Chloride (75-09-2)

Reason Code:

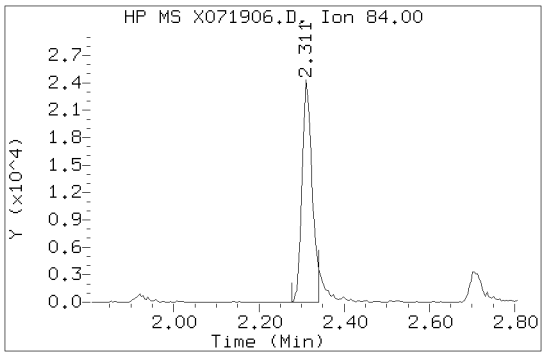
BEFORE

MASS
91
AREA
111787
HEIGHT
72323
25-Jul-2022
09:00
linh
pham



AFTER

MASS
84
AREA
40888
HEIGHT
24320
19-Aug-2022
10:59
linh
pham

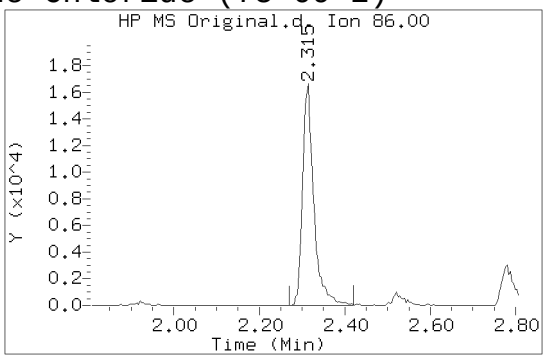


Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D
Inj Date : 19-JUL-2022 13:11
InstruID : voa6.i
LabSampID : VSTD005

Methylene Chloride (75-09-2)

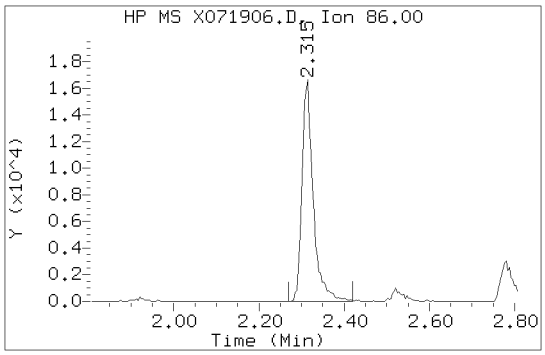
BEFORE

MASS
126
AREA
36519
HEIGHT
23180
25-Jul-2022
09:00
linh
pham



AFTER

MASS
86
AREA
31050
HEIGHT
16648
19-Aug-2022
10:59
linh
pham

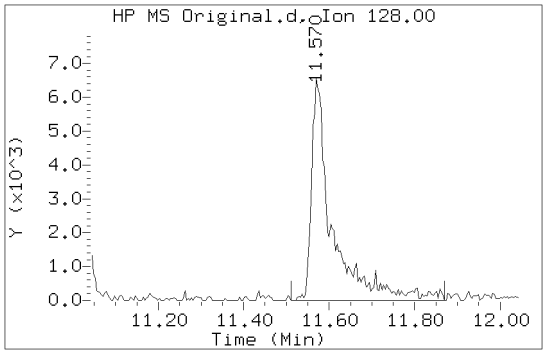


Reason Code:

Naphthalene (91-20-3)

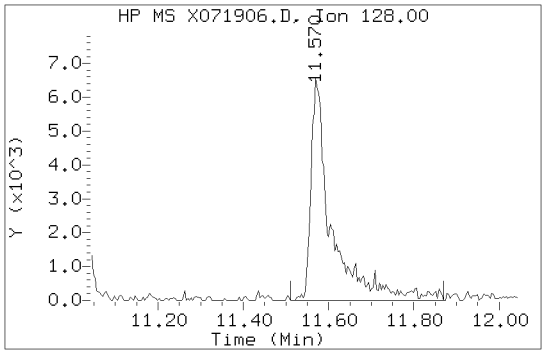
BEFORE

MASS
105
AREA
133745
HEIGHT
99939
25-Jul-2022
09:00
linh
pham



AFTER

MASS
128
AREA
21849
HEIGHT
6546
19-Aug-2022
10:59
linh
pham

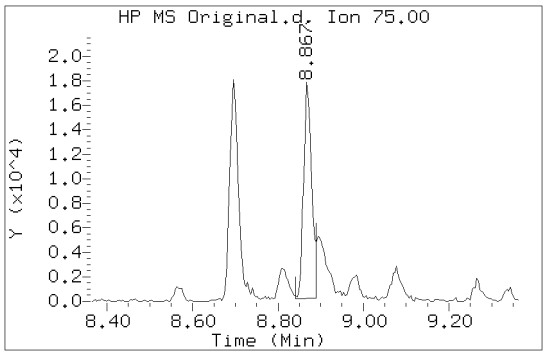


Reason Code:

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

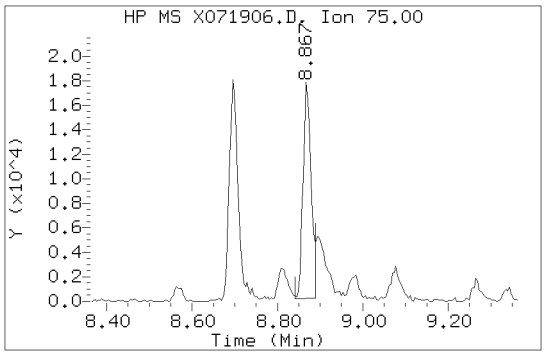
BEFORE

MASS
180
AREA
10995
HEIGHT
5351
25-Jul-2022
09:00
linh
pham



AFTER

MASS
75
AREA
24185
HEIGHT
17647
19-Aug-2022
10:59
linh
pham



Reason Code:

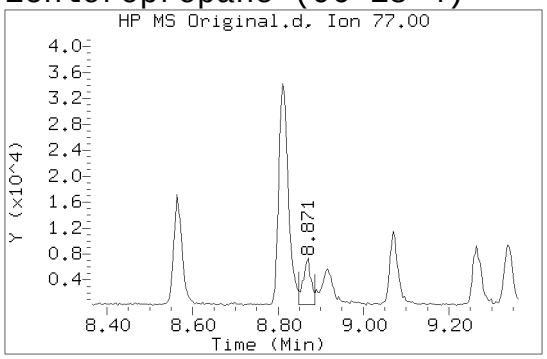
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D
Inj Date : 19-JUL-2022 13:11
InstruID : voa6.i
LabSampID : VSTD005

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

Reason Code:

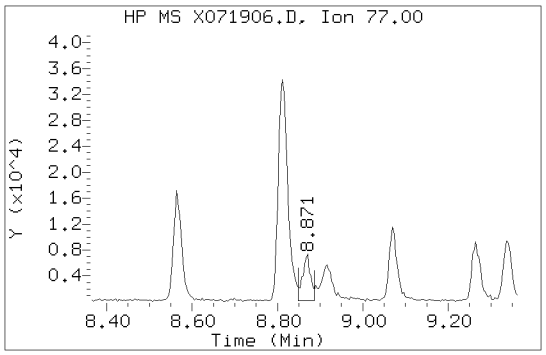
BEFORE

MASS
182
AREA
10507
HEIGHT
5207
25-Jul-2022
09:00
linh
pham



AFTER

MASS
77
AREA
9709
HEIGHT
7172
19-Aug-2022
10:59
linh
pham

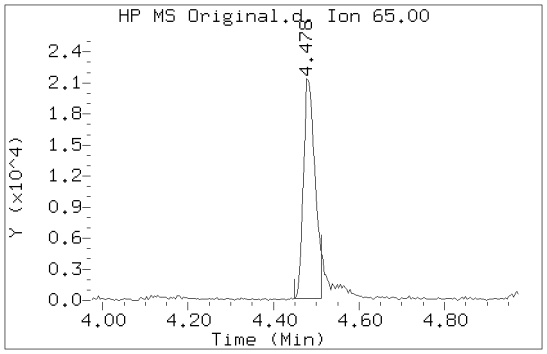


1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

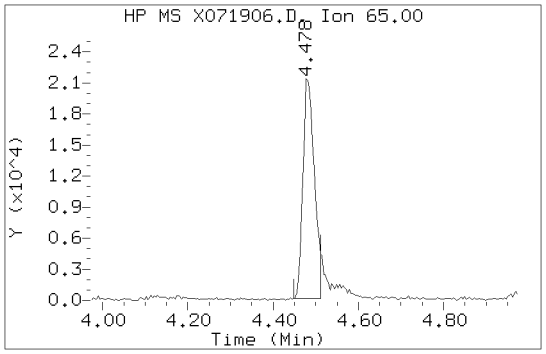
BEFORE

MASS
113
AREA
40606
HEIGHT
18160
25-Jul-2022
09:00
linh
pham



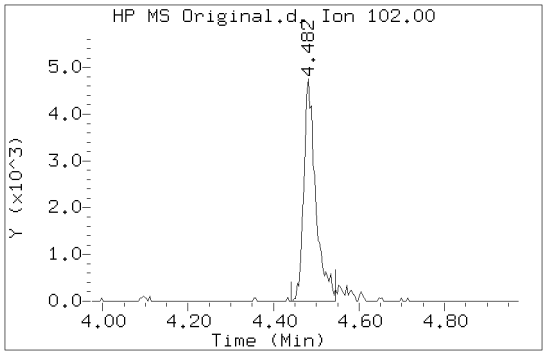
AFTER

MASS
65
AREA
40441
HEIGHT
21216
19-Aug-2022
10:59
linh
pham



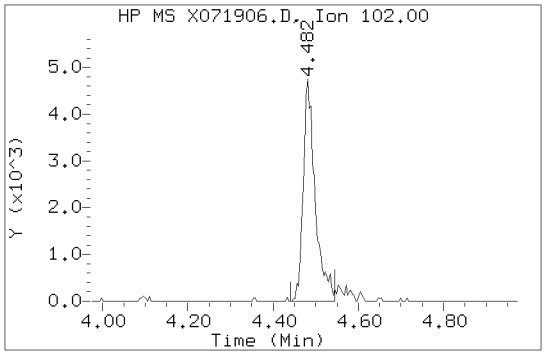
BEFORE

MASS
111
AREA
43698
HEIGHT
16952
25-Jul-2022
09:00
linh
pham



AFTER

MASS
102
AREA
9413
HEIGHT
4753
19-Aug-2022
10:59
linh
pham

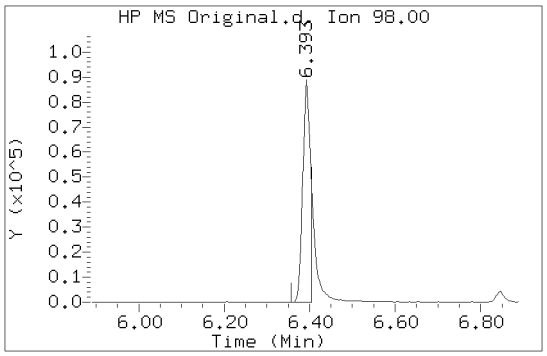


Toluene-d8 (2037-26-5)

Reason Code:

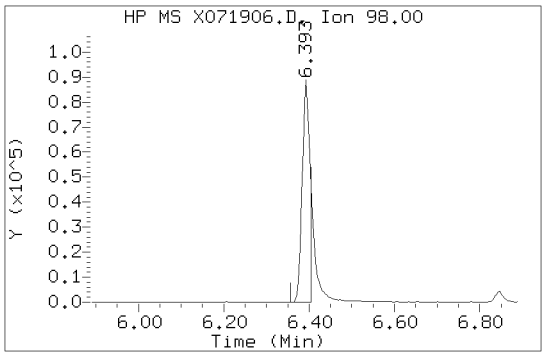
BEFORE

MASS
65
AREA
40441
HEIGHT
21216
25-Jul-2022
09:00
linh
pham



AFTER

MASS
98
AREA
110927
HEIGHT
88856
19-Aug-2022
10:59
linh
pham



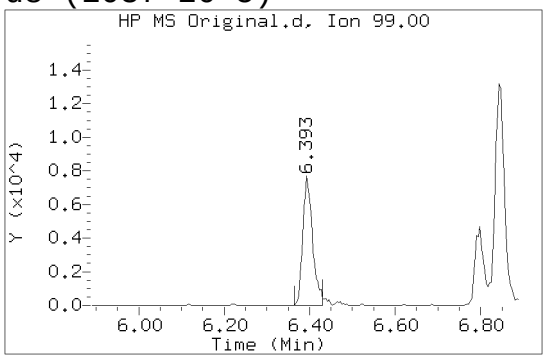
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D
Inj Date : 19-JUL-2022 13:11
InstruID : voa6.i
LabSampID : VSTD005

Toluene-d8 (2037-26-5)

Reason Code:

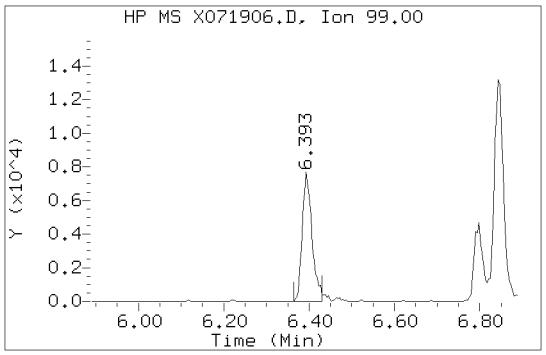
BEFORE

MASS
102
AREA
9413
HEIGHT
4753
25-Jul-2022
09:00
linh
pham



AFTER

MASS
99
AREA
12492
HEIGHT
7694
19-Aug-2022
10:59
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071907.D Page 1
Report Date: 19-Aug-2022 11:00

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071907.D
Lab Smp Id: VSTD020 Client Smp ID: VSTD020
Inj Date : 19-JUL-2022 13:32
Operator : PC Inst ID: voa6.i
Smp Info : VSTD020;VSTD020;1;6;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\8260W.m
Meth Date : 19-Aug-2022 11:00 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:11 Cal File: X071906.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	739593	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	1081697	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	997162	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	485715	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	142500	20.0000	19.98
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	154444	20.0000	20.00
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	500293	20.0000	20.10
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	180100	20.0000	19.74
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	141960	20.0000	20.26
31 1,1,1-Trichloroethane	97	4.084	4.084	(0.976)	214055	20.0000	20.40
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	134536	20.0000	19.72
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	101856	20.0000	19.86
22 1,1-Dichloroethane	63	2.929	2.929	(0.700)	227348	20.0000	19.96
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	125514	20.0000	20.33
32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	176949	20.0000	20.26
93 1,2,3-Trichlorobenzene	180	11.746	11.746	(1.215)	47433	20.0000	18.78
71 1,2,3-Trichloropropane	75	8.867	8.867	(0.917)	102755	20.0000	19.53(M)
90 1,2,4-Trichlorobenzene	180	11.341	11.341	(1.173)	87805	20.0000	19.84
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	483222	20.0000	20.74
89 1,2-Dibromo-3-Chloropropane	155	10.663	10.663	(1.103)	9850	20.0000	19.90

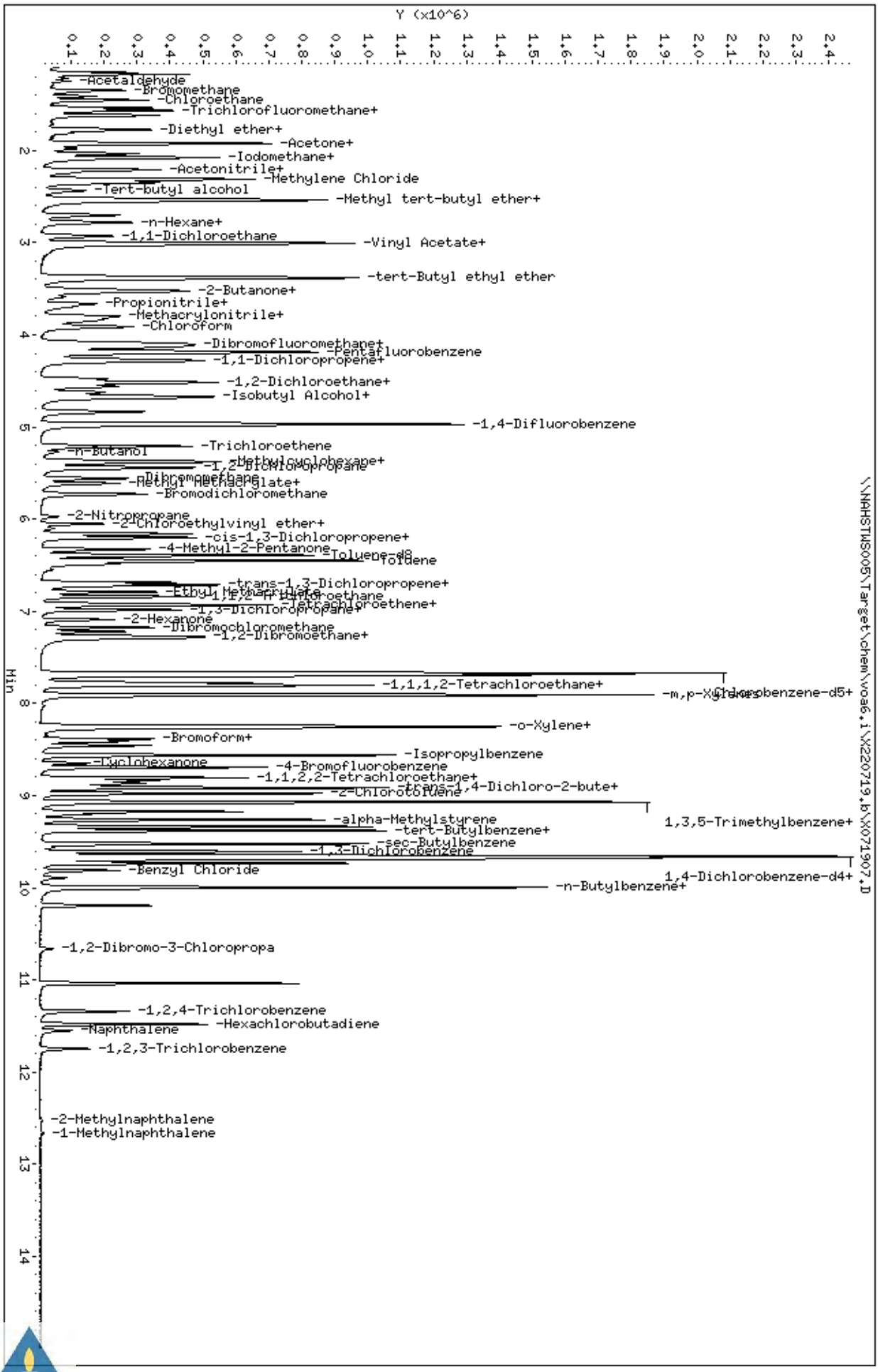
57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	131728	20.0000	20.26
88	1,2-Dichlorobenzene	146	9.995	9.995 (1.034)	246991	20.0000	20.32

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071907.D Page 2
Report Date: 19-Aug-2022 11:00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	196212	20.0000	20.68
42	1,2-Dichloropropane	63	5.441	5.441	(1.095)	132233	20.0000	19.86
75	1,3,5-Trimethylbenzene	105	9.070	9.070	(0.938)	493153	20.0000	20.90
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	276344	20.0000	20.50
54	1,3-Dichloropropane	76	6.985	6.985	(0.911)	210322	20.0000	20.16
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	290428	20.0000	20.29
26	2,2-Dichloropropane	77	3.518	3.518	(0.841)	205808	20.0000	20.20
24	2-Butanone	43	3.589	3.589	(0.858)	70958	40.0000	38.24
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	415686	20.0000	19.96
52	2-Hexanone	43	7.090	7.090	(0.924)	128291	40.0000	40.91
77	4-Chlorotoluene	91	9.073	9.073	(0.939)	475945	20.0000	20.48
82	p-Isopropyltoluene	119	9.651	9.651	(0.998)	506622	20.0000	21.38
45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	195937	40.0000	40.32
10	Acetone	43	1.981	1.981	(0.473)	78540	40.0000	47.44
37	Benzene	78	4.519	4.519	(0.909)	513182	20.0000	20.02
74	Bromobenzene	156	8.807	8.807	(0.911)	169138	20.0000	20.39
29	Bromochloromethane	128	3.799	3.799	(0.908)	81206	20.0000	19.47
39	Bromodichloromethane	83	5.730	5.730	(1.153)	185723	20.0000	20.33
66	Bromoform	173	8.414	8.414	(1.097)	88254	20.0000	19.03
6	Bromomethane	94	1.347	1.347	(0.322)	109055	20.0000	20.80
19	Carbon Disulfide	76	2.078	2.078	(0.497)	658312	40.0000	40.27
34	Carbon Tetrachloride	117	4.268	4.268	(0.859)	185192	20.0000	19.84(H)
59	Chlorobenzene	112	7.698	7.698	(1.003)	385649	20.0000	20.39
7	Chloroethane	64	1.411	1.411	(0.337)	95266	20.0000	20.08
28	Chloroform	83	3.911	3.911	(0.935)	248749	20.0000	19.93
3	Chloromethane	50	1.085	1.085	(0.259)	141389	20.0000	20.67
27	cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	147915	20.0000	20.11
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	227076	20.0000	20.23
55	Dibromochloromethane	129	7.176	7.176	(0.935)	148385	20.0000	20.04
44	Dibromomethane	93	5.557	5.557	(1.118)	88603	20.0000	19.83
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	148427	20.0000	20.96
61	Ethylbenzene	106	7.803	7.803	(1.017)	200036	20.0000	20.94
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	83822	20.0000	20.51
67	Isopropylbenzene	105	8.563	8.563	(1.116)	604478	20.0000	21.04
62	m,p-Xylenes	106	7.907	7.907	(1.031)	502559	40.0000	42.30
17	Methylene Chloride	84	2.311	2.311	(0.552)	145583	20.0000	20.90
87	n-Butylbenzene	91	9.995	9.995	(1.034)	421870	20.0000	21.42
73	n-Propylbenzene	91	8.912	8.912	(0.922)	692792	20.0000	21.62
92	Naphthalene	128	11.551	11.551	(1.195)	88822	20.0000	17.94
63	o-Xylene	106	8.245	8.245	(1.075)	237188	20.0000	20.53
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	579666	20.0000	21.17
64	Styrene	104	8.264	8.264	(1.077)	394677	20.0000	20.75
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	424647	20.0000	21.23
56	Tetrachloroethene	164	6.929	6.929	(0.903)	136299	20.0000	21.07
50	Toluene	91	6.449	6.449	(0.841)	569133	20.0000	20.30
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.606)	127901	20.0000	19.65
51	trans-1,3-Dichloropropene	75	6.685	6.685	(1.346)	187591	20.0000	20.18
38	Trichloroethene	130	5.212	5.212	(1.049)	156440	20.0000	20.60
8	Trichlorofluoromethane	101	1.569	1.569	(0.375)	242471	20.0000	20.81
5	Vinyl Chloride	62	1.149	1.149	(0.275)	156334	20.0000	20.15

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071907.D
Date : 19-JUL-2022 13:32
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

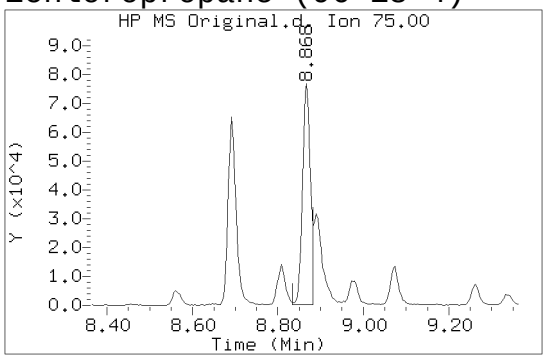
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071907.D
Inj Date : 19-JUL-2022 13:32
InstruID : voa6.i
LabSampID : VSTD020

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

Reason Code:

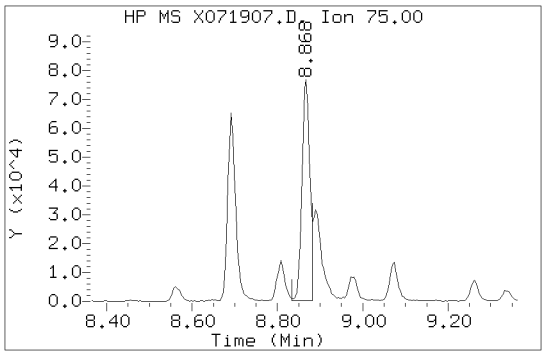
BEFORE

MASS
180
AREA
47433
HEIGHT
30757
25-Jul-2022
09:00
linh
pham



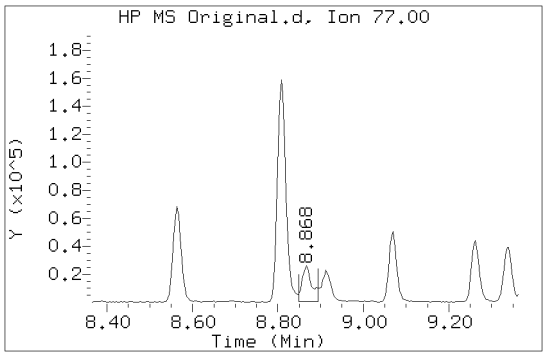
AFTER

MASS
75
AREA
102755
HEIGHT
76577
19-Aug-2022
10:59
linh
pham



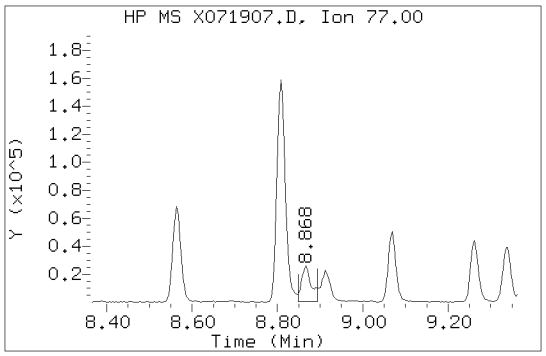
BEFORE

MASS
182
AREA
47169
HEIGHT
29608
25-Jul-2022
09:00
linh
pham



AFTER

MASS
77
AREA
42603
HEIGHT
25788
19-Aug-2022
10:59
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071908.D Page 1
Report Date: 19-Aug-2022 11:00

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071908.D
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 19-JUL-2022 13:53
Operator : PC Inst ID: voa6.i
Smp Info : VSTD050;VSTD050;1;7;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\8260W.m
Meth Date : 19-Aug-2022 11:00 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:32 Cal File: X071907.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.185	(1.000)	734958	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	1085873	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	1019317	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	512315	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	346983	50.0000	50.03
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	382235	50.0000	50.32
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1240134	50.0000	48.76
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	453323	50.0000	49.83
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	355310	50.0000	49.61
31 1,1,1-Trichloroethane	97	4.088	4.088	(0.977)	502522	50.0000	48.19
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	341695	50.0000	47.48
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	257236	50.0000	49.08
22 1,1-Dichloroethane	63	2.926	2.926	(0.699)	554513	50.0000	49.00
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	288416	50.0000	47.01
32 1,1-Dichloropropene	75	4.283	4.283	(0.862)	414434	50.0000	47.28
93 1,2,3-Trichlorobenzene	180	11.746	11.746	(1.216)	121908	50.0000	45.77
71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	253459	50.0000	45.68
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	221394	50.0000	47.44
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	1162230	50.0000	47.29
89 1,2-Dibromo-3-Chloropropane	155	10.659	10.659	(1.103)	25520	50.0000	47.15

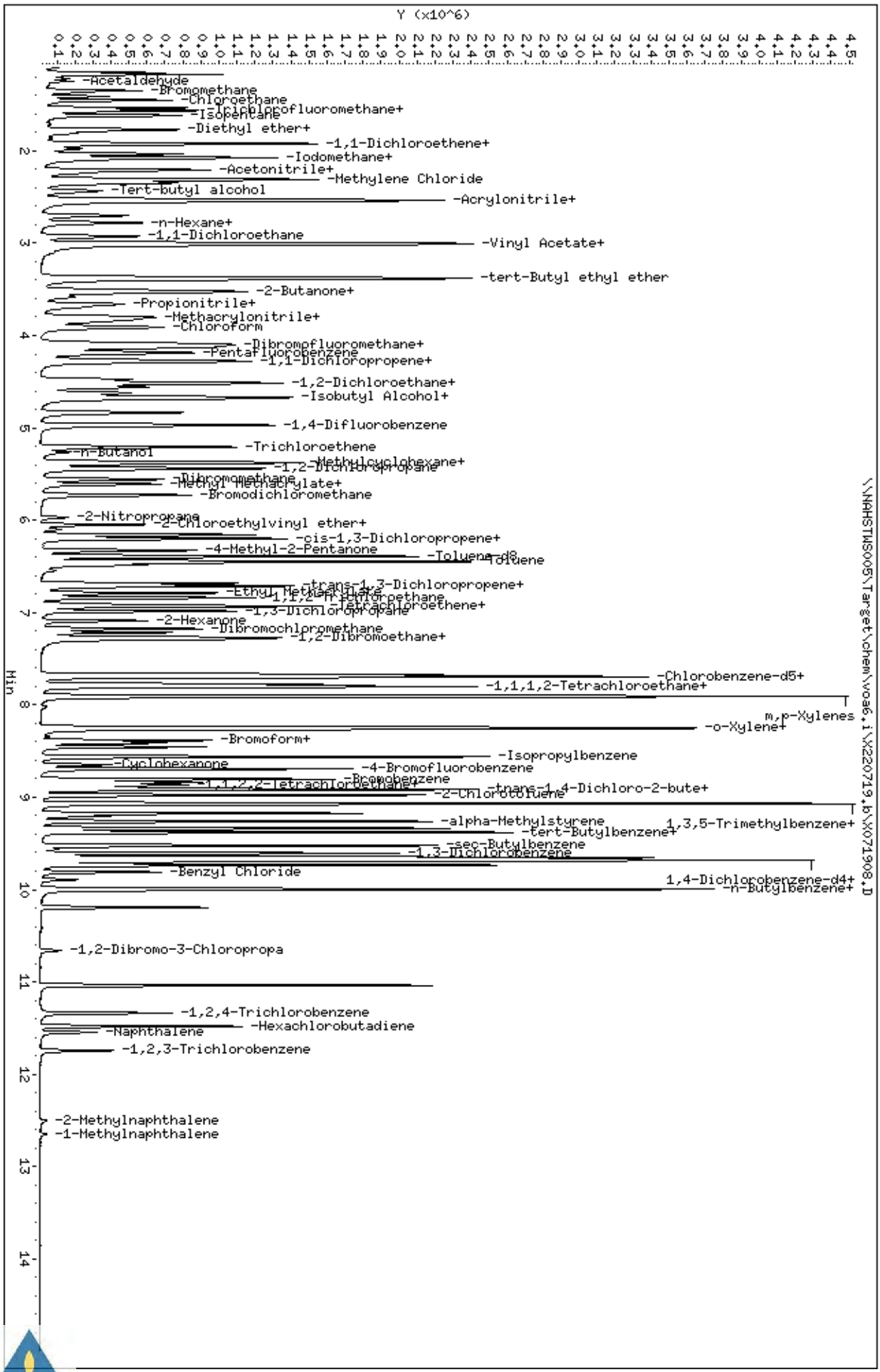
57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	334944	50.0000	50.40
88	1,2-Dichlorobenzene	146	9.996	9.996 (1.035)	617625	50.0000	48.17

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071908.D Page 2
Report Date: 19-Aug-2022 11:00

		QUANT SIG					AMOUNTS CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	468638	50.0000	49.20
42	1,2-Dichloropropane	63	5.437	5.437	(1.094)	329416	50.0000	49.28
75	1,3,5-Trimethylbenzene	105	9.070	9.070	(0.939)	1153705	50.0000	46.36
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	684242	50.0000	48.13
54	1,3-Dichloropropane	76	6.982	6.982	(0.910)	527266	50.0000	49.45
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	709045	50.0000	46.98
26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	492680	50.0000	49.02
24	2-Butanone	43	3.585	3.585	(0.857)	193554	100.000	104.97
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	990675	50.0000	45.11
52	2-Hexanone	43	7.090	7.090	(0.924)	323452	100.000	100.91
77	4-Chlorotoluene	91	9.070	9.070	(0.939)	1144586	50.0000	46.69
82	p-Isopropyltoluene	119	9.651	9.651	(0.999)	1165718	50.0000	46.64
45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	498897	100.000	100.44
10	Acetone	43	1.977	1.977	(0.472)	169593	100.000	110.14(M)
37	Benzene	78	4.515	4.515	(0.909)	1259556	50.0000	48.95
74	Bromobenzene	156	8.807	8.807	(0.912)	418666	50.0000	47.85
29	Bromochloromethane	128	3.799	3.799	(0.908)	201063	50.0000	48.52
39	Bromodichloromethane	83	5.730	5.730	(1.153)	463273	50.0000	50.51
66	Bromoform	173	8.410	8.410	(1.096)	238426	50.0000	48.29
6	Bromomethane	94	1.347	1.347	(0.322)	257164	50.0000	51.25
19	Carbon Disulfide	76	2.075	2.075	(0.496)	1581472	100.000	97.36
34	Carbon Tetrachloride	117	4.268	4.268	(0.859)	424773	50.0000	45.34(H)
59	Chlorobenzene	112	7.698	7.698	(1.003)	943881	50.0000	48.83
7	Chloroethane	64	1.407	1.407	(0.336)	230467	50.0000	48.88
28	Chloroform	83	3.908	3.908	(0.934)	615600	50.0000	49.65
3	Chloromethane	50	1.085	1.085	(0.259)	337031	50.0000	49.52
27	cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	373987	50.0000	51.18
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	580323	50.0000	51.51
55	Dibromochloromethane	129	7.177	7.177	(0.936)	378662	50.0000	50.05
44	Dibromomethane	93	5.557	5.557	(1.118)	223928	50.0000	49.93
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	341283	50.0000	48.73
61	Ethylbenzene	106	7.803	7.803	(1.017)	467536	50.0000	47.88
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	184987	50.0000	42.92
67	Isopropylbenzene	105	8.564	8.564	(1.116)	1383160	50.0000	47.10
62	m,p-Xylenes	106	7.908	7.908	(1.031)	1179120	100.000	97.09
17	Methylene Chloride	84	2.311	2.311	(0.552)	346955	50.0000	51.36
87	n-Butylbenzene	91	9.996	9.996	(1.035)	990308	50.0000	47.69
73	n-Propylbenzene	91	8.916	8.916	(0.923)	1583552	50.0000	46.85
92	Naphthalene	128	11.548	11.548	(1.195)	238116	50.0000	45.61
63	o-Xylene	106	8.241	8.241	(1.074)	567732	50.0000	48.08
81	sec-Butylbenzene	105	9.523	9.523	(0.986)	1311547	50.0000	45.41
64	Styrene	104	8.264	8.264	(1.077)	976088	50.0000	50.20
78	tert-Butylbenzene	119	9.340	9.340	(0.967)	962419	50.0000	45.63
56	Tetrachloroethene	164	6.929	6.929	(0.903)	305207	50.0000	46.17
50	Toluene	91	6.449	6.449	(0.841)	1377205	50.0000	48.06
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.606)	319350	50.0000	49.39
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.345)	493101	50.0000	52.85
38	Trichloroethene	130	5.209	5.209	(1.048)	369860	50.0000	48.52
8	Trichlorofluoromethane	101	1.565	1.565	(0.374)	545635	50.0000	47.14
5	Vinyl Chloride	62	1.149	1.149	(0.275)	370791	50.0000	48.11

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071908.D
Date : 19-JUL-2022 13:53
Client ID: VSTD050
Sample Info: VSTD050;VSTD050;1;7;
Purge Volume: 5.0
Column phase: DB624

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

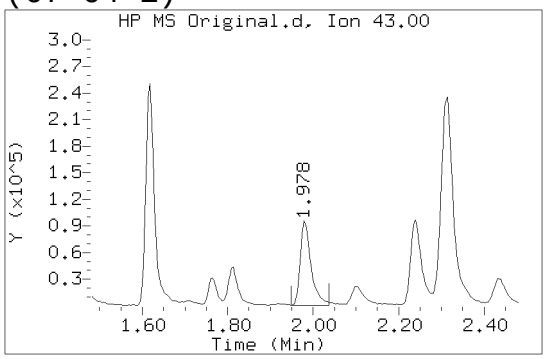
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071908.D
Inj Date : 19-JUL-2022 13:53
InstruID : voa6.i
LabSampID : VSTD050

Acetone (67-64-1)

Reason Code:

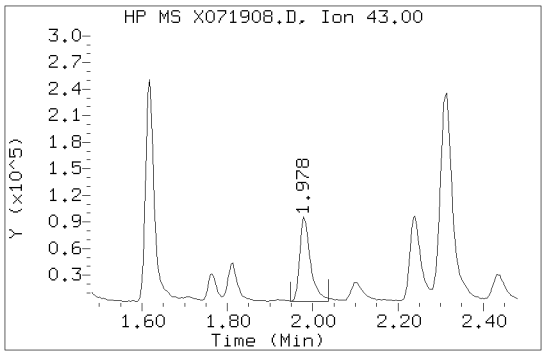
BEFORE

MASS
62
AREA
370791
HEIGHT
328896
25-Jul-2022
09:00
linh
pham



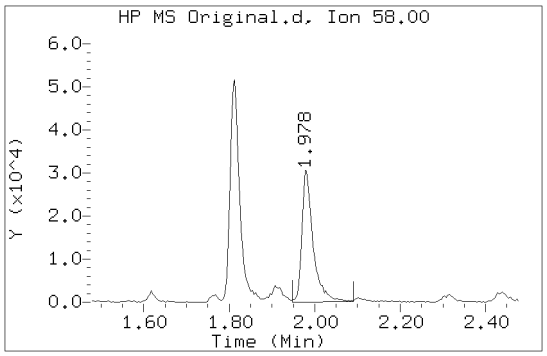
AFTER

MASS
43
AREA
169593
HEIGHT
95333
19-Aug-2022
10:59
linh
pham



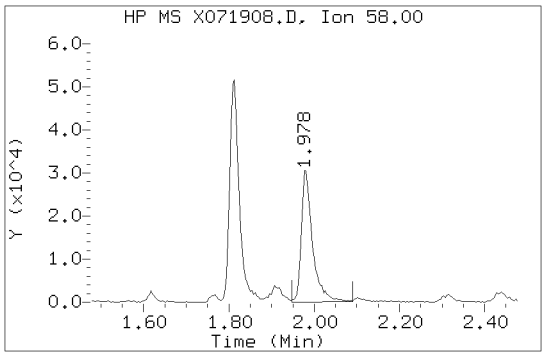
BEFORE

MASS
64
AREA
122861
HEIGHT
107460
25-Jul-2022
09:00
linh
pham



AFTER

MASS
58
AREA
56937
HEIGHT
30574
19-Aug-2022
10:59
linh
pham



ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071909.D
Lab Smp Id: VSTD100 Client Smp ID: VSTD100
Inj Date : 19-JUL-2022 14:14
Operator : PC Inst ID: voa6.i
Smp Info : VSTD100;VSTD100;1;8;
Misc Info : HS22052000V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\8260W.m
Meth Date : 19-Aug-2022 11:00 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

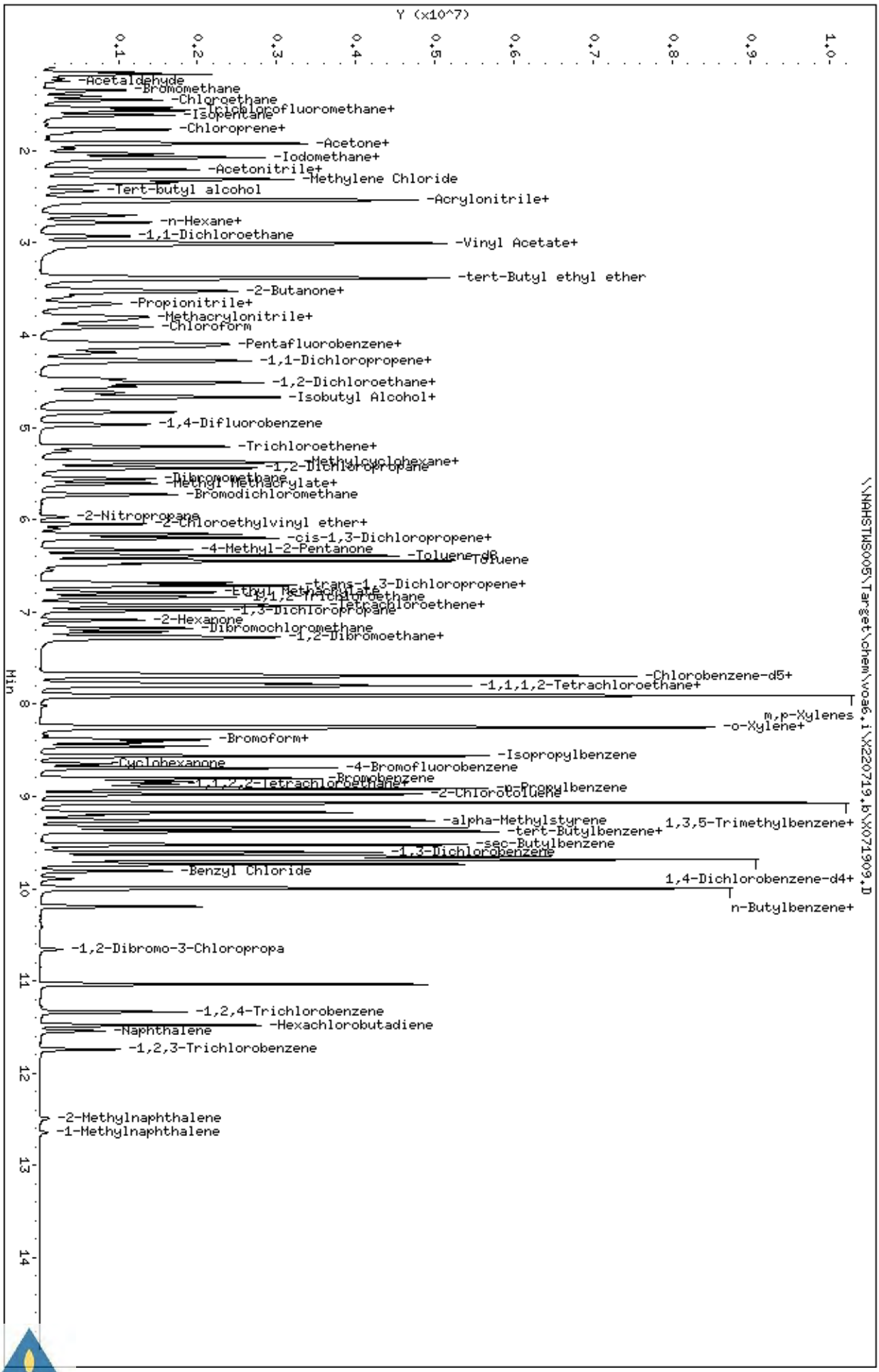
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	776308	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	1154877	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	1081115	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	547857	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	746005	100.000	102.58
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	809230	100.000	101.19
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	2649228	100.000	98.21
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	977060	100.000	102.12
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	765283	100.000	100.75
31 1,1,1-Trichloroethane	97	4.087	4.087	(0.977)	1106771	100.000	100.49
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	730488	100.000	94.93
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	543440	100.000	97.76
22 1,1-Dichloroethane	63	2.925	2.925	(0.699)	1163915	100.000	97.38
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	624202	100.000	96.32
32 1,1-Dichloropropene	75	4.282	4.282	(0.862)	942439	100.000	101.11
93 1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	284991	100.000	100.06
71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	543511	100.000	91.61
90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	522833	100.000	104.77
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	2572257	100.000	97.88
89 1,2-Dibromo-3-Chloropropane	155	10.659	10.659	(1.103)	61674	100.000	100.54

57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	703523	100.000	99.81
88	1,2-Dichlorobenzene	146	9.992	9.992 (1.034)	1339459	100.000	97.71

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	980664	100.000	96.82
42	1,2-Dichloropropane	63	5.441	5.441	(1.095)	691249	100.000	97.24
75	1,3,5-Trimethylbenzene	105	9.069	9.069	(0.938)	2590896	100.000	97.36
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	1499323	100.000	98.63
54	1,3-Dichloropropane	76	6.981	6.981	(0.910)	1108876	100.000	98.07
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	1533271	100.000	95.01
26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	1068902	100.000	100.95
24	2-Butanone	43	3.581	3.581	(0.856)	410442	200.000	210.75(A)
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	2164299	100.000	92.16
52	2-Hexanone	43	7.086	7.086	(0.924)	701293	200.000	206.29(A)
77	4-Chlorotoluene	91	9.069	9.069	(0.938)	2500348	100.000	95.39
82	p-Isopropyltoluene	119	9.650	9.650	(0.998)	2680829	100.000	100.31
45	4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	1056968	200.000	200.64(A)
10	Acetone	43	1.977	1.977	(0.472)	331360	200.000	208.83(A)
37	Benzene	78	4.515	4.515	(0.909)	2647487	100.000	96.74
74	Bromobenzene	156	8.807	8.807	(0.911)	908365	100.000	97.08
29	Bromochloromethane	128	3.799	3.799	(0.908)	418744	100.000	95.66
39	Bromodichloromethane	83	5.726	5.726	(1.152)	974443	100.000	99.90
66	Bromoform	173	8.410	8.410	(1.096)	516716	100.000	97.39
6	Bromomethane	94	1.343	1.343	(0.321)	532992	100.000	101.88
19	Carbon Disulfide	76	2.074	2.074	(0.496)	3384413	200.000	197.27
34	Carbon Tetrachloride	117	4.267	4.267	(0.859)	960811	100.000	96.44(H)
59	Chlorobenzene	112	7.694	7.694	(1.003)	2022869	100.000	98.68
7	Chloroethane	64	1.407	1.407	(0.336)	481997	100.000	96.80
28	Chloroform	83	3.911	3.911	(0.935)	1279887	100.000	97.74
3	Chloromethane	50	1.085	1.085	(0.259)	703134	100.000	97.77
27	cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	776558	100.000	100.61
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	1219777	100.000	101.81
55	Dibromochloromethane	129	7.176	7.176	(0.936)	810497	100.000	101.00
44	Dibromomethane	93	5.553	5.553	(1.118)	469656	100.000	98.47
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	739202	100.000	100.12
61	Ethylbenzene	106	7.802	7.802	(1.017)	1028416	100.000	99.31
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	461667	100.000	100.18
67	Isopropylbenzene	105	8.563	8.563	(1.116)	3131111	100.000	100.54
62	m,p-Xylenes	106	7.907	7.907	(1.031)	2582956	200.000	200.53(A)
17	Methylene Chloride	84	2.311	2.311	(0.552)	702932	100.000	99.32
87	n-Butylbenzene	91	9.995	9.995	(1.034)	2308605	100.000	103.96
73	n-Propylbenzene	91	8.916	8.916	(0.922)	3608465	100.000	99.84
92	Naphthalene	128	11.543	11.543	(1.194)	569028	100.000	101.93
63	o-Xylene	106	8.245	8.245	(1.075)	1248477	100.000	99.70
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	3060744	100.000	99.10
64	Styrene	104	8.260	8.260	(1.077)	2141037	100.000	103.83
78	tert-Butylbenzene	119	9.339	9.339	(0.966)	2210374	100.000	98.00
56	Tetrachloroethene	164	6.929	6.929	(0.903)	678866	100.000	96.83
50	Toluene	91	6.449	6.449	(0.841)	2931075	100.000	96.44
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.606)	677550	100.000	99.21
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.345)	1049314	100.000	105.75
38	Trichloroethene	130	5.208	5.208	(1.048)	803862	100.000	99.16
8	Trichlorofluoromethane	101	1.565	1.565	(0.374)	1203433	100.000	98.44
5	Vinyl Chloride	62	1.149	1.149	(0.275)	778484	100.000	95.63

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.
H - Operator selected an alternate compound hit.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071909.D
Date : 19-JUL-2022 14:14
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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071909.D
Inj Date : 19-JUL-2022 14:14
InstruID : voa6.i
LabSampID : VSTD100

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071910.D Page 1
Report Date: 19-Aug-2022 11:00

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071910.D
Lab Smp Id: VSTD150 Client Smp ID: VSTD150
Inj Date : 19-JUL-2022 14:35
Operator : PC Inst ID: voa6.i
Smp Info : VSTD150;VSTD150;1;9;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\8260W.m
Meth Date : 19-Aug-2022 11:00 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 14:14 Cal File: X071909.D
Als bottle: 11 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

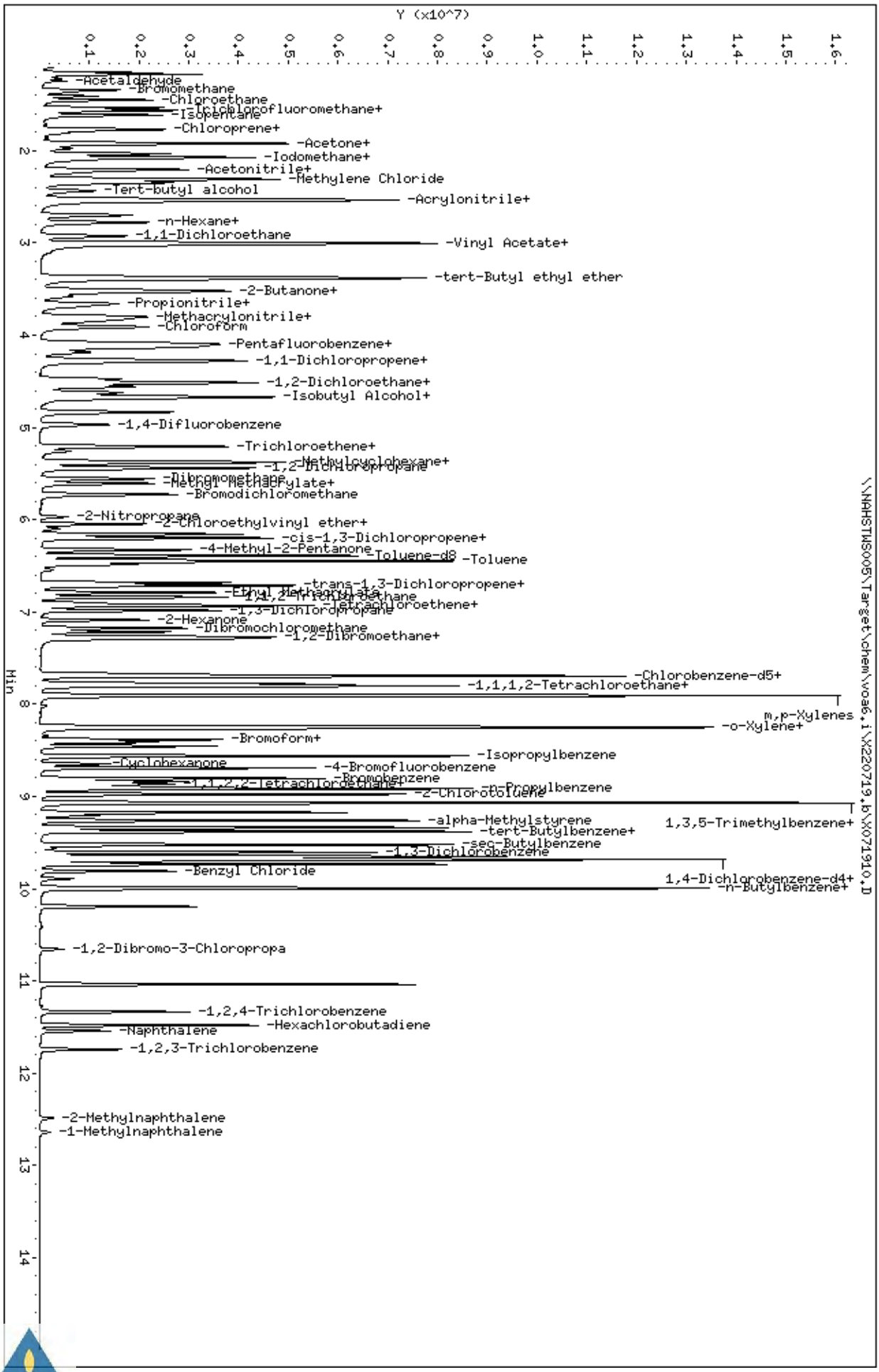
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	796235	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	1171801	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	1091116	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	549184	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	1092576	150.000	146.79
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	1212903	150.000	148.03
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	3736951	150.000	137.26
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	1441404	150.000	149.65
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	1195482	150.000	155.95
31 1,1,1-Trichloroethane	97	4.084	4.084	(0.976)	1707773	150.000	151.19
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	1135034	150.000	147.15
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	835768	150.000	148.97
22 1,1-Dichloroethane	63	2.926	2.926	(0.699)	1791548	150.000	146.15
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	943462	150.000	141.94
32 1,1-Dichloropropene	75	4.283	4.283	(0.862)	1444196	150.000	152.70
93 1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	478272	150.000	167.52
71 1,2,3-Trichloropropane	75	8.867	8.867	(0.917)	931744	150.000	156.67(M)
90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	848085	150.000	169.54
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	3955329	150.000	150.14
89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.102)	99187	150.000	151.45

57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	1092479	150.000	153.58
88	1,2-Dichlorobenzene	146	9.992	9.992 (1.034)	2079140	150.000	151.30

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	1482391	150.000	144.24
42	1,2-Dichloropropane	63	5.441	5.441	(1.095)	1070151	150.000	148.37
75	1,3,5-Trimethylbenzene	105	9.070	9.070	(0.938)	4008964	150.000	150.28
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	2311073	150.000	151.67
54	1,3-Dichloropropane	76	6.982	6.982	(0.910)	1715864	150.000	150.36
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	2360078	150.000	145.89
26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	1641201	150.000	151.24
24	2-Butanone	43	3.582	3.582	(0.856)	642842	300.000	321.82(A)
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	3314698	150.000	140.81
52	2-Hexanone	43	7.087	7.087	(0.924)	1103937	300.000	321.75(A)
77	4-Chlorotoluene	91	9.070	9.070	(0.938)	3879627	150.000	147.65
82	p-Isopropyltoluene	119	9.651	9.651	(0.998)	4157908	150.000	155.21
45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	1655136	300.000	311.31(A)
10	Acetone	43	1.977	1.977	(0.472)	485174	300.000	300.69(A)
37	Benzene	78	4.515	4.515	(0.909)	4062135	150.000	146.29
74	Bromobenzene	156	8.807	8.807	(0.911)	1415416	150.000	150.91
29	Bromochloromethane	128	3.799	3.799	(0.908)	653335	150.000	145.52
39	Bromodichloromethane	83	5.726	5.726	(1.152)	1524319	150.000	154.02
66	Bromoform	173	8.410	8.410	(1.096)	810870	150.000	150.74
6	Bromomethane	94	1.344	1.344	(0.321)	802069	150.000	150.12
19	Carbon Disulfide	76	2.075	2.075	(0.496)	5174750	300.000	294.08(A)
34	Carbon Tetrachloride	117	4.268	4.268	(0.859)	1493025	150.000	147.70(H)
59	Chlorobenzene	112	7.694	7.694	(1.003)	3132676	150.000	151.41
7	Chloroethane	64	1.407	1.407	(0.336)	733919	150.000	143.70
28	Chloroform	83	3.911	3.911	(0.935)	1980101	150.000	147.43
3	Chloromethane	50	1.085	1.085	(0.259)	1102492	150.000	149.44
27	cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	1206122	150.000	152.36
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	1917971	150.000	157.77
55	Dibromochloromethane	129	7.176	7.176	(0.935)	1278087	150.000	157.81
44	Dibromomethane	93	5.553	5.553	(1.118)	729812	150.000	150.81
2	Dichlorodifluoromethane	85	0.976	0.976	(0.233)	1136547	150.000	150.17
61	Ethylbenzene	106	7.803	7.803	(1.017)	1591049	150.000	152.23
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	720247	150.000	155.91
67	Isopropylbenzene	105	8.563	8.563	(1.116)	4840536	150.000	154.01
62	m,p-Xylenes	106	7.907	7.907	(1.031)	4020049	300.000	309.24(A)
17	Methylene Chloride	84	2.307	2.307	(0.551)	1078247	150.000	148.97
87	n-Butylbenzene	91	9.995	9.995	(1.034)	3614158	150.000	162.36
73	n-Propylbenzene	91	8.916	8.916	(0.922)	5561718	150.000	153.51
92	Naphthalene	128	11.544	11.544	(1.194)	950153	150.000	169.80
63	o-Xylene	106	8.245	8.245	(1.075)	1929311	150.000	152.66
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	4735185	150.000	152.94
64	Styrene	104	8.260	8.260	(1.077)	3307549	150.000	158.93
78	tert-Butylbenzene	119	9.339	9.339	(0.966)	3394260	150.000	150.12
56	Tetrachloroethene	164	6.929	6.929	(0.903)	1047361	150.000	148.02
50	Toluene	91	6.449	6.449	(0.841)	4550354	150.000	148.35
20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.605)	1045463	150.000	149.25
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.345)	1642003	150.000	163.10
38	Trichloroethene	130	5.208	5.208	(1.048)	1236555	150.000	150.33
8	Trichlorofluoromethane	101	1.565	1.565	(0.374)	1807152	150.000	144.12
5	Vinyl Chloride	62	1.149	1.149	(0.275)	1188248	150.000	142.31

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071910.D
Date : 19-JUL-2022 14:35
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

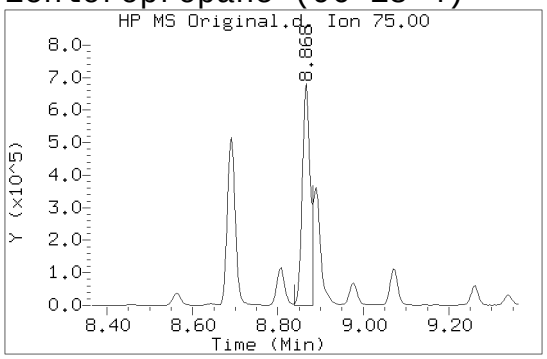
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071910.D
Inj Date : 19-JUL-2022 14:35
InstruID : voa6.i
LabSampID : VSTD150

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

Reason Code:

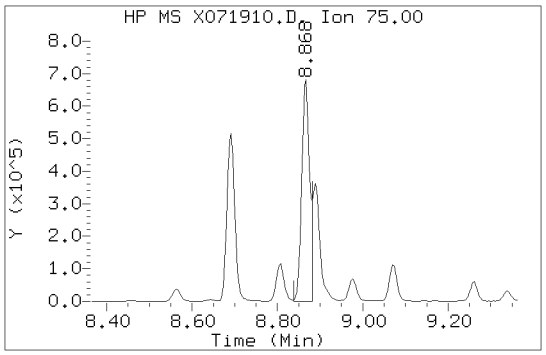
BEFORE

MASS
180
AREA
478272
HEIGHT
343057
25-Jul-2022
09:00
linh
pham



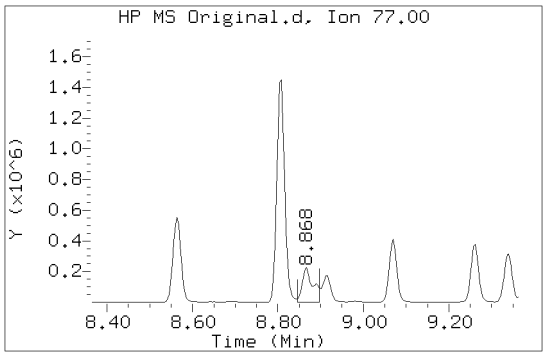
AFTER

MASS
75
AREA
931744
HEIGHT
680724
19-Aug-2022
10:59
linh
pham



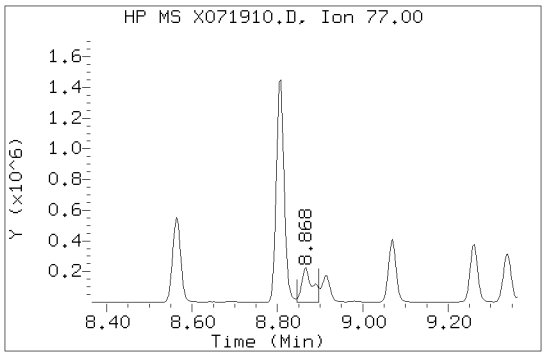
BEFORE

MASS
182
AREA
460546
HEIGHT
324767
25-Jul-2022
09:00
linh
pham



AFTER

MASS
77
AREA
405506
HEIGHT
224343
19-Aug-2022
10:59
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071911.D Page 1
Report Date: 19-Aug-2022 11:00

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071911.D
Lab Smp Id: VSTD200 Client Smp ID: VSTD200
Inj Date : 19-JUL-2022 14:56
Operator : PC Inst ID: voa6.i
Smp Info : VSTD200;VSTD200;1;10;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\8260W.m
Meth Date : 19-Aug-2022 11:00 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 14:35 Cal File: X071910.D
Als bottle: 12 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

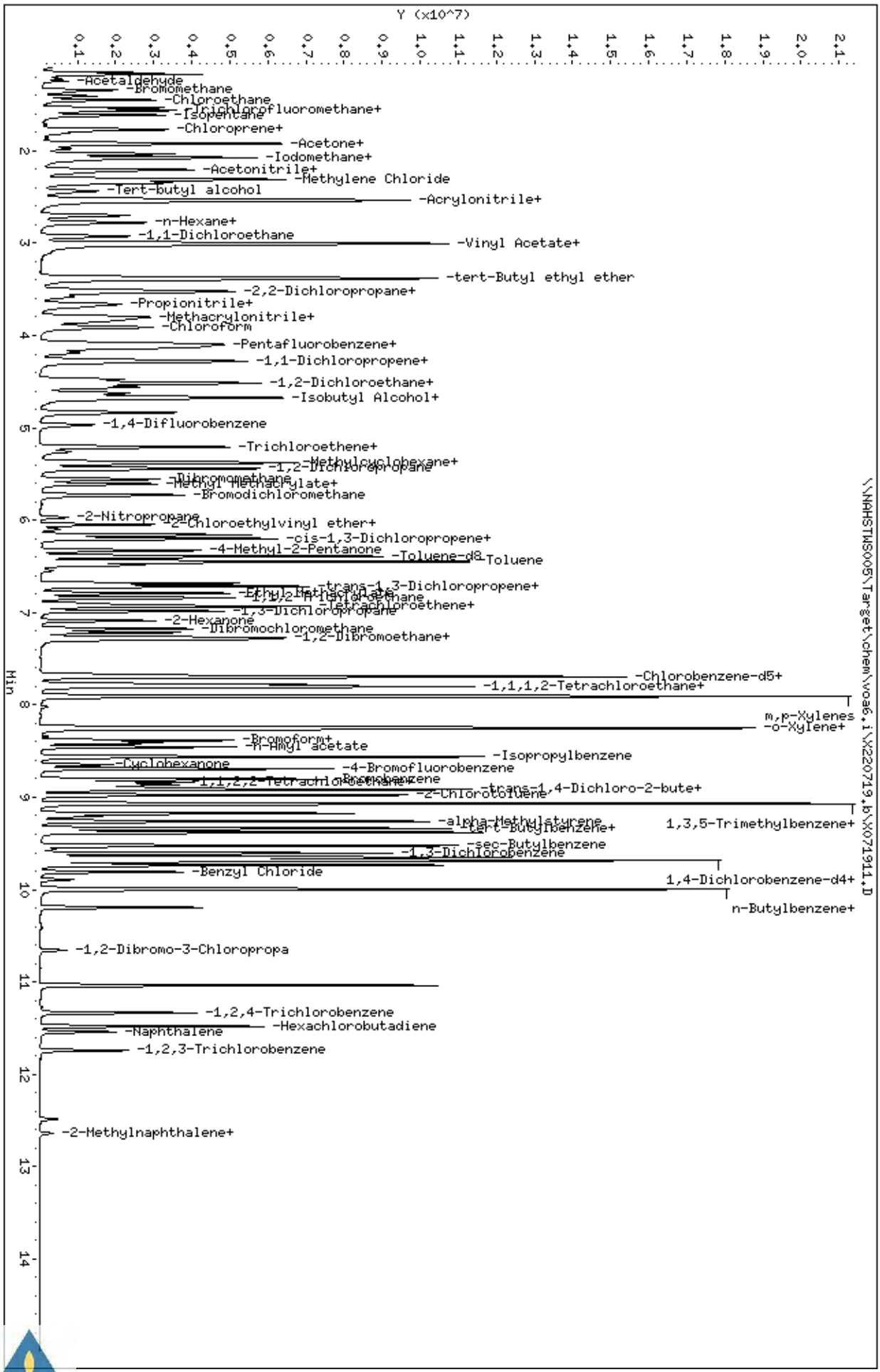
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	803738	50.0000	
*	36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	1205073	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	1124346	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	554221	50.0000	
$	30 Dibromofluoromethane	113	4.103	4.103	(0.980)	1508056	200.000	200.99(A)
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	1659515	200.000	200.76(A)
$	48 Toluene-d8	98	6.389	6.389	(0.833)	5194877	200.000	185.18
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	1974506	200.000	199.21
	60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	1612294	200.000	204.10(A)
	31 1,1,1-Trichloroethane	97	4.088	4.088	(0.977)	2254143	200.000	197.69
	68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	1542895	200.000	198.21
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	1135727	200.000	196.46
	22 1,1-Dichloroethane	63	2.925	2.925	(0.699)	2426731	200.000	196.12
	11 1,1-Dichloroethene	96	1.917	1.917	(0.458)	1236595	200.000	184.31
	32 1,1-Dichloropropene	75	4.282	4.282	(0.862)	1896946	200.000	195.04
	93 1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	666695	200.000	231.39(A)
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	1167458	200.000	194.52
	90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	1148206	200.000	227.46(A)
	79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	5244947	200.000	197.29
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.102)	141749	200.000	199.27

57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	1496052	200.000	204.10(A)
88	1,2-Dichlorobenzene	146	9.992	9.992 (1.034)	2799420	200.000	201.86(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	2012582	200.000	190.42
42	1,2-Dichloropropane	63	5.437	5.437	(1.094)	1450727	200.000	195.58
75	1,3,5-Trimethylbenzene	105	9.070	9.070	(0.938)	5246350	200.000	194.88
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	3095537	200.000	201.30(A)
54	1,3-Dichloropropane	76	6.985	6.985	(0.911)	2324887	200.000	197.71
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	3163641	200.000	193.79
26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	2176392	200.000	198.77
24	2-Butanone	43	3.578	3.578	(0.855)	881176	400.000	437.02(AH)
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	4456010	200.000	187.57
52	2-Hexanone	43	7.086	7.086	(0.924)	1516523	400.000	428.94(A)
77	4-Chlorotoluene	91	9.070	9.070	(0.938)	5189116	200.000	195.69
82	p-Isopropyltoluene	119	9.651	9.651	(0.998)	5441966	200.000	201.30(A)
45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	2269263	400.000	414.21(A)
10	Acetone	43	1.981	1.981	(0.473)	633758	400.000	390.88(A)
37	Benzene	78	4.515	4.515	(0.909)	5472288	200.000	191.63
74	Bromobenzene	156	8.807	8.807	(0.911)	1893902	200.000	200.09(A)
29	Bromochloromethane	128	3.795	3.795	(0.907)	892720	200.000	196.99
39	Bromodichloromethane	83	5.729	5.729	(1.153)	2073168	200.000	203.70(A)
66	Bromoform	173	8.410	8.410	(1.096)	1117306	200.000	201.16(A)
6	Bromomethane	94	1.344	1.344	(0.321)	1068317	200.000	198.52
19	Carbon Disulfide	76	2.075	2.075	(0.496)	6899401	400.000	388.43(A)
34	Carbon Tetrachloride	117	4.268	4.268	(0.859)	1968804	200.000	189.40(H)
59	Chlorobenzene	112	7.694	7.694	(1.003)	4198880	200.000	196.95
7	Chloroethane	64	1.407	1.407	(0.336)	975969	200.000	189.31
28	Chloroform	83	3.911	3.911	(0.935)	2672684	200.000	197.14
3	Chloromethane	50	1.085	1.085	(0.259)	1500734	200.000	201.51(A)
27	cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	1625068	200.000	203.37(A)
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	2613041	200.000	209.02(A)
55	Dibromochloromethane	129	7.176	7.176	(0.935)	1744246	200.000	209.01(A)
44	Dibromomethane	93	5.553	5.553	(1.118)	992325	200.000	199.39
2	Dichlorodifluoromethane	85	0.976	0.976	(0.233)	1493067	200.000	195.49
61	Ethylbenzene	106	7.802	7.802	(1.017)	2112026	200.000	196.11
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	962444	200.000	206.45(A)
67	Isopropylbenzene	105	8.563	8.563	(1.116)	6316064	200.000	195.02
62	m,p-Xylenes	106	7.907	7.907	(1.031)	5292303	400.000	395.08(A)
17	Methylene Chloride	84	2.307	2.307	(0.551)	1463710	200.000	200.64(A)
87	n-Butylbenzene	91	9.995	9.995	(1.034)	4708202	200.000	209.59(A)
73	n-Propylbenzene	91	8.916	8.916	(0.922)	7282081	200.000	199.17
92	Naphthalene	128	11.544	11.544	(1.194)	1361878	200.000	241.16(A)
63	o-Xylene	106	8.245	8.245	(1.075)	2579739	200.000	198.10
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	6146815	200.000	196.74
64	Styrene	104	8.260	8.260	(1.077)	4441868	200.000	207.13(A)
78	tert-Butylbenzene	119	9.339	9.339	(0.966)	4414774	200.000	193.49
56	Tetrachloroethene	164	6.929	6.929	(0.903)	1363627	200.000	187.03
50	Toluene	91	6.449	6.449	(0.841)	6032619	200.000	190.87
20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.605)	1400331	200.000	198.05
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.345)	2241759	200.000	216.52(A)
38	Trichloroethene	130	5.208	5.208	(1.048)	1647543	200.000	194.77
8	Trichlorofluoromethane	101	1.565	1.565	(0.374)	2331731	200.000	184.23
5	Vinyl Chloride	62	1.149	1.149	(0.275)	1561762	200.000	185.30

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.
H - Operator selected an alternate compound hit.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071911.D
Date : 19-JUL-2022 14:56
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\X220719.b\X071911.D
Inj Date : 19-JUL-2022 14:56
InstruID : voa6.i
LabSampID : VSTD200

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071915.D Page 1
Report Date: 19-Aug-2022 11:00

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071915.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 19-JUL-2022 16:20
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;ICV
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\8260W.m
Meth Date : 19-Aug-2022 11:00 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 14:56 Cal File: X071911.D
Als bottle: 16 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.185	(1.000)	803279	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	1177898	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	1099931	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.666	(1.000)	554211	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	393451	51.9327	51.93
$ 35 1,2-Dichloroethane-d4	65	4.478	4.474	(1.070)	422461	50.8929	50.89
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1372695	50.0189	50.01
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	511712	52.1682	52.16
60 1,1,1,2-Tetrachloroethane	131	7.773	7.776	(1.013)	375568	48.6005	48.60
31 1,1,1-Trichloroethane	97	4.088	4.088	(0.977)	538729	47.2761	47.27
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	372935	47.9121	47.91
53 1,1,2-Trichloroethane	83	6.839	6.843	(0.892)	269933	47.7307	47.73
22 1,1-Dichloroethane	63	2.929	2.925	(0.700)	575772	46.5590	46.55
11 1,1-Dichloroethene	96	1.921	1.917	(0.459)	306381	45.6913	45.69
32 1,1-Dichloropropene	75	4.283	4.282	(0.862)	455600	47.9253	47.92
93 1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	168688	58.5498	58.54
71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	277578	46.2518	46.25
90 1,2,4-Trichlorobenzene	180	11.338	11.337	(1.173)	285078	56.4761	56.47
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	1296372	48.7653	48.76
89 1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	32044	54.3117	54.31

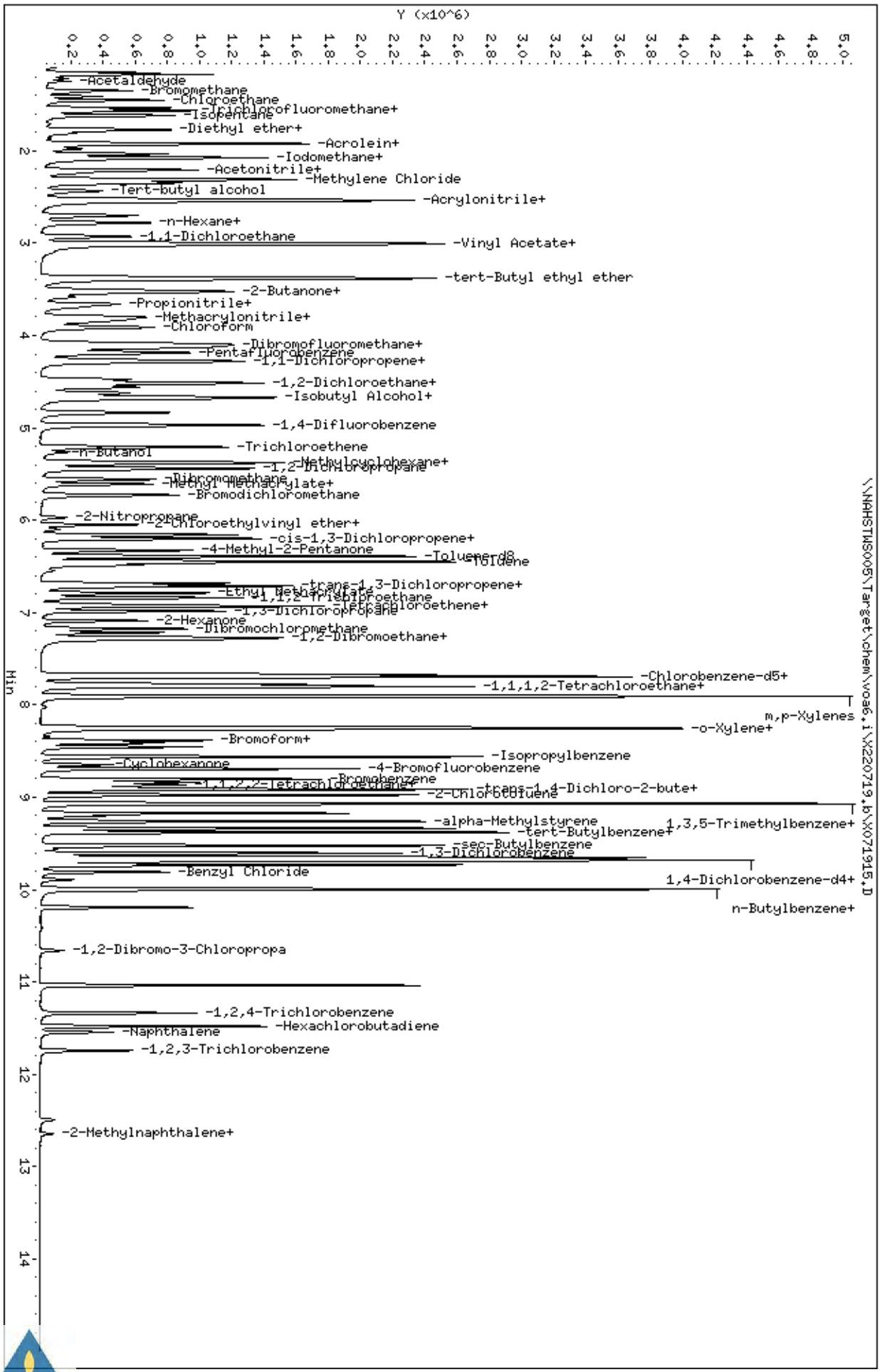
57 1,2-Dibromoethane	107	7.263	7.263 (0.947)	355369	49.5585	49.55
88 1,2-Dichlorobenzene	146	9.992	9.992 (1.034)	690253	49.7749	49.77

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071915.D Page 2
Report Date: 19-Aug-2022 11:00

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	487745	47.2147	47.21
42	1,2-Dichloropropane	63	5.437	5.437	(1.094)	341934	47.1626	47.16
75	1,3,5-Trimethylbenzene	105	9.070	9.070	(0.939)	1283913	47.6934	47.69
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	756362	49.1885	49.18
54	1,3-Dichloropropane	76	6.982	6.985	(0.910)	552590	48.0362	48.03
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	785297	48.1053	48.10
26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	537177	48.9036	48.90
24	2-Butanone	43	3.582	3.578	(0.856)	214703	106.544	106.54
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	1080955	45.5033	45.50
52	2-Hexanone	43	7.090	7.086	(0.924)	360829	104.326	104.32
77	4-Chlorotoluene	91	9.070	9.070	(0.939)	1262067	47.5975	47.59
82	p-Isopropyltoluene	119	9.651	9.651	(0.999)	1319696	48.8179	48.81
45	4-Methyl-2-Pentanone	43	6.326	6.329	(0.825)	541981	101.124	101.12
10	Acetone	43	1.981	1.981	(0.473)	197688	117.868	117.86(M)
37	Benzene	78	4.515	4.515	(0.909)	1304561	46.7389	46.73
74	Bromobenzene	156	8.807	8.807	(0.912)	455307	48.1063	48.10
29	Bromochloromethane	128	3.799	3.795	(0.908)	208389	46.0110	46.01
39	Bromodichloromethane	83	5.726	5.729	(1.152)	484620	48.7163	48.71
66	Bromoform	173	8.410	8.410	(1.096)	257179	48.2740	48.27
6	Bromomethane	94	1.347	1.344	(0.322)	266154	48.4591	48.45
19	Carbon Disulfide	76	2.075	2.075	(0.496)	1671660	94.1671	94.16
34	Carbon Tetrachloride	117	4.268	4.268	(0.859)	466337	45.8974	45.89
59	Chlorobenzene	112	7.694	7.694	(1.003)	1006409	48.2555	48.25
7	Chloroethane	64	1.411	1.407	(0.337)	237277	46.0533	46.05
28	Chloroform	83	3.911	3.911	(0.935)	637932	47.0823	47.08
3	Chloromethane	50	1.085	1.085	(0.259)	356275	47.9064	47.90
27	cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	386717	48.4238	48.42
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	612279	50.1068	50.10
55	Dibromochloromethane	129	7.177	7.176	(0.936)	406162	49.7511	49.75
44	Dibromomethane	93	5.553	5.553	(1.118)	234821	48.2731	48.27
2	Dichlorodifluoromethane	85	0.976	0.976	(0.233)	375605	49.0784	49.07
61	Ethylbenzene	106	7.803	7.802	(1.017)	511365	48.5367	48.53
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	238144	51.0844	51.08
67	Isopropylbenzene	105	8.564	8.563	(1.116)	1527409	48.2102	48.21
62	m,p-Xylenes	106	7.908	7.907	(1.031)	1298578	99.0935	99.09
17	Methylene Chloride	84	2.311	2.307	(0.552)	354520	47.9623	47.96
87	n-Butylbenzene	91	9.995	9.995	(1.035)	1136334	50.5879	50.58
73	n-Propylbenzene	91	8.912	8.916	(0.922)	1768242	48.3643	48.36
92	Naphthalene	128	11.544	11.544	(1.195)	334786	59.2863	59.28
63	o-Xylene	106	8.245	8.245	(1.075)	614343	48.2233	48.22
81	sec-Butylbenzene	105	9.523	9.523	(0.986)	1490865	47.7190	47.71
64	Styrene	104	8.260	8.260	(1.077)	1058982	50.4779	50.47
78	tert-Butylbenzene	119	9.336	9.339	(0.966)	1080631	47.3631	47.36
56	Tetrachloroethene	164	6.929	6.929	(0.903)	336020	47.1110	47.11
50	Toluene	91	6.449	6.449	(0.841)	1460598	47.2387	47.23
20	trans-1,2-Dichloroethene	96	2.536	2.532	(0.606)	332737	47.0862	47.08
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.345)	513764	50.7687	50.76
38	Trichloroethene	130	5.208	5.208	(1.048)	394013	47.6543	47.65
8	Trichlorofluoromethane	101	1.565	1.565	(0.374)	594796	47.0222	47.02
5	Vinyl Chloride	62	1.149	1.149	(0.275)	384663	45.6676	45.66

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071915.D
Date : 19-JUL-2022 16:20
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

\\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071915.D

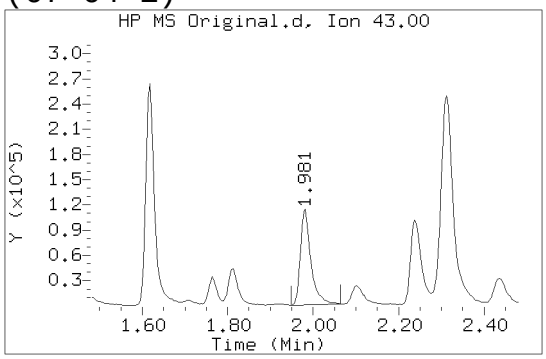
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071915.D
Inj Date : 19-JUL-2022 16:20
InstruID : voa6.i
LabSampID : ICV

Acetone (67-64-1)

Reason Code:

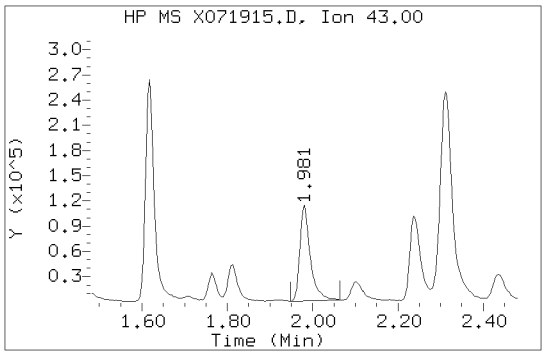
BEFORE

MASS
62
AREA
384663
HEIGHT
343232
25-Jul-2022
09:00
linh
pham



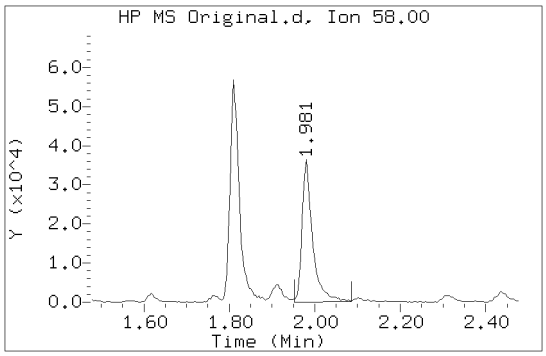
AFTER

MASS
43
AREA
197688
HEIGHT
114035
19-Aug-2022
10:59
linh
pham



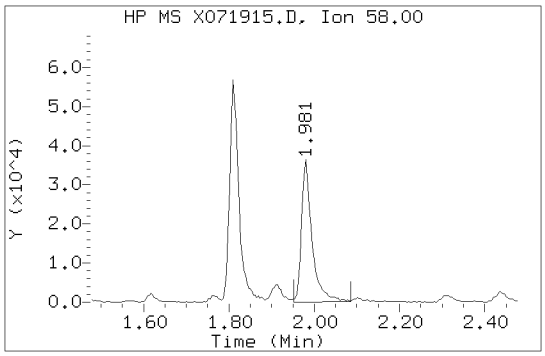
BEFORE

MASS
64
AREA
124297
HEIGHT
107814
25-Jul-2022
09:00
linh
pham



AFTER

MASS
58
AREA
63852
HEIGHT
36330
19-Aug-2022
10:59
linh
pham



right solutions.
right partner.

Raw Data VOA6 414932

Volatiles Organics by Method 8260C

Workorder

HS22080499

Client

Bhate Environmental Associates, Inc.

Project

LHAAP/Site 18 /24

08/19/2022

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081101.D Page 1
Report Date: 11-Aug-2022 11:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081101.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 11-AUG-2022 10:28
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\bfb.m
Meth Date : 26-Jul-2022 15:17 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)	FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.691	8.889	(0.000)	95	135616			0.00- 100.00	100.00
8.691	8.889	(0.000)	50	24312			15.00- 40.00	17.93
8.691	8.889	(0.000)	75	64160			30.00- 60.00	47.31
8.691	8.889	(0.000)	96	9758			5.00- 9.00	7.20
8.691	8.889	(0.000)	173	853			0.00- 2.00	0.76
8.691	8.889	(0.000)	174	112976			50.00- 0.00	83.31
8.691	8.889	(0.000)	175	8496			5.00- 9.00	7.52
8.691	8.889	(0.000)	176	110272			95.00- 101.00	97.61
8.691	8.889	(0.000)	177	8701			5.00- 9.00	7.89

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081101.D

Date : 11-AUG-2022 10:28

Client ID: BFB

Instrument: voa6.i

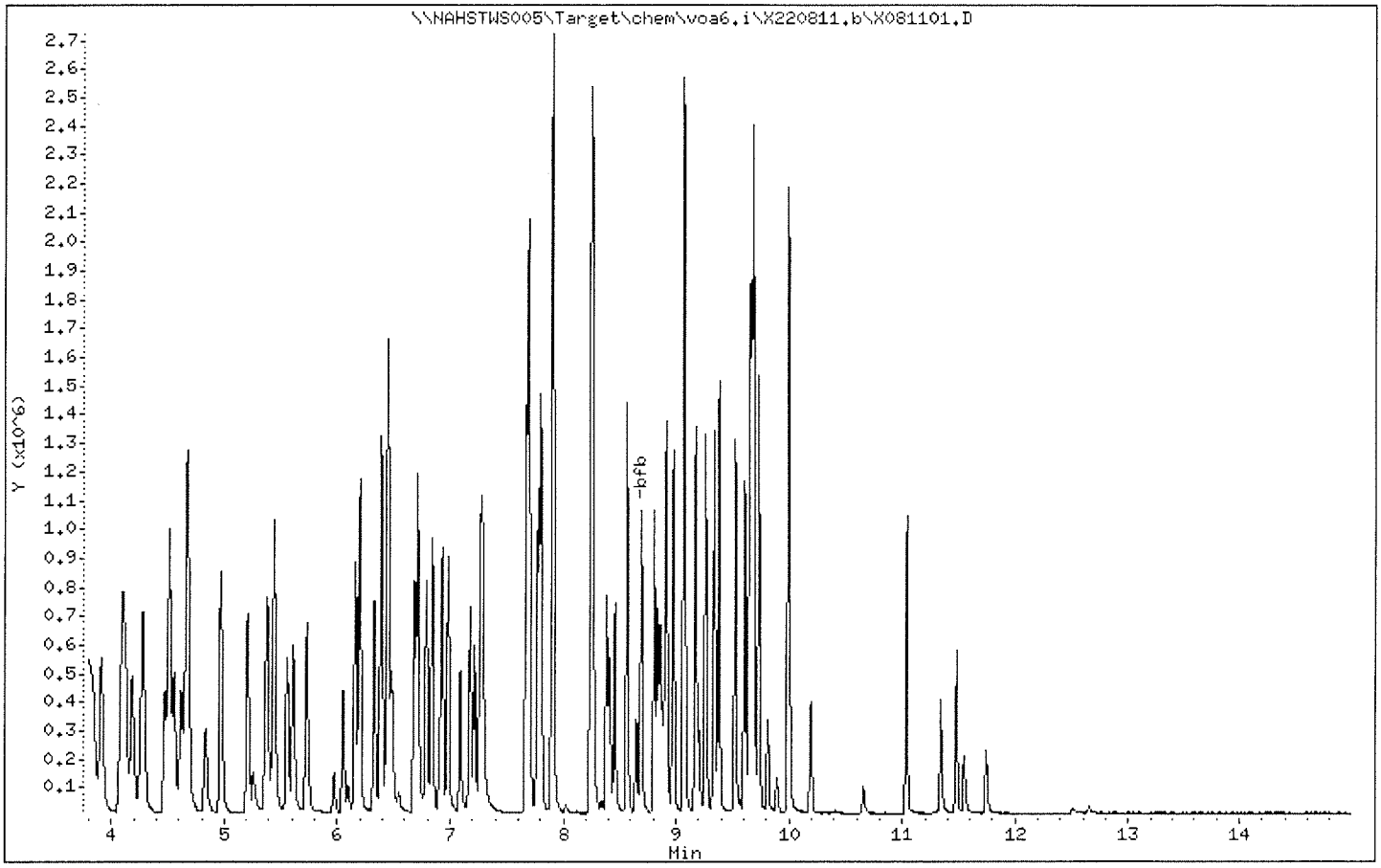
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081101.D

Date : 11-AUG-2022 10:28

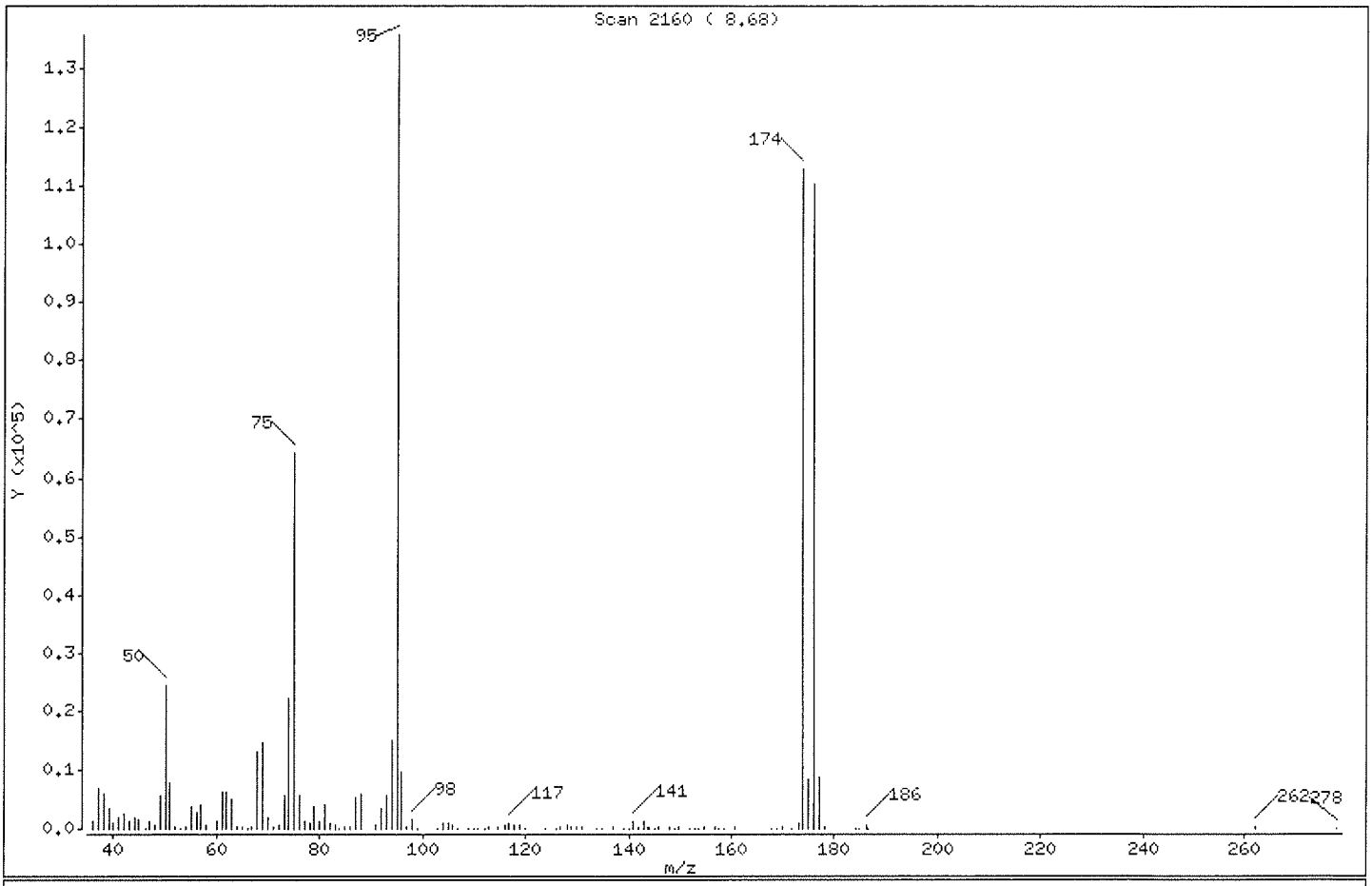
Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.93
75	30.00 - 60.00% of mass 95	47.31
96	5.00 - 9.00% of mass 95	7.20
173	Less than 2.00% of mass 174	0.63 (0.76)
174	Greater than 50.00% of mass 95	83.31
175	5.00 - 9.00% of mass 174	6.26 (7.52)
176	95.00 - 101.00% of mass 174	81.31 (97.61)
177	5.00 - 9.00% of mass 176	6.42 (7.89)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081101.D

Date : 11-AUG-2022 10:28

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: X081101.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 123

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.90	1219	68.00	13091	103.90	842	144.00	160
37.10	6720	69.00	14742	105.00	867	145.10	115
38.10	5990	70.10	1915	105.90	642	146.00	269
39.10	3347	71.00	205	106.90	146	147.90	328
39.90	889	72.00	727	108.90	154	149.00	103
41.10	1733	73.10	5577	110.00	108	149.80	178
42.00	2375	74.00	22272	110.70	150	151.90	94
43.10	1214	75.00	64160	112.10	61	152.80	68
44.00	1979	76.10	5743	112.90	216	153.80	89
45.00	1480	77.00	1144	114.80	446	154.80	267
46.10	76	78.00	834	116.00	598	156.90	448
47.00	1282	78.90	3885	116.90	784	157.70	70
48.00	732	79.90	1253	117.90	548	158.70	154
49.00	5563	81.00	3916	118.80	715	160.80	261
50.00	24312	81.90	819	120.00	78	167.80	66
51.00	7711	83.10	496	124.00	92	168.80	155
51.90	437	83.90	57	126.00	152	169.90	200
52.80	132	85.00	162	126.80	166	171.70	75
54.00	231	86.00	239	128.00	630	173.00	853
55.00	3599	87.00	5146	129.00	348	173.90	112976
56.00	2876	87.90	6023	129.80	415	174.90	8496
57.00	4165	91.00	621	131.00	292	175.90	110272
58.00	545	92.00	3387	133.80	108	176.90	8701
60.00	1395	93.00	5511	134.70	102	178.00	192
61.00	6211	94.00	14832	136.90	309	184.10	93
62.00	6095	95.00	135616	139.10	85	184.90	82
63.00	4842	96.00	9758	140.10	149	186.10	597
64.10	406	97.00	269	140.90	1369	186.70	92
64.90	288	98.10	1699	141.80	256	262.10	323
66.00	150	98.90	151	142.90	1161	278.10	71
66.90	396	102.80	79	143.80	164		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081103.D Page 1
Report Date: 19-Aug-2022 11:16

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081103.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 11-AUG-2022 11:10
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

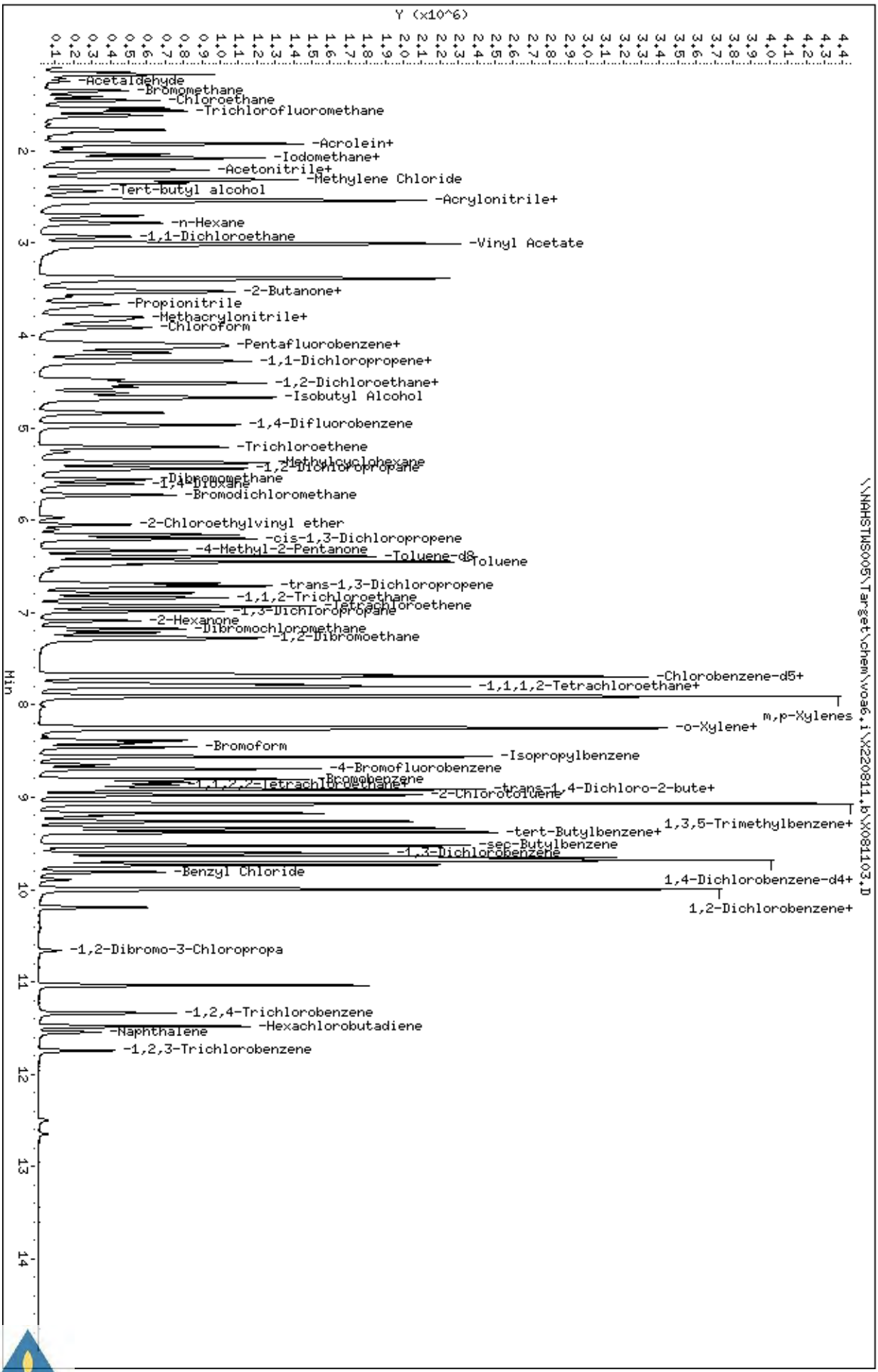
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.189	4.189	(1.000)	606308	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	912569	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	852798	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	419644	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.979)	312307	50.0000	54.65
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.069)	342758	50.0000	54.73
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1101604	50.0000	51.77
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	401674	50.0000	52.82
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	327149	50.0000	54.60
31 1,1,1-Trichloroethane	97	4.087	4.087	(0.976)	480455	50.0000	55.85
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	312357	50.0000	52.99
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	227196	50.0000	51.81
22 1,1-Dichloroethane	63	2.929	2.929	(0.699)	519225	50.0000	55.62
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	253856	50.0000	50.15
32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	412699	50.0000	56.03
93 1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	121553	50.0000	55.71
71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	231962	50.0000	51.04
90 1,2,4-Trichlorobenzene	180	11.341	11.341	(1.174)	216487	50.0000	56.64
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	1136159	50.0000	56.44
89 1,2-Dibromo-3-Chloropropane	155	10.659	10.659	(1.103)	25626	50.0000	57.18

57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	296351	50.0000	53.30
88	1,2-Dichlorobenzene	146	9.992	9.992 (1.034)	577572	50.0000	55.00

						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	422296	50.0000	52.76
42	1,2-Dichloropropane	63	5.437	5.437	(1.094)	302495	50.0000	53.85
75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1140910	50.0000	55.97
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	637734	50.0000	54.77
54	1,3-Dichloropropane	76	6.981	6.981	(0.910)	471375	50.0000	52.85
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	662207	50.0000	53.57
26	2,2-Dichloropropane	77	3.514	3.514	(0.839)	471980	50.0000	56.96
24	2-Butanone	43	3.585	3.585	(0.856)	173947	100.000	114.36
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	949626	50.0000	52.79
52	2-Hexanone	43	7.090	7.090	(0.924)	298660	100.000	111.37
77	4-Chlorotoluene	91	9.069	9.069	(0.939)	1093234	50.0000	54.45
82	p-Isopropyltoluene	119	9.650	9.650	(0.999)	1183634	50.0000	57.82
45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	464262	100.000	111.72
10	Acetone	43	1.981	1.981	(0.473)	129419	100.000	101.43
37	Benzene	78	4.515	4.515	(0.909)	1155334	50.0000	53.42
74	Bromobenzene	156	8.807	8.807	(0.912)	385602	50.0000	53.80
29	Bromochloromethane	128	3.799	3.799	(0.907)	178609	50.0000	52.24
39	Bromodichloromethane	83	5.729	5.729	(1.153)	420051	50.0000	54.50
66	Bromoform	173	8.410	8.410	(1.096)	213441	50.0000	51.58
6	Bromomethane	94	1.347	1.347	(0.322)	220624	50.0000	53.35
19	Carbon Disulfide	76	2.078	2.078	(0.496)	1449644	100.000	108.18
34	Carbon Tetrachloride	117	4.267	4.267	(0.859)	424094	50.0000	53.87
59	Chlorobenzene	112	7.694	7.694	(1.003)	868654	50.0000	53.72
7	Chloroethane	64	1.411	1.411	(0.337)	220329	50.0000	56.65
28	Chloroform	83	3.911	3.911	(0.934)	551331	50.0000	53.90
3	Chloromethane	50	1.085	1.085	(0.259)	326527	50.0000	58.15
27	cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	334349	50.0000	55.46
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	524841	50.0000	55.43
55	Dibromochloromethane	129	7.176	7.176	(0.936)	339895	50.0000	53.69
44	Dibromomethane	93	5.553	5.553	(1.118)	198639	50.0000	52.70
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	345701	50.0000	59.88(M)
61	Ethylbenzene	106	7.802	7.802	(1.017)	448403	50.0000	54.89
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	190825	50.0000	54.06
67	Isopropylbenzene	105	8.563	8.563	(1.116)	1380017	50.0000	56.18
62	m,p-Xylenes	106	7.907	7.907	(1.031)	1128606	100.000	111.08
17	Methylene Chloride	84	2.311	2.311	(0.552)	313916	50.0000	56.41
87	n-Butylbenzene	91	9.995	9.995	(1.035)	1020011	50.0000	59.97(M)
73	n-Propylbenzene	91	8.912	8.912	(0.922)	1587937	50.0000	57.36
92	Naphthalene	128	11.544	11.544	(1.195)	247038	50.0000	57.77
63	o-Xylene	106	8.241	8.241	(1.074)	533884	50.0000	54.05
81	sec-Butylbenzene	105	9.523	9.523	(0.986)	1358525	50.0000	57.42
64	Styrene	104	8.260	8.260	(1.077)	905925	50.0000	55.69
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	961155	50.0000	55.63
56	Tetrachloroethene	164	6.929	6.929	(0.903)	290530	50.0000	52.53
50	Toluene	91	6.449	6.449	(0.841)	1276094	50.0000	53.23
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.605)	294901	50.0000	55.28
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.345)	444828	50.0000	56.73
38	Trichloroethene	130	5.208	5.208	(1.048)	343153	50.0000	53.56
8	Trichlorofluoromethane	101	1.568	1.568	(0.375)	503092	50.0000	52.69
5	Vinyl Chloride	62	1.152	1.152	(0.275)	329148	50.0000	51.77

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081103.D
Date : 11-AUG-2022 11:10
Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

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

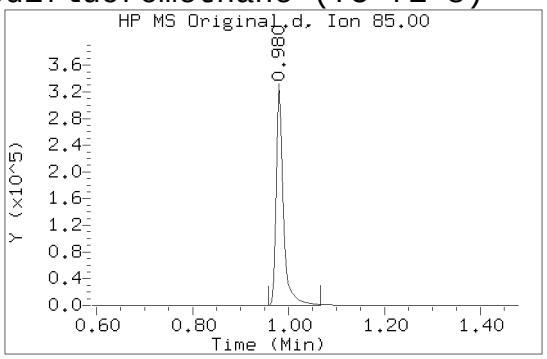
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081103.D
Inj Date : 11-AUG-2022 11:10
InstruID : voa6.i
LabSampID : CCV

Dichlorodifluoromethane (75-71-8)

Reason Code:

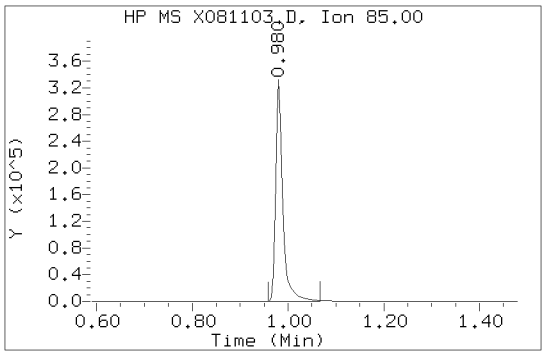
BEFORE

MASS
85
AREA
345701
HEIGHT
332224
19-Aug-2022
11:16
Linh
Pham



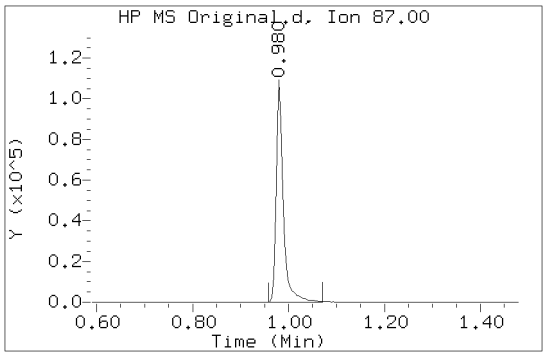
AFTER

MASS
85
AREA
345701
HEIGHT
332224
19-Aug-2022
11:16
Linh
Pham



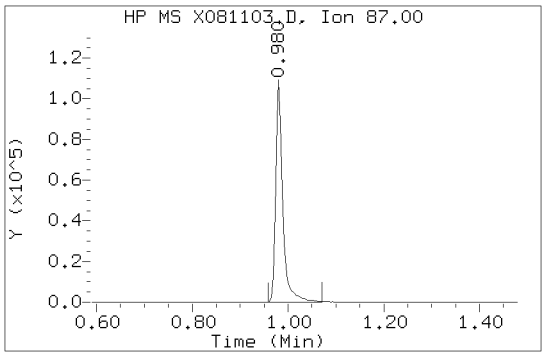
BEFORE

MASS
87
AREA
112802
HEIGHT
109264
19-Aug-2022
11:16
Linh
Pham



AFTER

MASS
87
AREA
112802
HEIGHT
109264
19-Aug-2022
11:16
Linh
Pham

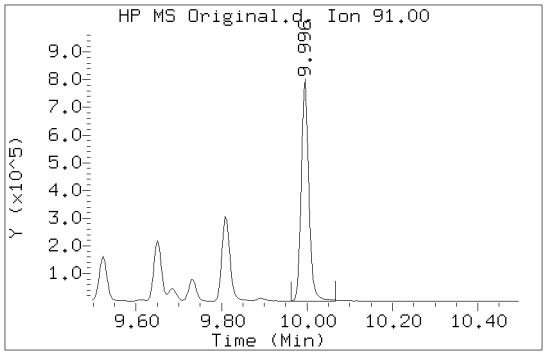


n-Butylbenzene (104-51-8)

Reason Code:

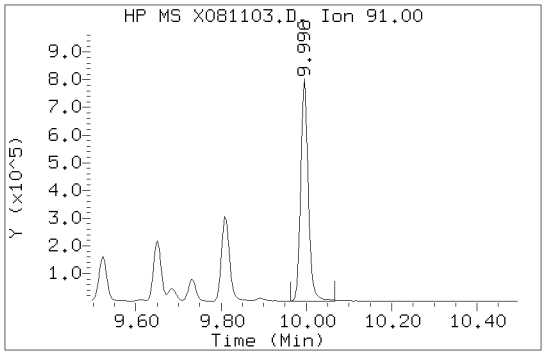
BEFORE

MASS
91
AREA
1020011
HEIGHT
802275
19-Aug-2022
11:16
Linh
Pham



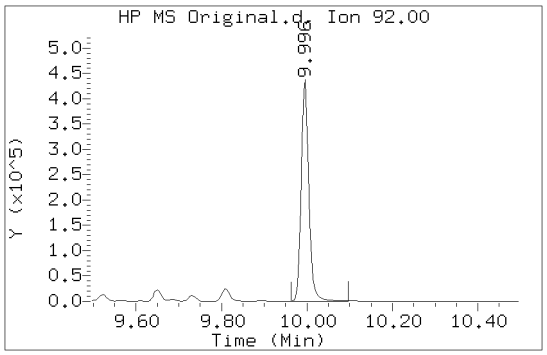
AFTER

MASS
91
AREA
1020011
HEIGHT
802275
19-Aug-2022
11:16
Linh
Pham



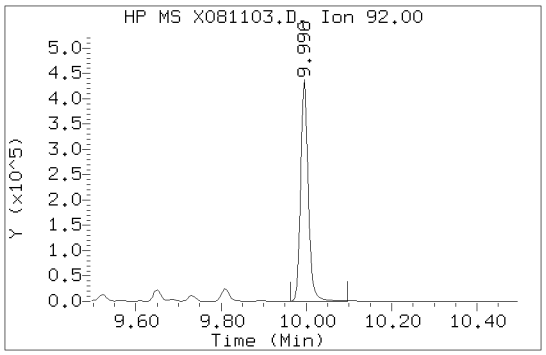
BEFORE

MASS
92
AREA
560031
HEIGHT
437331
19-Aug-2022
11:16
Linh
Pham



AFTER

MASS
92
AREA
560031
HEIGHT
437331
19-Aug-2022
11:16
Linh
Pham



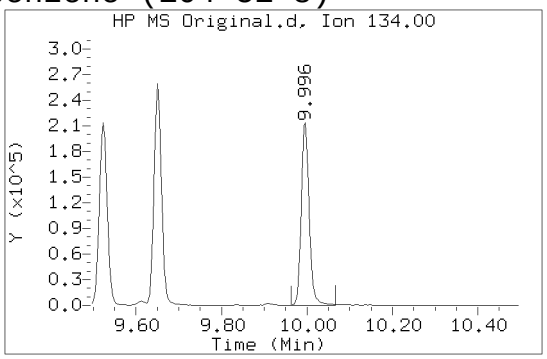
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081103.D
Inj Date : 11-AUG-2022 11:10
InstruID : voa6.i
LabSampID : CCV

n-Butylbenzene (104-51-8)

Reason Code:

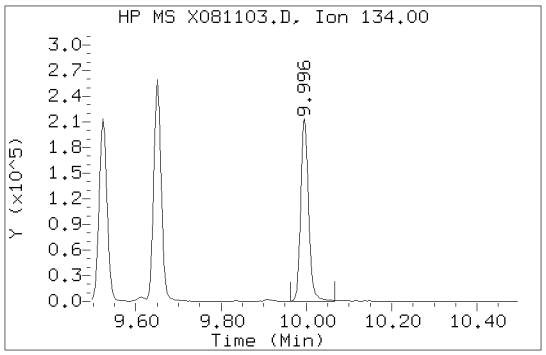
BEFORE

MASS
134
AREA
283923
HEIGHT
213292
19-Aug-2022
11:16
Linh
Pham



AFTER

MASS
134
AREA
283923
HEIGHT
213292
19-Aug-2022
11:16
Linh
Pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081104.D Page 1
Report Date: 12-Aug-2022 10:32

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081104.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 11-AUG-2022 11:31
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 11-Aug-2022 20:54 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.189	(1.000)	695996	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	308763	46.9679	46.96
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	340485	47.3171	47.31
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	976548	50.0000	
* 47 Chlorobenzene-d5	117	7.675	7.671	(1.000)	838888	50.0000	
$ 48 Toluene-d8	98	6.389	6.389	(0.832)	1140746	54.5018	54.50
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.132)	354798	47.3517	47.35
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	354216	50.0000	

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081105.D Page 1
Report Date: 19-Aug-2022 11:16

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081105.D
Lab Smp Id: VLCSW-220811 Client Smp ID: VLCSW-220811
Inj Date : 11-AUG-2022 11:52
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-220811;VLCSW-220811;3;;LCS
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

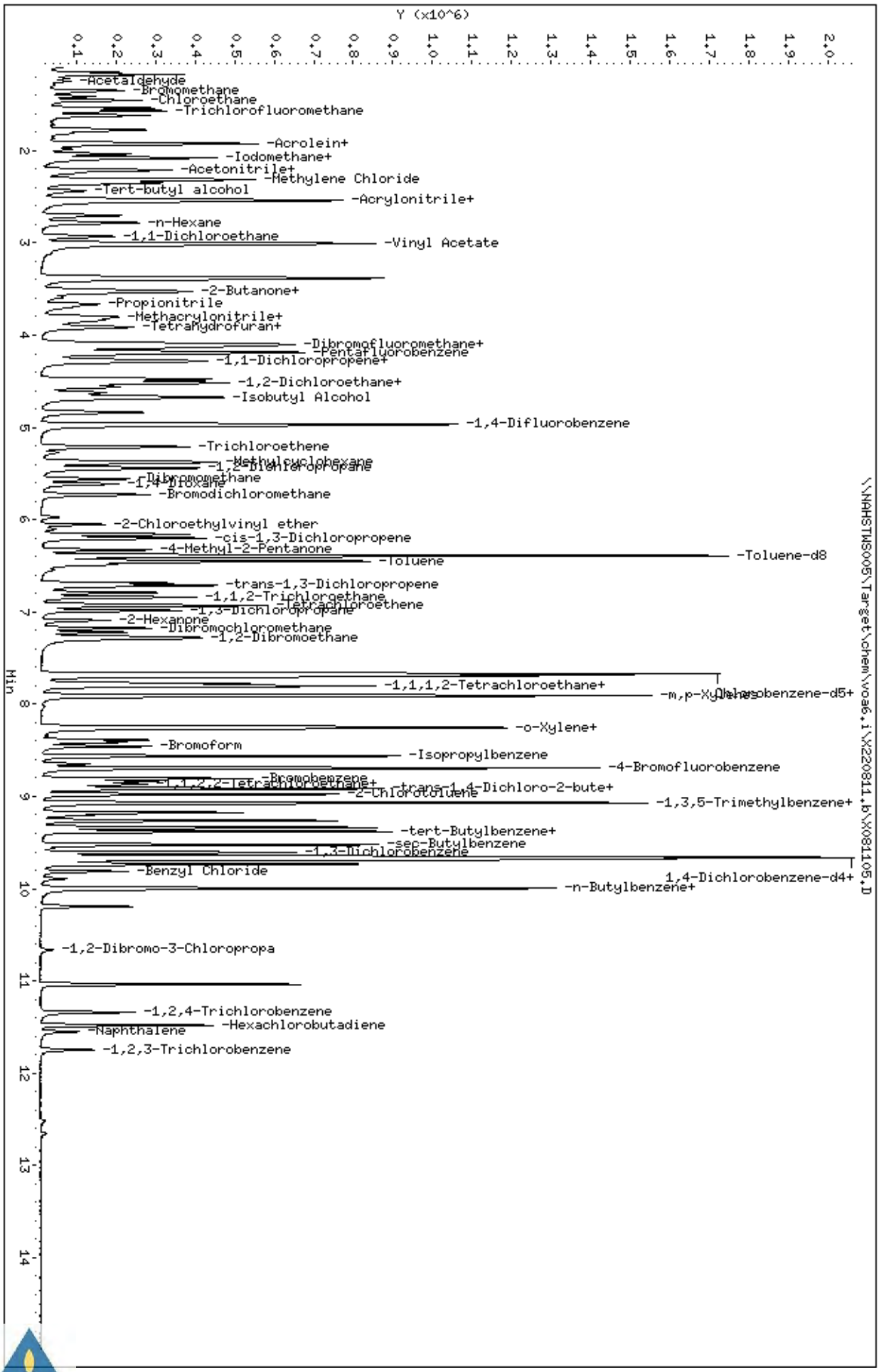
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.189	(1.000)	583274	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	873927	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	811653	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	391164	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	300071	54.5832	54.58
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	325905	54.0904	54.09
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1045467	51.6256	51.62
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	376697	52.0417	52.04
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	117364	20.5817	20.58
31 1,1,1-Trichloroethane	97	4.087	4.087	(0.977)	176343	21.3119	21.31
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	110330	20.0827	20.08
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	83329	19.9679	19.96
22 1,1-Dichloroethane	63	2.929	2.929	(0.700)	183768	20.4652	20.46
11 1,1-Dichloroethene	96	1.925	1.921	(0.460)	94881	19.4870	19.48
32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	150267	21.3048	21.30
93 1,2,3-Trichlorobenzene	180	11.746	11.742	(1.215)	43118	21.2039	21.20
71 1,2,3-Trichloropropane	75	8.867	8.863	(0.917)	84828	20.0262	20.02(M)
90 1,2,4-Trichlorobenzene	180	11.341	11.341	(1.173)	78782	22.1128	22.11
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	407492	21.7178	21.71
89 1,2-Dibromo-3-Chloropropane	155	10.663	10.659	(1.103)	8515	21.3080	21.30

57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	107768	20.3668	20.36
88	1,2-Dichlorobenzene	146	9.995	9.992 (1.034)	203609	20.8025	20.80

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	160836	20.9846	20.98
42	1,2-Dichloropropane	63	5.437	5.437	(1.094)	110345	20.5135	20.51
75	1,3,5-Trimethylbenzene	105	9.069	9.066	(0.938)	413590	21.7675	21.76
83	1,3-Dichlorobenzene	146	9.609	9.605	(0.994)	227150	20.9297	20.92
54	1,3-Dichloropropane	76	6.985	6.981	(0.911)	173708	20.4635	20.46
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	241315	20.9440	20.94
26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	178580	22.2554	22.25
24	2-Butanone	43	3.593	3.585	(0.858)	53171	36.3379	36.33
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	351314	20.9530	20.95
52	2-Hexanone	43	7.090	7.090	(0.924)	101631	39.8211	39.82
77	4-Chlorotoluene	91	9.073	9.069	(0.939)	401885	21.4744	21.47
82	p-Isopropyltoluene	119	9.650	9.650	(0.998)	428204	22.4426	22.44
45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	166207	42.0258	42.02
10	Acetone	43	1.984	1.981	(0.474)	51336	38.2974	38.29
37	Benzene	78	4.515	4.515	(0.909)	425757	20.5593	20.55
74	Bromobenzene	156	8.807	8.807	(0.911)	143199	21.4365	21.43
29	Bromochloromethane	128	3.799	3.799	(0.908)	65954	20.0549	20.05
39	Bromodichloromethane	83	5.729	5.729	(1.153)	155366	21.0505	21.05
66	Bromoform	173	8.413	8.410	(1.097)	71808	19.0330	19.03
6	Bromomethane	94	1.347	1.347	(0.322)	87200	21.1128	21.11
19	Carbon Disulfide	76	2.078	2.078	(0.497)	526374	40.8357	40.83
34	Carbon Tetrachloride	117	4.271	4.267	(0.860)	154257	20.4628	20.46
59	Chlorobenzene	112	7.697	7.694	(1.003)	322169	20.9339	20.93
7	Chloroethane	64	1.411	1.411	(0.337)	76305	20.3963	20.39
28	Chloroform	83	3.911	3.911	(0.935)	206095	20.9481	20.94
3	Chloromethane	50	1.085	1.085	(0.259)	121323	22.4948	22.49
27	cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	126203	21.7635	21.76
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	190803	21.0458	21.04
55	Dibromochloromethane	129	7.176	7.176	(0.936)	122142	20.2751	20.27
44	Dibromomethane	93	5.557	5.553	(1.118)	74347	20.5998	20.59
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	126919	22.7464	22.74
61	Ethylbenzene	106	7.802	7.802	(1.017)	165842	21.3319	21.33
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	70714	21.4917	21.49
67	Isopropylbenzene	105	8.563	8.563	(1.116)	497290	21.2710	21.27
62	m,p-Xylenes	106	7.907	7.907	(1.031)	411072	42.5099	42.50
17	Methylene Chloride	84	2.311	2.311	(0.552)	119636	21.8223	21.82
87	n-Butylbenzene	91	9.995	9.995	(1.034)	365179	23.0336	23.03
73	n-Propylbenzene	91	8.916	8.912	(0.922)	577722	22.3881	22.38
92	Naphthalene	128	11.551	11.544	(1.195)	84749	21.2637	21.26
63	o-Xylene	106	8.245	8.241	(1.075)	196097	20.8599	20.85
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	490716	22.2535	22.25
64	Styrene	104	8.263	8.260	(1.077)	322476	20.8308	20.83
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	349591	21.7090	21.70
56	Tetrachloroethene	164	6.933	6.929	(0.904)	107838	20.4892	20.48
50	Toluene	91	6.449	6.449	(0.841)	473016	20.7319	20.73
20	trans-1,2-Dichloroethene	96	2.539	2.536	(0.607)	108952	21.2335	21.23
51	trans-1,3-Dichloropropene	75	6.685	6.682	(1.346)	156328	20.8210	20.82
38	Trichloroethene	130	5.212	5.208	(1.049)	127323	20.7554	20.75
8	Trichlorofluoromethane	101	1.568	1.568	(0.375)	187228	20.3845	20.38
5	Vinyl Chloride	62	1.152	1.152	(0.275)	119749	19.5791	19.57

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081105.D
Date : 11-AUG-2022 11:52
Client ID: VLCSW-220811
Sample Info: VLCSW-220811;VLCSW-220811;3;LCS
Purge Volume: 5.0
Column phase: DB624

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

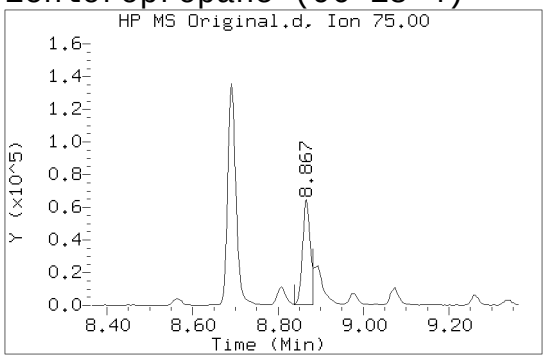
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081105.D
Inj Date : 11-AUG-2022 11:52
InstruID : voa6.i
LabSampID : VLCSW-220811

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

Reason Code:

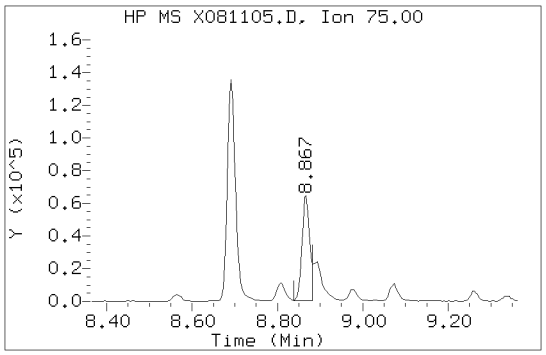
BEFORE

MASS
75
AREA
84828
HEIGHT
64415
19-Aug-2022
11:16
Linh
Pham



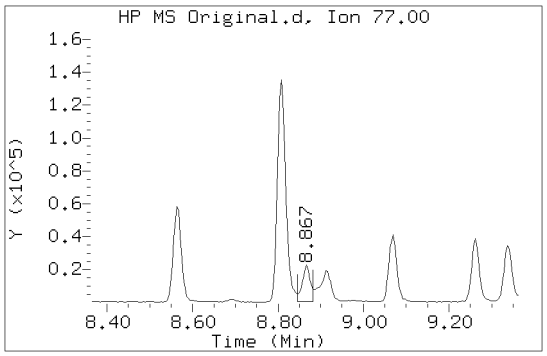
AFTER

MASS
75
AREA
84828
HEIGHT
64415
19-Aug-2022
11:16
Linh
Pham



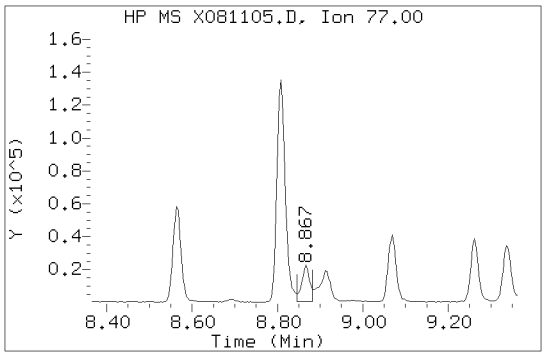
BEFORE

MASS
77
AREA
30650
HEIGHT
22463
19-Aug-2022
11:16
Linh
Pham



AFTER

MASS
77
AREA
30650
HEIGHT
22463
19-Aug-2022
11:16
Linh
Pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081107.D Page 1
Report Date: 19-Aug-2022 11:16

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081107.D
Lab Smp Id: VBLKW-220811 Client Smp ID: VBLKW-220811
Inj Date : 11-AUG-2022 12:34
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-220811;VBLKW-220811;3;;BLANK
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	679155	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	967095	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	826020	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	348323	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	304950	47.5470	47.54
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	333501	47.4970	47.49
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1112607	53.9855	53.98
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	360540	48.8941	48.89

01133891

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081107.D

Date : 11-AUG-2022 12:34

Client ID: VBLKW-220811

Instrument: voa6.i

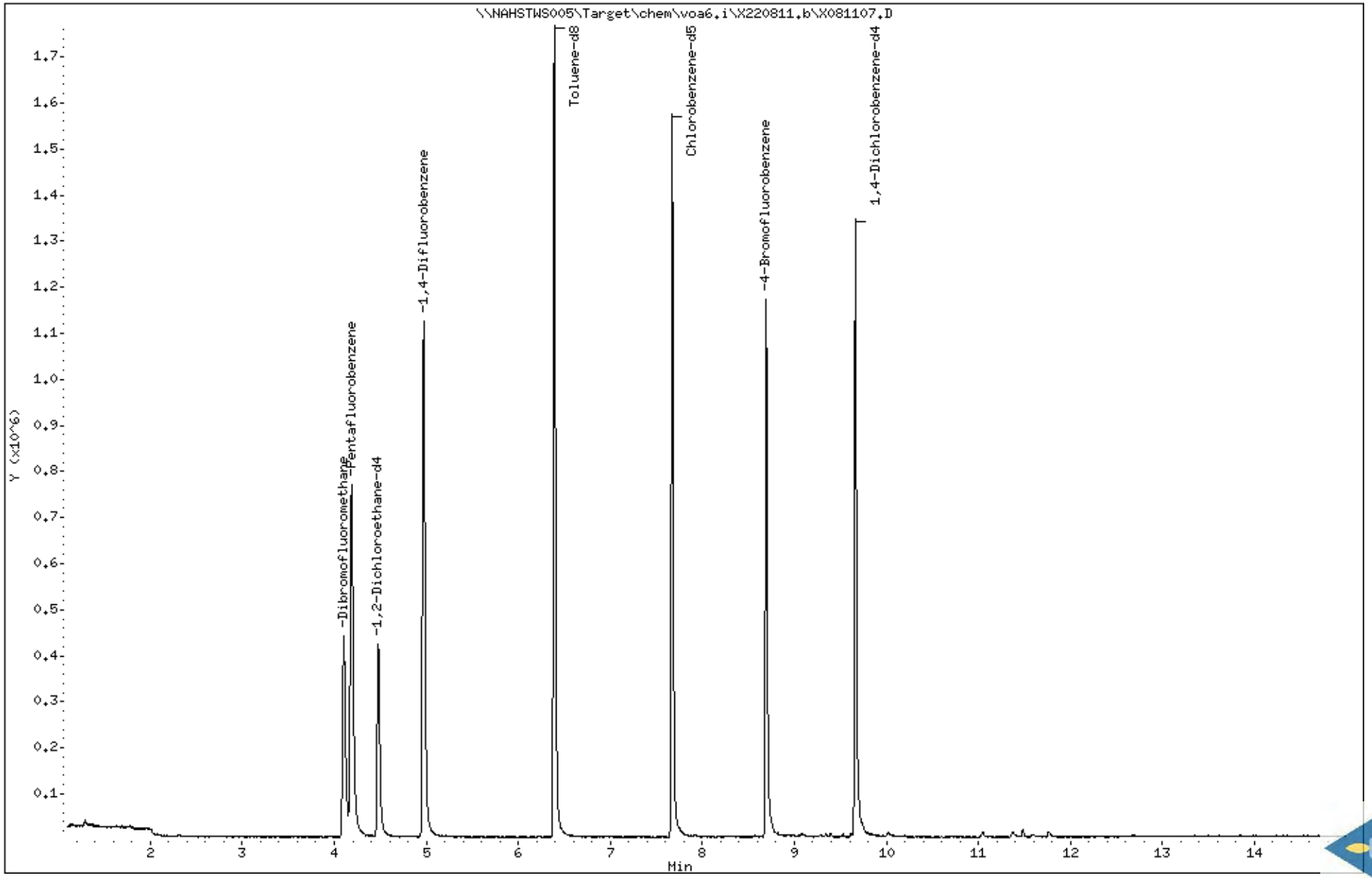
Sample Info: VBLKW-220811;VBLKW-220811;3;;BLANK

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081107.D
Inj Date : 11-AUG-2022 12:34
InstruID : voa6.i
LabSampID : VBLKW-220811

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081108.D Page 1
Report Date: 19-Aug-2022 11:16

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081108.D
Lab Smp Id: HS22080499-09 Client Smp ID: HS22080499-09
Inj Date : 11-AUG-2022 12:55
Operator : PC Inst ID: voa6.i
Smp Info : HS22080499-09;HS22080499-09;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	682163	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	959015	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	847765	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	371220	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.102	(0.981)	305381	47.4020	47.40
$ 35 1,2-Dichloroethane-d4	65	4.478	4.477	(1.070)	330987	46.9272	46.92
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1121429	53.0178	53.01
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	370103	48.9037	48.90

01133894

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081108.D

Page 1

Date : 11-AUG-2022 12:55

Client ID: HS22080499-09

Instrument: voa6.i

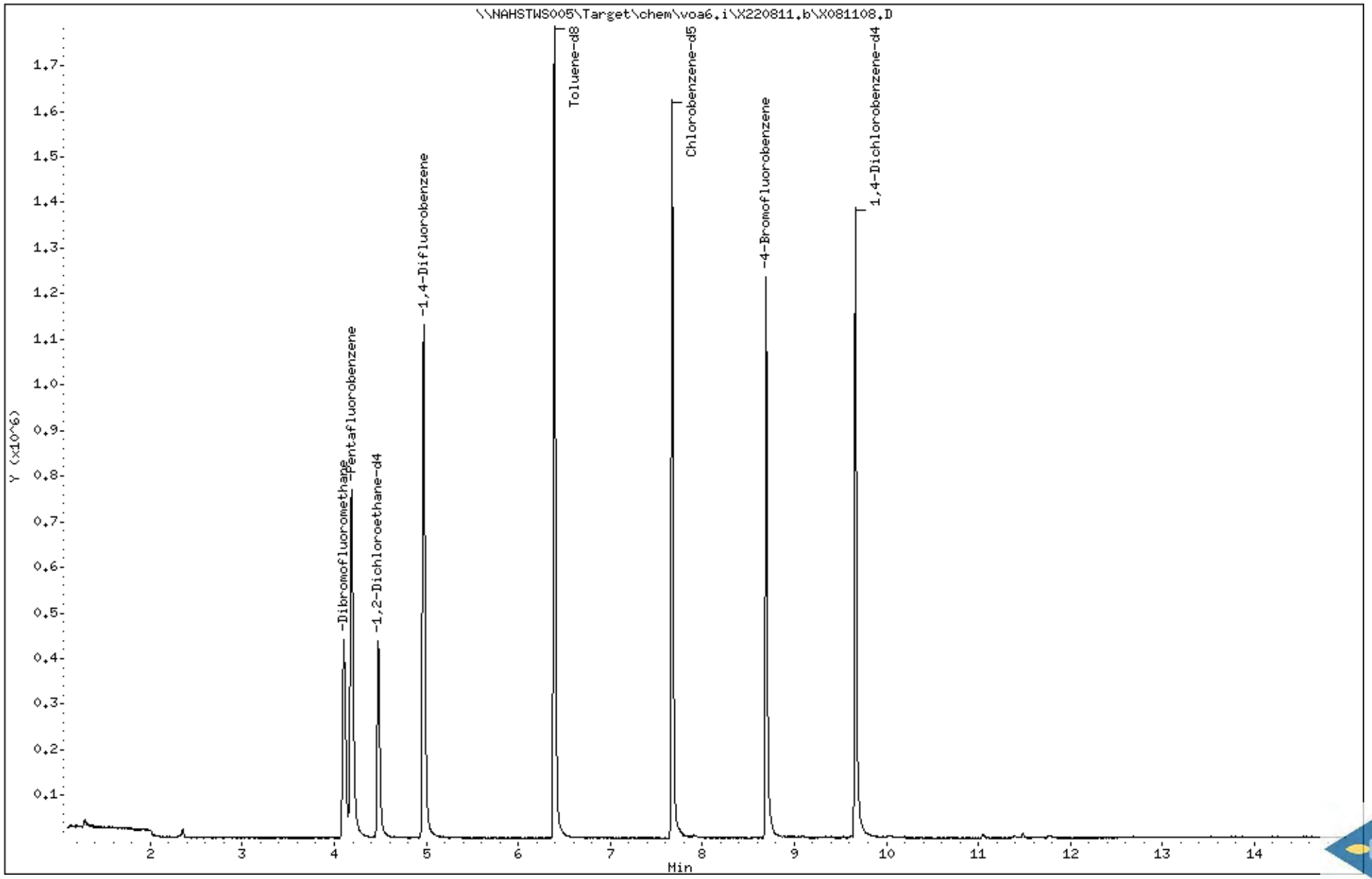
Sample Info: HS22080499-09;HS22080499-09;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081108.D
Inj Date : 11-AUG-2022 12:55
InstruID : voa6.i
LabSampID : HS22080499-09

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081114.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081114.D
Lab Smp Id: HS22080522-05MS Client Smp ID: HS22080522-05MS
Inj Date : 11-AUG-2022 15:01
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-05MS;HS22080522-05MS;3;;MS
Misc Info : HS22052000V6;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 14 QC Sample: MS
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: bhate.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

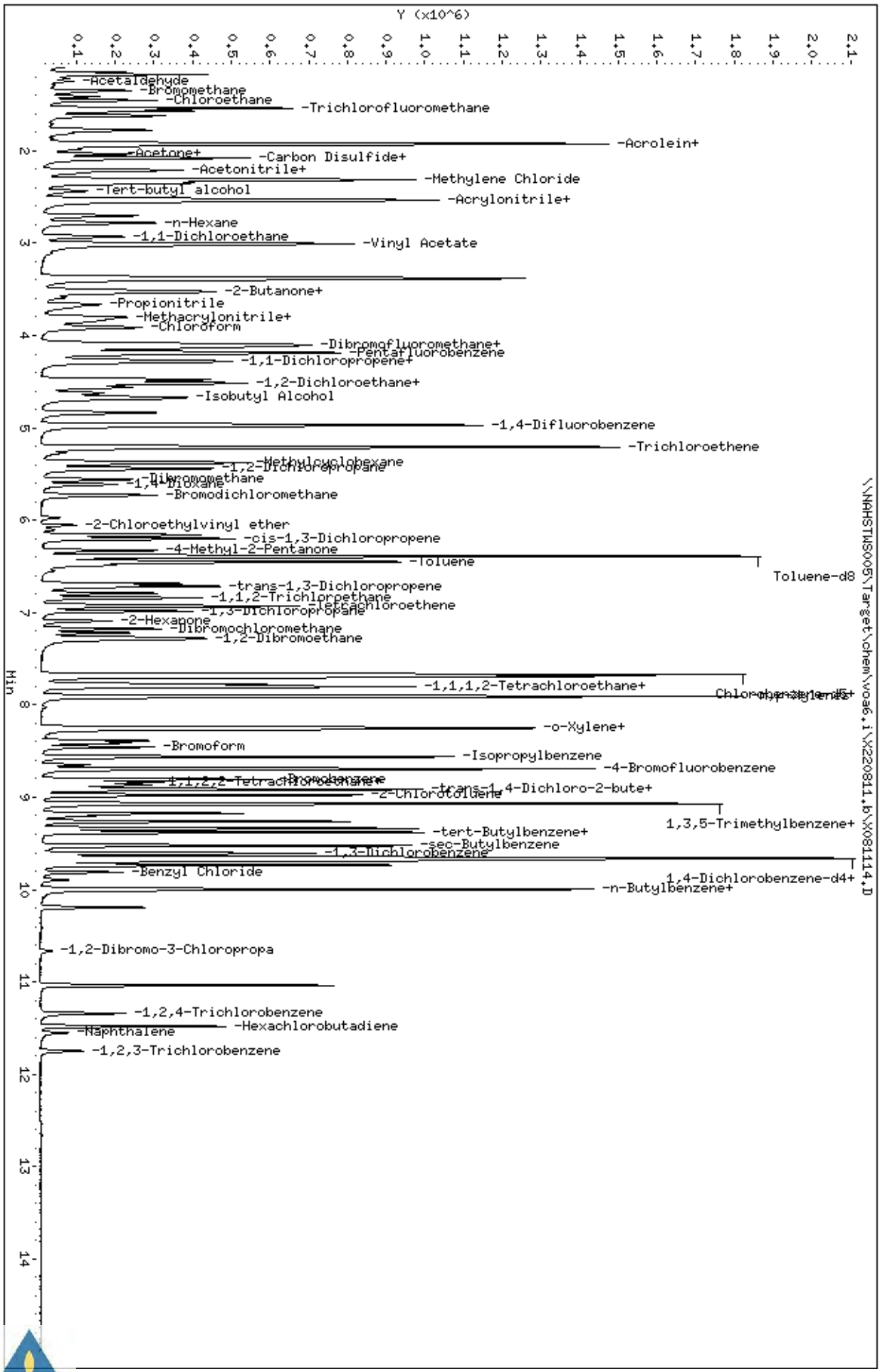
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.189	(1.000)	664479	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	957035	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	840559	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	403245	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	304027	48.4638	48.46
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	337220	49.0984	49.09
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1115288	53.1795	53.17
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	376925	50.2545	50.25
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	130411	22.0833	1104.16
31 1,1,1-Trichloroethane	97	4.088	4.087	(0.977)	208271	22.0945	1104.72
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	116119	20.5032	1025.15
53 1,1,2-Trichloroethane	83	6.839	6.843	(0.892)	90240	20.8804	1044.01
22 1,1-Dichloroethane	63	2.929	2.929	(0.700)	214861	21.0037	1050.18
11 1,1-Dichloroethene	96	1.925	1.921	(0.460)	115804	20.8776	1043.87
32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	176039	22.7913	1139.56
93 1,2,3-Trichlorobenzene	180	11.750	11.742	(1.216)	36569	17.4446	872.22
71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	90607	20.7497	1037.48(M)
90 1,2,4-Trichlorobenzene	180	11.341	11.341	(1.173)	72962	19.8657	993.28
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	449774	23.2531	1162.65
89 1,2-Dibromo-3-Chloropropane	155	10.663	10.659	(1.103)	7643	18.6456	932.28

57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	115947	21.1590	1057.95
88	1,2-Dichlorobenzene	146	9.995	9.992 (1.034)	219942	21.7980	1089.89

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
33	1,2-Dichloroethane	62	4.564	4.560	(0.919)	188136	22.4148	1120.74
42	1,2-Dichloropropane	63	5.441	5.437	(1.095)	122951	20.8721	1043.60
75	1,3,5-Trimethylbenzene	105	9.070	9.066	(0.938)	464027	23.6904	1184.51
83	1,3-Dichlorobenzene	146	9.609	9.605	(0.994)	247125	22.0880	1104.40
54	1,3-Dichloropropane	76	6.985	6.981	(0.911)	187381	21.3152	1065.75
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	260297	21.9147	1095.73
26	2,2-Dichloropropane	77	3.518	3.514	(0.841)	202492	22.1503	1107.51
24	2-Butanone	43	3.593	3.585	(0.858)	55708	33.4190	1670.95
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	389549	22.5374	1126.86
52	2-Hexanone	43	7.090	7.090	(0.924)	104836	39.6643	1983.21
77	4-Chlorotoluene	91	9.073	9.069	(0.939)	444813	23.0561	1152.80
82	p-Isopropyltoluene	119	9.651	9.650	(0.998)	479907	24.3988	1219.94
45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	172139	42.0289	2101.44
10	Acetone	43	1.981	1.981	(0.473)	48869	31.0148	1550.74
37	Benzene	78	4.515	4.515	(0.909)	485038	21.3880	1069.39
74	Bromobenzene	156	8.807	8.807	(0.911)	151768	22.0386	1101.92
29	Bromochloromethane	128	3.799	3.799	(0.908)	72286	19.2942	964.70
39	Bromodichloromethane	83	5.730	5.729	(1.153)	169027	20.9126	1045.63
66	Bromoform	173	8.410	8.410	(1.096)	78534	20.0308	1001.53
6	Bromomethane	94	1.347	1.347	(0.322)	99777	21.2117	1060.58
19	Carbon Disulfide	76	2.078	2.078	(0.497)	644614	43.8971	2194.85
34	Carbon Tetrachloride	117	4.271	4.267	(0.860)	183811	22.2658	1113.29
59	Chlorobenzene	112	7.698	7.694	(1.003)	360412	22.6135	1130.67
7	Chloroethane	64	1.411	1.411	(0.337)	83081	19.4936	974.68
28	Chloroform	83	3.911	3.911	(0.935)	234959	20.9633	1048.16
3	Chloromethane	50	1.085	1.085	(0.259)	137707	22.4125	1120.62
27	cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	147703	22.3584	1117.91
46	cis-1,3-Dichloropropene	75	6.161	6.157	(1.240)	208051	20.9555	1047.77
55	Dibromochloromethane	129	7.176	7.176	(0.935)	131552	21.0862	1054.31
44	Dibromomethane	93	5.557	5.553	(1.118)	80187	20.2886	1014.42
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	128440	20.1865	1009.32
61	Ethylbenzene	106	7.803	7.802	(1.017)	185575	23.0492	1152.46
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	78537	23.1541	1157.70
67	Isopropylbenzene	105	8.563	8.563	(1.116)	577131	23.8372	1191.85
62	m,p-Xylenes	106	7.907	7.907	(1.031)	467990	46.7316	2336.58
17	Methylene Chloride	84	2.311	2.311	(0.552)	127707	20.3927	1019.63
87	n-Butylbenzene	91	9.995	9.995	(1.034)	411622	25.1852	1259.25
73	n-Propylbenzene	91	8.916	8.912	(0.922)	661160	24.8540	1242.69
92	Naphthalene	128	11.551	11.544	(1.195)	66428	16.1676	808.37
63	o-Xylene	106	8.245	8.241	(1.075)	218005	22.3929	1119.64
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	563741	24.7992	1239.96
64	Styrene	104	8.264	8.260	(1.077)	358126	22.3381	1116.90
78	tert-Butylbenzene	119	9.339	9.336	(0.966)	401212	24.1681	1208.40
56	Tetrachloroethene	164	6.929	6.929	(0.903)	127587	23.4078	1170.39
50	Toluene	91	6.449	6.449	(0.841)	535028	22.6434	1132.16
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.606)	125145	21.4087	1070.43
51	trans-1,3-Dichloropropene	75	6.685	6.682	(1.346)	171343	20.8391	1041.95
38	Trichloroethene	130	5.208	5.208	(1.048)	496308	73.8793	3693.96
8	Trichlorofluoromethane	101	1.569	1.568	(0.375)	227147	21.7083	1085.41
5	Vinyl Chloride	62	1.152	1.152	(0.275)	135135	19.3946	969.73

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081114.D
Date : 11-AUG-2022 15:01
Client ID: HS22080522-05MS
Sample Info: HS22080522-05MS;HS22080522-05MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

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

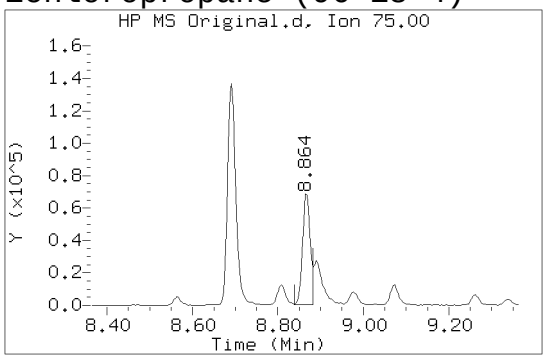
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081114.D
Inj Date : 11-AUG-2022 15:01
InstruID : voa6.i
LabSampID : HS22080522-05MS

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

Reason Code:

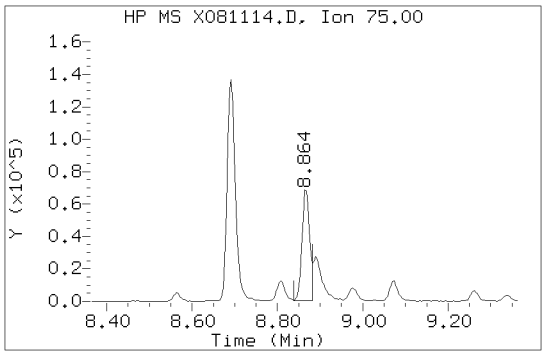
BEFORE

MASS
75
AREA
90607
HEIGHT
68701
19-Aug-2022
11:16
Linh
Pham



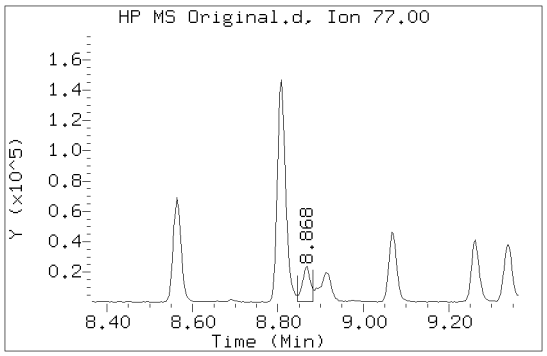
AFTER

MASS
75
AREA
90607
HEIGHT
68701
19-Aug-2022
11:16
Linh
Pham



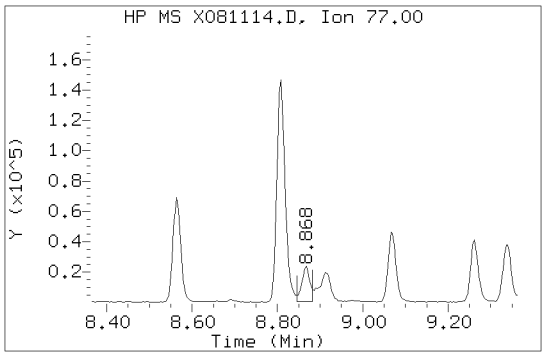
BEFORE

MASS
77
AREA
32600
HEIGHT
23616
19-Aug-2022
11:16
Linh
Pham



AFTER

MASS
77
AREA
32600
HEIGHT
23616
19-Aug-2022
11:16
Linh
Pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081115.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081115.D
Lab Smp Id: HS22080522-05MSD Client Smp ID: HS22080522-05MSD
Inj Date : 11-AUG-2022 15:22
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-05MSD;HS22080522-05MSD;3;;MSD
Misc Info : HS22052000V6;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 14 QC Sample: MSD
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	676677	50.0000	
* 36 1,4-Difluorobenzene	114	4.972	4.968	(1.000)	957979	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	832744	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	382896	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	305093	47.7465	47.74
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	331385	47.3676	47.36
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1119211	53.8674	53.86
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	370713	49.8842	49.88
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	127306	21.7598	1087.98
31 1,1,1-Trichloroethane	97	4.088	4.087	(0.977)	203426	21.1915	1059.57
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	119148	22.1561	1107.80
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	90416	21.1174	1055.87
22 1,1-Dichloroethane	63	2.929	2.929	(0.700)	211865	20.3375	1016.87
11 1,1-Dichloroethene	96	1.925	1.921	(0.460)	108653	19.2353	961.76
32 1,1-Dichloropropene	75	4.286	4.286	(0.862)	169017	21.8607	1093.03
93 1,2,3-Trichlorobenzene	180	11.746	11.742	(1.216)	45009	22.6118	1130.58
71 1,2,3-Trichloropropane	75	8.867	8.863	(0.918)	91942	22.1744	1108.71(M)
90 1,2,4-Trichlorobenzene	180	11.341	11.341	(1.174)	79783	22.8773	1143.86
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	445090	24.2339	1211.69
89 1,2-Dibromo-3-Chloropropane	155	10.663	10.659	(1.104)	8984	22.9052	1145.26

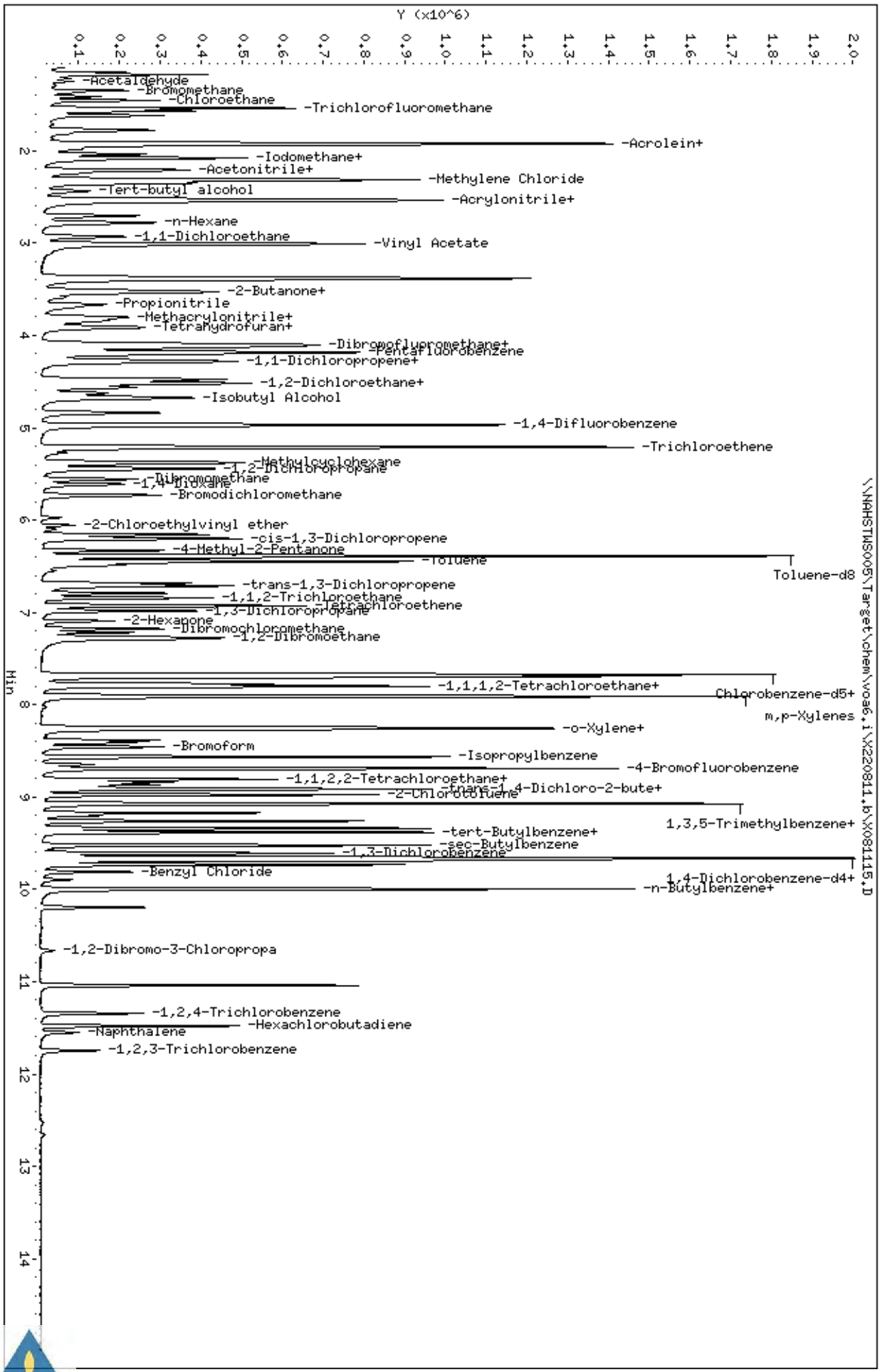
57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	115682	21.3088	1065.43
88	1,2-Dichlorobenzene	146	9.995	9.992 (1.035)	222453	23.2185	1160.92

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081115.D Page 2
Report Date: 19-Aug-2022 11:17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
33	1,2-Dichloroethane	62	4.564	4.560	(0.918)	187562	22.3244	1116.22
42	1,2-Dichloropropane	63	5.437	5.437	(1.093)	118371	20.0748	1003.74
75	1,3,5-Trimethylbenzene	105	9.069	9.066	(0.939)	454746	24.4504	1222.52
83	1,3-Dichlorobenzene	146	9.609	9.605	(0.995)	252131	23.7331	1186.65
54	1,3-Dichloropropane	76	6.985	6.981	(0.911)	184324	21.1642	1058.20
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	262669	23.2896	1164.48
26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	192704	20.6833	1034.16
24	2-Butanone	43	3.589	3.585	(0.858)	59185	34.8648	1743.24
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	384196	23.4090	1170.44
52	2-Hexanone	43	7.090	7.090	(0.924)	104321	39.8398	1991.99
77	4-Chlorotoluene	91	9.073	9.069	(0.939)	438192	23.9200	1195.99
82	p-Isopropyltoluene	119	9.650	9.650	(0.999)	478536	25.6221	1281.10
45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	175346	43.2137	2160.68
10	Acetone	43	1.985	1.981	(0.474)	48773	30.2761	1513.80
37	Benzene	78	4.519	4.515	(0.909)	469700	20.6912	1034.56
74	Bromobenzene	156	8.807	8.807	(0.912)	152626	23.3410	1167.05
29	Bromochloromethane	128	3.803	3.799	(0.909)	71646	18.7786	938.93
39	Bromodichloromethane	83	5.729	5.729	(1.152)	168023	20.7679	1038.39
66	Bromoform	173	8.410	8.410	(1.096)	77662	19.9965	999.82
6	Bromomethane	94	1.347	1.347	(0.322)	91635	18.9950	949.75
19	Carbon Disulfide	76	2.078	2.078	(0.497)	612388	40.9509	2047.54
34	Carbon Tetrachloride	117	4.271	4.267	(0.859)	177319	21.4583	1072.91
59	Chlorobenzene	112	7.697	7.694	(1.003)	350906	22.2237	1111.18
7	Chloroethane	64	1.411	1.411	(0.337)	81754	18.8365	941.82
28	Chloroform	83	3.915	3.911	(0.936)	229771	20.1309	1006.54
3	Chloromethane	50	1.085	1.085	(0.259)	127093	20.3170	1015.85
27	cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	142734	21.2167	1060.83
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.238)	205483	20.6764	1033.82
55	Dibromochloromethane	129	7.176	7.176	(0.935)	131899	21.3402	1067.01
44	Dibromomethane	93	5.557	5.553	(1.118)	80181	20.2671	1013.35
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	123744	19.0885	954.42
61	Ethylbenzene	106	7.802	7.802	(1.017)	181590	22.7659	1138.29
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	79611	24.7181	1235.90
67	Isopropylbenzene	105	8.563	8.563	(1.116)	561573	23.4123	1170.61
62	m,p-Xylenes	106	7.907	7.907	(1.031)	454088	45.7689	2288.44
17	Methylene Chloride	84	2.311	2.311	(0.552)	125256	19.6085	980.42
87	n-Butylbenzene	91	9.995	9.995	(1.035)	404444	26.0611	1303.05
73	n-Propylbenzene	91	8.916	8.912	(0.923)	643036	25.4573	1272.86
92	Naphthalene	128	11.551	11.544	(1.196)	81895	20.9913	1049.56
63	o-Xylene	106	8.245	8.241	(1.075)	215012	22.2927	1114.63
81	sec-Butylbenzene	105	9.523	9.523	(0.986)	551167	25.5347	1276.73
64	Styrene	104	8.263	8.260	(1.077)	353070	22.2294	1111.47
78	tert-Butylbenzene	119	9.339	9.336	(0.967)	393710	24.9766	1248.82
56	Tetrachloroethene	164	6.929	6.929	(0.903)	122840	22.7484	1137.42
50	Toluene	91	6.449	6.449	(0.841)	521681	22.2857	1114.28
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.606)	119908	20.1431	1007.15
51	trans-1,3-Dichloropropene	75	6.685	6.682	(1.345)	169066	20.5419	1027.09
38	Trichloroethene	130	5.212	5.208	(1.048)	471943	70.1831	3509.15
8	Trichlorofluoromethane	101	1.568	1.568	(0.375)	216692	20.3359	1016.79
5	Vinyl Chloride	62	1.152	1.152	(0.275)	129882	18.3047	915.23

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081115.D
Date : 11-AUG-2022 15:22
Client ID: HS220805Z2-05MSD
Sample Info: HS22080522-05MSD;HS22080522-05MSD;3;;MSD
Purge Volume: 5.0
Column phase: DB624

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

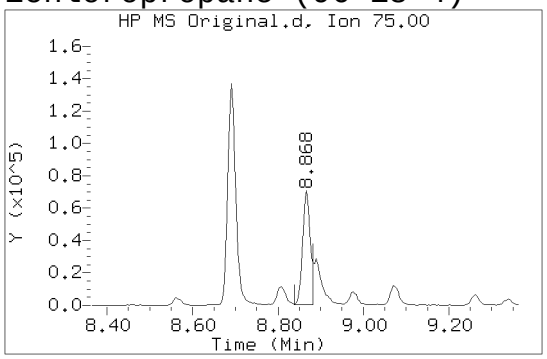
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081115.D
Inj Date : 11-AUG-2022 15:22
InstruID : voa6.i
LabSampID : HS22080522-05MSD

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

Reason Code:

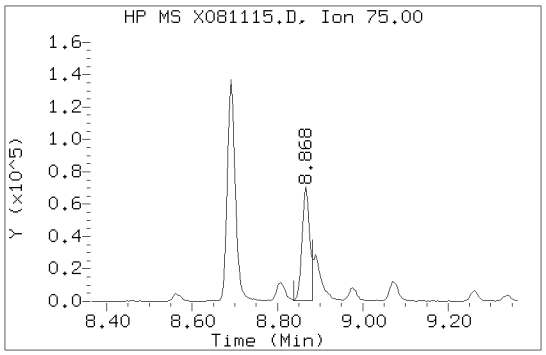
BEFORE

MASS
75
AREA
91942
HEIGHT
70358
19-Aug-2022
11:16
Linh
Pham



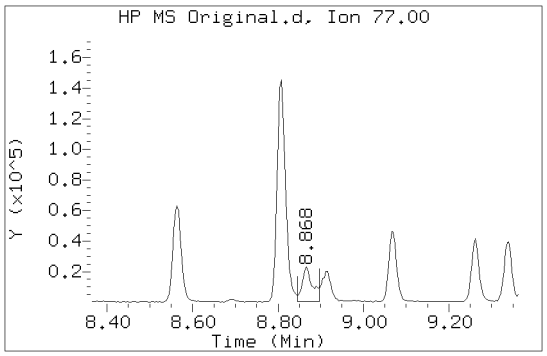
AFTER

MASS
75
AREA
91942
HEIGHT
70358
19-Aug-2022
11:16
Linh
Pham



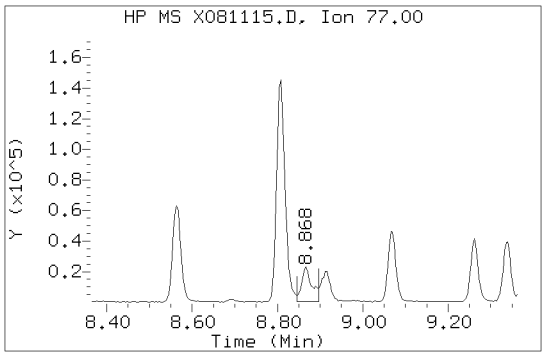
BEFORE

MASS
77
AREA
39902
HEIGHT
22598
19-Aug-2022
11:16
Linh
Pham



AFTER

MASS
77
AREA
39902
HEIGHT
22598
19-Aug-2022
11:16
Linh
Pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081118.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081118.D
Lab Smp Id: HS22080499-01 Client Smp ID: HS22080499-01
Inj Date : 11-AUG-2022 16:26
Operator : PC Inst ID: voa6.i
Smp Info : HS22080499-01;HS22080499-01;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	663127	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	951985	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	822503	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	358538	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	298798	47.7164	47.71
$ 35 1,2-Dichloroethane-d4	65	4.474	4.477	(1.069)	331531	48.3637	48.36
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1101002	53.6508	53.65
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	353581	48.1429	48.14
22 1,1-Dichloroethane	63	2.929	2.929	(0.700)	32784	3.21133	3.21(a)
27 cis-1,2-Dichloroethene	96	3.540	3.529	(0.846)	73649	11.1713	11.17
38 Trichloroethene	130	5.208	5.208	(1.048)	273169	40.8790	40.87
5 Vinyl Chloride	62	1.152	1.152	(0.275)	28130	4.04546	4.04(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

01133909

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081118.D

Date : 11-AUG-2022 16:26

Client ID: HS22080499-01

Instrument: voa6.i

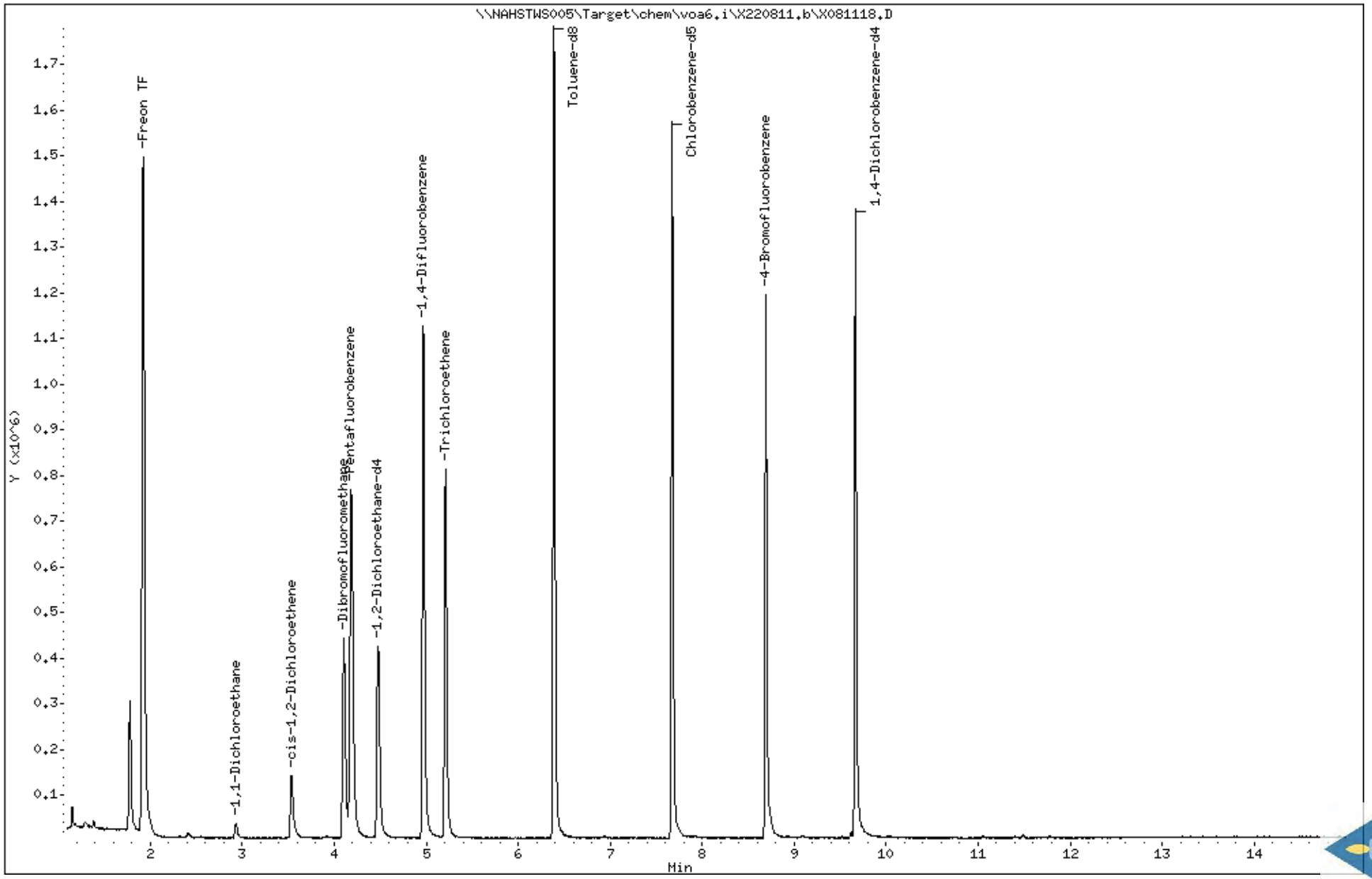
Sample Info: HS22080499-01;HS22080499-01;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081118.D

Date : 11-AUG-2022 16:26

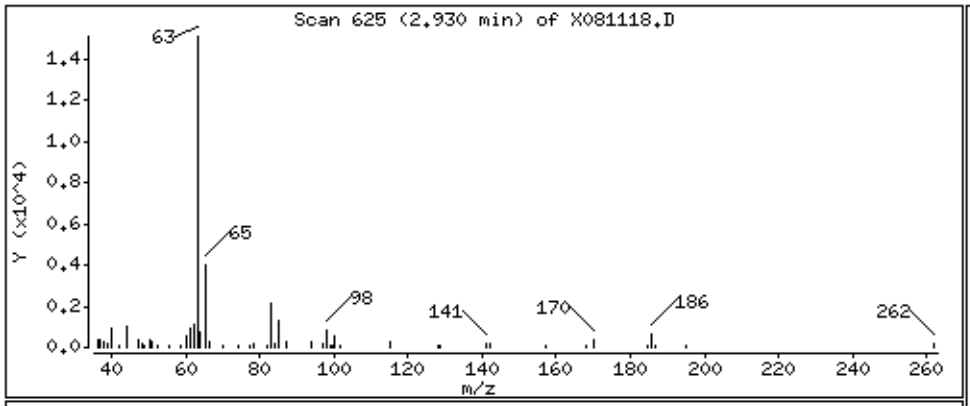
Client ID: HS22080499-01 Instrument: voa6.i

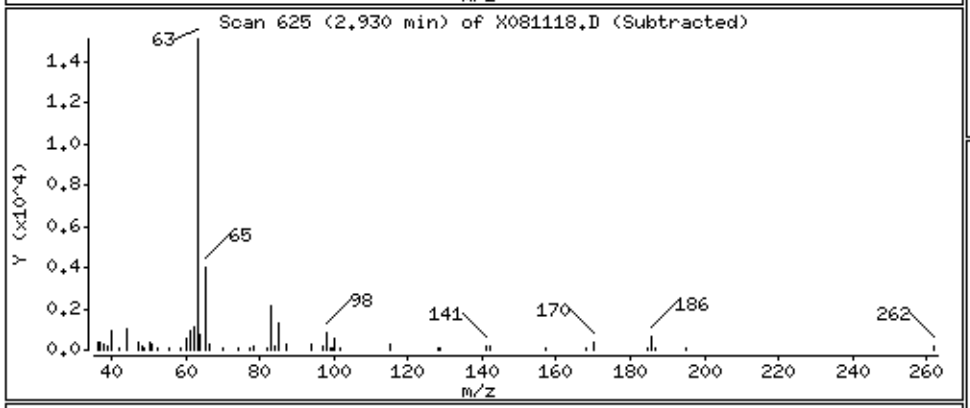
Sample Info: HS22080499-01;HS22080499-01;;;

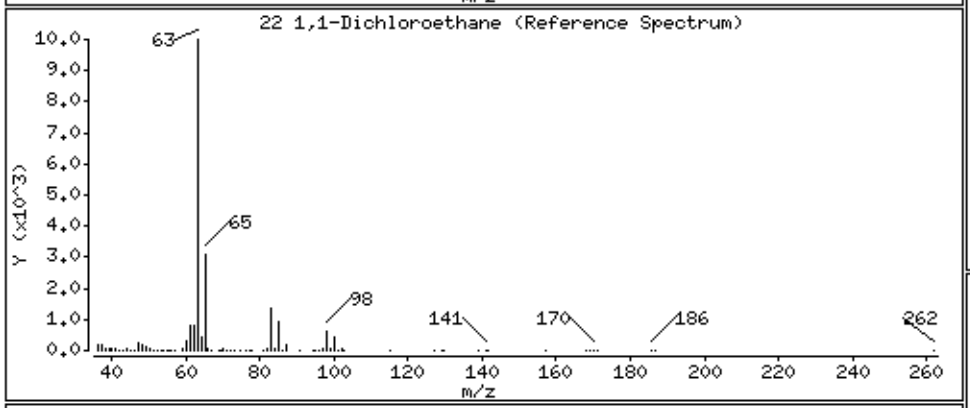
Purge Volume: 5.0 Operator: PC

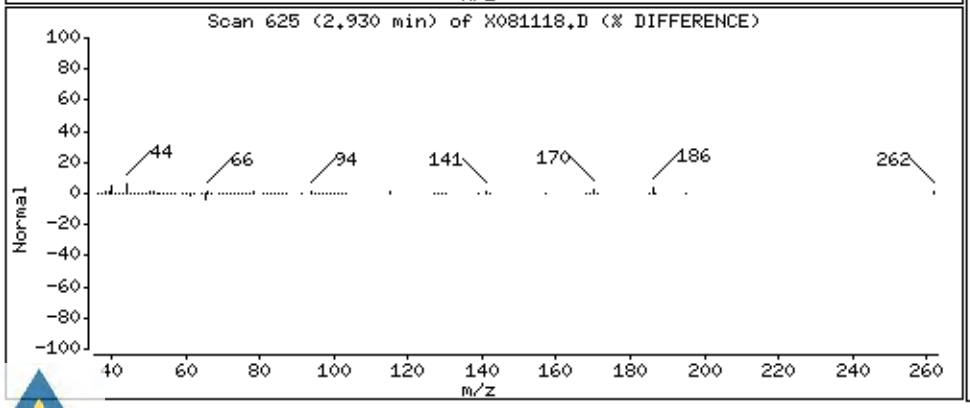
Column phase: DB624 Column diameter: 0.18

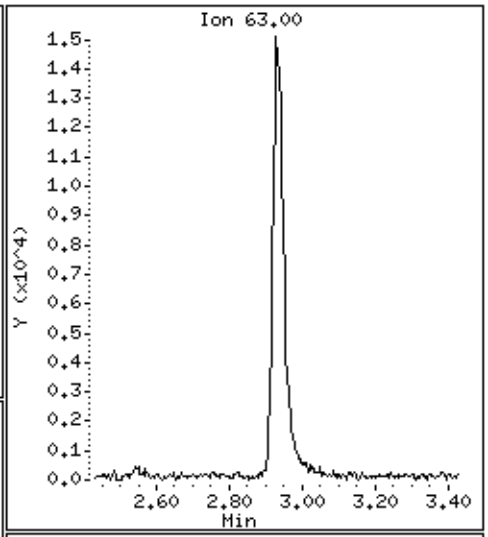
22 1,1-Dichloroethane Concentration: 3.21 ug/l

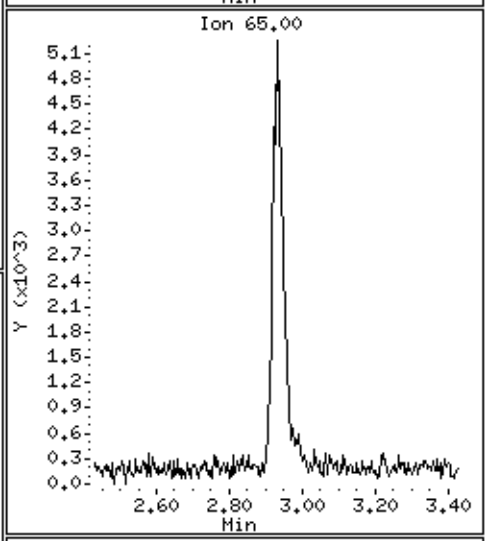


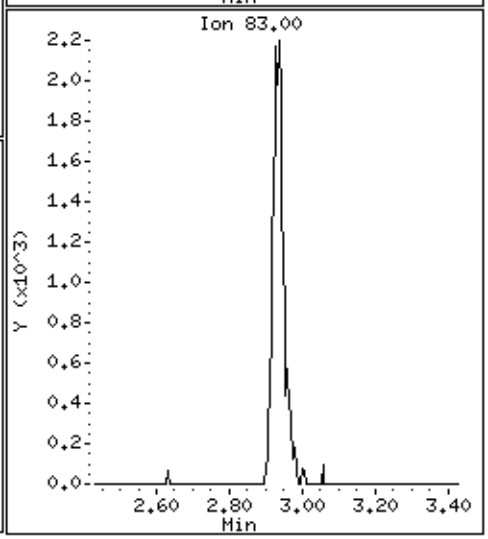












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081118.D Page 3

Date : 11-AUG-2022 16:26

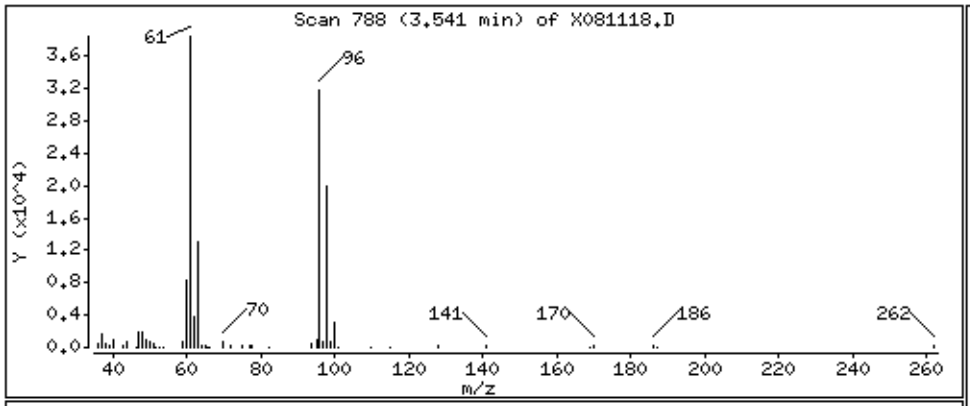
Client ID: HS22080499-01 Instrument: voa6.i

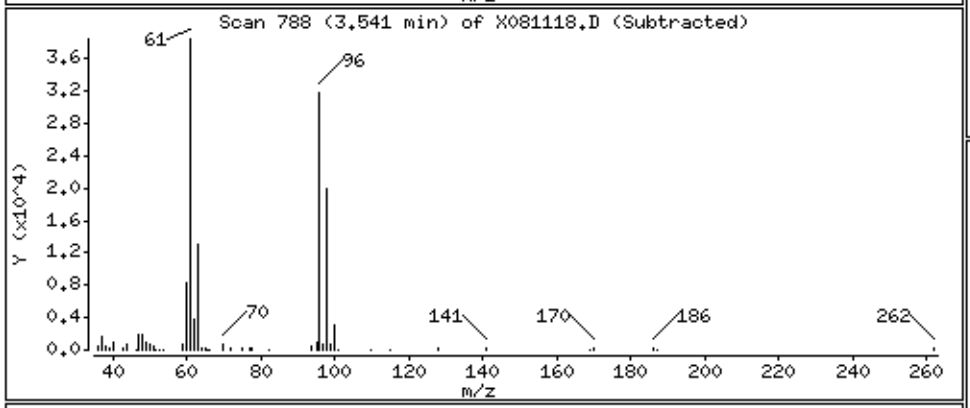
Sample Info: HS22080499-01;HS22080499-01;;;

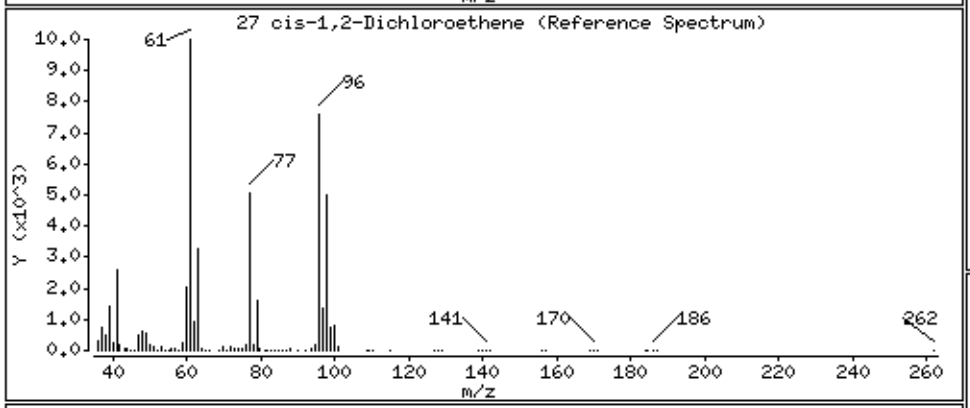
Purge Volume: 5.0 Operator: PC

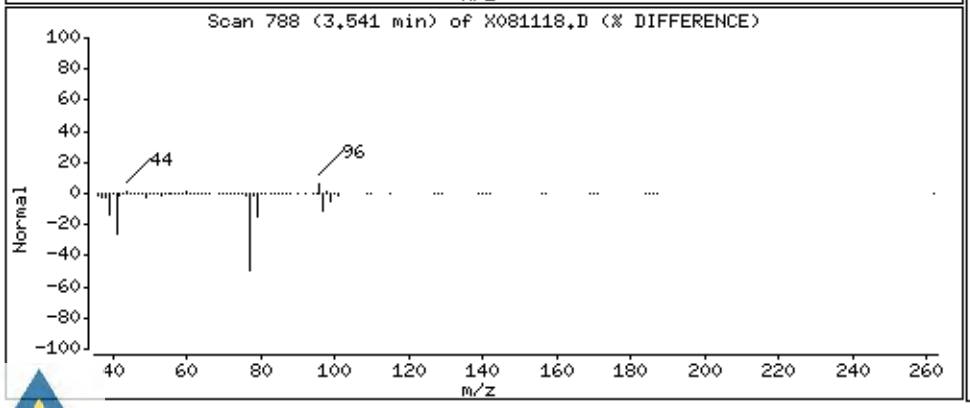
Column phase: DB624 Column diameter: 0.18

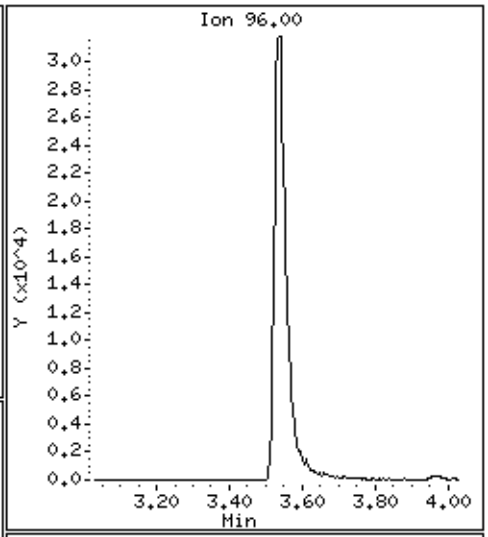
27 cis-1,2-Dichloroethene Concentration: 11.17 ug/l

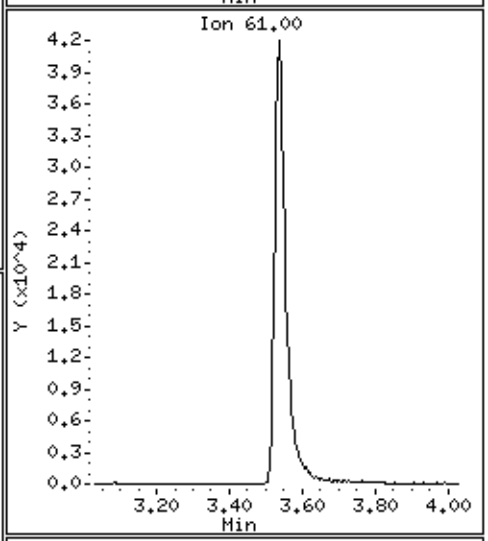


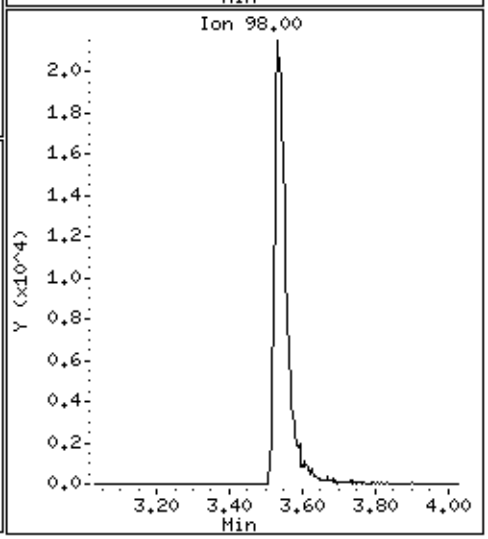












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081118.D Page 4

Date : 11-AUG-2022 16:26

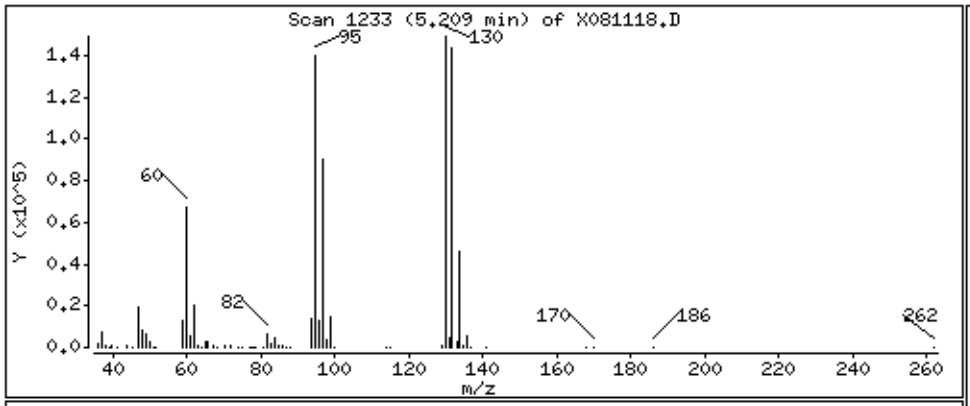
Client ID: HS22080499-01 Instrument: voa6.i

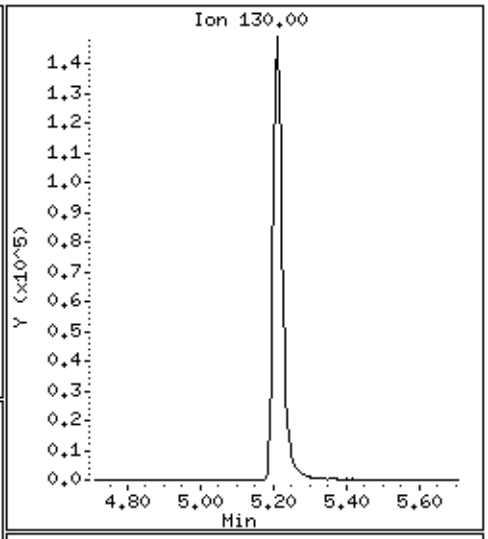
Sample Info: HS22080499-01;HS22080499-01;;;

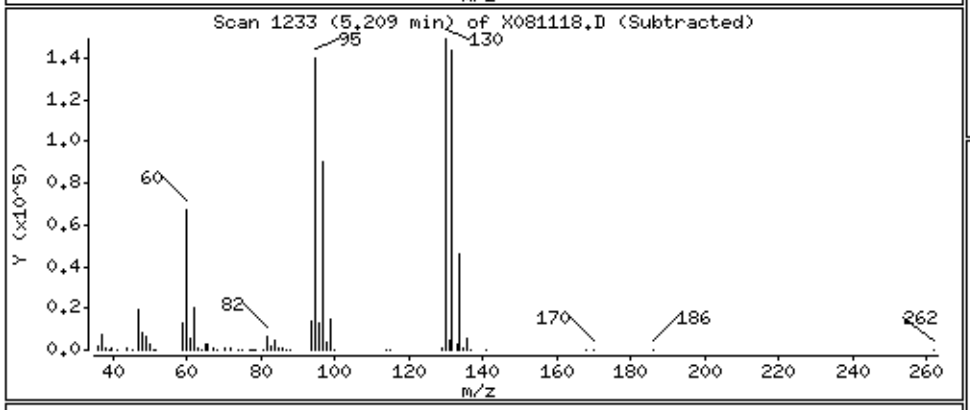
Purge Volume: 5.0 Operator: PC

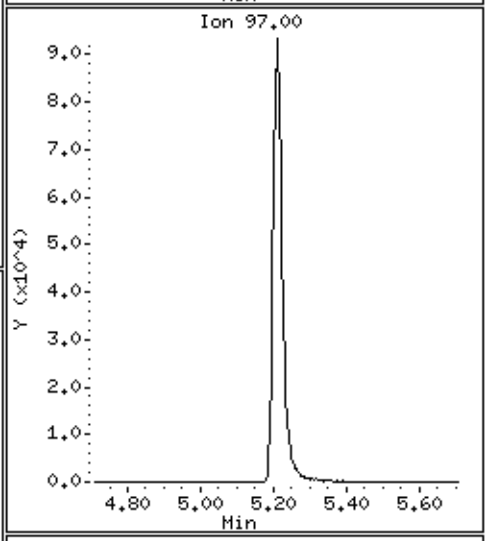
Column phase: DB624 Column diameter: 0.18

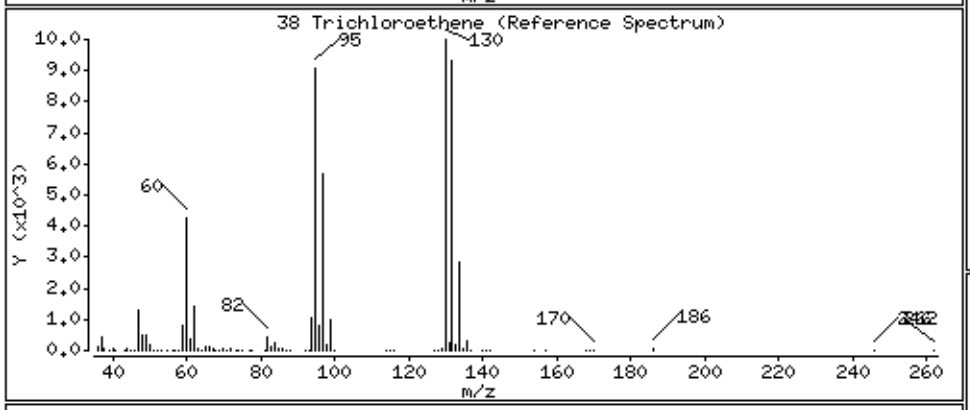
38 Trichloroethene Concentration: 40.87 ug/l

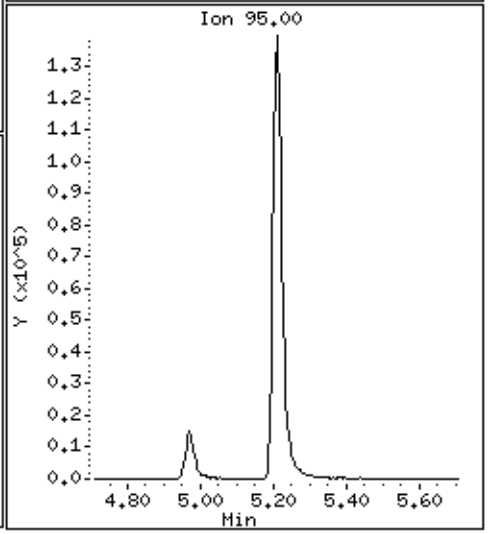


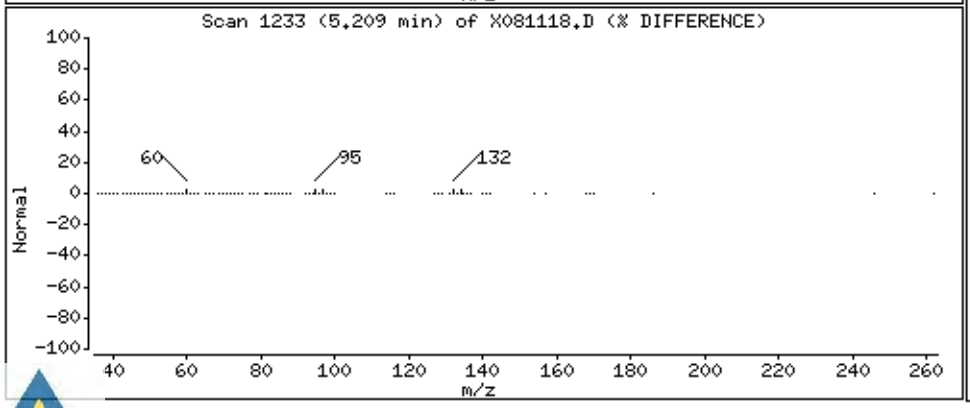












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081118.D Page 5

Date : 11-AUG-2022 16:26

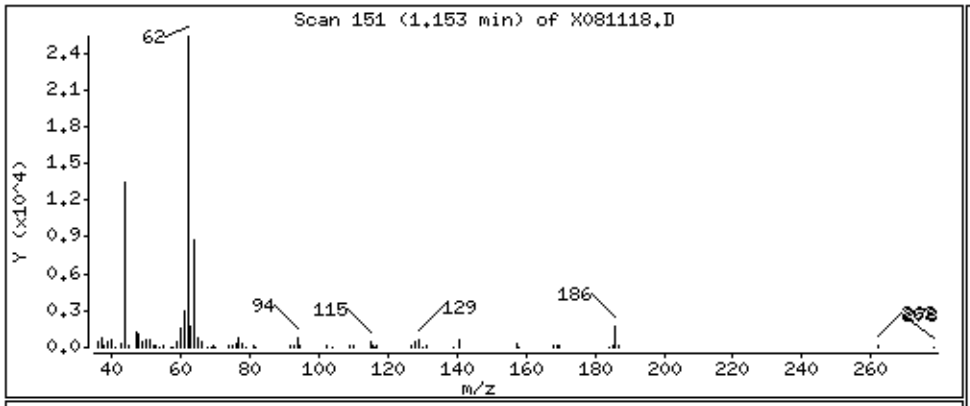
Client ID: HS22080499-01 Instrument: voa6.i

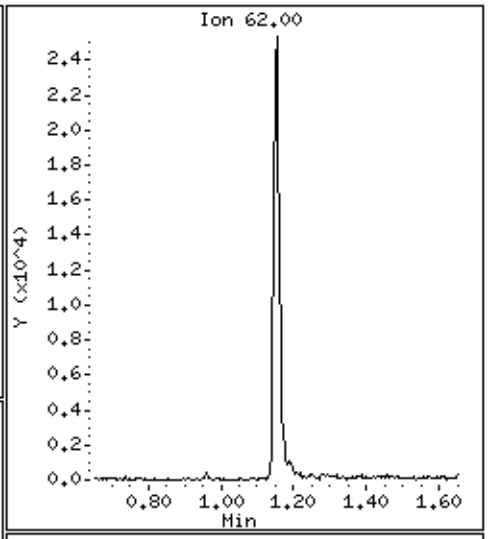
Sample Info: HS22080499-01;HS22080499-01;;;

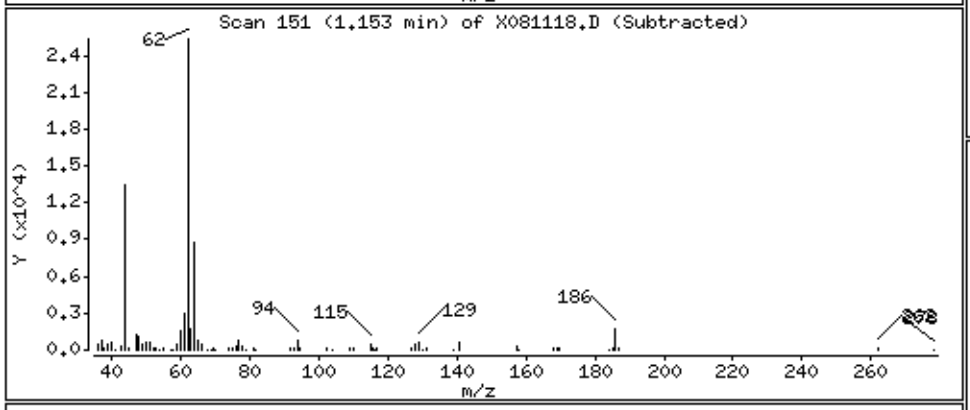
Purge Volume: 5.0 Operator: PC

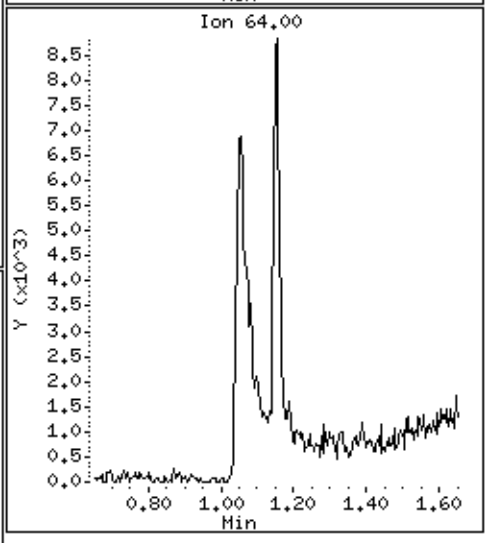
Column phase: DB624 Column diameter: 0.18

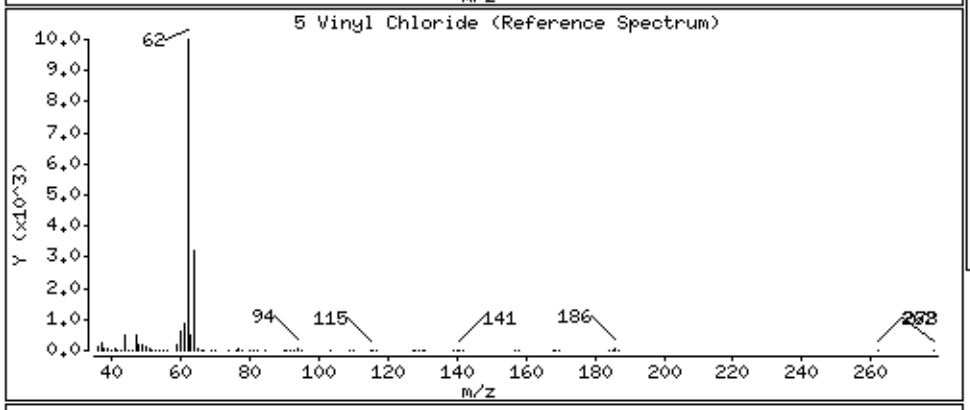
5 Vinyl Chloride Concentration: 4.04 ug/l

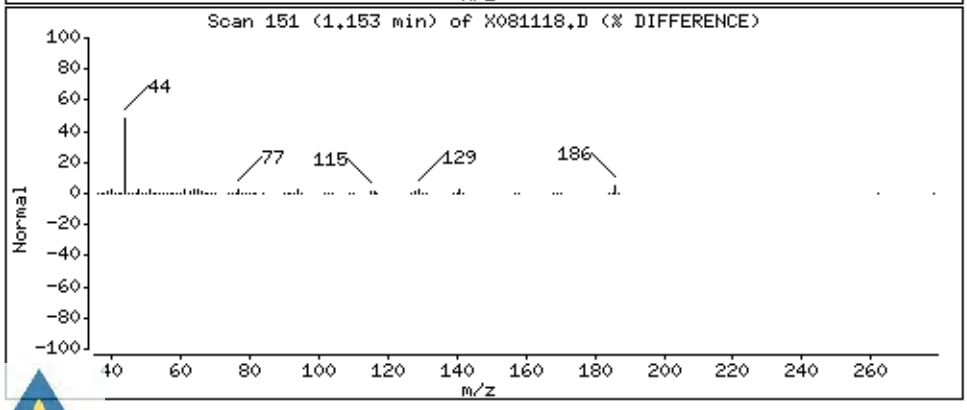












Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081118.D
Inj Date : 11-AUG-2022 16:26
InstruID : voa6.i
LabSampID : HS22080499-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081119.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081119.D
Lab Smp Id: HS22080499-03 Client Smp ID: HS22080499-03
Inj Date : 11-AUG-2022 16:47
Operator : PC Inst ID: voa6.i
Smp Info : HS22080499-03;HS22080499-03;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	658982	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	948829	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	821238	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	348607	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.102	(0.981)	297760	47.8517	47.85
$ 35 1,2-Dichloroethane-d4	65	4.478	4.477	(1.070)	330386	48.5007	48.50
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1109177	54.1324	54.13
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	346918	47.2942	47.29
22 1,1-Dichloroethane	63	2.933	2.929	(0.701)	33771	3.32882	3.32(a)
27 cis-1,2-Dichloroethene	96	3.540	3.529	(0.846)	59029	9.00999	9.00
38 Trichloroethene	130	5.212	5.208	(1.049)	229936	34.5238	34.52
5 Vinyl Chloride	62	1.149	1.152	(0.275)	3938	0.56990	0.56(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

01133916

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081119.D

Date : 11-AUG-2022 16:47

Client ID: HS22080499-03

Instrument: voa6.i

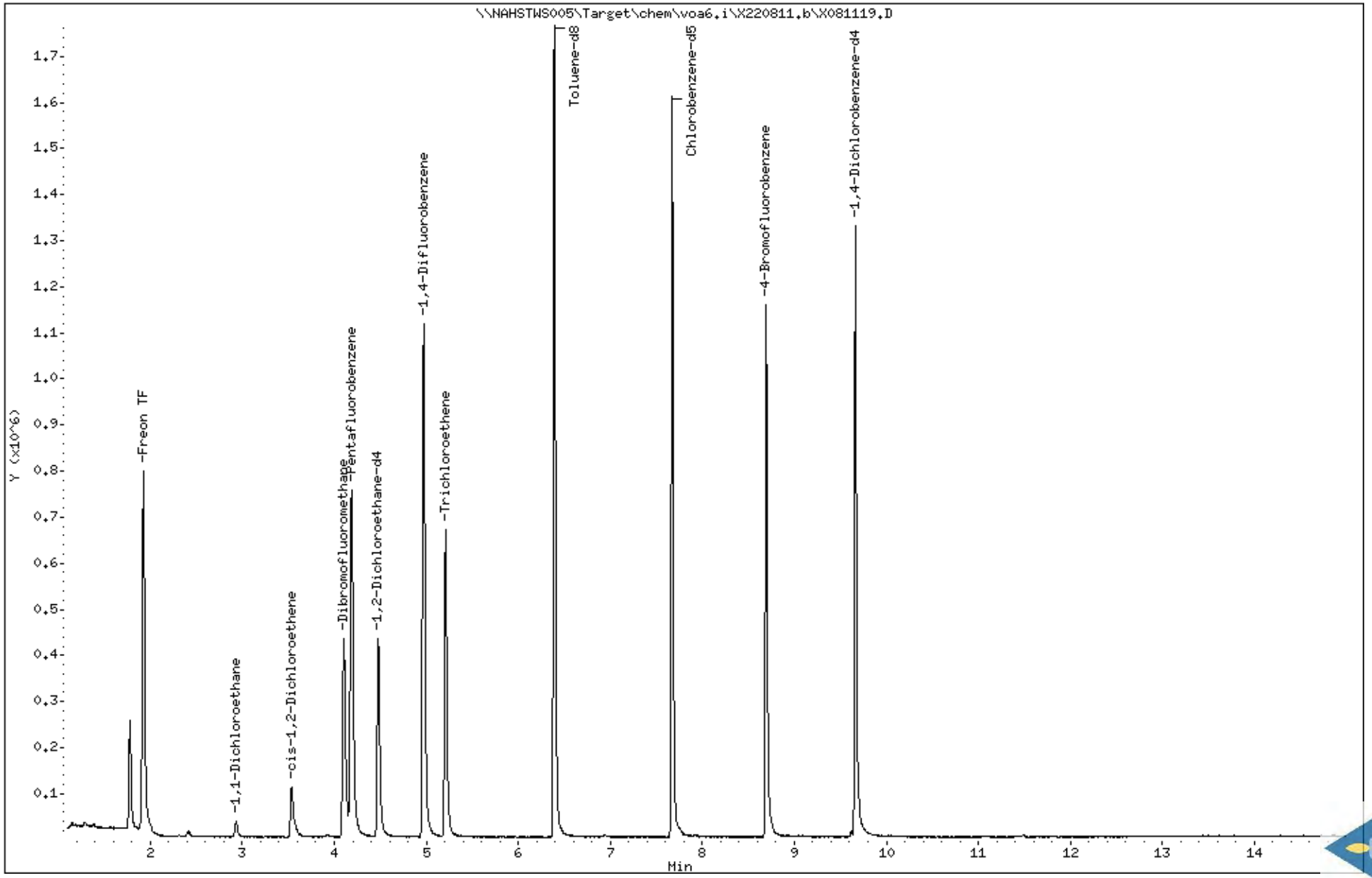
Sample Info: HS22080499-03;HS22080499-03;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081119.D

Date : 11-AUG-2022 16:47

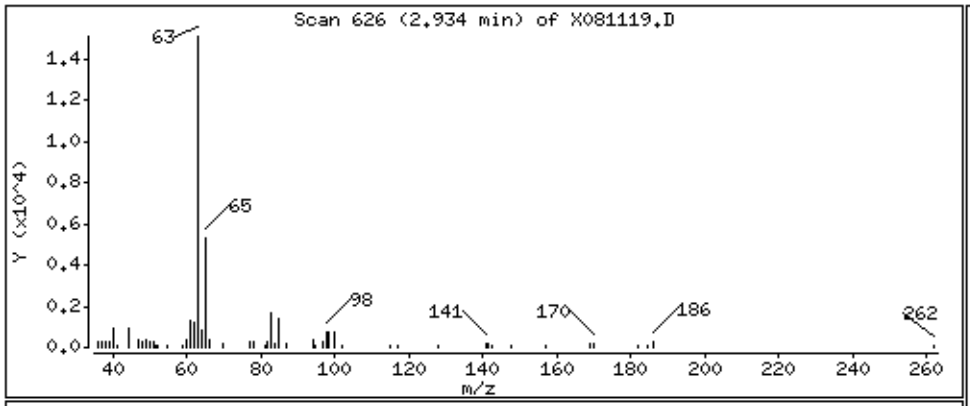
Client ID: HS22080499-03 Instrument: voa6.i

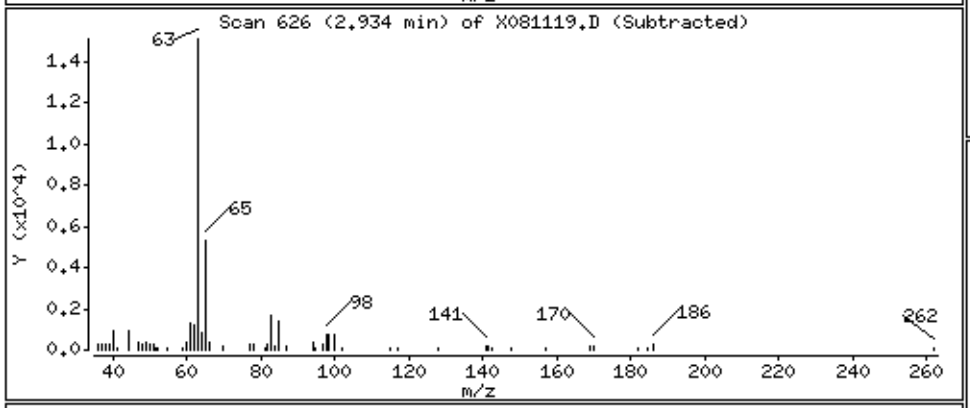
Sample Info: HS22080499-03;HS22080499-03;;;

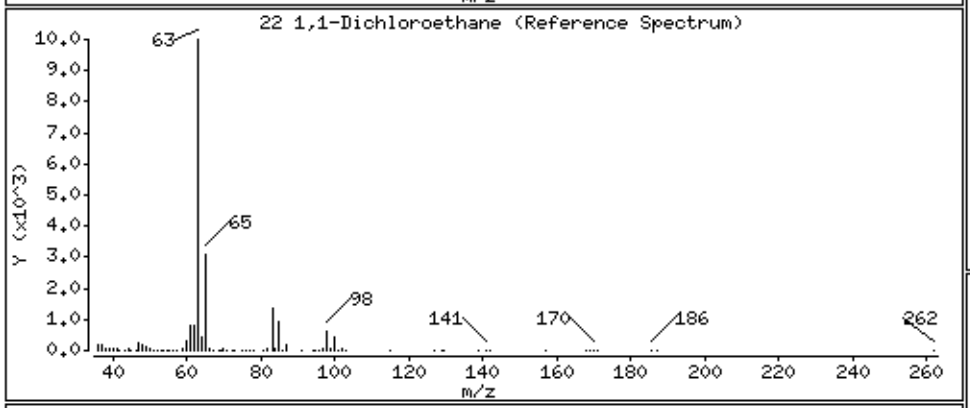
Purge Volume: 5.0 Operator: PC

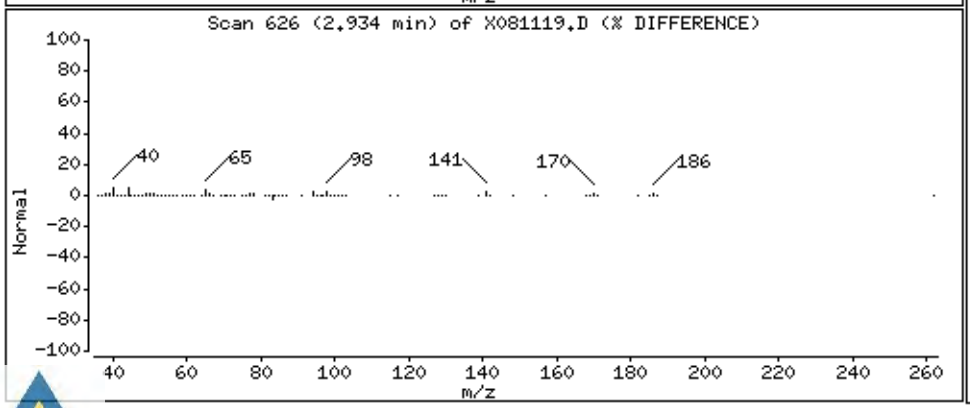
Column phase: DB624 Column diameter: 0.18

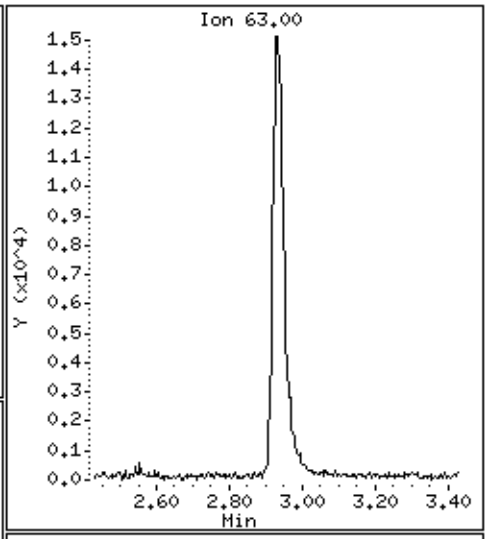
22 1,1-Dichloroethane Concentration: 3.32 ug/l

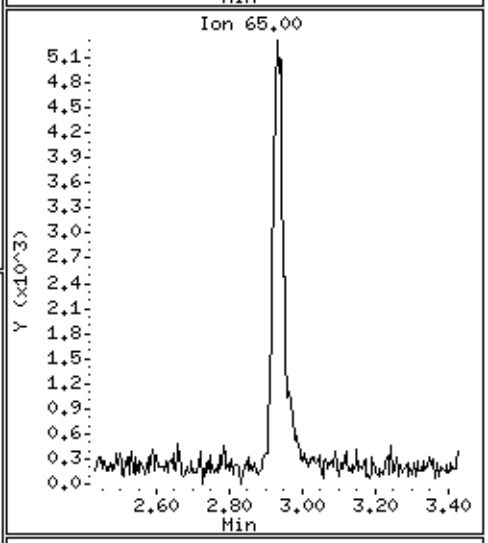


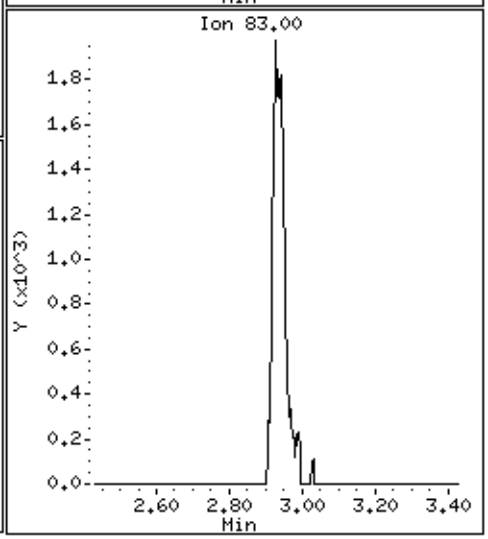












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081119.D Page 3

Date : 11-AUG-2022 16:47

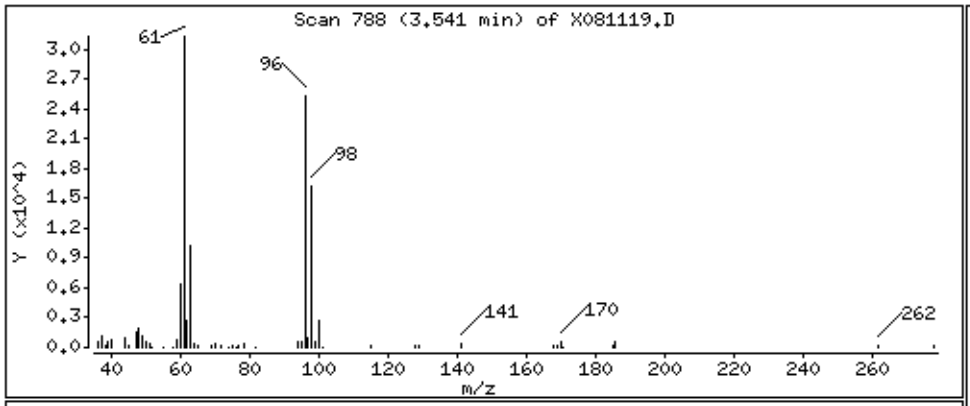
Client ID: HS22080499-03 Instrument: voa6.i

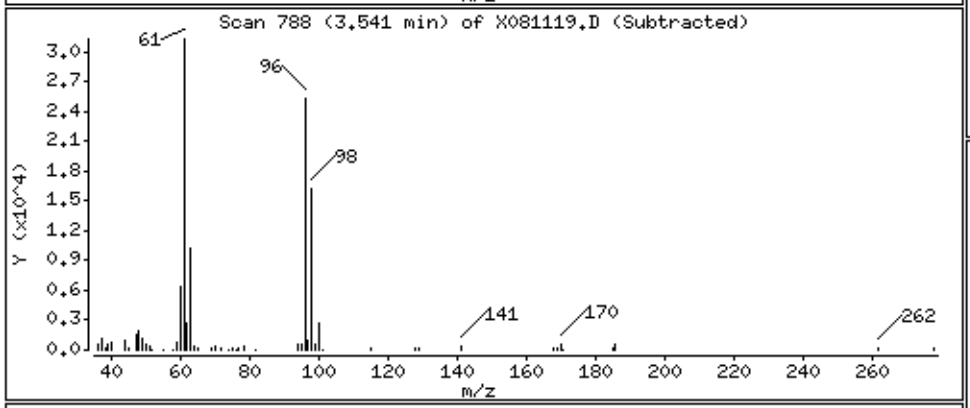
Sample Info: HS22080499-03;HS22080499-03;;;

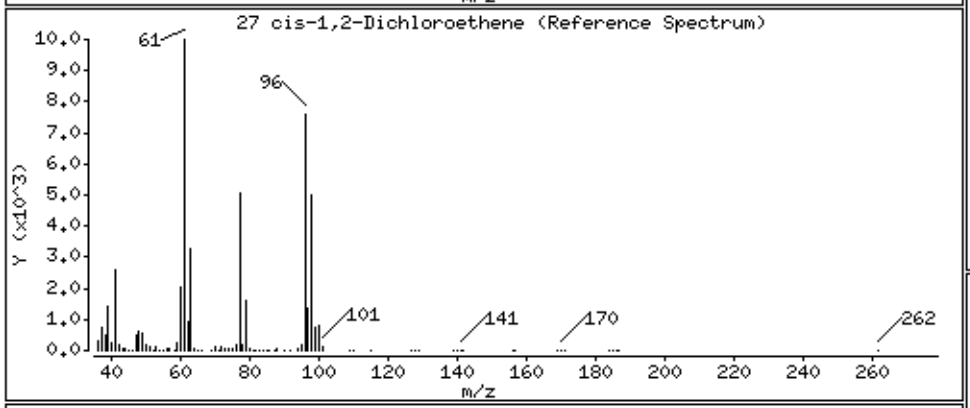
Purge Volume: 5.0 Operator: PC

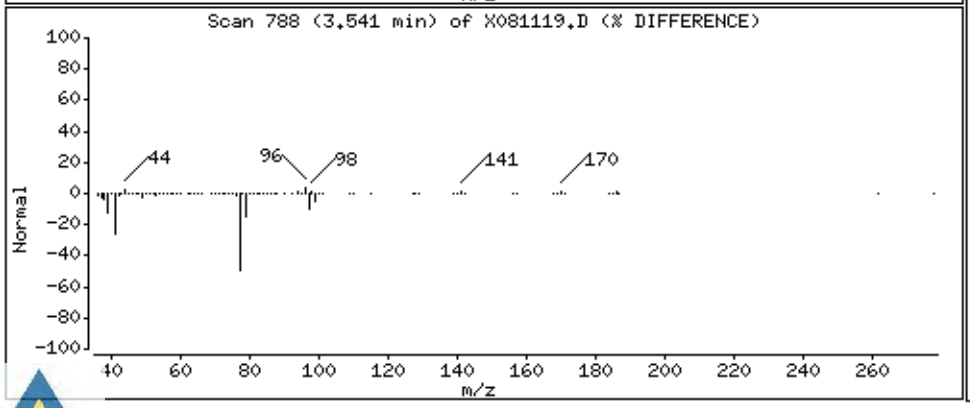
Column phase: DB624 Column diameter: 0.18

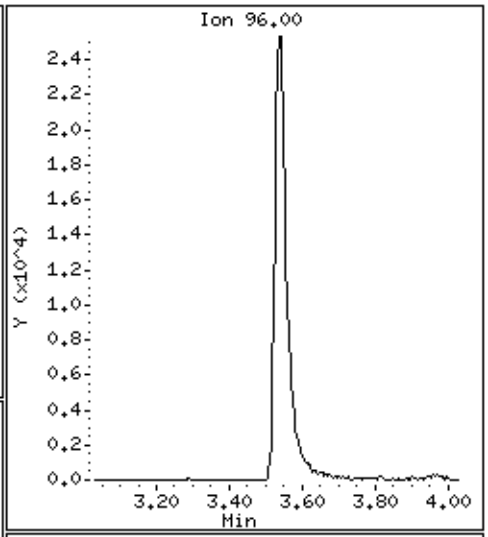
27 cis-1,2-Dichloroethene Concentration: 9.00 ug/l

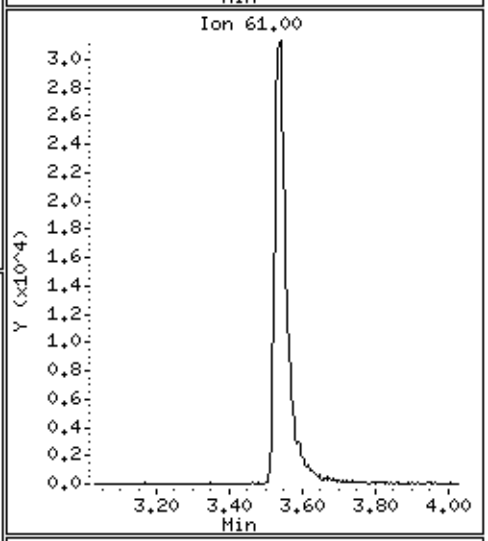


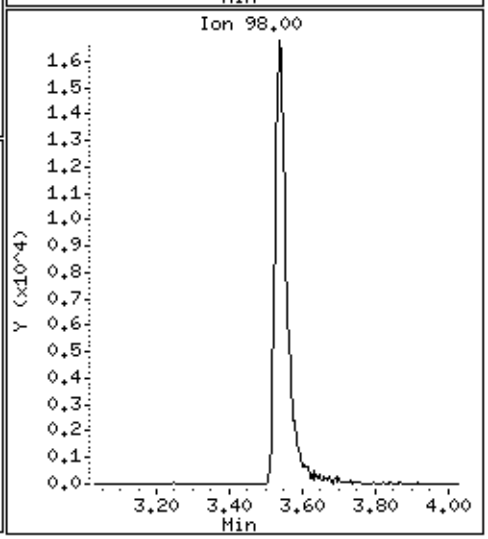












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081119.D Page 4

Date : 11-AUG-2022 16:47

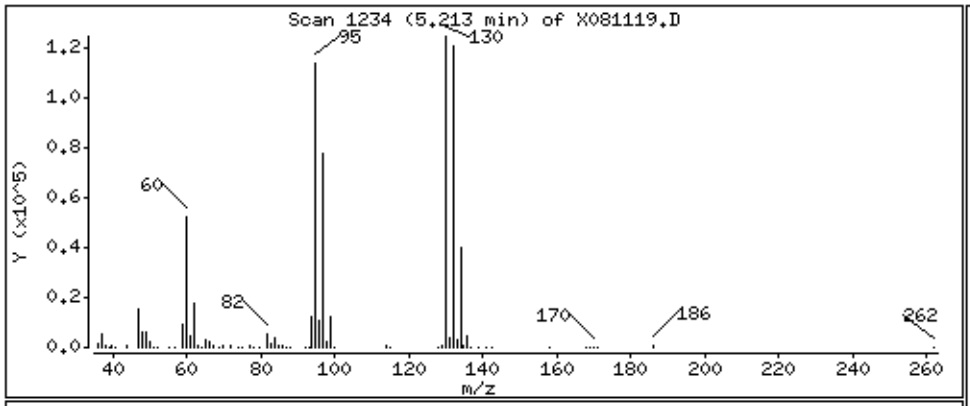
Client ID: HS22080499-03 Instrument: voa6.i

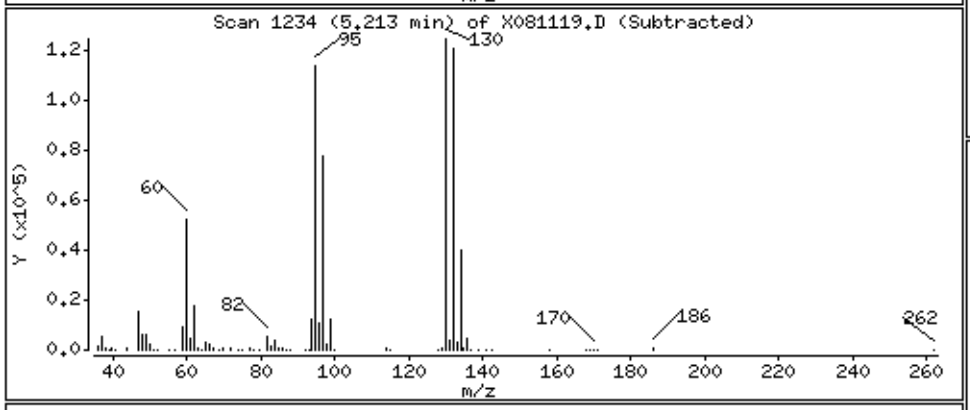
Sample Info: HS22080499-03;HS22080499-03;;;

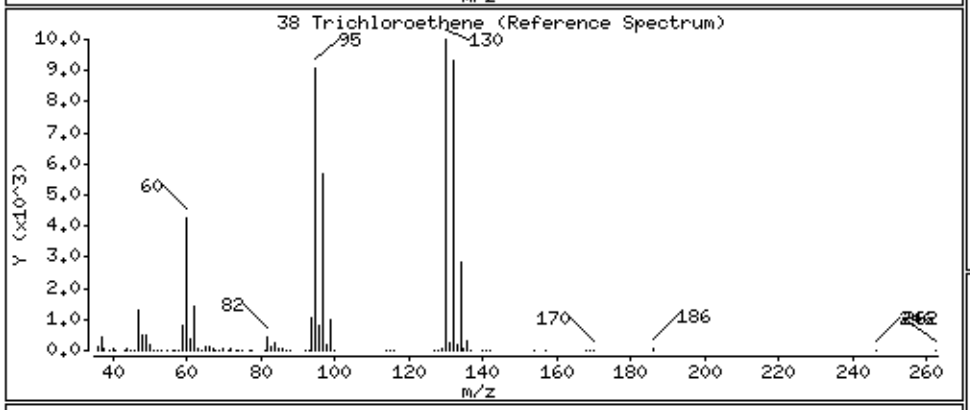
Purge Volume: 5.0 Operator: PC

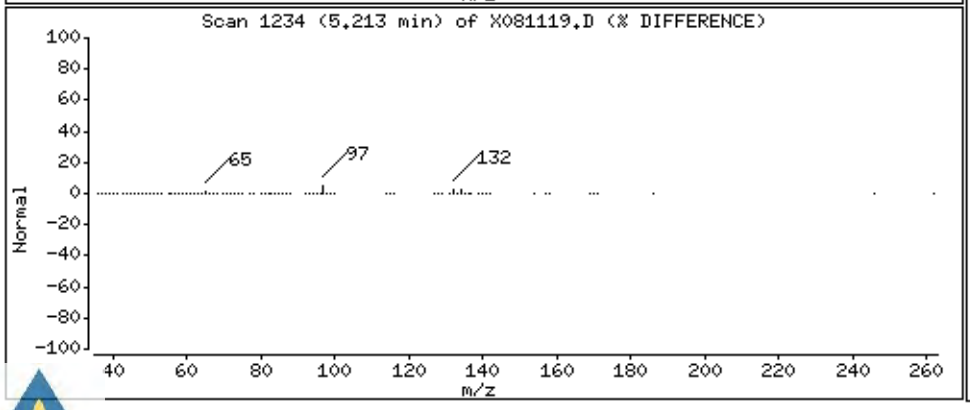
Column phase: DB624 Column diameter: 0.18

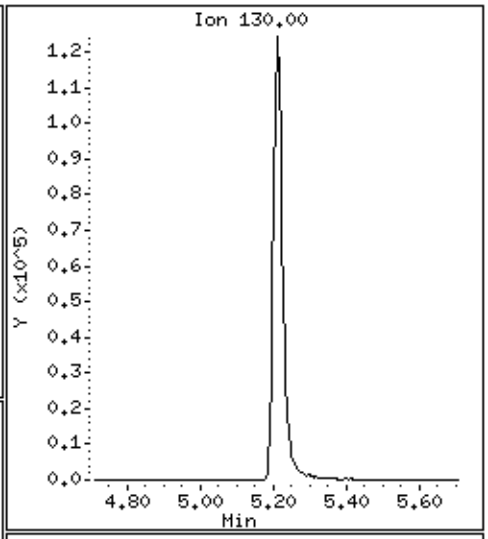
38 Trichloroethene Concentration: 34.52 ug/l

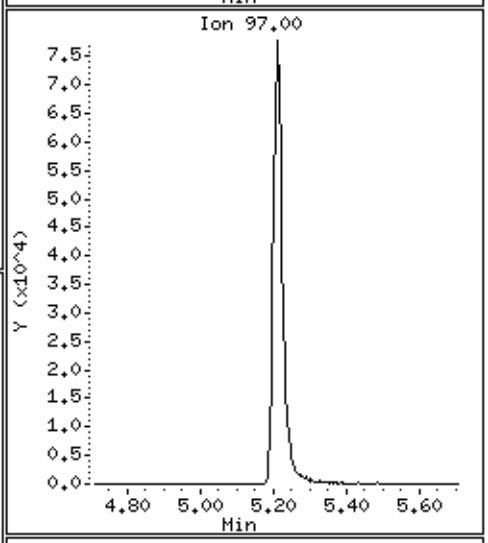


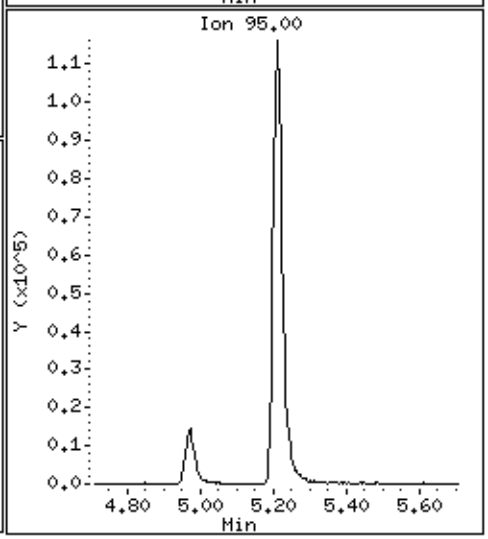












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081119.D Page 5

Date : 11-AUG-2022 16:47

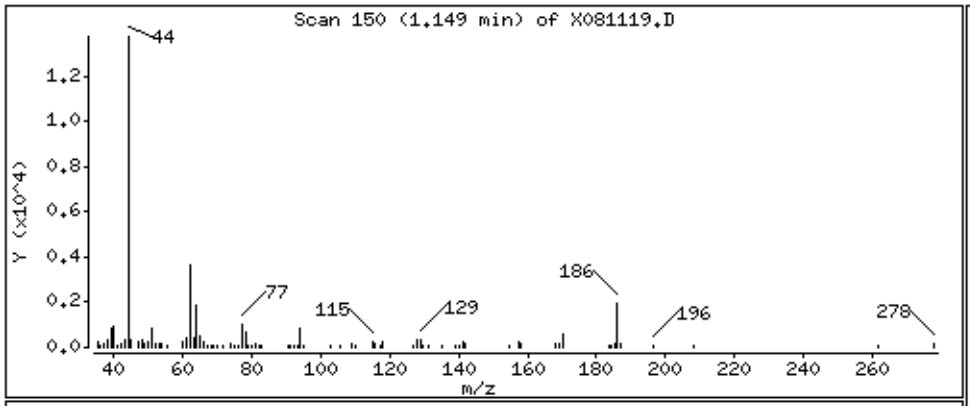
Client ID: HS22080499-03 Instrument: voa6.i

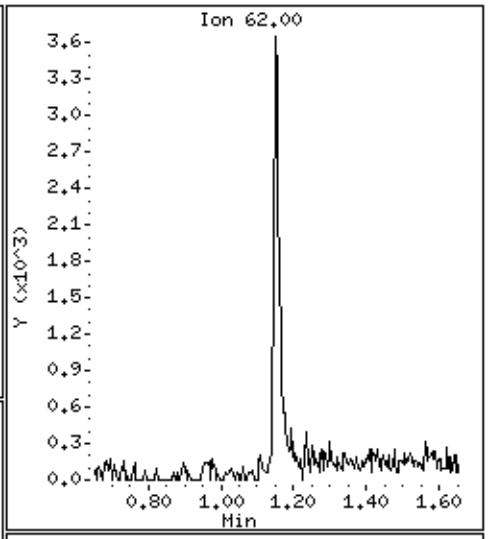
Sample Info: HS22080499-03;HS22080499-03;;;

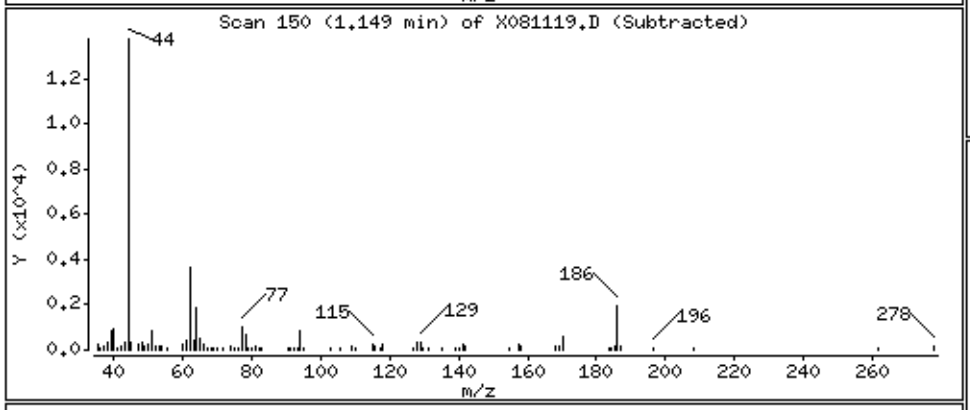
Purge Volume: 5.0 Operator: PC

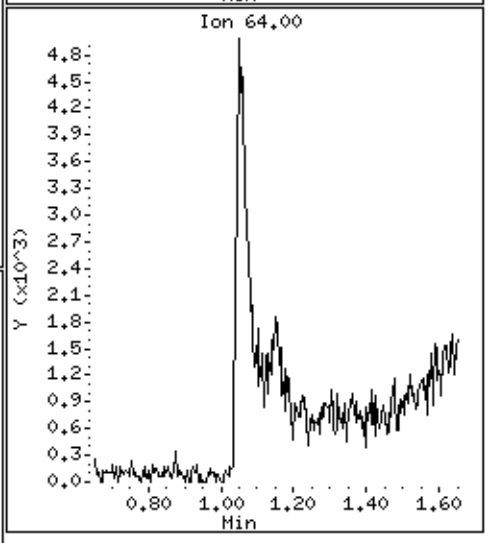
Column phase: DB624 Column diameter: 0.18

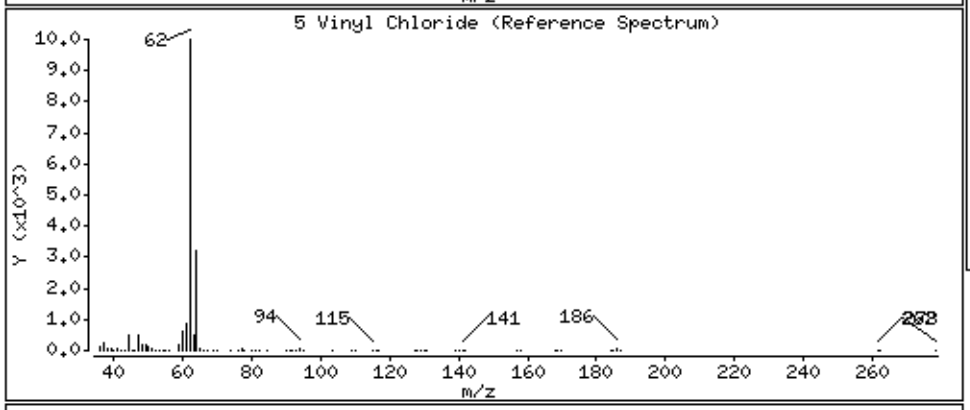
5 Vinyl Chloride Concentration: 0.56 ug/l

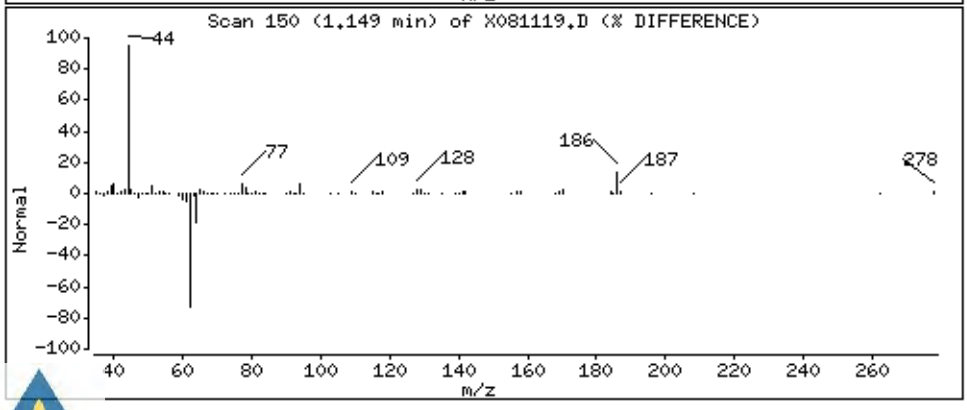












Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081119.D
Inj Date : 11-AUG-2022 16:47
InstruID : voa6.i
LabSampID : HS22080499-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081120.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081120.D
Lab Smp Id: HS22080499-05 Client Smp ID: HS22080499-05
Inj Date : 11-AUG-2022 17:08
Operator : PC Inst ID: voa6.i
Smp Info : HS22080499-05;HS22080499-05;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	663291	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	935190	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	813029	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	344207	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.102	(0.981)	298928	47.7255	47.72
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	323599	47.1869	47.18
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1090850	53.7755	53.77
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	350055	48.2195	48.21
33 1,2-Dichloroethane	62	4.567	4.560	(0.919)	5554	0.67717	0.67(a)
27 cis-1,2-Dichloroethene	96	3.536	3.529	(0.845)	46903	7.11261	7.11
38 Trichloroethene	130	5.212	5.208	(1.049)	34362	5.23453	5.23

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

01133923

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081120.D

Date : 11-AUG-2022 17:08

Client ID: HS22080499-05

Instrument: voa6.i

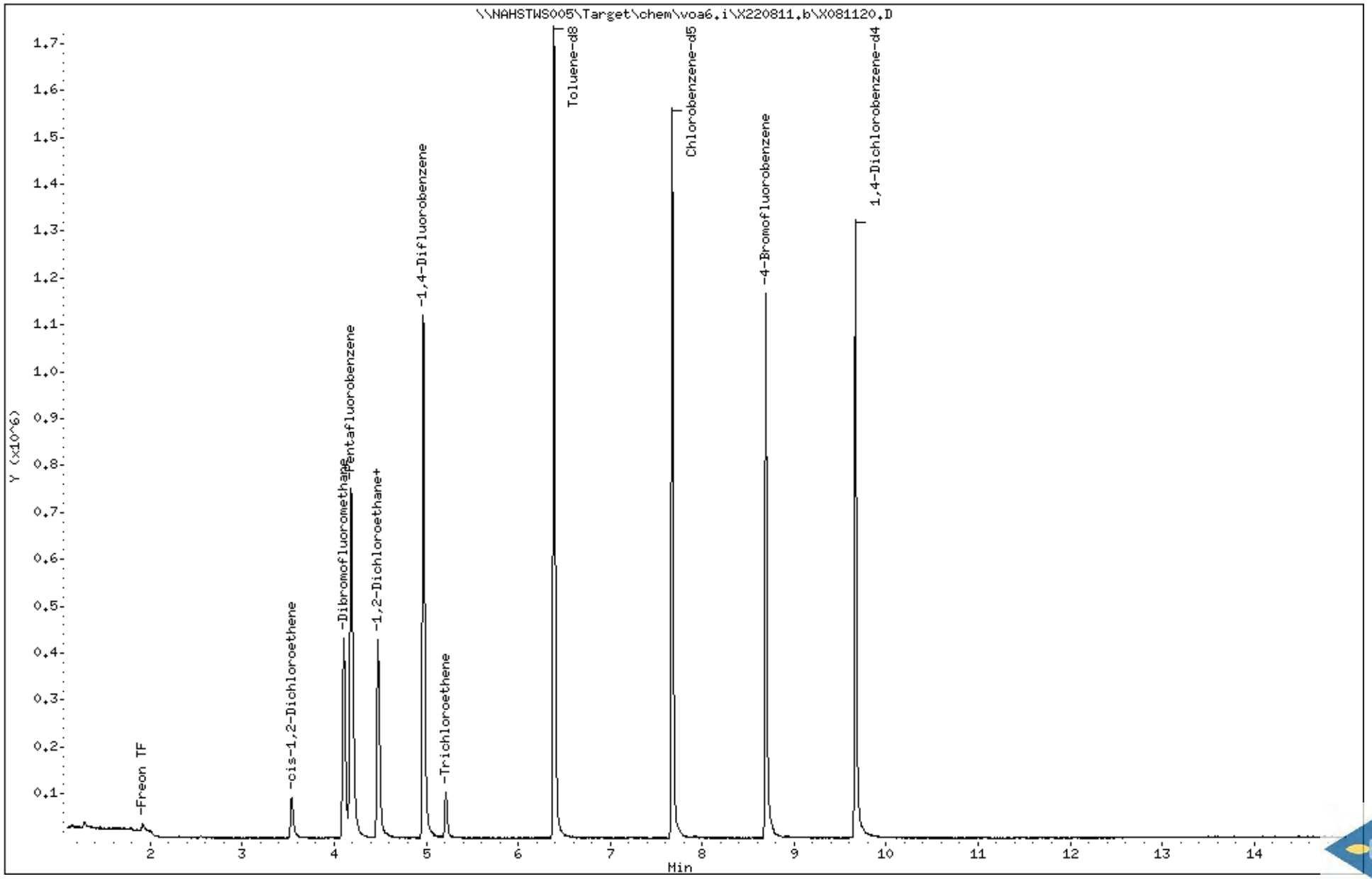
Sample Info: HS22080499-05;HS22080499-05;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081120.D

Date : 11-AUG-2022 17:08

Client ID: HS22080499-05

Instrument: voa6.i

Sample Info: HS22080499-05;HS22080499-05;;;

Purge Volume: 5.0

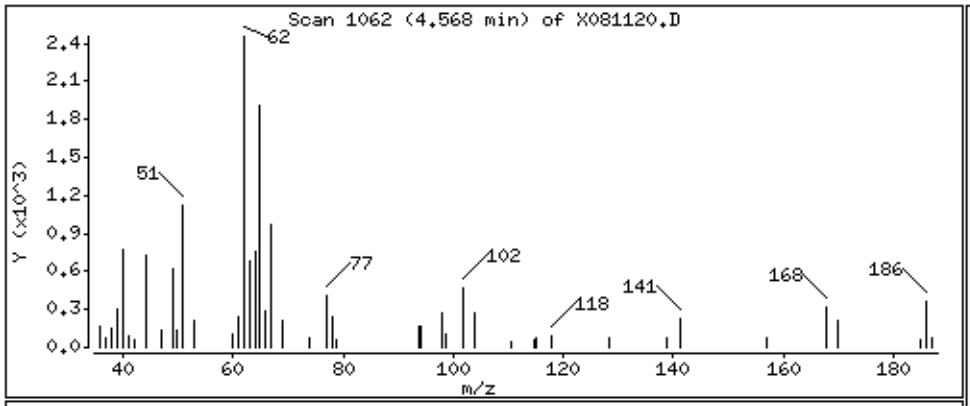
Operator: PC

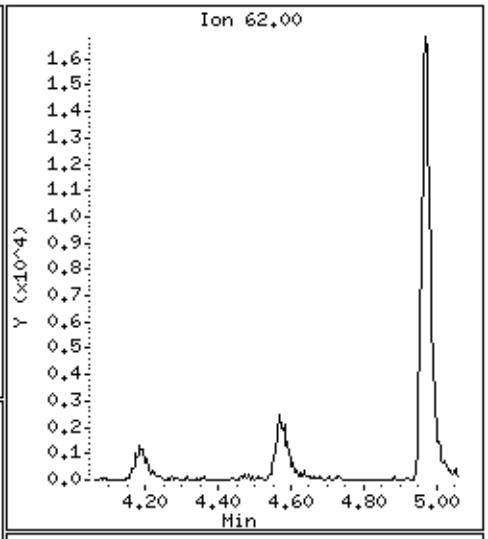
Column phase: DB624

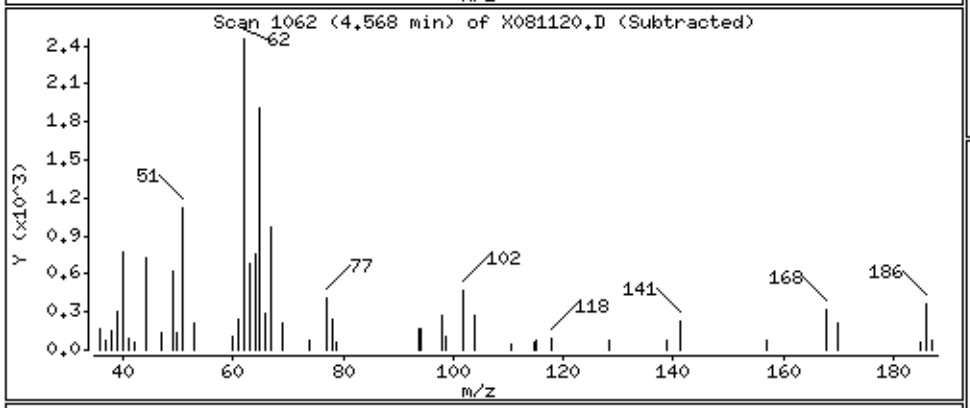
Column diameter: 0.18

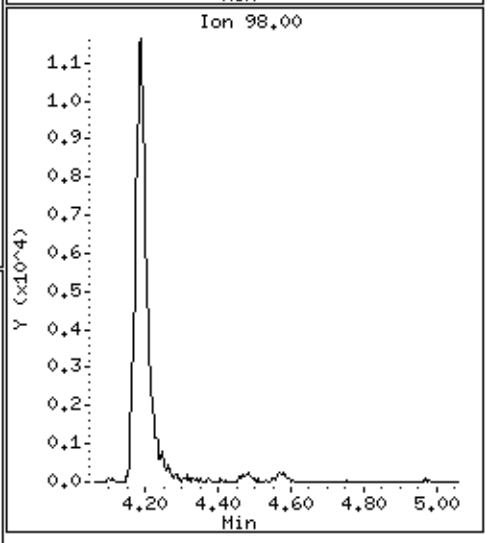
33 1,2-Dichloroethane

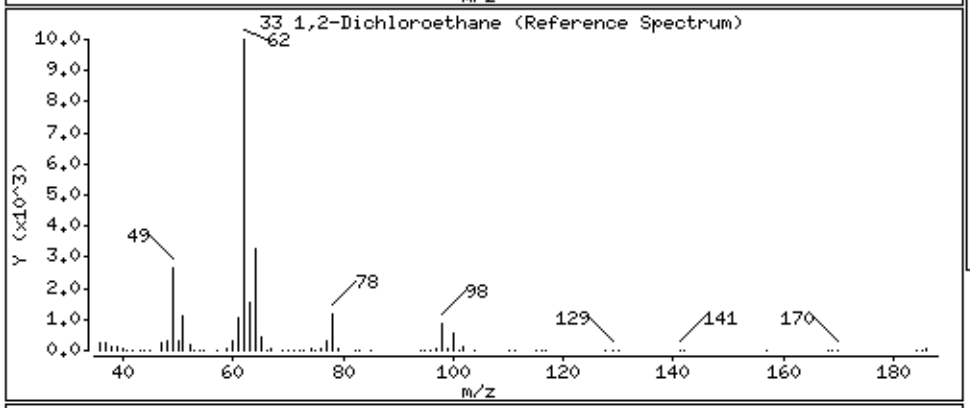
Concentration: 0.67 ug/l

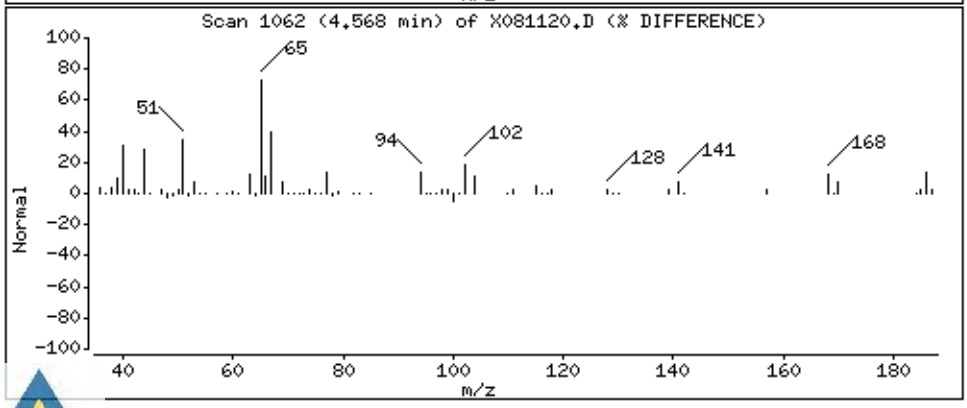












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081120.D Page 3

Date : 11-AUG-2022 17:08

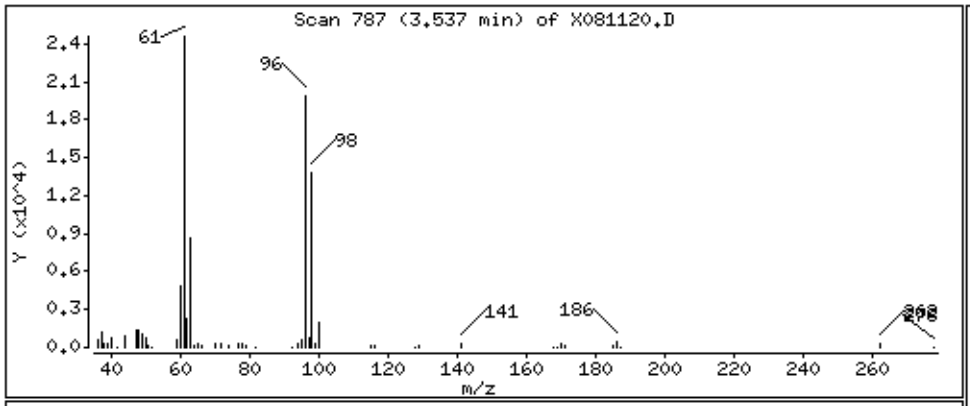
Client ID: HS22080499-05 Instrument: voa6.i

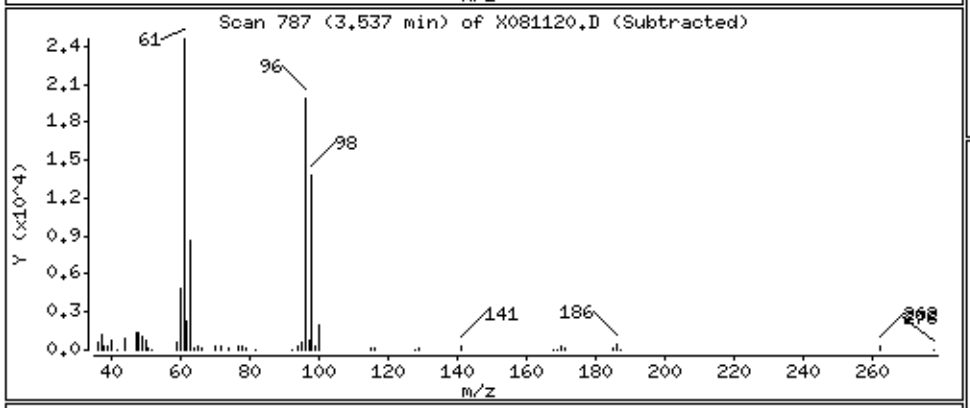
Sample Info: HS22080499-05;HS22080499-05;;;

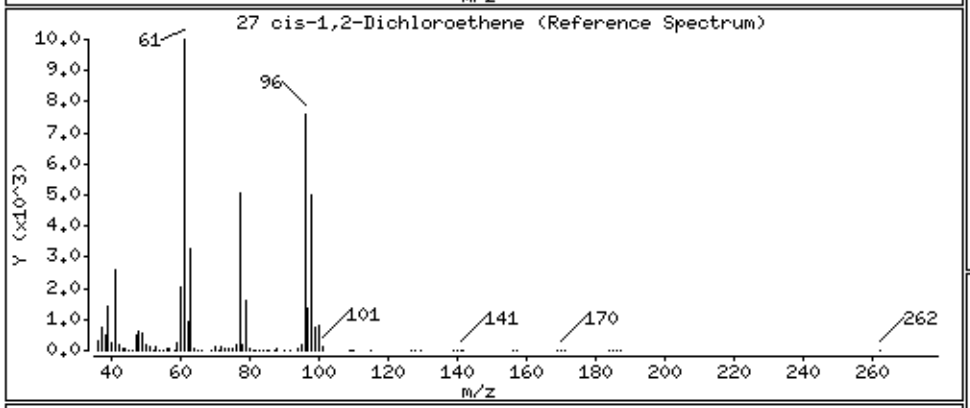
Purge Volume: 5.0 Operator: PC

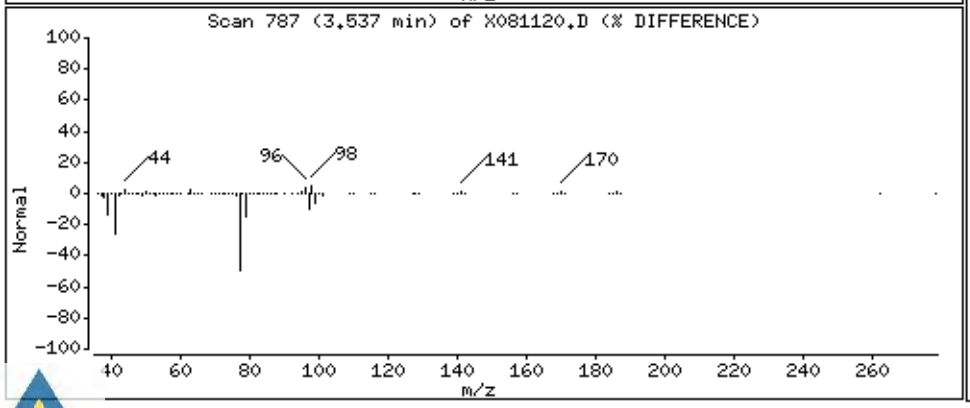
Column phase: DB624 Column diameter: 0.18

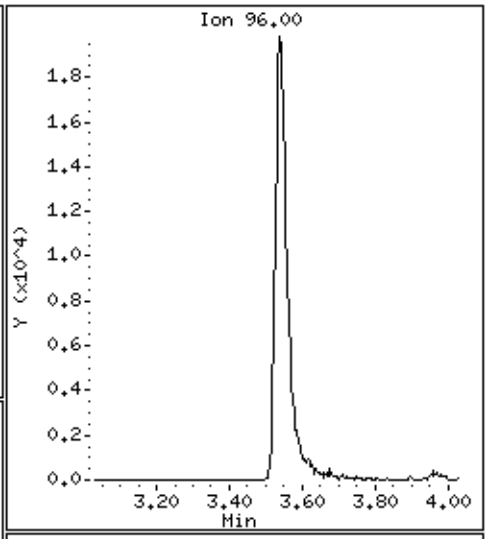
27 cis-1,2-Dichloroethene Concentration: 7.11 ug/l

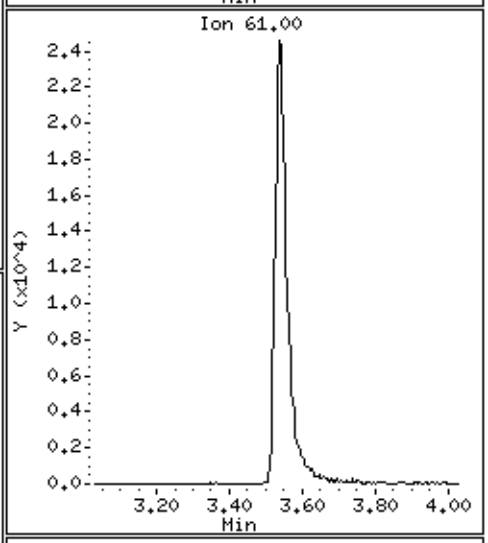


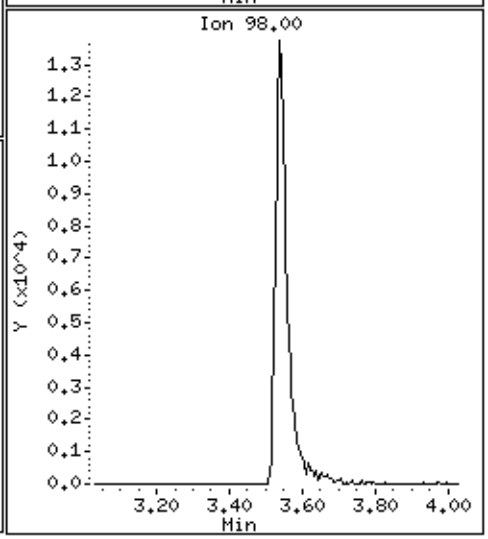












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081120.D Page 4

Date : 11-AUG-2022 17:08

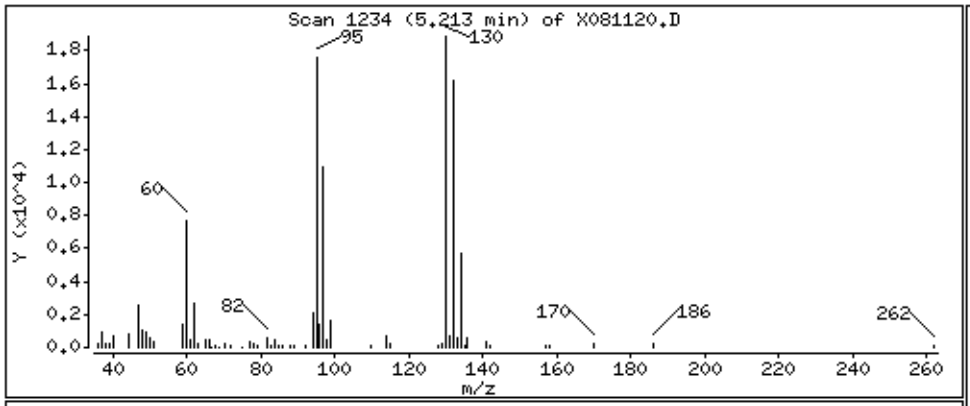
Client ID: HS22080499-05 Instrument: voa6.i

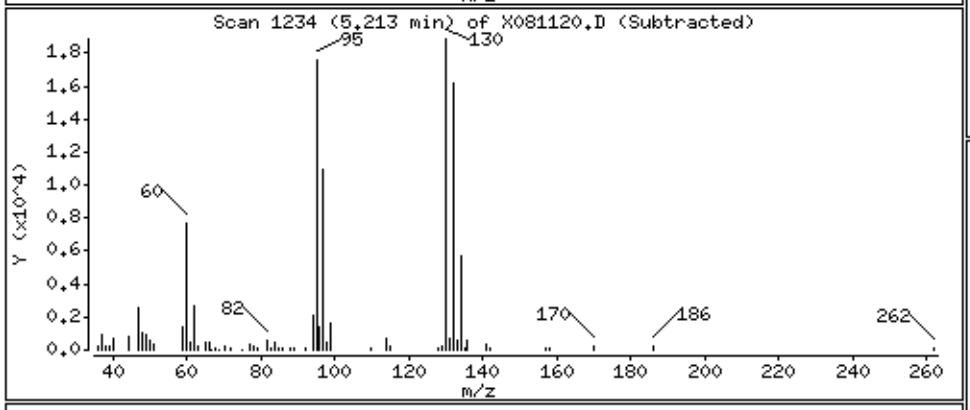
Sample Info: HS22080499-05;HS22080499-05;;;

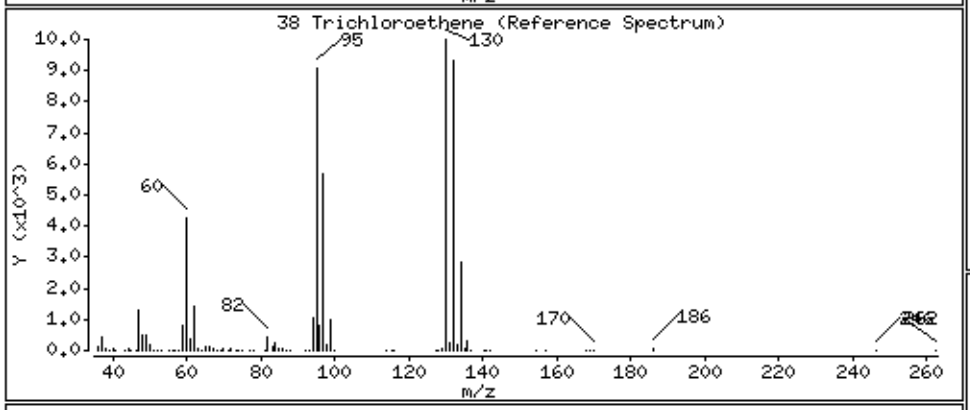
Purge Volume: 5.0 Operator: PC

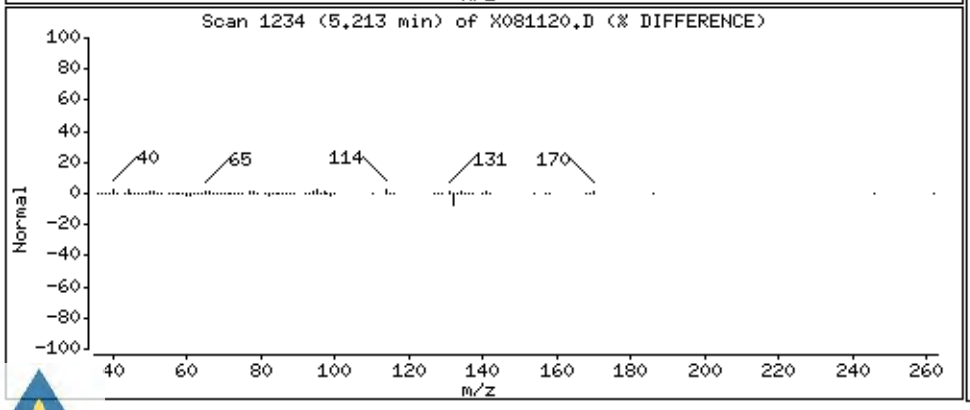
Column phase: DB624 Column diameter: 0.18

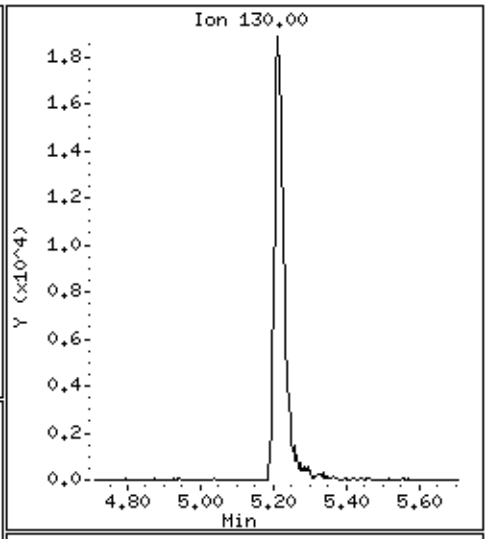
38 Trichloroethene Concentration: 5.23 ug/l

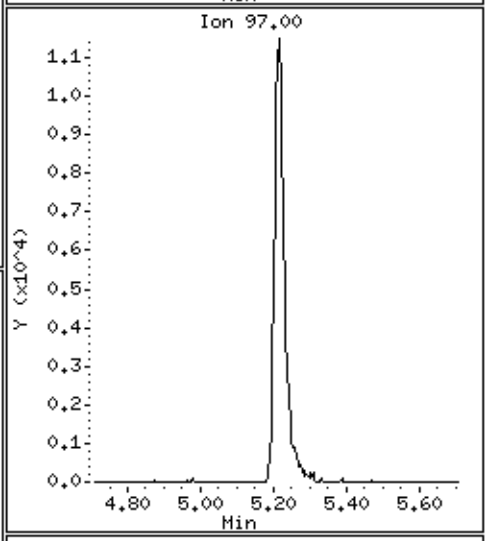


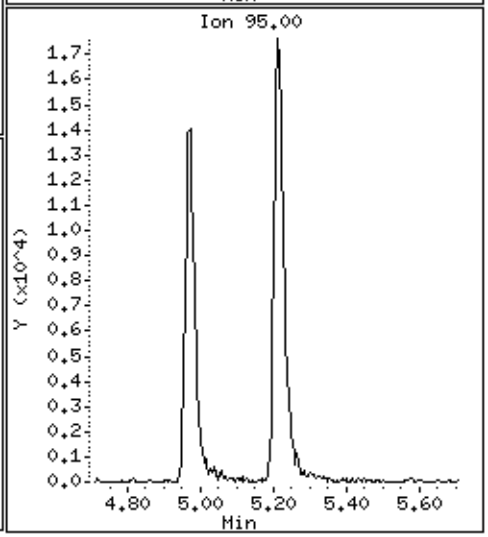












Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081120.D
Inj Date : 11-AUG-2022 17:08
InstruID : voa6.i
LabSampID : HS22080499-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081121.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081121.D
Lab Smp Id: HS22080499-06 Client Smp ID: HS22080499-06
Inj Date : 11-AUG-2022 17:29
Operator : PC Inst ID: voa6.i
Smp Info : HS22080499-06;HS22080499-06;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	675779	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	951411	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	836805	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	358817	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.102	(0.981)	298521	46.7653	46.76
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	332313	47.5648	47.56
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1110549	53.1911	53.19
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	359250	48.0777	48.07
38 Trichloroethene	130	5.223	5.208	(1.051)	6234	0.93346	0.93(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

01133929

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081121.D

Page 1

Date : 11-AUG-2022 17:29

Client ID: HS22080499-06

Instrument: voa6.i

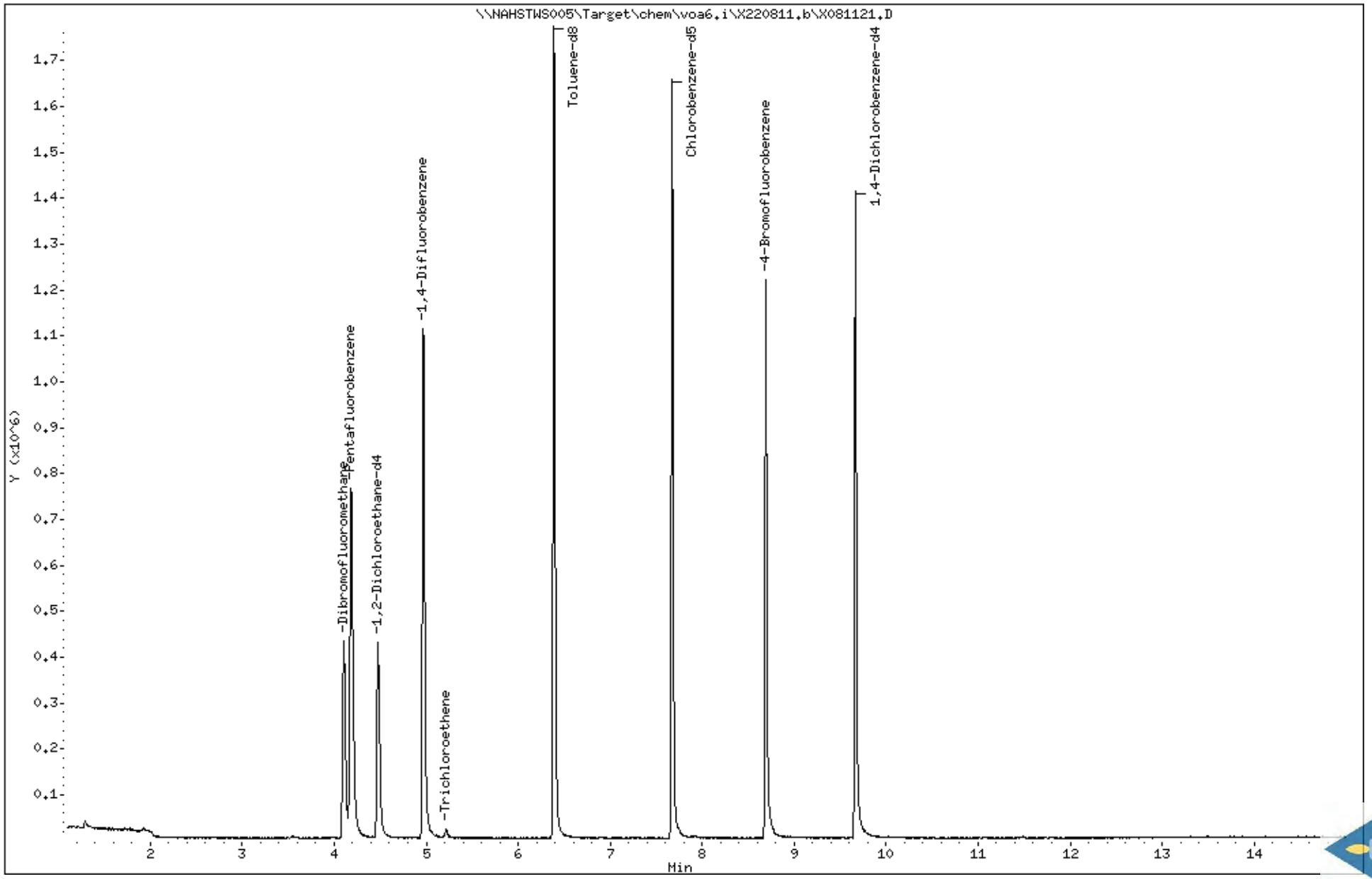
Sample Info: HS22080499-06;HS22080499-06;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081121.D

Date : 11-AUG-2022 17:29

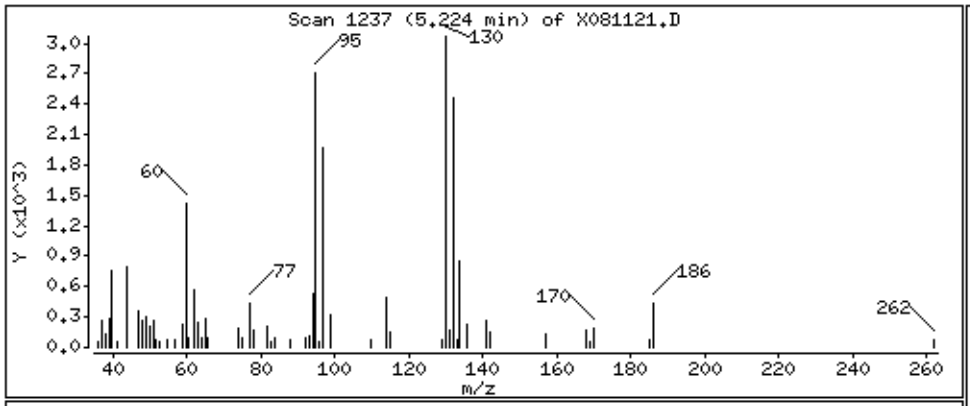
Client ID: HS22080499-06 Instrument: voa6.i

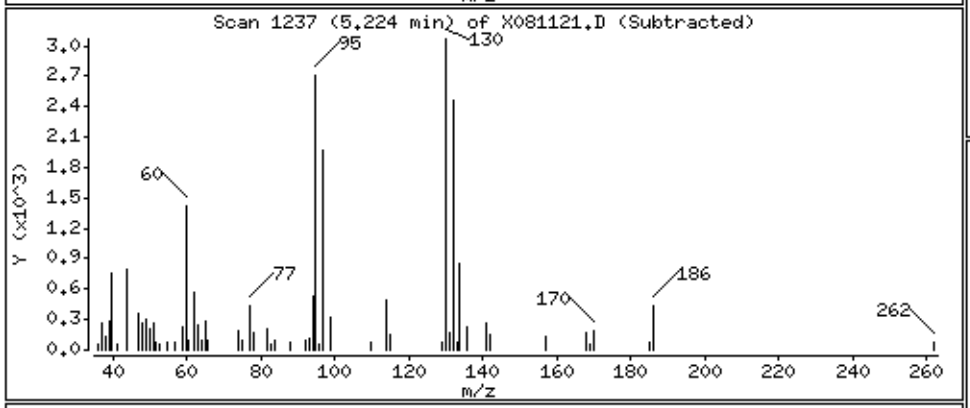
Sample Info: HS22080499-06;HS22080499-06;;;

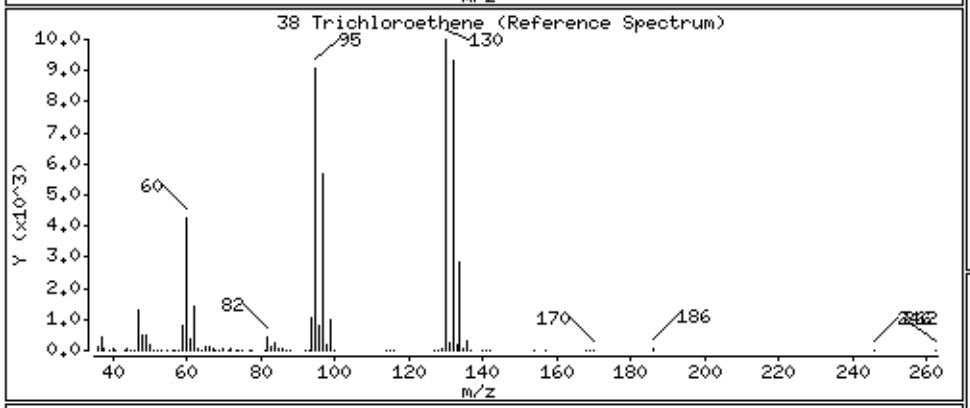
Purge Volume: 5.0 Operator: PC

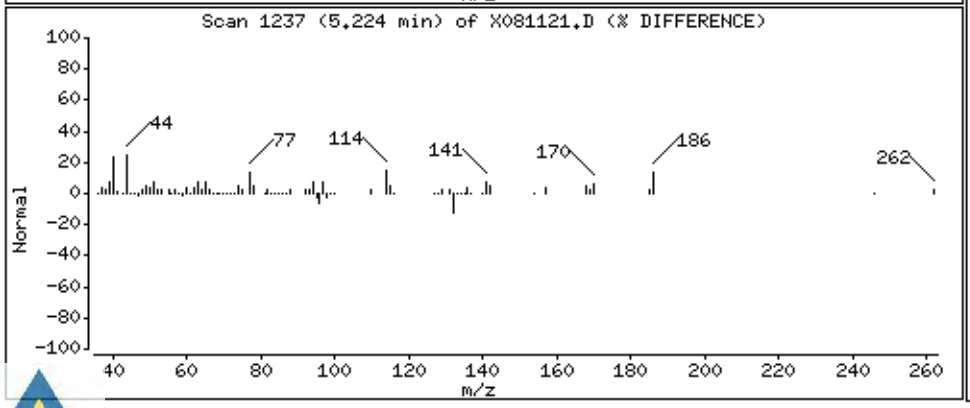
Column phase: DB624 Column diameter: 0.18

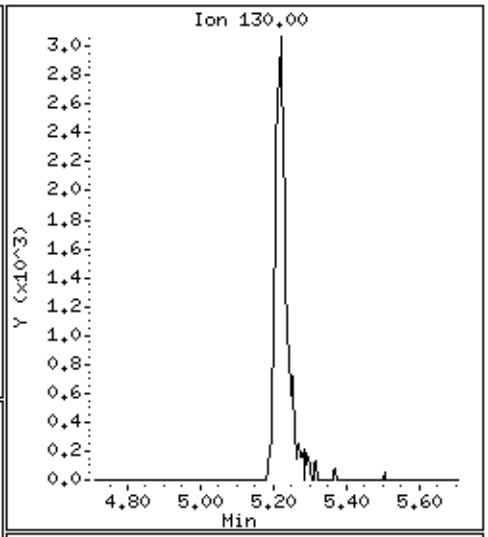
38 Trichloroethene Concentration: 0.93 ug/l

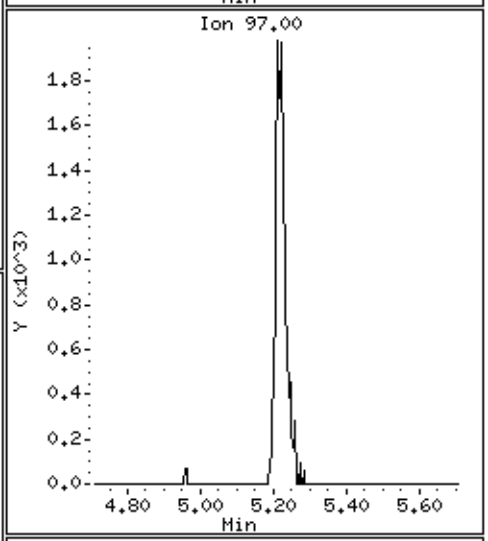


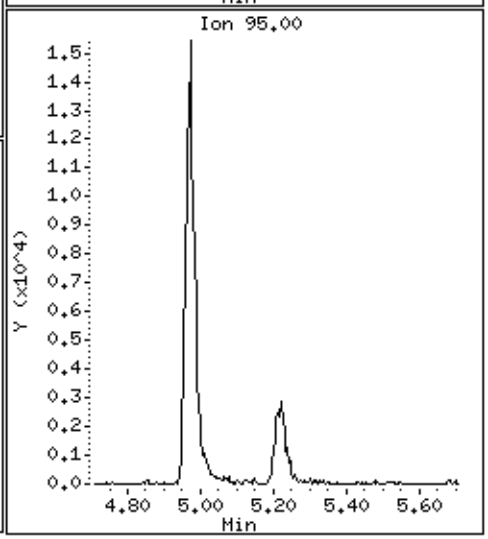












Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081121.D
Inj Date : 11-AUG-2022 17:29
InstruID : voa6.i
LabSampID : HS22080499-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081122.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081122.D
Lab Smp Id: HS22080499-07 Client Smp ID: HS22080499-07
Inj Date : 11-AUG-2022 17:50
Operator : PC Inst ID: voa6.i
Smp Info : HS22080499-07;HS22080499-07;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.189	4.189	(1.000)	662275	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	944289	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	828159	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	356513	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.979)	296085	47.3383	47.33
$ 35 1,2-Dichloroethane-d4	65	4.478	4.477	(1.069)	329010	48.0556	48.05
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1100595	53.2647	53.26
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	352584	47.6714	47.67

01133933

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081122.D

Page 1

Date : 11-AUG-2022 17:50

Client ID: HS22080499-07

Instrument: voa6.i

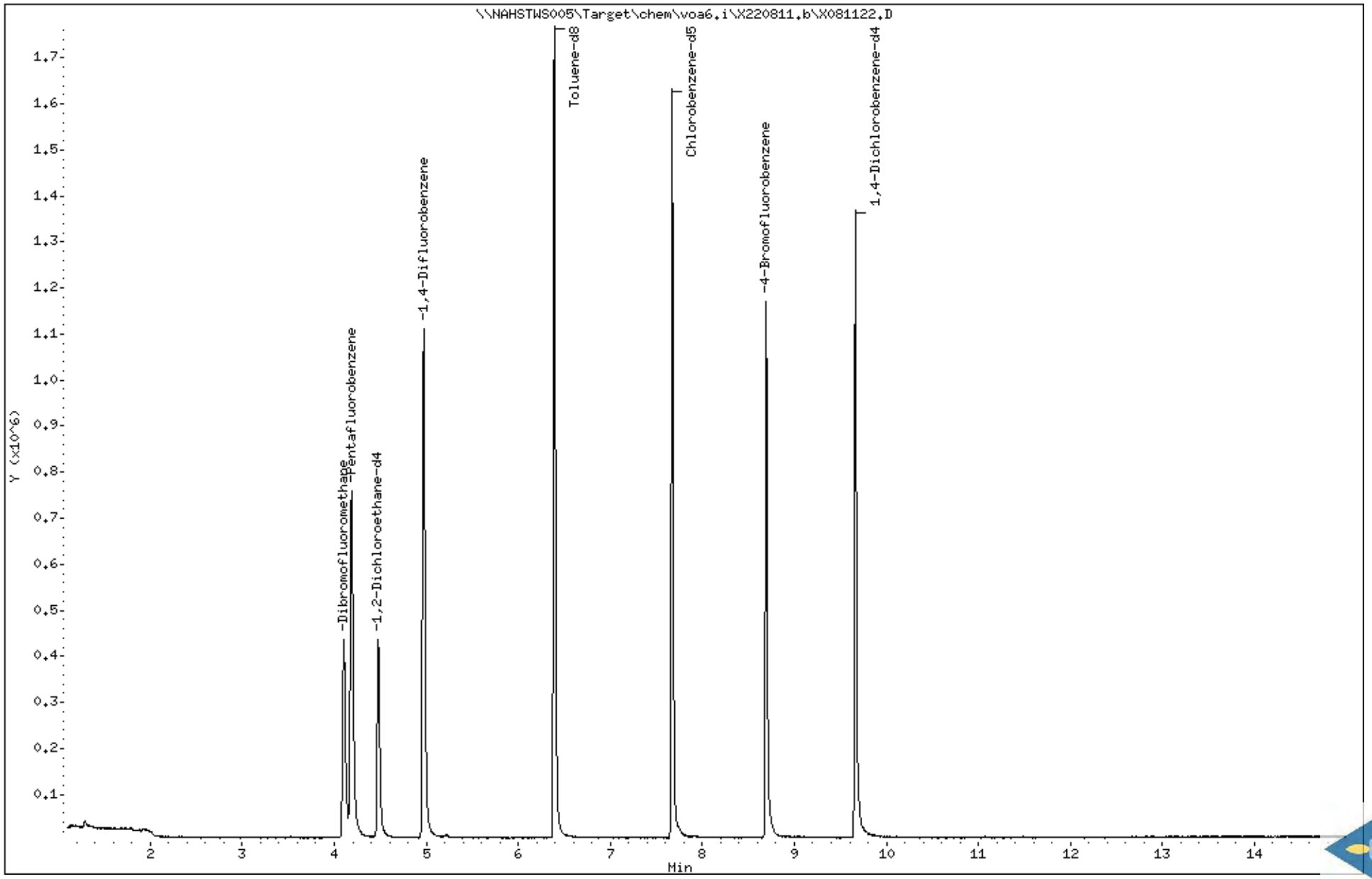
Sample Info: HS22080499-07;HS22080499-07;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081122.D
Inj Date : 11-AUG-2022 17:50
InstruID : voa6.i
LabSampID : HS22080499-07

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081130.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081130.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 11-AUG-2022 20:38
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:17 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 29 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.185	(1.000)	569313	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	882986	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	830230	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	408946	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	296601	50.0000	55.28
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	324482	50.0000	55.18
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1041640	50.0000	50.28
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	377422	50.0000	50.95
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	304868	50.0000	52.26
31 1,1,1-Trichloroethane	97	4.091	4.091	(0.978)	446107	50.0000	55.23
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	281414	50.0000	48.99
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	215148	50.0000	50.40
22 1,1-Dichloroethane	63	2.929	2.929	(0.700)	475253	50.0000	54.22
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	233664	50.0000	49.16
32 1,1-Dichloropropene	75	4.283	4.283	(0.862)	379989	50.0000	53.32
93 1,2,3-Trichlorobenzene	180	11.746	11.746	(1.216)	92909	50.0000	43.70
71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	225100	50.0000	50.83(M)
90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	177675	50.0000	47.70
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	1034671	50.0000	52.74
89 1,2-Dibromo-3-Chloropropane	155	10.663	10.663	(1.104)	19127	50.0000	44.41

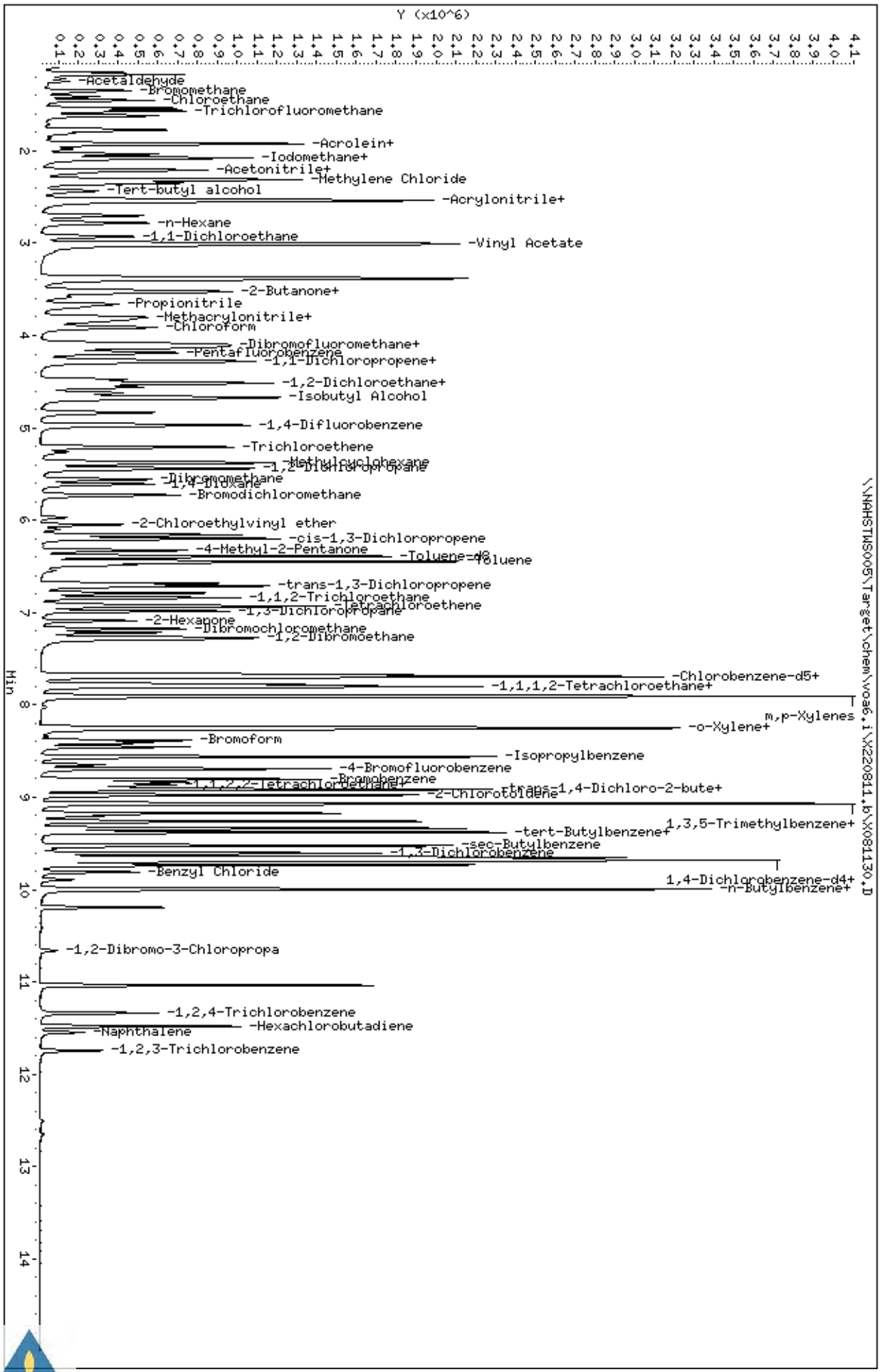
57 1,2-Dibromoethane	107	7.263	7.263 (0.947)	275019	50.0000	50.81
88 1,2-Dichlorobenzene	146	9.995	9.995 (1.035)	516433	50.0000	50.46

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081130.D Page 2
Report Date: 19-Aug-2022 11:17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	403098	50.0000	52.05
42	1,2-Dichloropropane	63	5.441	5.441	(1.095)	278568	50.0000	51.25
75	1,3,5-Trimethylbenzene	105	9.070	9.070	(0.939)	1051104	50.0000	52.91
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	580428	50.0000	51.15
54	1,3-Dichloropropane	76	6.982	6.982	(0.910)	435599	50.0000	50.16
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	596158	50.0000	49.49
26	2,2-Dichloropropane	77	3.518	3.518	(0.841)	404980	50.0000	52.03
24	2-Butanone	43	3.585	3.585	(0.857)	149185	100.000	104.45
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	874183	50.0000	49.87
52	2-Hexanone	43	7.090	7.090	(0.924)	262688	100.000	100.62
77	4-Chlorotoluene	91	9.070	9.070	(0.939)	1003744	50.0000	51.30
82	p-Isopropyltoluene	119	9.651	9.651	(0.999)	1069138	50.0000	53.59
45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	419758	100.000	103.76
10	Acetone	43	1.981	1.981	(0.473)	117163	100.000	97.58(M)
37	Benzene	78	4.515	4.515	(0.909)	1071321	50.0000	51.20
74	Bromobenzene	156	8.807	8.807	(0.912)	357116	50.0000	51.13
29	Bromochloromethane	128	3.803	3.803	(0.909)	161142	50.0000	50.20
39	Bromodichloromethane	83	5.730	5.730	(1.153)	386016	50.0000	51.76
66	Bromoform	173	8.410	8.410	(1.096)	190542	50.0000	47.40
6	Bromomethane	94	1.347	1.347	(0.322)	198815	50.0000	51.14
19	Carbon Disulfide	76	2.078	2.078	(0.497)	1267411	100.000	100.73
34	Carbon Tetrachloride	117	4.271	4.271	(0.860)	388762	50.0000	51.04
59	Chlorobenzene	112	7.694	7.694	(1.003)	807010	50.0000	51.26
7	Chloroethane	64	1.411	1.411	(0.337)	178984	50.0000	49.01
28	Chloroform	83	3.911	3.911	(0.935)	517576	50.0000	53.89
3	Chloromethane	50	1.085	1.085	(0.259)	254272	50.0000	48.24
27	cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	308777	50.0000	54.55
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	471713	50.0000	51.49
55	Dibromochloromethane	129	7.177	7.177	(0.936)	312711	50.0000	50.74
44	Dibromomethane	93	5.557	5.557	(1.118)	185358	50.0000	50.83
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	219481	50.0000	40.43
61	Ethylbenzene	106	7.799	7.799	(1.017)	419750	50.0000	52.78
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	166698	50.0000	48.46
67	Isopropylbenzene	105	8.564	8.564	(1.116)	1275689	50.0000	53.34
62	m,p-Xylenes	106	7.904	7.904	(1.030)	1053715	100.000	106.52
17	Methylene Chloride	84	2.311	2.311	(0.552)	285046	50.0000	54.52
87	n-Butylbenzene	91	9.995	9.995	(1.035)	895407	50.0000	54.02
73	n-Propylbenzene	91	8.912	8.912	(0.922)	1456316	50.0000	53.98
92	Naphthalene	128	11.547	11.547	(1.195)	174543	50.0000	41.88
63	o-Xylene	106	8.245	8.245	(1.075)	499761	50.0000	51.97
81	sec-Butylbenzene	105	9.523	9.523	(0.986)	1220110	50.0000	52.92
64	Styrene	104	8.260	8.260	(1.077)	829856	50.0000	52.40
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	885102	50.0000	52.57
56	Tetrachloroethene	164	6.929	6.929	(0.903)	272493	50.0000	50.61
50	Toluene	91	6.449	6.449	(0.841)	1190717	50.0000	51.02
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.606)	268950	50.0000	53.70
51	trans-1,3-Dichloropropene	75	6.685	6.685	(1.346)	397844	50.0000	52.44
38	Trichloroethene	130	5.208	5.208	(1.048)	320100	50.0000	51.64
8	Trichlorofluoromethane	101	1.569	1.569	(0.375)	455787	50.0000	50.84
5	Vinyl Chloride	62	1.152	1.152	(0.275)	274836	50.0000	46.03

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081130.D
Date : 11-AUG-2022 20:38
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

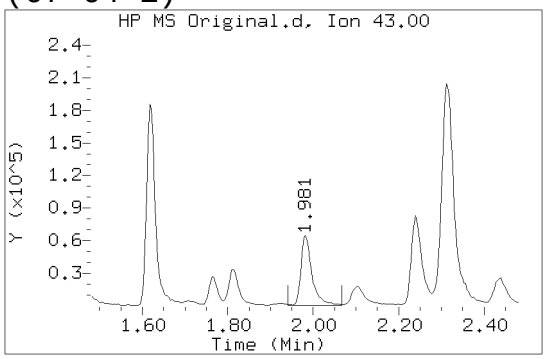
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081130.D
Inj Date : 11-AUG-2022 20:38
InstruID : voa6.i
LabSampID : CCV-END

Acetone (67-64-1)

Reason Code:

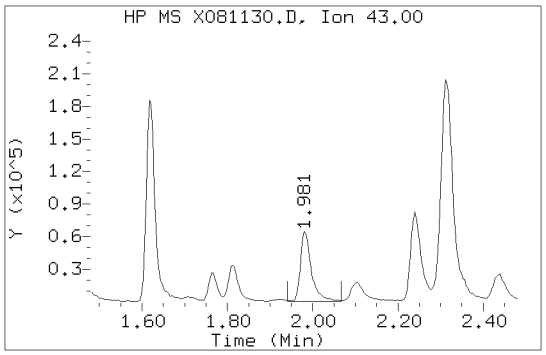
BEFORE

MASS
43
AREA
117163
HEIGHT
64555
19-Aug-2022
11:16
Linh
Pham



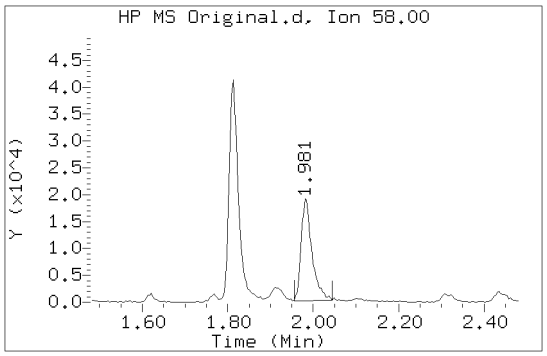
AFTER

MASS
43
AREA
117163
HEIGHT
64555
19-Aug-2022
11:16
Linh
Pham



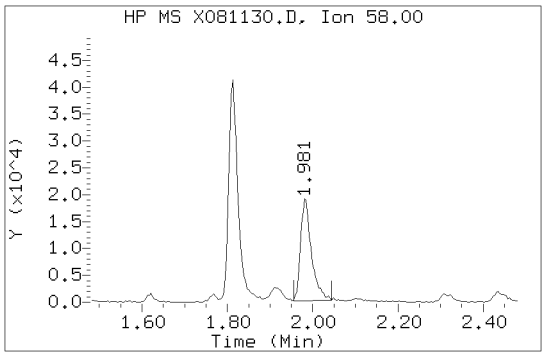
BEFORE

MASS
58
AREA
34280
HEIGHT
18925
19-Aug-2022
11:16
Linh
Pham



AFTER

MASS
58
AREA
34280
HEIGHT
18925
19-Aug-2022
11:16
Linh
Pham

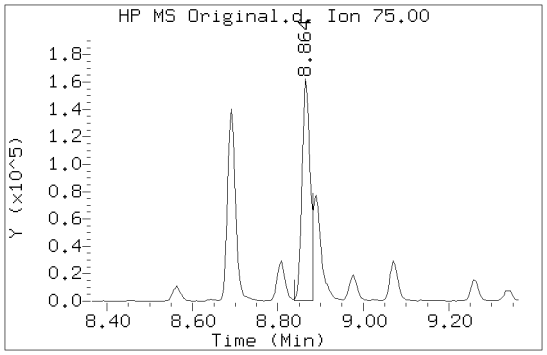


1,2,3-Trichloropropane (96-18-4)

Reason Code:

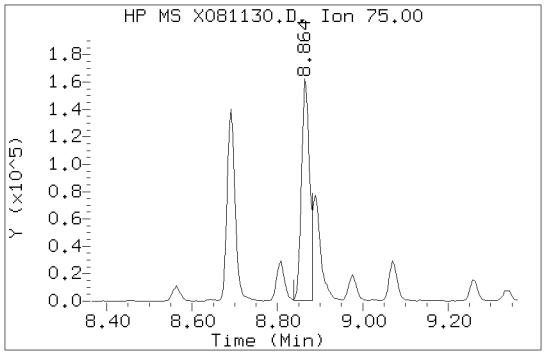
BEFORE

MASS
75
AREA
225100
HEIGHT
161931
19-Aug-2022
11:16
Linh
Pham



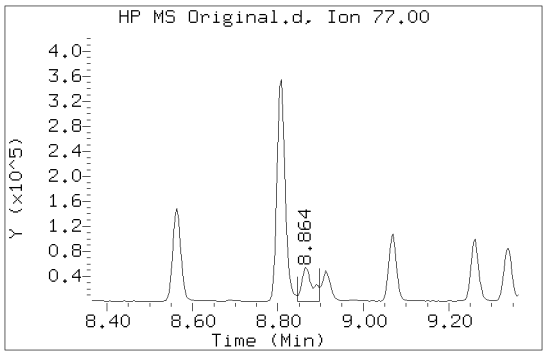
AFTER

MASS
75
AREA
225100
HEIGHT
161931
19-Aug-2022
11:16
Linh
Pham



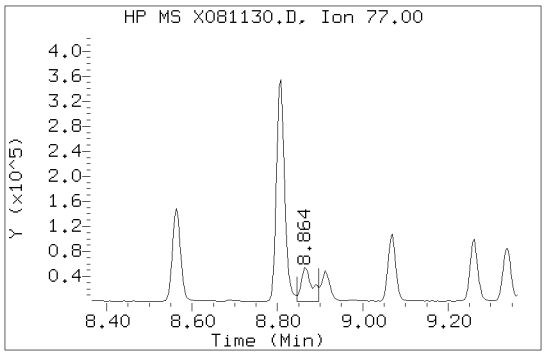
BEFORE

MASS
77
AREA
99979
HEIGHT
53701
19-Aug-2022
11:16
Linh
Pham



AFTER

MASS
77
AREA
99979
HEIGHT
53701
19-Aug-2022
11:16
Linh
Pham



HS22080499-MSSEMI-SW8270SIM

ALS WO# HS22080499

right solutions.
right partner.

Form 1

Organic Analysis Data Sheet

EPA 8270SIM

Workorder

HS22080499

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080499

EPA 8270SIM

HS22080499-01
MW5_080922

Collected	Received	Matrix	Units	Prep Method	Prep Amount	Basis
08/09/22 07:05	08/10/22 09:45	Water	ug/L	SW3510	Initial 1000mL Final 1mL	Wet

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File	PrepDate
1,4-Dioxane	2.1		0.10	0.10	0.10	10	08/23/22 18:45	SV-6_415764	30	08/12/22

MC - Method Class CV - Cold Vapor AA P - ICP-AES MS - ICP-MS

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080499

EPA 8270SIM

HS22080499-02
18CPTMW08DW_080922

Collected	Received	Matrix	Units	Prep Method	Prep Amount	Basis
08/09/22 07:50	08/10/22 09:45	Water	ug/L	SW3510	Initial 1000mL Final 1mL	Wet

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File	PrepDate
1,4-Dioxane	0.42		0.010	0.010	0.010	1	08/23/22 14:33	SV-6_415764	16	08/12/22

MC - Method Class CV - Cold Vapor AA P - ICP-AES MS - ICP-MS

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080499

EPA 8270SIM

HS22080499-03
18CPTMW08SW_080922

Collected	Received	Matrix	Units	Prep Method	Prep Amount	Basis
08/09/22 08:35	08/10/22 09:45	Water	ug/L	SW3510	Initial 1000mL Final 1mL	Wet

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File	PrepDate
1,4-Dioxane	0.89		0.10	0.10	0.10	10	08/24/22 13:43	SV-6_415764	08	08/12/22

MC - Method Class CV - Cold Vapor AA P - ICP-AES MS - ICP-MS

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080499

EPA 8270SIM

HS22080499-04
AWD1_080922

Collected	Received	Matrix	Units	Prep Method	Prep Amount	Basis
08/09/22 09:20	08/10/22 09:45	Water	ug/L	SW3510	Initial 1000mL Final 1mL	Wet

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File	PrepDate
1,4-Dioxane	6.9		0.20	0.20	0.20	20	08/24/22 14:01	SV-6_415764	09	08/12/22

MC - Method Class CV - Cold Vapor AA P - ICP-AES MS - ICP-MS

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080499

EPA 8270SIM

HS22080499-06
MW10_080922

Collected	Received	Matrix	Units	Prep Method	Prep Amount	Basis
08/09/22 10:50	08/10/22 09:45	Water	ug/L	SW3510	Initial 1000mL Final 1mL	Wet

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File	PrepDate
1,4-Dioxane	0.14		0.010	0.010	0.010	1	08/23/22 15:27	SV-6_415764	19	08/12/22

MC - Method Class CV - Cold Vapor AA P - ICP-AES MS - ICP-MS

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080499

EPA 8270SIM

HS22080499-07
18WW10_080922

Collected	Received	Matrix	Units	Prep Method	Prep Amount	Basis
08/09/22 11:35	08/10/22 09:45	Water	ug/L	SW3510	Initial 1000mL Final 1mL	Wet

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File	PrepDate
1,4-Dioxane	0.34		0.010	0.010	0.010	1	08/23/22 15:45	SV-6_415764	20	08/12/22

MC - Method Class CV - Cold Vapor AA P - ICP-AES MS - ICP-MS

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080499

EPA 8270SIM

HS22080499-08
MW17_080922

Collected	Received	Matrix	Units	Prep Method	Prep Amount	Basis
08/09/22 12:25	08/10/22 09:45	Water	ug/L	SW3510	Initial 1000mL Final 1mL	Wet

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File	PrepDate
1,4-Dioxane	0.81		0.050	0.050	0.050	5	08/24/22 14:19	SV-6_415764	10	08/12/22

MC - Method Class CV - Cold Vapor AA P - ICP-AES MS - ICP-MS

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080499

EPA 8270SIM

MBLK-182382
MBLK-182382

Collected	Received	Matrix	Units	Prep Method	Prep Amount	Basis
NA	NA	Aqueous	ug/L	SW3510	Initial 1000mL Final 1mL	Wet

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File	PrepDate
1,4-Dioxane	0.010	U	0.010	0.010	0.010	1	08/23/22 11:16	SV-6_415764	05	08/12/22

MC - Method Class CV - Cold Vapor AA P - ICP-AES MS - ICP-MS

right solutions.
right partner.

Form 2

System Monitoring Compound Recovery

Workorder

HS22080499

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080499

RunID
SV-6_415764

~

MBLK-182382 (6817428)	Analyzed 08/23/22 11:16		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
Nitrobenzene-d5	0.07908	0.08000	99	40 - 140	
4-Terphenyl-d14	0.05239	0.08000	66	40 - 140	
2-Fluorobiphenyl	0.03490	0.08000	44	40 - 140	

LCS-182382 (6817429)	Analyzed 08/23/22 11:34		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
4-Terphenyl-d14	0.05302	0.08000	66	40 - 140	
Nitrobenzene-d5	0.07408	0.08000	93	40 - 140	
2-Fluorobiphenyl	0.03441	0.08000	43	40 - 140	

LCSD-182382 (6817430)	Analyzed 08/23/22 11:52		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
2-Fluorobiphenyl	0.03726	0.08000	47	40 - 140	
Nitrobenzene-d5	0.07327	0.08000	92	40 - 140	
4-Terphenyl-d14	0.05532	0.08000	69	40 - 140	

HS22080499-01 (6817432)	Analyzed 08/23/22 14:15		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
4-Terphenyl-d14	0.04943	0.08000	62	40 - 140	
Nitrobenzene-d5	0.08868	0.08000	111	40 - 140	
2-Fluorobiphenyl	0.04408	0.08000	55	40 - 140	

HS22080499-02 (6817433)	Analyzed 08/23/22 14:33		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
2-Fluorobiphenyl	0.03985	0.08000	50	40 - 140	
Nitrobenzene-d5	0.07956	0.08000	99	40 - 140	
4-Terphenyl-d14	0.04971	0.08000	62	40 - 140	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080499

RunID
SV-6_415764

~

HS22080499-03 (6817434)	Analyzed 08/23/22 14:51		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
4-Terphenyl-d14	0.04825	0.08000	60	40 - 140	
Nitrobenzene-d5	0.07723	0.08000	97	40 - 140	
2-Fluorobiphenyl	0.03636	0.08000	45	40 - 140	

HS22080499-04 (6817435)	Analyzed 08/23/22 15:09		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
2-Fluorobiphenyl	0.05431	0.08000	68	40 - 140	
Nitrobenzene-d5	0.09795	0.08000	122	40 - 140	
4-Terphenyl-d14	0.04699	0.08000	59	40 - 140	

HS22080499-06 (6817436)	Analyzed 08/23/22 15:27		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
4-Terphenyl-d14	0.04246	0.08000	53	40 - 140	
Nitrobenzene-d5	0.08484	0.08000	106	40 - 140	
2-Fluorobiphenyl	0.03812	0.08000	48	40 - 140	

HS22080499-07 (6817437)	Analyzed 08/23/22 15:45		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
2-Fluorobiphenyl	0.03375	0.08000	42	40 - 140	
Nitrobenzene-d5	0.06601	0.08000	83	40 - 140	
4-Terphenyl-d14	0.04703	0.08000	59	40 - 140	

HS22080499-08 (6817438)	Analyzed 08/23/22 16:03		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
4-Terphenyl-d14	0.04298	0.08000	54	40 - 140	
Nitrobenzene-d5	0.06761	0.08000	85	40 - 140	
2-Fluorobiphenyl	0.03680	0.08000	46	40 - 140	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080499

RunID
SV-6_415764

~

HS22080499-01 (6817447)	Analyzed 08/23/22 18:45		Conc Units ug/L		DF 10
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
4-Terphenyl-d14	0	0.08000	0	40 - 140	*
Nitrobenzene-d5	0	0.08000	0	40 - 140	*
2-Fluorobiphenyl	0	0.08000	0	40 - 140	*

HS22080499-03 (6817450)	Analyzed 08/24/22 13:43		Conc Units ug/L		DF 10
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
4-Terphenyl-d14	0.04565	0.08000	57	40 - 140	
Nitrobenzene-d5	0.05518	0.08000	69	40 - 140	
2-Fluorobiphenyl	0.04979	0.08000	62	40 - 140	

HS22080499-04 (6817451)	Analyzed 08/24/22 14:01		Conc Units ug/L		DF 20
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
2-Fluorobiphenyl	0.08150	0.08000	102	40 - 140	
Nitrobenzene-d5	0.1066	0.08000	133	40 - 140	
4-Terphenyl-d14	0.05766	0.08000	72	40 - 140	

HS22080499-08 (6817452)	Analyzed 08/24/22 14:19		Conc Units ug/L		DF 5
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
4-Terphenyl-d14	0.05384	0.08000	67	40 - 140	
Nitrobenzene-d5	0.08299	0.08000	104	40 - 140	
2-Fluorobiphenyl	0.05857	0.08000	73	40 - 140	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

right solutions.
right partner.

Form 3B

Laboratory Control Sample Recovery

EPA 8270SIM

Workorder

HS22080499

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080499

RunID
SV-6_415764

EPA 8270SIM

SV-6_415764				LCS-182382			LCS-182382					
QC Matrix	Aqueous		Run Date	08/23/22			08/23/22					
Prep Method	SW3510	Units	Run Time	11:34			11:52					
Prep Batch	182382 08/12/22	ug/L	Prep Amt	1000 mL			1000 mL					
Analyte		%R Limits	Spike Added	LCS Result	%R	Q	LCSD Result	%R	Q	RPD Limit	RPD	Q
1,4-Dioxane		40-140	0.08	0.1057	132		0.1071	134.0		20		
2-Fluorobiphenyl		40-140	0.08	0.03441	43		0.03726	47.0		20		
4-Terphenyl-d14		40-140	0.08	0.05302	66		0.05532	69.0		20		
Nitrobenzene-d5		40-140	0.08	0.07408	93		0.07327	92.0		20		

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits

right solutions.
right partner.

Form 4

Method Blank Summary

Workorder

HS22080499

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080499

~

BatchID
182382

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK-182382	05.D	08/23/22 11:16	SV-6_415764
LCS-182382	LCS-182382	06.D	08/23/22 11:34	SV-6_415764
LCSD-182382	LCSD-182382	07.D	08/23/22 11:52	SV-6_415764
ZZZZZZ	HS22080472-01	14.D	08/23/22 13:57	SV-6_415764
MW5_080922	HS22080499-01	15.D	08/23/22 14:15	SV-6_415764
18CPTMW08DW_080922	HS22080499-02	16.D	08/23/22 14:33	SV-6_415764
18CPTMW08SW_080922	HS22080499-03	17.D	08/23/22 14:51	SV-6_415764
AWD1_080922	HS22080499-04	18.D	08/23/22 15:09	SV-6_415764
MW10_080922	HS22080499-06	19.D	08/23/22 15:27	SV-6_415764
18WW10_080922	HS22080499-07	20.D	08/23/22 15:45	SV-6_415764
MW17_080922	HS22080499-08	21.D	08/23/22 16:03	SV-6_415764
ZZZZZZ	HS22080522-01	22.D	08/23/22 16:21	SV-6_415764
ZZZZZZ	HS22080522-02	23.D	08/23/22 16:39	SV-6_415764
ZZZZZZ	HS22080522-03	24.D	08/23/22 16:57	SV-6_415764
ZZZZZZ	HS22080522-04	25.D	08/23/22 17:15	SV-6_415764
ZZZZZZ	HS22080522-08	26.D	08/23/22 17:33	SV-6_415764
ZZZZZZ	HS22080522-09	27.D	08/23/22 17:51	SV-6_415764
ZZZZZZ	HS22080522-10	28.D	08/23/22 18:09	SV-6_415764
ZZZZZZ	HS22080472-01	29.D	08/23/22 18:27	SV-6_415764
MW5_080922	HS22080499-01	30.D	08/23/22 18:45	SV-6_415764
18CPTMW08SW_080922	HS22080499-03	08.D	08/24/22 13:43	SV-6_415764
AWD1_080922	HS22080499-04	09.D	08/24/22 14:01	SV-6_415764
MW17_080922	HS22080499-08	10.D	08/24/22 14:19	SV-6_415764
ZZZZZZ	HS22080522-01	11.D	08/24/22 14:37	SV-6_415764
ZZZZZZ	HS22080522-02	12.D	08/24/22 14:55	SV-6_415764
ZZZZZZ	HS22080522-03	13.D	08/24/22 15:13	SV-6_415764

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080499

Lab File ID: 001 DFTPP Injection Date: 03/10/22

Instrument ID: SV6 DFTPP Injection Time: 1015

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	55.4
68	Less than 2.0% of mass 69	0.8 (1.6)1
69	Mass 69 relative abundance	49.8
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	10.0 - 80.0% of mass 198	59.7
197	Less than 2.0% of mass 198	0.1
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	21.2
365	1.0 - 100.0% of mass 198	2.1
441	Present, but less than mass 443	9.1
442	50.0 - 150.0% of mass 198	62.4
443	15.0 - 24.0% of mass 442	12.2 (19.5)2

1-Value is % mass 69 2-Value is % mass 442

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	1 4 DX-0.08	1 4 DX-0.08	002	03/10/22	1025
02	1 4 DX-0.01	1 4 DX-0.01	003	03/10/22	1047
03	1 4 DX-0.03	1 4 DX-0.03	004	03/10/22	1105
04	1 4 DX-0.05	1 4 DX-0.05	005	03/10/22	1122
05	1 4 DX-0.1	1 4 DX-0.1	006	03/10/22	1140
06	1 4 DX-0.15	1 4 DX-0.15	007	03/10/22	1158
07	1 4 DX-0.2	1 4 DX-0.2	008	03/10/22	1216
08	1 4 DX-0.5	1 4 DX-0.5	009	03/10/22	1256
09	1 4 DX-ICV	1 4 DX-ICV	010	03/10/22	1415
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080499

Lab File ID: 01 BFB Injection Date: 08/23/22

Instrument ID: SV6 BFB Injection Time: 0933

GC Column: DB-5MS ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	46.3
68	Less than 2.0% of mass 69	0.6 (1.4)1
69	Mass 69 relative abundance	41.7
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	10.0 - 80.0% of mass 198	50.0
197	Less than 2.0% of mass 198	0.6
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	20.4
365	1.0 - 100.0% of mass 198	2.7
441	Present, but less than mass 443	9.9
442	50.0 - 150.0% of mass 198	66.8
443	15.0 - 24.0% of mass 442	12.8 (19.2)2

1-Value is % mass 69 2-Value is % mass 442

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	1 4DIOX-CCV	1 4DIOX-CCV	03	08/23/22	1031
02	MBLK-182382	MBLK-182382	05	08/23/22	1116
03	LCS-182382	LCS-182382	06	08/23/22	1134
04	LCSD-182382	LCSD-182382	07	08/23/22	1152
05	HS22080499-01	HS22080499-01	15	08/23/22	1415
06	HS22080499-02	HS22080499-02	16	08/23/22	1433
07	HS22080499-03	HS22080499-03	17	08/23/22	1451
08	HS22080499-04	HS22080499-04	18	08/23/22	1509
09	HS22080499-06	HS22080499-06	19	08/23/22	1527
10	HS22080499-07	HS22080499-07	20	08/23/22	1545
11	HS22080499-08	HS22080499-08	21	08/23/22	1603
12	HS22080499-01	HS22080499-01	30	08/23/22	1845
13	1 4DIOX-CCV	1 4DIOX-CCV	31	08/23/22	1903
14					
15					
16					
17					
18					

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080499

Lab File ID: 01 DFTPP Injection Date: 08/24/22

Instrument ID: SV6 DFTPP Injection Time: 1017

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	47.4
68	Less than 2.0% of mass 69	0.6 (1.4)1
69	Mass 69 relative abundance	44.1
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	10.0 - 80.0% of mass 198	52.0
197	Less than 2.0% of mass 198	1.1
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	20.6
365	1.0 - 100.0% of mass 198	2.5
441	Present, but less than mass 443	9.1
442	50.0 - 150.0% of mass 198	61.8
443	15.0 - 24.0% of mass 442	12.0 (19.4)2

1-Value is % mass 69 2-Value is % mass 442

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	1 4-DIOX-CCV	1 4-DIOX-CCV	04	08/24/22	1215
02	HS22080499-03	HS22080499-03	08	08/24/22	1343
03	HS22080499-04	HS22080499-04	09	08/24/22	1401
04	HS22080499-08	HS22080499-08	10	08/24/22	1419
05	1 4-DIOX-CCV	1 4-DIOX-CCV	33	08/24/22	2112
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

right solutions.
right partner.

Form 6

Initial Calibration Data

Workorder

HS22080499

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Initial Calibration Data

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080499

RunID SV-6_410398

Volatiles Organics by Method 8260C

ICAL Start Date 10-MAR-2022 1025
ICAL End Date 10-MAR-2022 1256

Calibration Files

Calibration File Names

Level 1 ..SV6.i\220310.b\003.D
Level 2 ..SV6.i\220310.b\004.D
Level 3 ..SV6.i\220310.b\005.D
Level 4 ..SV6.i\220310.b\002.D
Level 5 ..SV6.i\220310.b\006.D
Level 6 ..SV6.i\220310.b\007.D
Level 7 ..SV6.i\220310.b\008.D
Level 8 ..SV6.i\220310.b\009.D

Compound	Level 1 0.01000	Level 2 0.03000	Level 3 0.05000	Level 4 0.08000	Level 5 0.10000	Level 6 0.15000	Curve	b	m1	m2	%RSD or R^2	Q
	Level 7 0.20000	Level 8 0.50000										
1,4-Dioxane	0.03798	0.03918	0.04058	0.04498	0.04442	0.04181						
	0.04227	0.03722					0.04105	6.932				
----------	0.04227 ---------	0.03722 ---------	 ---------	 ---------	 ---------	 ---------	0.04105 ---------	6.932 ----------				
2-Fluorophenol	NE	NE	NE	NE	NE	NE						
	NE	NE					NE	NE				
Phenol-d6	NE	NE	NE	NE	NE	NE						
	NE	NE					NE	NE				
Nitrobenzene-d5	0.35847	0.33688	0.34994	0.32911	0.33873	0.30360						
	0.33135	0.31866					0.33334	5.160				
2-Fluorobiphenyl	1.56485	1.50533	1.78010	1.61832	1.49752	1.52796						
	1.51386	1.44464					1.55657	6.656				
105 2,4,6-Tribromophenol	NE	NE	NE	NE	NE	NE						
	NE	NE					NE	NE				
158 4-Terphenyl-d14	1.90541	1.83082	1.91899	1.73323	1.90173	1.90441						
	1.92766	1.91858					1.88010	3.537				

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

right solutions.
right partner.

Form 6I

Initial Calibration Verification (ICV)

Workorder

HS22080499

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080499

RunID SV-6_410398

Volatiles Organics by Method 8260C

Instrument ID SV6.i ICAL Date 10-MAR-2022
Lab File ID 010.D ICAL Time 1025
?VAL? ?VAL? Conc Units ug/L
Analysis Type SV Level LOW

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
1,4-Dioxane	0.08000	0.08051	100.64	40-140	
Nitrobenzene-d5	0.08000	0.07786	97.33	40-140	
2-Fluorobiphenyl	0.08000	0.08171	102.14	40-140	
158 4-Terphenyl-d14	0.08000	0.06597	82.47	40-140	

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080499

Instrument ID: SV6 Calibration Date: 08/23/22 Time: 1031

Lab File ID: 03 Init. Calib. Date(s): 03/10/22 03/10/22

Init. Calib. Times: 1025 1256

GC Column: RTX-5SIL MS ID: 0.28 (mm)

COMPOUND	RRF OR AMOUNT	RRF8e-002 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
1,4-Dioxane	4.1e-002	4.44e-002	0.01	8.29	20.00	AVRG
Nitrobenzene-d5	0.3330000	0.3125592	0.01	-6.14	20.00	AVRG
4-Terphenyl-d14	1.8800000	1.7815958	0.01	-5.23	20.00	AVRG
2-Fluorobiphenyl	1.5570000	1.5528194	0.01	-0.27	20.00	AVRG

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080499

Instrument ID: SV6 Calibration Date: 08/23/22 Time: 1903

Lab File ID: 31 Init. Calib. Date(s): 03/10/22 03/10/22

Init. Calib. Times: 1025 1256

GC Column: RTX-5SIL MS ID: 0.28 (mm)

COMPOUND	RRF OR AMOUNT	RRF8e-002 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
1,4-Dioxane	4.1e-002	4.25e-002	0.01	3.66	50.00	AVRG
Nitrobenzene-d5	0.3330000	0.3194666	0.01	-4.06	50.00	AVRG
4-Terphenyl-d14	1.8800000	1.3774718	0.01	-26.73	50.00	AVRG
2-Fluorobiphenyl	1.5570000	0.7893068	0.01	-49.30	50.00	AVRG

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080499

Instrument ID: SV6 Calibration Date: 08/24/22 Time: 1215

Lab File ID: 04 Init. Calib. Date(s): 03/10/22 03/10/22

Init. Calib. Times: 1025 1256

GC Column: RTX-5SIL MS ID: 0.28 (mm)

COMPOUND	RRF OR AMOUNT	RRF8e-002 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
1,4-Dioxane	4.1e-002	4.85e-002	0.01	18.29	20.00	AVRG
Nitrobenzene-d5	0.3330000	0.3399589	0.01	2.09	20.00	AVRG
4-Terphenyl-d14	1.8800000	1.6804567	0.01	-10.61	20.00	AVRG
2-Fluorobiphenyl	1.5570000	1.5160387	0.01	-2.63	20.00	AVRG

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080499

Instrument ID: SV6 Calibration Date: 08/24/22 Time: 2112

Lab File ID: 33 Init. Calib. Date(s): 03/10/22 03/10/22

Init. Calib. Times: 1025 1256

GC Column: RTX-5SIL MS ID: 0.28 (mm)

COMPOUND	RRF OR AMOUNT	RRF8e-002 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
1,4-Dioxane	4.1e-002	4.61e-002	0.01	12.44	50.00	AVRG
Nitrobenzene-d5	0.3330000	0.2436831	0.01	-26.82	50.00	AVRG
4-Terphenyl-d14	1.8800000	1.3350552	0.01	-28.99	50.00	AVRG
2-Fluorobiphenyl	1.5570000	1.2233926	0.01	-21.43	50.00	AVRG

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080499

Lab File ID (Standard): 03 Date Analyzed: 08/23/22

Instrument ID: SV6 Time Analyzed: 1031

GC Column: RTX-5SIL MS ID: 0.28 (mm) Heated Purge: (Y/N) N

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	6003	3.59	15829	4.71	7005	6.38
	UPPER LIMIT	12006	4.09	31658	5.21	14010	6.88
	LOWER LIMIT	3002	3.09	7915	4.21	3503	5.88
	CLIENT SAMPLE NO.						
01	MBLK-182382	3706	3.60	13895	4.71	7586	6.38
02	LCS-182382	11986	3.60	17681	4.71	8740	6.38
03	LCSD-182382	10965	3.60	15980	4.71	7794	6.38
04	HS22080499-01	6602	3.60	14475	4.71	8215	6.38
05	HS22080499-02	6614	3.60	15686	4.71	8087	6.38
06	HS22080499-03	6148	3.60	13047	4.71	7285	6.38
07	HS22080499-04	7201	3.60	15262	4.72	4089	6.39
08	HS22080499-06	5016	3.60	17170	4.71	9427	6.38
09	HS22080499-07	4235	3.60	16079	4.71	7783	6.38
10	HS22080499-08	4623	3.60	17890	4.71	8654	6.38
11	HS22080499-01	3218	3.60	10573	4.72	7210	6.39
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080499

Lab File ID (Standard): 03 Date Analyzed: 08/23/22

Instrument ID: SV6 Time Analyzed: 1031

GC Column: RTX-5SIL MS ID: 0.28 (mm) Heated Purge: (Y/N) N

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	17339	7.83	7501	10.66	5111	12.72
	UPPER LIMIT	34678	8.33	15002	11.16	10222	13.22
	LOWER LIMIT	8670	7.33	3751	10.16	2556	12.22
	CLIENT SAMPLE NO.						
01	MBLK-182382	13732	7.82	7295	10.66	4549	12.72
02	LCS-182382	15619	7.82	8081	10.66	5095	12.72
03	LCSD-182382	13992	7.82	6397	10.66	4136	12.72
04	HS22080499-01	15329	7.83	10278	10.66	8614	12.73
05	HS22080499-02	14882	7.82	8490	10.66	7857	12.73
06	HS22080499-03	13519	7.83	8028	10.66	7090	12.73
07	HS22080499-04	15971	7.83	12523	10.67	9865	12.74
08	HS22080499-06	17418	7.83	12363	10.66	10155	12.73
09	HS22080499-07	14183	7.83	8592	10.66	7968	12.74
10	HS22080499-08	16100	7.83	11074	10.66	9595	12.73
11	HS22080499-01	10508	7.83	6166	10.67	4788	12.75
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080499

Lab File ID (Standard): 04 Date Analyzed: 08/24/22

Instrument ID: SV6 Time Analyzed: 1215

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	5721	3.55	13873	4.66	6874	6.33
	UPPER LIMIT	11442	4.05	27746	5.16	13748	6.83
	LOWER LIMIT	2861	3.05	6937	4.16	3437	5.83
	CLIENT SAMPLE NO.						
01	HS22080499-03	5086	3.55	11200	4.66	6581	6.33
02	HS22080499-04	6024	3.55	13170	4.66	7710	6.33
03	HS22080499-08	4038	3.55	15363	4.66	8890	6.33
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080499

Lab File ID (Standard): 04 Date Analyzed: 08/24/22

Instrument ID: SV6 Time Analyzed: 1215

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	14770	7.78	6043	10.59	4226	12.65
	UPPER LIMIT	29540	8.28	12086	11.09	8452	13.15
	LOWER LIMIT	7385	7.28	3022	10.09	2113	12.15
	CLIENT SAMPLE NO.						
01	HS22080499-03	9753	7.78	4765	10.59	3055	12.64
02	HS22080499-04	13373	7.78	6716	10.59	5014	12.64
03	HS22080499-08	13820	7.78	6781	10.59	4928	12.64
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

right solutions.
right partner.

Form 12

Preparation Log

SW3510

Workorder

HS22080499

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Form 12 - Preparation Log

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080499

RunID
182382

EPA 8270SIM

Prep Batch 182382 **Prep Method** **Prep Date** 08/12/22

	Matrix	Type	Lab Sample ID	Initial Amt (mL)	Final Amt (mL)	Client Sample ID
1	Aqueous	MBLK	MBLK-182382	1000	1	MBLK-182382
2	Aqueous	LCS	LCS-182382	1000	1	LCS-182382
3	Aqueous	LCSD	LCSD-182382	1000	1	LCSD-182382
4	Water	SAMP	HS22080499-01	1000	1	MW5_080922
5	Water	SAMP	HS22080499-02	1000	1	18CPTMW08DW_080922
6	Water	SAMP	HS22080499-03	1000	1	18CPTMW08SW_080922
7	Water	SAMP	HS22080499-04	1000	1	AWD1_080922
8	Water	SAMP	HS22080499-06	1000	1	MW10_080922
9	Water	SAMP	HS22080499-07	1000	1	18WW10_080922
10	Water	SAMP	HS22080499-08	1000	1	MW17_080922

right solutions.
right partner.

Analysis Run Log

Workorder

HS22080499

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080499

RunID
SV-6_410398

~

Instrument ID SV-6 **Matrix** R410398 **Start Date** 03/10/2022 **EndDate** 03/10/2022

Client Sample ID	Type	Lab Sample ID	DF	Analysis Date	File ID
DFTPP	TUNE	DFTPP	1	03/10/22 10:15	001.D
1 4 DX-0.08	ICAL4	1 4 DX-0.08	1	03/10/22 10:25	002.D
1 4 DX-0.01	ICAL1	1 4 DX-0.01	1	03/10/22 10:47	003.D
1 4 DX-0.03	ICAL2	1 4 DX-0.03	1	03/10/22 11:05	004.D
1 4 DX-0.05	ICAL3	1 4 DX-0.05	1	03/10/22 11:22	005.D
1 4 DX-0.1	ICAL5	1 4 DX-0.1	1	03/10/22 11:40	006.D
1 4 DX-0.15	ICAL6	1 4 DX-0.15	1	03/10/22 11:58	007.D
1 4 DX-0.2	ICAL7	1 4 DX-0.2	1	03/10/22 12:16	008.D
1 4 DX-0.5	ICAL8	1 4 DX-0.5	1	03/10/22 12:56	009.D
1 4 DX-ICV	ICV	1 4 DX-ICV	1	03/10/22 14:15	010.D

SV06 -Logbook

Batch: 50796 **Analyst:** Marco Gutierrez

Date: 08-23-2022 **Reviewer:**

Method: R8270LL SIM **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	DFTPP	TUNE	08-23-2022 09:33 am	1.00	0.00 gm	0.00 mL	01.D		Y	NA
2	SLSTD-2.5	CCV	08-23-2022 09:45 am	1.00	1000.00 mL	1000.00 mL	02.D	Liquid	Y	NA
3	1 4DIOX-CCV	CCV	08-23-2022 10:31 am	1.00	1000.00 mL	1000.00 mL	03.D	Liquid	Y	NA
4	MBLK-182382	MBLK	08-23-2022 11:16 am	1.00	1000.00 mL	1000.00 mL	05.D	Liquid	Y	NA
5	LCS-182382	LCS	08-23-2022 11:34 am	1.00	1000.00 mL	1000.00 mL	06.D	Liquid	Y	NA
6	LCSD-182382	LCSD	08-23-2022 11:52 am	1.00	1000.00 mL	1000.00 mL	07.D	Liquid	Y	NA
7	MBLK-182546	MBLK	08-23-2022 12:10 pm	1.00	1000.00 mL	1000.00 mL	08.D	Liquid	Y	NA
8	LCS-182546	LCS	08-23-2022 12:27 pm	1.00	1000.00 mL	1000.00 mL	09.D	Liquid	Y	NA
9	LCSD-182546	LCSD	08-23-2022 12:45 pm	1.00	1000.00 mL	1000.00 mL	10.D	Liquid	Y	NA
10	MBLK-182674	SAMP	08-23-2022 01:03 pm	1.00	1000.00 mL	1000.00 mL	11.D	Liquid	Y	NA
11	LCS-182674	LCS	08-23-2022 01:21 pm	1.00	1000.00 mL	1000.00 mL	12.D	Liquid	Y	NA
12	LCSD-182674	LCSD	08-23-2022 01:39 pm	1.00	1000.00 mL	1000.00 mL	13.D	Liquid	Y	NA
13	HS22080472-01	SAMP	08-23-2022 01:57 pm	1.00	1000.00 mL	1000.00 mL	14.D	Liquid	Y	NA
14	HS22080499-01	SAMP	08-23-2022 02:15 pm	1.00	1000.00 mL	1000.00 mL	15.D	Liquid	Y	NA
15	HS22080499-02	SAMP	08-23-2022 02:33 pm	1.00	1000.00 mL	1000.00 mL	16.D	Liquid	Y	NA
16	HS22080499-03	SAMP	08-23-2022 02:51 pm	1.00	1000.00 mL	1000.00 mL	17.D	Liquid	Y	NA
17	HS22080499-04	SAMP	08-23-2022 03:09 pm	1.00	1000.00 mL	1000.00 mL	18.D	Liquid	Y	NA
18	HS22080499-06	SAMP	08-23-2022 03:27 pm	1.00	1000.00 mL	1000.00 mL	19.D	Liquid	Y	NA
19	HS22080499-07	SAMP	08-23-2022 03:45 pm	1.00	1000.00 mL	1000.00 mL	20.D	Liquid	Y	NA
20	HS22080499-08	SAMP	08-23-2022 04:03 pm	1.00	1000.00 mL	1000.00 mL	21.D	Liquid	Y	NA
21	HS22080522-01	SAMP	08-23-2022 04:21 pm	1.00	1000.00 mL	1000.00 mL	22.D	Liquid	Y	NA
22	HS22080522-02	SAMP	08-23-2022 04:39 pm	1.00	1000.00 mL	1000.00 mL	23.D	Liquid	Y	NA
23	HS22080522-03	SAMP	08-23-2022 04:57 pm	1.00	1000.00 mL	1000.00 mL	24.D	Liquid	Y	NA
24	HS22080522-04	SAMP	08-23-2022 05:15 pm	1.00	1000.00 mL	1000.00 mL	25.D	Liquid	Y	NA
25	HS22080522-08	SAMP	08-23-2022 05:33 pm	1.00	1000.00 mL	1000.00 mL	26.D	Liquid	Y	NA
26	HS22080522-09	SAMP	08-23-2022 05:51 pm	1.00	1000.00 mL	1000.00 mL	27.D	Liquid	Y	NA
27	HS22080522-10	SAMP	08-23-2022 06:09 pm	1.00	1000.00 mL	1000.00 mL	28.D	Liquid	Y	NA
28	HS22080472-01	SAMP	08-23-2022 06:27 pm	100.0(	1000.00 mL	1000.00 mL	29.D	Liquid	Y	NA
29	HS22080499-01	SAMP	08-23-2022 06:45 pm	10.00	1000.00 mL	1000.00 mL	30.D	Liquid	Y	NA
30	1 4DIOX-CCV	CCV	08-23-2022 07:03 pm	1.00	1000.00 mL	1000.00 mL	31.D	Liquid	Y	NA

SV06 -Logbook

Batch: 50778 **Analyst:** Marco Gutierrez

Date: 08-24-2022 **Reviewer:**

Method: R8270DLVISIM **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	DFTPP	TUNE	08-24-2022 10:17 am	1.00	0.00 gm	0.00 mL	01.D		Y	NA
2	SLSTD-2.5	CCV	08-24-2022 10:29 am	1.00	1000.00 mL	1000.00 mL	02.D	Liquid	Y	NA
3	LVI PAH-0.025	CCV	08-24-2022 11:04 am	1.00	33.00 mL	2000.00 mL	03.D	Liquid	Y	NA
4	1 4-DIOX-0.08	CCV	08-24-2022 12:15 pm	1.00	1000.00 mL	1000.00 mL	04.D	Liquid	Y	NA
5	CCB	SAMP	08-24-2022 12:45 pm	1.00	1000.00 mL	1000.00 mL	05.D	Liquid	Y	NA
6	HS22080879-17	SAMP	08-24-2022 01:03 pm	10.00	33.00 mL	2000.00 mL	06.D	Liquid	Y	NA
7	HS22080879-17	SAMP	08-24-2022 01:23 pm	1000.0	33.00 mL	2000.00 mL	07.D	Liquid	Y	NA
8	HS22080499-03	SAMP	08-24-2022 01:43 pm	10.00	1000.00 mL	1000.00 mL	08.D	Liquid	Y	NA
9	HS22080499-04	SAMP	08-24-2022 02:01 pm	20.00	1000.00 mL	1000.00 mL	09.D	Liquid	Y	NA
10	HS22080499-08	SAMP	08-24-2022 02:19 pm	5.00	1000.00 mL	1000.00 mL	10.D	Liquid	Y	NA
11	HS22080522-01	SAMP	08-24-2022 02:37 pm	100.0(	1000.00 mL	1000.00 mL	11.D	Liquid	Y	NA
12	HS22080522-02	SAMP	08-24-2022 02:55 pm	100.0(	1000.00 mL	1000.00 mL	12.D	Liquid	Y	NA
13	HS22080522-03	SAMP	08-24-2022 03:13 pm	100.0(	1000.00 mL	1000.00 mL	13.D	Liquid	Y	NA
14	HS22080522-08	SAMP	08-24-2022 03:31 pm	20.00	1000.00 mL	1000.00 mL	14.D	Liquid	Y	NA
15	HS22080522-10	SAMP	08-24-2022 03:49 pm	100.0(	1000.00 mL	1000.00 mL	15.D	Liquid	Y	NA
16	HS22080611-01	SAMP	08-24-2022 04:07 pm	1.00	1000.00 mL	1000.00 mL	16.D	Liquid	Y	NA
17	HS22080611-02	SAMP	08-24-2022 04:25 pm	1.00	1000.00 mL	1000.00 mL	17.D	Liquid	Y	NA
18	HS22080611-03	SAMP	08-24-2022 04:43 pm	1.00	1000.00 mL	1000.00 mL	18.D	Liquid	Y	NA
19	HS22080611-04	SAMP	08-24-2022 05:01 pm	1.00	1000.00 mL	1000.00 mL	19.D	Liquid	Y	NA
20	HS22080611-05	SAMP	08-24-2022 05:19 pm	1.00	1000.00 mL	1000.00 mL	20.D	Liquid	Y	NA
21	HS22080611-06	SAMP	08-24-2022 05:37 pm	1.00	1000.00 mL	1000.00 mL	21.D	Liquid	Y	NA
22	HS22080695-01	SAMP	08-24-2022 05:55 pm	1.00	1000.00 mL	1000.00 mL	22.D	Liquid	Y	NA
23	HS22080695-04	SAMP	08-24-2022 06:13 pm	1.00	1000.00 mL	1000.00 mL	23.D	Liquid	Y	NA
24	HS22080695-05	SAMP	08-24-2022 06:31 pm	1.00	1000.00 mL	1000.00 mL	24.D	Liquid	Y	NA
25	HS22080695-06	SAMP	08-24-2022 06:49 pm	1.00	1000.00 mL	1000.00 mL	25.D	Liquid	Y	NA
26	HS22080695-07	SAMP	08-24-2022 07:07 pm	1.00	1000.00 mL	1000.00 mL	26.D	Liquid	Y	NA
27	HS22080695-08	SAMP	08-24-2022 07:25 pm	1.00	1000.00 mL	1000.00 mL	27.D	Liquid	Y	NA
28	HS22080752-01	SAMP	08-24-2022 07:43 pm	1.00	1000.00 mL	1000.00 mL	28.D	Liquid	Y	NA
29	HS22080752-02	SAMP	08-24-2022 08:01 pm	1.00	1000.00 mL	1000.00 mL	29.D	Liquid	Y	NA
30	HS22080752-03	SAMP	08-24-2022 08:19 pm	1.00	1000.00 mL	1000.00 mL	30.D	Liquid	Y	NA
31	HS22080752-04	SAMP	08-24-2022 08:37 pm	1.00	1000.00 mL	1000.00 mL	31.D	Liquid	Y	NA
32	HS22080752-05	SAMP	08-24-2022 08:55 pm	1.00	1000.00 mL	1000.00 mL	32.D	Liquid	Y	NA
33	1 4-DIOX-0.08	CCV	08-24-2022 09:12 pm	1.00	1000.00 mL	1000.00 mL	33.D	Liquid	Y	NA
34	CCB	SAMP	08-24-2022 09:30 pm	1.00	1000.00 mL	1000.00 mL	34.D	Liquid	Y	NA

right solutions.
right partner.

Raw Data SV-6 410398

Workorder

HS22080499

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\001.D Page 1
Report Date: 10-Mar-2022 10:29

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\001.D
Lab Smp Id: DFTPP Client Smp ID: DFTPP
Inj Date : 10-MAR-2022 10:15 MS Autotune Date: 09-MAR-2022 11:12
Operator : smith Inst ID: SV6.i
Smp Info : DFTPP;DFTPP;3;;DFTPP
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DFTPP.m
Meth Date : 09-Dec-2021 09:52 jjuarez Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vf * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
5.667	6.357	-0.690	198	97000			0.00- 100.00	100.00
5.667	6.357	-0.690	51	53776			10.00- 80.00	55.44
5.667	6.357	-0.690	68	766			0.00- 2.00	1.59
5.667	6.357	-0.690	69	48284			0.00- 0.00	49.78
5.667	6.357	-0.690	70	222			0.00- 2.00	0.46
5.667	6.357	-0.690	127	57876			10.00- 80.00	59.67
5.667	6.357	-0.690	197	89			0.00- 2.00	0.09
5.667	6.357	-0.690	199	6703			5.00- 9.00	6.91
5.667	6.357	-0.690	275	20548			10.00- 60.00	21.18
5.667	6.357	-0.690	365	2011			1.00- 100.00	2.07
5.667	6.357	-0.690	441	8864			0.01- 99.99	74.94
5.667	6.357	-0.690	442	60568			50.00- 150.00	62.44
5.667	6.357	-0.690	443	11828			15.00- 24.00	19.53

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	55.44
68	Less than 2.00% of mass 69	0.79 (1.59)
69	Mass 69 relative abundance	49.78
70	Less than 2.00% of mass 69	0.23 (0.46)
127	10.00 - 80.00% of mass 198	59.67
197	Less than 2.00% of mass 198	0.09
199	5.00 - 9.00% of mass 198	6.91
275	10.00 - 60.00% of mass 198	21.18
365	1.00 - 100.00% of mass 198	2.07
441	Present, but less than mass 443	9.14
442	50.00 - 150.00% of mass 198	62.44
443	15.00 - 24.00% of mass 442	12.19 (19.53)

Data File: 001.D
Spectrum: Average Spectrum: 5.657 to 5.662 min. (SUB)
Location of Maximum: 198.00
Number of points: 255

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	59	111.00	4304	180.00	2452	257.00	491
37.00	224	112.00	539	181.00	1144	258.00	2733
38.00	615	113.00	143	182.00	177	259.00	454
39.00	3676	116.00	789	184.00	192	261.00	82
40.00	317	117.00	14919	185.00	1728	264.00	185
41.00	107	118.00	1145	186.00	13758	265.00	973
44.00	143	119.00	105	187.00	3715	266.00	174
45.00	94	120.00	150	188.00	457	268.00	88
47.00	15	122.00	973	189.00	685	270.00	75
48.00	89	123.00	1516	190.00	117	272.00	103
49.00	508	124.00	642	191.00	390	273.00	1456
50.00	14754	125.00	696	192.00	1177	274.00	3568
51.00	53776	126.00	256	193.00	1358	275.00	20544
52.00	2771	127.00	57872	194.00	259	276.00	2620
53.00	81	128.00	4240	195.00	139	277.00	1638
55.00	257	129.00	21648	196.00	2928	278.00	262
56.00	1346	130.00	1884	197.00	89	283.00	139
57.00	3111	131.00	409	198.00	97000	284.00	97
58.00	105	132.00	154	199.00	6703	285.00	237
61.00	558	134.00	606	200.00	528	293.00	305
62.00	699	135.00	1740	201.00	612	294.00	85
63.00	1803	136.00	678	203.00	645	295.00	95
64.00	268	137.00	930	204.00	3334	296.00	5500
65.00	1049	138.00	177	205.00	5688	297.00	828
68.00	766	140.00	157	206.00	23784	303.00	625
69.00	48280	141.00	2481	207.00	3124	304.00	170
70.00	222	142.00	824	208.00	849	308.00	75
73.00	474	143.00	679	209.00	168	314.00	238
74.00	5459	144.00	97	210.00	354	315.00	643
75.00	8373	145.00	111	211.00	911	316.00	288
76.00	3216	146.00	464	215.00	167	321.00	145
77.00	63088	147.00	1285	216.00	492	323.00	1574
78.00	4098	148.00	3525	217.00	6177	324.00	249
79.00	3357	149.00	673	218.00	732	327.00	240
80.00	2361	150.00	140	221.00	5622	328.00	123
81.00	3824	151.00	388	222.00	202	332.00	116
82.00	1046	152.00	197	223.00	1480	333.00	145
83.00	984	153.00	769	224.00	12590	334.00	1088
84.00	280	154.00	654	225.00	3091	335.00	208
85.00	674	155.00	1544	226.00	254	341.00	172
86.00	1189	156.00	1996	227.00	4932	346.00	310
87.00	592	157.00	598	228.00	818	352.00	508
88.00	224	158.00	423	229.00	1162	353.00	276
89.00	90	159.00	429	230.00	119	354.00	517
91.00	780	160.00	694	231.00	476	355.00	80

92.00	934	161.00	1193	233.00	83	365.00	2011
93.00	5961	162.00	336	234.00	295	366.00	237
94.00	433	163.00	100	235.00	300	371.00	101
95.00	133	164.00	97	236.00	162	372.00	897
96.00	339	165.00	922	237.00	449	373.00	165
97.00	116	166.00	761	239.00	168	383.00	177
98.00	4829	167.00	6070	240.00	144	390.00	86
99.00	3781	168.00	3181	241.00	236	402.00	245
100.00	330	169.00	504	242.00	771	403.00	502
101.00	2289	170.00	104	243.00	851	404.00	138
102.00	119	171.00	173	244.00	9664	421.00	356
103.00	671	172.00	468	245.00	1352	422.00	273
104.00	1246	173.00	626	246.00	1814	423.00	3205
105.00	1212	174.00	1018	247.00	300	424.00	810
106.00	442	175.00	1981	249.00	349	441.00	8864
107.00	16936	176.00	577	253.00	177	442.00	60568
108.00	2535	177.00	828	254.00	257	443.00	11828
109.00	409	178.00	262	255.00	47016	444.00	1210
110.00	29360	179.00	3529	256.00	7188		

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\001.D

Date : 10-MAR-2022 10:15

Client ID: DFTPP

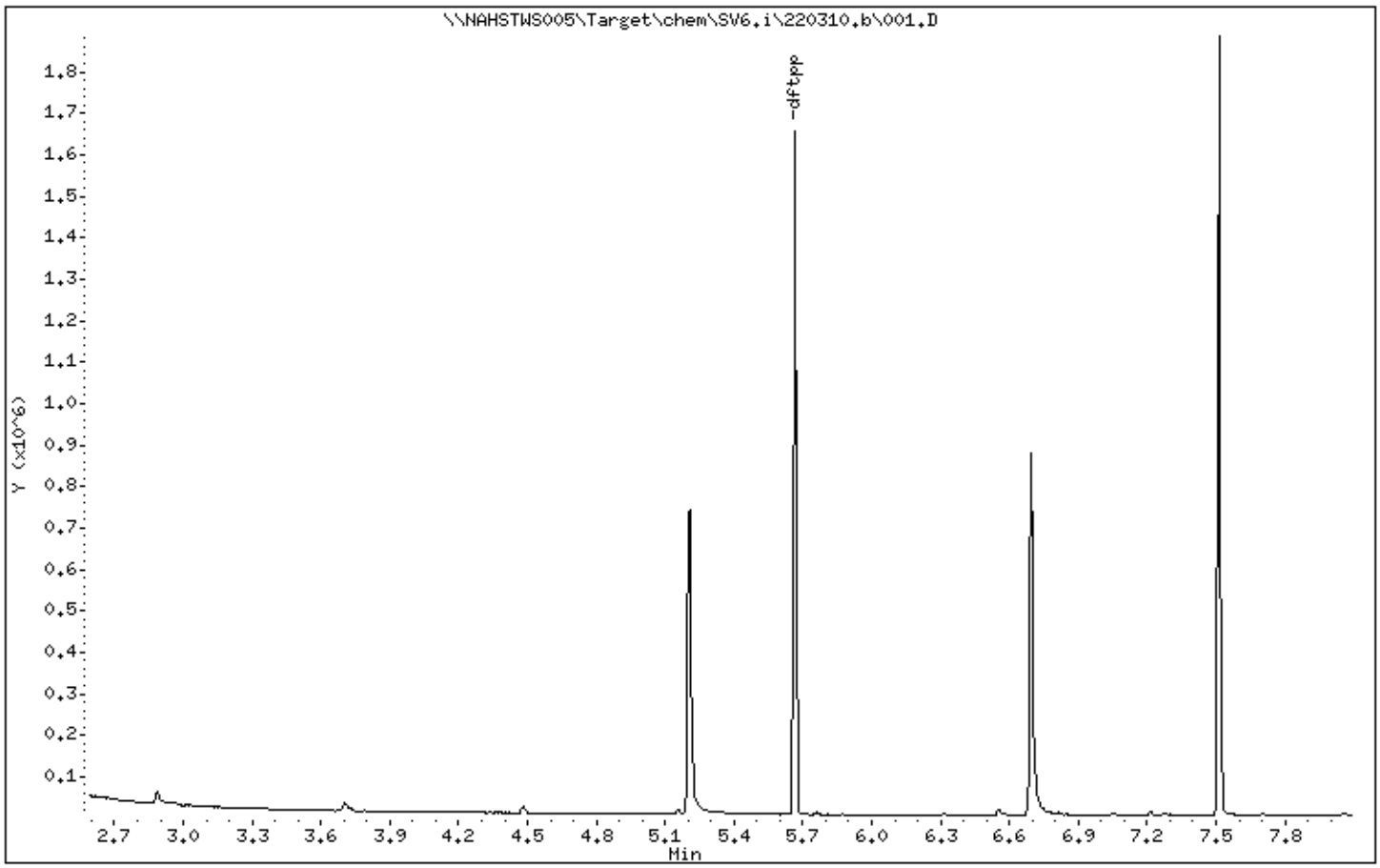
Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\001.D

Date : 10-MAR-2022 10:15

Client ID: DFTPP

Instrument: SV6.i

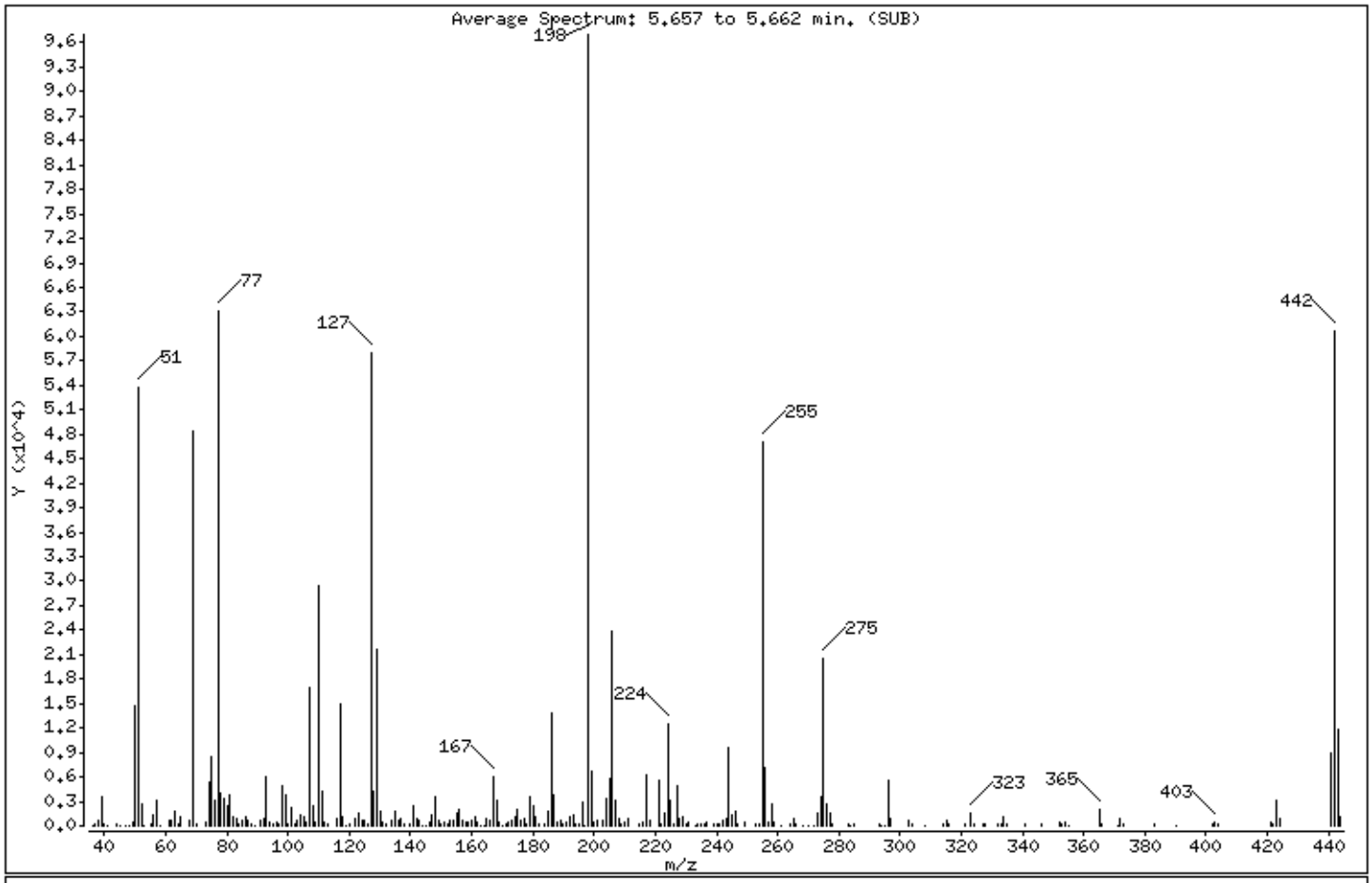
Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	55.44
68	Less than 2.00% of mass 69	0.79 (1.59)
69	Mass 69 relative abundance	49.78
70	Less than 2.00% of mass 69	0.23 (0.46)
127	10.00 - 80.00% of mass 198	59.67
197	Less than 2.00% of mass 198	0.09
199	5.00 - 9.00% of mass 198	6.91
275	10.00 - 60.00% of mass 198	21.18
365	1.00 - 100.00% of mass 198	2.07
441	Present, but less than mass 443	9.14
442	50.00 - 150.00% of mass 198	62.44
443	15.00 - 24.00% of mass 442	12.19 (19.53)

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\001.D

Date : 10-MAR-2022 10:15

Client ID: DFTPP Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS Column diameter: 0.25

Data File: 001.D
Spectrum: Average Spectrum: 5.657 to 5.662 min. (SUB)
Location of Maximum: 198.00
Number of points: 255

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	59	111.00	4304	180.00	2452	257.00	491
37.00	224	112.00	539	181.00	1144	258.00	2733
38.00	615	113.00	143	182.00	177	259.00	454
39.00	3676	116.00	789	184.00	192	261.00	82
40.00	317	117.00	14919	185.00	1728	264.00	185
41.00	107	118.00	1145	186.00	13758	265.00	973
44.00	143	119.00	105	187.00	3715	266.00	174
45.00	94	120.00	150	188.00	457	268.00	88
47.00	15	122.00	973	189.00	685	270.00	75
48.00	89	123.00	1516	190.00	117	272.00	103
49.00	508	124.00	642	191.00	390	273.00	1456
50.00	14754	125.00	696	192.00	1177	274.00	3568
51.00	53776	126.00	256	193.00	1358	275.00	20544
52.00	2771	127.00	57872	194.00	259	276.00	2620
53.00	81	128.00	4240	195.00	139	277.00	1638
55.00	257	129.00	21648	196.00	2928	278.00	262
56.00	1346	130.00	1884	197.00	89	283.00	139
57.00	3111	131.00	409	198.00	97000	284.00	97
58.00	105	132.00	154	199.00	6703	285.00	237
61.00	558	134.00	606	200.00	528	293.00	305
62.00	699	135.00	1740	201.00	612	294.00	85
63.00	1803	136.00	678	203.00	645	295.00	95
64.00	268	137.00	930	204.00	3334	296.00	5500
65.00	1049	138.00	177	205.00	5688	297.00	828
68.00	766	140.00	157	206.00	23784	303.00	625
69.00	48280	141.00	2481	207.00	3124	304.00	170
70.00	222	142.00	824	208.00	849	308.00	75
73.00	474	143.00	679	209.00	168	314.00	238
74.00	5459	144.00	97	210.00	354	315.00	643
75.00	8373	145.00	111	211.00	911	316.00	288
76.00	3216	146.00	464	215.00	167	321.00	145
77.00	63088	147.00	1285	216.00	492	323.00	1574
78.00	4098	148.00	3525	217.00	6177	324.00	249
79.00	3357	149.00	673	218.00	732	327.00	240
80.00	2361	150.00	140	221.00	5622	328.00	123

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\001.D

Date : 10-MAR-2022 10:15

Client ID: DFTPP Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS Column diameter: 0.25

Data File: 001.D
Spectrum: Average Spectrum: 5.657 to 5.662 min. (SUB)
Location of Maximum: 198.00
Number of points: 255

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	3824	151.00	388	222.00	202	332.00	116
82.00	1046	152.00	197	223.00	1480	333.00	145
83.00	984	153.00	769	224.00	12590	334.00	1088
84.00	280	154.00	654	225.00	3091	335.00	208
85.00	674	155.00	1544	226.00	254	341.00	172
86.00	1189	156.00	1996	227.00	4932	346.00	310
87.00	592	157.00	598	228.00	818	352.00	508
88.00	224	158.00	423	229.00	1162	353.00	276
89.00	90	159.00	429	230.00	119	354.00	517
91.00	780	160.00	694	231.00	476	355.00	80
92.00	934	161.00	1193	233.00	83	365.00	2011
93.00	5961	162.00	336	234.00	295	366.00	237
94.00	433	163.00	100	235.00	300	371.00	101
95.00	133	164.00	97	236.00	162	372.00	897
96.00	339	165.00	922	237.00	449	373.00	165
97.00	116	166.00	761	239.00	168	383.00	177
98.00	4829	167.00	6070	240.00	144	390.00	86
99.00	3781	168.00	3181	241.00	236	402.00	245
100.00	330	169.00	504	242.00	771	403.00	502
101.00	2289	170.00	104	243.00	851	404.00	138
102.00	119	171.00	173	244.00	9664	421.00	356
103.00	671	172.00	468	245.00	1352	422.00	273
104.00	1246	173.00	626	246.00	1814	423.00	3205
105.00	1212	174.00	1018	247.00	300	424.00	810
106.00	442	175.00	1981	249.00	349	441.00	8864
107.00	16936	176.00	577	253.00	177	442.00	60568
108.00	2535	177.00	828	254.00	257	443.00	11828
109.00	409	178.00	262	255.00	47016	444.00	1210
110.00	29360	179.00	3529	256.00	7188		

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\002.D
Lab Smp Id: 1 4 DX-0.08 Client Smp ID: 1 4 DX-0.08
Inj Date : 10-MAR-2022 10:25 MS Autotune Date: 09-MAR-2022 11:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4 DX-0.08;1 4 DX-0.08
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DXSIM.m
Meth Date : 25-Aug-2022 16:08 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 10:25 Cal File: 002.D
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.790	3.790	(1.000)	6809	0.10000	(aM)
* 45 Naphthalene-d8	136	4.918	4.918	(1.000)	24566	0.10000	
$ 33 Nitrobenzene-d5	82	4.262	4.262	(0.867)	6468	0.08000	0.07898(M)
* 86 Acenaphthene-d10	164	6.603	6.603	(1.000)	12954	0.10000	
$ 69 2-Fluorobiphenyl	172	5.943	5.943	(0.900)	16771	0.08000	0.08317
* 126 Phenanthrene-d10	188	8.053	8.053	(1.000)	26502	0.10000	
* 182 Chrysene-d12	240	10.958	10.958	(1.000)	11837	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.656	9.656	(0.881)	16413	0.08000	0.07375(M)
* 198 Perylene-d12	264	13.085	13.085	(1.000)	8294	0.10000	
1 1,4-Dioxane	58	2.005	2.005	(0.529)	245	0.08000	0.08765(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

01133990

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\002.D

Date : 10-MAR-2022 10:25

Client ID: 1 4 DX-0.08

Instrument: SV6.i

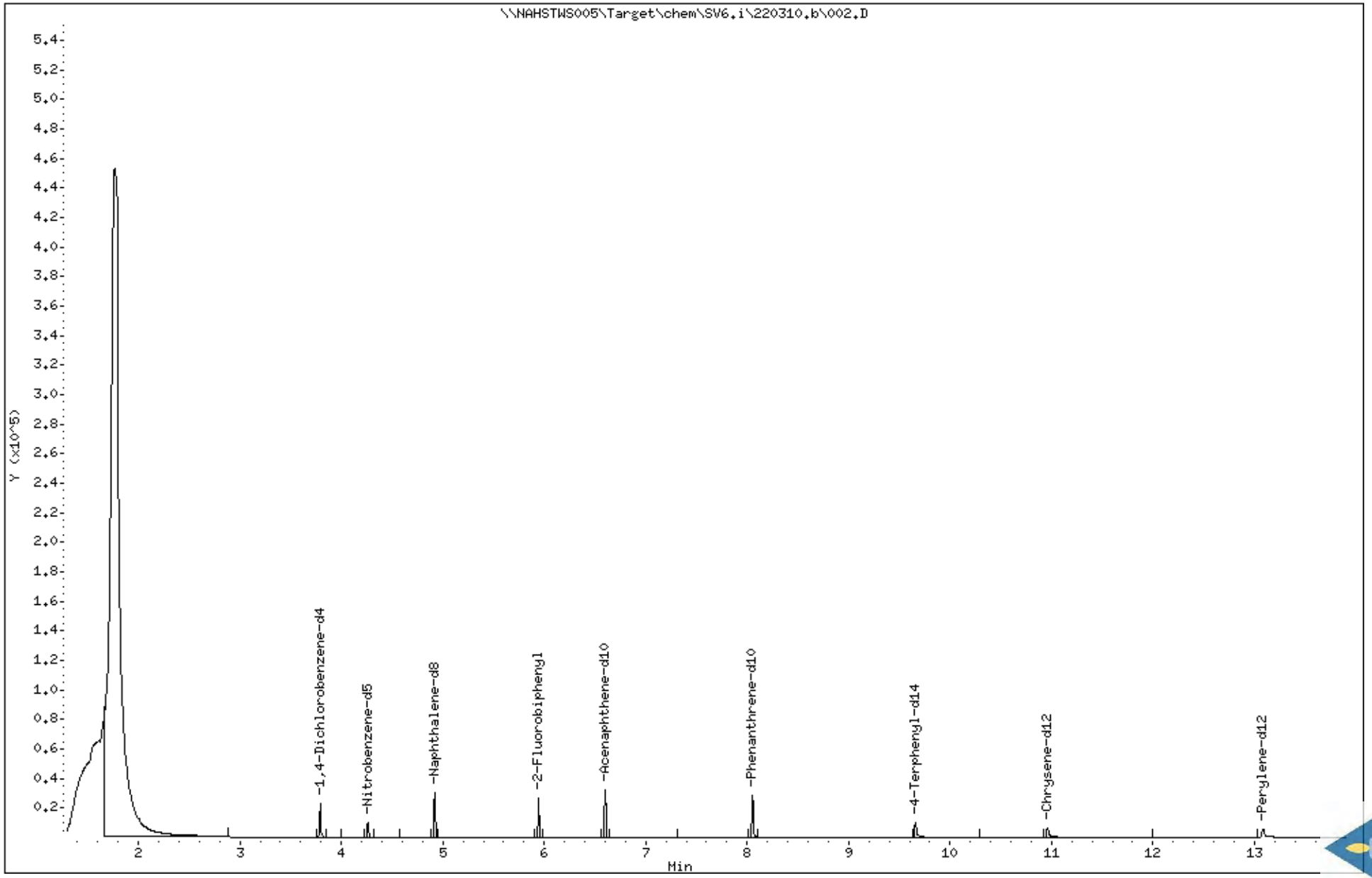
Sample Info: 1 4 DX-0.08;1 4 DX-0.08

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



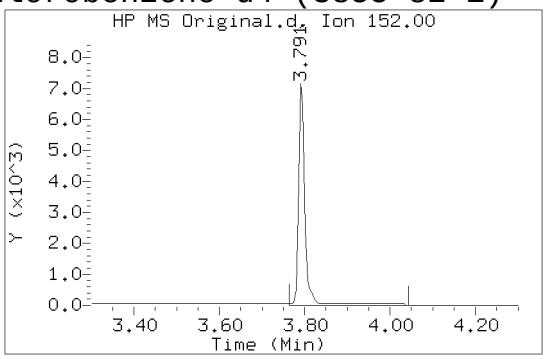
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\002.D
Inj Date : 10-MAR-2022 10:25
InstruID : SV6.i
LabSampID : 1 4 DX-0.08

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

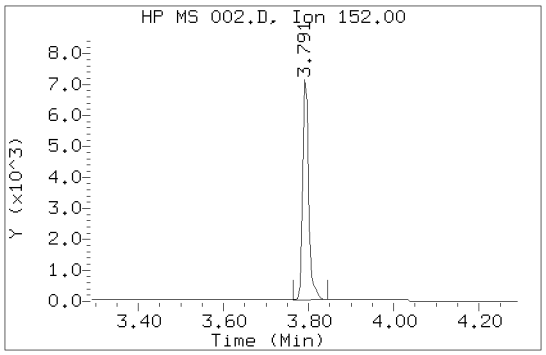
BEFORE

MASS
152
AREA
7703
HEIGHT
7154
25-Aug-2022
16:02
linh
pham



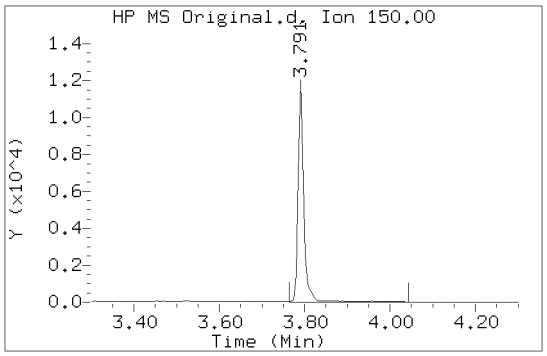
AFTER

MASS
152
AREA
6809
HEIGHT
7102
25-Aug-2022
16:08
linh
pham



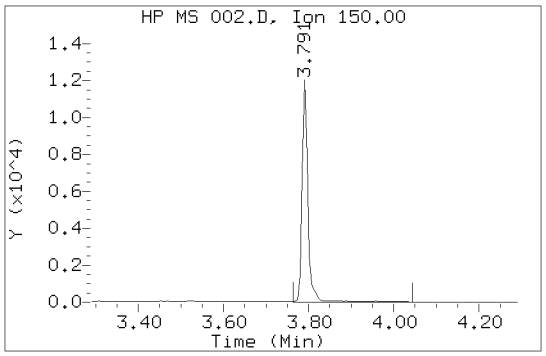
BEFORE

MASS
150
AREA
11466
HEIGHT
12036
25-Aug-2022
16:02
linh
pham



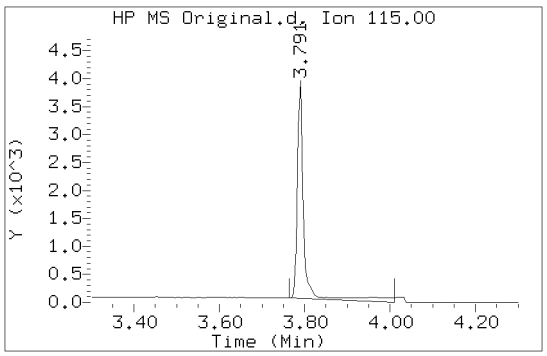
AFTER

MASS
150
AREA
11466
HEIGHT
12036
25-Aug-2022
16:08
linh
pham



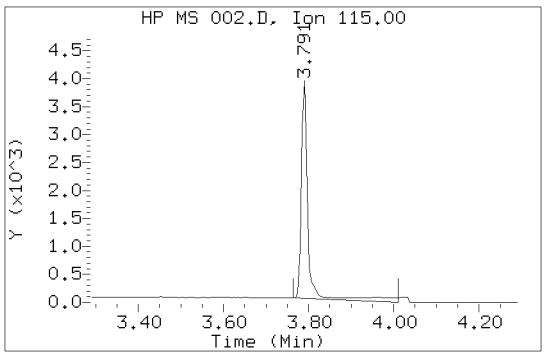
BEFORE

MASS
115
AREA
4211
HEIGHT
3890
25-Aug-2022
16:02
linh
pham



AFTER

MASS
115
AREA
4211
HEIGHT
3890
25-Aug-2022
16:08
linh
pham

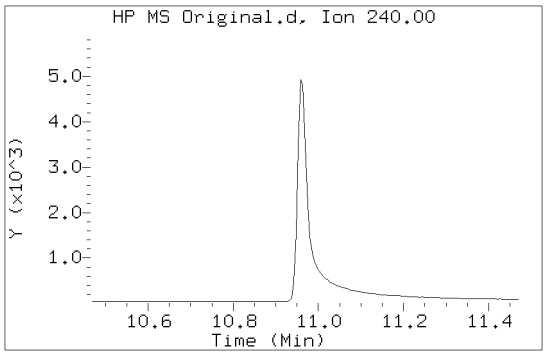


Chrysene-d12 (1719-03-5)

Reason Code:

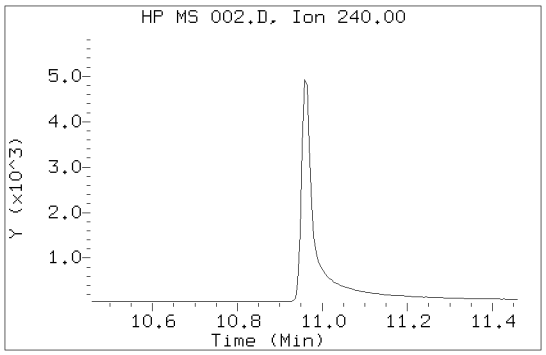
BEFORE

MASS
240
AREA
0
HEIGHT
0
25-Aug-2022
16:02
linh
pham



AFTER

MASS
240
AREA
11837
HEIGHT
4871
25-Aug-2022
16:08
linh
pham



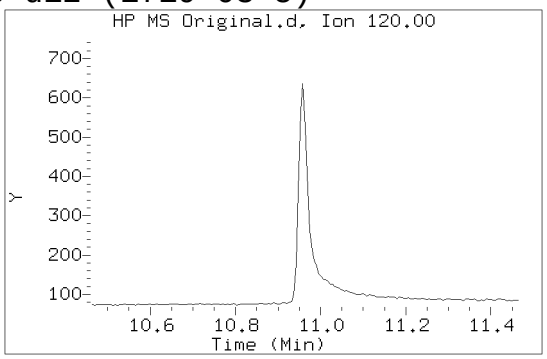
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\002.D
Inj Date : 10-MAR-2022 10:25
InstruID : SV6.i
LabSampID : 1 4 DX-0.08

Chrysene-d12 (1719-03-5)

Reason Code:

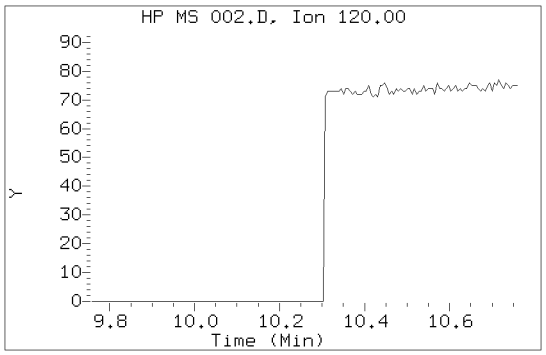
BEFORE

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:02
linh
pham



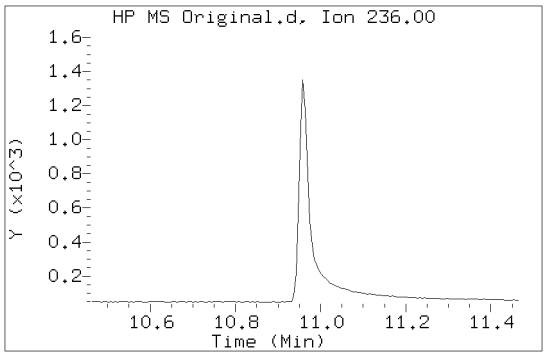
AFTER

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



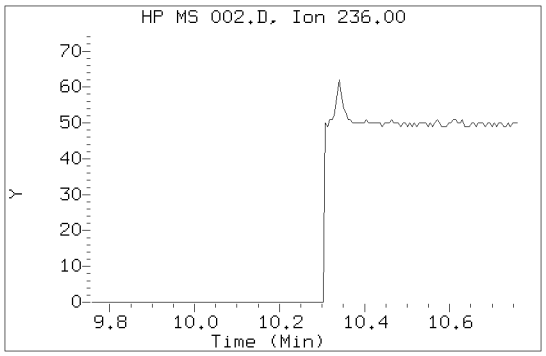
BEFORE

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:02
linh
pham



AFTER

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

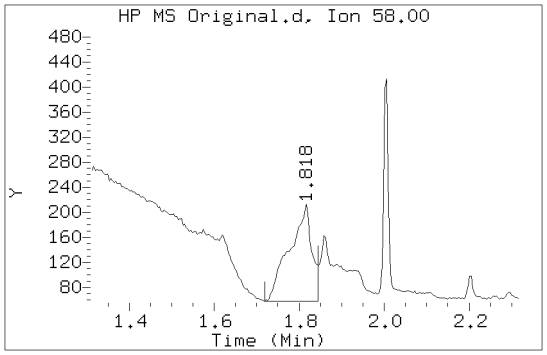


1,4-Dioxane ()

Reason Code:

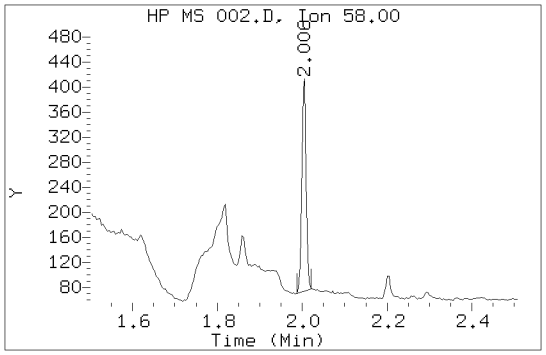
BEFORE

MASS
58
AREA
561
HEIGHT
155
25-Aug-2022
16:02
linh
pham



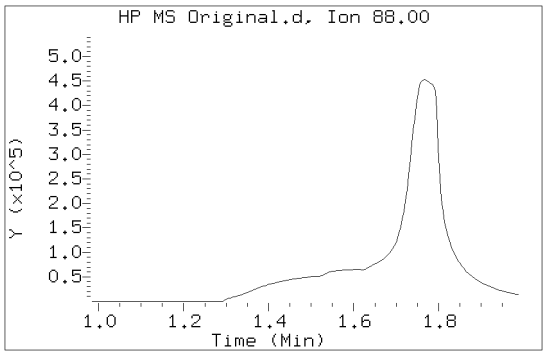
AFTER

MASS
58
AREA
245
HEIGHT
338
25-Aug-2022
16:08
linh
pham



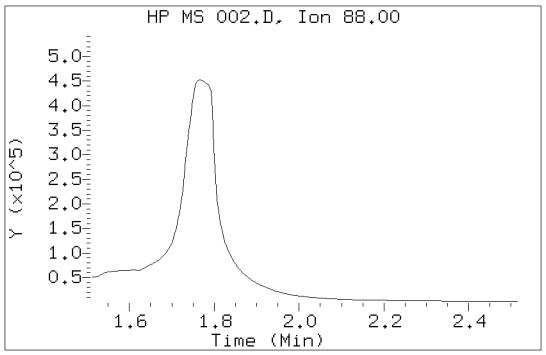
BEFORE

MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:02
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



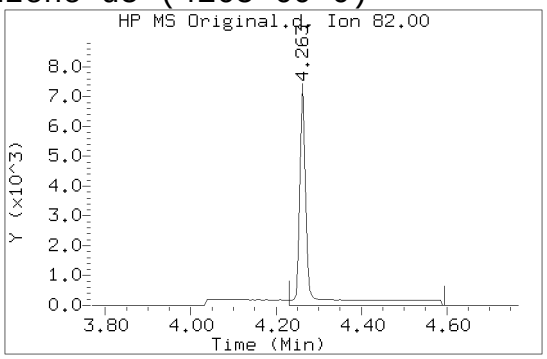
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\002.D
Inj Date : 10-MAR-2022 10:25
InstruID : SV6.i
LabSampID : 1 4 DX-0.08

Nitrobenzene-d5 (4165-60-0)

Reason Code:

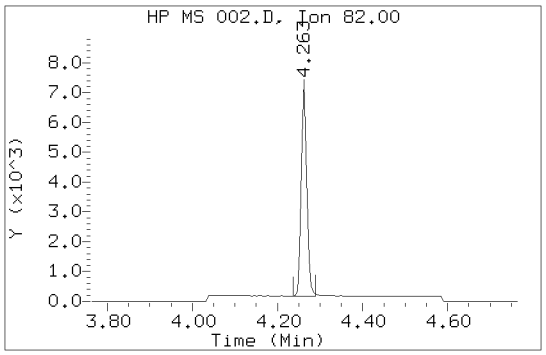
BEFORE

MASS
82
AREA
10168
HEIGHT
7437
25-Aug-2022
16:02
linh
pham



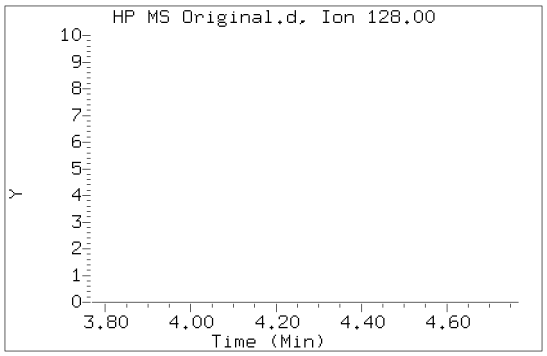
AFTER

MASS
82
AREA
6468
HEIGHT
7271
25-Aug-2022
16:08
linh
pham



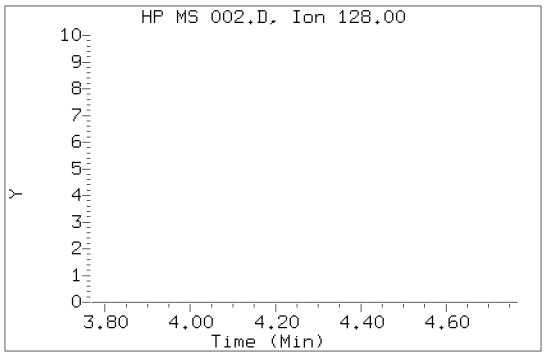
BEFORE

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:02
linh
pham



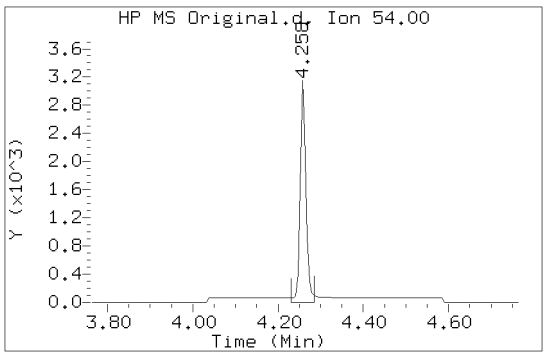
AFTER

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



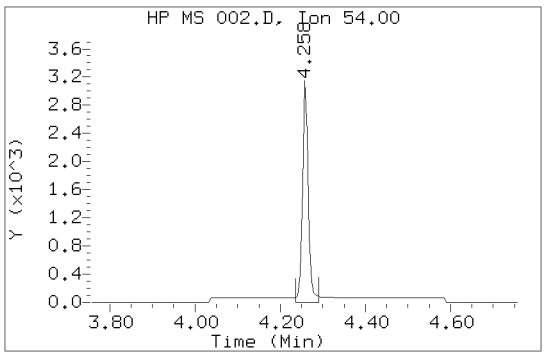
BEFORE

MASS
54
AREA
2990
HEIGHT
3148
25-Aug-2022
16:02
linh
pham



AFTER

MASS
54
AREA
2995
HEIGHT
3148
25-Aug-2022
16:08
linh
pham

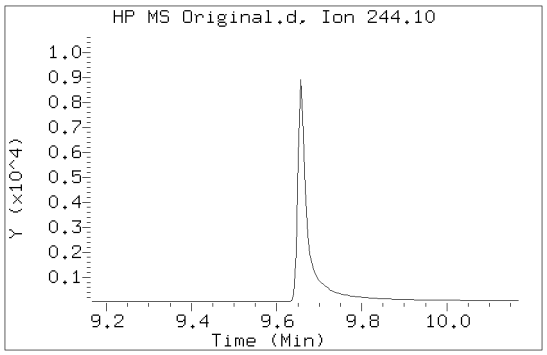


4-Terphenyl-d14 (1718-51-0)

Reason Code:

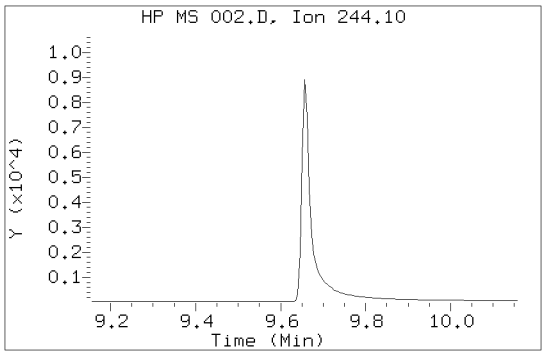
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
25-Aug-2022
16:02
linh
pham



AFTER

MASS
244.1
AREA
16413
HEIGHT
8885
25-Aug-2022
16:08
linh
pham

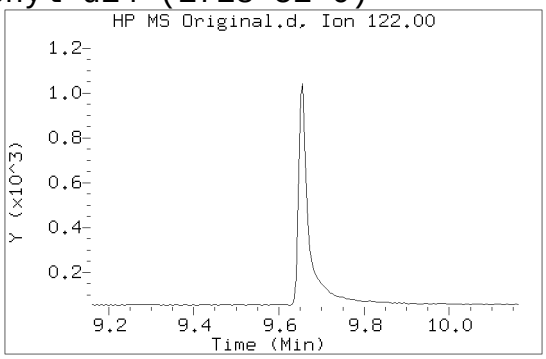


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\002.D
Inj Date : 10-MAR-2022 10:25
InstruID : SV6.i
LabSampID : 1 4 DX-0.08

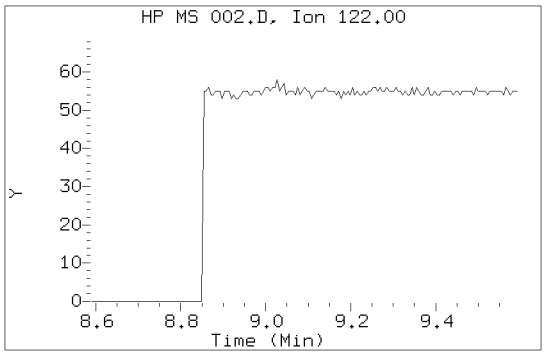
4-Terphenyl-d14 (1718-51-0)

Reason Code:

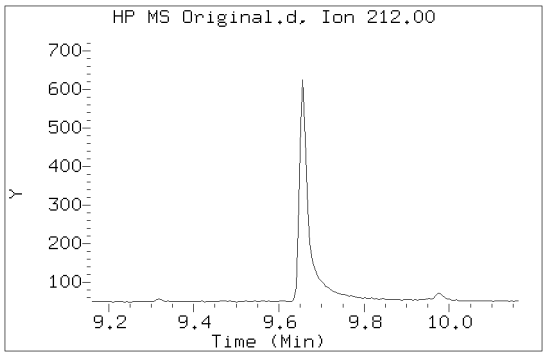
BEFORE
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:02
linh
pham



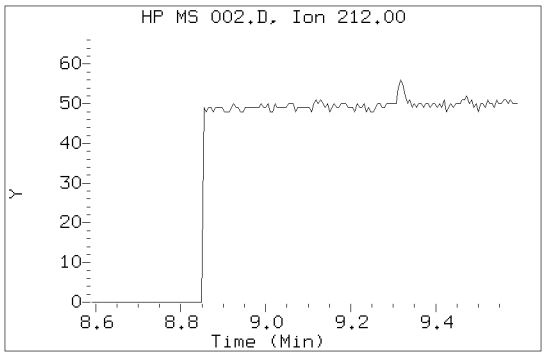
AFTER
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:02
linh
pham



AFTER
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\003.D Page 1
Report Date: 25-Aug-2022 16:08

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\003.D
Lab Smp Id: 1 4 DX-0.01 Client Smp ID: 1 4 DX-0.01
Inj Date : 10-MAR-2022 10:47 MS Autotune Date: 09-MAR-2022 11:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4 DX-0.01;1 4 DX-0.01
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DXSIM.m
Meth Date : 25-Aug-2022 16:08 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 10:25 Cal File: 002.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.795	3.795	(1.000)	5529	0.10000	(a)
* 45 Naphthalene-d8	136	4.922	4.922	(1.000)	16961	0.10000	(M)
$ 33 Nitrobenzene-d5	82	4.262	4.262	(0.866)	608	0.01000	0.01075(QM)
* 86 Acenaphthene-d10	164	6.603	6.603	(1.000)	9707	0.10000	
$ 69 2-Fluorobiphenyl	172	5.943	5.943	(0.900)	1519	0.01000	0.01005(QM)
* 126 Phenanthrene-d10	188	8.058	8.058	(1.000)	16382	0.10000	
* 182 Chrysene-d12	240	10.963	10.963	(1.000)	6576	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.661	9.661	(0.881)	1253	0.01000	0.01013(M)
* 198 Perylene-d12	264	13.090	13.090	(1.000)	3752	0.10000	
1 1,4-Dioxane	58	1.994	1.994	(0.525)	21	0.01000	0.009252(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01133996

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\003.D

Date : 10-MAR-2022 10:47

Client ID: 1 4 DX-0.01

Instrument: SV6.i

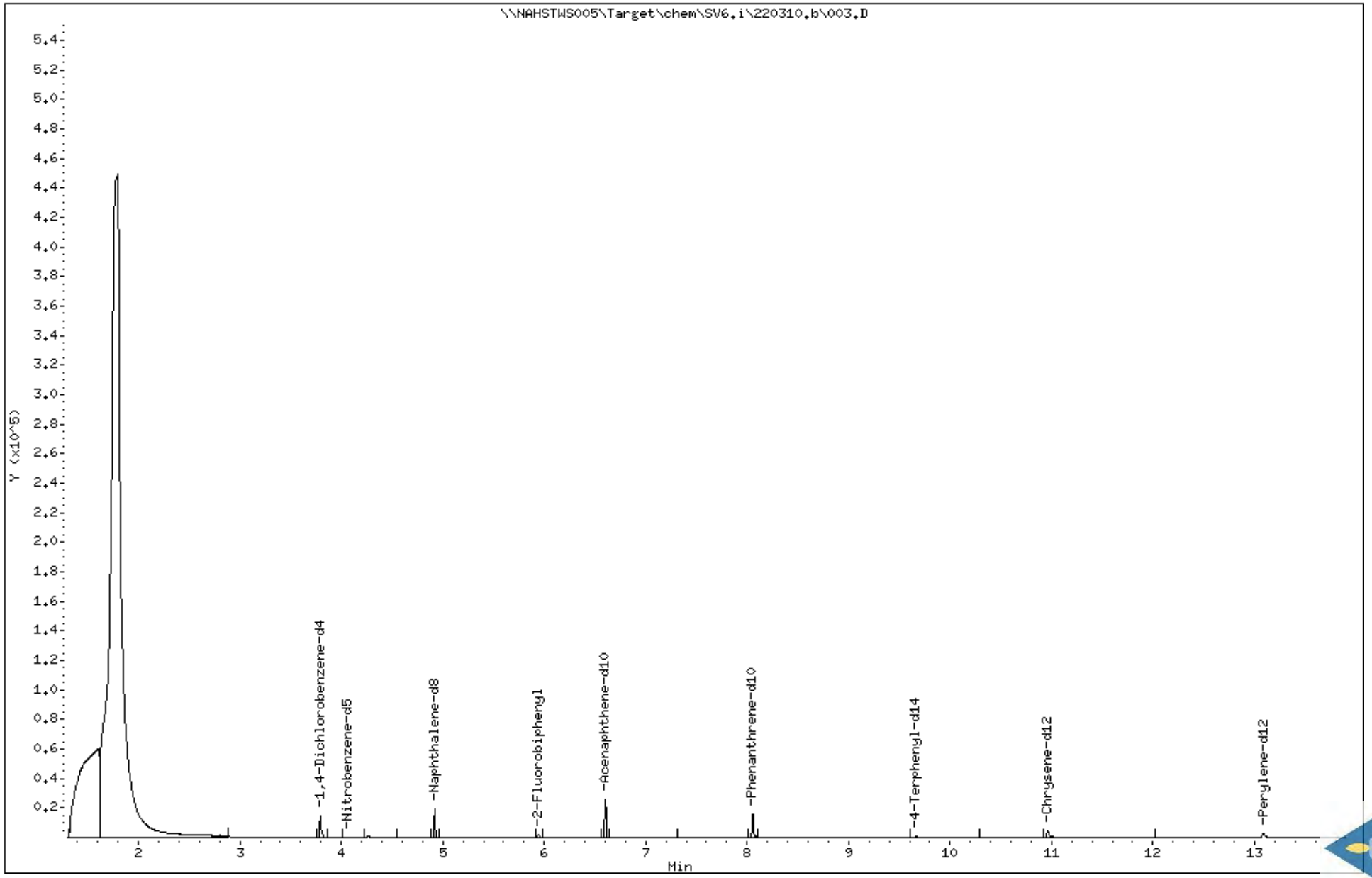
Sample Info: 1 4 DX-0.01;1 4 DX-0.01

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



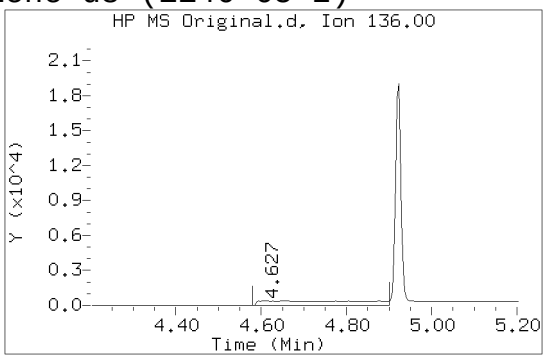
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\003.D
Inj Date : 10-MAR-2022 10:47
InstruID : SV6.i
LabSampID : 1 4 DX-0.01

Naphthalene-d8 (1146-65-2)

Reason Code:

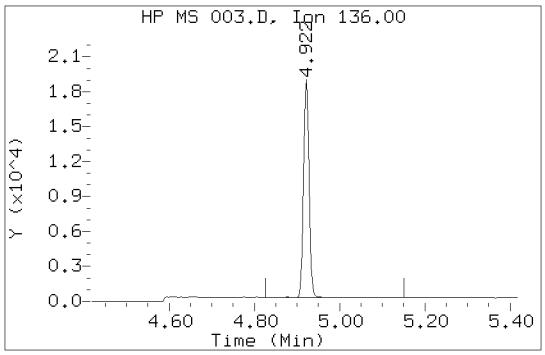
BEFORE

MASS
136
AREA
6591
HEIGHT
377
25-Aug-2022
16:04
linh
pham



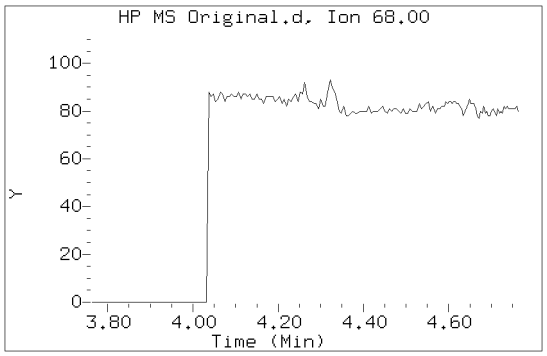
AFTER

MASS
136
AREA
16961
HEIGHT
18707
25-Aug-2022
16:08
linh
pham



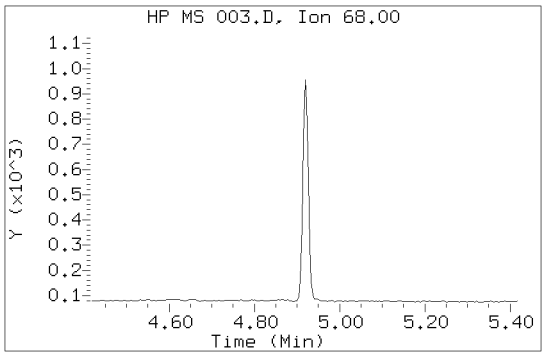
BEFORE

MASS
68
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
68
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

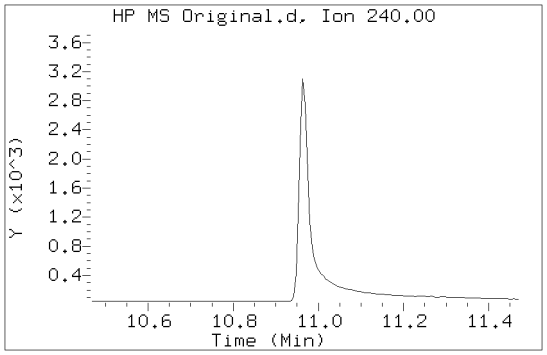


Chrysene-d12 (1719-03-5)

Reason Code:

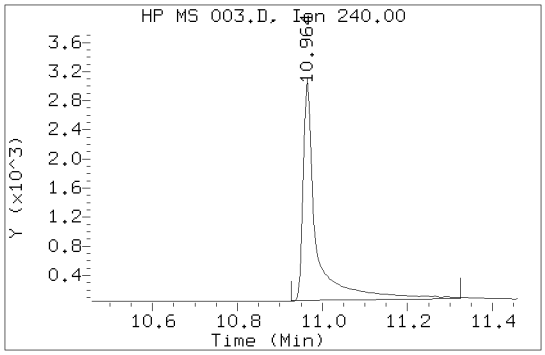
BEFORE

MASS
240
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



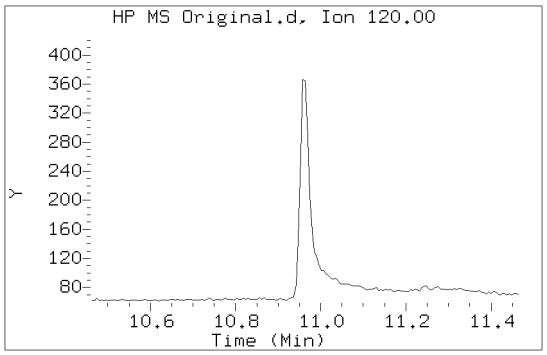
AFTER

MASS
240
AREA
6576
HEIGHT
3041
25-Aug-2022
16:08
linh
pham



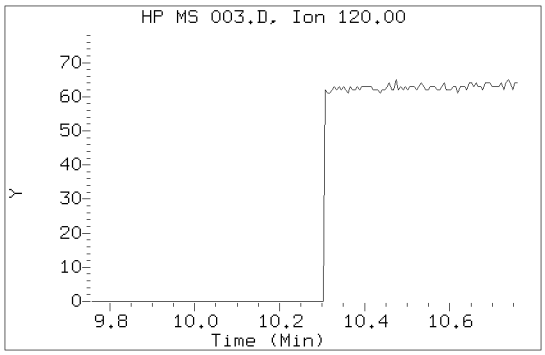
BEFORE

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



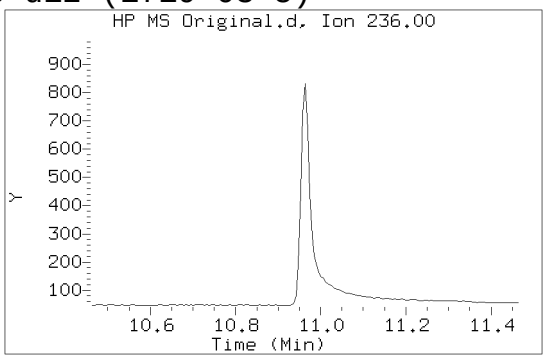
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\003.D
Inj Date : 10-MAR-2022 10:47
InstruID : SV6.i
LabSampID : 1 4 DX-0.01

Chrysene-d12 (1719-03-5)

Reason Code:

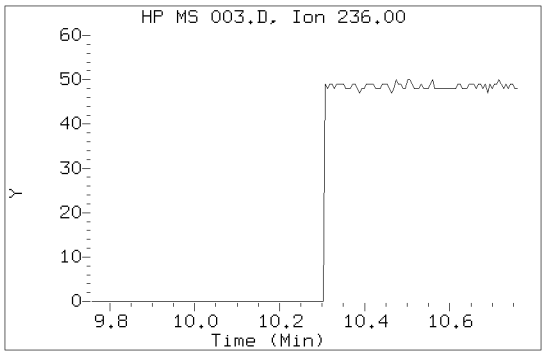
BEFORE

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

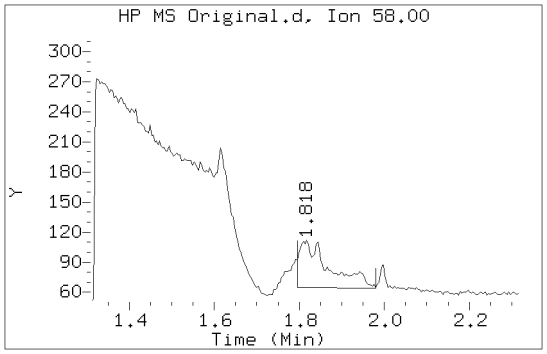


1,4-Dioxane ()

Reason Code:

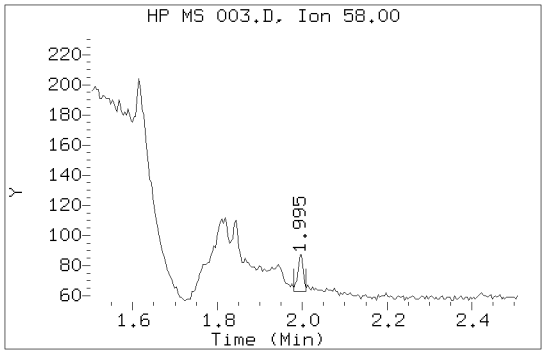
BEFORE

MASS
58
AREA
231
HEIGHT
47
25-Aug-2022
16:04
linh
pham



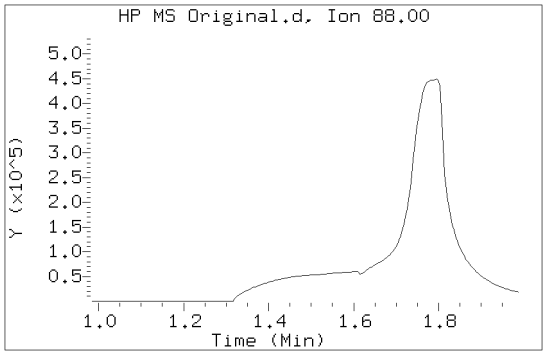
AFTER

MASS
58
AREA
21
HEIGHT
24
25-Aug-2022
16:08
linh
pham



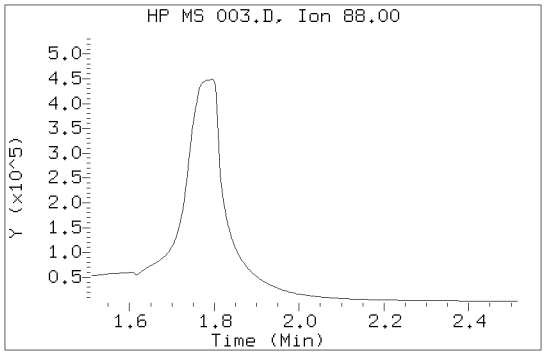
BEFORE

MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

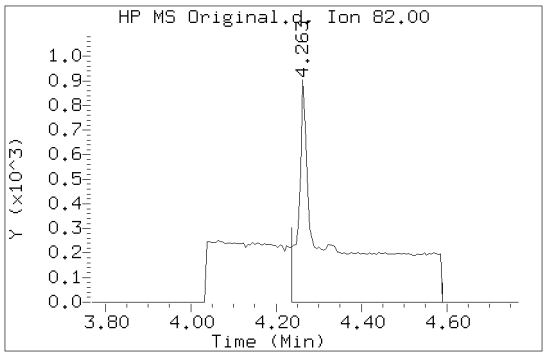


Nitrobenzene-d5 (4165-60-0)

Reason Code:

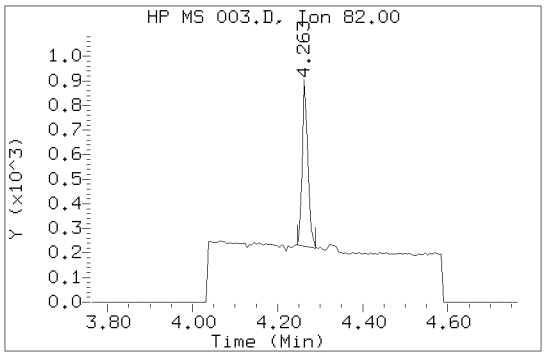
BEFORE

MASS
82
AREA
4980
HEIGHT
904
25-Aug-2022
16:04
linh
pham



AFTER

MASS
82
AREA
608
HEIGHT
676
25-Aug-2022
16:08
linh
pham

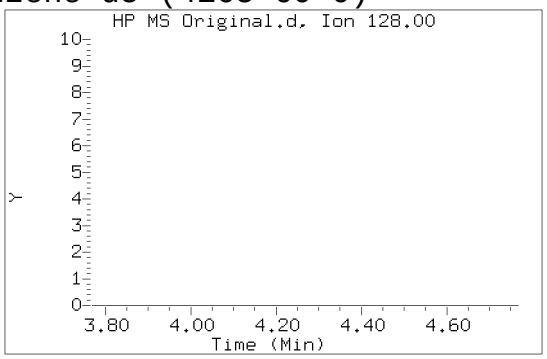


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\003.D
Inj Date : 10-MAR-2022 10:47
InstruID : SV6.i
LabSampID : 1 4 DX-0.01

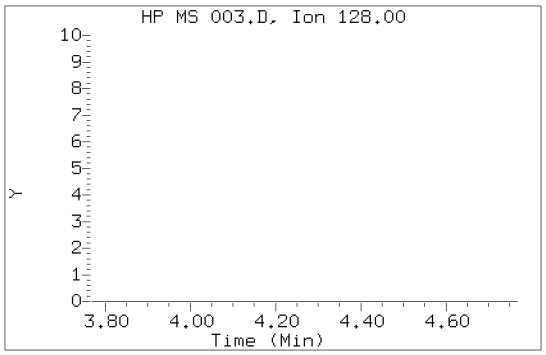
Nitrobenzene-d5 (4165-60-0)

Reason Code:

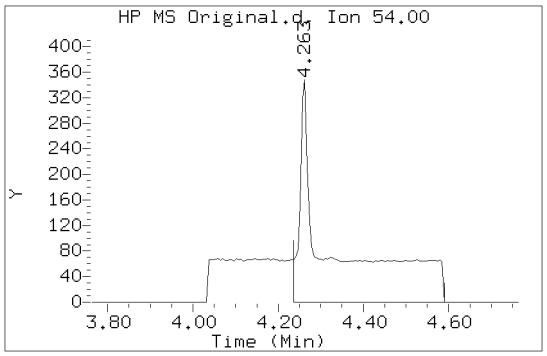
BEFORE
MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



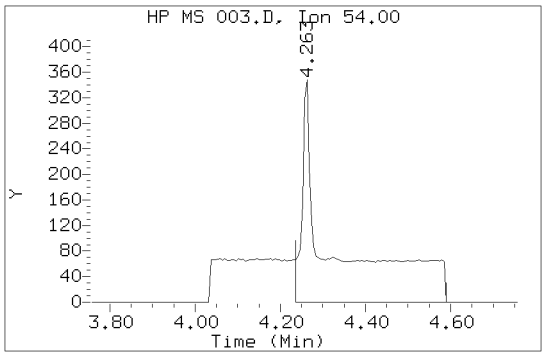
AFTER
MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
54
AREA
1660
HEIGHT
348
25-Aug-2022
16:04
linh
pham



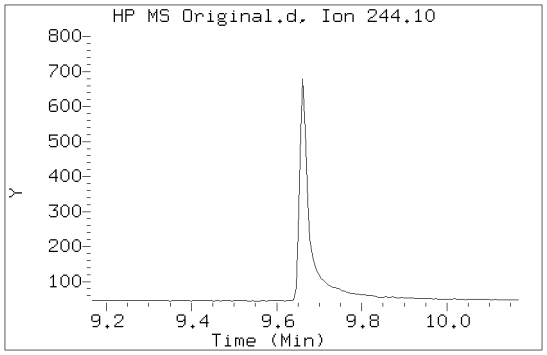
AFTER
MASS
54
AREA
1660
HEIGHT
348
25-Aug-2022
16:08
linh
pham



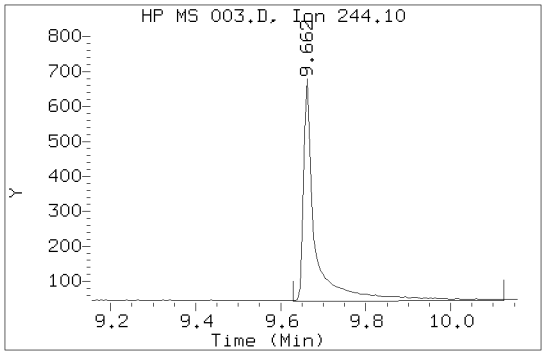
4-Terphenyl-d14 (1718-51-0)

Reason Code:

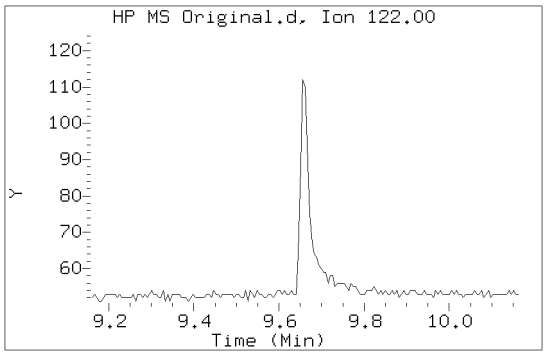
BEFORE
MASS
244.1
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



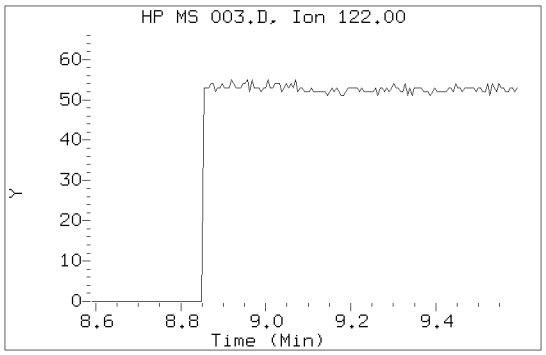
AFTER
MASS
244.1
AREA
1253
HEIGHT
635
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

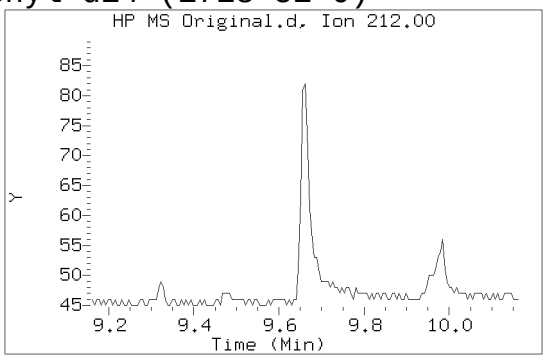


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\003.D
Inj Date : 10-MAR-2022 10:47
InstruID : SV6.i
LabSampID : 1 4 DX-0.01

4-Terphenyl-d14 (1718-51-0)

BEFORE

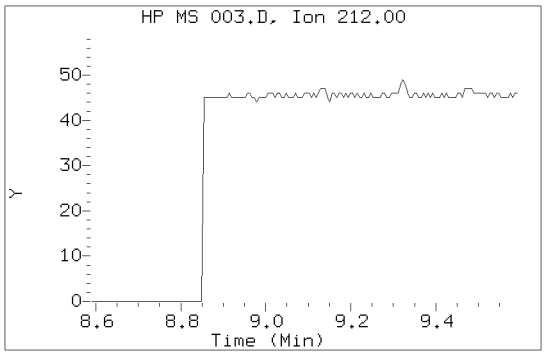
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



Reason Code:

AFTER

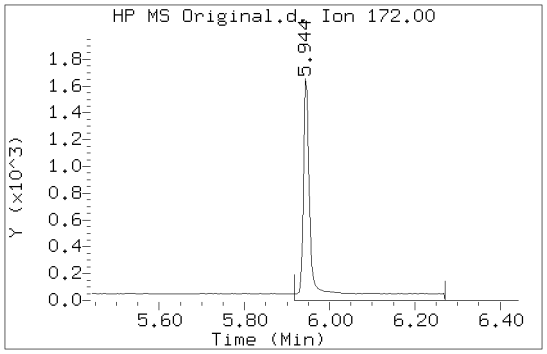
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



2-Fluorobiphenyl (321-60-8)

BEFORE

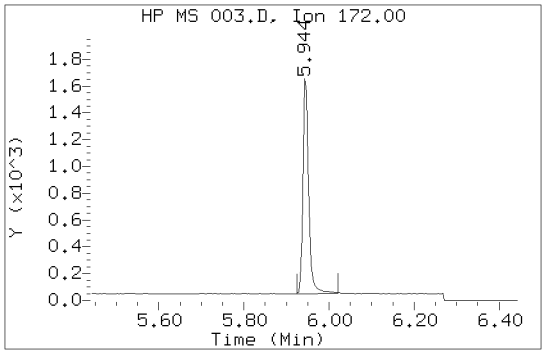
MASS
172
AREA
2590
HEIGHT
1655
25-Aug-2022
16:04
linh
pham



Reason Code:

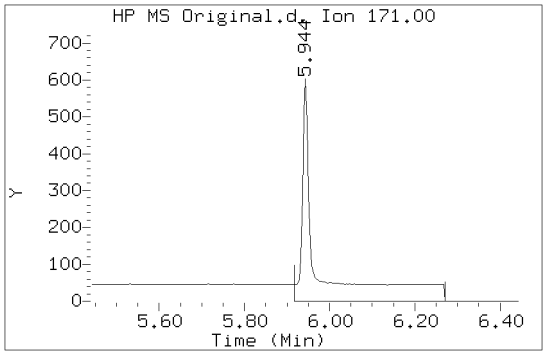
AFTER

MASS
172
AREA
1519
HEIGHT
1606
25-Aug-2022
16:08
linh
pham



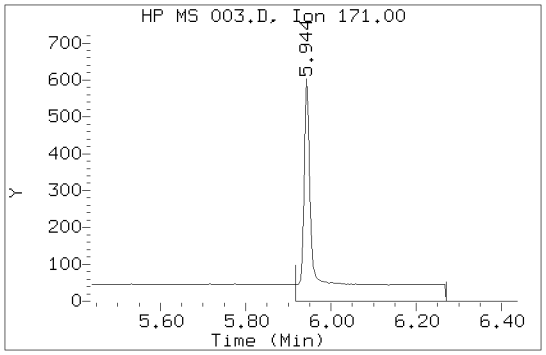
BEFORE

MASS
171
AREA
1483
HEIGHT
603
25-Aug-2022
16:04
linh
pham



AFTER

MASS
171
AREA
1483
HEIGHT
603
25-Aug-2022
16:08
linh
pham



Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\004.D Page 1
Report Date: 25-Aug-2022 16:08

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\004.D
Lab Smp Id: 1 4 DX-0.03 Client Smp ID: 1 4 DX-0.03
Inj Date : 10-MAR-2022 11:05 MS Autotune Date: 09-MAR-2022 11:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4 DX-0.03;1 4 DX-0.03
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DXSIM.m
Meth Date : 25-Aug-2022 16:08 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 10:47 Cal File: 003.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.790	3.790	(1.000)	4850	0.10000	(aM)
* 45 Naphthalene-d8	136	4.918	4.918	(1.000)	18345	0.10000	(M)
$ 33 Nitrobenzene-d5	82	4.262	4.262	(0.867)	1854	0.03000	0.03032(QM)
* 86 Acenaphthene-d10	164	6.603	6.603	(1.000)	9938	0.10000	
$ 69 2-Fluorobiphenyl	172	5.943	5.943	(0.900)	4488	0.03000	0.02901(Q)
* 126 Phenanthrene-d10	188	8.053	8.053	(1.000)	16949	0.10000	
* 182 Chrysene-d12	240	10.963	10.963	(1.000)	7290	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.656	9.656	(0.881)	4004	0.03000	0.02921(M)
* 198 Perylene-d12	264	13.090	13.090	(1.000)	4319	0.10000	
1 1,4-Dioxane	58	1.990	1.990	(0.525)	57	0.03000	0.02863(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01134002

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\004.D

Page 1

Date : 10-MAR-2022 11:05

Client ID: 1 4 DX-0.03

Instrument: SV6.i

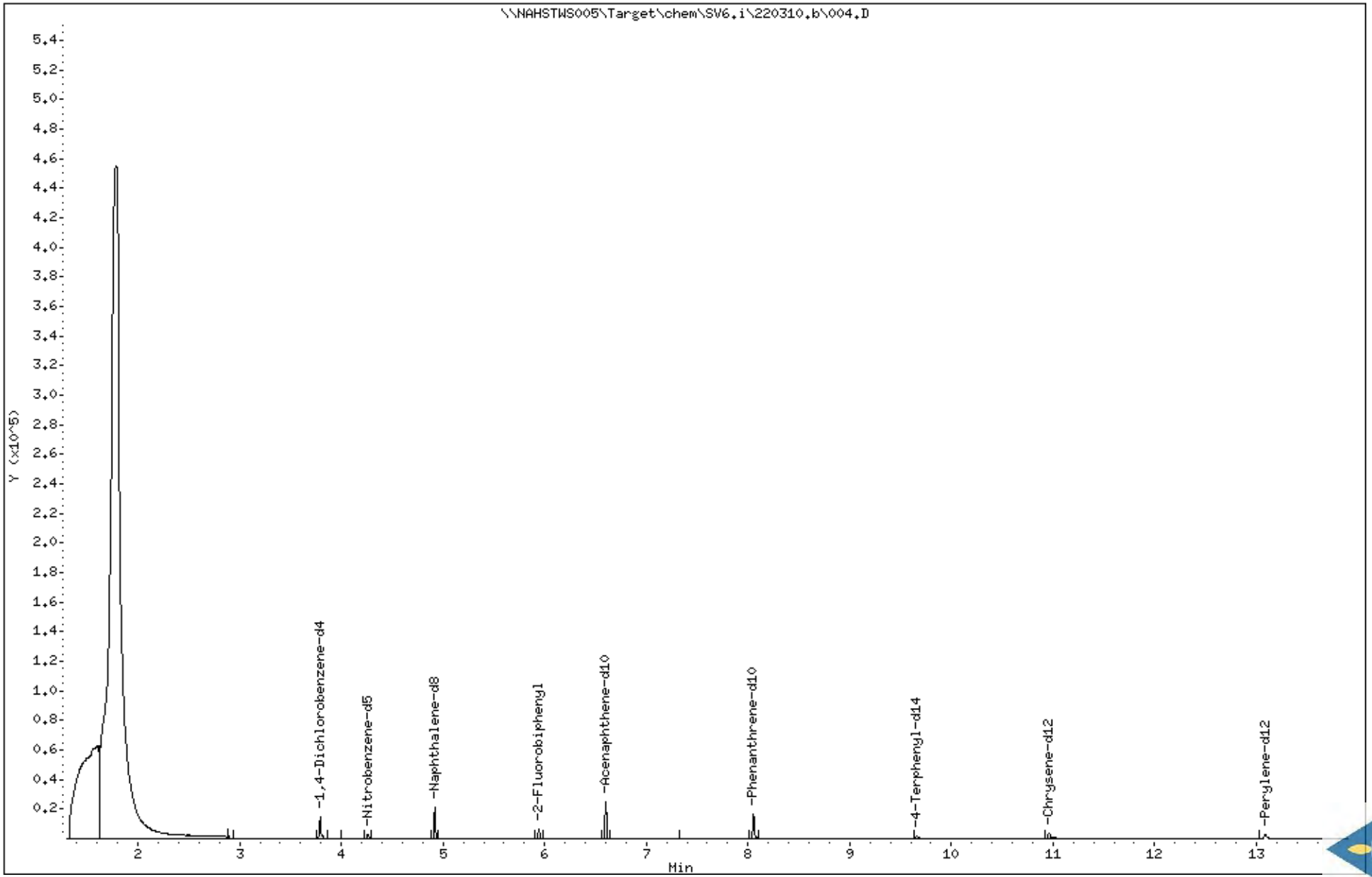
Sample Info: 1 4 DX-0.03;1 4 DX-0.03

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28

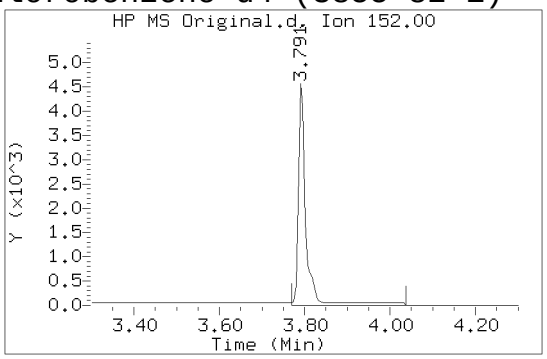


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\004.D
Inj Date : 10-MAR-2022 11:05
InstruID : SV6.i
LabSampID : 1 4 DX-0.03

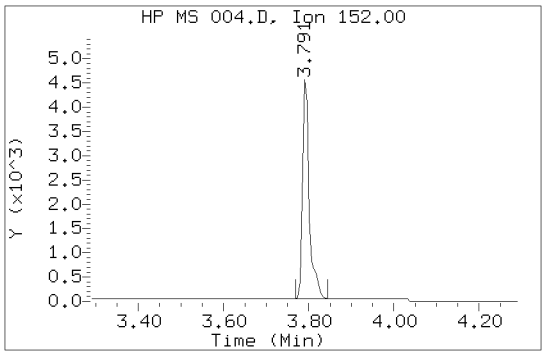
1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

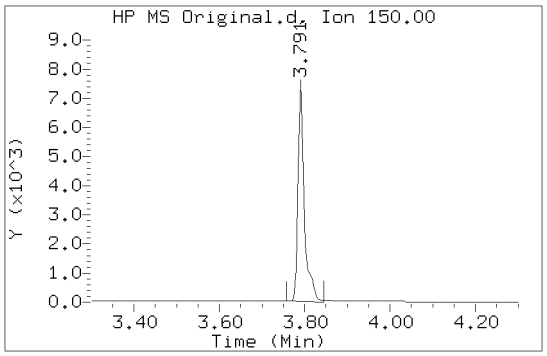
BEFORE
MASS
152
AREA
5742
HEIGHT
4567
25-Aug-2022
16:04
linh
pham



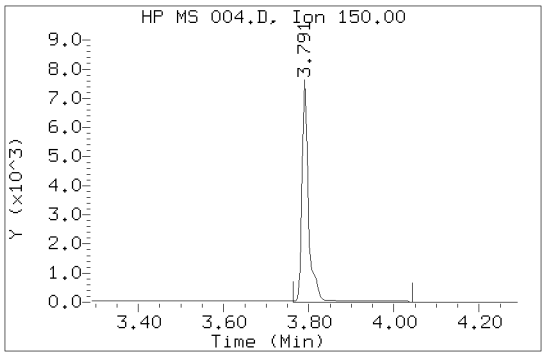
AFTER
MASS
152
AREA
4850
HEIGHT
4511
25-Aug-2022
16:08
linh
pham



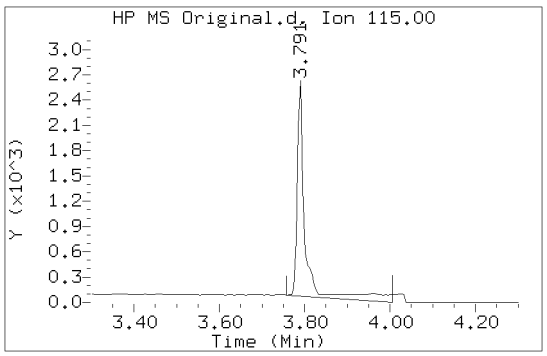
BEFORE
MASS
150
AREA
7811
HEIGHT
7601
25-Aug-2022
16:04
linh
pham



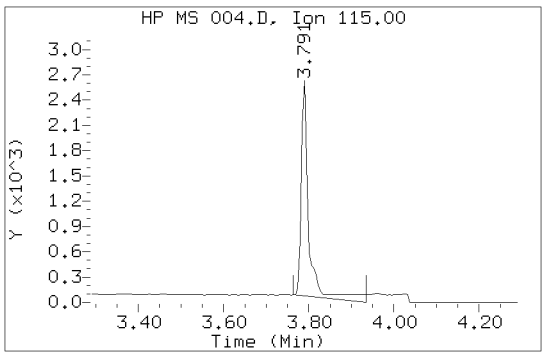
AFTER
MASS
150
AREA
8525
HEIGHT
7633
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
115
AREA
3339
HEIGHT
2555
25-Aug-2022
16:04
linh
pham



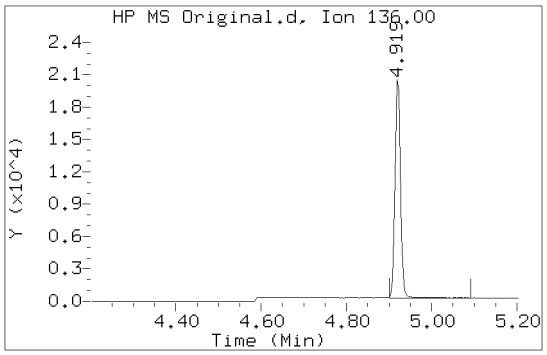
AFTER
MASS
115
AREA
3101
HEIGHT
2555
25-Aug-2022
16:08
linh
pham



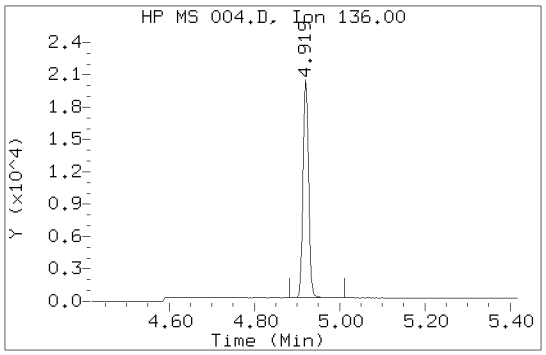
Naphthalene-d8 (1146-65-2)

Reason Code:

BEFORE
MASS
136
AREA
18381
HEIGHT
20218
25-Aug-2022
16:04
linh
pham



AFTER
MASS
136
AREA
18345
HEIGHT
20214
25-Aug-2022
16:08
linh
pham



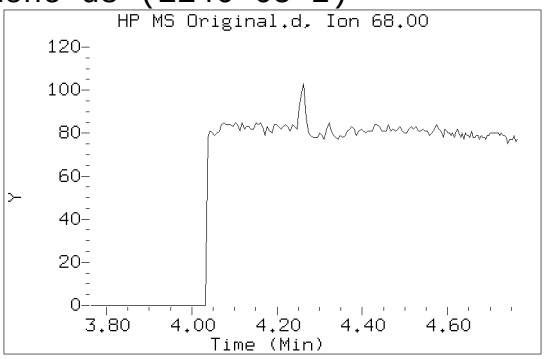
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\004.D
Inj Date : 10-MAR-2022 11:05
InstruID : SV6.i
LabSampID : 1 4 DX-0.03

Naphthalene-d8 (1146-65-2)

Reason Code:

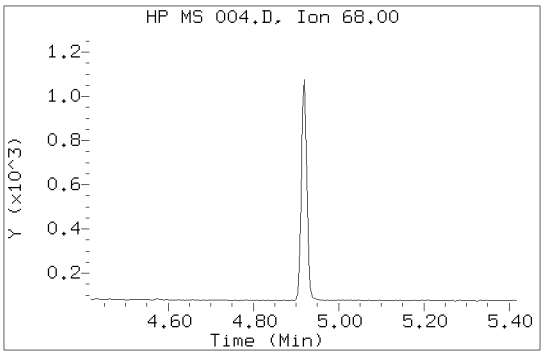
BEFORE

MASS
68
AREA
905
HEIGHT
999
25-Aug-2022
16:04
linh
pham



AFTER

MASS
68
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

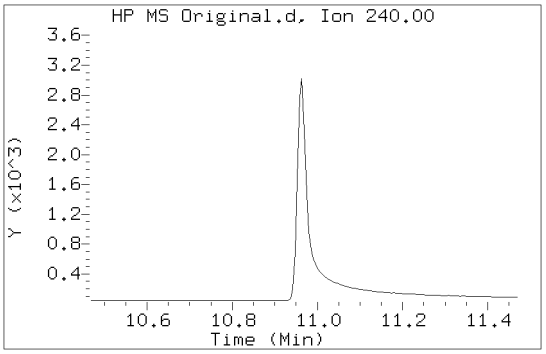


Chrysene-d12 (1719-03-5)

Reason Code:

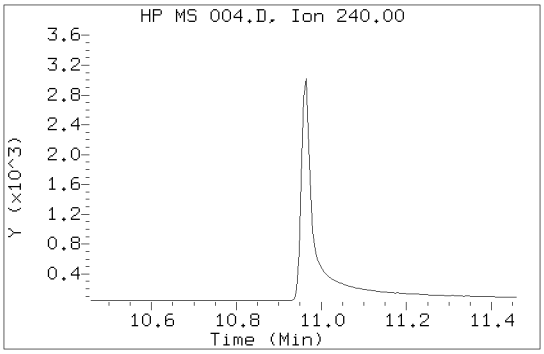
BEFORE

MASS
240
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



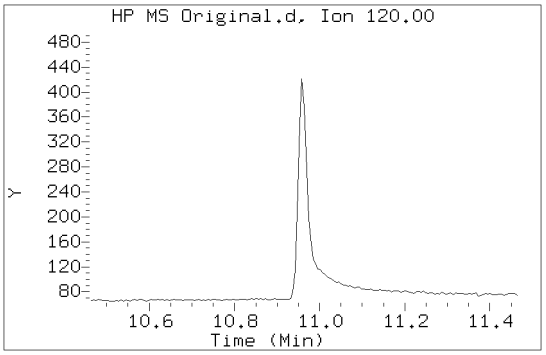
AFTER

MASS
240
AREA
7290
HEIGHT
2973
25-Aug-2022
16:08
linh
pham



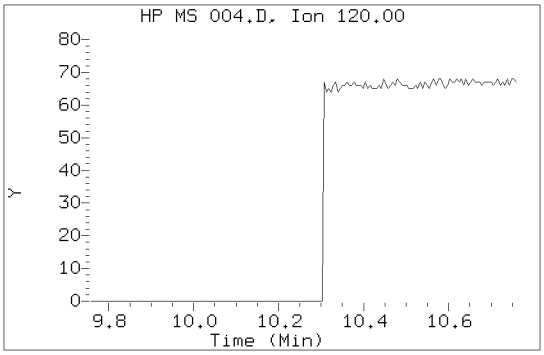
BEFORE

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



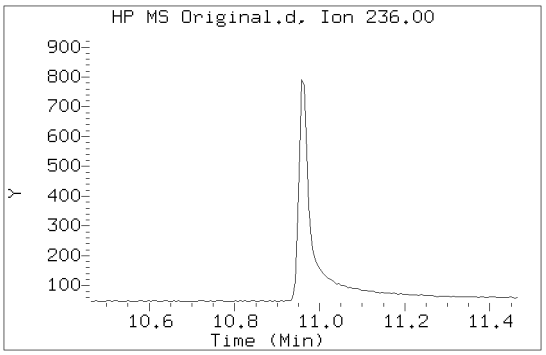
AFTER

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



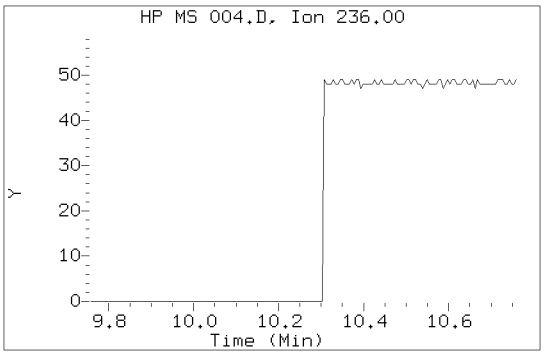
BEFORE

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



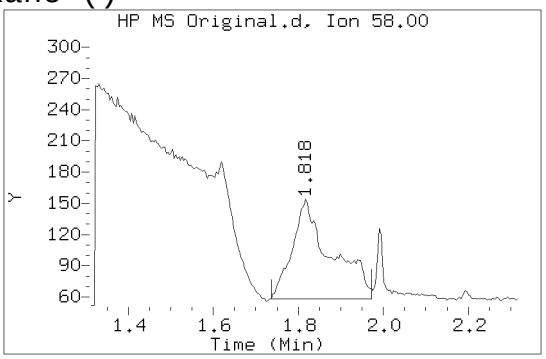
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\004.D
Inj Date : 10-MAR-2022 11:05
InstruID : SV6.i
LabSampID : 1 4 DX-0.03

1,4-Dioxane ()

Reason Code:

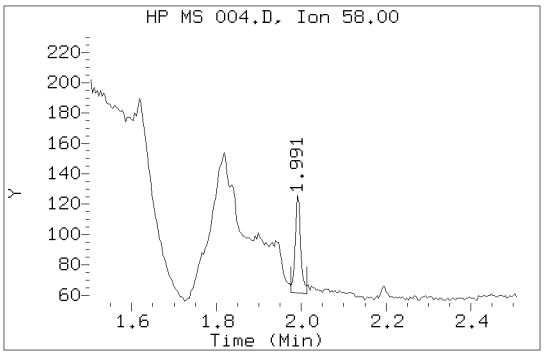
BEFORE

MASS
58
AREA
606
HEIGHT
96
25-Aug-2022
16:04
linh
pham



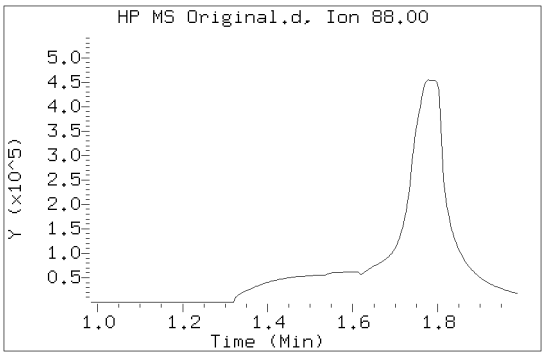
AFTER

MASS
58
AREA
57
HEIGHT
64
25-Aug-2022
16:08
linh
pham



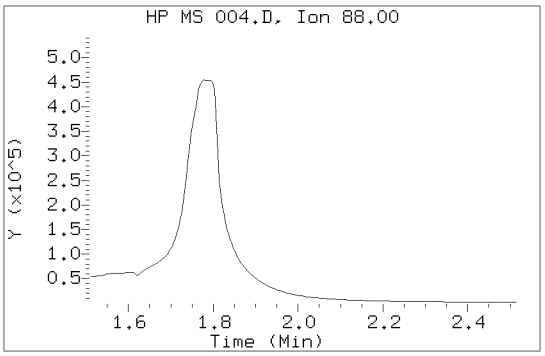
BEFORE

MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

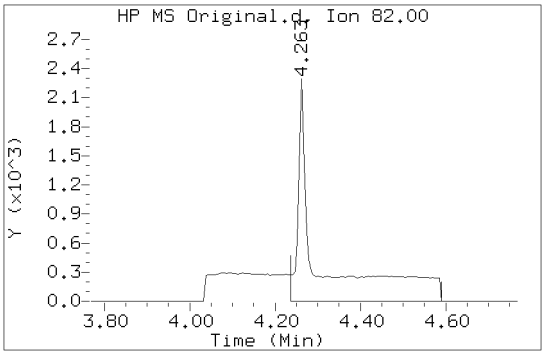


Nitrobenzene-d5 (4165-60-0)

Reason Code:

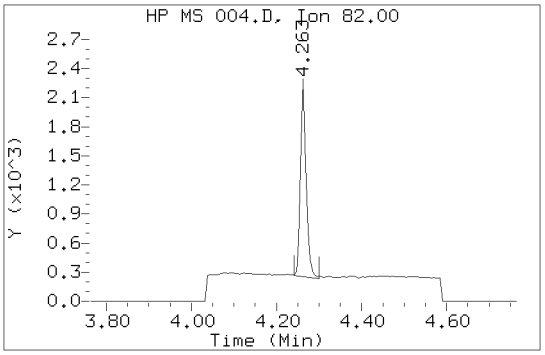
BEFORE

MASS
82
AREA
7178
HEIGHT
2293
25-Aug-2022
16:04
linh
pham



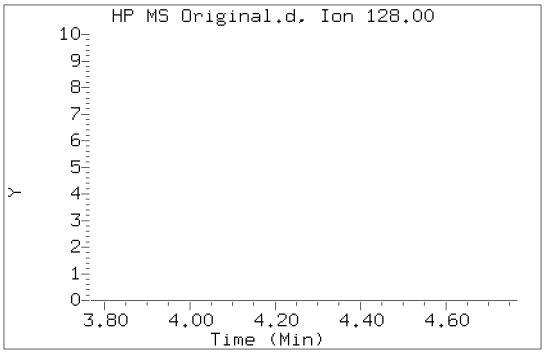
AFTER

MASS
82
AREA
1854
HEIGHT
2038
25-Aug-2022
16:08
linh
pham



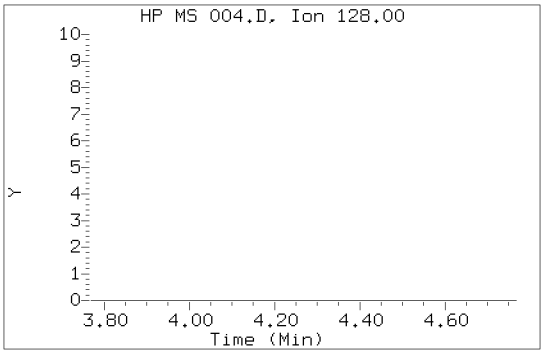
BEFORE

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



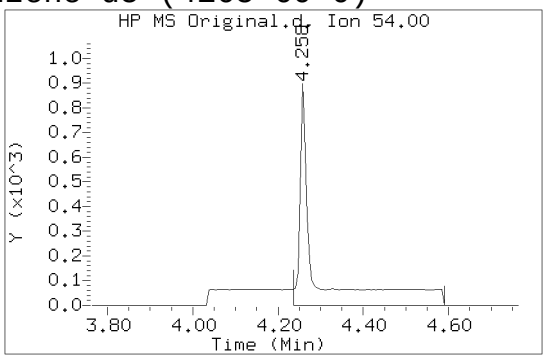
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\004.D
Inj Date : 10-MAR-2022 11:05
InstruID : SV6.i
LabSampID : 1 4 DX-0.03

Nitrobenzene-d5 (4165-60-0)

Reason Code:

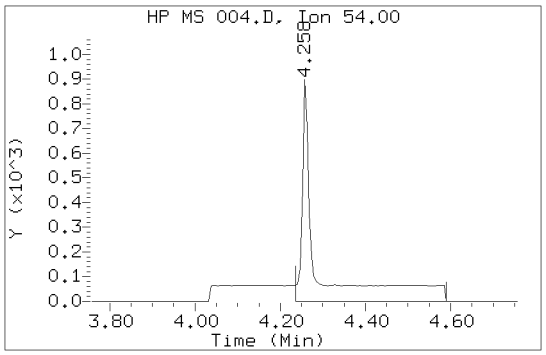
BEFORE

MASS
54
AREA
2147
HEIGHT
898
25-Aug-2022
16:04
linh
pham



AFTER

MASS
54
AREA
2147
HEIGHT
898
25-Aug-2022
16:08
linh
pham

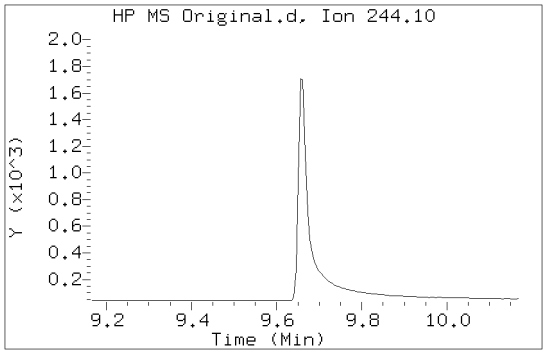


4-Terphenyl-d14 (1718-51-0)

Reason Code:

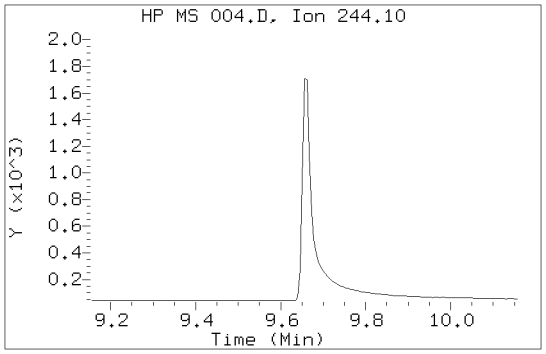
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



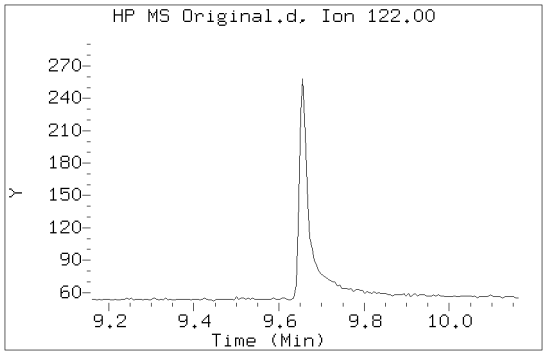
AFTER

MASS
244.1
AREA
4004
HEIGHT
1671
25-Aug-2022
16:08
linh
pham



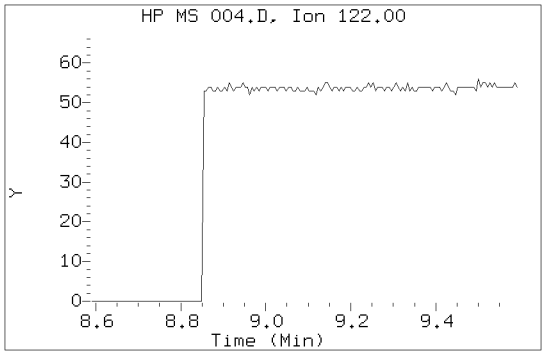
BEFORE

MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



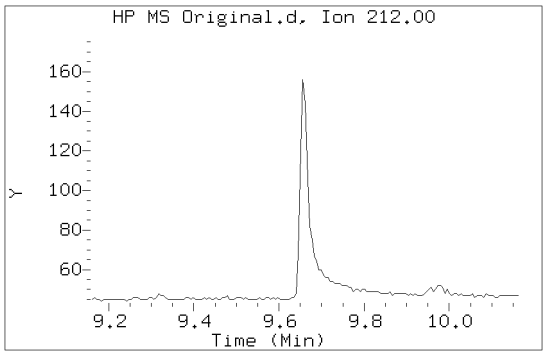
AFTER

MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



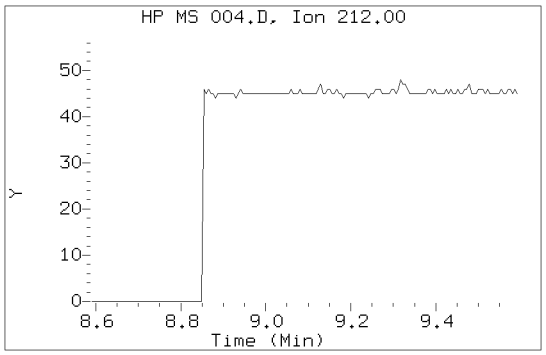
BEFORE

MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\005.D Page 1
Report Date: 25-Aug-2022 16:08

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\005.D
Lab Smp Id: 1 4 DX-0.05 Client Smp ID: 1 4 DX-0.05
Inj Date : 10-MAR-2022 11:22 MS Autotune Date: 09-MAR-2022 11:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4 DX-0.05;1 4 DX-0.05
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DXSIM.m
Meth Date : 25-Aug-2022 16:08 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 11:05 Cal File: 004.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.790	3.790	(1.000)	5274	0.10000	(aM)
* 45 Naphthalene-d8	136	4.918	4.918	(1.000)	20409	0.10000	
$ 33 Nitrobenzene-d5	82	4.262	4.262	(0.867)	3571	0.05000	0.05249(QM)
* 86 Acenaphthene-d10	164	6.603	6.603	(1.000)	9759	0.10000	
$ 69 2-Fluorobiphenyl	172	5.943	5.943	(0.900)	8686	0.05000	0.05718
* 126 Phenanthrene-d10	188	8.053	8.053	(1.000)	16554	0.10000	
* 182 Chrysene-d12	240	10.958	10.958	(1.000)	6789	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.656	9.656	(0.881)	6514	0.05000	0.05103(M)
* 198 Perylene-d12	264	13.085	13.085	(1.000)	4224	0.10000	
1 1,4-Dioxane	58	1.994	1.994	(0.526)	107	0.05000	0.04942(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01134008

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\005.D

Date : 10-MAR-2022 11:22

Client ID: 1 4 DX-0.05

Instrument: SV6.i

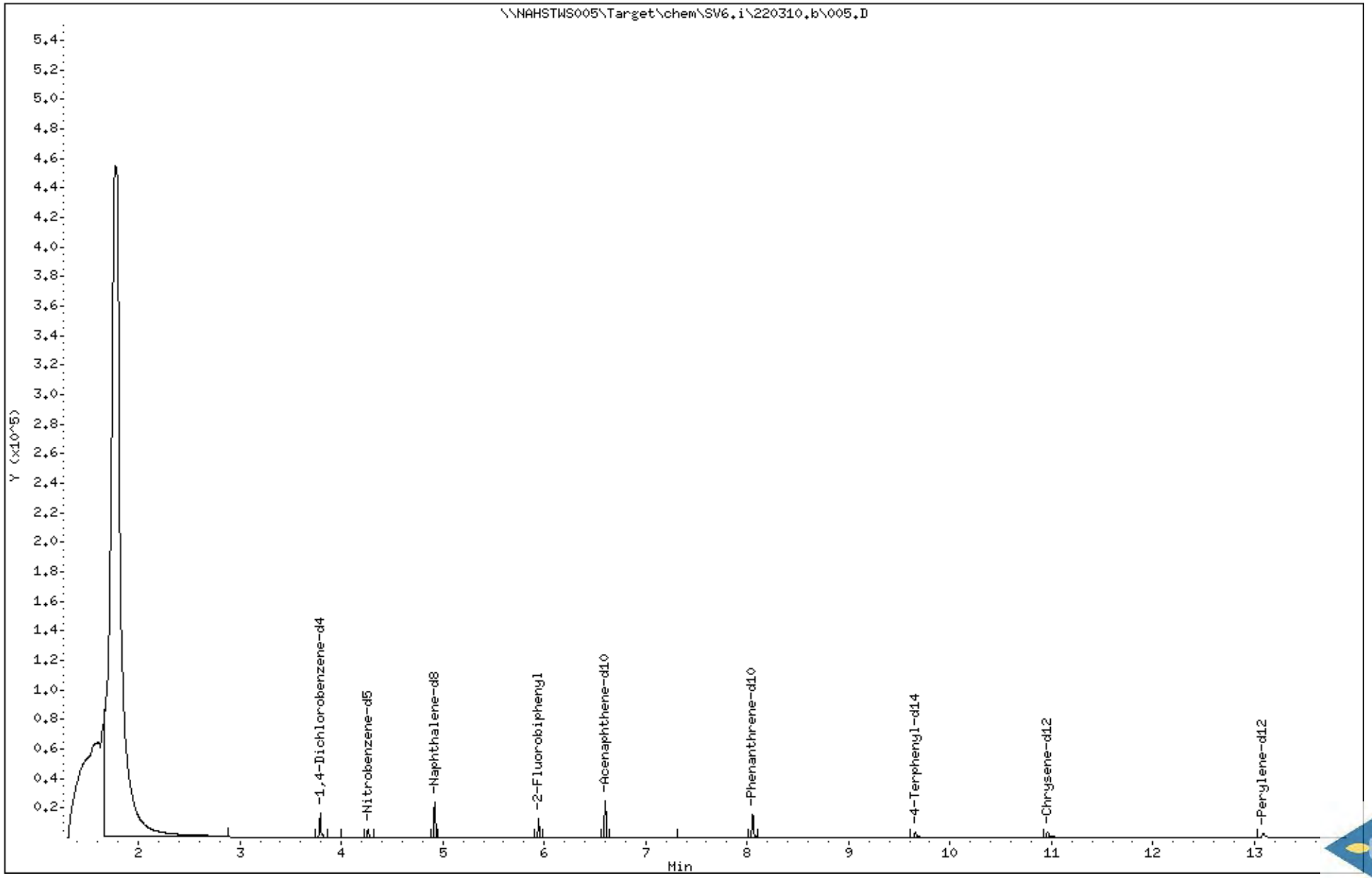
Sample Info: 1 4 DX-0.05;1 4 DX-0.05

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



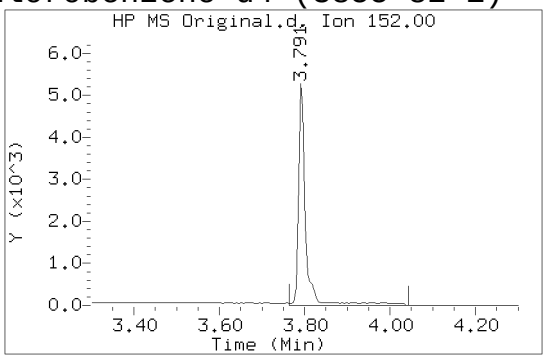
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\005.D
Inj Date : 10-MAR-2022 11:22
InstruID : SV6.i
LabSampID : 1 4 DX-0.05

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

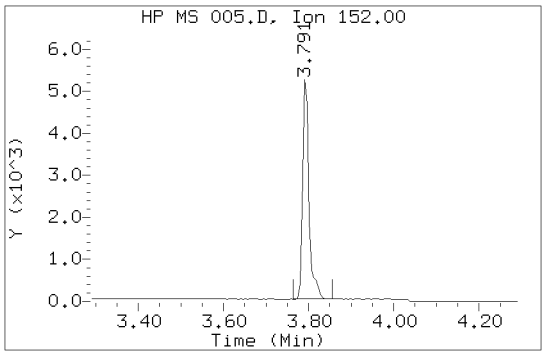
BEFORE

MASS
152
AREA
6163
HEIGHT
5277
25-Aug-2022
16:04
linh
pham



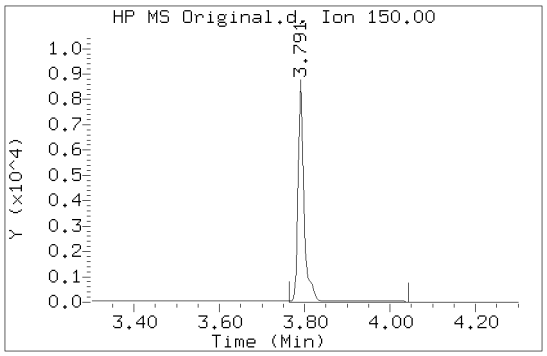
AFTER

MASS
152
AREA
5274
HEIGHT
5222
25-Aug-2022
16:08
linh
pham



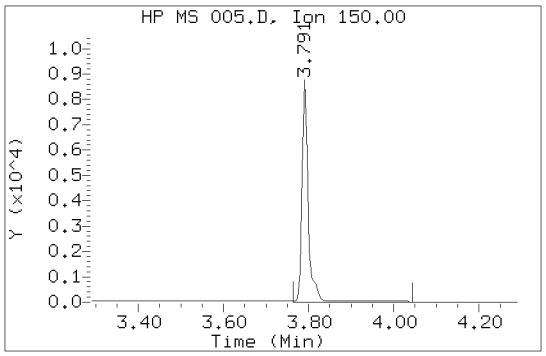
BEFORE

MASS
150
AREA
9110
HEIGHT
8769
25-Aug-2022
16:04
linh
pham



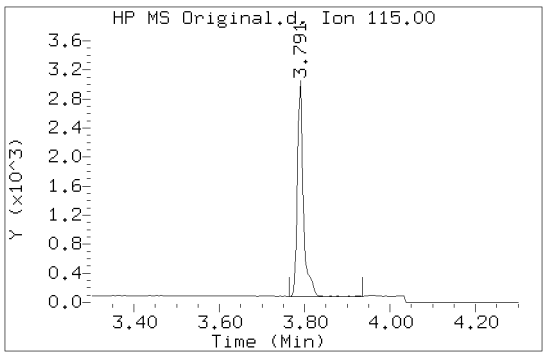
AFTER

MASS
150
AREA
9110
HEIGHT
8769
25-Aug-2022
16:08
linh
pham



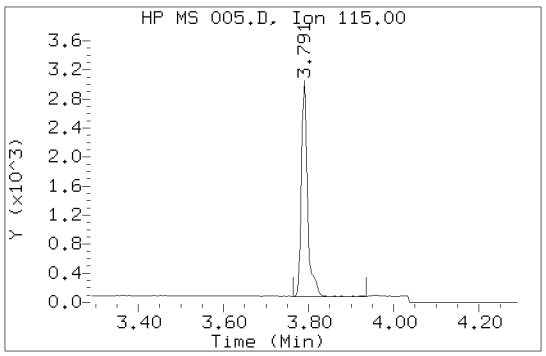
BEFORE

MASS
115
AREA
2922
HEIGHT
2969
25-Aug-2022
16:04
linh
pham



AFTER

MASS
115
AREA
2922
HEIGHT
2969
25-Aug-2022
16:08
linh
pham

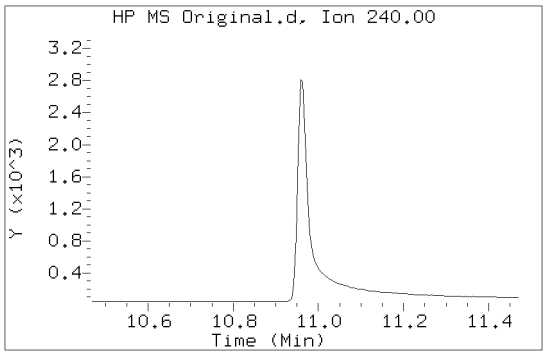


Chrysene-d12 (1719-03-5)

Reason Code:

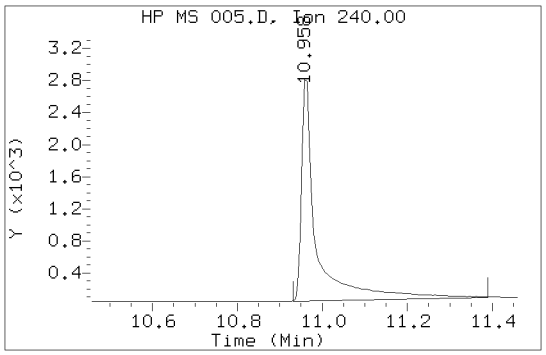
BEFORE

MASS
240
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
240
AREA
6789
HEIGHT
2758
25-Aug-2022
16:08
linh
pham

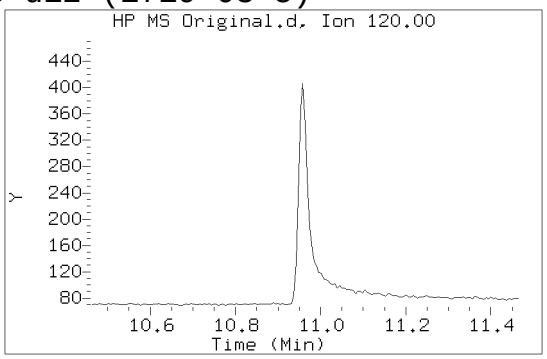


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\005.D
Inj Date : 10-MAR-2022 11:22
InstruID : SV6.i
LabSampID : 1 4 DX-0.05

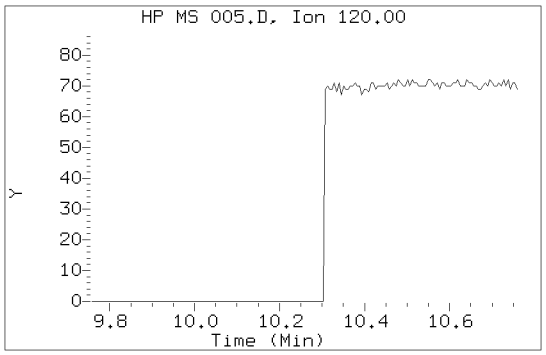
Chrysene-d12 (1719-03-5)

Reason Code:

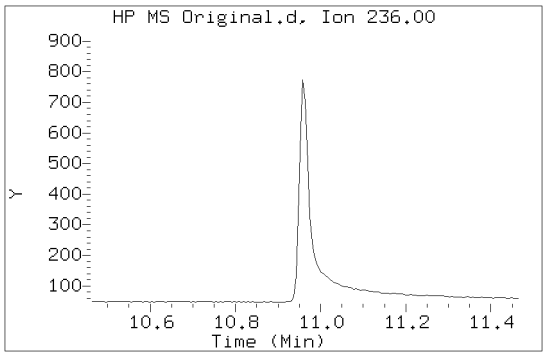
BEFORE
MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



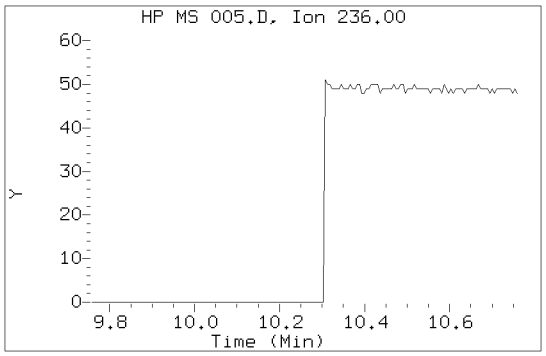
AFTER
MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



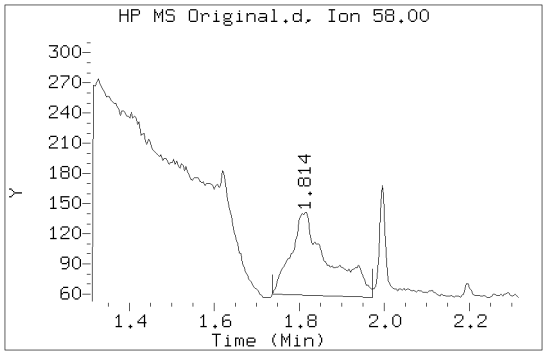
AFTER
MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



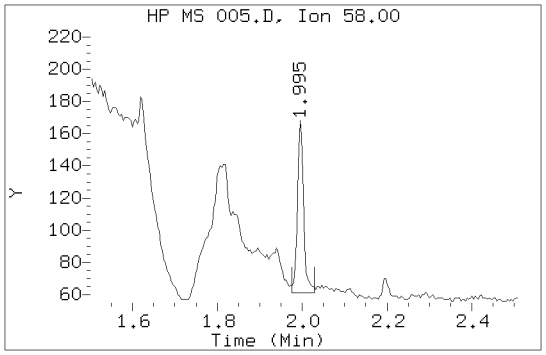
1,4-Dioxane ()

Reason Code:

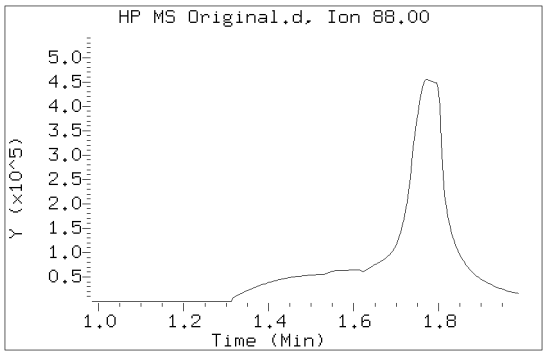
BEFORE
MASS
58
AREA
509
HEIGHT
81
25-Aug-2022
16:04
linh
pham



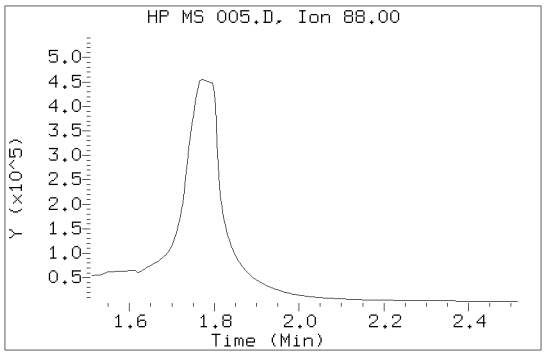
AFTER
MASS
58
AREA
107
HEIGHT
107
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



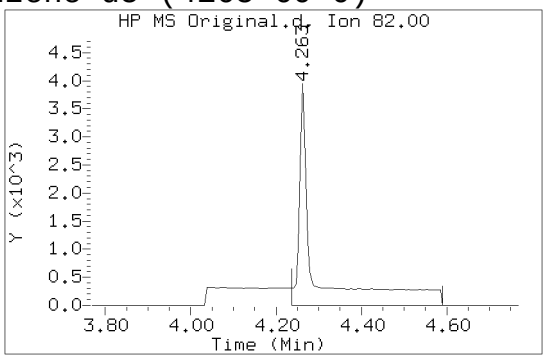
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\005.D
Inj Date : 10-MAR-2022 11:22
InstruID : SV6.i
LabSampID : 1 4 DX-0.05

Nitrobenzene-d5 (4165-60-0)

Reason Code:

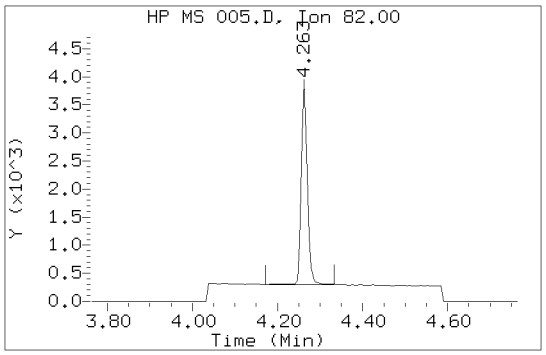
BEFORE

MASS
82
AREA
9627
HEIGHT
3947
25-Aug-2022
16:04
linh
pham



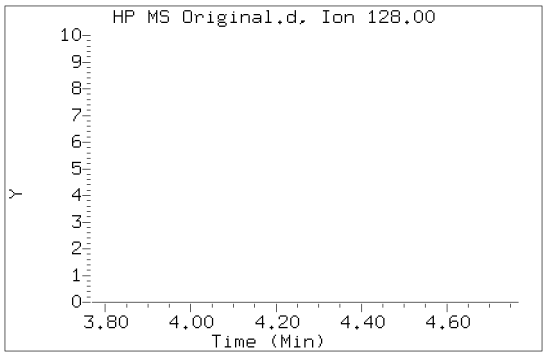
AFTER

MASS
82
AREA
3571
HEIGHT
3653
25-Aug-2022
16:08
linh
pham



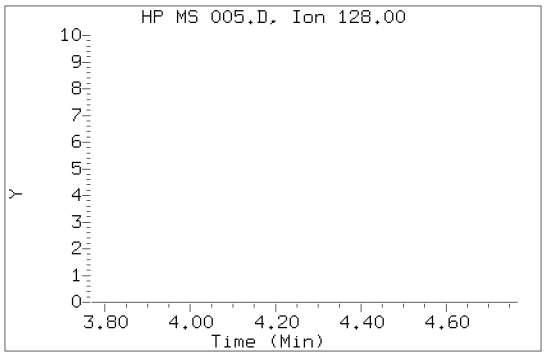
BEFORE

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



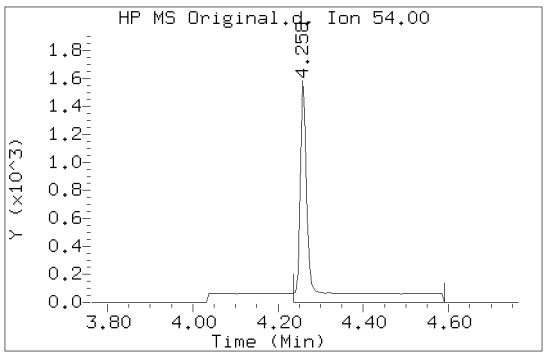
AFTER

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



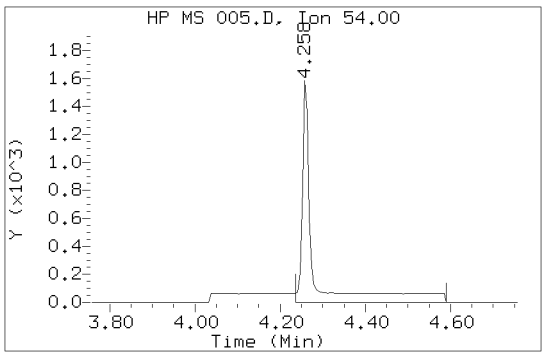
BEFORE

MASS
54
AREA
2838
HEIGHT
1584
25-Aug-2022
16:04
linh
pham



AFTER

MASS
54
AREA
2838
HEIGHT
1584
25-Aug-2022
16:08
linh
pham

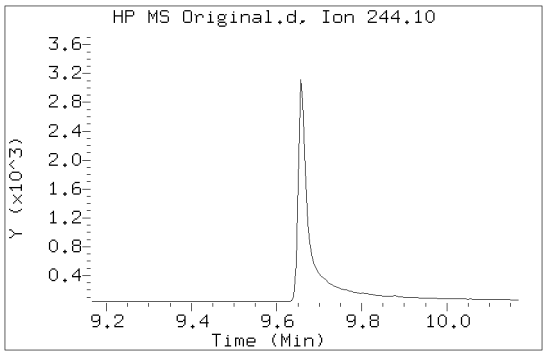


4-Terphenyl-d14 (1718-51-0)

Reason Code:

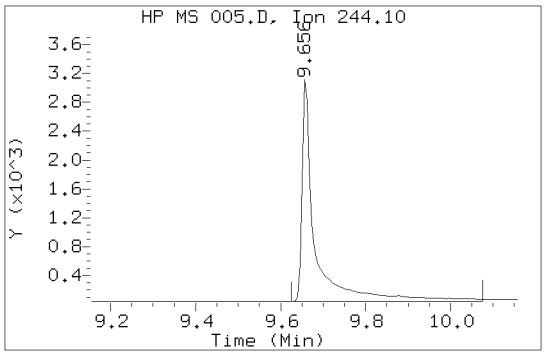
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
244.1
AREA
6514
HEIGHT
3070
25-Aug-2022
16:08
linh
pham

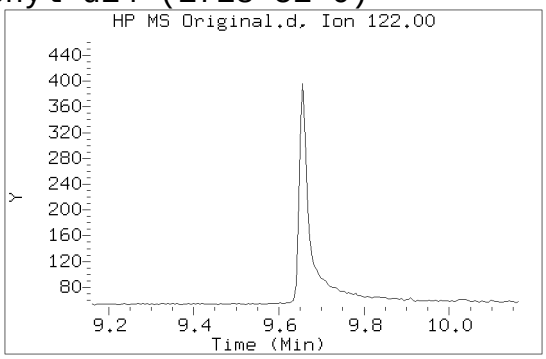


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\005.D
Inj Date : 10-MAR-2022 11:22
InstruID : SV6.i
LabSampID : 1 4 DX-0.05

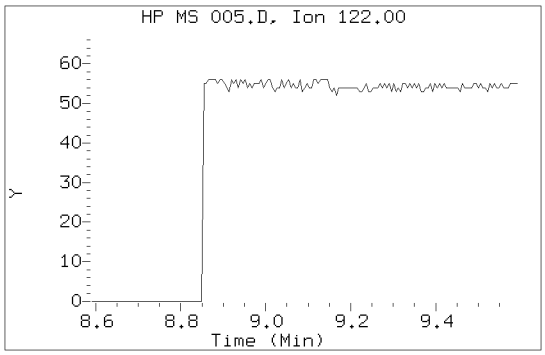
4-Terphenyl-d14 (1718-51-0)

Reason Code:

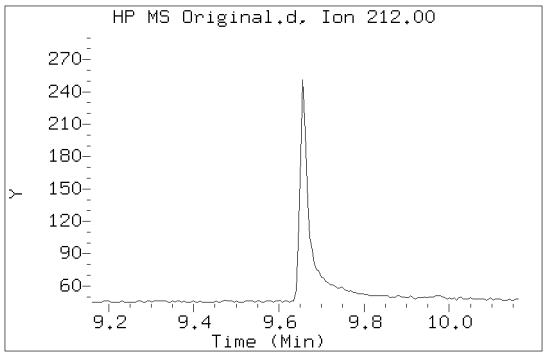
BEFORE
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



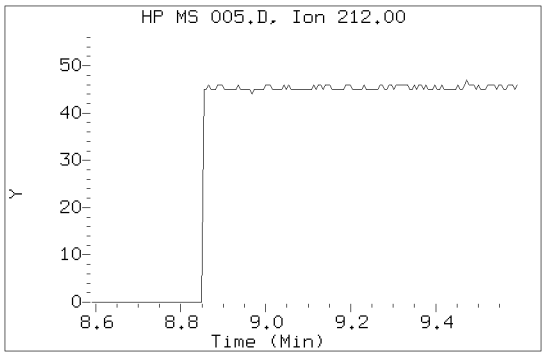
AFTER
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\006.D Page 1
Report Date: 25-Aug-2022 16:08

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\006.D
Lab Smp Id: 1 4 DX-0.1 Client Smp ID: 1 4 DX-0.1
Inj Date : 10-MAR-2022 11:40 MS Autotune Date: 09-MAR-2022 11:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4 DX-0.1;1 4 DX-0.1
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DXSIM.m
Meth Date : 25-Aug-2022 16:08 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 11:22 Cal File: 005.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.790	3.790	(1.000)	6146	0.10000	(aM)
* 45 Naphthalene-d8	136	4.918	4.918	(1.000)	20583	0.10000	
$ 33 Nitrobenzene-d5	82	4.262	4.262	(0.867)	6972	0.10000	0.1016(M)
* 86 Acenaphthene-d10	164	6.603	6.603	(1.000)	11296	0.10000	
$ 69 2-Fluorobiphenyl	172	5.943	5.943	(0.900)	16916	0.10000	0.09621
* 126 Phenanthrene-d10	188	8.058	8.058	(1.000)	19503	0.10000	
* 182 Chrysene-d12	240	10.963	10.963	(1.000)	7205	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.661	9.661	(0.881)	13702	0.10000	0.1012(M)
* 198 Perylene-d12	264	13.090	13.090	(1.000)	4516	0.10000	
1 1,4-Dioxane	58	1.994	1.994	(0.526)	273	0.10000	0.1082(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

01134014

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\006.D

Page 1

Date : 10-MAR-2022 11:40

Client ID: 1 4 DX-0.1

Instrument: SV6.i

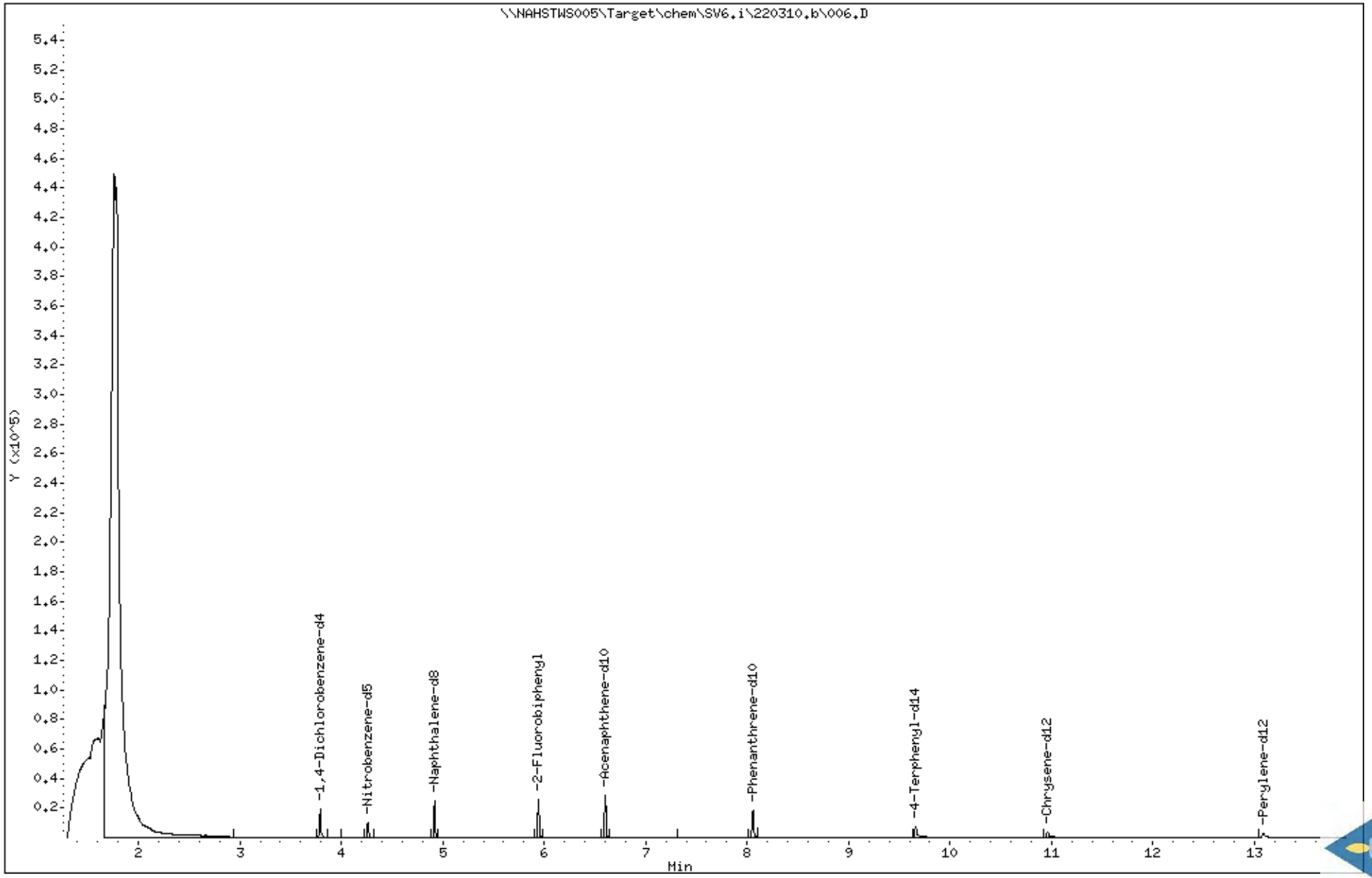
Sample Info: 1 4 DX-0.1;1 4 DX-0.1

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28

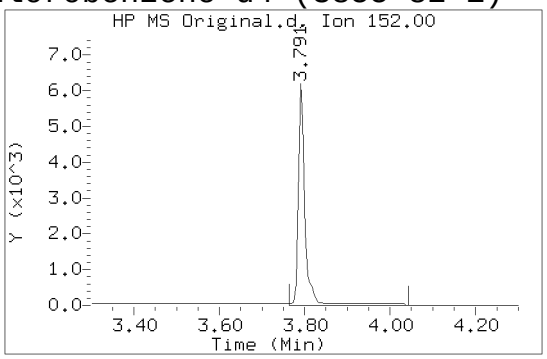


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\006.D
Inj Date : 10-MAR-2022 11:40
InstruID : SV6.i
LabSampID : 1 4 DX-0.1

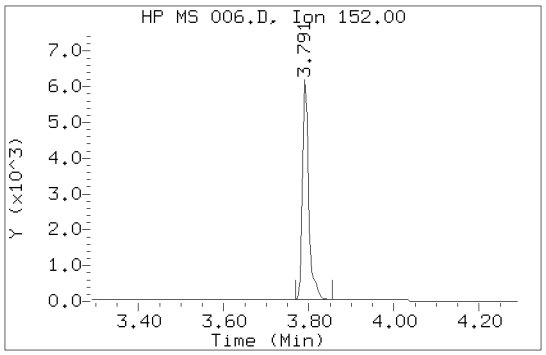
1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

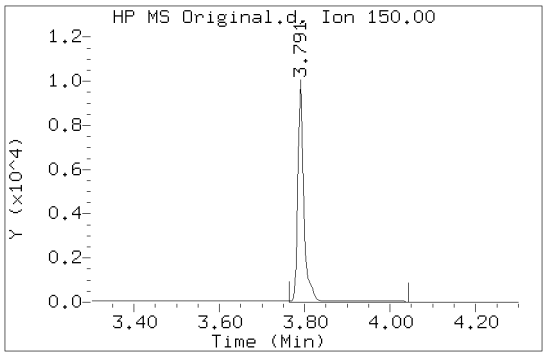
BEFORE
MASS
152
AREA
7014
HEIGHT
6198
25-Aug-2022
16:04
linh
pham



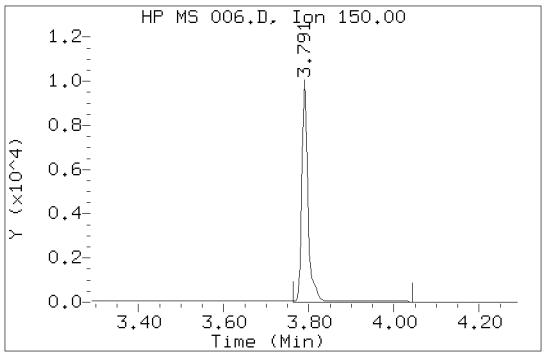
AFTER
MASS
152
AREA
6146
HEIGHT
6147
25-Aug-2022
16:08
linh
pham



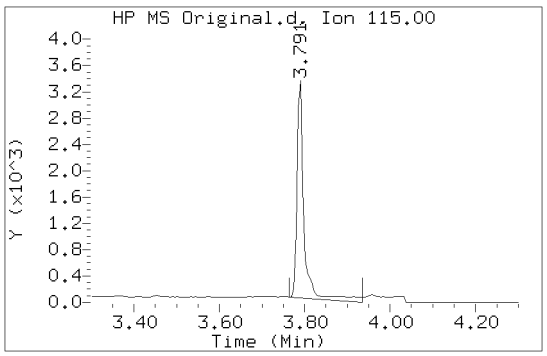
BEFORE
MASS
150
AREA
10435
HEIGHT
10058
25-Aug-2022
16:04
linh
pham



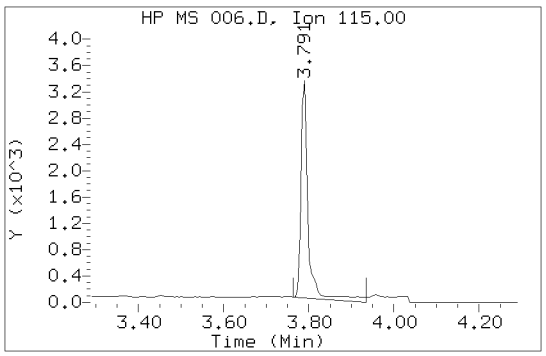
AFTER
MASS
150
AREA
10435
HEIGHT
10058
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
115
AREA
3810
HEIGHT
3300
25-Aug-2022
16:04
linh
pham



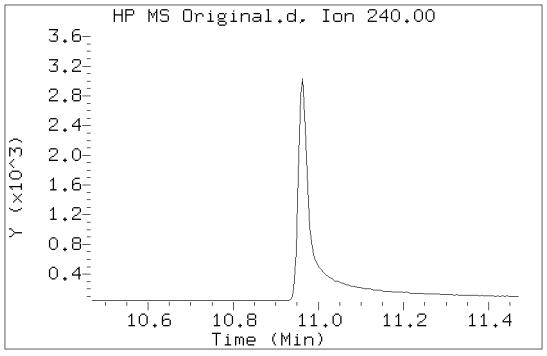
AFTER
MASS
115
AREA
3810
HEIGHT
3300
25-Aug-2022
16:08
linh
pham



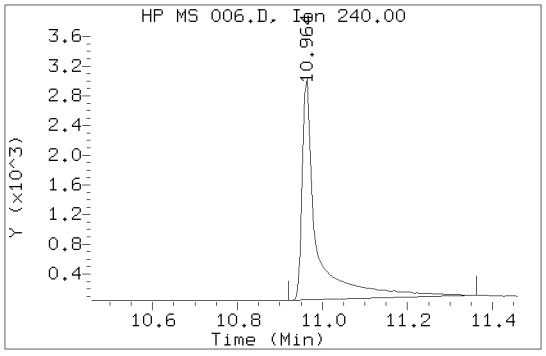
Chrysene-d12 (1719-03-5)

Reason Code:

BEFORE
MASS
240
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
240
AREA
7205
HEIGHT
2978
25-Aug-2022
16:08
linh
pham

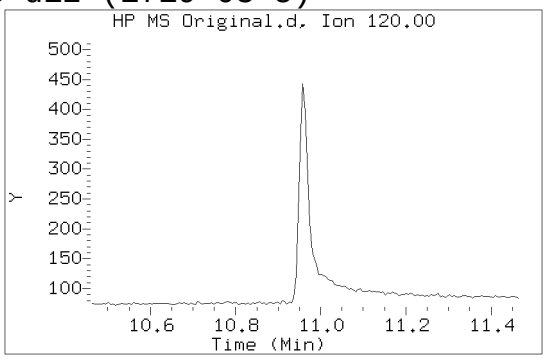


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\006.D
Inj Date : 10-MAR-2022 11:40
InstruID : SV6.i
LabSampID : 1 4 DX-0.1

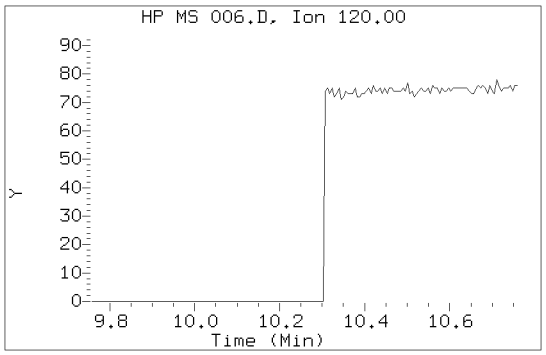
Chrysene-d12 (1719-03-5)

Reason Code:

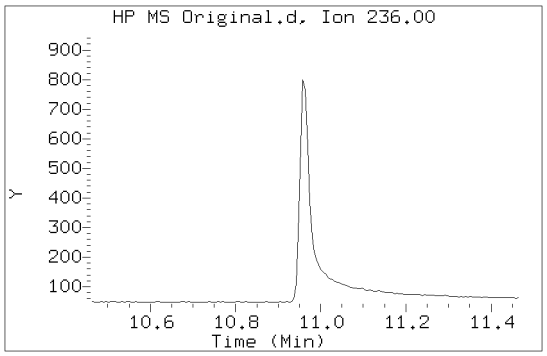
BEFORE
MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



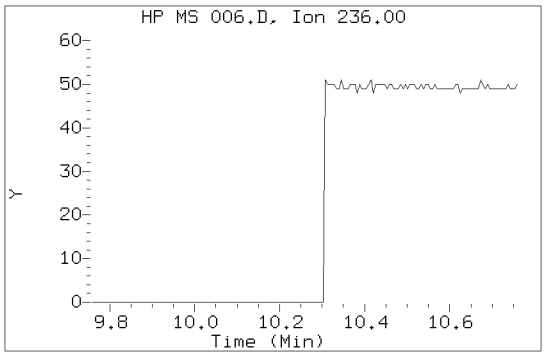
AFTER
MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



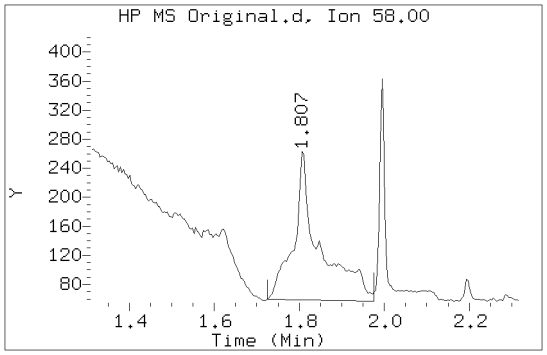
AFTER
MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



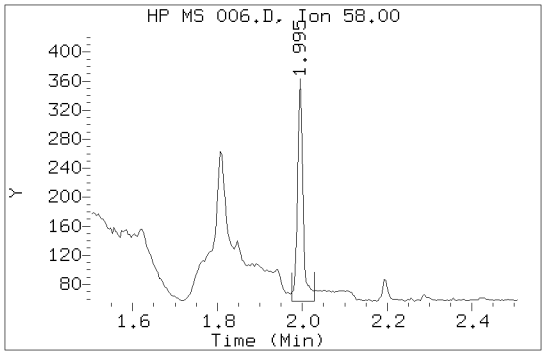
1,4-Dioxane ()

Reason Code:

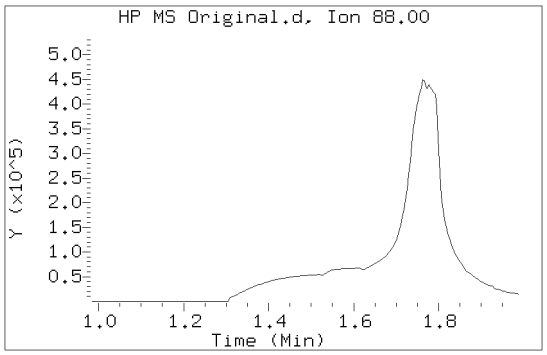
BEFORE
MASS
58
AREA
864
HEIGHT
203
25-Aug-2022
16:04
linh
pham



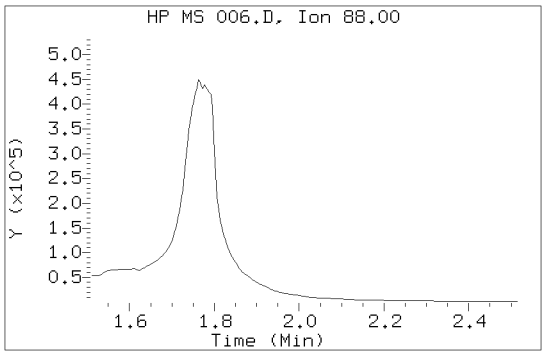
AFTER
MASS
58
AREA
273
HEIGHT
306
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



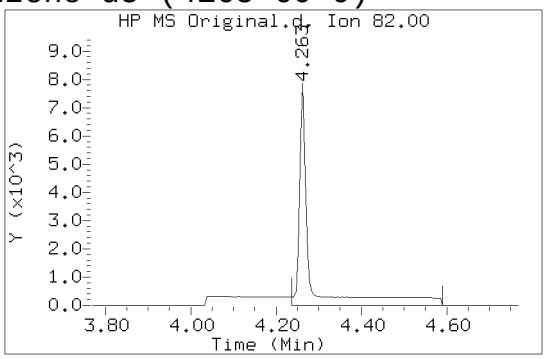
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\006.D
Inj Date : 10-MAR-2022 11:40
InstruID : SV6.i
LabSampID : 1 4 DX-0.1

Nitrobenzene-d5 (4165-60-0)

Reason Code:

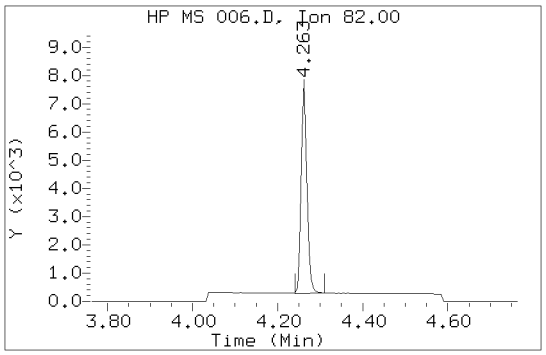
BEFORE

MASS
82
AREA
12838
HEIGHT
7851
25-Aug-2022
16:04
linh
pham



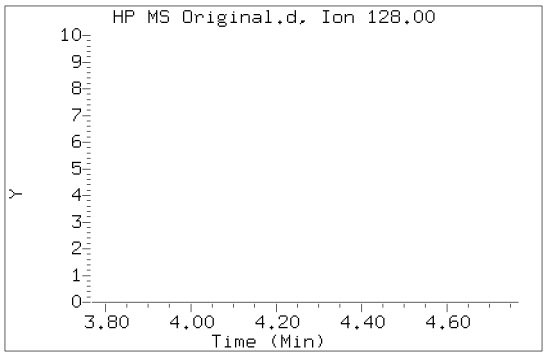
AFTER

MASS
82
AREA
6972
HEIGHT
7565
25-Aug-2022
16:08
linh
pham



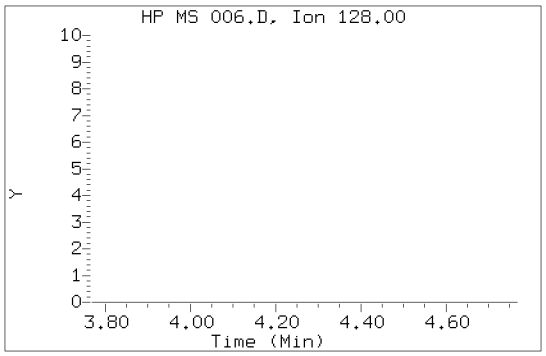
BEFORE

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



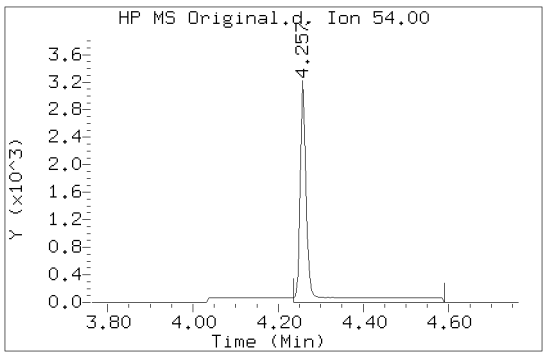
AFTER

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



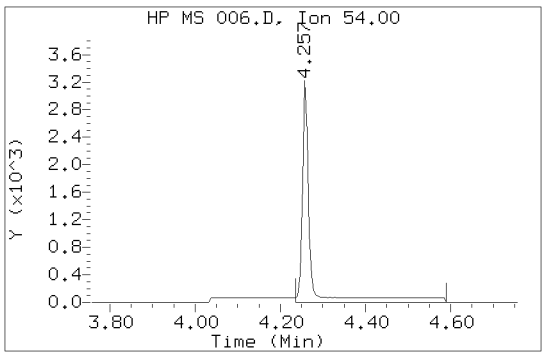
BEFORE

MASS
54
AREA
4279
HEIGHT
3222
25-Aug-2022
16:04
linh
pham



AFTER

MASS
54
AREA
4279
HEIGHT
3222
25-Aug-2022
16:08
linh
pham

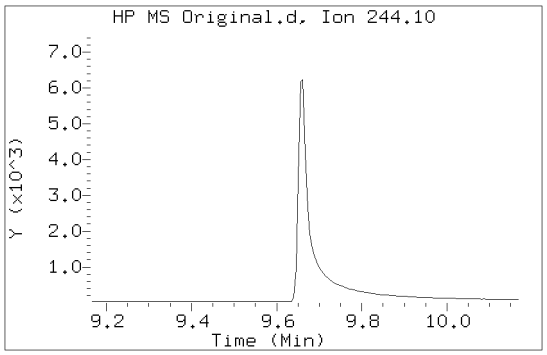


4-Terphenyl-d14 (1718-51-0)

Reason Code:

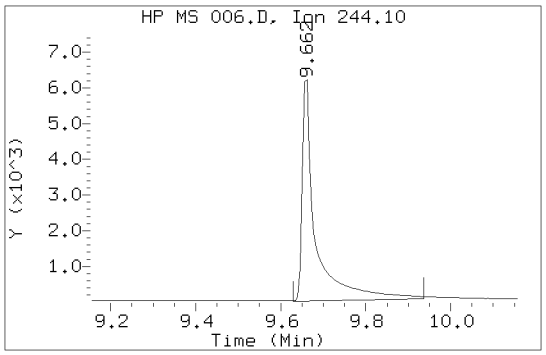
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
244.1
AREA
13702
HEIGHT
6196
25-Aug-2022
16:08
linh
pham

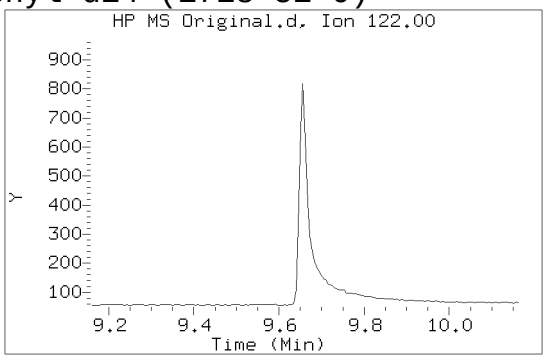


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\006.D
Inj Date : 10-MAR-2022 11:40
InstruID : SV6.i
LabSampID : 1 4 DX-0.1

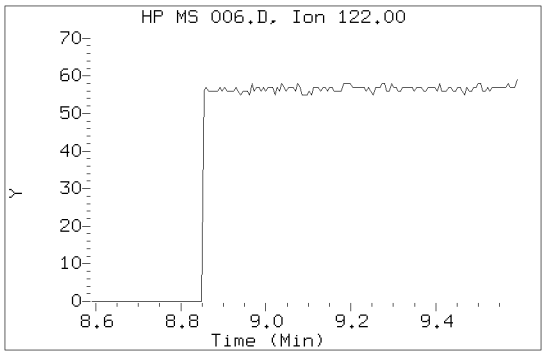
4-Terphenyl-d14 (1718-51-0)

Reason Code:

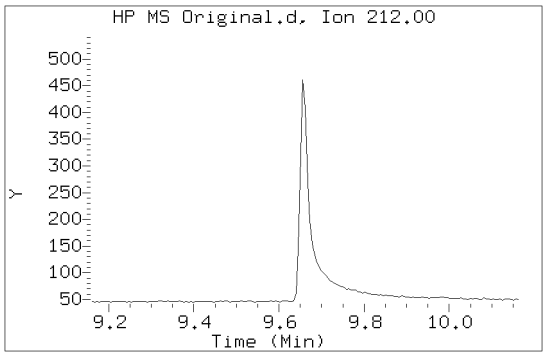
BEFORE
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



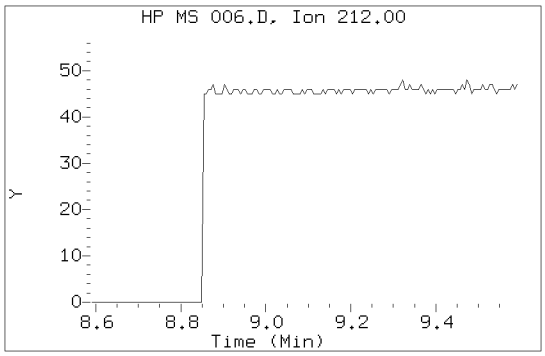
AFTER
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\007.D Page 1
Report Date: 25-Aug-2022 16:08

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\007.D
Lab Smp Id: 1 4 DX-0.15 Client Smp ID: 1 4 DX-0.15
Inj Date : 10-MAR-2022 11:58 MS Autotune Date: 09-MAR-2022 11:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4 DX-0.15;1 4 DX-0.15
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DXSIM.m
Meth Date : 25-Aug-2022 16:08 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 11:40 Cal File: 006.D
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.790	3.790	(1.000)	3795	0.10000	(aM)
* 45 Naphthalene-d8	136	4.918	4.918	(1.000)	14247	0.10000	(M)
$ 33 Nitrobenzene-d5	82	4.262	4.262	(0.867)	6488	0.15000	0.1366(M)
* 86 Acenaphthene-d10	164	6.603	6.603	(1.000)	7392	0.10000	
$ 69 2-Fluorobiphenyl	172	5.943	5.943	(0.900)	16942	0.15000	0.1472
* 126 Phenanthrene-d10	188	8.058	8.058	(1.000)	12440	0.10000	
* 182 Chrysene-d12	240	10.963	10.963	(1.000)	4575	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.661	9.661	(0.881)	13069	0.15000	0.1519(AM)
* 198 Perylene-d12	264	13.090	13.090	(1.000)	2595	0.10000	
1 1,4-Dioxane	58	1.979	1.979	(0.522)	238	0.15000	0.1528(M)

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.

01134020

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\007.D

Page 1

Date : 10-MAR-2022 11:58

Client ID: 1 4 DX-0.15

Instrument: SV6.i

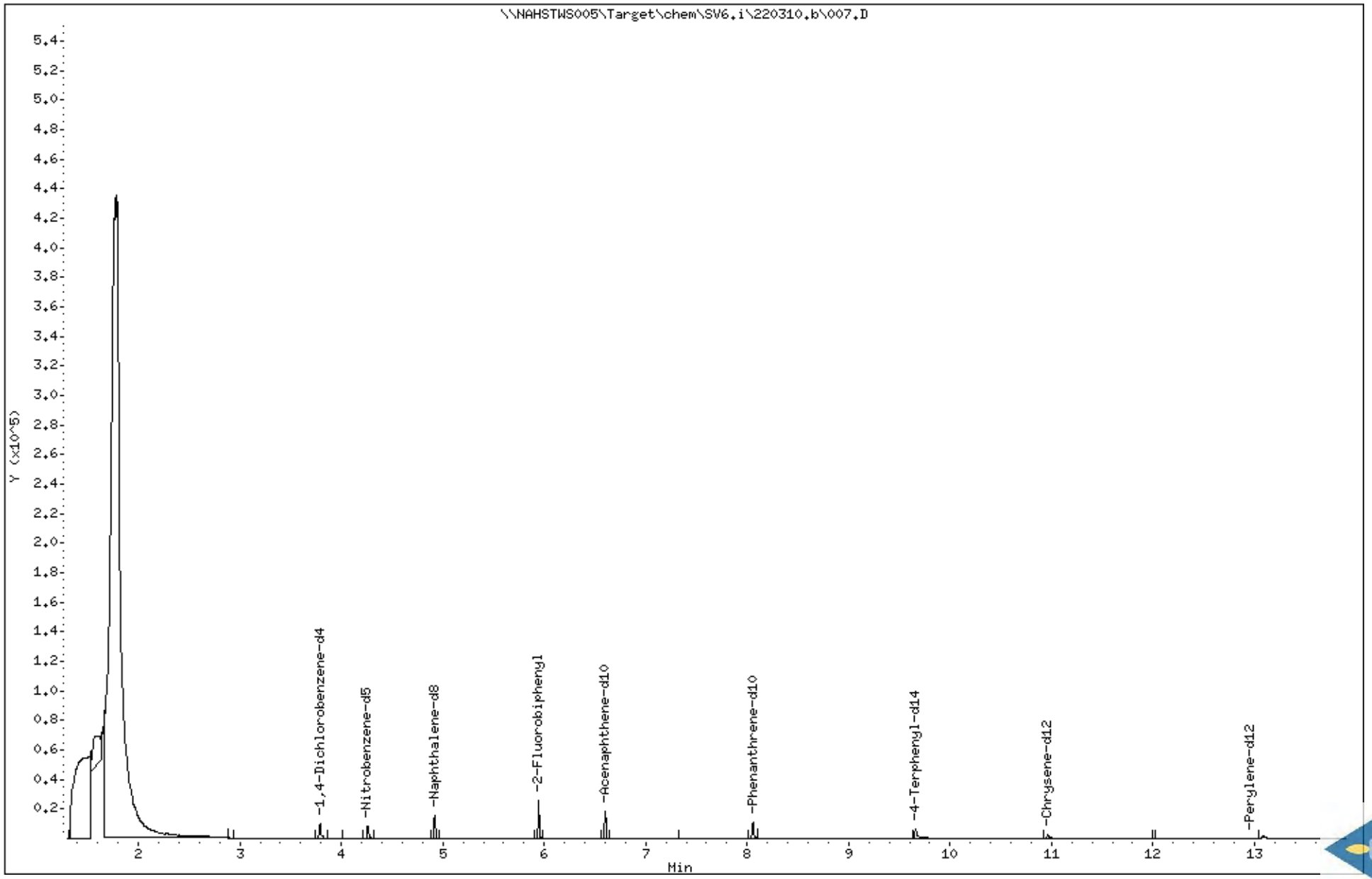
Sample Info: 1 4 DX-0.15;1 4 DX-0.15

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28

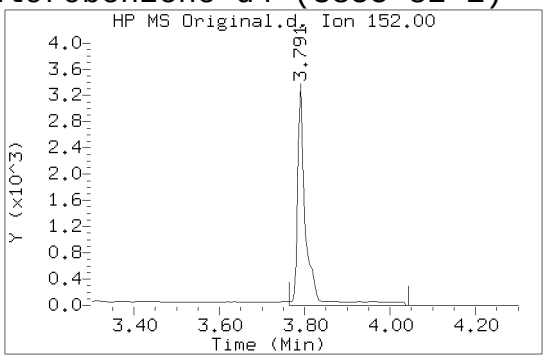


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\007.D
Inj Date : 10-MAR-2022 11:58
InstruID : SV6.i
LabSampID : 1 4 DX-0.15

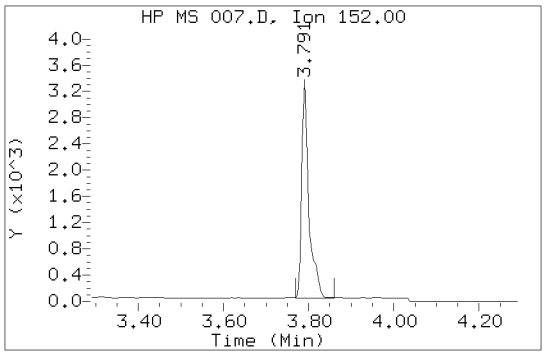
1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

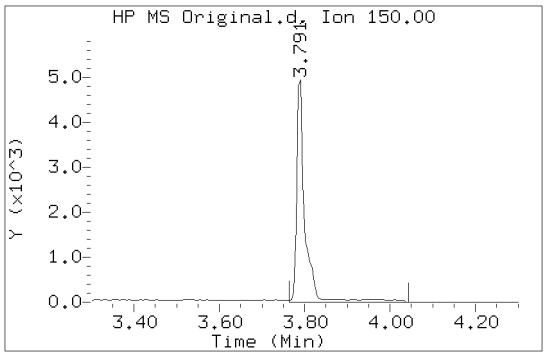
BEFORE
MASS
152
AREA
4665
HEIGHT
3379
25-Aug-2022
16:04
linh
pham



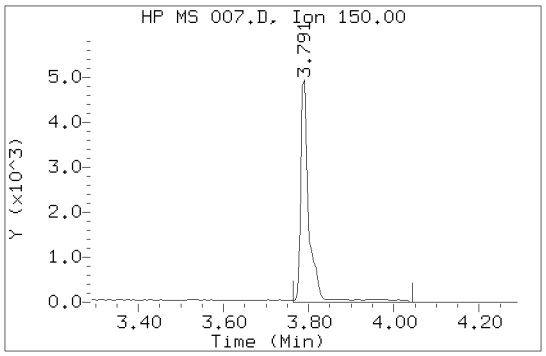
AFTER
MASS
152
AREA
3795
HEIGHT
3326
25-Aug-2022
16:08
linh
pham



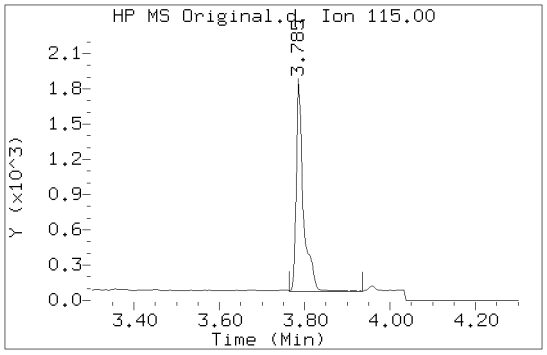
BEFORE
MASS
150
AREA
6833
HEIGHT
4945
25-Aug-2022
16:04
linh
pham



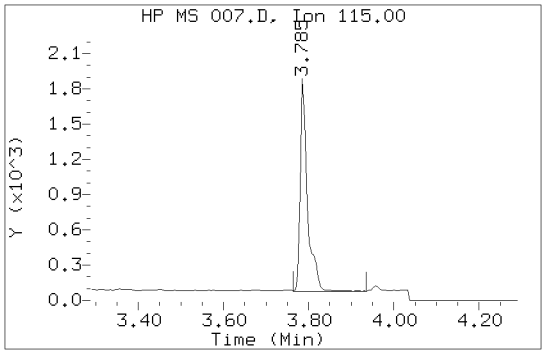
AFTER
MASS
150
AREA
6833
HEIGHT
4945
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
115
AREA
2089
HEIGHT
1807
25-Aug-2022
16:04
linh
pham



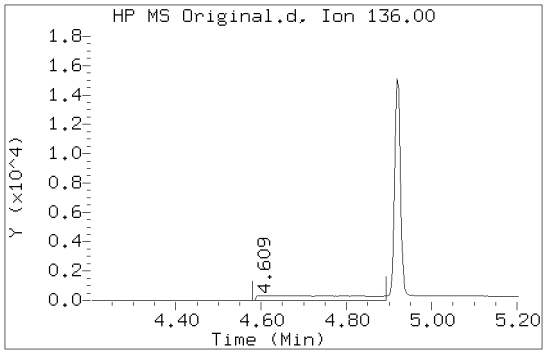
AFTER
MASS
115
AREA
2089
HEIGHT
1807
25-Aug-2022
16:08
linh
pham



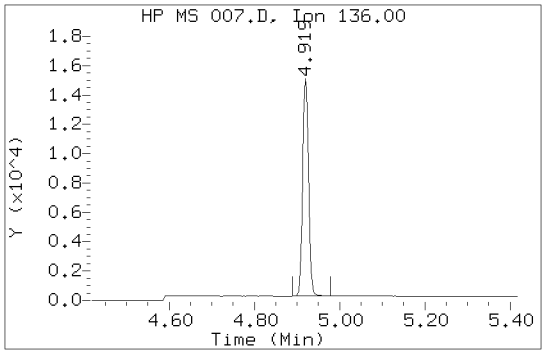
Naphthalene-d8 (1146-65-2)

Reason Code:

BEFORE
MASS
136
AREA
5460
HEIGHT
316
25-Aug-2022
16:04
linh
pham



AFTER
MASS
136
AREA
14247
HEIGHT
14814
25-Aug-2022
16:08
linh
pham



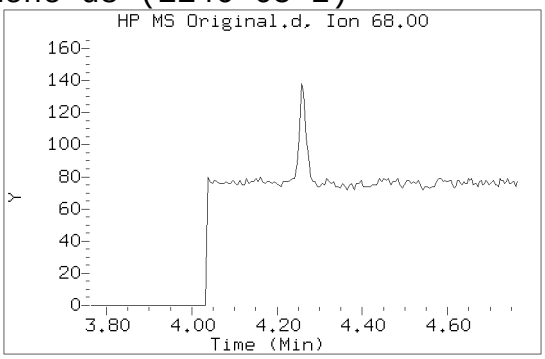
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\007.D
Inj Date : 10-MAR-2022 11:58
InstruID : SV6.i
LabSampID : 1 4 DX-0.15

Naphthalene-d8 (1146-65-2)

Reason Code:

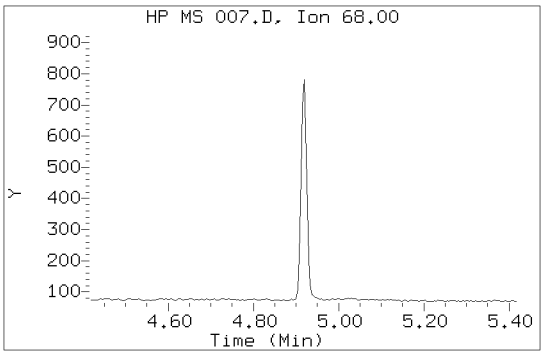
BEFORE

MASS
68
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
68
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

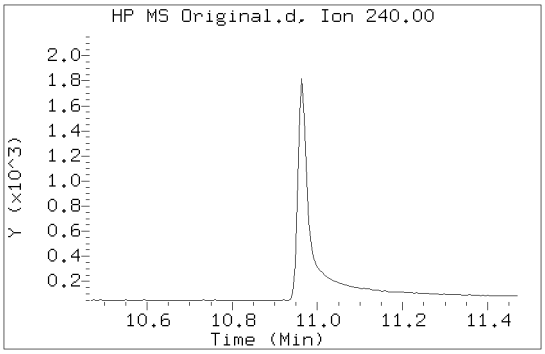


Chrysene-d12 (1719-03-5)

Reason Code:

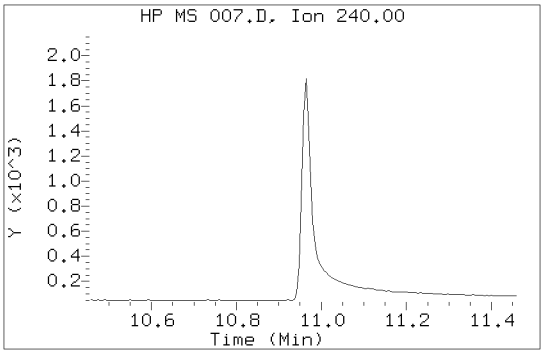
BEFORE

MASS
240
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



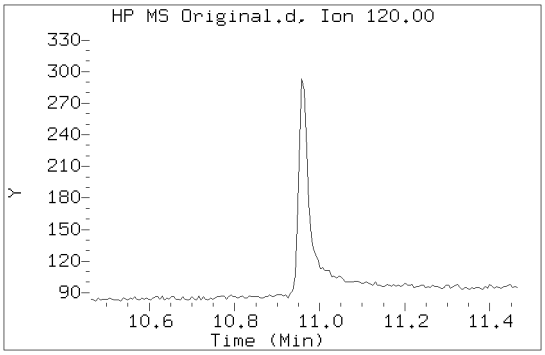
AFTER

MASS
240
AREA
4575
HEIGHT
1766
25-Aug-2022
16:08
linh
pham



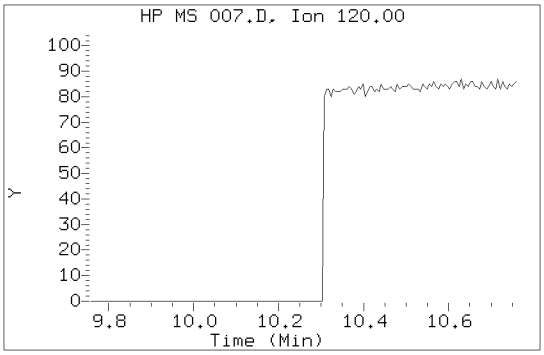
BEFORE

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



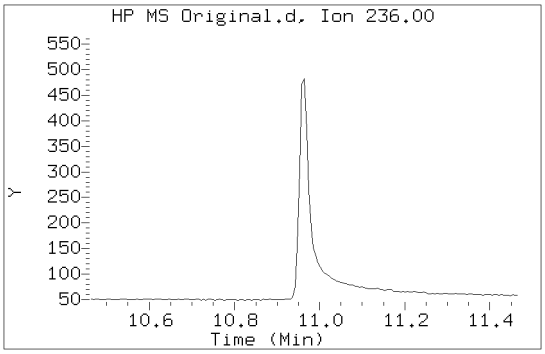
AFTER

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



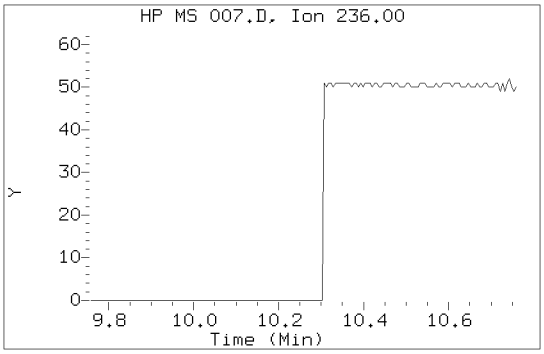
BEFORE

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



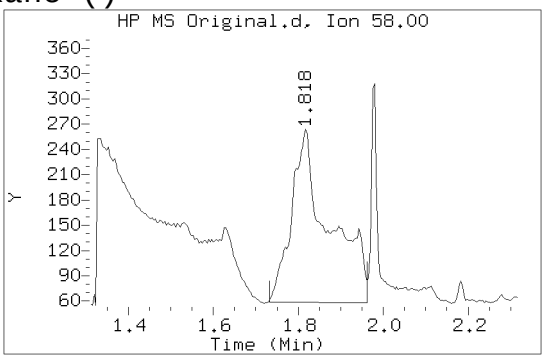
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\007.D
Inj Date : 10-MAR-2022 11:58
InstruID : SV6.i
LabSampID : 1 4 DX-0.15

1,4-Dioxane ()

Reason Code:

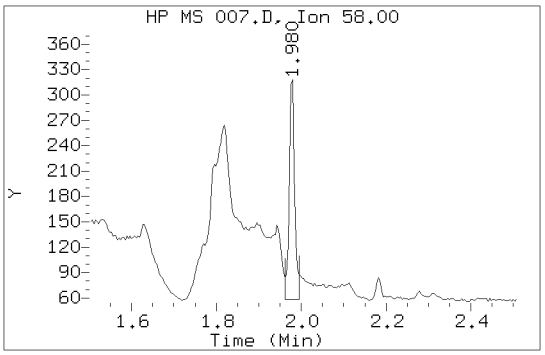
BEFORE

MASS
58
AREA
1252
HEIGHT
205
25-Aug-2022
16:04
linh
pham



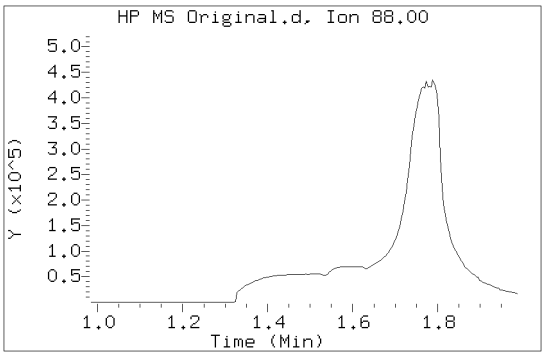
AFTER

MASS
58
AREA
238
HEIGHT
260
25-Aug-2022
16:08
linh
pham



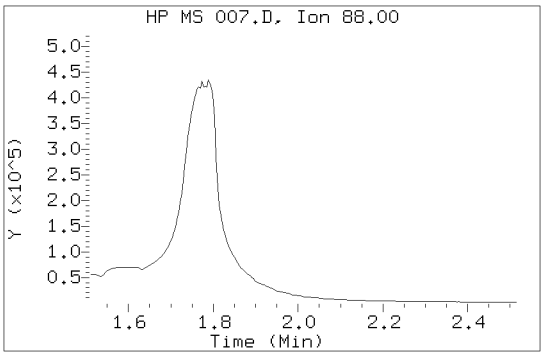
BEFORE

MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

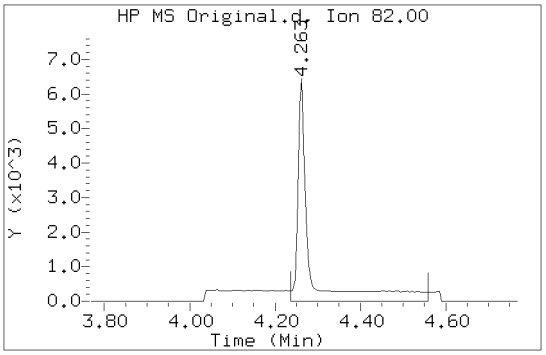


Nitrobenzene-d5 (4165-60-0)

Reason Code:

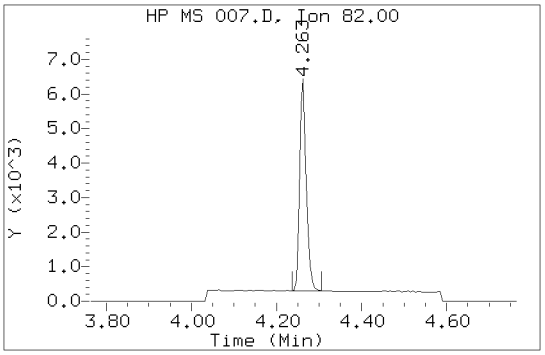
BEFORE

MASS
82
AREA
12102
HEIGHT
6437
25-Aug-2022
16:04
linh
pham



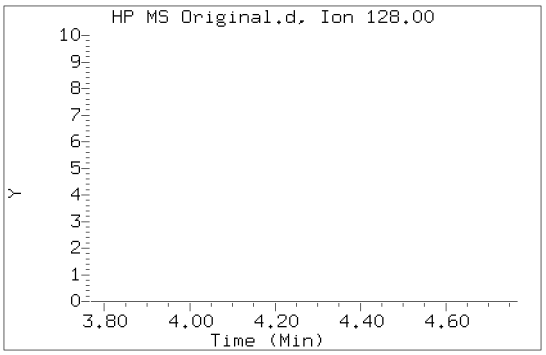
AFTER

MASS
82
AREA
6488
HEIGHT
6131
25-Aug-2022
16:08
linh
pham



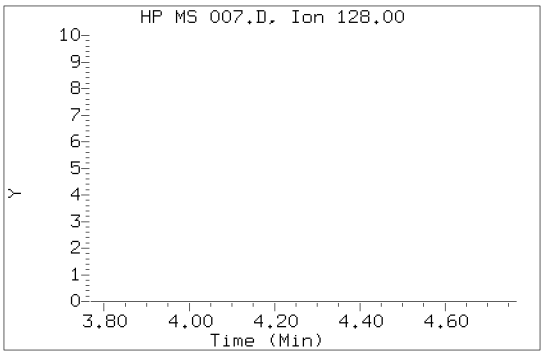
BEFORE

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



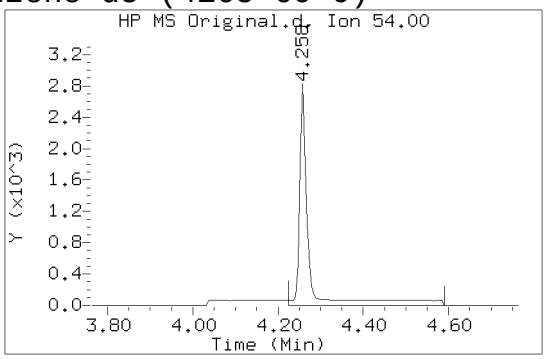
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\007.D
Inj Date : 10-MAR-2022 11:58
InstruID : SV6.i
LabSampID : 1 4 DX-0.15

Nitrobenzene-d5 (4165-60-0)

Reason Code:

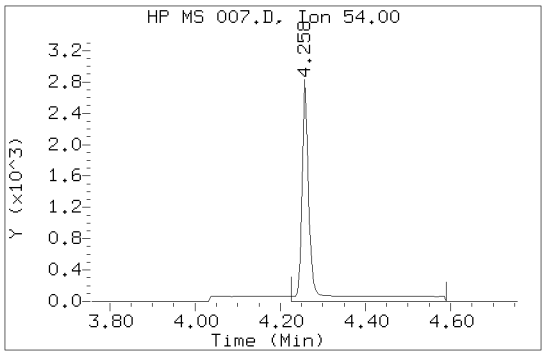
BEFORE

MASS
54
AREA
4221
HEIGHT
2829
25-Aug-2022
16:04
linh
pham



AFTER

MASS
54
AREA
4221
HEIGHT
2829
25-Aug-2022
16:08
linh
pham

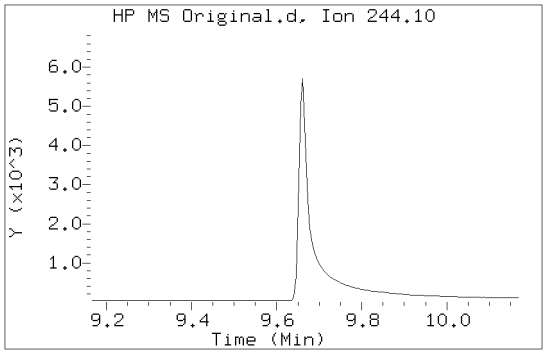


4-Terphenyl-d14 (1718-51-0)

Reason Code:

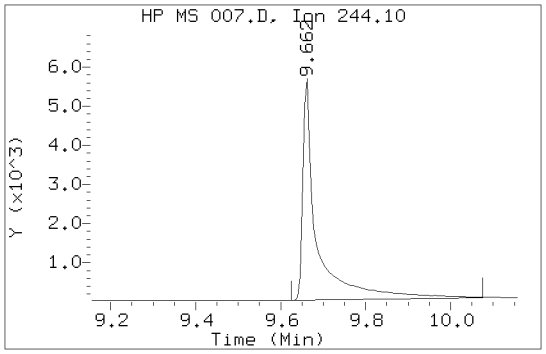
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



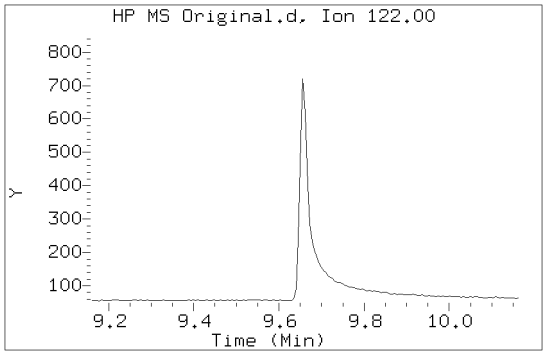
AFTER

MASS
244.1
AREA
13069
HEIGHT
5661
25-Aug-2022
16:08
linh
pham



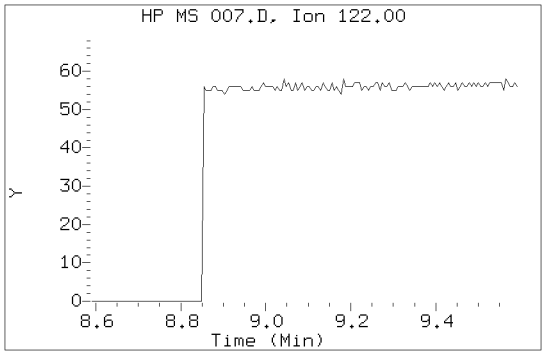
BEFORE

MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



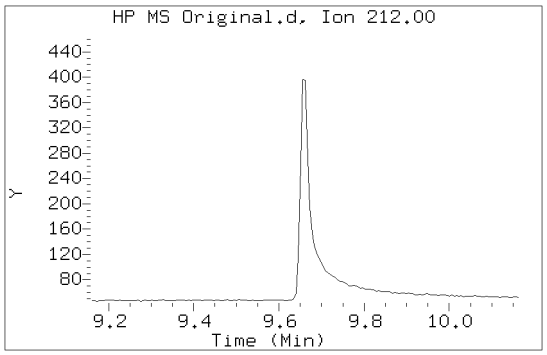
AFTER

MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



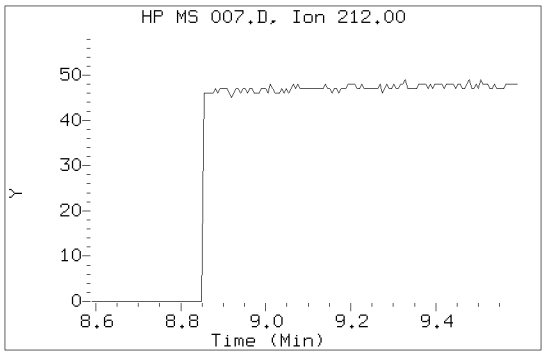
BEFORE

MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\008.D Page 1
Report Date: 25-Aug-2022 16:08

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\008.D
Lab Smp Id: 1 4 DX-0.2 Client Smp ID: 1 4 DX-0.2
Inj Date : 10-MAR-2022 12:16 MS Autotune Date: 09-MAR-2022 11:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4 DX-0.2;1 4 DX-0.2
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DXSIM.m
Meth Date : 25-Aug-2022 16:08 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 11:58 Cal File: 007.D
Als bottle: 8 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.796	3.796	(1.000)	7263	0.10000	(aM)
* 45 Naphthalene-d8	136	4.918	4.918	(1.000)	25657	0.10000	
$ 33 Nitrobenzene-d5	82	4.262	4.262	(0.867)	17003	0.20000	0.1988(AM)
* 86 Acenaphthene-d10	164	6.603	6.603	(1.000)	14251	0.10000	
$ 69 2-Fluorobiphenyl	172	5.943	5.943	(0.900)	43148	0.20000	0.1945(A)
* 126 Phenanthrene-d10	188	8.059	8.059	(1.000)	24746	0.10000	
* 182 Chrysene-d12	240	10.963	10.963	(1.000)	9545	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.661	9.661	(0.881)	36799	0.20000	0.2050(AM)
* 198 Perylene-d12	264	13.090	13.090	(1.000)	5135	0.10000	
1 1,4-Dioxane	58	2.013	2.013	(0.530)	614	0.20000	0.2059(M)

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.

01134026

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\008.D

Page 1

Date : 10-MAR-2022 12:16

Client ID: 1 4 DX-0.2

Instrument: SV6.i

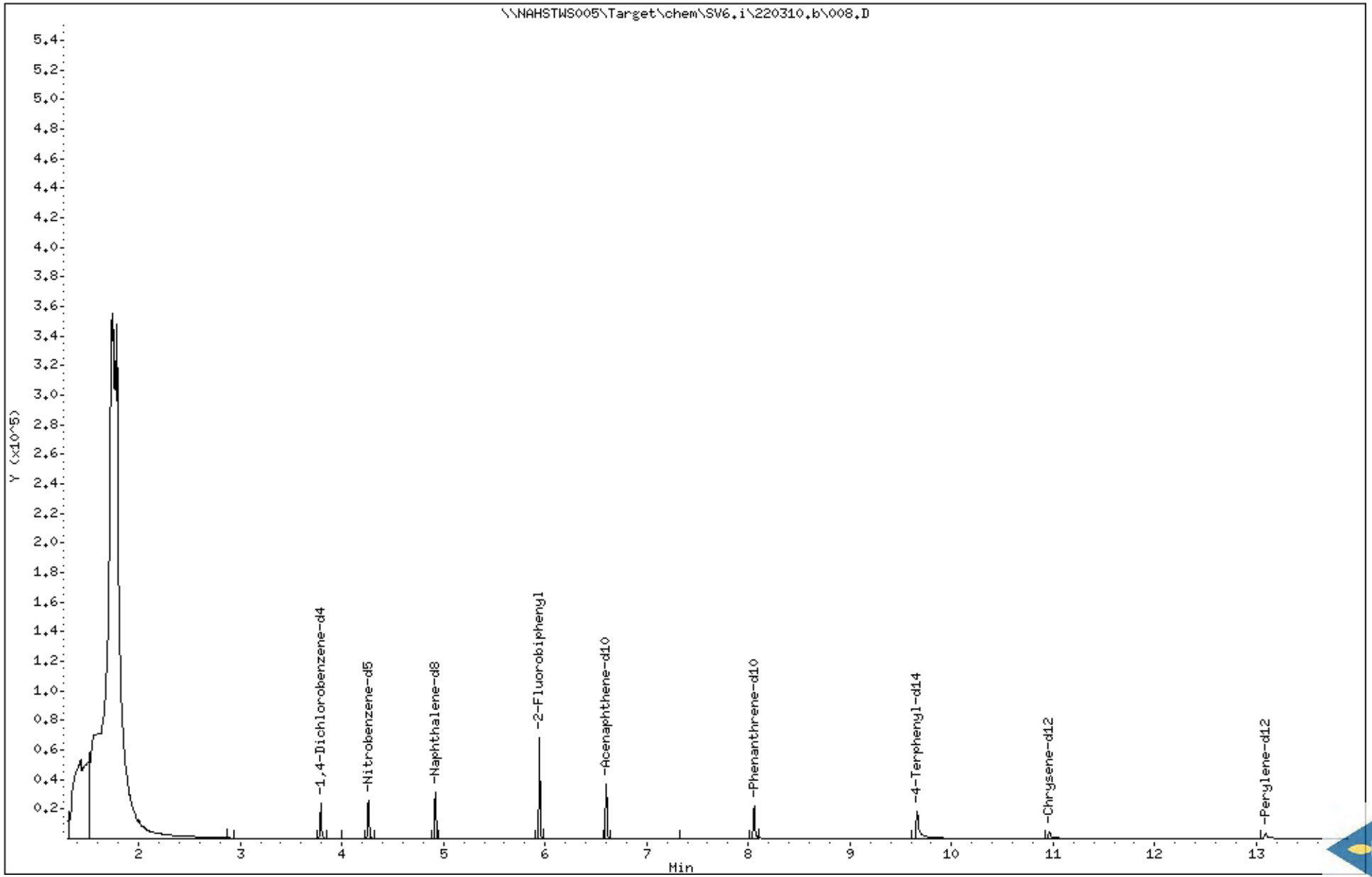
Sample Info: 1 4 DX-0.2;1 4 DX-0.2

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28

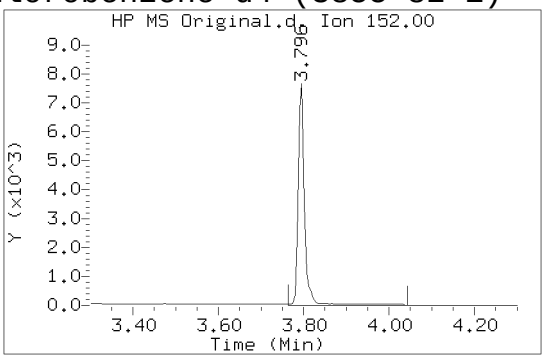


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\008.D
Inj Date : 10-MAR-2022 12:16
InstruID : SV6.i
LabSampID : 1 4 DX-0.2

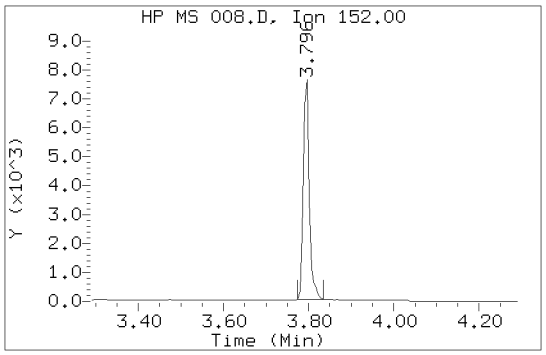
1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

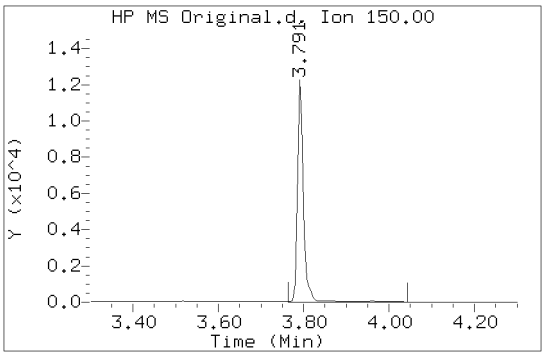
BEFORE
MASS
152
AREA
8188
HEIGHT
7663
25-Aug-2022
16:04
linh
pham



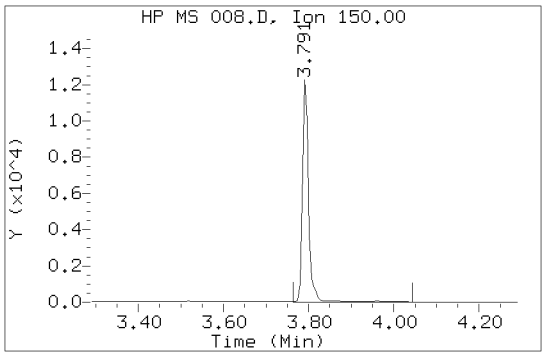
AFTER
MASS
152
AREA
7263
HEIGHT
7596
25-Aug-2022
16:08
linh
pham



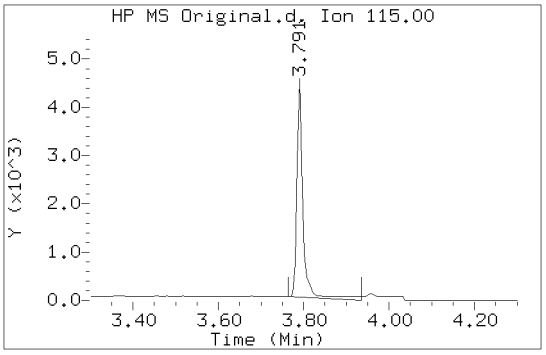
BEFORE
MASS
150
AREA
12278
HEIGHT
12265
25-Aug-2022
16:04
linh
pham



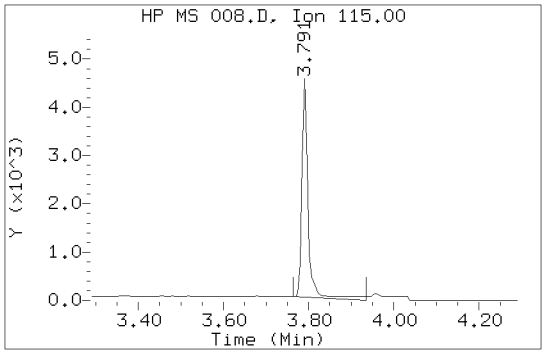
AFTER
MASS
150
AREA
12278
HEIGHT
12265
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
115
AREA
4513
HEIGHT
4526
25-Aug-2022
16:04
linh
pham



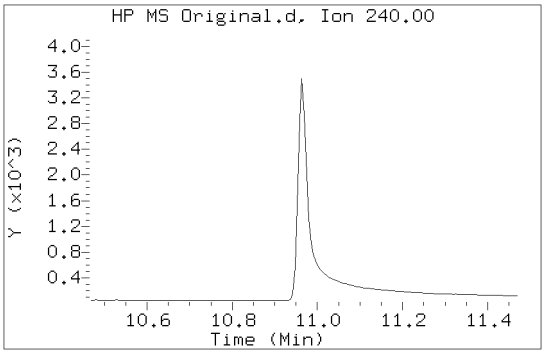
AFTER
MASS
115
AREA
4513
HEIGHT
4526
25-Aug-2022
16:08
linh
pham



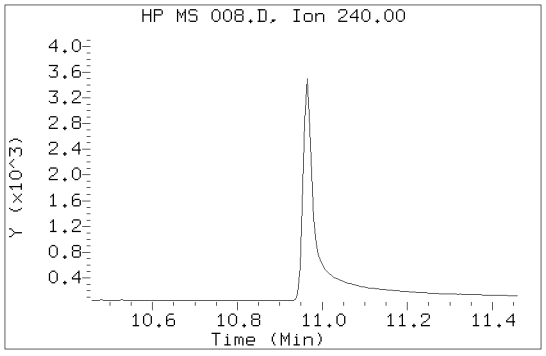
Chrysene-d12 (1719-03-5)

Reason Code:

BEFORE
MASS
240
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
240
AREA
9545
HEIGHT
3446
25-Aug-2022
16:08
linh
pham



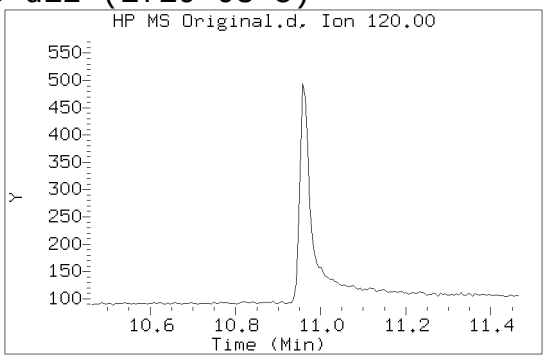
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\008.D
Inj Date : 10-MAR-2022 12:16
InstruID : SV6.i
LabSampID : 1 4 DX-0.2

Chrysene-d12 (1719-03-5)

Reason Code:

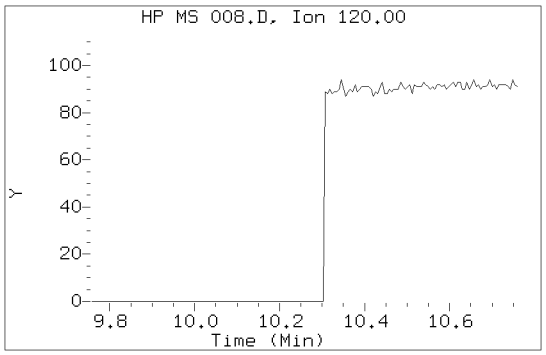
BEFORE

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



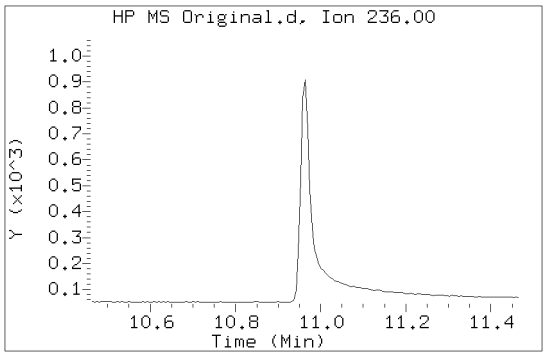
AFTER

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



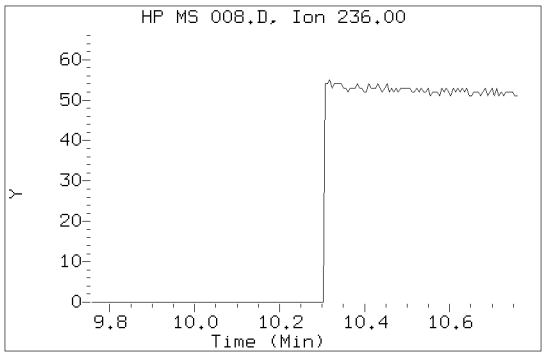
BEFORE

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

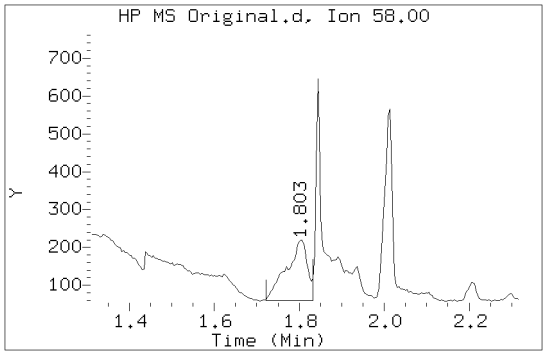


1,4-Dioxane ()

Reason Code:

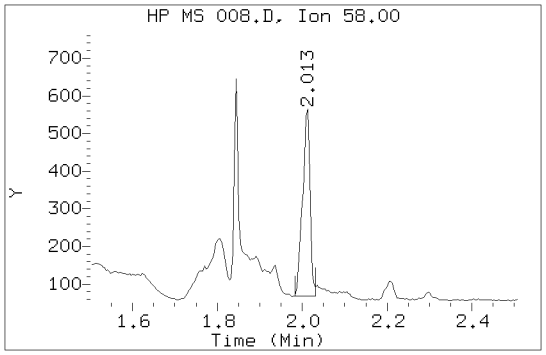
BEFORE

MASS
58
AREA
554
HEIGHT
160
25-Aug-2022
16:04
linh
pham



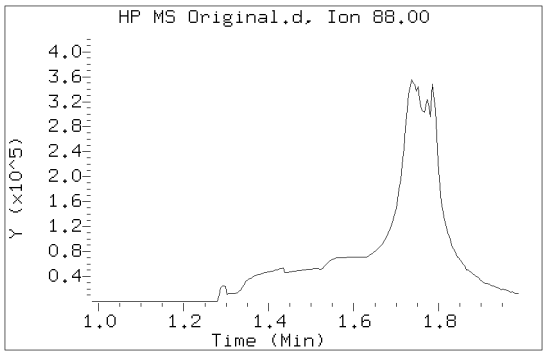
AFTER

MASS
58
AREA
614
HEIGHT
496
25-Aug-2022
16:08
linh
pham



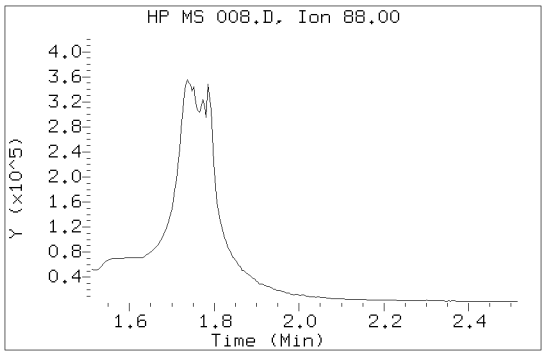
BEFORE

MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



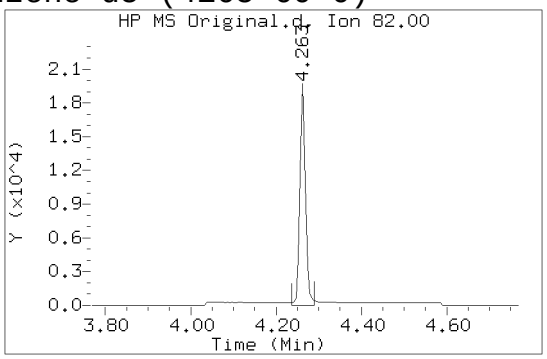
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\008.D
Inj Date : 10-MAR-2022 12:16
InstruID : SV6.i
LabSampID : 1 4 DX-0.2

Nitrobenzene-d5 (4165-60-0)

Reason Code:

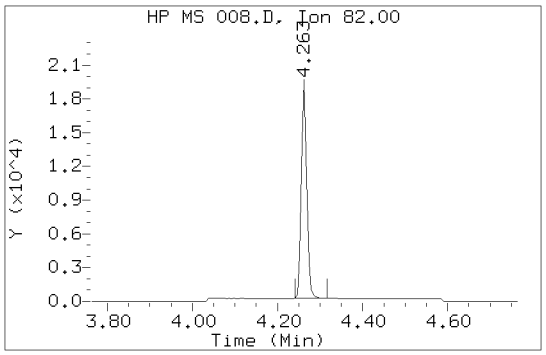
BEFORE

MASS
82
AREA
17887
HEIGHT
19712
25-Aug-2022
16:04
linh
pham



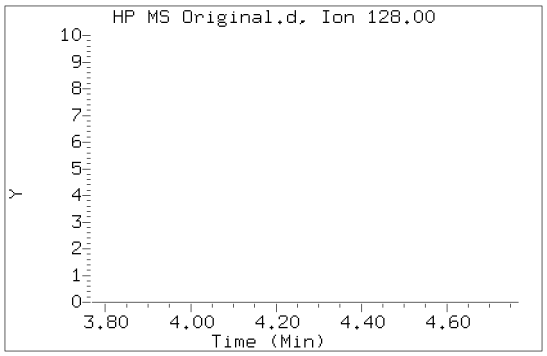
AFTER

MASS
82
AREA
17003
HEIGHT
19451
25-Aug-2022
16:08
linh
pham



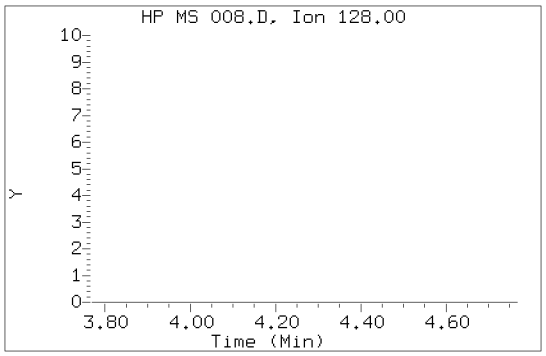
BEFORE

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



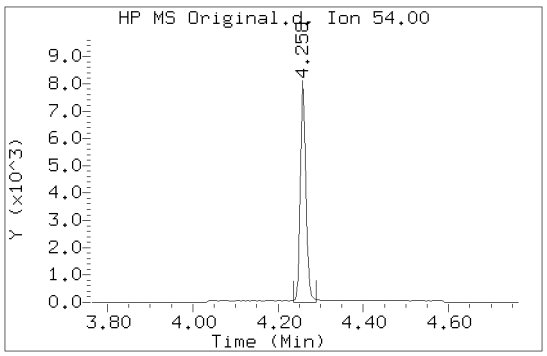
AFTER

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



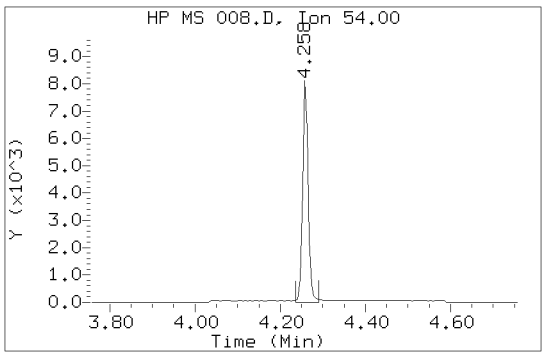
BEFORE

MASS
54
AREA
7400
HEIGHT
8110
25-Aug-2022
16:04
linh
pham



AFTER

MASS
54
AREA
7400
HEIGHT
8110
25-Aug-2022
16:08
linh
pham

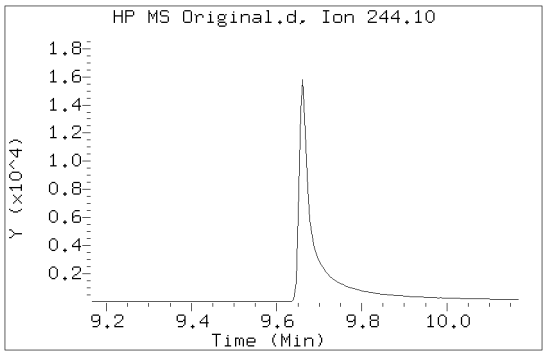


4-Terphenyl-d14 (1718-51-0)

Reason Code:

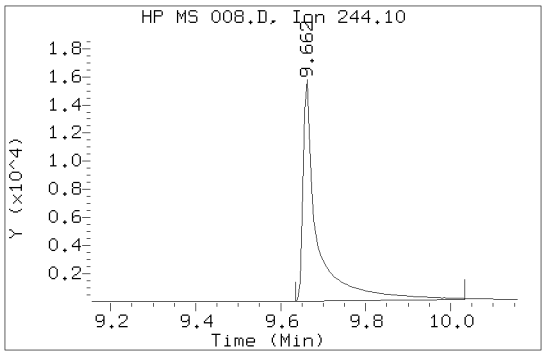
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
244.1
AREA
36799
HEIGHT
15739
25-Aug-2022
16:08
linh
pham

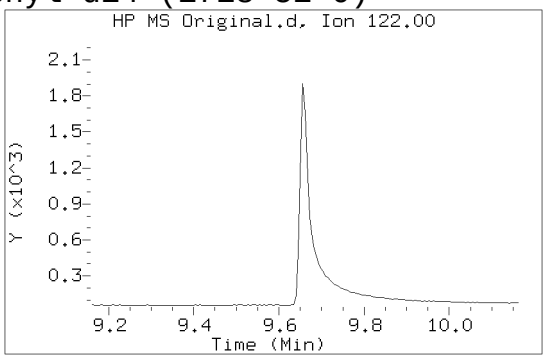


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\008.D
Inj Date : 10-MAR-2022 12:16
InstruID : SV6.i
LabSampID : 1 4 DX-0.2

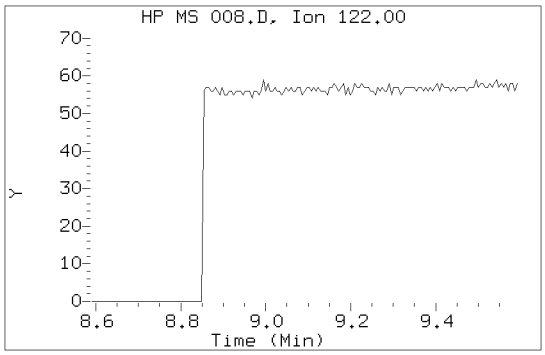
4-Terphenyl-d14 (1718-51-0)

Reason Code:

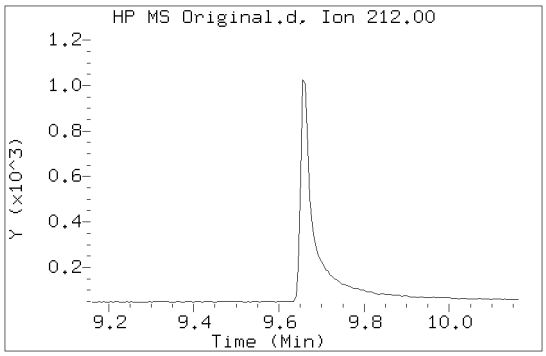
BEFORE
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



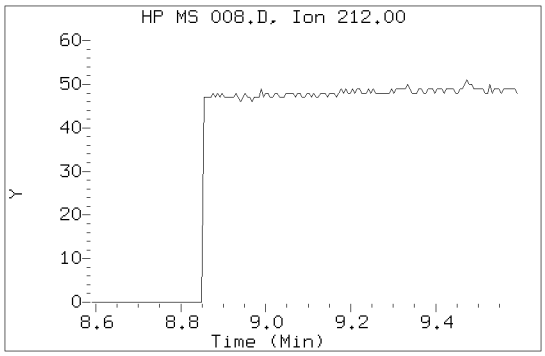
AFTER
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\009.D
Lab Smp Id: 1 4 DX-0.5 Client Smp ID: 1 4 DX-0.5
Inj Date : 10-MAR-2022 12:56 MS Autotune Date: 09-MAR-2022 11:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4 DX-0.5;1 4 DX-0.5
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DXSIM.m
Meth Date : 25-Aug-2022 16:08 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:16 Cal File: 008.D
Als bottle: 9 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.801	3.801	(1.000)	6911	0.10000	(aQM)
* 45 Naphthalene-d8	136	4.922	4.922	(1.000)	13189	0.10000	(M)
$ 33 Nitrobenzene-d5	82	4.268	4.268	(0.907)	21014	0.50000	0.4780(A)
* 86 Acenaphthene-d10	164	6.603	6.603	(1.000)	7222	0.10000	(QM)
$ 69 2-Fluorobiphenyl	172	5.943	5.943	(1.000)	52166	0.50000	0.4640(A)
* 126 Phenanthrene-d10	188	8.064	8.064	(1.000)	12388	0.10000	
* 182 Chrysene-d12	240	10.969	10.969	(1.000)	3790	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.667	9.667	(0.881)	36357	0.50000	0.5102(AM)
* 198 Perylene-d12	264	13.101	13.101	(1.000)	1809	0.10000	
1 1,4-Dioxane	58	2.049	2.049	(0.539)	1286	0.50000	0.4533(H)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

01134033

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\009.D

Date : 10-MAR-2022 12:56

Client ID: 1 4 DX-0.5

Instrument: SV6.i

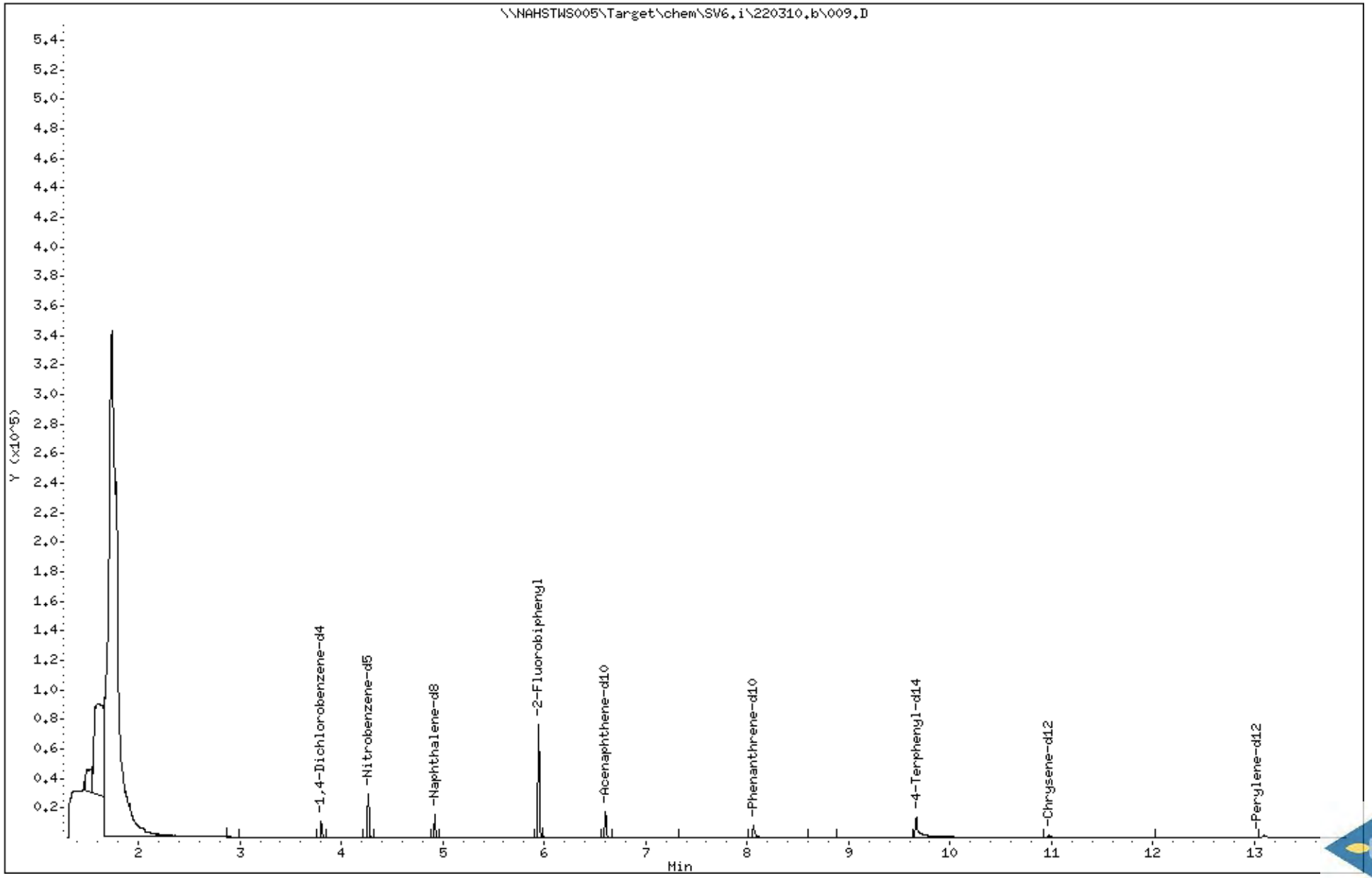
Sample Info: 1 4 DX-0.5;1 4 DX-0.5

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28

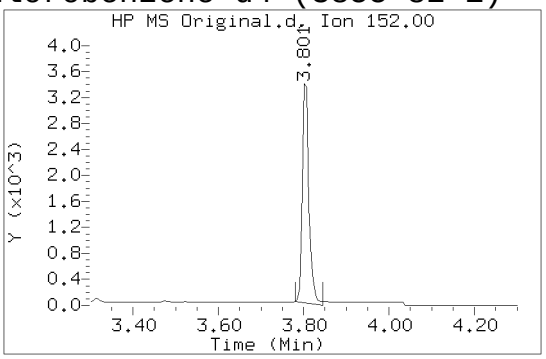


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\009.D
Inj Date : 10-MAR-2022 12:56
InstruID : SV6.i
LabSampID : 1 4 DX-0.5

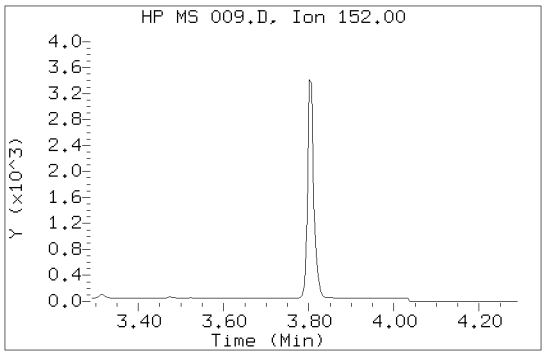
1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

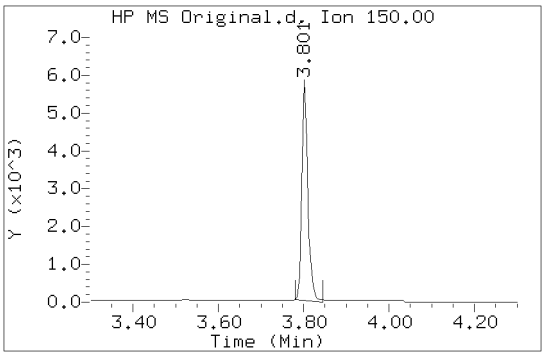
BEFORE
MASS
152
AREA
3578
HEIGHT
3374
25-Aug-2022
16:04
linh
pham



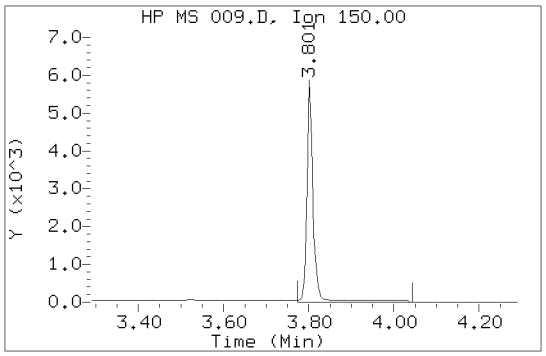
AFTER
MASS
152
AREA
6911
HEIGHT
3414
25-Aug-2022
16:08
linh
pham



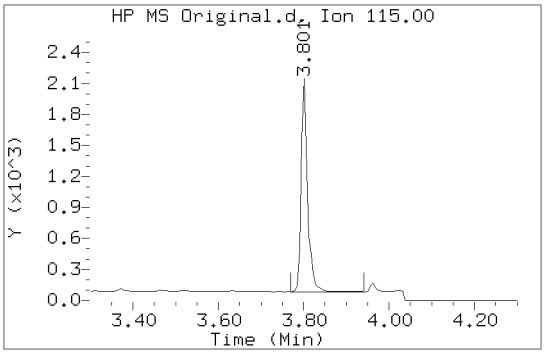
BEFORE
MASS
150
AREA
5548
HEIGHT
5835
25-Aug-2022
16:04
linh
pham



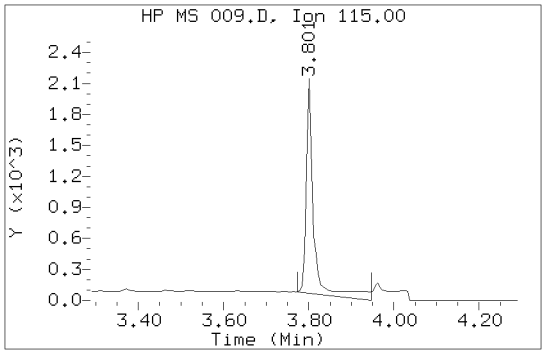
AFTER
MASS
150
AREA
6275
HEIGHT
5877
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
115
AREA
2092
HEIGHT
2063
25-Aug-2022
16:04
linh
pham



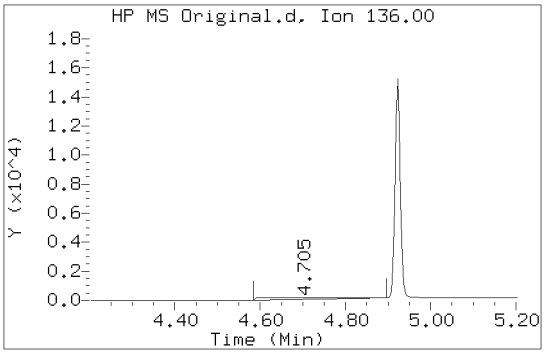
AFTER
MASS
115
AREA
2533
HEIGHT
2075
25-Aug-2022
16:08
linh
pham



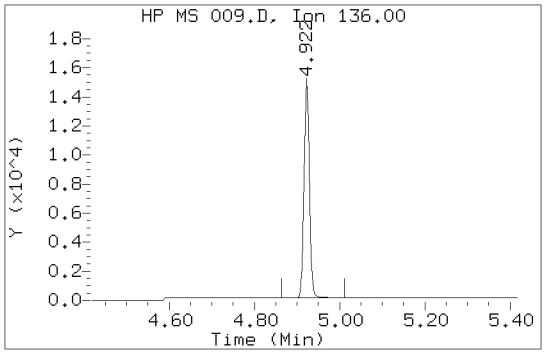
Naphthalene-d8 (1146-65-2)

Reason Code:

BEFORE
MASS
136
AREA
1531
HEIGHT
108
25-Aug-2022
16:04
linh
pham



AFTER
MASS
136
AREA
13189
HEIGHT
15077
25-Aug-2022
16:08
linh
pham



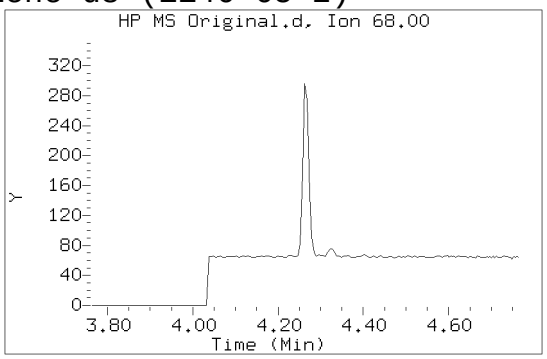
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\009.D
Inj Date : 10-MAR-2022 12:56
InstruID : SV6.i
LabSampID : 1 4 DX-0.5

Naphthalene-d8 (1146-65-2)

Reason Code:

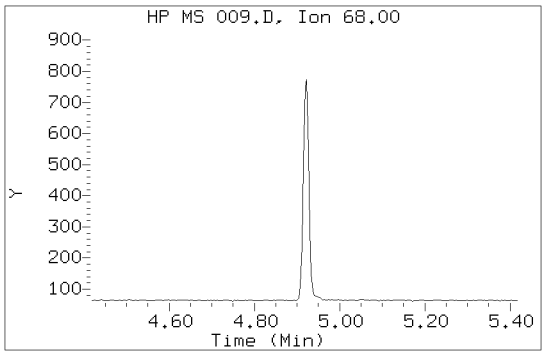
BEFORE

MASS
68
AREA
262
HEIGHT
233
25-Aug-2022
16:04
linh
pham



AFTER

MASS
68
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

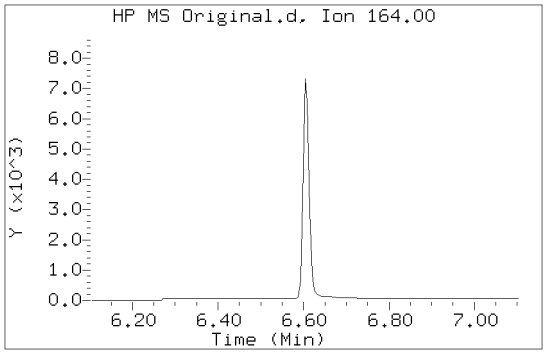


Acenaphthene-d10 (15067-26-2)

Reason Code:

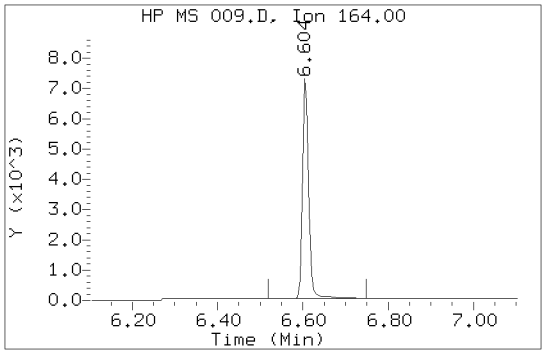
BEFORE

MASS
164
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



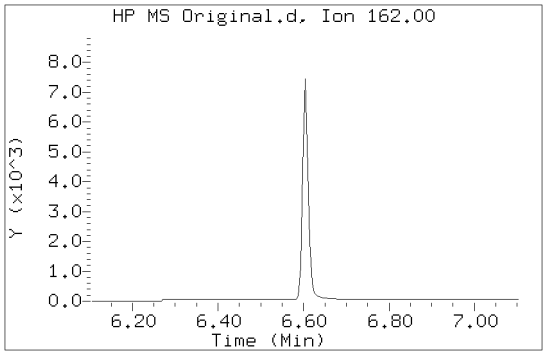
AFTER

MASS
164
AREA
7222
HEIGHT
7257
25-Aug-2022
16:08
linh
pham



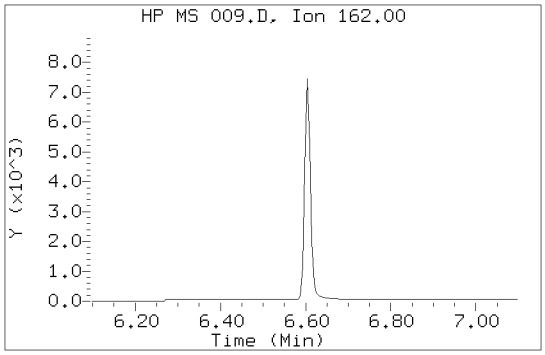
BEFORE

MASS
162
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



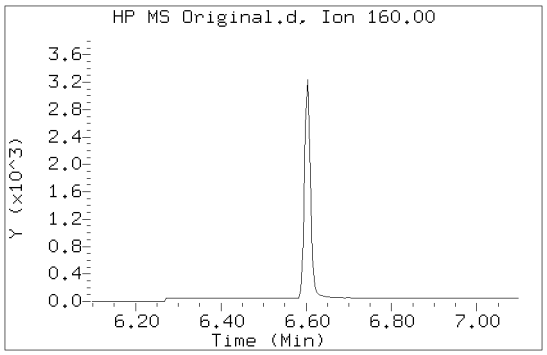
AFTER

MASS
162
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



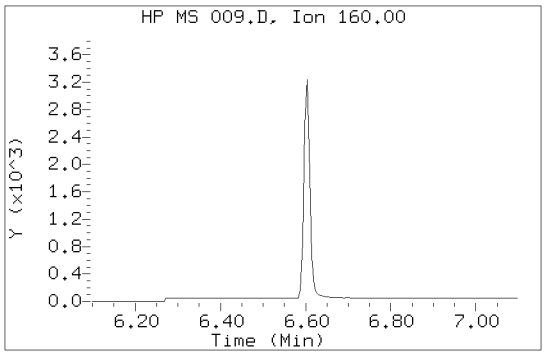
BEFORE

MASS
160
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
160
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



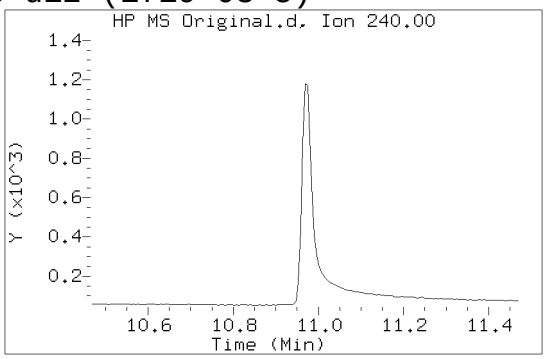
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\009.D
Inj Date : 10-MAR-2022 12:56
InstruID : SV6.i
LabSampID : 1 4 DX-0.5

Chrysene-d12 (1719-03-5)

Reason Code:

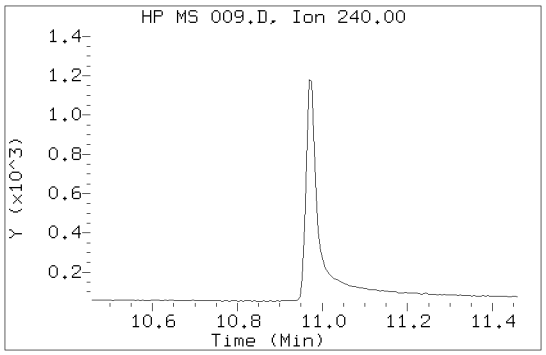
BEFORE

MASS
240
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



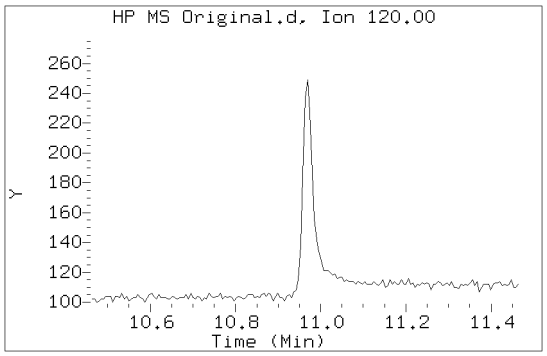
AFTER

MASS
240
AREA
3790
HEIGHT
1133
25-Aug-2022
16:08
linh
pham



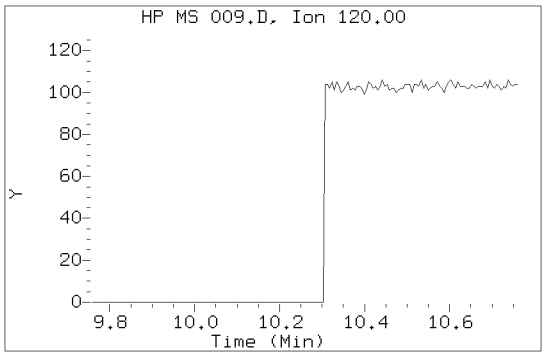
BEFORE

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



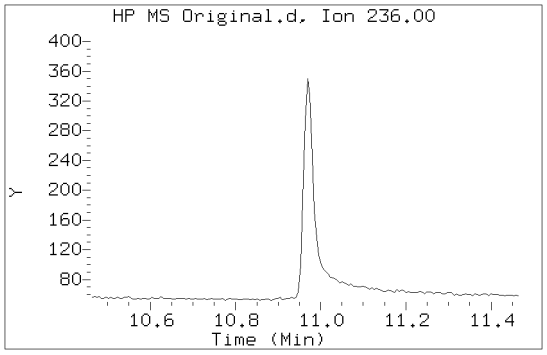
AFTER

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



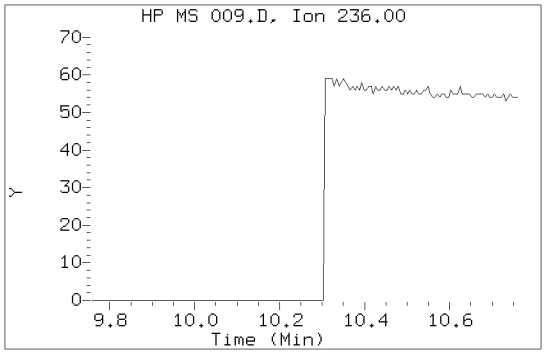
BEFORE

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

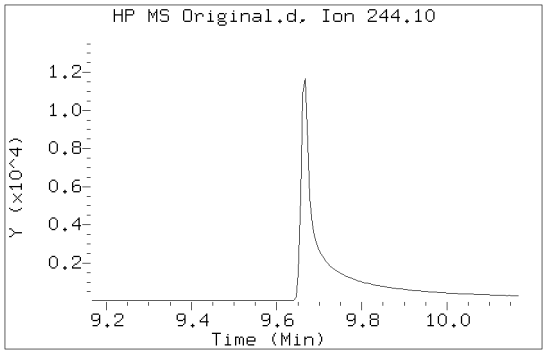


4-Terphenyl-d14 (1718-51-0)

Reason Code:

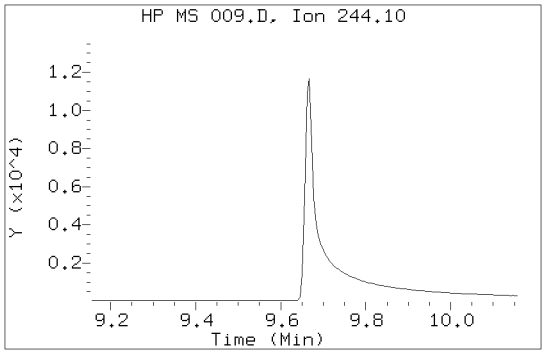
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
244.1
AREA
36357
HEIGHT
11597
25-Aug-2022
16:08
linh
pham

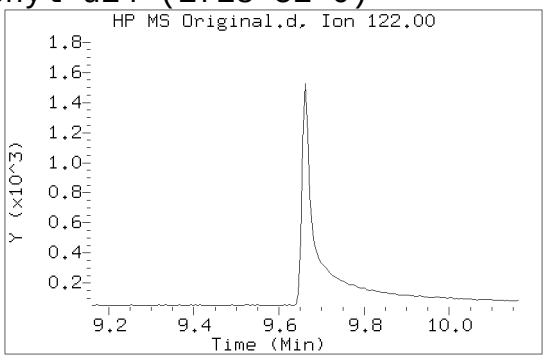


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\009.D
Inj Date : 10-MAR-2022 12:56
InstruID : SV6.i
LabSampID : 1 4 DX-0.5

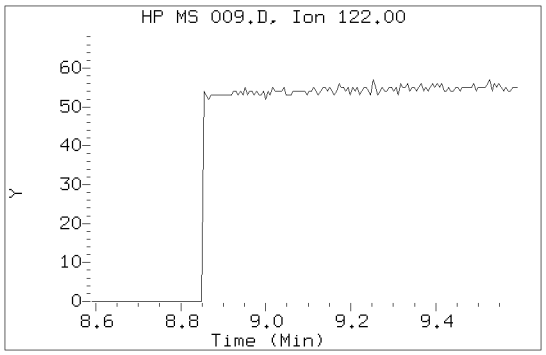
4-Terphenyl-d14 (1718-51-0)

Reason Code:

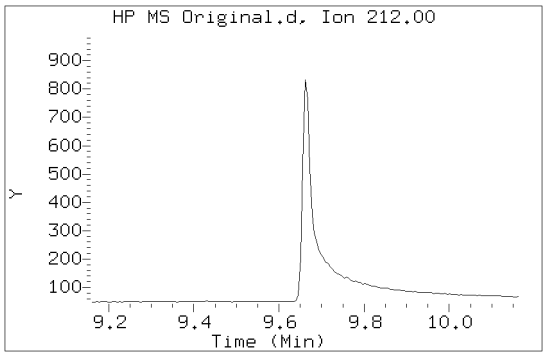
BEFORE
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



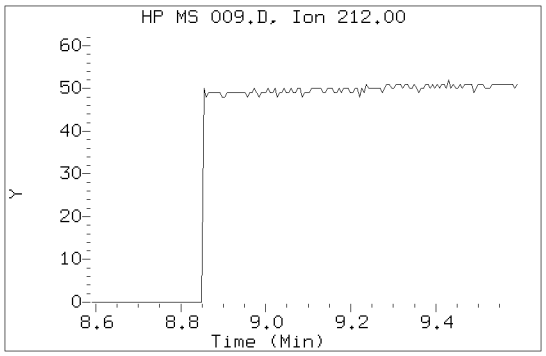
AFTER
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\010.D
Lab Smp Id: 1 4 DX-ICV Client Smp ID: 1 4 DX-ICV
Inj Date : 10-MAR-2022 14:15 MS Autotune Date: 09-MAR-2022 11:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4 DX-ICV;1 4 DX-ICV
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DXSIM.m
Meth Date : 25-Aug-2022 16:08 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 10 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.795	3.801	(1.000)	6142	0.10000	(aM)
* 45 Naphthalene-d8	136	4.922	4.922	(1.000)	16012	0.10000	(M)
$ 33 Nitrobenzene-d5	82	4.262	4.268	(0.866)	4156	0.07786	0.07786(M)
* 86 Acenaphthene-d10	164	6.609	6.603	(1.000)	8780	0.10000	(M)
$ 69 2-Fluorobiphenyl	172	5.947	5.943	(0.900)	11167	0.08171	0.08171(M)
* 126 Phenanthrene-d10	188	8.064	8.064	(1.000)	15732	0.10000	
* 182 Chrysene-d12	240	10.974	10.969	(1.000)	6319	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.667	9.667	(0.881)	7838	0.06597	0.06597(M)
* 198 Perylene-d12	264	13.101	13.101	(1.000)	4163	0.10000	(M)
1 1,4-Dioxane	58	2.002	2.049	(0.527)	203	0.08051	0.08051(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

01134039

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\010.D

Page 1

Date : 10-MAR-2022 14:15

Client ID: 1 4 DX-ICV

Instrument: SV6.i

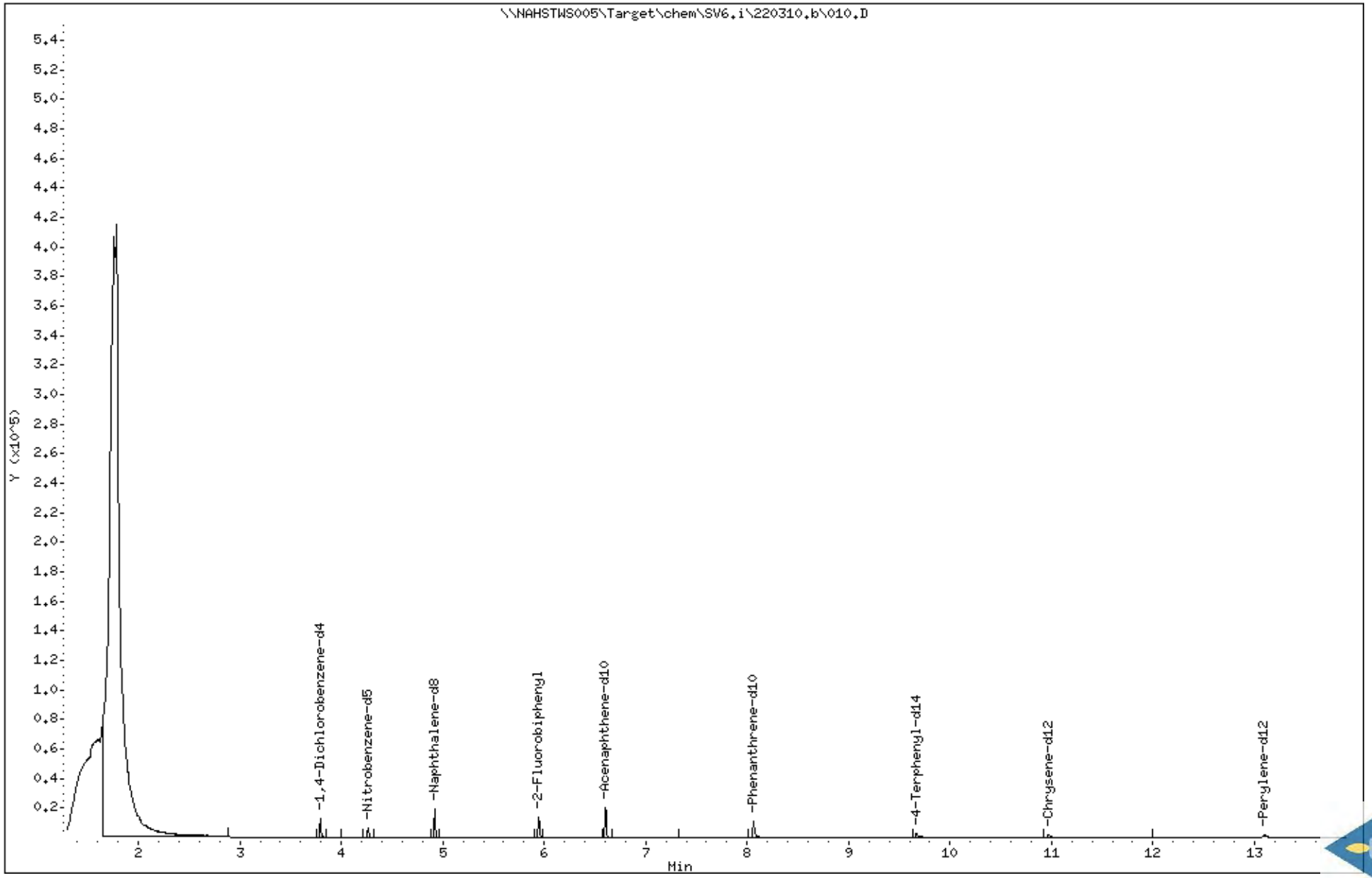
Sample Info: 1 4 DX-ICV;1 4 DX-ICV

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



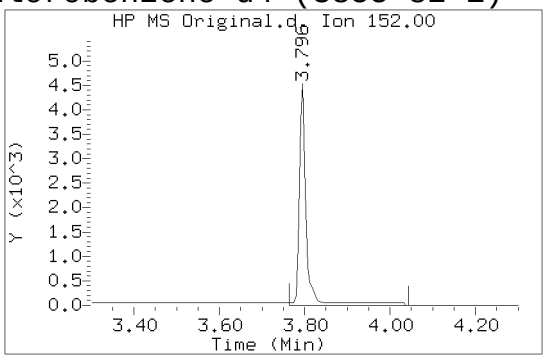
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\010.D
Inj Date : 10-MAR-2022 14:15
InstruID : SV6.i
LabSampID : 1 4 DX-ICV

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

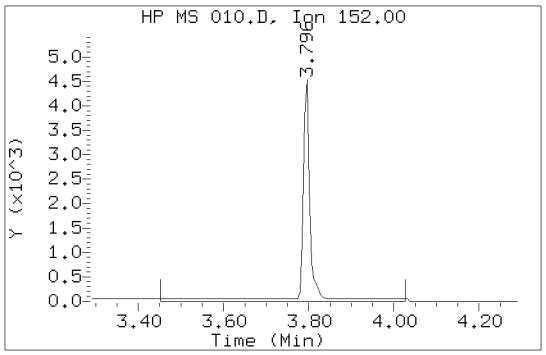
BEFORE

MASS
152
AREA
5222
HEIGHT
4535
25-Aug-2022
16:04
linh
pham



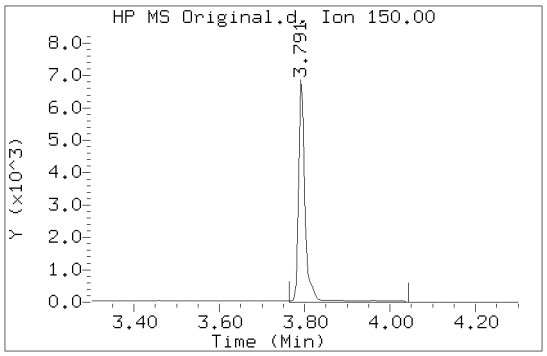
AFTER

MASS
152
AREA
6142
HEIGHT
4535
25-Aug-2022
16:08
linh
pham



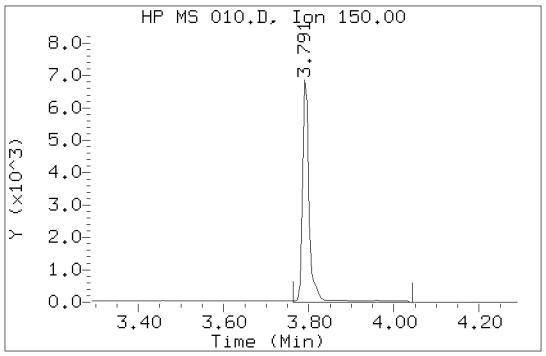
BEFORE

MASS
150
AREA
7641
HEIGHT
6864
25-Aug-2022
16:04
linh
pham



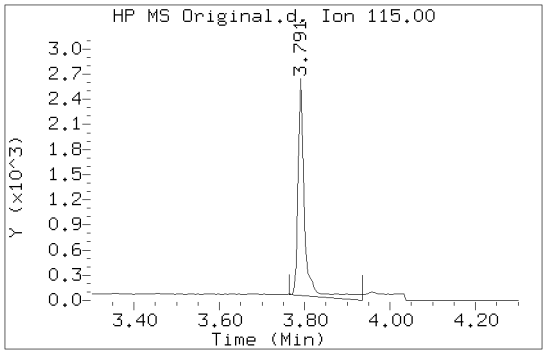
AFTER

MASS
150
AREA
7641
HEIGHT
6864
25-Aug-2022
16:08
linh
pham



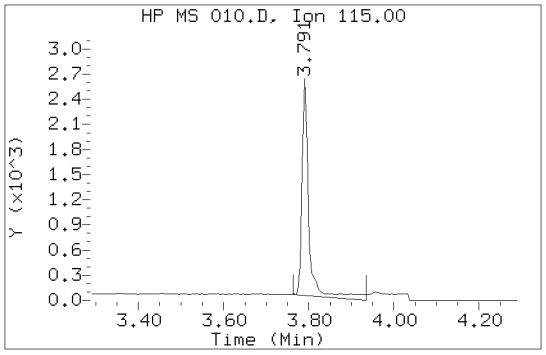
BEFORE

MASS
115
AREA
2822
HEIGHT
2584
25-Aug-2022
16:04
linh
pham



AFTER

MASS
115
AREA
2822
HEIGHT
2584
25-Aug-2022
16:08
linh
pham

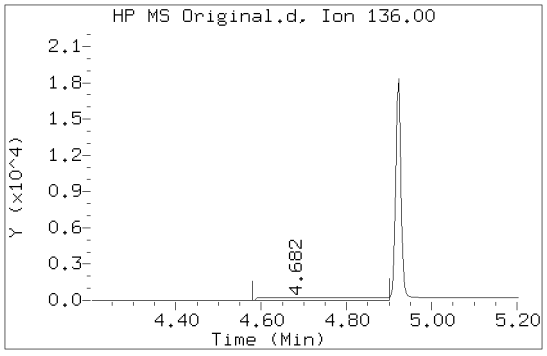


Naphthalene-d8 (1146-65-2)

Reason Code:

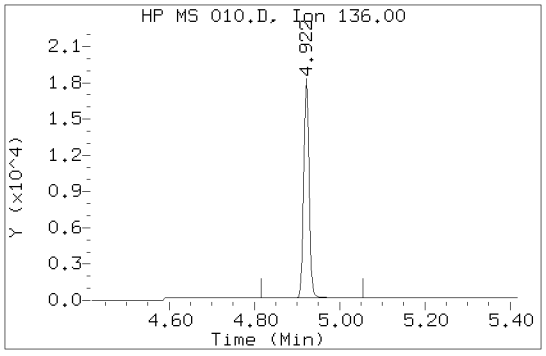
BEFORE

MASS
136
AREA
3810
HEIGHT
208
25-Aug-2022
16:04
linh
pham



AFTER

MASS
136
AREA
16012
HEIGHT
18137
25-Aug-2022
16:08
linh
pham



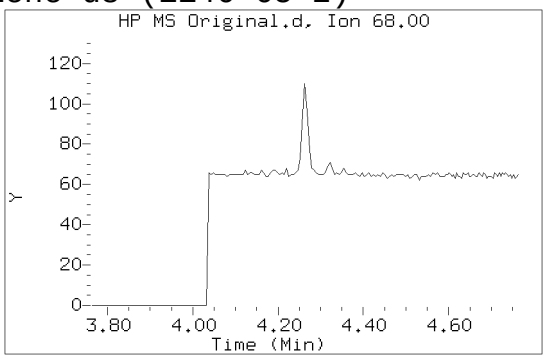
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\010.D
Inj Date : 10-MAR-2022 14:15
InstruID : SV6.i
LabSampID : 1 4 DX-ICV

Naphthalene-d8 (1146-65-2)

Reason Code:

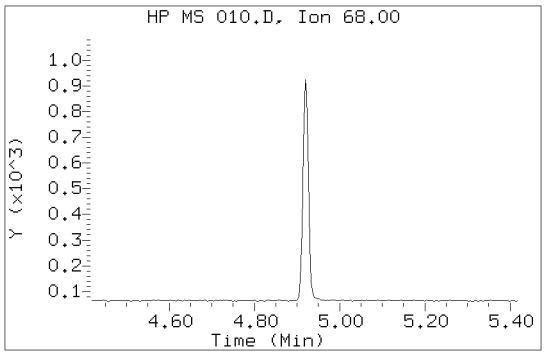
BEFORE

MASS
68
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
68
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

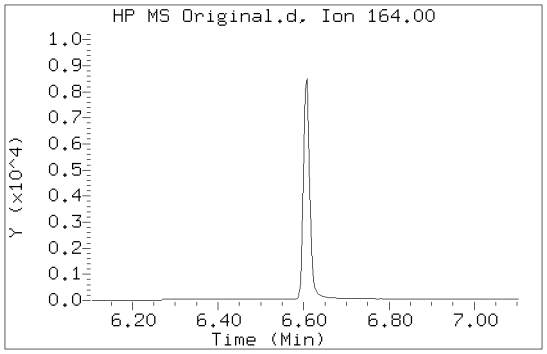


Acenaphthene-d10 (15067-26-2)

Reason Code:

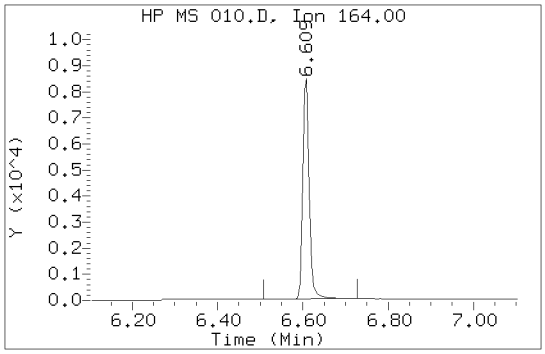
BEFORE

MASS
164
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



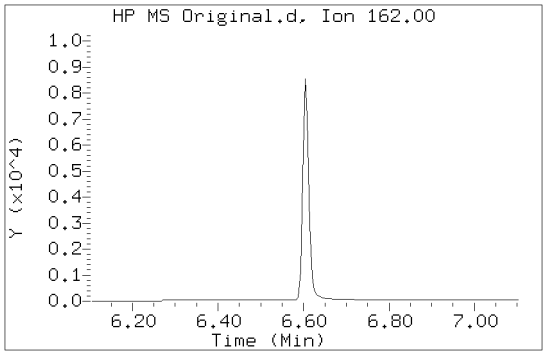
AFTER

MASS
164
AREA
8780
HEIGHT
8443
25-Aug-2022
16:08
linh
pham



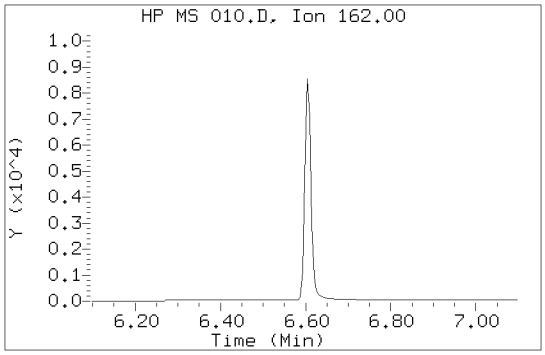
BEFORE

MASS
162
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



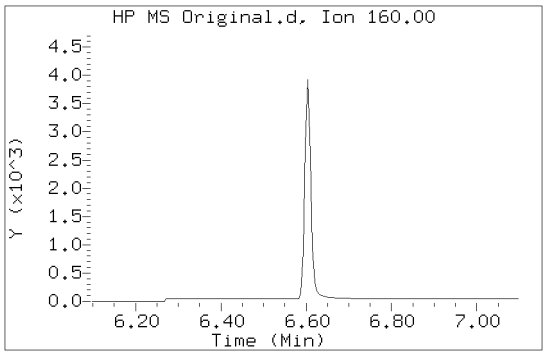
AFTER

MASS
162
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



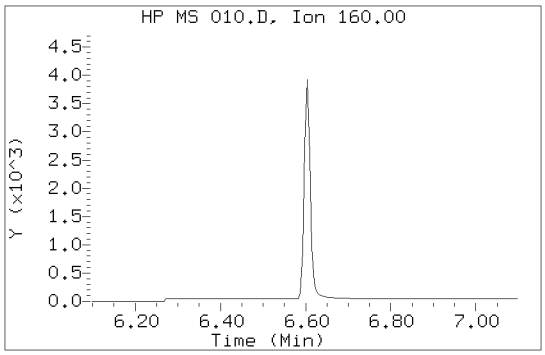
BEFORE

MASS
160
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
160
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

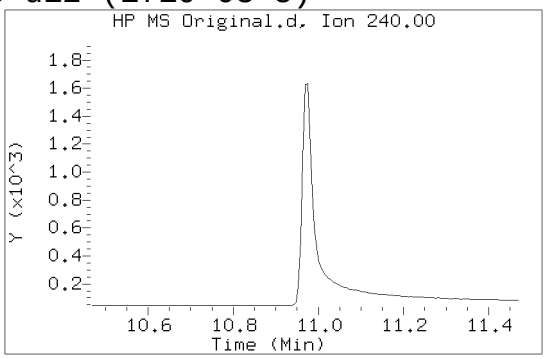


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\010.D
Inj Date : 10-MAR-2022 14:15
InstruID : SV6.i
LabSampID : 1 4 DX-ICV

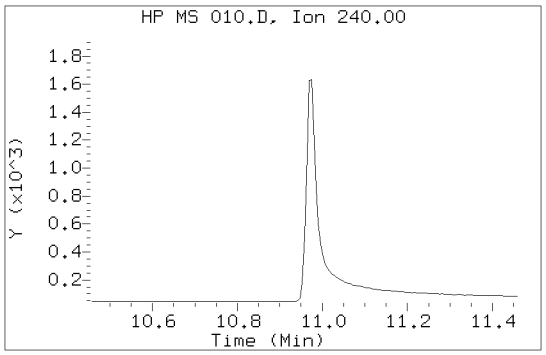
Chrysene-d12 (1719-03-5)

Reason Code:

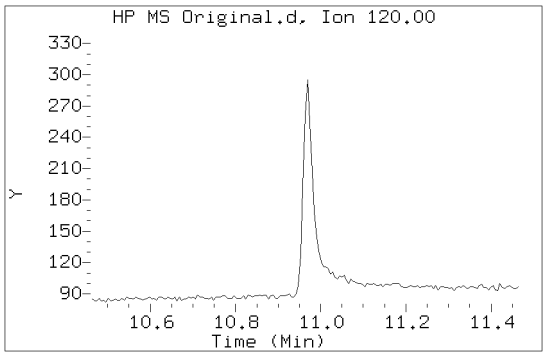
BEFORE
MASS
240
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



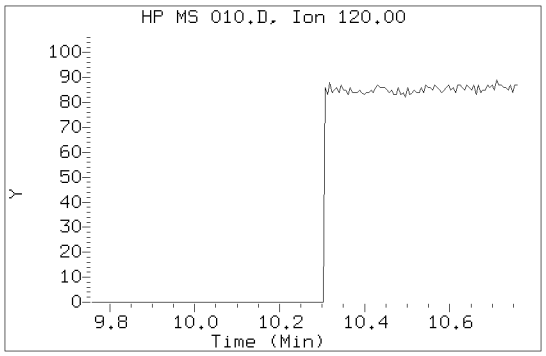
AFTER
MASS
240
AREA
6319
HEIGHT
1596
25-Aug-2022
16:08
linh
pham



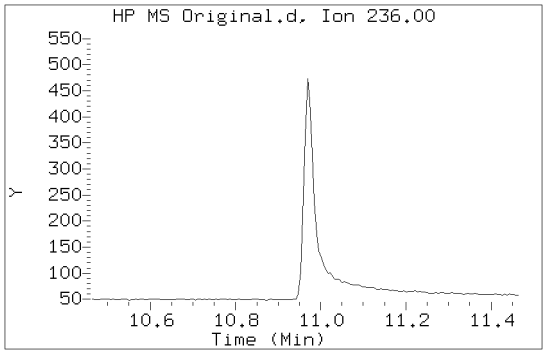
BEFORE
MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



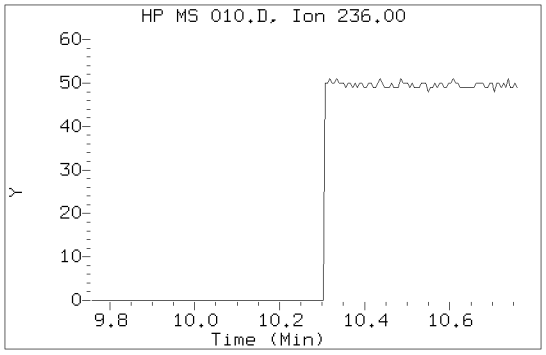
AFTER
MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



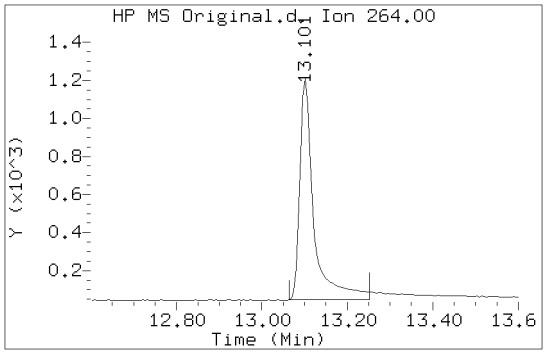
AFTER
MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



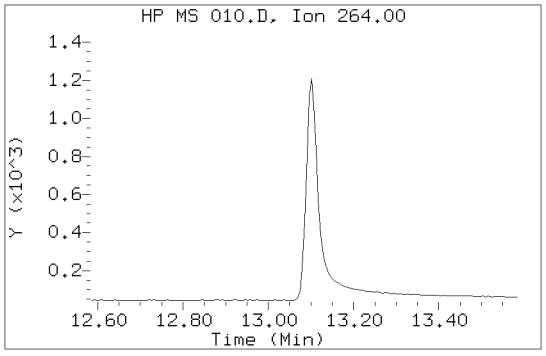
Perylene-d12 (1520-96-3)

Reason Code:

BEFORE
MASS
264
AREA
2659
HEIGHT
1162
25-Aug-2022
16:04
linh
pham



AFTER
MASS
264
AREA
4163
HEIGHT
1174
25-Aug-2022
16:08
linh
pham

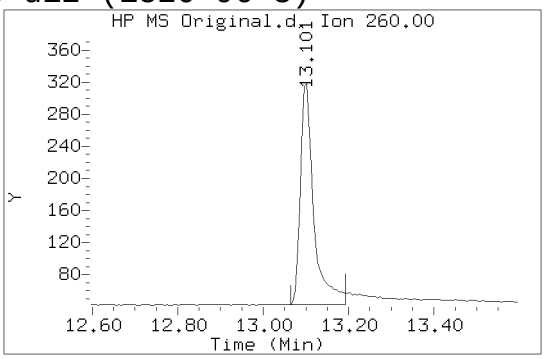


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\010.D
Inj Date : 10-MAR-2022 14:15
InstruID : SV6.i
LabSampID : 1 4 DX-ICV

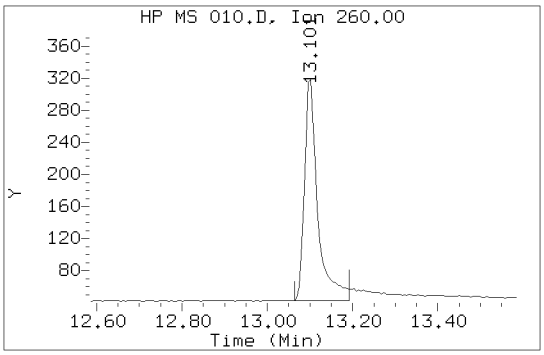
Perylene-d12 (1520-96-3)

Reason Code:

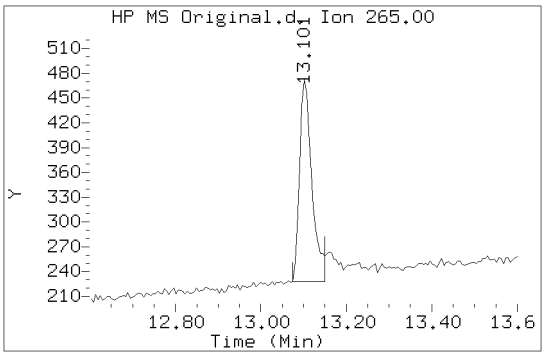
BEFORE
MASS
260
AREA
598
HEIGHT
275
25-Aug-2022
16:04
linh
pham



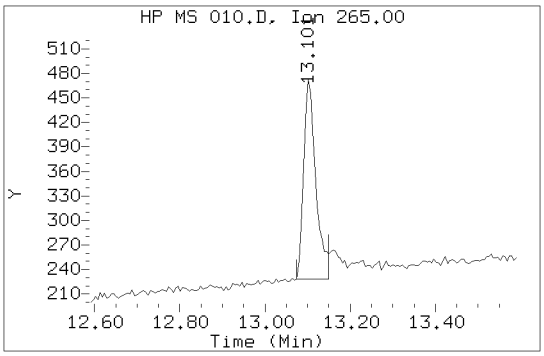
AFTER
MASS
260
AREA
598
HEIGHT
275
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
265
AREA
490
HEIGHT
244
25-Aug-2022
16:04
linh
pham



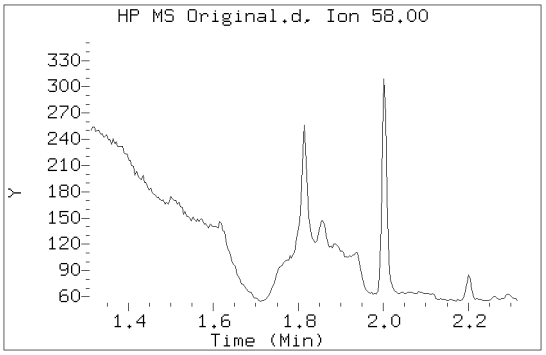
AFTER
MASS
265
AREA
490
HEIGHT
244
25-Aug-2022
16:08
linh
pham



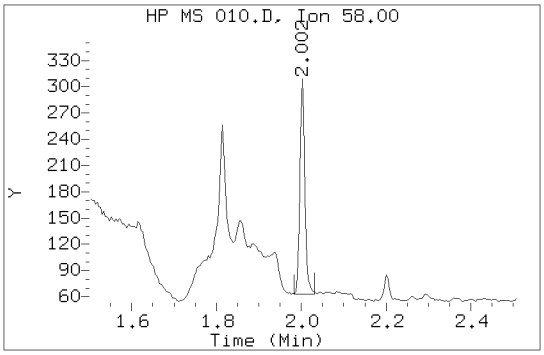
1,4-Dioxane ()

Reason Code:

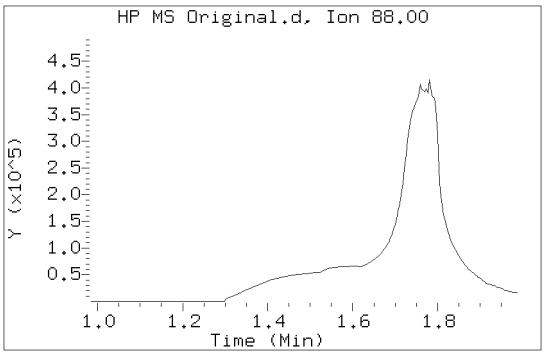
BEFORE
MASS
58
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



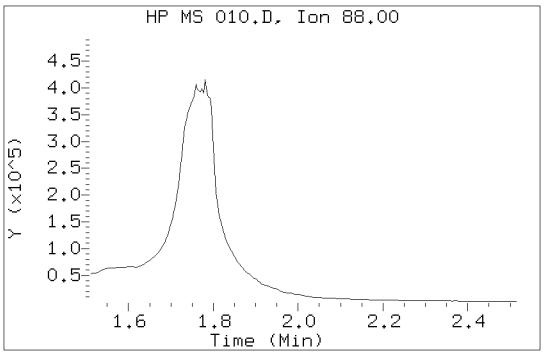
AFTER
MASS
58
AREA
203
HEIGHT
246
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

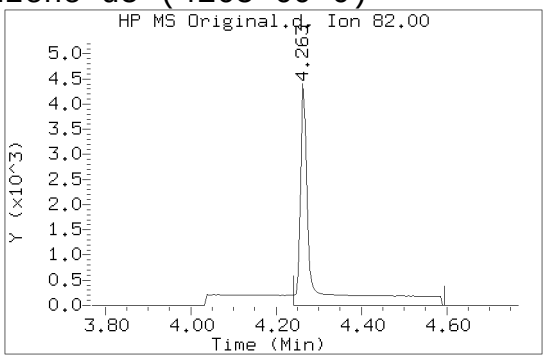


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\010.D
Inj Date : 10-MAR-2022 14:15
InstruID : SV6.i
LabSampID : 1 4 DX-ICV

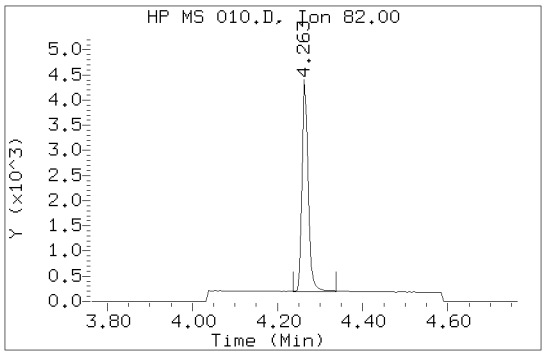
Nitrobenzene-d5 (4165-60-0)

Reason Code:

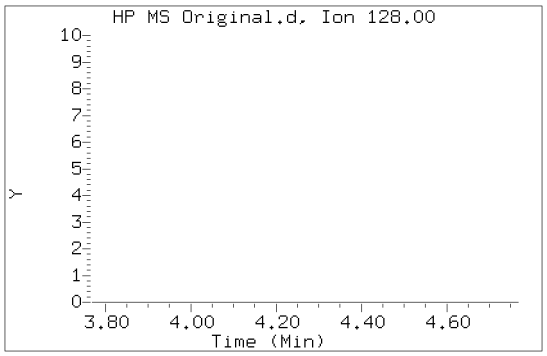
BEFORE
MASS
82
AREA
8115
HEIGHT
4405
25-Aug-2022
16:04
linh
pham



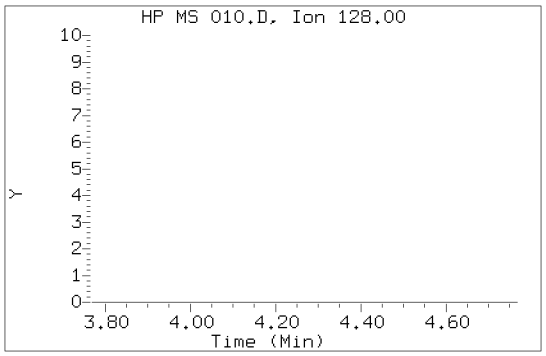
AFTER
MASS
82
AREA
4156
HEIGHT
4208
25-Aug-2022
16:08
linh
pham



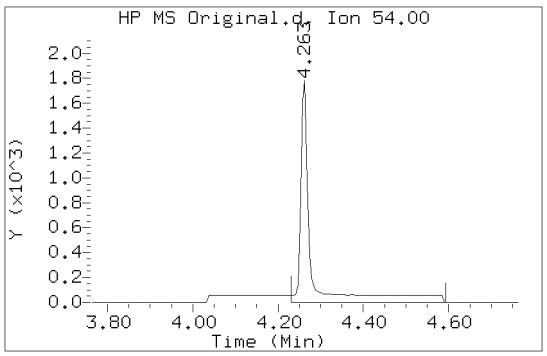
BEFORE
MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



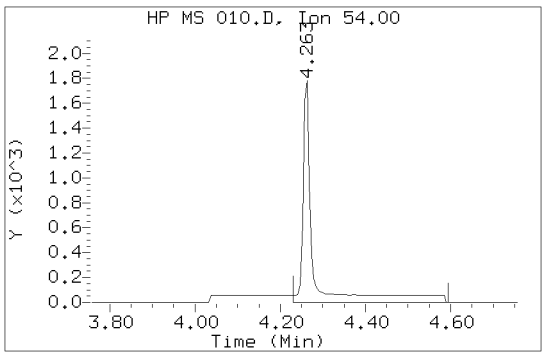
AFTER
MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
54
AREA
2997
HEIGHT
1781
25-Aug-2022
16:04
linh
pham



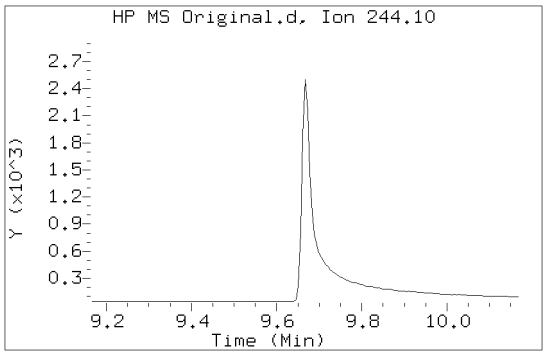
AFTER
MASS
54
AREA
2997
HEIGHT
1781
25-Aug-2022
16:08
linh
pham



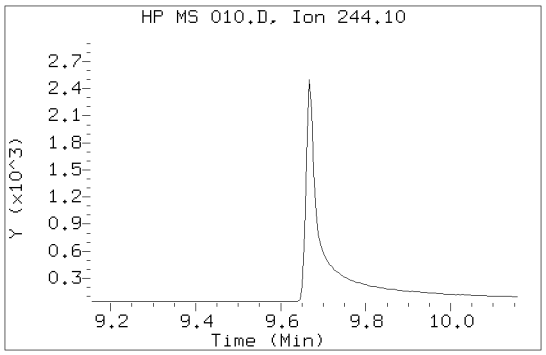
4-Terphenyl-d14 (1718-51-0)

Reason Code:

BEFORE
MASS
244.1
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
244.1
AREA
7838
HEIGHT
2457
25-Aug-2022
16:08
linh
pham

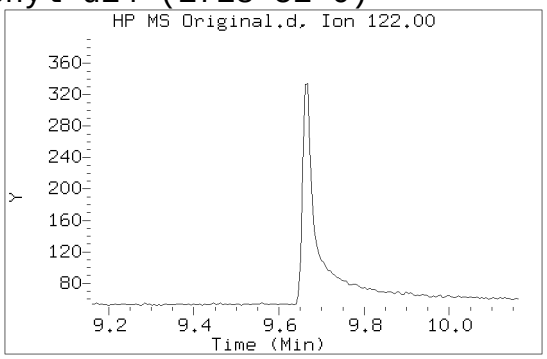


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\010.D
Inj Date : 10-MAR-2022 14:15
InstruID : SV6.i
LabSampID : 1 4 DX-ICV

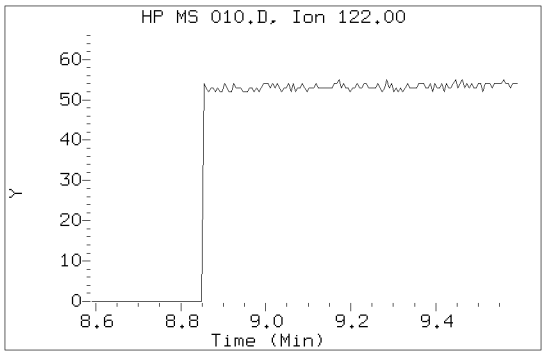
4-Terphenyl-d14 (1718-51-0)

Reason Code:

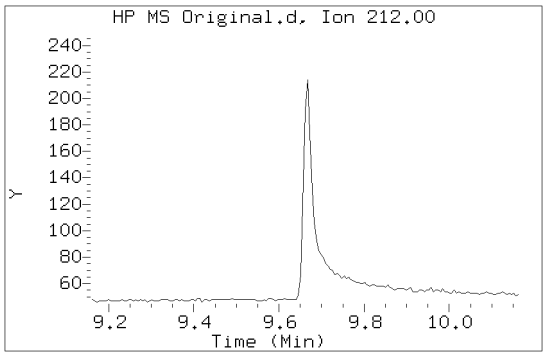
BEFORE
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



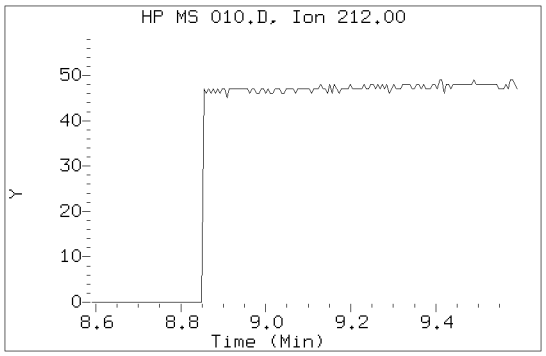
AFTER
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



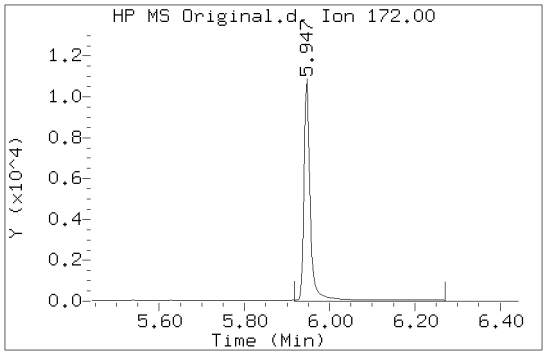
AFTER
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



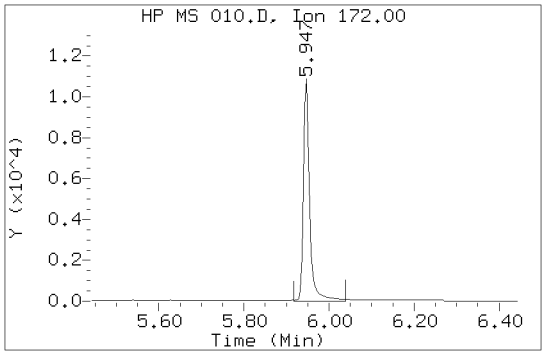
2-Fluorobiphenyl (321-60-8)

Reason Code:

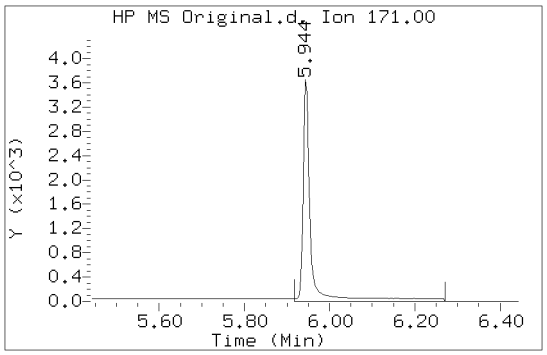
BEFORE
MASS
172
AREA
11965
HEIGHT
10878
25-Aug-2022
16:04
linh
pham



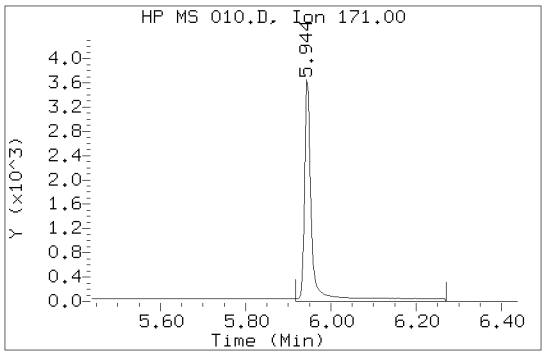
AFTER
MASS
172
AREA
11167
HEIGHT
10878
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
171
AREA
4702
HEIGHT
3651
25-Aug-2022
16:04
linh
pham



AFTER
MASS
171
AREA
4702
HEIGHT
3651
25-Aug-2022
16:08
linh
pham



right solutions.
right partner.

Raw Data SV-6 415764

Workorder

HS22080499

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\01.D

Date : 23-AUG-2022 09:33

Client ID: DFTPP

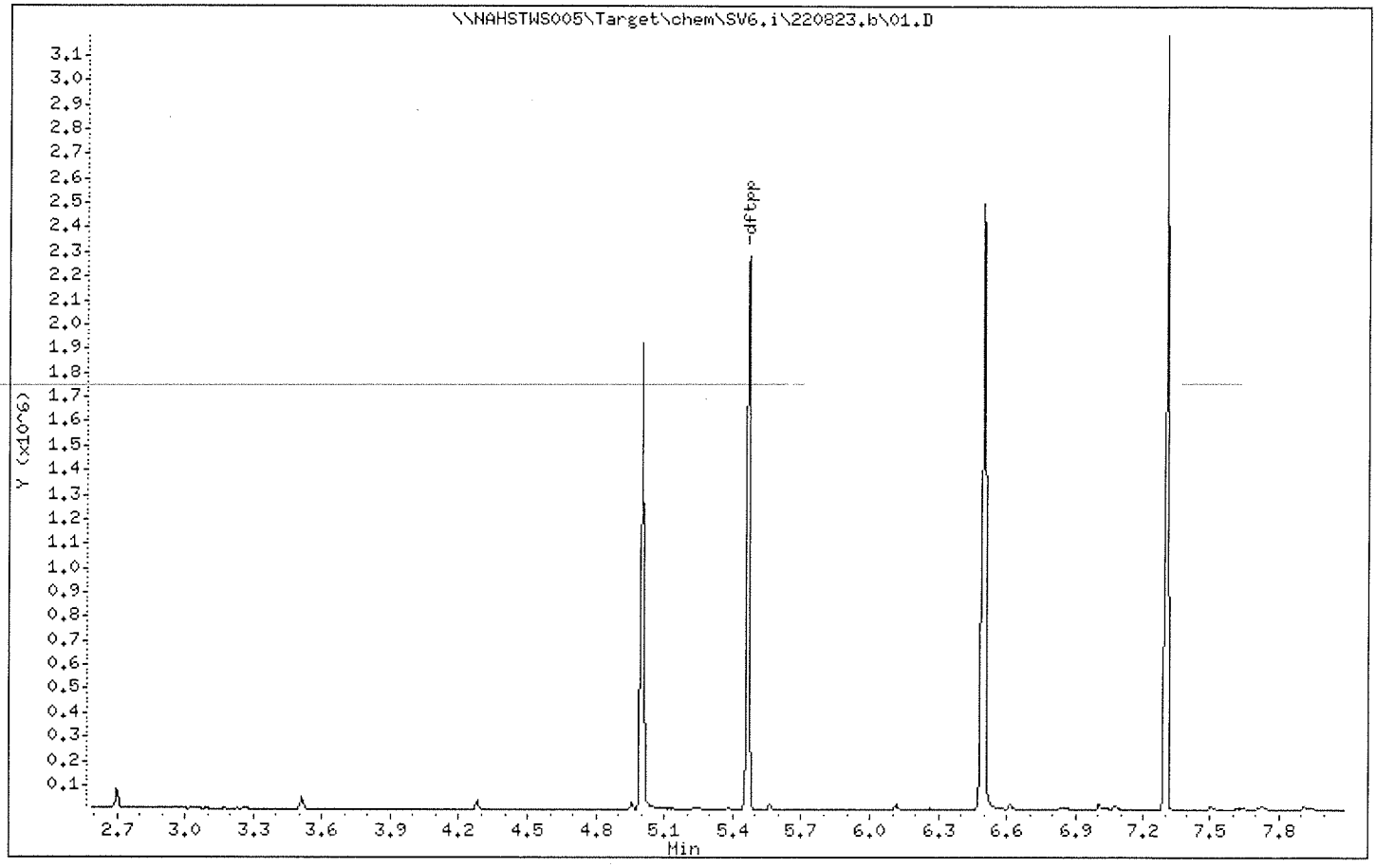
Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\01.D

Date : 23-AUG-2022 09:33

Client ID: DFTPP

Instrument: SV6.i

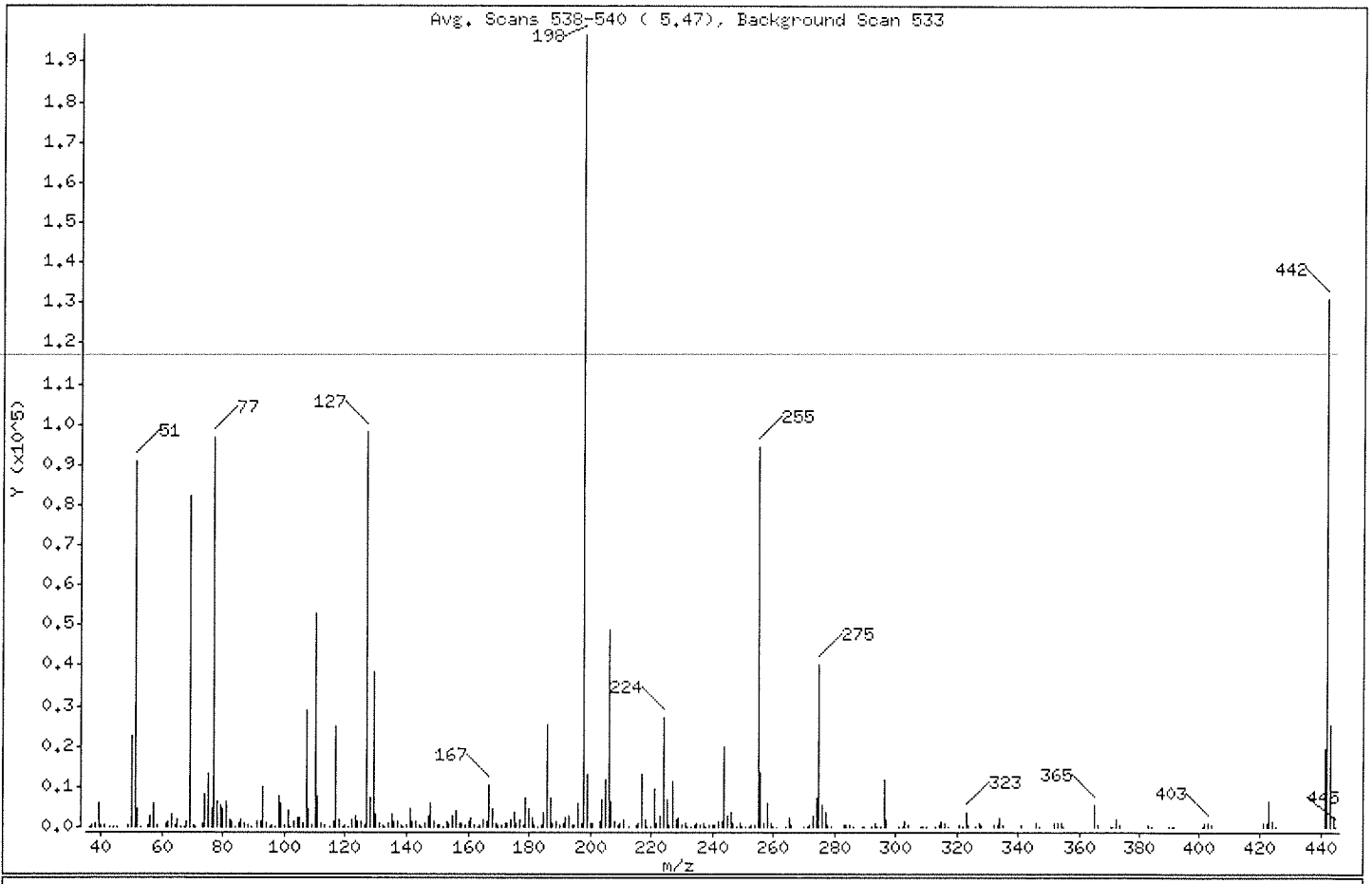
Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	46.31
68	Less than 2.00% of mass 69	0.59 (1.41)
69	Mass 69 relative abundance	41.75
70	Less than 2.00% of mass 69	0.21 (0.50)
127	10.00 - 80.00% of mass 198	49.98
197	Less than 2.00% of mass 198	0.57
199	5.00 - 9.00% of mass 198	6.67
275	10.00 - 60.00% of mass 198	20.40
365	1.00 - 100.00% of mass 198	2.67
441	Present, but less than mass 443	9.93
442	50.00 - 150.00% of mass 198	66.75
443	15.00 - 24.00% of mass 442	12.79 (19.16)

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\01.D

Date : 23-AUG-2022 09:33

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 01.D

Spectrum: Avg. Scans 538-540 (5.47), Background Scan 533

Location of Maximum: 198.00

Number of points: 293

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	71	120.00	367	194.00	571	276.00	5207
37.00	372	121.00	130	195.00	382	277.00	3419
38.00	960	122.00	1761	196.00	5711	278.00	533
39.00	5917	123.00	2799	197.00	1124	279.00	73
40.00	255	124.00	1289	198.00	196544	283.00	423
41.00	231	125.00	1232	199.00	13108	284.00	269
43.00	108	126.00	419	200.00	947	285.00	618
44.00	39	127.00	98240	201.00	865	286.00	53
45.00	175	128.00	7138	203.00	1351	289.00	74
49.00	514	129.00	38368	204.00	6834	290.00	62
50.00	22528	130.00	3289	205.00	11717	292.00	181
51.00	91024	131.00	722	206.00	48912	293.00	793
52.00	4378	132.00	304	207.00	6122	294.00	163
53.00	165	133.00	186	208.00	1503	295.00	184
55.00	409	134.00	1076	209.00	502	296.00	11552
56.00	2576	135.00	3063	210.00	743	297.00	1717
57.00	5964	136.00	1261	211.00	1795	301.00	61
58.00	283	137.00	1357	213.00	117	302.00	165
61.00	1004	138.00	288	215.00	525	303.00	1347
62.00	1170	139.00	171	216.00	1006	304.00	311
63.00	3200	140.00	476	217.00	12913	308.00	144
64.00	399	141.00	4712	218.00	1603	309.00	50
65.00	1631	142.00	1517	219.00	205	310.00	143
66.00	50	143.00	1136	220.00	85	313.00	50
67.00	59	144.00	231	221.00	9563	314.00	539
68.00	1160	145.00	224	222.00	968	315.00	1290
69.00	82048	146.00	753	223.00	2928	316.00	717
70.00	407	147.00	2514	224.00	27192	317.00	70
71.00	53	148.00	5897	225.00	6745	321.00	371
73.00	698	149.00	1148	226.00	662	322.00	175
74.00	8269	150.00	271	227.00	11386	323.00	3679
75.00	12928	151.00	654	228.00	1586	324.00	641
76.00	4546	152.00	184	229.00	2265	326.00	52
77.00	96640	153.00	1528	230.00	291	327.00	713
78.00	6146	154.00	1124	231.00	914	328.00	375

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\01.D

Date : 23-AUG-2022 09:33

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 01.D
Spectrum: Avg. Scans 538-540 (5.47), Background Scan 533
Location of Maximum: 198.00
Number of points: 293

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	5514	155.00	2645	232.00	154	332.00	231
80.00	4336	156.00	3901	233.00	189	333.00	376
81.00	6503	157.00	781	234.00	656	334.00	2328
82.00	1587	158.00	741	235.00	826	335.00	529
83.00	1517	159.00	561	236.00	538	341.00	419
84.00	96	160.00	1544	237.00	818	346.00	805
85.00	1077	161.00	2254	238.00	50	347.00	60
86.00	1653	162.00	567	239.00	405	352.00	1074
87.00	800	163.00	170	240.00	272	353.00	737
88.00	342	164.00	237	241.00	537	354.00	1105
89.00	139	165.00	1758	242.00	1366	355.00	152
91.00	1388	166.00	1375	243.00	1287	365.00	5245
92.00	1550	167.00	10546	244.00	19952	366.00	653
93.00	10129	168.00	4441	245.00	2596	370.00	70
94.00	705	169.00	739	246.00	3797	371.00	202
95.00	189	170.00	245	247.00	784	372.00	1775
96.00	478	171.00	397	248.00	153	373.00	451
97.00	185	172.00	871	249.00	696	383.00	558
98.00	7864	173.00	1122	250.00	147	384.00	62
99.00	5741	174.00	1950	251.00	183	390.00	200
100.00	511	175.00	3761	252.00	220	391.00	83
101.00	3864	176.00	1080	253.00	448	392.00	62
102.00	186	177.00	1712	254.00	672	401.00	56
103.00	1159	178.00	554	255.00	94248	402.00	786
104.00	2188	179.00	7321	256.00	13638	403.00	1053
105.00	2068	180.00	4741	257.00	971	404.00	346
106.00	727	181.00	2356	258.00	5933	421.00	862
107.00	28824	182.00	322	259.00	870	422.00	835
108.00	4345	183.00	172	260.00	137	423.00	6425
109.00	644	184.00	516	261.00	153	424.00	1207
110.00	52784	185.00	3436	264.00	214	425.00	51
111.00	7830	186.00	25456	265.00	2398	441.00	19512
112.00	966	187.00	7025	266.00	469	442.00	131200
113.00	302	188.00	711	270.00	72	443.00	25136
115.00	50	189.00	1539	271.00	199	444.00	2181

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\01.D

Date : 23-AUG-2022 09:33

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 01.D

Spectrum: Avg. Scans 538-540 (5.47), Background Scan 533

Location of Maximum: 198.00

Number of points: 293

m/z	Y	m/z	Y	m/z	Y	m/z	Y
116.00	1474	190.00	266	272.00	257	445.00	58
117.00	24712	191.00	688	273.00	2833		
118.00	1761	192.00	2347	274.00	7258		
119.00	199	193.00	2642	275.00	40104		

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D Page 1
Report Date: 25-Aug-2022 16:19

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Lab Smp Id: 1 4DIOX-CCV Client Smp ID: 1 4DIOX-CCV
Inj Date : 23-AUG-2022 10:31
Operator : LG Inst ID: SV6.i
Smp Info : 1 4DIOX-0.08
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 25-Aug-2022 16:19 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	
* 20 1,4-Dichlorobenzene-d4	152	3.592	3.592	(1.000)	6003	0.10000		(aM)
* 45 Naphthalene-d8	136	4.705	4.705	(1.000)	15829	0.10000		(M)
$ 33 Nitrobenzene-d5	82	4.059	4.059	(0.863)	3958	0.08000	0.07501	(QM)
* 86 Acenaphthene-d10	164	6.376	6.376	(1.000)	7005	0.10000		(QM)
$ 69 2-Fluorobiphenyl	172	5.718	5.718	(0.897)	8702	0.08000	0.07981	(M)
* 126 Phenanthrene-d10	188	7.827	7.827	(1.000)	17339	0.10000		(M)
* 182 Chrysene-d12	240	10.657	10.657	(1.000)	7501	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.408	9.408	(0.883)	10691	0.08000	0.07581	(M)
* 198 Perylene-d12	264	12.724	12.724	(1.000)	5111	0.10000		
1 1,4-Dioxane	58	1.887	1.887	(0.525)	213	0.08000	0.08643	(aQM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01134053

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D

Date : 23-AUG-2022 10:31

Client ID: 1 4DIOX-CCV

Sample Info: 1 4DIOX-0.08

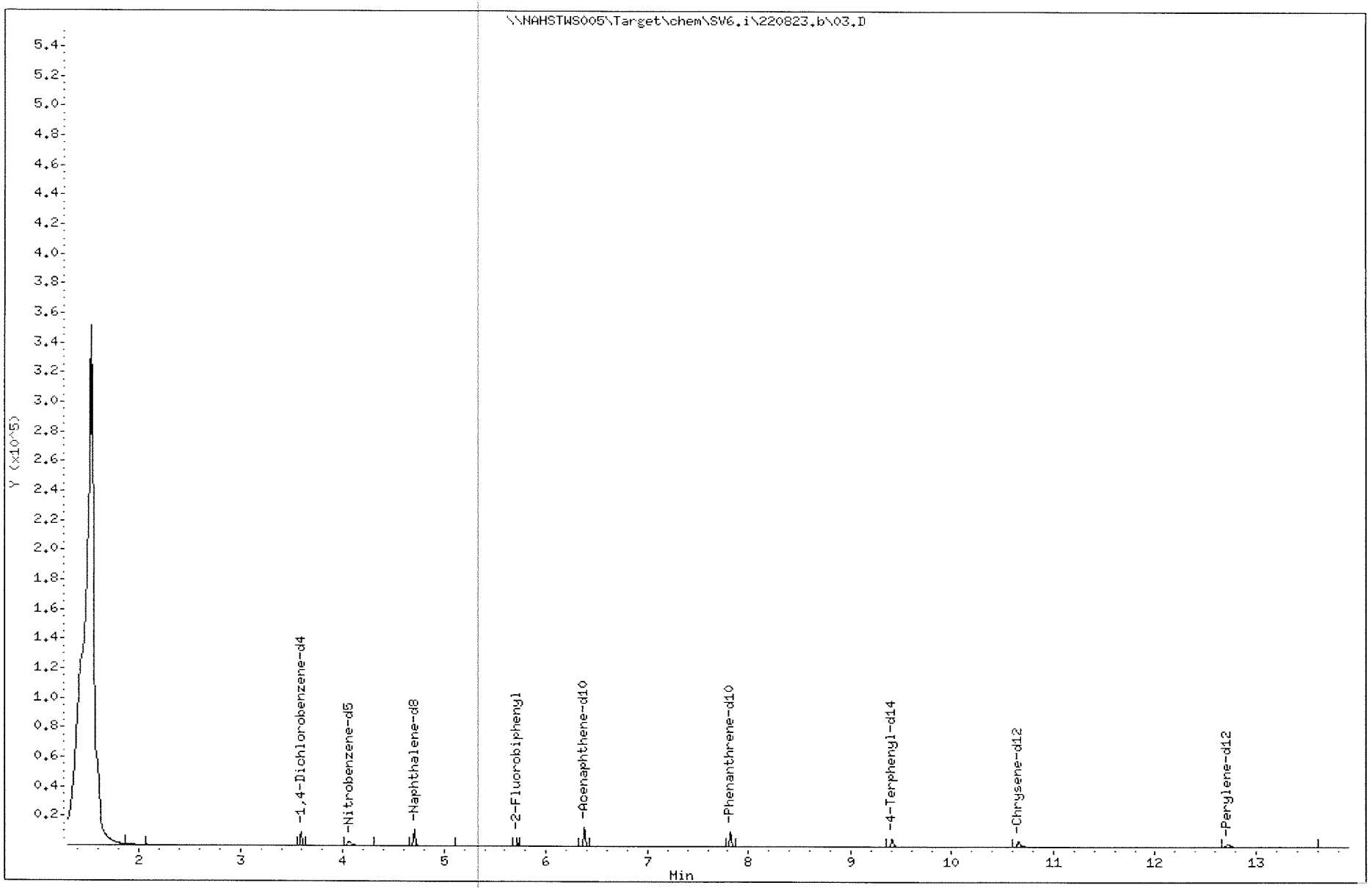
Purge Volume: 1000.0

Column phase: RTX-5SIL MS

Instrument: SV6.i

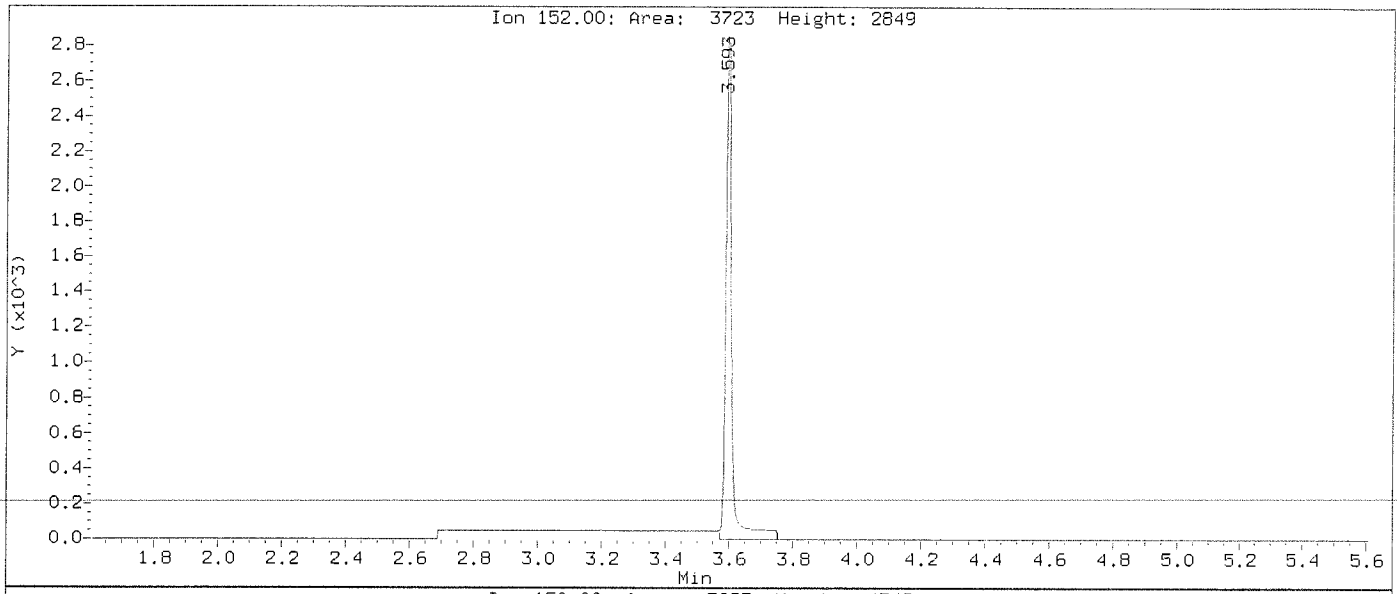
Operator: LG

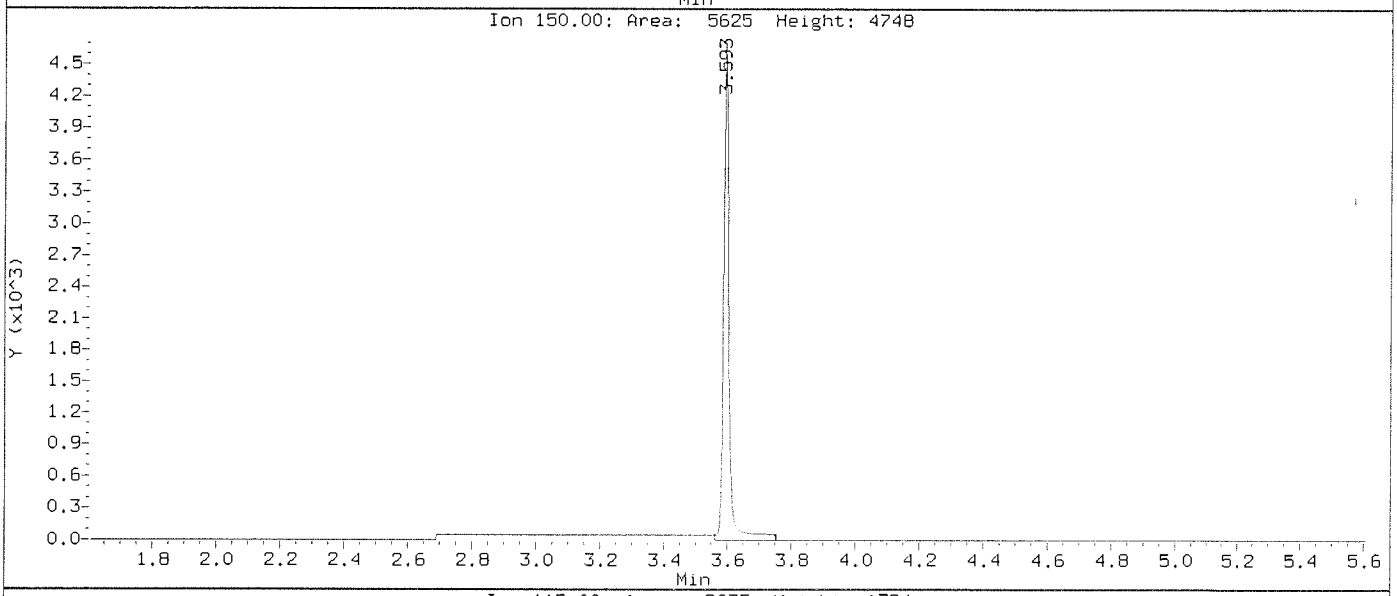
Column diameter: 0.28

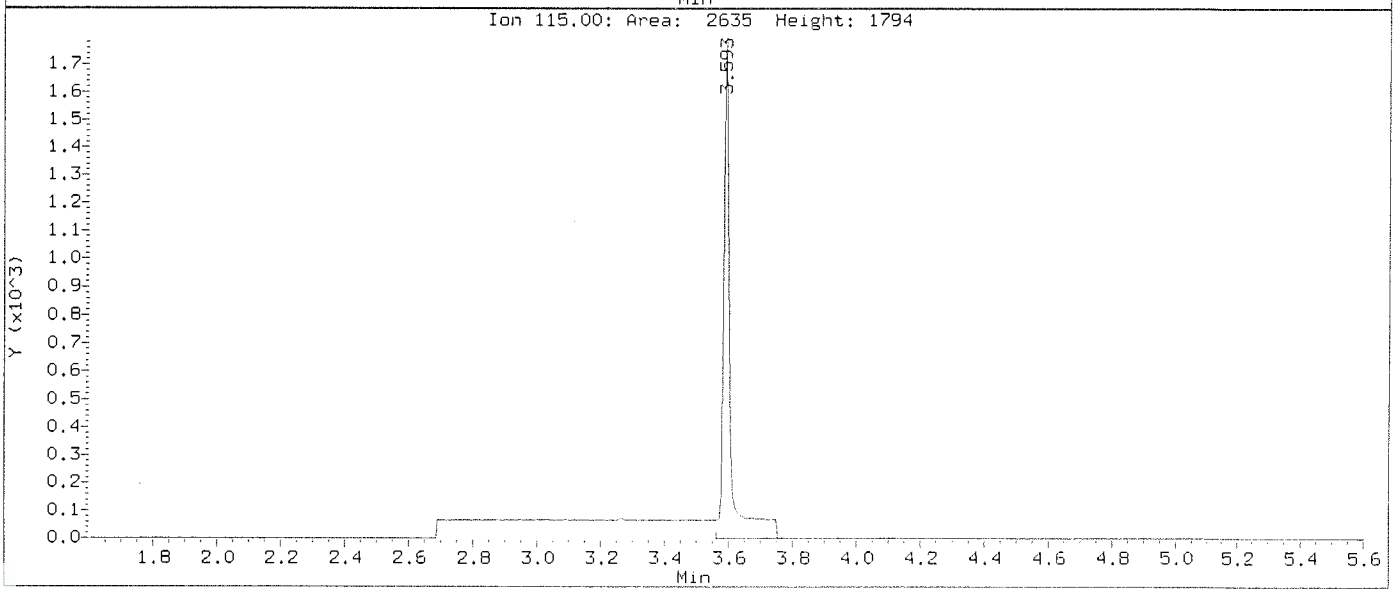


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\Before\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: 1,4-Dichlorobenzene-d4
CAS Number: 3855-82-1

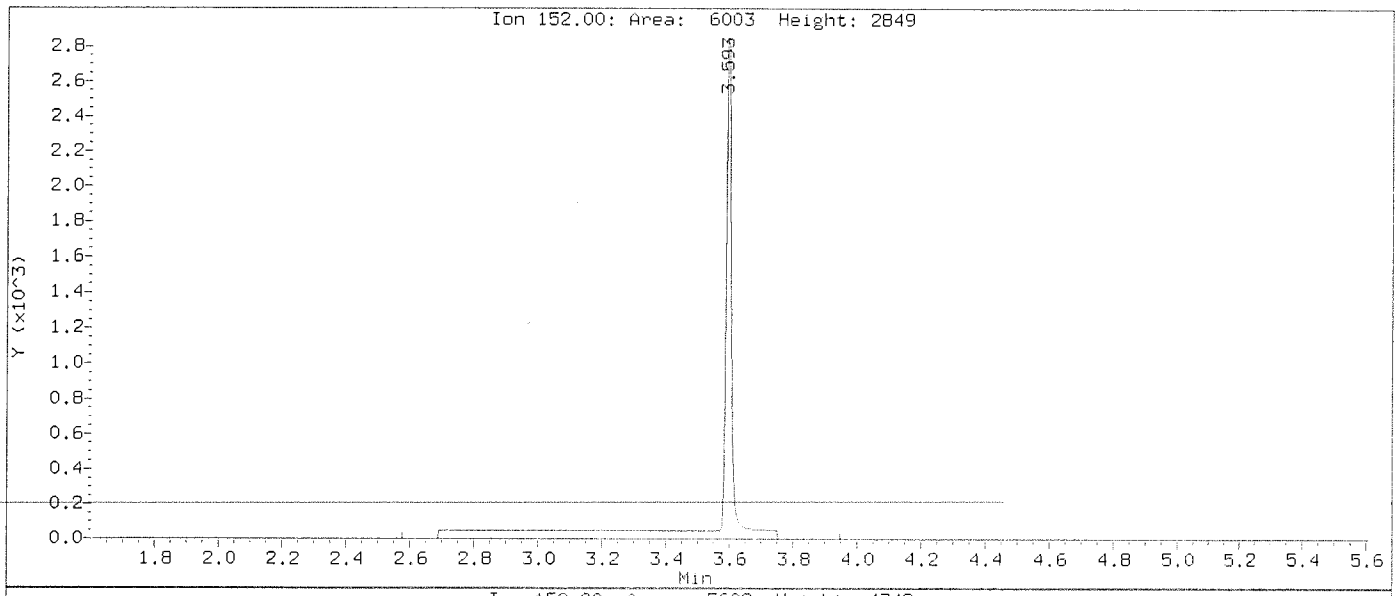


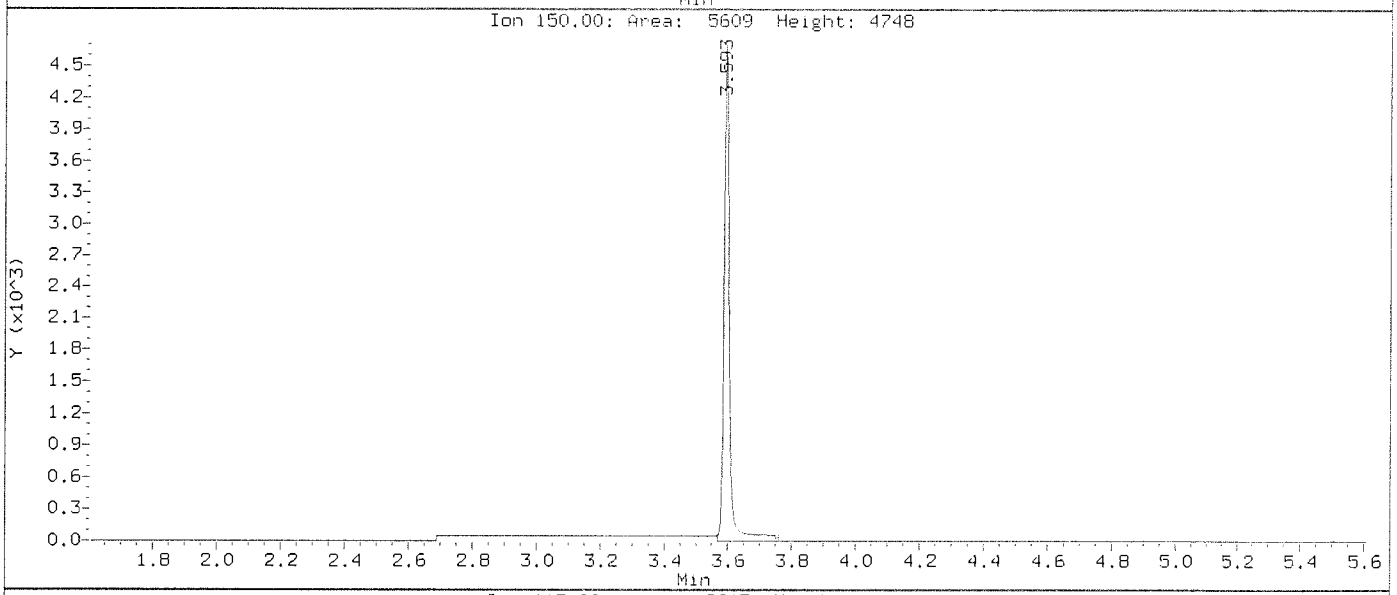


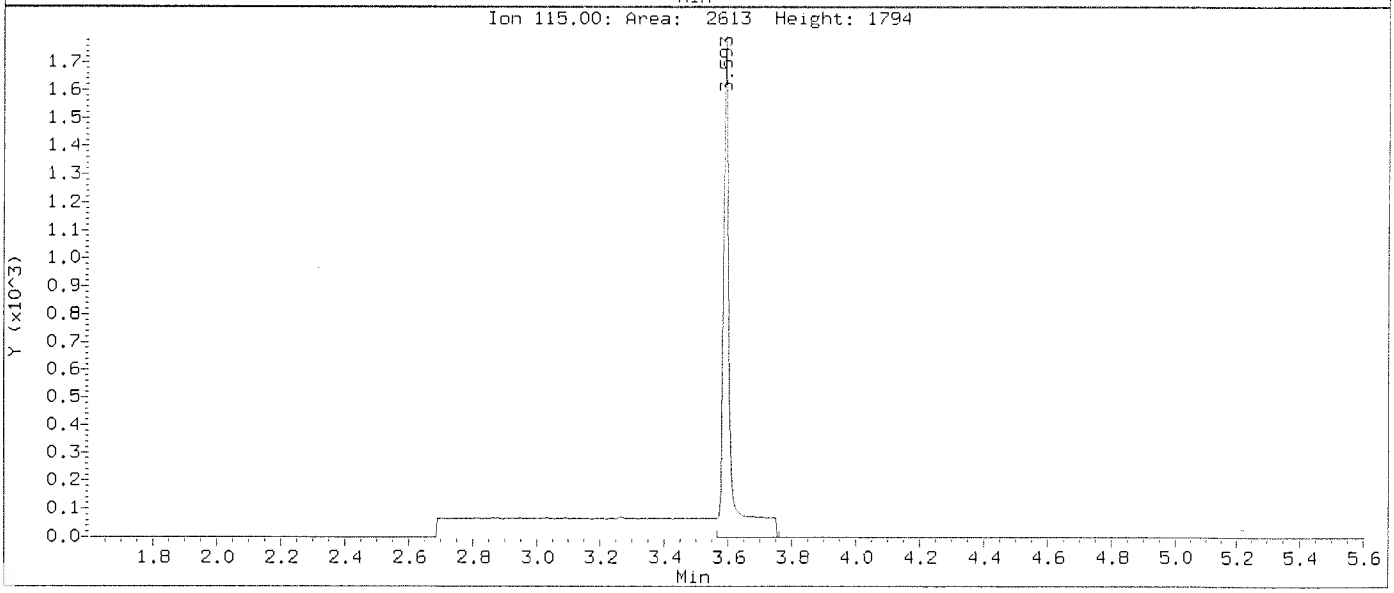


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: 1,4-Dichlorobenzene-d4
CAS Number: 3855-82-1

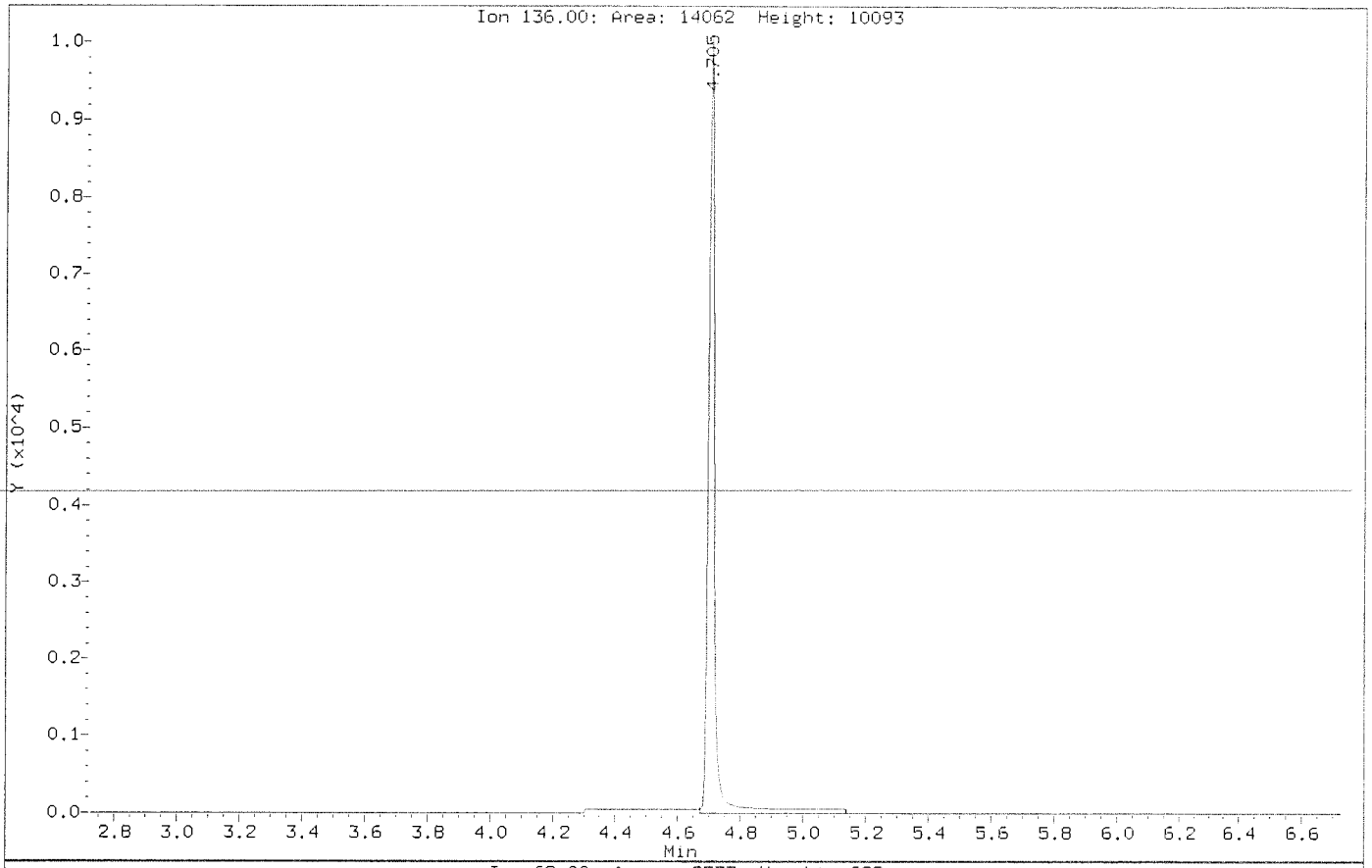


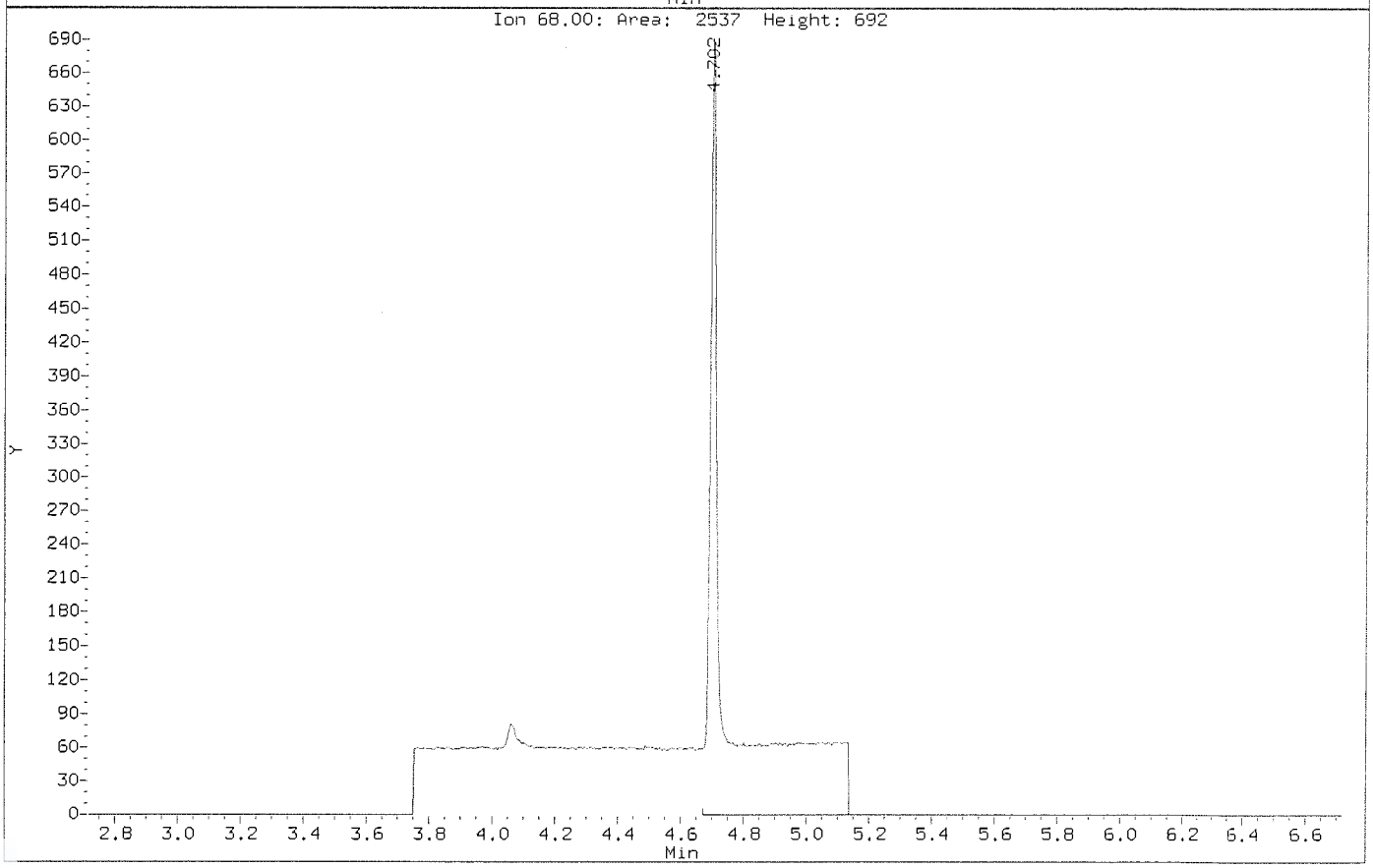




Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\Before\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

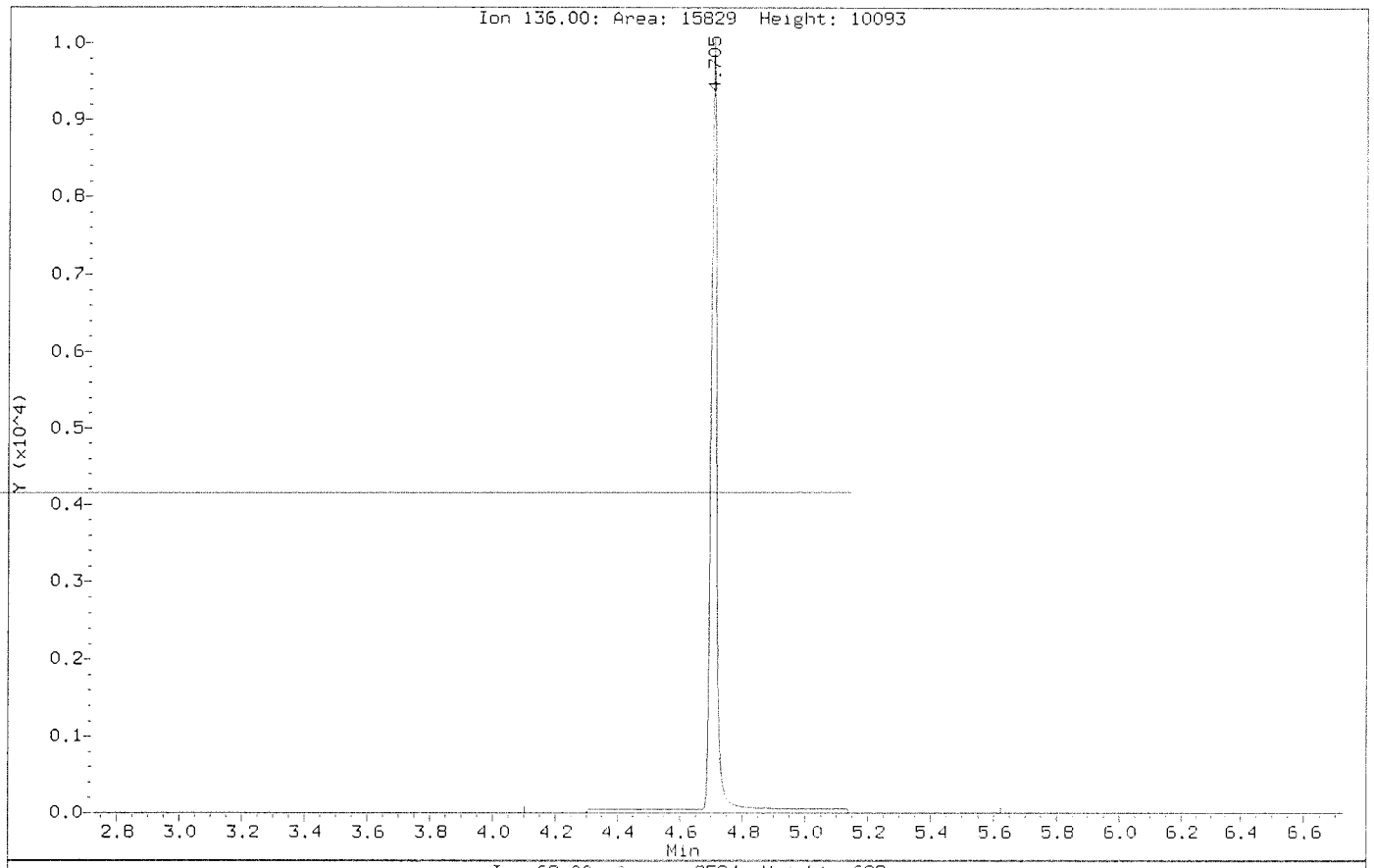
Compound: Naphthalene-d8
CAS Number: 1146-65-2

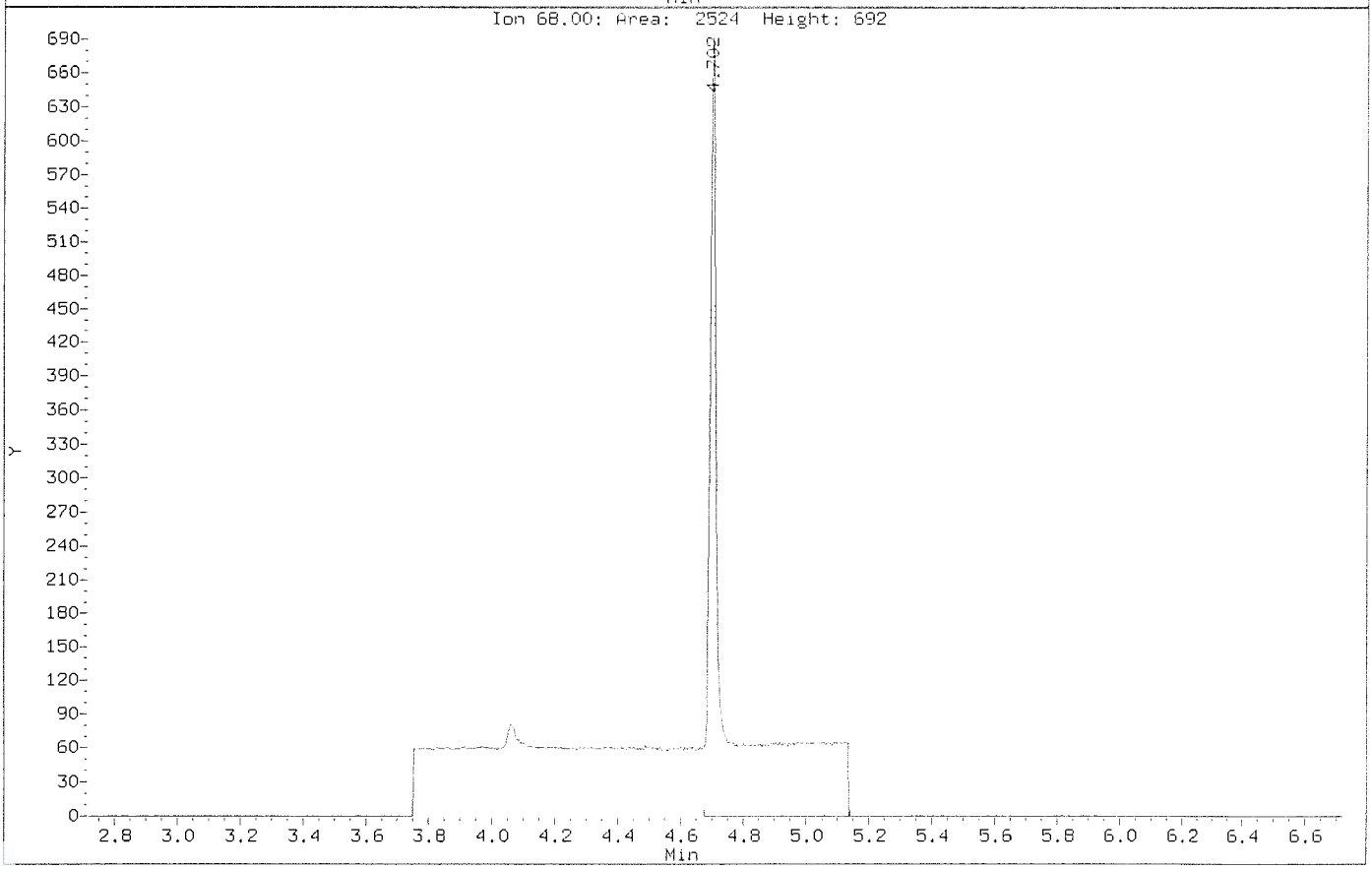




Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

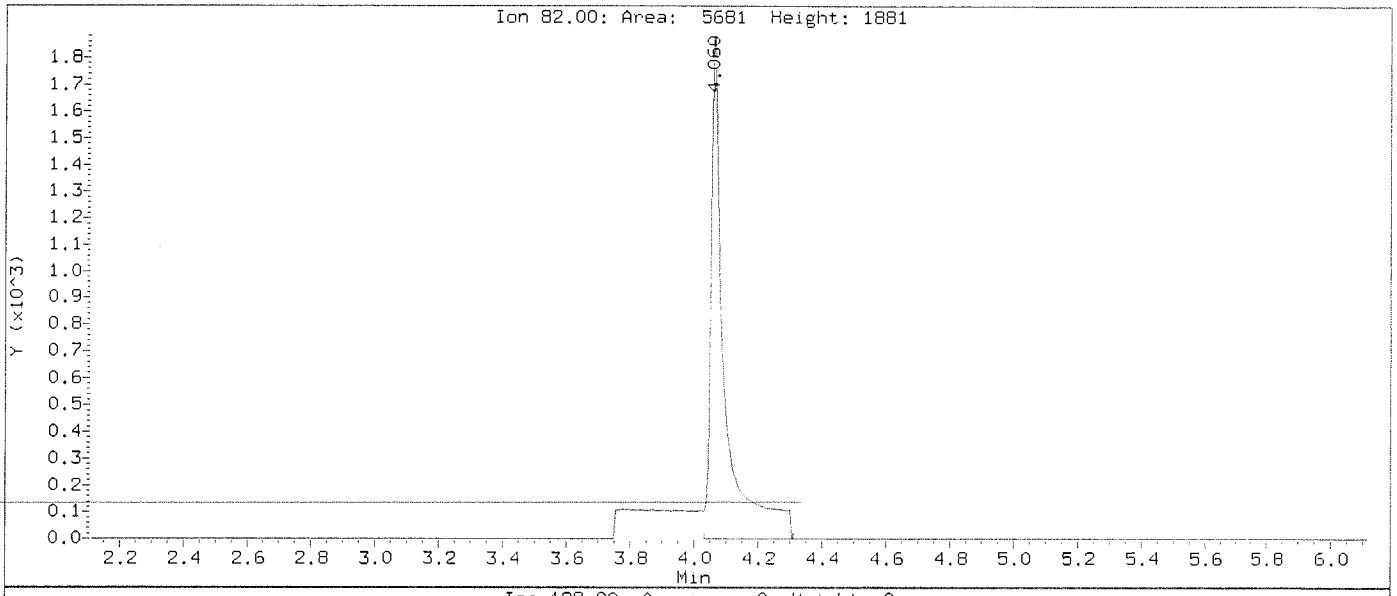
Compound: Naphthalene-d8
CAS Number: 1146-65-2

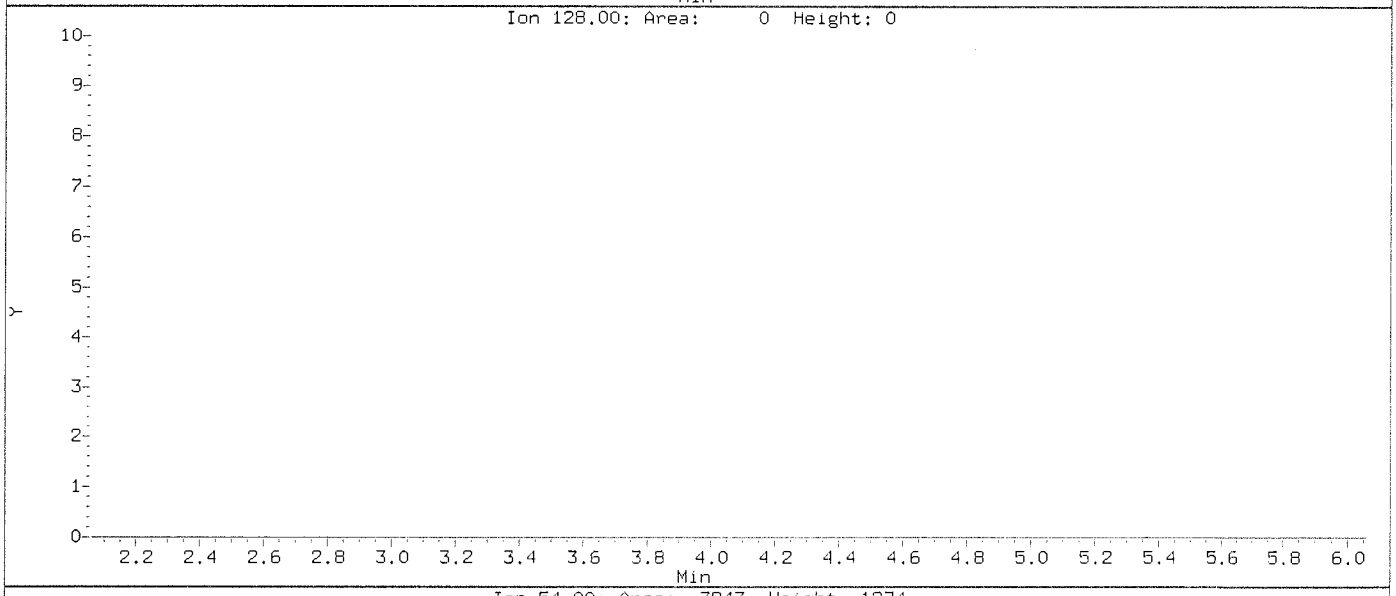


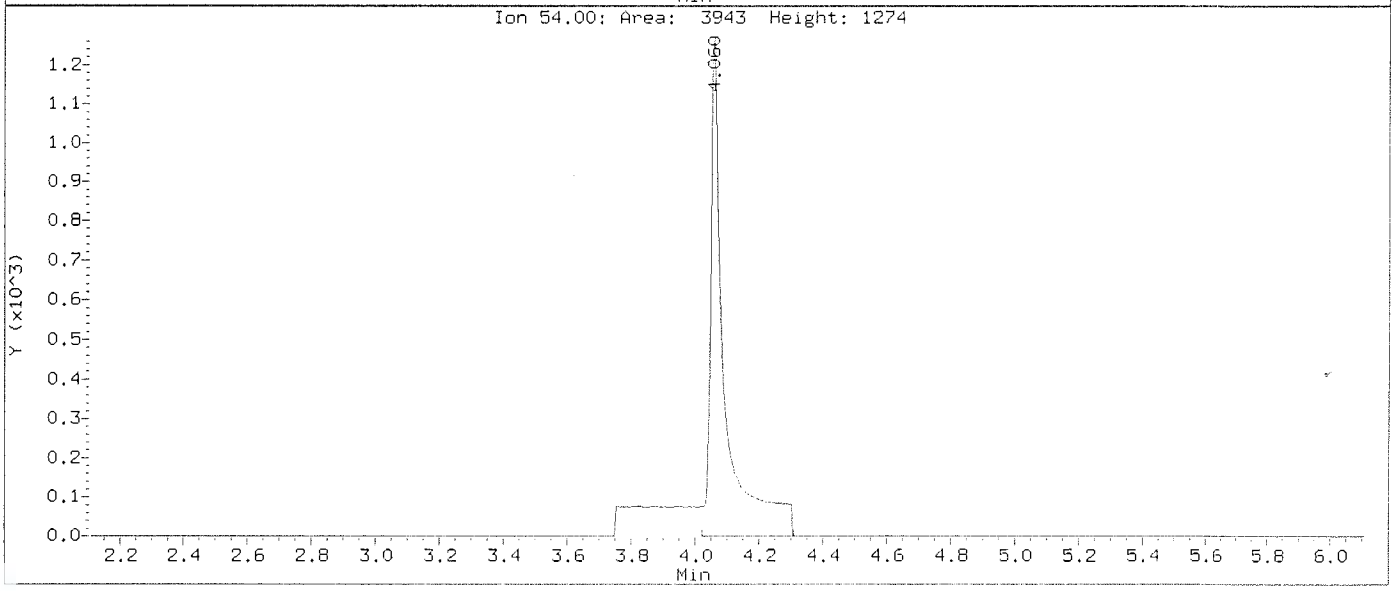


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\Before\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: Nitrobenzene-d5
CAS Number: 4165-60-0

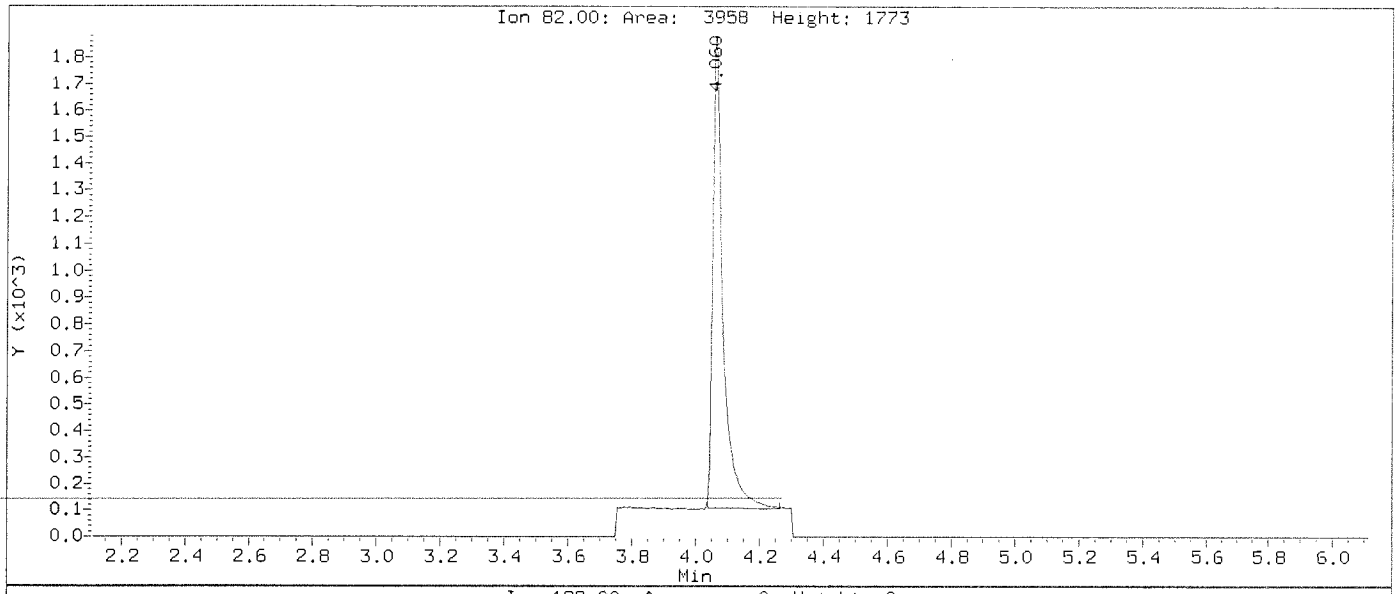


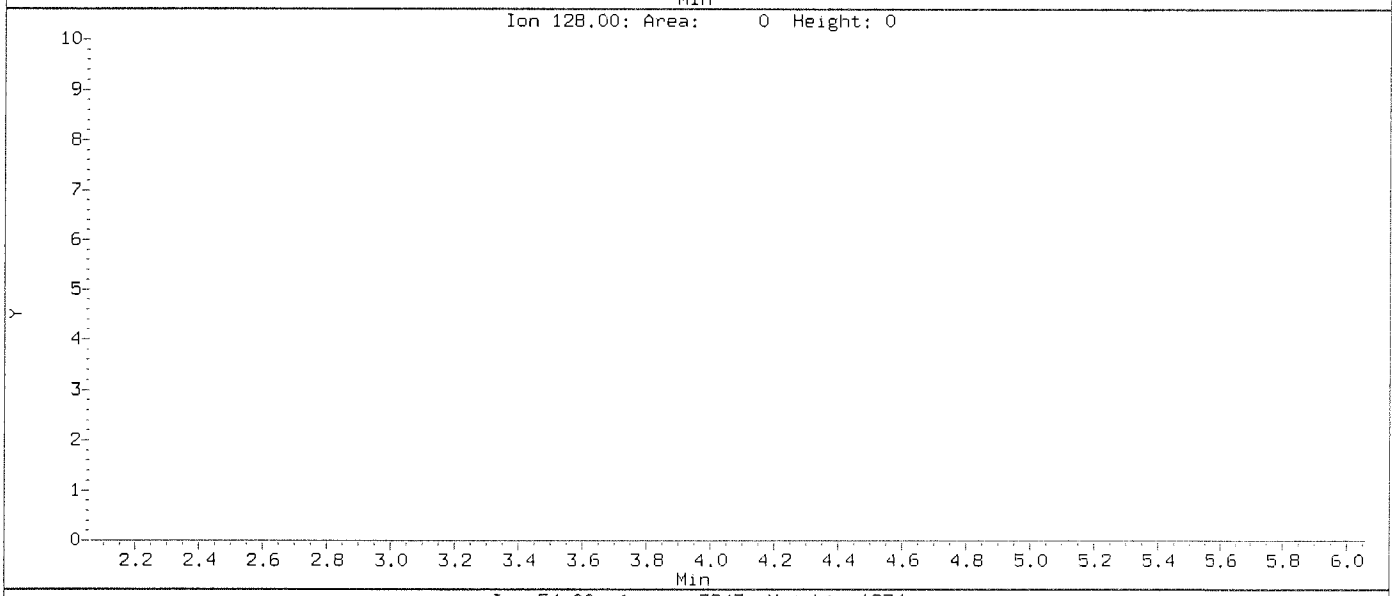


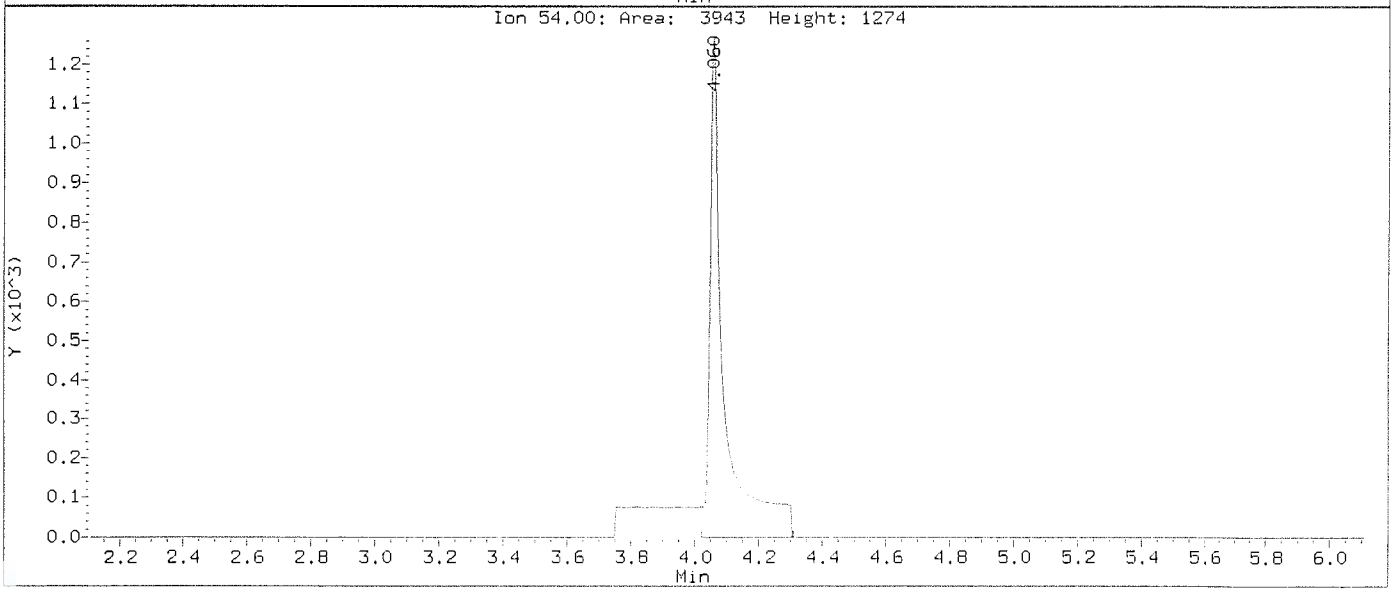


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: Nitrobenzene-d5
CAS Number: 4165-60-0

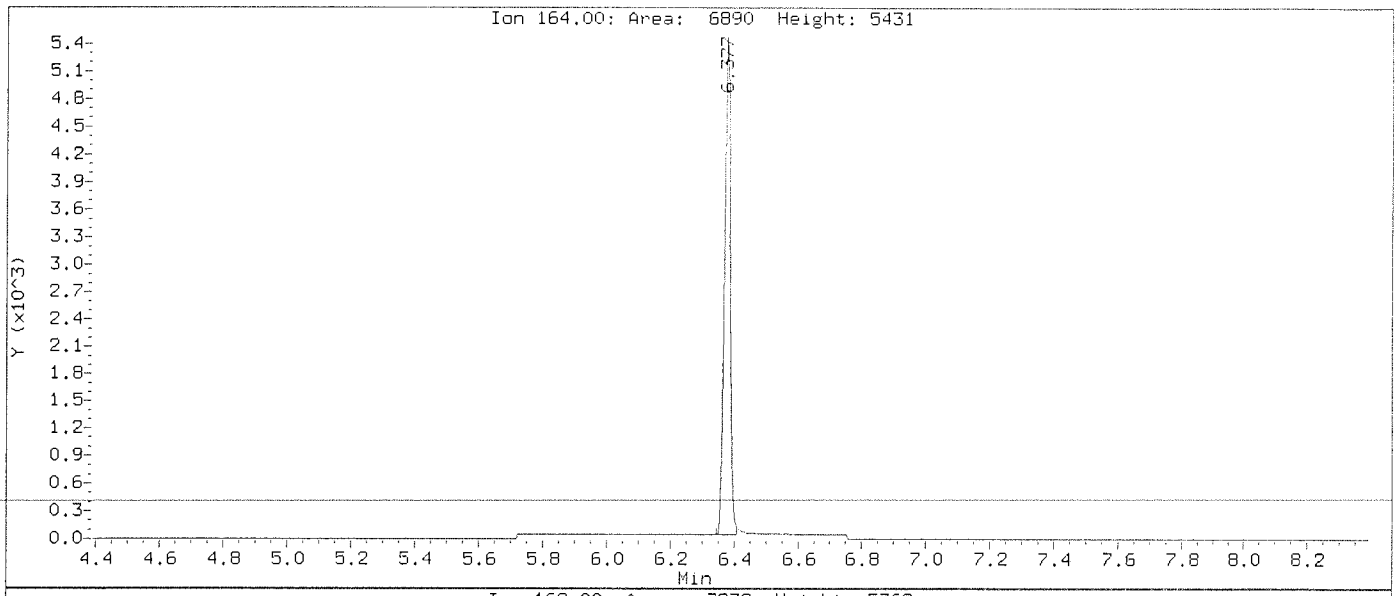


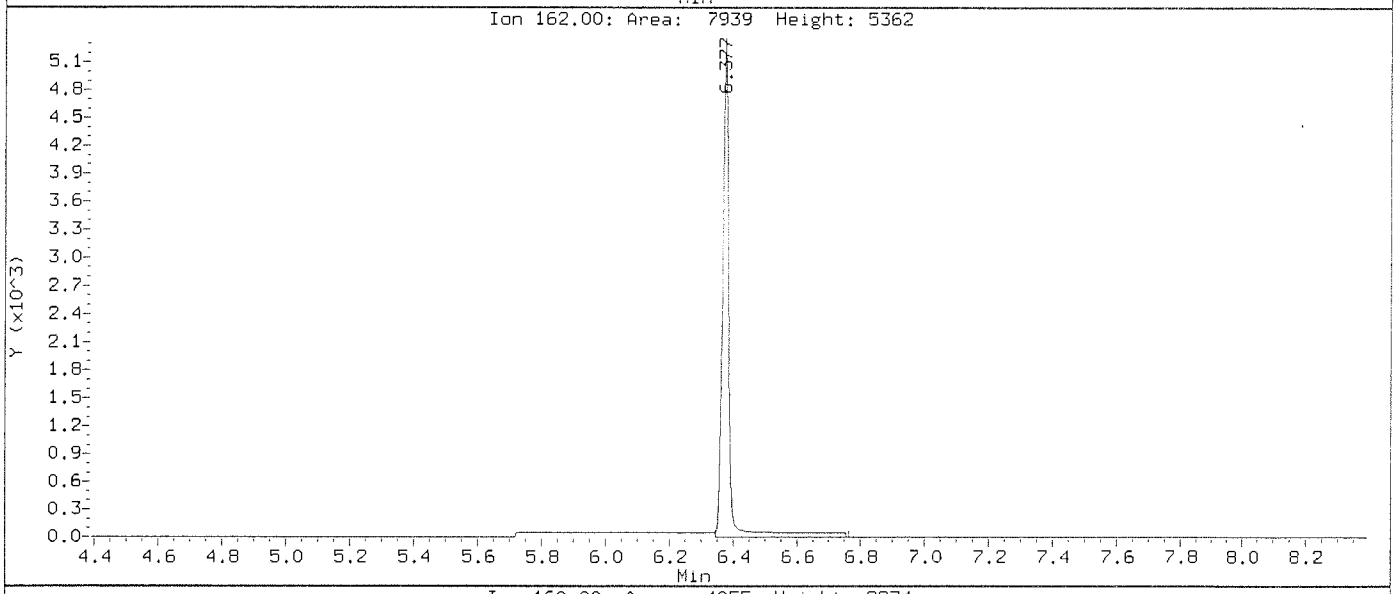


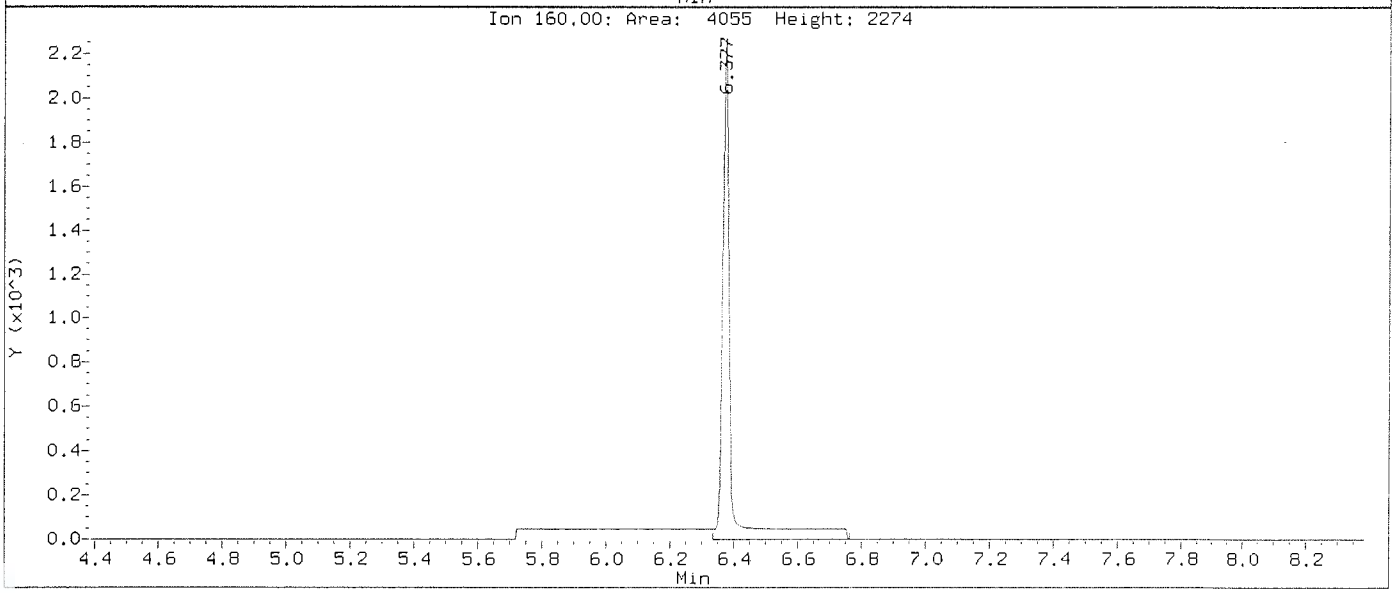


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\Before\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: Acenaphthene-d10
CAS Number: 15067-26-2

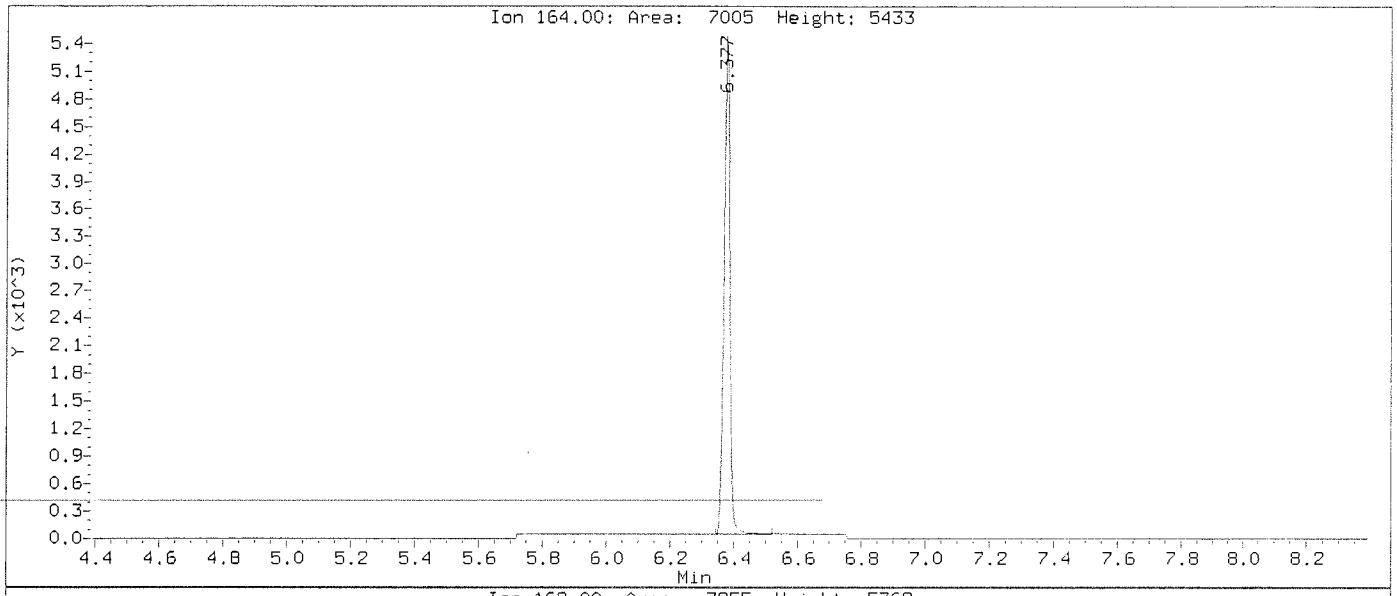


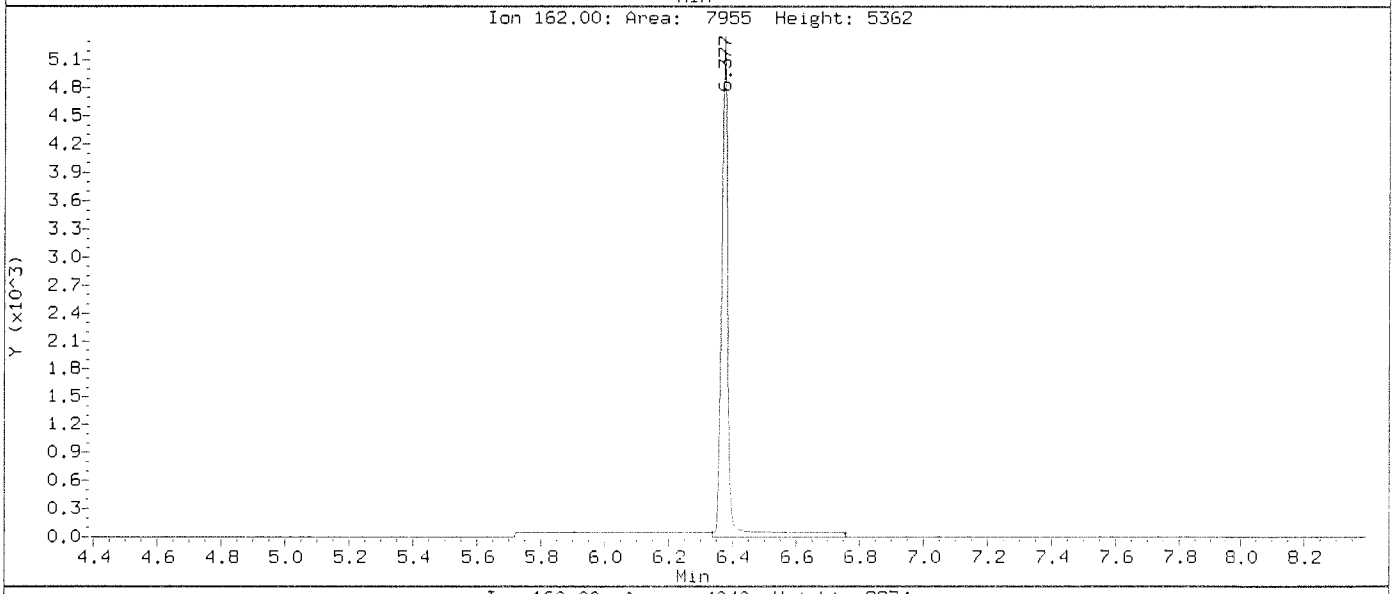


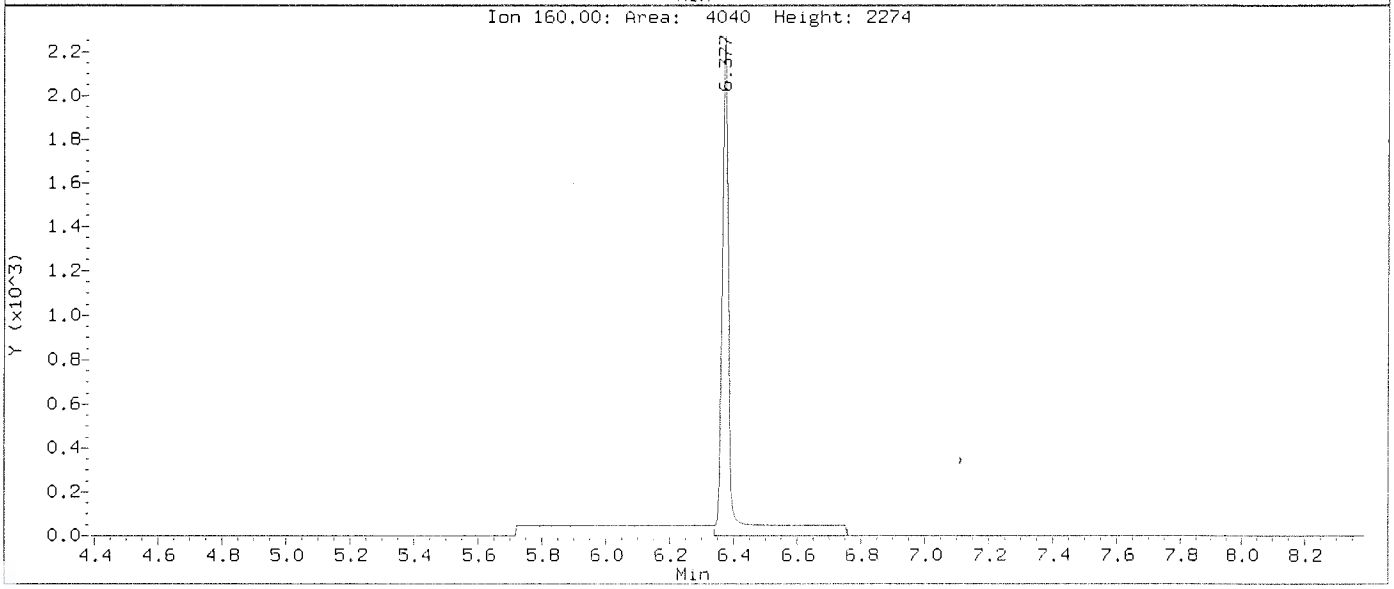


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: Acenaphthene-d10
CAS Number: 15067-26-2

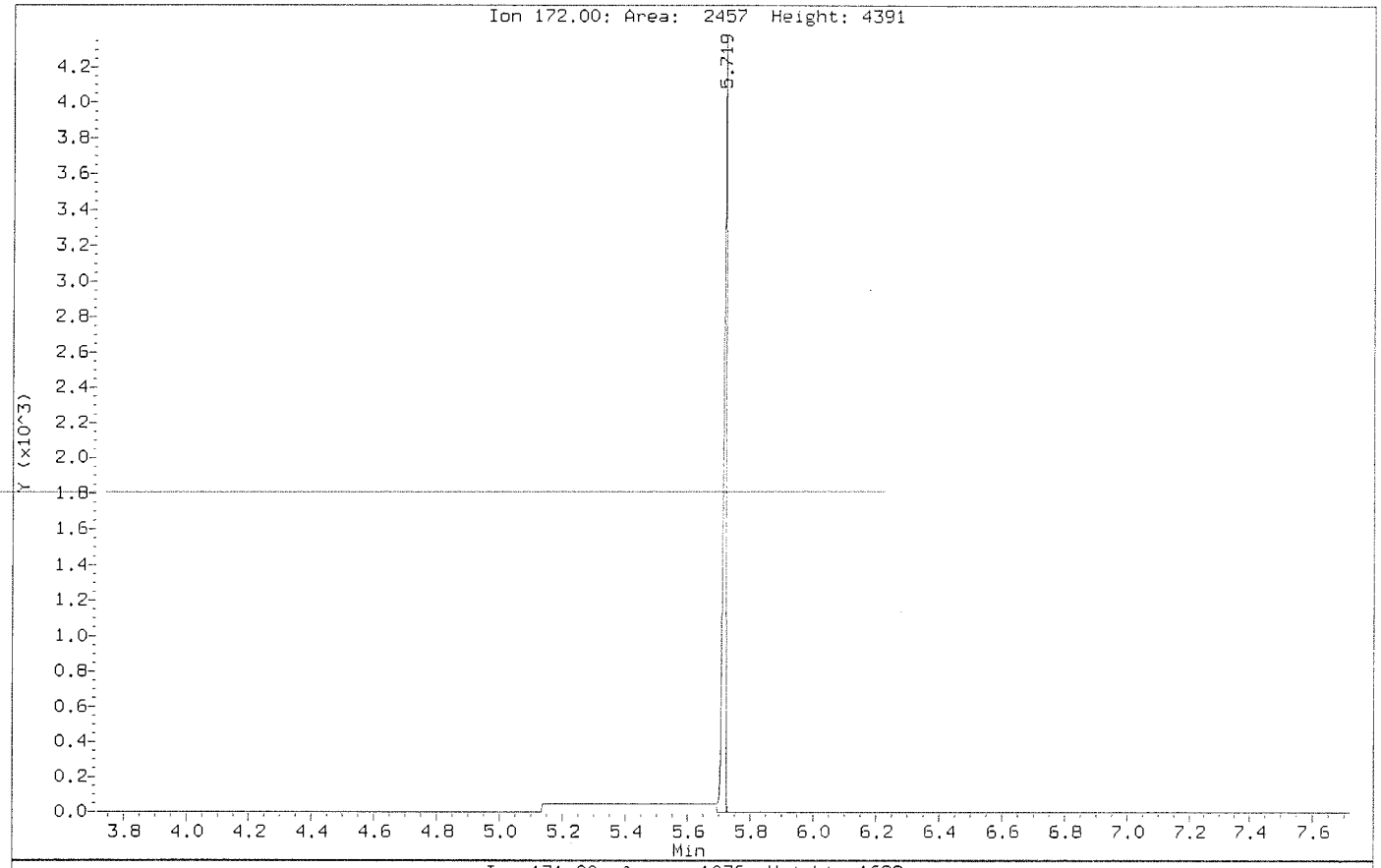


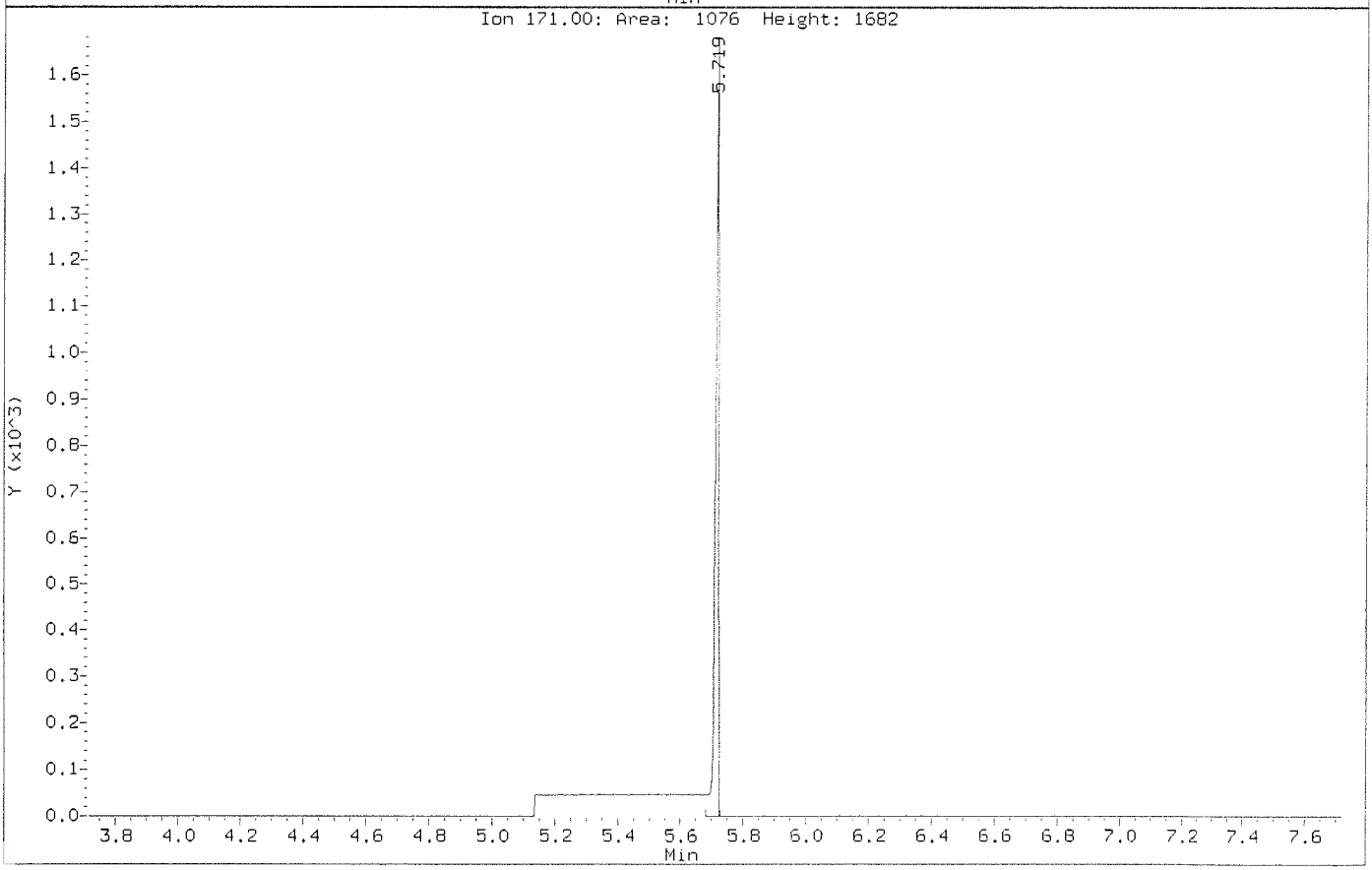




Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\Before\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

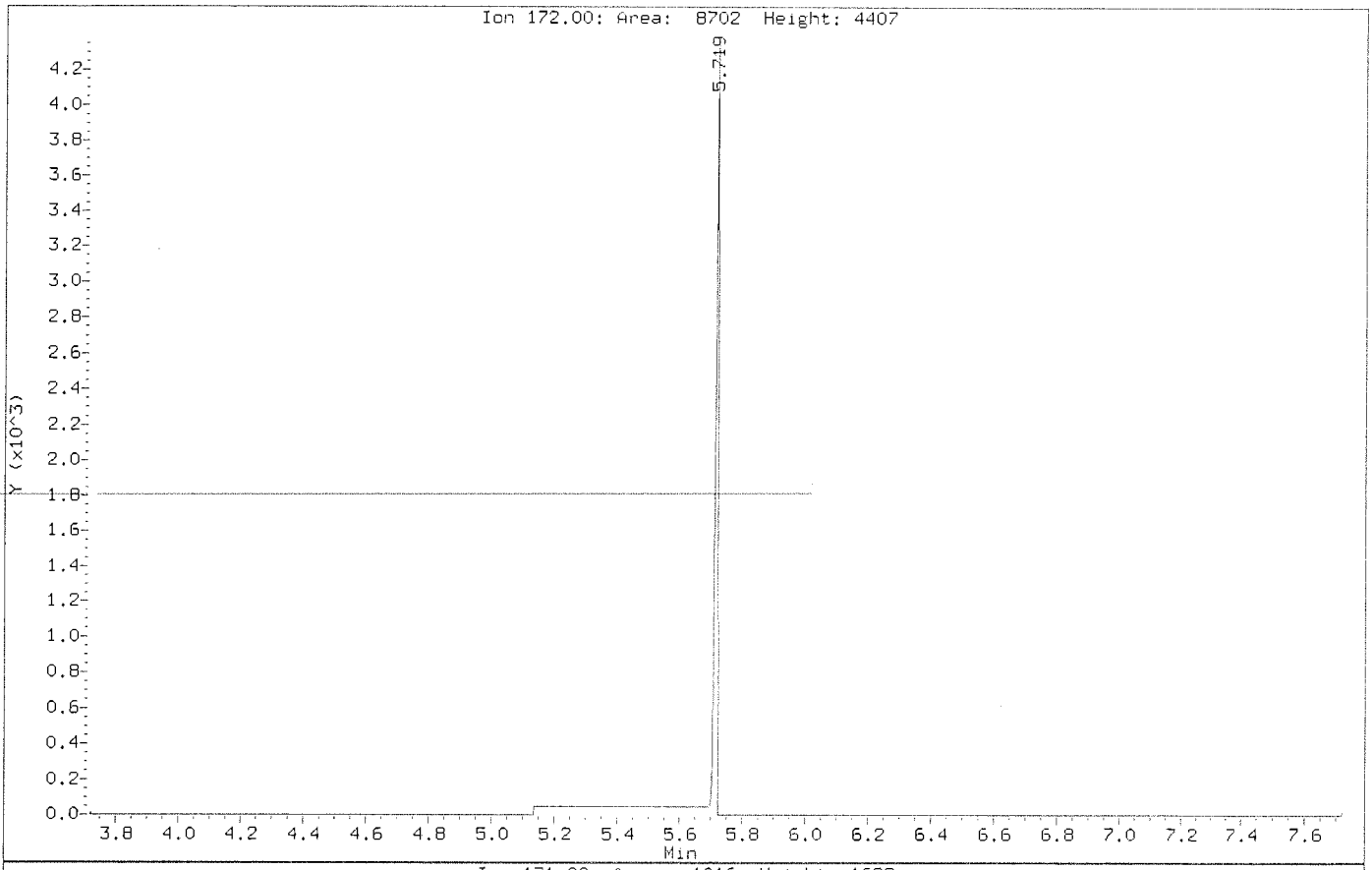
Compound: 2-Fluorobiphenyl
CAS Number: 321-60-8

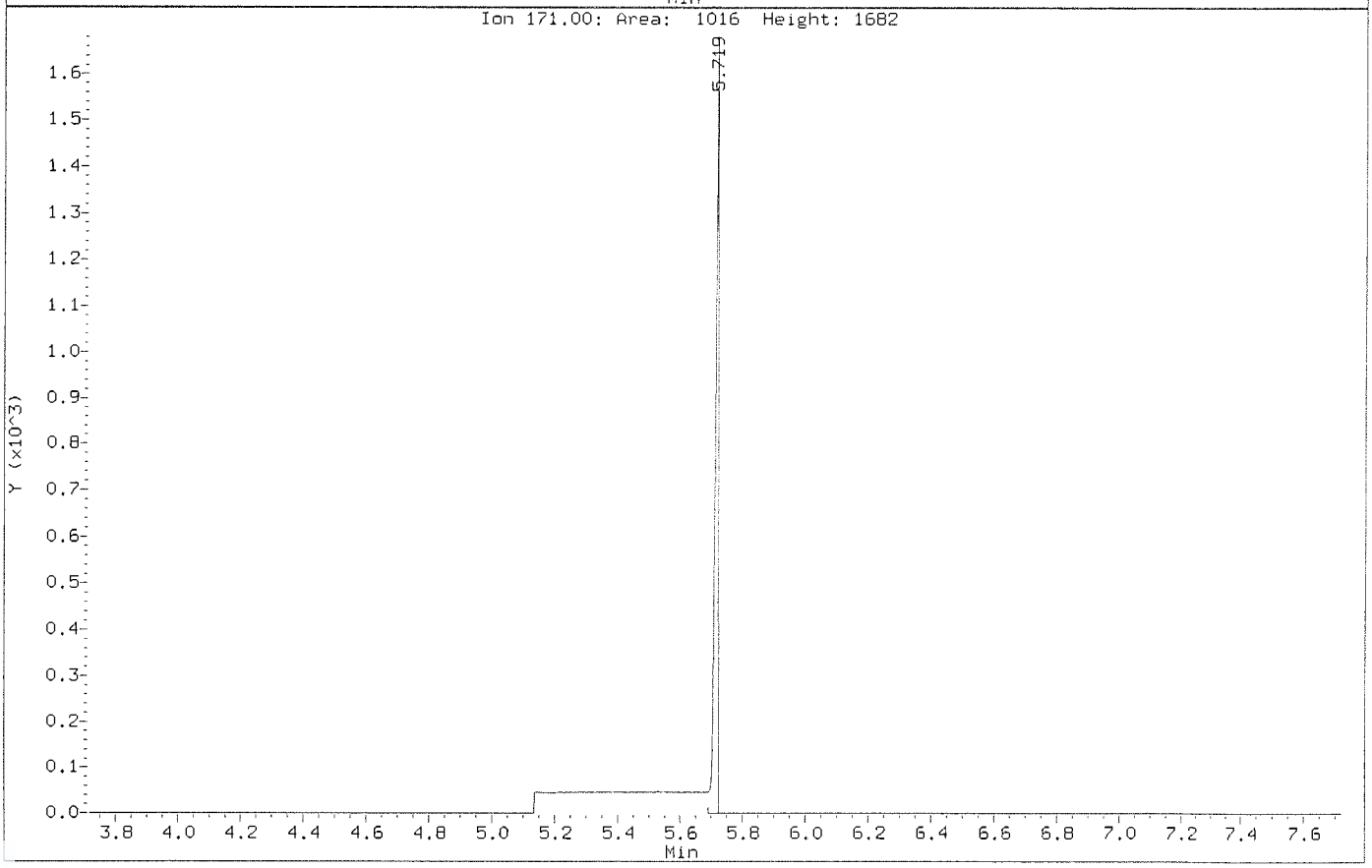




Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

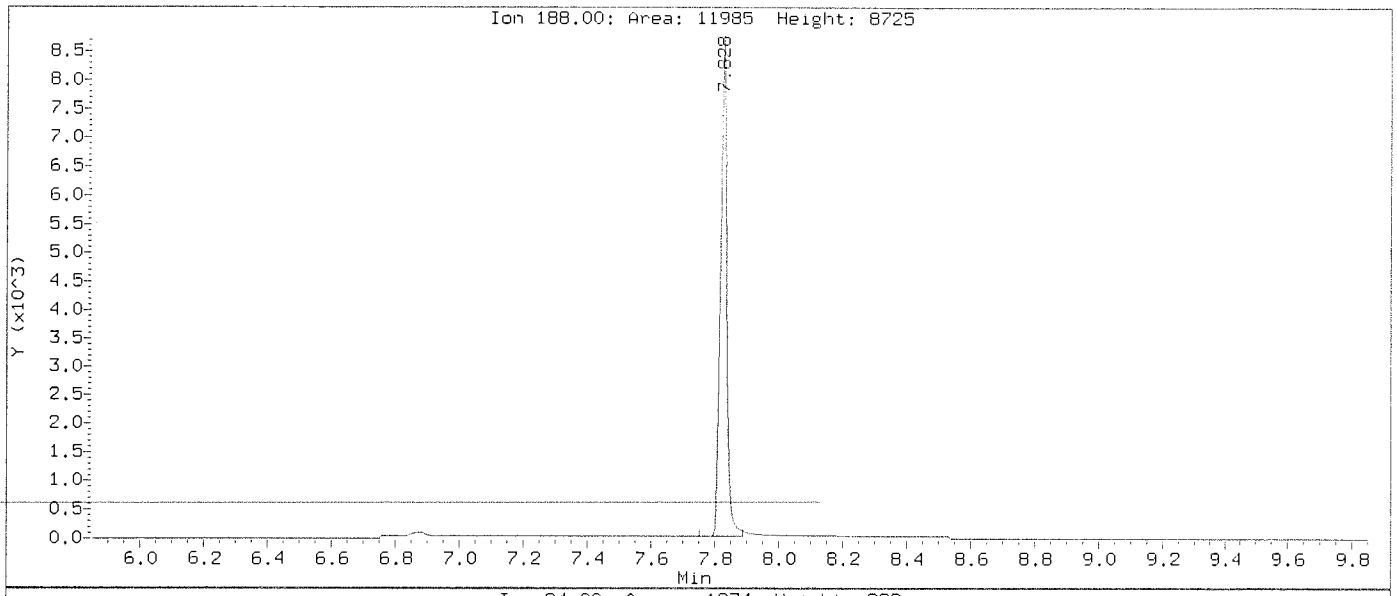
Compound: 2-Fluorobiphenyl
CAS Number: 321-60-8

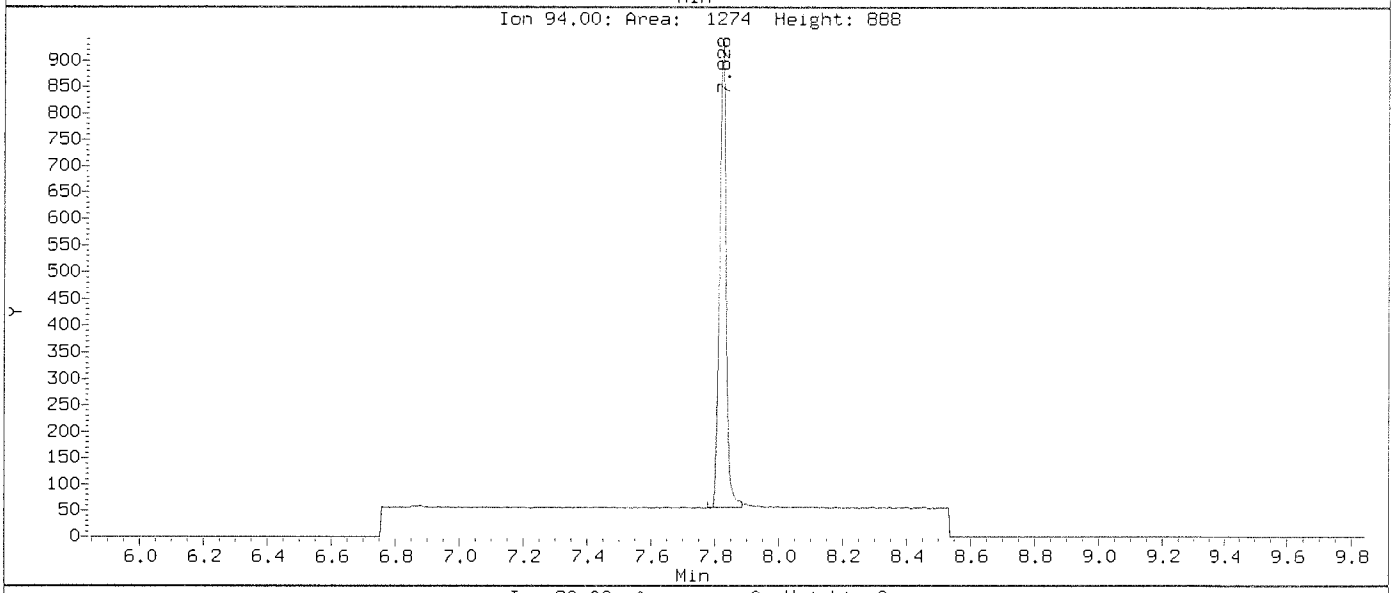


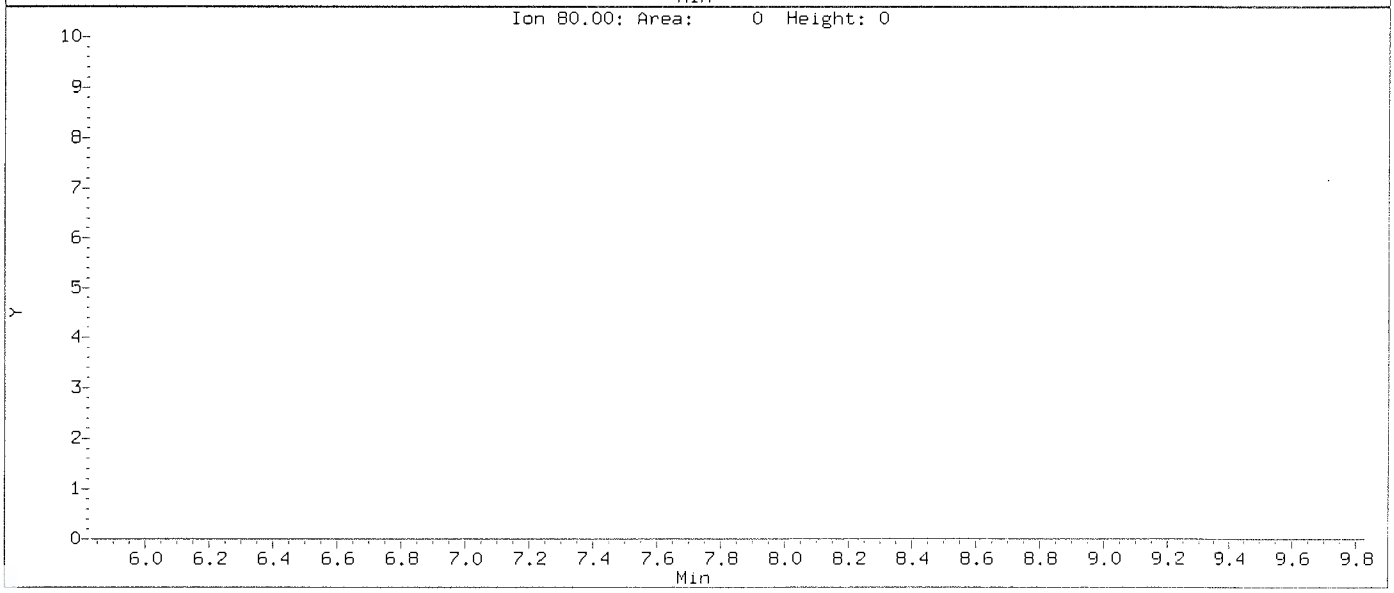


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\Before\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: Phenanthrene-d10
CAS Number: 1517-22-2

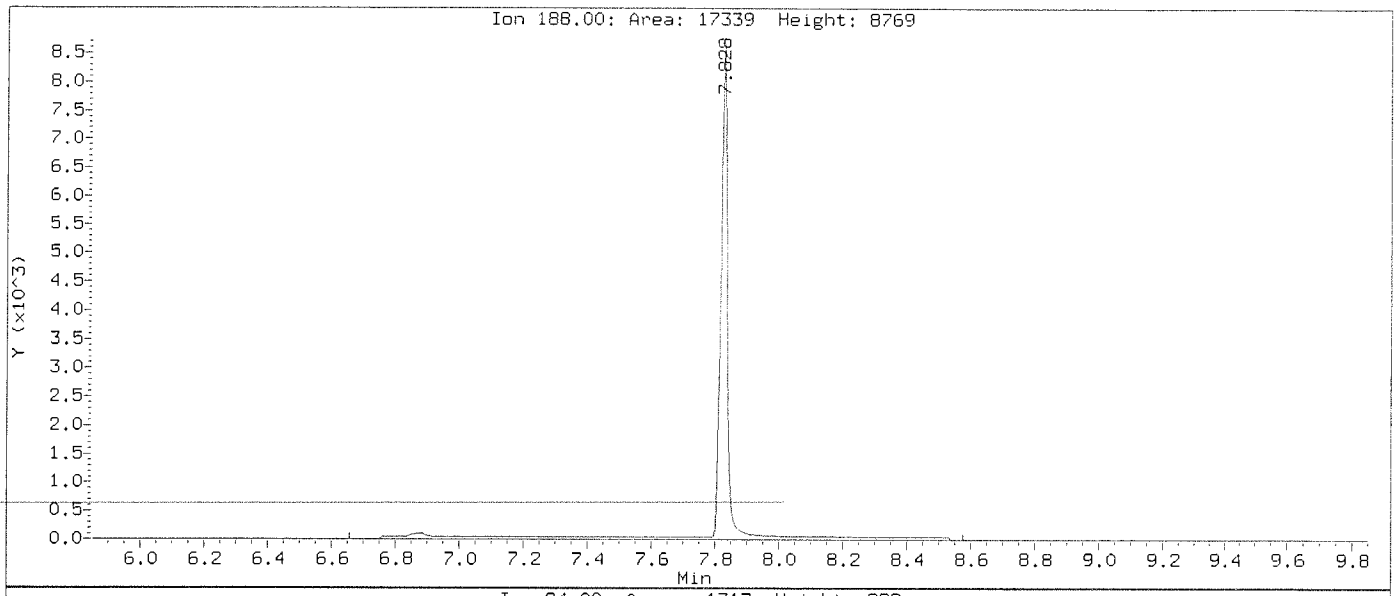


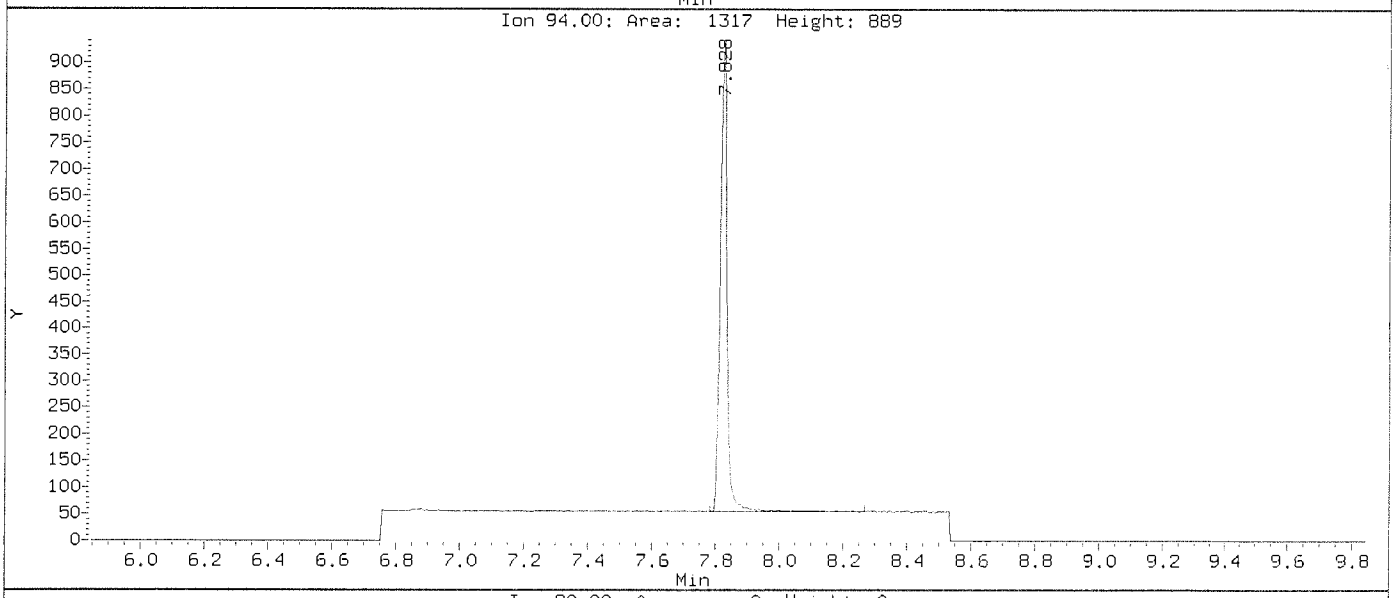


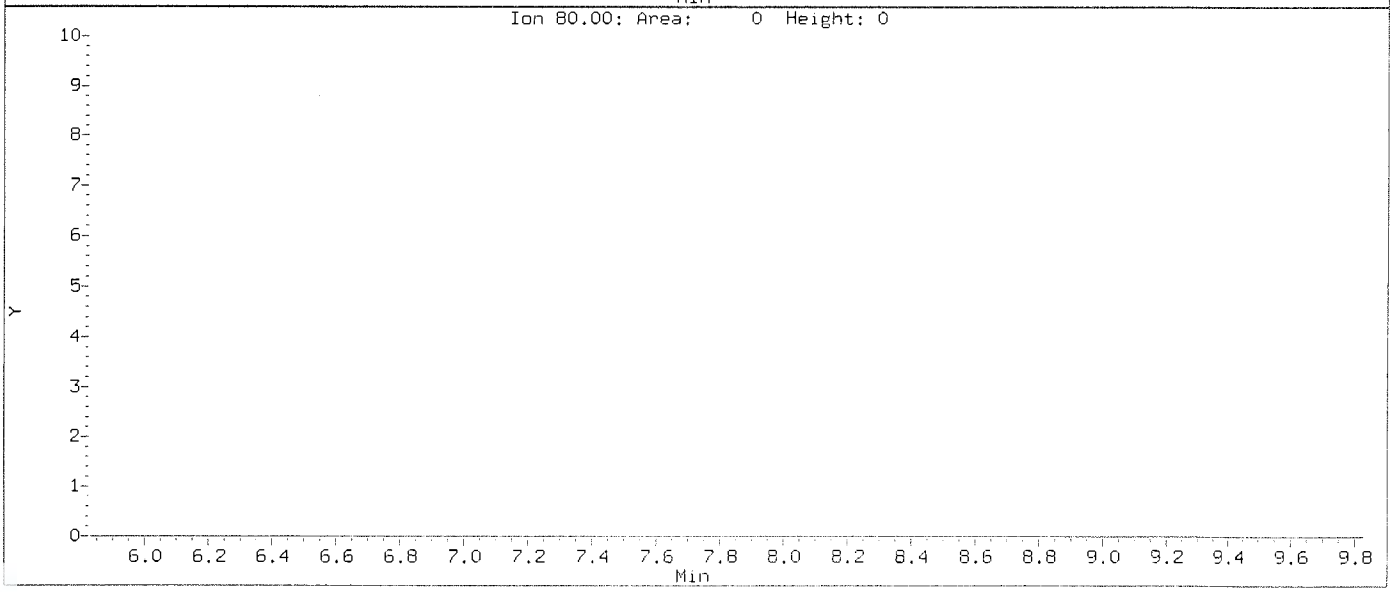


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: Phenanthrene-d10
CAS Number: 1517-22-2

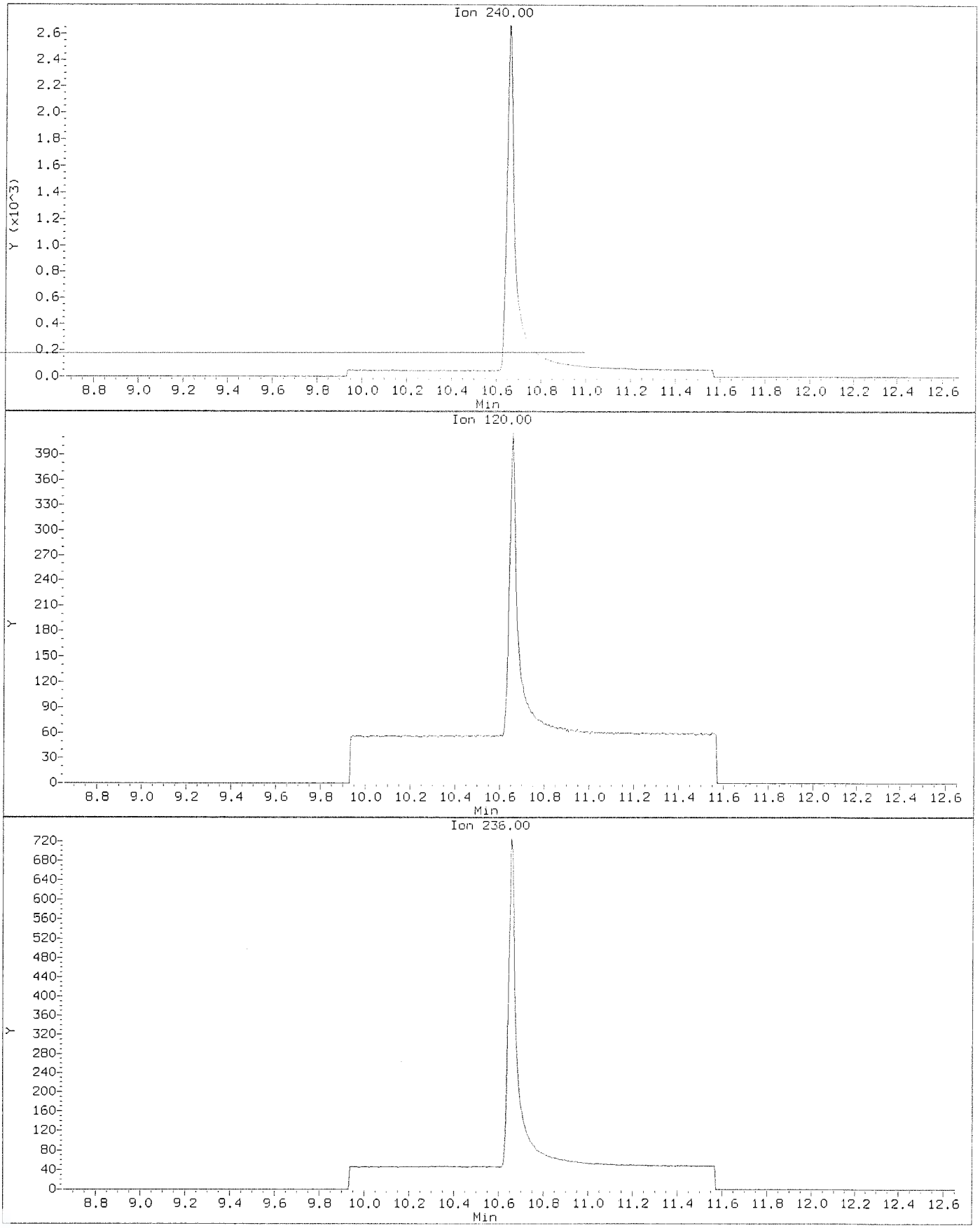






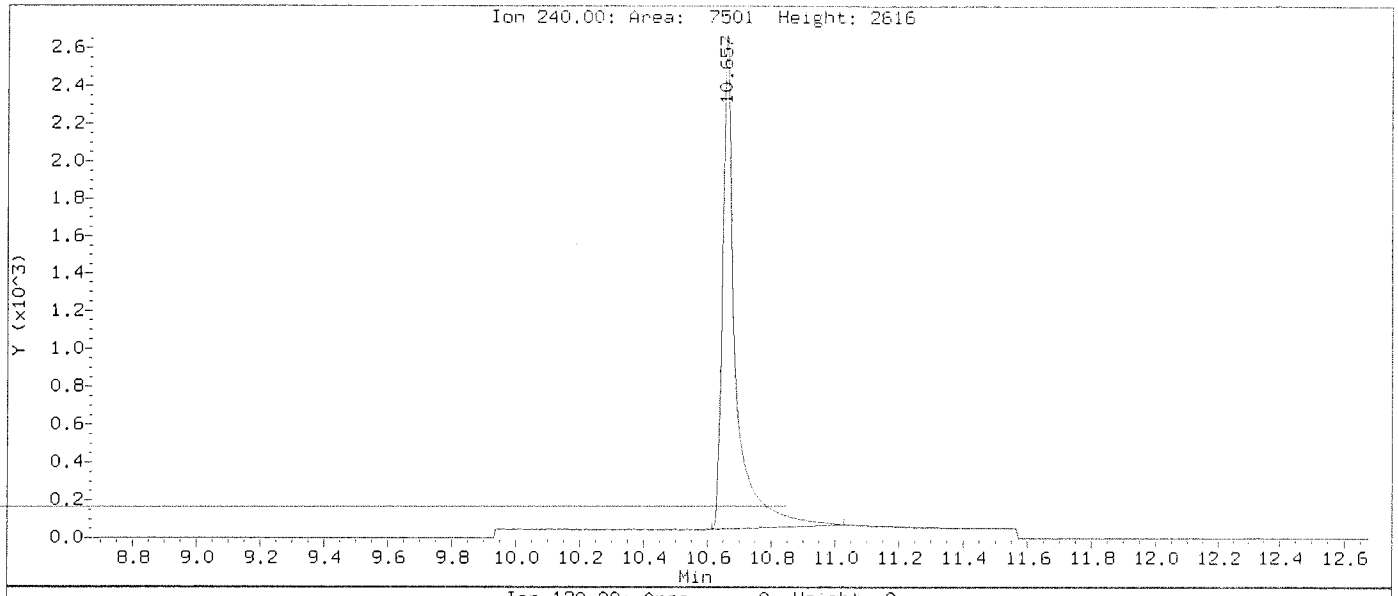
Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\Before\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

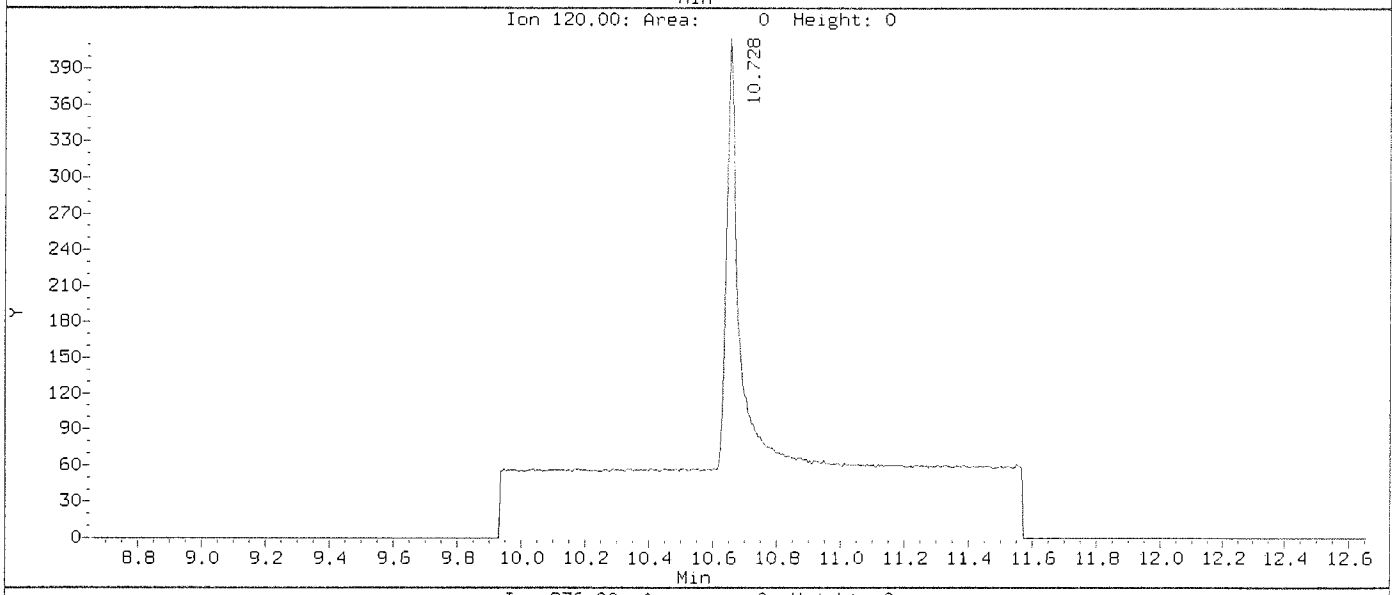
Compound: Chrysene-d12
CAS Number: 1719-03-5

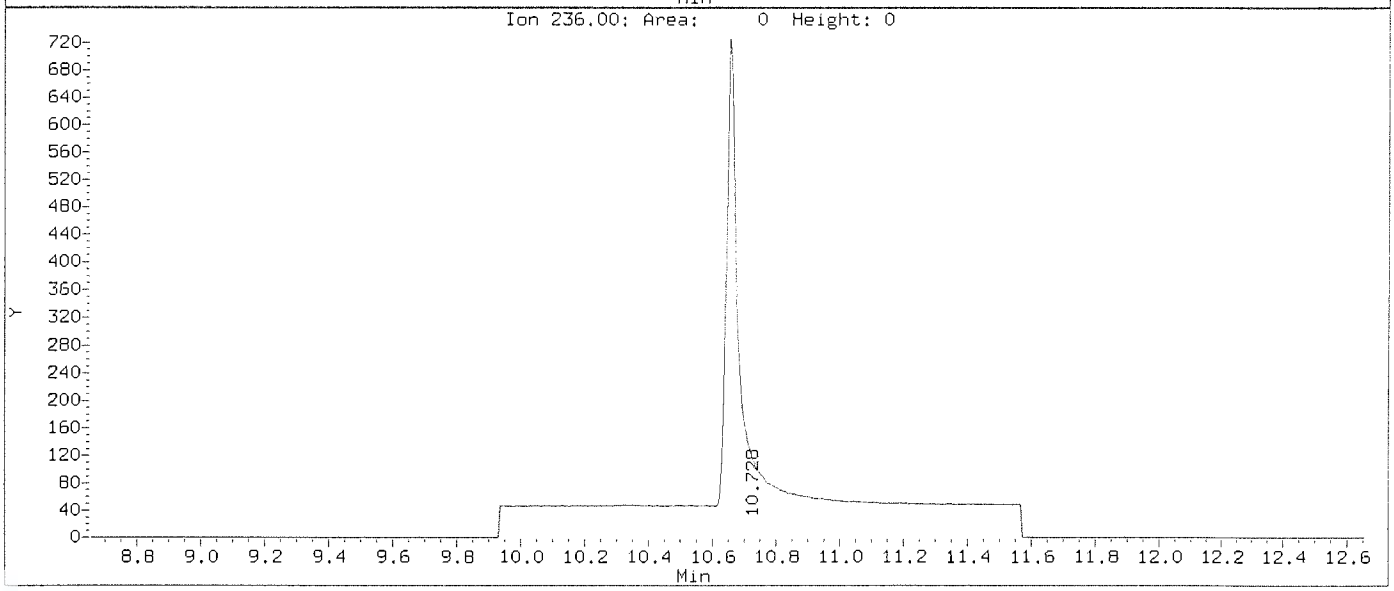


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: Chrysene-d12
CAS Number: 1719-03-5

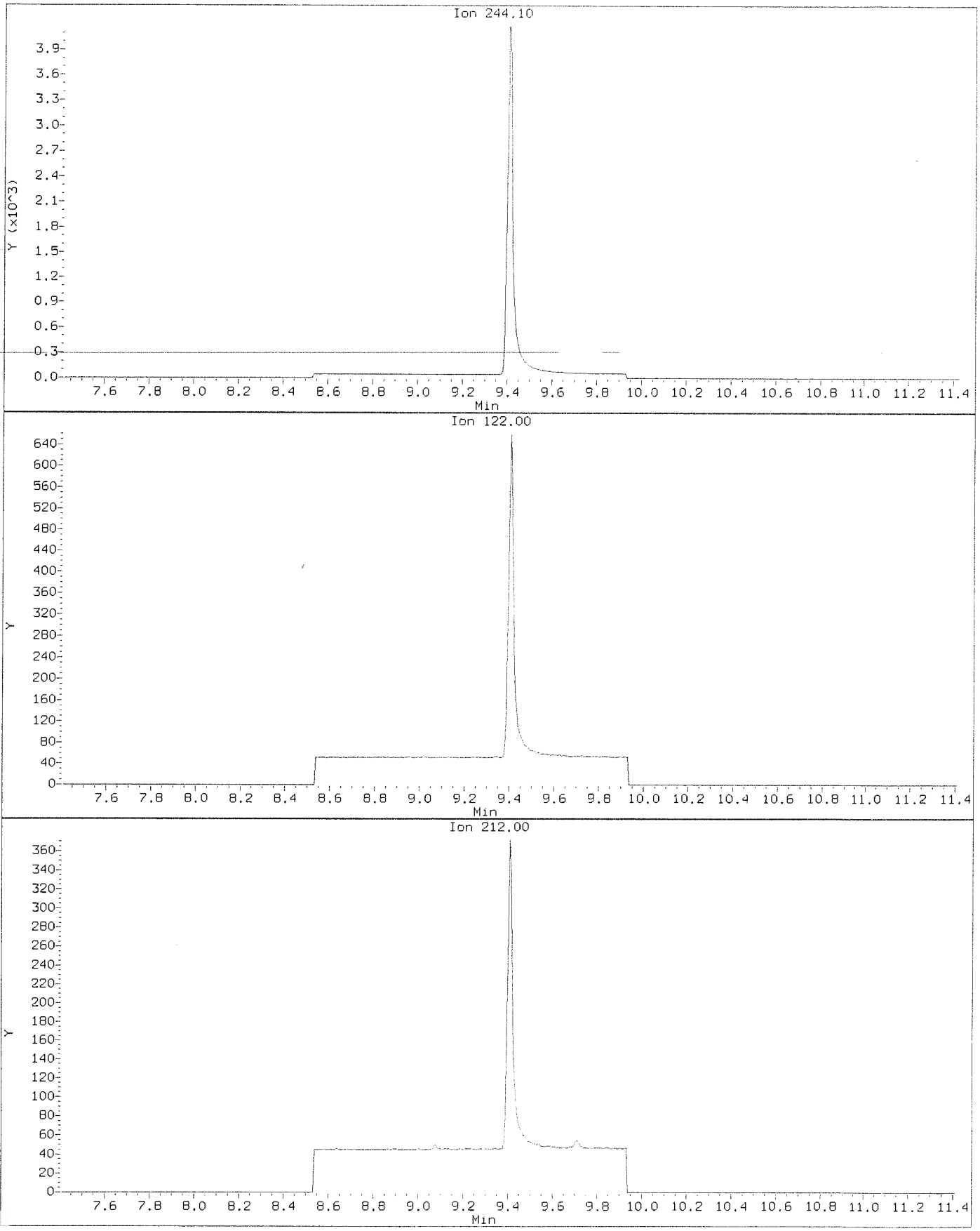






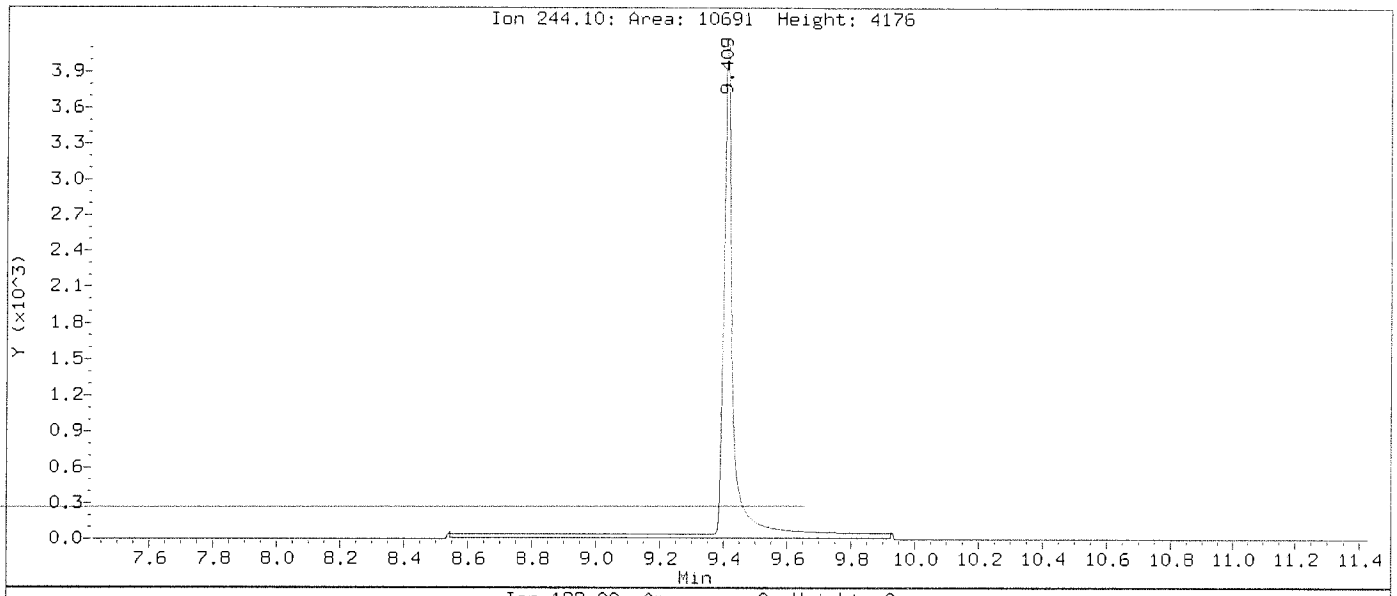
Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\Before\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

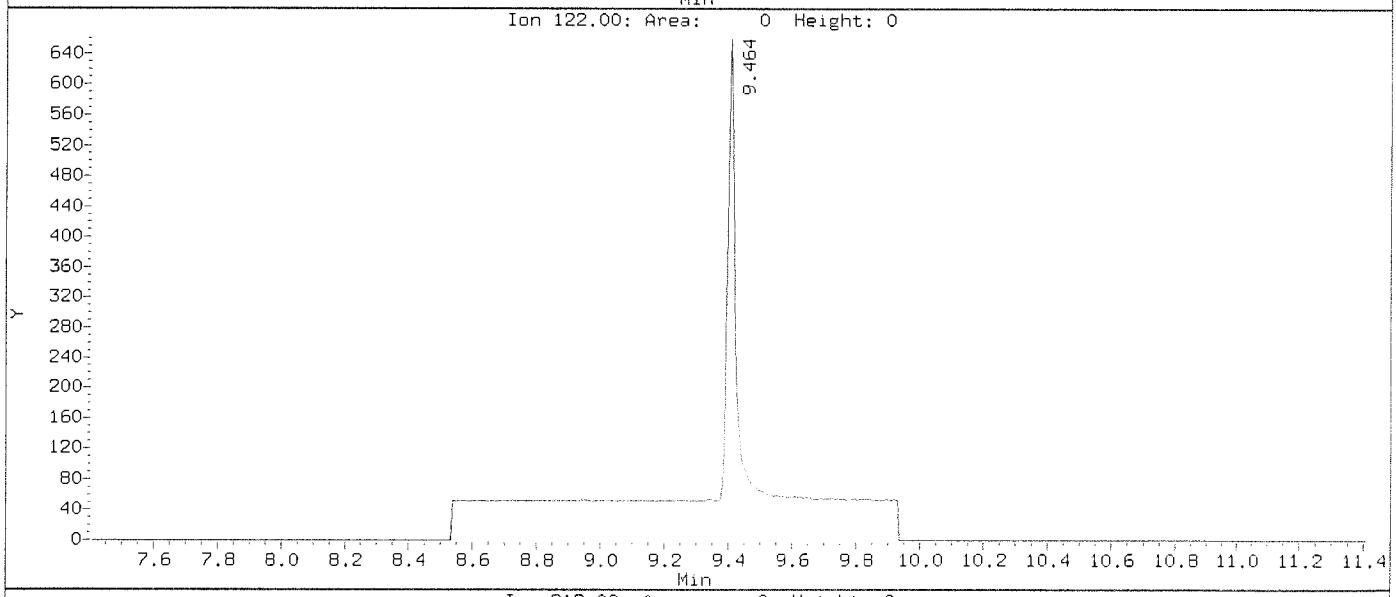
Compound: 4-Terphenyl-d14
CAS Number: 1718-51-0

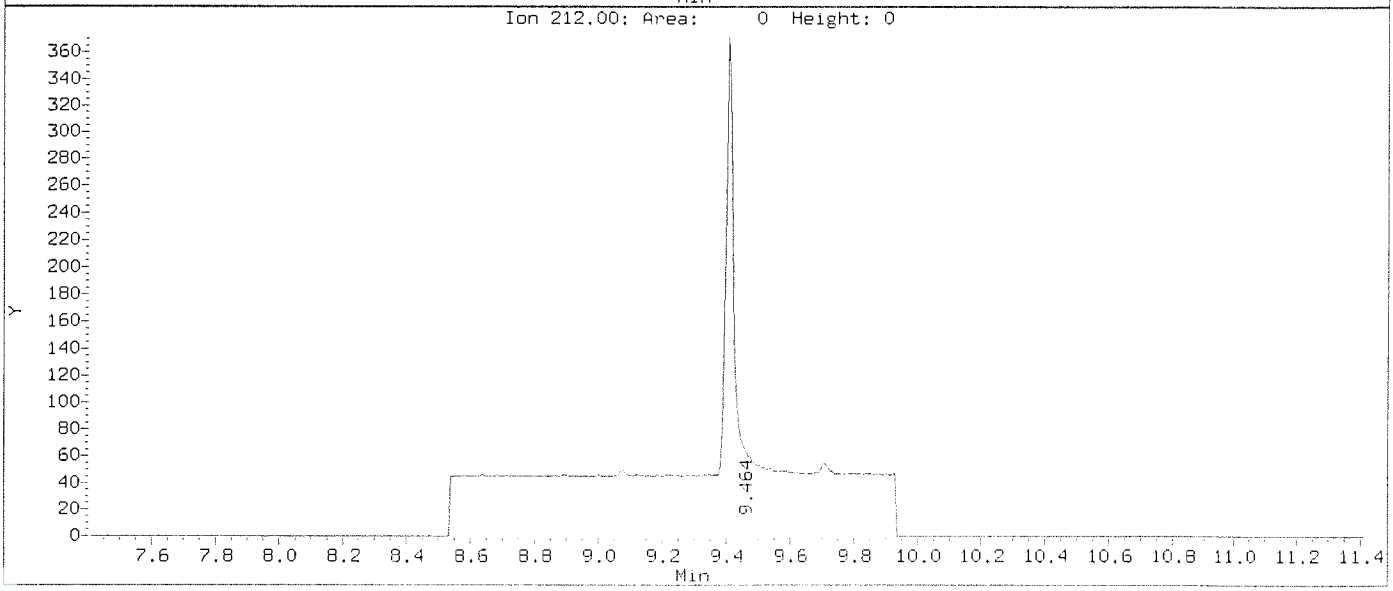


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: 4-Terphenyl-d14
CAS Number: 1718-51-0

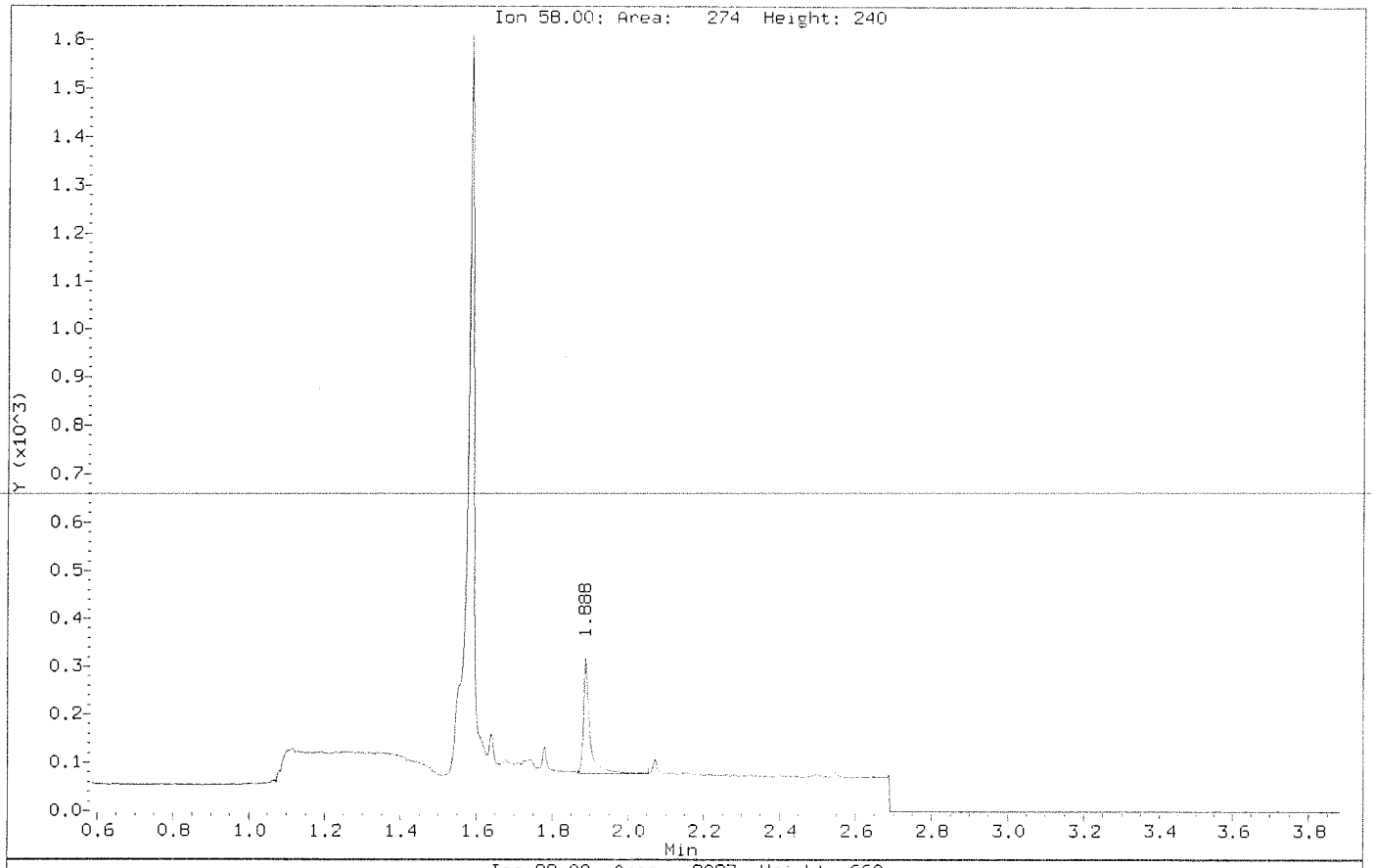


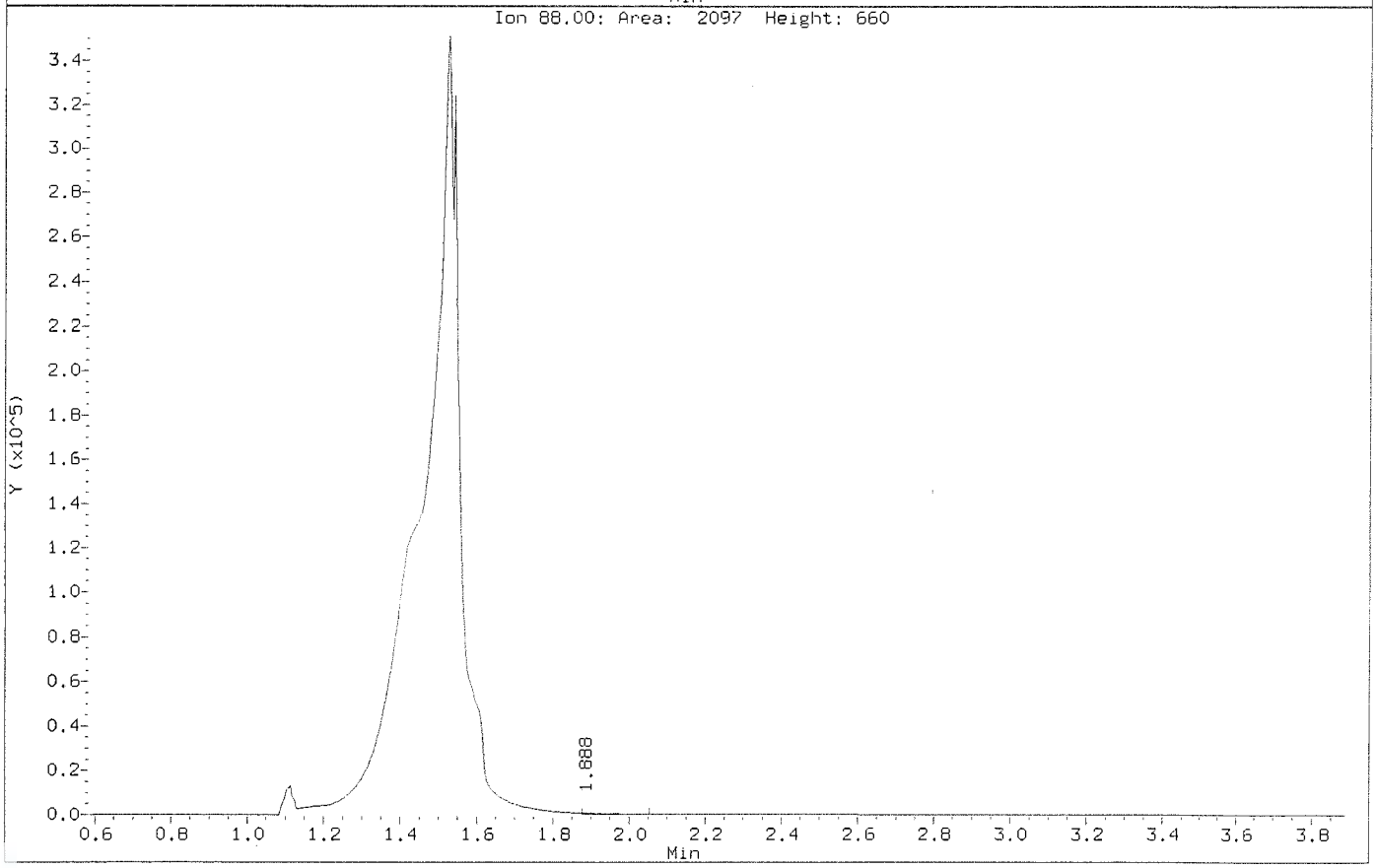




Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\Before\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

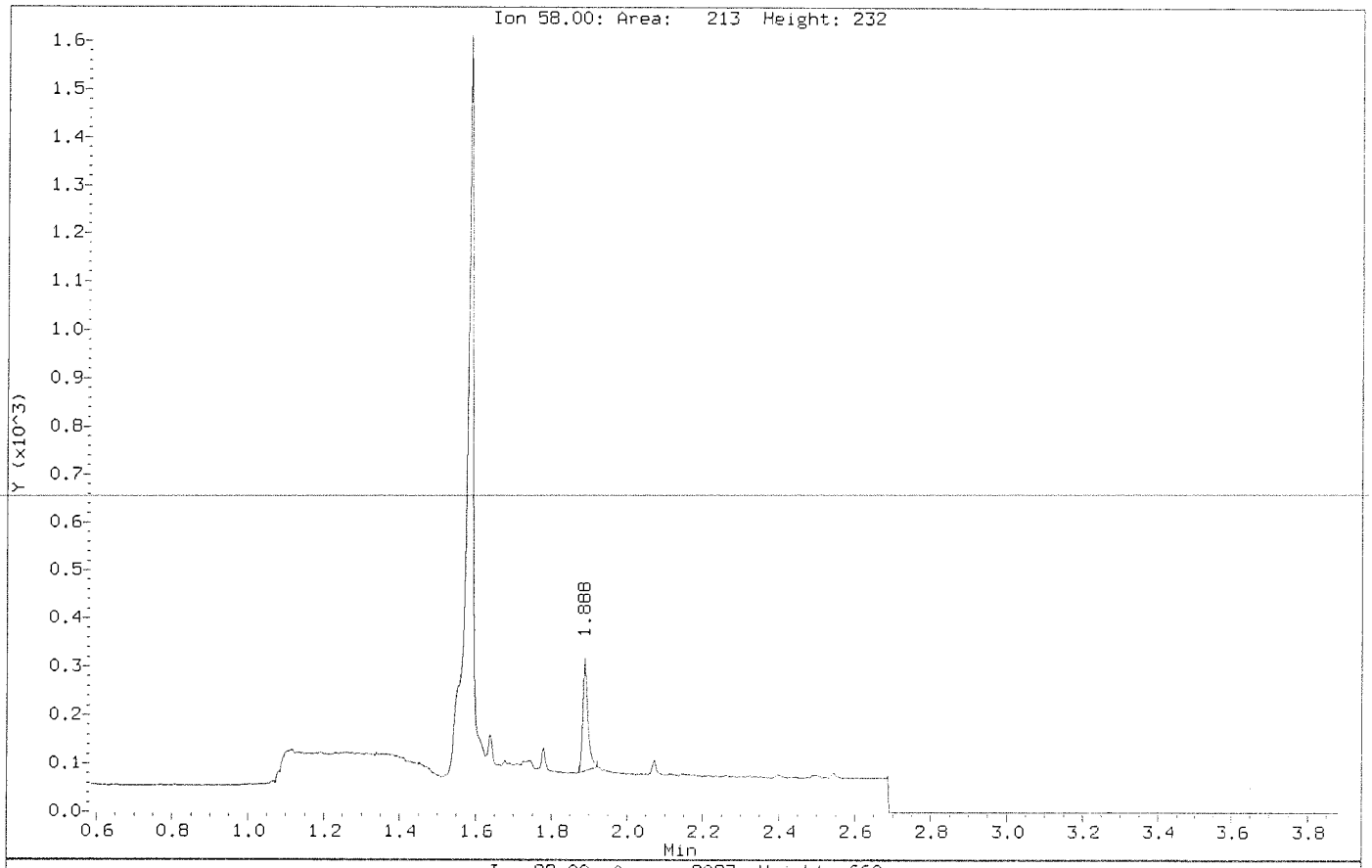
Compound: 1,4-Dioxane
CAS Number:

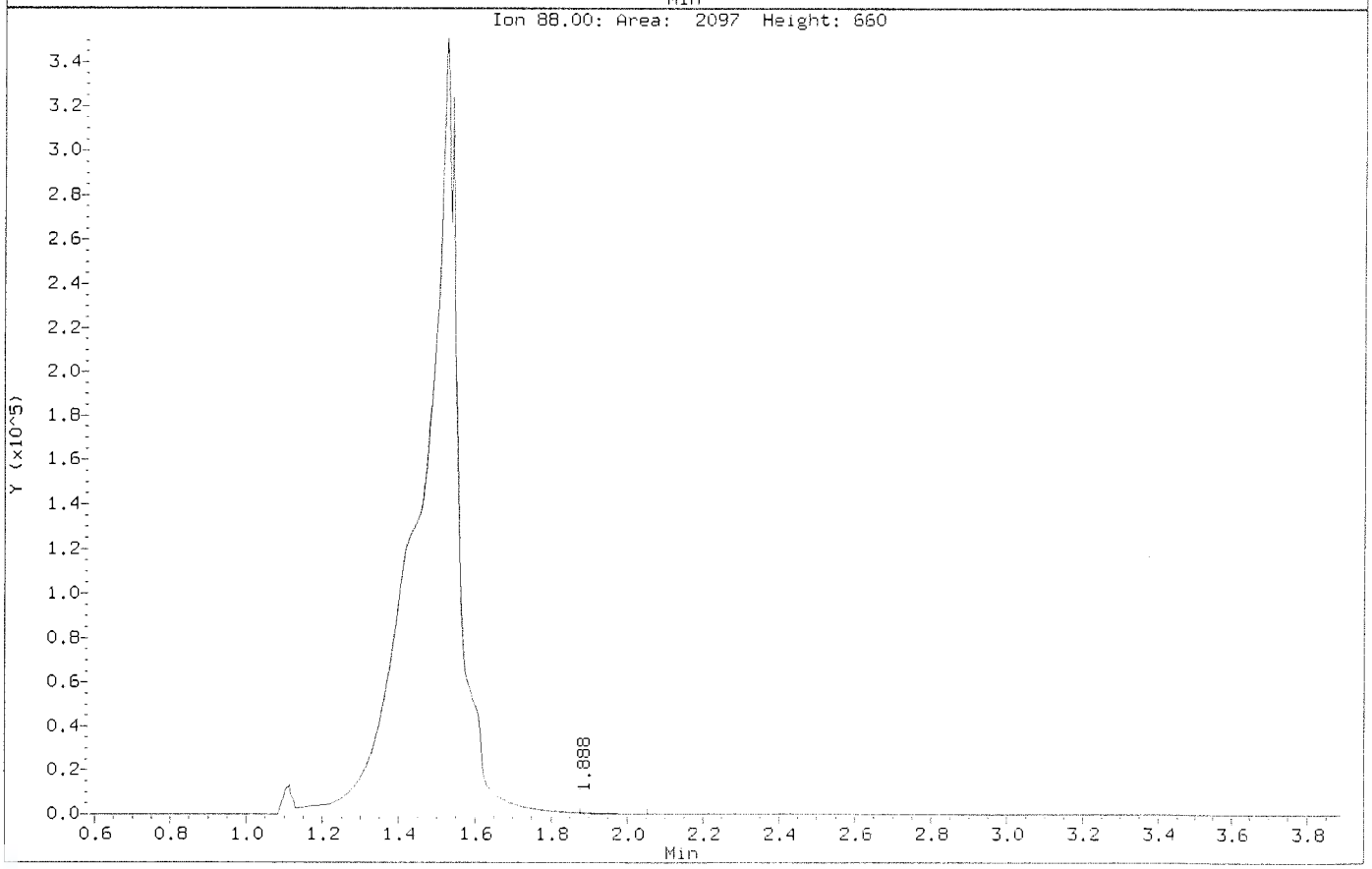




Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: 1,4-Dioxane
CAS Number:





Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\05.D Page 1
Report Date: 24-Aug-2022 10:25

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\05.D
Lab Smp Id: MBLK-182382
Inj Date : 23-AUG-2022 11:16
Operator : LG Inst ID: SV6.i
Smp Info : MBLK-182382
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.598	3.592	(1.000)	3706	0.10000	(aQ)
* 45 Naphthalene-d8	136	4.705	4.705	(1.000)	13895	0.10000	
$ 33 Nitrobenzene-d5	82	4.054	4.059	(0.862)	3663	0.07908	0.07908(M)
* 86 Acenaphthene-d10	164	6.376	6.376	(1.000)	7586	0.10000	(Q)
$ 69 2-Fluorobiphenyl	172	5.719	5.718	(0.897)	4121	0.03490	0.03490(M)
* 126 Phenanthrene-d10	188	7.822	7.827	(1.000)	13732	0.10000	
* 182 Chrysene-d12	240	10.657	10.657	(1.000)	7295	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.408	9.408	(0.000)	7185	0.05239	0.05239(M)
* 198 Perylene-d12	264	12.724	12.724	(1.000)	4549	0.10000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01134073

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\05.D

Date : 23-AUG-2022 11:16

Client ID:

Instrument: SV6.i

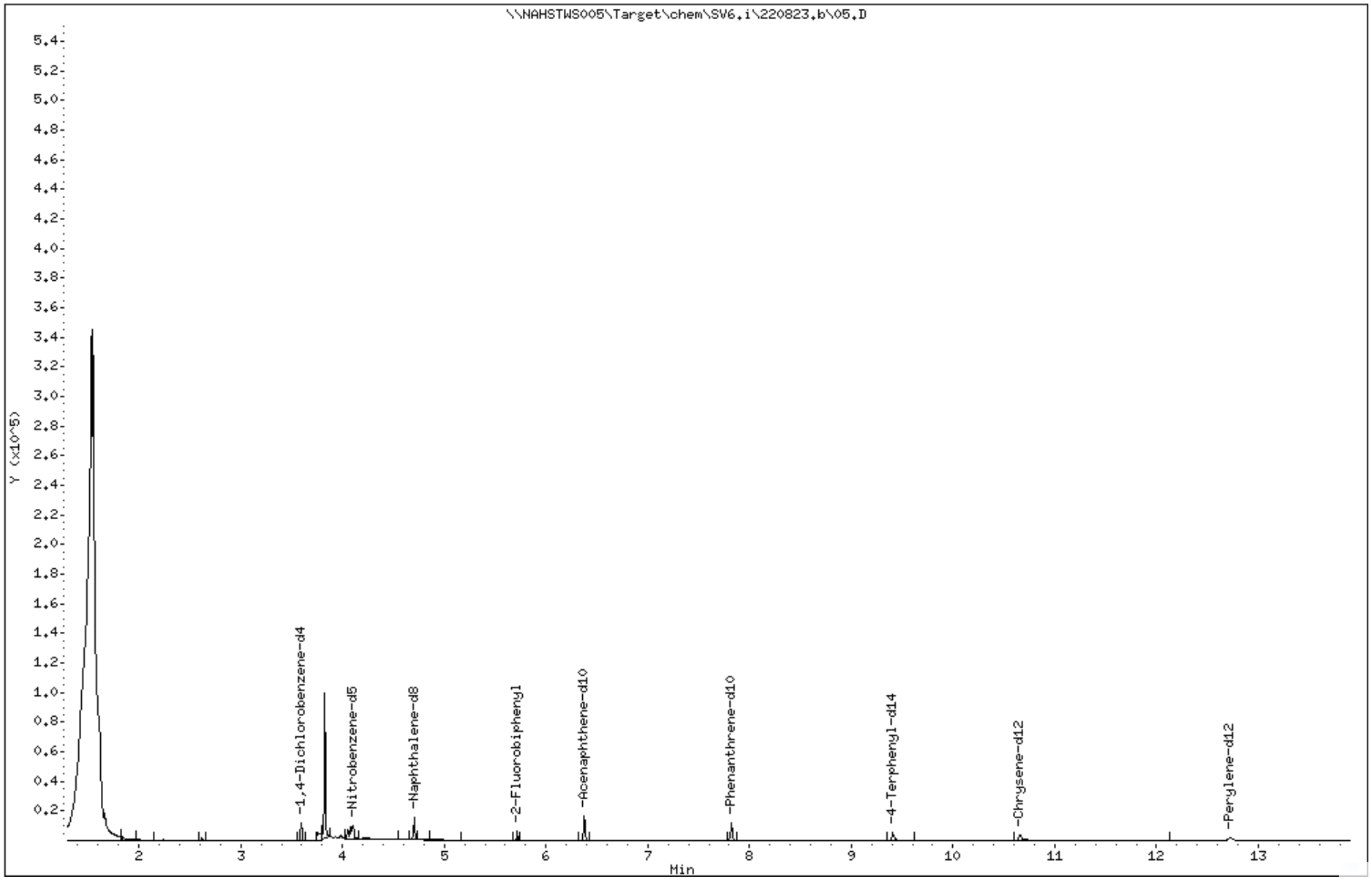
Sample Info: MBLK-182382

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



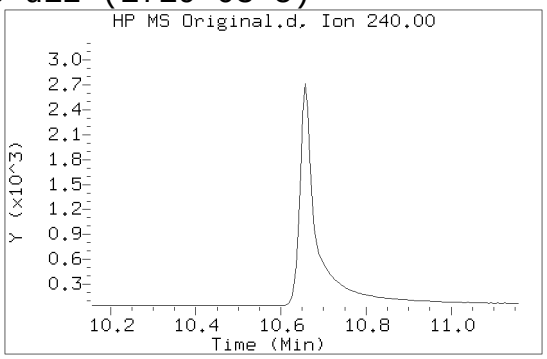
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\05.D
Inj Date : 23-AUG-2022 11:16
InstruID : SV6.i
LabSampID : MBLK-182382

Chrysene-d12 (1719-03-5)

Reason Code:

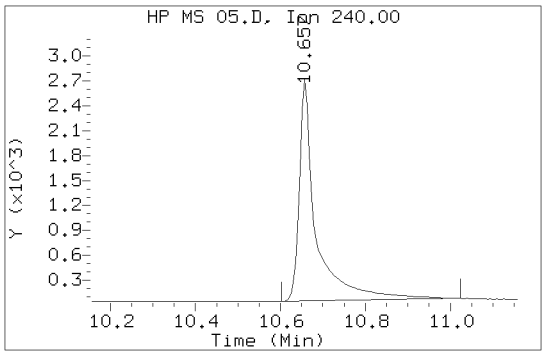
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
11:30
ALSHS
Server



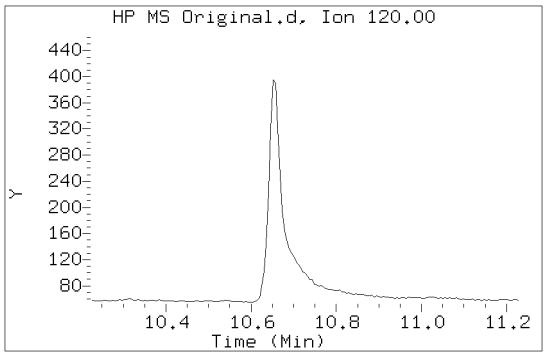
AFTER

MASS
240
AREA
7295
HEIGHT
2666
24-Aug-2022
10:25
ALSHS
S



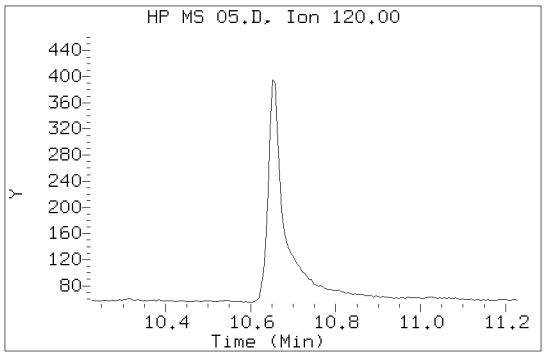
BEFORE

MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
11:30
ALSHS
Server



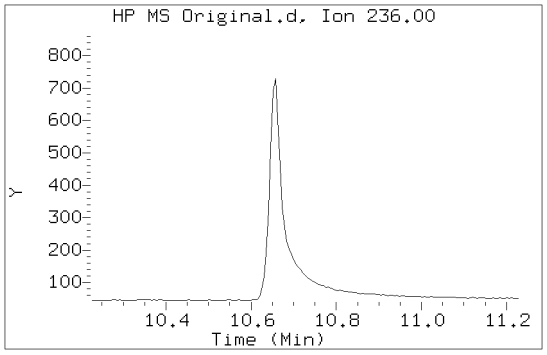
AFTER

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



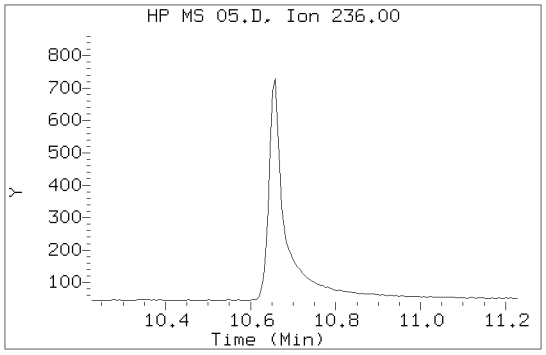
BEFORE

MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
11:30
ALSHS
Server



AFTER

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

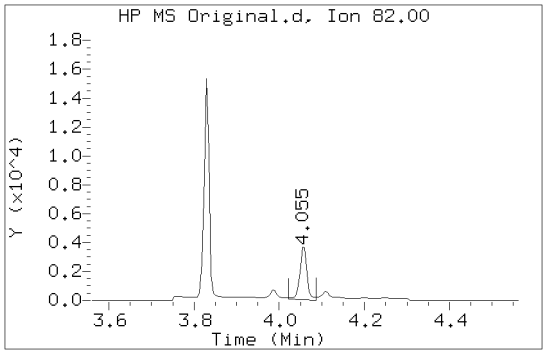


Nitrobenzene-d5 (4165-60-0)

Reason Code:

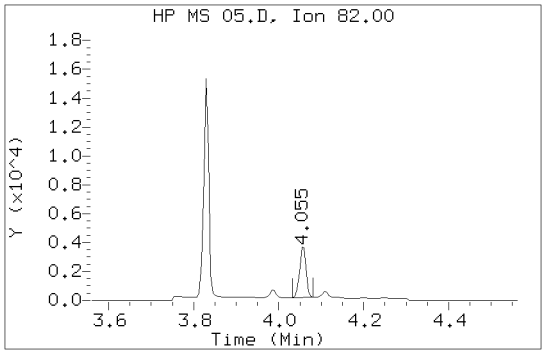
BEFORE

MASS
82
AREA
4302
HEIGHT
3638
23-Aug-2022
11:30
ALSHS
Server



AFTER

MASS
82
AREA
3663
HEIGHT
3483
24-Aug-2022
10:25
ALSHS
S

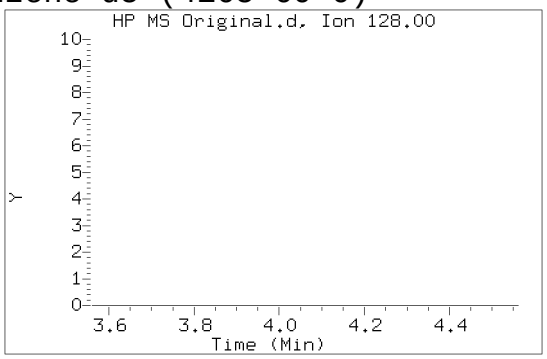


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\05.D
Inj Date : 23-AUG-2022 11:16
InstruID : SV6.i
LabSampID : MBLK-182382

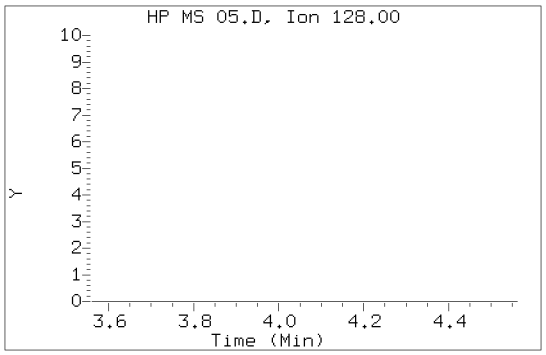
Nitrobenzene-d5 (4165-60-0)

Reason Code:

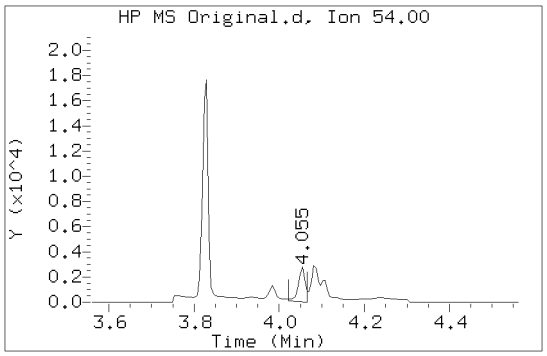
BEFORE
MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
11:30
ALSHS
Server



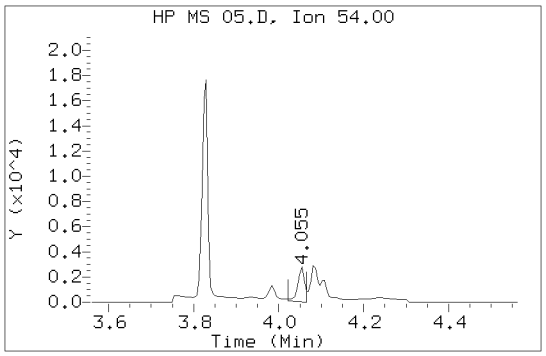
AFTER
MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
54
AREA
3083
HEIGHT
2754
23-Aug-2022
11:30
ALSHS
Server



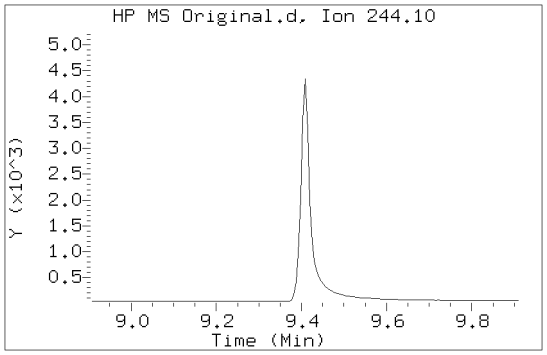
AFTER
MASS
54
AREA
3083
HEIGHT
2754
24-Aug-2022
10:25
ALSHS
S



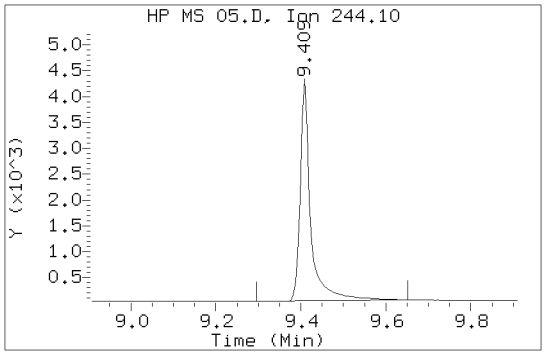
4-Terphenyl-d14 (1718-51-0)

Reason Code:

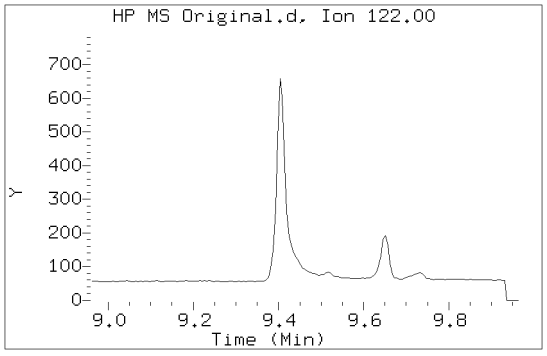
BEFORE
MASS
244.1
AREA
0
HEIGHT
0
23-Aug-2022
11:30
ALSHS
Server



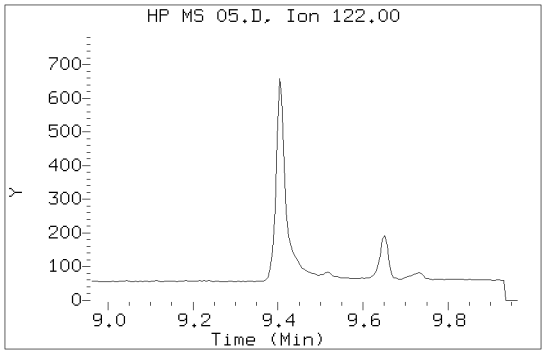
AFTER
MASS
244.1
AREA
7185
HEIGHT
4289
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
122
AREA
0
HEIGHT
0
23-Aug-2022
11:30
ALSHS
Server



AFTER
MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

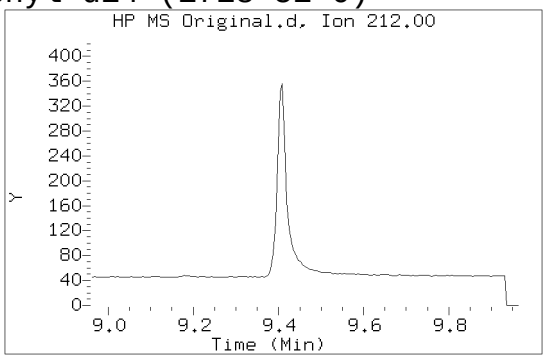


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\05.D
Inj Date : 23-AUG-2022 11:16
InstruID : SV6.i
LabSampID : MBLK-182382

4-Terphenyl-d14 (1718-51-0)

BEFORE

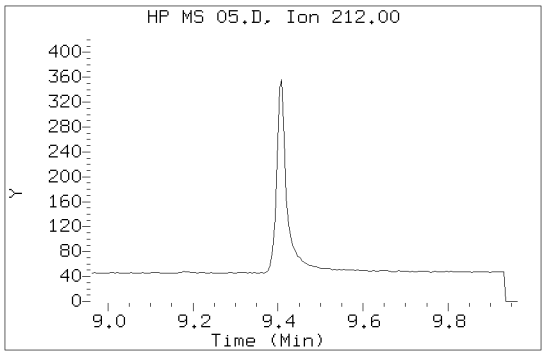
MASS
212
AREA
0
HEIGHT
0
23-Aug-2022
11:30
ALSHS
Server



AFTER

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

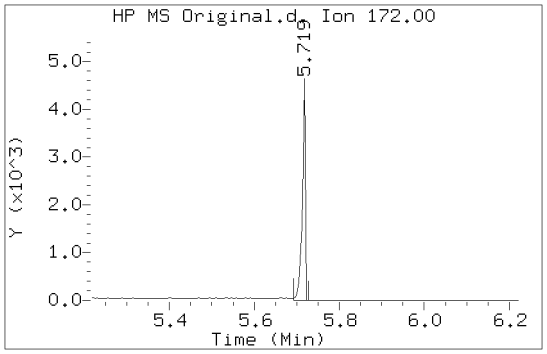
Reason Code:



2-Fluorobiphenyl (321-60-8)

BEFORE

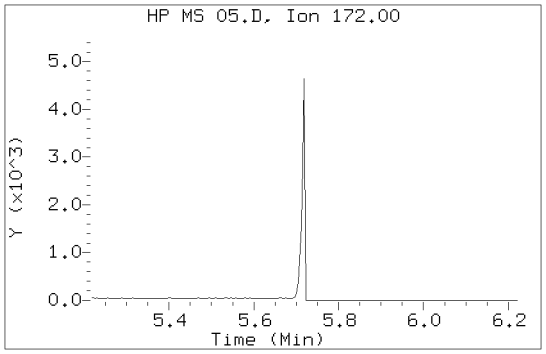
MASS
172
AREA
2447
HEIGHT
4641
23-Aug-2022
11:30
ALSHS
Server



AFTER

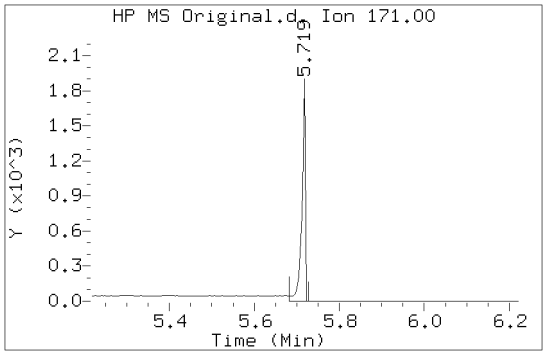
MASS
172
AREA
4121
HEIGHT
4641
24-Aug-2022
10:25
ALSHS
S

Reason Code:



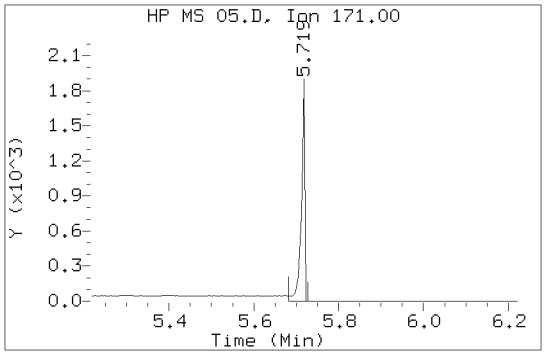
BEFORE

MASS
171
AREA
1113
HEIGHT
1901
23-Aug-2022
11:30
ALSHS
Server



AFTER

MASS
171
AREA
1113
HEIGHT
1901
24-Aug-2022
10:25
ALSHS
S



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\06.D
Lab Smp Id: LCS-182382
Inj Date : 23-AUG-2022 11:34
Operator : LG Inst ID: SV6.i
Smp Info : LCS-182382
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.598	3.592	(1.000)	11986	0.10000	(aM)
* 45 Naphthalene-d8	136	4.705	4.705	(1.000)	17681	0.10000	
$ 33 Nitrobenzene-d5	82	4.059	4.059	(0.863)	4366	0.07408	0.07408(M)
* 86 Acenaphthene-d10	164	6.376	6.376	(1.000)	8740	0.10000	(M)
$ 69 2-Fluorobiphenyl	172	5.718	5.718	(0.897)	4681	0.03441	0.03441(M)
* 126 Phenanthrene-d10	188	7.822	7.827	(1.000)	15619	0.10000	
* 182 Chrysene-d12	240	10.657	10.657	(1.000)	8081	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.408	9.408	(0.883)	8055	0.05302	0.05302(M)
* 198 Perylene-d12	264	12.719	12.724	(1.000)	5095	0.10000	
1 1,4-Dioxane	58	1.920	1.887	(0.534)	520	0.10568	0.1057(aM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

01134078

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\06.D

Page 1

Date : 23-AUG-2022 11:34

Client ID:

Instrument: SV6.i

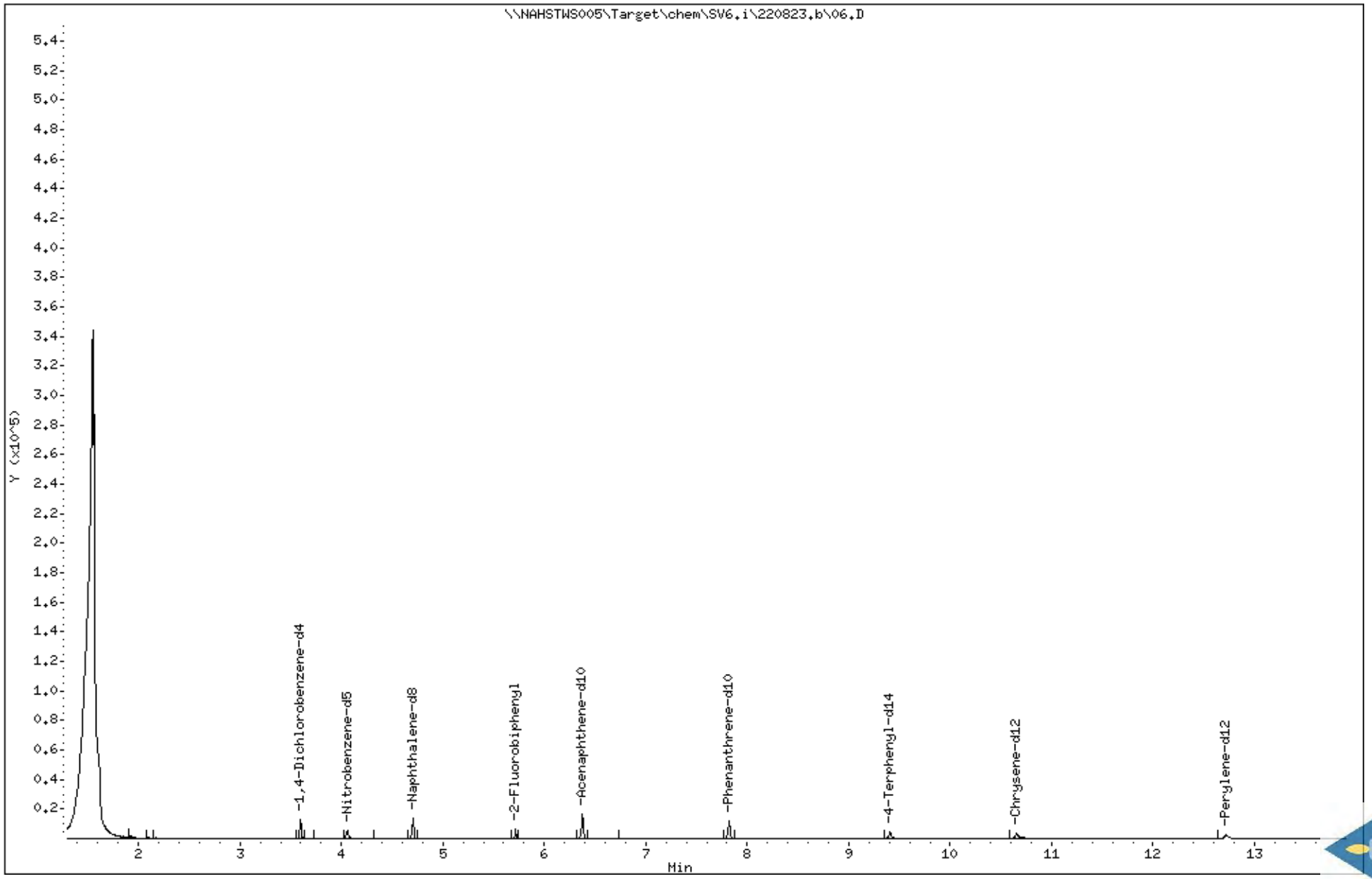
Sample Info: LCS-182382

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



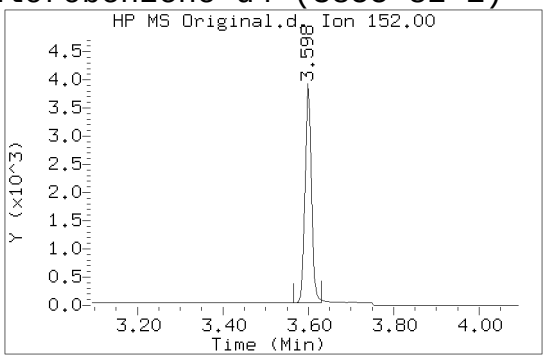
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\06.D
Inj Date : 23-AUG-2022 11:34
InstruID : SV6.i
LabSampID : LCS-182382

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

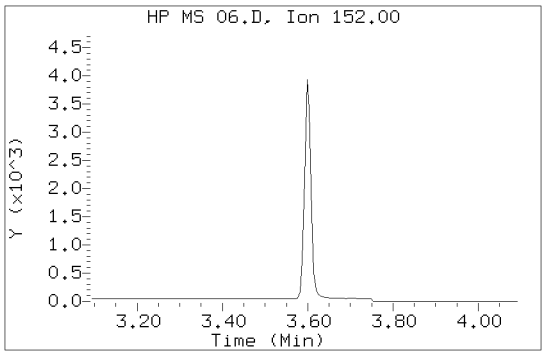
BEFORE

MASS
152
AREA
4013
HEIGHT
3885
23-Aug-2022
11:48
ALSHS
Server



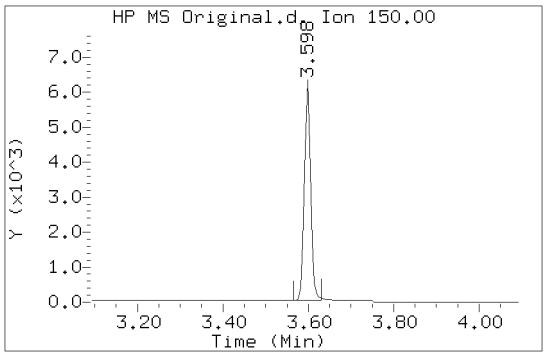
AFTER

MASS
152
AREA
11986
HEIGHT
4007
24-Aug-2022
10:25
ALSHS
S



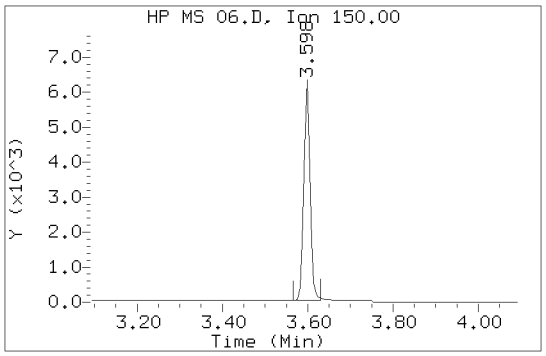
BEFORE

MASS
150
AREA
6334
HEIGHT
6303
23-Aug-2022
11:48
ALSHS
Server



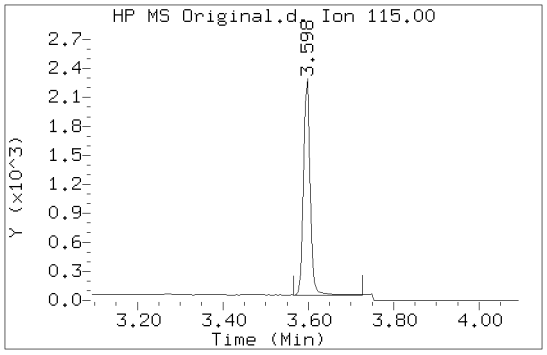
AFTER

MASS
150
AREA
6334
HEIGHT
6303
24-Aug-2022
10:25
ALSHS
S



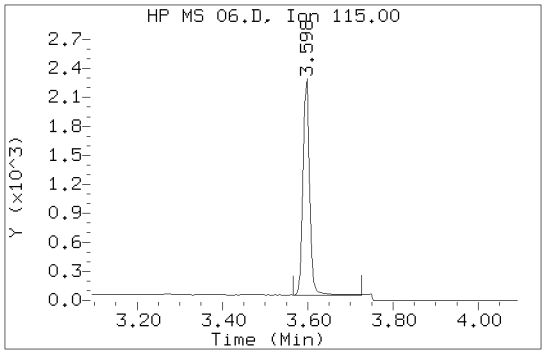
BEFORE

MASS
115
AREA
2380
HEIGHT
2238
23-Aug-2022
11:48
ALSHS
Server



AFTER

MASS
115
AREA
2380
HEIGHT
2238
24-Aug-2022
10:25
ALSHS
S

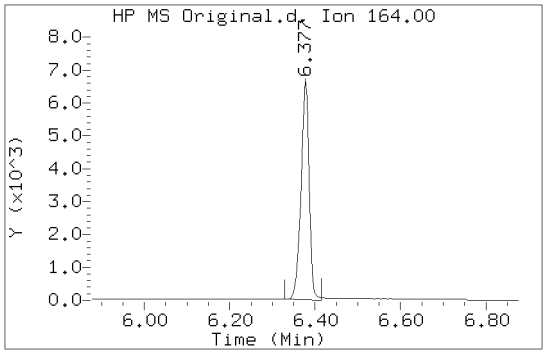


Acenaphthene-d10 (15067-26-2)

Reason Code:

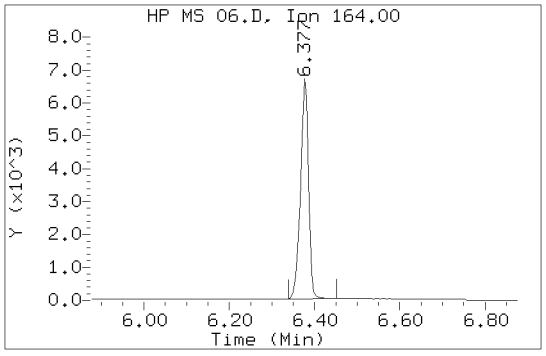
BEFORE

MASS
164
AREA
8871
HEIGHT
6718
23-Aug-2022
11:48
ALSHS
Server



AFTER

MASS
164
AREA
8740
HEIGHT
6688
24-Aug-2022
10:25
ALSHS
S

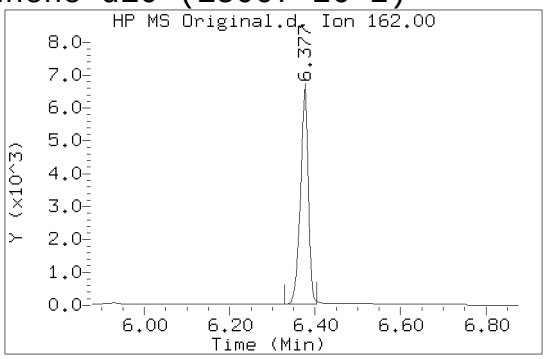


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\06.D
Inj Date : 23-AUG-2022 11:34
InstruID : SV6.i
LabSampID : LCS-182382

Acenaphthene-d10 (15067-26-2)

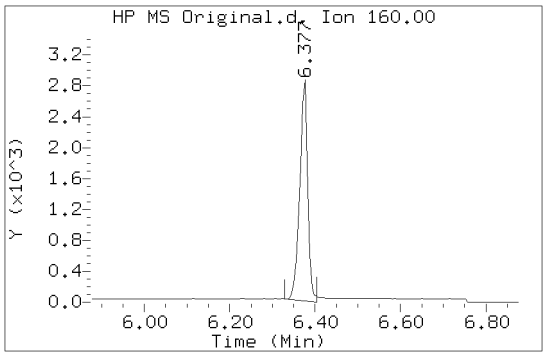
BEFORE

MASS
162
AREA
8458
HEIGHT
6694
23-Aug-2022
11:48
ALSHS
Server



BEFORE

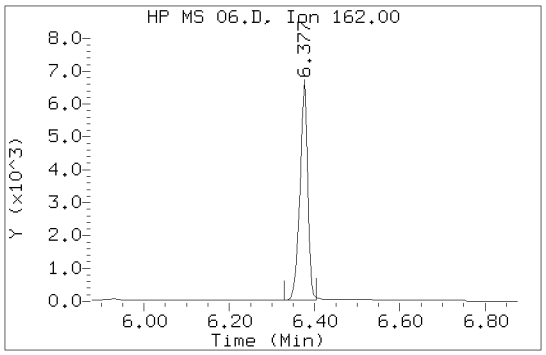
MASS
160
AREA
3745
HEIGHT
2860
23-Aug-2022
11:48
ALSHS
Server



Reason Code:

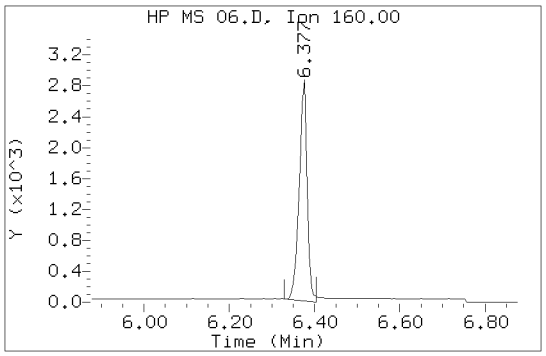
AFTER

MASS
162
AREA
8458
HEIGHT
6694
24-Aug-2022
10:25
ALSHS
S



AFTER

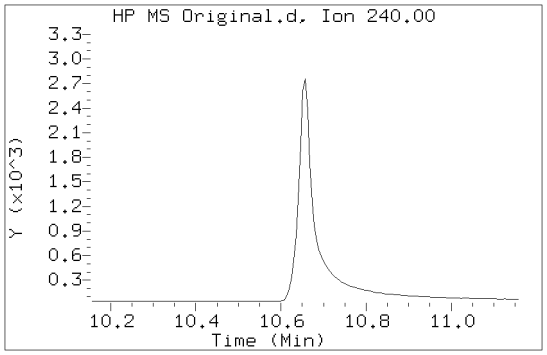
MASS
160
AREA
3745
HEIGHT
2860
24-Aug-2022
10:25
ALSHS
S



Chrysene-d12 (1719-03-5)

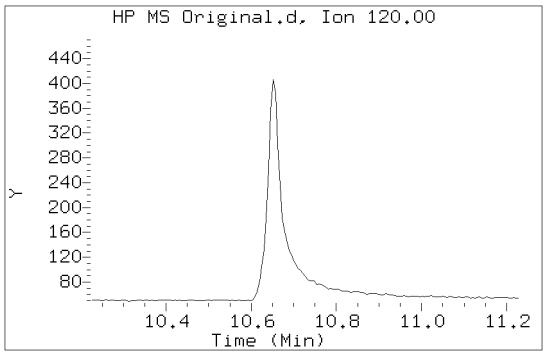
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
11:48
ALSHS
Server



BEFORE

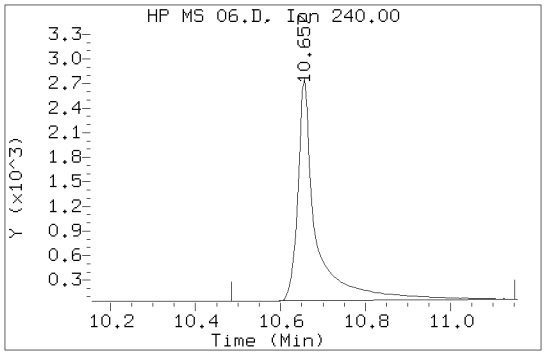
MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
11:48
ALSHS
Server



Reason Code:

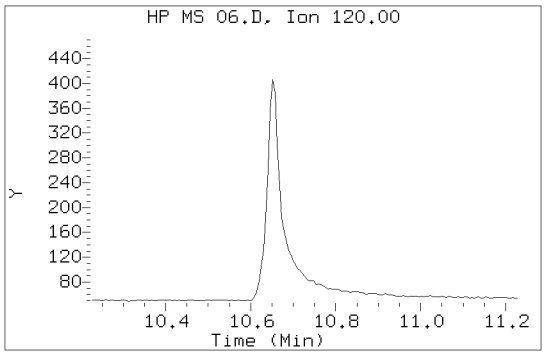
AFTER

MASS
240
AREA
8081
HEIGHT
2705
24-Aug-2022
10:25
ALSHS
S



AFTER

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



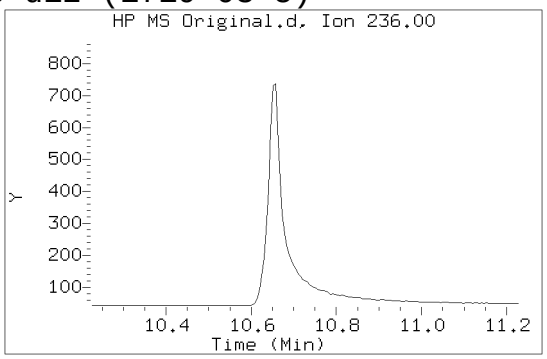
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\06.D
Inj Date : 23-AUG-2022 11:34
InstruID : SV6.i
LabSampID : LCS-182382

Chrysene-d12 (1719-03-5)

Reason Code:

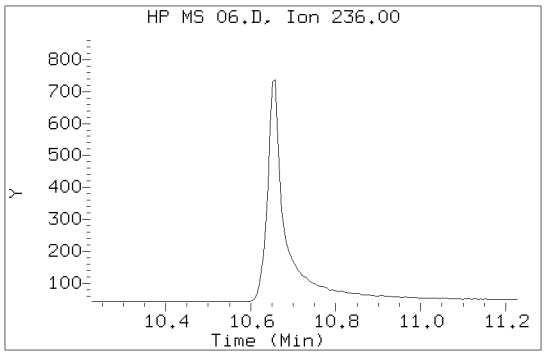
BEFORE

MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
11:48
ALSHS
Server



AFTER

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

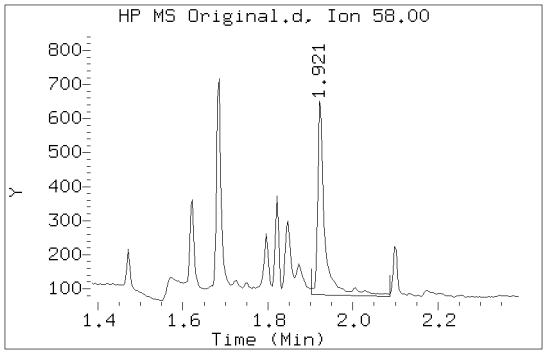


1,4-Dioxane ()

Reason Code:

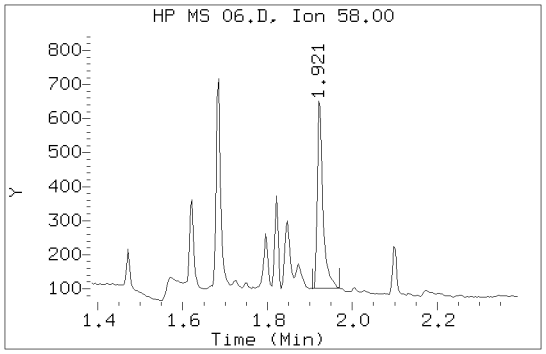
BEFORE

MASS
58
AREA
683
HEIGHT
568
23-Aug-2022
11:48
ALSHS
Server



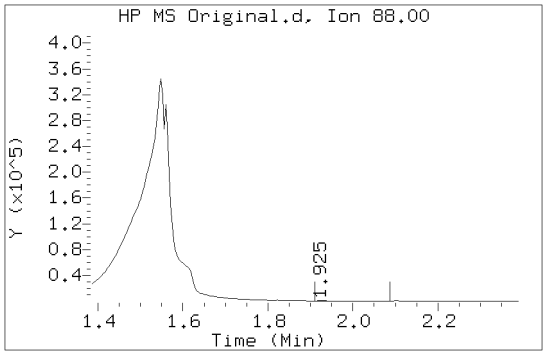
AFTER

MASS
58
AREA
520
HEIGHT
550
24-Aug-2022
10:25
ALSHS
S



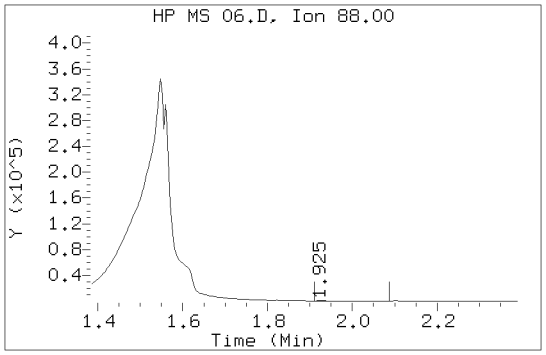
BEFORE

MASS
88
AREA
2170
HEIGHT
956
23-Aug-2022
11:48
ALSHS
Server



AFTER

MASS
88
AREA
2170
HEIGHT
956
24-Aug-2022
10:25
ALSHS
S

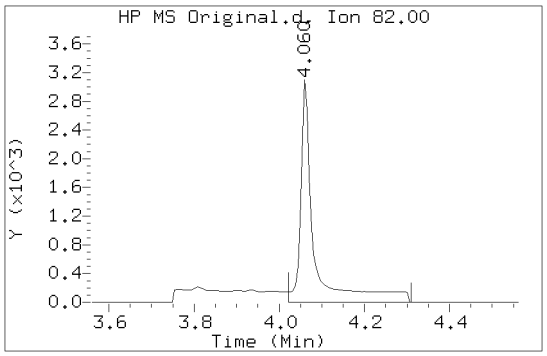


Nitrobenzene-d5 (4165-60-0)

Reason Code:

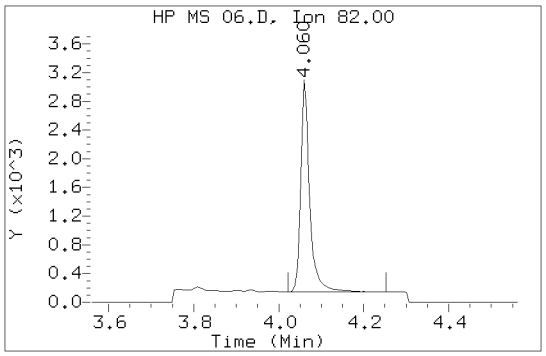
BEFORE

MASS
82
AREA
6752
HEIGHT
3099
23-Aug-2022
11:48
ALSHS
Server



AFTER

MASS
82
AREA
4366
HEIGHT
2956
24-Aug-2022
10:25
ALSHS
S

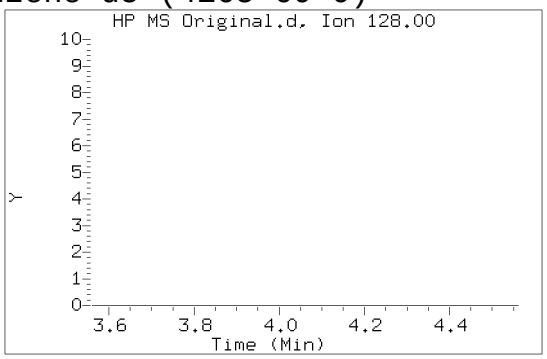


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\06.D
Inj Date : 23-AUG-2022 11:34
InstruID : SV6.i
LabSampID : LCS-182382

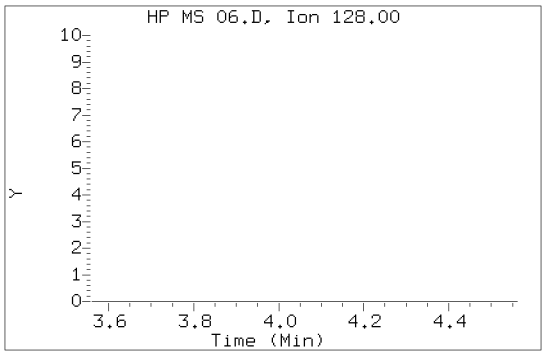
Nitrobenzene-d5 (4165-60-0)

Reason Code:

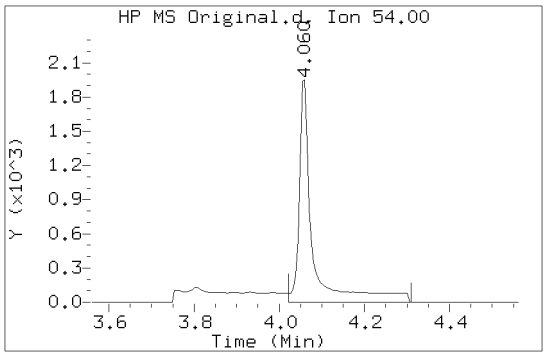
BEFORE
MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
11:48
ALSHS
Server



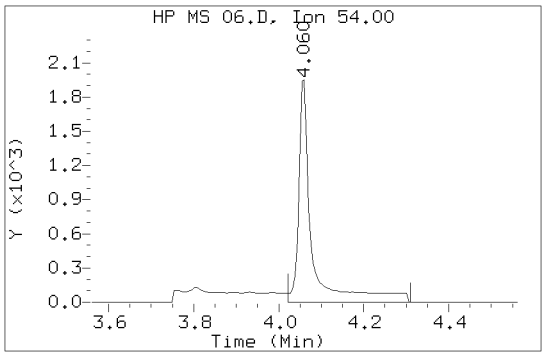
AFTER
MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
54
AREA
4233
HEIGHT
1950
23-Aug-2022
11:48
ALSHS
Server



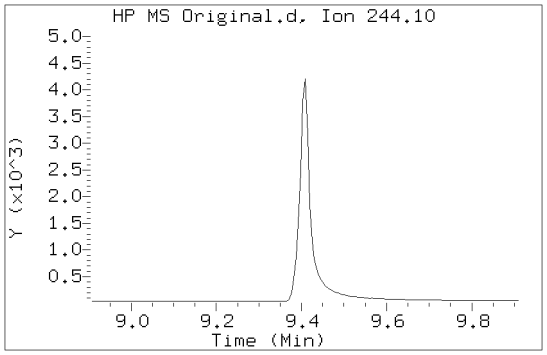
AFTER
MASS
54
AREA
4233
HEIGHT
1950
24-Aug-2022
10:25
ALSHS
S



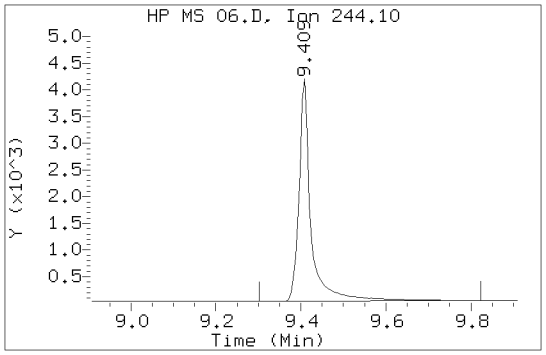
4-Terphenyl-d14 (1718-51-0)

Reason Code:

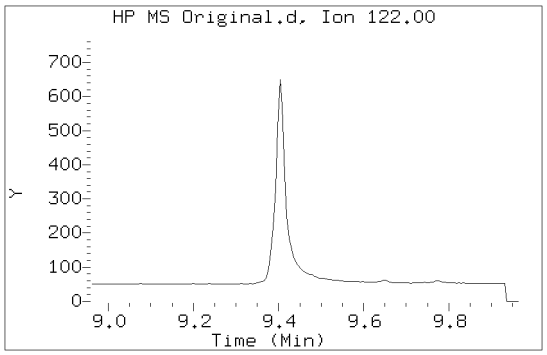
BEFORE
MASS
244.1
AREA
0
HEIGHT
0
23-Aug-2022
11:48
ALSHS
Server



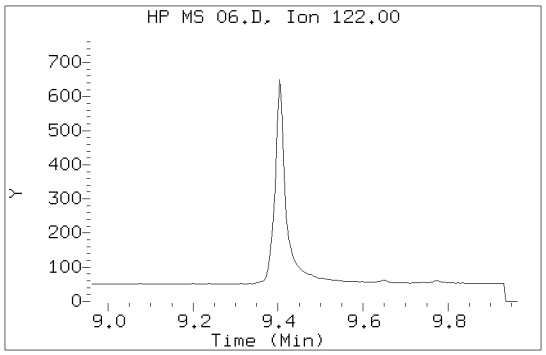
AFTER
MASS
244.1
AREA
8055
HEIGHT
4158
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
122
AREA
0
HEIGHT
0
23-Aug-2022
11:48
ALSHS
Server



AFTER
MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



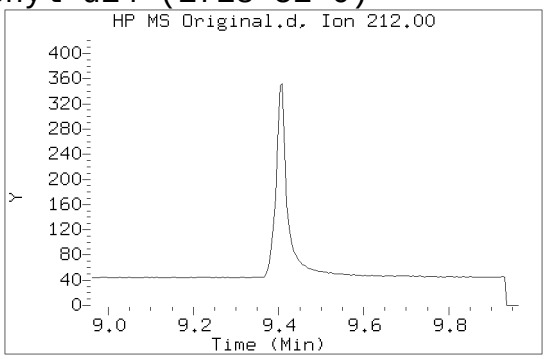
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\06.D
Inj Date : 23-AUG-2022 11:34
InstruID : SV6.i
LabSampID : LCS-182382

4-Terphenyl-d14 (1718-51-0)

Reason Code:

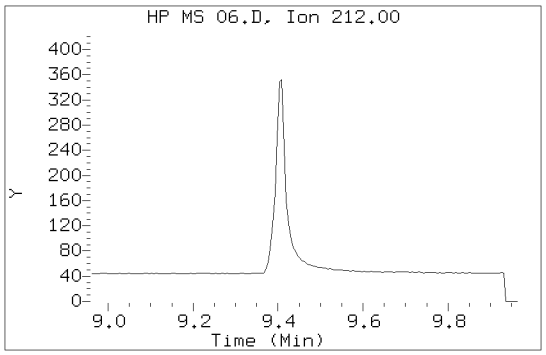
BEFORE

MASS
212
AREA
0
HEIGHT
0
23-Aug-2022
11:48
ALSHS
Server



AFTER

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

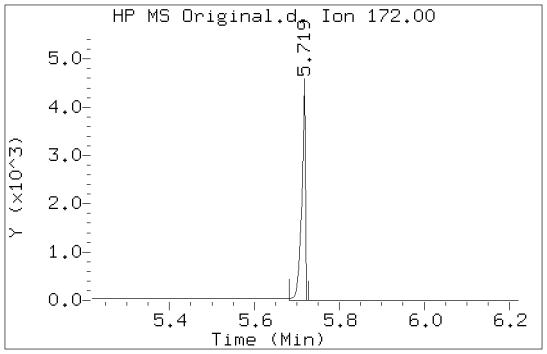


2-Fluorobiphenyl (321-60-8)

Reason Code:

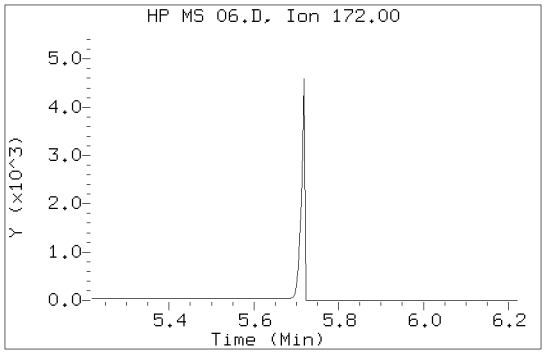
BEFORE

MASS
172
AREA
2838
HEIGHT
4591
23-Aug-2022
11:48
ALSHS
Server



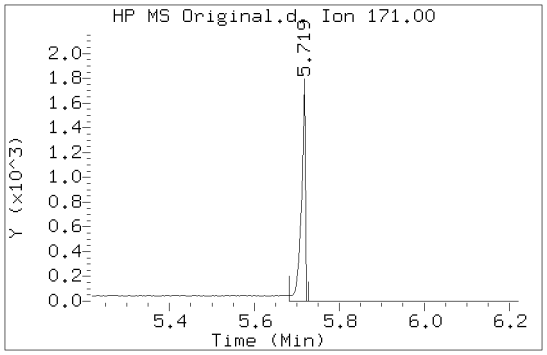
AFTER

MASS
172
AREA
4681
HEIGHT
4603
24-Aug-2022
10:25
ALSHS
S



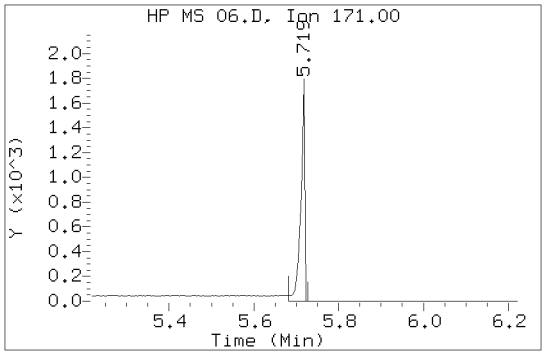
BEFORE

MASS
171
AREA
1215
HEIGHT
1795
23-Aug-2022
11:48
ALSHS
Server



AFTER

MASS
171
AREA
1215
HEIGHT
1795
24-Aug-2022
10:25
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\07.D Page 1
Report Date: 24-Aug-2022 10:25

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\07.D
Lab Smp Id: LCSD-182382
Inj Date : 23-AUG-2022 11:52
Operator : LG Inst ID: SV6.i
Smp Info : LCSD-182382
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 6 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.598	3.592	(1.000)	10965	0.10000	(aM)
* 45 Naphthalene-d8	136	4.705	4.705	(1.000)	15980	0.10000	
$ 33 Nitrobenzene-d5	82	4.059	4.059	(0.863)	3903	0.07327	0.07327(M)
* 86 Acenaphthene-d10	164	6.377	6.376	(1.000)	7794	0.10000	(Q)
$ 69 2-Fluorobiphenyl	172	5.719	5.718	(0.897)	4521	0.03727	0.03726(M)
* 126 Phenanthrene-d10	188	7.822	7.827	(1.000)	13992	0.10000	
* 182 Chrysene-d12	240	10.657	10.657	(1.000)	6397	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.409	9.408	(0.883)	6654	0.05533	0.05532(M)
* 198 Perylene-d12	264	12.719	12.724	(1.000)	4136	0.10000	
1 1,4-Dioxane	58	1.906	1.887	(0.530)	482	0.10708	0.1071(aM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01134085

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\07.D

Date : 23-AUG-2022 11:52

Client ID:

Instrument: SV6.i

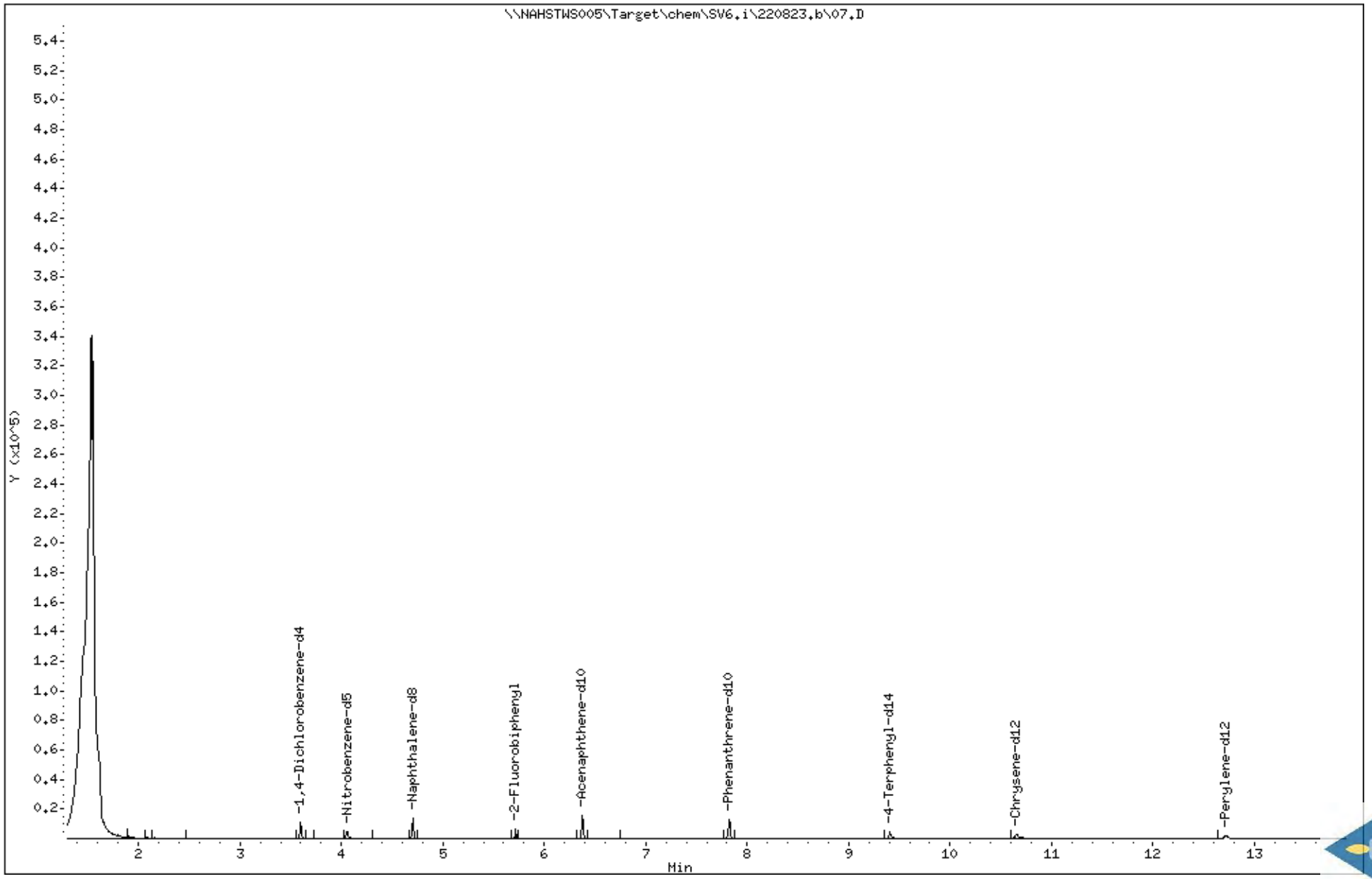
Sample Info: LCSD-182382

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



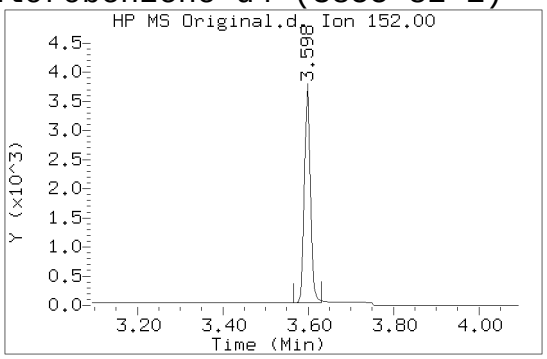
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\07.D
Inj Date : 23-AUG-2022 11:52
InstruID : SV6.i
LabSampID : LCSD-182382

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

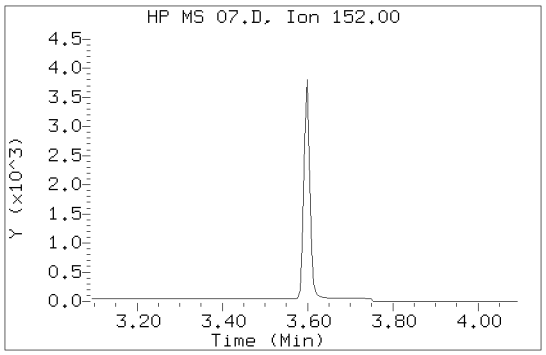
BEFORE

MASS
152
AREA
3602
HEIGHT
3756
23-Aug-2022
12:07
ALSHS
Server



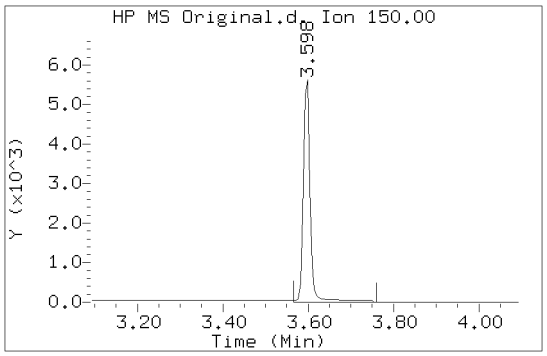
AFTER

MASS
152
AREA
10965
HEIGHT
3869
24-Aug-2022
10:25
ALSHS
S



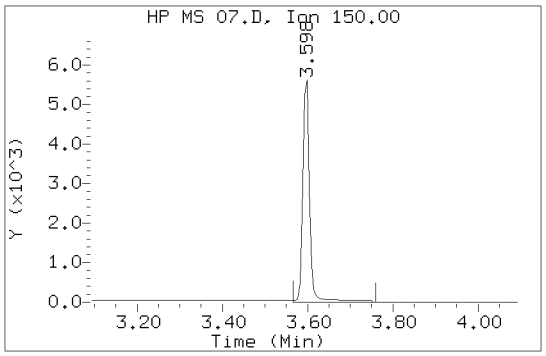
BEFORE

MASS
150
AREA
6299
HEIGHT
5623
23-Aug-2022
12:07
ALSHS
Server



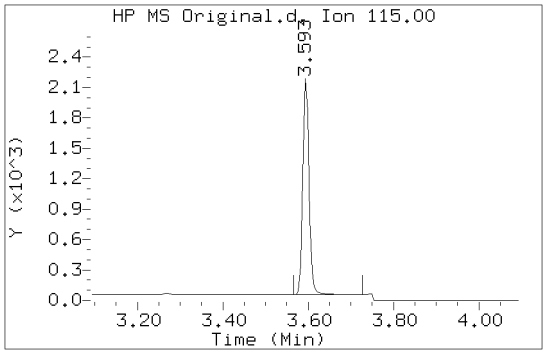
AFTER

MASS
150
AREA
6299
HEIGHT
5623
24-Aug-2022
10:25
ALSHS
S



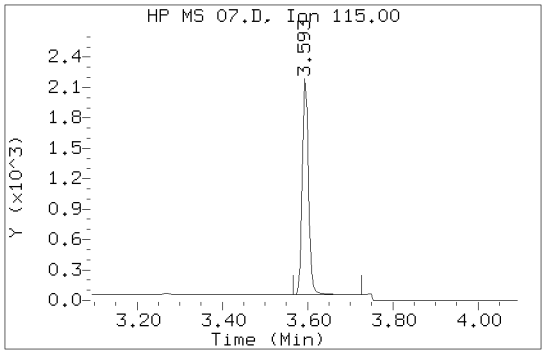
BEFORE

MASS
115
AREA
2133
HEIGHT
2131
23-Aug-2022
12:07
ALSHS
Server



AFTER

MASS
115
AREA
2133
HEIGHT
2131
24-Aug-2022
10:25
ALSHS
S

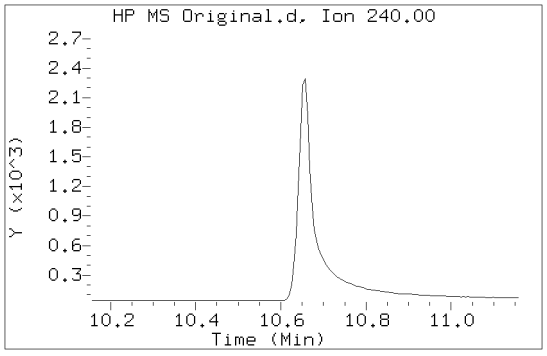


Chrysene-d12 (1719-03-5)

Reason Code:

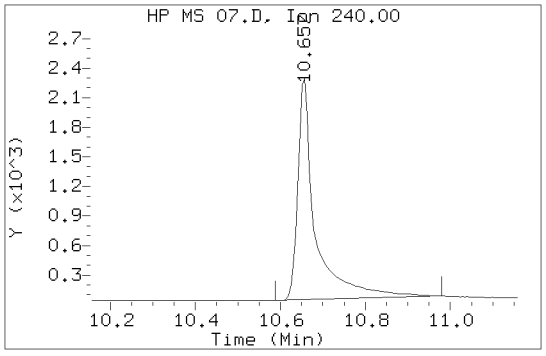
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
12:07
ALSHS
Server



AFTER

MASS
240
AREA
6397
HEIGHT
2240
24-Aug-2022
10:25
ALSHS
S

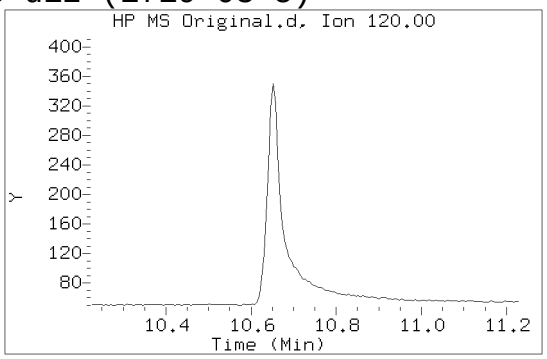


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\07.D
Inj Date : 23-AUG-2022 11:52
InstruID : SV6.i
LabSampID : LCSD-182382

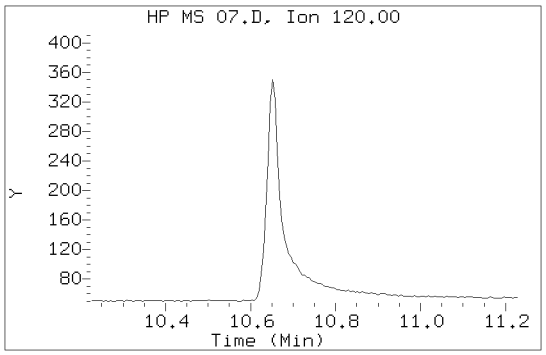
Chrysene-d12 (1719-03-5)

Reason Code:

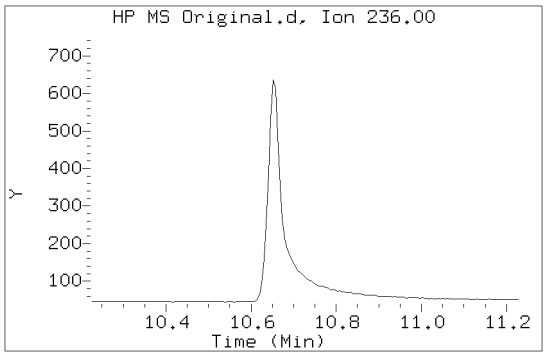
BEFORE
MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
12:07
ALSHS
Server



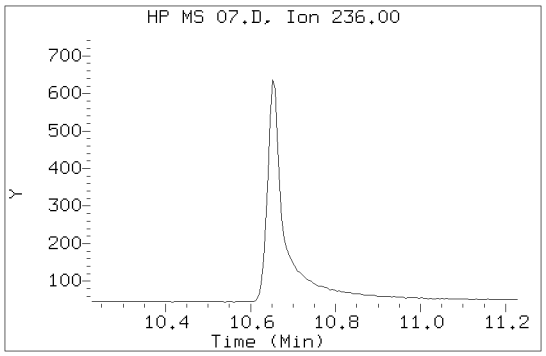
AFTER
MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
12:07
ALSHS
Server



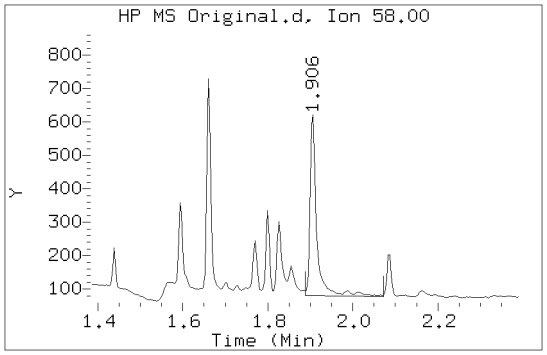
AFTER
MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



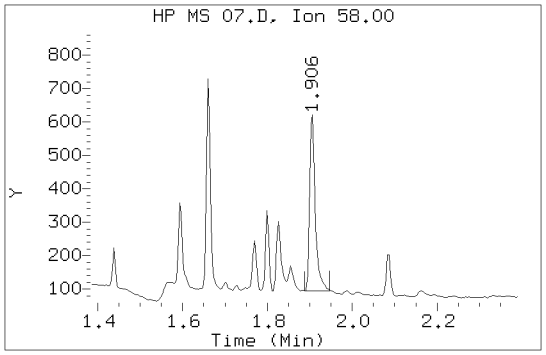
1,4-Dioxane ()

Reason Code:

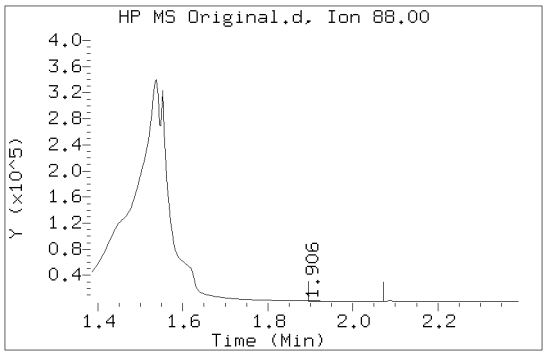
BEFORE
MASS
58
AREA
591
HEIGHT
539
23-Aug-2022
12:07
ALSHS
Server



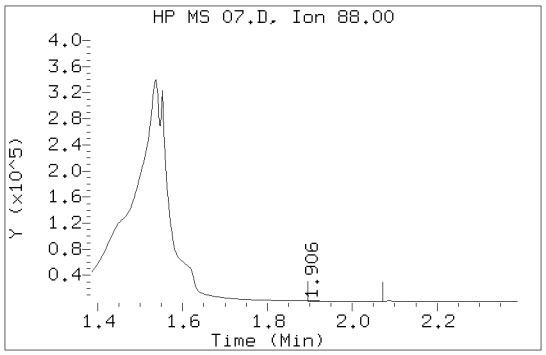
AFTER
MASS
58
AREA
482
HEIGHT
527
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
88
AREA
2399
HEIGHT
981
23-Aug-2022
12:07
ALSHS
Server



AFTER
MASS
88
AREA
2399
HEIGHT
981
24-Aug-2022
10:25
ALSHS
S



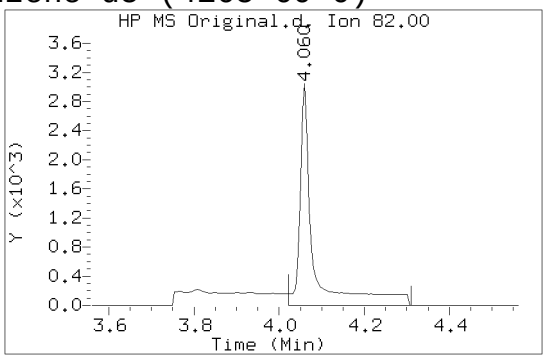
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\07.D
Inj Date : 23-AUG-2022 11:52
InstruID : SV6.i
LabSampID : LCSD-182382

Nitrobenzene-d5 (4165-60-0)

Reason Code:

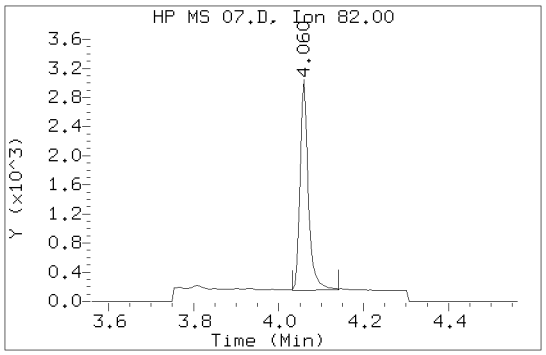
BEFORE

MASS
82
AREA
6515
HEIGHT
3045
23-Aug-2022
12:07
ALSHS
Server



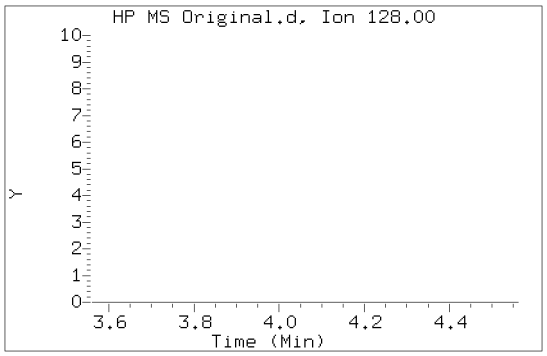
AFTER

MASS
82
AREA
3903
HEIGHT
2890
24-Aug-2022
10:25
ALSHS
S



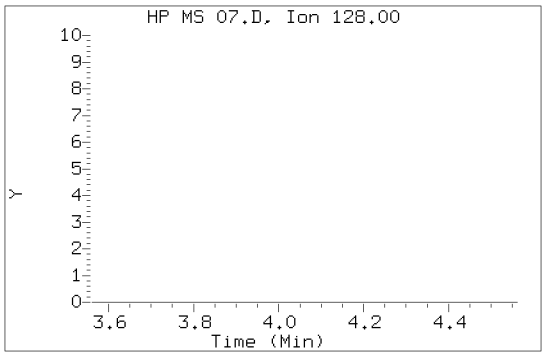
BEFORE

MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
12:07
ALSHS
Server



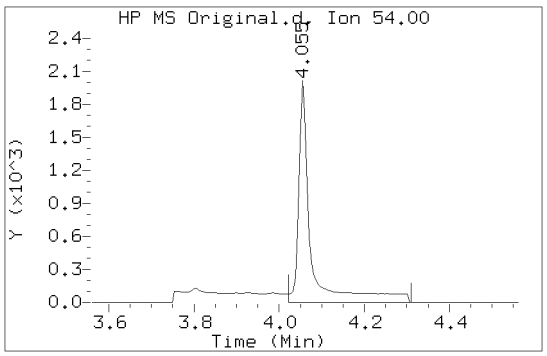
AFTER

MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



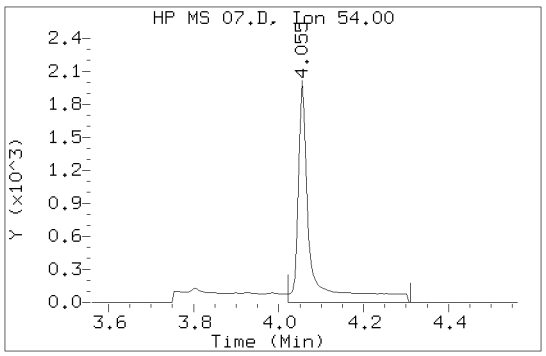
BEFORE

MASS
54
AREA
3948
HEIGHT
2015
23-Aug-2022
12:07
ALSHS
Server



AFTER

MASS
54
AREA
3948
HEIGHT
2015
24-Aug-2022
10:25
ALSHS
S

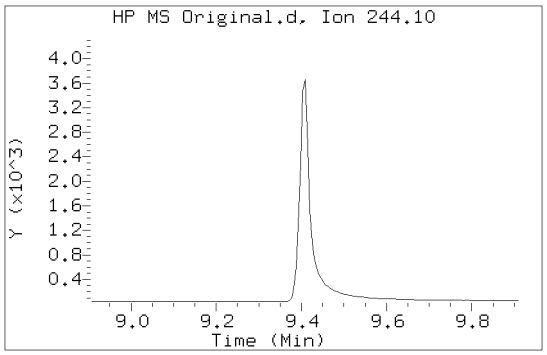


4-Terphenyl-d14 (1718-51-0)

Reason Code:

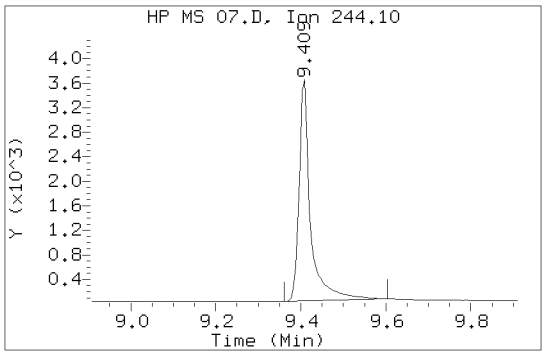
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
23-Aug-2022
12:07
ALSHS
Server



AFTER

MASS
244.1
AREA
6654
HEIGHT
3604
24-Aug-2022
10:25
ALSHS
S



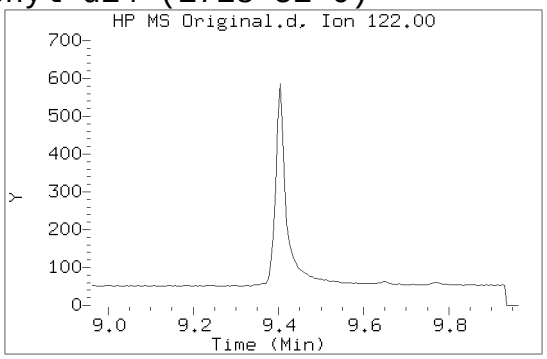
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\07.D
Inj Date : 23-AUG-2022 11:52
InstruID : SV6.i
LabSampID : LCSD-182382

4-Terphenyl-d14 (1718-51-0)

Reason Code:

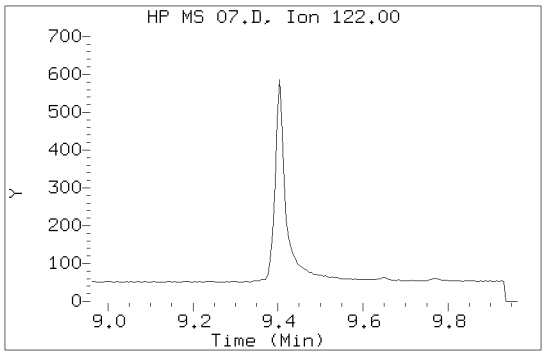
BEFORE

MASS
122
AREA
0
HEIGHT
0
23-Aug-2022
12:07
ALSHS
Server



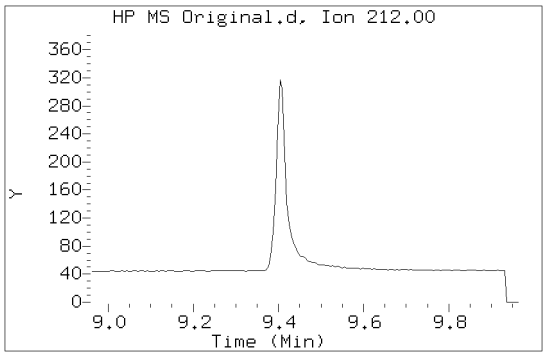
AFTER

MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



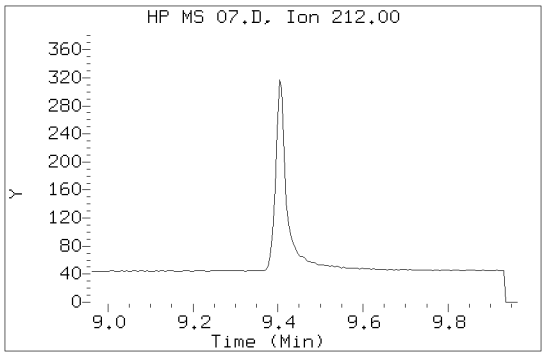
BEFORE

MASS
212
AREA
0
HEIGHT
0
23-Aug-2022
12:07
ALSHS
Server



AFTER

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

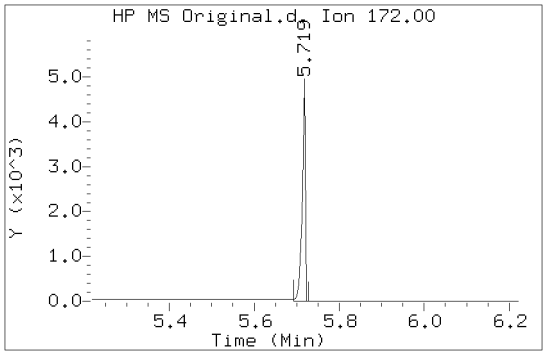


2-Fluorobiphenyl (321-60-8)

Reason Code:

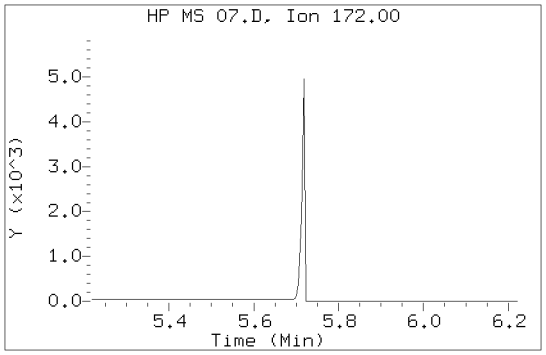
BEFORE

MASS
172
AREA
2701
HEIGHT
4957
23-Aug-2022
12:07
ALSHS
Server



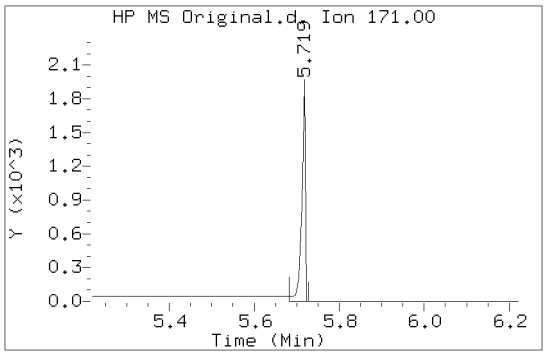
AFTER

MASS
172
AREA
4521
HEIGHT
4957
24-Aug-2022
10:25
ALSHS
S



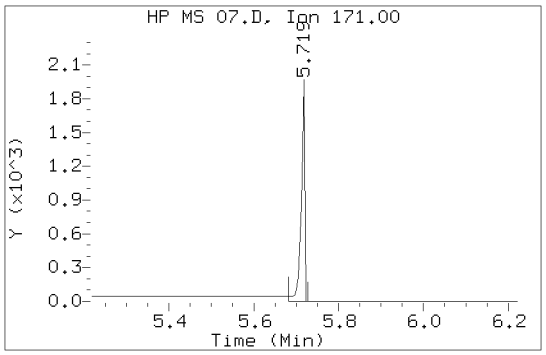
BEFORE

MASS
171
AREA
1194
HEIGHT
1969
23-Aug-2022
12:07
ALSHS
Server



AFTER

MASS
171
AREA
1194
HEIGHT
1969
24-Aug-2022
10:25
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\15.D Page 1
Report Date: 24-Aug-2022 10:26

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\15.D
Lab Smp Id: HS22080499-01
Inj Date : 23-AUG-2022 14:15
Operator : LG Inst ID: SV6.i
Smp Info : HS22080499-01
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.598	3.592	(1.000)	6602	0.10000	(aM)
* 45 Naphthalene-d8	136	4.708	4.705	(1.000)	14475	0.10000	
$ 33 Nitrobenzene-d5	82	4.059	4.059	(0.862)	4279	0.08868	0.08868(M)
* 86 Acenaphthene-d10	164	6.382	6.376	(1.000)	8215	0.10000	(Q)
$ 69 2-Fluorobiphenyl	172	5.718	5.718	(0.896)	5636	0.04408	0.04408(M)
* 126 Phenanthrene-d10	188	7.827	7.827	(1.000)	15329	0.10000	
* 182 Chrysene-d12	240	10.662	10.657	(1.000)	10278	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.408	9.408	(0.882)	9552	0.04943	0.04943(M)
* 198 Perylene-d12	264	12.729	12.724	(1.000)	8614	0.10000	
1 1,4-Dioxane	58	1.902	1.887	(0.529)	3803	1.40316	1.403(AQ)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.

01134092

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\15.D

Date : 23-AUG-2022 14:15

Client ID:

Instrument: SV6.i

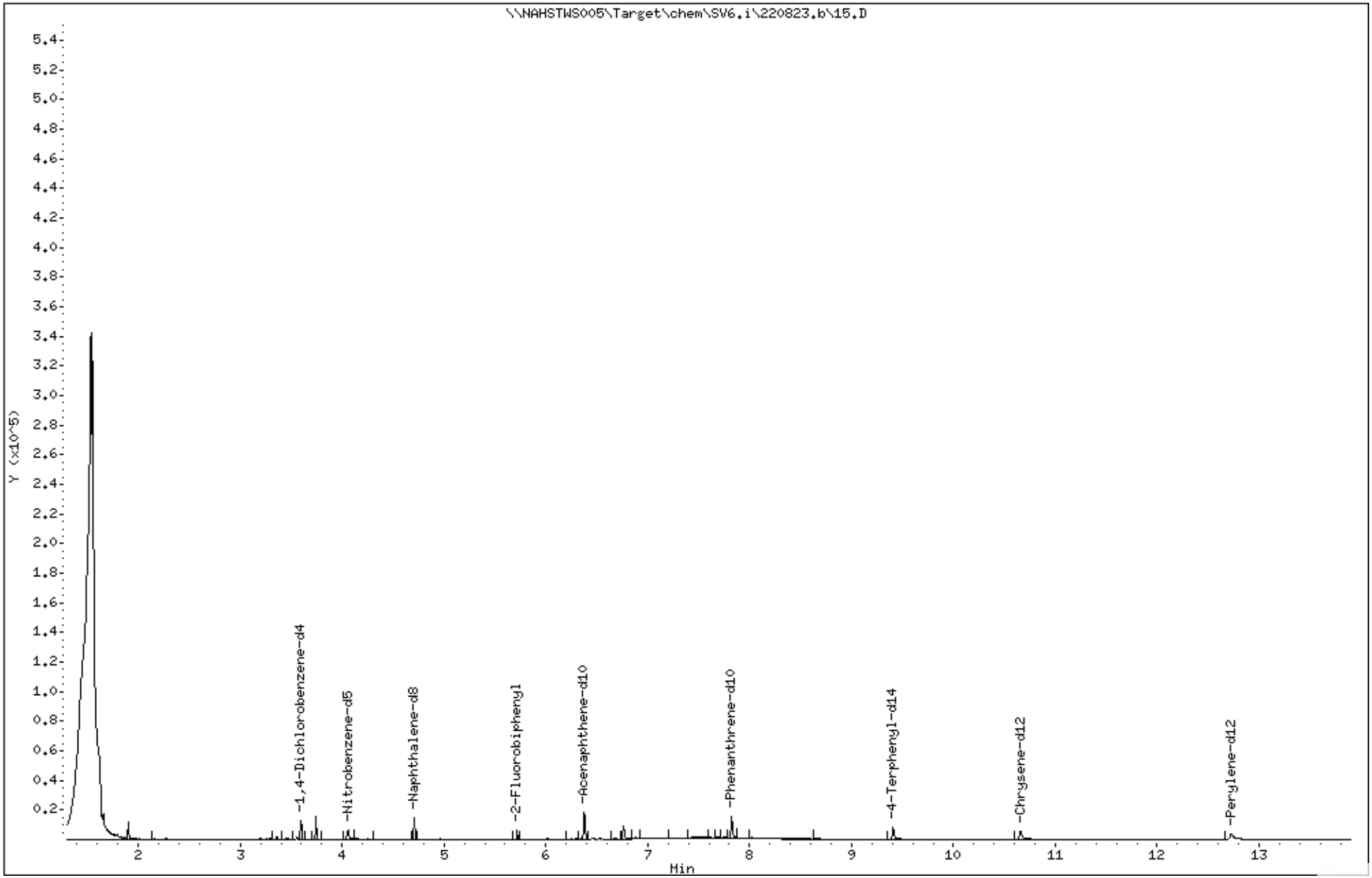
Sample Info: HS22080499-01

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\15.D

Date : 23-AUG-2022 14:15

Client ID:

Instrument: SV6.i

Sample Info: HS22080499-01

Purge Volume: 1000.0

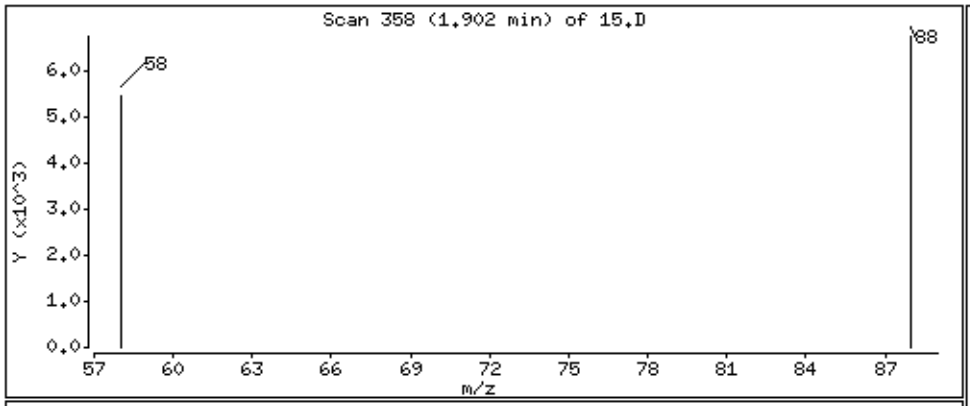
Operator: LG

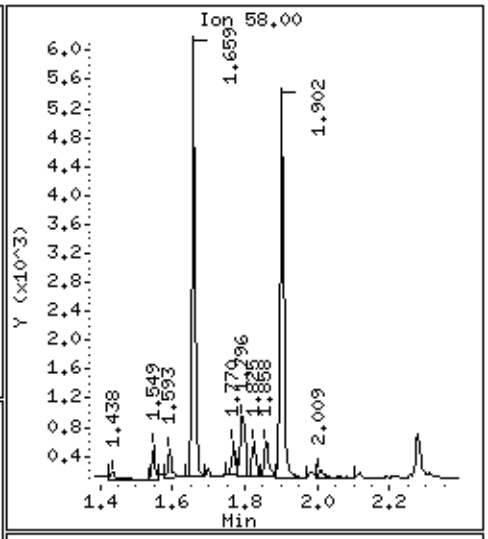
Column phase: RTX-5SIL MS

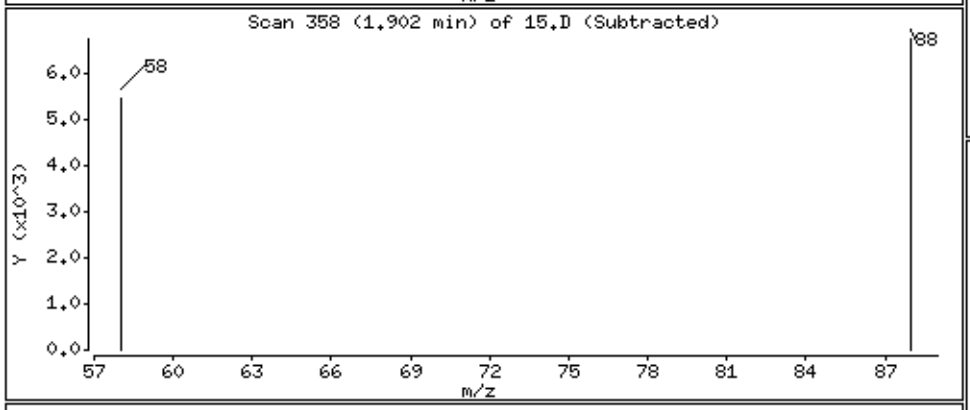
Column diameter: 0.28

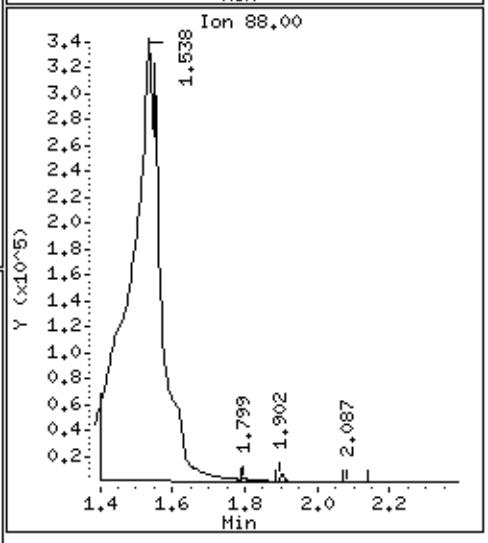
1 1,4-Dioxane

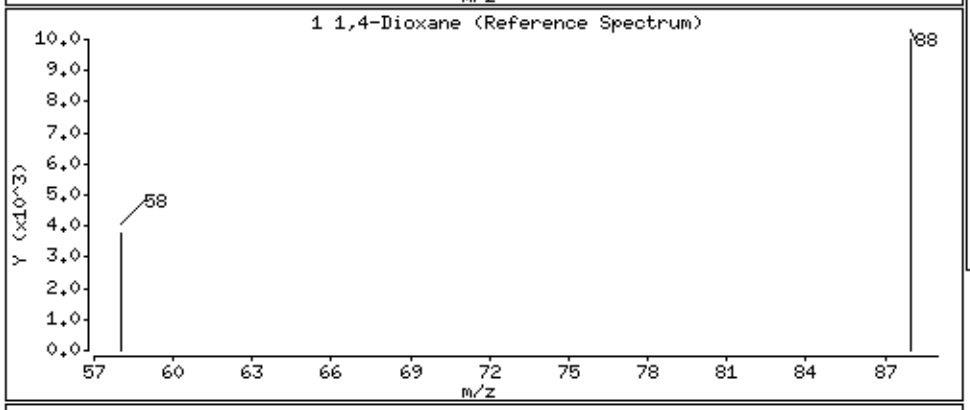
Concentration: 1.403 ug/L

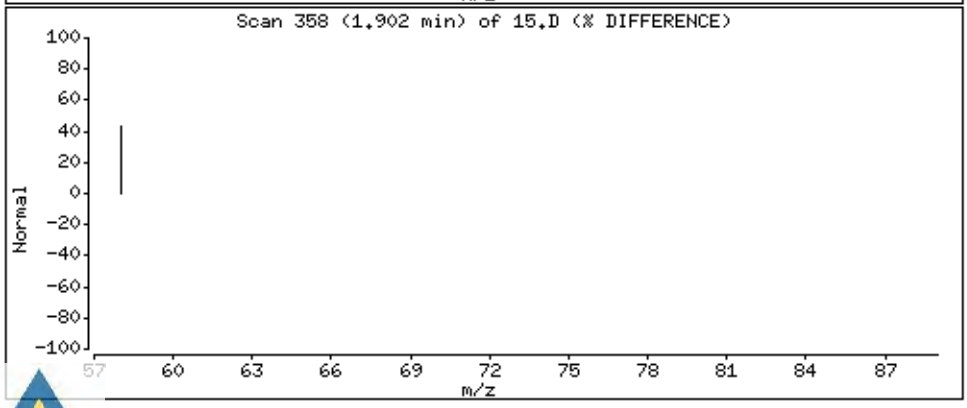












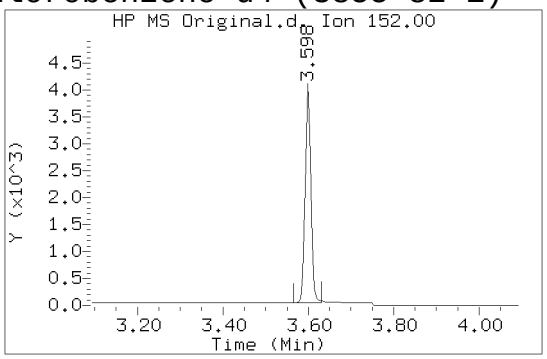
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\15.D
Inj Date : 23-AUG-2022 14:15
InstruID : SV6.i
LabSampID : HS22080499-01

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

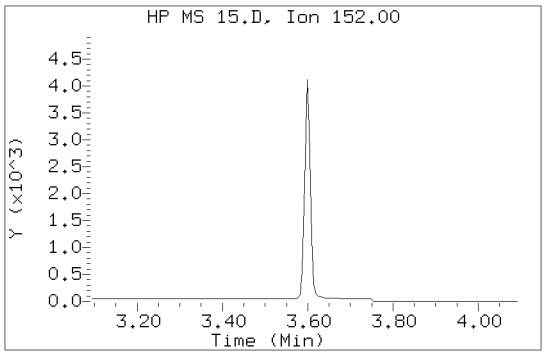
BEFORE

MASS
152
AREA
3706
HEIGHT
4067
23-Aug-2022
14:30
ALSHS
Server



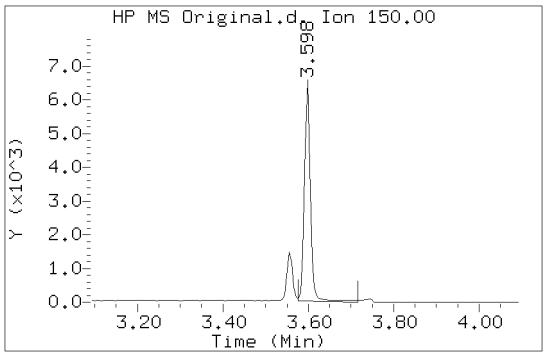
AFTER

MASS
152
AREA
6602
HEIGHT
4118
24-Aug-2022
10:25
ALSHS
S



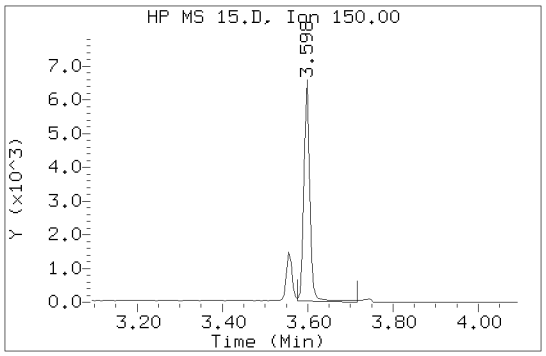
BEFORE

MASS
150
AREA
6310
HEIGHT
6555
23-Aug-2022
14:30
ALSHS
Server



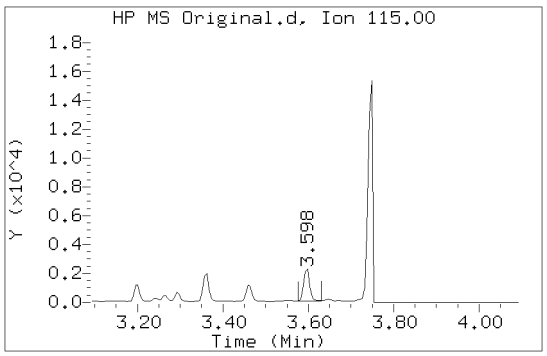
AFTER

MASS
150
AREA
6310
HEIGHT
6555
24-Aug-2022
10:25
ALSHS
S



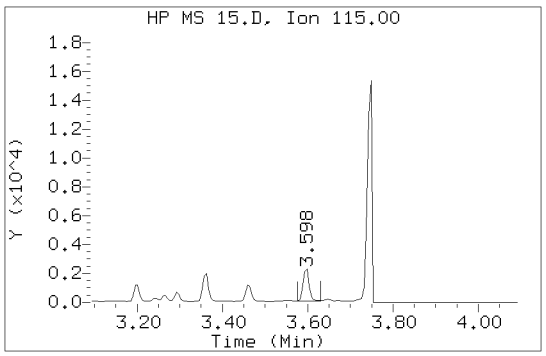
BEFORE

MASS
115
AREA
2167
HEIGHT
2212
23-Aug-2022
14:30
ALSHS
Server



AFTER

MASS
115
AREA
2167
HEIGHT
2212
24-Aug-2022
10:25
ALSHS
S

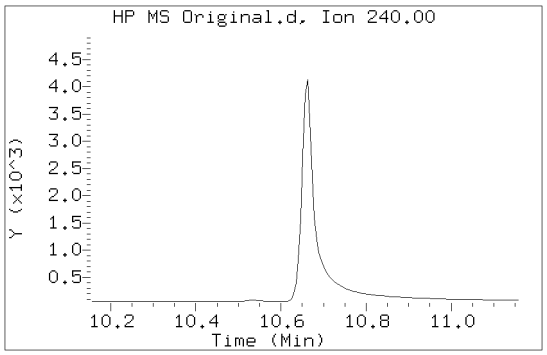


Chrysene-d12 (1719-03-5)

Reason Code:

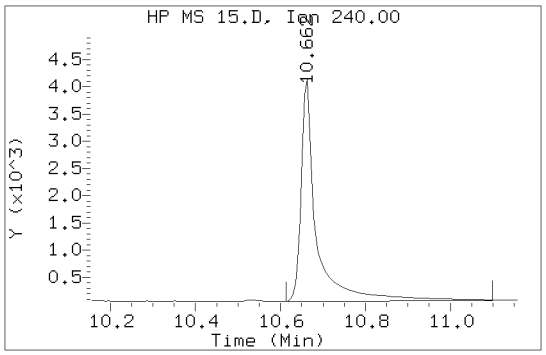
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
14:30
ALSHS
Server



AFTER

MASS
240
AREA
10278
HEIGHT
4069
24-Aug-2022
10:25
ALSHS
S



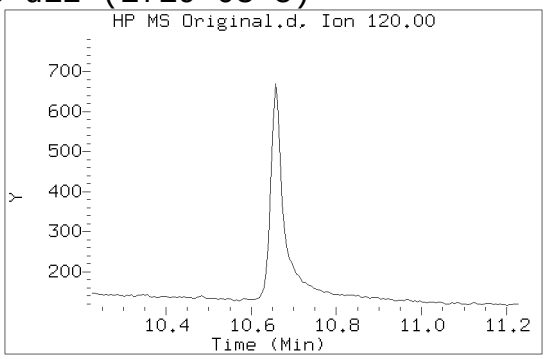
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\15.D
Inj Date : 23-AUG-2022 14:15
InstruID : SV6.i
LabSampID : HS22080499-01

Chrysene-d12 (1719-03-5)

Reason Code:

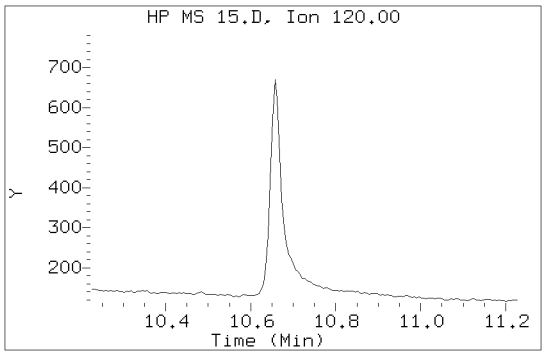
BEFORE

MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
14:30
ALSHS
Server



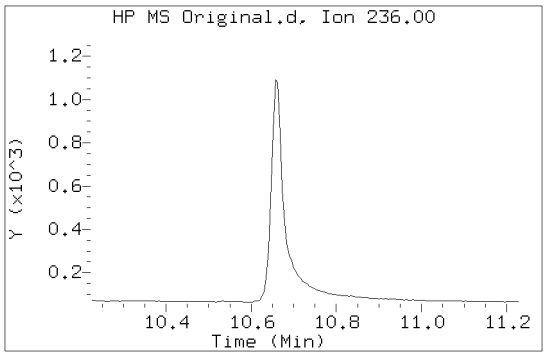
AFTER

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



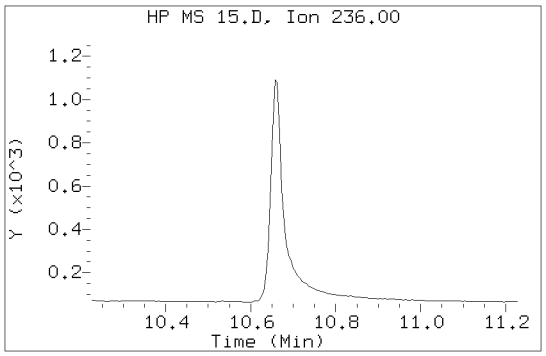
BEFORE

MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
14:30
ALSHS
Server



AFTER

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

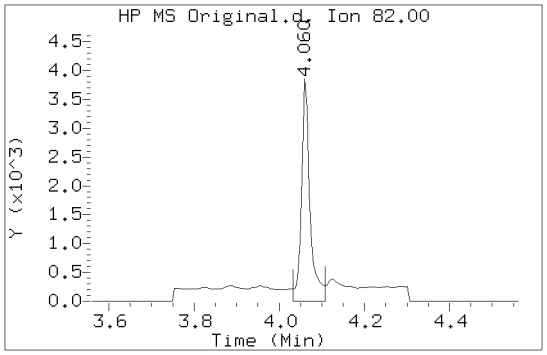


Nitrobenzene-d5 (4165-60-0)

Reason Code:

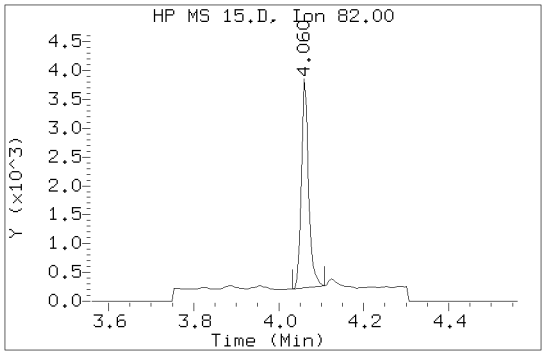
BEFORE

MASS
82
AREA
5426
HEIGHT
3854
23-Aug-2022
14:30
ALSHS
Server



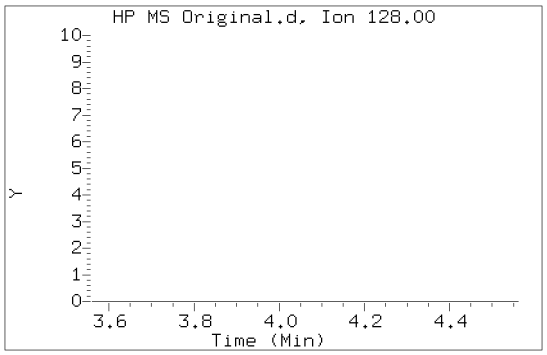
AFTER

MASS
82
AREA
4279
HEIGHT
3623
24-Aug-2022
10:25
ALSHS
S



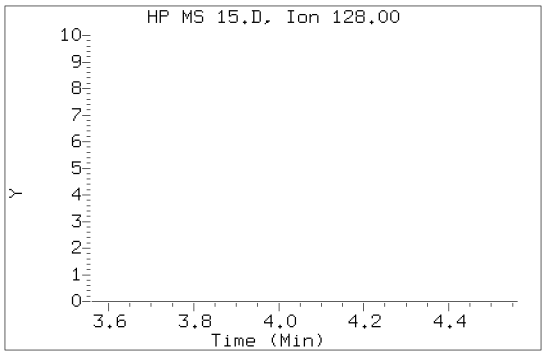
BEFORE

MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
14:30
ALSHS
Server



AFTER

MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



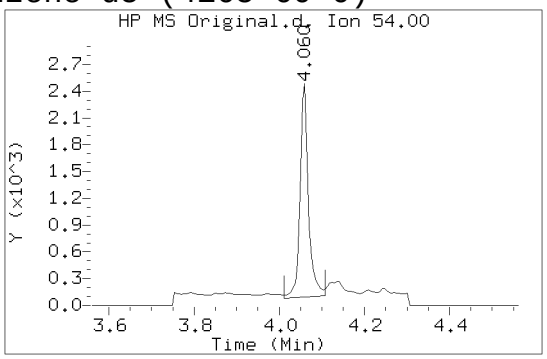
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\15.D
Inj Date : 23-AUG-2022 14:15
InstruID : SV6.i
LabSampID : HS22080499-01

Nitrobenzene-d5 (4165-60-0)

Reason Code:

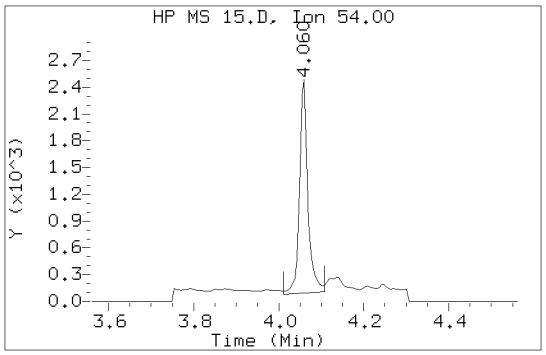
BEFORE

MASS
54
AREA
3267
HEIGHT
2390
23-Aug-2022
14:30
ALSHS
Server



AFTER

MASS
54
AREA
3267
HEIGHT
2390
24-Aug-2022
10:25
ALSHS
S

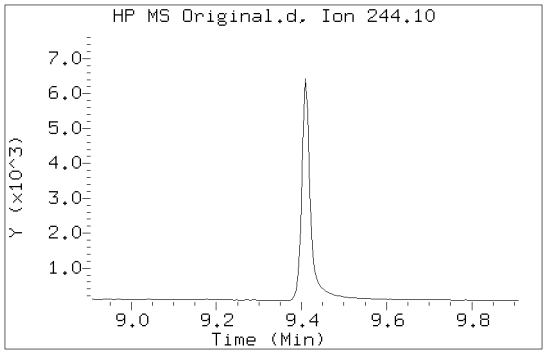


4-Terphenyl-d14 (1718-51-0)

Reason Code:

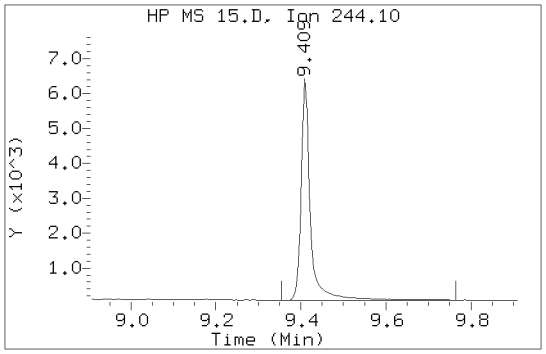
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
23-Aug-2022
14:30
ALSHS
Server



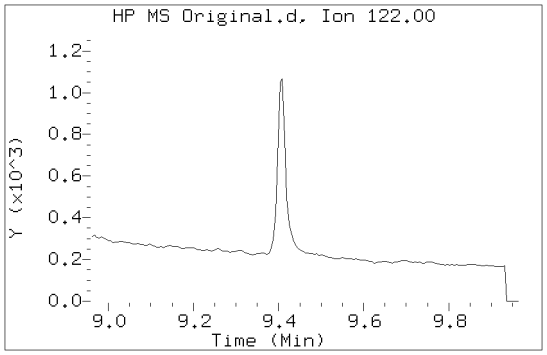
AFTER

MASS
244.1
AREA
9552
HEIGHT
6348
24-Aug-2022
10:25
ALSHS
S



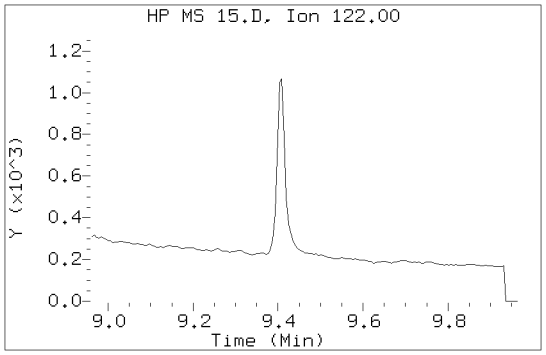
BEFORE

MASS
122
AREA
0
HEIGHT
0
23-Aug-2022
14:30
ALSHS
Server



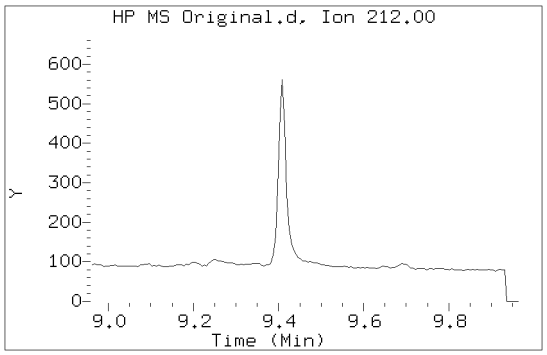
AFTER

MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



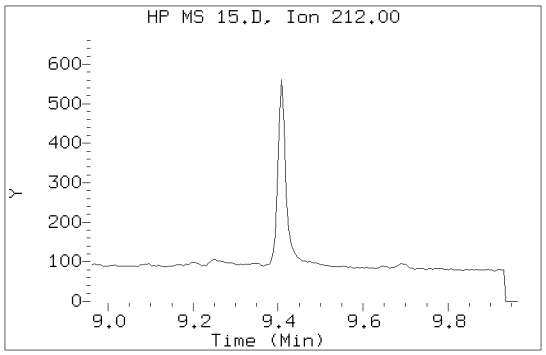
BEFORE

MASS
212
AREA
0
HEIGHT
0
23-Aug-2022
14:30
ALSHS
Server



AFTER

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



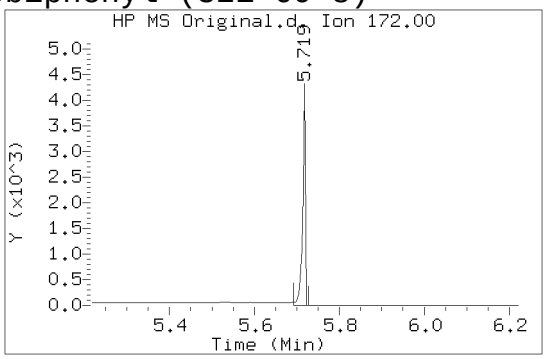
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\15.D
Inj Date : 23-AUG-2022 14:15
InstruID : SV6.i
LabSampID : HS22080499-01

2-Fluorobiphenyl (321-60-8)

Reason Code:

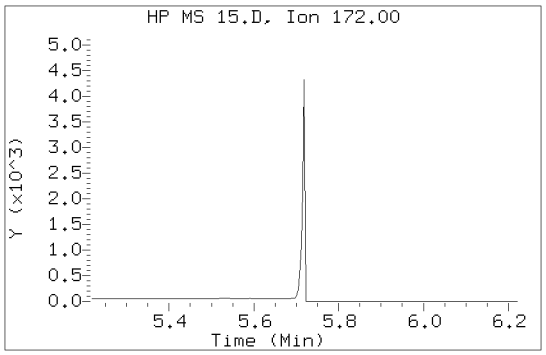
BEFORE

MASS
172
AREA
1997
HEIGHT
4328
23-Aug-2022
14:30
ALSHS
Server



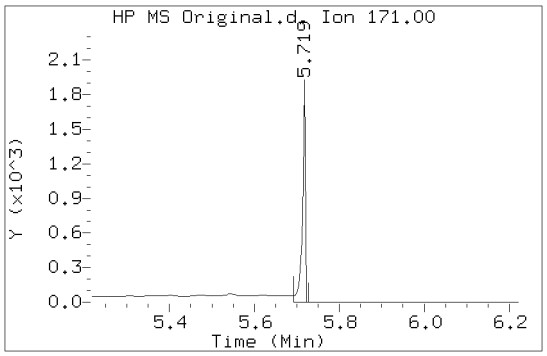
AFTER

MASS
172
AREA
5636
HEIGHT
4382
24-Aug-2022
10:25
ALSHS
S



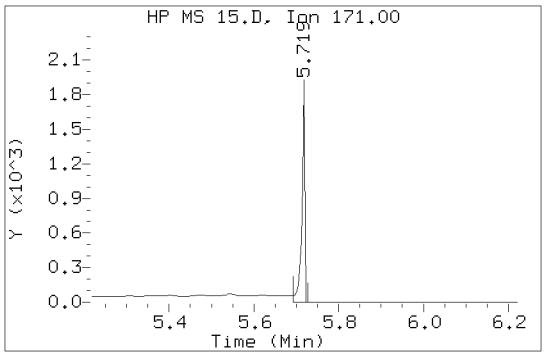
BEFORE

MASS
171
AREA
958
HEIGHT
1928
23-Aug-2022
14:30
ALSHS
Server



AFTER

MASS
171
AREA
958
HEIGHT
1928
24-Aug-2022
10:25
ALSHS
S



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\16.D
Lab Smp Id: HS22080499-02
Inj Date : 23-AUG-2022 14:33
Operator : LG Inst ID: SV6.i
Smp Info : HS22080499-02
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.598	3.592	(1.000)	6614	0.10000	(aM)
* 45 Naphthalene-d8	136	4.705	4.705	(1.000)	15686	0.10000	
$ 33 Nitrobenzene-d5	82	4.059	4.059	(0.863)	4160	0.07956	0.07956(M)
* 86 Acenaphthene-d10	164	6.377	6.376	(1.000)	8087	0.10000	(Q)
$ 69 2-Fluorobiphenyl	172	5.719	5.718	(0.897)	5016	0.03985	0.03985(M)
* 126 Phenanthrene-d10	188	7.822	7.827	(1.000)	14882	0.10000	
* 182 Chrysene-d12	240	10.657	10.657	(1.000)	8490	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.409	9.408	(0.883)	7935	0.04971	0.04971(M)
* 198 Perylene-d12	264	12.730	12.724	(1.000)	7857	0.10000	
1 1,4-Dioxane	58	1.913	1.887	(0.532)	1138	0.41911	0.4191(MH)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

01134099

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\16.D

Page 1

Date : 23-AUG-2022 14:33

Client ID:

Instrument: SV6.i

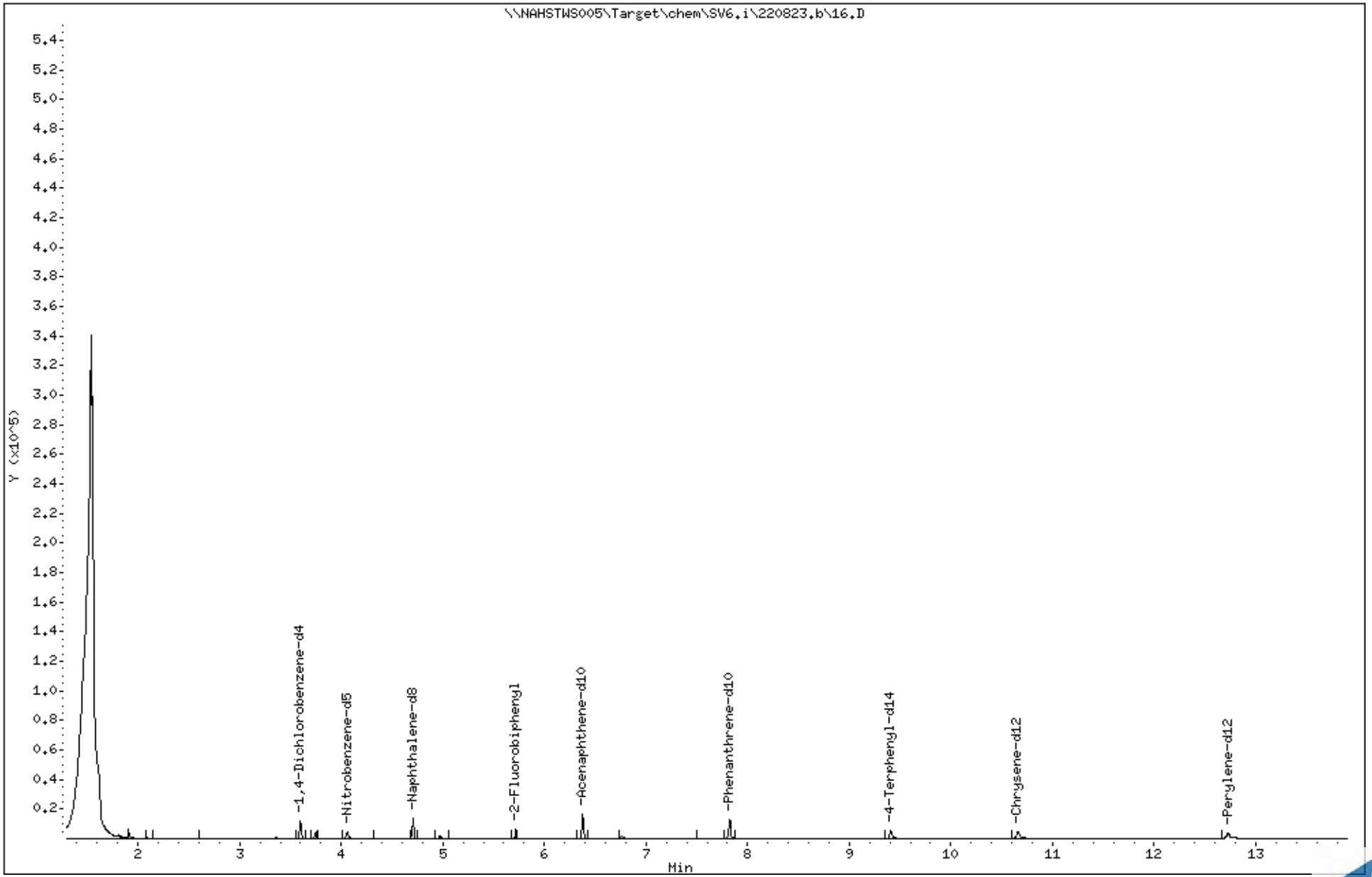
Sample Info: HS22080499-02

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\16.D

Date : 23-AUG-2022 14:33

Client ID:

Instrument: SV6.i

Sample Info: HS22080499-02

Purge Volume: 1000.0

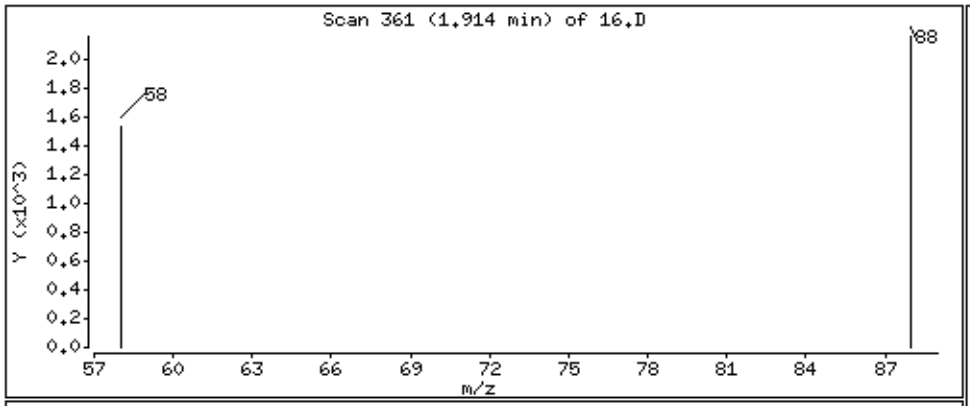
Operator: LG

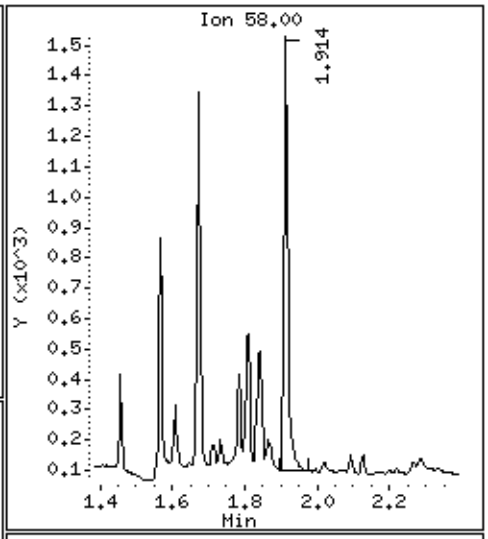
Column phase: RTX-5SIL MS

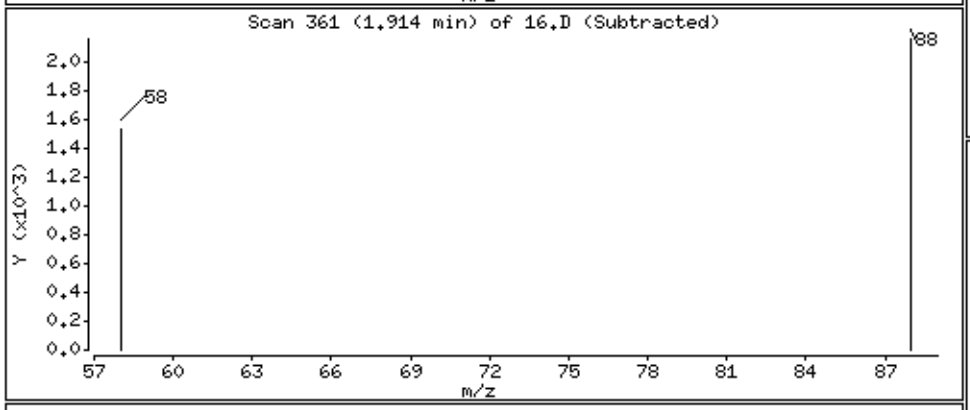
Column diameter: 0.28

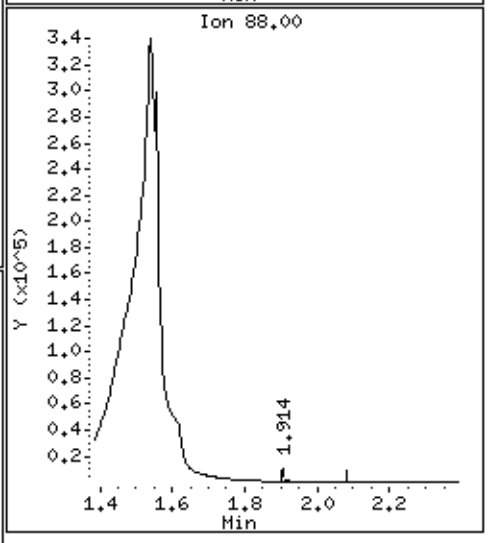
1 1,4-Dioxane

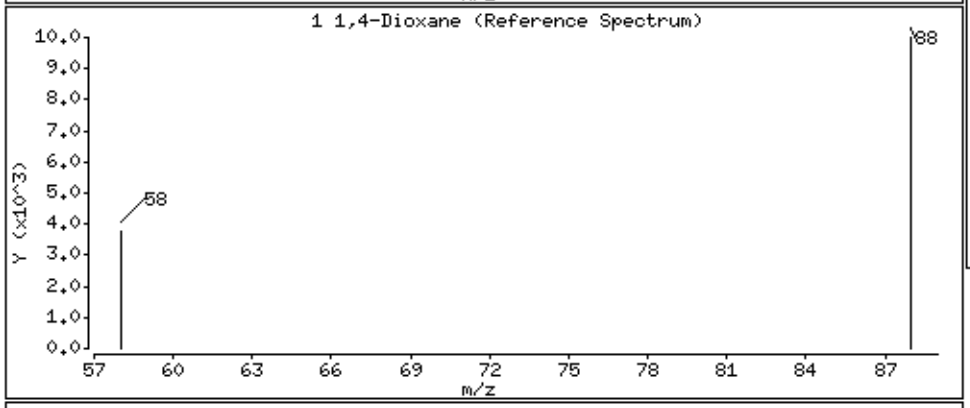
Concentration: 0.4191 ug/L

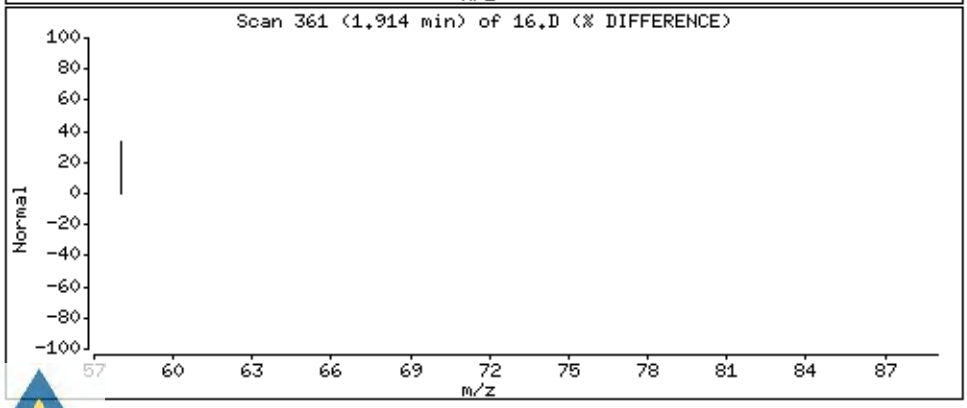












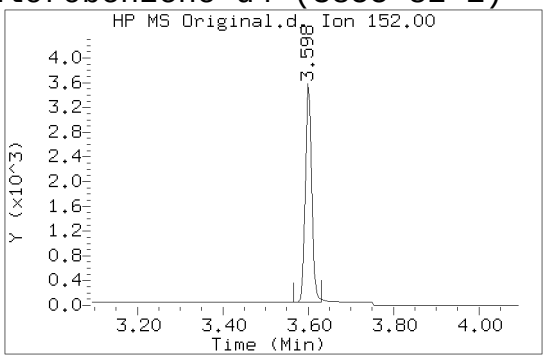
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\16.D
Inj Date : 23-AUG-2022 14:33
InstruID : SV6.i
LabSampID : HS22080499-02

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

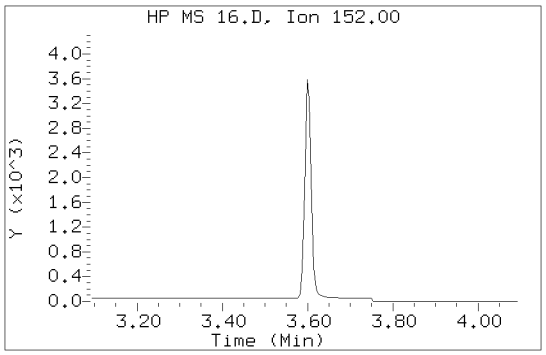
BEFORE

MASS
152
AREA
3654
HEIGHT
3533
23-Aug-2022
14:50
ALSHS
Server



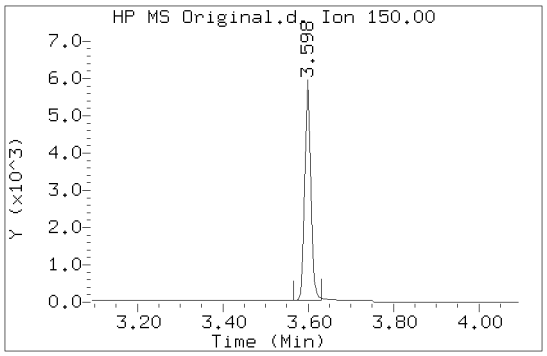
AFTER

MASS
152
AREA
6614
HEIGHT
3584
24-Aug-2022
10:25
ALSHS
S



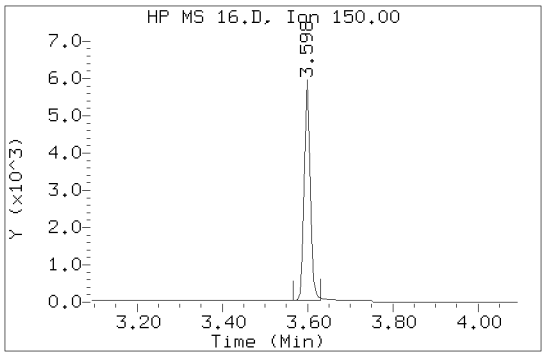
BEFORE

MASS
150
AREA
5766
HEIGHT
5911
23-Aug-2022
14:50
ALSHS
Server



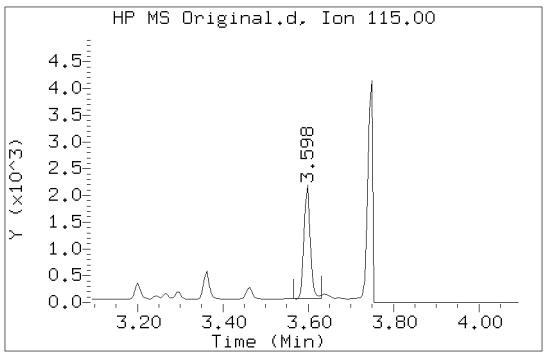
AFTER

MASS
150
AREA
5766
HEIGHT
5911
24-Aug-2022
10:25
ALSHS
S



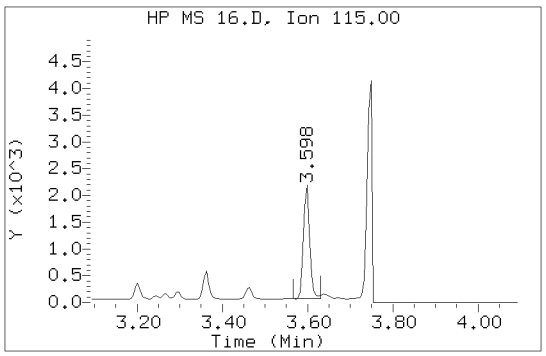
BEFORE

MASS
115
AREA
2136
HEIGHT
2117
23-Aug-2022
14:50
ALSHS
Server



AFTER

MASS
115
AREA
2136
HEIGHT
2117
24-Aug-2022
10:25
ALSHS
S

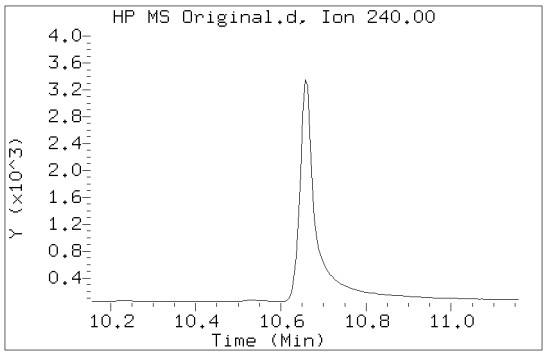


Chrysene-d12 (1719-03-5)

Reason Code:

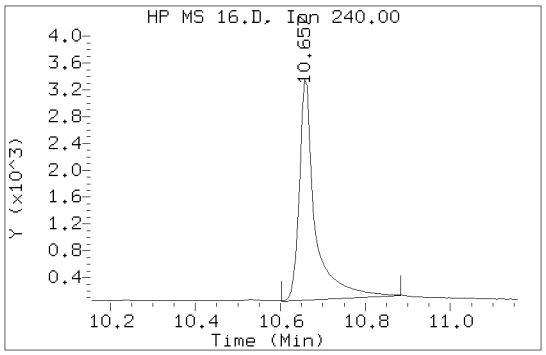
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
14:50
ALSHS
Server



AFTER

MASS
240
AREA
8490
HEIGHT
3287
24-Aug-2022
10:25
ALSHS
S



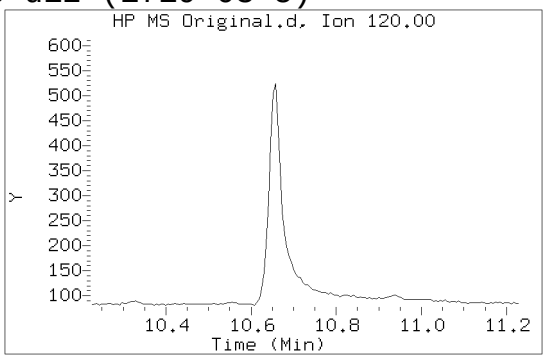
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\16.D
Inj Date : 23-AUG-2022 14:33
InstruID : SV6.i
LabSampID : HS22080499-02

Chrysene-d12 (1719-03-5)

Reason Code:

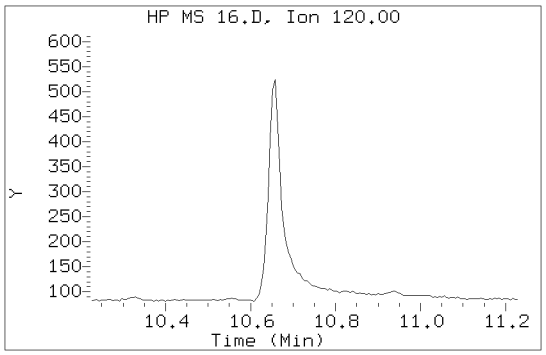
BEFORE

MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
14:50
ALSHS
Server



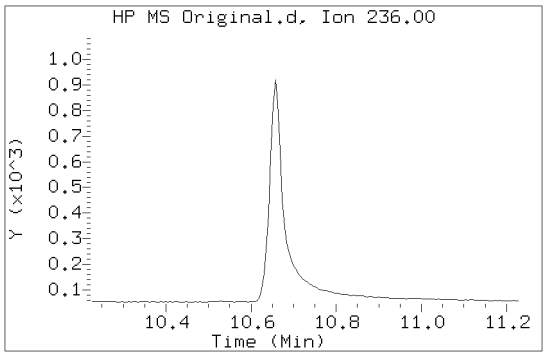
AFTER

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



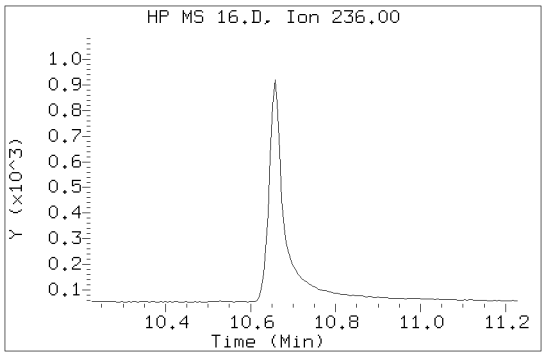
BEFORE

MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
14:50
ALSHS
Server



AFTER

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

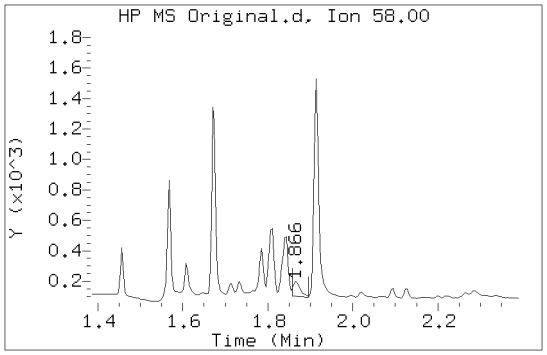


1,4-Dioxane ()

Reason Code:

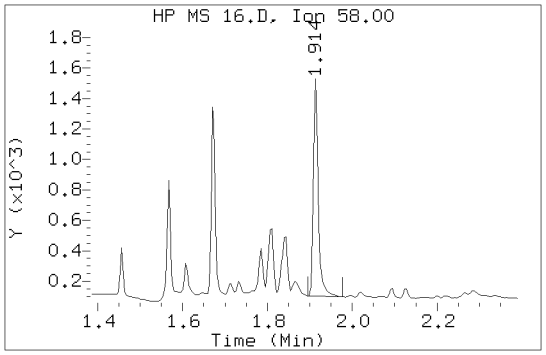
BEFORE

MASS
58
AREA
116
HEIGHT
98
23-Aug-2022
14:50
ALSHS
Server



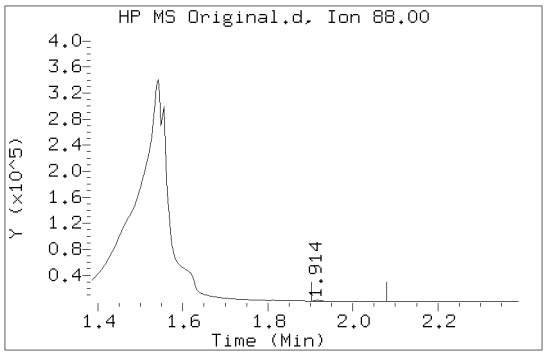
AFTER

MASS
58
AREA
1138
HEIGHT
1428
24-Aug-2022
10:25
ALSHS
S



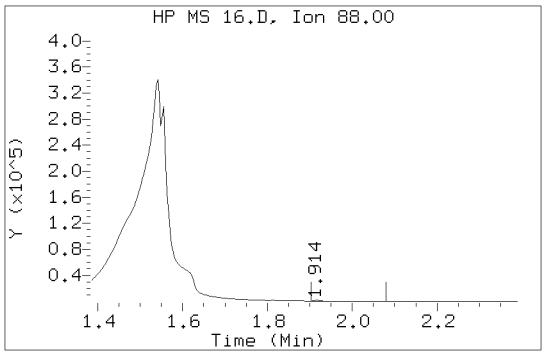
BEFORE

MASS
88
AREA
2822
HEIGHT
1906
23-Aug-2022
14:50
ALSHS
Server



AFTER

MASS
88
AREA
2822
HEIGHT
1906
24-Aug-2022
10:25
ALSHS
S



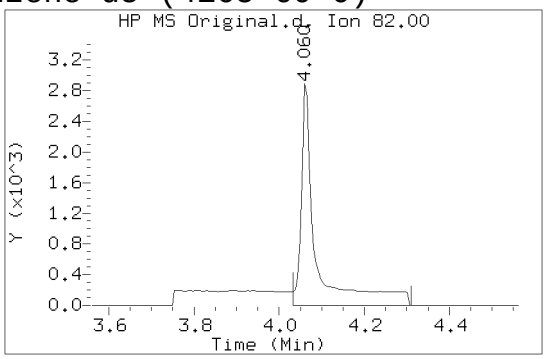
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\16.D
Inj Date : 23-AUG-2022 14:33
InstruID : SV6.i
LabSampID : HS22080499-02

Nitrobenzene-d5 (4165-60-0)

Reason Code:

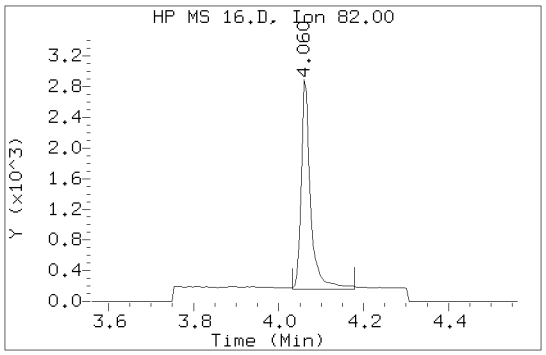
BEFORE

MASS
82
AREA
6905
HEIGHT
2892
23-Aug-2022
14:50
ALSHS
Server



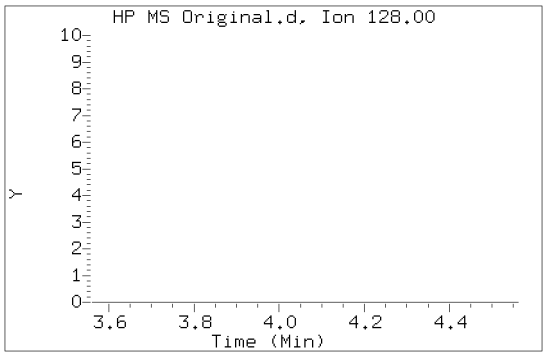
AFTER

MASS
82
AREA
4160
HEIGHT
2729
24-Aug-2022
10:25
ALSHS
S



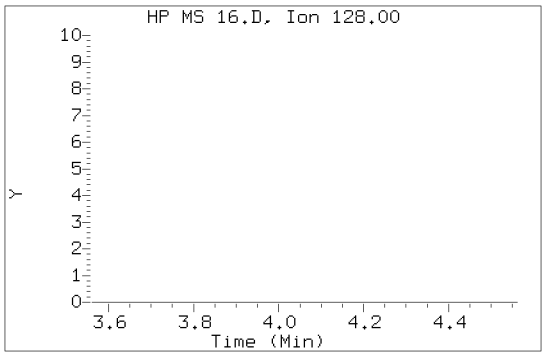
BEFORE

MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
14:50
ALSHS
Server



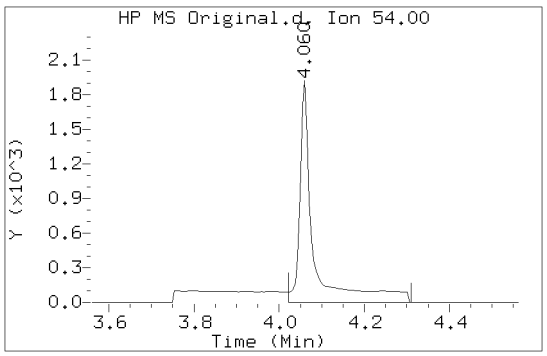
AFTER

MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



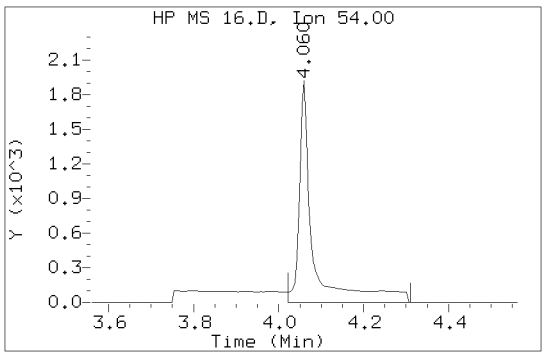
BEFORE

MASS
54
AREA
4251
HEIGHT
1919
23-Aug-2022
14:50
ALSHS
Server



AFTER

MASS
54
AREA
4251
HEIGHT
1919
24-Aug-2022
10:25
ALSHS
S

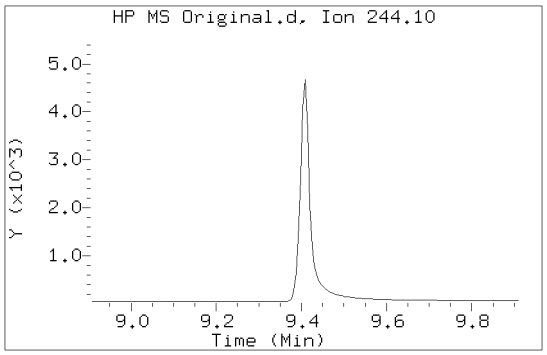


4-Terphenyl-d14 (1718-51-0)

Reason Code:

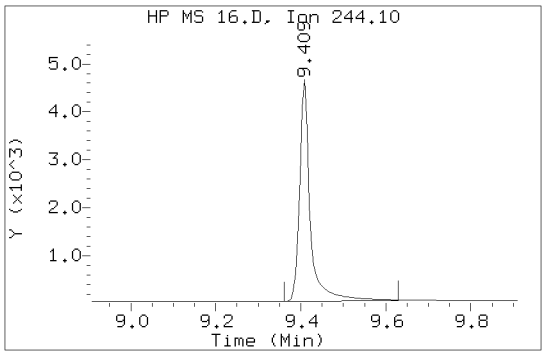
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
23-Aug-2022
14:50
ALSHS
Server



AFTER

MASS
244.1
AREA
7935
HEIGHT
4611
24-Aug-2022
10:25
ALSHS
S



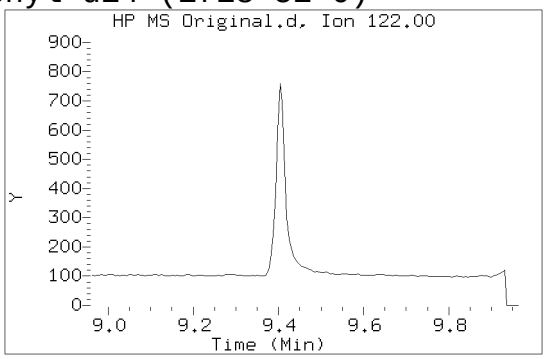
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\16.D
Inj Date : 23-AUG-2022 14:33
InstruID : SV6.i
LabSampID : HS22080499-02

4-Terphenyl-d14 (1718-51-0)

Reason Code:

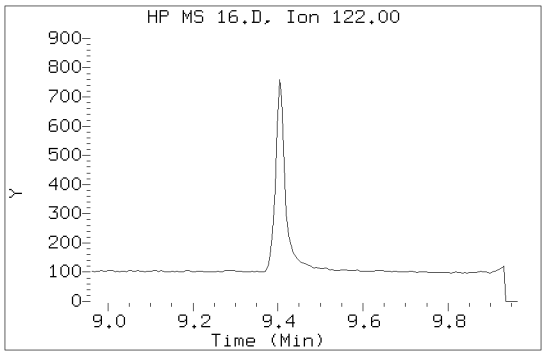
BEFORE

MASS
122
AREA
0
HEIGHT
0
23-Aug-2022
14:50
ALSHS
Server



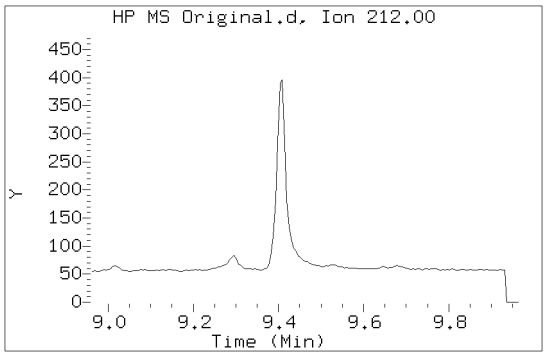
AFTER

MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



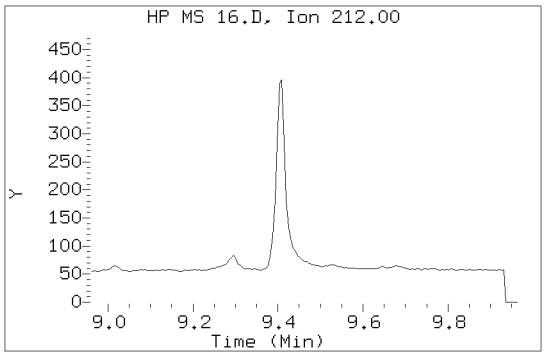
BEFORE

MASS
212
AREA
0
HEIGHT
0
23-Aug-2022
14:50
ALSHS
Server



AFTER

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

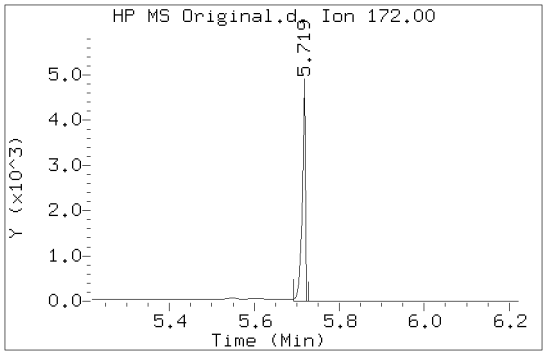


2-Fluorobiphenyl (321-60-8)

Reason Code:

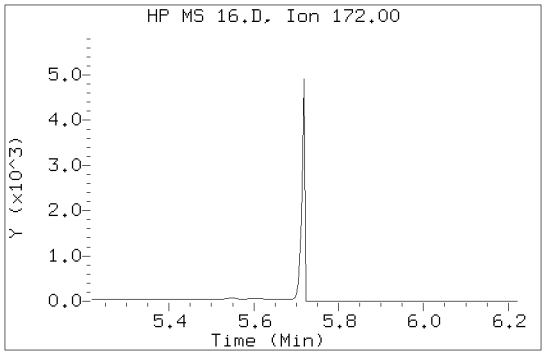
BEFORE

MASS
172
AREA
2687
HEIGHT
4914
23-Aug-2022
14:50
ALSHS
Server



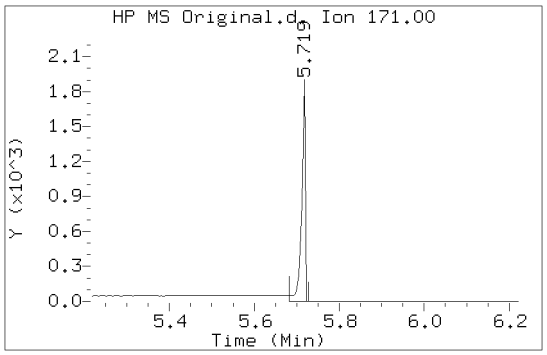
AFTER

MASS
172
AREA
5016
HEIGHT
4914
24-Aug-2022
10:25
ALSHS
S



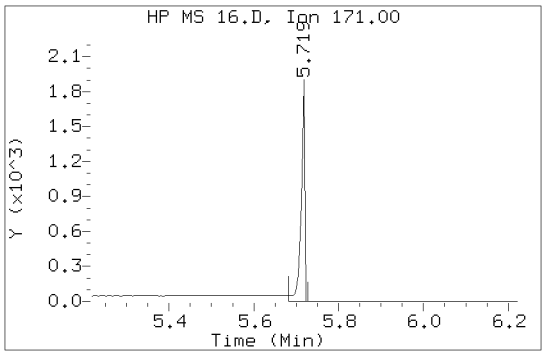
BEFORE

MASS
171
AREA
1178
HEIGHT
1902
23-Aug-2022
14:50
ALSHS
Server



AFTER

MASS
171
AREA
1178
HEIGHT
1902
24-Aug-2022
10:25
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\17.D Page 1
Report Date: 24-Aug-2022 10:26

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\17.D
Lab Smp Id: HS22080499-03
Inj Date : 23-AUG-2022 14:51
Operator : LG Inst ID: SV6.i
Smp Info : HS22080499-03
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.598	3.592	(1.000)	6148	0.10000	(aM)
* 45 Naphthalene-d8	136	4.708	4.705	(1.000)	13047	0.10000	
$ 33 Nitrobenzene-d5	82	4.059	4.059	(0.862)	3359	0.07723	0.07723(M)
* 86 Acenaphthene-d10	164	6.382	6.376	(1.000)	7285	0.10000	(Q)
$ 69 2-Fluorobiphenyl	172	5.718	5.718	(0.896)	4123	0.03636	0.03636(M)
* 126 Phenanthrene-d10	188	7.827	7.827	(1.000)	13519	0.10000	
* 182 Chrysene-d12	240	10.662	10.657	(1.000)	8028	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.408	9.408	(0.882)	7283	0.04825	0.04825(M)
* 198 Perylene-d12	264	12.729	12.724	(1.000)	7090	0.10000	
1 1,4-Dioxane	58	1.906	1.887	(0.530)	2705	1.07174	1.072(AQ)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.

01134107

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\17.D

Page 1

Date : 23-AUG-2022 14:51

Client ID:

Instrument: SV6.i

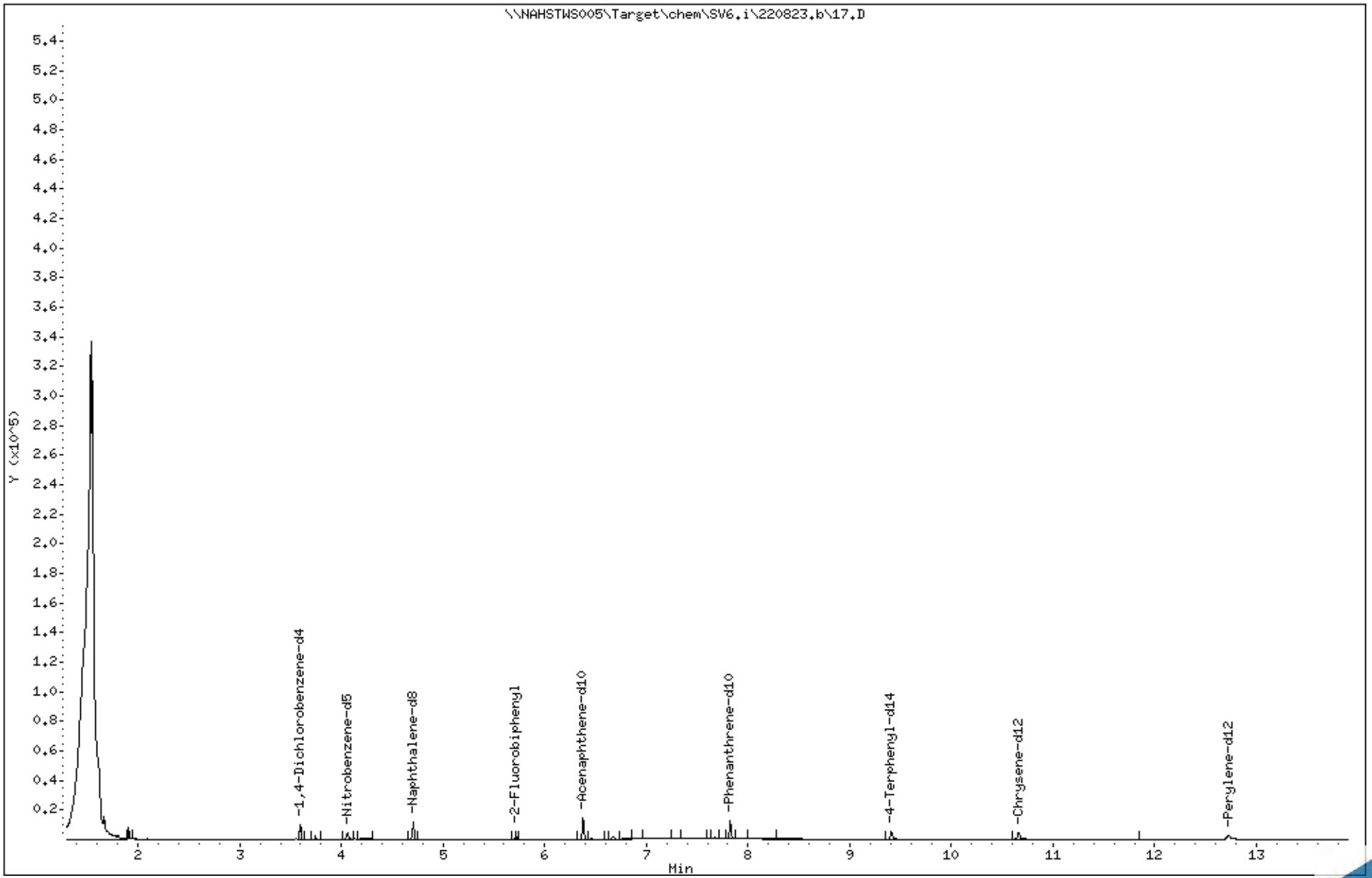
Sample Info: HS22080499-03

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\17.D

Date : 23-AUG-2022 14:51

Client ID:

Instrument: SV6.i

Sample Info: HS22080499-03

Purge Volume: 1000.0

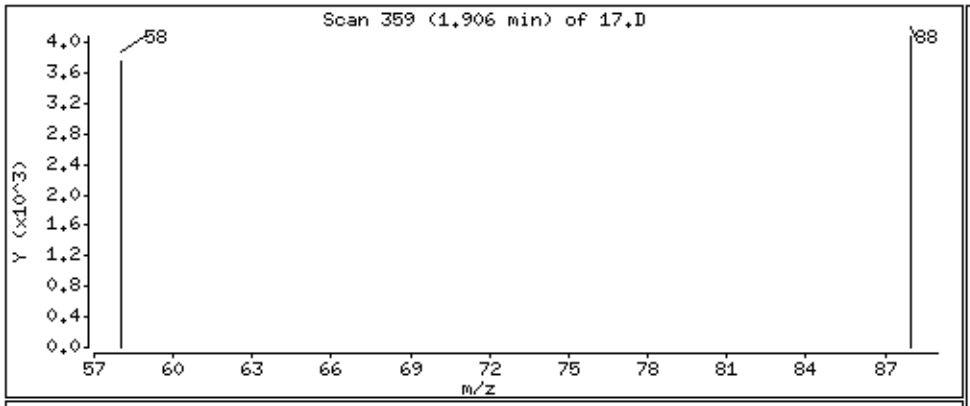
Operator: LG

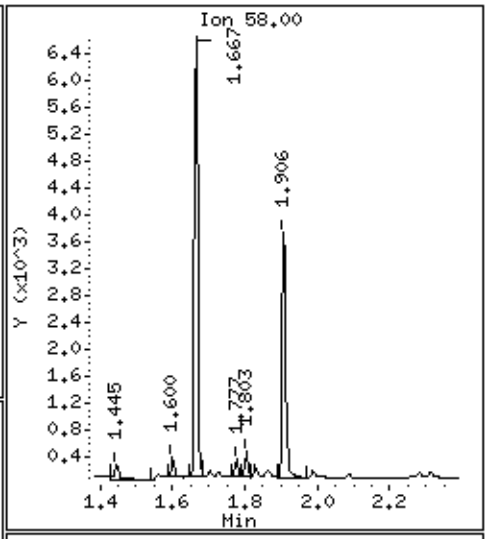
Column phase: RTX-5SIL MS

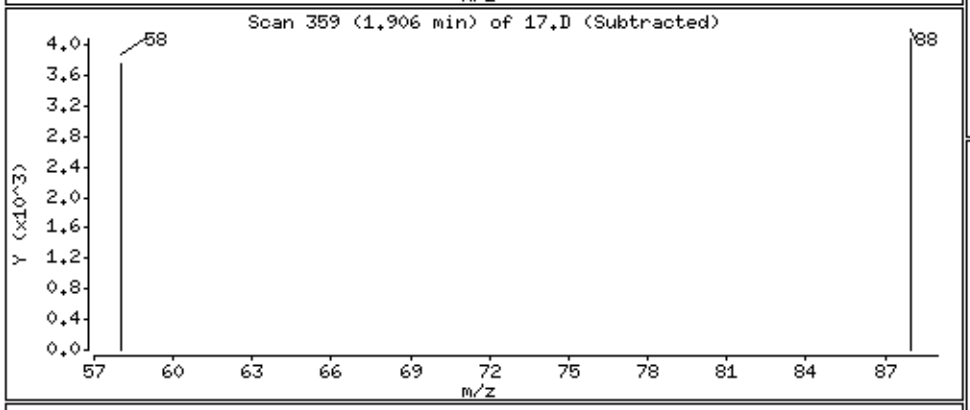
Column diameter: 0.28

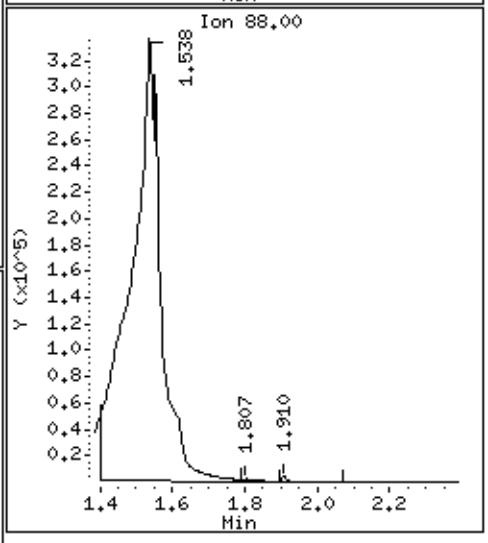
1 1,4-Dioxane

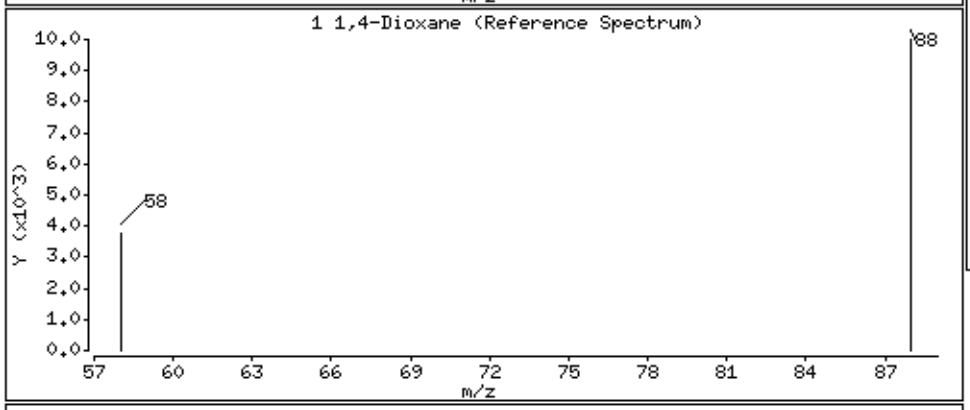
Concentration: 1.072 ug/L

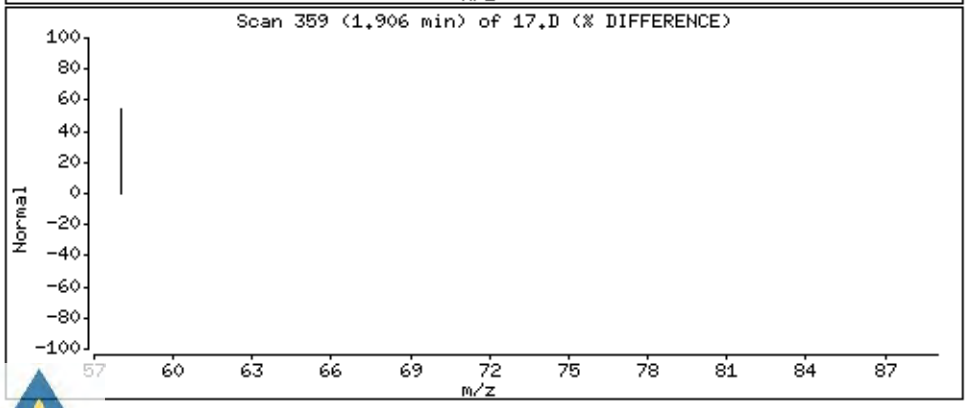












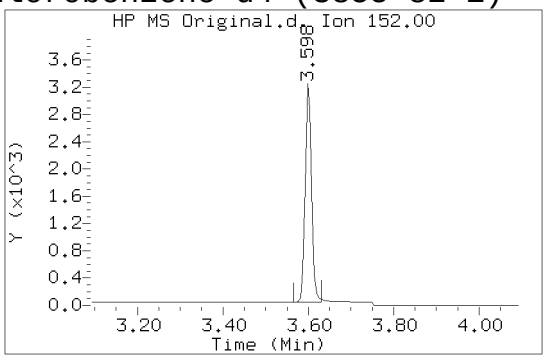
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\17.D
Inj Date : 23-AUG-2022 14:51
InstruID : SV6.i
LabSampID : HS22080499-03

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

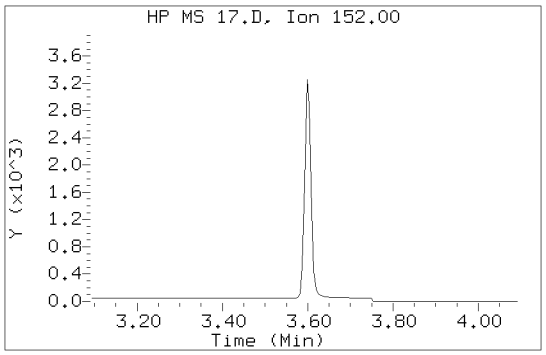
BEFORE

MASS
152
AREA
3271
HEIGHT
3203
23-Aug-2022
15:07
ALSHS
Server



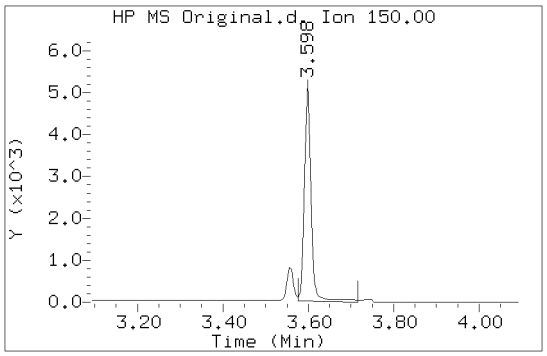
AFTER

MASS
152
AREA
6148
HEIGHT
3252
24-Aug-2022
10:25
ALSHS
S



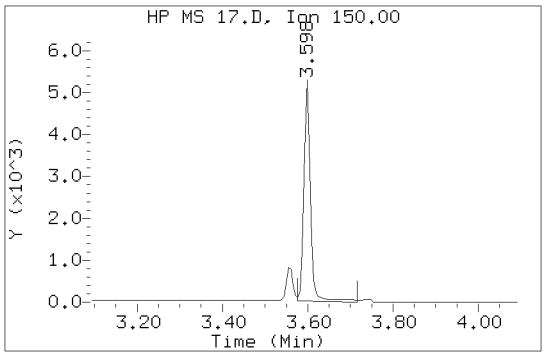
BEFORE

MASS
150
AREA
5543
HEIGHT
5274
23-Aug-2022
15:07
ALSHS
Server



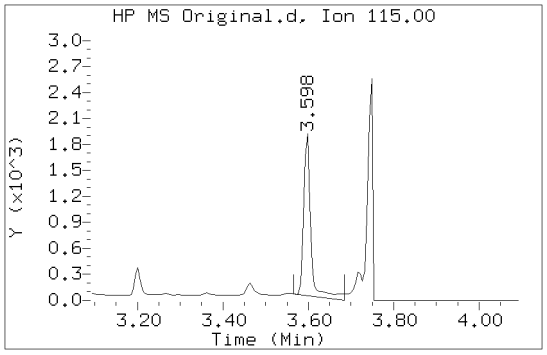
AFTER

MASS
150
AREA
5543
HEIGHT
5274
24-Aug-2022
10:25
ALSHS
S



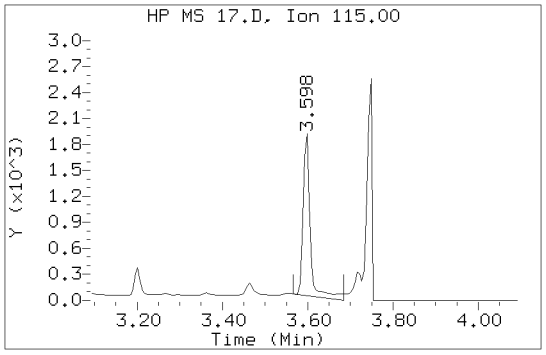
BEFORE

MASS
115
AREA
2153
HEIGHT
1876
23-Aug-2022
15:07
ALSHS
Server



AFTER

MASS
115
AREA
2153
HEIGHT
1876
24-Aug-2022
10:25
ALSHS
S

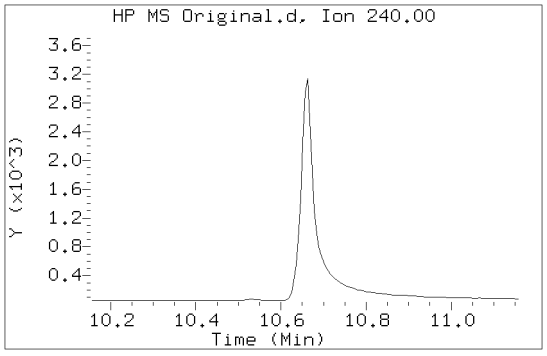


Chrysene-d12 (1719-03-5)

Reason Code:

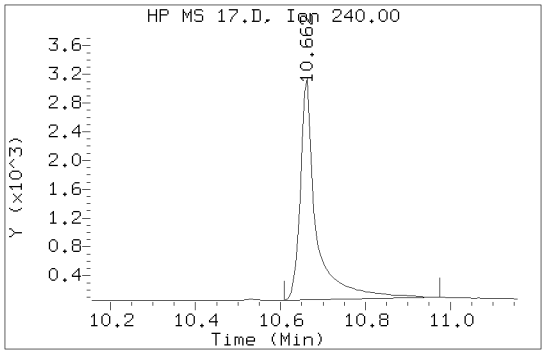
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
15:07
ALSHS
Server



AFTER

MASS
240
AREA
8028
HEIGHT
3076
24-Aug-2022
10:25
ALSHS
S

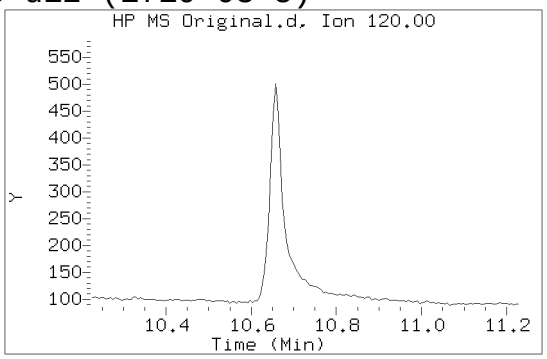


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\17.D
Inj Date : 23-AUG-2022 14:51
InstruID : SV6.i
LabSampID : HS22080499-03

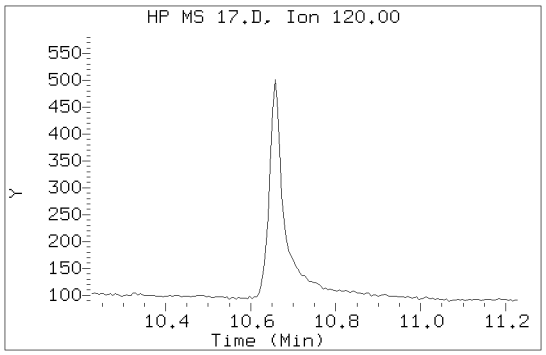
Chrysene-d12 (1719-03-5)

Reason Code:

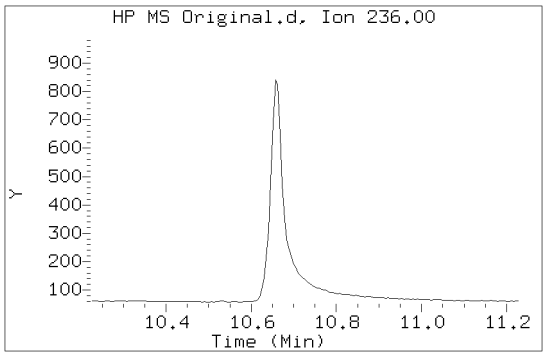
BEFORE
MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
15:07
ALSHS
Server



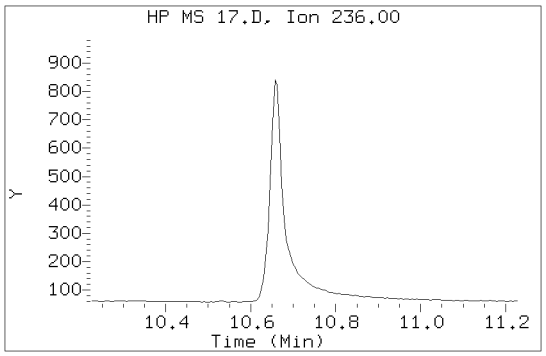
AFTER
MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
15:07
ALSHS
Server



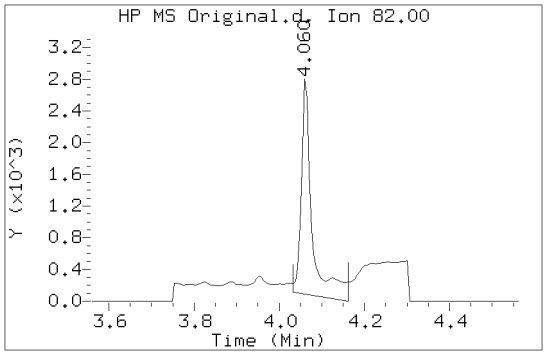
AFTER
MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



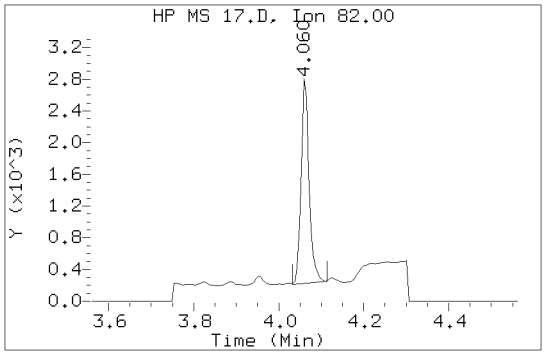
Nitrobenzene-d5 (4165-60-0)

Reason Code:

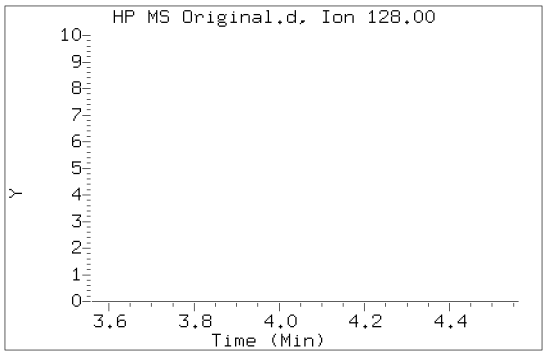
BEFORE
MASS
82
AREA
4852
HEIGHT
2716
23-Aug-2022
15:07
ALSHS
Server



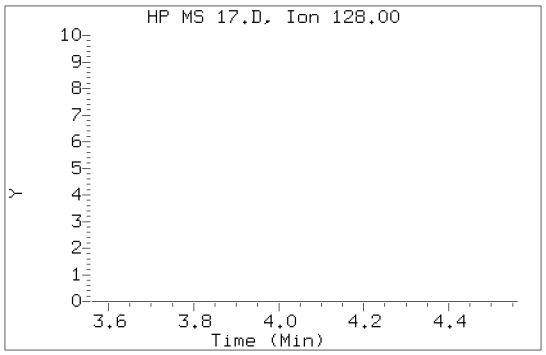
AFTER
MASS
82
AREA
3359
HEIGHT
2580
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
15:07
ALSHS
Server



AFTER
MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



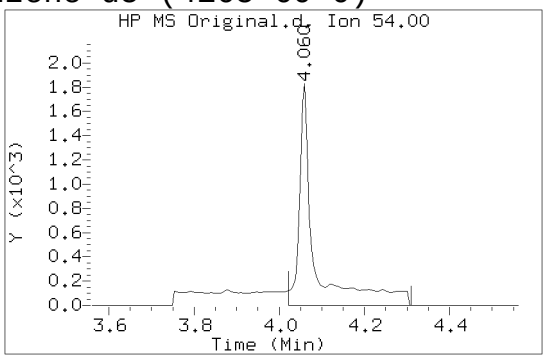
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\17.D
Inj Date : 23-AUG-2022 14:51
InstruID : SV6.i
LabSampID : HS22080499-03

Nitrobenzene-d5 (4165-60-0)

Reason Code:

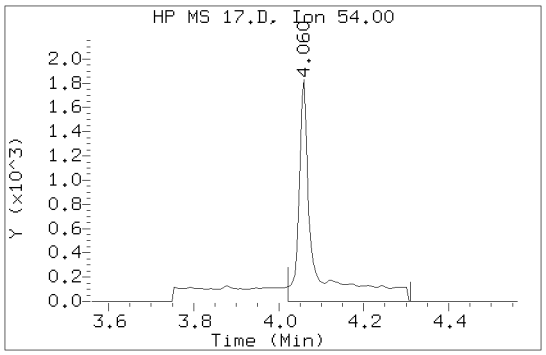
BEFORE

MASS
54
AREA
4488
HEIGHT
1829
23-Aug-2022
15:07
ALSHS
Server



AFTER

MASS
54
AREA
4488
HEIGHT
1829
24-Aug-2022
10:25
ALSHS
S

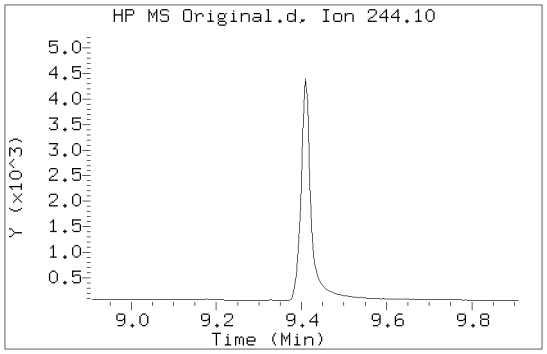


4-Terphenyl-d14 (1718-51-0)

Reason Code:

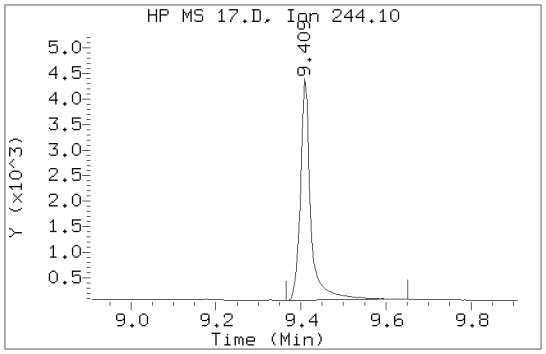
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
23-Aug-2022
15:07
ALSHS
Server



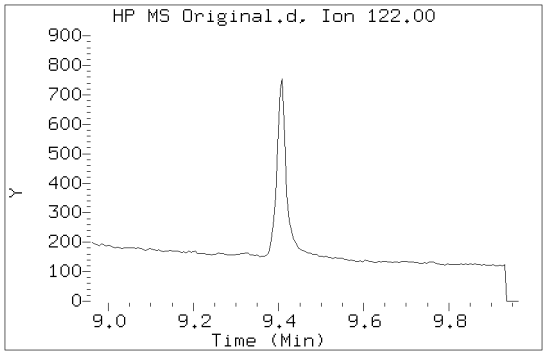
AFTER

MASS
244.1
AREA
7283
HEIGHT
4326
24-Aug-2022
10:25
ALSHS
S



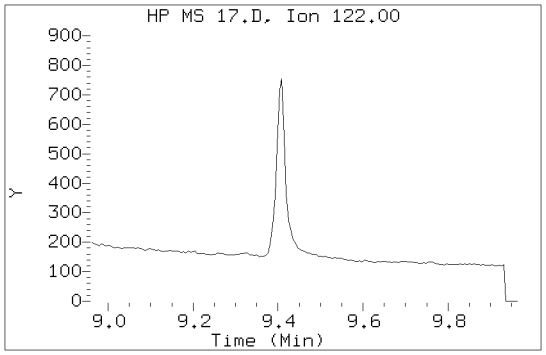
BEFORE

MASS
122
AREA
0
HEIGHT
0
23-Aug-2022
15:07
ALSHS
Server



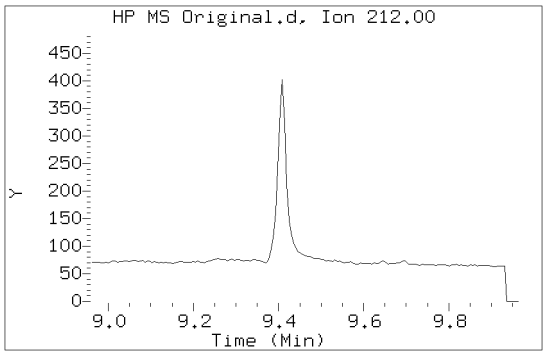
AFTER

MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



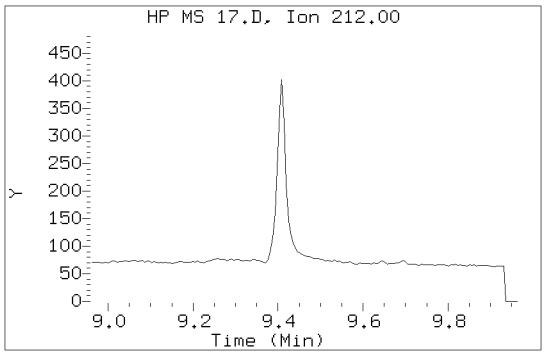
BEFORE

MASS
212
AREA
0
HEIGHT
0
23-Aug-2022
15:07
ALSHS
Server



AFTER

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



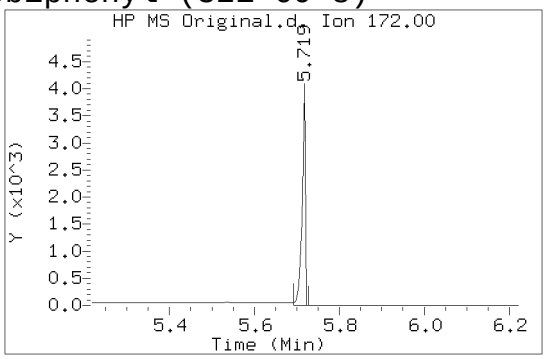
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\17.D
Inj Date : 23-AUG-2022 14:51
InstruID : SV6.i
LabSampID : HS22080499-03

2-Fluorobiphenyl (321-60-8)

Reason Code:

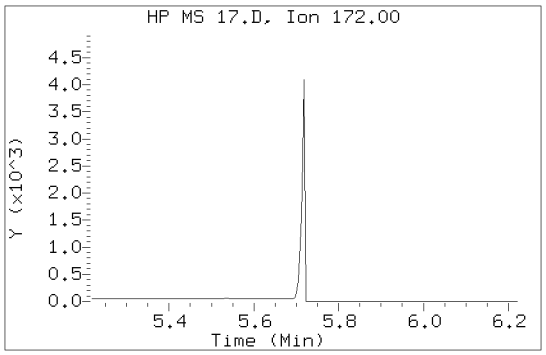
BEFORE

MASS
172
AREA
2268
HEIGHT
4093
23-Aug-2022
15:07
ALSHS
Server



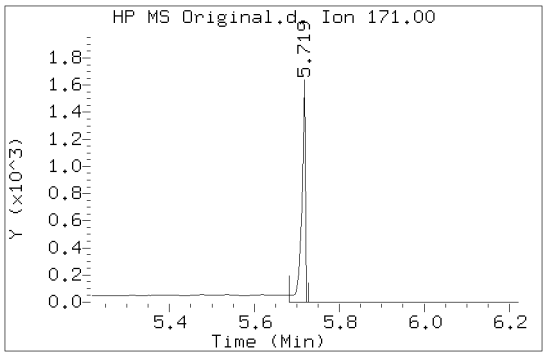
AFTER

MASS
172
AREA
4123
HEIGHT
4093
24-Aug-2022
10:25
ALSHS
S



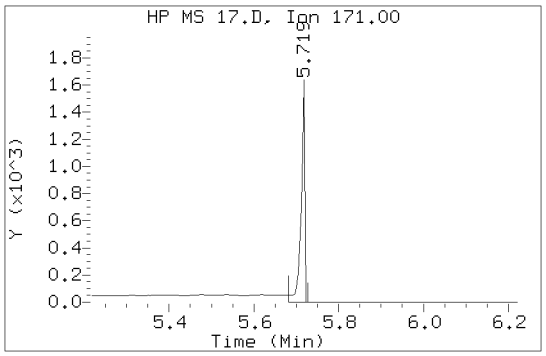
BEFORE

MASS
171
AREA
1022
HEIGHT
1638
23-Aug-2022
15:07
ALSHS
Server



AFTER

MASS
171
AREA
1022
HEIGHT
1638
24-Aug-2022
10:25
ALSHS
S



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\18.D
Lab Smp Id: HS22080499-04
Inj Date : 23-AUG-2022 15:09
Operator : LG Inst ID: SV6.i
Smp Info : HS22080499-04
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.603	3.592	(1.000)	7201	0.10000	(aM)
* 45 Naphthalene-d8	136	4.716	4.705	(1.000)	15262	0.10000	
$ 33 Nitrobenzene-d5	82	4.070	4.059	(0.863)	4983	0.09795	0.09795(M)
* 86 Acenaphthene-d10	164	6.387	6.376	(1.000)	4089	0.10000	(QM)
$ 69 2-Fluorobiphenyl	172	5.718	5.718	(0.895)	3457	0.05431	0.05431(M)
* 126 Phenanthrene-d10	188	7.832	7.827	(1.000)	15971	0.10000	
* 182 Chrysene-d12	240	10.667	10.657	(1.000)	12523	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.414	9.408	(0.882)	11063	0.04699	0.04699(M)
* 198 Perylene-d12	264	12.740	12.724	(1.000)	9865	0.10000	(M)
1 1,4-Dioxane	58	1.913	1.887	(0.531)	16248	5.49619	5.496(AM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.

01134115

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\18.D

Date : 23-AUG-2022 15:09

Client ID:

Instrument: SV6.i

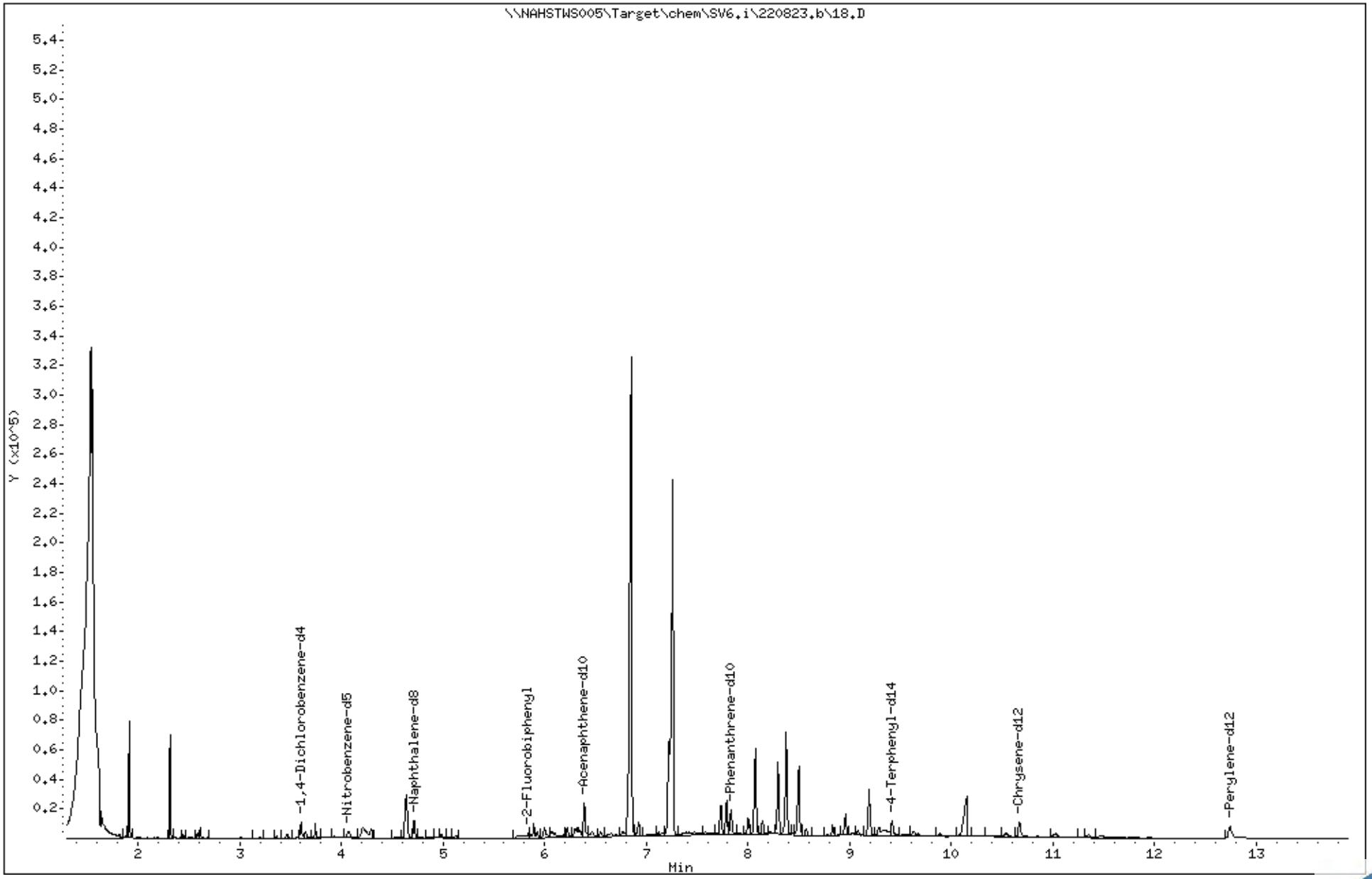
Sample Info: HS22080499-04

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\18.D

Date : 23-AUG-2022 15:09

Client ID:

Instrument: SV6.i

Sample Info: HS22080499-04

Purge Volume: 1000.0

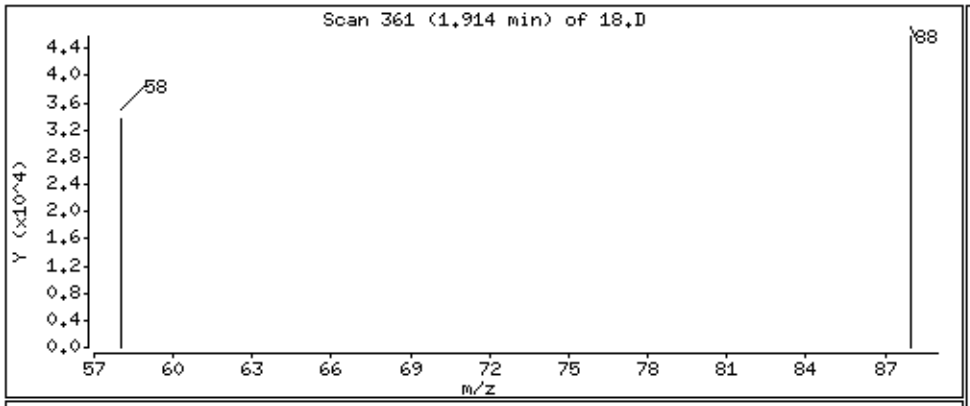
Operator: LG

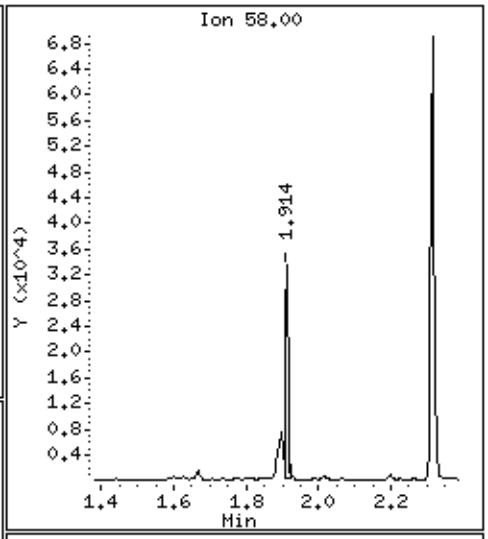
Column phase: RTX-5SIL MS

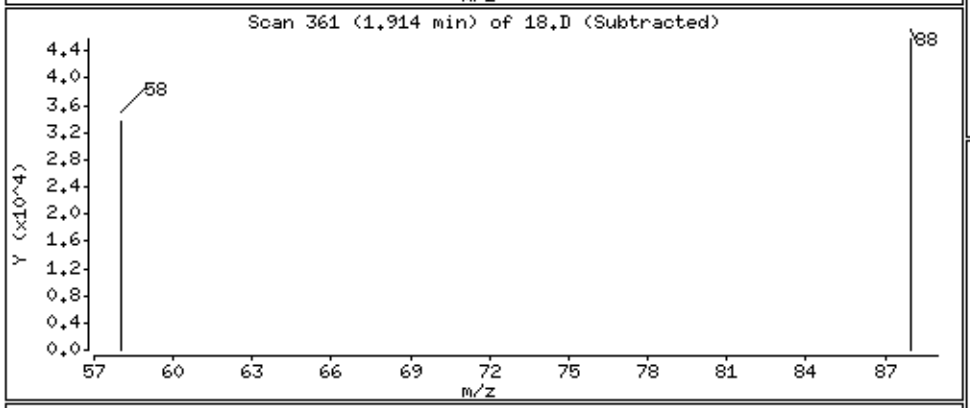
Column diameter: 0.28

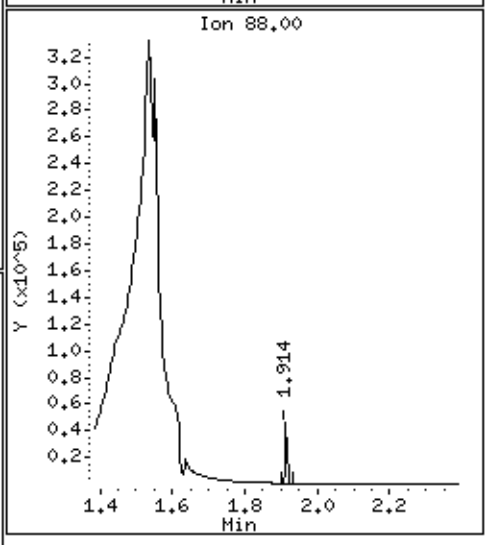
1 1,4-Dioxane

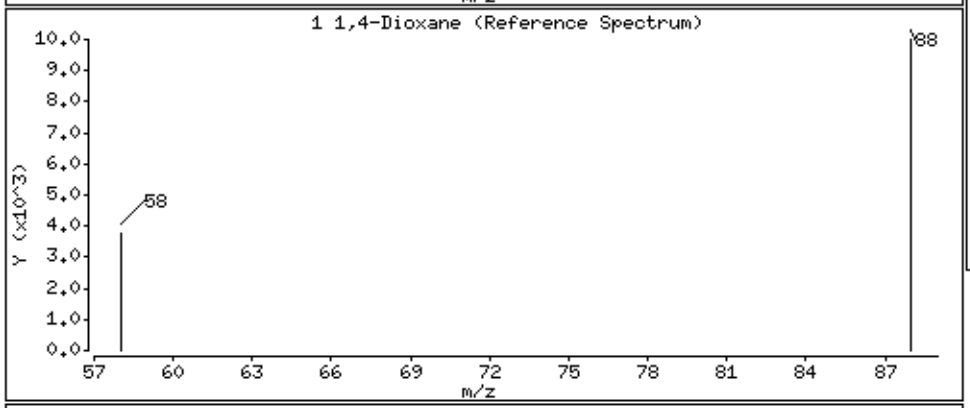
Concentration: 5.496 ug/L

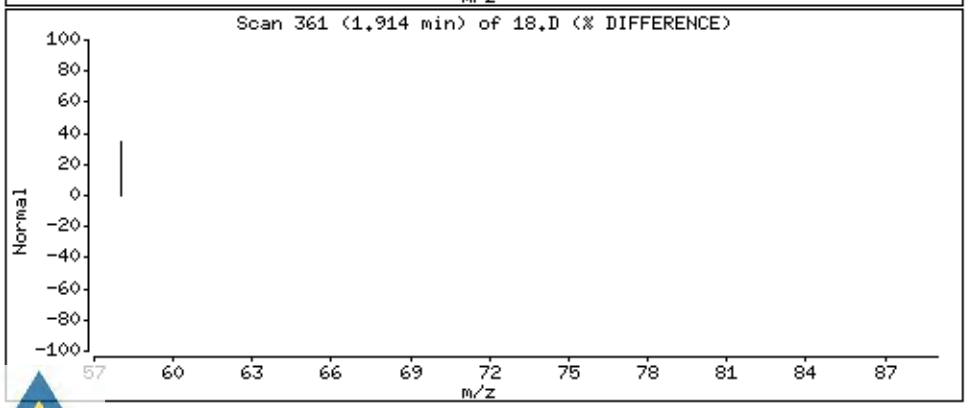












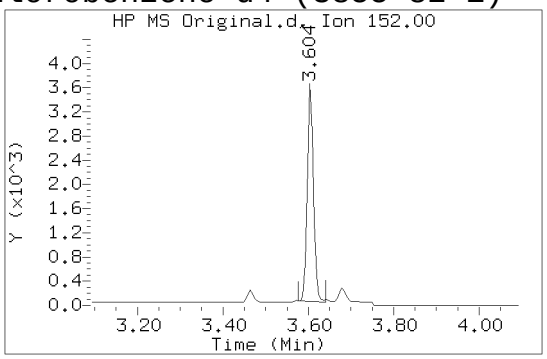
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\18.D
Inj Date : 23-AUG-2022 15:09
InstruID : SV6.i
LabSampID : HS22080499-04

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

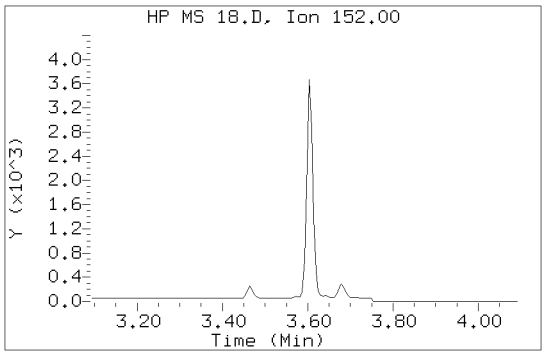
BEFORE

MASS
152
AREA
3631
HEIGHT
3597
23-Aug-2022
15:24
ALSHS
Server



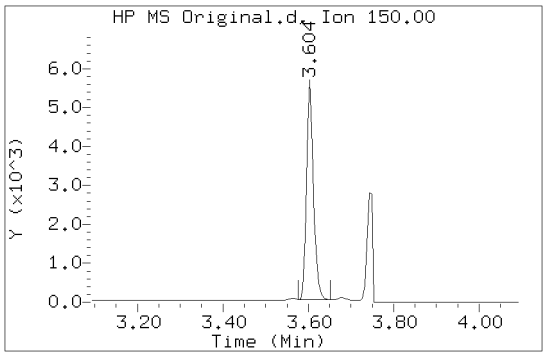
AFTER

MASS
152
AREA
7201
HEIGHT
3666
24-Aug-2022
10:25
ALSHS
S



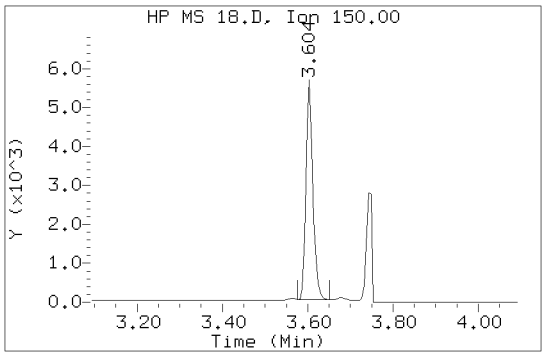
BEFORE

MASS
150
AREA
6364
HEIGHT
5651
23-Aug-2022
15:24
ALSHS
Server



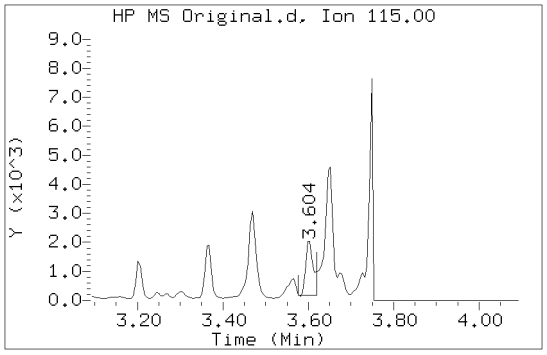
AFTER

MASS
150
AREA
6364
HEIGHT
5651
24-Aug-2022
10:25
ALSHS
S



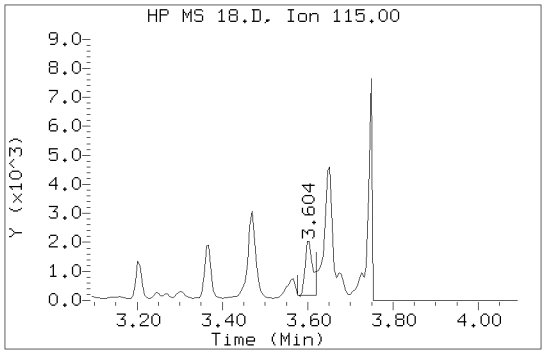
BEFORE

MASS
115
AREA
2390
HEIGHT
1860
23-Aug-2022
15:24
ALSHS
Server



AFTER

MASS
115
AREA
2390
HEIGHT
1860
24-Aug-2022
10:25
ALSHS
S

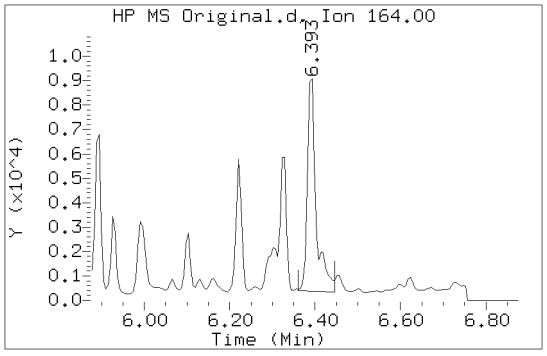


Acenaphthene-d10 (15067-26-2)

Reason Code:

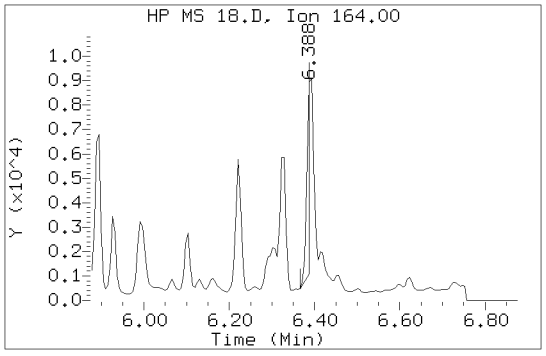
BEFORE

MASS
164
AREA
12409
HEIGHT
8709
23-Aug-2022
15:24
ALSHS
Server



AFTER

MASS
164
AREA
4089
HEIGHT
7874
24-Aug-2022
10:25
ALSHS
S



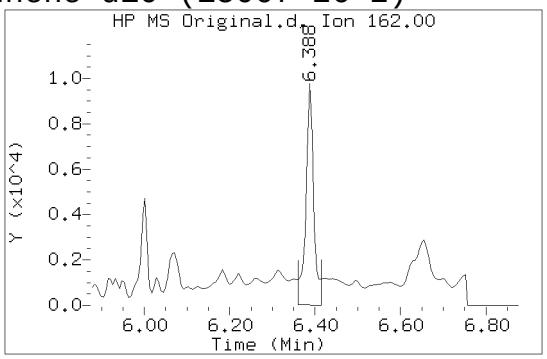
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\18.D
Inj Date : 23-AUG-2022 15:09
InstruID : SV6.i
LabSampID : HS22080499-04

Acenaphthene-d10 (15067-26-2)

Reason Code:

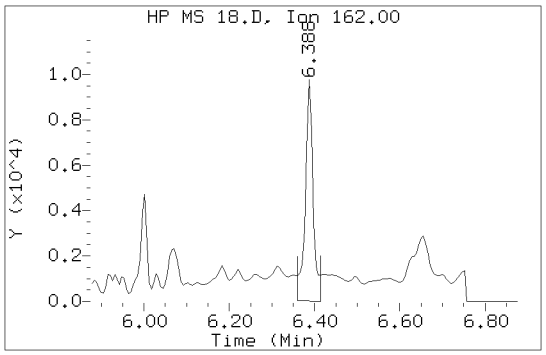
BEFORE

MASS
162
AREA
12303
HEIGHT
9750
23-Aug-2022
15:24
ALSHS
Server



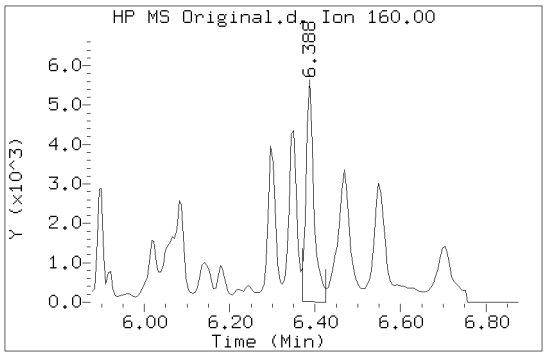
AFTER

MASS
162
AREA
12303
HEIGHT
9750
24-Aug-2022
10:25
ALSHS
S



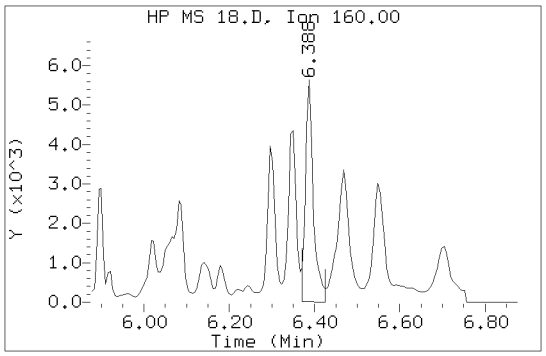
BEFORE

MASS
160
AREA
7201
HEIGHT
5628
23-Aug-2022
15:24
ALSHS
Server



AFTER

MASS
160
AREA
7201
HEIGHT
5628
24-Aug-2022
10:25
ALSHS
S

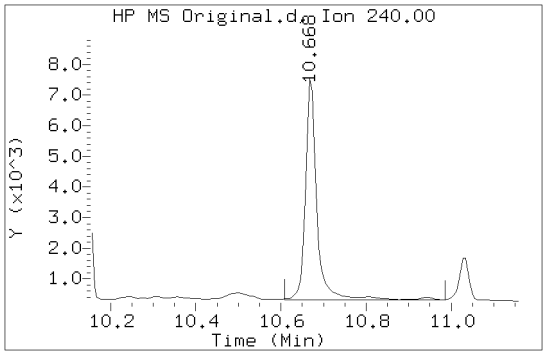


Chrysene-d12 (1719-03-5)

Reason Code:

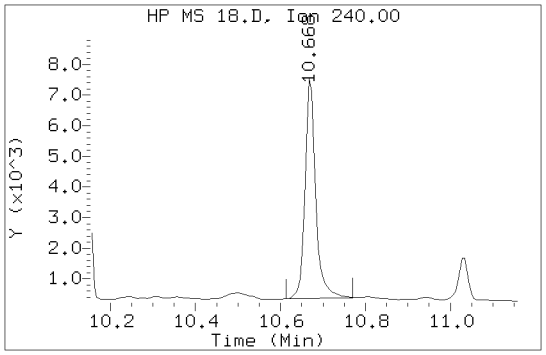
BEFORE

MASS
240
AREA
13837
HEIGHT
7222
23-Aug-2022
15:24
ALSHS
Server



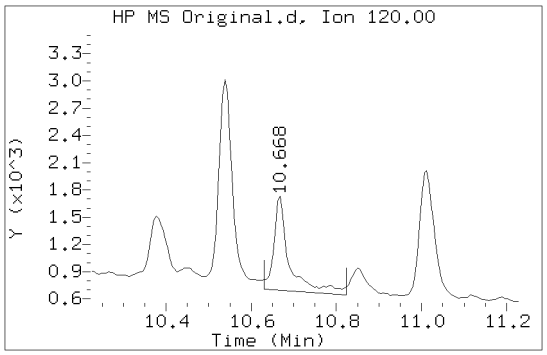
AFTER

MASS
240
AREA
12523
HEIGHT
7161
24-Aug-2022
10:25
ALSHS
S



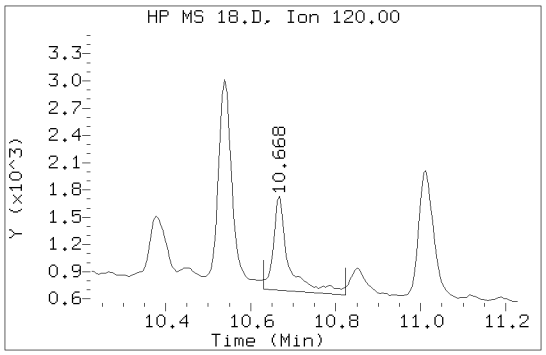
BEFORE

MASS
120
AREA
2654
HEIGHT
1031
23-Aug-2022
15:24
ALSHS
Server



AFTER

MASS
120
AREA
2654
HEIGHT
1031
24-Aug-2022
10:25
ALSHS
S



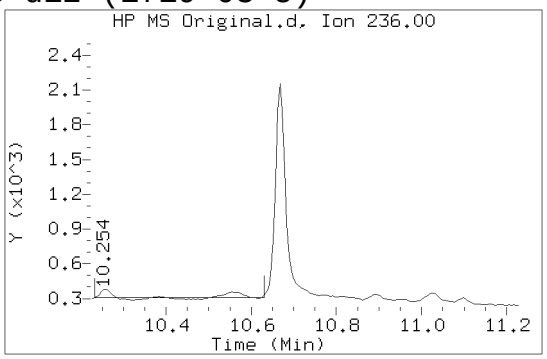
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\18.D
Inj Date : 23-AUG-2022 15:09
InstruID : SV6.i
LabSampID : HS22080499-04

Chrysene-d12 (1719-03-5)

Reason Code:

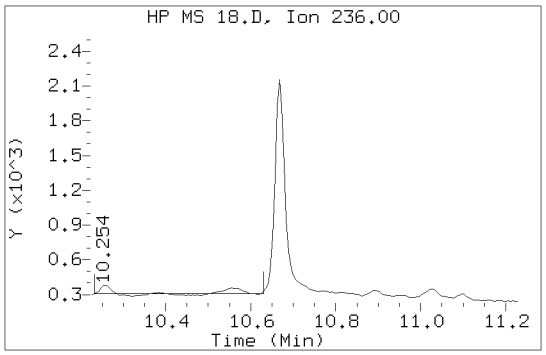
BEFORE

MASS
236
AREA
135
HEIGHT
70
23-Aug-2022
15:24
ALSHS
Server



AFTER

MASS
236
AREA
135
HEIGHT
70
24-Aug-2022
10:25
ALSHS
S

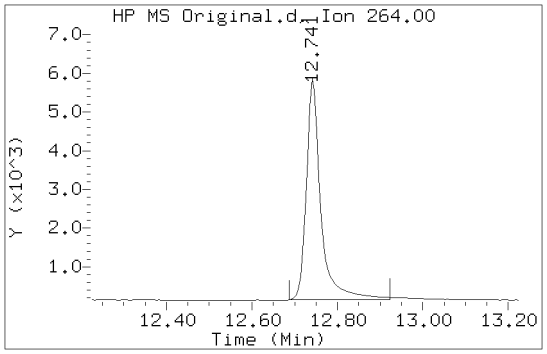


Perylene-d12 (1520-96-3)

Reason Code:

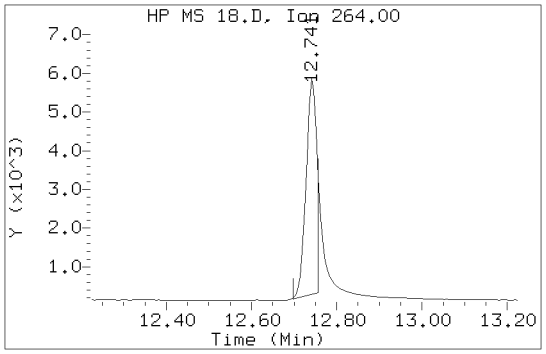
BEFORE

MASS
264
AREA
13524
HEIGHT
5712
23-Aug-2022
15:24
ALSHS
Server



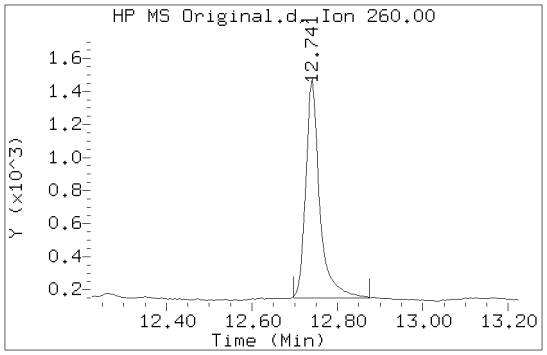
AFTER

MASS
264
AREA
9865
HEIGHT
5572
24-Aug-2022
10:25
ALSHS
S



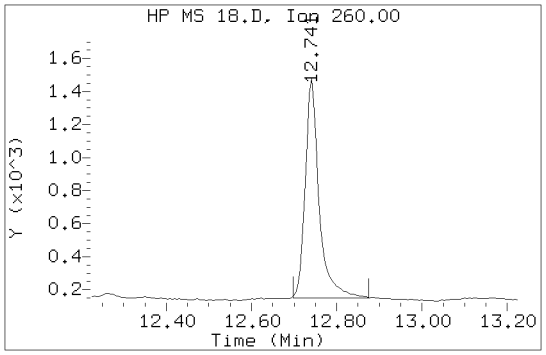
BEFORE

MASS
260
AREA
2986
HEIGHT
1324
23-Aug-2022
15:24
ALSHS
Server



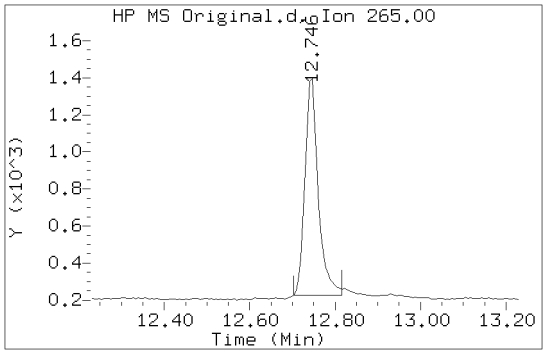
AFTER

MASS
260
AREA
2986
HEIGHT
1324
24-Aug-2022
10:25
ALSHS
S



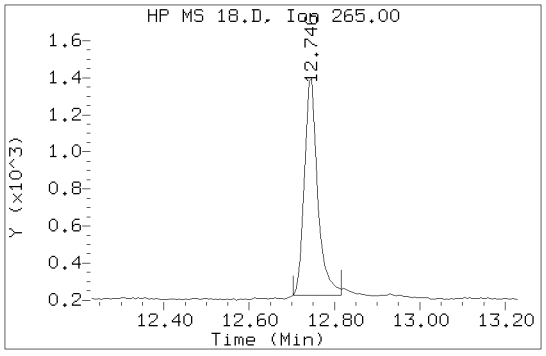
BEFORE

MASS
265
AREA
2543
HEIGHT
1168
23-Aug-2022
15:24
ALSHS
Server



AFTER

MASS
265
AREA
2543
HEIGHT
1168
24-Aug-2022
10:25
ALSHS
S



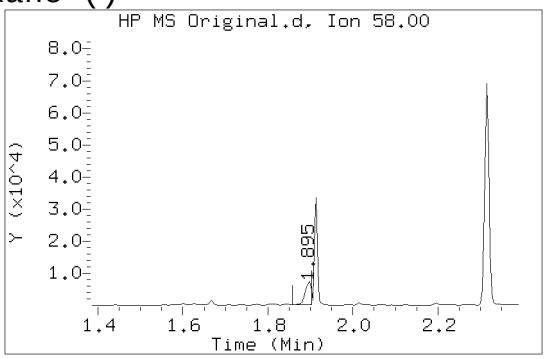
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\18.D
Inj Date : 23-AUG-2022 15:09
InstruID : SV6.i
LabSampID : HS22080499-04

1,4-Dioxane ()

Reason Code:

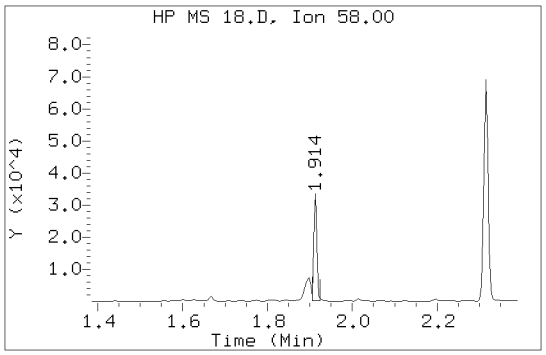
BEFORE

MASS
58
AREA
7023
HEIGHT
6773
23-Aug-2022
15:24
ALSHS
Server



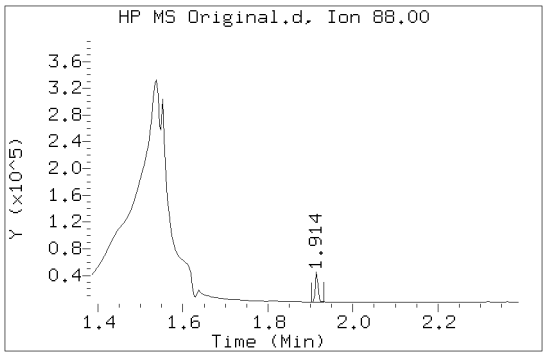
AFTER

MASS
58
AREA
16248
HEIGHT
33319
24-Aug-2022
10:25
ALSHS
S



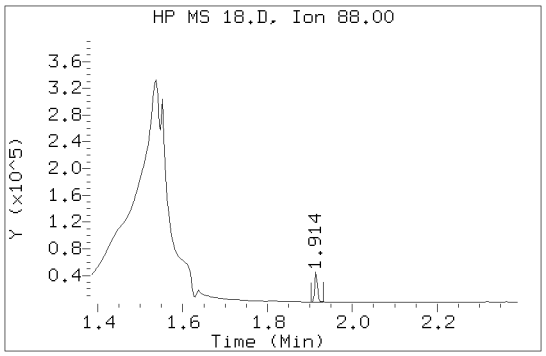
BEFORE

MASS
88
AREA
20038
HEIGHT
45624
23-Aug-2022
15:24
ALSHS
Server



AFTER

MASS
88
AREA
20038
HEIGHT
45624
24-Aug-2022
10:25
ALSHS
S

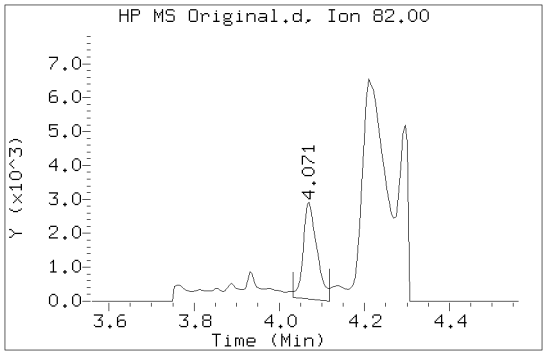


Nitrobenzene-d5 (4165-60-0)

Reason Code:

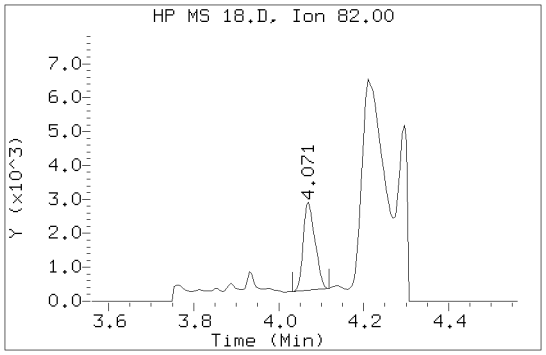
BEFORE

MASS
82
AREA
6491
HEIGHT
2856
23-Aug-2022
15:24
ALSHS
Server



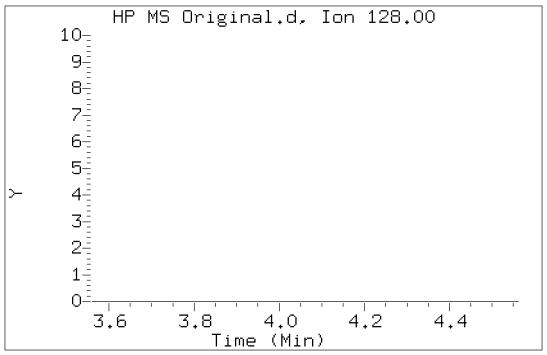
AFTER

MASS
82
AREA
4983
HEIGHT
2592
24-Aug-2022
10:25
ALSHS
S



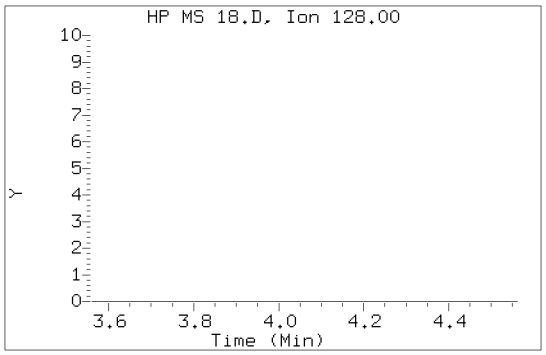
BEFORE

MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
15:24
ALSHS
Server



AFTER

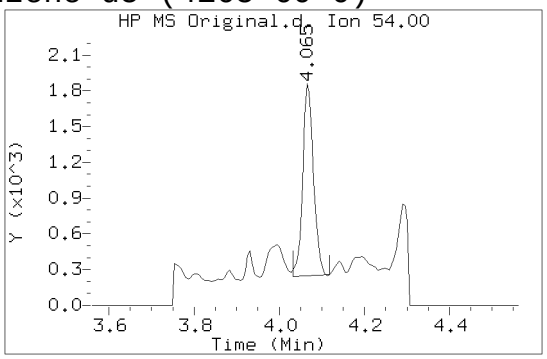
MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\18.D
Inj Date : 23-AUG-2022 15:09
InstruID : SV6.i
LabSampID : HS22080499-04

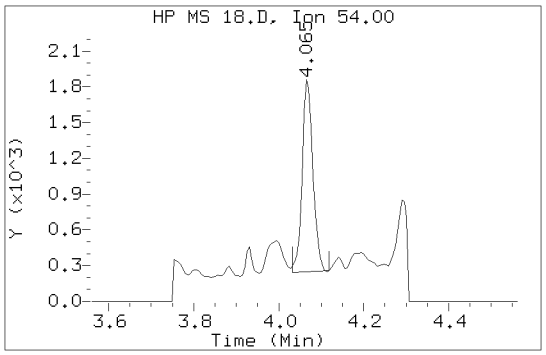
Nitrobenzene-d5 (4165-60-0)

BEFORE
MASS
54
AREA
2829
HEIGHT
1613
23-Aug-2022
15:24
ALSHS
Server



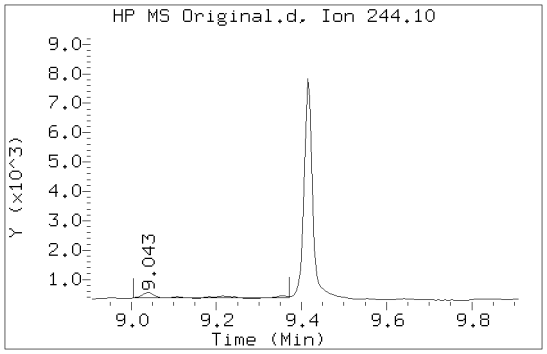
Reason Code:

AFTER
MASS
54
AREA
2829
HEIGHT
1613
24-Aug-2022
10:25
ALSHS
S



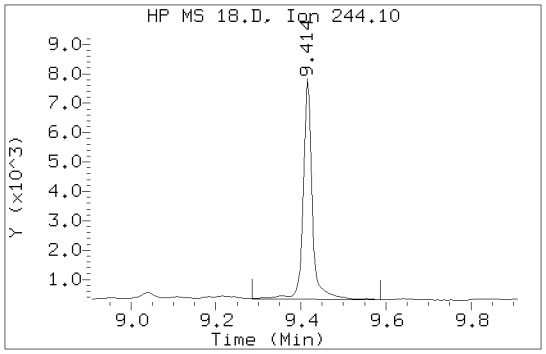
4-Terphenyl-d14 (1718-51-0)

BEFORE
MASS
244.1
AREA
759
HEIGHT
180
23-Aug-2022
15:24
ALSHS
Server

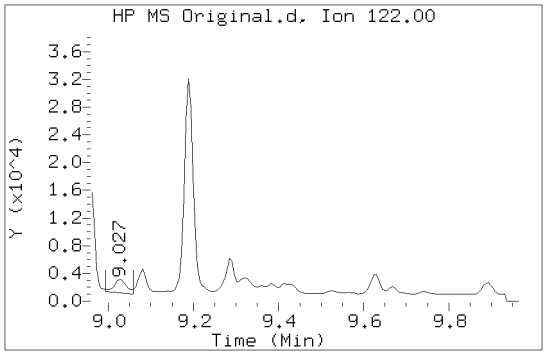


Reason Code:

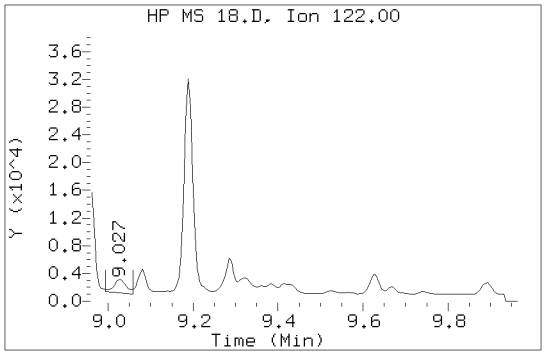
AFTER
MASS
244.1
AREA
11063
HEIGHT
7501
24-Aug-2022
10:25
ALSHS
S



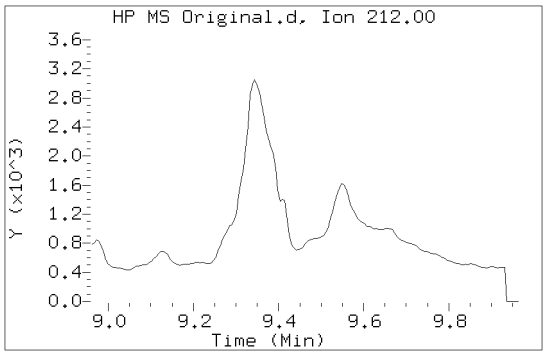
BEFORE
MASS
122
AREA
4148
HEIGHT
2000
23-Aug-2022
15:24
ALSHS
Server



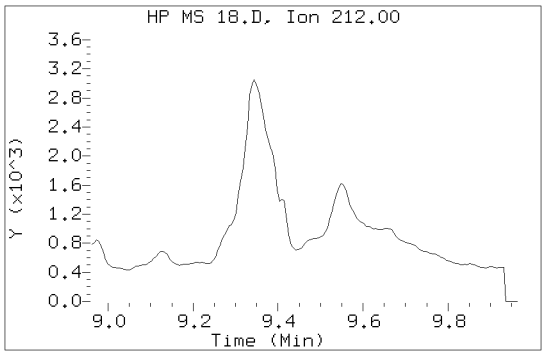
AFTER
MASS
122
AREA
4148
HEIGHT
2000
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
212
AREA
471
HEIGHT
338
23-Aug-2022
15:24
ALSHS
Server



AFTER
MASS
212
AREA
471
HEIGHT
338
24-Aug-2022
10:25
ALSHS
S



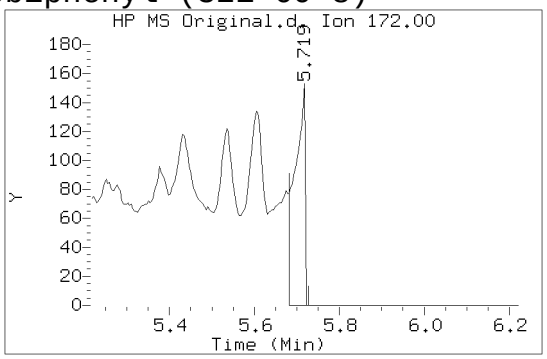
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\18.D
Inj Date : 23-AUG-2022 15:09
InstruID : SV6.i
LabSampID : HS22080499-04

2-Fluorobiphenyl (321-60-8)

Reason Code:

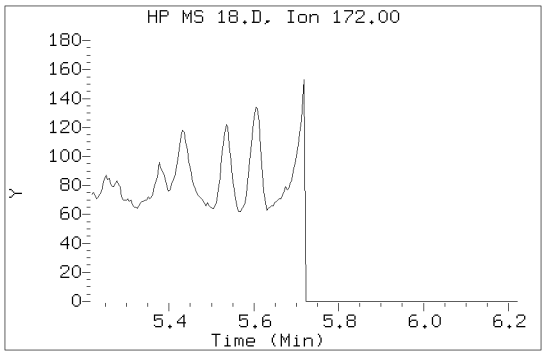
BEFORE

MASS
172
AREA
268
HEIGHT
153
23-Aug-2022
15:24
ALSHS
Server



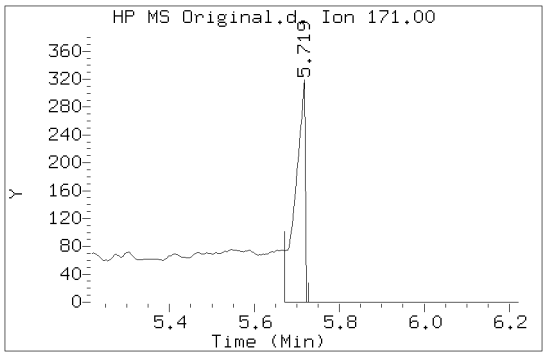
AFTER

MASS
172
AREA
3457
HEIGHT
153
24-Aug-2022
10:25
ALSHS
S



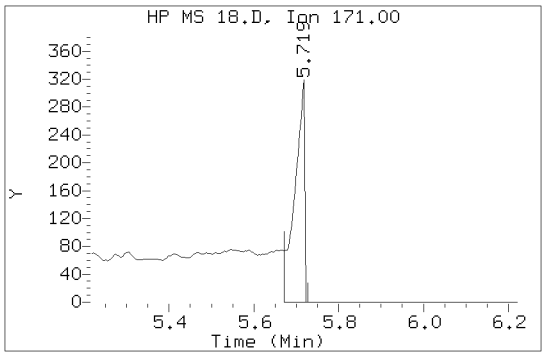
BEFORE

MASS
171
AREA
530
HEIGHT
319
23-Aug-2022
15:24
ALSHS
Server



AFTER

MASS
171
AREA
530
HEIGHT
319
24-Aug-2022
10:25
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\19.D Page 1
Report Date: 24-Aug-2022 10:26

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\19.D
Lab Smp Id: HS22080499-06
Inj Date : 23-AUG-2022 15:27
Operator : LG Inst ID: SV6.i
Smp Info : HS22080499-06
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.603	3.592	(1.000)	5016	0.10000	(aQ)
* 45 Naphthalene-d8	136	4.708	4.705	(1.000)	17170	0.10000	(M)
$ 33 Nitrobenzene-d5	82	4.065	4.059	(0.863)	4856	0.08484	0.08484(M)
* 86 Acenaphthene-d10	164	6.376	6.376	(1.000)	9427	0.10000	(M)
$ 69 2-Fluorobiphenyl	172	5.718	5.718	(0.897)	5593	0.03812	0.03812(M)
* 126 Phenanthrene-d10	188	7.827	7.827	(1.000)	17418	0.10000	
* 182 Chrysene-d12	240	10.662	10.657	(1.000)	12363	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.408	9.408	(0.882)	9870	0.04246	0.04246(M)
* 198 Perylene-d12	264	12.729	12.724	(1.000)	11926	0.10000	
1 1,4-Dioxane	58	1.891	1.887	(0.525)	290	0.14083	0.1408(aM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01134124

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\19.D

Date : 23-AUG-2022 15:27

Client ID:

Instrument: SV6.i

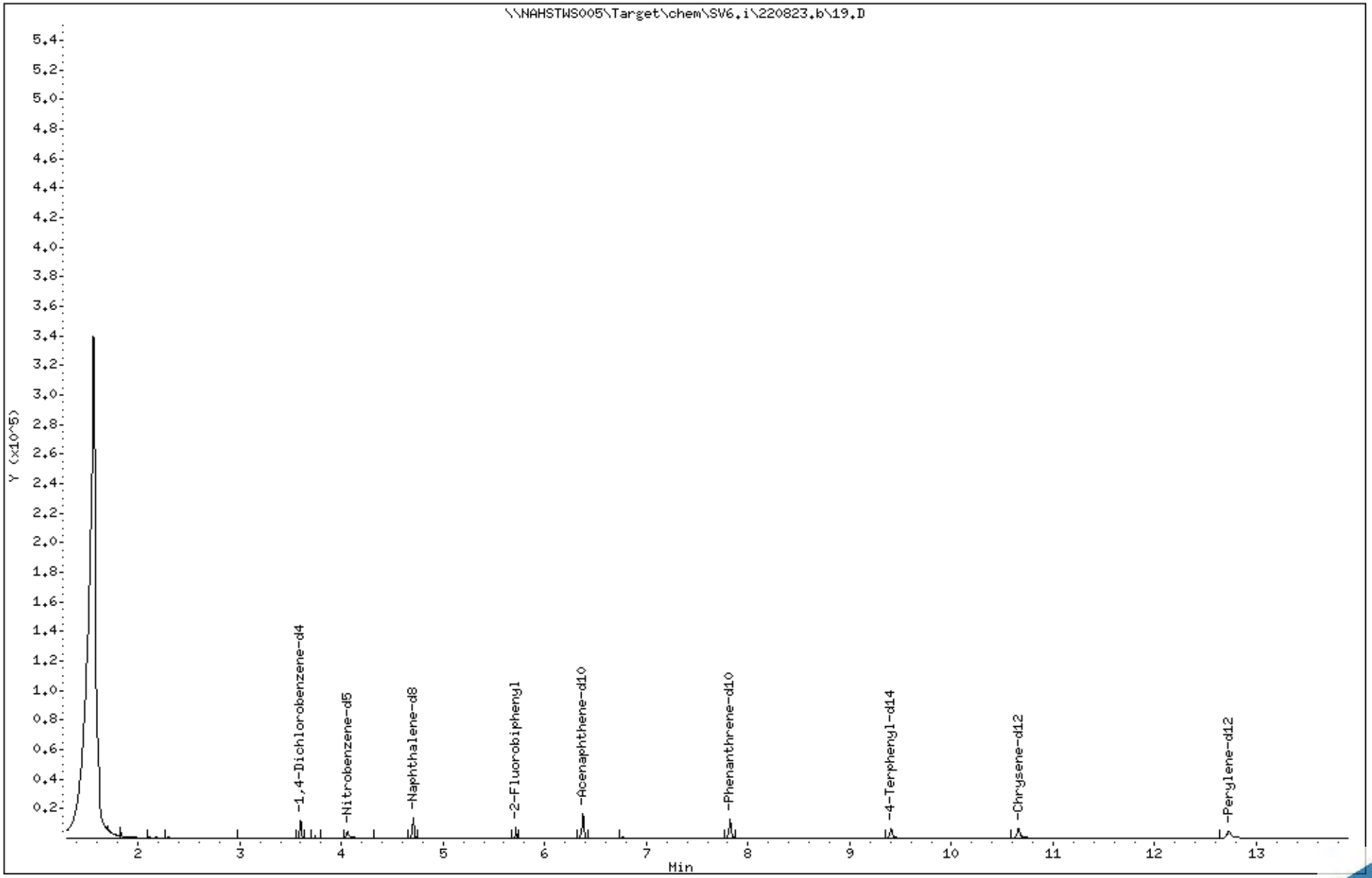
Sample Info: HS22080499-06

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\19.D

Date : 23-AUG-2022 15:27

Client ID:

Instrument: SV6.i

Sample Info: HS22080499-06

Purge Volume: 1000.0

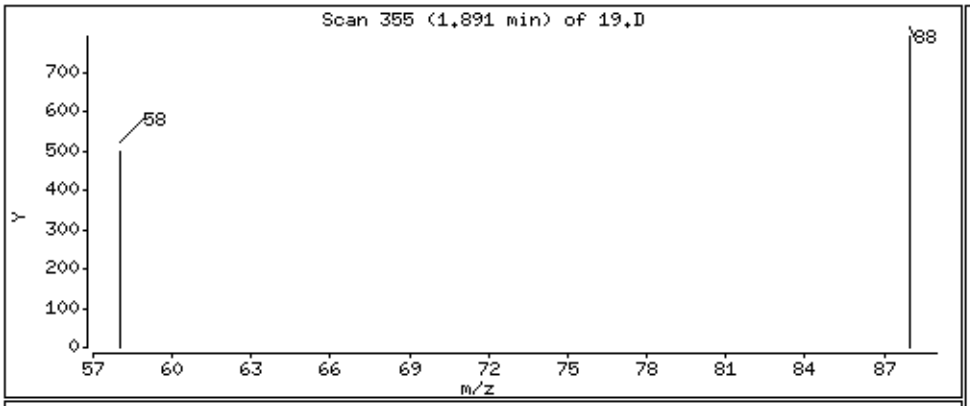
Operator: LG

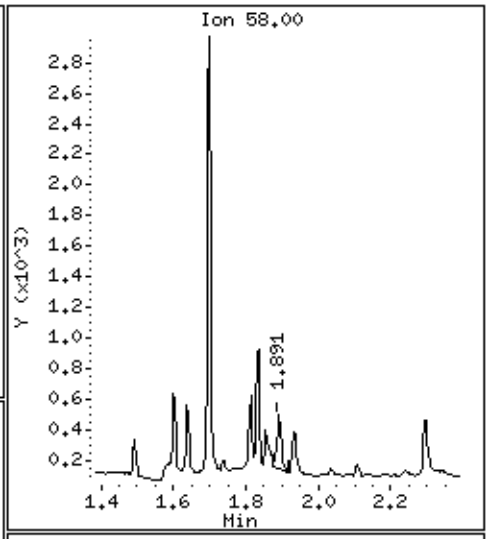
Column phase: RTX-5SIL MS

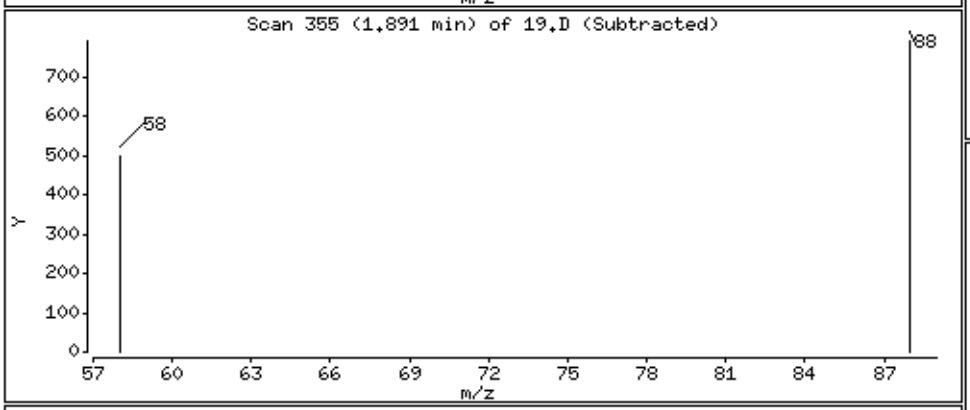
Column diameter: 0.28

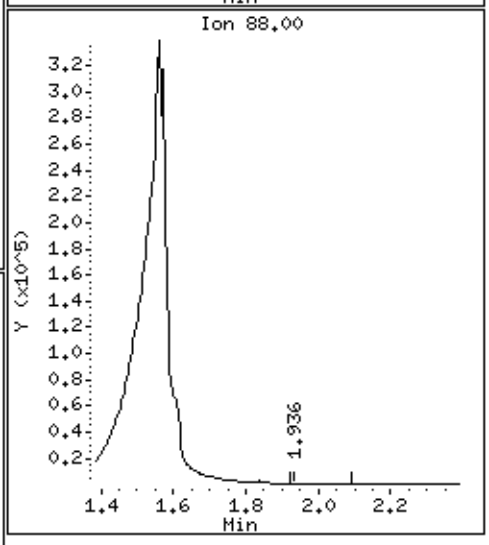
1 1,4-Dioxane

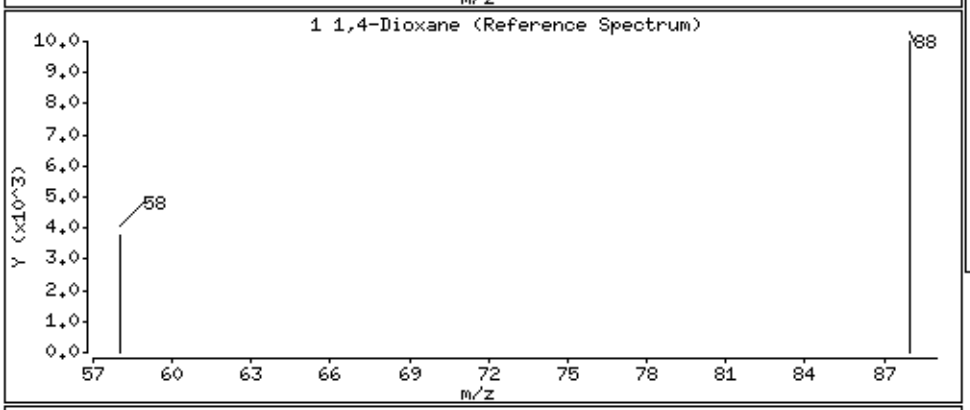
Concentration: 0.1408 ug/L

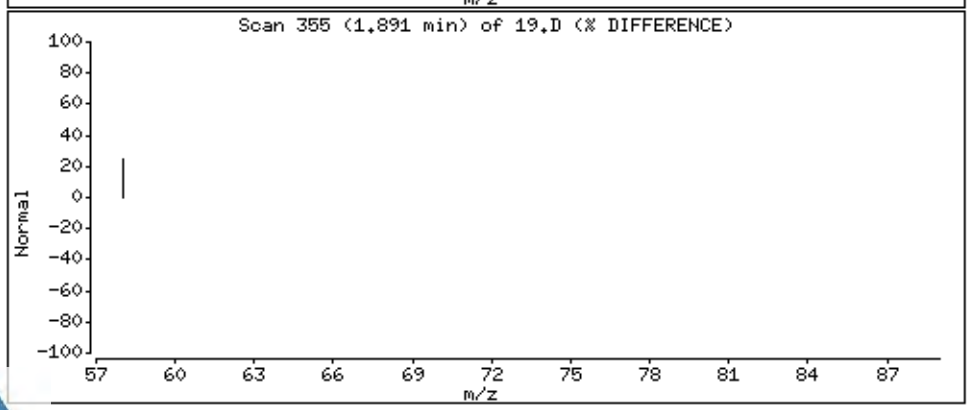












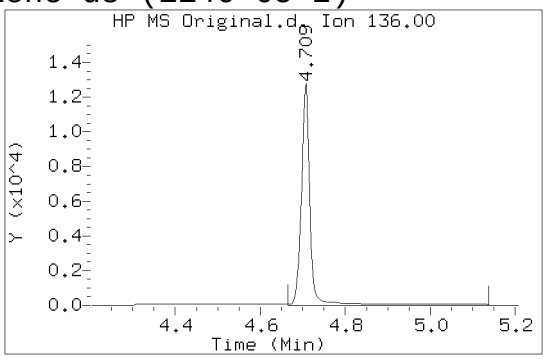
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\19.D
Inj Date : 23-AUG-2022 15:27
InstruID : SV6.i
LabSampID : HS22080499-06

Naphthalene-d8 (1146-65-2)

Reason Code:

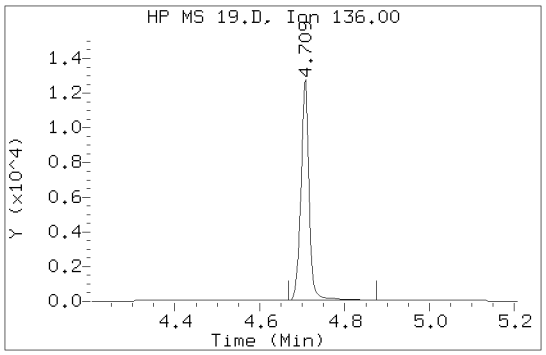
BEFORE

MASS
136
AREA
19281
HEIGHT
12776
23-Aug-2022
15:44
ALSHS
Server



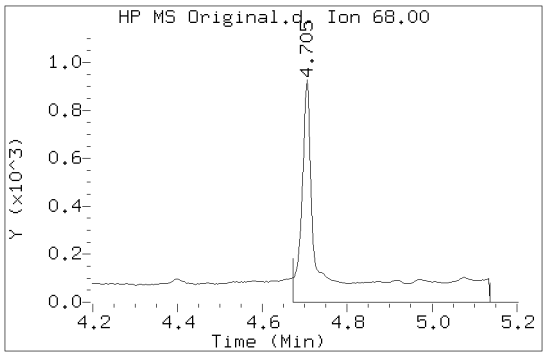
AFTER

MASS
136
AREA
17170
HEIGHT
12707
24-Aug-2022
10:25
ALSHS
S



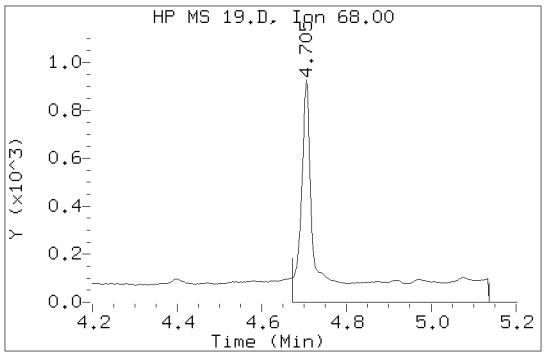
BEFORE

MASS
68
AREA
3557
HEIGHT
927
23-Aug-2022
15:44
ALSHS
Server



AFTER

MASS
68
AREA
3557
HEIGHT
927
24-Aug-2022
10:25
ALSHS
S

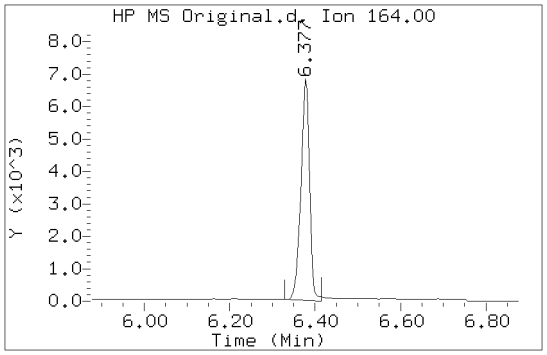


Acenaphthene-d10 (15067-26-2)

Reason Code:

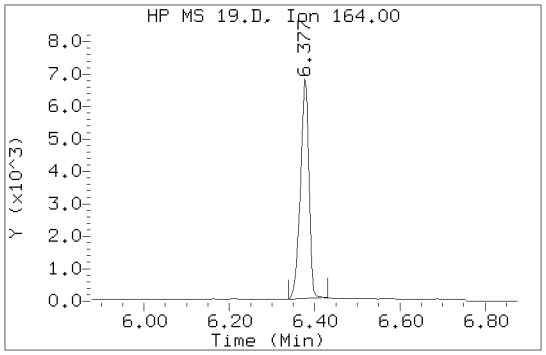
BEFORE

MASS
164
AREA
9665
HEIGHT
6826
23-Aug-2022
15:44
ALSHS
Server



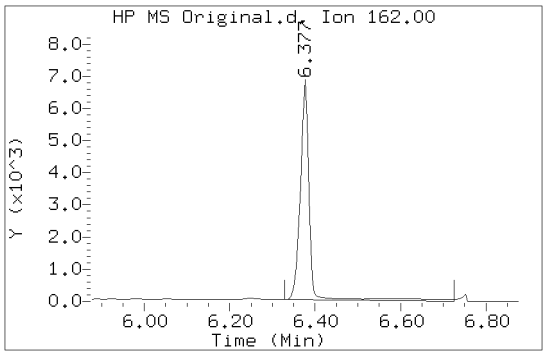
AFTER

MASS
164
AREA
9427
HEIGHT
6776
24-Aug-2022
10:25
ALSHS
S



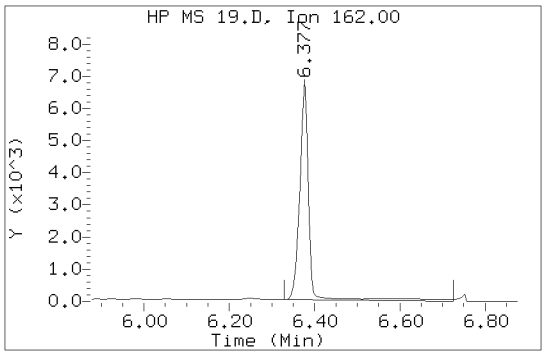
BEFORE

MASS
162
AREA
10150
HEIGHT
6835
23-Aug-2022
15:44
ALSHS
Server



AFTER

MASS
162
AREA
10150
HEIGHT
6835
24-Aug-2022
10:25
ALSHS
S



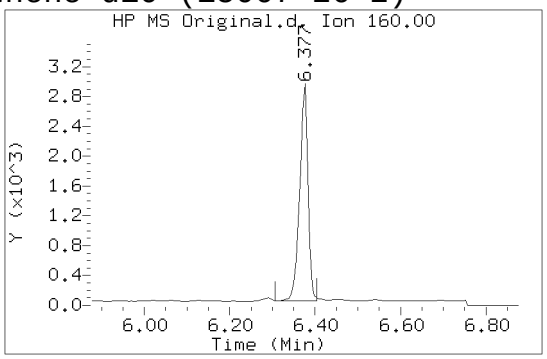
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\19.D
Inj Date : 23-AUG-2022 15:27
InstruID : SV6.i
LabSampID : HS22080499-06

Acenaphthene-d10 (15067-26-2)

Reason Code:

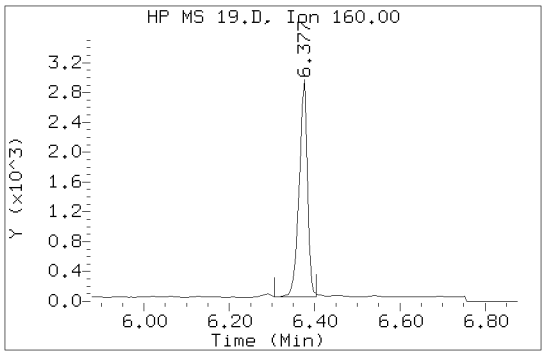
BEFORE

MASS
160
AREA
3954
HEIGHT
2909
23-Aug-2022
15:44
ALSHS
Server



AFTER

MASS
160
AREA
3954
HEIGHT
2909
24-Aug-2022
10:25
ALSHS
S

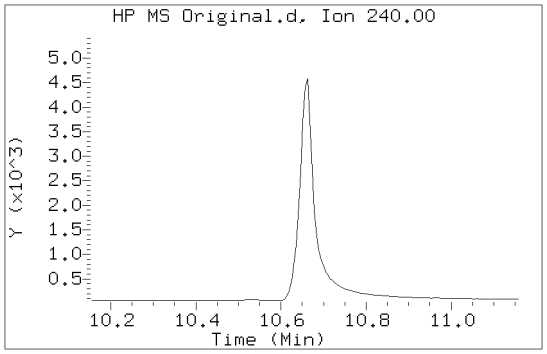


Chrysene-d12 (1719-03-5)

Reason Code:

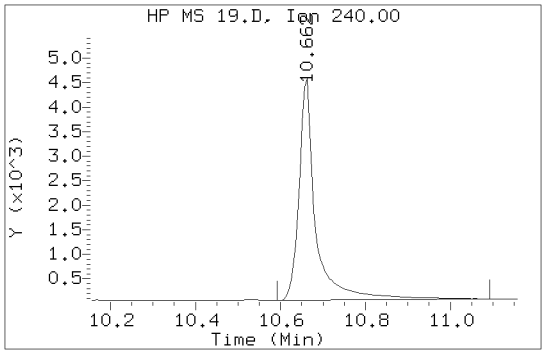
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
15:44
ALSHS
Server



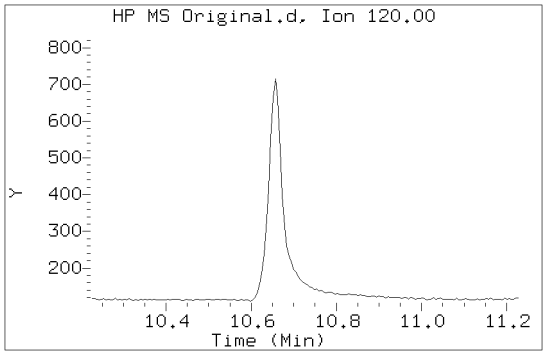
AFTER

MASS
240
AREA
12363
HEIGHT
4515
24-Aug-2022
10:25
ALSHS
S



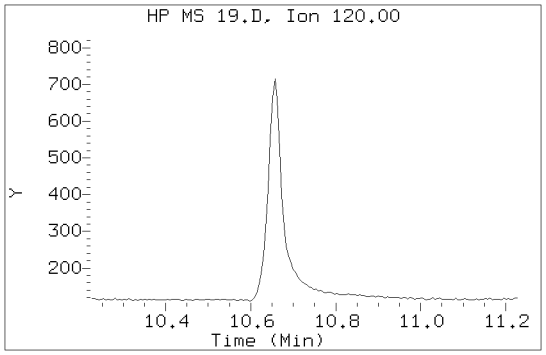
BEFORE

MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
15:44
ALSHS
Server



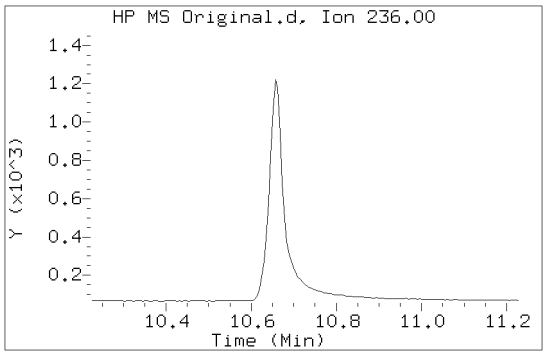
AFTER

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



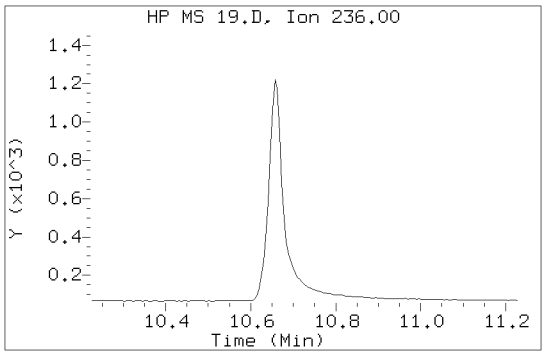
BEFORE

MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
15:44
ALSHS
Server



AFTER

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



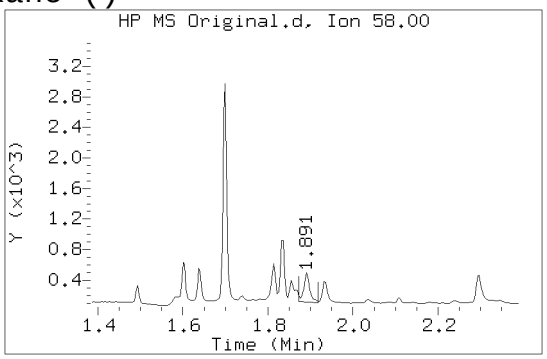
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\19.D
Inj Date : 23-AUG-2022 15:27
InstruID : SV6.i
LabSampID : HS22080499-06

1,4-Dioxane ()

Reason Code:

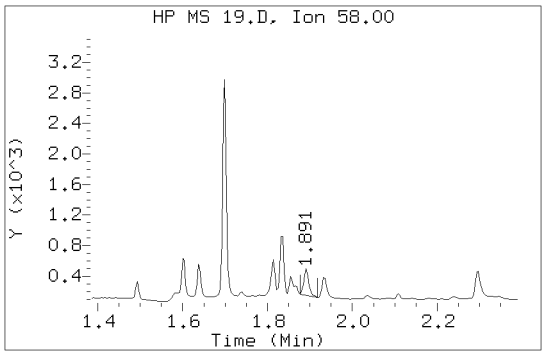
BEFORE

MASS
58
AREA
390
HEIGHT
389
23-Aug-2022
15:44
ALSHS
Server



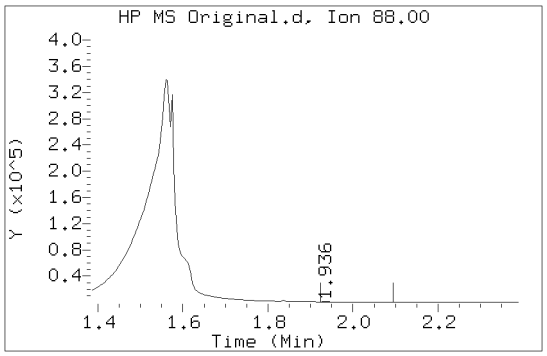
AFTER

MASS
58
AREA
290
HEIGHT
353
24-Aug-2022
10:25
ALSHS
S



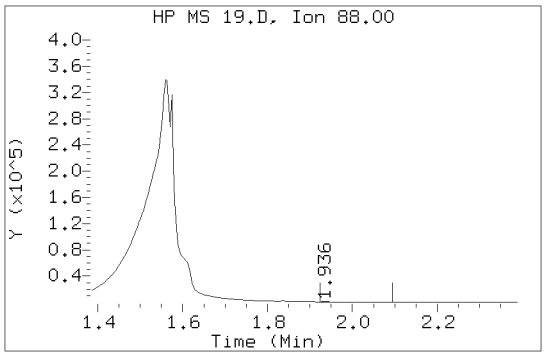
BEFORE

MASS
88
AREA
1788
HEIGHT
617
23-Aug-2022
15:44
ALSHS
Server



AFTER

MASS
88
AREA
1788
HEIGHT
617
24-Aug-2022
10:25
ALSHS
S

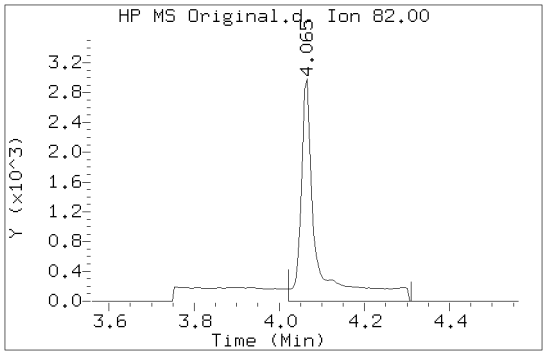


Nitrobenzene-d5 (4165-60-0)

Reason Code:

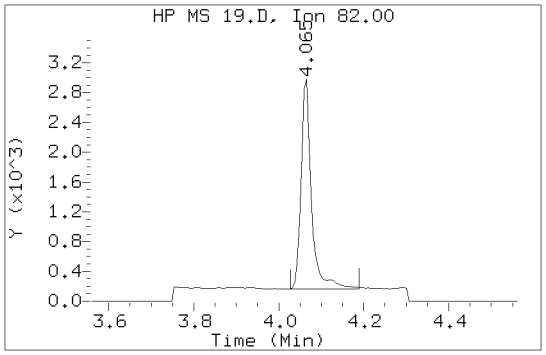
BEFORE

MASS
82
AREA
7638
HEIGHT
2984
23-Aug-2022
15:44
ALSHS
Server



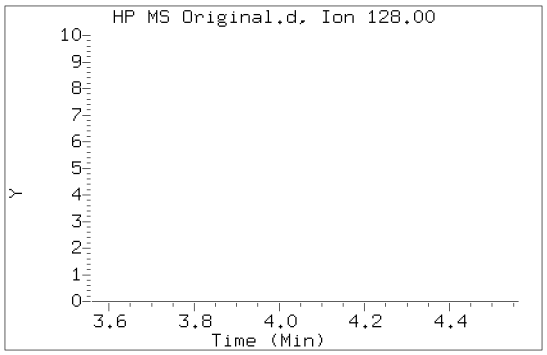
AFTER

MASS
82
AREA
4856
HEIGHT
2824
24-Aug-2022
10:25
ALSHS
S



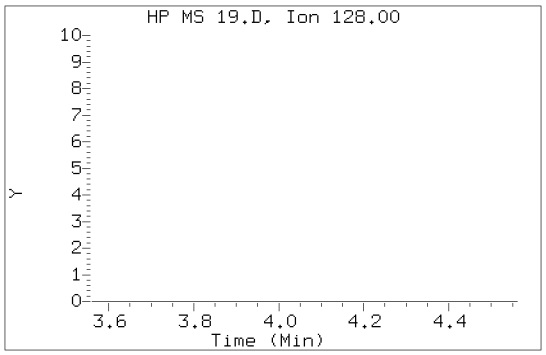
BEFORE

MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
15:44
ALSHS
Server



AFTER

MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



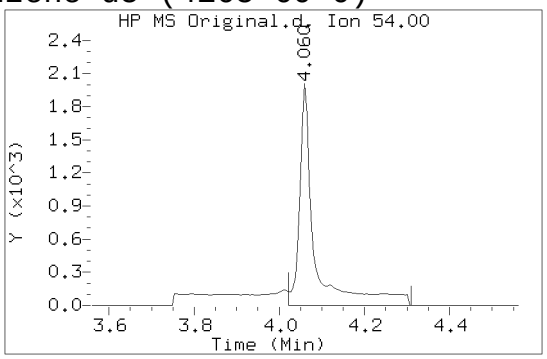
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\19.D
Inj Date : 23-AUG-2022 15:27
InstruID : SV6.i
LabSampID : HS22080499-06

Nitrobenzene-d5 (4165-60-0)

Reason Code:

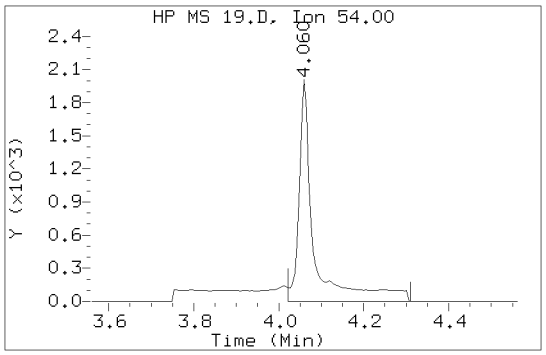
BEFORE

MASS
54
AREA
4876
HEIGHT
2008
23-Aug-2022
15:44
ALSHS
Server



AFTER

MASS
54
AREA
4876
HEIGHT
2008
24-Aug-2022
10:25
ALSHS
S

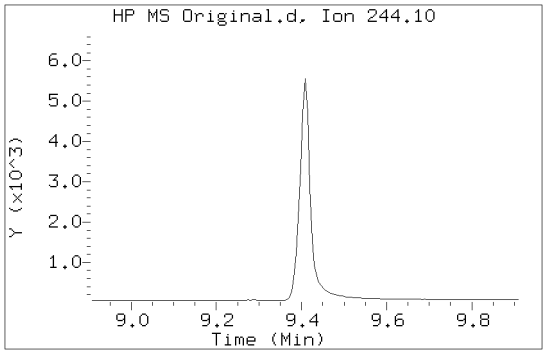


4-Terphenyl-d14 (1718-51-0)

Reason Code:

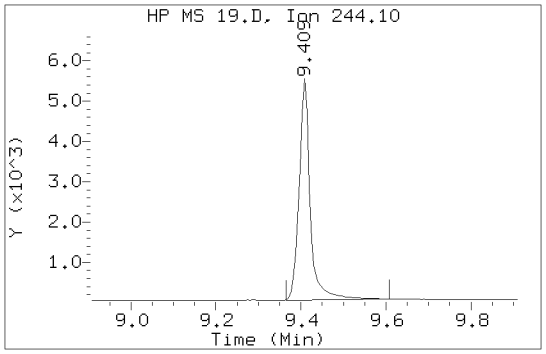
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
23-Aug-2022
15:44
ALSHS
Server



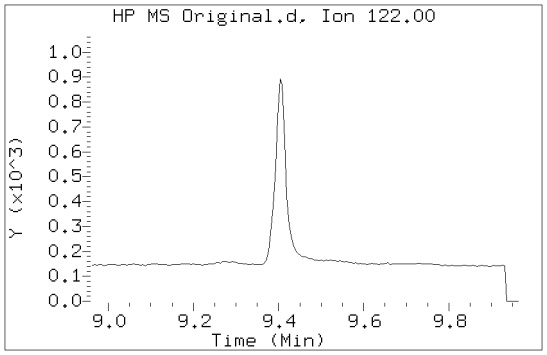
AFTER

MASS
244.1
AREA
9870
HEIGHT
5489
24-Aug-2022
10:25
ALSHS
S



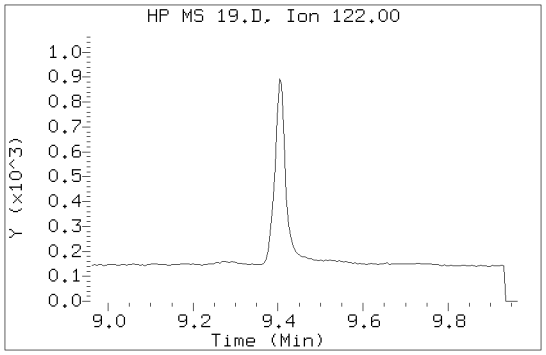
BEFORE

MASS
122
AREA
0
HEIGHT
0
23-Aug-2022
15:44
ALSHS
Server



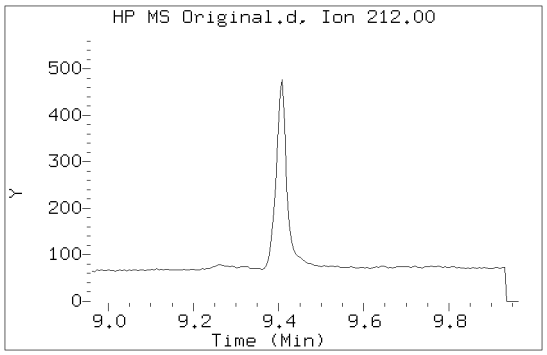
AFTER

MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



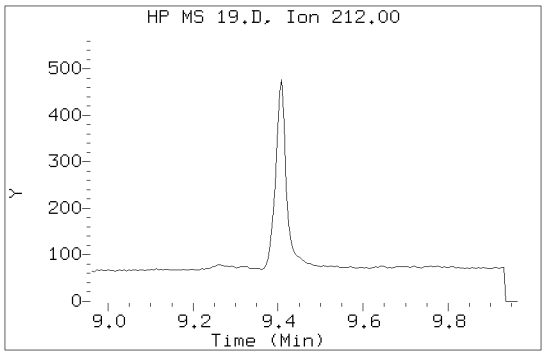
BEFORE

MASS
212
AREA
0
HEIGHT
0
23-Aug-2022
15:44
ALSHS
Server



AFTER

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



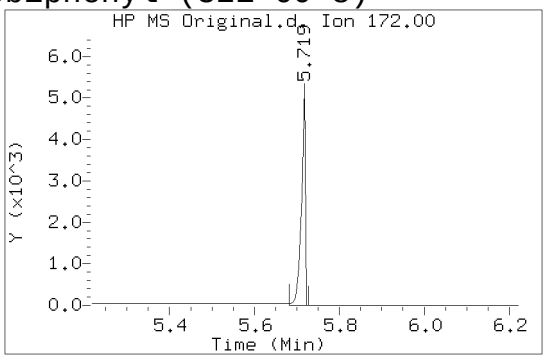
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\19.D
Inj Date : 23-AUG-2022 15:27
InstruID : SV6.i
LabSampID : HS22080499-06

2-Fluorobiphenyl (321-60-8)

Reason Code:

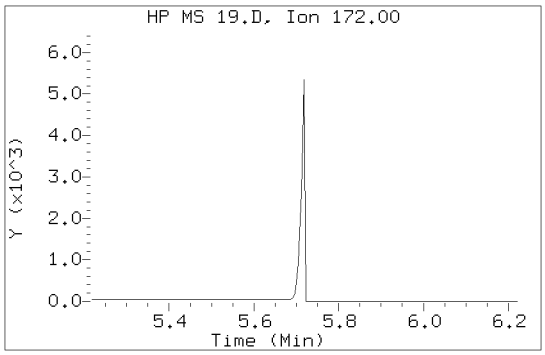
BEFORE

MASS
172
AREA
3513
HEIGHT
5345
23-Aug-2022
15:44
ALSHS
Server



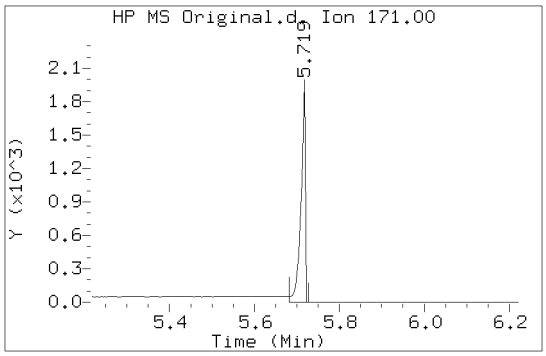
AFTER

MASS
172
AREA
5593
HEIGHT
5345
24-Aug-2022
10:25
ALSHS
S



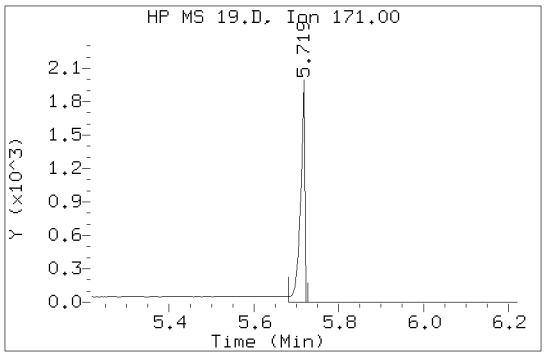
BEFORE

MASS
171
AREA
1466
HEIGHT
1995
23-Aug-2022
15:44
ALSHS
Server



AFTER

MASS
171
AREA
1466
HEIGHT
1995
24-Aug-2022
10:25
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\20.D Page 1
Report Date: 24-Aug-2022 10:26

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\20.D
Lab Smp Id: HS22080499-07
Inj Date : 23-AUG-2022 15:45
Operator : LG Inst ID: SV6.i
Smp Info : HS22080499-07
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.598	3.592	(1.000)	4235	0.10000	(aQ)
* 45 Naphthalene-d8	136	4.709	4.705	(1.000)	16079	0.10000	
$ 33 Nitrobenzene-d5	82	4.065	4.059	(0.863)	3538	0.06601	0.06601(M)
* 86 Acenaphthene-d10	164	6.382	6.376	(1.000)	7783	0.10000	(Q)
$ 69 2-Fluorobiphenyl	172	5.719	5.718	(0.896)	4089	0.03375	0.03375(M)
* 126 Phenanthrene-d10	188	7.827	7.827	(1.000)	14183	0.10000	
* 182 Chrysene-d12	240	10.662	10.657	(1.000)	8592	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.414	9.408	(0.883)	7597	0.04703	0.04703(M)
* 198 Perylene-d12	264	12.735	12.724	(1.000)	7968	0.10000	
1 1,4-Dioxane	58	1.851	1.887	(0.514)	598	0.34396	0.3440(Q)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01134132

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\20.D

Date : 23-AUG-2022 15:45

Client ID:

Instrument: SV6.i

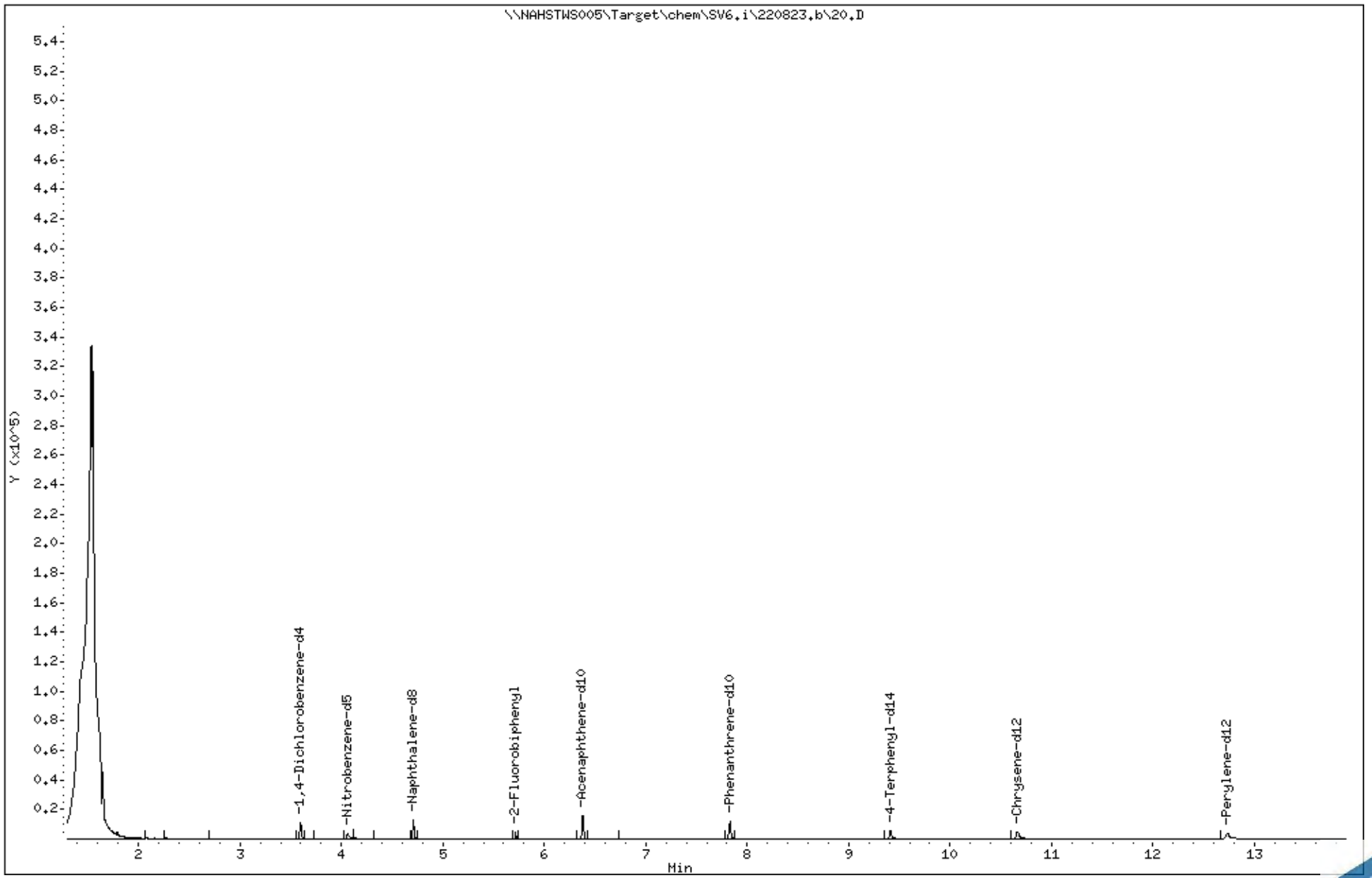
Sample Info: HS22080499-07

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\20.D

Date : 23-AUG-2022 15:45

Client ID:

Instrument: SV6.i

Sample Info: HS22080499-07

Purge Volume: 1000.0

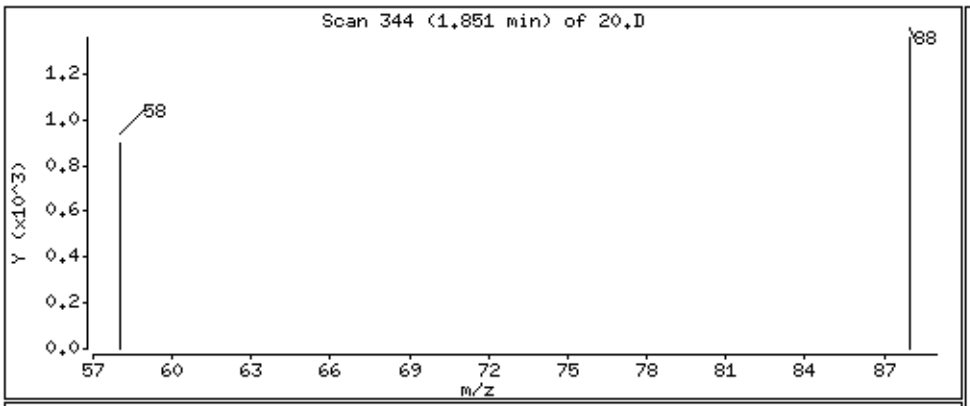
Operator: LG

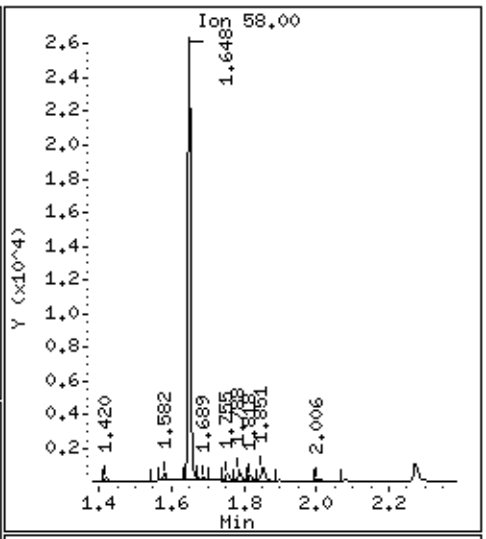
Column phase: RTX-5SIL MS

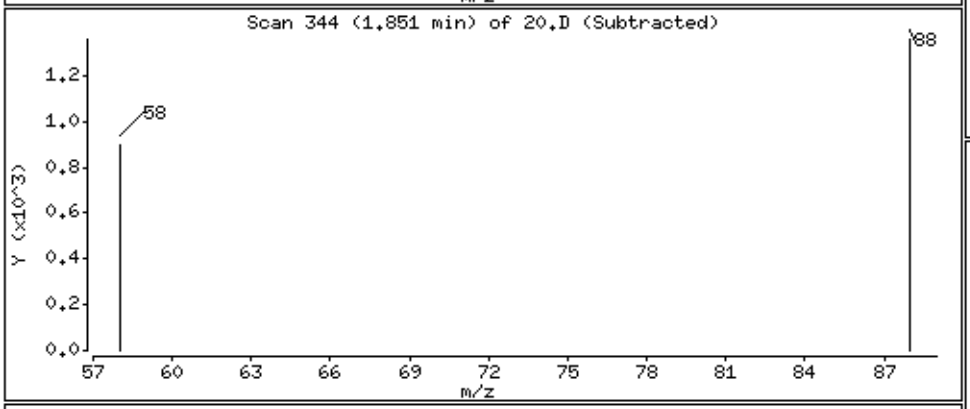
Column diameter: 0.28

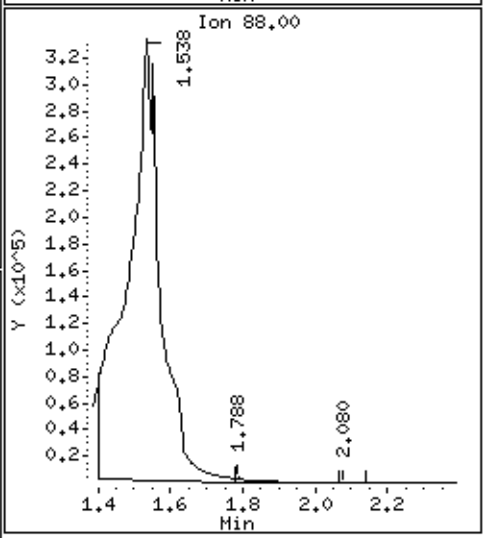
1 1,4-Dioxane

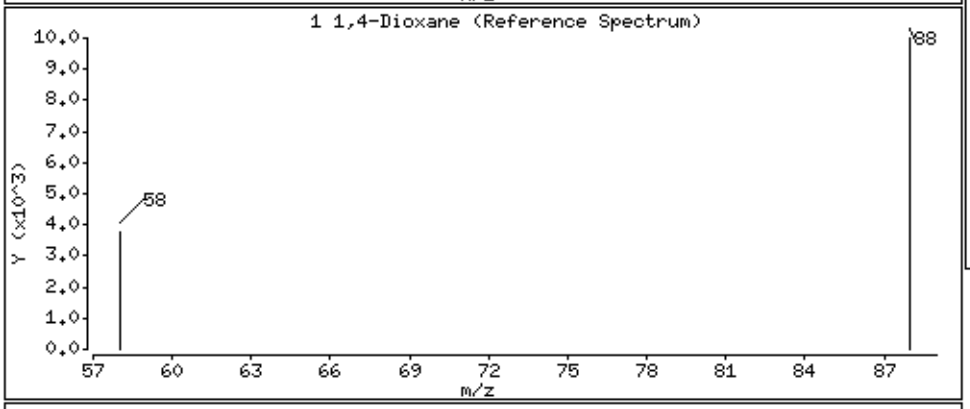
Concentration: 0.3440 ug/L

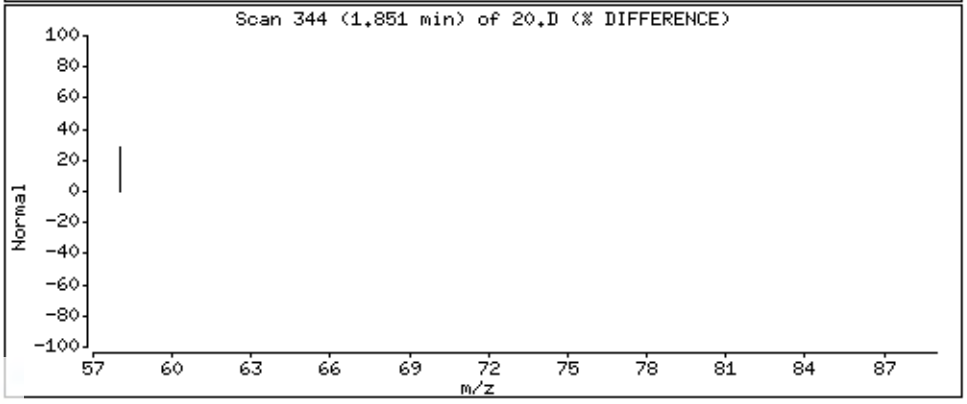












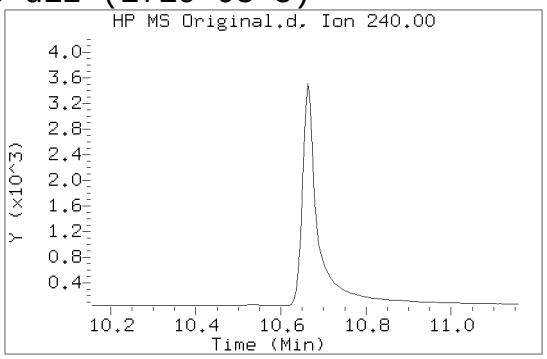
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\20.D
Inj Date : 23-AUG-2022 15:45
InstruID : SV6.i
LabSampID : HS22080499-07

Chrysene-d12 (1719-03-5)

Reason Code:

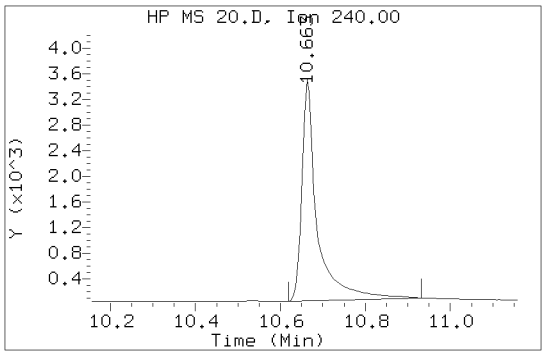
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
16:01
ALSHS
Server



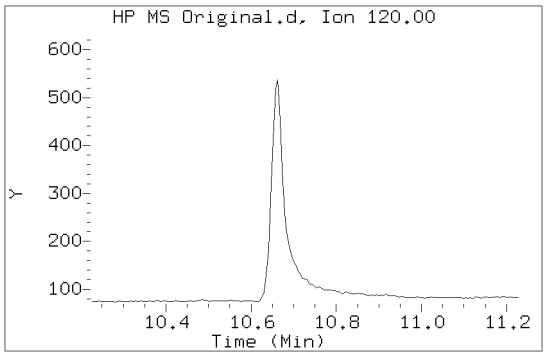
AFTER

MASS
240
AREA
8592
HEIGHT
3449
24-Aug-2022
10:25
ALSHS
S



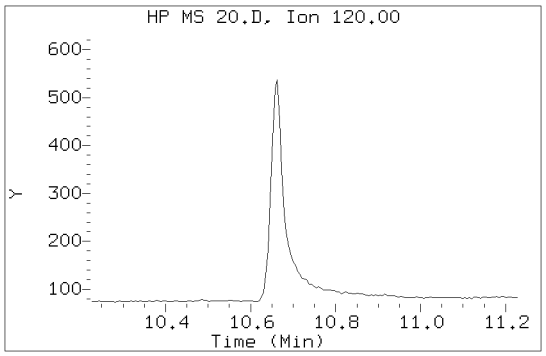
BEFORE

MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
16:01
ALSHS
Server



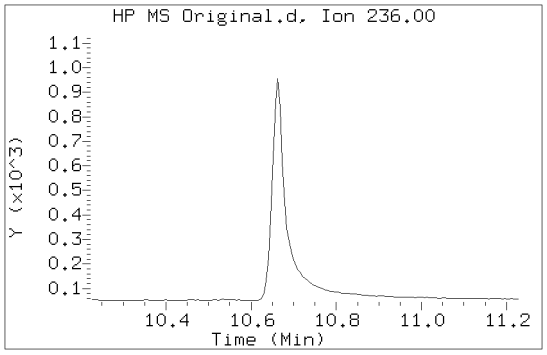
AFTER

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



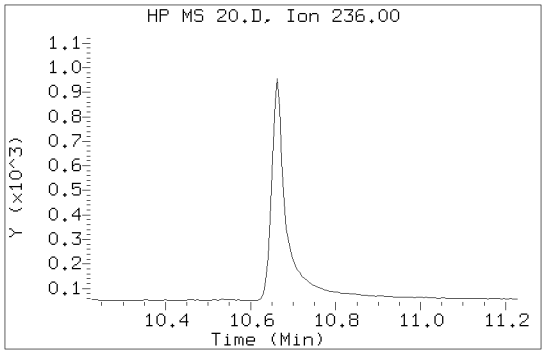
BEFORE

MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
16:01
ALSHS
Server



AFTER

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

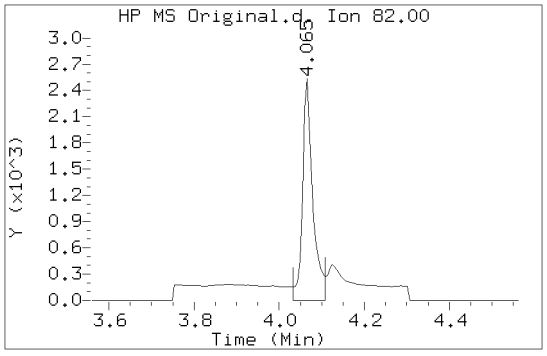


Nitrobenzene-d5 (4165-60-0)

Reason Code:

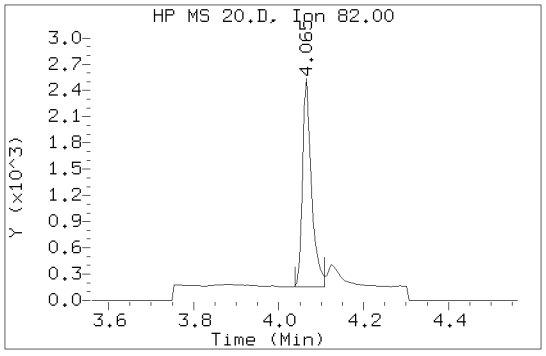
BEFORE

MASS
82
AREA
4275
HEIGHT
2534
23-Aug-2022
16:01
ALSHS
Server



AFTER

MASS
82
AREA
3538
HEIGHT
2381
24-Aug-2022
10:25
ALSHS
S

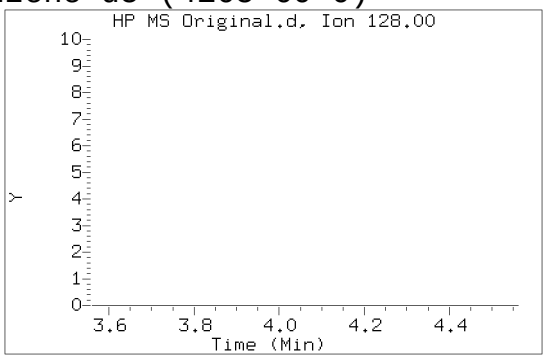


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\20.D
Inj Date : 23-AUG-2022 15:45
InstruID : SV6.i
LabSampID : HS22080499-07

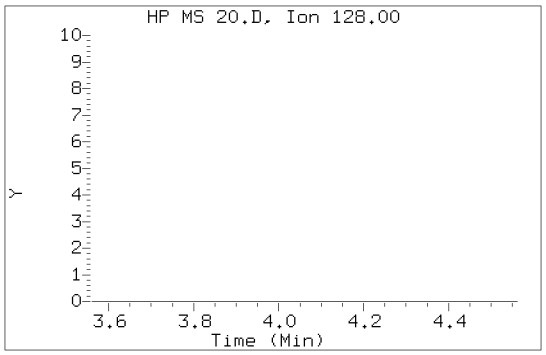
Nitrobenzene-d5 (4165-60-0)

Reason Code:

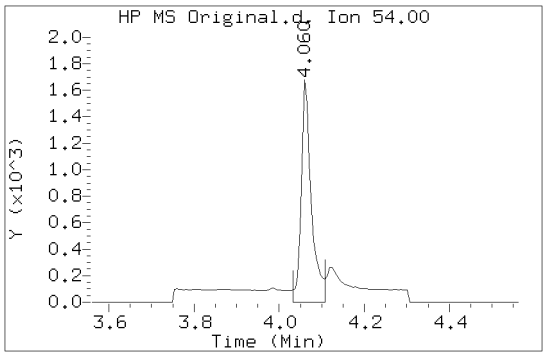
BEFORE
MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
16:01
ALSHS
Server



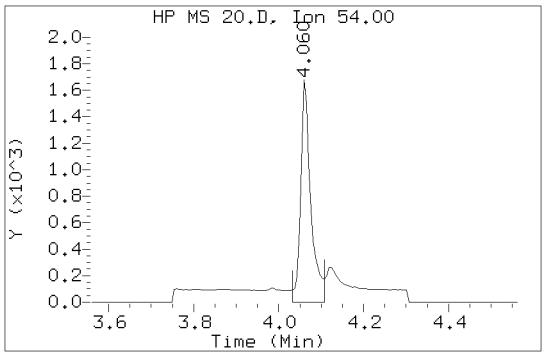
AFTER
MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
54
AREA
2802
HEIGHT
1678
23-Aug-2022
16:01
ALSHS
Server



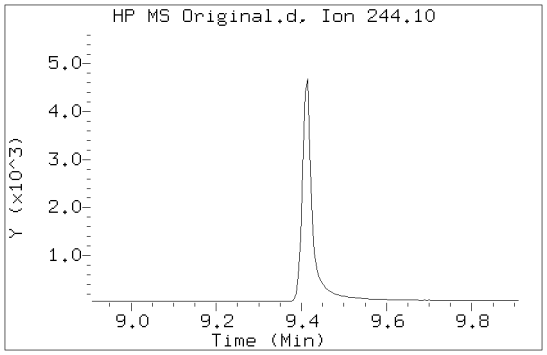
AFTER
MASS
54
AREA
2802
HEIGHT
1678
24-Aug-2022
10:25
ALSHS
S



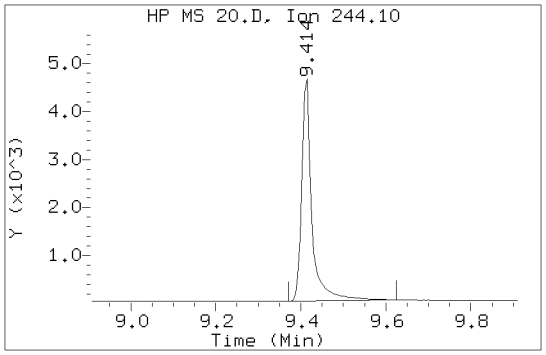
4-Terphenyl-d14 (1718-51-0)

Reason Code:

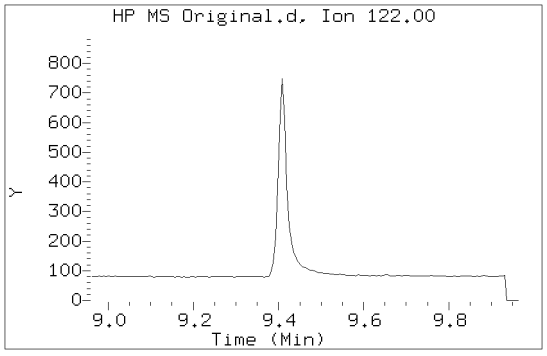
BEFORE
MASS
244.1
AREA
0
HEIGHT
0
23-Aug-2022
16:01
ALSHS
Server



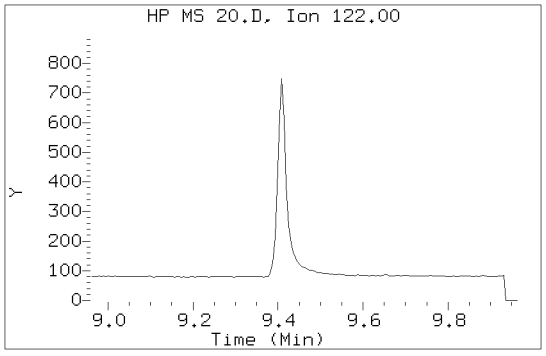
AFTER
MASS
244.1
AREA
7597
HEIGHT
4627
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
122
AREA
0
HEIGHT
0
23-Aug-2022
16:01
ALSHS
Server



AFTER
MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

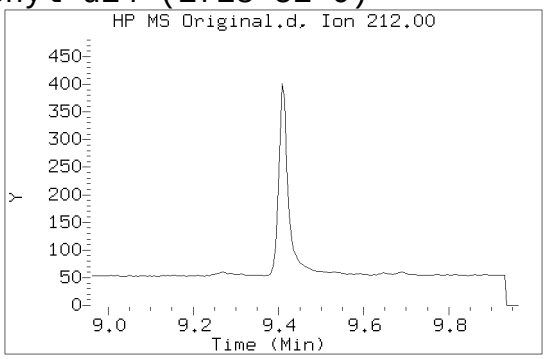


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\20.D
Inj Date : 23-AUG-2022 15:45
InstruID : SV6.i
LabSampID : HS22080499-07

4-Terphenyl-d14 (1718-51-0)

BEFORE

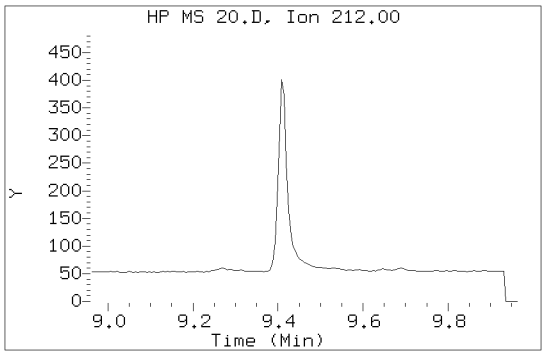
MASS
212
AREA
0
HEIGHT
0
23-Aug-2022
16:01
ALSHS
Server



Reason Code:

AFTER

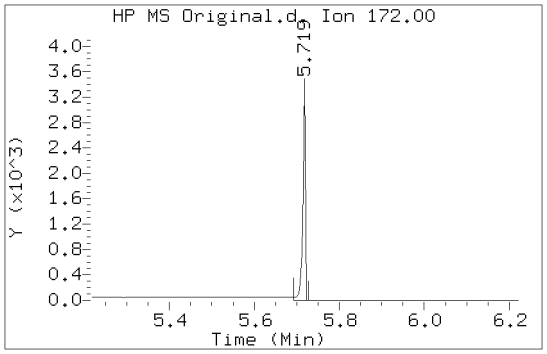
MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



2-Fluorobiphenyl (321-60-8)

BEFORE

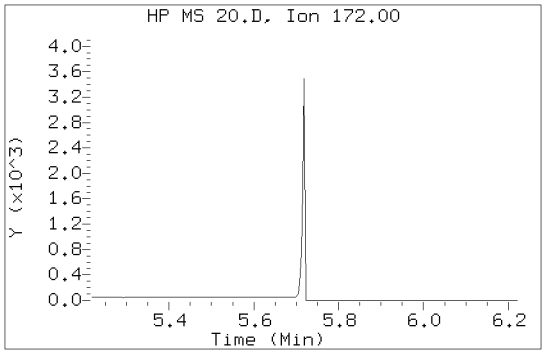
MASS
172
AREA
1513
HEIGHT
3490
23-Aug-2022
16:01
ALSHS
Server



Reason Code:

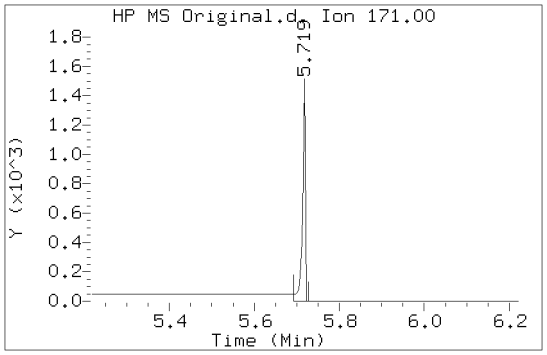
AFTER

MASS
172
AREA
4089
HEIGHT
3520
24-Aug-2022
10:25
ALSHS
S



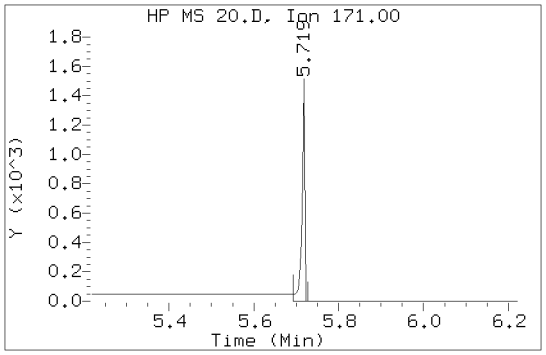
BEFORE

MASS
171
AREA
738
HEIGHT
1515
23-Aug-2022
16:01
ALSHS
Server



AFTER

MASS
171
AREA
738
HEIGHT
1515
24-Aug-2022
10:25
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\21.D Page 1
Report Date: 24-Aug-2022 10:26

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\21.D
Lab Smp Id: HS22080499-08
Inj Date : 23-AUG-2022 16:03
Operator : LG Inst ID: SV6.i
Smp Info : HS22080499-08
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.598	3.592	(1.000)	4623	0.10000	(aQ)
* 45 Naphthalene-d8	136	4.709	4.705	(1.000)	17890	0.10000	
$ 33 Nitrobenzene-d5	82	4.065	4.059	(0.863)	4032	0.06761	0.06761(M)
* 86 Acenaphthene-d10	164	6.382	6.376	(1.000)	8654	0.10000	(M)
$ 69 2-Fluorobiphenyl	172	5.719	5.718	(0.896)	4957	0.03680	0.03680(M)
* 126 Phenanthrene-d10	188	7.827	7.827	(1.000)	16100	0.10000	
* 182 Chrysene-d12	240	10.662	10.657	(1.000)	11074	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.409	9.408	(0.882)	8948	0.04298	0.04298(M)
* 198 Perylene-d12	264	12.730	12.724	(1.000)	9595	0.10000	(M)
1 1,4-Dioxane	58	1.906	1.887	(0.530)	1391	0.73292	0.7329(AMH)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

01134139

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\21.D

Date : 23-AUG-2022 16:03

Client ID:

Instrument: SV6.i

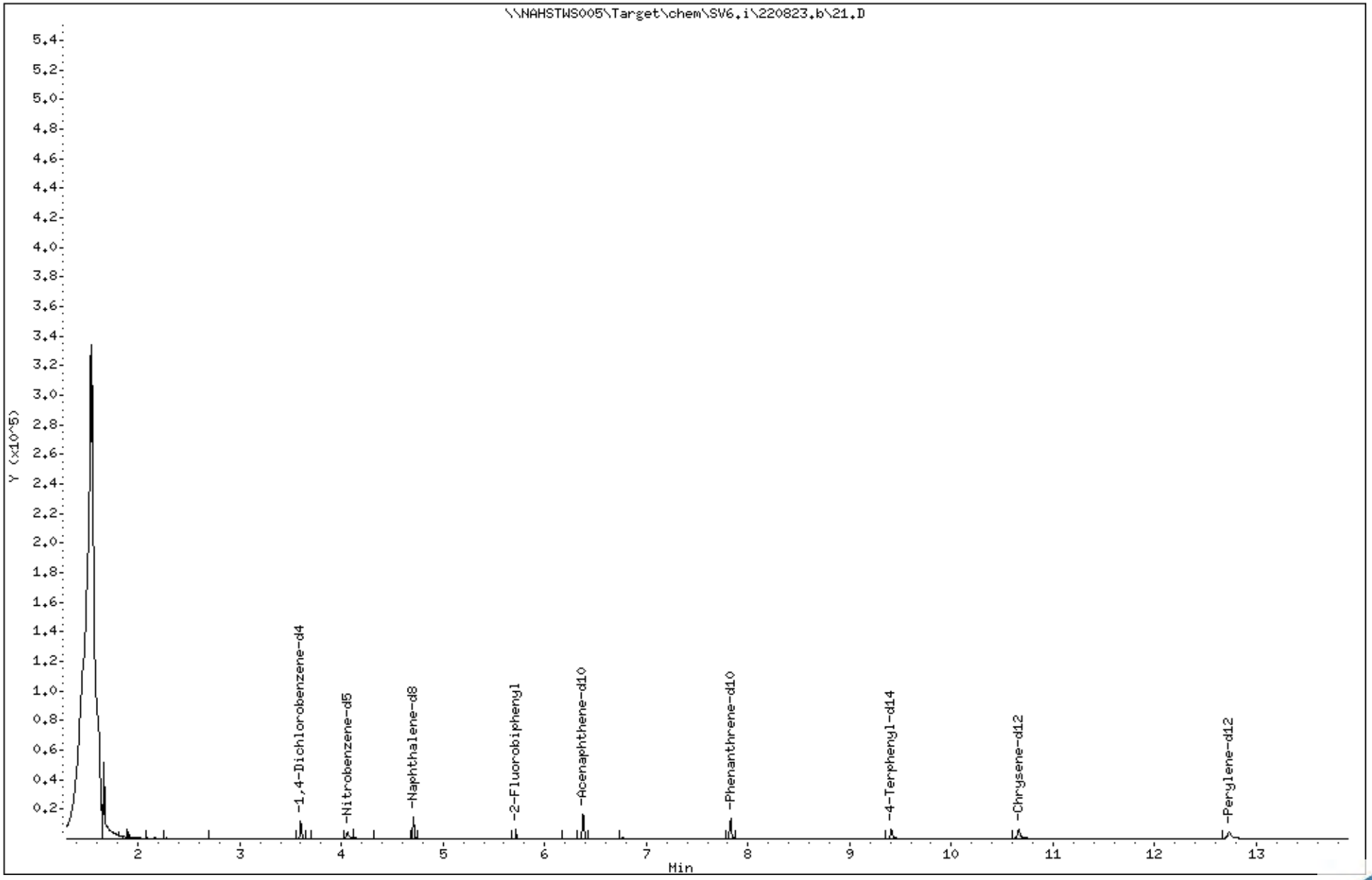
Sample Info: HS22080499-08

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\21.D

Date : 23-AUG-2022 16:03

Client ID:

Instrument: SV6.i

Sample Info: HS22080499-08

Purge Volume: 1000.0

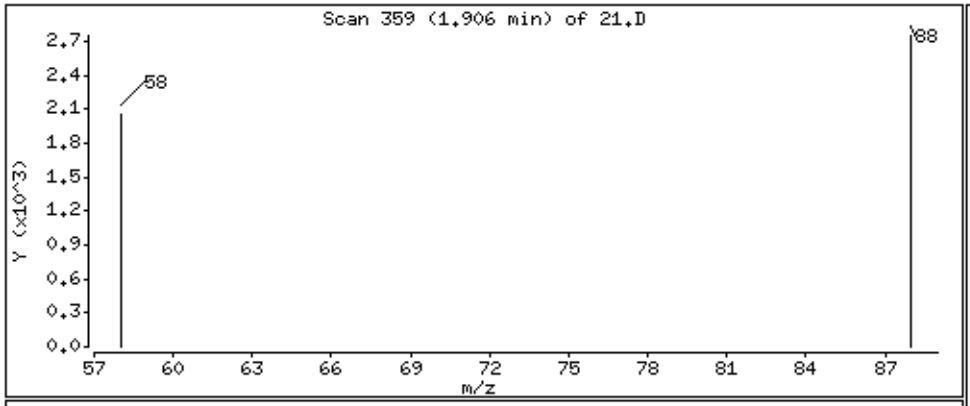
Operator: LG

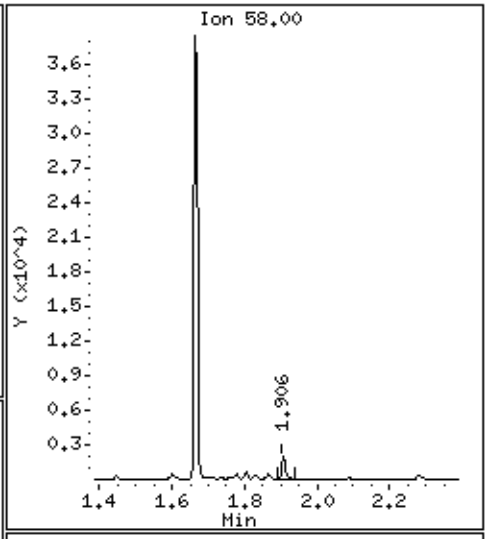
Column phase: RTX-5SIL MS

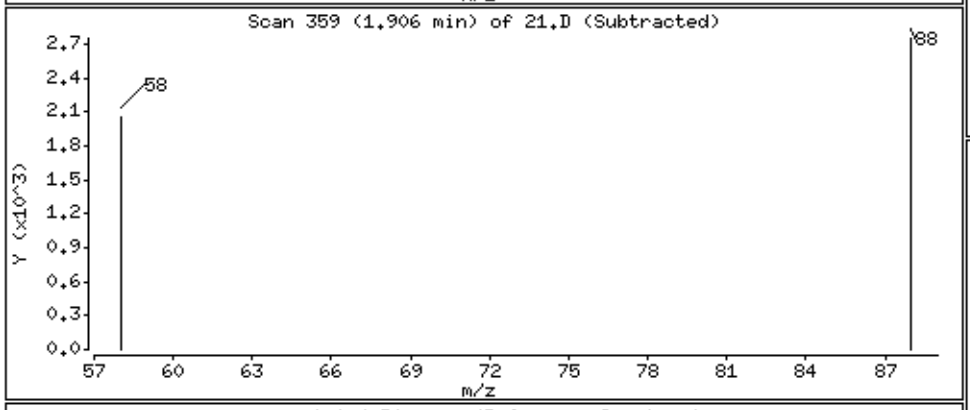
Column diameter: 0.28

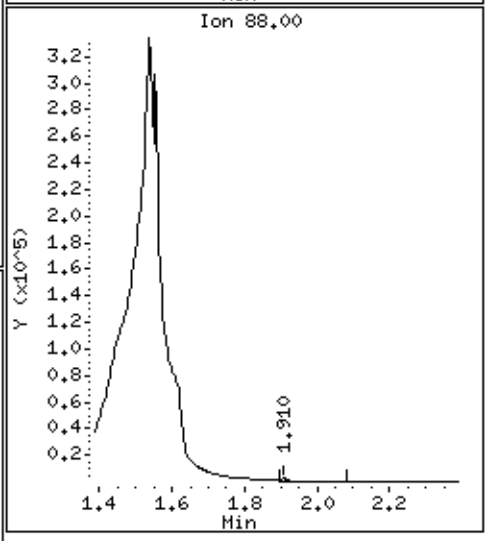
1 1,4-Dioxane

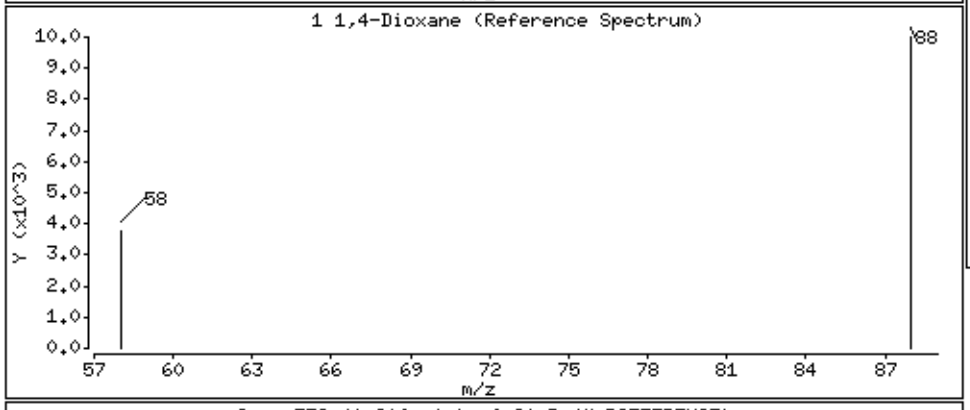
Concentration: 0.7329 ug/L

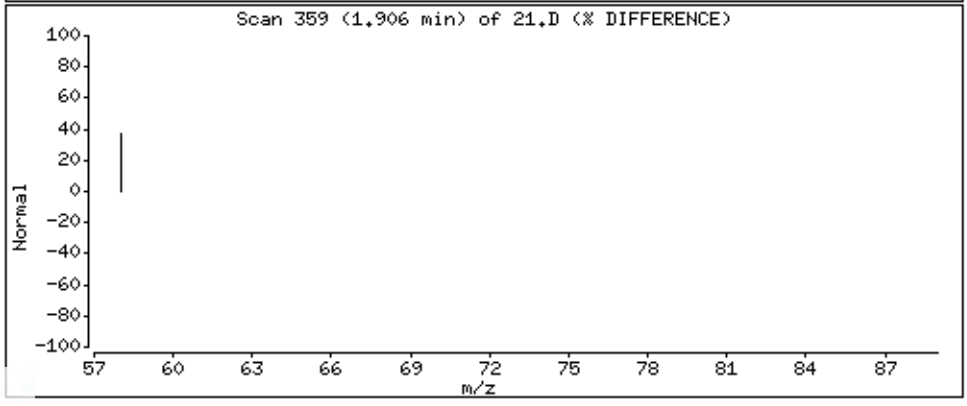












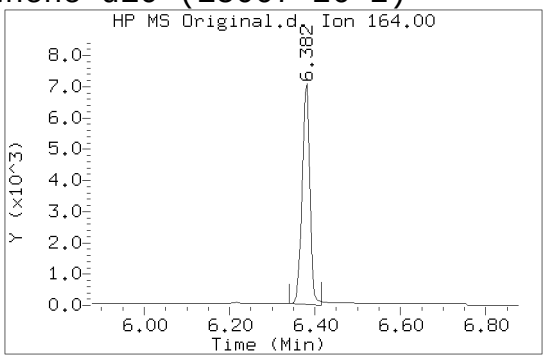
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\21.D
Inj Date : 23-AUG-2022 16:03
InstruID : SV6.i
LabSampID : HS22080499-08

Acenaphthene-d10 (15067-26-2)

Reason Code:

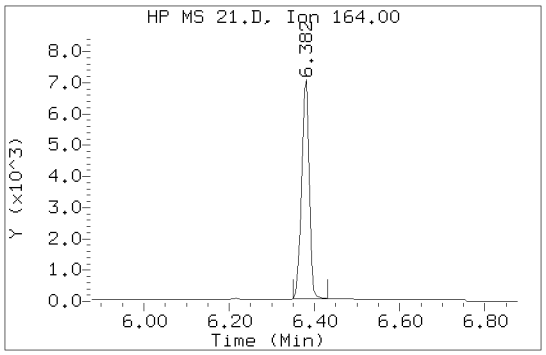
BEFORE

MASS
164
AREA
8923
HEIGHT
7074
23-Aug-2022
16:19
ALSHS
Server



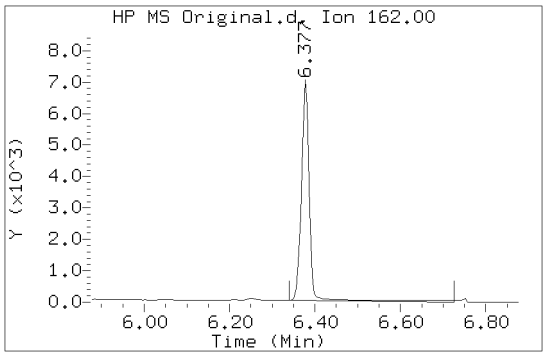
AFTER

MASS
164
AREA
8654
HEIGHT
7009
24-Aug-2022
10:25
ALSHS
S



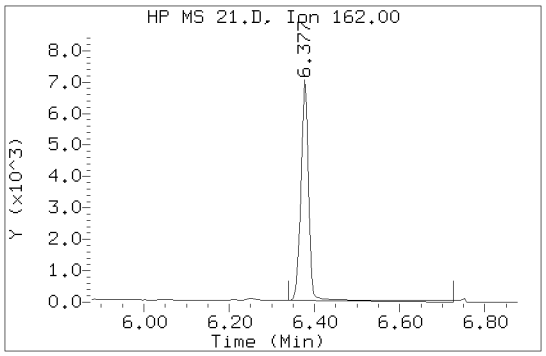
BEFORE

MASS
162
AREA
9418
HEIGHT
7017
23-Aug-2022
16:19
ALSHS
Server



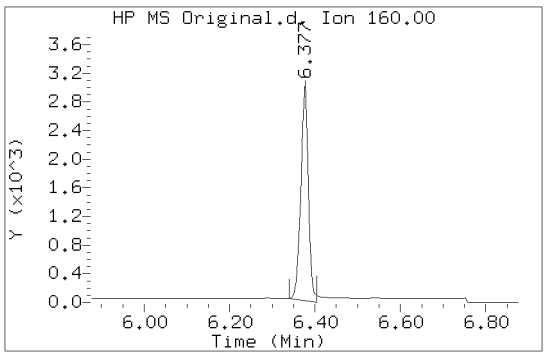
AFTER

MASS
162
AREA
9418
HEIGHT
7017
24-Aug-2022
10:25
ALSHS
S



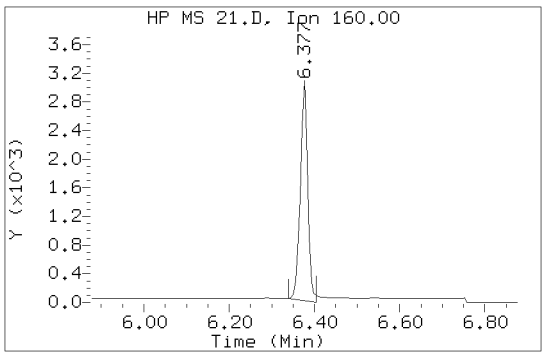
BEFORE

MASS
160
AREA
3731
HEIGHT
3073
23-Aug-2022
16:19
ALSHS
Server



AFTER

MASS
160
AREA
3731
HEIGHT
3073
24-Aug-2022
10:25
ALSHS
S

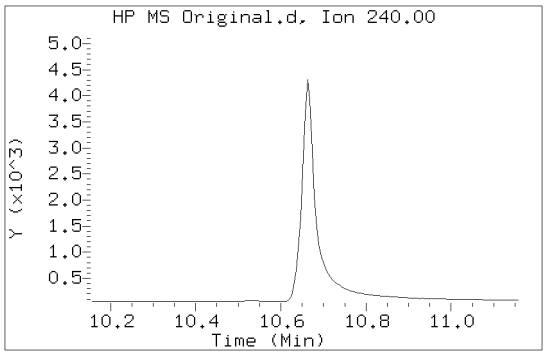


Chrysene-d12 (1719-03-5)

Reason Code:

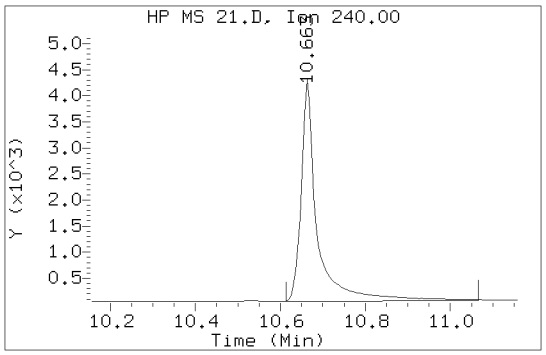
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
16:19
ALSHS
Server



AFTER

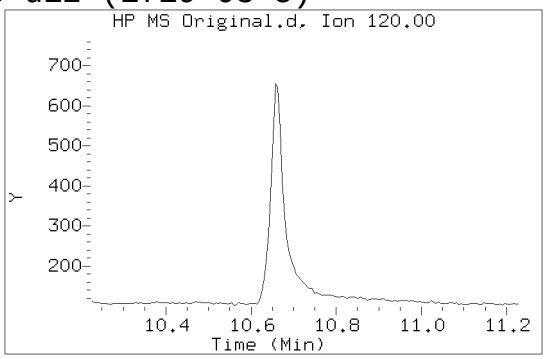
MASS
240
AREA
11074
HEIGHT
4244
24-Aug-2022
10:25
ALSHS
S



Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\21.D
Inj Date : 23-AUG-2022 16:03
InstruID : SV6.i
LabSampID : HS22080499-08

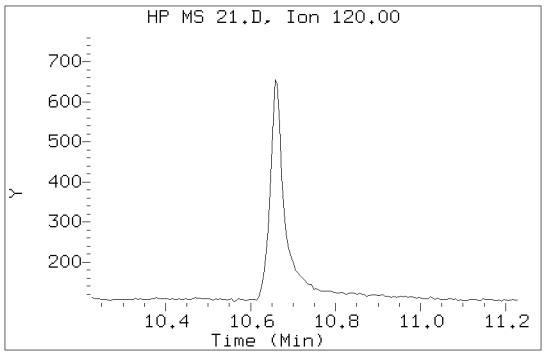
Chrysene-d12 (1719-03-5)

BEFORE
MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
16:19
ALSHS
Server

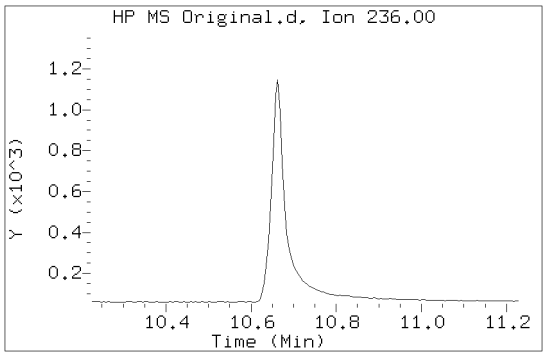


Reason Code:

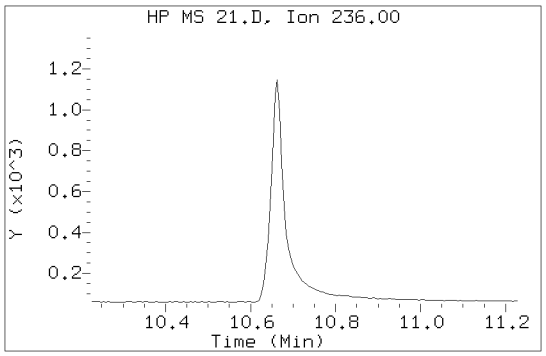
AFTER
MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
16:19
ALSHS
Server

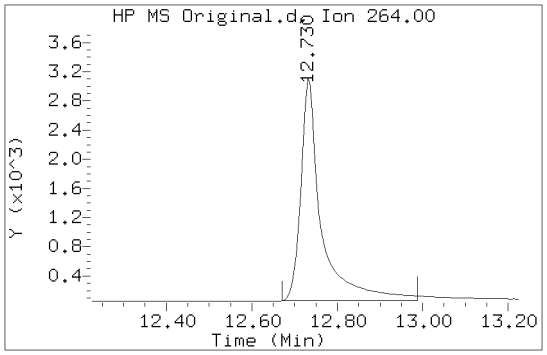


AFTER
MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



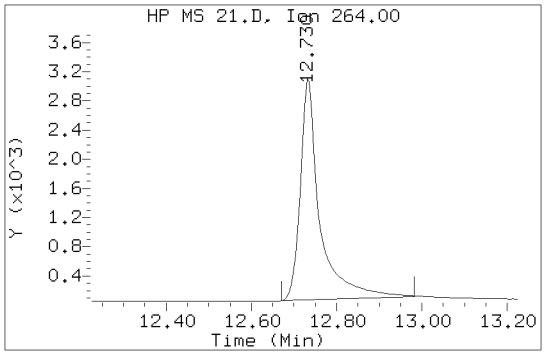
Perylene-d12 (1520-96-3)

BEFORE
MASS
264
AREA
10223
HEIGHT
3042
23-Aug-2022
16:19
ALSHS
Server

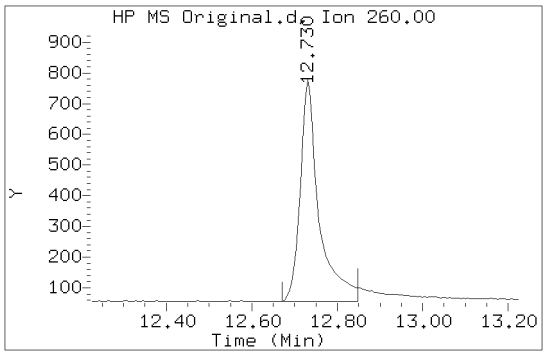


Reason Code:

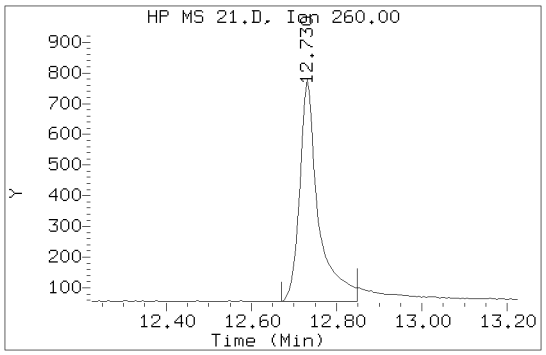
AFTER
MASS
264
AREA
9595
HEIGHT
3027
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
260
AREA
2185
HEIGHT
721
23-Aug-2022
16:19
ALSHS
Server



AFTER
MASS
260
AREA
2185
HEIGHT
721
24-Aug-2022
10:25
ALSHS
S



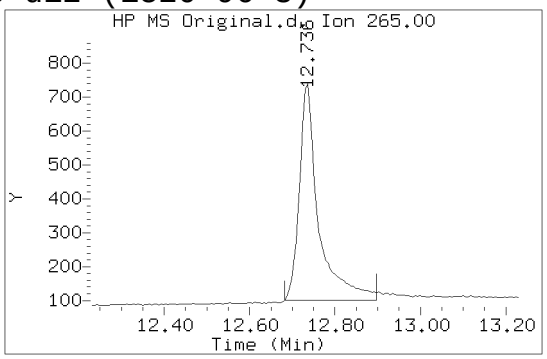
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\21.D
Inj Date : 23-AUG-2022 16:03
InstruID : SV6.i
LabSampID : HS22080499-08

Perylene-d12 (1520-96-3)

Reason Code:

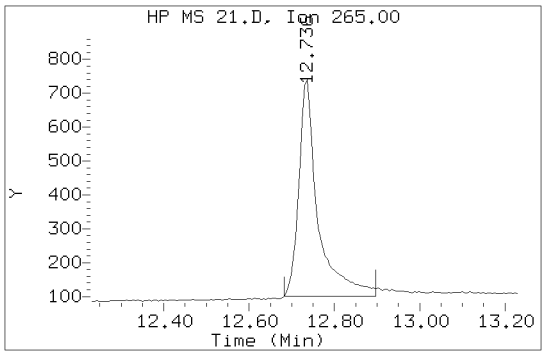
BEFORE

MASS
265
AREA
1985
HEIGHT
639
23-Aug-2022
16:19
ALSHS
Server



AFTER

MASS
265
AREA
1985
HEIGHT
639
24-Aug-2022
10:25
ALSHS
S

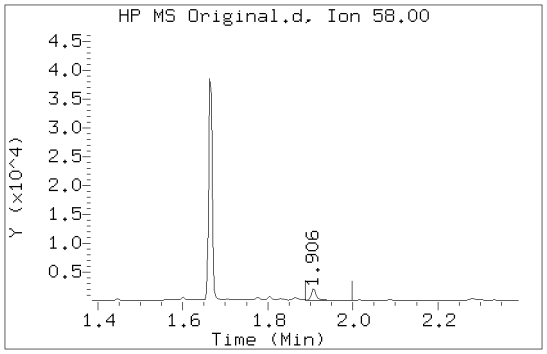


1,4-Dioxane ()

Reason Code:

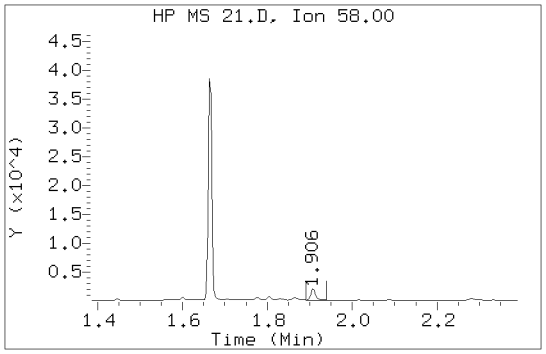
BEFORE

MASS
58
AREA
1478
HEIGHT
1965
23-Aug-2022
16:19
ALSHS
Server



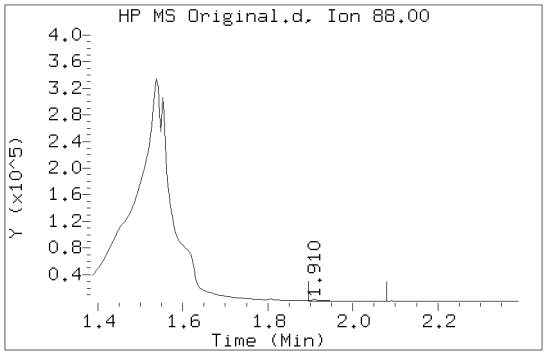
AFTER

MASS
58
AREA
1391
HEIGHT
1946
24-Aug-2022
10:25
ALSHS
S



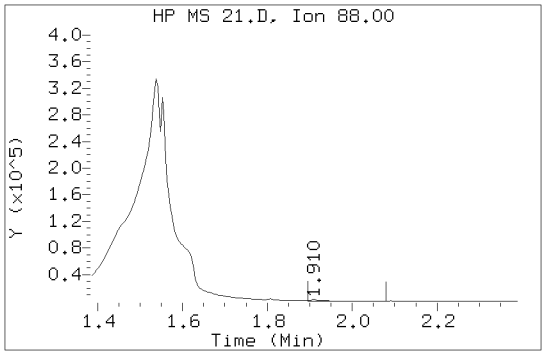
BEFORE

MASS
88
AREA
4187
HEIGHT
2741
23-Aug-2022
16:19
ALSHS
Server



AFTER

MASS
88
AREA
4187
HEIGHT
2741
24-Aug-2022
10:25
ALSHS
S

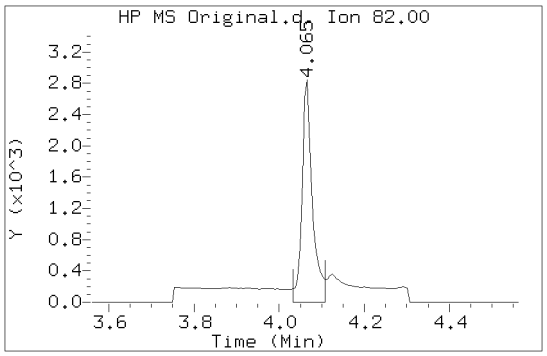


Nitrobenzene-d5 (4165-60-0)

Reason Code:

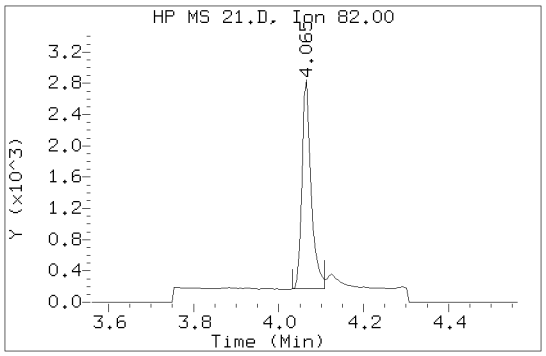
BEFORE

MASS
82
AREA
4855
HEIGHT
2843
23-Aug-2022
16:19
ALSHS
Server



AFTER

MASS
82
AREA
4032
HEIGHT
2672
24-Aug-2022
10:25
ALSHS
S



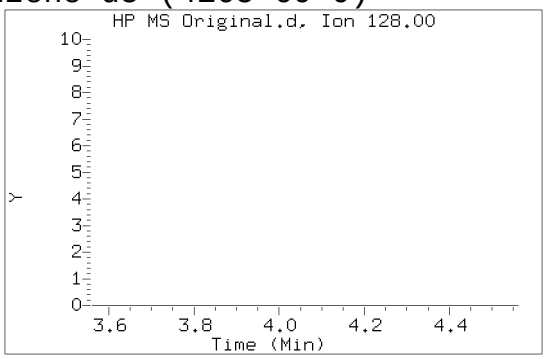
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\21.D
Inj Date : 23-AUG-2022 16:03
InstruID : SV6.i
LabSampID : HS22080499-08

Nitrobenzene-d5 (4165-60-0)

Reason Code:

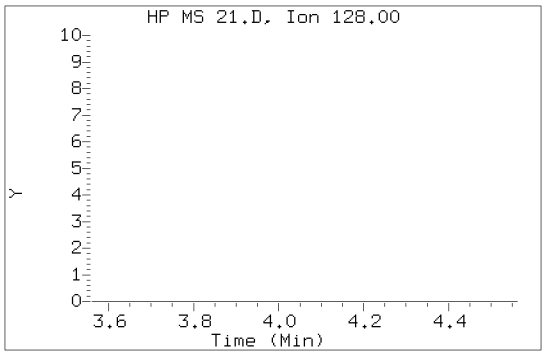
BEFORE

MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
16:19
ALSHS
Server



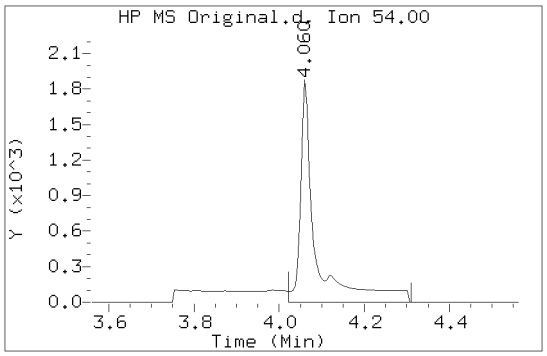
AFTER

MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



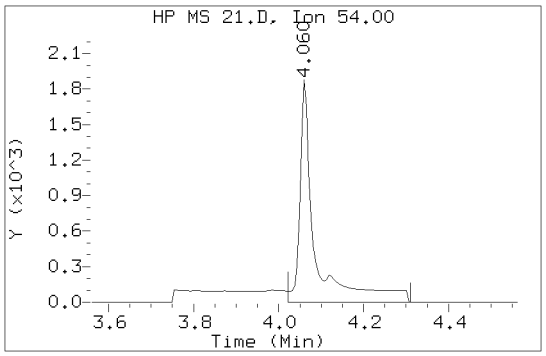
BEFORE

MASS
54
AREA
4595
HEIGHT
1877
23-Aug-2022
16:19
ALSHS
Server



AFTER

MASS
54
AREA
4595
HEIGHT
1877
24-Aug-2022
10:25
ALSHS
S

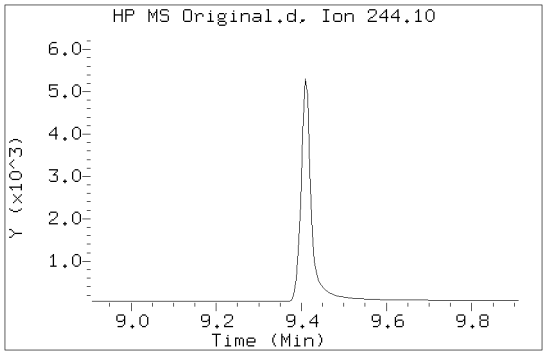


4-Terphenyl-d14 (1718-51-0)

Reason Code:

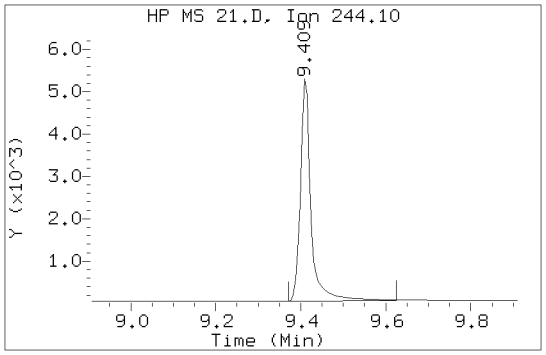
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
23-Aug-2022
16:19
ALSHS
Server



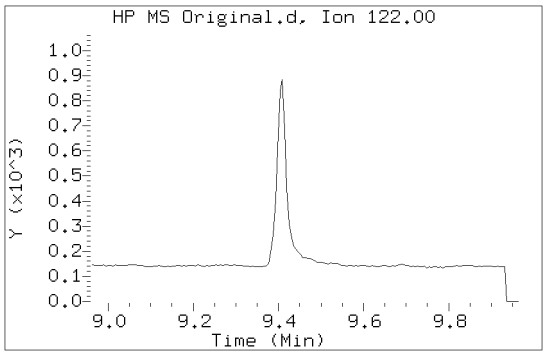
AFTER

MASS
244.1
AREA
8948
HEIGHT
5242
24-Aug-2022
10:25
ALSHS
S



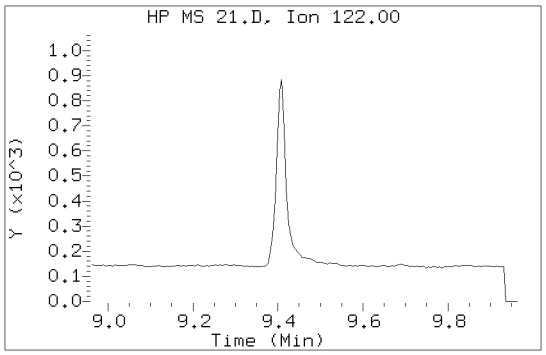
BEFORE

MASS
122
AREA
0
HEIGHT
0
23-Aug-2022
16:19
ALSHS
Server



AFTER

MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

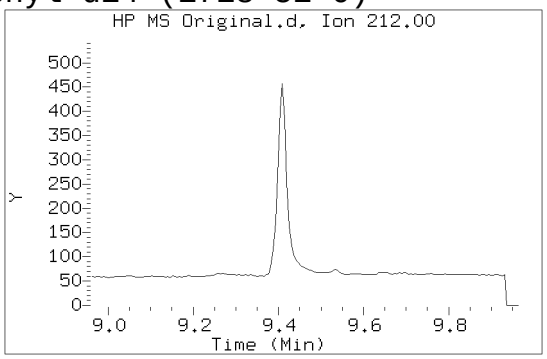


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\21.D
Inj Date : 23-AUG-2022 16:03
InstruID : SV6.i
LabSampID : HS22080499-08

4-Terphenyl-d14 (1718-51-0)

BEFORE

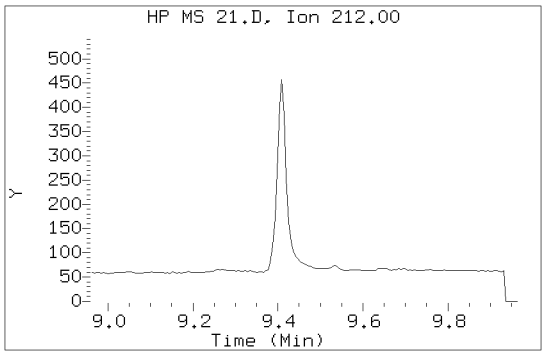
MASS
212
AREA
0
HEIGHT
0
23-Aug-2022
16:19
ALSHS
Server



AFTER

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

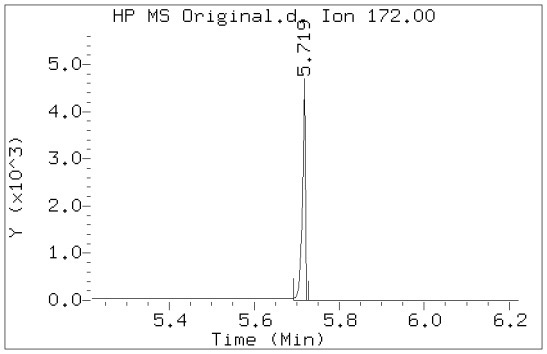
Reason Code:



2-Fluorobiphenyl (321-60-8)

BEFORE

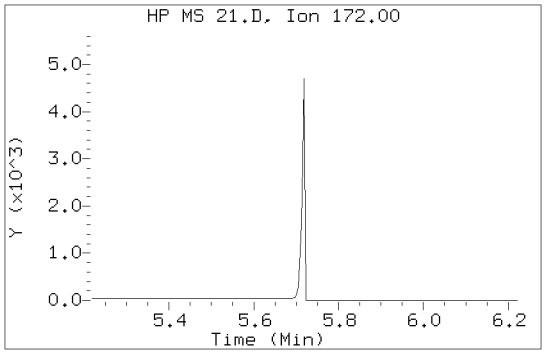
MASS
172
AREA
2448
HEIGHT
4699
23-Aug-2022
16:19
ALSHS
Server



AFTER

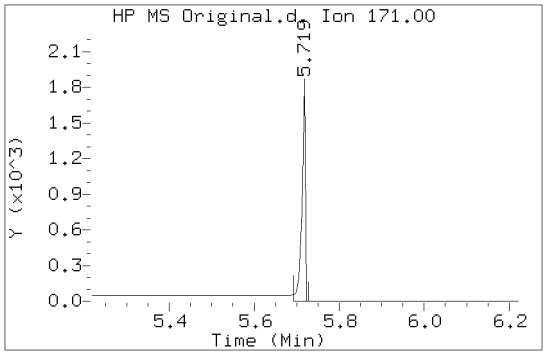
MASS
172
AREA
4957
HEIGHT
4728
24-Aug-2022
10:25
ALSHS
S

Reason Code:



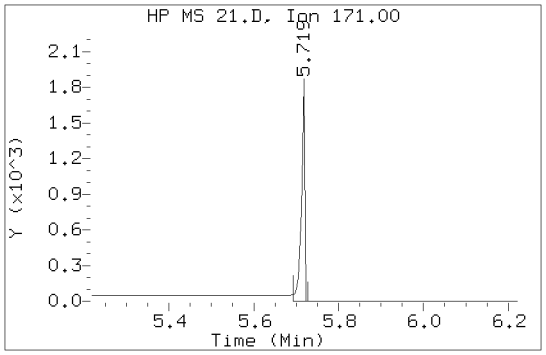
BEFORE

MASS
171
AREA
1098
HEIGHT
1871
23-Aug-2022
16:19
ALSHS
Server



AFTER

MASS
171
AREA
1098
HEIGHT
1871
24-Aug-2022
10:25
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\30.D Page 1
Report Date: 24-Aug-2022 10:28

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\30.D
Lab Smp Id: HS22080499-01
Inj Date : 23-AUG-2022 18:45
Operator : LG Inst ID: SV6.i
Smp Info : HS22080499-01X10
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 27
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	10.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	
* 20 1,4-Dichlorobenzene-d4	152	3.598	3.592	(1.000)	3218	0.10000		(aQ)
* 45 Naphthalene-d8	136	4.716	4.705	(1.000)	10573	0.10000		(M)
* 86 Acenaphthene-d10	164	6.387	6.376	(1.000)	7210	0.10000		(Q)
* 126 Phenanthrene-d10	188	7.832	7.827	(1.000)	10508	0.10000		
* 182 Chrysene-d12	240	10.673	10.657	(1.000)	6166	0.10000		(M)
* 198 Perylene-d12	264	12.746	12.724	(1.000)	4788	0.10000		
1 1,4-Dioxane	58	1.869	1.887	(0.520)	284	0.21497	2.150	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01134147

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\30.D

Page 1

Date : 23-AUG-2022 18:45

Client ID:

Instrument: SV6.i

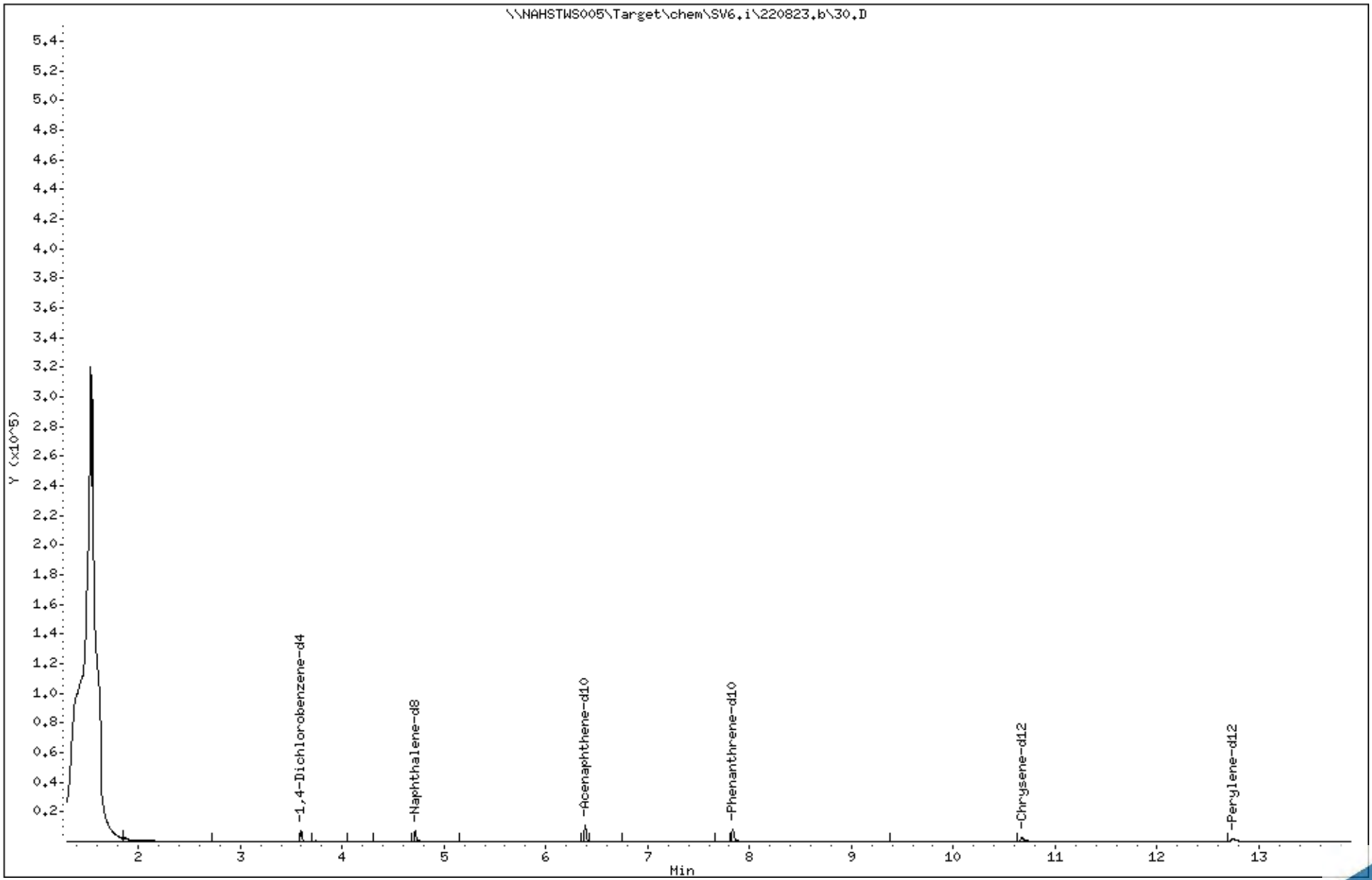
Sample Info: HS22080499-01X10

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\30.D

Date : 23-AUG-2022 18:45

Client ID:

Instrument: SV6.i

Sample Info: HS22080499-01X10

Purge Volume: 1000.0

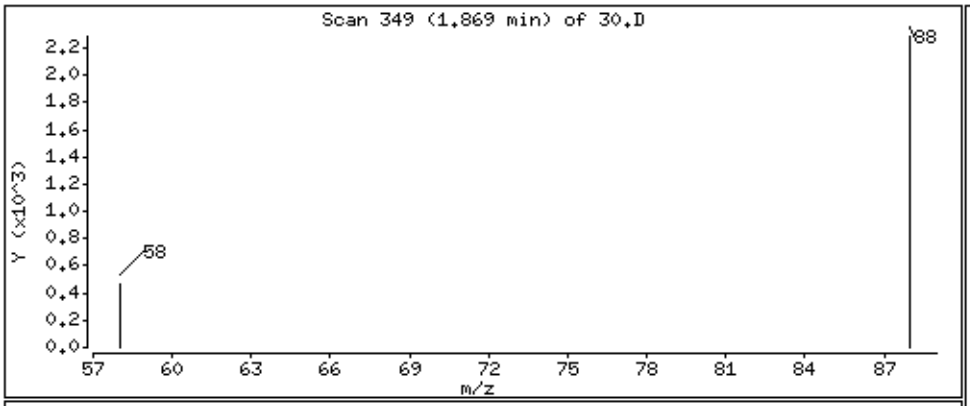
Operator: LG

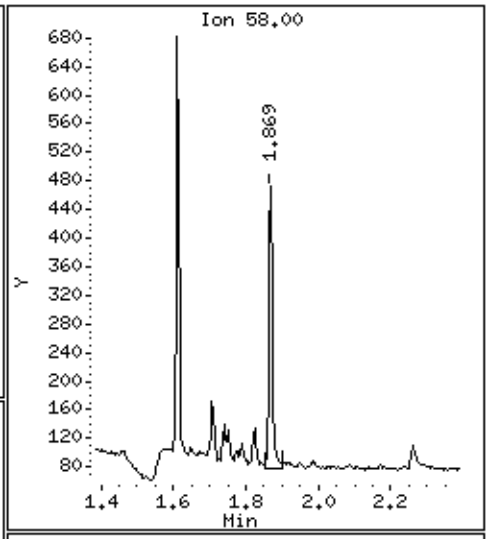
Column phase: RTX-5SIL MS

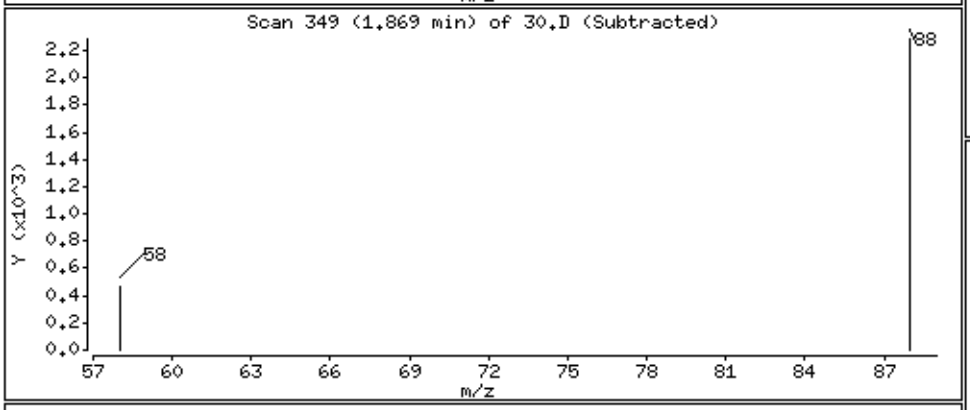
Column diameter: 0.28

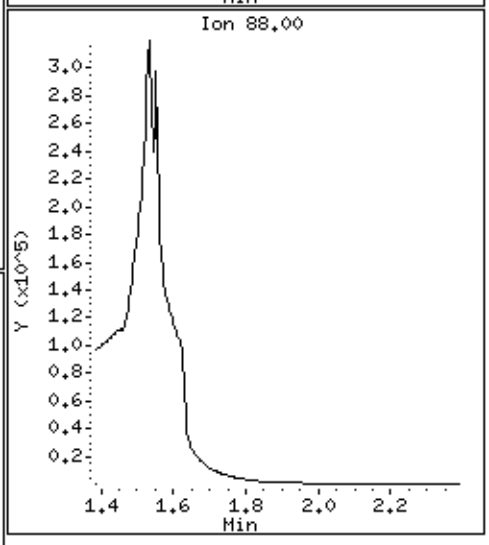
1 1,4-Dioxane

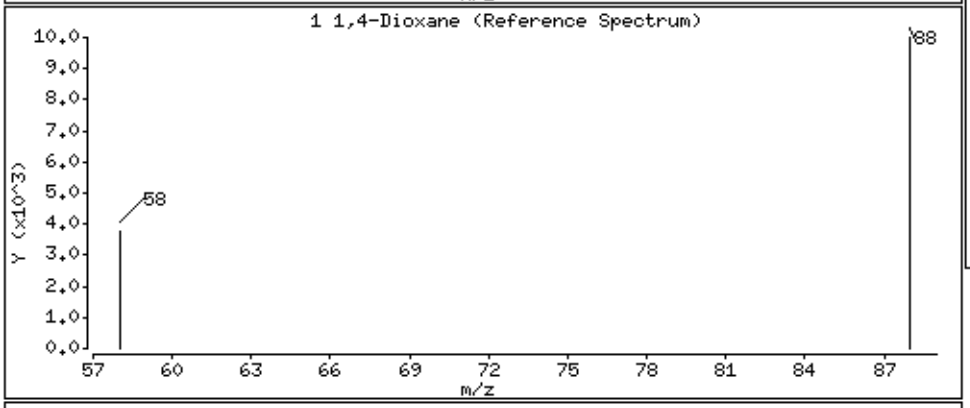
Concentration: 2.150 ug/L

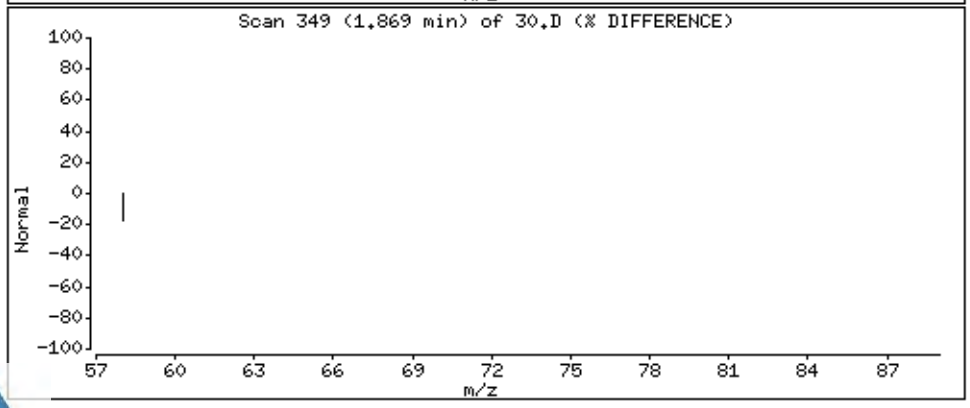












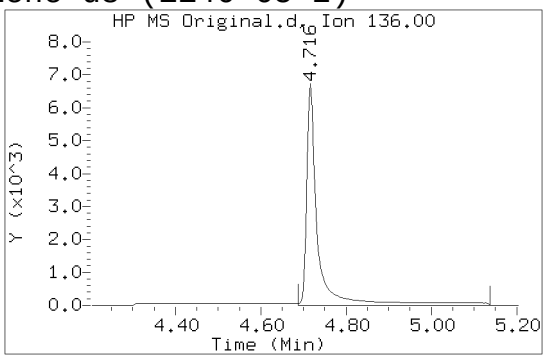
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\30.D
Inj Date : 23-AUG-2022 18:45
InstruID : SV6.i
LabSampID : HS22080499-01

Naphthalene-d8 (1146-65-2)

Reason Code:

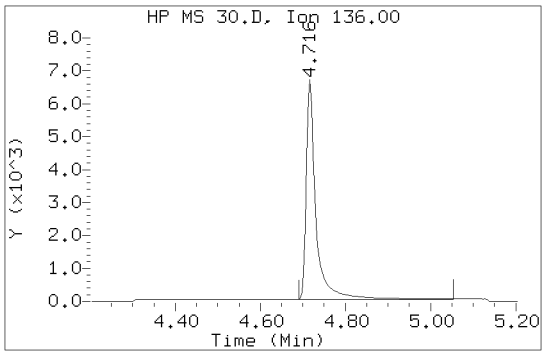
BEFORE

MASS
136
AREA
12229
HEIGHT
6732
23-Aug-2022
19:00
ALSHS
Server



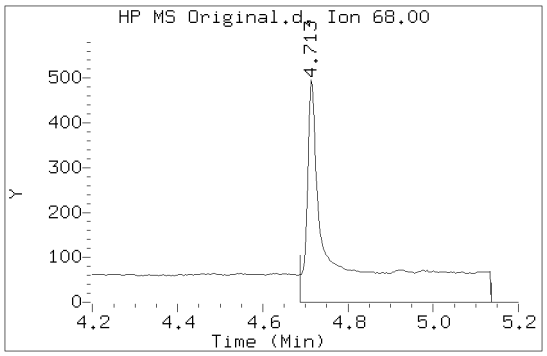
AFTER

MASS
136
AREA
10573
HEIGHT
6678
24-Aug-2022
10:28
ALSHS
S



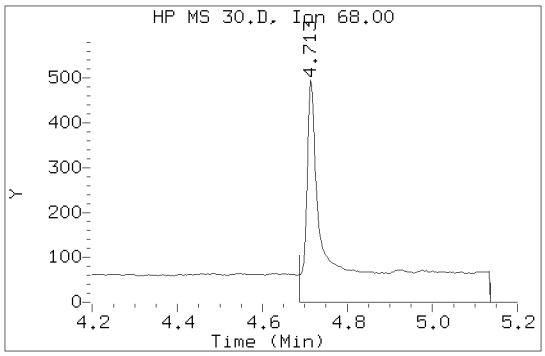
BEFORE

MASS
68
AREA
2450
HEIGHT
496
23-Aug-2022
19:00
ALSHS
Server



AFTER

MASS
68
AREA
2450
HEIGHT
496
24-Aug-2022
10:28
ALSHS
S

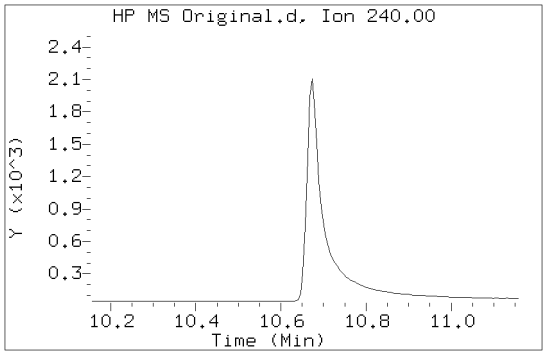


Chrysene-d12 (1719-03-5)

Reason Code:

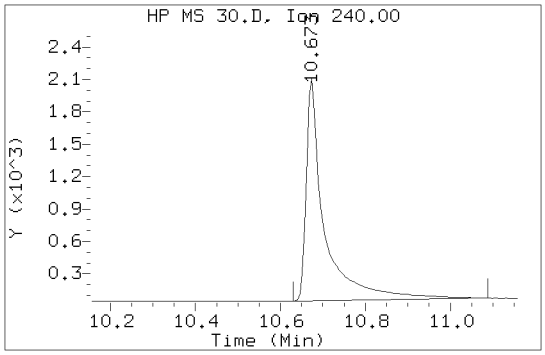
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
19:00
ALSHS
Server



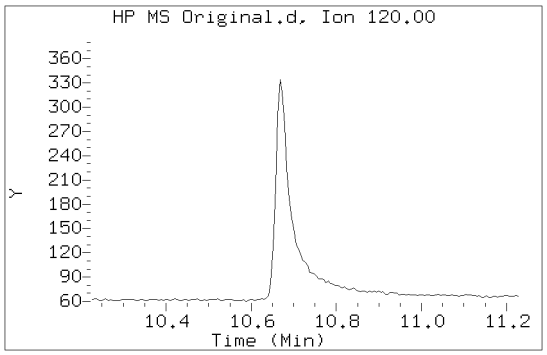
AFTER

MASS
240
AREA
6166
HEIGHT
2055
24-Aug-2022
10:28
ALSHS
S



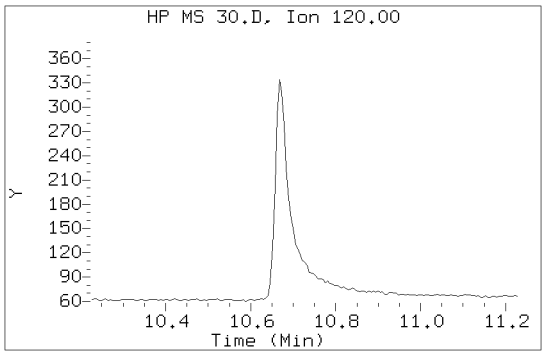
BEFORE

MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
19:00
ALSHS
Server



AFTER

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:28
ALSHS
S



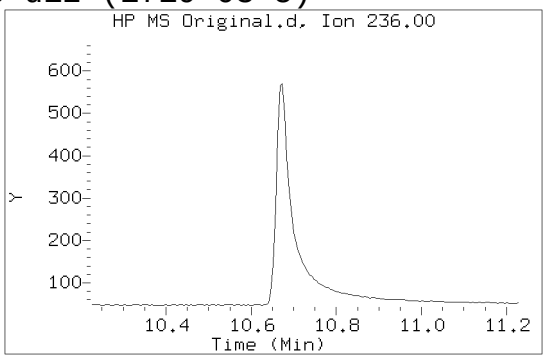
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\30.D
Inj Date : 23-AUG-2022 18:45
InstruID : SV6.i
LabSampID : HS22080499-01

Chrysene-d12 (1719-03-5)

Reason Code:

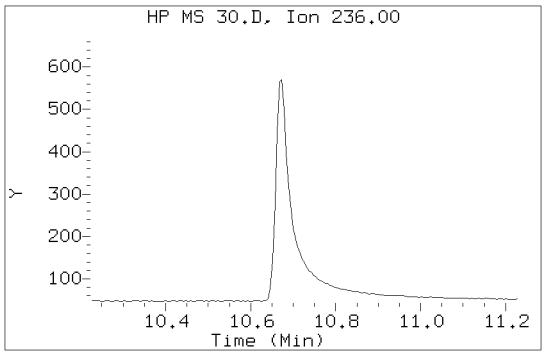
BEFORE

MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
19:00
ALSHS
Server



AFTER

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:28
ALSHS
S

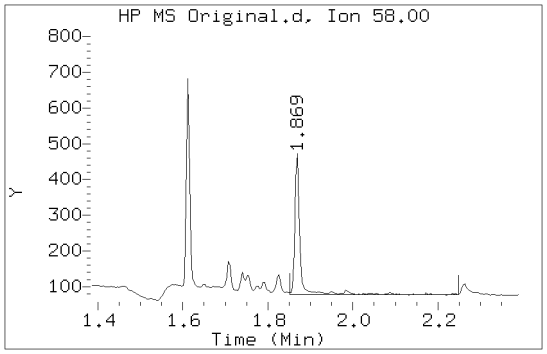


1,4-Dioxane ()

Reason Code:

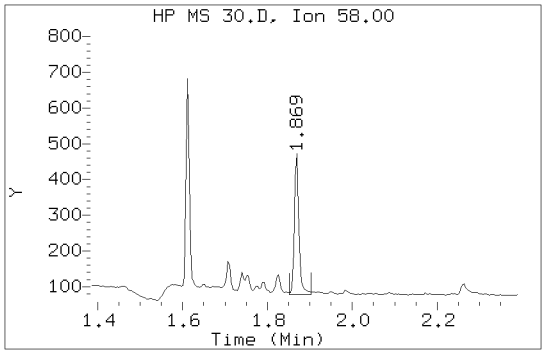
BEFORE

MASS
58
AREA
316
HEIGHT
393
23-Aug-2022
19:00
ALSHS
Server



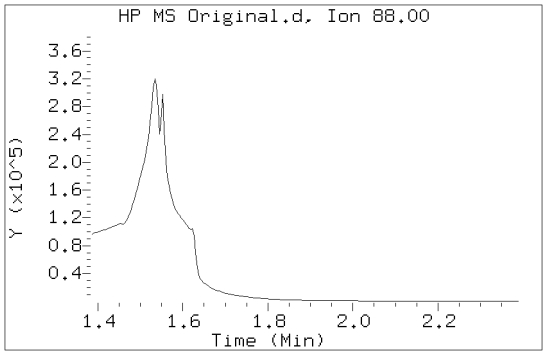
AFTER

MASS
58
AREA
284
HEIGHT
393
24-Aug-2022
10:28
ALSHS
S



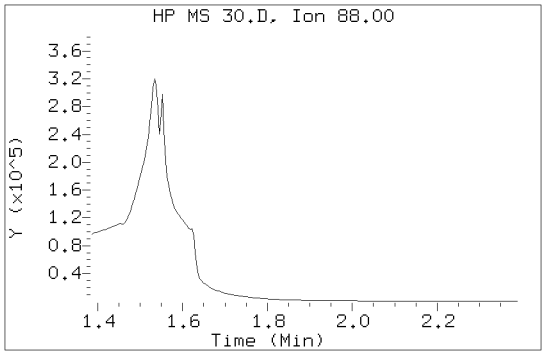
BEFORE

MASS
88
AREA
0
HEIGHT
0
23-Aug-2022
19:00
ALSHS
Server



AFTER

MASS
88
AREA
0
HEIGHT
0
24-Aug-2022
10:28
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\01.D

Date : 24-AUG-2022 10:17

Client ID: DFTPP

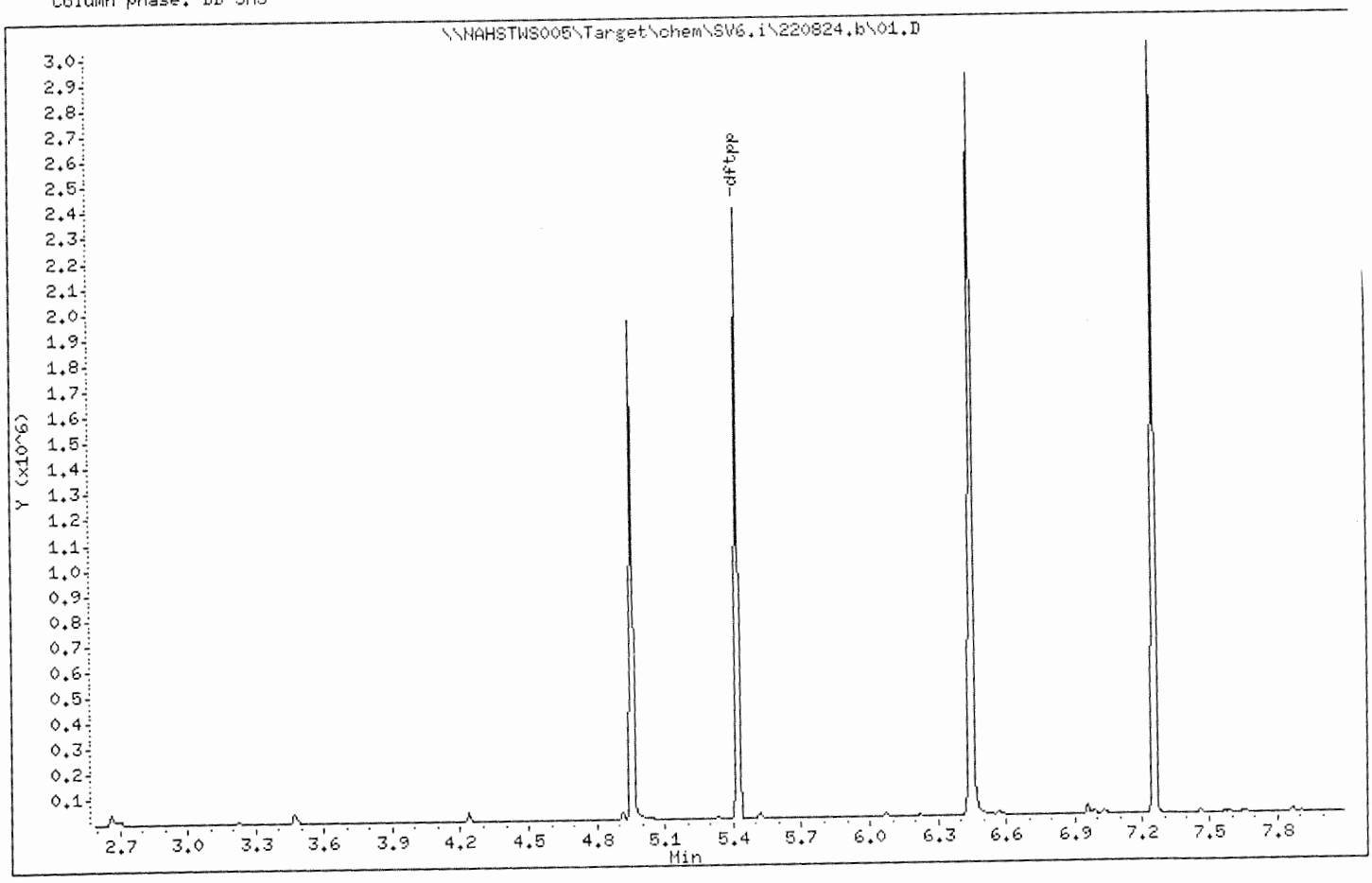
Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\01.D

Date : 24-AUG-2022 10:17

Client ID: DFTPP

Instrument: SV6.i

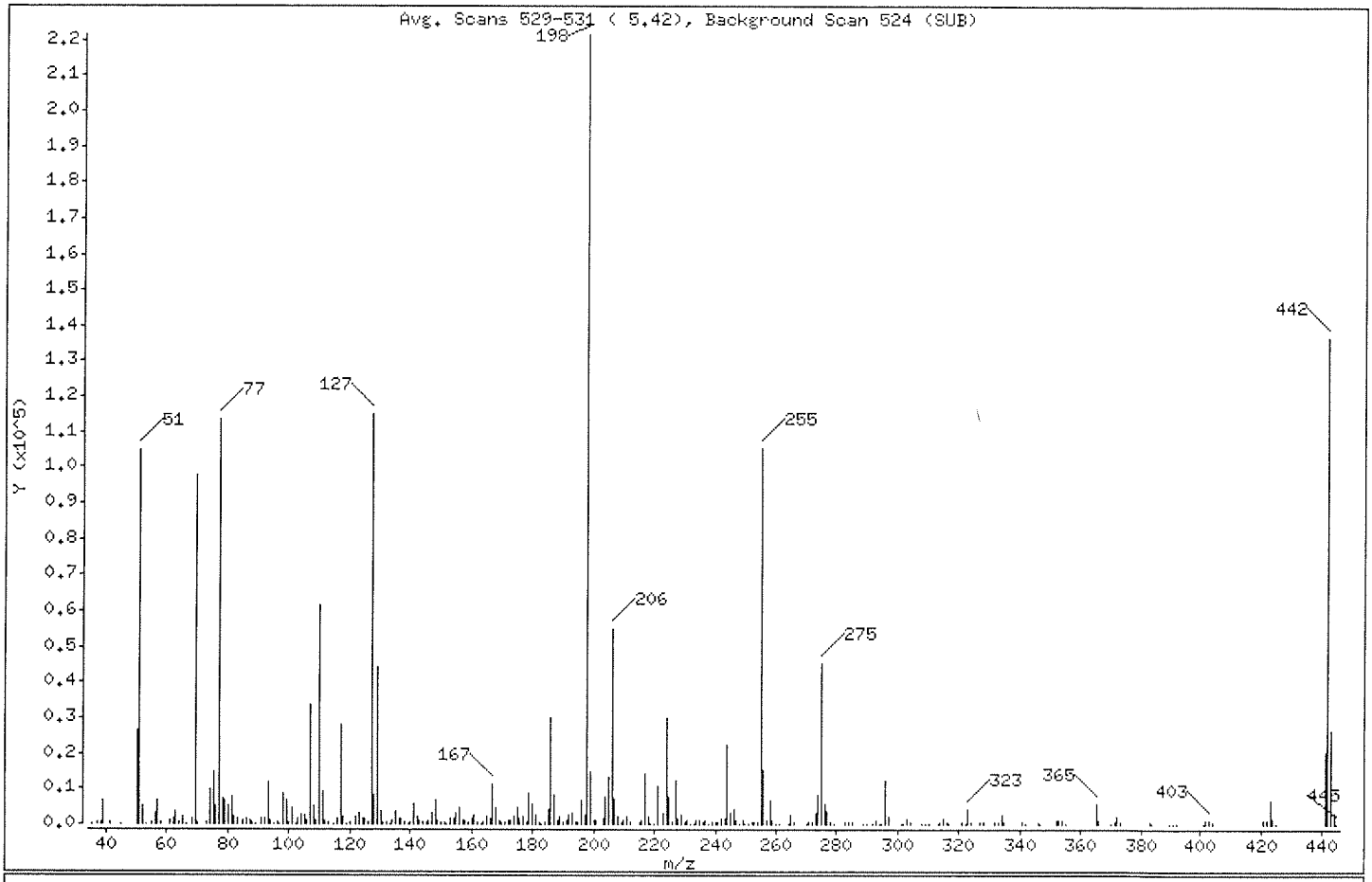
Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	47.43
68	Less than 2.00% of mass 69	0.60 (1.35)
69	Mass 69 relative abundance	44.12
70	Less than 2.00% of mass 69	0.24 (0.54)
127	10.00 - 80.00% of mass 198	51.96
197	Less than 2.00% of mass 198	1.14
199	5.00 - 9.00% of mass 198	6.75
275	10.00 - 60.00% of mass 198	20.57
365	1.00 - 100.00% of mass 198	2.52
441	Present, but less than mass 443	9.11
442	50.00 - 150.00% of mass 198	61.83
443	15.00 - 24.00% of mass 442	11.97 (19.36)

Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\01.D

Date : 24-AUG-2022 10:17

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 01.D

Spectrum: Avg. Scans 529-531 (5.42), Background Scan 524 (SUB)

Location of Maximum: 198.00

Number of points: 283

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	84	125.00	1419	196.00	6611	276.00	5836
37.00	341	126.00	520	197.00	2512	277.00	3752
38.00	718	127.00	114984	198.00	221312	278.00	555
39.00	6749	128.00	8325	199.00	14929	279.00	113
41.00	291	129.00	44416	200.00	1128	283.00	430
45.00	156	130.00	3684	201.00	948	284.00	302
50.00	26280	131.00	757	203.00	1436	285.00	705
51.00	104968	132.00	428	204.00	7783	289.00	105
52.00	5315	133.00	76	205.00	13349	290.00	105
53.00	254	134.00	1271	206.00	54824	292.00	130
55.00	451	135.00	3561	207.00	6928	293.00	791
56.00	2946	136.00	1399	208.00	1816	294.00	227
57.00	6781	137.00	1600	209.00	565	295.00	245
58.00	325	138.00	358	210.00	830	296.00	12411
61.00	1177	139.00	173	211.00	2049	297.00	1814
62.00	1408	140.00	500	212.00	278	301.00	148
63.00	3815	141.00	5372	215.00	555	302.00	183
64.00	600	142.00	1857	216.00	1191	303.00	1549
65.00	1868	143.00	1258	217.00	14343	304.00	362
66.00	67	144.00	313	218.00	1919	308.00	130
68.00	1321	145.00	298	219.00	181	309.00	52
69.00	97640	146.00	985	220.00	120	310.00	156
70.00	523	147.00	2809	221.00	10788	313.00	71
73.00	722	148.00	6658	223.00	3276	314.00	558
74.00	9612	149.00	1266	224.00	29952	315.00	1519
75.00	14978	150.00	334	225.00	7679	316.00	741
76.00	5256	151.00	734	226.00	757	317.00	113
77.00	113224	152.00	221	227.00	12192	321.00	411
78.00	7361	153.00	1734	228.00	1722	322.00	150
79.00	6487	154.00	1309	229.00	2534	323.00	4067
80.00	5065	155.00	3107	230.00	379	324.00	734
81.00	7467	156.00	4351	231.00	1001	327.00	751
82.00	1820	157.00	838	232.00	175	328.00	373
83.00	1736	158.00	933	233.00	208	332.00	280
85.00	1210	159.00	709	234.00	790	333.00	409

Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\01.D

Date : 24-AUG-2022 10:17

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 01.D
Spectrum: Avg. Scans 529-531 (5.42), Background Scan 524 (SUB)
Location of Maximum: 198.00
Number of points: 283

m/z	Y	m/z	Y	m/z	Y	m/z	Y
86.00	1597	160.00	1717	235.00	872	334.00	2506
87.00	1042	161.00	2600	236.00	594	335.00	591
88.00	404	162.00	725	237.00	845	341.00	495
89.00	127	163.00	150	238.00	64	342.00	70
91.00	1586	164.00	292	239.00	410	346.00	763
92.00	1709	165.00	2143	240.00	365	347.00	141
93.00	11664	166.00	1526	241.00	688	352.00	1195
94.00	831	167.00	11431	242.00	1514	353.00	802
95.00	245	168.00	4739	243.00	1505	354.00	1151
96.00	557	169.00	836	244.00	22360	355.00	191
97.00	220	170.00	268	245.00	2814	365.00	5578
98.00	8809	171.00	464	246.00	4137	366.00	773
99.00	6664	172.00	987	247.00	800	370.00	110
100.00	704	173.00	1212	248.00	219	371.00	274
101.00	4359	174.00	2280	249.00	797	372.00	1952
102.00	238	175.00	4478	250.00	54	373.00	492
103.00	1312	176.00	1294	251.00	232	383.00	531
104.00	2753	177.00	1899	252.00	266	384.00	115
105.00	2442	178.00	677	253.00	535	390.00	217
106.00	770	179.00	8454	254.00	684	391.00	139
107.00	33480	180.00	5517	255.00	105240	392.00	53
108.00	4992	181.00	2595	256.00	15052	401.00	58
109.00	861	182.00	402	257.00	1168	402.00	795
110.00	61464	183.00	228	258.00	6519	403.00	1101
111.00	9163	184.00	641	259.00	1028	404.00	413
112.00	1110	185.00	3876	260.00	127	421.00	967
113.00	358	186.00	29968	261.00	160	422.00	860
115.00	61	187.00	8224	264.00	195	423.00	6721
116.00	1714	188.00	785	265.00	2574	424.00	1314
117.00	27984	189.00	1845	266.00	427	425.00	109
118.00	1835	190.00	308	270.00	137	441.00	20152
119.00	223	191.00	905	271.00	257	442.00	136832
120.00	404	192.00	2597	272.00	311	443.00	26488
122.00	2041	193.00	2813	273.00	3243	444.00	2455
123.00	3111	194.00	581	274.00	8100	445.00	122

Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\01.D

Date : 24-AUG-2022 10:17

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 01.D
Spectrum: Avg. Scans 529-531 (5.42), Background Scan 524 (SUB)
Location of Maximum: 198.00
Number of points: 283

m/z	Y	m/z	Y	m/z	Y	m/z	Y
124.00	1482	195.00	386	275.00	45528		

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D
Lab Smp Id: 1 4-DIOX-CCV Client Smp ID: 1 4-DIOX-CCV
Inj Date : 24-AUG-2022 12:15
Operator : LG Inst ID: SV6.i
Smp Info : 1 4-DIOX-0.08;1 4-DIOX-0.08;2
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220824.b\DXSIM.m
Meth Date : 30-Aug-2022 12:43 Linh.Pham Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	
* 20 1,4-Dichlorobenzene-d4	152	3.552	3.557	(1.000)	5721	0.10000		(aM)
* 45 Naphthalene-d8	136	4.660	4.682	(1.000)	13873	0.10000		
$ 33 Nitrobenzene-d5	82	4.019	4.072	(0.862)	3773	0.08000	0.08159	(QM)
* 86 Acenaphthene-d10	164	6.330	6.351	(1.000)	6874	0.10000		(QM)
$ 69 2-Fluorobiphenyl	172	5.681	5.714	(0.898)	8337	0.08000	0.07792	(QM)
* 126 Phenanthrene-d10	188	7.780	7.802	(1.000)	14770	0.10000		(M)
* 182 Chrysene-d12	240	10.594	10.615	(1.000)	6043	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.356	9.378	(0.883)	8124	0.08000	0.07150	(M)
* 198 Perylene-d12	264	12.645	12.672	(1.000)	4226	0.10000		
1 1,4-Dioxane	58	1.847	1.828	(0.520)	222	0.08000	0.09452	(aQM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01134157

Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D

Date : 24-AUG-2022 12:15

Client ID: 1 4-DIOX-CCV

Sample Info: 1 4-DIOX-0.08;1 4-DIOX-0.08;2

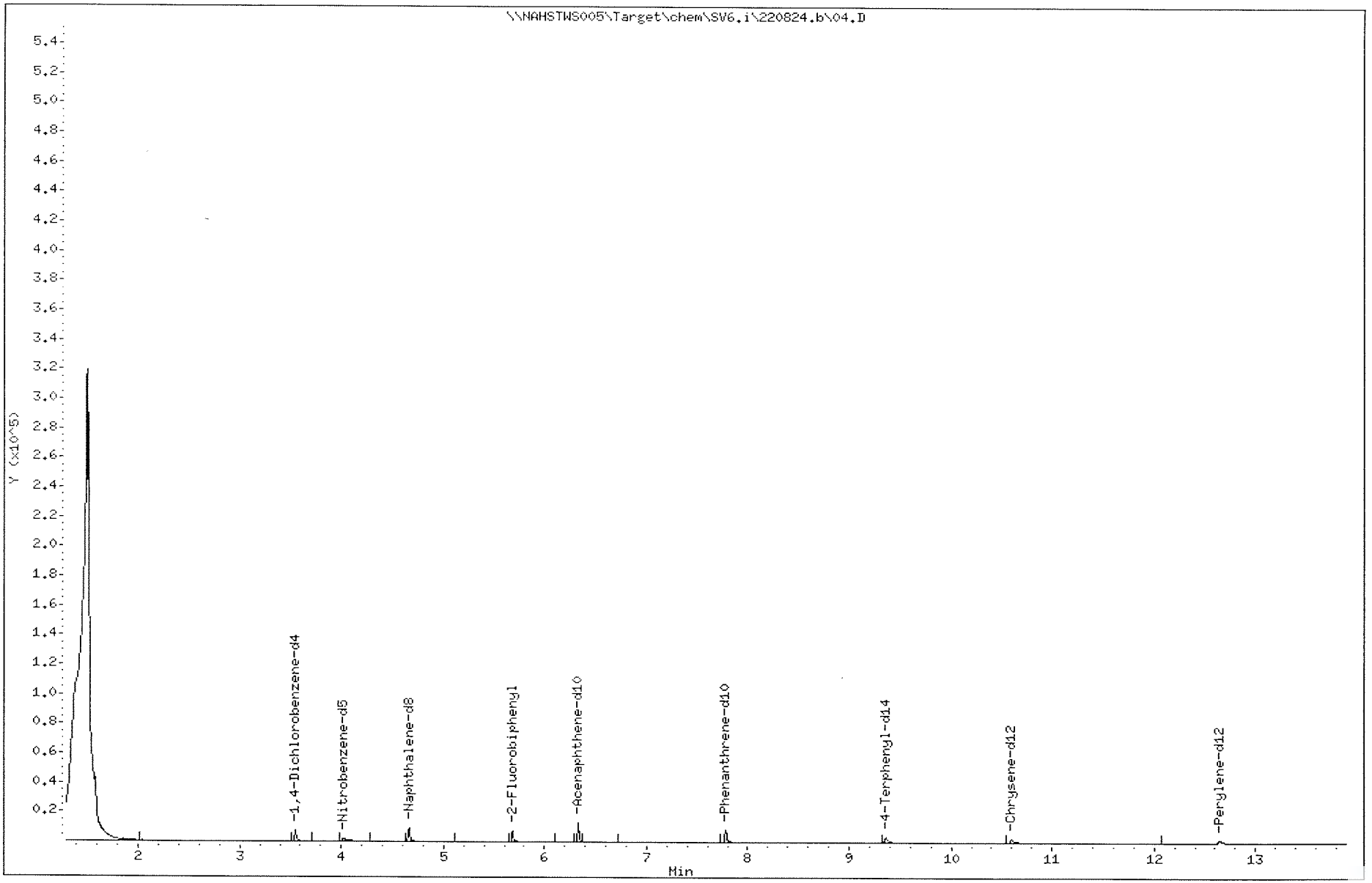
Purge Volume: 1000.0

Column phase: RTX-5SIL MS

Instrument: SV6.i

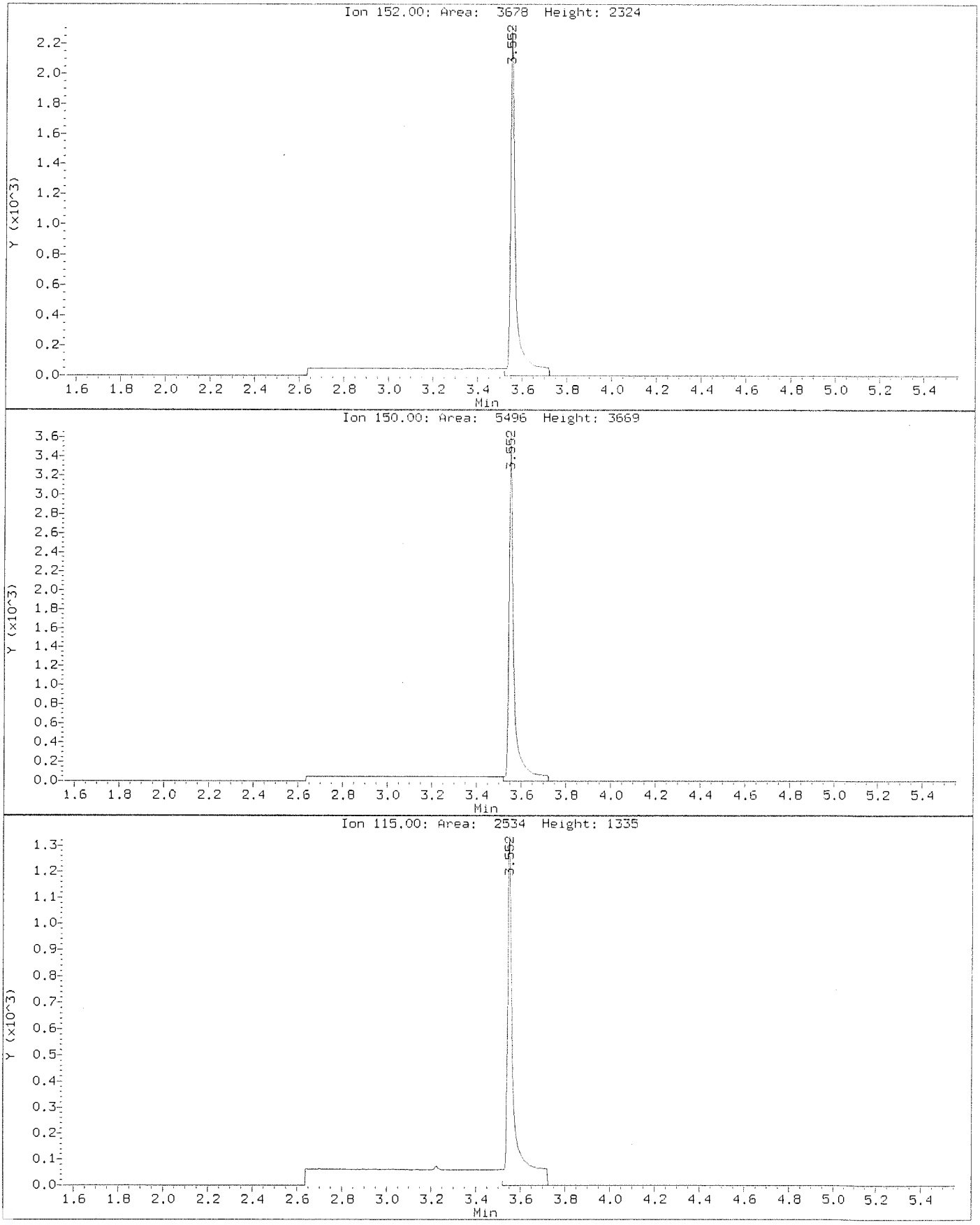
Operator: LG

Column diameter: 0.28



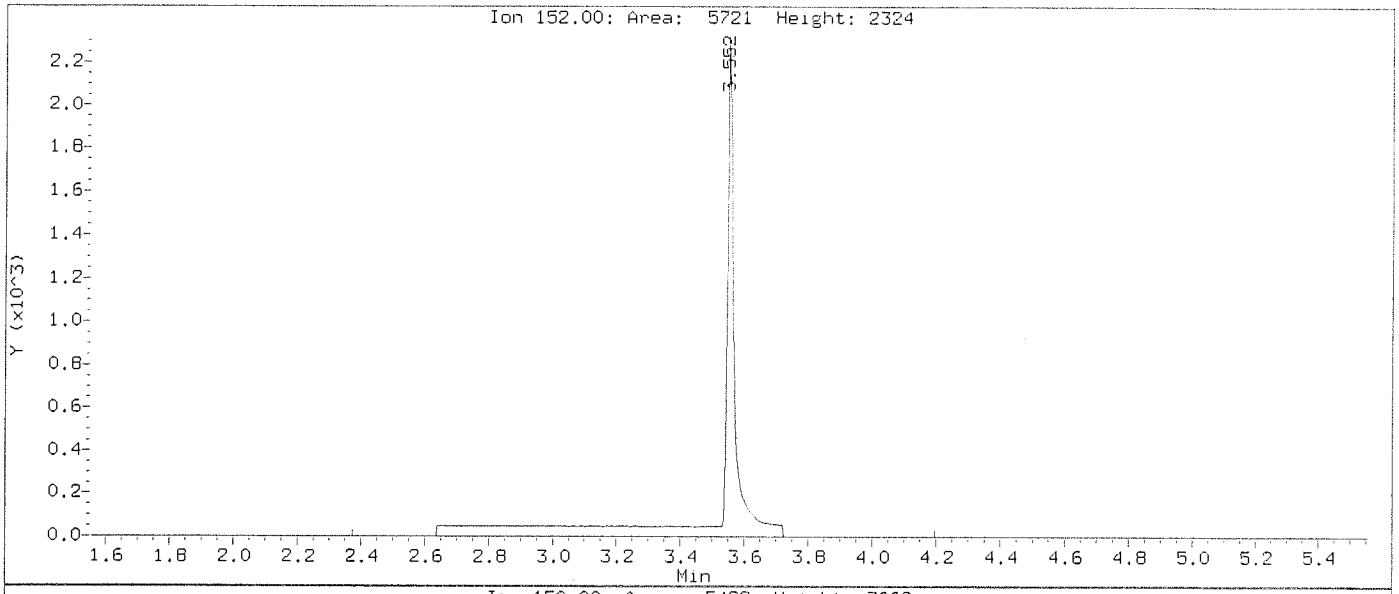
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

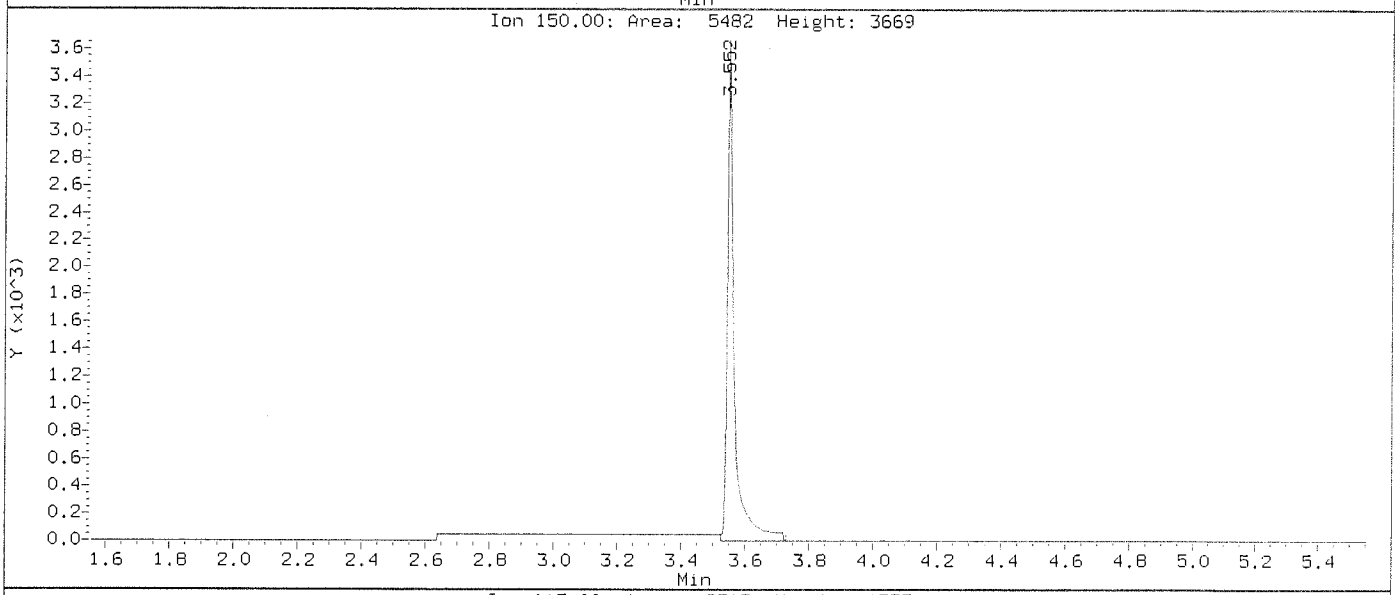
Compound: 1,4-Dichlorobenzene-d4
CAS Number: 3855-82-1

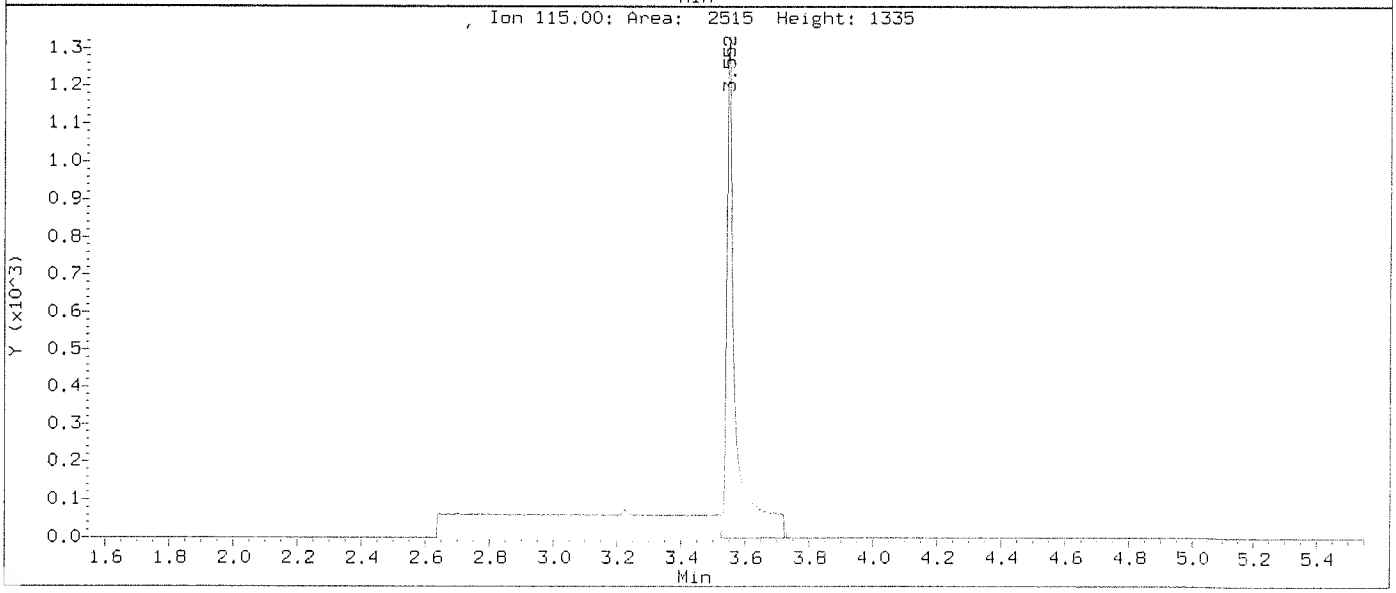


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: 1,4-Dichlorobenzene-d4
CAS Number: 3855-82-1

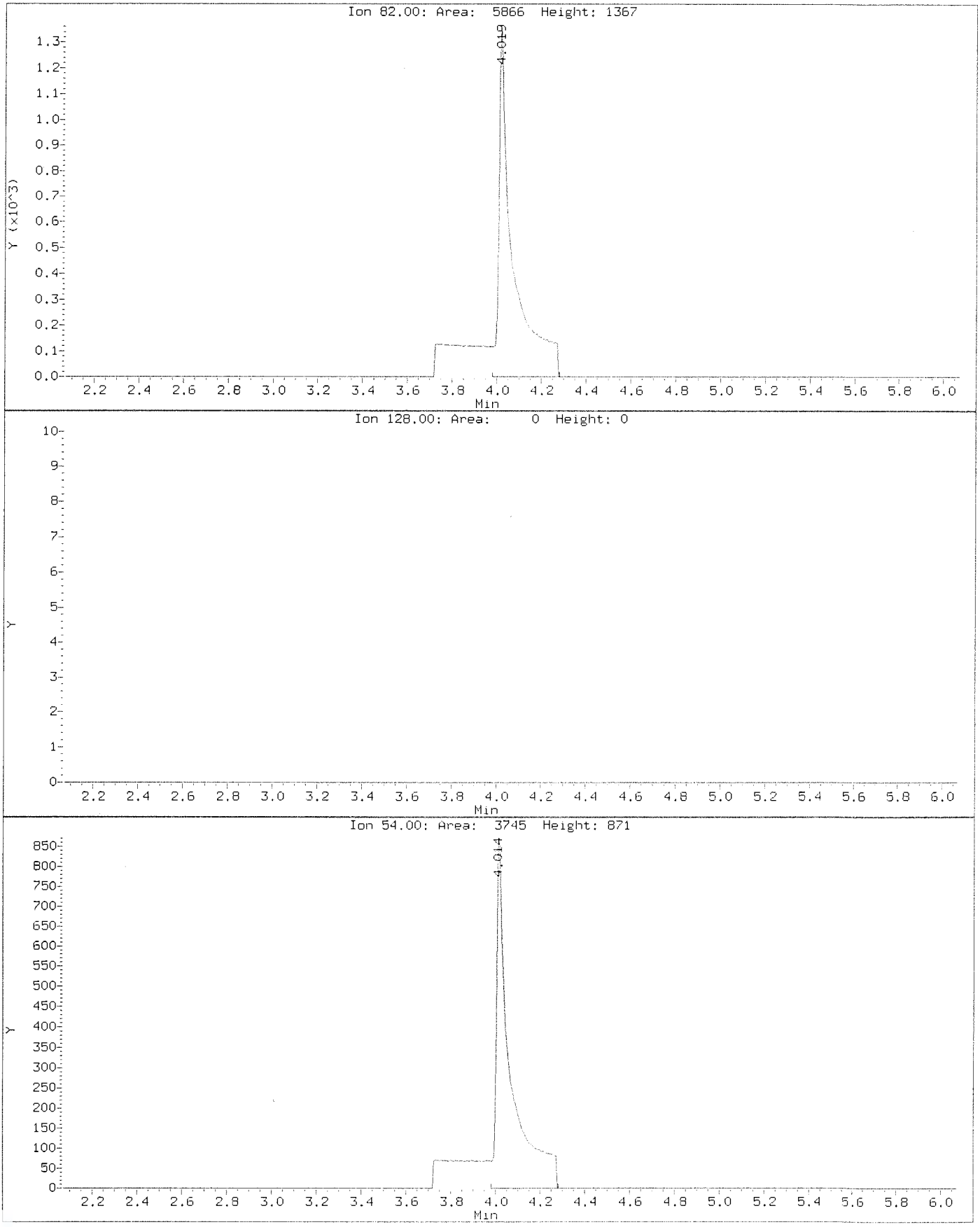






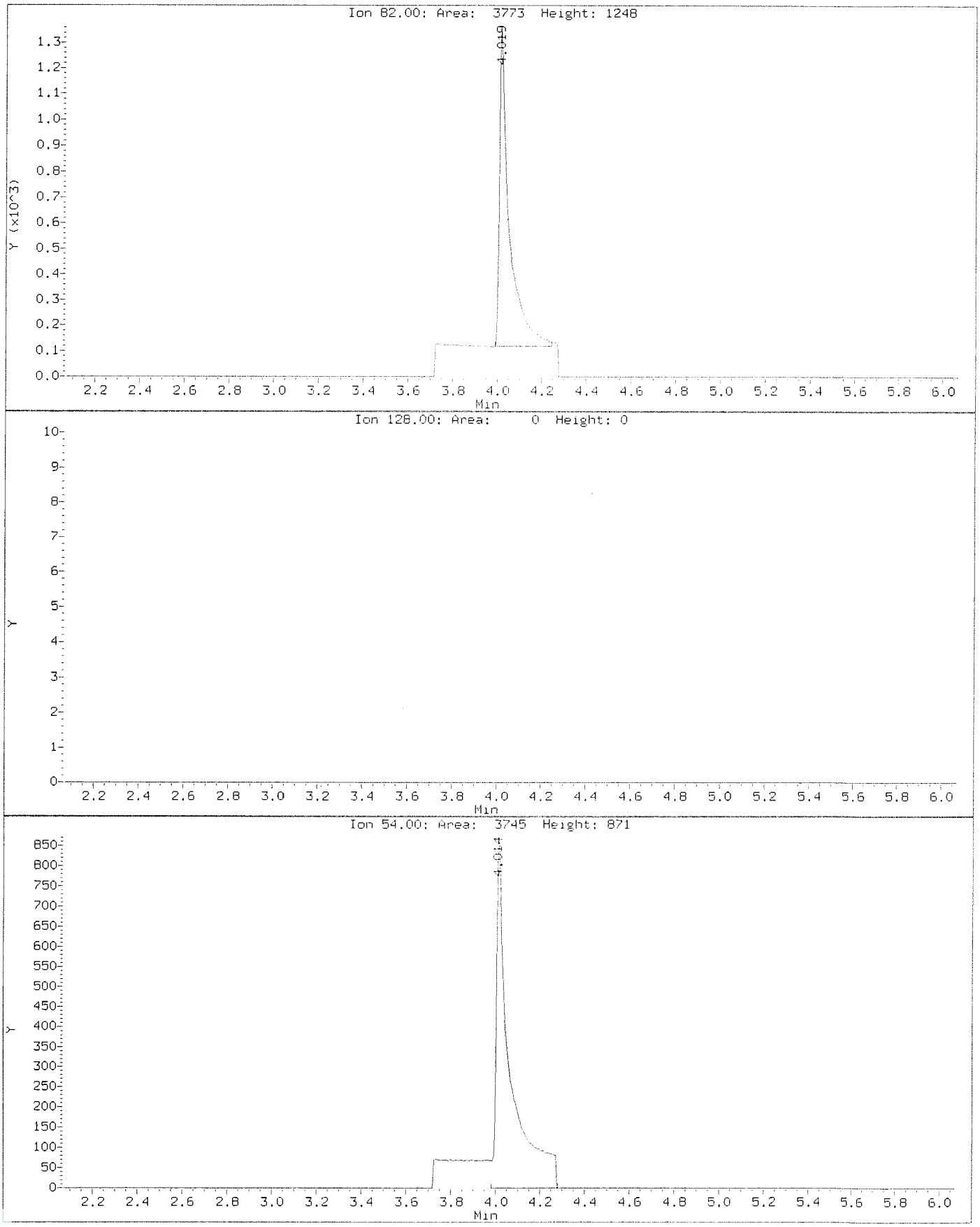
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: Nitrobenzene-d5
CAS Number: 4165-60-0



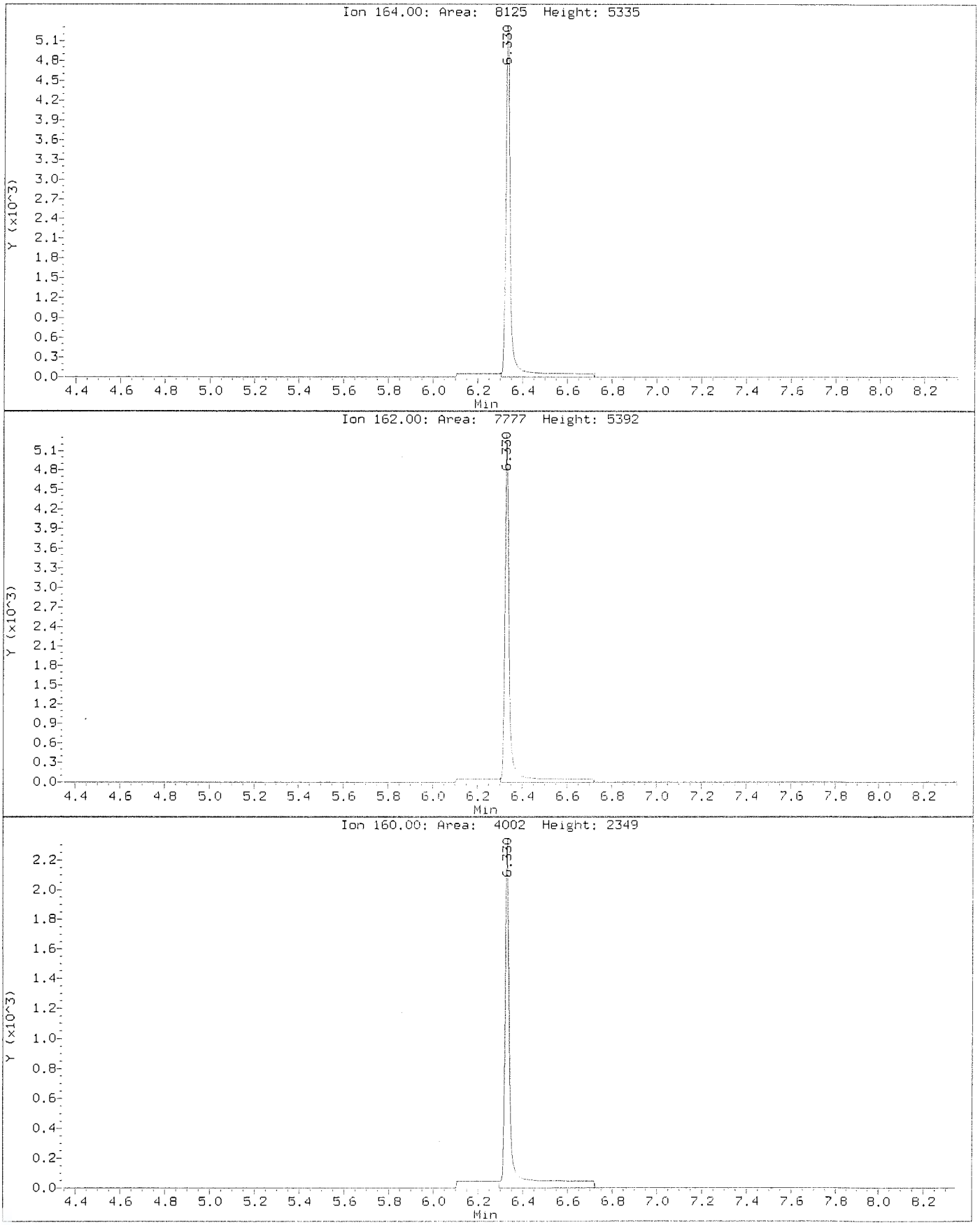
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: Nitrobenzene-d5
CAS Number: 4165-60-0



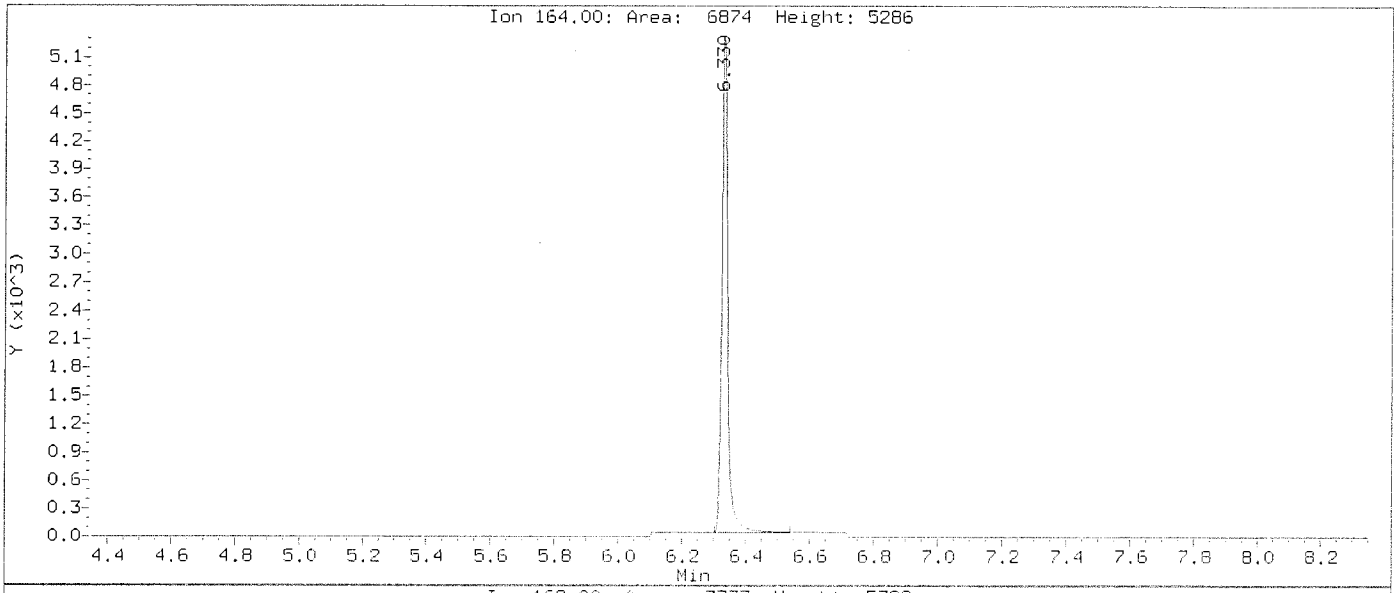
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

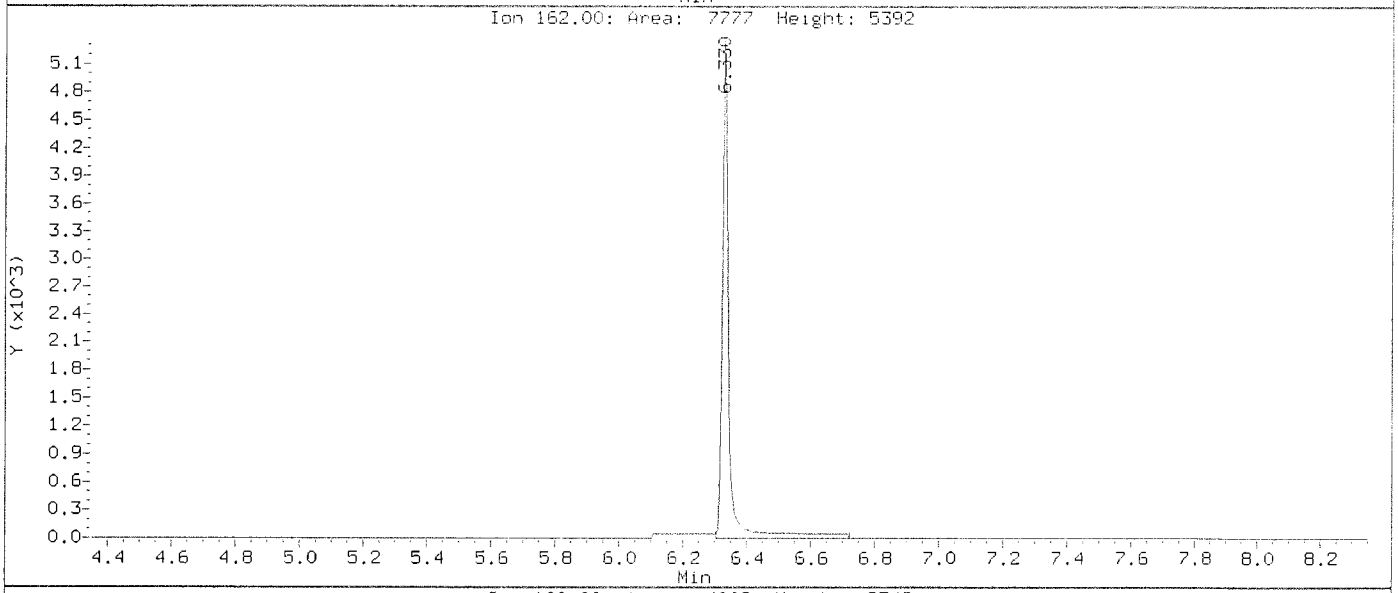
Compound: Acenaphthene-d10
CAS Number: 15067-26-2

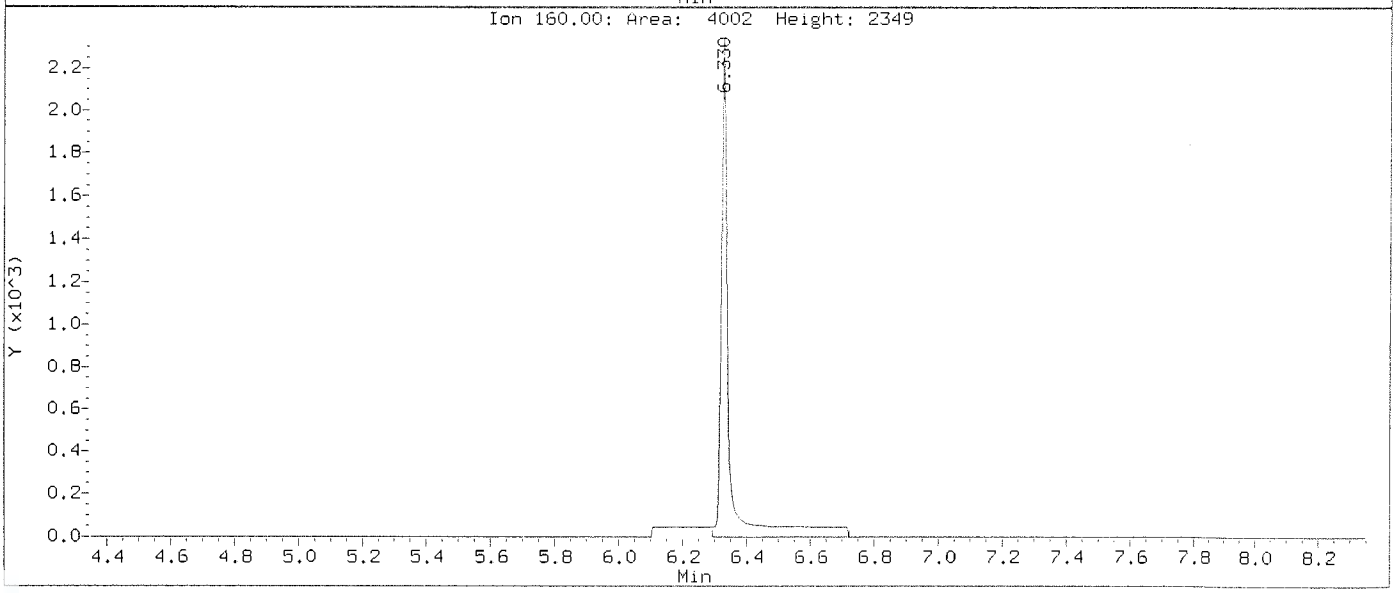


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: Acenaphthene-d10
CAS Number: 15067-26-2

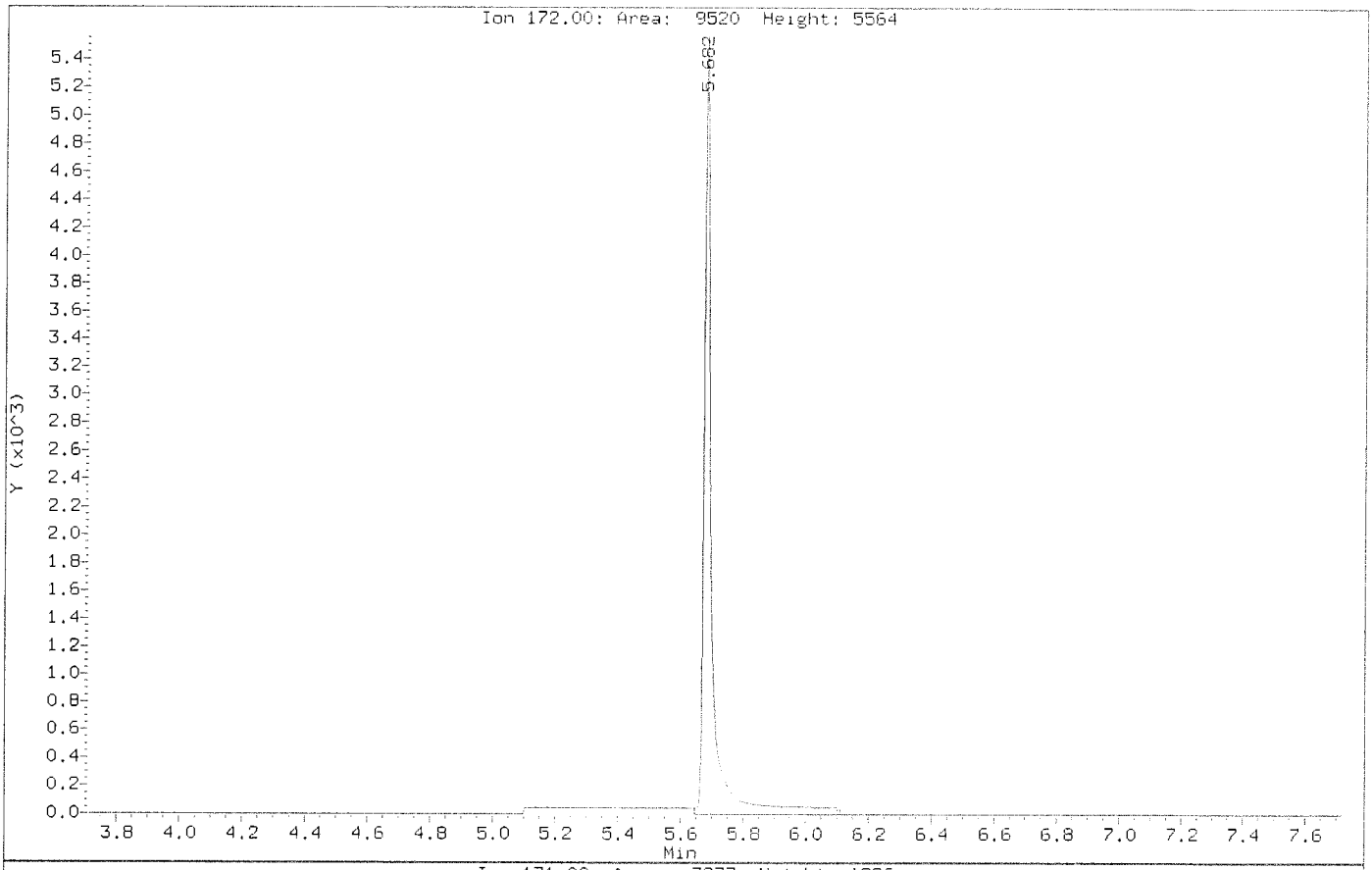


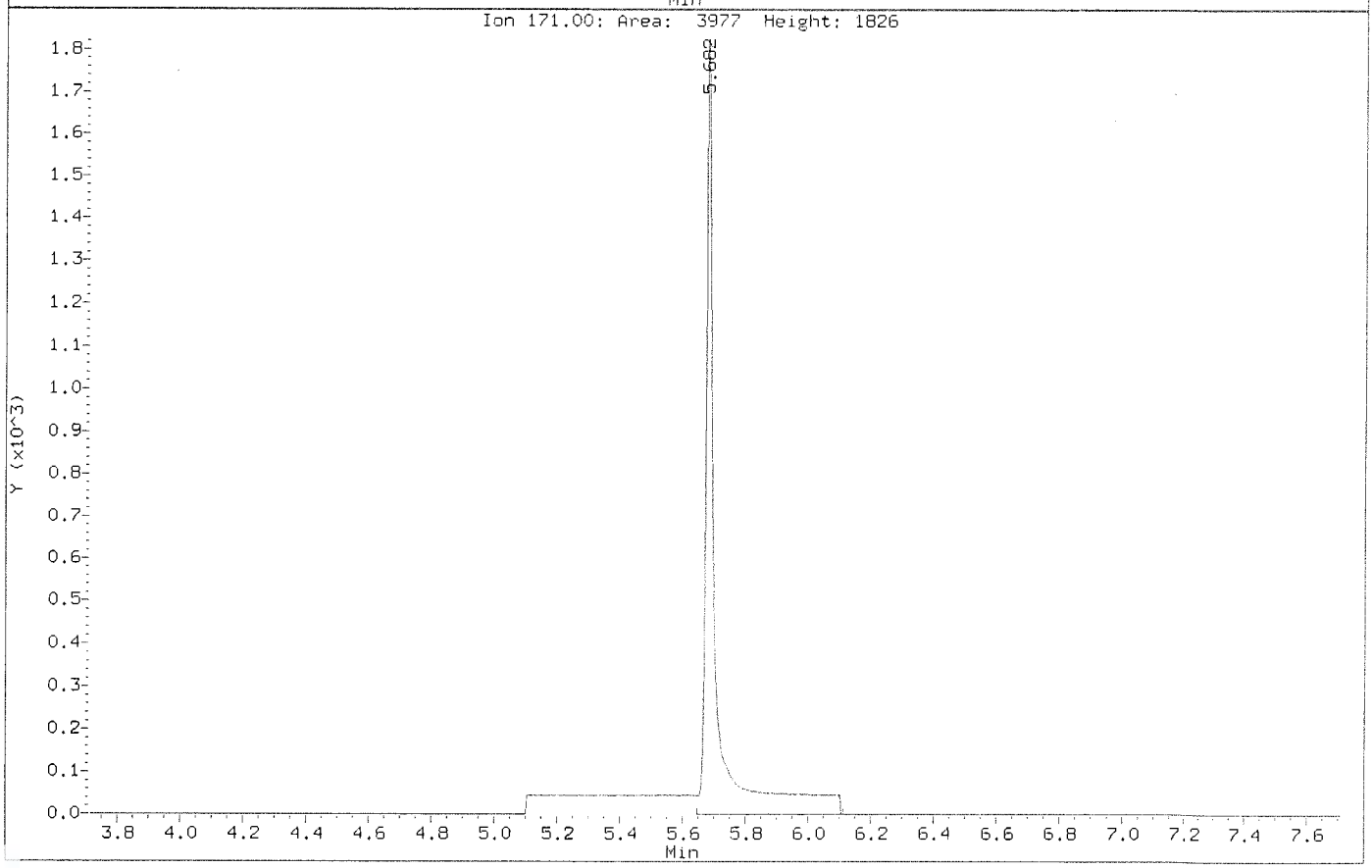




Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

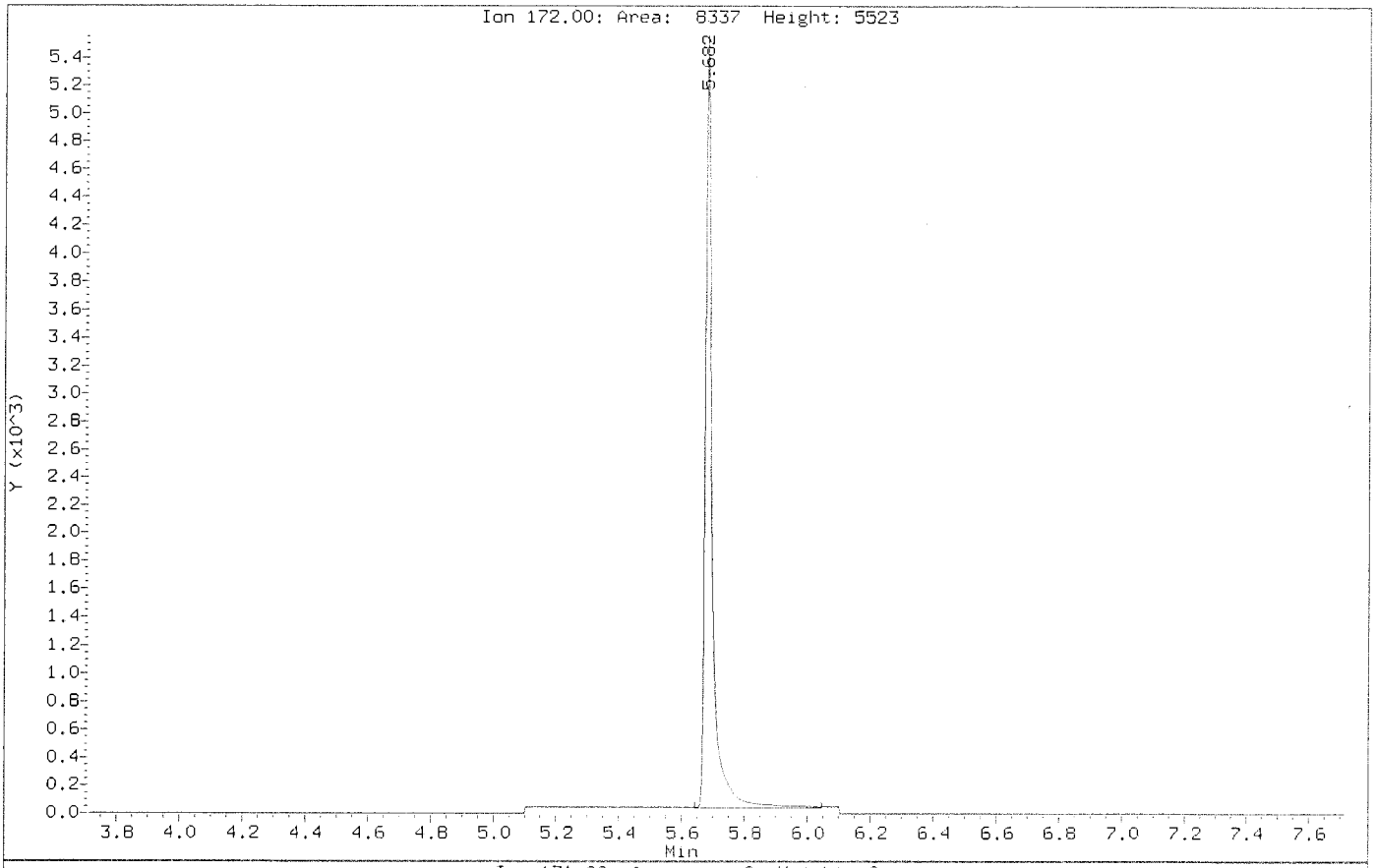
Compound: 2-Fluorobiphenyl
CAS Number: 321-60-8

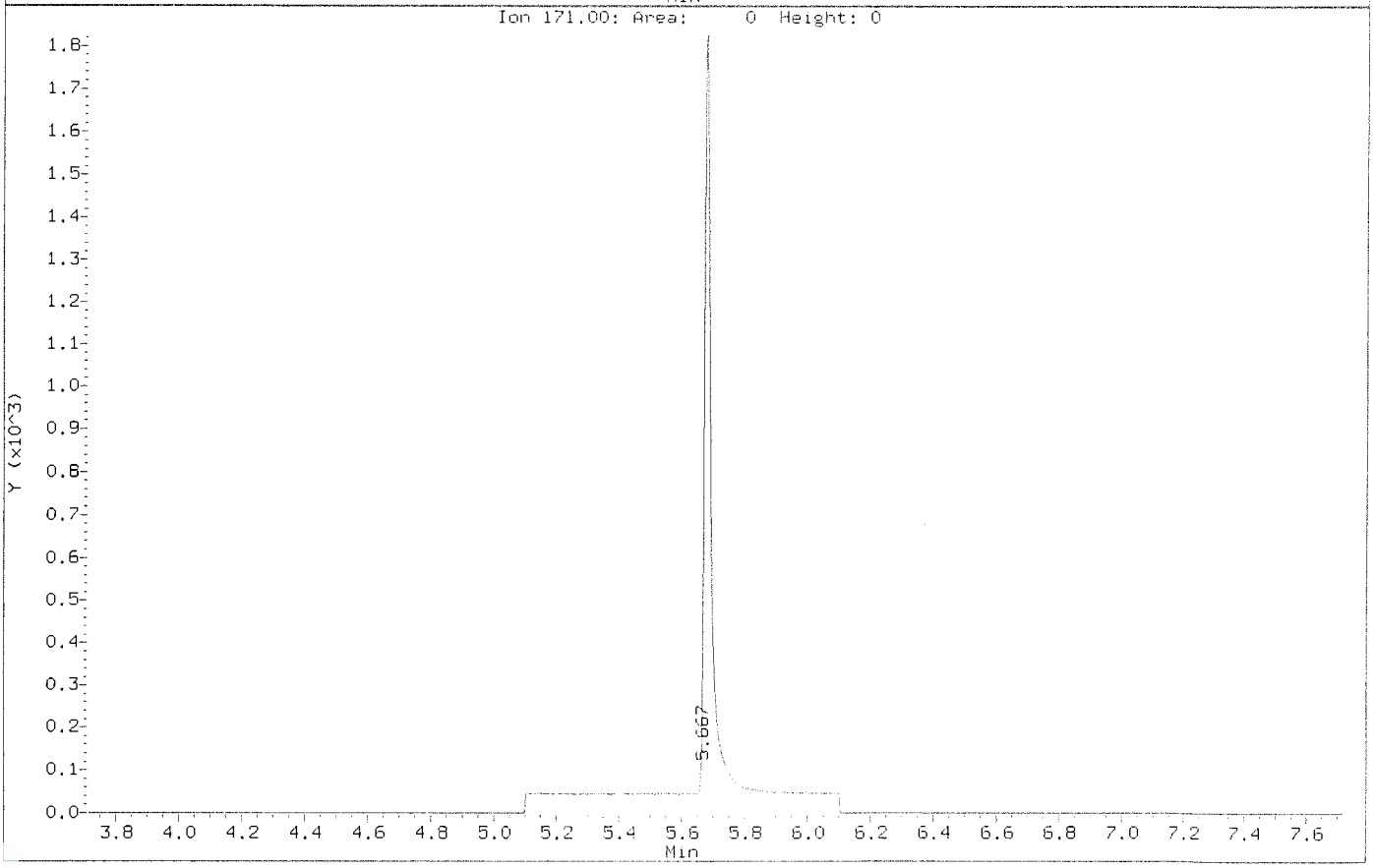




Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

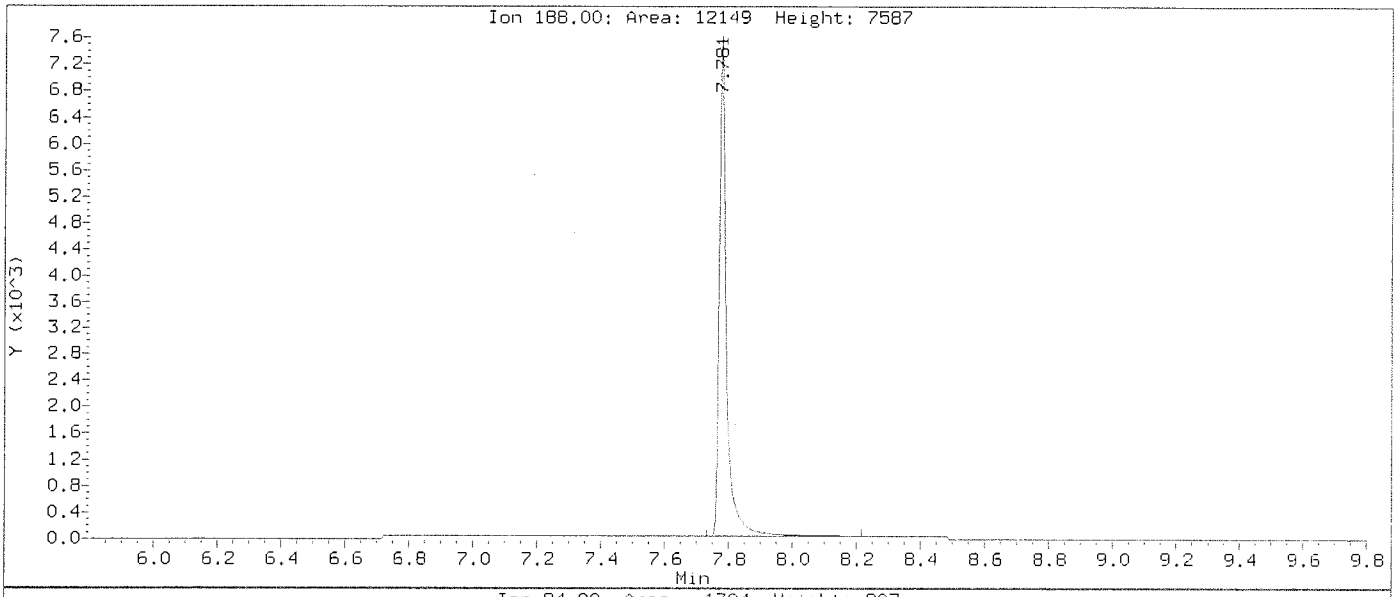
Compound: 2-Fluorobiphenyl
CAS Number: 321-60-8

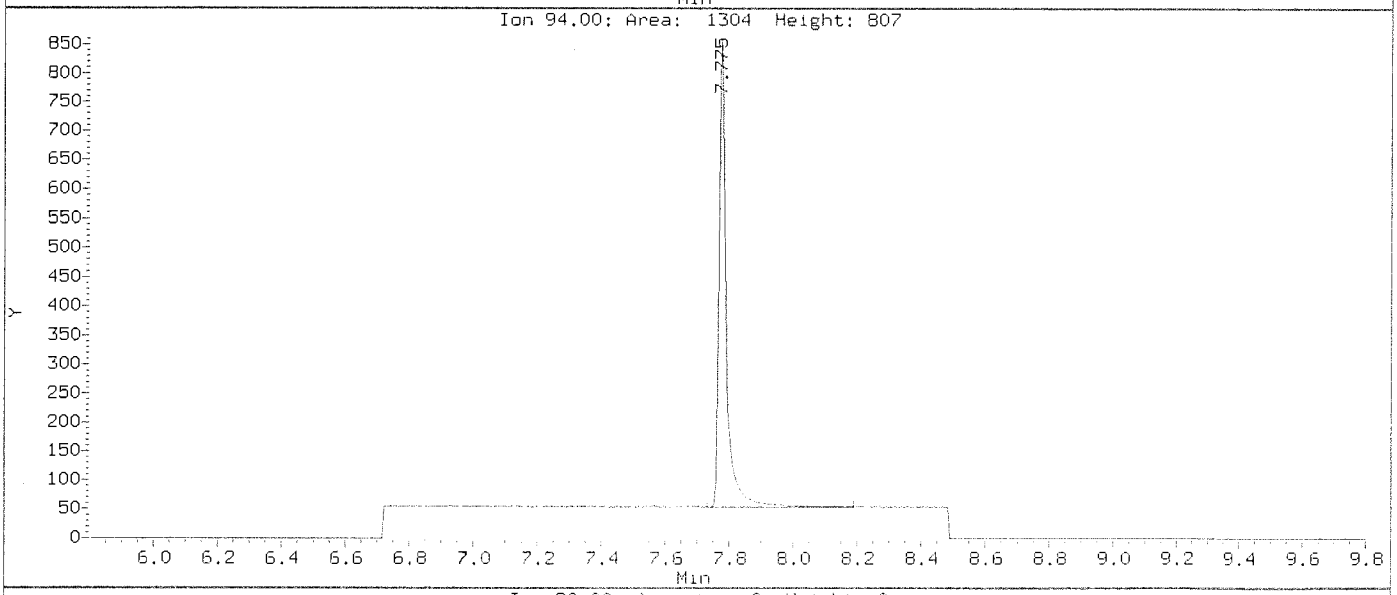


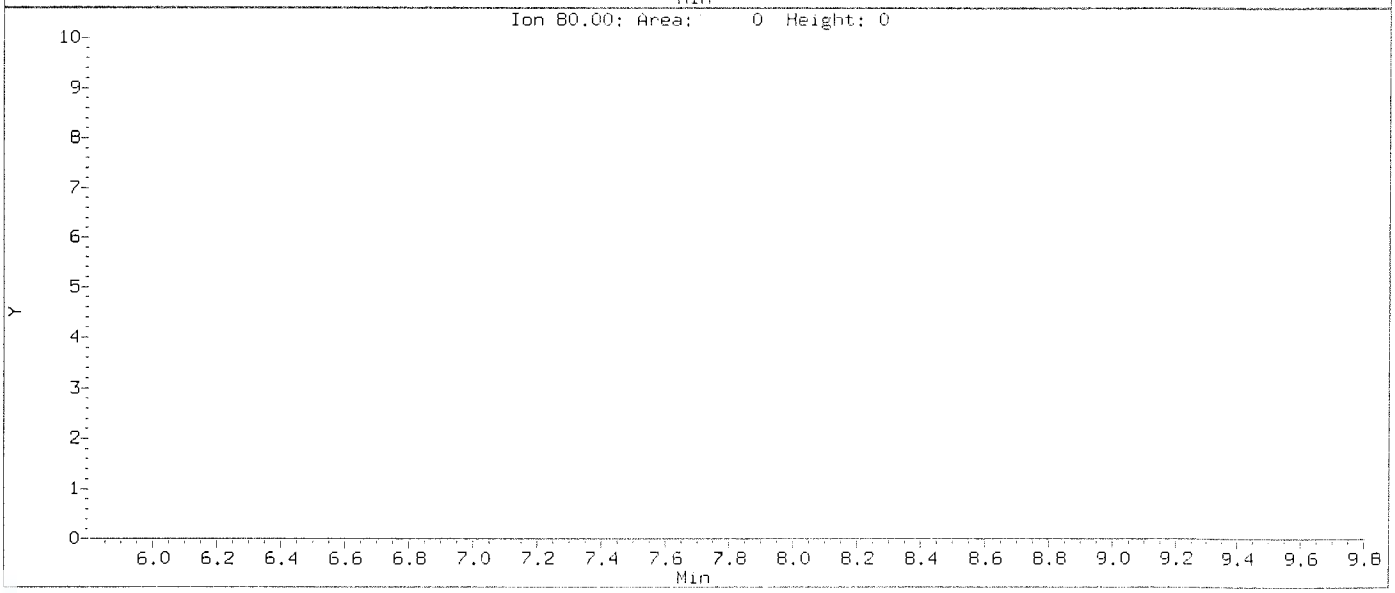


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: Phenanthrene-d10
CAS Number: 1517-22-2

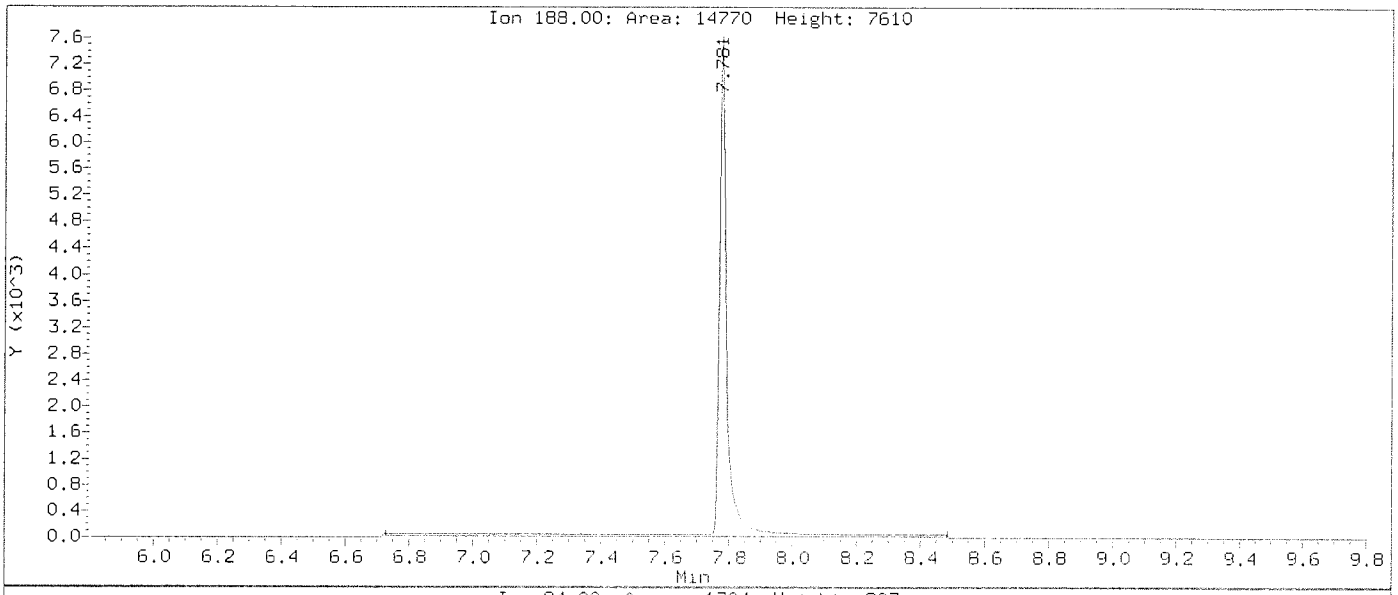


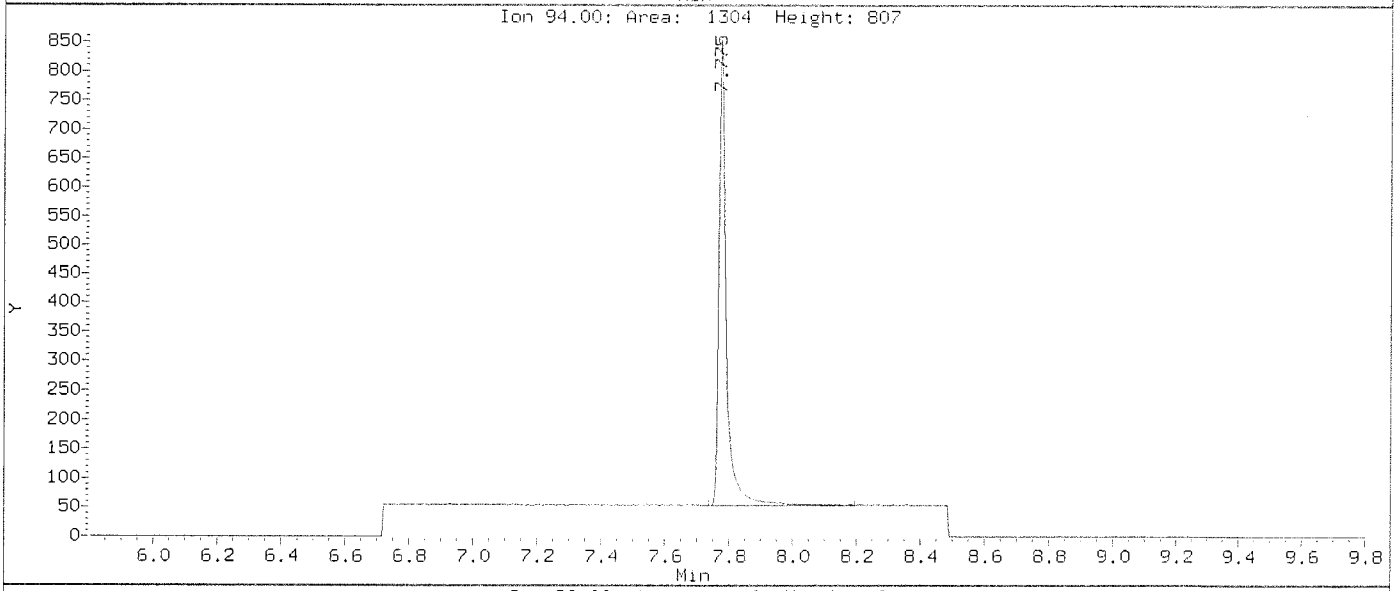


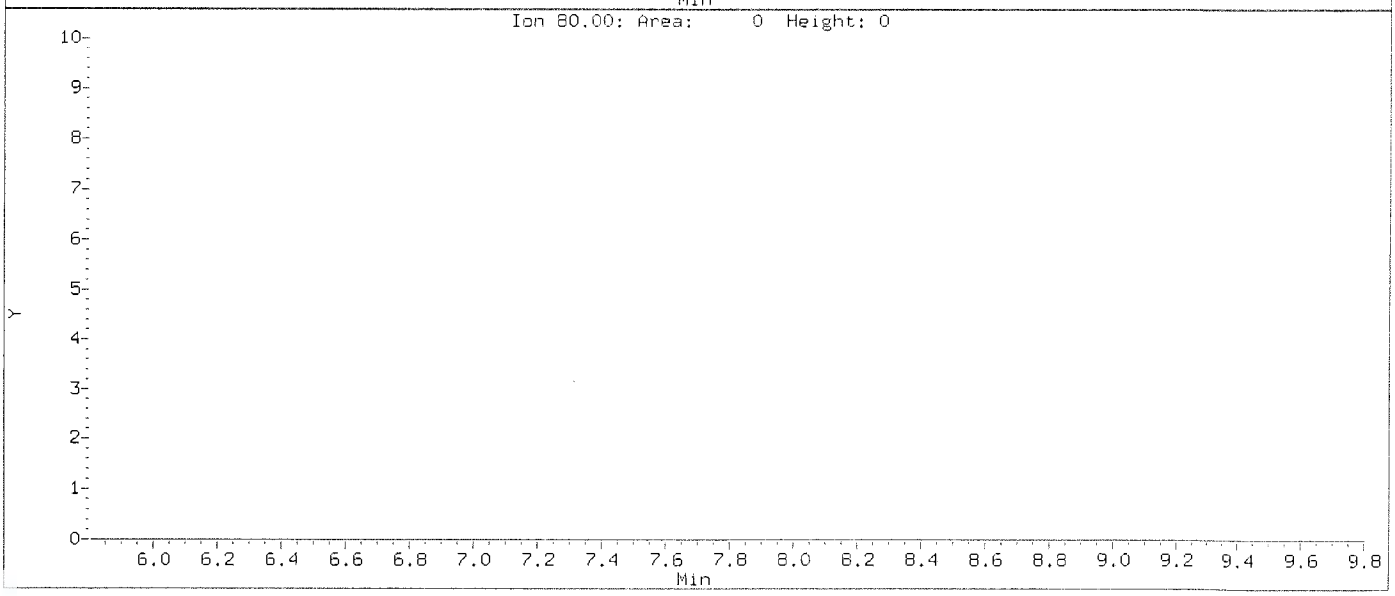


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: Phenanthrene-d10
CAS Number: 1517-22-2

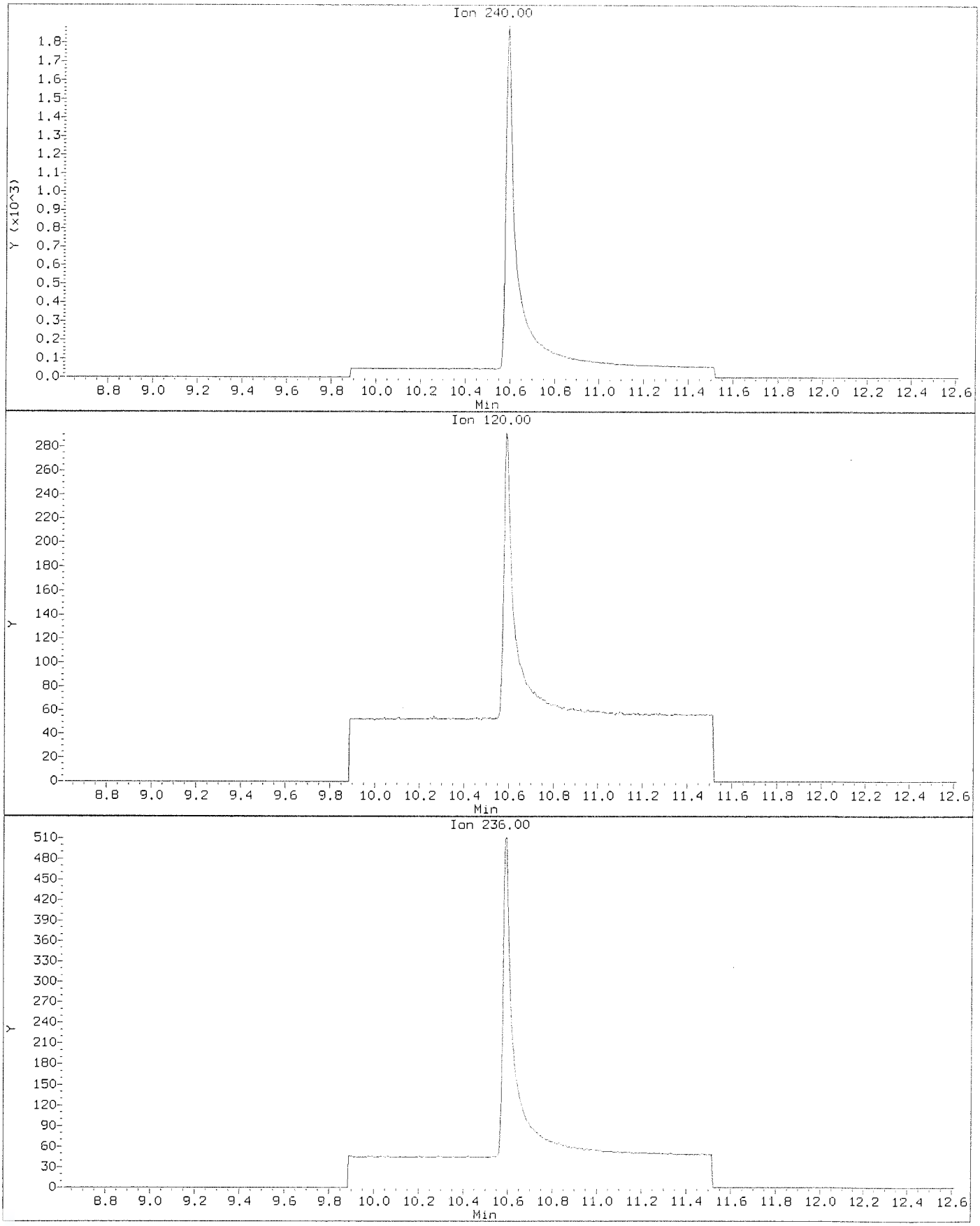






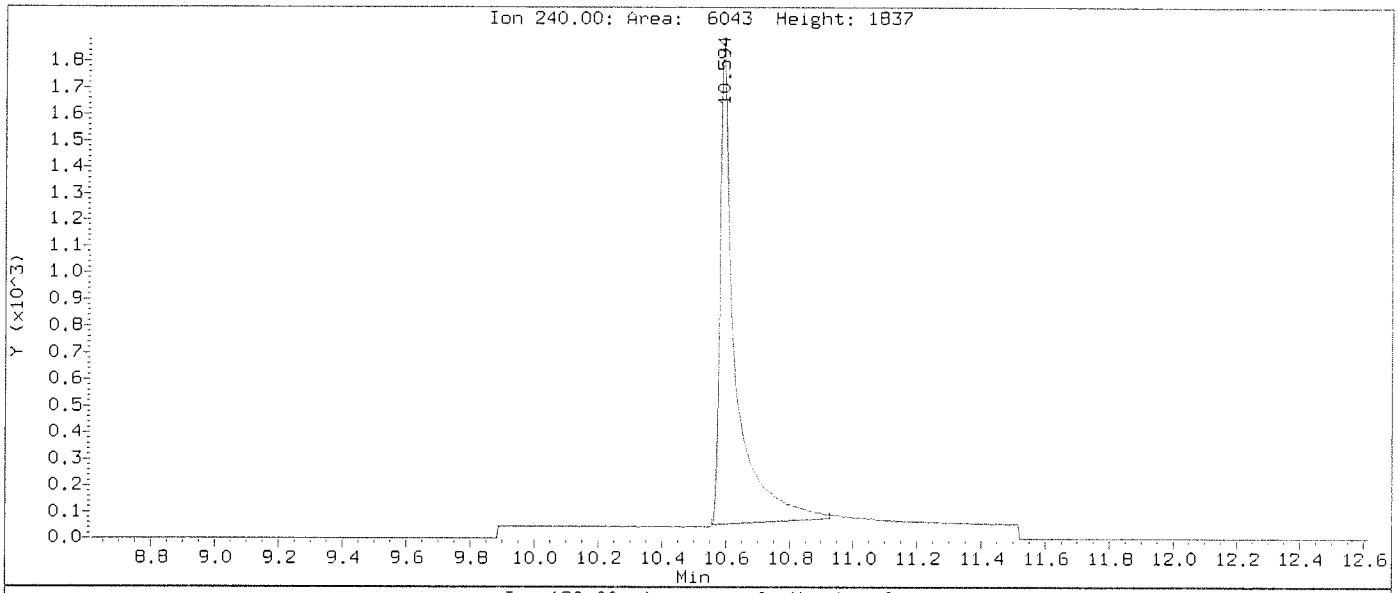
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

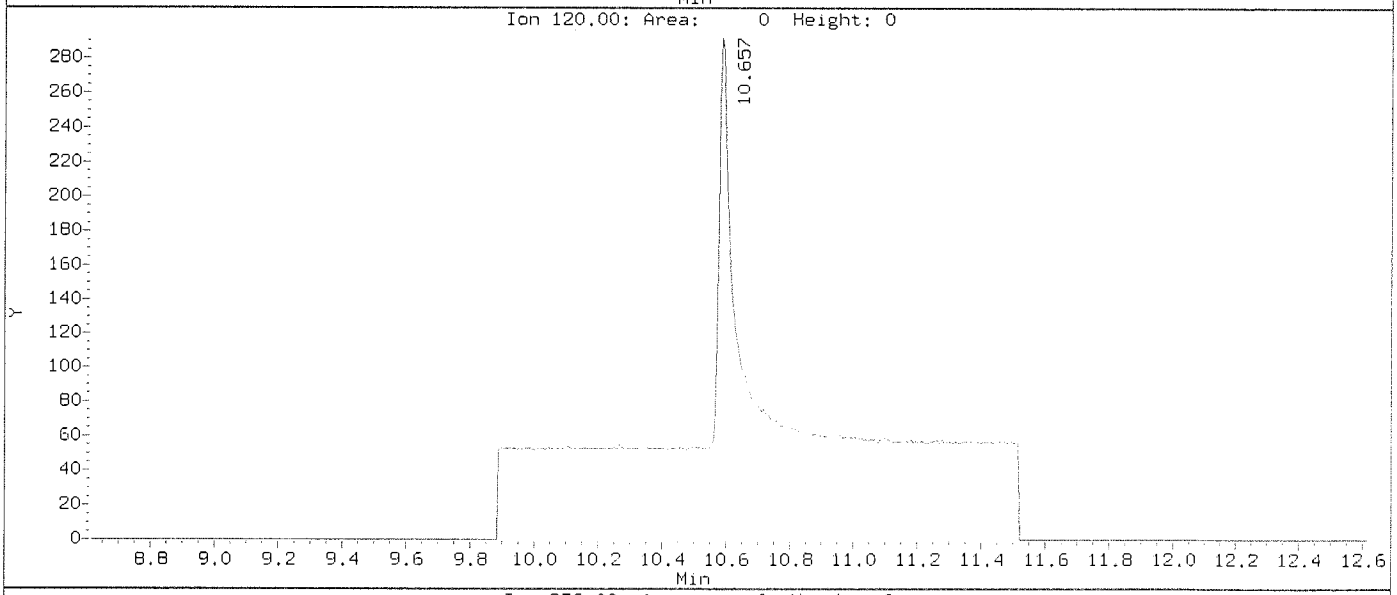
Compound: Chrysene-d12
CAS Number: 1719-03-5

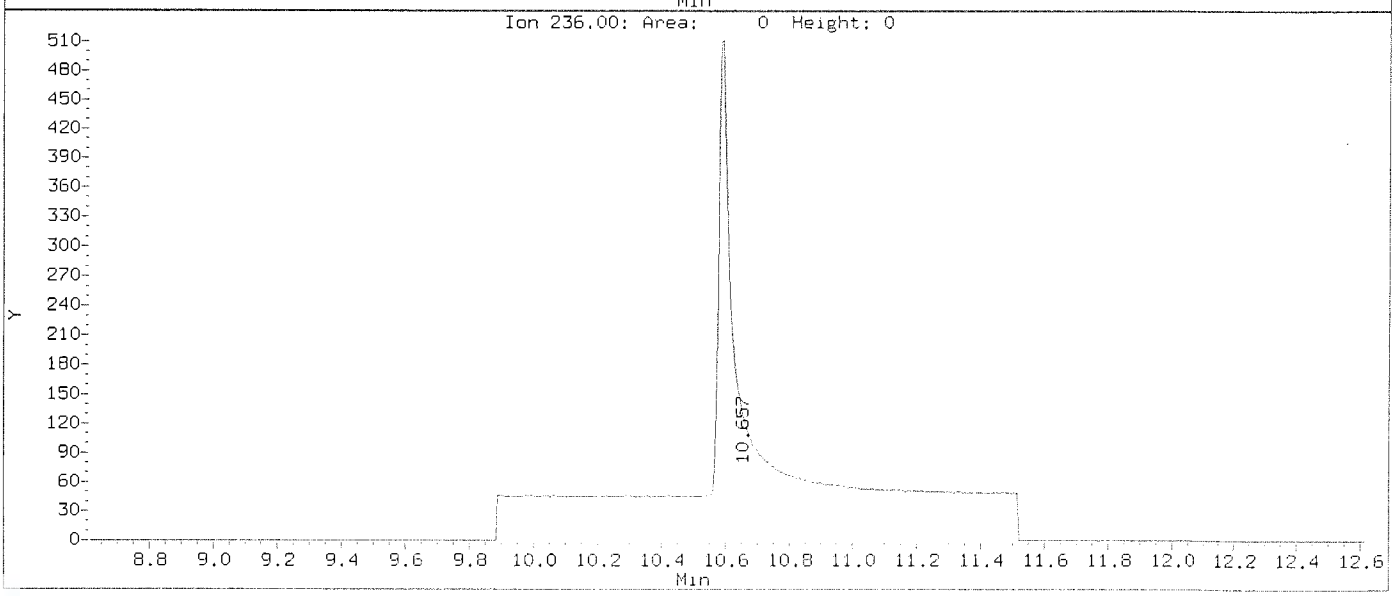


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: Chrysene-d12
CAS Number: 1719-03-5

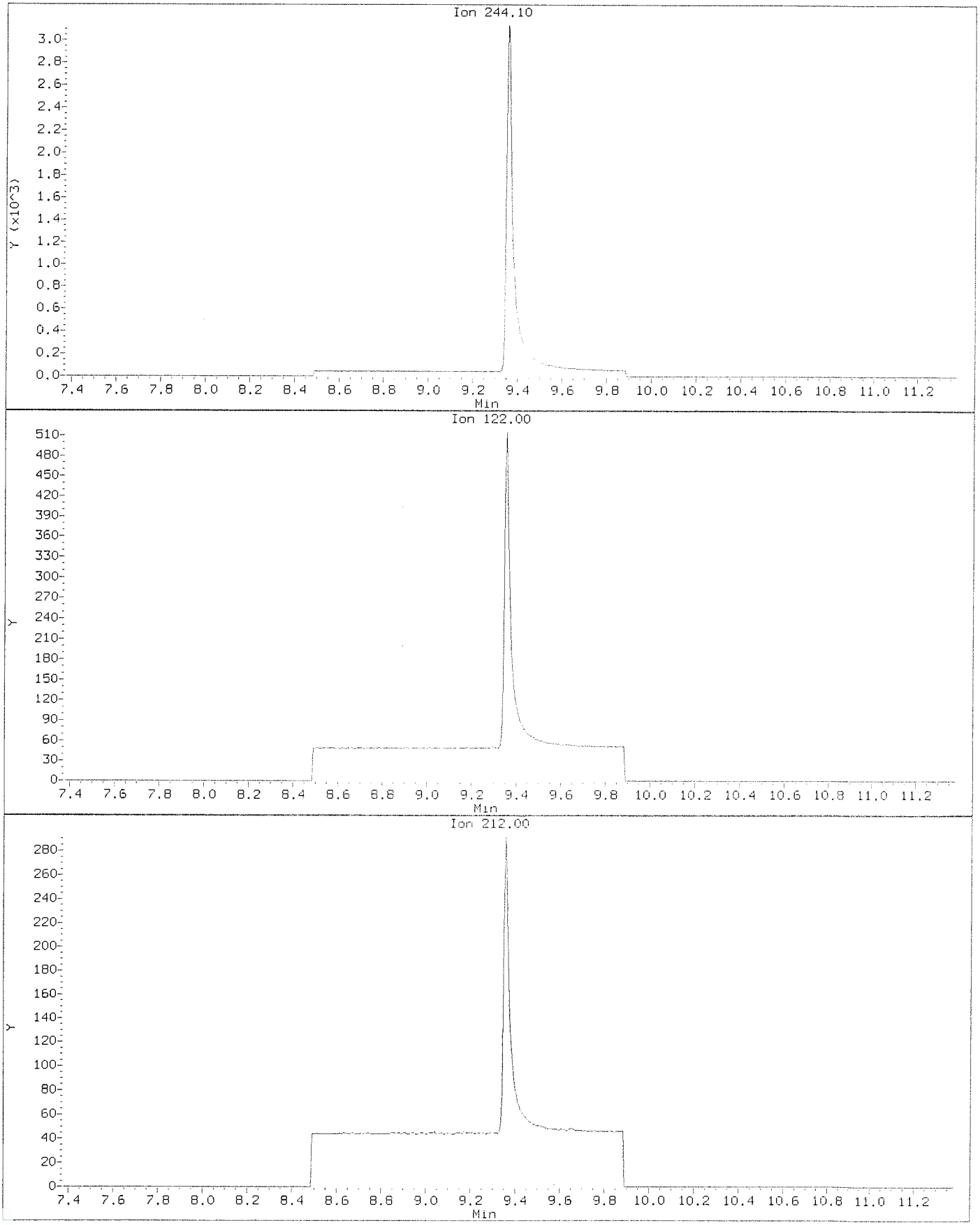






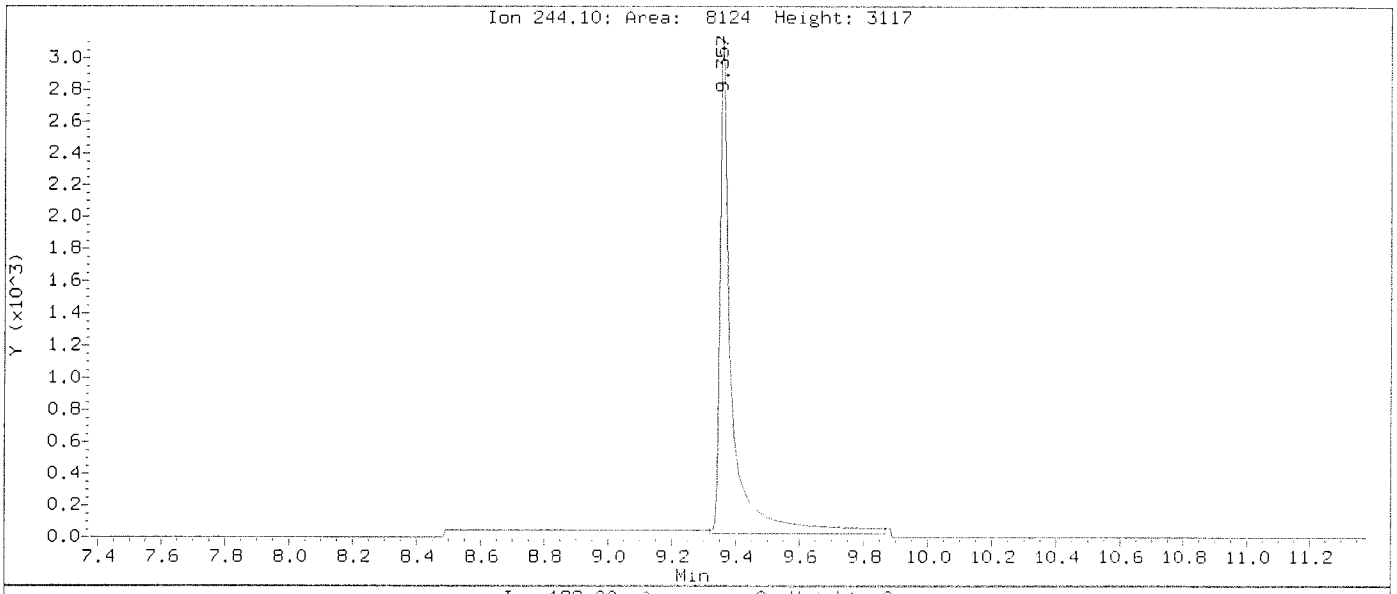
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

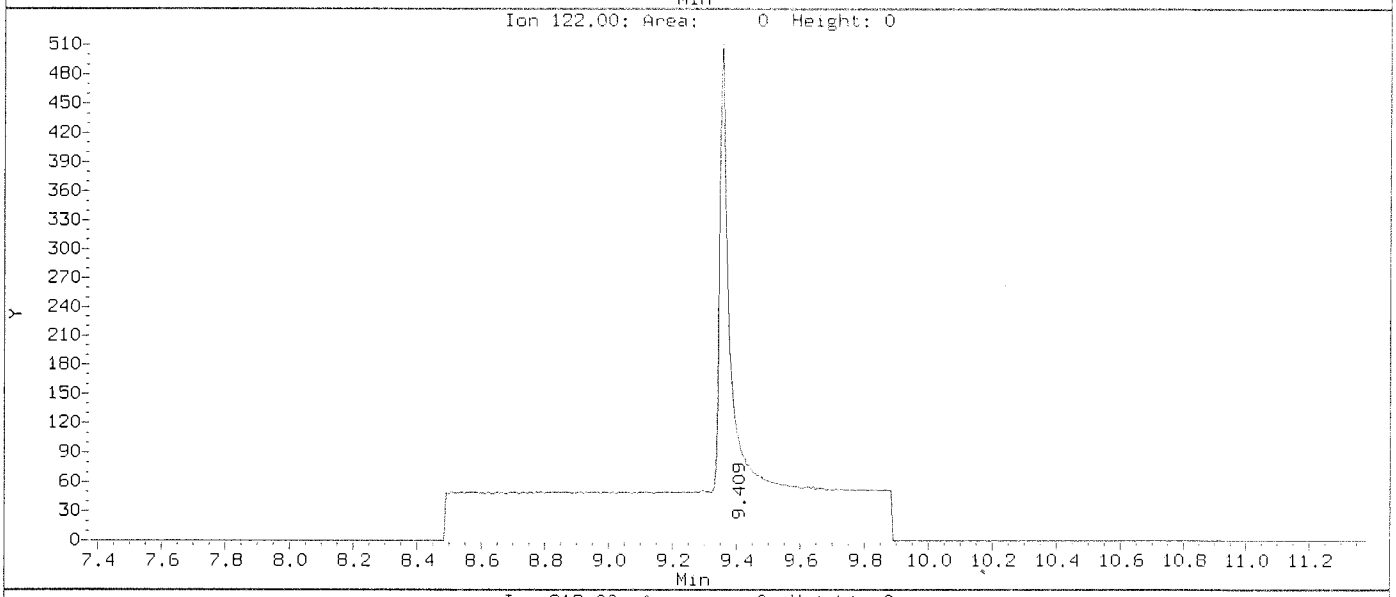
Compound: 4-Terphenyl-d14
CAS Number: 1718-51-0

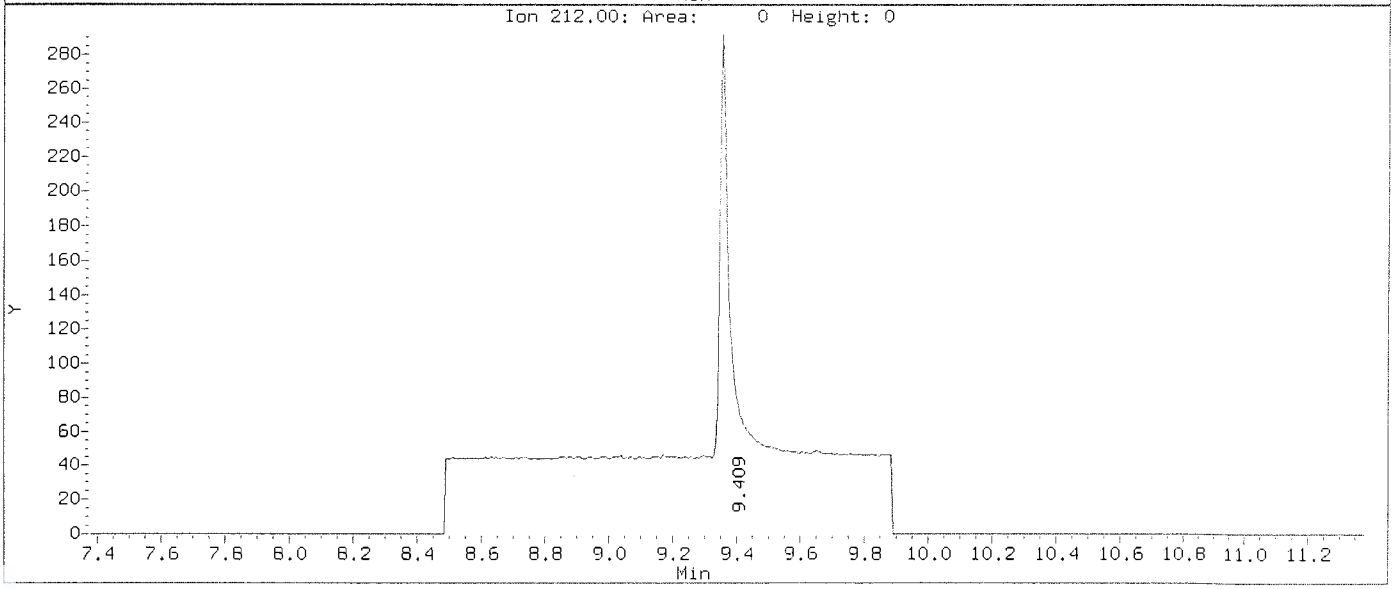


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: 4-Terphenyl-d14
CAS Number: 1718-51-0

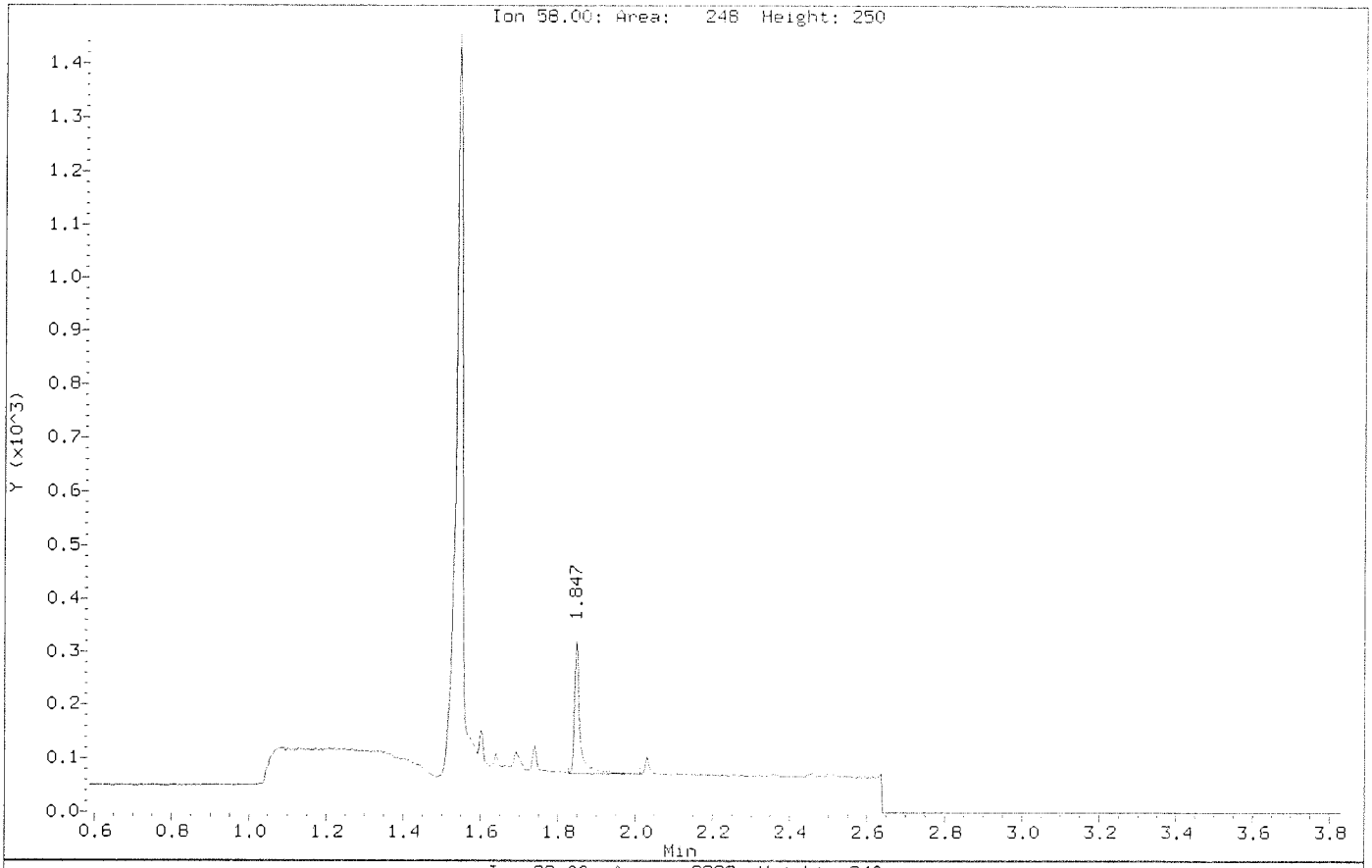


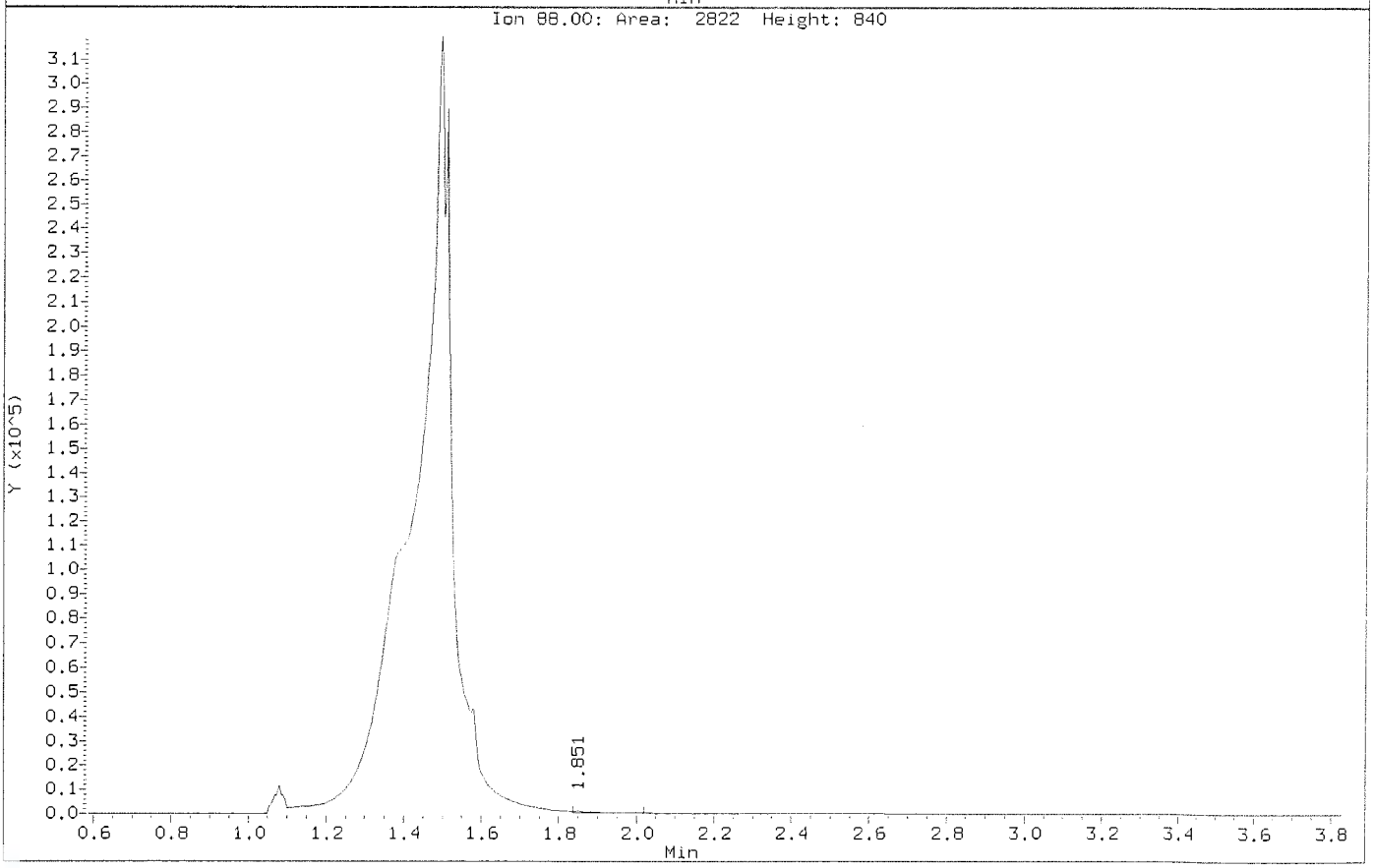




Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

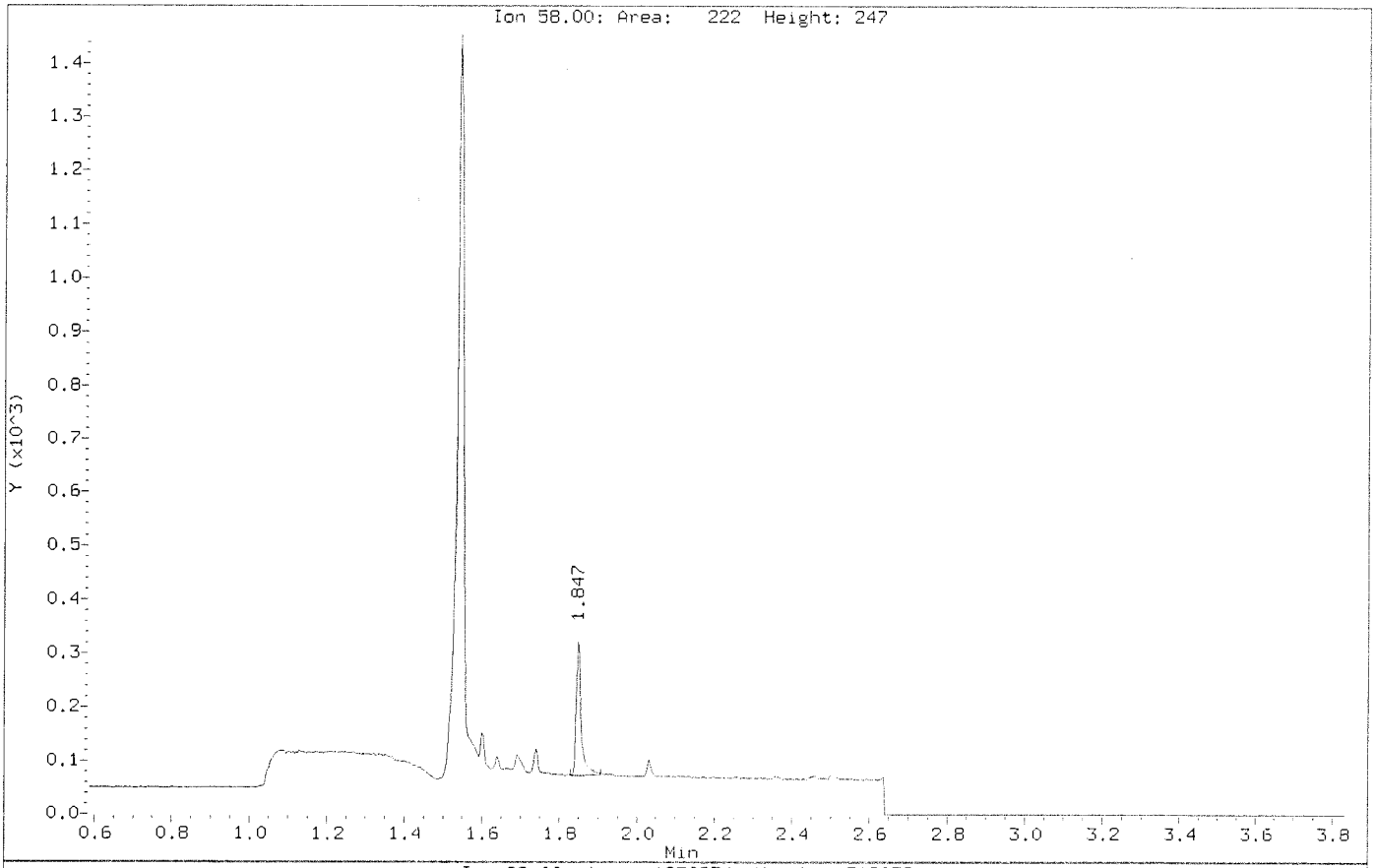
Compound: 1,4-Dioxane
CAS Number:

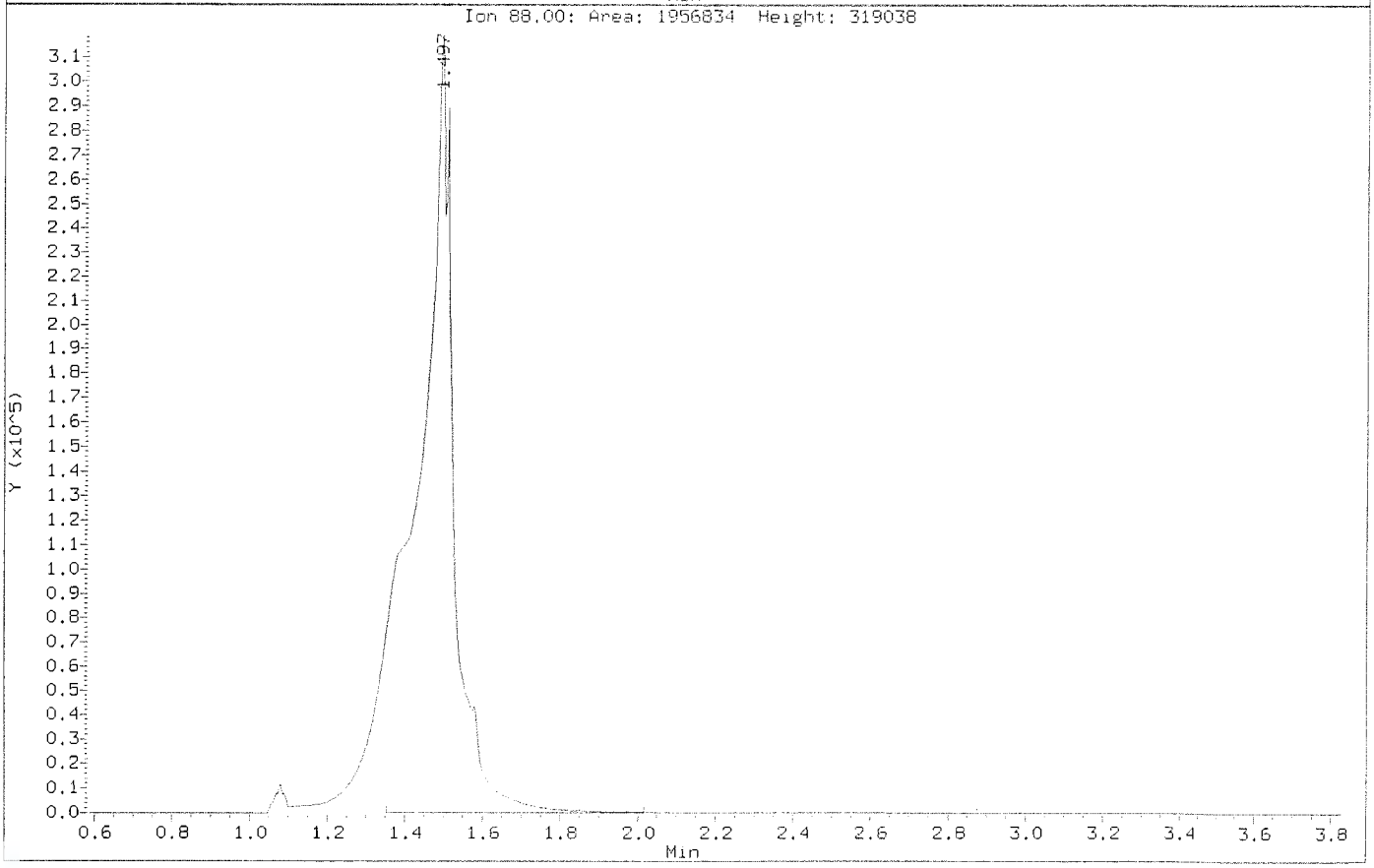




Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: 1,4-Dioxane
CAS Number:





Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\08.D Page 1
Report Date: 24-Aug-2022 15:50

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220824.b\08.D
Lab Smp Id: HS22080499-03
Inj Date : 24-AUG-2022 13:43
Operator : LG Inst ID: SV6.i
Smp Info : HS22080499-03X10
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220824.b\DXSIM.m
Meth Date : 24-Aug-2022 15:42 jjuarez Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 8
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	10.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.552	3.552	(1.000)	5086	0.10000	(aM)
* 45 Naphthalene-d8	136	4.662	4.660	(1.000)	11200	0.10000	
$ 33 Nitrobenzene-d5	82	4.024	4.019	(0.863)	206	0.00552	0.05518(M)
* 86 Acenaphthene-d10	164	6.333	6.330	(1.000)	6581	0.10000	(Q)
$ 69 2-Fluorobiphenyl	172	5.683	5.681	(0.897)	510	0.00498	0.04979(M)
* 126 Phenanthrene-d10	188	7.779	7.780	(1.000)	9753	0.10000	
* 182 Chrysene-d12	240	10.592	10.594	(1.000)	4765	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.355	9.356	(0.883)	409	0.00457	0.04565(M)
* 198 Perylene-d12	264	12.644	12.645	(1.000)	3055	0.10000	
1 1,4-Dioxane	58	1.825	1.847	(0.514)	185	0.08860	0.8860(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01134175

Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\08.D

Date : 24-AUG-2022 13:43

Client ID:

Instrument: SV6.i

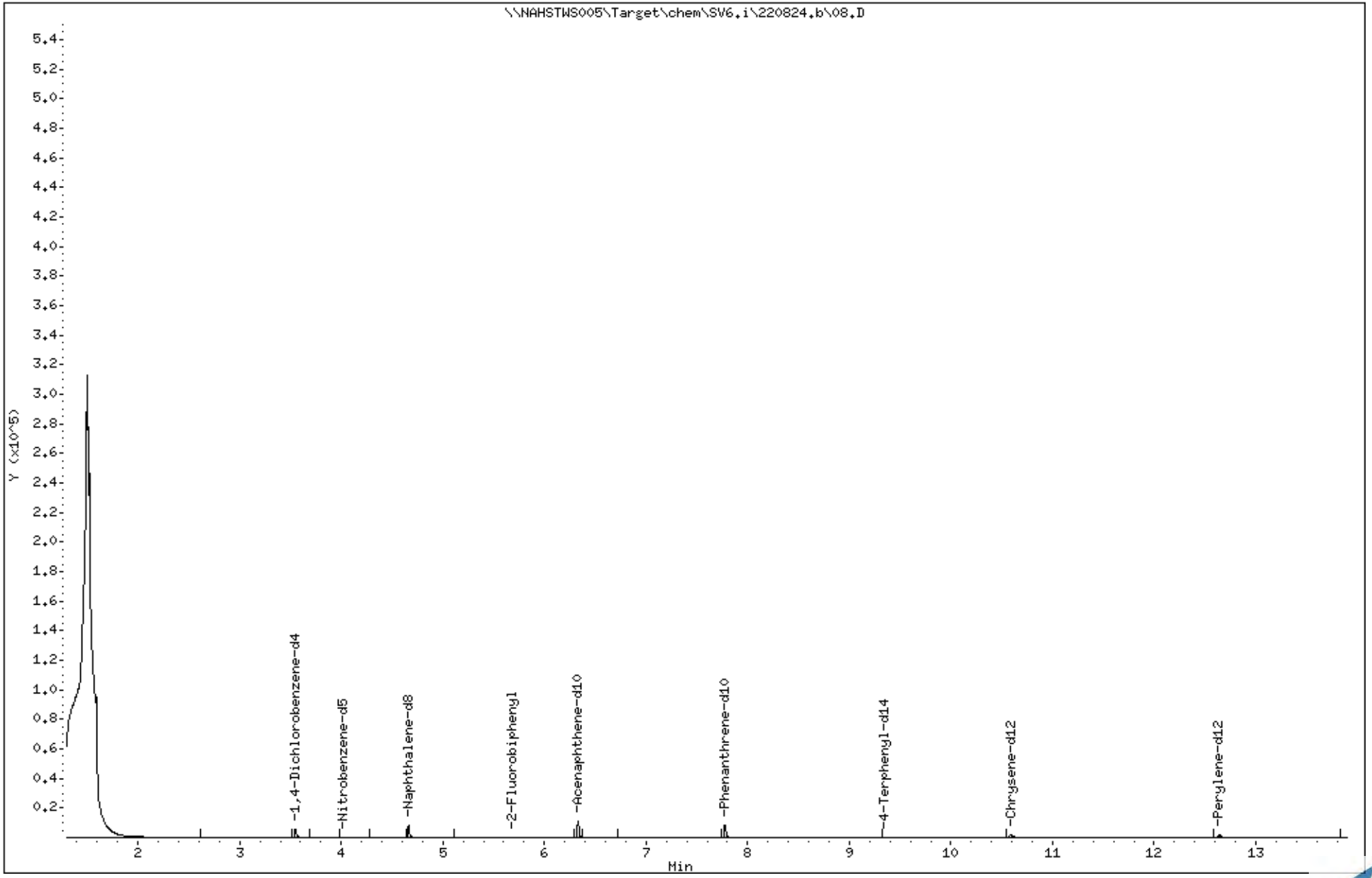
Sample Info: HS22080499-03X10

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\08.D

Date : 24-AUG-2022 13:43

Client ID:

Instrument: SV6.i

Sample Info: HS22080499-03X10

Purge Volume: 1000.0

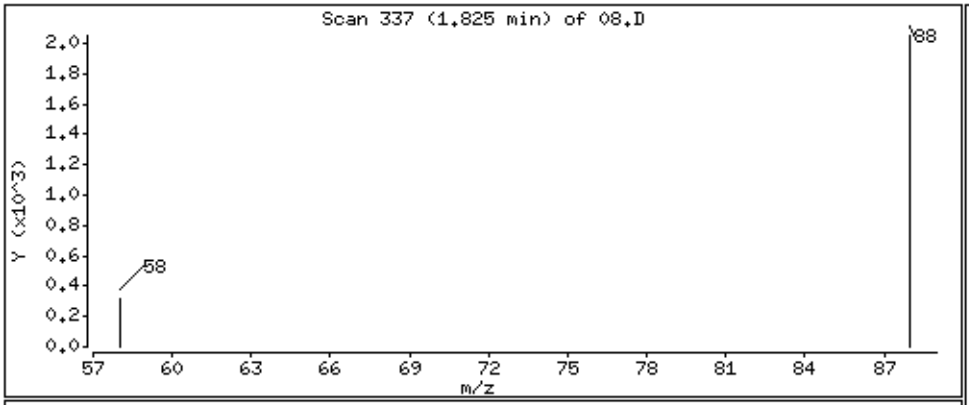
Operator: LG

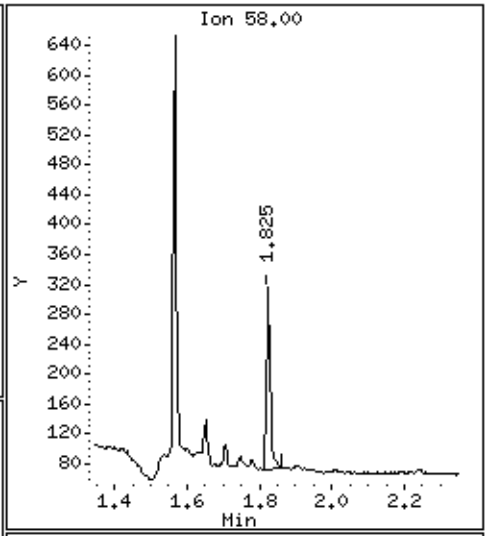
Column phase: RTX-5SIL MS

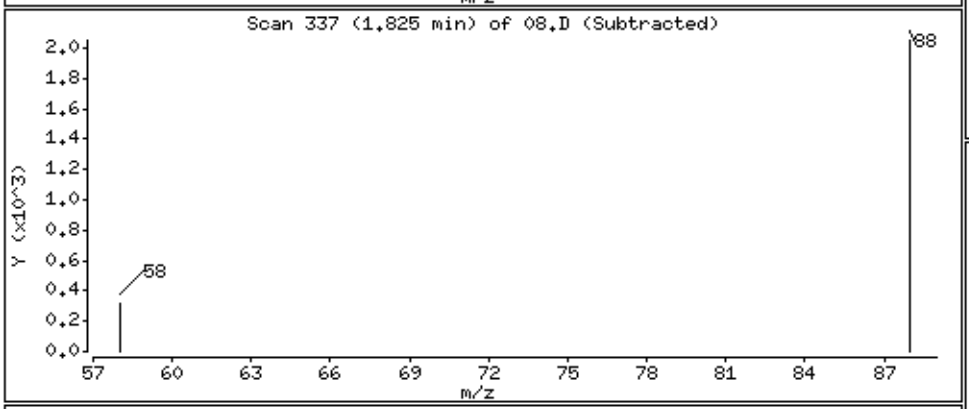
Column diameter: 0.28

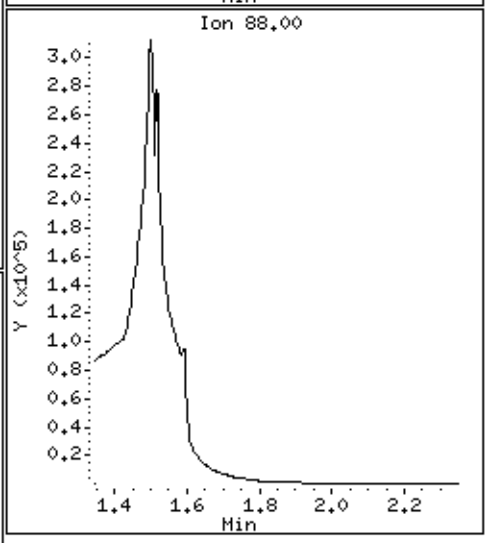
1 1,4-Dioxane

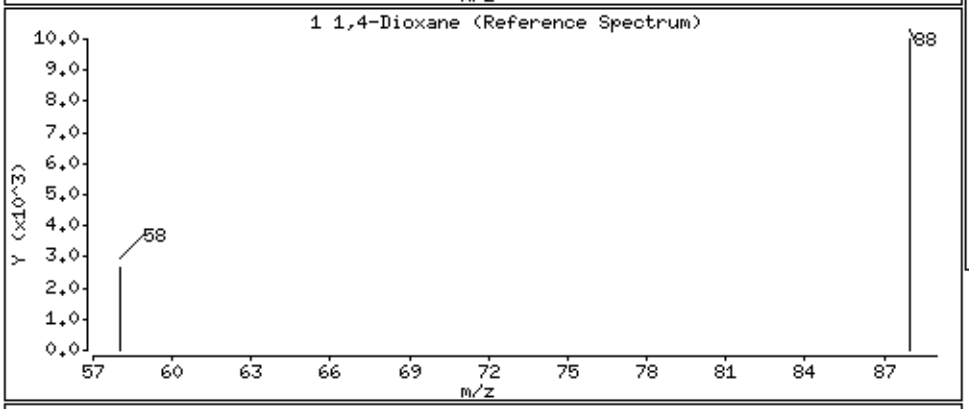
Concentration: 0.8860 ug/L

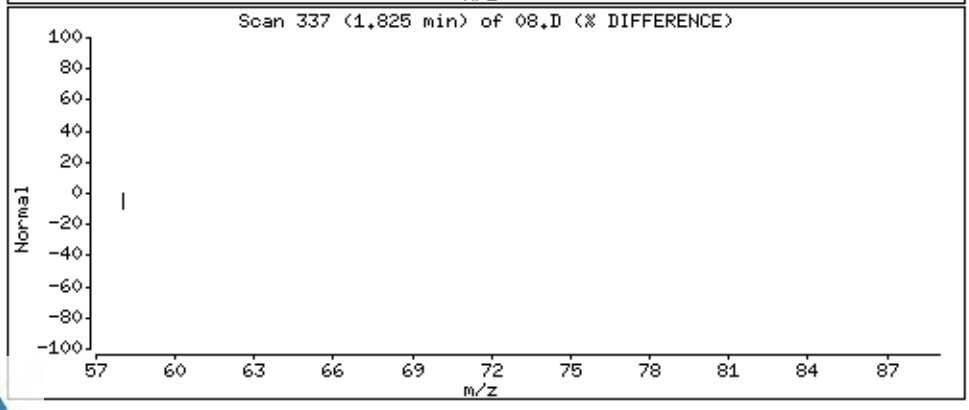












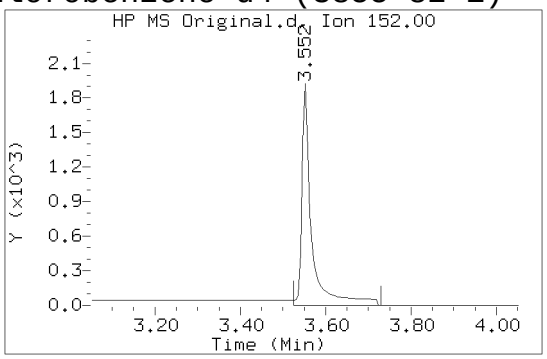
Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\08.D
Inj Date : 24-AUG-2022 13:43
InstruID : SV6.i
LabSampID : HS22080499-03

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

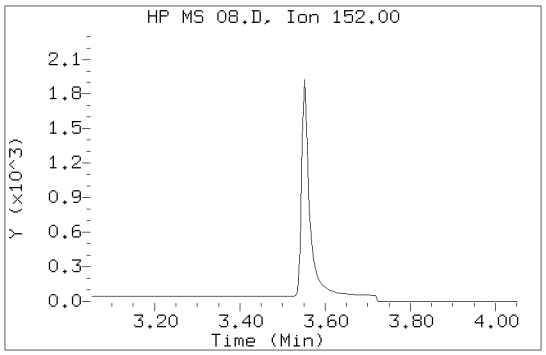
BEFORE

MASS
152
AREA
2996
HEIGHT
1924
24-Aug-2022
13:58
ALSHS
Server



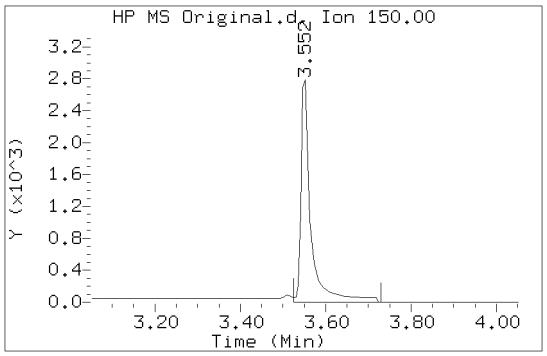
AFTER

MASS
152
AREA
5086
HEIGHT
1924
24-Aug-2022
15:50
ALSHS
S



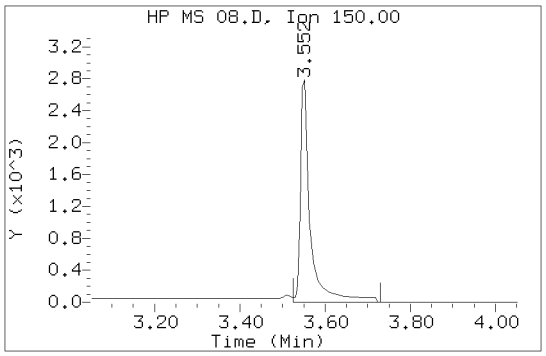
BEFORE

MASS
150
AREA
4435
HEIGHT
2786
24-Aug-2022
13:58
ALSHS
Server



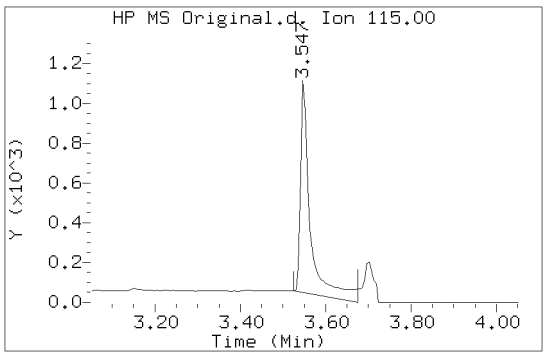
AFTER

MASS
150
AREA
4435
HEIGHT
2786
24-Aug-2022
15:50
ALSHS
S



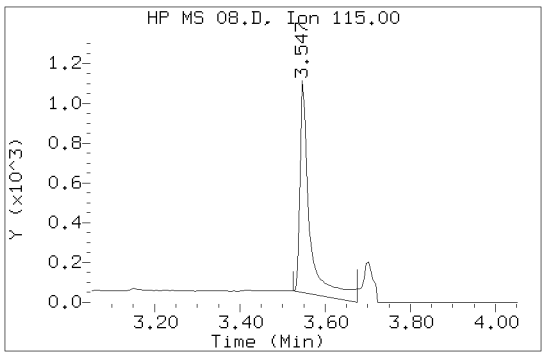
BEFORE

MASS
115
AREA
1676
HEIGHT
1064
24-Aug-2022
13:58
ALSHS
Server



AFTER

MASS
115
AREA
1676
HEIGHT
1064
24-Aug-2022
15:50
ALSHS
S

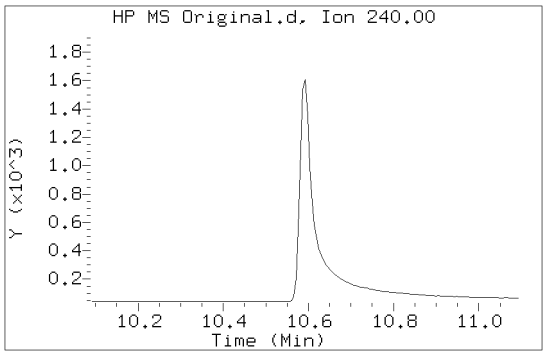


Chrysene-d12 (1719-03-5)

Reason Code:

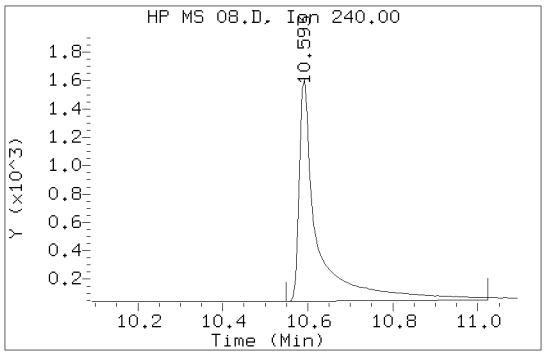
BEFORE

MASS
240
AREA
0
HEIGHT
0
24-Aug-2022
13:58
ALSHS
Server



AFTER

MASS
240
AREA
4765
HEIGHT
1561
24-Aug-2022
15:50
ALSHS
S

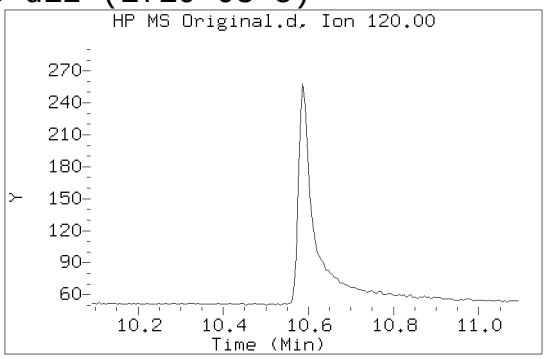


Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\08.D
Inj Date : 24-AUG-2022 13:43
InstruID : SV6.i
LabSampID : HS22080499-03

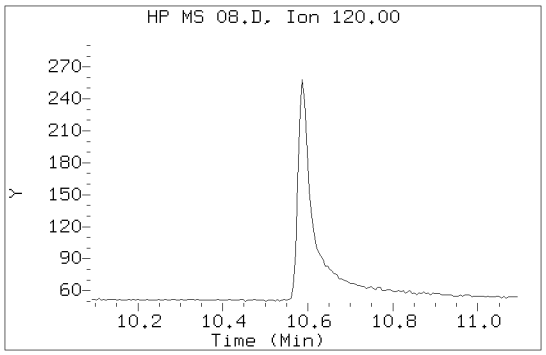
Chrysene-d12 (1719-03-5)

Reason Code:

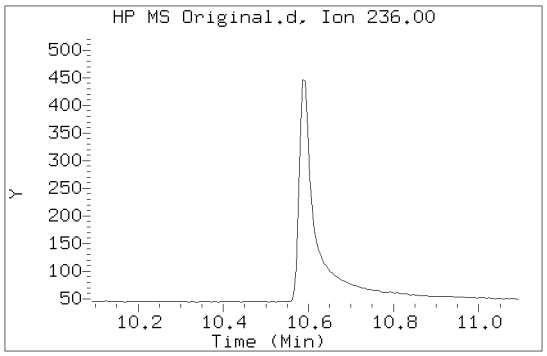
BEFORE
MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
13:58
ALSHS
Server



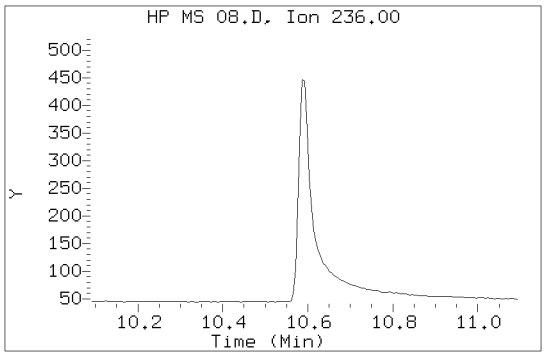
AFTER
MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



BEFORE
MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
13:58
ALSHS
Server



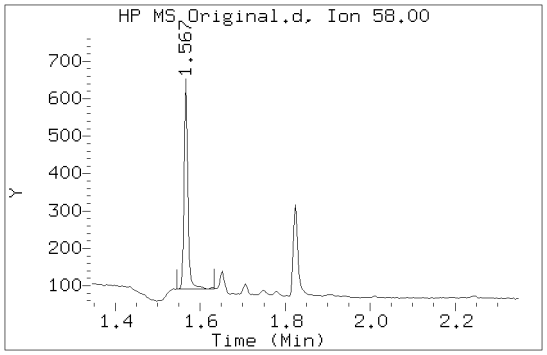
AFTER
MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



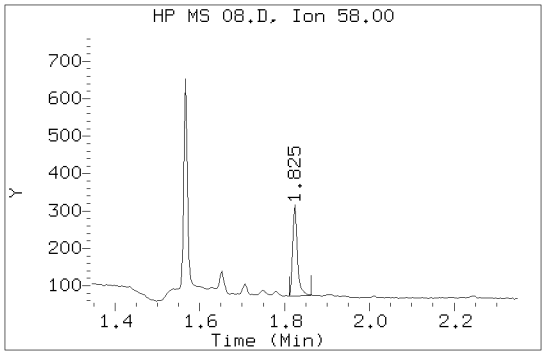
1,4-Dioxane ()

Reason Code:

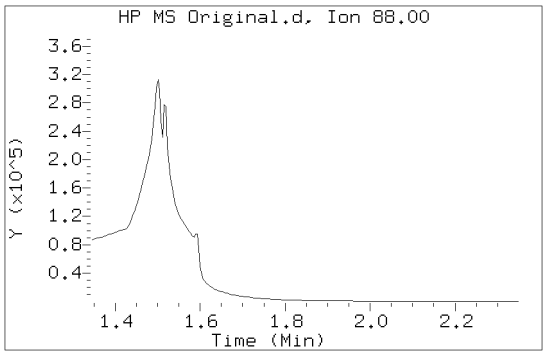
BEFORE
MASS
58
AREA
357
HEIGHT
562
24-Aug-2022
13:58
ALSHS
Server



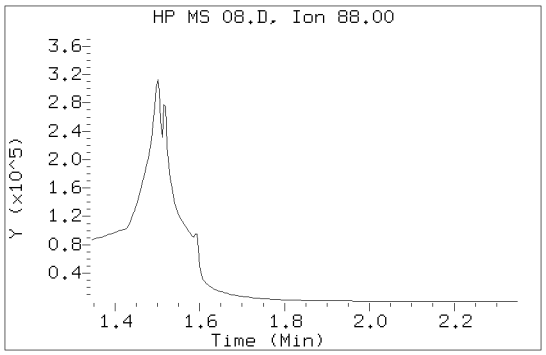
AFTER
MASS
58
AREA
185
HEIGHT
244
24-Aug-2022
15:50
ALSHS
S



BEFORE
MASS
88
AREA
0
HEIGHT
0
24-Aug-2022
13:58
ALSHS
Server



AFTER
MASS
88
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



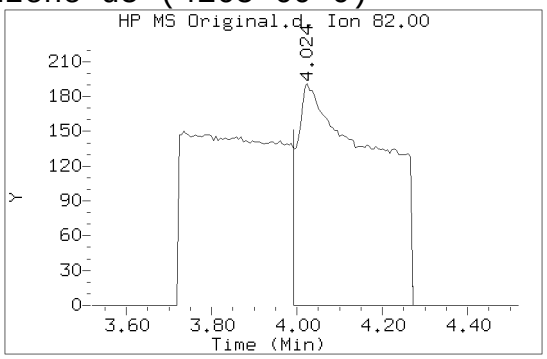
Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\08.D
Inj Date : 24-AUG-2022 13:43
InstruID : SV6.i
LabSampID : HS22080499-03

Nitrobenzene-d5 (4165-60-0)

Reason Code:

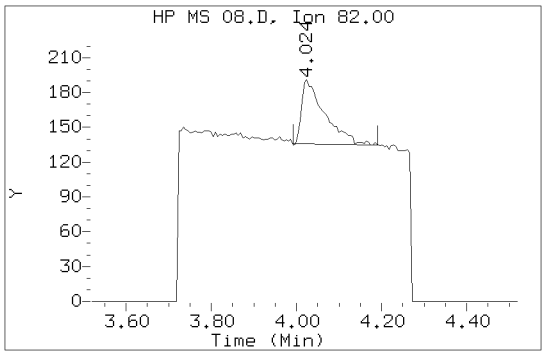
BEFORE

MASS
82
AREA
2458
HEIGHT
191
24-Aug-2022
13:58
ALSHS
Server



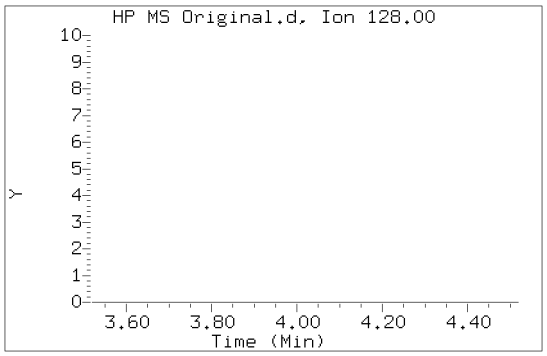
AFTER

MASS
82
AREA
206
HEIGHT
55
24-Aug-2022
15:50
ALSHS
S



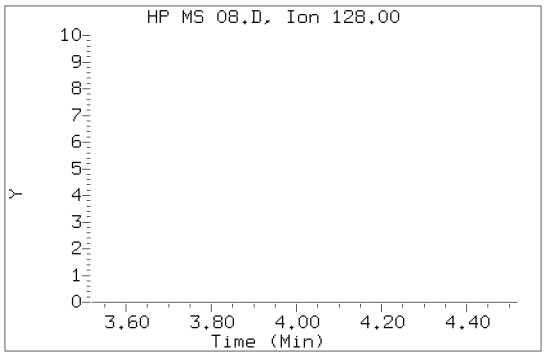
BEFORE

MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
13:58
ALSHS
Server



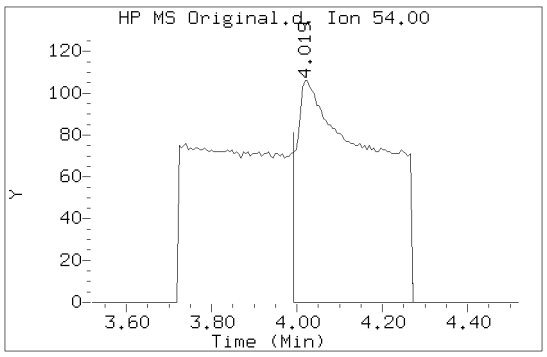
AFTER

MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



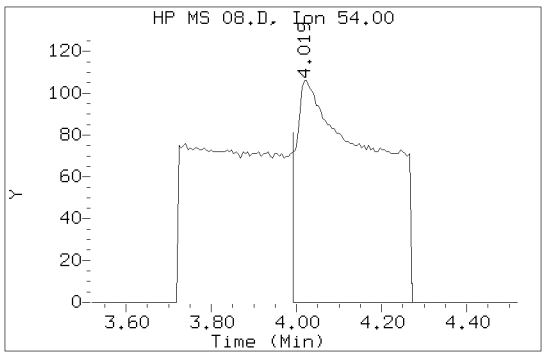
BEFORE

MASS
54
AREA
1342
HEIGHT
106
24-Aug-2022
13:58
ALSHS
Server



AFTER

MASS
54
AREA
1342
HEIGHT
106
24-Aug-2022
15:50
ALSHS
S

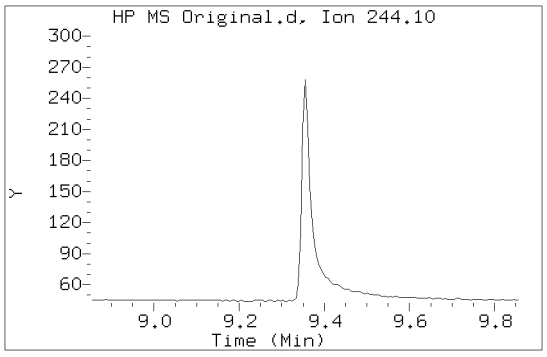


4-Terphenyl-d14 (1718-51-0)

Reason Code:

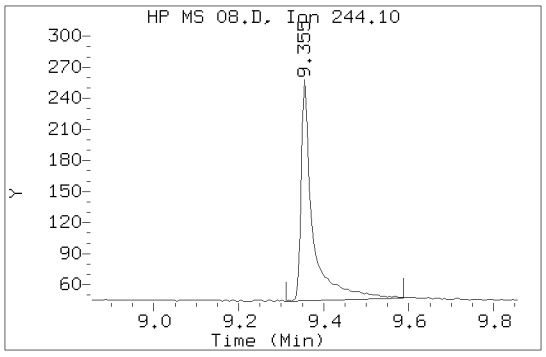
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
24-Aug-2022
13:58
ALSHS
Server



AFTER

MASS
244.1
AREA
409
HEIGHT
213
24-Aug-2022
15:50
ALSHS
S

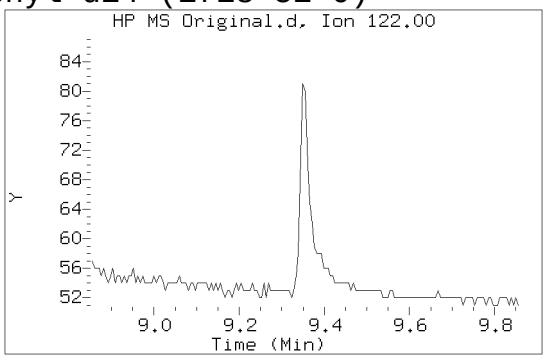


Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\08.D
Inj Date : 24-AUG-2022 13:43
InstruID : SV6.i
LabSampID : HS22080499-03

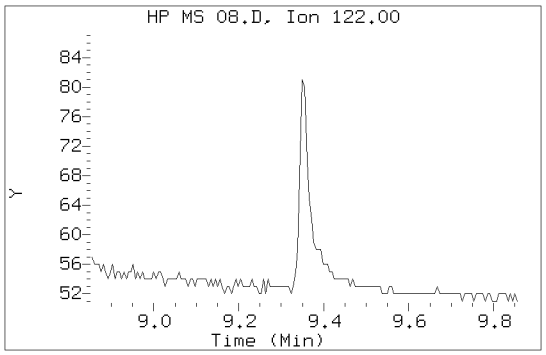
4-Terphenyl-d14 (1718-51-0)

Reason Code:

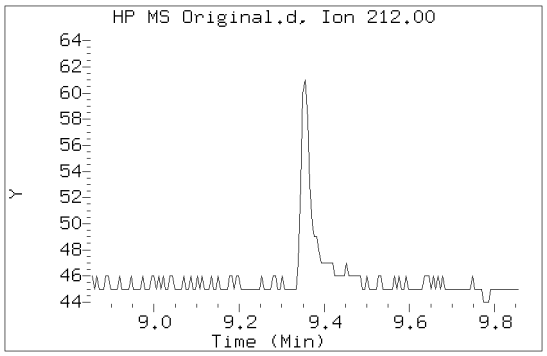
BEFORE
MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
13:58
ALSHS
Server



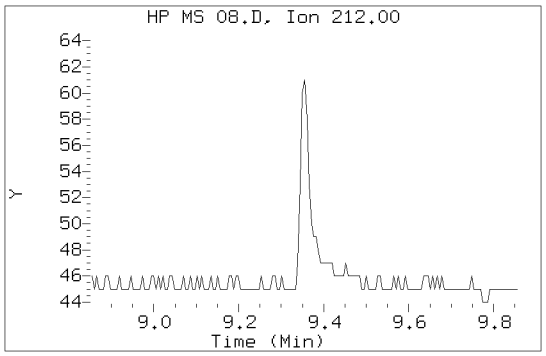
AFTER
MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



BEFORE
MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
13:58
ALSHS
Server



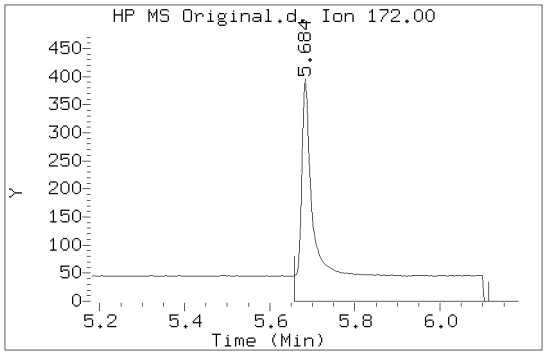
AFTER
MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



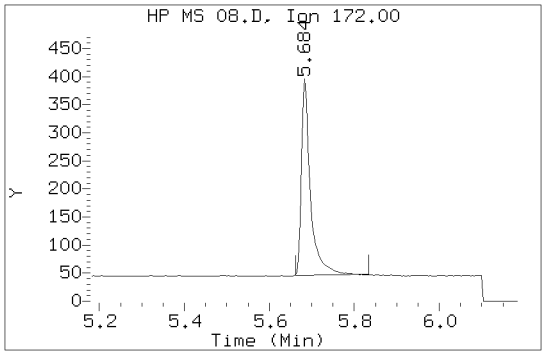
2-Fluorobiphenyl (321-60-8)

Reason Code:

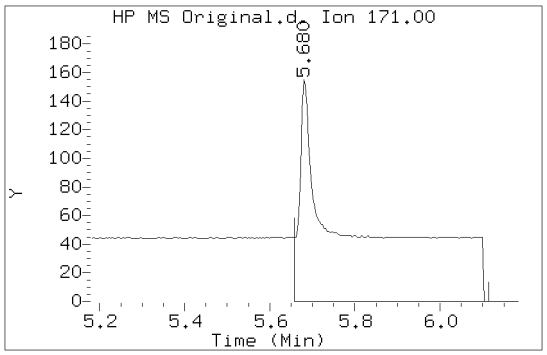
BEFORE
MASS
172
AREA
1761
HEIGHT
396
24-Aug-2022
13:58
ALSHS
Server



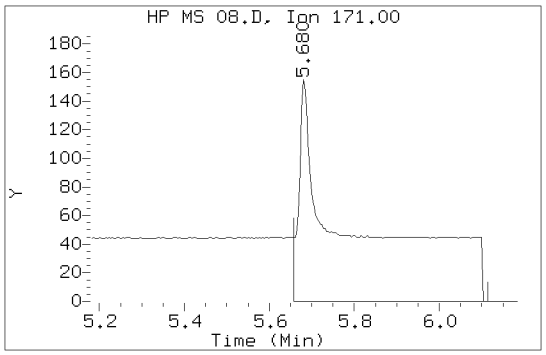
AFTER
MASS
172
AREA
510
HEIGHT
349
24-Aug-2022
15:50
ALSHS
S



BEFORE
MASS
171
AREA
1381
HEIGHT
155
24-Aug-2022
13:58
ALSHS
Server



AFTER
MASS
171
AREA
1381
HEIGHT
155
24-Aug-2022
15:50
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\09.D Page 1
Report Date: 24-Aug-2022 15:50

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220824.b\09.D
Lab Smp Id: HS22080499-04
Inj Date : 24-AUG-2022 14:01
Operator : LG Inst ID: SV6.i
Smp Info : HS22080499-04X20
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220824.b\DXSIM.m
Meth Date : 24-Aug-2022 15:42 jjuarez Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 9
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	20.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.552	3.552	(1.000)	6024	0.10000	(aM)
* 45 Naphthalene-d8	136	4.660	4.660	(1.000)	13170	0.10000	
$ 33 Nitrobenzene-d5	82	4.019	4.019	(0.862)	234	0.00533	0.1066(M)
* 86 Acenaphthene-d10	164	6.330	6.330	(1.000)	7710	0.10000	(Q)
$ 69 2-Fluorobiphenyl	172	5.677	5.681	(0.897)	489	0.00407	0.08149(M)
* 126 Phenanthrene-d10	188	7.775	7.780	(1.000)	13373	0.10000	
* 182 Chrysene-d12	240	10.588	10.594	(1.000)	6716	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.351	9.356	(0.883)	364	0.00288	0.05766(M)
* 198 Perylene-d12	264	12.640	12.645	(1.000)	5014	0.10000	
1 1,4-Dioxane	58	1.843	1.847	(0.519)	856	0.34613	6.923(Q)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01134182

Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\09.D

Date : 24-AUG-2022 14:01

Client ID:

Instrument: SV6.i

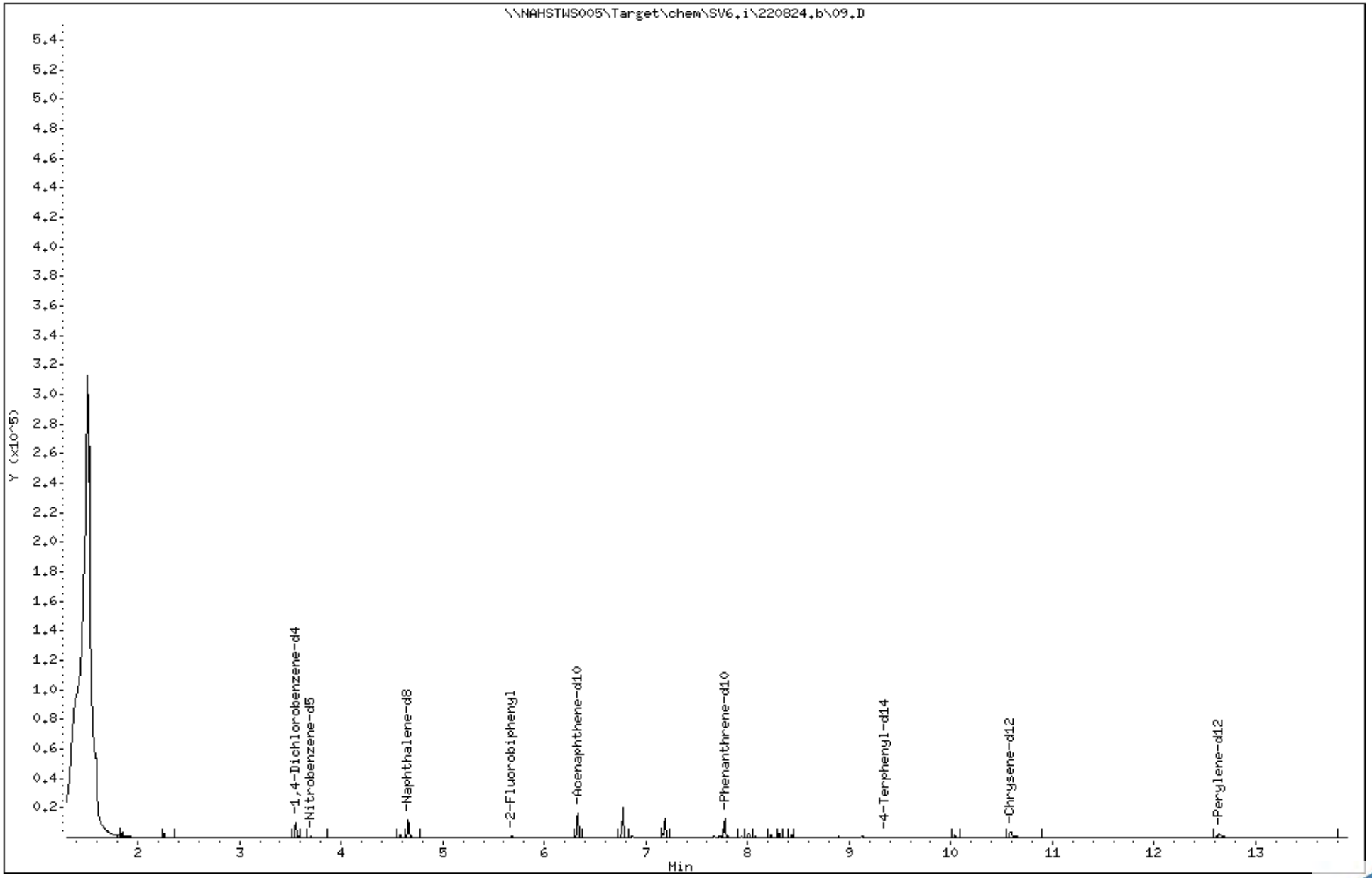
Sample Info: HS22080499-04X20

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\09.D

Date : 24-AUG-2022 14:01

Client ID:

Instrument: SV6.i

Sample Info: HS22080499-04X20

Purge Volume: 1000.0

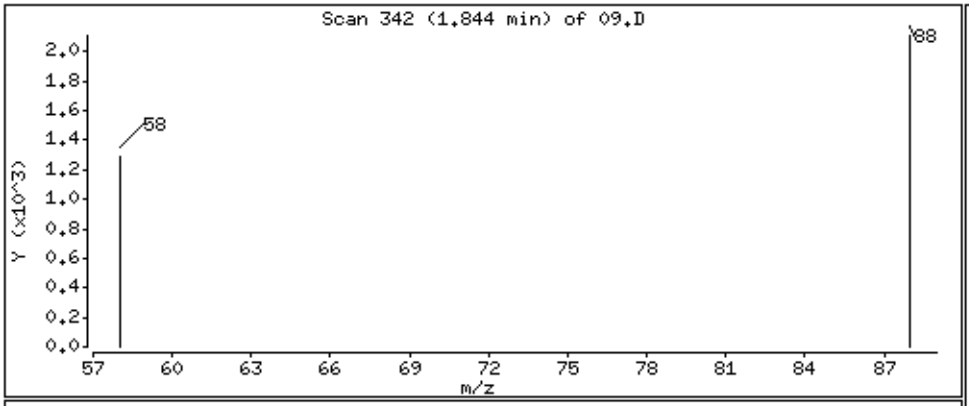
Operator: LG

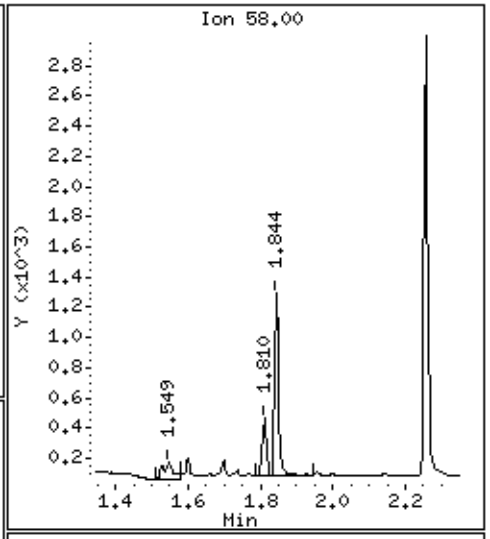
Column phase: RTX-5SIL MS

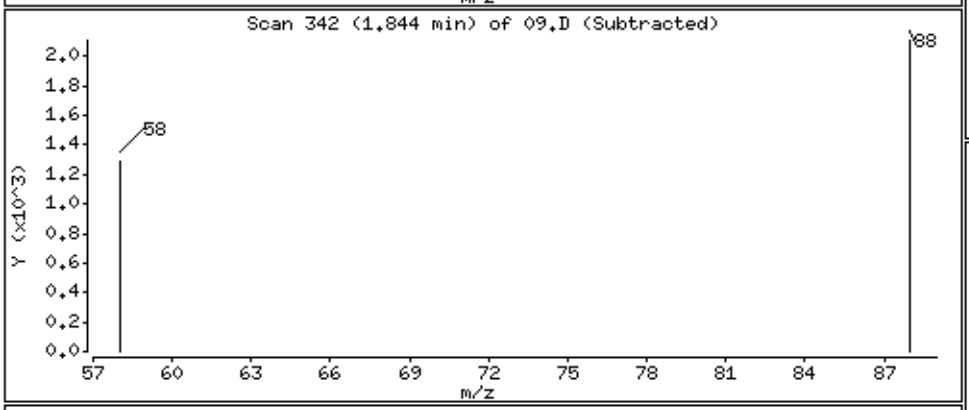
Column diameter: 0.28

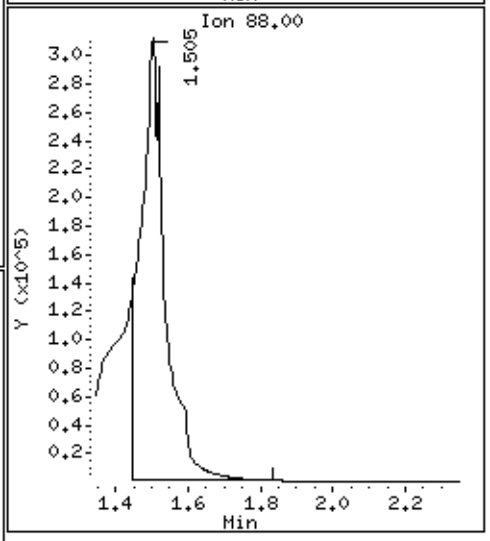
1 1,4-Dioxane

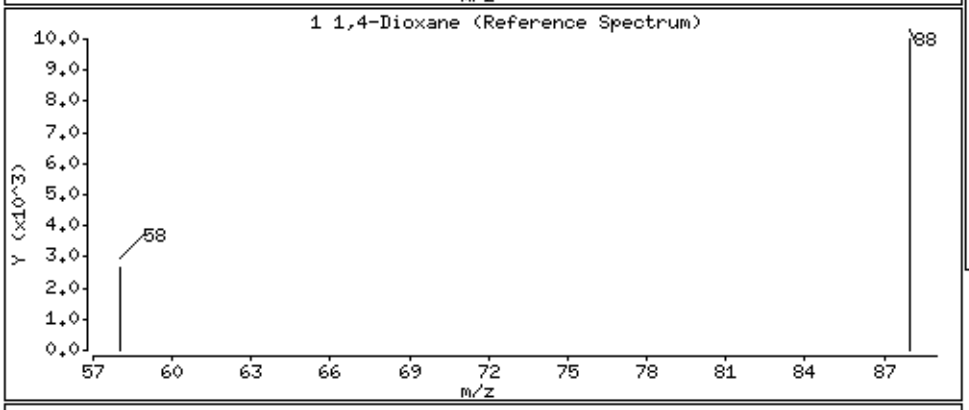
Concentration: 6.923 ug/L

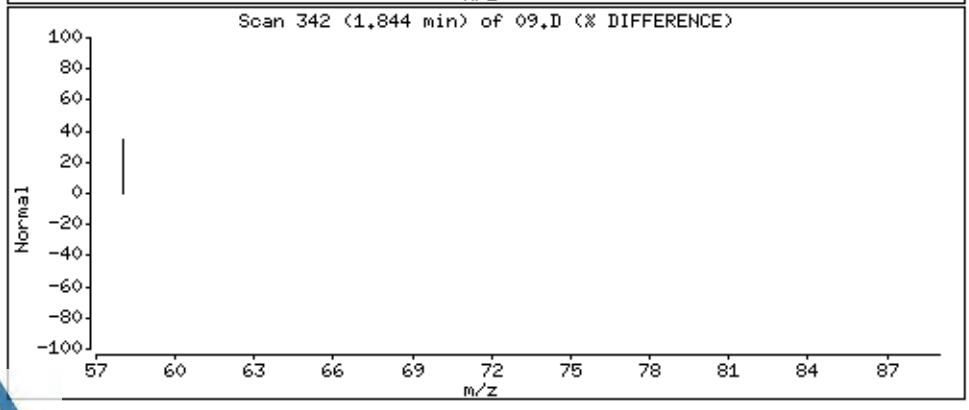












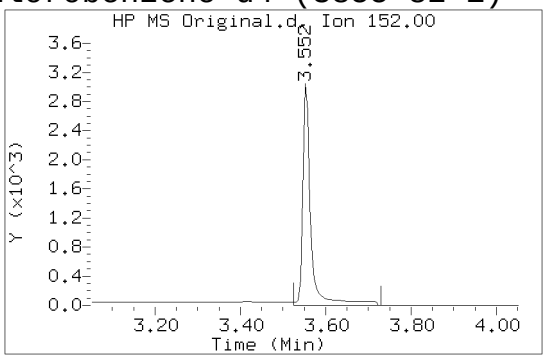
Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\09.D
Inj Date : 24-AUG-2022 14:01
InstruID : SV6.i
LabSampID : HS22080499-04

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

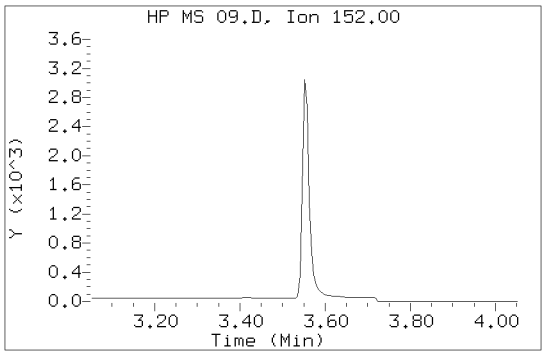
BEFORE

MASS
152
AREA
3916
HEIGHT
3045
24-Aug-2022
14:17
ALSHS
Server



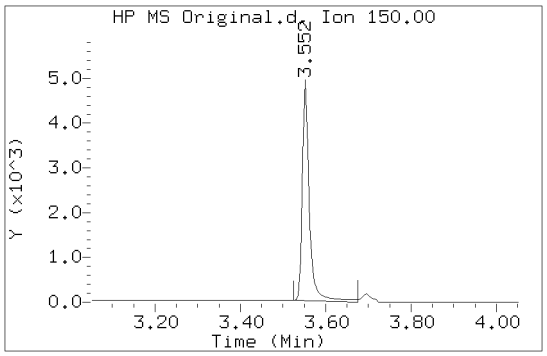
AFTER

MASS
152
AREA
6024
HEIGHT
3045
24-Aug-2022
15:50
ALSHS
S



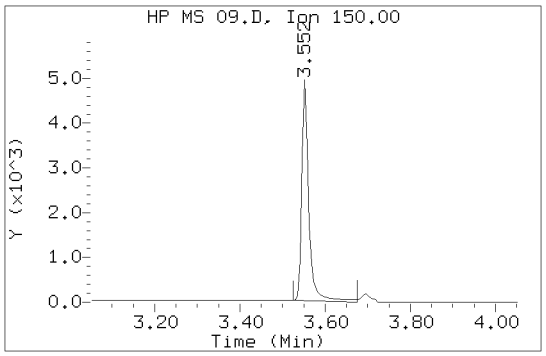
BEFORE

MASS
150
AREA
5513
HEIGHT
4928
24-Aug-2022
14:17
ALSHS
Server



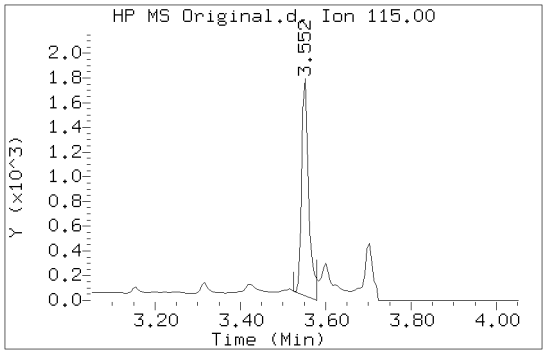
AFTER

MASS
150
AREA
5513
HEIGHT
4928
24-Aug-2022
15:50
ALSHS
S



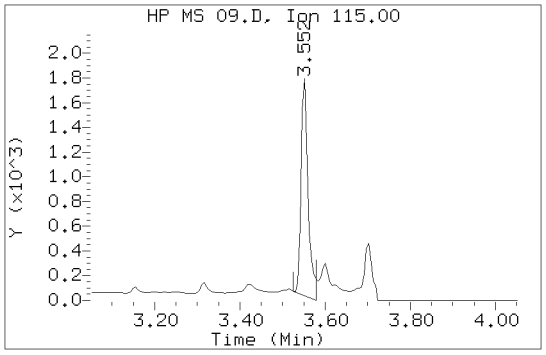
BEFORE

MASS
115
AREA
1984
HEIGHT
1757
24-Aug-2022
14:17
ALSHS
Server



AFTER

MASS
115
AREA
1984
HEIGHT
1757
24-Aug-2022
15:50
ALSHS
S

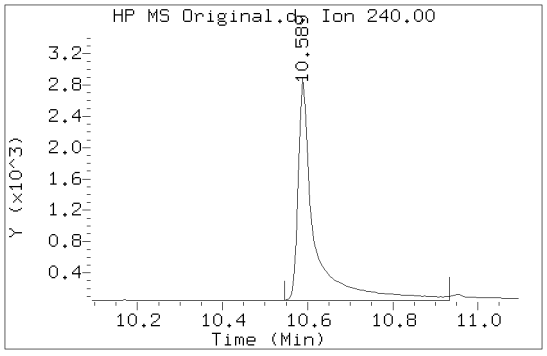


Chrysene-d12 (1719-03-5)

Reason Code:

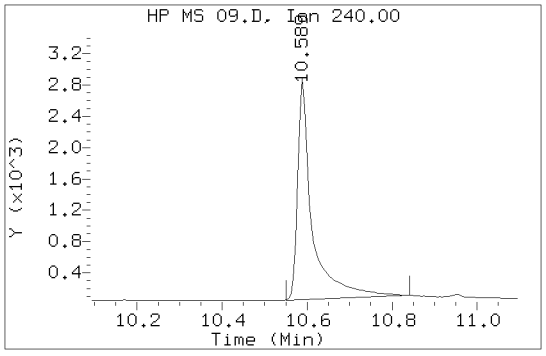
BEFORE

MASS
240
AREA
7504
HEIGHT
2829
24-Aug-2022
14:17
ALSHS
Server



AFTER

MASS
240
AREA
6716
HEIGHT
2822
24-Aug-2022
15:50
ALSHS
S

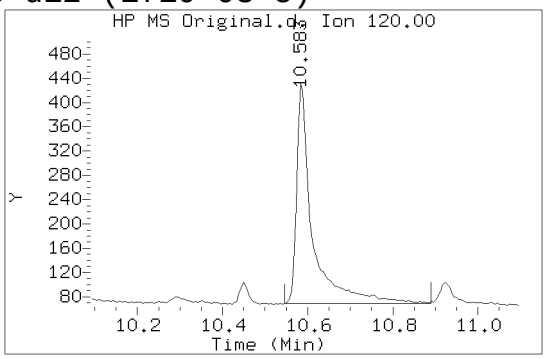


Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\09.D
Inj Date : 24-AUG-2022 14:01
InstruID : SV6.i
LabSampID : HS22080499-04

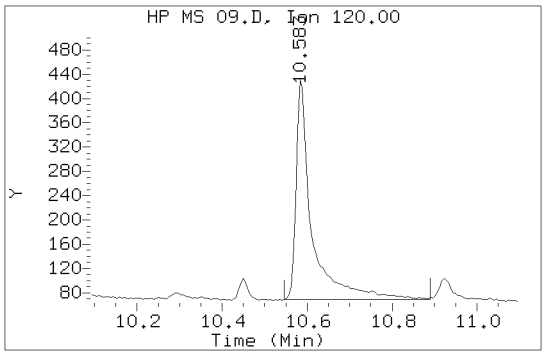
Chrysene-d12 (1719-03-5)

Reason Code:

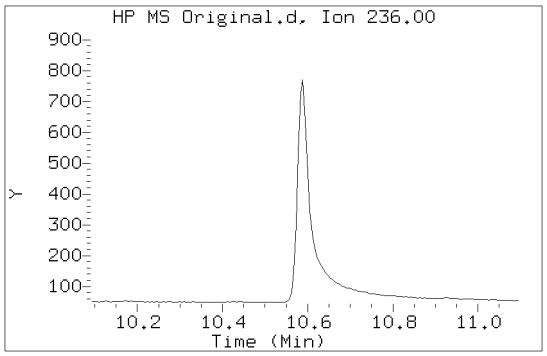
BEFORE
MASS
120
AREA
934
HEIGHT
362
24-Aug-2022
14:17
ALSHS
Server



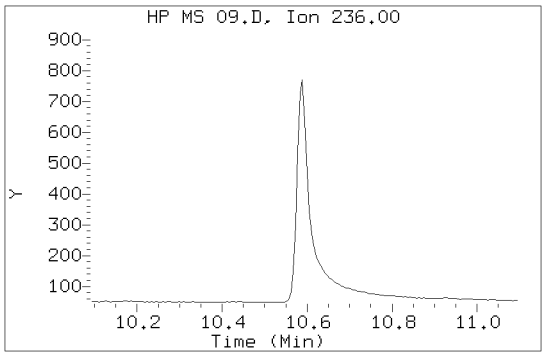
AFTER
MASS
120
AREA
934
HEIGHT
362
24-Aug-2022
15:50
ALSHS
S



BEFORE
MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
14:17
ALSHS
Server



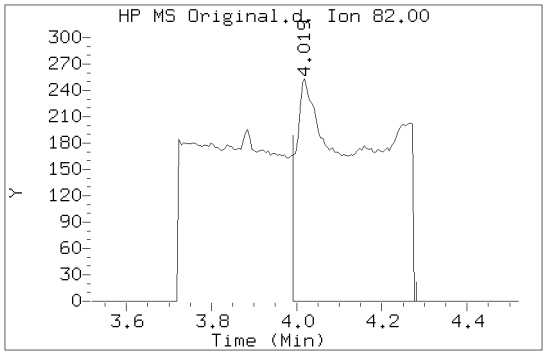
AFTER
MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



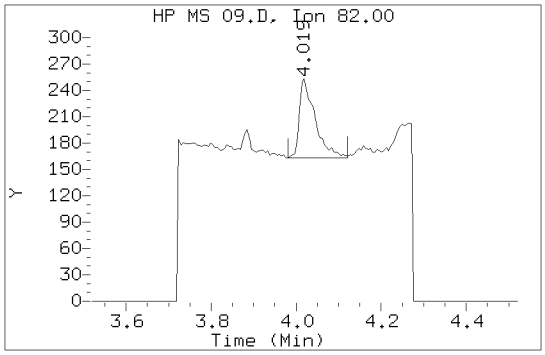
Nitrobenzene-d5 (4165-60-0)

Reason Code:

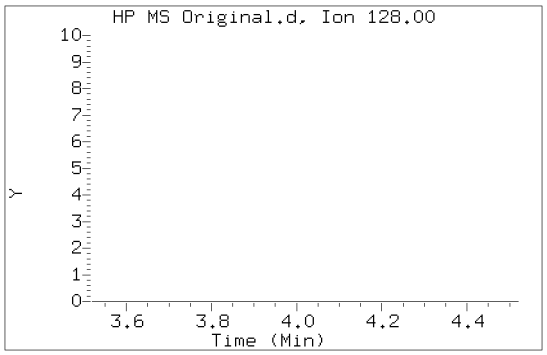
BEFORE
MASS
82
AREA
3147
HEIGHT
253
24-Aug-2022
14:17
ALSHS
Server



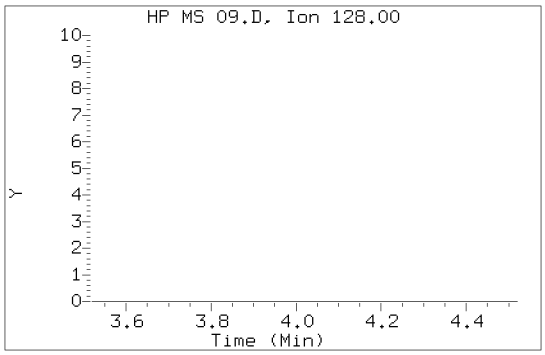
AFTER
MASS
82
AREA
234
HEIGHT
90
24-Aug-2022
15:50
ALSHS
S



BEFORE
MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
14:17
ALSHS
Server



AFTER
MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



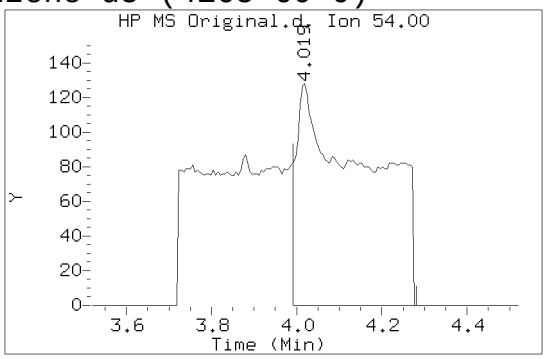
Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\09.D
Inj Date : 24-AUG-2022 14:01
InstruID : SV6.i
LabSampID : HS22080499-04

Nitrobenzene-d5 (4165-60-0)

Reason Code:

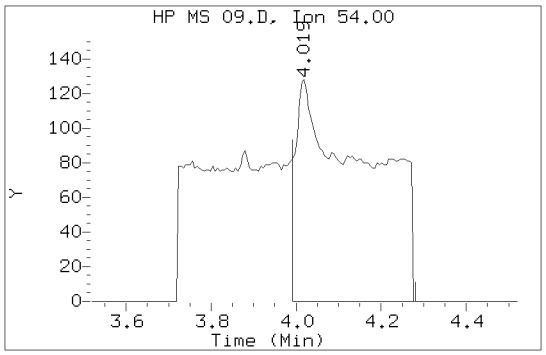
BEFORE

MASS
54
AREA
1472
HEIGHT
128
24-Aug-2022
14:17
ALSHS
Server



AFTER

MASS
54
AREA
1472
HEIGHT
128
24-Aug-2022
15:50
ALSHS
S

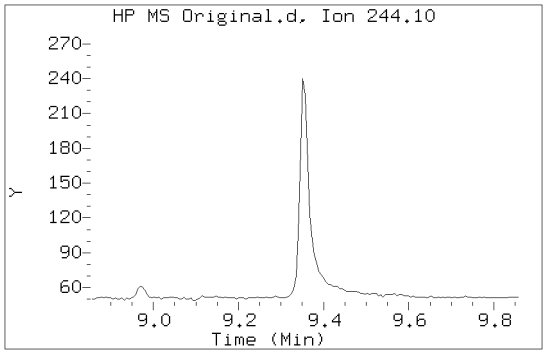


4-Terphenyl-d14 (1718-51-0)

Reason Code:

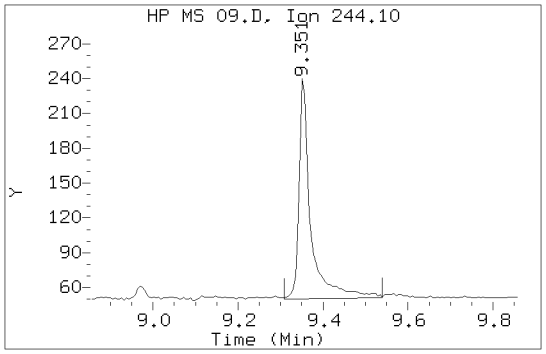
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
24-Aug-2022
14:17
ALSHS
Server



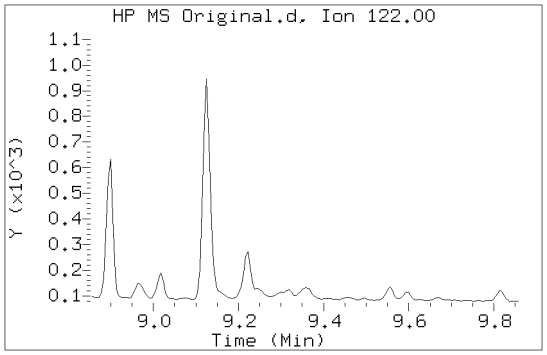
AFTER

MASS
244.1
AREA
364
HEIGHT
189
24-Aug-2022
15:50
ALSHS
S



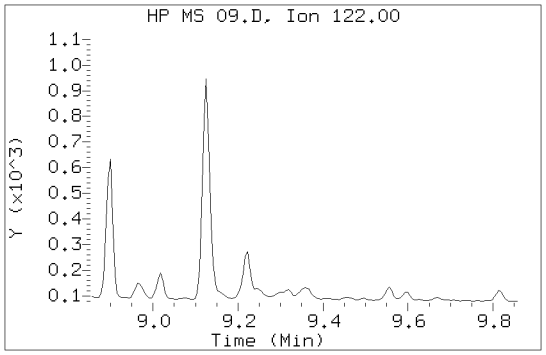
BEFORE

MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
14:17
ALSHS
Server



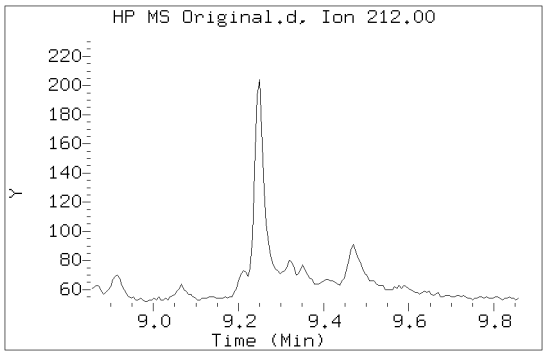
AFTER

MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



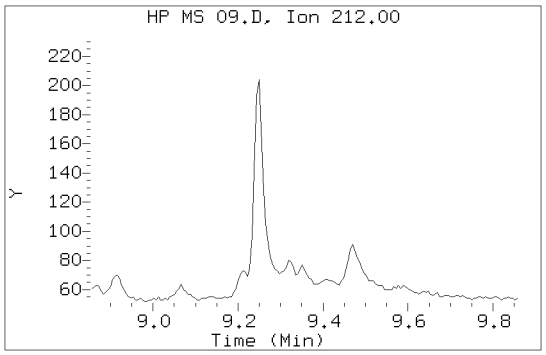
BEFORE

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
14:17
ALSHS
Server



AFTER

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



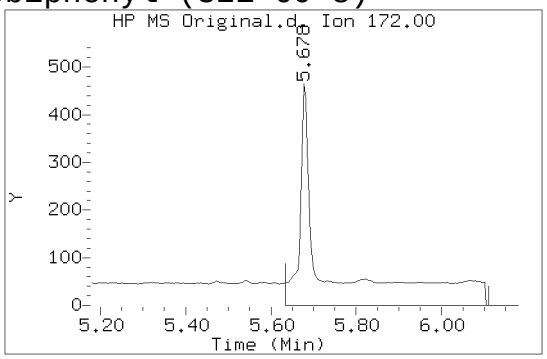
Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\09.D
Inj Date : 24-AUG-2022 14:01
InstruID : SV6.i
LabSampID : HS22080499-04

2-Fluorobiphenyl (321-60-8)

Reason Code:

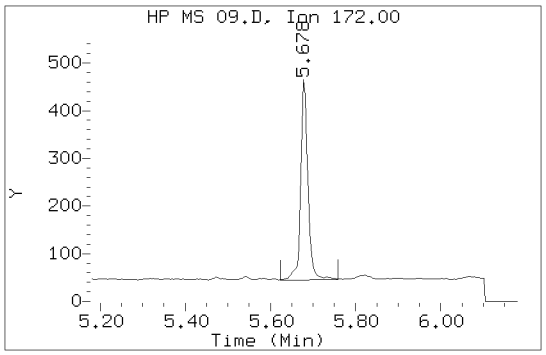
BEFORE

MASS
172
AREA
1842
HEIGHT
465
24-Aug-2022
14:17
ALSHS
Server



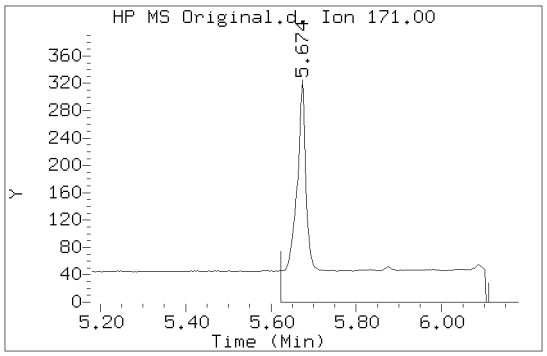
AFTER

MASS
172
AREA
489
HEIGHT
419
24-Aug-2022
15:50
ALSHS
S



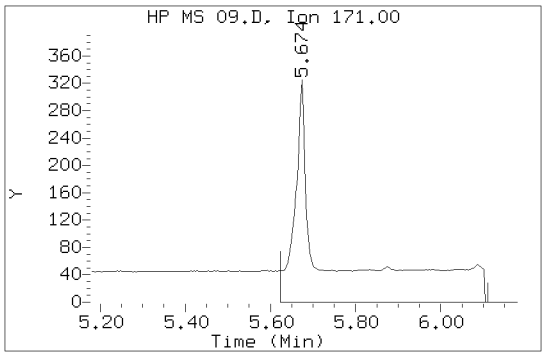
BEFORE

MASS
171
AREA
1747
HEIGHT
325
24-Aug-2022
14:17
ALSHS
Server



AFTER

MASS
171
AREA
1747
HEIGHT
325
24-Aug-2022
15:50
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\10.D Page 1
Report Date: 24-Aug-2022 15:50

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220824.b\10.D
Lab Smp Id: HS22080499-08
Inj Date : 24-AUG-2022 14:19
Operator : LG Inst ID: SV6.i
Smp Info : HS22080499-08X5
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220824.b\DXSIM.m
Meth Date : 24-Aug-2022 15:42 jjuarez Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 10
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	5.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.552	3.552	(1.000)	4038	0.10000	(aQ)
* 45 Naphthalene-d8	136	4.660	4.660	(1.000)	15363	0.10000	
$ 33 Nitrobenzene-d5	82	4.019	4.019	(0.862)	850	0.01660	0.08299(M)
* 86 Acenaphthene-d10	164	6.330	6.330	(1.000)	8890	0.10000	(Q)
$ 69 2-Fluorobiphenyl	172	5.677	5.681	(0.897)	1621	0.01171	0.05857(M)
* 126 Phenanthrene-d10	188	7.775	7.780	(1.000)	13820	0.10000	
* 182 Chrysene-d12	240	10.588	10.594	(1.000)	6781	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.351	9.356	(0.883)	1373	0.01077	0.05385(M)
* 198 Perylene-d12	264	12.640	12.645	(1.000)	4928	0.10000	
1 1,4-Dioxane	58	1.858	1.847	(0.523)	270	0.16287	0.8144(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01134189

Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\10.D

Date : 24-AUG-2022 14:19

Client ID:

Instrument: SV6.i

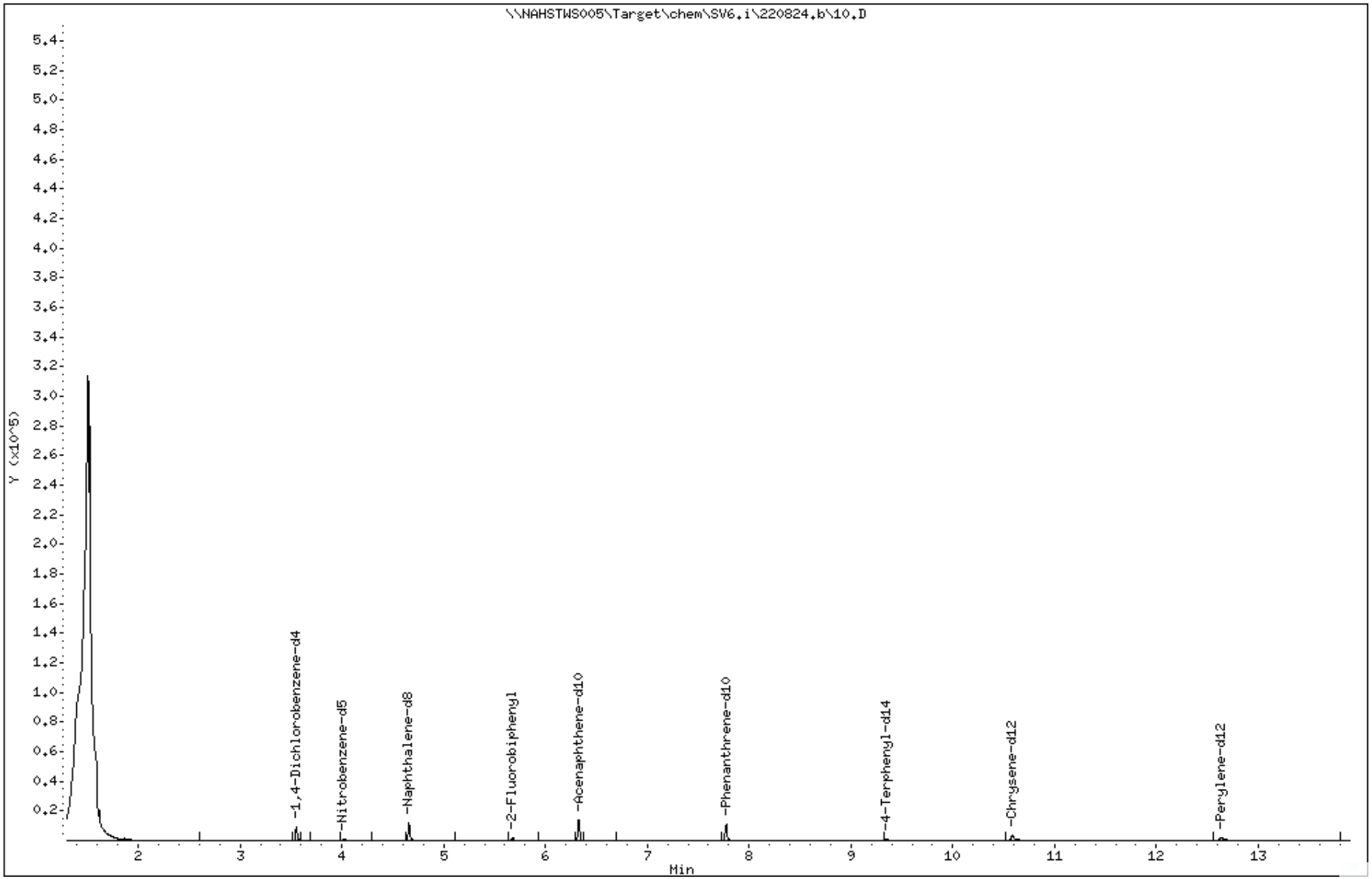
Sample Info: HS22080499-08X5

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\10.D

Date : 24-AUG-2022 14:19

Client ID:

Instrument: SV6.i

Sample Info: HS22080499-08X5

Purge Volume: 1000.0

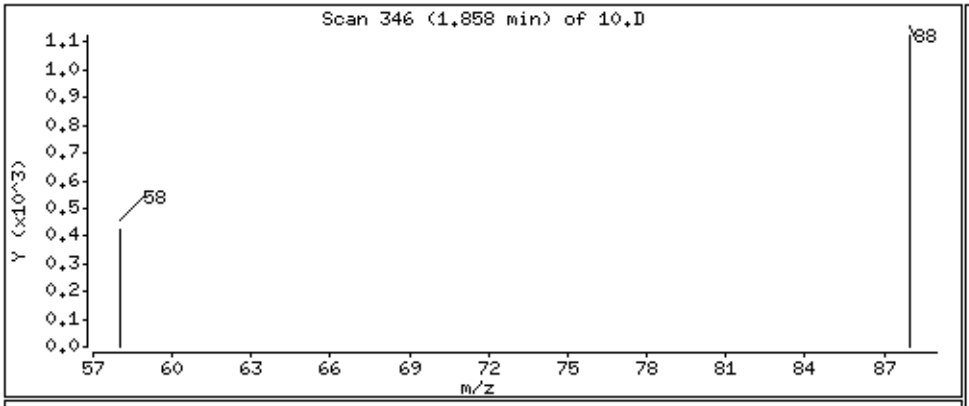
Operator: LG

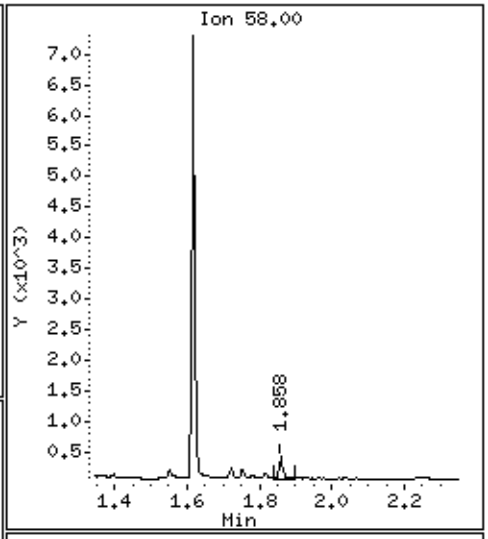
Column phase: RTX-5SIL MS

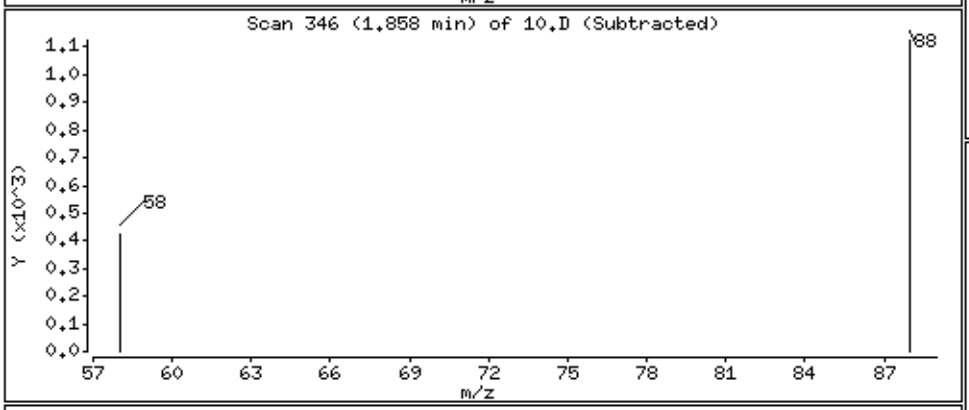
Column diameter: 0.28

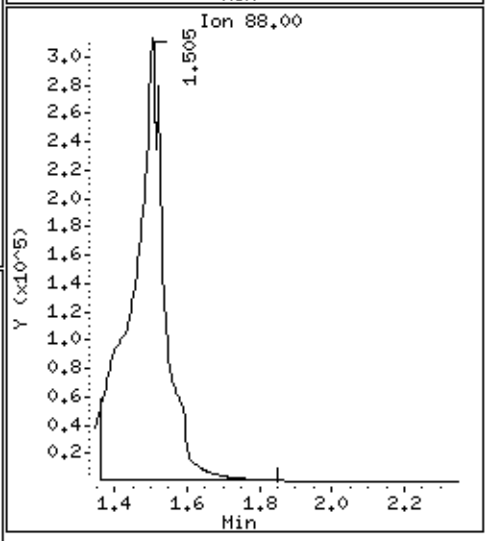
1 1,4-Dioxane

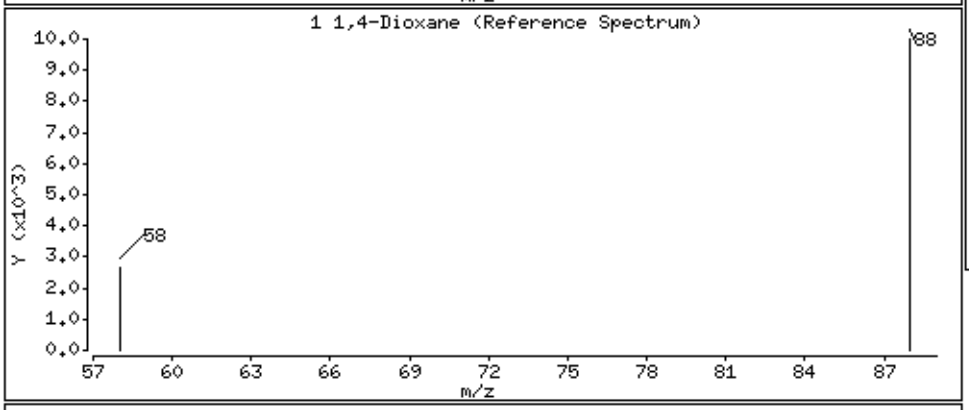
Concentration: 0.8144 ug/L

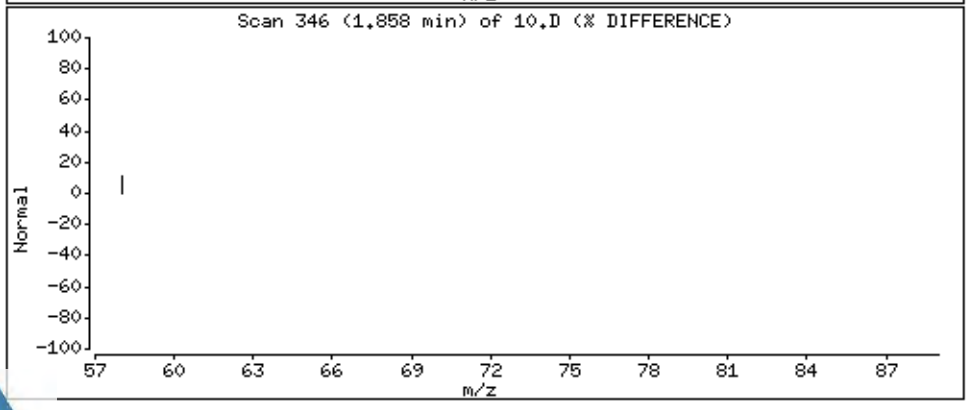












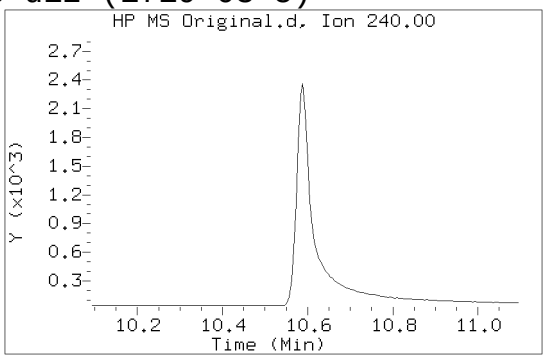
Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\10.D
Inj Date : 24-AUG-2022 14:19
InstruID : SV6.i
LabSampID : HS22080499-08

Chrysene-d12 (1719-03-5)

Reason Code:

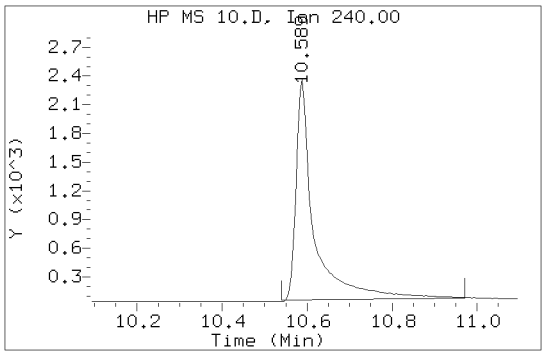
BEFORE

MASS
240
AREA
0
HEIGHT
0
24-Aug-2022
14:35
ALSHS
Server



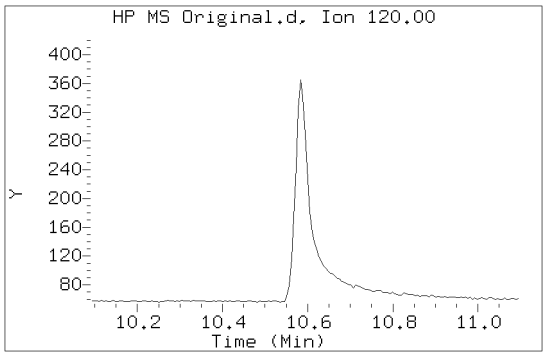
AFTER

MASS
240
AREA
6781
HEIGHT
2301
24-Aug-2022
15:50
ALSHS
S



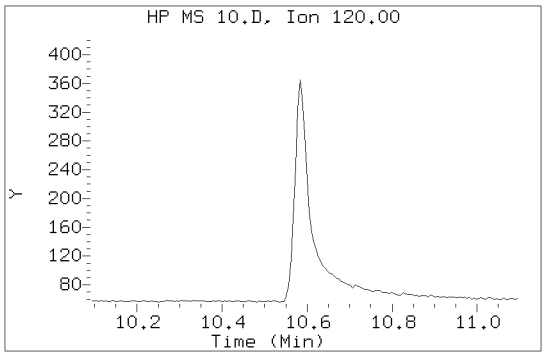
BEFORE

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
14:35
ALSHS
Server



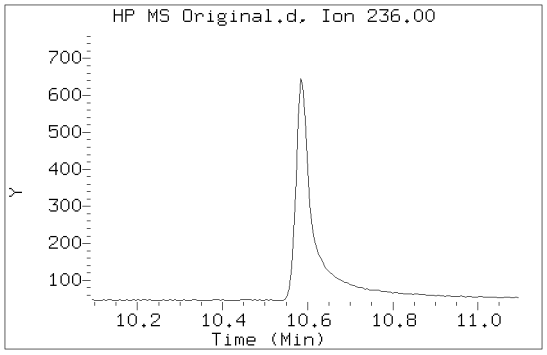
AFTER

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



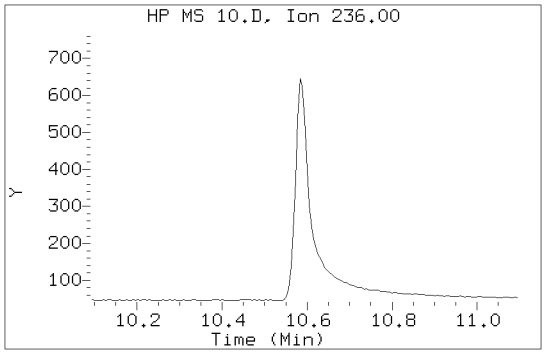
BEFORE

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
14:35
ALSHS
Server



AFTER

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S

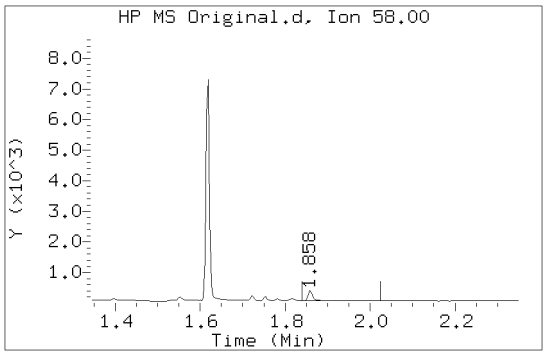


1,4-Dioxane ()

Reason Code:

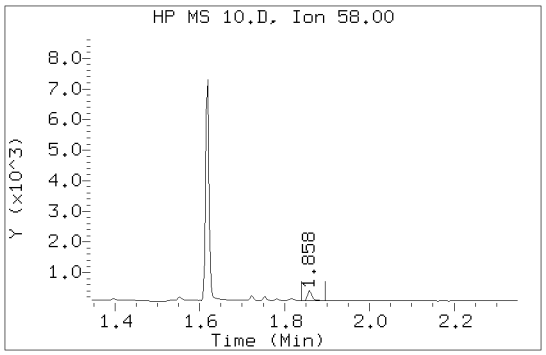
BEFORE

MASS
58
AREA
292
HEIGHT
348
24-Aug-2022
14:35
ALSHS
Server



AFTER

MASS
58
AREA
270
HEIGHT
348
24-Aug-2022
15:50
ALSHS
S



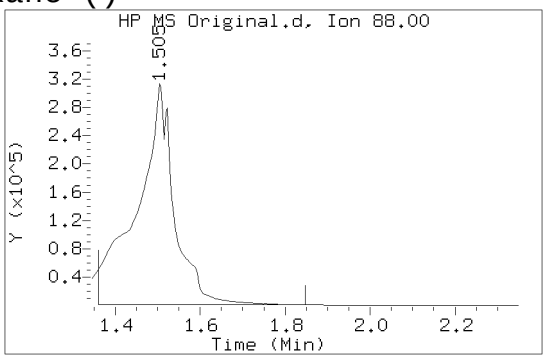
Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\10.D
Inj Date : 24-AUG-2022 14:19
InstruID : SV6.i
LabSampID : HS22080499-08

1,4-Dioxane ()

Reason Code:

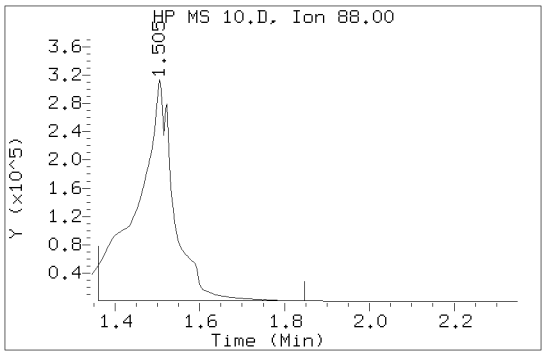
BEFORE

MASS
88
AREA
1913832
HEIGHT
312543
24-Aug-2022
14:35
ALSHS
Server



AFTER

MASS
88
AREA
1913832
HEIGHT
312543
24-Aug-2022
15:50
ALSHS
S

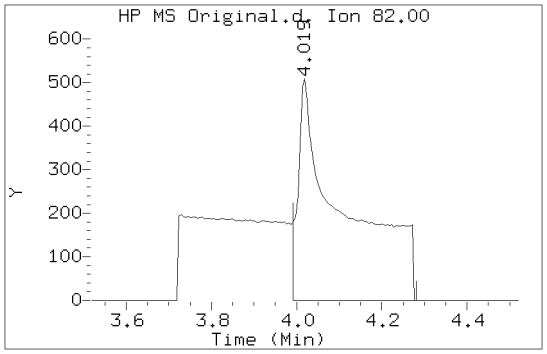


Nitrobenzene-d5 (4165-60-0)

Reason Code:

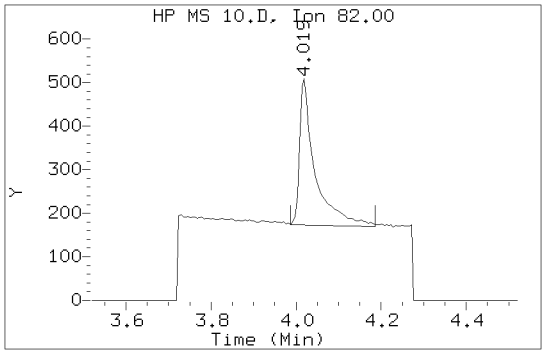
BEFORE

MASS
82
AREA
3755
HEIGHT
509
24-Aug-2022
14:35
ALSHS
Server



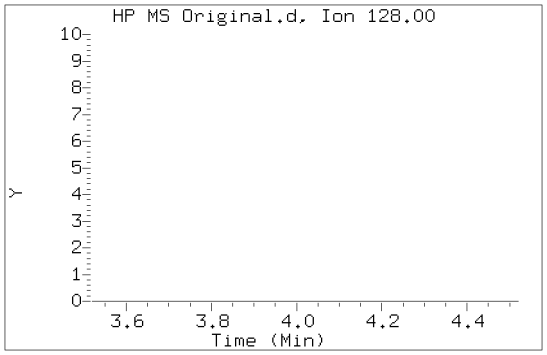
AFTER

MASS
82
AREA
850
HEIGHT
335
24-Aug-2022
15:50
ALSHS
S



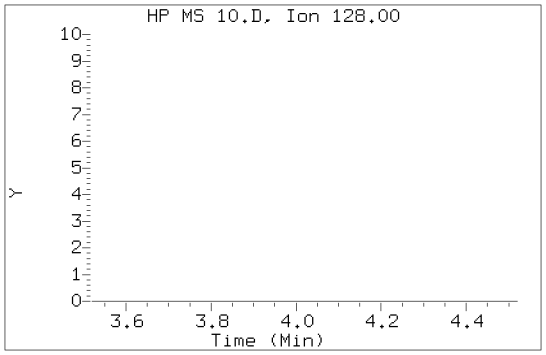
BEFORE

MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
14:35
ALSHS
Server



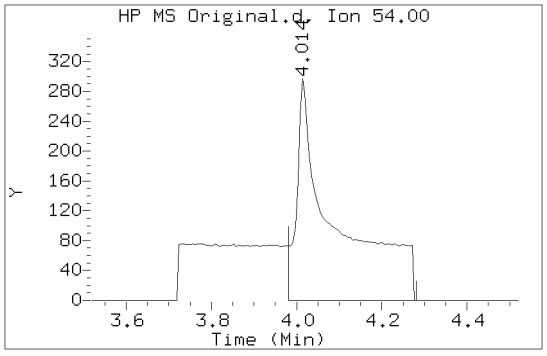
AFTER

MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



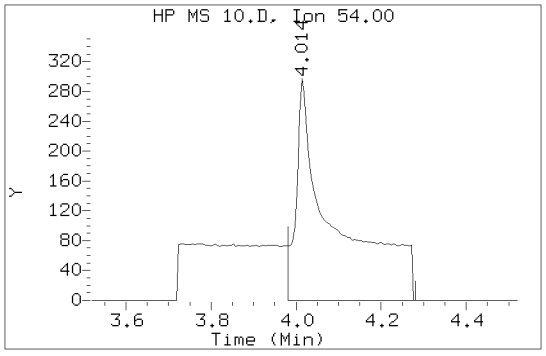
BEFORE

MASS
54
AREA
1837
HEIGHT
297
24-Aug-2022
14:35
ALSHS
Server



AFTER

MASS
54
AREA
1837
HEIGHT
297
24-Aug-2022
15:50
ALSHS
S



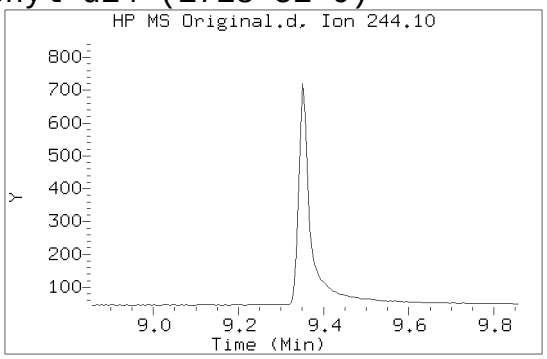
Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\10.D
Inj Date : 24-AUG-2022 14:19
InstruID : SV6.i
LabSampID : HS22080499-08

4-Terphenyl-d14 (1718-51-0)

Reason Code:

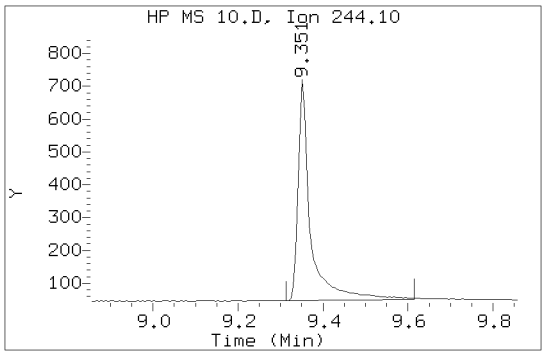
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
24-Aug-2022
14:35
ALSHS
Server



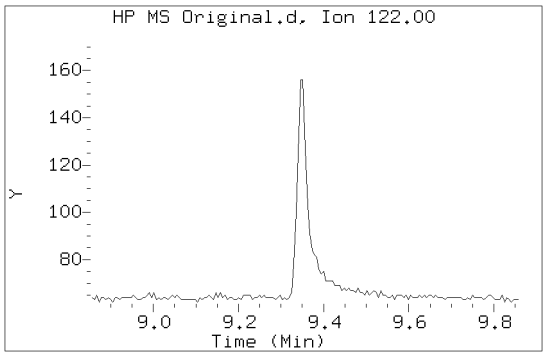
AFTER

MASS
244.1
AREA
1373
HEIGHT
672
24-Aug-2022
15:50
ALSHS
S



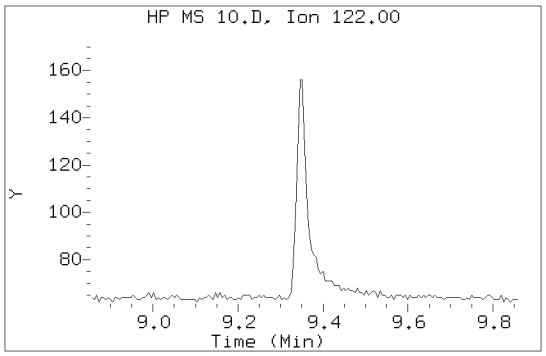
BEFORE

MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
14:35
ALSHS
Server



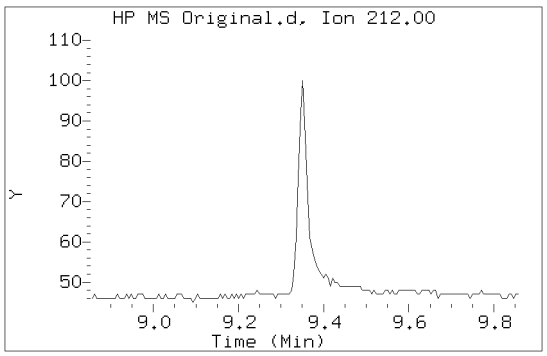
AFTER

MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



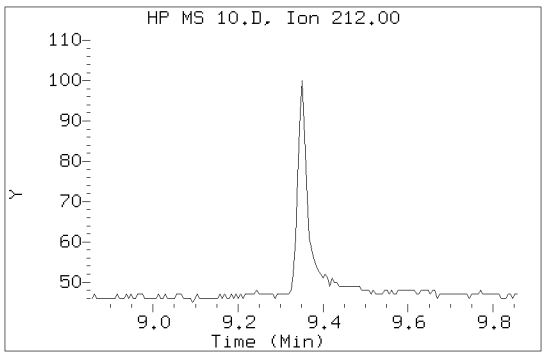
BEFORE

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
14:35
ALSHS
Server



AFTER

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S

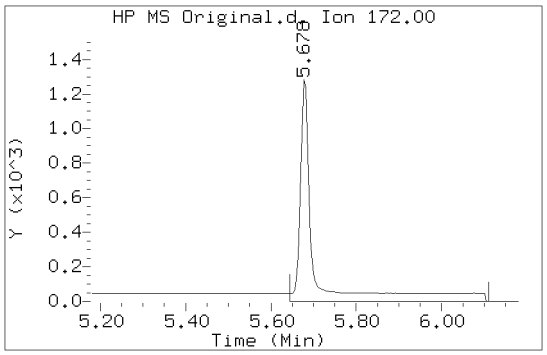


2-Fluorobiphenyl (321-60-8)

Reason Code:

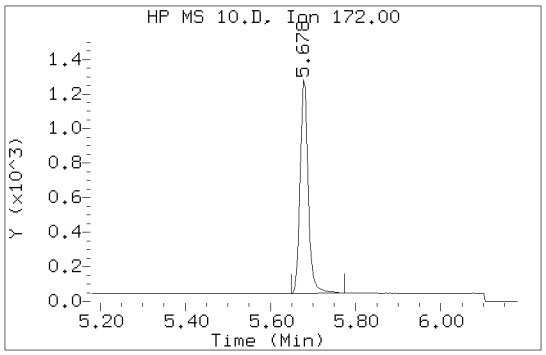
BEFORE

MASS
172
AREA
2918
HEIGHT
1283
24-Aug-2022
14:35
ALSHS
Server



AFTER

MASS
172
AREA
1621
HEIGHT
1236
24-Aug-2022
15:50
ALSHS
S



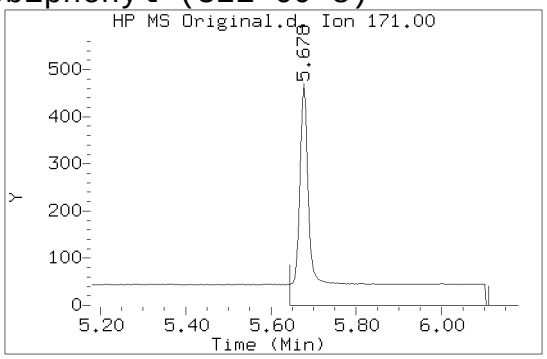
Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\10.D
Inj Date : 24-AUG-2022 14:19
InstruID : SV6.i
LabSampID : HS22080499-08

2-Fluorobiphenyl (321-60-8)

Reason Code:

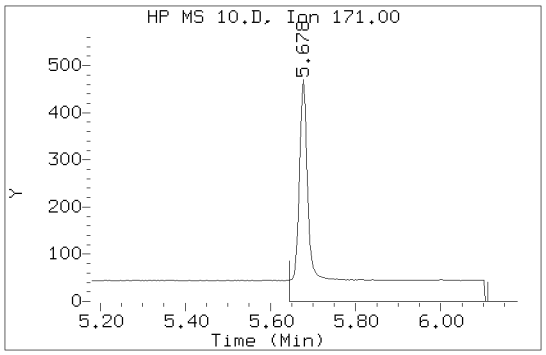
BEFORE

MASS
171
AREA
1795
HEIGHT
470
24-Aug-2022
14:35
ALSHS
Server



AFTER

MASS
171
AREA
1795
HEIGHT
470
24-Aug-2022
15:50
ALSHS
S



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220824.b\33.D
Lab Smp Id: 1 4-DIOX-CCV Client Smp ID: 1 4-DIOX-CCV
Inj Date : 24-AUG-2022 21:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4-DIOX-0.08;1 4-DIOX-0.08;2
Misc Info :
Comment :
Method : \\nahstws005\Target\chem\SV6.i\220824.b\DXSIM.m
Meth Date : 30-Aug-2022 12:43 Linh.Pham Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTWS005

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	
* 20 1,4-Dichlorobenzene-d4	152	3.557	3.557	(1.000)	3119	0.10000		(aQ)
* 45 Naphthalene-d8	136	4.682	4.682	(1.000)	11675	0.10000		
$ 33 Nitrobenzene-d5	82	4.072	4.072	(0.870)	2276	0.08000	0.05848	(QM)
* 86 Acenaphthene-d10	164	6.351	6.351	(1.000)	6859	0.10000		(Q)
$ 69 2-Fluorobiphenyl	172	5.714	5.714	(0.900)	6713	0.08000	0.06288	(M)
* 126 Phenanthrene-d10	188	7.802	7.802	(1.000)	9884	0.10000		
* 182 Chrysene-d12	240	10.615	10.615	(1.000)	5614	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.378	9.378	(0.883)	5996	0.08000	0.05681	(M)
* 198 Perylene-d12	264	12.672	12.672	(1.000)	4222	0.10000		(M)
1 1,4-Dioxane	58	1.828	1.828	(0.514)	176	0.08000	0.1374	(QM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\33.D

Date : 24-AUG-2022 21:12

Client ID: 1 4-DIOX-CCV

Instrument: SV6.i

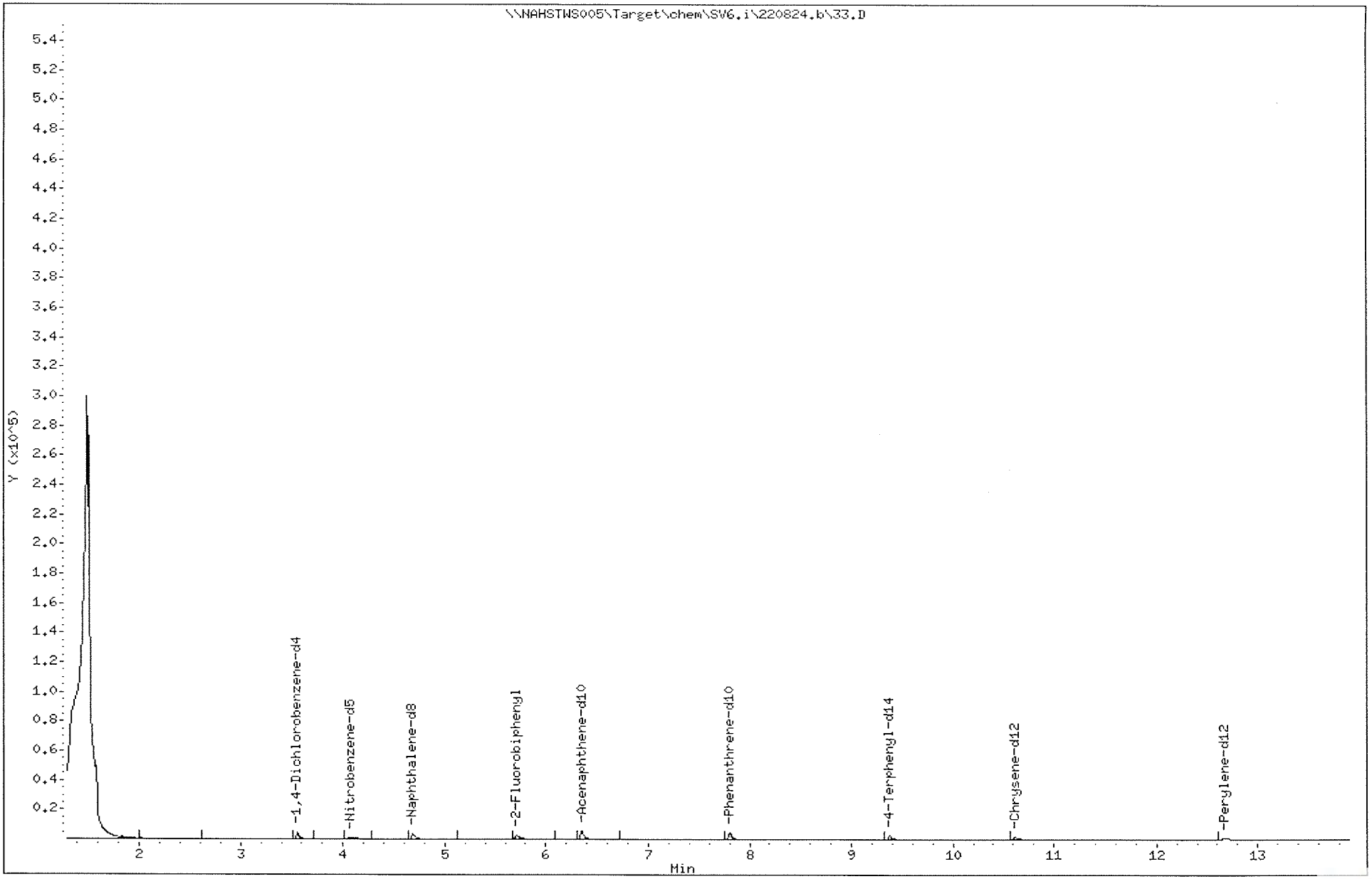
Sample Info: 1 4-DIOX-0.08;1 4-DIOX-0.08;2

Purge Volume: 1000.0

Operator: LG

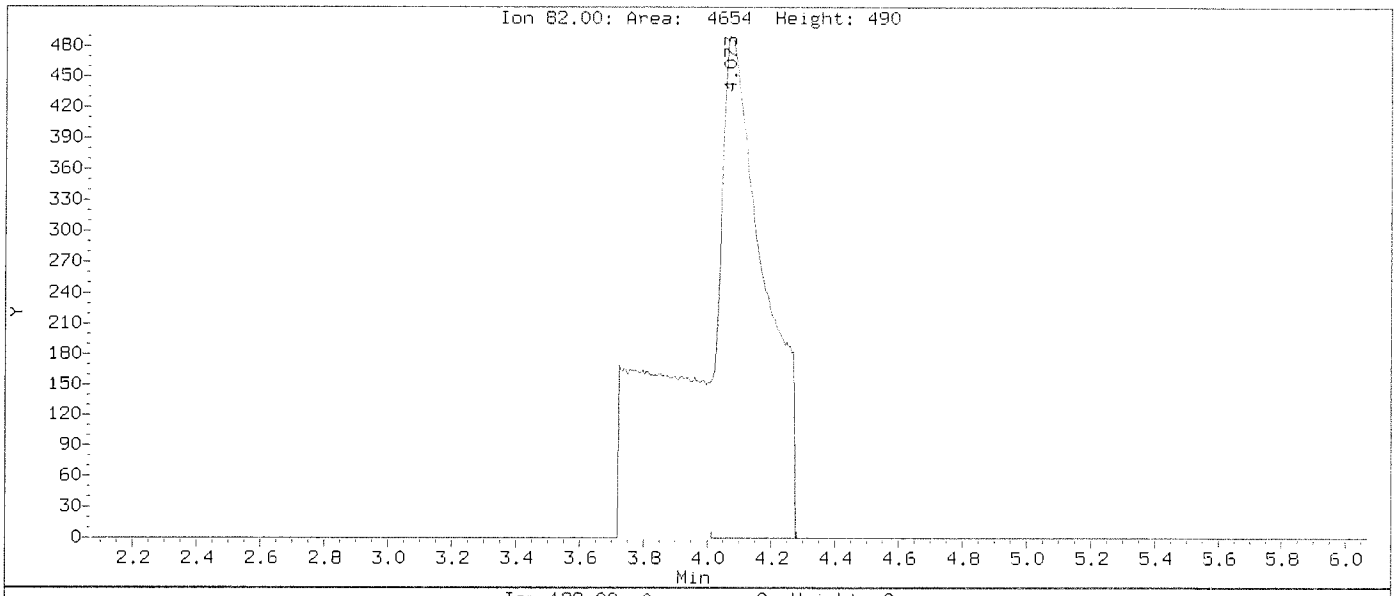
Column phase: RTX-5SIL MS

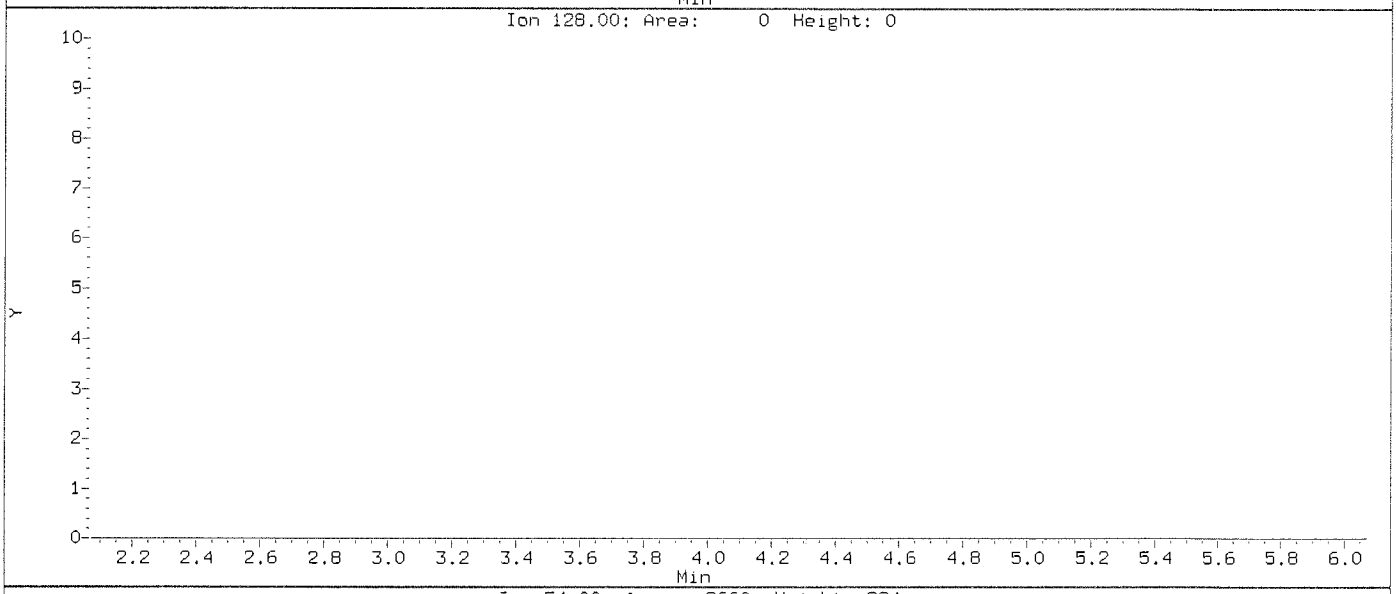
Column diameter: 0.28

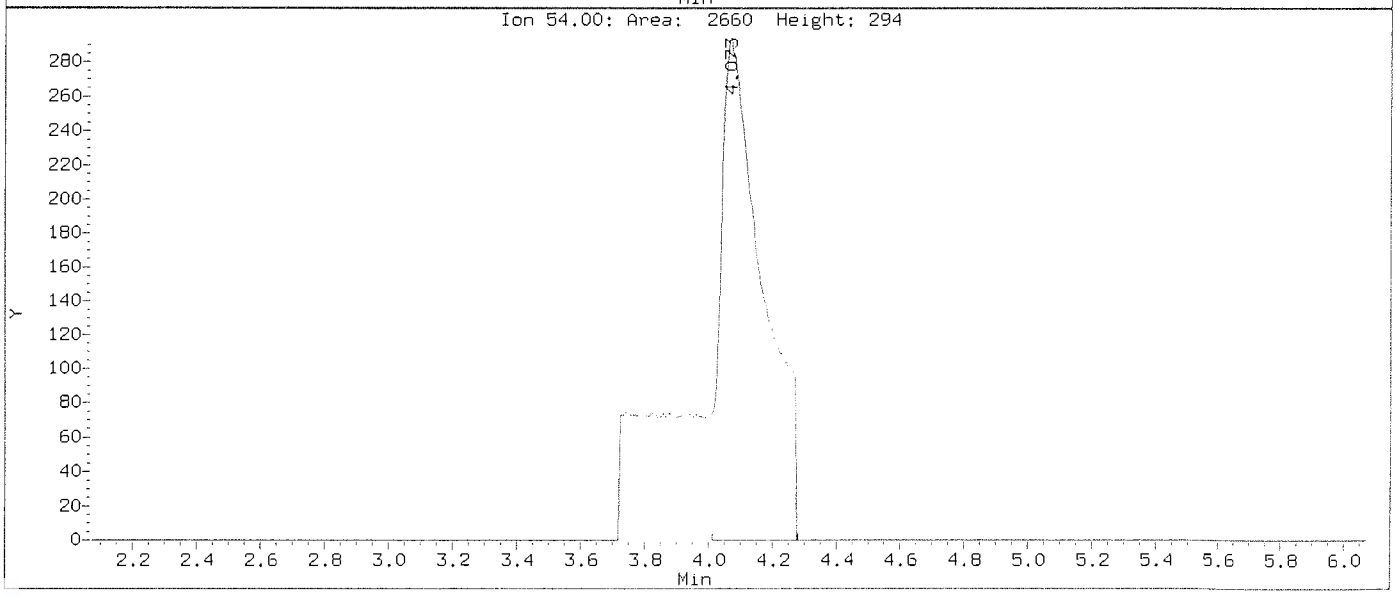


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: Nitrobenzene-d5
CAS Number: 4165-60-0

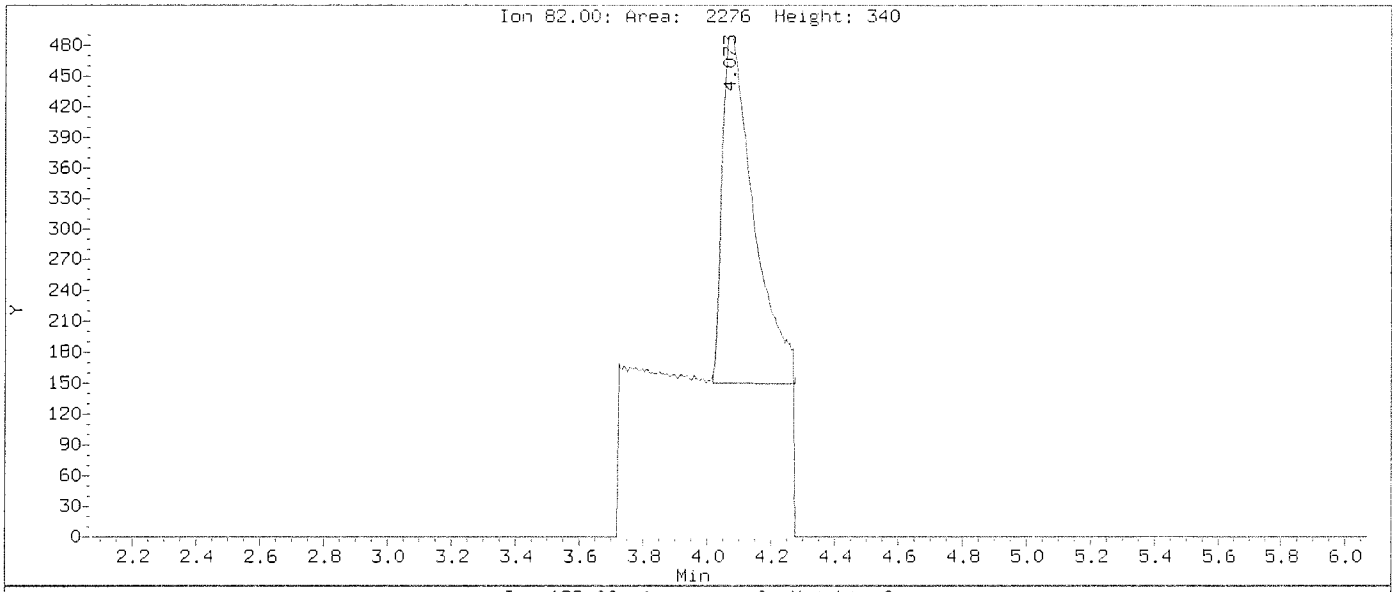


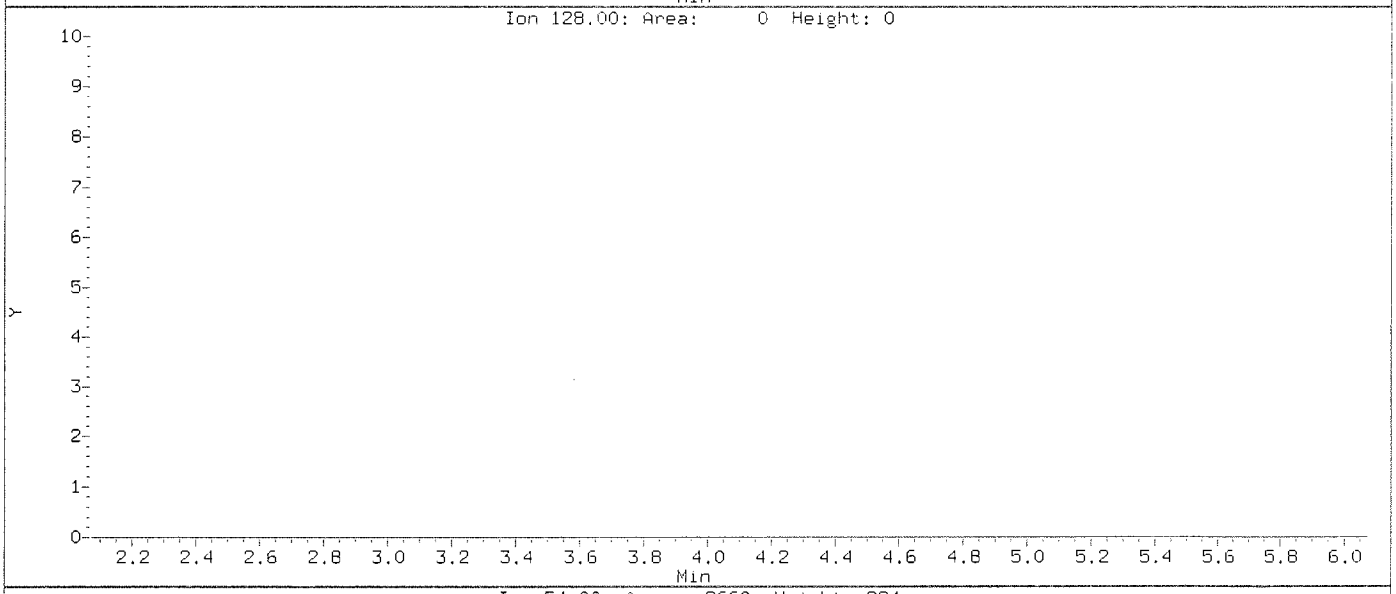


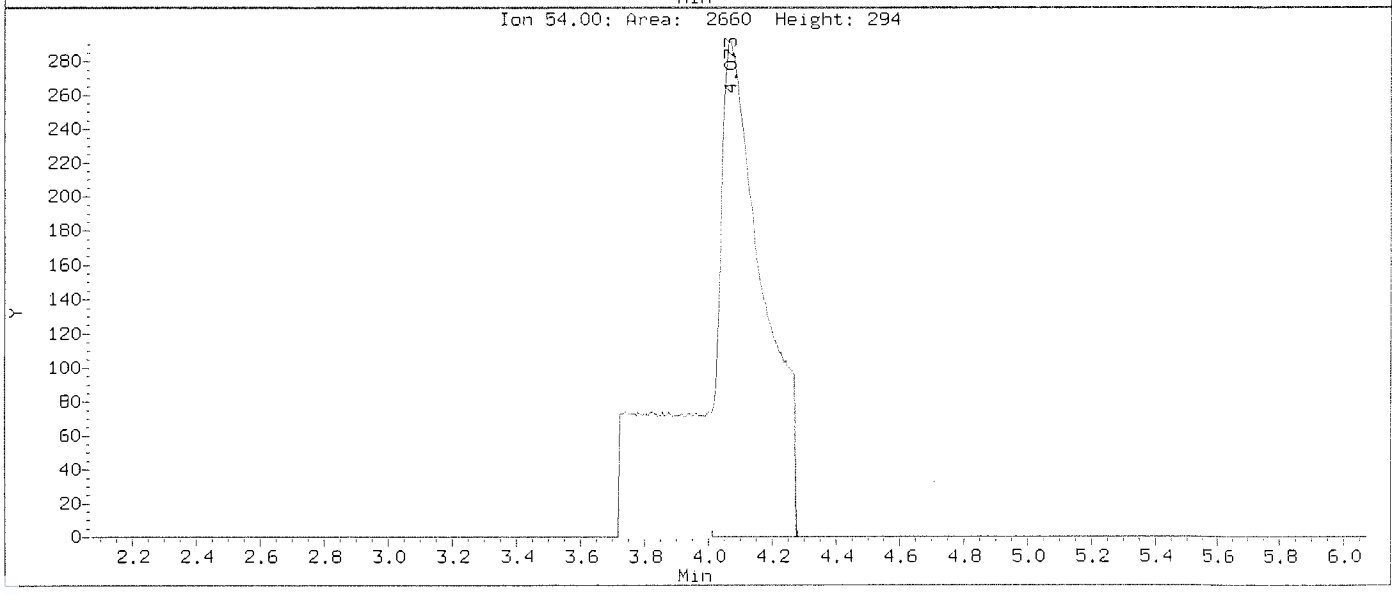


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: Nitrobenzene-d5
CAS Number: 4165-60-0

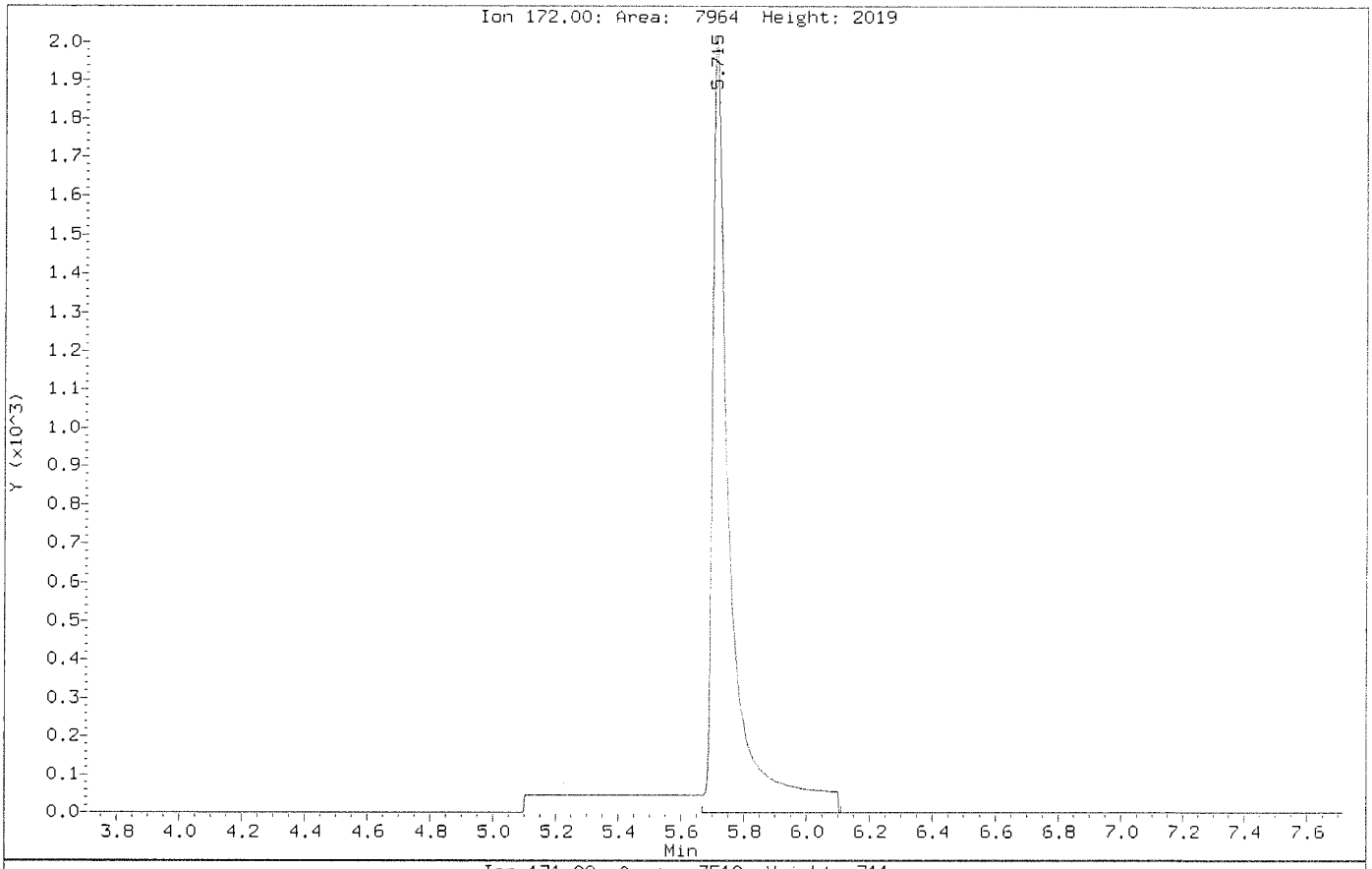


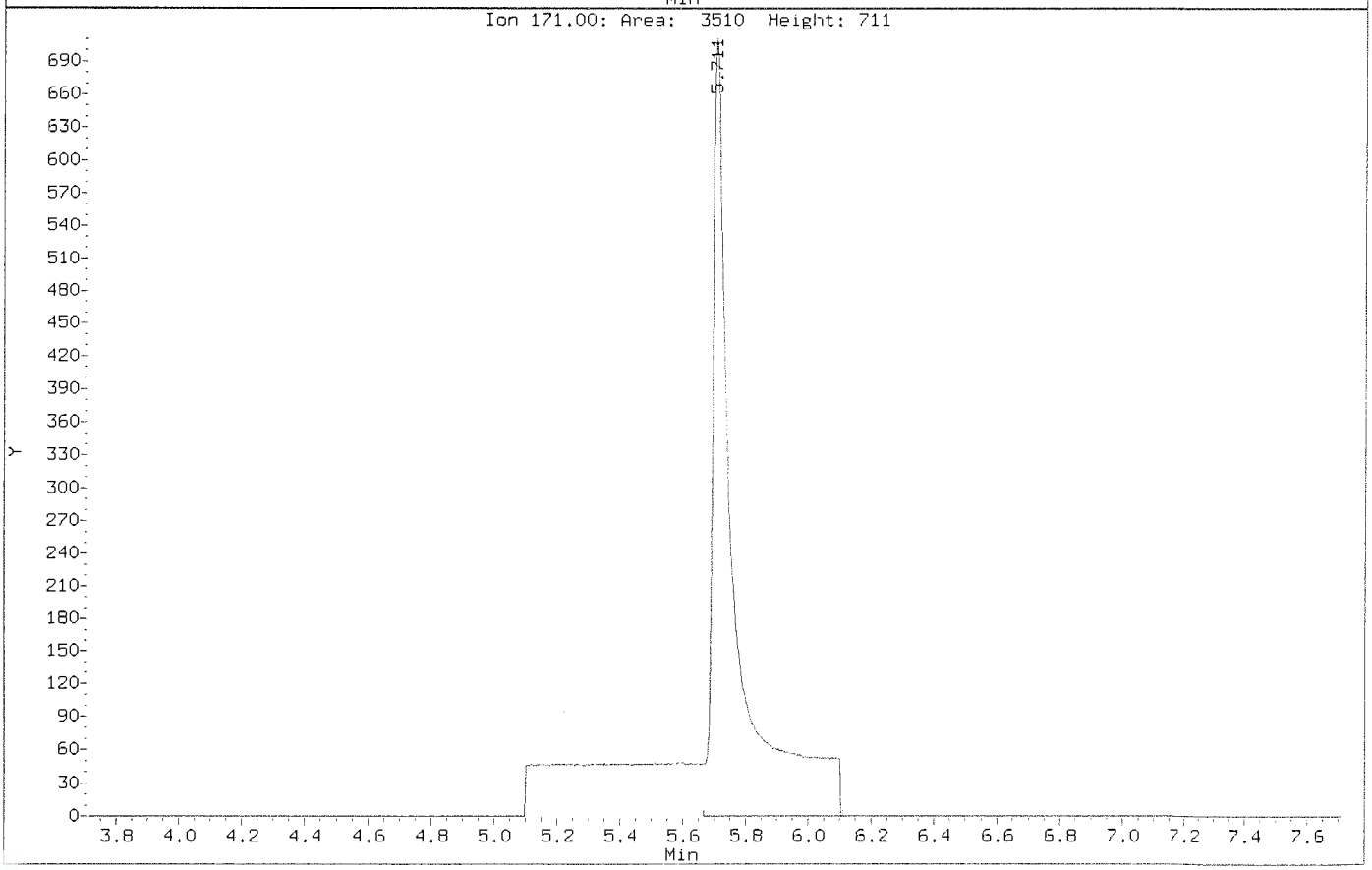




Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

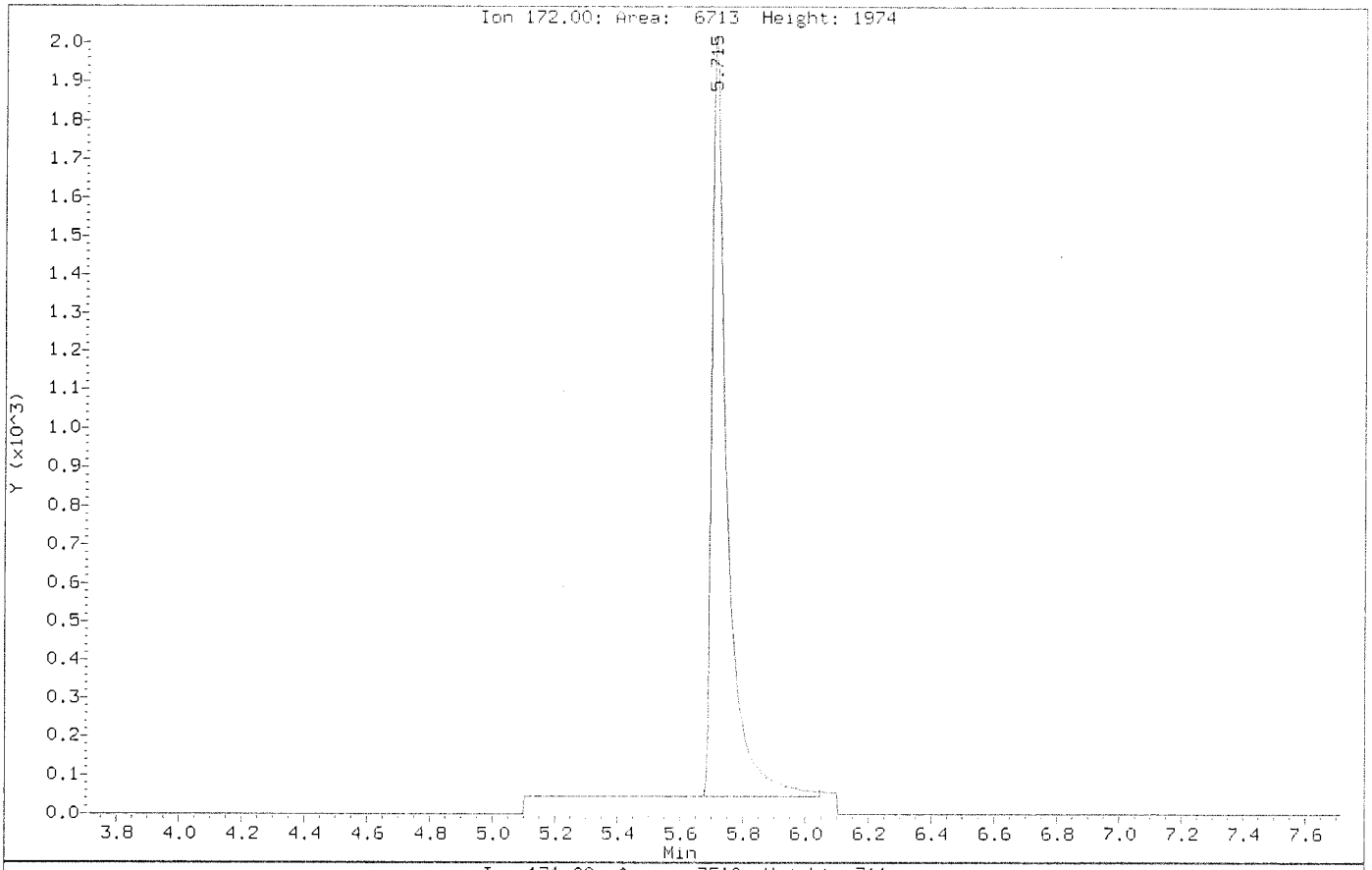
Compound: 2-Fluorobiphenyl
CAS Number: 321-60-8

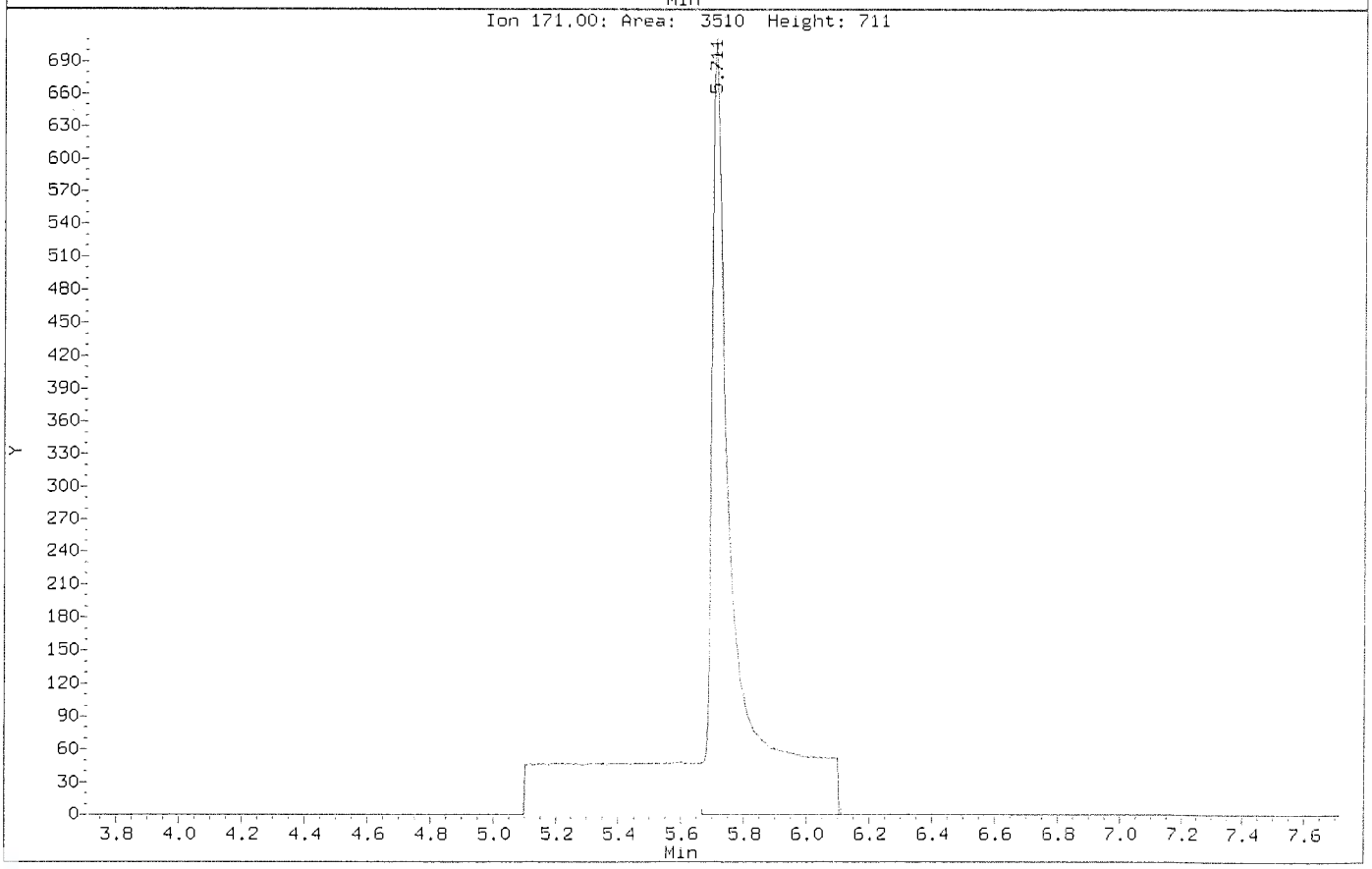




Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

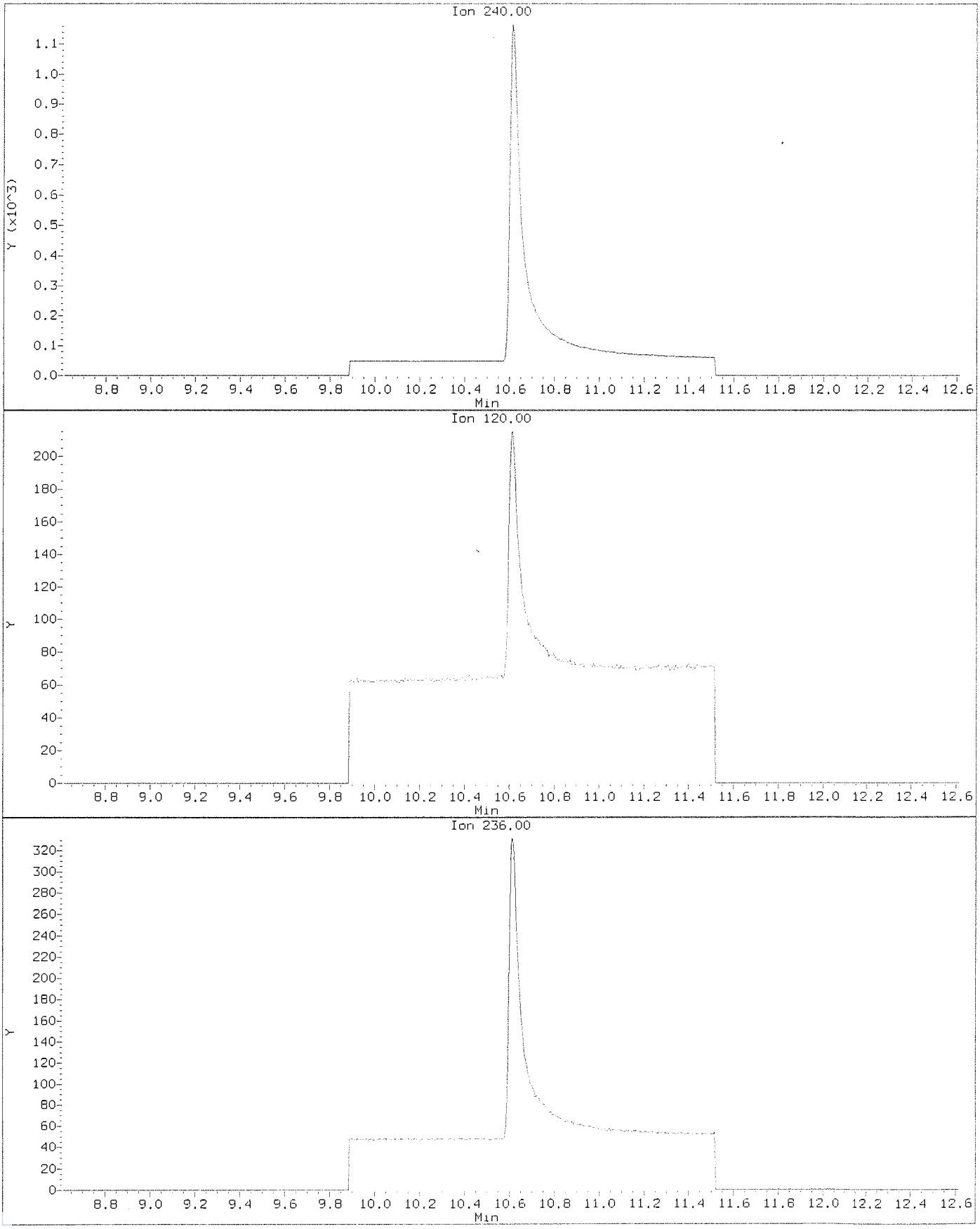
Compound: 2-Fluorobiphenyl
CAS Number: 321-60-8





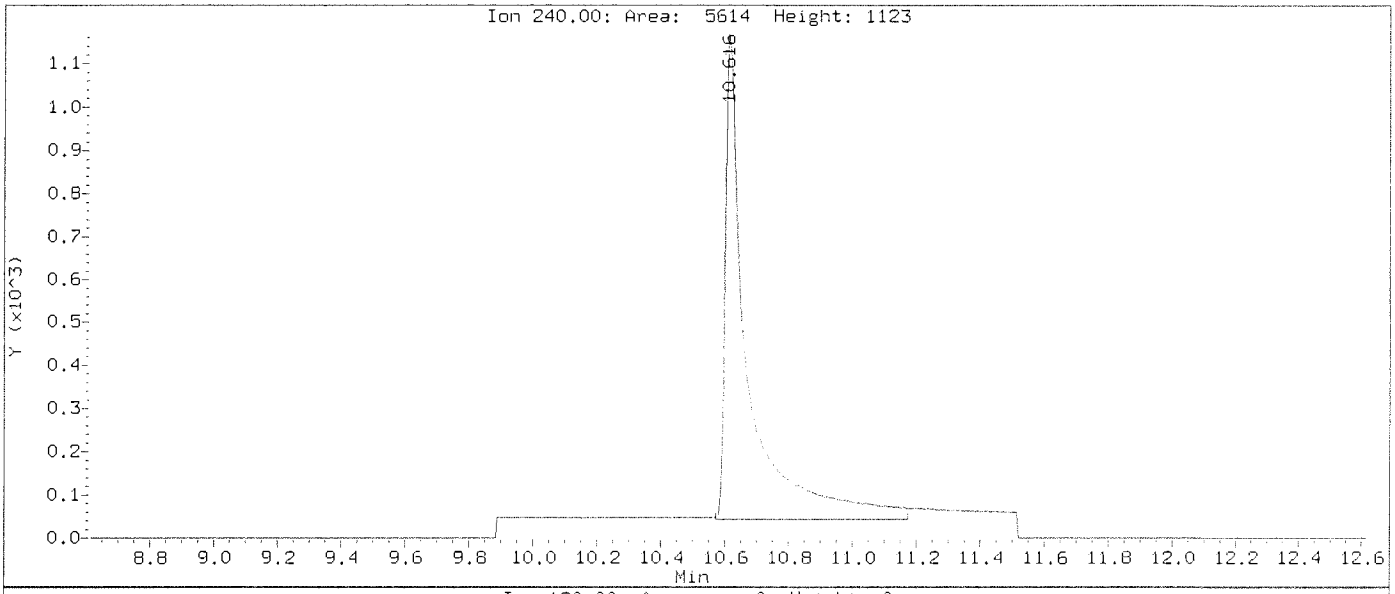
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

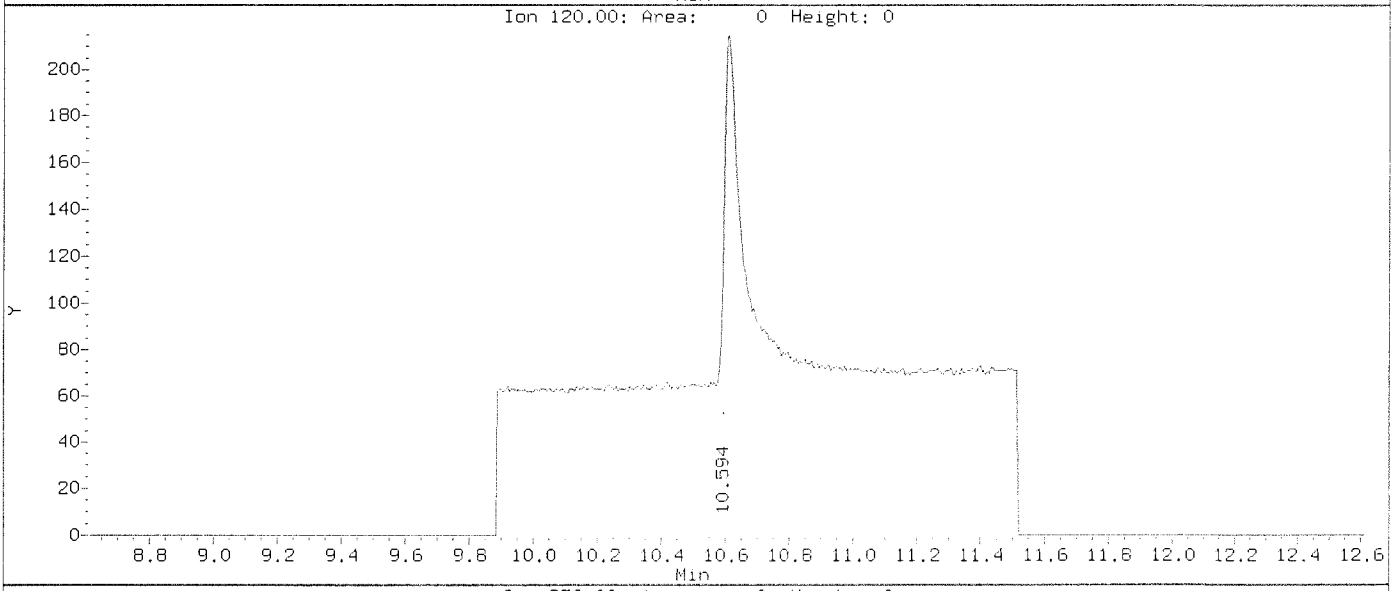
Compound: Chrysene-d12
CAS Number: 1719-03-5

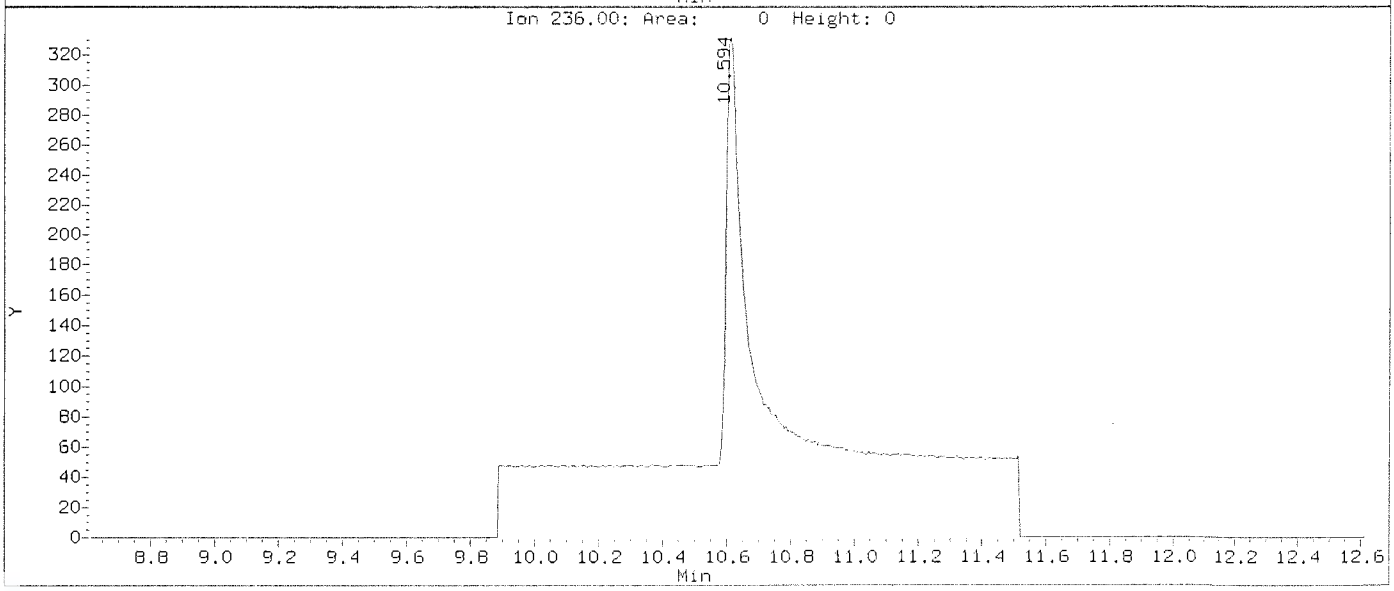


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: Chrysene-d12
CAS Number: 1719-03-5

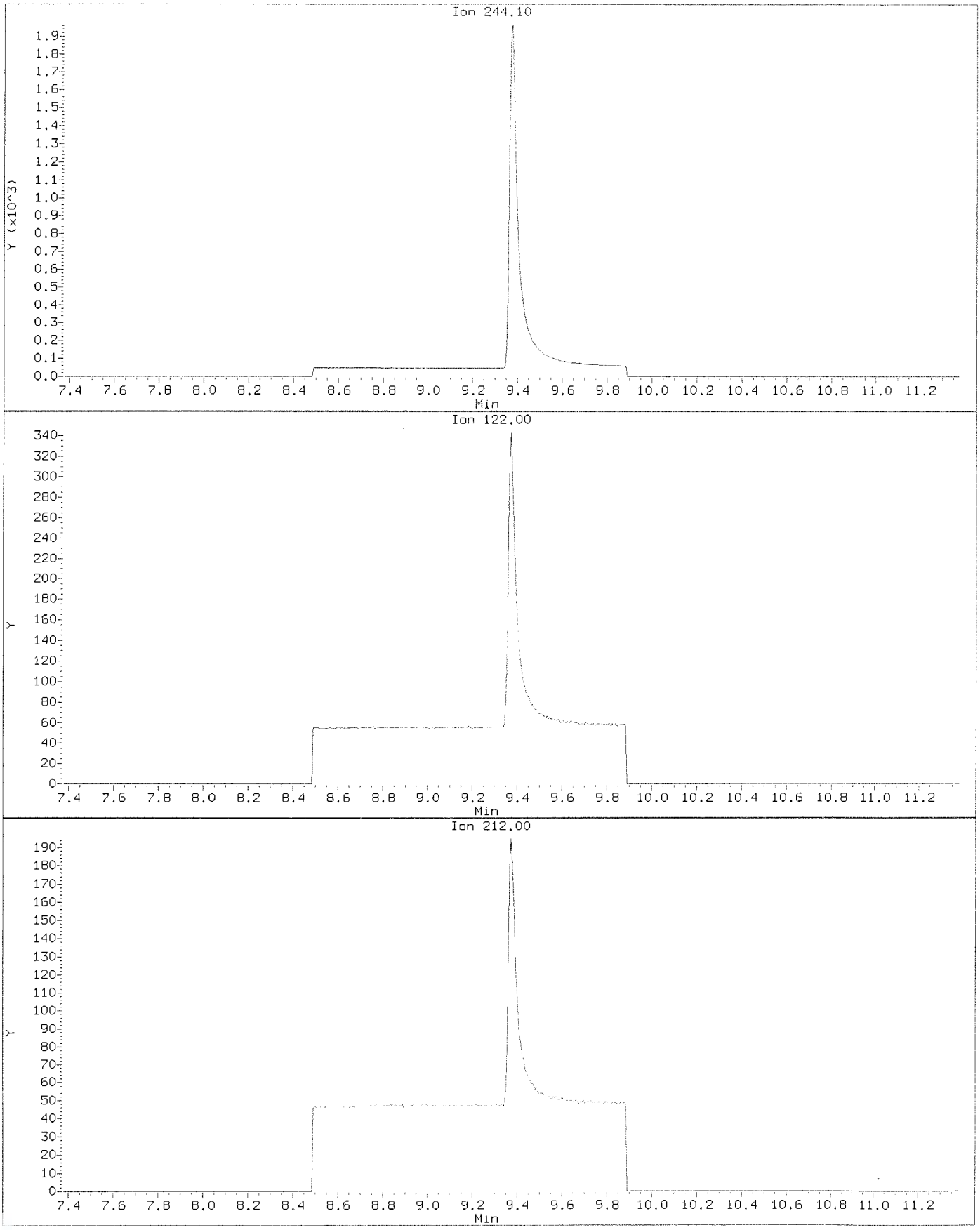






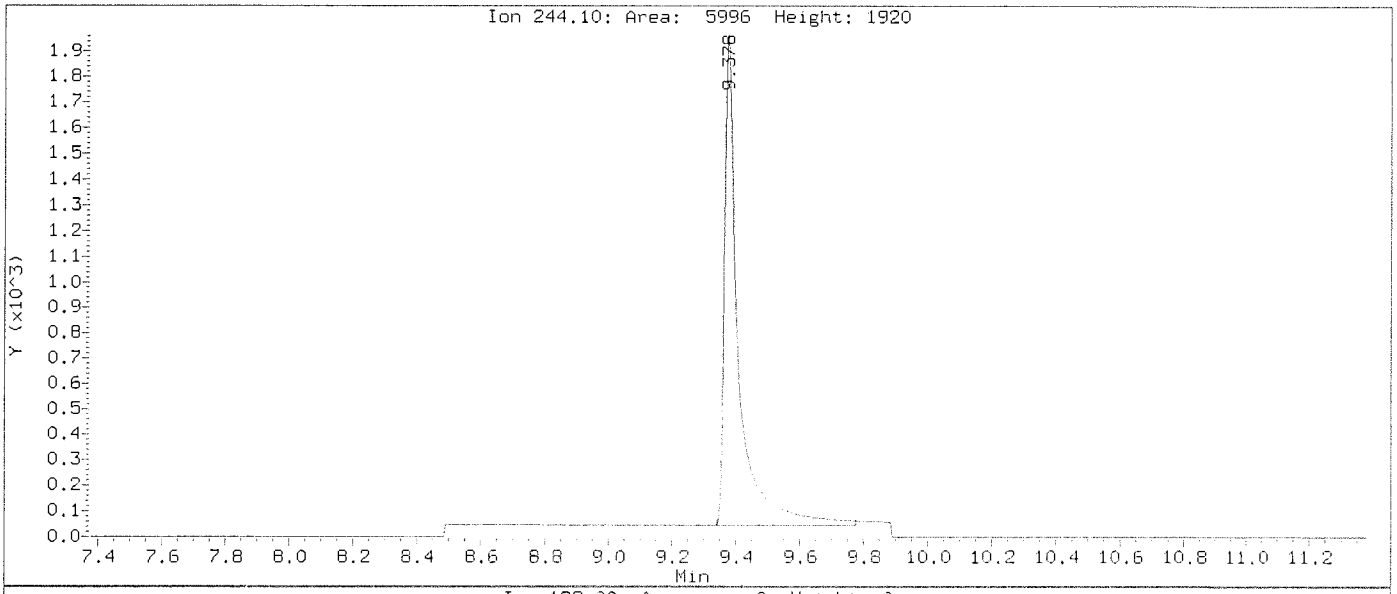
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

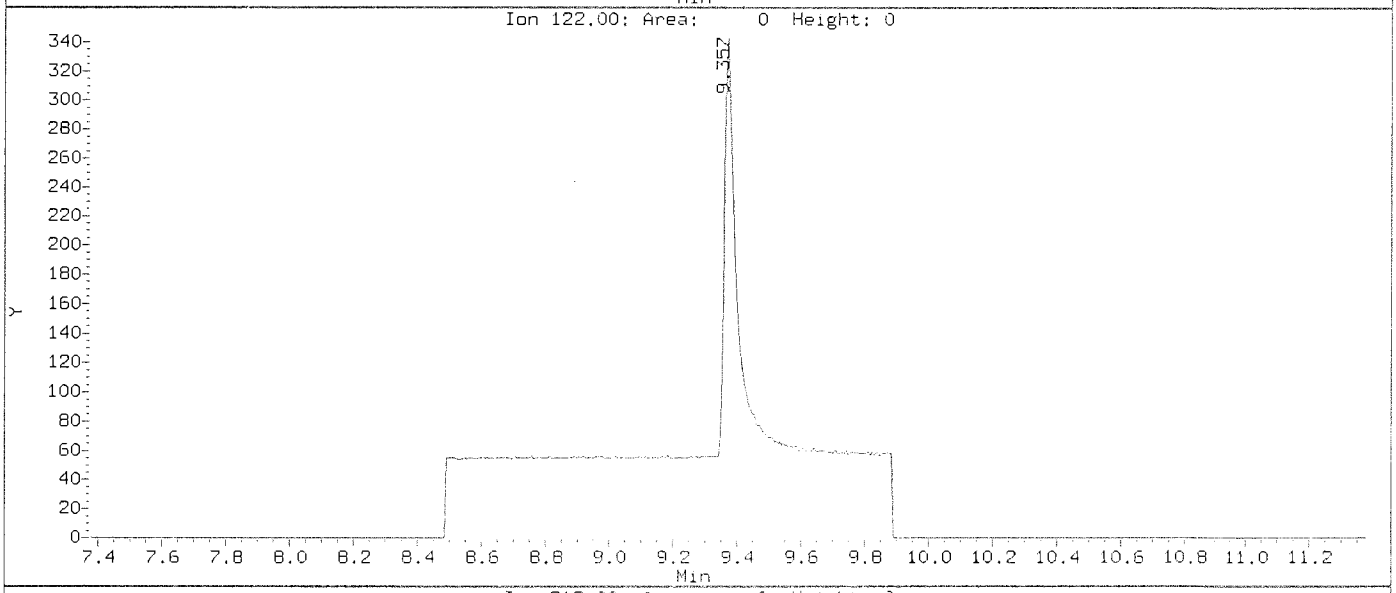
Compound: 4-Terphenyl-d14
CAS Number: 1718-51-0

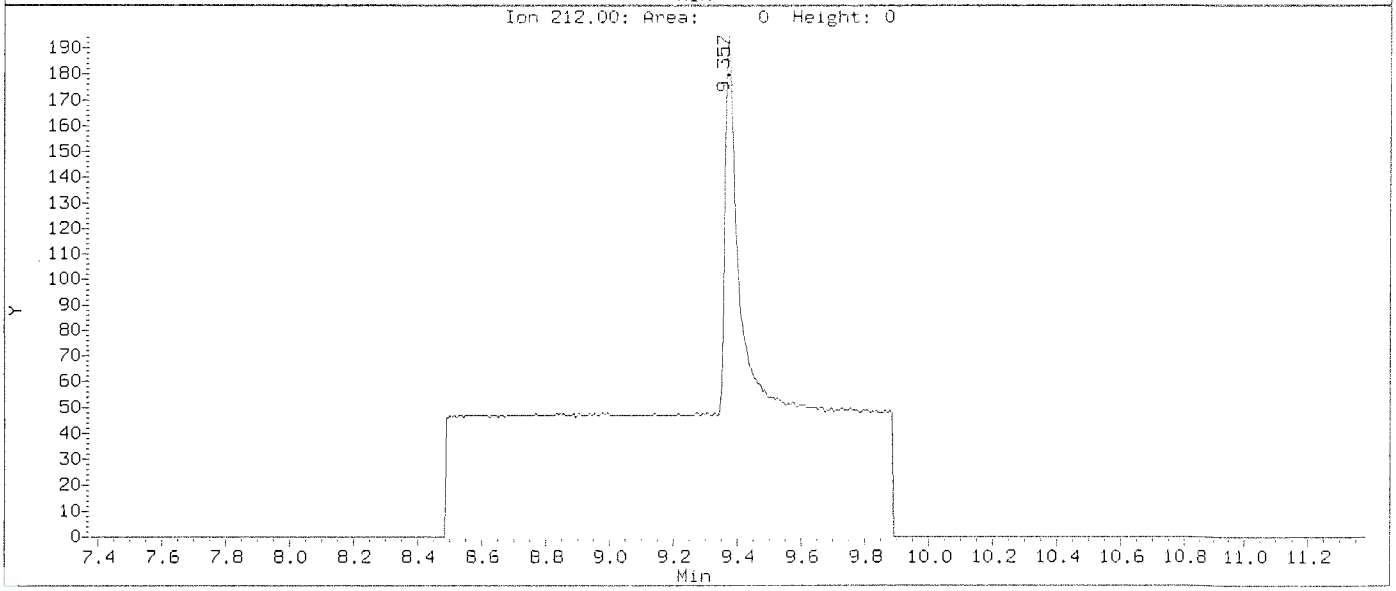


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: 4-Terphenyl-d14
CAS Number: 1718-51-0

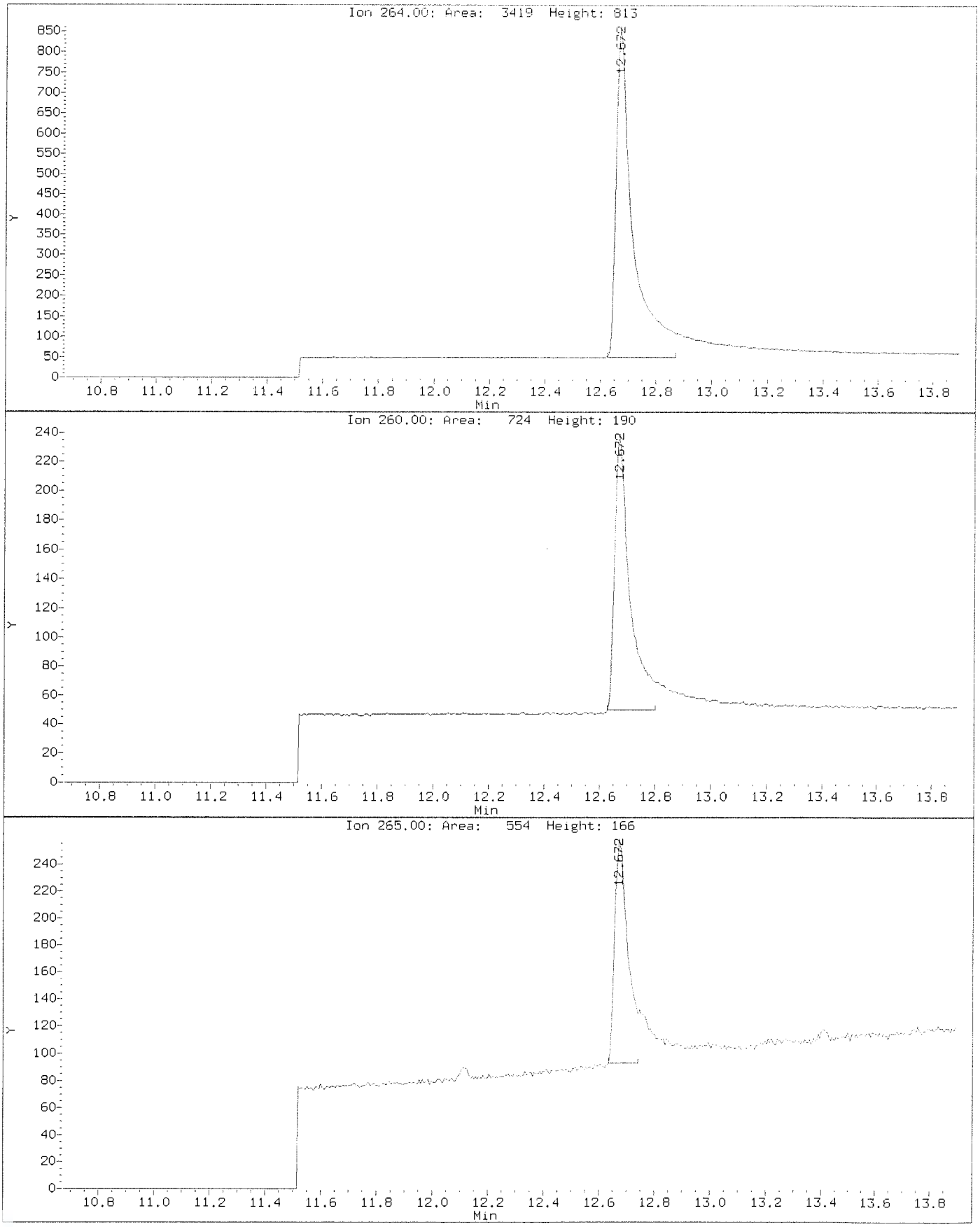






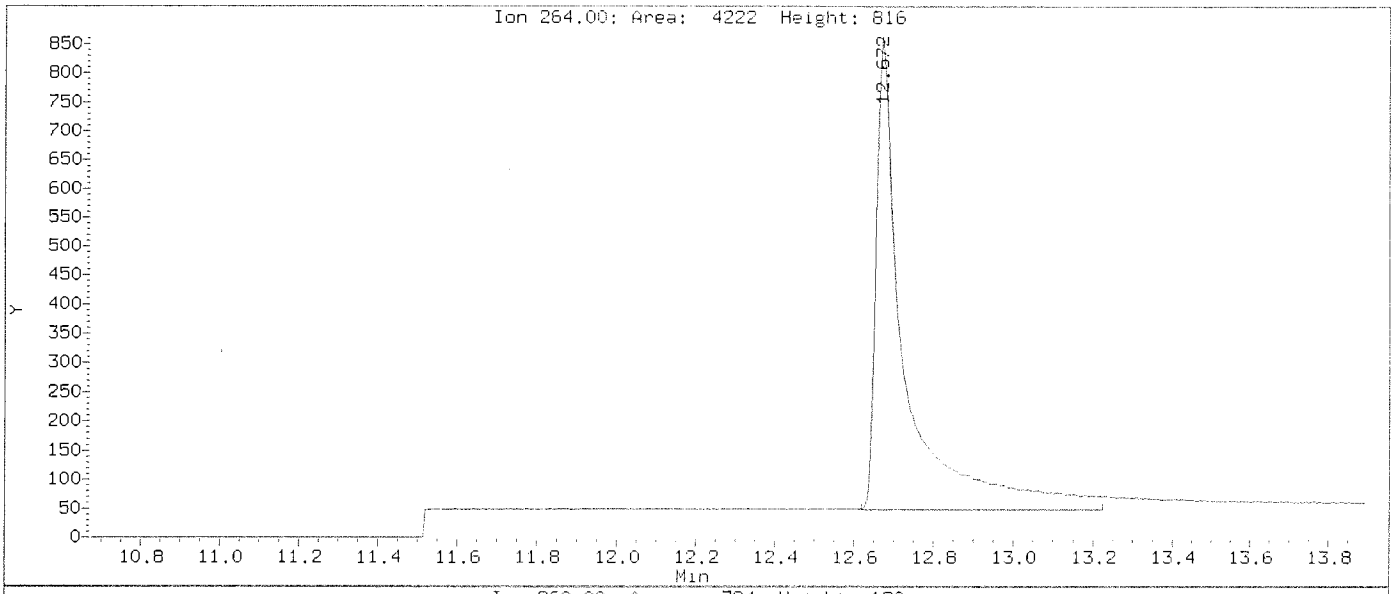
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

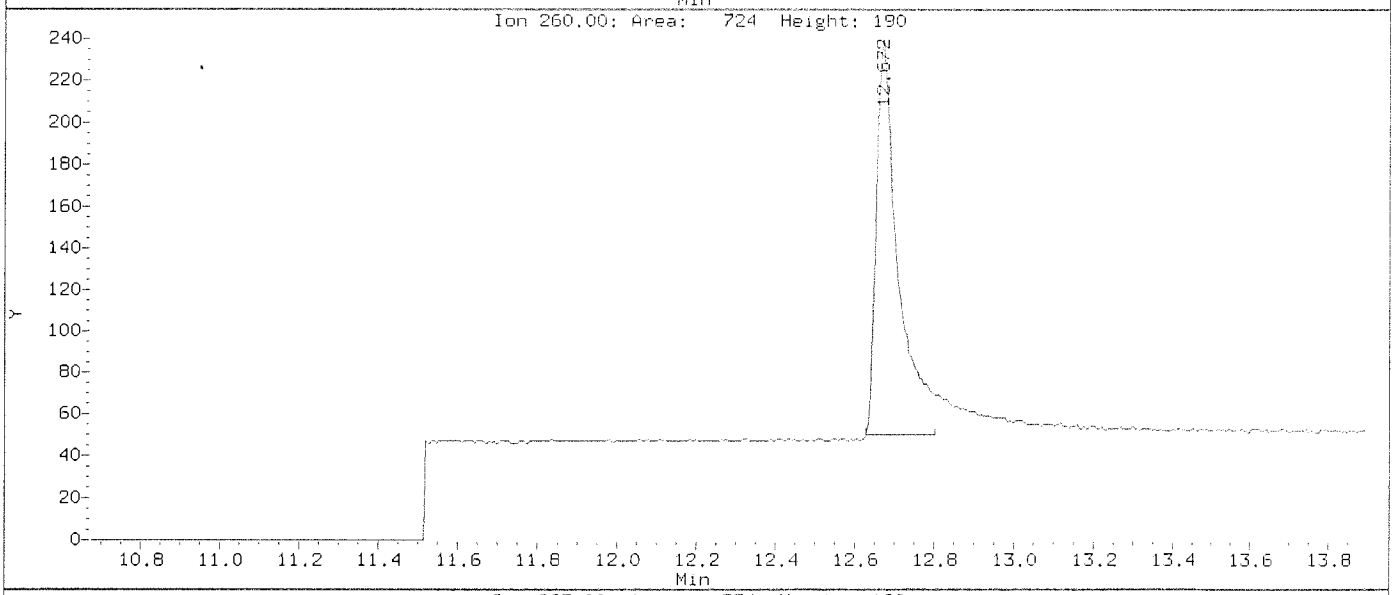
Compound: Perylene-d12
CAS Number: 1520-96-3

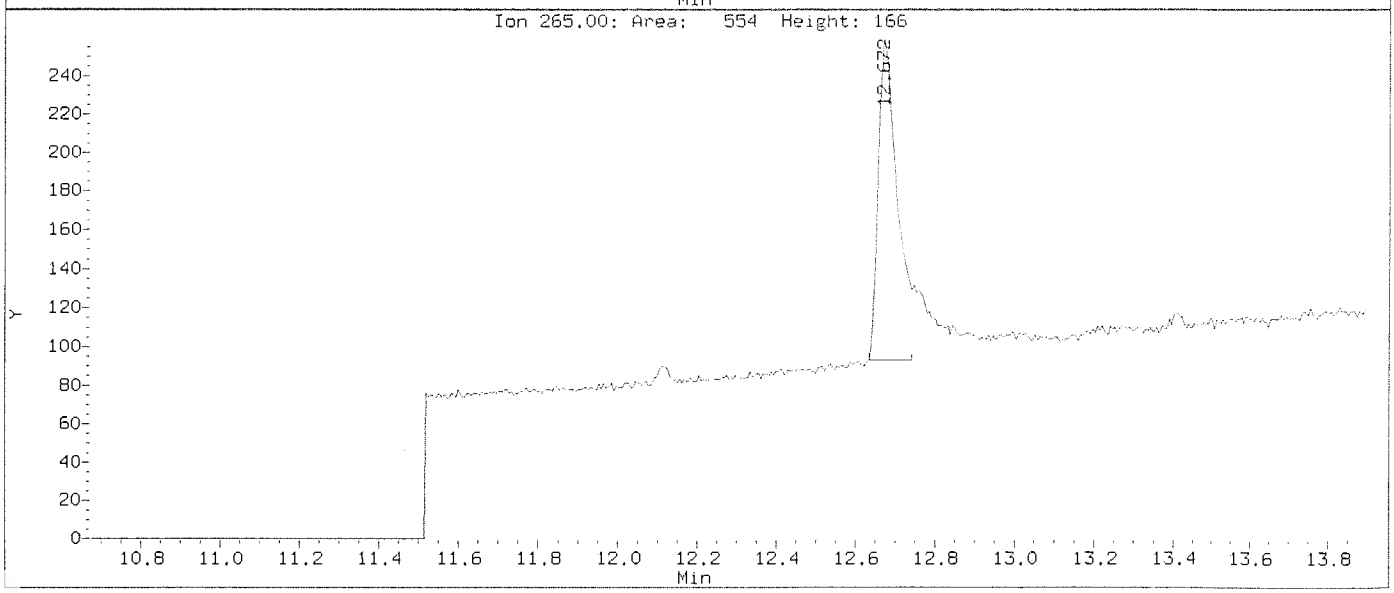


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: Perylene-d12
CAS Number: 1520-96-3

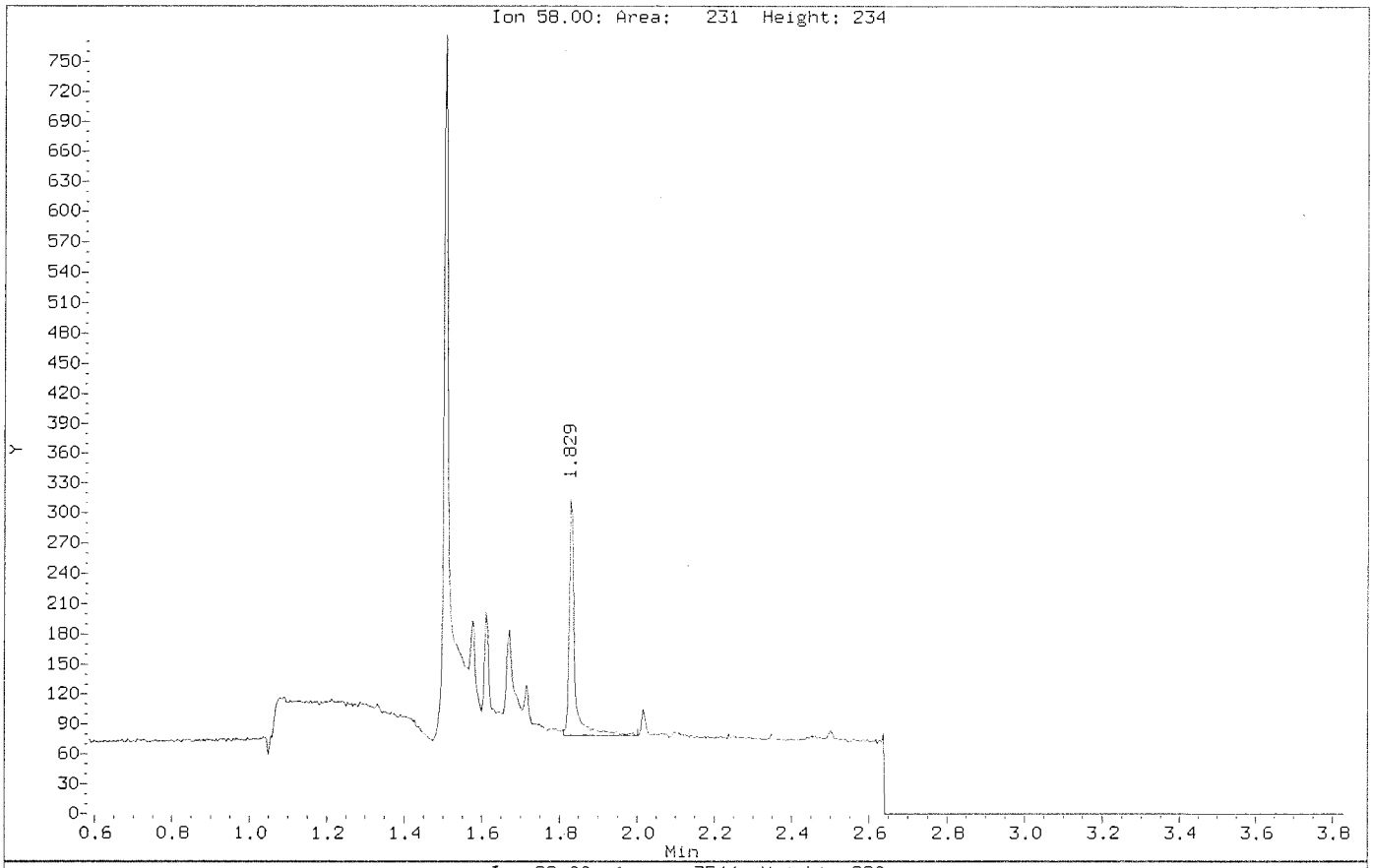


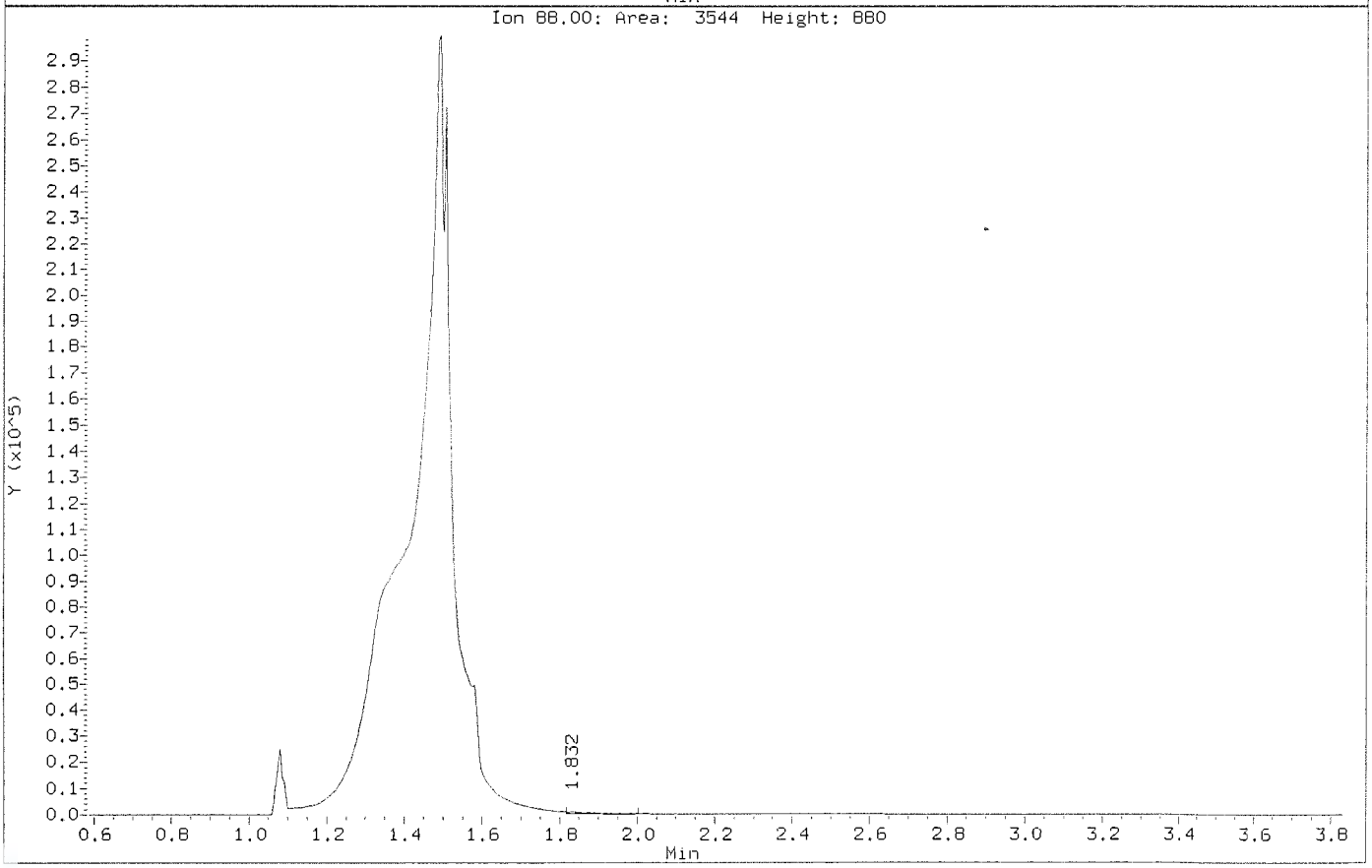




Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

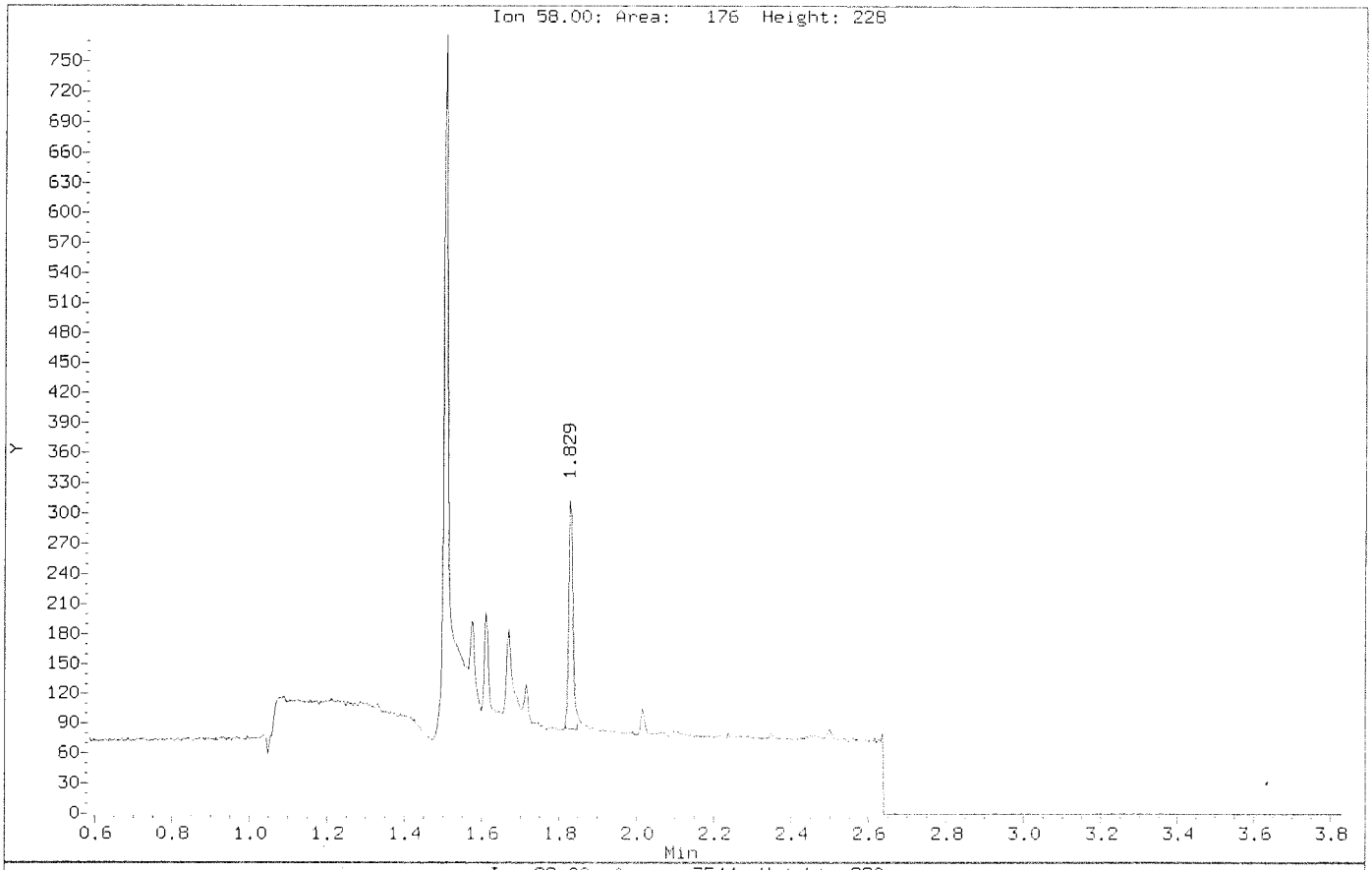
Compound: 1,4-Dioxane
CAS Number:

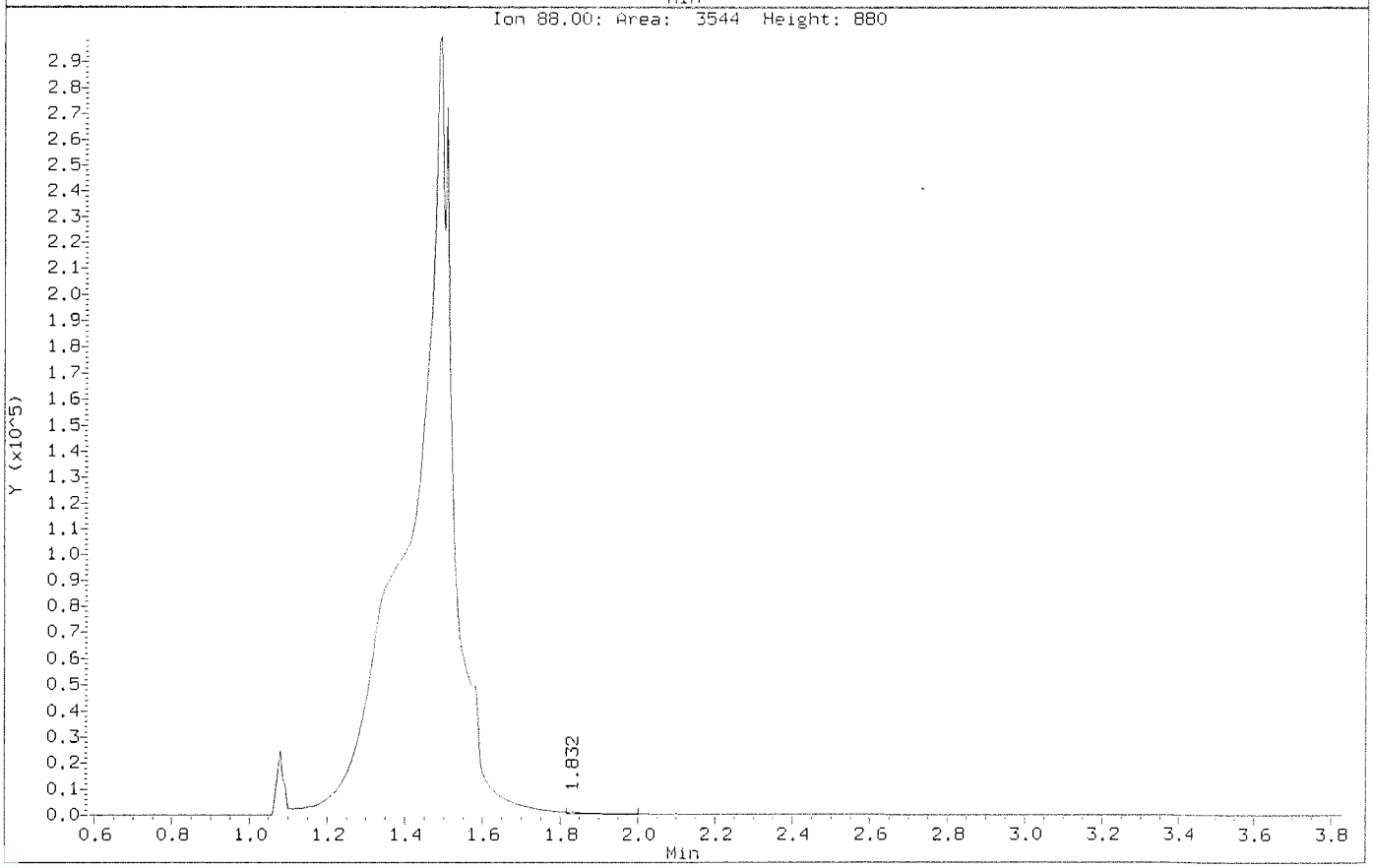




Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: 1,4-Dioxane
CAS Number:





HS22080499 - ME - ICP_W_DOD

ALS WO# HS22080499

ALS Houston, US

Date: 02-Sep-22

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499
Start Date: 22-Aug-2022 End Date: 22-Aug-2022

Run ID:ICPMS07_415559
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS07_415559_Tune	1	22-Aug-2022 00:00	ICPMS07_415559_Tune_1	
CAL BLK	1	22-Aug-2022 12:37	018CALB.d_6812314	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
2/10/200	1	22-Aug-2022 12:40	019CALS.d_6812315	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
5/25/500	1	22-Aug-2022 12:42	020CALS.d_6812316	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
10/50/100	1	22-Aug-2022 12:44	021CALS.d_6812317	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
100/500/10K	1	22-Aug-2022 12:46	022CALS.d_6812318	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
200/1000/20K	1	22-Aug-2022 12:49	023CALS.d_6812319	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICV	1	22-Aug-2022 12:57	025_ICV.d_6812321	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLICV2	1	22-Aug-2022 12:59	026LCV2.d_6812322	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLICV5	1	22-Aug-2022 13:01	027LCV5.d_6812323	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICB	1	22-Aug-2022 13:03	028_ICB.d_6812324	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICSA	1	22-Aug-2022 13:09	029ICSA.d_6812325	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICSAB	1	22-Aug-2022 13:11	030ICSB.d_6812326	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CAL BLK	1	22-Aug-2022 20:07	136CALB.d_6813220	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
2/10/200	1	22-Aug-2022 20:09	137CALS.d_6813221	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
5/25/500	1	22-Aug-2022 20:11	138CALS.d_6813222	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
10/50/100	1	22-Aug-2022 20:13	139CALS.d_6813223	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
100/500/10K	1	22-Aug-2022 20:15	140CALS.d_6813224	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
200/1000/20K	1	22-Aug-2022 20:17	141CALS.d_6813225	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICCV 1	1	22-Aug-2022 20:21	143_ICV.d_6813227	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLCCV2	1	22-Aug-2022 20:23	144LCV2.d_6813228	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLCCV5	1	22-Aug-2022 20:25	145LCV5.d_6813229	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICCB 1	1	22-Aug-2022 20:27	146_ICB.d_6813230	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 2	1	22-Aug-2022 20:32	148_CCV.d_6813232	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 2	1	22-Aug-2022 20:34	149_CCB.d_6813233	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
MBLK-182618	1	22-Aug-2022 20:36	150SMPL.d_6813234	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LCS-182618	1	22-Aug-2022 20:38	151SMPL.d_6813235	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ZZZZZZSD	25	22-Aug-2022 20:42	153SMPL.d_6813237	BA NA
ZZZZZZPDS	5	22-Aug-2022 20:48	156SMPL.d_6813240	BA NA
CCV 3	1	22-Aug-2022 20:50	157_CCV.d_6813241	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 3	1	22-Aug-2022 20:52	158_CCB.d_6813242	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
MW19_080922	5	22-Aug-2022 20:56	160SMPL.d_6813244	MN
CCV 4	1	22-Aug-2022 21:15	169_CCV.d_6813253	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN

ALS Houston, US

Date: 02-Sep-22

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499
Start Date: 22-Aug-2022 End Date: 22-Aug-2022

Run ID:ICPMS07_415559
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
CCB 4	1	22-Aug-2022 21:16	170_CCB.d_6813254	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 5	1	22-Aug-2022 21:33	178_CCV.d_6813323	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 5	1	22-Aug-2022 21:35	179_CCB.d_6813324	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN

ALS Houston, US

Date: 02-Sep-22

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499
Start Date: 23-Aug-2022 End Date: 23-Aug-2022

Run ID:ICPMS07_415638
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS07_415638_Tune	1	23-Aug-2022 00:00	ICPMS07_415638_Tune_1	
CAL BLK	1	23-Aug-2022 11:56	018CALB.d_6815391	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
2/10/200	1	23-Aug-2022 11:58	019CALS.d_6815392	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
5/25/500	1	23-Aug-2022 12:01	020CALS.d_6815393	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
10/50/100	1	23-Aug-2022 12:03	021CALS.d_6815394	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
100/500/10K	1	23-Aug-2022 12:05	022CALS.d_6815395	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
200/1000/20K	1	23-Aug-2022 12:08	023CALS.d_6815396	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
2/10/200	1	23-Aug-2022 12:18	025CALS.d_6815398	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICV	1	23-Aug-2022 12:24	027_ICV.d_6815400	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLICV2	1	23-Aug-2022 12:26	028LCV2.d_6815401	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLICV5	1	23-Aug-2022 12:28	029LCV5.d_6815402	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICB	1	23-Aug-2022 12:30	030_ICB.d_6815403	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICSA	1	23-Aug-2022 12:34	031ICSA.d_6815404	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICSAB	1	23-Aug-2022 12:36	032ICSB.d_6815405	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 1	1	23-Aug-2022 12:43	034_CCV.d_6815407	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 1	1	23-Aug-2022 12:45	035_CCB.d_6815408	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ZZZZZZSD	5	23-Aug-2022 13:06	039SMPL.d_6815410	AG AL AS BE CA CD CO CR CU FE K MG MN NI PB SB SE TL V ZN
ZZZZZZMS	1	23-Aug-2022 13:08	040SMPL.d_6815411	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ZZZZZZPDS	1	23-Aug-2022 13:12	042SMPL.d_6815413	AG AL AS BE CA CD CO CR CU FE K MG MN NI PB SB SE TL V ZN
MW19_080922	50	23-Aug-2022 13:16	044SMPL.d_6815415	NA
CCV 2	1	23-Aug-2022 13:20	046_CCV.d_6815417	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 2	1	23-Aug-2022 13:22	047_CCB.d_6815418	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
MW19_080922	1	23-Aug-2022 13:24	048SMPL.d_6815419	AG AL AS BA BE CA CD CO CR CU FE K MG NI PB SB SE TL V ZN
CCV 3	1	23-Aug-2022 13:45	058_CCV.d_6815429	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 3	1	23-Aug-2022 13:47	059_CCB.d_6815430	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 4	1	23-Aug-2022 14:33	070_CCV.d_6815440	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 4	1	23-Aug-2022 14:35	071_CCB.d_6815441	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 5	1	23-Aug-2022 15:01	082_CCV.d_6815477	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 5	1	23-Aug-2022 15:03	083_CCB.d_6815478	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ZZZZZZMSD	1	23-Aug-2022 15:05	084SMPL.d_6815479	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 6	1	23-Aug-2022 15:29	094_CCV.d_6815482	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 6	1	23-Aug-2022 15:31	095_CCB.d_6815483	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN

ALS Houston, US Date: 02-Sep-22

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499
Start Date: 23-Aug-2022 End Date: 23-Aug-2022

Run ID:ICPMS07_415638
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
CCV 7	1	23-Aug-2022 16:17	104_CCV.d_6815486	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 7	1	23-Aug-2022 16:19	105_CCB.d_6815487	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN

ALS Houston, US

Date: 02-Sep-22

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Run ID: ICPMS07_415559
Instrument: ICPMS07
Method: SW6020A

ICV | Date: 22-Aug-2022 12:57 | Seq: 6812321 | ICV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	103.531	104	90-110	
Antimony	100	103.275	103	90-110	
Arsenic	100	107.128	107	90-110	
Barium	100	103.108	103	90-110	
Beryllium	100	105.618	106	90-110	
Cadmium	100	103.469	103	90-110	
Calcium	10000	9954.04	100	90-110	
Chromium	100	99.982	100	90-110	
Cobalt	100	95.464	96	90-110	
Copper	100	102.943	103	90-110	
Iron	10000	10022.703	100	90-110	
Lead	100	99.696	100	90-110	
Magnesium	10000	10068.132	101	90-110	
Manganese	100	103.713	104	90-110	
Nickel	100	102.37	102	90-110	
Potassium	10000	10115.34	101	90-110	
Selenium	100	106.372	106	90-110	
Silver	100	104.352	104	90-110	
Sodium	10000	10052.131	101	90-110	
Thallium	100	106.137	106	90-110	
Vanadium	100	102.061	102	90-110	
Zinc	100	103.495	103	90-110	

ICCV1 | Date: 22-Aug-2022 20:21 | Seq: 6813227 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	106.681	107	90-110	
Antimony	100	103.393	103	90-110	
Arsenic	100	109.205	109	90-110	
Barium	100	105.954	106	90-110	
Beryllium	100	105.022	105	90-110	
Cadmium	100	106.35	106	90-110	
Calcium	10000	10058.083	101	90-110	
Chromium	100	104.29	104	90-110	
Cobalt	100	105.999	106	90-110	
Copper	100	104.339	104	90-110	
Iron	10000	10136.572	101	90-110	
Lead	100	98.51	99	90-110	
Magnesium	10000	10100.637	101	90-110	
Manganese	100	105.436	105	90-110	
Nickel	100	104.952	105	90-110	
Potassium	10000	10090.62	101	90-110	
Selenium	100	106.822	107	90-110	
Silver	100	105.081	105	90-110	
Sodium	10000	9987.386	100	90-110	
Thallium	100	106.748	107	90-110	
Vanadium	100	103.563	104	90-110	
Zinc	100	106.666	107	90-110	

CCV2 | Date: 22-Aug-2022 20:32 | Seq: 6813232 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	104.547	105	90-110	
Antimony	100	99.515	100	90-110	
Arsenic	100	101.078	101	90-110	
Barium	100	100.512	101	90-110	
Beryllium	100	105.197	105	90-110	

ALS Houston, US Date: 02-Sep-22

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Run ID: ICPMS07_415559
Instrument: ICPMS07
Method: SW6020A

CCV2 Date: 22-Aug-2022 20:32 Seq: 6813232 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Cadmium	100	102.499	102	90-110	
Calcium	10000	9969.889	100	90-110	
Chromium	100	100.691	101	90-110	
Cobalt	100	102.03	102	90-110	
Copper	100	100.446	100	90-110	
Iron	10000	10012.533	100	90-110	
Lead	100	94.521	95	90-110	
Magnesium	10000	9960.924	100	90-110	
Manganese	100	100.542	101	90-110	
Nickel	100	100.694	101	90-110	
Potassium	10000	10014.514	100	90-110	
Selenium	100	102.088	102	90-110	
Silver	100	102.193	102	90-110	
Sodium	10000	9804.36	98	90-110	
Thallium	100	100.296	100	90-110	
Vanadium	100	100.024	100	90-110	
Zinc	100	100.424	100	90-110	

CCV3 Date: 22-Aug-2022 20:50 Seq: 6813241 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	106.255	106	90-110	
Antimony	100	99.948	100	90-110	
Arsenic	100	101.93	102	90-110	
Barium	100	101.274	101	90-110	
Beryllium	100	97.919	98	90-110	
Cadmium	100	101.48	101	90-110	
Calcium	10000	10032.644	100	90-110	
Chromium	100	99.953	100	90-110	
Cobalt	100	101.588	102	90-110	
Copper	100	100.468	100	90-110	
Iron	10000	9943.807	99	90-110	
Lead	100	95.416	95	90-110	
Magnesium	10000	9932.814	99	90-110	
Manganese	100	100.889	101	90-110	
Nickel	100	100.647	101	90-110	
Potassium	10000	10085.775	101	90-110	
Selenium	100	103.482	103	90-110	
Silver	100	102.49	102	90-110	
Sodium	10000	9936.291	99	90-110	
Thallium	100	100.81	101	90-110	
Vanadium	100	99.892	100	90-110	
Zinc	100	101.277	101	90-110	

CCV4 Date: 22-Aug-2022 21:15 Seq: 6813253 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	101.944	102	90-110	
Antimony	100	97.702	98	90-110	
Arsenic	100	101.121	101	90-110	
Barium	100	99.879	100	90-110	
Beryllium	100	99.739	100	90-110	
Cadmium	100	101.754	102	90-110	
Calcium	10000	9920.306	99	90-110	
Chromium	100	99.476	100	90-110	
Cobalt	100	101.981	102	90-110	
Copper	100	100.307	100	90-110	

ALS Houston, US

Date: 02-Sep-22

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Run ID: ICPMS07_415559
Instrument: ICPMS07
Method: SW6020A

CCV4 Date: 22-Aug-2022 21:15 Seq: 6813253 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Iron	10000	9938.872	99	90-110	
Lead	100	94.57	95	90-110	
Magnesium	10000	9952.135	100	90-110	
Manganese	100	100.906	101	90-110	
Nickel	100	100.634	101	90-110	
Potassium	10000	10026.132	100	90-110	
Selenium	100	101.078	101	90-110	
Silver	100	101.428	101	90-110	
Sodium	10000	9834.997	98	90-110	
Thallium	100	99.524	100	90-110	
Vanadium	100	99.783	100	90-110	
Zinc	100	100.114	100	90-110	

CCV5 Date: 22-Aug-2022 21:33 Seq: 6813323 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	105.141	105	90-110	
Antimony	100	98.32	98	90-110	
Arsenic	100	102.558	103	90-110	
Barium	100	101.139	101	90-110	
Beryllium	100	98.78	99	90-110	
Cadmium	100	102.345	102	90-110	
Calcium	10000	10070.43	101	90-110	
Chromium	100	100.767	101	90-110	
Cobalt	100	101.612	102	90-110	
Copper	100	100.571	101	90-110	
Iron	10000	9980.842	100	90-110	
Lead	100	94.064	94	90-110	
Magnesium	10000	9972.648	100	90-110	
Manganese	100	99.876	100	90-110	
Nickel	100	101.111	101	90-110	
Potassium	10000	10102.375	101	90-110	
Selenium	100	103.922	104	90-110	
Silver	100	102.742	103	90-110	
Sodium	10000	9876.176	99	90-110	
Thallium	100	99.177	99	90-110	
Vanadium	100	100.795	101	90-110	
Zinc	100	99.704	100	90-110	

ALS Houston, US Date: 02-Sep-22

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Run ID: ICPMS07_415638
Instrument: ICPMS07
Method: SW6020A

ICV Date: 23-Aug-2022 12:24 Seq: 6815400 ICV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	101.607	102	90-110	
Antimony	100	101.235	101	90-110	
Arsenic	100	107.118	107	90-110	
Barium	100	103.392	103	90-110	
Beryllium	100	103.916	104	90-110	
Cadmium	100	103.301	103	90-110	
Calcium	10000	9959.956	100	90-110	
Chromium	100	99.233	99	90-110	
Cobalt	100	103.31	103	90-110	
Copper	100	97.193	97	90-110	
Iron	10000	9980.514	100	90-110	
Lead	100	100.253	100	90-110	
Magnesium	10000	9990.013	100	90-110	
Manganese	100	103.28	103	90-110	
Nickel	100	100.94	101	90-110	
Potassium	10000	9987.076	100	90-110	
Selenium	100	105.312	105	90-110	
Silver	100	100.645	101	90-110	
Sodium	10000	9967.288	100	90-110	
Thallium	100	107.205	107	90-110	
Vanadium	100	102.05	102	90-110	
Zinc	100	104.597	105	90-110	

CCV1 Date: 23-Aug-2022 12:43 Seq: 6815407 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	99.674	100	90-110	
Antimony	100	97.647	98	90-110	
Arsenic	100	99.182	99	90-110	
Barium	100	98.764	99	90-110	
Beryllium	100	102.895	103	90-110	
Cadmium	100	99.4	99	90-110	
Calcium	10000	9839.277	98	90-110	
Chromium	100	94.381	94	90-110	
Cobalt	100	98.916	99	90-110	
Copper	100	92.963	93	90-110	
Iron	10000	9856.296	99	90-110	
Lead	100	95.951	96	90-110	
Magnesium	10000	9873.967	99	90-110	
Manganese	100	98.65	99	90-110	
Nickel	100	97.374	97	90-110	
Potassium	10000	9852.884	99	90-110	
Selenium	100	99.123	99	90-110	
Silver	100	98.945	99	90-110	
Sodium	10000	9849.553	99	90-110	
Thallium	100	100.785	101	90-110	
Vanadium	100	97.647	98	90-110	
Zinc	100	101.26	101	90-110	

CCV2 Date: 23-Aug-2022 13:20 Seq: 6815417 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	105.094	105	90-110	
Antimony	100	98.134	98	90-110	
Arsenic	100	102.65	103	90-110	
Barium	100	100.759	101	90-110	
Beryllium	100	102.885	103	90-110	

ALS Houston, US

Date: 02-Sep-22

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Run ID: ICPMS07_415638
Instrument: ICPMS07
Method: SW6020A

CCV2 Date: 23-Aug-2022 13:20 Seq: 6815417 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Cadmium	100	101.782	102	90-110	
Calcium	10000	10154.228	102	90-110	
Chromium	100	95.573	96	90-110	
Cobalt	100	100.729	101	90-110	
Copper	100	93.663	94	90-110	
Iron	10000	10023.98	100	90-110	
Lead	100	99.672	100	90-110	
Magnesium	10000	10077.358	101	90-110	
Manganese	100	102.738	103	90-110	
Nickel	100	99.3	99	90-110	
Potassium	10000	10271.614	103	90-110	
Selenium	100	102.653	103	90-110	
Silver	100	102.841	103	90-110	
Sodium	10000	10239.995	102	90-110	
Thallium	100	106.858	107	90-110	
Vanadium	100	100.269	100	90-110	
Zinc	100	101.152	101	90-110	

CCV3 Date: 23-Aug-2022 13:45 Seq: 6815429 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	101.342	101	90-110	
Antimony	100	98.217	98	90-110	
Arsenic	100	102.511	103	90-110	
Barium	100	99.523	100	90-110	
Beryllium	100	101.777	102	90-110	
Cadmium	100	100.284	100	90-110	
Calcium	10000	10082.981	101	90-110	
Chromium	100	96.667	97	90-110	
Cobalt	100	100.75	101	90-110	
Copper	100	94.473	95	90-110	
Iron	10000	10027.166	100	90-110	
Lead	100	99.466	100	90-110	
Magnesium	10000	10158.34	102	90-110	
Manganese	100	101.968	102	90-110	
Nickel	100	99.72	100	90-110	
Potassium	10000	10192.502	102	90-110	
Selenium	100	102.331	102	90-110	
Silver	100	101.546	102	90-110	
Sodium	10000	10466.792	105	90-110	
Thallium	100	104.547	105	90-110	
Vanadium	100	101.516	102	90-110	
Zinc	100	103.379	103	90-110	

CCV4 Date: 23-Aug-2022 14:33 Seq: 6815440 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	103.066	103	90-110	
Antimony	100	98.435	98	90-110	
Arsenic	100	101.473	101	90-110	
Barium	100	100.305	100	90-110	
Beryllium	100	100.848	101	90-110	
Cadmium	100	101.819	102	90-110	
Calcium	10000	9972.599	100	90-110	
Chromium	100	96.474	97	90-110	
Cobalt	100	101.463	101	90-110	
Copper	100	94.89	95	90-110	

ALS Houston, US

Date: 02-Sep-22

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Run ID: ICPMS07_415638
Instrument: ICPMS07
Method: SW6020A

CCV4 Date: 23-Aug-2022 14:33 Seq: 6815440 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Iron	10000	10044.644	100	90-110	
Lead	100	98.736	99	90-110	
Magnesium	10000	10246.304	102	90-110	
Manganese	100	100.807	101	90-110	
Nickel	100	101.233	101	90-110	
Potassium	10000	10031.171	100	90-110	
Selenium	100	101.566	102	90-110	
Silver	100	101.343	101	90-110	
Sodium	10000	10473.781	105	90-110	
Thallium	100	103.6	104	90-110	
Vanadium	100	100.982	101	90-110	
Zinc	100	103.677	104	90-110	

CCV5 Date: 23-Aug-2022 15:01 Seq: 6815477 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	101.812	102	90-110	
Antimony	100	100.131	100	90-110	
Arsenic	100	101.855	102	90-110	
Barium	100	101.132	101	90-110	
Beryllium	100	107.495	107	90-110	
Cadmium	100	101.837	102	90-110	
Calcium	10000	9797.234	98	90-110	
Chromium	100	97.415	97	90-110	
Cobalt	100	102.328	102	90-110	
Copper	100	96.148	96	90-110	
Iron	10000	10045.331	100	90-110	
Lead	100	99.251	99	90-110	
Magnesium	10000	10135.693	101	90-110	
Manganese	100	100.788	101	90-110	
Nickel	100	101.016	101	90-110	
Potassium	10000	9947.124	100	90-110	
Selenium	100	99.324	99	90-110	
Silver	100	100.609	101	90-110	
Sodium	10000	10300.859	103	90-110	
Thallium	100	104.509	105	90-110	
Vanadium	100	101.218	101	90-110	
Zinc	100	104.027	104	90-110	

CCV6 Date: 23-Aug-2022 15:29 Seq: 6815482 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	103.247	103	90-110	
Antimony	100	99.497	100	90-110	
Arsenic	100	102.283	102	90-110	
Barium	100	99.007	99	90-110	
Beryllium	100	108.809	109	90-110	
Cadmium	100	100.404	100	90-110	
Calcium	10000	10018.26	100	90-110	
Chromium	100	97.878	98	90-110	
Cobalt	100	102.945	103	90-110	
Copper	100	96.487	97	90-110	
Iron	10000	10199.329	102	90-110	
Lead	100	101.151	101	90-110	
Magnesium	10000	10389.657	104	90-110	
Manganese	100	101.739	102	90-110	
Nickel	100	102.089	102	90-110	

ALS Houston, US Date: 02-Sep-22

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Run ID: ICPMS07_415638
Instrument: ICPMS07
Method: SW6020A

CCV6 Date: 23-Aug-2022 15:29 Seq: 6815482 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Potassium	10000	10183.845	102	90-110	
Selenium	100	101.045	101	90-110	
Silver	100	102.685	103	90-110	
Sodium	10000	10740.563	107	90-110	
Thallium	100	104.276	104	90-110	
Vanadium	100	102.94	103	90-110	
Zinc	100	104.88	105	90-110	

CCV7 Date: 23-Aug-2022 16:17 Seq: 6815486 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	103.704	104	90-110	
Antimony	100	100.097	100	90-110	
Arsenic	100	100.372	100	90-110	
Barium	100	99.967	100	90-110	
Beryllium	100	102.296	102	90-110	
Cadmium	100	100.784	101	90-110	
Calcium	10000	9968.101	100	90-110	
Chromium	100	97.682	98	90-110	
Cobalt	100	103.149	103	90-110	
Copper	100	96.151	96	90-110	
Iron	10000	10267.988	103	90-110	
Lead	100	98.661	99	90-110	
Magnesium	10000	10475.288	105	90-110	
Manganese	100	101.485	101	90-110	
Nickel	100	101.579	102	90-110	
Potassium	10000	10153.494	102	90-110	
Selenium	100	99.411	99	90-110	
Silver	100	100.147	100	90-110	
Sodium	10000	10644.223	106	90-110	
Thallium	100	103.714	104	90-110	
Vanadium	100	102.187	102	90-110	
Zinc	100	103.366	103	90-110	

ALS Houston, US Date: 02-Sep-22

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Run ID: ICPMS07_415559
Instrument: ICPMS07
Method: SW6020A

ICB	Date: 22-Aug-2022 13:03		Seq: 6812324	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	5	0.4	5	U	
Arsenic	5	0.4	5	U	
Barium	5	1.9	5	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	5	0.4	5	U	
Cobalt	5	0.1	5	U	
Copper	5	1	5	U	
Iron	200	12	200	U	
Lead	5	0.6	5	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	5	0.6	5	U	
Potassium	200	18	200	U	
Selenium	5	1.1	5	U	
Silver	5	0.2	5	U	
Sodium	200	14	200	U	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	5	2	5	U	

ICCB1	Date: 22-Aug-2022 20:27		Seq: 6813230	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	-31.56	14	200	J	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB2	Date: 22-Aug-2022 20:34		Seq: 6813233	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	

ALS Houston, US

Date: 02-Sep-22

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Run ID: ICPMS07_415559
Instrument: ICPMS07
Method: SW6020A

CCB2 | Date: 22-Aug-2022 20:34 | Seq: 6813233 | CCB | Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	4	0.4	4	U
Cobalt	5	0.2	5	U
Copper	2	1	2	U
Iron	200	12	200	U
Lead	2	0.6	2	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	2	0.6	2	U
Potassium	200	18	200	U
Selenium	2	1.1	2	U
Silver	2	0.2	2	U
Sodium	-19.18	14	200	J
Thallium	2	0.2	2	U
Vanadium	5	0.6	5	U
Zinc	4	2	4	U

MBLK-182618 | Date: 22-Aug-2022 20:36 | Seq: 6813234 | MBLK | Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	7.024	1.8	10	J
Antimony	5	0.4	5	U
Arsenic	5	0.4	5	U
Barium	5	1.9	5	U
Beryllium	2	0.2	2	U
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	5	0.4	5	U
Cobalt	5	0.1	5	U
Copper	5	1	5	U
Iron	200	12	200	U
Lead	5	0.6	5	U
Magnesium	14.08	10	200	J
Manganese	5	0.7	5	U
Nickel	5	0.6	5	U
Potassium	200	18	200	U
Selenium	5	1.1	5	U
Silver	5	0.2	5	U
Sodium	200	14	200	U
Thallium	2	0.2	2	U
Vanadium	5	0.6	5	U
Zinc	5	2	5	U

CCB3 | Date: 22-Aug-2022 20:52 | Seq: 6813242 | CCB | Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	10	1.8	10	U
Antimony	2	0.4	2	U
Arsenic	2	0.4	2	U
Barium	4	1.9	4	U
Beryllium	2	0.2	2	U
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	4	0.4	4	U
Cobalt	5	0.2	5	U
Copper	2	1	2	U

ALS Houston, US Date: 02-Sep-22

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Run ID: ICPMS07_415559
Instrument: ICPMS07
Method: SW6020A

CCB3	Date: 22-Aug-2022 20:52		Seq: 6813242	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	200	14	200	U	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB4	Date: 22-Aug-2022 21:16		Seq: 6813254	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	200	14	200	U	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB5	Date: 22-Aug-2022 21:35		Seq: 6813324	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	

ALS Houston, US

Date: 02-Sep-22

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Run ID: ICPMS07_415559
Instrument: ICPMS07
Method: SW6020A

CCB5 | Date: 22-Aug-2022 21:35 | Seq: 6813324 | CCB | Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Potassium	200	18	200	U
Selenium	2	1.1	2	U
Silver	2	0.2	2	U
Sodium	-15.55	14	200	J
Thallium	2	0.2	2	U
Vanadium	5	0.6	5	U
Zinc	4	2	4	U

ALS Houston, US

Date: 02-Sep-22

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Run ID: ICPMS07_415638
Instrument: ICPMS07
Method: SW6020A

ICB	Date: 23-Aug-2022 12:30		Seq: 6815403	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	200	14	200	U	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB1	Date: 23-Aug-2022 12:45		Seq: 6815408	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	200	14	200	U	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB2	Date: 23-Aug-2022 13:22		Seq: 6815418	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	

ALS Houston, US

Date: 02-Sep-22

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Run ID: ICPMS07_415638
Instrument: ICPMS07
Method: SW6020A

CCB2 Date: 23-Aug-2022 13:22 Seq: 6815418 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	4	0.4	4	U
Cobalt	5	0.2	5	U
Copper	2	1	2	U
Iron	200	12	200	U
Lead	2	0.6	2	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	2	0.6	2	U
Potassium	200	18	200	U
Selenium	2	1.1	2	U
Silver	2	0.2	2	U
Sodium	168.8	14	200	J
Thallium	2	0.2	2	U
Vanadium	5	0.6	5	U
Zinc	4	2	4	U

CCB3 Date: 23-Aug-2022 13:47 Seq: 6815430 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	10	1.8	10	U
Antimony	2	0.4	2	U
Arsenic	2	0.4	2	U
Barium	4	1.9	4	U
Beryllium	2	0.2	2	U
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	4	0.4	4	U
Cobalt	5	0.2	5	U
Copper	2	1	2	U
Iron	200	12	200	U
Lead	2	0.6	2	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	2	0.6	2	U
Potassium	22.97	18	200	J
Selenium	2	1.1	2	U
Silver	2	0.2	2	U
Sodium	257.9	14	200	
Thallium	2	0.2	2	U
Vanadium	5	0.6	5	U
Zinc	4	2	4	U

CCB4 Date: 23-Aug-2022 14:35 Seq: 6815441 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	10	1.8	10	U
Antimony	2	0.4	2	U
Arsenic	2	0.4	2	U
Barium	4	1.9	4	U
Beryllium	2	0.2	2	U
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	4	0.4	4	U
Cobalt	5	0.2	5	U
Copper	2	1	2	U

ALS Houston, US

Date: 02-Sep-22

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Run ID: ICPMS07_415638
Instrument: ICPMS07
Method: SW6020A

CCB4	Date: 23-Aug-2022 14:35		Seq: 6815441	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	134.6	14	200	J	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB5	Date: 23-Aug-2022 15:03		Seq: 6815478	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	90.16	14	200	J	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB6	Date: 23-Aug-2022 15:31		Seq: 6815483	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	

ALS Houston, US

Date: 02-Sep-22

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Run ID: ICPMS07_415638
Instrument: ICPMS07
Method: SW6020A

CCB6	Date: 23-Aug-2022 15:31		Seq: 6815483	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Potassium	21.64	18	200	J	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	194	14	200	J	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB7	Date: 23-Aug-2022 16:19		Seq: 6815487	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	98.81	14	200	J	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

ALS Houston, US Date: 02-Sep-22

Form 4 - ICP Interference Check Sample

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Run ID:ICPMS07_415559
Instrument:ICPMS07
Method:SW6020A

ICSA	Date: 22-Aug-2022 13:09	Seq: 6812325	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100000	100900	101	
Antimony		0.188	0	
Arsenic		0.12	0	
Barium		1.374	0	
Beryllium		0.006	0	
Cadmium		0.802	0	
Calcium	100000	103300	103	
Chromium		2.022	0	
Cobalt		0.129	0	
Copper		0.172	0	
Iron	100000	98800	98.8	
Lead		0.055	0	
Magnesium	100000	100100	100	
Manganese		0.47	0	
Nickel		0.446	0	
Potassium	100000	100800	101	
Selenium		0.362	0	
Silver		0.017	0	
Sodium	100000	100100	100	
Thallium		0.005	0	
Vanadium		0.043	0	
Zinc		1.219	0	

ICSAB	Date: 22-Aug-2022 13:11	Seq: 6812326	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100500	99410	98.9	
Antimony	100	98.1	98.1	
Arsenic	100	98.33	98.3	
Barium	100	101.4	101	
Beryllium	100	101.2	101	
Cadmium	100	98.93	98.9	
Calcium	110000	110700	101	
Chromium	100	96.67	96.7	
Cobalt	100	89.74	89.7	
Copper	100	94.9	94.9	
Iron	110000	107400	97.6	
Lead	100	97.34	97.3	
Magnesium	110000	108500	98.6	
Manganese	100	98.34	98.3	
Nickel	100	95.33	95.3	
Potassium	110000	109600	99.6	
Selenium	100	96.2	96.2	
Silver	100	94.19	94.2	
Sodium	110000	109400	99.5	
Thallium	100	99.75	99.8	
Vanadium	100	98.94	98.9	
Zinc	100	97.47	97.5	

ALS Houston, US

Date: 02-Sep-22

Form 4 - ICP Interference Check Sample

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Run ID:ICPMS07_415638
Instrument:ICPMS07
Method:SW6020A

ICSA	Date: 23-Aug-2022 12:34	Seq: 6815404	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100000	100600	101	
Antimony		0.115	0	
Arsenic		0.094	0	
Barium		1.358	0	
Beryllium		0.004	0	
Cadmium		0.778	0	
Calcium	100000	102400	102	
Chromium		2.061	0	
Cobalt		0.128	0	
Copper		0.122	0	
Iron	100000	99440	99.4	
Lead		0.062	0	
Magnesium	100000	100100	100	
Manganese		0.433	0	
Nickel		0.401	0	
Potassium	100000	100100	100	
Selenium		-0.31	0	
Silver		0.018	0	
Sodium	100000	101000	101	
Thallium		0.009	0	
Vanadium		0.039	0	
Zinc		1.228	0	

ICSAB	Date: 23-Aug-2022 12:36	Seq: 6815405	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100500	99520	99.0	
Antimony	100	97.97	98.0	
Arsenic	100	99.87	99.9	
Barium	100	101.2	101	
Beryllium	100	99.72	99.7	
Cadmium	100	98.21	98.2	
Calcium	110000	111800	102	
Chromium	100	96.19	96.2	
Cobalt	100	98.24	98.2	
Copper	100	90.52	90.5	
Iron	110000	107700	97.9	
Lead	100	98.72	98.7	
Magnesium	110000	108200	98.3	
Manganese	100	98.78	98.8	
Nickel	100	96.08	96.1	
Potassium	110000	108900	99.0	
Selenium	100	100.5	100	
Silver	100	87.83	87.8	
Sodium	110000	108900	99.0	
Thallium	100	102.9	103	
Vanadium	100	99.23	99.2	
Zinc	100	98.47	98.5	

ALS Houston, US Date: 02-Sep-22

Form 5A - Matrix Spike/Matrix Spike Duplicate Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Date Analyzed: 23-Aug-2022 15:05
Date Extracted: 19-Aug-2022 09:00
Units: ug/L

Matrix Spike: HS22080472-01MS
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	MS Result	Spike Amount	% Rec	MSD Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Aluminum	14.10	118.8	100.0	105	117.8	100.0	104	84-117	0.847	20
Antimony	5.000	51.96	50.00	104	52.85	50.00	106	85-117	1.71	20
Arsenic	5.000	56.55	50.00	112	56.58	50.00	113	84-116	0.0636	20
Barium	398.7	452.0	50.00	107	446.7	50.00	96.0	86-114	1.19	20
Beryllium	2.000	55.33	50.00	111	58.90	50.00	118	83-121	6.25	20
Cadmium	2.000	53.96	50.00	108	54.29	50.00	109	87-115	0.595	20
Calcium	18190	22560	5000	87.3	22090	5000	78.0	87-118	2.10	20
Chromium	0.4180	50.63	50.00	100	52.01	50.00	103	85-116	2.68	20
Cobalt	0.1760	52.15	50.00	104	53.89	50.00	107	86-115	3.28	20
Copper	5.000	49.01	50.00	96.5	50.65	50.00	101	85-118	3.29	20
Iron	90.66	5222	5000	103	5322	5000	105	87-118	1.91	20
Lead	5.000	51.45	50.00	102	52.34	50.00	105	88-115	1.71	20
Magnesium	18090	22070	5000	79.6	22590	5000	90.0	83-118	2.33	20
Manganese	74.29	124.5	50.00	100	124.9	50.00	101	87-115	0.328	20
Nickel	5.000	50.98	50.00	101	52.70	50.00	105	85-117	3.30	20
Potassium	2681	7896	5000	104	7743	5000	101	87-115	1.95	20
Selenium	5.000	49.53	50.00	98.6	46.88	50.00	93.8	80-120	5.50	20
Silver	5.000	41.19	50.00	82.4	40.77	50.00	81.5	85-116	1.02	20
Sodium	768400	726200	5000	-845	751600	5000	-337	85-117	3.44	20
Thallium	2.000	51.06	50.00	102	51.80	50.00	104	82-116	1.43	20
Vanadium	5.000	54.72	50.00	109	55.50	50.00	111	86-115	1.42	20
Zinc	4.970	57.99	50.00	106	59.37	50.00	109	83-119	2.35	20

ALS Houston, US

Date: 02-Sep-22

Form 5B - Post Digest Sample Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Date Analyzed: 22-Aug-2022 20:48
Date Extracted: 19-Aug-2022 09:00
Units: ug/L

Lab Sample ID: HS22080472-01PDS
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Barium	354.8	899	500	109	80-120
Sodium	765600	811500	50000	92	80-120

ALS Houston, US Date: 02-Sep-22

Form 5B - Post Digest Sample Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Date Analyzed: 23-Aug-2022 13:12
Date Extracted: 19-Aug-2022 09:00
Units: ug/L

Lab Sample ID: HS22080472-01PDS
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Aluminum	14.1	116.2	100	102	80-120
Antimony	0	98.26	100	98	80-120
Arsenic	0	110.4	100	110	80-120
Beryllium	0	108.8	100	109	80-120
Cadmium	0	106	100	106	80-120
Calcium	18190	27520	10000	93	80-120
Chromium	0.418	99.39	100	99	80-120
Cobalt	0.176	102.5	100	102	80-120
Copper	0	94.34	100	94	80-120
Iron	90.66	10100	10000	100	80-120
Lead	0	108.4	100	108	80-120
Magnesium	18090	26680	10000	86	80-120
Manganese	74.29	174.4	100	100	80-120
Nickel	0	98.86	100	99	80-120
Potassium	2681	13020	10000	103	80-120
Selenium	0	108.5	100	108	80-120
Silver	0	103.5	100	103	80-120
Thallium	0	109.9	100	110	80-120
Vanadium	0	107	100	107	80-120
Zinc	4.97	108.3	100	103	80-120

ALS Houston, US Date: 02-Sep-22

Form 7 - Laboratory Control Sample

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Date Analyzed: 22-Aug-2022 20:38
Date Extracted: 19-Aug-2022 09:00
Units: ug/L

Lab Sample ID: LCS-182618 Analysis Method: SW6020A

Analyte	Spike Amount	LCS Result	% Rec	% Rec Limits
Aluminum	100	109.6	110	84-117
Antimony	50	53.24	106	85-117
Arsenic	50	55.76	112	84-116
Barium	50	54.04	108	86-114
Beryllium	50	58.58	117	83-121
Cadmium	50	55.91	112	87-115
Calcium	5000	5107	102	87-118
Chromium	50	53.84	108	85-116
Cobalt	50	55.53	111	86-115
Copper	50	55.2	110	85-118
Iron	5000	5326	107	87-118
Lead	50	48.92	98	88-115
Magnesium	5000	5437	109	83-118
Manganese	50	54.8	110	87-115
Nickel	50	54.38	109	85-117
Potassium	5000	5402	108	87-115
Selenium	50	57.53	115	80-120
Silver	50	44.47	89	85-116
Sodium	5000	5232	105	85-117
Thallium	50	51.71	103	82-116
Vanadium	50	54.02	108	86-115
Zinc	50	56.68	113	83-119

ALS Houston, US

Date: 02-Sep-22

Form 8 - ICP Serial Dilutions

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Date Analyzed: 22-Aug-2022 20:42
Date Extracted: 19-Aug-2022 09:00
Units: ug/L

Lab Sample ID: HS22080472-01SD
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	C	SD Result	C	RPD	Q
Barium	354.8		343.2		3	
Sodium	765600		762800		0	

ALS Houston, US

Date: 02-Sep-22

Form 8 - ICP Serial Dilutions

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080499

Date Analyzed: 23-Aug-2022 13:06
Date Extracted: 19-Aug-2022 09:00
Units: ug/L

Lab Sample ID: HS22080472-01SD
Client Sample ID:

Analysis Method: SW6020A

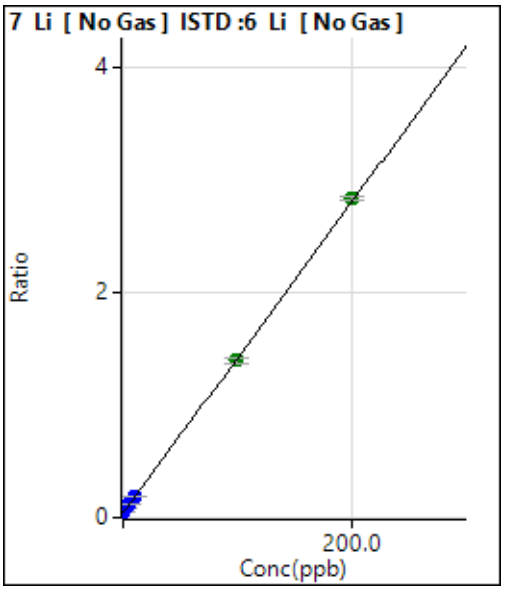
Analyte	Sample Result	C	SD Result	C	RPD	Q
Aluminum	14.1		26.55	J	88	
Antimony	0	U	0	U	0	
Arsenic	0	U	0	U	0	
Beryllium	0	U	0	U	0	
Cadmium	0	U	0	U	0	
Calcium	18190		18120		0	
Chromium	0.418	J	0	U	0	
Cobalt	0.176	J	0	U	0	
Copper	0	U	0	U	0	
Iron	90.66	J	91.1	J	0	
Lead	0	U	0	U	0	
Magnesium	18090		18110		0	
Manganese	74.29		75.2		1	
Nickel	0	U	0	U	0	
Potassium	2681		2409		10	E
Selenium	0	U	0	U	0	
Silver	0	U	0	U	0	
Thallium	0	U	0	U	0	
Vanadium	0	U	0	U	0	
Zinc	4.97	J	0	U	0	

Calibration for 143_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\082222A.b\
Analysis File: 082222A.batch.bin
DA Date-Time: 08/22/2022 20:22:31
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	136CALB.d	CAL BLK	08/22/2022 20:07:01
2	137CALS.d	2/10/200	08/22/2022 20:09:11
3	138CALS.d	5/25/500	08/22/2022 20:11:20
4	139CALS.d	10/50/100	08/22/2022 20:13:30
5	140CALS.d	100/500/10K	08/22/2022 20:15:39
6	141CALS.d	200/1000/20K	08/22/2022 20:17:44

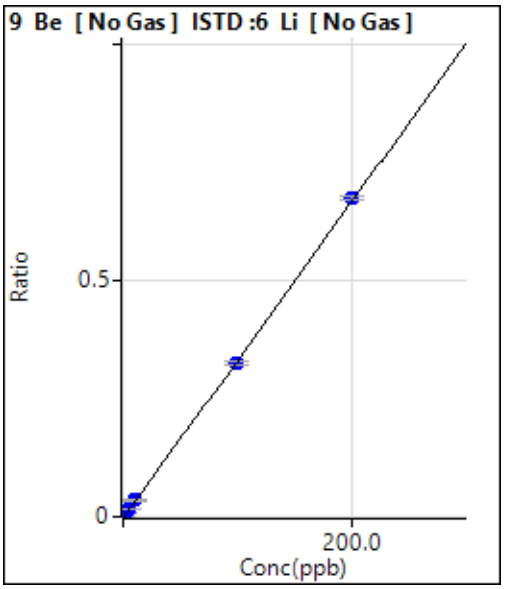
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35828.95	0.0549	P	5.5	
2	☐	2.000	2.481	57297.79	0.0891	P	0.3	24.0
3	☐	5.000	4.904	79275.14	0.1226	P	0.8	-1.9
4	☐	10.000	9.813	122261.24	0.1904	P	1.3	-1.9
5	☐	100.000	96.948	957901.00	1.3943	A	3.8	-3.1
6	☐	200.000	201.533	1857600.75	2.8393	A	1.6	0.8

y = 0.0138 * x + 0.0549
R = 0.9998
DL = 0.657 ppb
BEC = 3.971 ppb

Weight: <None>
Min Conc: <None>

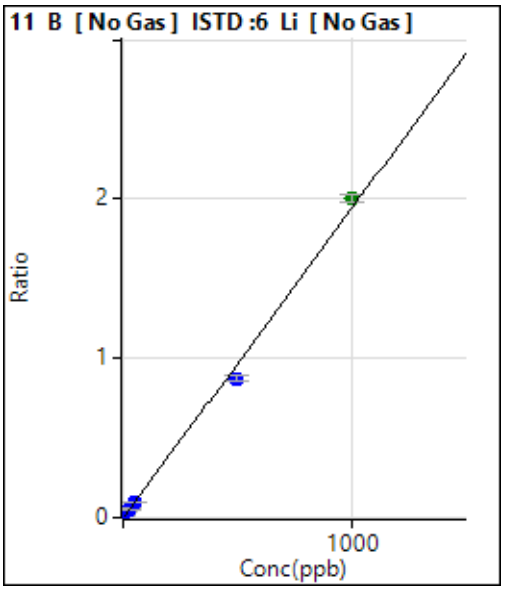


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0000	P	29.0	
2	☐	2.000	2.570	5566.15	0.0087	P	3.2	28.5
3	☐	5.000	5.127	11137.84	0.0172	P	3.1	2.5
4	☐	10.000	10.314	22224.32	0.0346	P	0.8	3.1
5	☐	100.000	97.127	223720.64	0.3256	P	2.4	-2.9
6	☐	200.000	201.412	441697.75	0.6751	P	0.7	0.7

y = 0.0034 * x + 4.5882E-005
R = 0.9998
DL = 0.0119 ppb
BEC = 0.01369 ppb

Weight: <None>
Min Conc: <None>

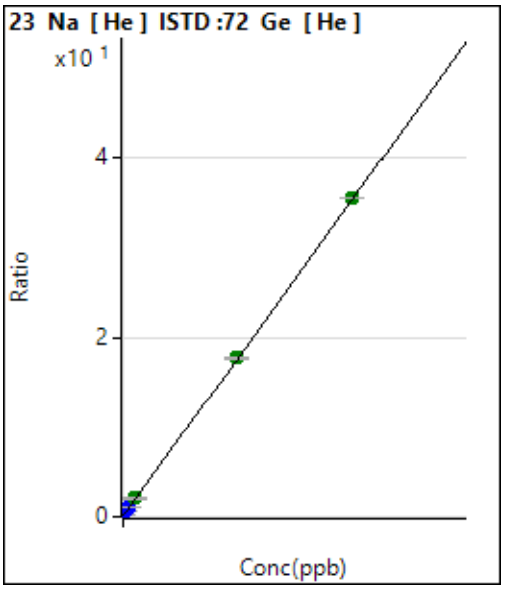
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5057.63	0.0077	P	6.0	
2	☐	10.000	11.723	19623.77	0.0305	P	1.8	17.2
3	☐	25.000	23.639	34707.87	0.0537	P	2.6	-5.4
4	☐	50.000	47.458	64192.46	0.1000	P	1.9	-5.1
5	☐	500.000	444.497	598843.28	0.8717	P	3.9	-11.1
6	☐	1000.000	1027.895	1312189.90	2.0056	A	2.6	2.8

y = 0.0019 * x + 0.0077
R = 0.9979
DL = 0.7188 ppb
BEC = 3.985 ppb

Weight: <None>
Min Conc: <None>

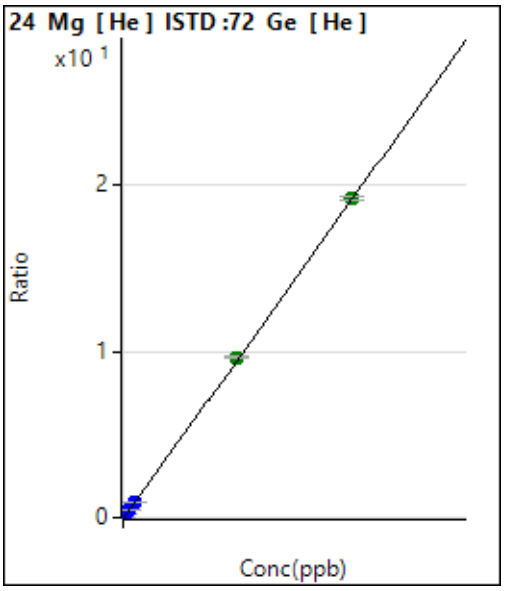


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	113031.74	0.2637	P	1.4	
2	☐	200.000	234.634	290704.16	0.6766	P	8.4	17.3
3	☐	500.000	448.263	453677.61	1.0525	P	0.6	-10.3
4	☐	1000.000	1011.984	878190.43	2.0444	A	1.0	1.2
5	☐	10000.00	9893.410	7589096.35	17.6719	A	1.4	-1.1
6	☐	20000.00	20053.64	14970410.1	35.5497	A	0.4	0.3

y = 0.0018 * x + 0.2637
R = 1.0000
DL = 6.104 ppb
BEC = 149.9 ppb

Weight: <None>
Min Conc: <None>

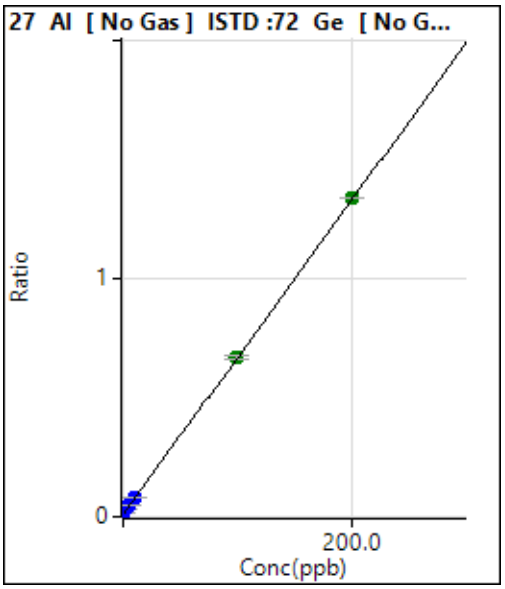
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1483.44	0.0035	P	14.1	
2	☐	200.000	241.967	101418.78	0.2360	P	1.3	21.0
3	☐	500.000	488.515	203846.72	0.4729	P	0.2	-2.3
4	☐	1000.000	973.493	403327.18	0.9389	P	0.3	-2.7
5	☐	10000.00	10013.87	4133960.04	9.6260	A	0.9	0.1
6	☐	20000.00	19994.25	8092443.42	19.2164	A	0.8	0.0

y = 9.6092E-004 * x + 0.0035
R = 1.0000
DL = 1.527 ppb
BEC = 3.601 ppb

Weight: <None>
Min Conc: <None>

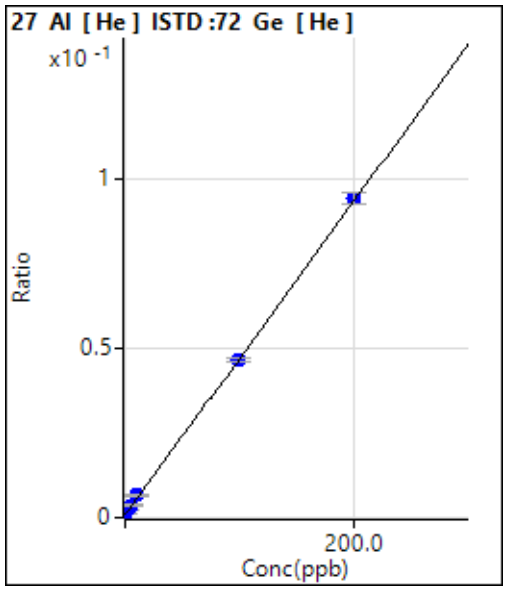


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	27428.04	0.0167	P	3.8	
2	☐	2.000	2.469	54329.47	0.0330	P	1.2	23.4
3	☐	5.000	4.961	82239.11	0.0495	P	2.6	-0.8
4	☐	10.000	9.945	137083.45	0.0824	P	1.5	-0.5
5	☐	100.000	99.263	1116201.15	0.6718	A	2.0	-0.7
6	☐	200.000	200.368	2150140.64	1.3390	A	0.4	0.2

y = 0.0066 * x + 0.0167
R = 1.0000
DL = 0.2863 ppb
BEC = 2.533 ppb

Weight: <None>
Min Conc: <None>

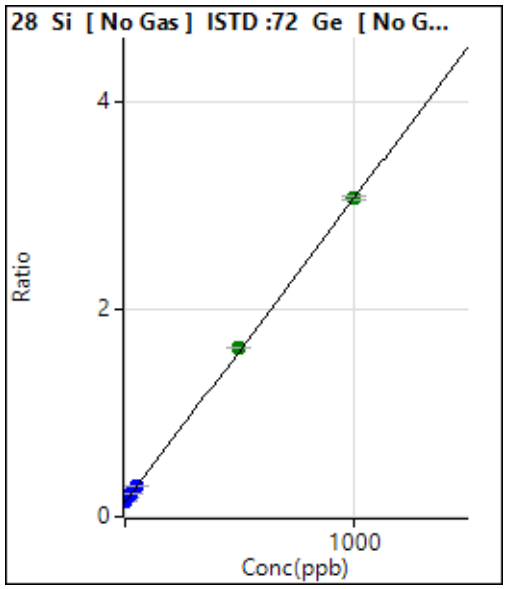
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	546.69	0.0013	P	10.8	
2	☐	2.000	1.954	936.71	0.0022	P	10.4	-2.3
3	☐	5.000	4.909	1530.11	0.0035	P	10.3	-1.8
4	☐	10.000	11.425	2820.34	0.0066	P	1.8	14.2
5	☐	100.000	97.953	20024.64	0.0466	P	3.4	-2.0
6	☐	200.000	200.955	39713.73	0.0943	P	3.9	0.5

y = 4.6305E-004 * x + 0.0013
R = 0.9999
DL = 0.8953 ppb
BEC = 2.754 ppb

Weight: <None>
Min Conc: <None>

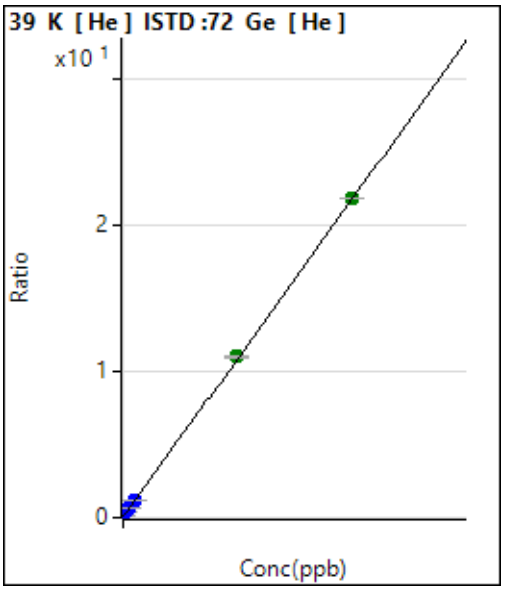


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	255640.52	0.1558	P	5.3	
2	☐	10.000	10.622	307648.20	0.1869	P	0.3	6.2
3	☐	25.000	22.013	366306.31	0.2203	P	2.0	-11.9
4	☐	50.000	46.822	487644.64	0.2929	P	0.7	-6.4
5	☐	500.000	505.336	2717696.94	1.6357	A	0.2	1.1
6	☐	1000.000	997.559	4941112.64	3.0771	A	0.8	-0.2

y = 0.0029 * x + 0.1558
R = 1.0000
DL = 8.512 ppb
BEC = 53.2 ppb

Weight: <None>
Min Conc: <None>

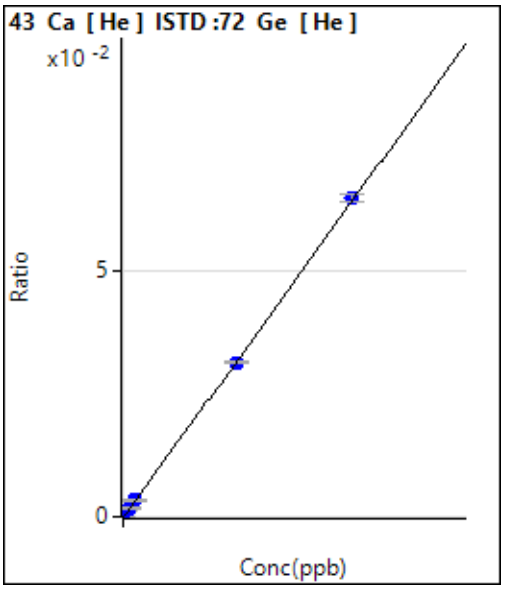
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	65036.44	0.1517	P	1.7	
2	☐	200.000	253.325	183416.25	0.4267	P	0.9	26.7
3	☐	500.000	487.523	293535.81	0.6810	P	1.7	-2.5
4	☐	1000.000	972.191	518555.67	1.2072	P	0.5	-2.8
5	☐	10000.00	10016.09	4734743.47	11.0252	A	1.3	0.2
6	☐	20000.00	19993.12	9203530.28	21.8563	A	0.5	0.0

y = 0.0011 * x + 0.1517
R = 1.0000
DL = 6.928 ppb
BEC = 139.8 ppb

Weight: <None>
Min Conc: <None>

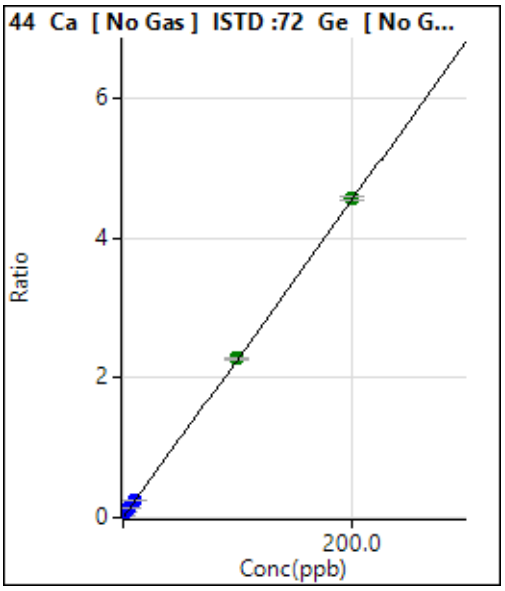


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43.33	0.0001	P	26.6	
2	☐	200.000	305.793	466.68	0.0011	P	19.0	52.9
3	☐	500.000	491.968	726.70	0.0017	P	9.7	-1.6
4	☐	1000.000	1035.615	1476.78	0.0034	P	8.7	3.6
5	☐	10000.00	9715.018	13486.81	0.0314	P	1.6	-2.8
6	☐	20000.00	20139.85	27374.25	0.0650	P	2.8	0.7

y = 3.2223E-006 * x + 1.0109E-004
R = 0.9998
DL = 25.03 ppb
BEC = 31.37 ppb

Weight: <None>
Min Conc: <None>

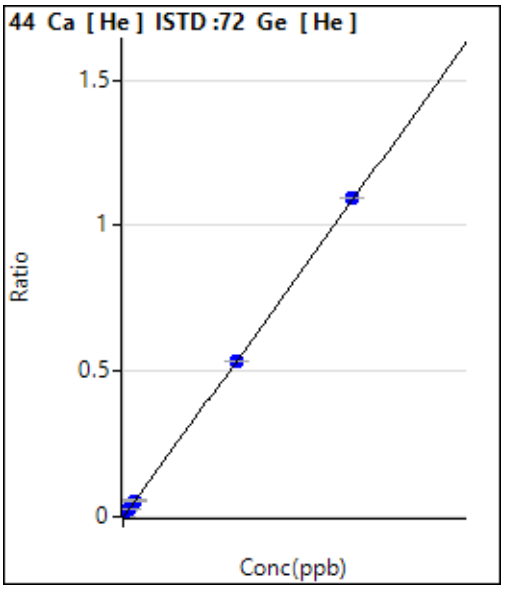
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	39223.36	0.0239	P	24.6	
2	☐	2.000	2.721	141111.44	0.0857	P	1.8	36.1
3	☐	5.000	4.614	214082.39	0.1287	P	1.8	-7.7
4	☐	10.000	9.466	397846.95	0.2390	P	0.6	-5.3
5	☐	100.000	99.518	3796434.73	2.2849	A	1.1	-0.5
6	☐	200.000	200.270	7344578.64	4.5738	A	1.3	0.1

y = 0.0227 * x + 0.0239
R = 1.0000
DL = 0.7761 ppb
BEC = 1.052 ppb

Weight: <None>
Min Conc: <None>

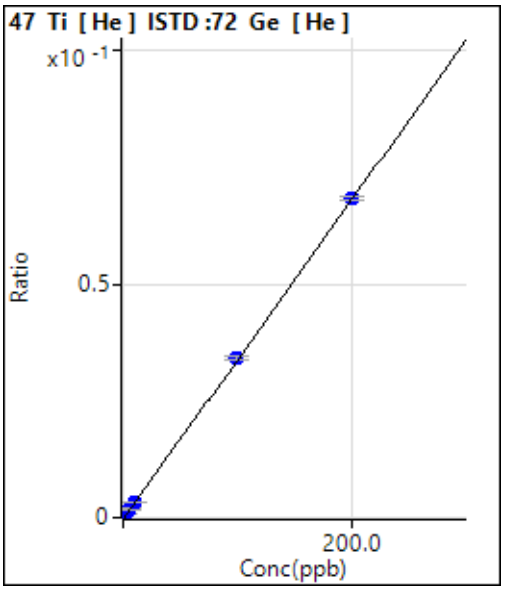


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	886.71	0.0021	P	12.7	
2	☐	200.000	282.978	7502.21	0.0175	P	7.5	41.5
3	☐	500.000	475.429	12038.81	0.0279	P	2.3	-4.9
4	☐	1000.000	985.422	23914.41	0.0557	P	3.5	-1.5
5	☐	10000.00	9795.089	229704.14	0.5349	P	0.4	-2.0
6	☐	20000.00	20102.96	461329.85	1.0955	P	0.4	0.5

y = 5.4394E-005 * x + 0.0021
R = 0.9999
DL = 14.52 ppb
BEC = 38.01 ppb

Weight: <None>
Min Conc: <None>

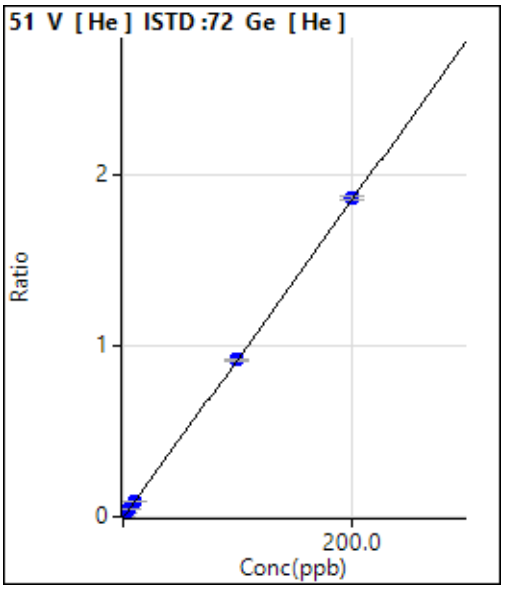
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	2.494	366.68	0.0009	P	3.2	24.7
3	☐	5.000	5.361	790.04	0.0018	P	18.2	7.2
4	☐	10.000	9.435	1386.77	0.0032	P	7.7	-5.6
5	☐	100.000	100.035	14698.03	0.0342	P	1.6	0.0
6	☐	200.000	199.997	28810.48	0.0684	P	1.7	0.0

y = 3.4212E-004 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

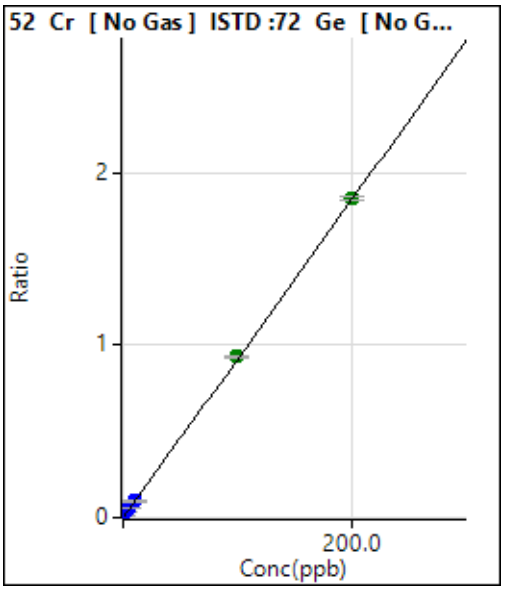


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1056.71	0.0025	P	6.1	
2	☐	2.000	2.430	10774.28	0.0251	P	1.9	21.5
3	☐	5.000	4.910	20750.21	0.0481	P	1.7	-1.8
4	☐	10.000	9.898	40613.28	0.0945	P	0.4	-1.0
5	☐	100.000	98.870	396065.52	0.9223	P	1.1	-1.1
6	☐	200.000	200.568	786721.67	1.8684	P	1.2	0.3

y = 0.0093 * x + 0.0025
R = 1.0000
DL = 0.04873 ppb
BEC = 0.265 ppb

Weight: <None>
Min Conc: <None>

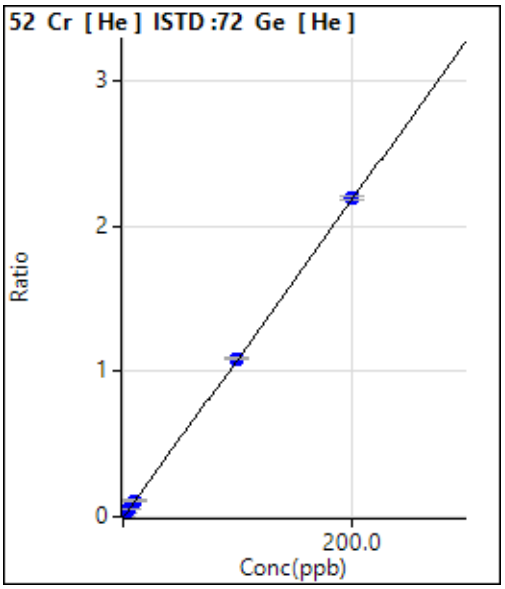
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13149.90	0.0080	P	4.2	
2	☐	2.000	2.299	48141.52	0.0292	P	2.0	15.0
3	☐	5.000	4.712	85680.49	0.0515	P	2.0	-5.8
4	☐	10.000	9.432	158341.00	0.0951	P	0.7	-5.7
5	☐	100.000	100.158	1549927.69	0.9329	A	1.2	0.2
6	☐	200.000	199.954	2977634.64	1.8543	A	0.9	0.0

y = 0.0092 * x + 0.0080
R = 1.0000
DL = 0.1091 ppb
BEC = 0.868 ppb

Weight: <None>
Min Conc: <None>

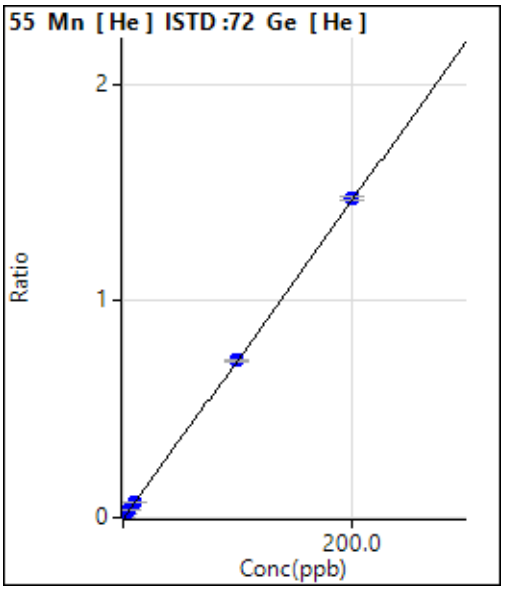


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1533.45	0.0036	P	14.8	
2	☐	2.000	2.406	12856.21	0.0299	P	2.1	20.3
3	☐	5.000	4.949	24889.53	0.0577	P	0.4	-1.0
4	☐	10.000	9.880	47981.23	0.1117	P	2.7	-1.2
5	☐	100.000	99.199	467698.70	1.0891	P	1.7	-0.8
6	☐	200.000	200.404	924952.80	2.1966	P	0.8	0.2

y = 0.0109 * x + 0.0036
R = 1.0000
DL = 0.145 ppb
BEC = 0.3271 ppb

Weight: <None>
Min Conc: <None>

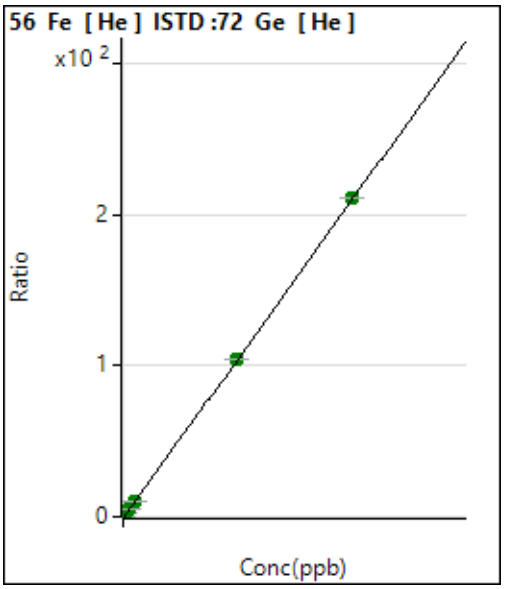
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	343.34	0.0008	P	5.9	
2	☐	2.000	2.705	8883.02	0.0207	P	2.6	35.3
3	☐	5.000	4.938	15976.29	0.0371	P	0.2	-1.2
4	☐	10.000	9.791	31232.54	0.0727	P	0.4	-2.1
5	☐	100.000	98.538	311125.05	0.7245	P	0.8	-1.5
6	☐	200.000	200.736	621107.14	1.4750	P	0.7	0.4

y = 0.0073 * x + 8.0086E-004
R = 1.0000
DL = 0.01936 ppb
BEC = 0.1091 ppb

Weight: <None>
Min Conc: <None>

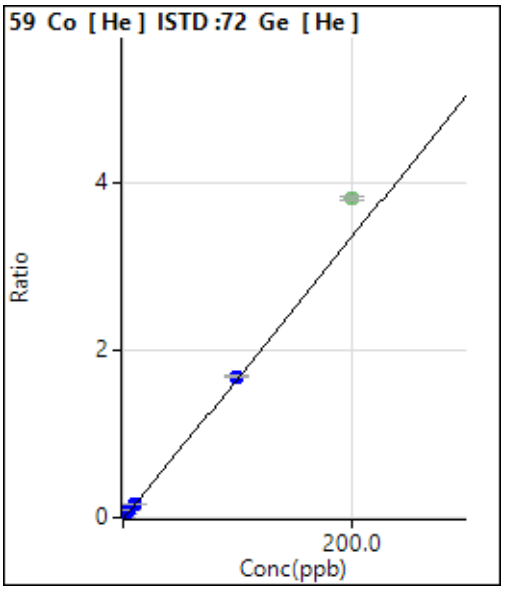


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13323.37	0.0311	P	2.5	
2	☐	200.000	263.301	1204661.23	2.8026	A	1.6	31.7
3	☐	500.000	526.954	2404416.58	5.5778	A	1.4	5.4
4	☐	1000.000	1016.407	4609167.22	10.7298	A	0.9	1.6
5	☐	10000.00	9896.057	44748616.0	104.197	A	0.6	-1.0
6	☐	20000.00	20049.84	88882518.6	211.075	A	0.6	0.2

y = 0.0105 * x + 0.0311
R = 1.0000
DL = 0.2238 ppb
BEC = 2.953 ppb

Weight: <None>
Min Conc: <None>

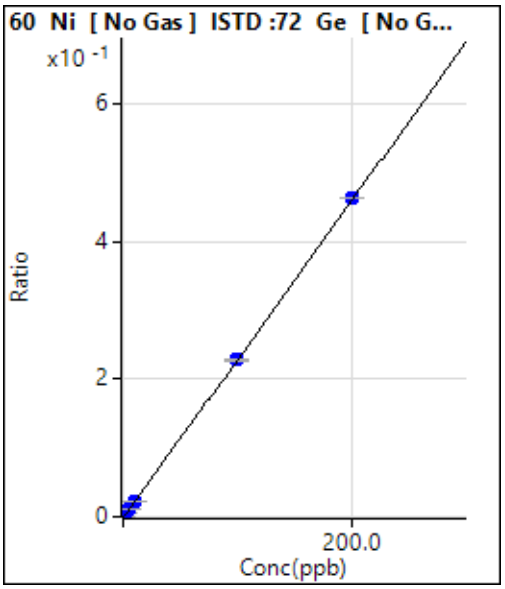
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0001	P	61.0	
2	☐	2.000	2.481	17962.08	0.0418	P	4.0	24.0
3	☐	5.000	5.003	36295.29	0.0842	P	1.5	0.1
4	☐	10.000	10.102	72975.22	0.1699	P	0.6	1.0
5	☐	100.000	99.980	721618.19	1.6803	P	1.2	0.0
6	☑	200.000		1603251.80	3.8075	A	1.3	

y = 0.0168 * x + 1.0854E-004
R = 1.0000
DL = 0.01182 ppb
BEC = 0.006458 ppb

Weight: <None>
Min Conc: <None>

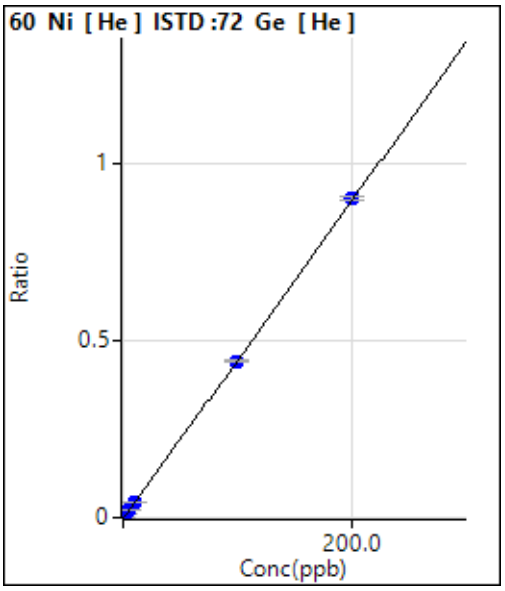


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	600.03	0.0004	P	35.2	
2	☐	2.000	2.528	10207.34	0.0062	P	1.0	26.4
3	☐	5.000	4.990	19767.89	0.0119	P	1.2	-0.2
4	☐	10.000	9.895	38638.35	0.0232	P	1.4	-1.0
5	☐	100.000	98.489	378361.73	0.2277	P	1.2	-1.5
6	☐	200.000	200.756	744756.74	0.4638	P	0.3	0.4

y = 0.0023 * x + 3.6597E-004
R = 1.0000
DL = 0.1672 ppb
BEC = 0.1585 ppb

Weight: <None>
Min Conc: <None>

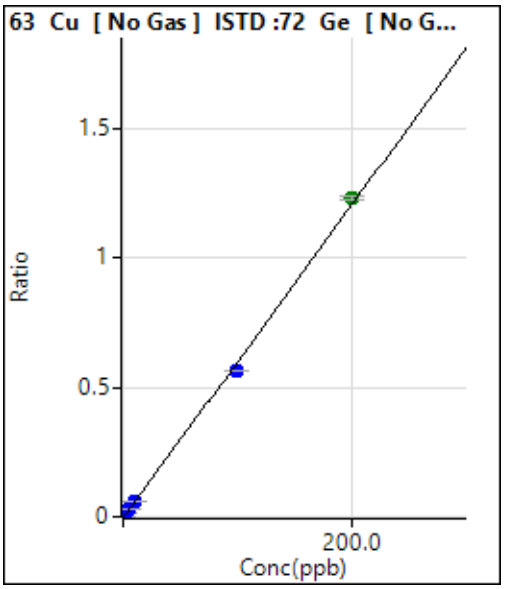
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	246.67	0.0006	P	23.7	
2	☐	2.000	2.502	5067.70	0.0118	P	2.2	25.1
3	☐	5.000	4.828	9576.86	0.0222	P	1.7	-3.4
4	☐	10.000	9.898	19303.89	0.0449	P	5.1	-1.0
5	☐	100.000	98.421	189686.73	0.4417	P	1.9	-1.6
6	☐	200.000	200.794	379220.76	0.9006	P	0.6	0.4

y = 0.0045 * x + 5.7605E-004
R = 1.0000
DL = 0.09134 ppb
BEC = 0.1285 ppb

Weight: <None>
Min Conc: <None>

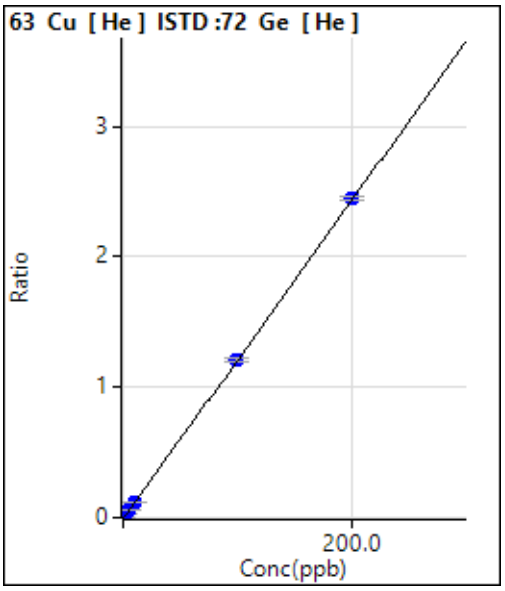


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1423.45	0.0009	P	12.4	
2	☐	2.000	2.284	24135.12	0.0147	P	1.9	14.2
3	☐	5.000	4.645	48111.93	0.0289	P	1.9	-7.1
4	☐	10.000	9.338	95359.66	0.0573	P	0.9	-6.6
5	☐	100.000	93.164	936585.06	0.5637	P	1.1	-6.8
6	☐	200.000	203.457	1975103.20	1.2300	A	1.4	1.7

y = 0.0060 * x + 8.6740E-004
R = 0.9992
DL = 0.05334 ppb
BEC = 0.1436 ppb

Weight: <None>
Min Conc: <None>

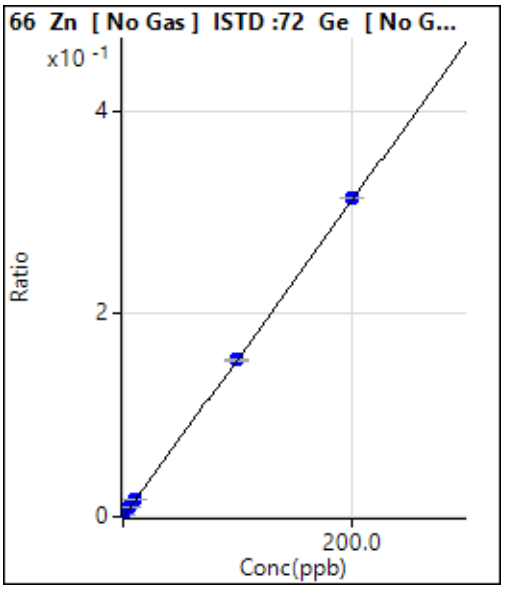
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	606.69	0.0014	P	8.1	
2	☐	2.000	2.369	13039.76	0.0303	P	2.4	18.4
3	☐	5.000	4.951	26666.45	0.0619	P	2.6	-1.0
4	☐	10.000	9.948	52789.37	0.1229	P	1.8	-0.5
5	☐	100.000	99.195	520742.92	1.2126	P	1.9	-0.8
6	☐	200.000	200.403	1031003.48	2.4485	P	0.9	0.2

y = 0.0122 * x + 0.0014
R = 1.0000
DL = 0.02823 ppb
BEC = 0.1159 ppb

Weight: <None>
Min Conc: <None>

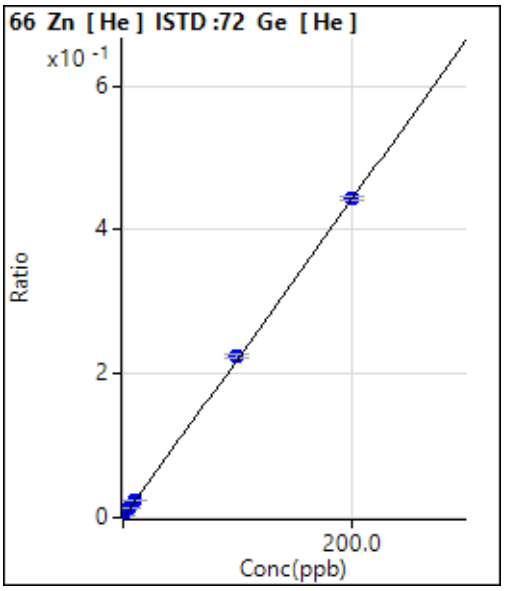


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1790.16	0.0011	P	6.6	
2	☐	2.000	3.912	11848.71	0.0072	P	2.0	95.6
3	☐	5.000	4.908	14558.01	0.0088	P	1.3	-1.8
4	☐	10.000	9.838	27377.90	0.0164	P	2.6	-1.6
5	☐	100.000	98.370	256979.08	0.1547	P	0.6	-1.6
6	☐	200.000	200.806	505140.93	0.3146	P	0.1	0.4

y = 0.0016 * x + 0.0011
R = 0.9999
DL = 0.1381 ppb
BEC = 0.6989 ppb

Weight: <None>
Min Conc: <None>

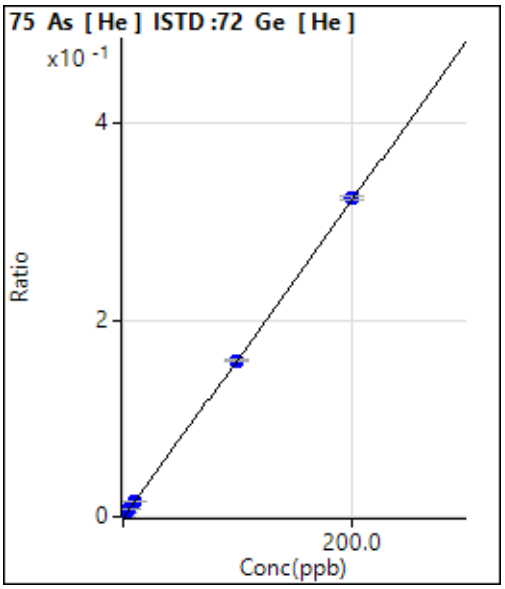
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	730.03	0.0017	P	10.1	
2	☐	2.000	3.854	4397.45	0.0102	P	3.2	92.7
3	☐	5.000	4.942	5447.87	0.0126	P	3.3	-1.2
4	☐	10.000	10.040	10274.05	0.0239	P	4.3	0.4
5	☐	100.000	100.385	96098.63	0.2238	P	2.7	0.4
6	☐	200.000	199.788	186839.01	0.4437	P	0.6	-0.1

y = 0.0022 * x + 0.0017
R = 1.0000
DL = 0.2329 ppb
BEC = 0.7702 ppb

Weight: <None>
Min Conc: <None>

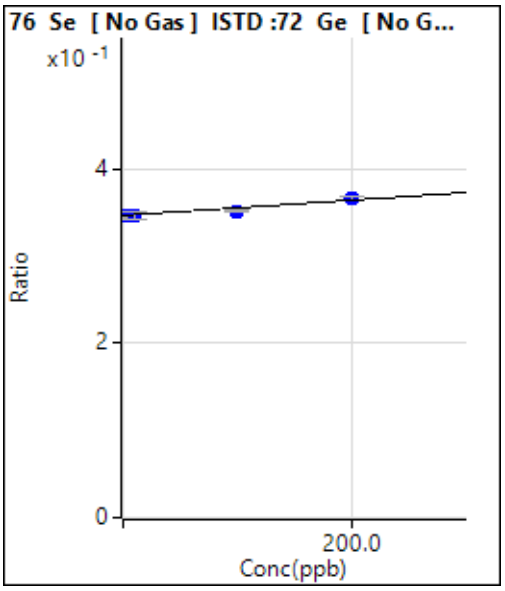


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	54.44	0.0001	P	2.8	
2	☐	2.000	2.463	1764.57	0.0041	P	2.8	23.2
3	☐	5.000	4.950	3501.58	0.0081	P	1.5	-1.0
4	☐	10.000	9.712	6793.96	0.0158	P	4.0	-2.9
5	☐	100.000	98.497	68383.17	0.1592	P	1.5	-1.5
6	☐	200.000	200.762	136613.26	0.3244	P	1.3	0.4

y = 0.0016 * x + 1.2701E-004
R = 1.0000
DL = 0.006506 ppb
BEC = 0.07863 ppb

Weight: <None>
Min Conc: <None>

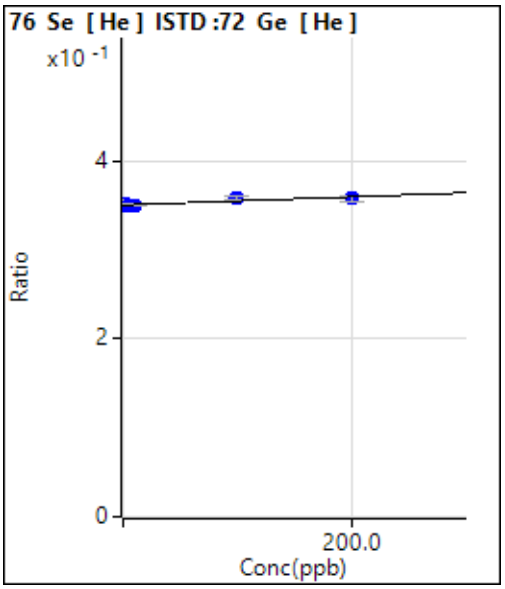
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	568809.15	0.3466	P	1.9	
2	☐	2.000	9.278	571898.82	0.3474	P	0.4	363.9
3	☐	5.000	8.452	577694.68	0.3474	P	1.9	69.0
4	☐	10.000	-1.625	576732.92	0.3465	P	2.0	-116.3
5	☐	100.000	55.270	584015.98	0.3515	P	0.3	-44.7
6	☐	200.000	222.787	588099.49	0.3662	P	0.7	11.4

y = 8.8035E-005 * x + 0.3466
R = 0.9657
DL = 229.6 ppb
BEC = 3937 ppb

Weight: <None>
Min Conc: <None>

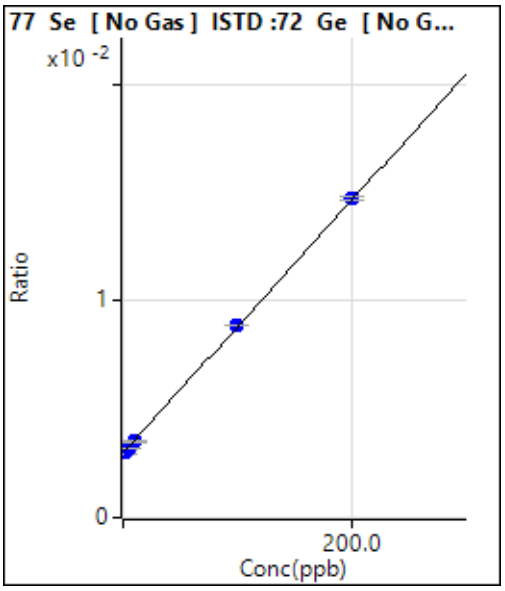


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150243.33	0.3506	P	0.8	
2	☐	2.000	54.149	151753.27	0.3531	P	2.2	2607.4
3	☐	5.000	-7.120	150974.64	0.3502	P	0.3	-242.4
4	☐	10.000	0.876	150610.39	0.3506	P	0.6	-91.2
5	☐	100.000	171.283	153991.03	0.3586	P	1.3	71.3
6	☐	200.000	164.596	150857.08	0.3583	P	1.7	-17.7

y = 4.6778E-005 * x + 0.3506
R = 0.8751
DL = 174.2 ppb
BEC = 7494 ppb

Weight: <None>
Min Conc: <None>

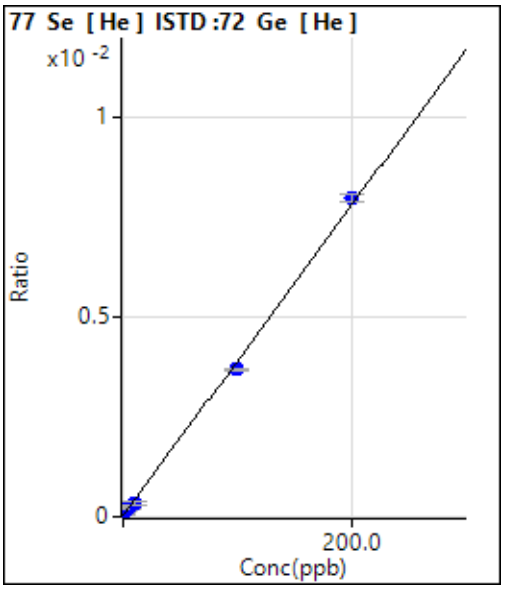
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5037.69	0.0031	P	3.2	
2	☐	2.000	-1.107	4947.65	0.0030	P	7.6	-155.4
3	☐	5.000	2.310	5331.18	0.0032	P	1.2	-53.8
4	☐	10.000	8.057	5891.39	0.0035	P	3.1	-19.4
5	☐	100.000	99.698	14744.96	0.0089	P	0.9	-0.3
6	☐	200.000	200.346	23657.71	0.0147	P	0.9	0.2

y = 5.8212E-005 * x + 0.0031
R = 0.9999
DL = 5.136 ppb
BEC = 52.75 ppb

Weight: <None>
Min Conc: <None>

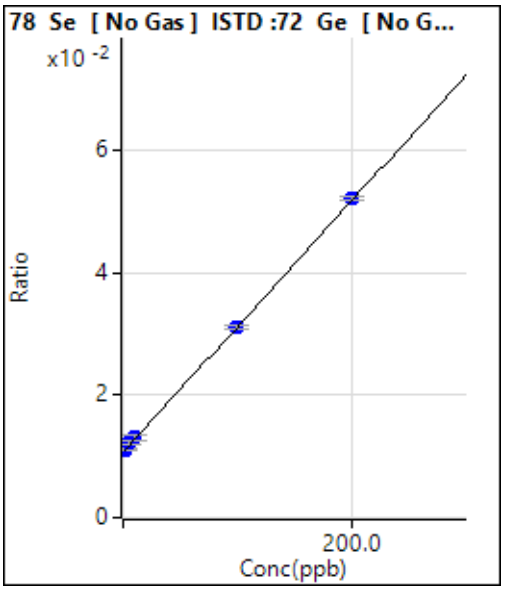


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0001	P	33.2	
2	☐	2.000	2.197	66.67	0.0002	P	17.3	9.8
3	☐	5.000	3.784	93.33	0.0002	P	12.9	-24.3
4	☐	10.000	7.202	150.00	0.0003	P	30.5	-28.0
5	☐	100.000	93.113	1580.13	0.0037	P	1.6	-6.9
6	☐	200.000	203.612	3353.81	0.0080	P	3.0	1.8

y = 3.8765E-005 * x + 6.9947E-005
R = 0.9992
DL = 1.796 ppb
BEC = 1.804 ppb

Weight: <None>
Min Conc: <None>

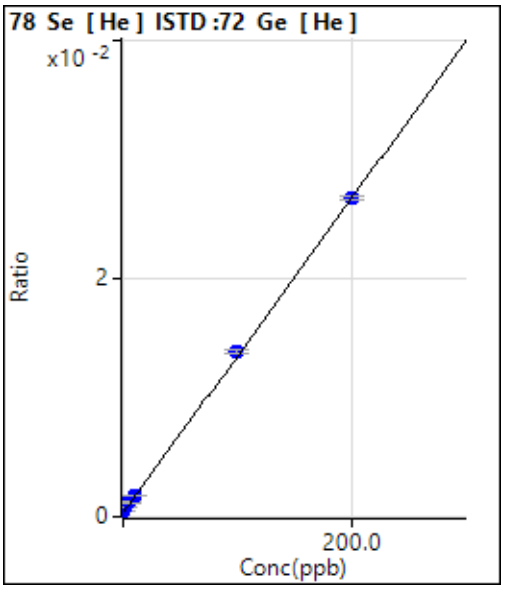
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18022.35	0.0110	P	1.8	
2	☐	2.000	0.391	18209.28	0.0111	P	3.5	-80.5
3	☐	5.000	6.111	20345.69	0.0122	P	3.6	22.2
4	☐	10.000	10.659	21904.81	0.0132	P	7.0	6.6
5	☐	100.000	98.198	51706.20	0.0311	P	1.6	-1.8
6	☐	200.000	200.856	83773.12	0.0522	P	1.0	0.4

y = 2.0505E-004 * x + 0.0110
R = 0.9999
DL = 2.875 ppb
BEC = 53.56 ppb

Weight: <None>
Min Conc: <None>

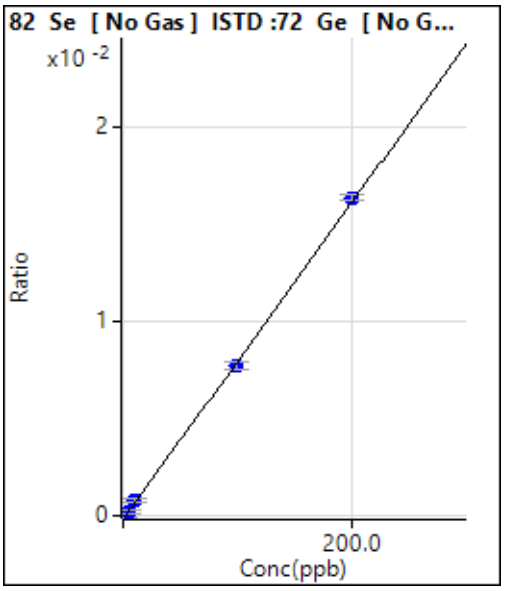


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	197.33	0.0005	P	8.5	
2	☐	2.000	2.845	359.34	0.0008	P	3.9	42.3
3	☐	5.000	5.703	522.68	0.0012	P	7.7	14.1
4	☐	10.000	10.393	786.69	0.0018	P	1.2	3.9
5	☐	100.000	101.582	5951.32	0.0139	P	1.6	1.6
6	☐	200.000	199.164	11254.72	0.0267	P	1.1	-0.4

y = 1.3189E-004 * x + 4.6064E-004
R = 1.0000
DL = 0.8877 ppb
BEC = 3.493 ppb

Weight: <None>
Min Conc: <None>

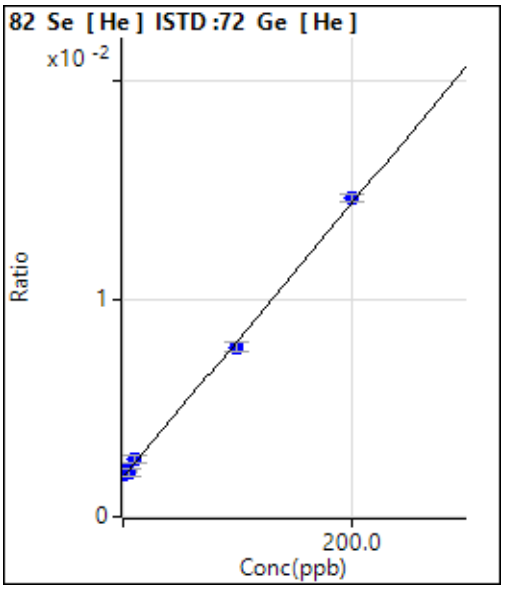
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-131.53	-0.0001	P	-224.	
2	☐	2.000	0.154	-112.84	-0.0001	P	-48.9	-92.3
3	☐	5.000	3.606	356.61	0.0002	P	93.1	-27.9
4	☐	10.000	11.227	1382.18	0.0008	P	24.3	12.3
5	☐	100.000	95.684	12808.95	0.0077	P	5.0	-4.3
6	☐	200.000	202.150	26300.29	0.0164	P	1.5	1.1

y = 8.1423E-005 * x - 8.1253E-005
R = 0.9996
DL = 6.723 ppb
BEC = -0.9979 ppb

Weight: <None>
Min Conc: <None>

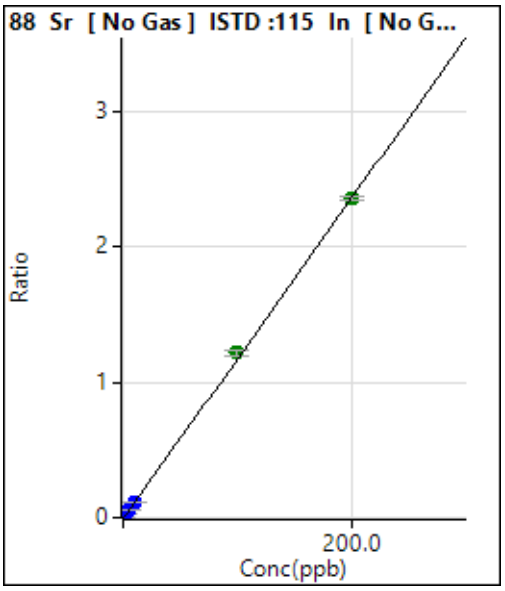


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	813.38	0.0019	P	4.3	
2	☐	2.000	2.864	893.38	0.0021	P	4.6	43.2
3	☐	5.000	2.643	890.05	0.0021	P	17.4	-47.1
4	☐	10.000	11.913	1136.73	0.0026	P	11.7	19.1
5	☐	100.000	94.002	3350.48	0.0078	P	5.3	-6.0
6	☐	200.000	202.953	6164.88	0.0146	P	2.8	1.5

y = 6.2792E-005 * x + 0.0019
R = 0.9992
DL = 3.932 ppb
BEC = 30.23 ppb

Weight: <None>
Min Conc: <None>

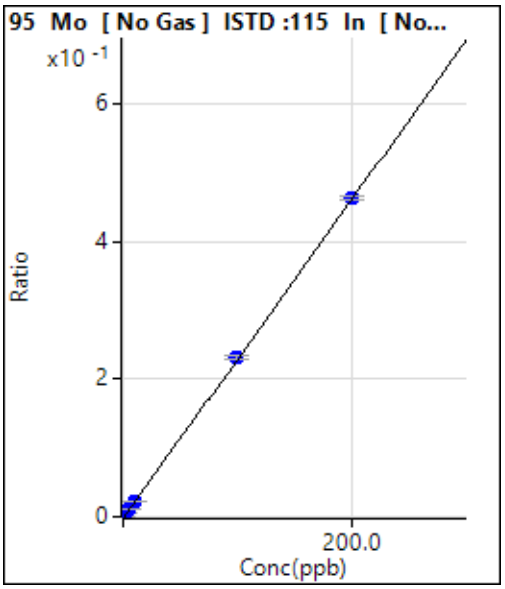
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6060.99	0.0032	P	58.7	
2	☐	2.000	2.173	57038.27	0.0289	P	1.6	8.6
3	☐	5.000	4.610	111590.01	0.0577	P	0.8	-7.8
4	☐	10.000	9.278	217716.00	0.1129	P	1.7	-7.2
5	☐	100.000	102.487	2313712.93	1.2156	A	3.0	2.5
6	☐	200.000	198.800	4437570.04	2.3550	A	1.4	-0.6

y = 0.0118 * x + 0.0032
R = 0.9999
DL = 0.4734 ppb
BEC = 0.2689 ppb

Weight: <None>
Min Conc: <None>

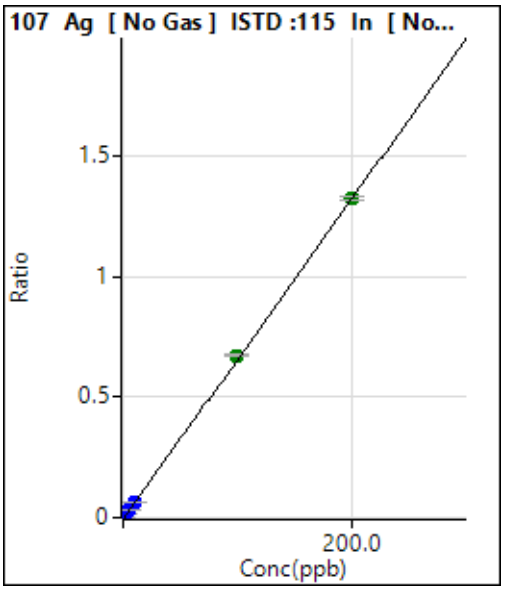


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	70.00	0.0000	P	111.5	
2	☐	2.000	2.397	11024.78	0.0056	P	1.5	19.9
3	☐	5.000	4.845	21741.35	0.0112	P	2.2	-3.1
4	☐	10.000	9.481	42360.99	0.0220	P	1.4	-5.2
5	☐	100.000	99.831	439750.20	0.2310	P	2.0	-0.2
6	☐	200.000	200.110	872576.60	0.4631	P	0.8	0.1

y = 0.0023 * x + 3.6670E-005
R = 1.0000
DL = 0.05302 ppb
BEC = 0.01585 ppb

Weight: <None>
Min Conc: <None>

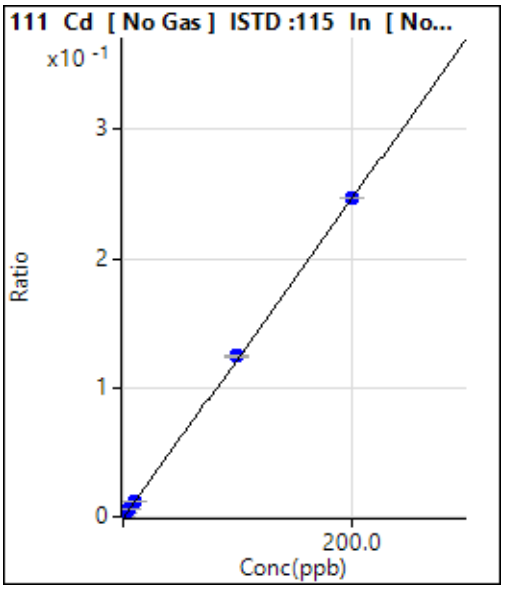
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	316.68	0.0002	P	42.4	
2	☐	2.000	2.248	29874.06	0.0151	P	4.3	12.4
3	☐	5.000	4.626	59845.49	0.0310	P	0.7	-7.5
4	☐	10.000	9.124	117390.72	0.0609	P	1.3	-8.8
5	☐	100.000	101.117	1281525.32	0.6732	A	0.8	1.1
6	☐	200.000	199.492	2502412.00	1.3280	A	1.1	-0.3

y = 0.0067 * x + 1.6697E-004
R = 1.0000
DL = 0.03189 ppb
BEC = 0.02509 ppb

Weight: <None>
Min Conc: <None>

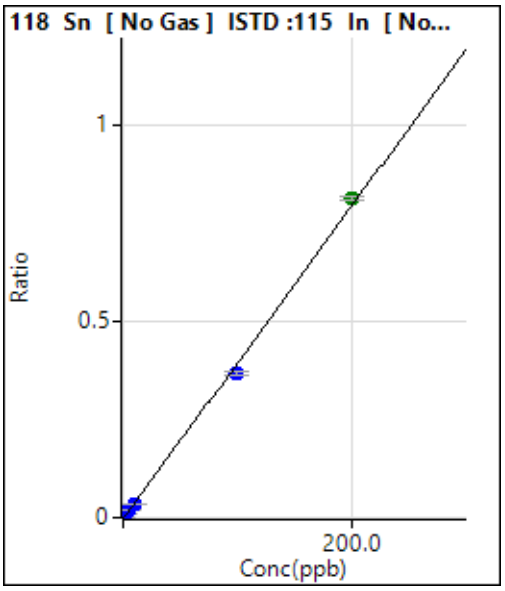


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	2.354	5751.36	0.0029	P	6.2	17.7
3	☐	5.000	4.983	11915.59	0.0062	P	1.7	-0.3
4	☐	10.000	9.680	23080.43	0.0120	P	1.7	-3.2
5	☐	100.000	100.576	236746.51	0.1244	P	1.2	0.6
6	☐	200.000	199.725	465393.09	0.2470	P	0.5	-0.1

y = 0.0012 * x + 1.7267E-006
R = 1.0000
DL = 0.007256 ppb
BEC = 0.001396 ppb

Weight: <None>
Min Conc: <None>

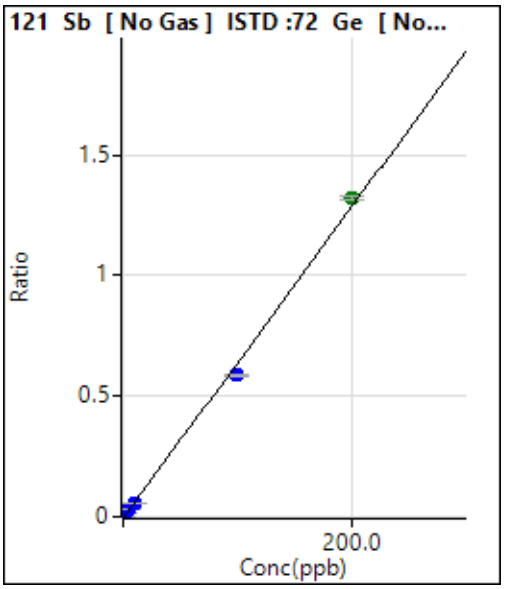
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1326.76	0.0007	P	10.6	
2	☐	2.000	2.122	18076.24	0.0092	P	3.1	6.1
3	☐	5.000	4.477	35819.19	0.0185	P	0.4	-10.5
4	☐	10.000	8.923	69841.97	0.0362	P	2.1	-10.8
5	☐	100.000	92.149	699795.90	0.3676	P	1.6	-7.9
6	☐	200.000	203.991	1531974.61	0.8130	A	0.8	2.0

y = 0.0040 * x + 7.0212E-004
R = 0.9989
DL = 0.05581 ppb
BEC = 0.1763 ppb

Weight: <None>
Min Conc: <None>

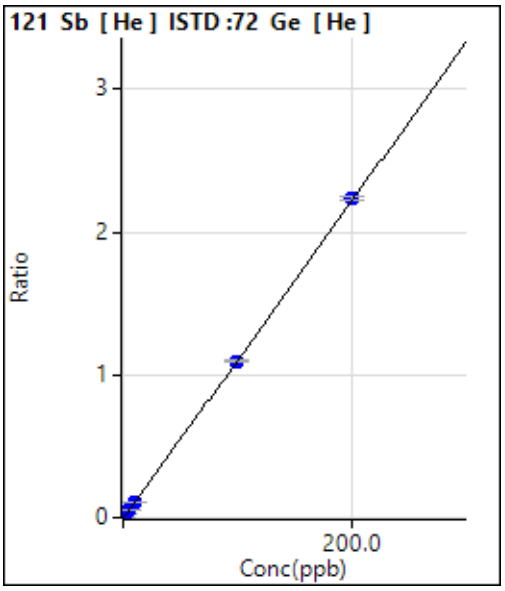


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	993.39	0.0006	P	14.1	
2	☐	2.000	2.310	25541.97	0.0155	P	4.5	15.5
3	☐	5.000	4.560	49965.38	0.0300	P	2.7	-8.8
4	☐	10.000	9.067	98437.55	0.0591	P	1.6	-9.3
5	☐	100.000	90.692	973761.03	0.5861	P	1.2	-9.3
6	☐	200.000	204.709	2123042.10	1.3221	A	1.0	2.4

y = 0.0065 * x + 6.0545E-004
R = 0.9985
DL = 0.03961 ppb
BEC = 0.09379 ppb

Weight: <None>
Min Conc: <None>

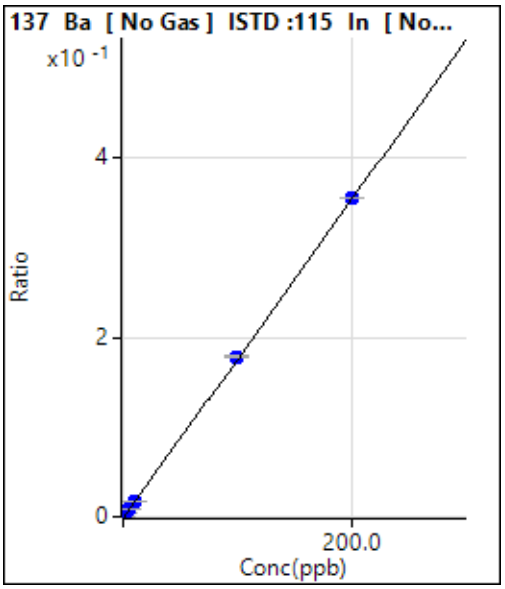
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	540.02	0.0013	P	7.5	
2	☐	2.000	2.441	12222.60	0.0284	P	2.5	22.1
3	☐	5.000	4.976	24423.06	0.0567	P	2.2	-0.5
4	☐	10.000	9.846	47629.97	0.1109	P	0.5	-1.5
5	☐	100.000	98.395	470992.86	1.0967	P	1.0	-1.6
6	☐	200.000	200.807	941929.21	2.2369	P	0.9	0.4

y = 0.0111 * x + 0.0013
R = 0.9999
DL = 0.02547 ppb
BEC = 0.1132 ppb

Weight: <None>
Min Conc: <None>

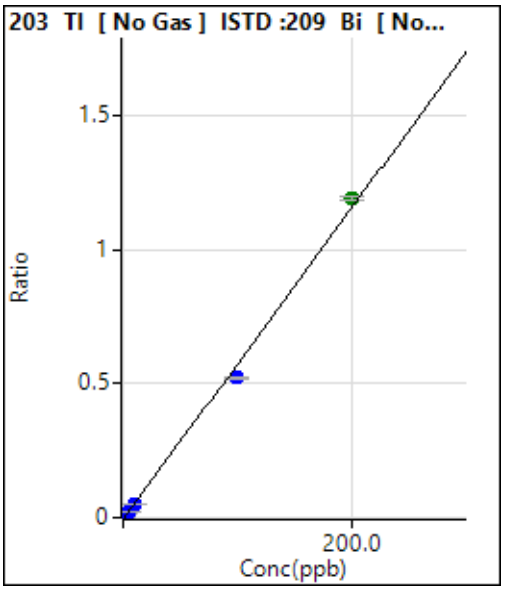


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	236.68	0.0001	P	42.3	
2	☐	2.000	2.321	8396.23	0.0043	P	1.6	16.0
3	☐	5.000	4.846	16904.60	0.0087	P	0.8	-3.1
4	☐	10.000	9.752	33680.76	0.0175	P	0.9	-2.5
5	☐	100.000	100.007	338844.25	0.1780	P	1.2	0.0
6	☐	200.000	200.009	670622.12	0.3559	P	0.2	0.0

y = 0.0018 * x + 1.2405E-004
R = 1.0000
DL = 0.08845 ppb
BEC = 0.06974 ppb

Weight: <None>
Min Conc: <None>

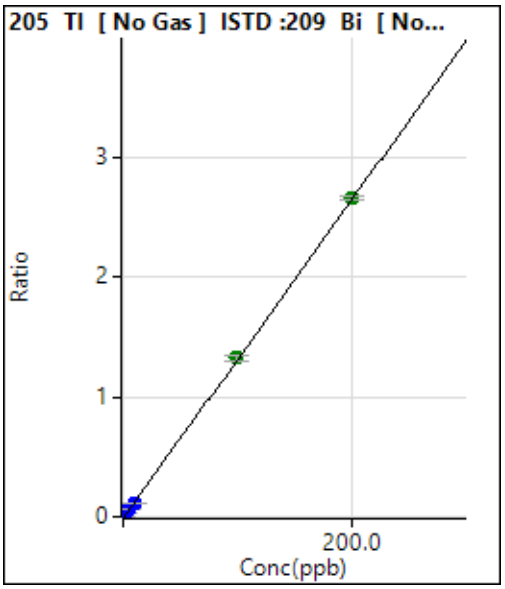
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	100.00	0.0001	P	33.3	
2	☐	2.000	2.122	22013.05	0.0124	P	2.1	6.1
3	☐	5.000	4.223	44268.64	0.0246	P	3.0	-15.5
4	☐	10.000	8.605	88515.67	0.0501	P	0.9	-13.9
5	☐	100.000	89.799	902115.92	0.5220	P	1.7	-10.2
6	☐	200.000	205.189	1988286.27	1.1927	A	1.2	2.6

y = 0.0058 * x + 5.7442E-005
R = 0.9982
DL = 0.009886 ppb
BEC = 0.009883 ppb

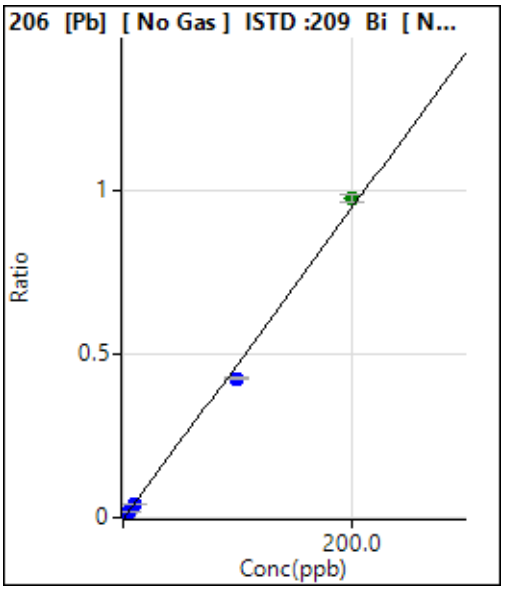
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	253.35	0.0001	P	66.0	
2	☐	2.000	2.195	52008.51	0.0293	P	1.2	9.7
3	☐	5.000	4.446	106471.84	0.0592	P	2.4	-11.1
4	☐	10.000	8.930	209823.37	0.1187	P	0.5	-10.7
5	☐	100.000	99.580	2284433.87	1.3221	A	3.8	-0.4
6	☐	200.000	200.276	4431918.99	2.6589	A	1.0	0.1

y = 0.0133 * x + 1.4518E-004
R = 1.0000
DL = 0.02165 ppb
BEC = 0.01094 ppb

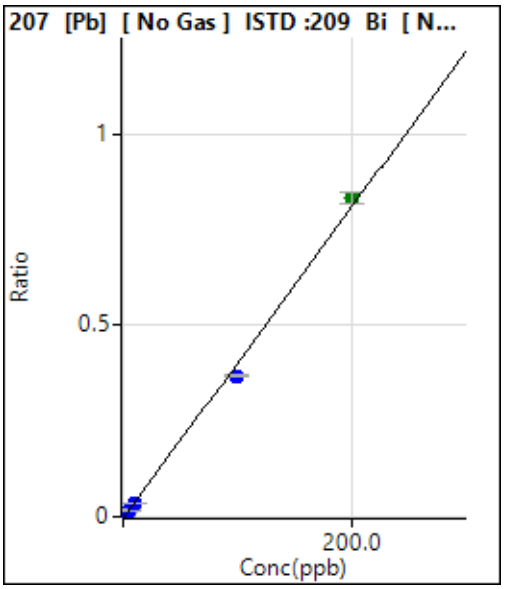
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	203.34	0.0001	P	15.2	
2	☐	2.000	2.153	18377.18	0.0103	P	2.9	7.7
3	☐	5.000	4.241	36470.44	0.0203	P	0.7	-15.2
4	☐	10.000	8.579	72259.18	0.0409	P	1.9	-14.2
5	☐	100.000	89.463	734674.78	0.4251	P	1.6	-10.5
6	☐	200.000	205.357	1626029.51	0.9757	A	2.3	2.7

y = 0.0048 * x + 1.1723E-004
R = 0.9981
DL = 0.01127 ppb
BEC = 0.02468 ppb

Weight: <None>
Min Conc: <None>

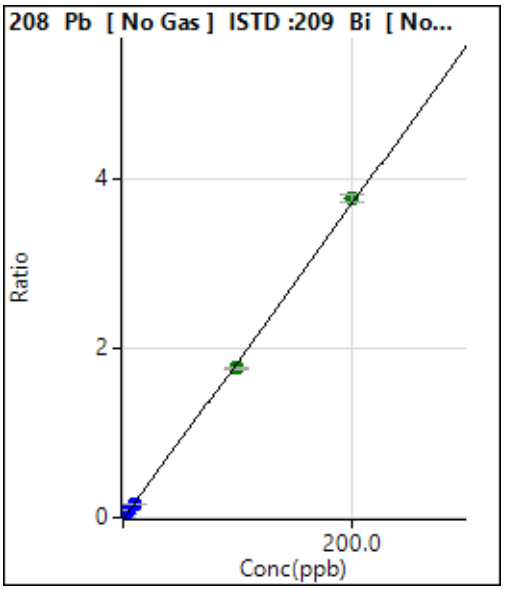


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	153.34	0.0001	P	40.0	
2	☐	2.000	2.129	15546.64	0.0088	P	4.9	6.4
3	☐	5.000	4.284	31536.99	0.0175	P	3.2	-14.3
4	☐	10.000	8.754	63139.75	0.0357	P	0.3	-12.5
5	☐	100.000	90.465	636464.52	0.3683	P	1.3	-9.5
6	☐	200.000	204.846	1389620.34	0.8338	A	4.0	2.4

y = 0.0041 * x + 8.7793E-005
R = 0.9985
DL = 0.0259 ppb
BEC = 0.02157 ppb

Weight: <None>
Min Conc: <None>

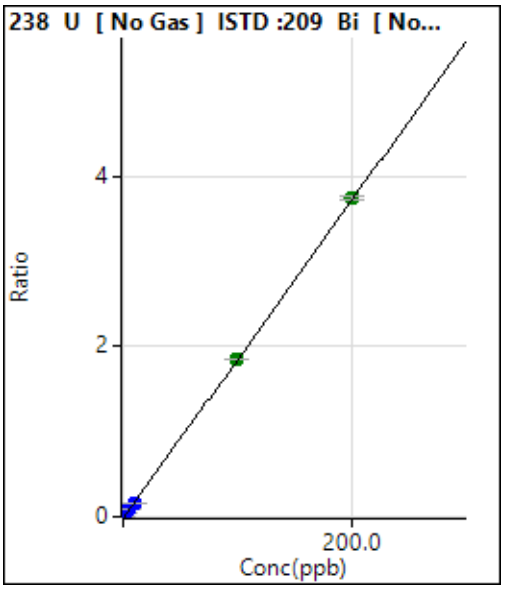
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	736.69	0.0004	P	19.1	
2	☐	2.000	2.138	71260.05	0.0401	P	1.9	6.9
3	☐	5.000	4.355	146252.66	0.0813	P	1.7	-12.9
4	☐	10.000	8.796	289429.19	0.1637	P	0.4	-12.0
5	☐	100.000	94.672	3038582.14	1.7581	A	1.0	-5.3
6	☐	200.000	202.739	6274227.82	3.7645	A	2.0	1.4

y = 0.0186 * x + 4.2356E-004
R = 0.9995
DL = 0.01307 ppb
BEC = 0.02281 ppb

Weight: <None>
Min Conc: <None>

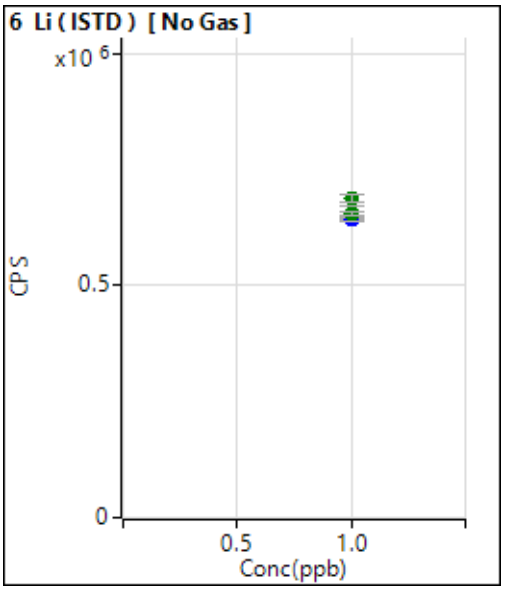


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	173.34	0.0001	P	47.1	
2	☐	2.000	2.198	73111.03	0.0412	P	0.5	9.9
3	☐	5.000	4.391	147784.51	0.0821	P	1.9	-12.2
4	☐	10.000	8.988	296937.60	0.1680	P	1.0	-10.1
5	☐	100.000	99.019	3196735.89	1.8496	A	0.7	-1.0
6	☐	200.000	200.554	6243705.95	3.7461	A	1.4	0.3

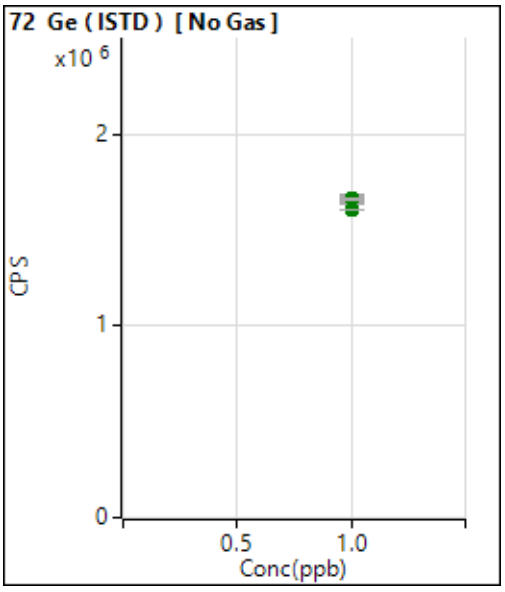
y = 0.0187 * x + 9.9495E-005
R = 1.0000
DL = 0.007528 ppb
BEC = 0.005327 ppb

Weight: <None>
Min Conc: <None>

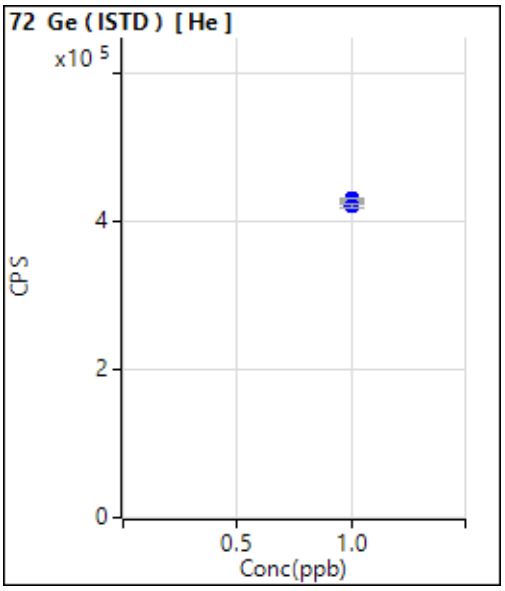
Calibration for 143_ICV.d



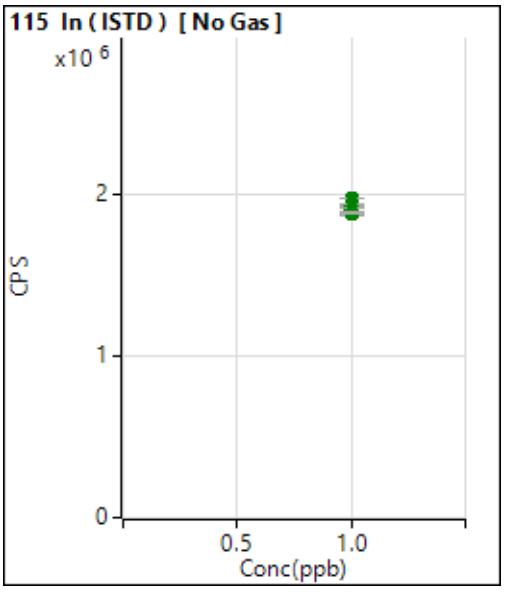
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		654203.84		M	5.1	
2	☐	1.000		642756.72		P	0.5	
3	☐	1.000		646519.35		P	0.8	
4	☐	1.000		642042.68		P	1.1	
5	☐	1.000		687374.41		A	2.1	
6	☐	1.000		654294.39		A	1.0	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1641029.93		A	0.9	
2	☐	1.000		1646033.05		A	0.9	
3	☐	1.000		1663363.15		A	1.6	
4	☐	1.000		1664939.98		A	2.0	
5	☐	1.000		1661534.92		A	0.3	
6	☐	1.000		1605769.19		A	0.1	

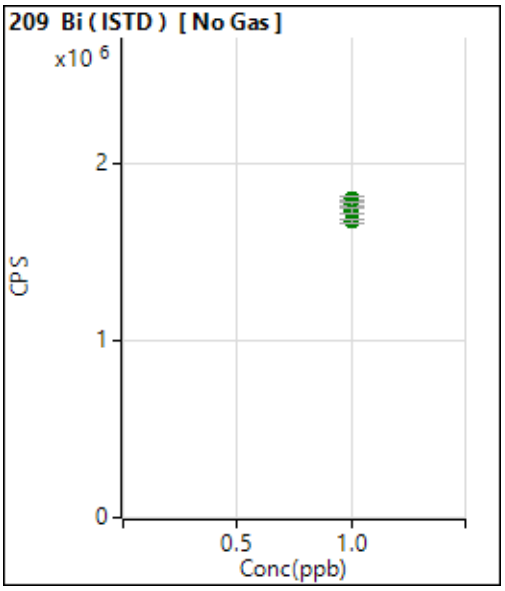


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		428589.26		P	0.9	
2	☐	1.000		429817.79		P	0.7	
3	☐	1.000		431068.07		P	0.6	
4	☐	1.000		429568.69		P	0.2	
5	☐	1.000		429476.35		P	0.9	
6	☐	1.000		421104.65		P	0.9	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1892968.90		A	3.1	
2	☐	1.000		1974579.56		A	0.4	
3	☐	1.000		1933270.49		A	0.6	
4	☐	1.000		1927907.23		A	1.2	
5	☐	1.000		1903731.32		A	1.2	
6	☐	1.000		1884405.19		A	0.5	

Calibration for 143_ICV.d



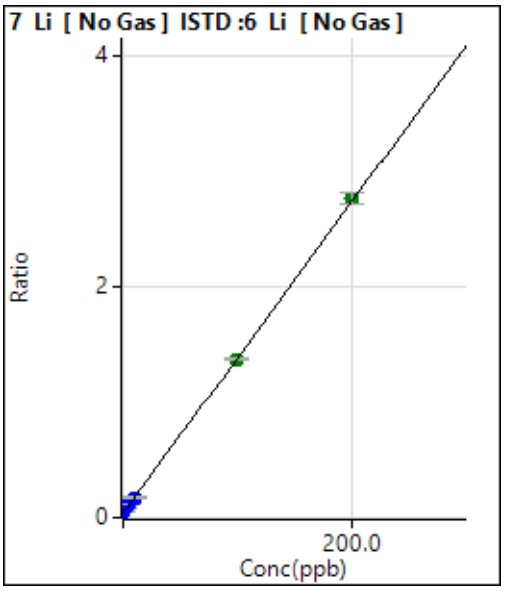
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1736706.69		A	2.1	
2	☐	1.000		1776310.76		A	0.3	
3	☐	1.000		1799894.45		A	1.6	
4	☐	1.000		1767785.81		A	0.9	
5	☐	1.000		1728457.37		A	1.4	
6	☐	1.000		1666933.10		A	1.4	

Calibration for 025_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\082222A.b\
Analysis File: 082222A.batch.bin
DA Date-Time: 08/22/2022 20:20:33
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	018CALB.d	CAL BLK	08/22/2022 12:37:46
2	019CALS.d	2/10/200	08/22/2022 12:40:06
3	020CALS.d	5/25/500	08/22/2022 12:42:24
4	021CALS.d	10/50/100	08/22/2022 12:44:42
5	022CALS.d	100/500/10K	08/22/2022 12:46:59
6	023CALS.d	200/1000/20K	08/22/2022 12:49:11

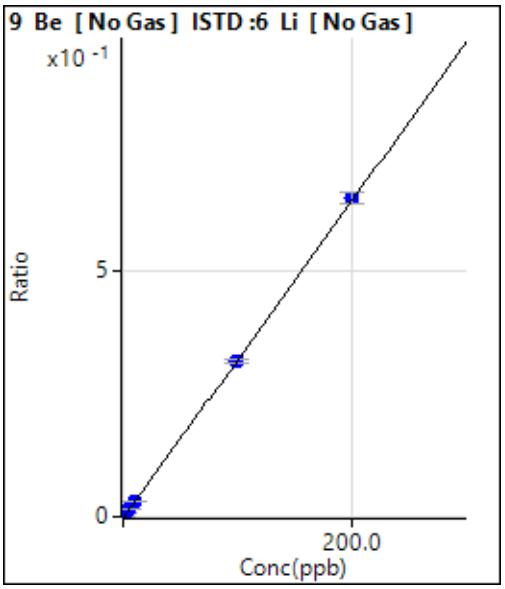
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	41136.69	0.0528	P	1.6	
2	☐	2.000	2.291	65789.77	0.0836	P	0.6	14.6
3	☐	5.000	4.766	89457.20	0.1170	P	2.0	-4.7
4	☐	10.000	9.040	134901.75	0.1746	P	2.0	-9.6
5	☐	100.000	97.553	1062663.58	1.3673	A	1.4	-2.4
6	☐	200.000	201.275	2068369.55	2.7650	A	4.0	0.6

y = 0.0135 * x + 0.0528
R = 0.9999
DL = 0.1916 ppb
BEC = 3.915 ppb

Weight: <None>
Min Conc: <None>

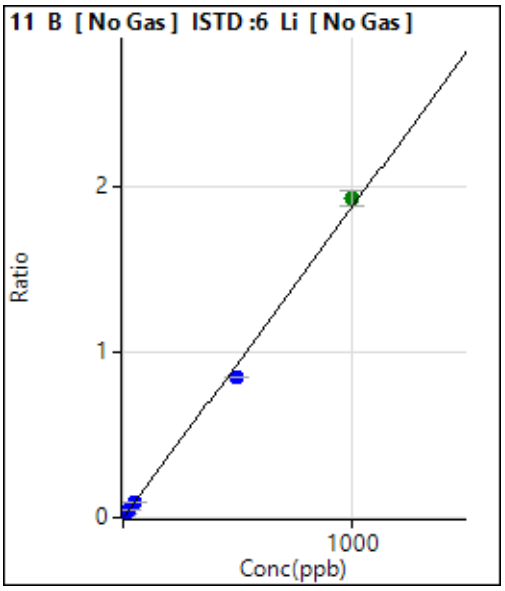


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8.33	0.0000	P	34.5	
2	☐	2.000	2.420	6133.05	0.0078	P	1.6	21.0
3	☐	5.000	4.911	12093.62	0.0158	P	0.9	-1.8
4	☐	10.000	9.822	24419.64	0.0316	P	3.6	-1.8
5	☐	100.000	98.053	245186.38	0.3155	P	1.4	-1.9
6	☐	200.000	200.980	483647.32	0.6466	P	3.6	0.5

y = 0.0032 * x + 1.0680E-005
R = 0.9999
DL = 0.003436 ppb
BEC = 0.00332 ppb

Weight: <None>
Min Conc: <None>

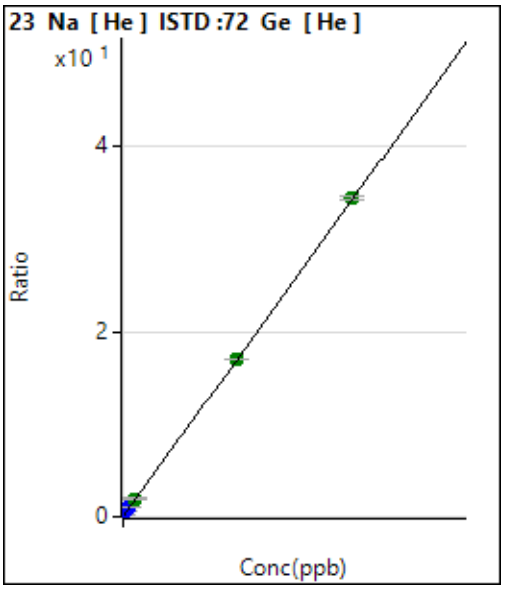
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5604.49	0.0072	P	1.1	
2	☐	10.000	10.546	21194.38	0.0269	P	1.6	5.5
3	☐	25.000	22.809	38181.79	0.0499	P	1.5	-8.8
4	☐	50.000	44.993	70684.98	0.0915	P	3.4	-10.0
5	☐	500.000	449.914	660851.18	0.8502	P	0.1	-10.0
6	☐	1000.000	1025.343	1442295.40	1.9284	A	4.3	2.5

y = 0.0019 * x + 0.0072
R = 0.9983
DL = 0.1277 ppb
BEC = 3.836 ppb

Weight: <None>
Min Conc: <None>

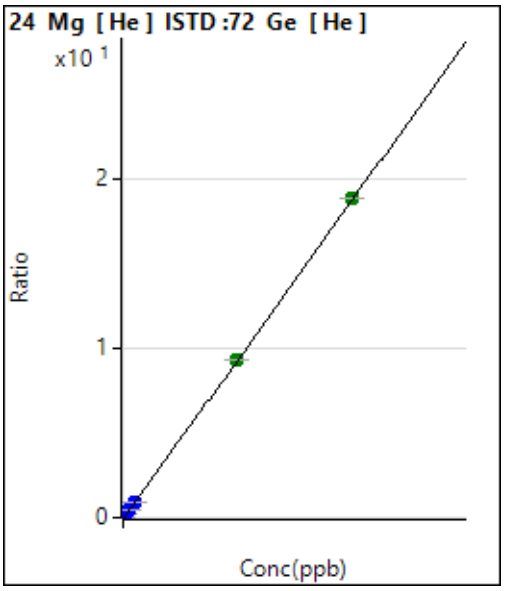


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	96217.35	0.2107	P	1.3	
2	☐	200.000	237.083	284434.93	0.6154	P	1.1	18.5
3	☐	500.000	466.293	459547.83	1.0067	P	0.9	-6.7
4	☐	1000.000	1020.761	899371.47	1.9532	A	2.3	2.1
5	☐	10000.00	9883.504	7789478.01	17.0829	A	0.4	-1.2
6	☐	20000.00	20057.68	15299572.6	34.4513	A	0.9	0.3

y = 0.0017 * x + 0.2107
R = 1.0000
DL = 4.873 ppb
BEC = 123.4 ppb

Weight: <None>
Min Conc: <None>

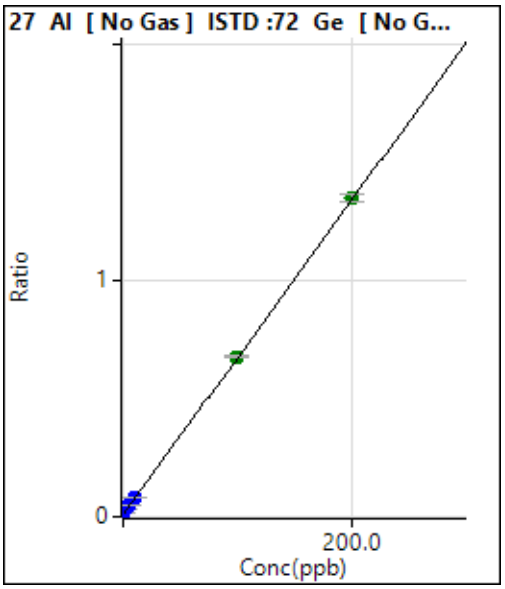
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	270.01	0.0006	P	11.6	
2	☐	200.000	238.433	103713.43	0.2244	P	1.2	19.2
3	☐	500.000	481.277	206474.83	0.4523	P	1.2	-3.7
4	☐	1000.000	944.893	408669.64	0.8875	P	1.3	-5.5
5	☐	10000.00	9892.153	4233949.52	9.2853	A	0.4	-1.1
6	☐	20000.00	20056.76	8360438.84	18.8258	A	0.5	0.3

y = 9.3860E-004 * x + 5.9149E-004
R = 1.0000
DL = 0.219 ppb
BEC = 0.6302 ppb

Weight: <None>
Min Conc: <None>

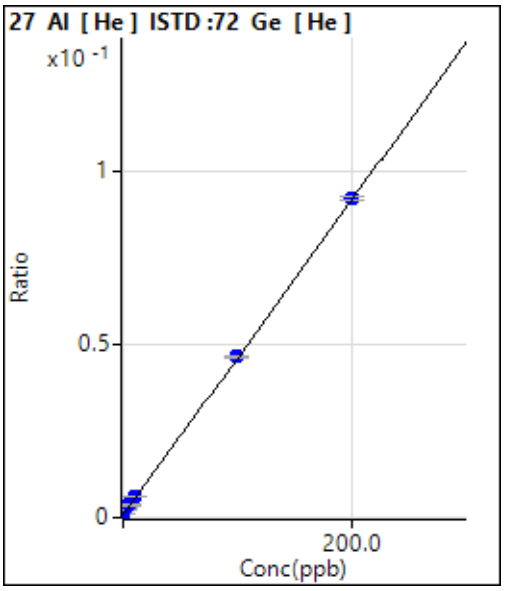


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	28607.39	0.0160	P	1.6	
2	☐	2.000	2.374	57472.09	0.0318	P	2.8	18.7
3	☐	5.000	4.814	87280.22	0.0481	P	1.7	-3.7
4	☐	10.000	9.871	146519.13	0.0817	P	1.3	-1.3
5	☐	100.000	99.215	1193475.03	0.6768	A	1.3	-0.8
6	☐	200.000	200.400	2316814.24	1.3508	A	2.3	0.2

y = 0.0067 * x + 0.0160
R = 1.0000
DL = 0.1147 ppb
BEC = 2.401 ppb

Weight: <None>
Min Conc: <None>

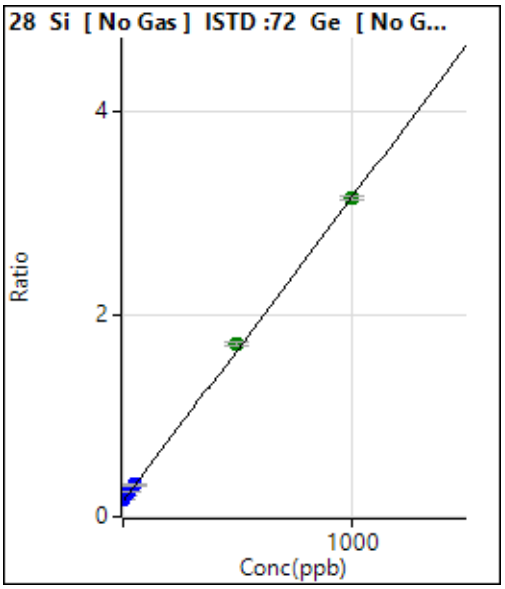
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	556.69	0.0012	P	18.9	
2	☐	2.000	2.869	1166.73	0.0025	P	7.3	43.4
3	☐	5.000	5.576	1716.81	0.0038	P	10.7	11.5
4	☐	10.000	11.071	2883.69	0.0063	P	3.9	10.7
5	☐	100.000	99.530	21233.12	0.0466	P	2.0	-0.5
6	☐	200.000	200.159	41037.55	0.0924	P	1.1	0.1

y = 4.5559E-004 * x + 0.0012
R = 1.0000
DL = 1.519 ppb
BEC = 2.674 ppb

Weight: <None>
Min Conc: <None>

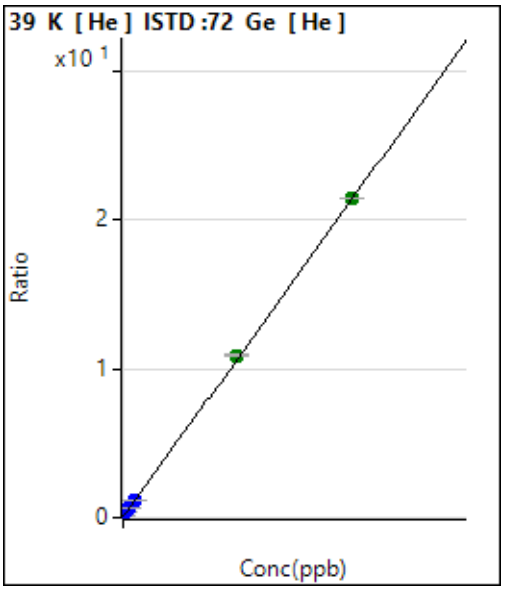


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	306156.92	0.1712	P	1.0	
2	☐	10.000	11.005	368964.51	0.2042	P	0.6	10.0
3	☐	25.000	22.718	434689.42	0.2394	P	0.3	-9.1
4	☐	50.000	47.821	564069.15	0.3147	P	1.2	-4.4
5	☐	500.000	512.533	3013888.91	1.7093	A	1.4	2.5
6	☐	1000.000	993.889	5409033.04	3.1538	A	1.3	-0.6

y = 0.0030 * x + 0.1712
R = 0.9999
DL = 1.644 ppb
BEC = 57.04 ppb

Weight: <None>
Min Conc: <None>

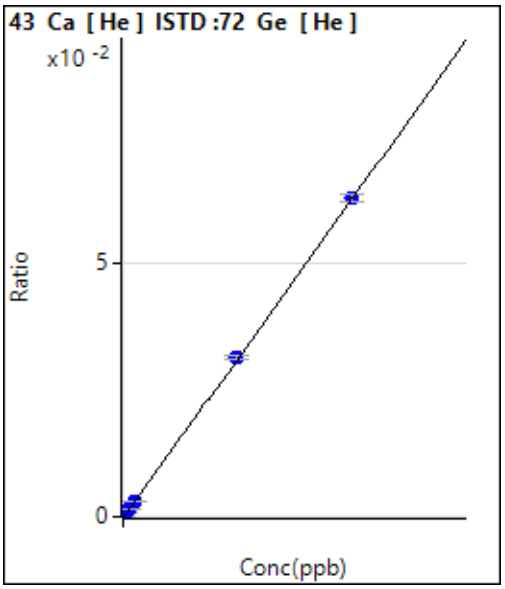
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	66614.06	0.1459	P	0.8	
2	☐	200.000	247.155	189266.11	0.4095	P	0.6	23.6
3	☐	500.000	477.596	299122.76	0.6552	P	0.4	-4.5
4	☐	1000.000	944.574	531074.03	1.1533	P	1.6	-5.5
5	☐	10000.00	10046.29	4952097.53	10.8607	A	1.2	0.5
6	☐	20000.00	19979.71	9528015.69	21.4551	A	0.5	-0.1

y = 0.0011 * x + 0.1459
R = 1.0000
DL = 3.347 ppb
BEC = 136.8 ppb

Weight: <None>
Min Conc: <None>

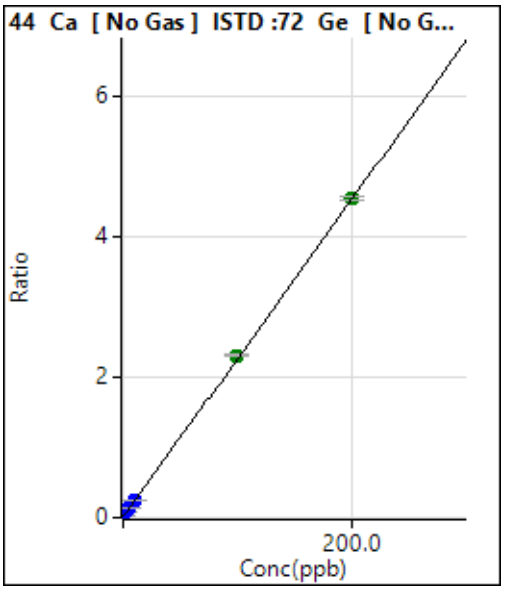


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0001	P	49.7	
2	☐	200.000	270.173	416.68	0.0009	P	15.9	35.1
3	☐	500.000	476.481	706.70	0.0015	P	17.0	-4.7
4	☐	1000.000	950.951	1400.09	0.0030	P	2.5	-4.9
5	☐	10000.00	10003.71	14364.32	0.0315	P	2.1	0.0
6	☐	20000.00	20000.48	27945.36	0.0629	P	2.7	0.0

y = 3.1438E-006 * x + 5.1169E-005
R = 1.0000
DL = 24.28 ppb
BEC = 16.28 ppb

Weight: <None>
Min Conc: <None>

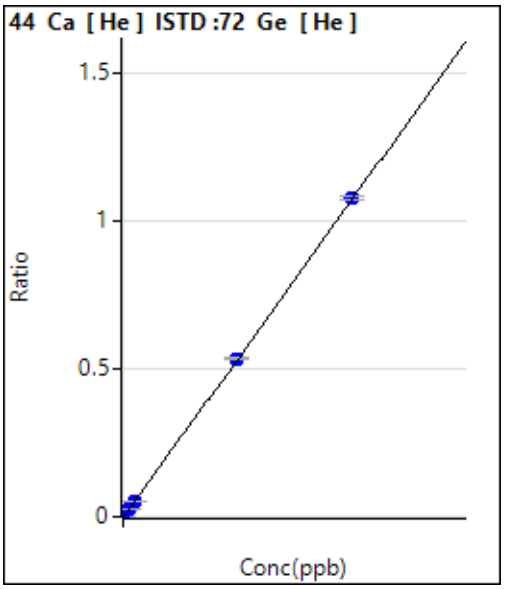
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	55458.39	0.0310	P	1.1	
2	☐	2.000	2.813	170769.13	0.0945	P	1.0	40.7
3	☐	5.000	4.645	246727.77	0.1359	P	0.8	-7.1
4	☐	10.000	9.515	440592.29	0.2458	P	1.5	-4.9
5	☐	100.000	100.575	4058718.06	2.3015	A	1.3	0.6
6	☐	200.000	199.738	7786946.97	4.5401	A	0.9	-0.1

y = 0.0226 * x + 0.0310
R = 1.0000
DL = 0.04689 ppb
BEC = 1.373 ppb

Weight: <None>
Min Conc: <None>

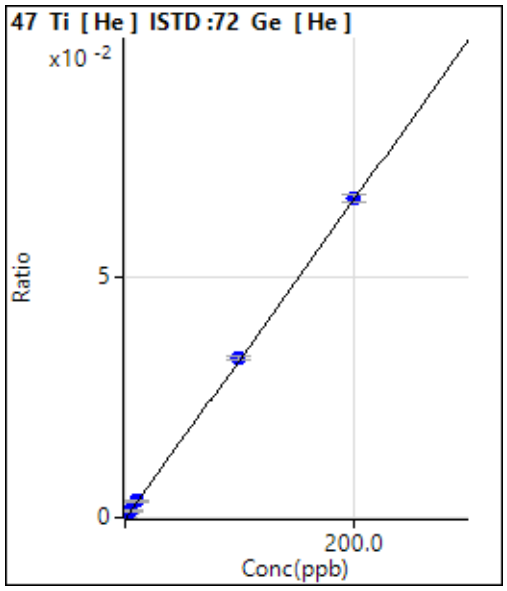


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	716.70	0.0016	P	11.8	
2	☐	200.000	285.355	7802.35	0.0169	P	1.6	42.7
3	☐	500.000	500.217	12969.65	0.0284	P	2.8	0.0
4	☐	1000.000	969.594	24679.16	0.0536	P	0.7	-3.0
5	☐	10000.00	9938.338	243844.94	0.5348	P	0.5	-0.6
6	☐	20000.00	20031.49	477968.14	1.0763	P	0.9	0.2

y = 5.3652E-005 * x + 0.0016
R = 1.0000
DL = 10.32 ppb
BEC = 29.26 ppb

Weight: <None>
Min Conc: <None>

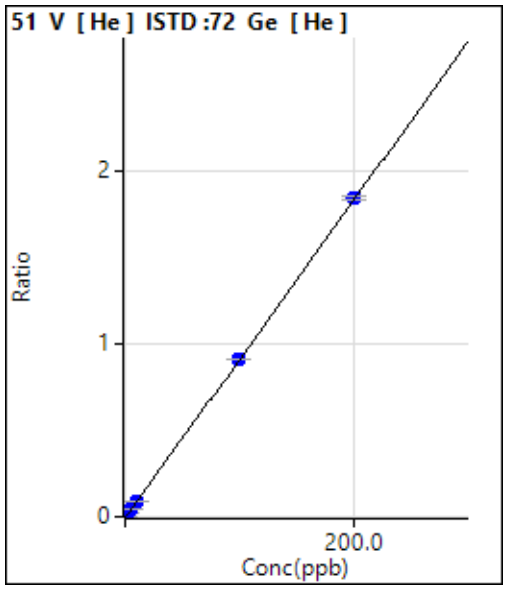
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	2.431	376.68	0.0008	P	16.1	21.6
3	☐	5.000	4.617	703.37	0.0015	P	19.0	-7.7
4	☐	10.000	10.279	1576.78	0.0034	P	5.7	2.8
5	☐	100.000	99.721	15118.55	0.0332	P	2.8	-0.3
6	☐	200.000	200.131	29548.73	0.0665	P	2.5	0.1

y = 3.3243E-004 * x + 7.3020E-006
R = 1.0000
DL = 0.1141 ppb
BEC = 0.02197 ppb

Weight: <None>
Min Conc: <None>

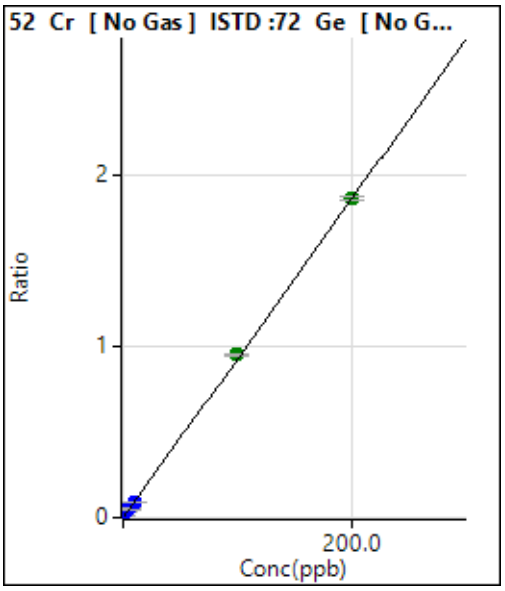


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	827.81	0.0018	P	9.0	
2	☐	2.000	2.381	10931.06	0.0237	P	3.6	19.0
3	☐	5.000	4.842	21109.63	0.0462	P	1.9	-3.2
4	☐	10.000	9.598	41388.92	0.0899	P	1.5	-4.0
5	☐	100.000	99.077	415330.89	0.9109	P	0.4	-0.9
6	☐	200.000	200.482	817687.00	1.8413	P	0.7	0.2

y = 0.0092 * x + 0.0018
R = 1.0000
DL = 0.05326 ppb
BEC = 0.1976 ppb

Weight: <None>
Min Conc: <None>

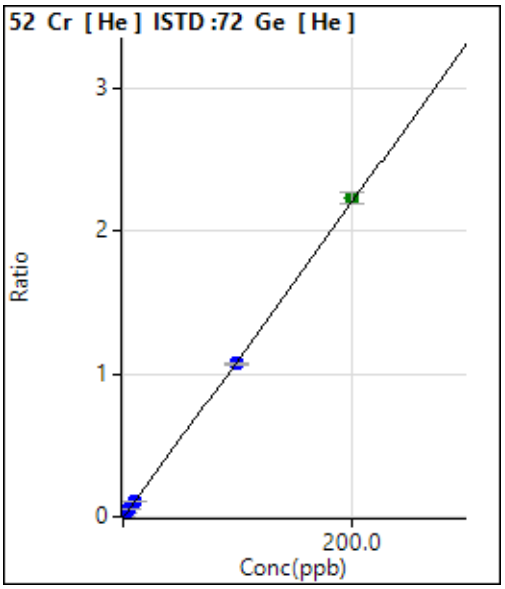
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14631.35	0.0082	P	0.2	
2	☐	2.000	2.322	53866.17	0.0298	P	2.7	16.1
3	☐	5.000	4.571	92198.87	0.0508	P	1.0	-8.6
4	☐	10.000	9.239	168946.30	0.0942	P	0.5	-7.6
5	☐	100.000	101.306	1678490.96	0.9519	A	1.7	1.3
6	☐	200.000	199.393	3199804.43	1.8657	A	0.8	-0.3

y = 0.0093 * x + 0.0082
R = 1.0000
DL = 0.004738 ppb
BEC = 0.8781 ppb

Weight: <None>
Min Conc: <None>

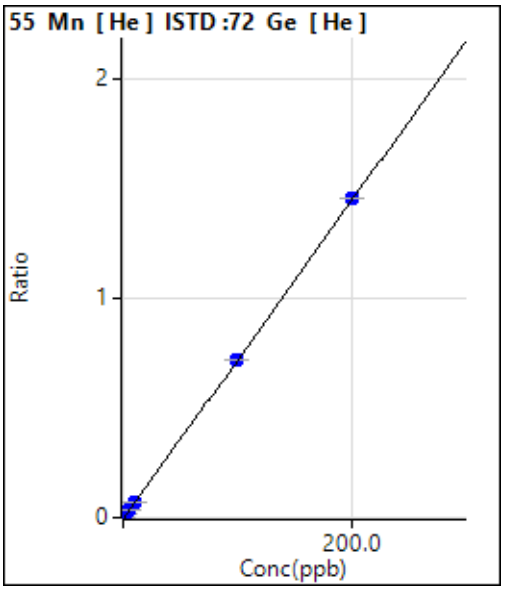


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1546.78	0.0034	P	10.5	
2	☐	2.000	2.356	13600.29	0.0294	P	3.6	17.8
3	☐	5.000	4.797	25754.56	0.0564	P	1.6	-4.1
4	☐	10.000	9.594	50403.14	0.1094	P	0.1	-4.1
5	☐	100.000	96.491	487926.50	1.0701	P	0.1	-3.5
6	☐	200.000	201.776	992042.77	2.2339	A	4.0	0.9

y = 0.0111 * x + 0.0034
R = 0.9998
DL = 0.09667 ppb
BEC = 0.3064 ppb

Weight: <None>
Min Conc: <None>

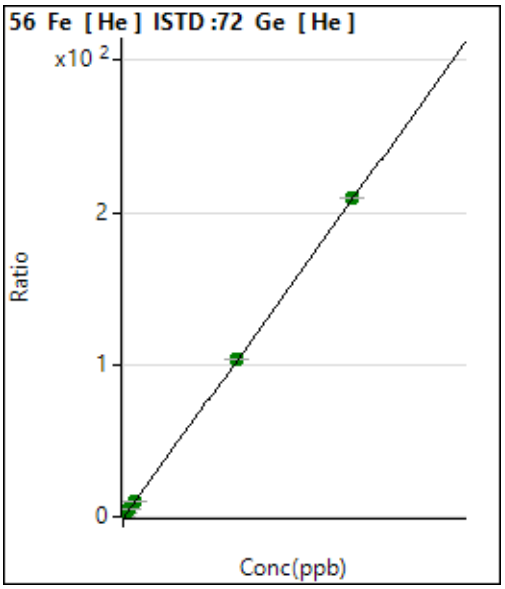
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	166.67	0.0004	P	33.5	
2	☐	2.000	2.644	9029.80	0.0195	P	2.4	32.2
3	☐	5.000	4.983	16663.74	0.0365	P	1.3	-0.3
4	☐	10.000	9.815	32953.45	0.0716	P	0.4	-1.8
5	☐	100.000	99.078	327850.42	0.7190	P	0.7	-0.9
6	☐	200.000	200.464	645869.00	1.4544	P	0.5	0.2

y = 0.0073 * x + 3.6532E-004
R = 1.0000
DL = 0.05063 ppb
BEC = 0.05037 ppb

Weight: <None>
Min Conc: <None>

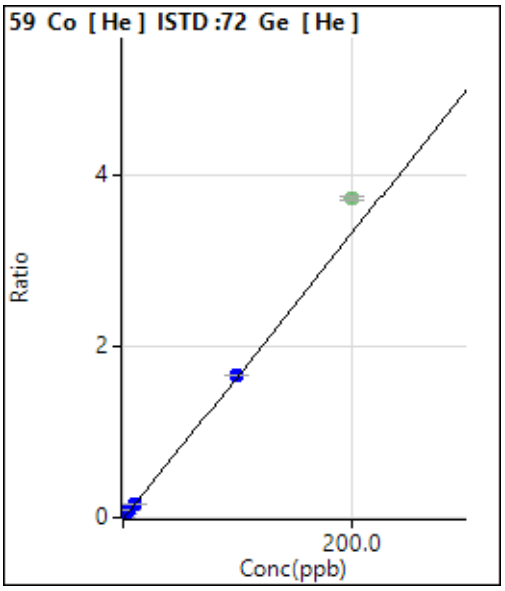


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8726.24	0.0191	P	3.5	
2	☐	200.000	254.824	1239730.84	2.6821	A	1.9	27.4
3	☐	500.000	519.783	2488477.36	5.4510	A	0.3	4.0
4	☐	1000.000	990.779	4776807.22	10.3731	A	1.4	-0.9
5	☐	10000.00	9894.729	47158105.9	103.423	A	0.6	-1.1
6	☐	20000.00	20052.05	93068928.6	209.571	A	0.6	0.3

y = 0.0105 * x + 0.0191
R = 1.0000
DL = 0.1922 ppb
BEC = 1.829 ppb

Weight: <None>
Min Conc: <None>

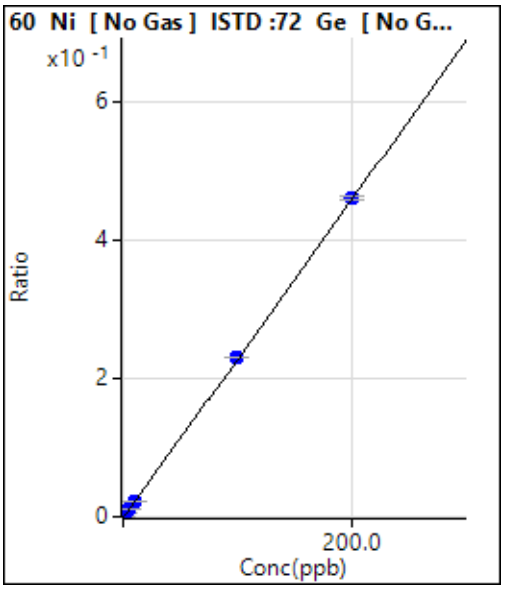
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0001	P	41.8	
2	☐	2.000	2.505	19360.62	0.0419	P	2.7	25.3
3	☐	5.000	4.972	37913.06	0.0831	P	2.9	-0.6
4	☐	10.000	9.659	74268.43	0.1613	P	1.2	-3.4
5	☐	100.000	100.025	761236.11	1.6695	P	0.4	0.0
6	☑	200.000		1657257.01	3.7318	A	0.9	

y = 0.0167 * x + 8.0369E-005
R = 1.0000
DL = 0.006045 ppb
BEC = 0.004816 ppb

Weight: <None>
Min Conc: <None>

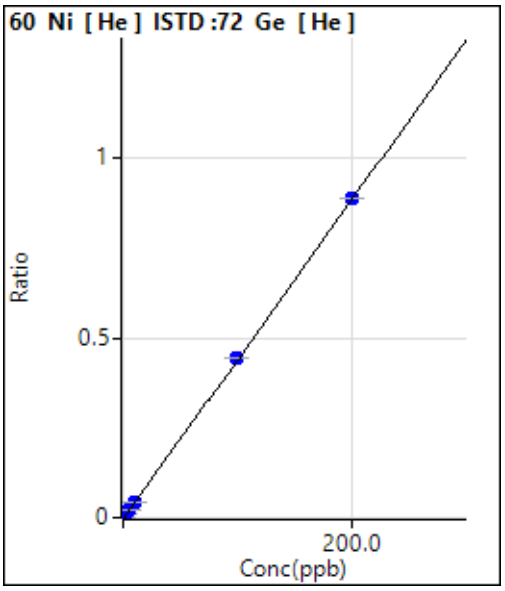


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	546.69	0.0003	P	20.6	
2	☐	2.000	2.465	10821.11	0.0060	P	3.4	23.3
3	☐	5.000	4.887	21016.47	0.0116	P	2.7	-2.3
4	☐	10.000	9.716	40697.73	0.0227	P	1.9	-2.8
5	☐	100.000	99.679	405791.48	0.2301	P	0.5	-0.3
6	☐	200.000	200.173	792045.95	0.4618	P	1.0	0.1

y = 0.0023 * x + 3.0544E-004
R = 1.0000
DL = 0.082 ppb
BEC = 0.1325 ppb

Weight: <None>
Min Conc: <None>

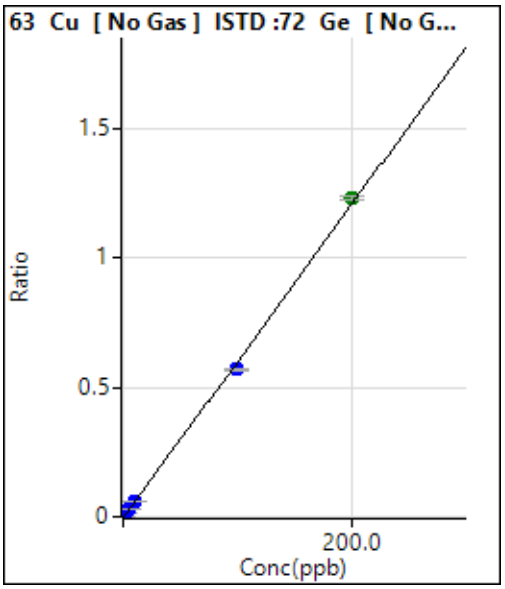
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	190.01	0.0004	P	27.3	
2	☐	2.000	2.582	5497.87	0.0119	P	1.9	29.1
3	☐	5.000	4.891	10113.93	0.0222	P	2.6	-2.2
4	☐	10.000	9.717	20081.67	0.0436	P	1.3	-2.8
5	☐	100.000	99.940	202752.24	0.4447	P	0.3	-0.1
6	☐	200.000	200.041	395072.34	0.8896	P	0.4	0.0

y = 0.0044 * x + 4.1606E-004
R = 1.0000
DL = 0.07675 ppb
BEC = 0.0936 ppb

Weight: <None>
Min Conc: <None>

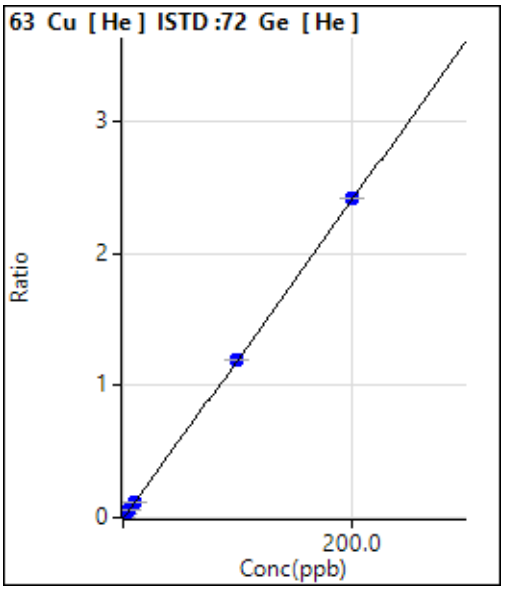


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1480.10	0.0008	P	3.4	
2	☐	2.000	2.280	26482.77	0.0147	P	5.3	14.0
3	☐	5.000	4.621	52411.27	0.0289	P	0.4	-7.6
4	☐	10.000	9.330	102944.48	0.0574	P	0.6	-6.7
5	☐	100.000	93.927	1006161.10	0.5706	P	1.3	-6.1
6	☐	200.000	203.077	2114320.44	1.2328	A	1.2	1.5

y = 0.0061 * x + 8.2736E-004
R = 0.9994
DL = 0.01383 ppb
BEC = 0.1364 ppb

Weight: <None>
Min Conc: <None>

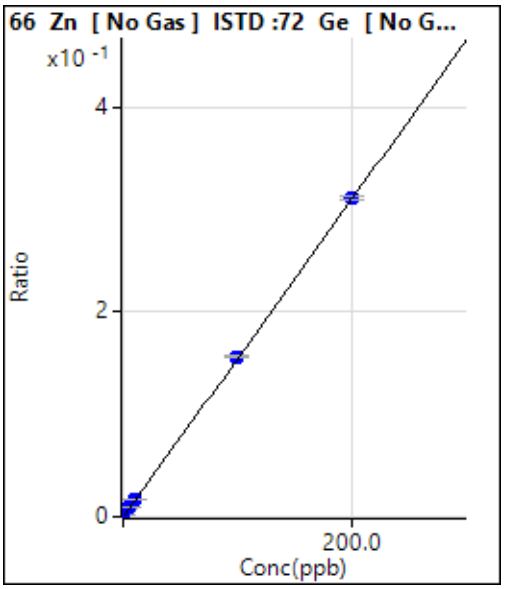
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	630.03	0.0014	P	19.4	
2	☐	2.000	2.423	14157.60	0.0306	P	1.5	21.1
3	☐	5.000	5.025	28326.53	0.0621	P	0.2	0.5
4	☐	10.000	9.809	55175.25	0.1198	P	1.6	-1.9
5	☐	100.000	99.252	547111.01	1.1999	P	0.1	-0.7
6	☐	200.000	200.379	1075127.53	2.4209	P	0.4	0.2

y = 0.0121 * x + 0.0014
R = 1.0000
DL = 0.06652 ppb
BEC = 0.1142 ppb

Weight: <None>
Min Conc: <None>

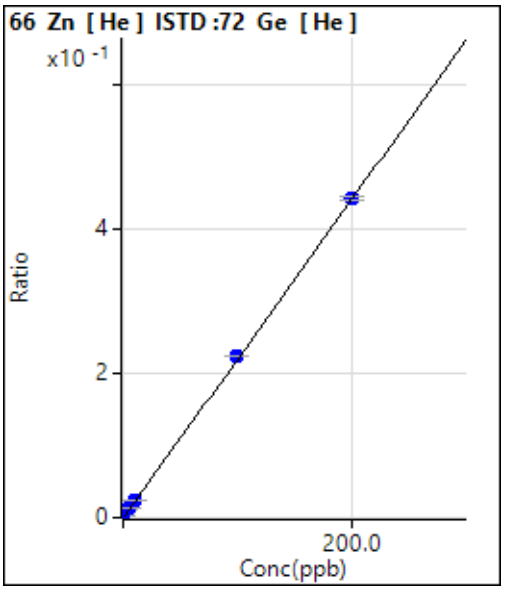


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1860.16	0.0010	P	3.2	
2	☐	2.000	3.869	12726.18	0.0070	P	0.5	93.4
3	☐	5.000	4.946	15826.15	0.0087	P	1.0	-1.1
4	☐	10.000	9.801	29124.86	0.0162	P	1.7	-2.0
5	☐	100.000	100.108	275742.87	0.1564	P	1.7	0.1
6	☐	200.000	199.938	533919.65	0.3113	P	0.8	0.0

y = 0.0016 * x + 0.0010
R = 1.0000
DL = 0.06467 ppb
BEC = 0.6701 ppb

Weight: <None>
Min Conc: <None>

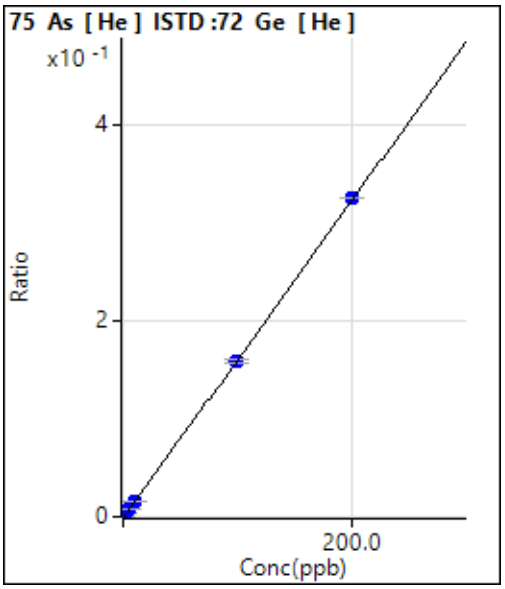
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	683.36	0.0015	P	18.7	
2	☐	2.000	3.798	4560.84	0.0099	P	8.6	89.9
3	☐	5.000	4.849	5564.58	0.0122	P	3.3	-3.0
4	☐	10.000	9.981	10827.85	0.0235	P	2.6	-0.2
5	☐	100.000	100.403	101658.49	0.2229	P	0.2	0.4
6	☐	200.000	199.785	196351.27	0.4421	P	0.8	-0.1

y = 0.0022 * x + 0.0015
R = 1.0000
DL = 0.3809 ppb
BEC = 0.6785 ppb

Weight: <None>
Min Conc: <None>

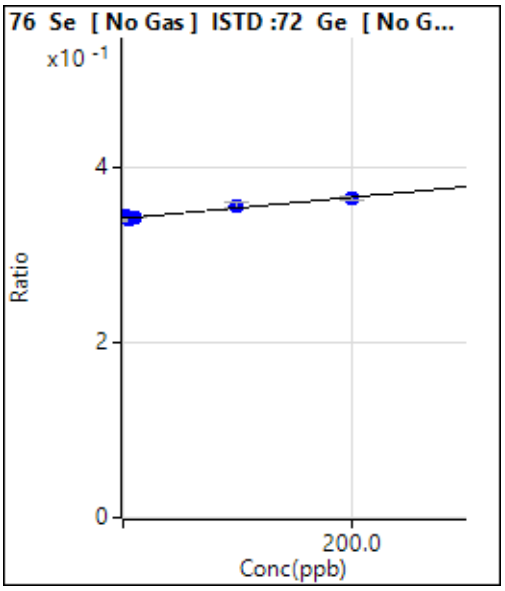


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	58.89	0.0001	P	7.0	
2	☐	2.000	2.394	1855.70	0.0040	P	5.0	19.7
3	☐	5.000	4.829	3637.17	0.0080	P	2.0	-3.4
4	☐	10.000	9.385	7074.12	0.0154	P	1.7	-6.2
5	☐	100.000	98.424	72905.62	0.1599	P	2.3	-1.6
6	☐	200.000	200.819	144820.66	0.3261	P	0.4	0.4

y = 0.0016 * x + 1.2898E-004
R = 0.9999
DL = 0.01657 ppb
BEC = 0.07946 ppb

Weight: <None>
Min Conc: <None>

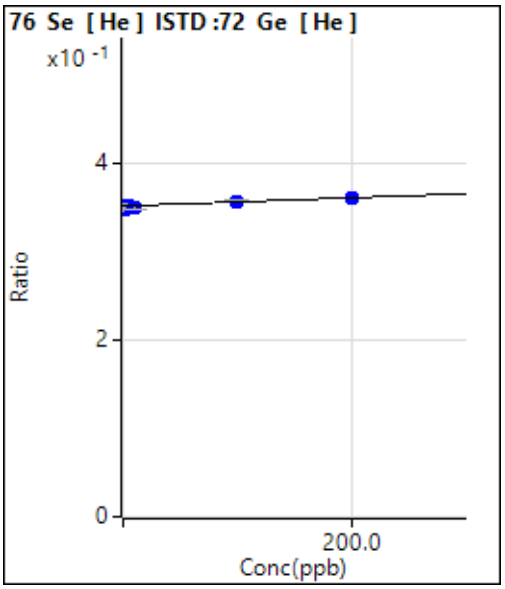
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	610810.04	0.3415	P	0.5	
2	☐	2.000	26.374	622866.83	0.3447	P	0.5	1218.7
3	☐	5.000	-10.932	617774.89	0.3402	P	0.7	-318.6
4	☐	10.000	10.490	614447.10	0.3428	P	0.4	4.9
5	☐	100.000	121.589	628197.13	0.3563	P	1.7	21.6
6	☐	200.000	189.335	625188.31	0.3645	P	1.0	-5.3

y = 1.2159E-004 * x + 0.3415
R = 0.9794
DL = 38.37 ppb
BEC = 2809 ppb

Weight: <None>
Min Conc: <None>

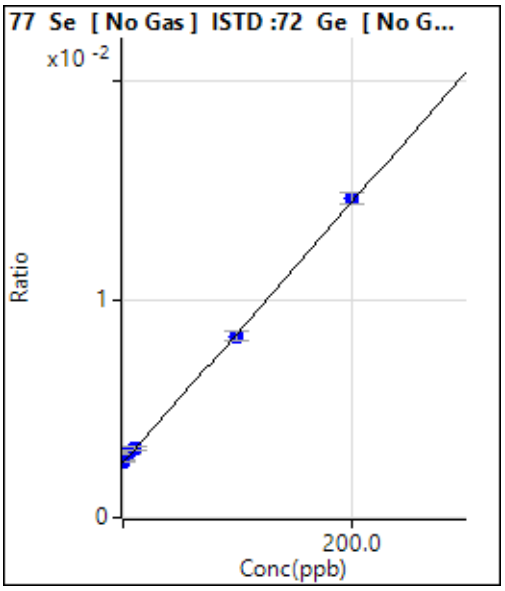


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	160725.80	0.3519	P	1.2	
2	☐	2.000	-89.143	160729.21	0.3477	P	0.9	-4557.
3	☐	5.000	4.631	160762.80	0.3522	P	0.8	-7.4
4	☐	10.000	-38.343	161276.33	0.3501	P	1.7	-483.4
5	☐	100.000	119.875	163059.36	0.3576	P	0.6	19.9
6	☐	200.000	193.400	160343.87	0.3611	P	0.4	-3.3

y = 4.7114E-005 * x + 0.3519
R = 0.9337
DL = 272.3 ppb
BEC = 7470 ppb

Weight: <None>
Min Conc: <None>

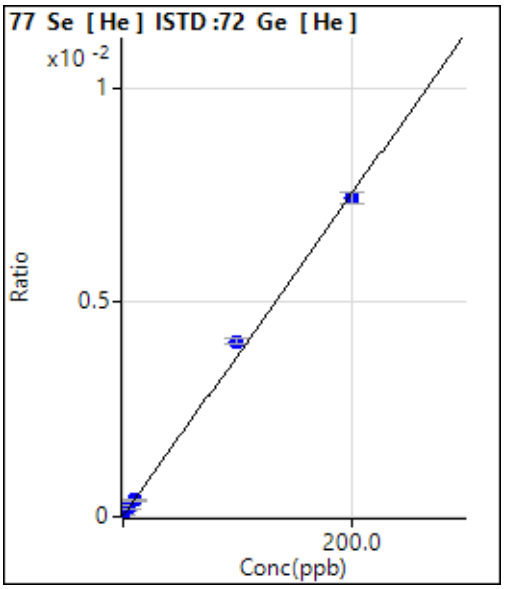
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4634.21	0.0026	P	3.9	
2	☐	2.000	5.477	5274.45	0.0029	P	2.6	173.9
3	☐	5.000	6.738	5437.85	0.0030	P	2.4	34.8
4	☐	10.000	9.865	5701.30	0.0032	P	3.5	-1.4
5	☐	100.000	96.026	14681.54	0.0083	P	6.0	-4.0
6	☐	200.000	201.916	25140.42	0.0147	P	3.3	1.0

y = 5.9754E-005 * x + 0.0026
R = 0.9995
DL = 5.135 ppb
BEC = 43.37 ppb

Weight: <None>
Min Conc: <None>

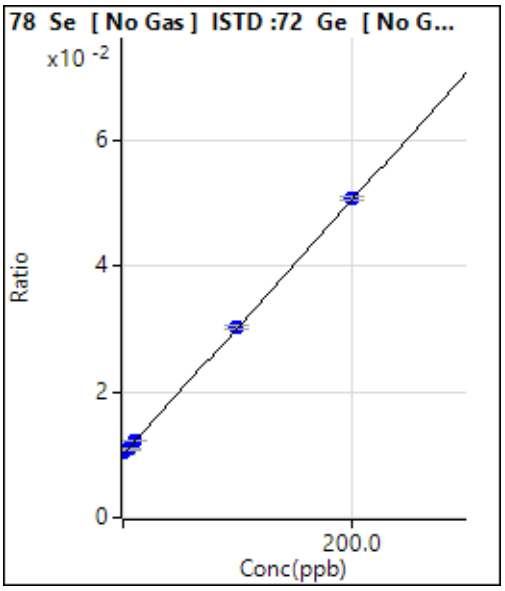


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0001	P	49.7	
2	☐	2.000	2.870	73.33	0.0002	P	39.9	43.5
3	☐	5.000	4.848	106.67	0.0002	P	37.5	-3.0
4	☐	10.000	8.845	176.67	0.0004	P	11.2	-11.6
5	☐	100.000	107.228	1860.16	0.0041	P	3.4	7.2
6	☐	200.000	196.439	3300.48	0.0074	P	3.5	-1.8

y = 3.7571E-005 * x + 5.1169E-005
R = 0.9990
DL = 2.032 ppb
BEC = 1.362 ppb

Weight: <None>
Min Conc: <None>

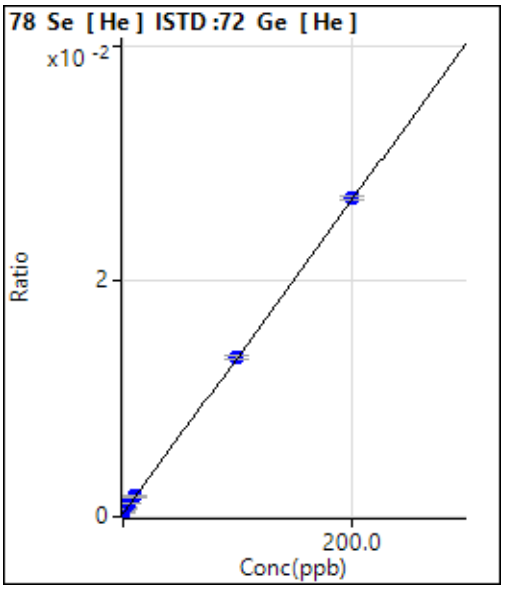
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18436.19	0.0103	P	1.5	
2	☐	2.000	2.044	19370.83	0.0107	P	0.4	2.2
3	☐	5.000	3.353	19948.38	0.0110	P	2.5	-32.9
4	☐	10.000	9.458	21901.51	0.0122	P	1.8	-5.4
5	☐	100.000	99.165	53486.33	0.0303	P	1.8	-0.8
6	☐	200.000	200.486	87123.87	0.0508	P	1.3	0.2

y = 2.0196E-004 * x + 0.0103
R = 1.0000
DL = 2.306 ppb
BEC = 51.04 ppb

Weight: <None>
Min Conc: <None>

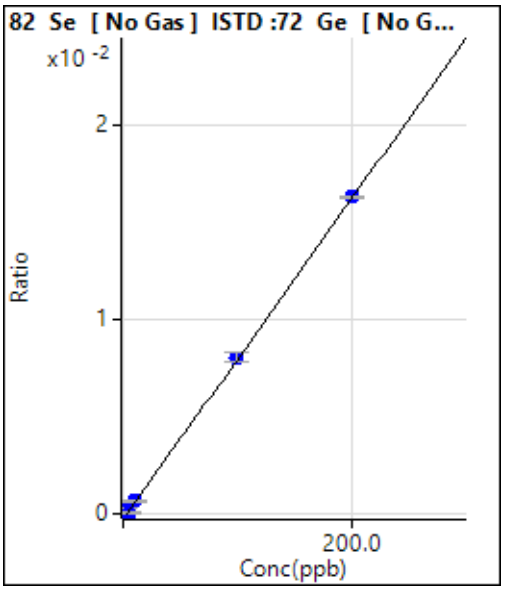


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	181.33	0.0004	P	10.3	
2	☐	2.000	2.853	358.67	0.0008	P	12.5	42.6
3	☐	5.000	5.485	514.01	0.0011	P	8.4	9.7
4	☐	10.000	9.943	791.36	0.0017	P	6.6	-0.6
5	☐	100.000	98.980	6182.10	0.0136	P	2.8	-1.0
6	☐	200.000	200.492	12014.69	0.0271	P	0.9	0.2

y = 1.3296E-004 * x + 3.9720E-004
R = 1.0000
DL = 0.9251 ppb
BEC = 2.987 ppb

Weight: <None>
Min Conc: <None>

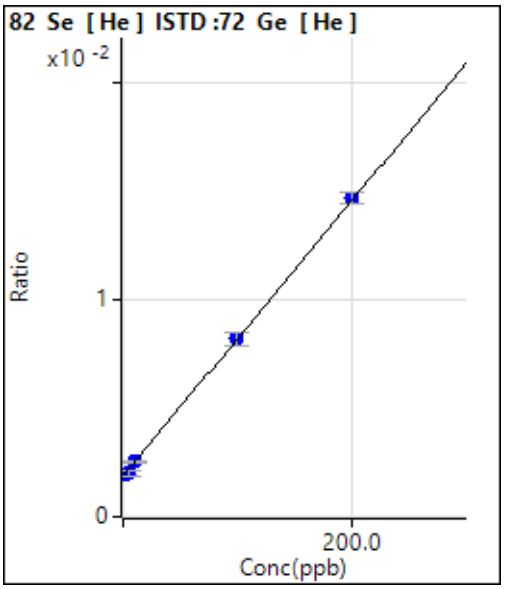
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-348.78	-0.0002	P	-44.4	
2	☐	2.000	4.745	353.18	0.0002	P	139.9	137.3
3	☐	5.000	2.830	69.70	0.0000	P	216.6	-43.4
4	☐	10.000	10.371	1182.27	0.0007	P	19.4	3.7
5	☐	100.000	100.071	14207.02	0.0081	P	5.4	0.1
6	☐	200.000	199.973	27950.12	0.0163	P	0.9	0.0

y = 8.2468E-005 * x - 1.9508E-004
R = 0.9998
DL = 3.149 ppb
BEC = -2.365 ppb

Weight: <None>
Min Conc: <None>

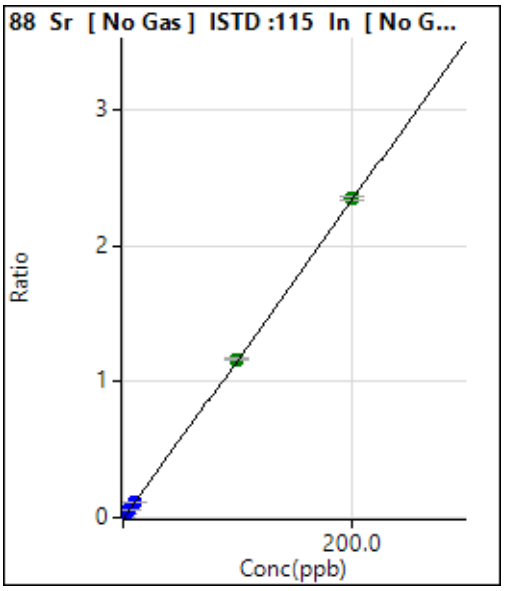


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	896.71	0.0020	P	13.6	
2	☐	2.000	-0.498	893.38	0.0019	P	4.6	-124.9
3	☐	5.000	0.475	910.05	0.0020	P	9.7	-90.5
4	☐	10.000	8.875	1163.41	0.0025	P	4.5	-11.3
5	☐	100.000	98.348	3737.25	0.0082	P	6.6	-1.7
6	☐	200.000	201.020	6528.37	0.0147	P	3.2	0.5

y = 6.3360E-005 * x + 0.0020
R = 0.9998
DL = 12.67 ppb
BEC = 31 ppb

Weight: <None>
Min Conc: <None>

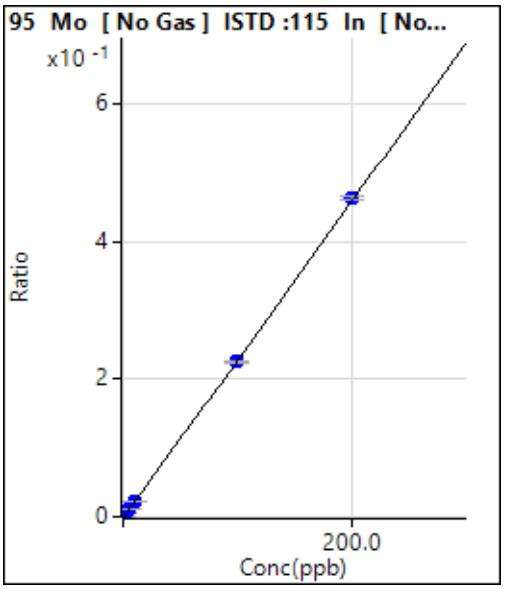
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1103.40	0.0005	P	12.7	
2	☐	2.000	2.301	58538.20	0.0276	P	2.9	15.1
3	☐	5.000	4.594	116180.61	0.0545	P	1.0	-8.1
4	☐	10.000	9.349	232143.45	0.1103	P	1.7	-6.5
5	☐	100.000	99.258	2420306.99	1.1661	A	0.8	-0.7
6	☐	200.000	200.411	4681137.43	2.3540	A	1.5	0.2

y = 0.0117 * x + 5.3040E-004
R = 1.0000
DL = 0.01716 ppb
BEC = 0.04517 ppb

Weight: <None>
Min Conc: <None>

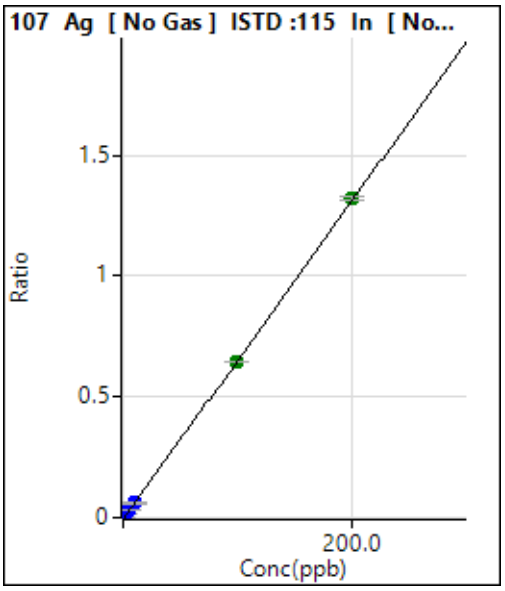


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0000	P	42.3	
2	☐	2.000	2.335	11468.45	0.0054	P	4.3	16.7
3	☐	5.000	4.611	22693.02	0.0106	P	1.2	-7.8
4	☐	10.000	9.546	46327.26	0.0220	P	1.5	-4.5
5	☐	100.000	97.611	466800.68	0.2249	P	0.9	-2.4
6	☐	200.000	201.223	921965.98	0.4636	P	0.8	0.6

y = 0.0023 * x + 1.9166E-005
R = 0.9999
DL = 0.01055 ppb
BEC = 0.008319 ppb

Weight: <None>
Min Conc: <None>

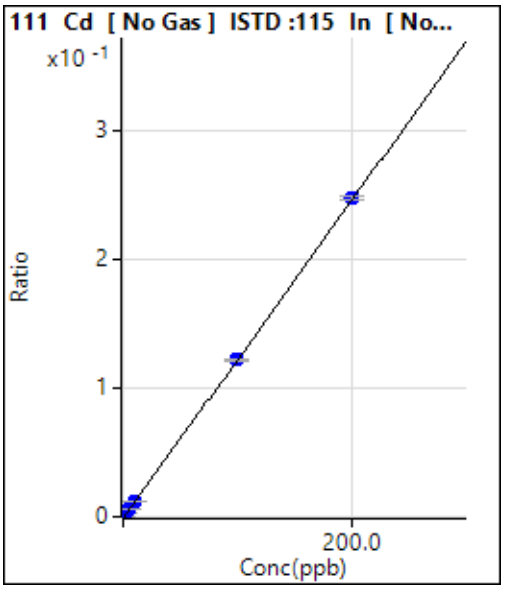
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	326.68	0.0002	P	11.9	
2	☐	2.000	2.230	31497.80	0.0148	P	1.2	11.5
3	☐	5.000	4.447	62688.62	0.0294	P	1.7	-11.1
4	☐	10.000	9.093	126157.07	0.0600	P	2.6	-9.1
5	☐	100.000	98.356	1342763.94	0.6470	A	0.4	-1.6
6	☐	200.000	200.879	2627149.65	1.3212	A	0.8	0.4

y = 0.0066 * x + 1.5715E-004
R = 0.9999
DL = 0.008503 ppb
BEC = 0.0239 ppb

Weight: <None>
Min Conc: <None>

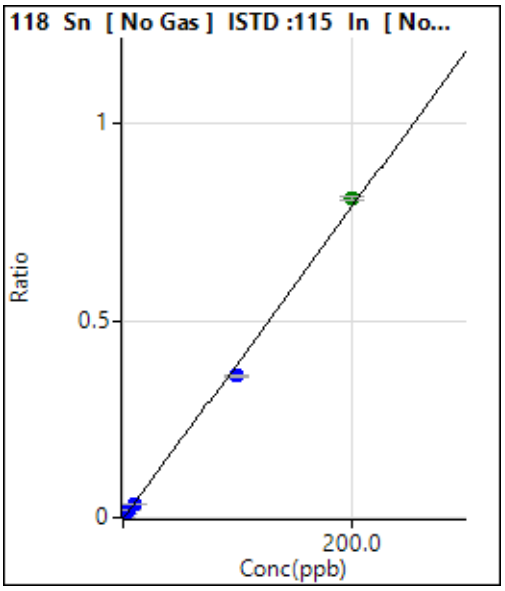


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	2.522	6615.12	0.0031	P	4.8	26.1
3	☐	5.000	4.865	12793.07	0.0060	P	4.0	-2.7
4	☐	10.000	9.713	25211.07	0.0120	P	0.9	-2.9
5	☐	100.000	98.781	252821.20	0.1218	P	1.2	-1.2
6	☐	200.000	200.622	491982.35	0.2474	P	0.6	0.3

y = 0.0012 * x + 1.6170E-006
R = 1.0000
DL = 0.006813 ppb
BEC = 0.001311 ppb

Weight: <None>
Min Conc: <None>

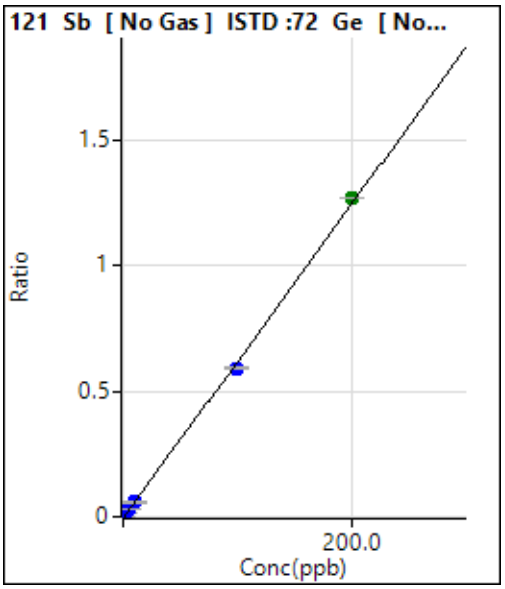
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1403.43	0.0007	P	16.7	
2	☐	2.000	2.192	19855.36	0.0093	P	1.1	9.6
3	☐	5.000	4.275	37490.48	0.0176	P	2.9	-14.5
4	☐	10.000	8.654	73461.40	0.0349	P	0.9	-13.5
5	☐	100.000	90.827	746993.35	0.3599	P	0.9	-9.2
6	☐	200.000	204.670	1611109.93	0.8102	A	0.7	2.3

y = 0.0040 * x + 6.7588E-004
R = 0.9986
DL = 0.08551 ppb
BEC = 0.1709 ppb

Weight: <None>
Min Conc: <None>

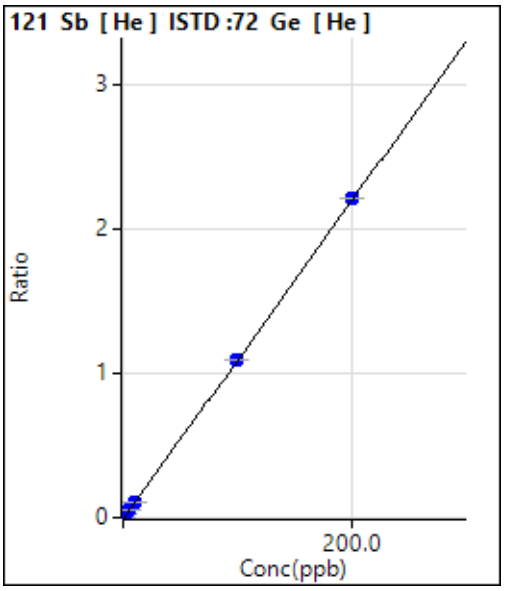


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	590.03	0.0003	P	18.2	
2	☐	2.000	2.323	26854.40	0.0149	P	1.4	16.2
3	☐	5.000	4.487	51568.19	0.0284	P	0.7	-10.3
4	☐	10.000	9.142	103106.47	0.0575	P	1.4	-8.6
5	☐	100.000	94.268	1040346.65	0.5900	P	1.1	-5.7
6	☐	200.000	202.919	2177601.74	1.2696	A	0.6	1.5

y = 0.0063 * x + 3.2971E-004
R = 0.9994
DL = 0.02874 ppb
BEC = 0.05271 ppb

Weight: <None>
Min Conc: <None>

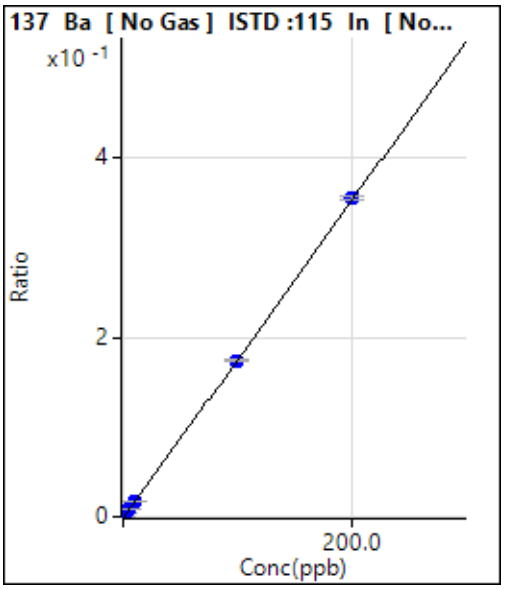
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	296.68	0.0006	P	1.6	
2	☐	2.000	2.423	12672.99	0.0274	P	2.3	21.2
3	☐	5.000	4.902	25020.70	0.0548	P	0.3	-2.0
4	☐	10.000	9.623	49262.74	0.1070	P	0.7	-3.8
5	☐	100.000	98.894	498527.92	1.0933	P	0.4	-1.1
6	☐	200.000	200.570	984432.75	2.2167	P	0.4	0.3

y = 0.0110 * x + 6.4964E-004
R = 1.0000
DL = 0.002772 ppb
BEC = 0.0588 ppb

Weight: <None>
Min Conc: <None>

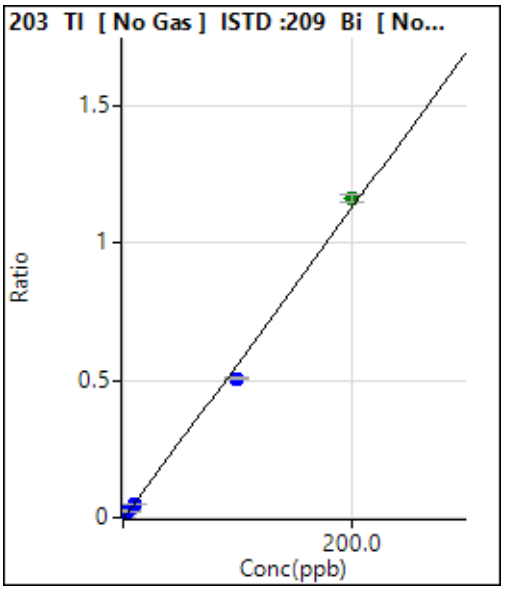


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	143.34	0.0001	P	24.8	
2	☐	2.000	2.334	8919.88	0.0042	P	0.9	16.7
3	☐	5.000	4.757	18096.17	0.0085	P	2.1	-4.9
4	☐	10.000	9.655	36097.10	0.0172	P	1.0	-3.5
5	☐	100.000	98.430	361608.34	0.1742	P	0.6	-1.6
6	☐	200.000	200.805	706675.23	0.3554	P	0.7	0.4

y = 0.0018 * x + 6.8789E-005
R = 1.0000
DL = 0.02893 ppb
BEC = 0.03888 ppb

Weight: <None>
Min Conc: <None>

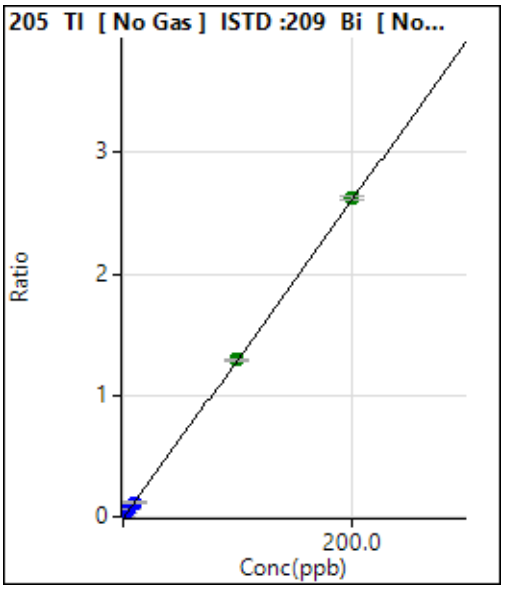
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	34.7	
2	☐	2.000	2.109	22774.40	0.0120	P	1.3	5.4
3	☐	5.000	4.379	46878.15	0.0248	P	3.7	-12.4
4	☐	10.000	8.709	92839.91	0.0493	P	1.5	-12.9
5	☐	100.000	89.301	945910.79	0.5057	P	1.2	-10.7
6	☐	200.000	205.429	2065782.16	1.1634	A	1.8	2.7

y = 0.0057 * x + 8.9151E-006
R = 0.9981
DL = 0.001637 ppb
BEC = 0.001574 ppb

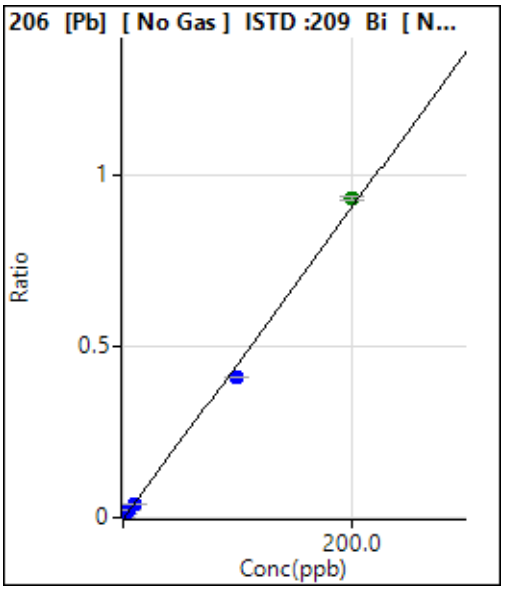
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0000	P	86.6	
2	☐	2.000	2.206	55061.60	0.0289	P	2.2	10.3
3	☐	5.000	4.488	111071.28	0.0588	P	2.9	-10.2
4	☐	10.000	9.020	222260.54	0.1181	P	2.1	-9.8
5	☐	100.000	98.679	2416161.58	1.2918	A	1.4	-1.3
6	☐	200.000	200.720	4665796.39	2.6276	A	1.7	0.4

y = 0.0131 * x + 2.1391E-005
R = 1.0000
DL = 0.004245 ppb
BEC = 0.001634 ppb

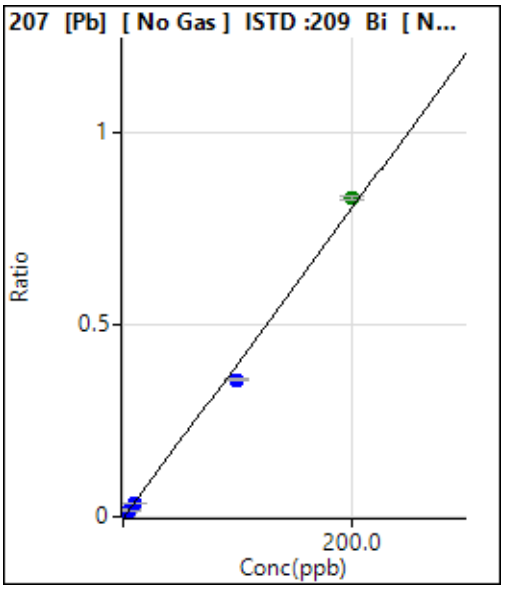
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	173.33	0.0001	P	14.6	
2	☐	2.000	2.222	19472.17	0.0102	P	1.8	11.1
3	☐	5.000	4.495	38904.32	0.0206	P	1.8	-10.1
4	☐	10.000	8.795	75618.69	0.0402	P	2.6	-12.0
5	☐	100.000	89.926	766906.65	0.4100	P	0.8	-10.1
6	☐	200.000	205.107	1660507.58	0.9350	A	0.8	2.6

y = 0.0046 * x + 9.2711E-005
R = 0.9983
DL = 0.008882 ppb
BEC = 0.02034 ppb

Weight: <None>
Min Conc: <None>

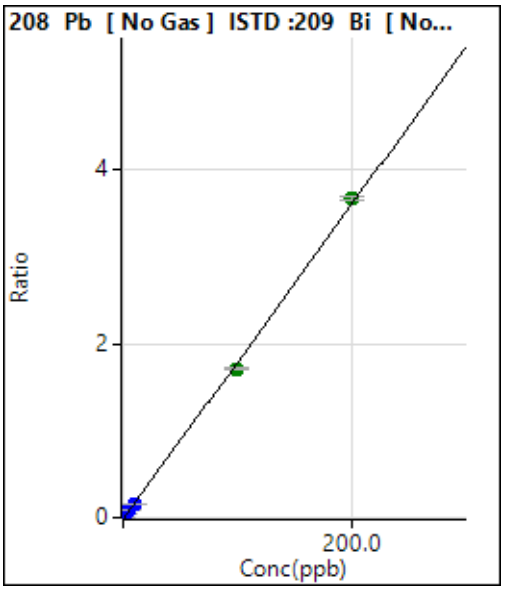


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	143.33	0.0001	P	4.0	
2	☐	2.000	2.137	16598.02	0.0087	P	2.7	6.8
3	☐	5.000	4.309	33037.61	0.0175	P	3.9	-13.8
4	☐	10.000	8.713	66389.78	0.0353	P	1.5	-12.9
5	☐	100.000	88.564	669429.10	0.3579	P	0.6	-11.4
6	☐	200.000	205.798	1476543.57	0.8315	A	1.5	2.9

y = 0.0040 * x + 7.6662E-005
R = 0.9978
DL = 0.002301 ppb
BEC = 0.01898 ppb

Weight: <None>
Min Conc: <None>

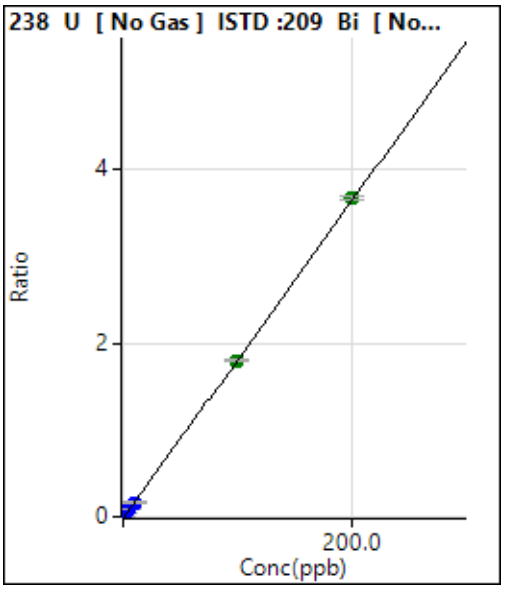
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	766.68	0.0004	P	6.0	
2	☐	2.000	2.189	76288.66	0.0400	P	1.5	9.4
3	☐	5.000	4.456	153209.79	0.0811	P	3.2	-10.9
4	☐	10.000	8.840	301948.43	0.1604	P	1.9	-11.6
5	☐	100.000	94.440	3198940.16	1.7102	A	0.7	-5.6
6	☐	200.000	202.850	6522086.83	3.6729	A	1.4	1.4

y = 0.0181 * x + 4.1006E-004
R = 0.9995
DL = 0.004104 ppb
BEC = 0.02265 ppb

Weight: <None>
Min Conc: <None>

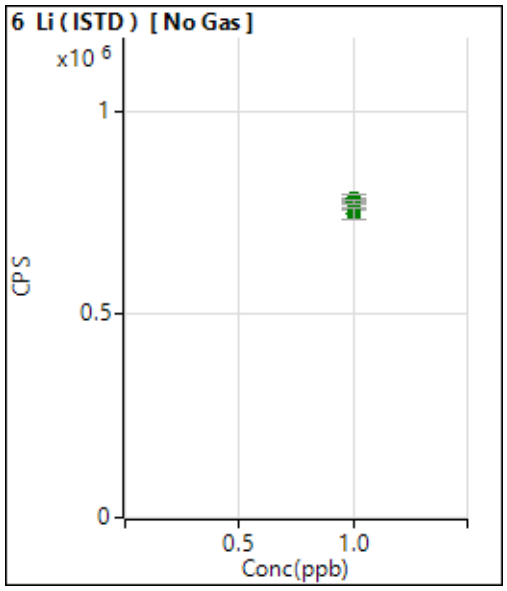


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	2.173	75773.76	0.0398	P	2.8	8.7
3	☐	5.000	4.492	155370.22	0.0822	P	2.2	-10.2
4	☐	10.000	9.063	312144.25	0.1659	P	1.0	-9.4
5	☐	100.000	98.265	3363733.91	1.7983	A	1.7	-1.7
6	☐	200.000	200.926	6530395.32	3.6771	A	1.4	0.5

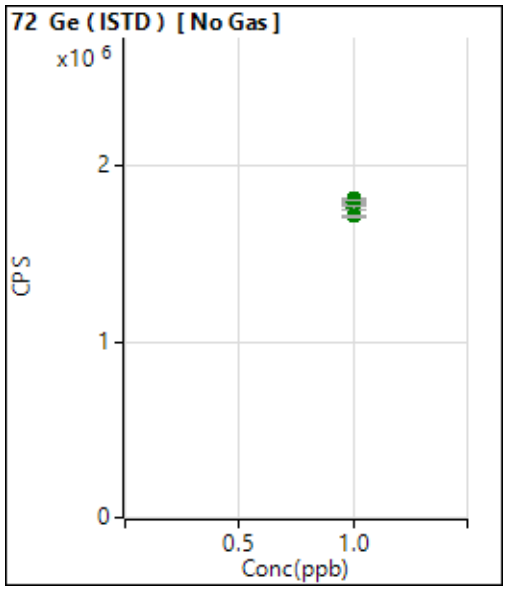
y = 0.0183 * x + 3.5654E-006
R = 0.9999
DL = 0.0005062 ppb
BEC = 0.0001948 ppb

Weight: <None>
Min Conc: <None>

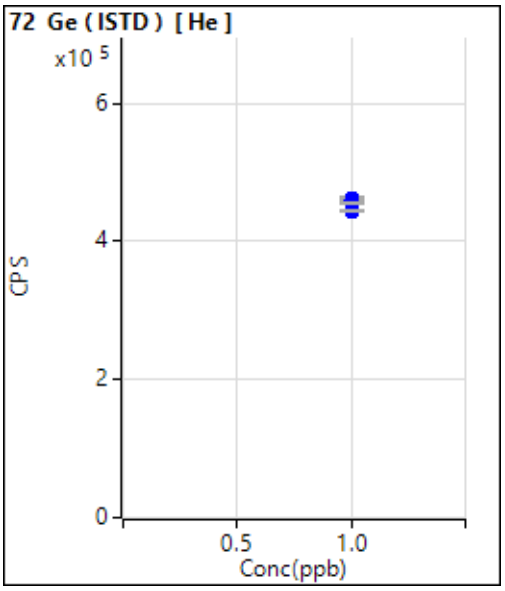
Calibration for 025_ICV.d



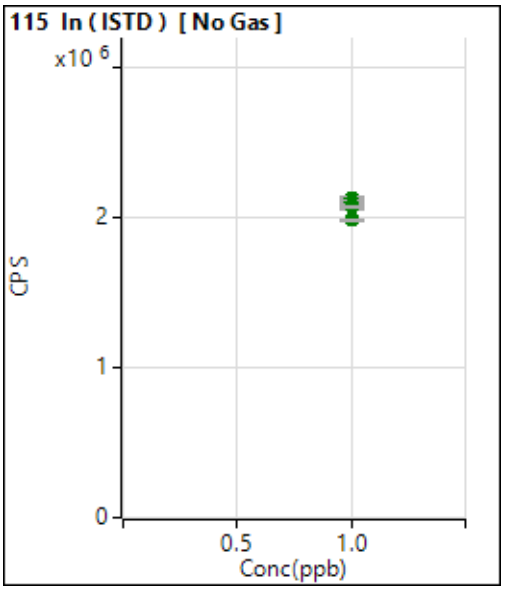
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		779901.77		A	2.3	
2	☐	1.000		786683.41		A	1.9	
3	☐	1.000		764885.19		A	1.6	
4	☐	1.000		773008.02		A	2.6	
5	☐	1.000		777283.77		A	1.3	
6	☐	1.000		748585.87		A	3.4	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1788655.65		A	0.8	
2	☐	1.000		1806932.89		A	0.7	
3	☐	1.000		1816122.99		A	0.5	
4	☐	1.000		1792612.57		A	0.8	
5	☐	1.000		1763466.22		A	1.4	
6	☐	1.000		1715150.18		A	0.4	

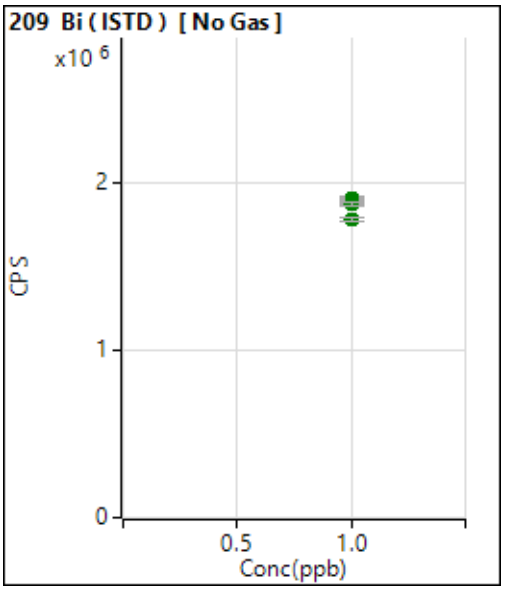


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		456662.66		P	0.5	
2	☐	1.000		462225.88		P	1.4	
3	☐	1.000		456508.14		P	0.8	
4	☐	1.000		460539.81		P	1.2	
5	☐	1.000		455980.69		P	0.4	
6	☐	1.000		444094.33		P	0.2	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		2077406.26		A	2.5	
2	☐	1.000		2125018.35		A	1.3	
3	☐	1.000		2132431.25		A	1.3	
4	☐	1.000		2104656.56		A	1.3	
5	☐	1.000		2075498.83		A	0.5	
6	☐	1.000		1988557.03		A	0.4	

Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1869675.08		A	0.0	
2	☐	1.000		1905803.93		A	1.7	
3	☐	1.000		1890434.50		A	2.0	
4	☐	1.000		1882141.85		A	1.0	
5	☐	1.000		1870567.16		A	1.0	
6	☐	1.000		1775926.79		A	1.3	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	018CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T12:37:46-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	41137	0.00
Be	9	1	No Gas	8	415.69
V	51	2	He	828	1.08
Cr	52	2	He	1547	0.69
Fe	56	2	He	8726	0.04
Se	78	2	He	181	5.45
As	75	2	He	59	11.09
Ca	44	2	He	717	1.62
Na	23	2	He	96217	0.00
Mg	24	2	He	270	4.11
K	39	2	He	66614	0.00
Mn	55	2	He	167	19.83
Co	59	2	He	37	113.62
Ni	60	2	He	190	14.39
Cu	63	2	He	630	3.15
Zn	66	2	He	683	2.73
Al	27	2	He	557	3.48
B	11	1	No Gas	5604	0.03
Al	27	1	No Gas	28607	0.01
Si	28	1	No Gas	306157	0.00
Ag	107	1	No Gas	327	3.90
Cd	111	1	No Gas	3	5196.15
Sr	88	1	No Gas	1103	1.32
Mo	95	1	No Gas	40	108.25
Sn	118	1	No Gas	1403	1.16
Sb	121	1	No Gas	590	3.16
Ba	137	1	No Gas	143	18.43
Tl	205	1	No Gas	40	216.51
Tl	203	1	No Gas	17	207.85
Pb	208	1	No Gas	767	0.79
U	238	1	No Gas	7	1299.04
Ca	43	2	He	23	212.09
Sb	121	2	He	297	0.66
Ti	47	2	He	3	5196.15
Cu	63	1	No Gas	1480	0.28

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD

Calibration Blank Report

Li	6	1	No Gas	779902	2.27
Ge	72	2	He	456663	0.48
Ge	72	1	No Gas	1788656	0.79
In	115	1	No Gas	2077406	2.48

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	No Gas	1869675	0.04

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	019CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T12:40:06-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	6133	0.01
V	51	2	He	10931	0.02
Cr	52	2	He	13600	0.03
Fe	56	2	He	1239731	0.00
Se	78	2	He	359	3.28
As	75	2	He	1856	0.29
Ca	44	2	He	7802	0.03
Na	23	2	He	284435	0.00
Mg	24	2	He	103713	0.00
K	39	2	He	189266	0.00
Mn	55	2	He	9030	0.01
Co	59	2	He	19361	0.01
Ni	60	2	He	5498	0.04
Cu	63	2	He	14158	0.01
Zn	66	2	He	4561	0.16
Al	27	2	He	1167	0.55
B	11	1	No Gas	21194	0.00
Al	27	1	No Gas	57472	0.01
Si	28	1	No Gas	368965	0.00
Ag	107	1	No Gas	31498	0.00
Cd	111	1	No Gas	6615	0.09
Sr	88	1	No Gas	58538	0.00
Mo	95	1	No Gas	11468	0.03
Sn	118	1	No Gas	19855	0.00
Sb	121	1	No Gas	26854	0.01
Ba	137	1	No Gas	8920	0.01
Tl	205	1	No Gas	55062	0.00
Tl	203	1	No Gas	22774	0.00
Pb	208	1	No Gas	76289	0.00
U	238	1	No Gas	75774	0.00
Ca	43	2	He	417	4.05
Sb	121	2	He	12673	0.01
Cu	63	1	No Gas	26483	0.02

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	786683	1.86	779902	100.87	70	120	
Ge	72	2	He	462226	1.36	456663	101.22	70	120	
Ge	72	1	No Gas	1806933	0.65	1788656	101.02	70	120	

Calibration Standard Report

In	115	1	No Gas	2125018	1.27	2077406	102.29	70	120	
Bi	209	1	No Gas	1905804	1.72	1869675	101.93	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	020CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T12:42:24-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	12094	0.01
V	51	2	He	21110	0.01
Cr	52	2	He	25755	0.01
Fe	56	2	He	2488477	0.00
Se	78	2	He	514	1.49
As	75	2	He	3637	0.05
Ca	44	2	He	12970	0.03
Na	23	2	He	459548	0.00
Mg	24	2	He	206475	0.00
K	39	2	He	299123	0.00
Mn	55	2	He	16664	0.00
Co	59	2	He	37913	0.01
Ni	60	2	He	10114	0.02
Cu	63	2	He	28327	0.00
Zn	66	2	He	5565	0.05
Al	27	2	He	1717	0.66
B	11	1	No Gas	38182	0.00
Al	27	1	No Gas	87280	0.00
Si	28	1	No Gas	434689	0.00
Ag	107	1	No Gas	62689	0.00
Cd	111	1	No Gas	12793	0.02
Sr	88	1	No Gas	116181	0.00
Mo	95	1	No Gas	22693	0.01
Sn	118	1	No Gas	37490	0.01
Sb	121	1	No Gas	51568	0.00
Ba	137	1	No Gas	18096	0.01
Tl	205	1	No Gas	111071	0.00
Tl	203	1	No Gas	46878	0.00
Pb	208	1	No Gas	153210	0.00
U	238	1	No Gas	155370	0.00
Ca	43	2	He	707	2.31
Sb	121	2	He	25021	0.00
Cu	63	1	No Gas	52411	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	764885	1.60	779902	98.07	70	120	
Ge	72	2	He	456508	0.78	456663	99.97	70	120	
Ge	72	1	No Gas	1816123	0.49	1788656	101.54	70	120	

Calibration Standard Report

In	115	1	No Gas	2132431	1.27	2077406	102.65	70	120	
Bi	209	1	No Gas	1890435	2.01	1869675	101.11	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	021CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T12:44:42-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	24420	0.00
V	51	2	He	41389	0.00
Cr	52	2	He	50403	0.00
Fe	56	2	He	4776807	0.00
Se	78	2	He	791	0.69
As	75	2	He	7074	0.01
Ca	44	2	He	24679	0.00
Na	23	2	He	899371	0.00
Mg	24	2	He	408670	0.00
K	39	2	He	531074	0.00
Mn	55	2	He	32953	0.00
Co	59	2	He	74268	0.00
Ni	60	2	He	20082	0.00
Cu	63	2	He	55175	0.00
Zn	66	2	He	10828	0.03
Al	27	2	He	2884	0.13
B	11	1	No Gas	70685	0.00
Al	27	1	No Gas	146519	0.00
Si	28	1	No Gas	564069	0.00
Ag	107	1	No Gas	126157	0.00
Cd	111	1	No Gas	25211	0.00
Sr	88	1	No Gas	232143	0.00
Mo	95	1	No Gas	46327	0.00
Sn	118	1	No Gas	73461	0.00
Sb	121	1	No Gas	103106	0.00
Ba	137	1	No Gas	36097	0.00
Tl	205	1	No Gas	222261	0.00
Tl	203	1	No Gas	92840	0.00
Pb	208	1	No Gas	301948	0.00
U	238	1	No Gas	312144	0.00
Ca	43	2	He	1400	0.09
Sb	121	2	He	49263	0.00
Cu	63	1	No Gas	102944	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	773008	2.62	779902	99.12	70	120	
Ge	72	2	He	460540	1.24	456663	100.85	70	120	
Ge	72	1	No Gas	1792613	0.83	1788656	100.22	70	120	

Calibration Standard Report

In	115	1	No Gas	2104657	1.27	2077406	101.31	70	120	
Bi	209	1	No Gas	1882142	1.03	1869675	100.67	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	022CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T12:46:59-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	245186	0.00
V	51	2	He	415331	0.00
Cr	52	2	He	487927	0.00
Fe	56	2	He	47158106	0.00
Se	78	2	He	6182	0.05
As	75	2	He	72906	0.00
Ca	44	2	He	243845	0.00
Na	23	2	He	7789478	0.00
Mg	24	2	He	4233950	0.00
K	39	2	He	4952098	0.00
Mn	55	2	He	327850	0.00
Co	59	2	He	761236	0.00
Ni	60	2	He	202752	0.00
Cu	63	2	He	547111	0.00
Zn	66	2	He	101658	0.00
Al	27	2	He	21233	0.01
B	11	1	No Gas	660851	0.00
Al	27	1	No Gas	1193475	0.00
Si	28	1	No Gas	3013889	0.00
Ag	107	1	No Gas	1342764	0.00
Cd	111	1	No Gas	252821	0.00
Sr	88	1	No Gas	2420307	0.00
Mo	95	1	No Gas	466801	0.00
Sn	118	1	No Gas	746993	0.00
Sb	121	1	No Gas	1040347	0.00
Ba	137	1	No Gas	361608	0.00
Tl	205	1	No Gas	2416162	0.00
Tl	203	1	No Gas	945911	0.00
Pb	208	1	No Gas	3198940	0.00
U	238	1	No Gas	3363734	0.00
Ca	43	2	He	14364	0.02
Sb	121	2	He	498528	0.00
Cu	63	1	No Gas	1006161	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	777284	1.33	779902	99.66	70	120	
Ge	72	2	He	455981	0.45	456663	99.85	70	120	
Ge	72	1	No Gas	1763466	1.37	1788656	98.59	70	120	

Calibration Standard Report

In	115	1	No Gas	2075499	0.51	2077406	99.91	70	120	
Bi	209	1	No Gas	1870567	1.04	1869675	100.05	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	023CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T12:49:11-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	483647	0.00
V	51	2	He	817687	0.00
Cr	52	2	He	992043	0.00
Fe	56	2	He	93068929	0.00
Se	78	2	He	12015	0.01
As	75	2	He	144821	0.00
Ca	44	2	He	477968	0.00
Na	23	2	He	15299573	0.00
Mg	24	2	He	8360439	0.00
K	39	2	He	9528016	0.00
Mn	55	2	He	645869	0.00
Co	59	2	He	1657257	0.00
Ni	60	2	He	395072	0.00
Cu	63	2	He	1075128	0.00
Zn	66	2	He	196351	0.00
Al	27	2	He	41038	0.00
B	11	1	No Gas	1442295	0.00
Al	27	1	No Gas	2316814	0.00
Si	28	1	No Gas	5409033	0.00
Ag	107	1	No Gas	2627150	0.00
Cd	111	1	No Gas	491982	0.00
Sr	88	1	No Gas	4681137	0.00
Mo	95	1	No Gas	921966	0.00
Sn	118	1	No Gas	1611110	0.00
Sb	121	1	No Gas	2177602	0.00
Ba	137	1	No Gas	706675	0.00
Tl	205	1	No Gas	4665796	0.00
Tl	203	1	No Gas	2065782	0.00
Pb	208	1	No Gas	6522087	0.00
U	238	1	No Gas	6530395	0.00
Ca	43	2	He	27945	0.01
Sb	121	2	He	984433	0.00
Cu	63	1	No Gas	2114320	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	748586	3.42	779902	95.98	70	120	
Ge	72	2	He	444094	0.23	456663	97.25	70	120	
Ge	72	1	No Gas	1715150	0.44	1788656	95.89	70	120	

Calibration Standard Report

In	115	1	No Gas	1988557	0.44	2077406	95.72	70	120	
Bi	209	1	No Gas	1775927	1.33	1869675	94.99	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	025_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T12:57:46-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	104.754	3.093	1126285	0.45	100	104.8	90	110	
Be	9	1	No Gas	105.618	3.402	261335	0.33	100	105.6	90	110	
V	51	2	He	102.061	0.806	430068	0.09	100	102.1	90	110	
Cr	52	2	He	99.982	1.587	508160	0.70	100	100.0	90	110	
Fe	56	2	He	10022.703	0.634	48020371	0.32	10000	100.2	90	110	
Se	78	2	He	106.372	1.020	6665	0.47	100	106.4	90	110	
As	75	2	He	107.128	0.810	79767	0.20	100	107.1	90	110	
Ca	44	2	He	9954.040	0.593	245526	0.93	10000	99.5	90	110	
Na	23	2	He	10052.131	1.628	7963067	2.14	10000	100.5	90	110	
Mg	24	2	He	10068.132	0.928	4332109	1.28	10000	100.7	90	110	
K	39	2	He	10115.340	0.859	5012289	1.23	10000	101.2	90	110	
Mn	55	2	He	103.713	0.750	344992	1.03	100	103.7	90	110	
Co	59	2	He	95.464	0.228	799123	0.75	100	95.5	90	110	
Ni	60	2	He	102.370	0.816	208780	1.09	100	102.4	90	110	
Cu	63	2	He	102.943	0.376	570436	0.78	100	102.9	90	110	
Zn	66	2	He	103.495	0.594	105326	1.34	100	103.5	90	110	
Al	27	2	He	103.531	0.981	22181	1.81	100	103.5	90	110	
B	11	1	No Gas	473.199	4.103	687324	1.08	500	94.6	90	110	
Al	27	1	No Gas	103.028	1.334	1247953	0.86	100	103.0	90	110	
Si	28	1	No Gas	523.127	0.503	3094148	0.50	500	104.6	90	110	
Ag	107	1	No Gas	104.352	2.357	1405443	0.75	100	104.4	90	110	
Cd	111	1	No Gas	103.469	1.482	261300	0.73	100	103.5	90	110	
Sr	88	1	No Gas	103.507	3.331	2489573	1.31	100	103.5	90	110	
Mo	95	1	No Gas	98.172	1.178	463276	1.50	100	98.2	90	110	
Sn	118	1	No Gas	94.338	1.963	765493	1.44	100	94.3	90	110	
Sb	121	1	No Gas	96.325	0.489	1071392	0.28	100	96.3	90	110	
Ba	137	1	No Gas	103.108	2.325	373695	0.20	100	103.1	90	110	
Tl	205	1	No Gas	106.137	1.282	2548222	1.53	100	106.1	90	110	
Tl	203	1	No Gas	95.588	0.953	992794	1.09	100	95.6	90	110	
Pb	208	1	No Gas	99.696	1.001	3311099	1.23	100	99.7	90	110	
U	238	1	No Gas	101.096	1.048	3393086	0.88	100	101.1	90	110	
Ca	43	2	He	9913.807	3.220	14308	2.37	10000	99.1	90	110	
Sb	121	2	He	103.275	0.475	523354	0.41	100	103.3	90	110	
Ti	47	2	He	102.625	0.995	15643	1.73	100	102.6	90	110	
Cu	63	1	No Gas	96.411	0.834	1040891	1.09	100	96.4	90	110	
Se	82	1	No Gas	102.177	5.640	14628	5.75	100	102.2	90	110	

QC ISTD Table

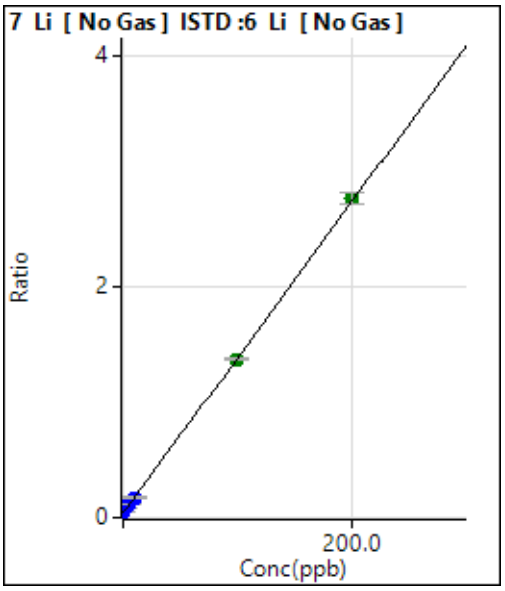
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	769612	3.20	779902	98.68	70	120	
Ge	72	2	He	458399	0.88	456663	100.38	70	120	
Ge	72	1	No Gas	1777175	0.50	1788656	99.36	70	120	
In	115	1	No Gas	2048256	2.17	2077406	98.60	70	120	
Bi	209	1	No Gas	1833986	0.25	1869675	98.09	70	120	

Calibration for 025_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\082222A.b\
Analysis File: 082222A.batch.bin
DA Date-Time: 08/22/2022 20:20:33
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	018CALB.d	CAL BLK	08/22/2022 12:37:46
2	019CALS.d	2/10/200	08/22/2022 12:40:06
3	020CALS.d	5/25/500	08/22/2022 12:42:24
4	021CALS.d	10/50/100	08/22/2022 12:44:42
5	022CALS.d	100/500/10K	08/22/2022 12:46:59
6	023CALS.d	200/1000/20K	08/22/2022 12:49:11

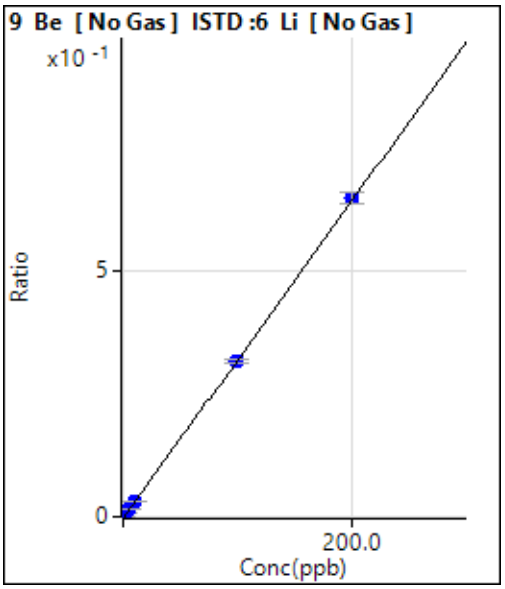
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	41136.69	0.0528	P	1.6	
2	☐	2.000	2.291	65789.77	0.0836	P	0.6	14.6
3	☐	5.000	4.766	89457.20	0.1170	P	2.0	-4.7
4	☐	10.000	9.040	134901.75	0.1746	P	2.0	-9.6
5	☐	100.000	97.553	1062663.58	1.3673	A	1.4	-2.4
6	☐	200.000	201.275	2068369.55	2.7650	A	4.0	0.6

y = 0.0135 * x + 0.0528
R = 0.9999
DL = 0.1916 ppb
BEC = 3.915 ppb

Weight: <None>
Min Conc: <None>

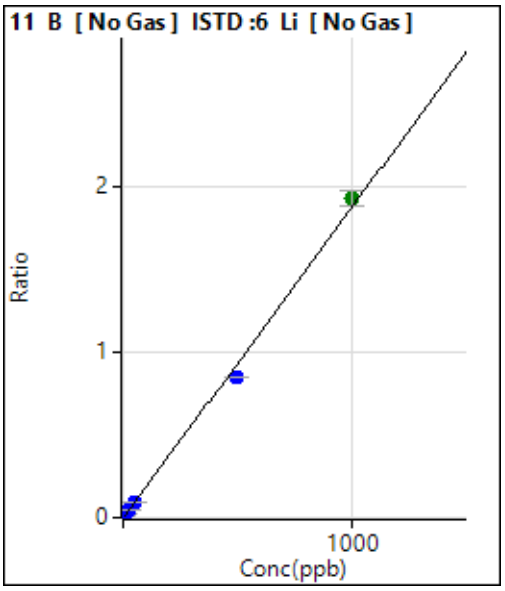


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8.33	0.0000	P	34.5	
2	☐	2.000	2.420	6133.05	0.0078	P	1.6	21.0
3	☐	5.000	4.911	12093.62	0.0158	P	0.9	-1.8
4	☐	10.000	9.822	24419.64	0.0316	P	3.6	-1.8
5	☐	100.000	98.053	245186.38	0.3155	P	1.4	-1.9
6	☐	200.000	200.980	483647.32	0.6466	P	3.6	0.5

y = 0.0032 * x + 1.0680E-005
R = 0.9999
DL = 0.003436 ppb
BEC = 0.00332 ppb

Weight: <None>
Min Conc: <None>

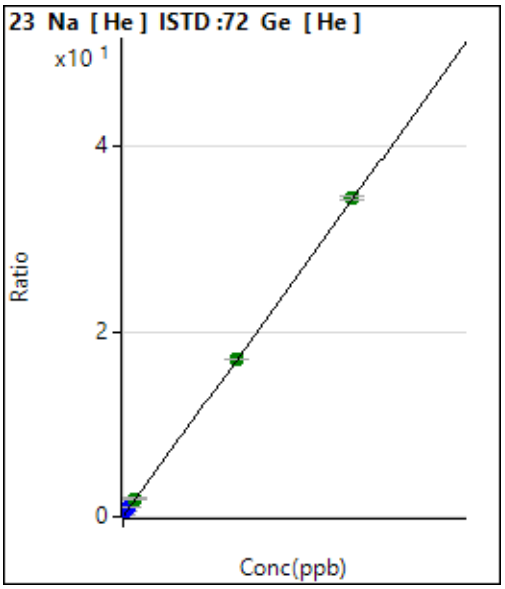
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5604.49	0.0072	P	1.1	
2	☐	10.000	10.546	21194.38	0.0269	P	1.6	5.5
3	☐	25.000	22.809	38181.79	0.0499	P	1.5	-8.8
4	☐	50.000	44.993	70684.98	0.0915	P	3.4	-10.0
5	☐	500.000	449.914	660851.18	0.8502	P	0.1	-10.0
6	☐	1000.000	1025.343	1442295.40	1.9284	A	4.3	2.5

y = 0.0019 * x + 0.0072
R = 0.9983
DL = 0.1277 ppb
BEC = 3.836 ppb

Weight: <None>
Min Conc: <None>

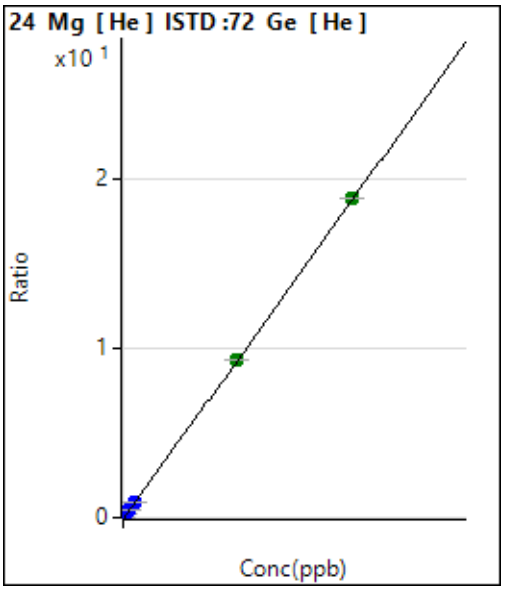


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	96217.35	0.2107	P	1.3	
2	☐	200.000	237.083	284434.93	0.6154	P	1.1	18.5
3	☐	500.000	466.293	459547.83	1.0067	P	0.9	-6.7
4	☐	1000.000	1020.761	899371.47	1.9532	A	2.3	2.1
5	☐	10000.00	9883.504	7789478.01	17.0829	A	0.4	-1.2
6	☐	20000.00	20057.68	15299572.6	34.4513	A	0.9	0.3

y = 0.0017 * x + 0.2107
R = 1.0000
DL = 4.873 ppb
BEC = 123.4 ppb

Weight: <None>
Min Conc: <None>

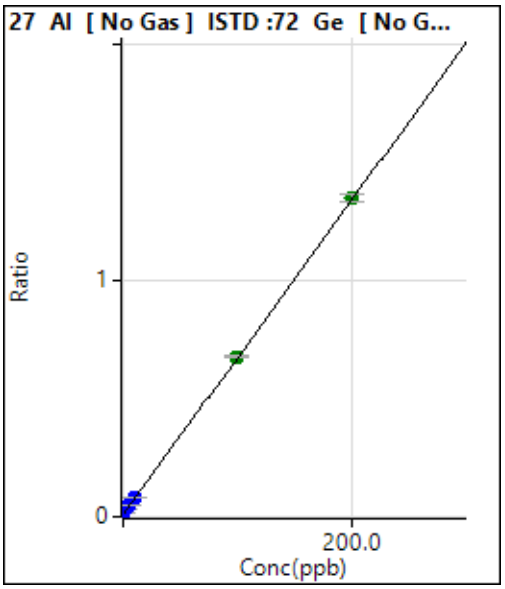
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	270.01	0.0006	P	11.6	
2	☐	200.000	238.433	103713.43	0.2244	P	1.2	19.2
3	☐	500.000	481.277	206474.83	0.4523	P	1.2	-3.7
4	☐	1000.000	944.893	408669.64	0.8875	P	1.3	-5.5
5	☐	10000.00	9892.153	4233949.52	9.2853	A	0.4	-1.1
6	☐	20000.00	20056.76	8360438.84	18.8258	A	0.5	0.3

y = 9.3860E-004 * x + 5.9149E-004
R = 1.0000
DL = 0.219 ppb
BEC = 0.6302 ppb

Weight: <None>
Min Conc: <None>

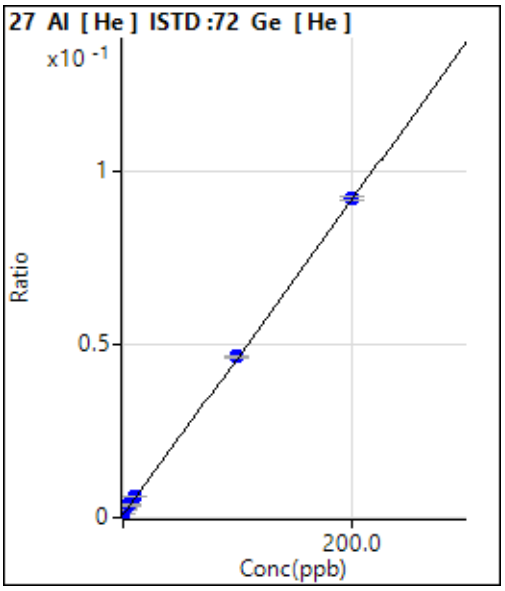


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	28607.39	0.0160	P	1.6	
2	☐	2.000	2.374	57472.09	0.0318	P	2.8	18.7
3	☐	5.000	4.814	87280.22	0.0481	P	1.7	-3.7
4	☐	10.000	9.871	146519.13	0.0817	P	1.3	-1.3
5	☐	100.000	99.215	1193475.03	0.6768	A	1.3	-0.8
6	☐	200.000	200.400	2316814.24	1.3508	A	2.3	0.2

y = 0.0067 * x + 0.0160
R = 1.0000
DL = 0.1147 ppb
BEC = 2.401 ppb

Weight: <None>
Min Conc: <None>

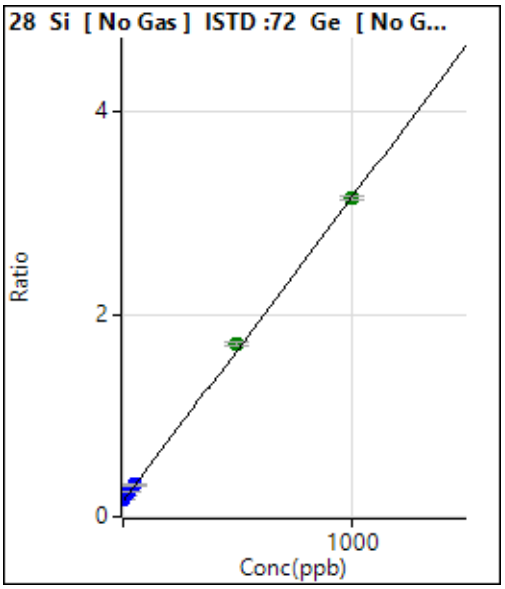
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	556.69	0.0012	P	18.9	
2	☐	2.000	2.869	1166.73	0.0025	P	7.3	43.4
3	☐	5.000	5.576	1716.81	0.0038	P	10.7	11.5
4	☐	10.000	11.071	2883.69	0.0063	P	3.9	10.7
5	☐	100.000	99.530	21233.12	0.0466	P	2.0	-0.5
6	☐	200.000	200.159	41037.55	0.0924	P	1.1	0.1

y = 4.5559E-004 * x + 0.0012
R = 1.0000
DL = 1.519 ppb
BEC = 2.674 ppb

Weight: <None>
Min Conc: <None>

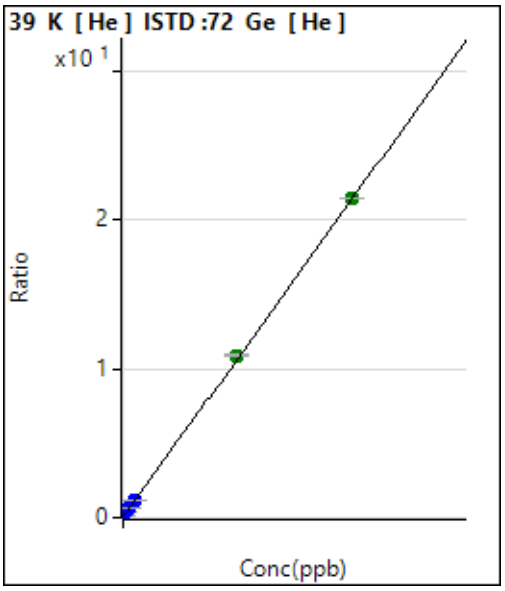


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	306156.92	0.1712	P	1.0	
2	☐	10.000	11.005	368964.51	0.2042	P	0.6	10.0
3	☐	25.000	22.718	434689.42	0.2394	P	0.3	-9.1
4	☐	50.000	47.821	564069.15	0.3147	P	1.2	-4.4
5	☐	500.000	512.533	3013888.91	1.7093	A	1.4	2.5
6	☐	1000.000	993.889	5409033.04	3.1538	A	1.3	-0.6

y = 0.0030 * x + 0.1712
R = 0.9999
DL = 1.644 ppb
BEC = 57.04 ppb

Weight: <None>
Min Conc: <None>

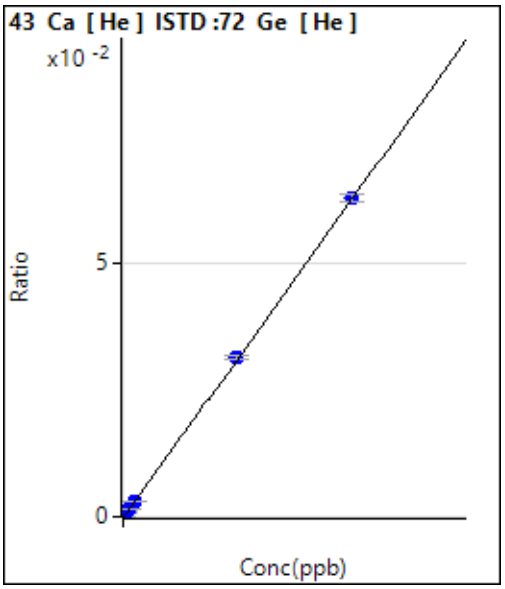
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	66614.06	0.1459	P	0.8	
2	☐	200.000	247.155	189266.11	0.4095	P	0.6	23.6
3	☐	500.000	477.596	299122.76	0.6552	P	0.4	-4.5
4	☐	1000.000	944.574	531074.03	1.1533	P	1.6	-5.5
5	☐	10000.00	10046.29	4952097.53	10.8607	A	1.2	0.5
6	☐	20000.00	19979.71	9528015.69	21.4551	A	0.5	-0.1

y = 0.0011 * x + 0.1459
R = 1.0000
DL = 3.347 ppb
BEC = 136.8 ppb

Weight: <None>
Min Conc: <None>

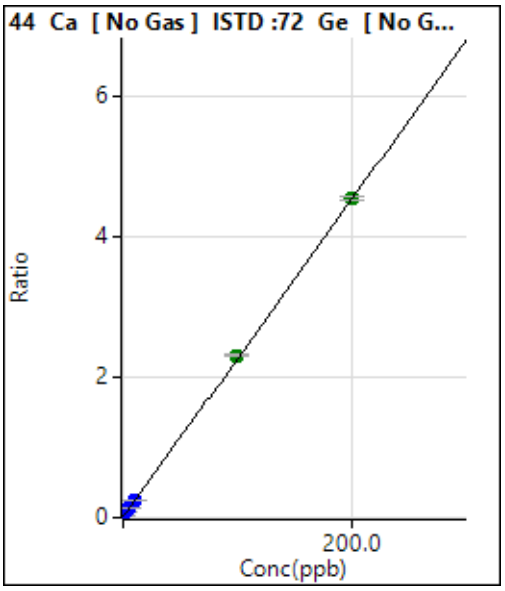


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0001	P	49.7	
2	☐	200.000	270.173	416.68	0.0009	P	15.9	35.1
3	☐	500.000	476.481	706.70	0.0015	P	17.0	-4.7
4	☐	1000.000	950.951	1400.09	0.0030	P	2.5	-4.9
5	☐	10000.00	10003.71	14364.32	0.0315	P	2.1	0.0
6	☐	20000.00	20000.48	27945.36	0.0629	P	2.7	0.0

y = 3.1438E-006 * x + 5.1169E-005
R = 1.0000
DL = 24.28 ppb
BEC = 16.28 ppb

Weight: <None>
Min Conc: <None>

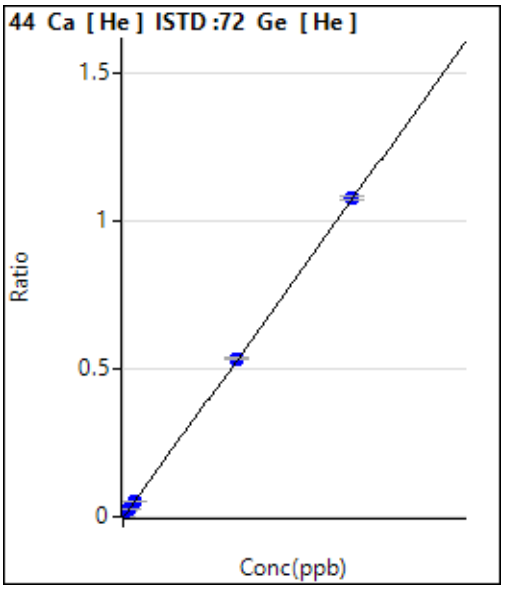
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	55458.39	0.0310	P	1.1	
2	☐	2.000	2.813	170769.13	0.0945	P	1.0	40.7
3	☐	5.000	4.645	246727.77	0.1359	P	0.8	-7.1
4	☐	10.000	9.515	440592.29	0.2458	P	1.5	-4.9
5	☐	100.000	100.575	4058718.06	2.3015	A	1.3	0.6
6	☐	200.000	199.738	7786946.97	4.5401	A	0.9	-0.1

y = 0.0226 * x + 0.0310
R = 1.0000
DL = 0.04689 ppb
BEC = 1.373 ppb

Weight: <None>
Min Conc: <None>

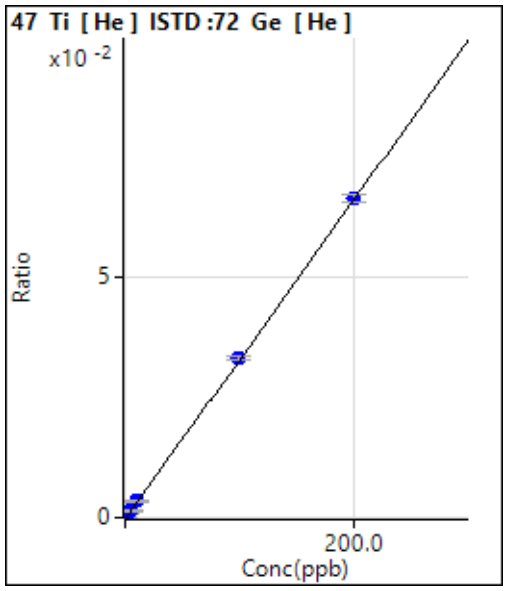


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	716.70	0.0016	P	11.8	
2	☐	200.000	285.355	7802.35	0.0169	P	1.6	42.7
3	☐	500.000	500.217	12969.65	0.0284	P	2.8	0.0
4	☐	1000.000	969.594	24679.16	0.0536	P	0.7	-3.0
5	☐	10000.00	9938.338	243844.94	0.5348	P	0.5	-0.6
6	☐	20000.00	20031.49	477968.14	1.0763	P	0.9	0.2

y = 5.3652E-005 * x + 0.0016
R = 1.0000
DL = 10.32 ppb
BEC = 29.26 ppb

Weight: <None>
Min Conc: <None>

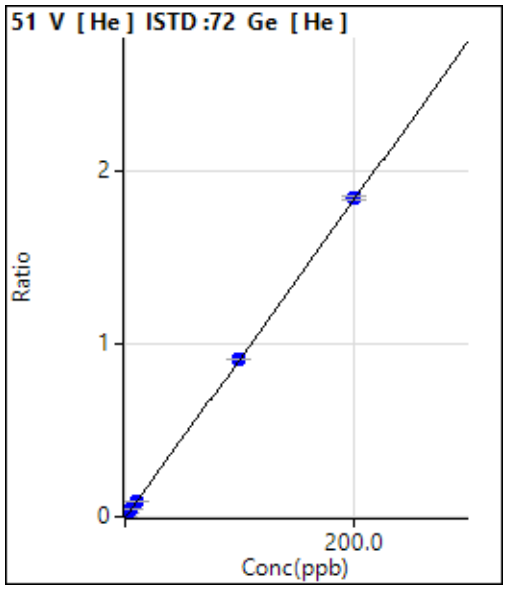
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	2.431	376.68	0.0008	P	16.1	21.6
3	☐	5.000	4.617	703.37	0.0015	P	19.0	-7.7
4	☐	10.000	10.279	1576.78	0.0034	P	5.7	2.8
5	☐	100.000	99.721	15118.55	0.0332	P	2.8	-0.3
6	☐	200.000	200.131	29548.73	0.0665	P	2.5	0.1

y = 3.3243E-004 * x + 7.3020E-006
R = 1.0000
DL = 0.1141 ppb
BEC = 0.02197 ppb

Weight: <None>
Min Conc: <None>

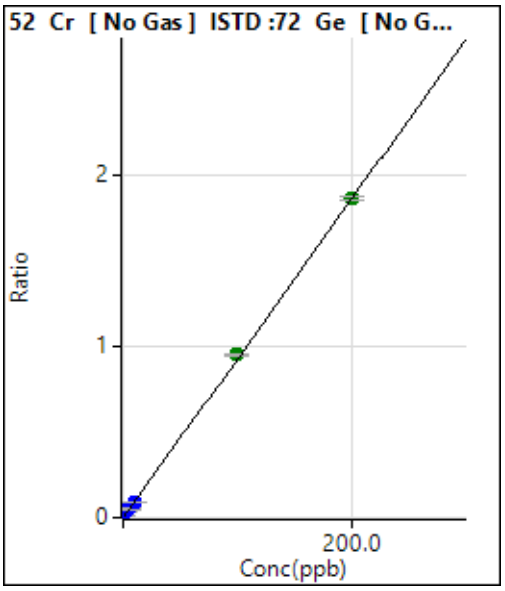


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	827.81	0.0018	P	9.0	
2	☐	2.000	2.381	10931.06	0.0237	P	3.6	19.0
3	☐	5.000	4.842	21109.63	0.0462	P	1.9	-3.2
4	☐	10.000	9.598	41388.92	0.0899	P	1.5	-4.0
5	☐	100.000	99.077	415330.89	0.9109	P	0.4	-0.9
6	☐	200.000	200.482	817687.00	1.8413	P	0.7	0.2

y = 0.0092 * x + 0.0018
R = 1.0000
DL = 0.05326 ppb
BEC = 0.1976 ppb

Weight: <None>
Min Conc: <None>

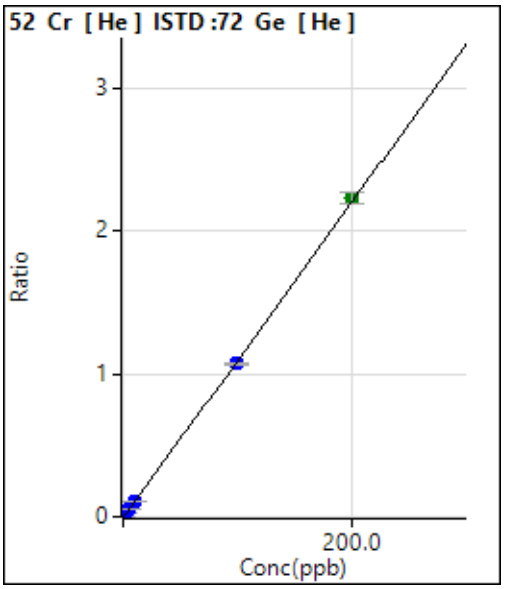
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14631.35	0.0082	P	0.2	
2	☐	2.000	2.322	53866.17	0.0298	P	2.7	16.1
3	☐	5.000	4.571	92198.87	0.0508	P	1.0	-8.6
4	☐	10.000	9.239	168946.30	0.0942	P	0.5	-7.6
5	☐	100.000	101.306	1678490.96	0.9519	A	1.7	1.3
6	☐	200.000	199.393	3199804.43	1.8657	A	0.8	-0.3

y = 0.0093 * x + 0.0082
R = 1.0000
DL = 0.004738 ppb
BEC = 0.8781 ppb

Weight: <None>
Min Conc: <None>

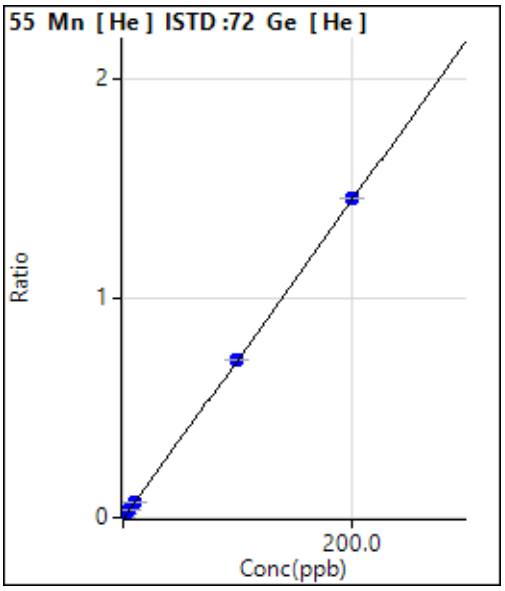


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1546.78	0.0034	P	10.5	
2	☐	2.000	2.356	13600.29	0.0294	P	3.6	17.8
3	☐	5.000	4.797	25754.56	0.0564	P	1.6	-4.1
4	☐	10.000	9.594	50403.14	0.1094	P	0.1	-4.1
5	☐	100.000	96.491	487926.50	1.0701	P	0.1	-3.5
6	☐	200.000	201.776	992042.77	2.2339	A	4.0	0.9

y = 0.0111 * x + 0.0034
R = 0.9998
DL = 0.09667 ppb
BEC = 0.3064 ppb

Weight: <None>
Min Conc: <None>

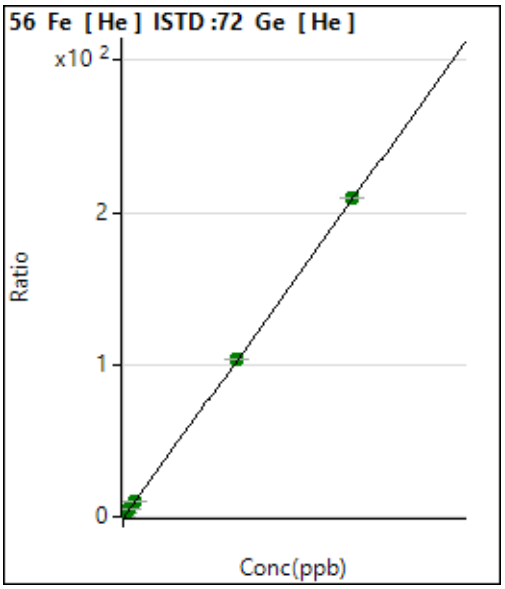
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	166.67	0.0004	P	33.5	
2	☐	2.000	2.644	9029.80	0.0195	P	2.4	32.2
3	☐	5.000	4.983	16663.74	0.0365	P	1.3	-0.3
4	☐	10.000	9.815	32953.45	0.0716	P	0.4	-1.8
5	☐	100.000	99.078	327850.42	0.7190	P	0.7	-0.9
6	☐	200.000	200.464	645869.00	1.4544	P	0.5	0.2

y = 0.0073 * x + 3.6532E-004
R = 1.0000
DL = 0.05063 ppb
BEC = 0.05037 ppb

Weight: <None>
Min Conc: <None>

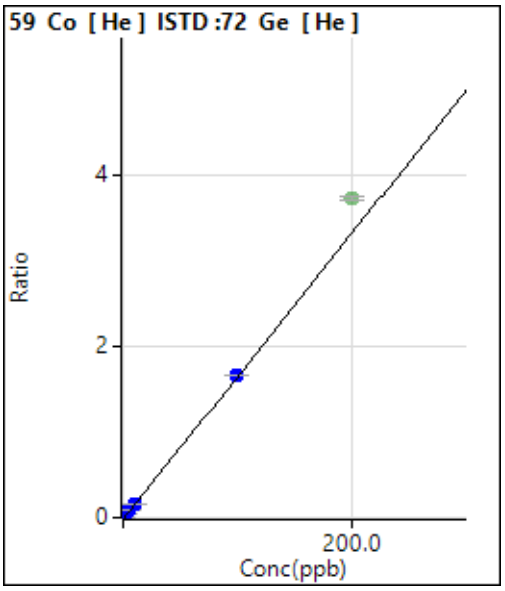


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8726.24	0.0191	P	3.5	
2	☐	200.000	254.824	1239730.84	2.6821	A	1.9	27.4
3	☐	500.000	519.783	2488477.36	5.4510	A	0.3	4.0
4	☐	1000.000	990.779	4776807.22	10.3731	A	1.4	-0.9
5	☐	10000.00	9894.729	47158105.9	103.423	A	0.6	-1.1
6	☐	20000.00	20052.05	93068928.6	209.571	A	0.6	0.3

y = 0.0105 * x + 0.0191
R = 1.0000
DL = 0.1922 ppb
BEC = 1.829 ppb

Weight: <None>
Min Conc: <None>

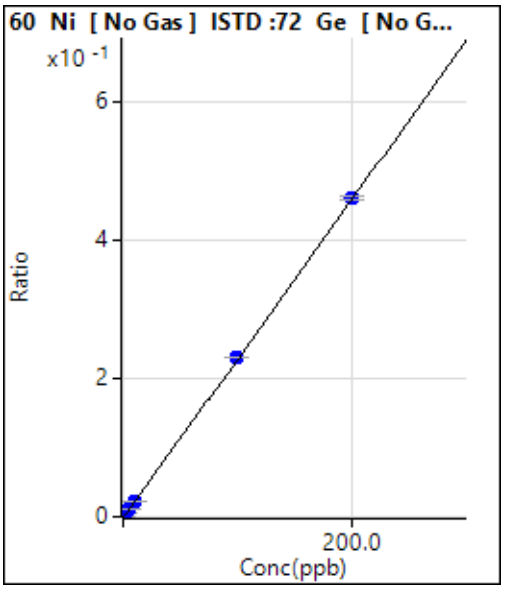
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0001	P	41.8	
2	☐	2.000	2.505	19360.62	0.0419	P	2.7	25.3
3	☐	5.000	4.972	37913.06	0.0831	P	2.9	-0.6
4	☐	10.000	9.659	74268.43	0.1613	P	1.2	-3.4
5	☐	100.000	100.025	761236.11	1.6695	P	0.4	0.0
6	☑	200.000		1657257.01	3.7318	A	0.9	

y = 0.0167 * x + 8.0369E-005
R = 1.0000
DL = 0.006045 ppb
BEC = 0.004816 ppb

Weight: <None>
Min Conc: <None>

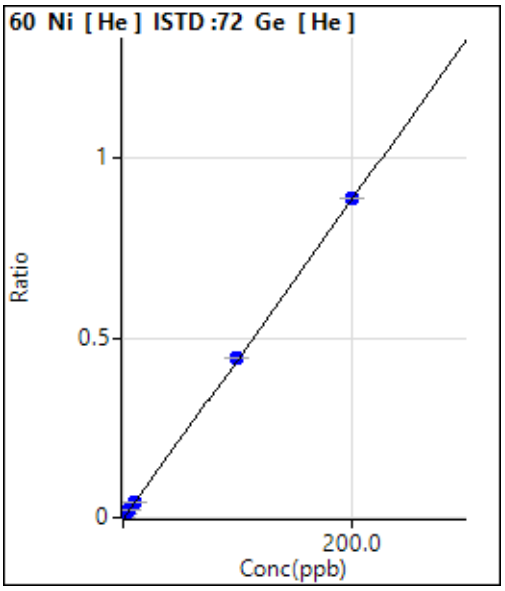


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	546.69	0.0003	P	20.6	
2	☐	2.000	2.465	10821.11	0.0060	P	3.4	23.3
3	☐	5.000	4.887	21016.47	0.0116	P	2.7	-2.3
4	☐	10.000	9.716	40697.73	0.0227	P	1.9	-2.8
5	☐	100.000	99.679	405791.48	0.2301	P	0.5	-0.3
6	☐	200.000	200.173	792045.95	0.4618	P	1.0	0.1

y = 0.0023 * x + 3.0544E-004
R = 1.0000
DL = 0.082 ppb
BEC = 0.1325 ppb

Weight: <None>
Min Conc: <None>

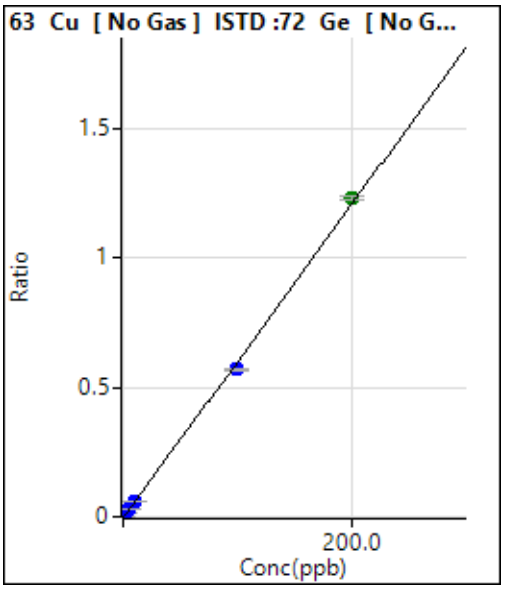
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	190.01	0.0004	P	27.3	
2	☐	2.000	2.582	5497.87	0.0119	P	1.9	29.1
3	☐	5.000	4.891	10113.93	0.0222	P	2.6	-2.2
4	☐	10.000	9.717	20081.67	0.0436	P	1.3	-2.8
5	☐	100.000	99.940	202752.24	0.4447	P	0.3	-0.1
6	☐	200.000	200.041	395072.34	0.8896	P	0.4	0.0

y = 0.0044 * x + 4.1606E-004
R = 1.0000
DL = 0.07675 ppb
BEC = 0.0936 ppb

Weight: <None>
Min Conc: <None>

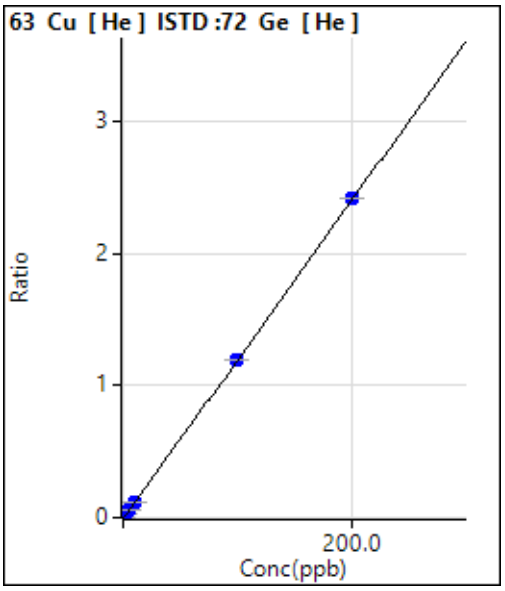


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1480.10	0.0008	P	3.4	
2	☐	2.000	2.280	26482.77	0.0147	P	5.3	14.0
3	☐	5.000	4.621	52411.27	0.0289	P	0.4	-7.6
4	☐	10.000	9.330	102944.48	0.0574	P	0.6	-6.7
5	☐	100.000	93.927	1006161.10	0.5706	P	1.3	-6.1
6	☐	200.000	203.077	2114320.44	1.2328	A	1.2	1.5

y = 0.0061 * x + 8.2736E-004
R = 0.9994
DL = 0.01383 ppb
BEC = 0.1364 ppb

Weight: <None>
Min Conc: <None>

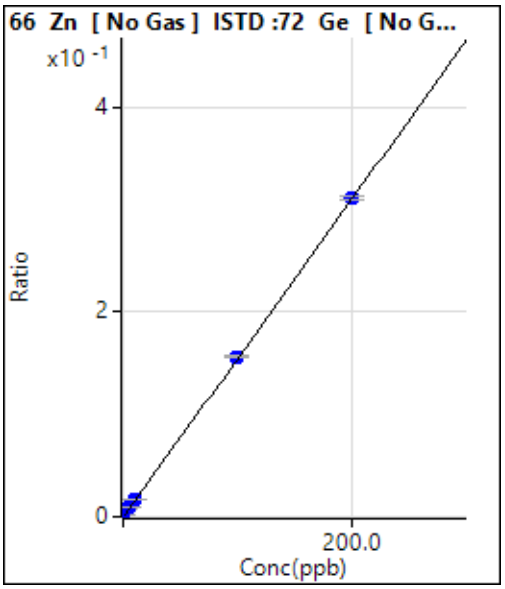
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	630.03	0.0014	P	19.4	
2	☐	2.000	2.423	14157.60	0.0306	P	1.5	21.1
3	☐	5.000	5.025	28326.53	0.0621	P	0.2	0.5
4	☐	10.000	9.809	55175.25	0.1198	P	1.6	-1.9
5	☐	100.000	99.252	547111.01	1.1999	P	0.1	-0.7
6	☐	200.000	200.379	1075127.53	2.4209	P	0.4	0.2

y = 0.0121 * x + 0.0014
R = 1.0000
DL = 0.06652 ppb
BEC = 0.1142 ppb

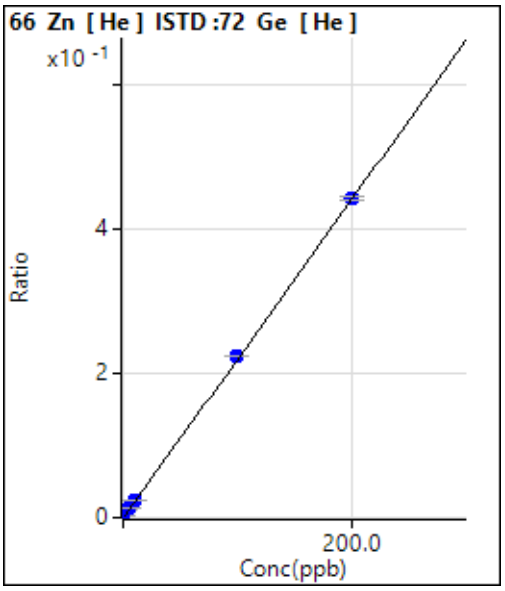
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1860.16	0.0010	P	3.2	
2	☐	2.000	3.869	12726.18	0.0070	P	0.5	93.4
3	☐	5.000	4.946	15826.15	0.0087	P	1.0	-1.1
4	☐	10.000	9.801	29124.86	0.0162	P	1.7	-2.0
5	☐	100.000	100.108	275742.87	0.1564	P	1.7	0.1
6	☐	200.000	199.938	533919.65	0.3113	P	0.8	0.0

y = 0.0016 * x + 0.0010
R = 1.0000
DL = 0.06467 ppb
BEC = 0.6701 ppb

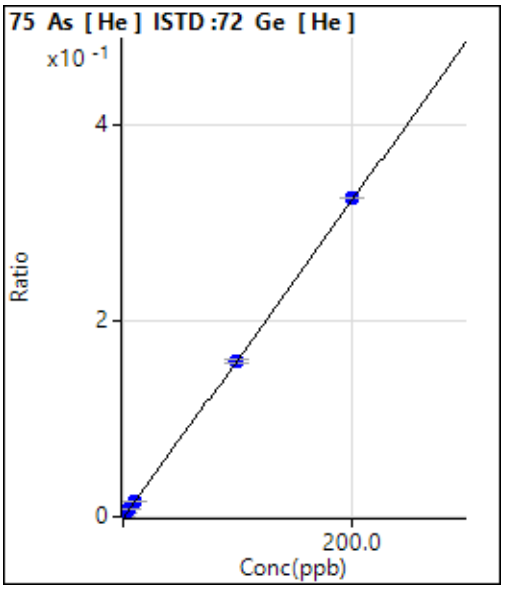
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	683.36	0.0015	P	18.7	
2	☐	2.000	3.798	4560.84	0.0099	P	8.6	89.9
3	☐	5.000	4.849	5564.58	0.0122	P	3.3	-3.0
4	☐	10.000	9.981	10827.85	0.0235	P	2.6	-0.2
5	☐	100.000	100.403	101658.49	0.2229	P	0.2	0.4
6	☐	200.000	199.785	196351.27	0.4421	P	0.8	-0.1

y = 0.0022 * x + 0.0015
R = 1.0000
DL = 0.3809 ppb
BEC = 0.6785 ppb

Weight: <None>
Min Conc: <None>

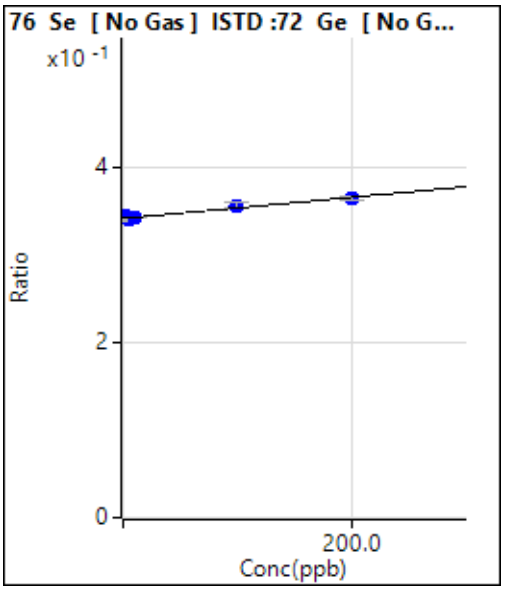


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	58.89	0.0001	P	7.0	
2	☐	2.000	2.394	1855.70	0.0040	P	5.0	19.7
3	☐	5.000	4.829	3637.17	0.0080	P	2.0	-3.4
4	☐	10.000	9.385	7074.12	0.0154	P	1.7	-6.2
5	☐	100.000	98.424	72905.62	0.1599	P	2.3	-1.6
6	☐	200.000	200.819	144820.66	0.3261	P	0.4	0.4

y = 0.0016 * x + 1.2898E-004
R = 0.9999
DL = 0.01657 ppb
BEC = 0.07946 ppb

Weight: <None>
Min Conc: <None>

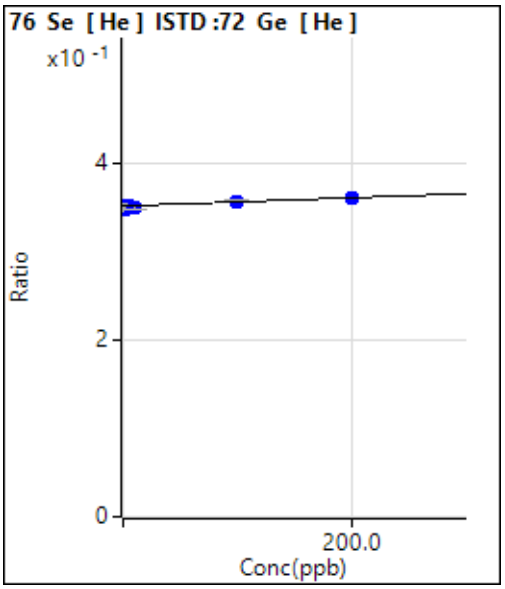
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	610810.04	0.3415	P	0.5	
2	☐	2.000	26.374	622866.83	0.3447	P	0.5	1218.7
3	☐	5.000	-10.932	617774.89	0.3402	P	0.7	-318.6
4	☐	10.000	10.490	614447.10	0.3428	P	0.4	4.9
5	☐	100.000	121.589	628197.13	0.3563	P	1.7	21.6
6	☐	200.000	189.335	625188.31	0.3645	P	1.0	-5.3

y = 1.2159E-004 * x + 0.3415
R = 0.9794
DL = 38.37 ppb
BEC = 2809 ppb

Weight: <None>
Min Conc: <None>

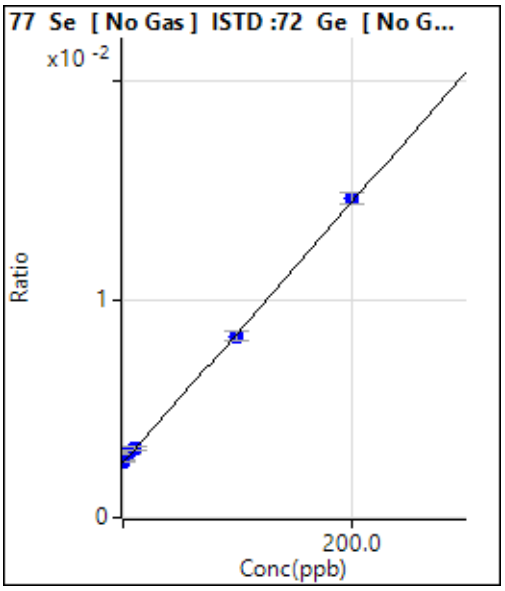


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	160725.80	0.3519	P	1.2	
2	☐	2.000	-89.143	160729.21	0.3477	P	0.9	-4557.
3	☐	5.000	4.631	160762.80	0.3522	P	0.8	-7.4
4	☐	10.000	-38.343	161276.33	0.3501	P	1.7	-483.4
5	☐	100.000	119.875	163059.36	0.3576	P	0.6	19.9
6	☐	200.000	193.400	160343.87	0.3611	P	0.4	-3.3

y = 4.7114E-005 * x + 0.3519
R = 0.9337
DL = 272.3 ppb
BEC = 7470 ppb

Weight: <None>
Min Conc: <None>

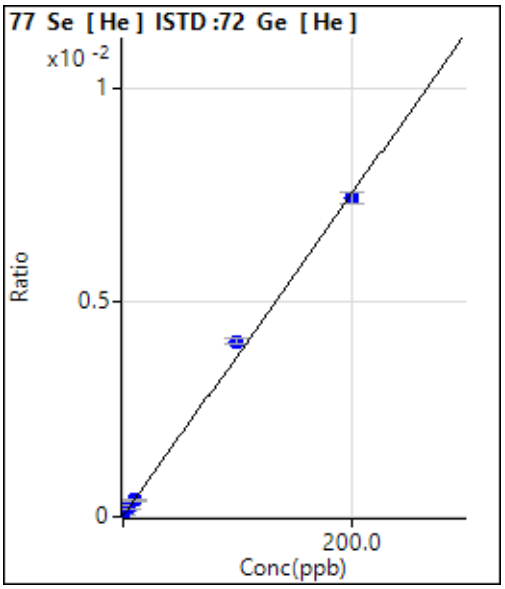
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4634.21	0.0026	P	3.9	
2	☐	2.000	5.477	5274.45	0.0029	P	2.6	173.9
3	☐	5.000	6.738	5437.85	0.0030	P	2.4	34.8
4	☐	10.000	9.865	5701.30	0.0032	P	3.5	-1.4
5	☐	100.000	96.026	14681.54	0.0083	P	6.0	-4.0
6	☐	200.000	201.916	25140.42	0.0147	P	3.3	1.0

y = 5.9754E-005 * x + 0.0026
R = 0.9995
DL = 5.135 ppb
BEC = 43.37 ppb

Weight: <None>
Min Conc: <None>

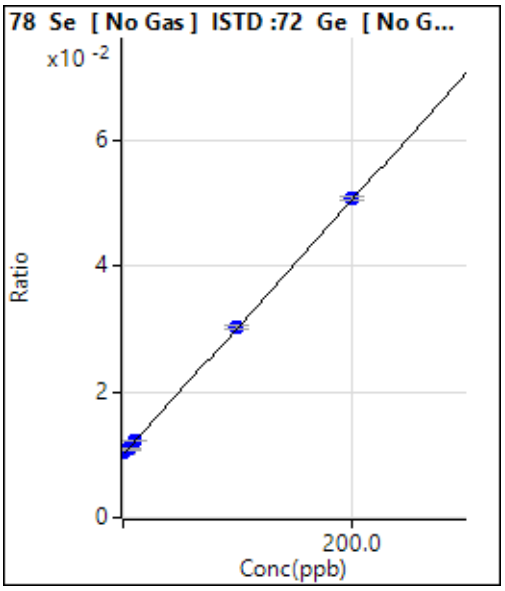


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0001	P	49.7	
2	☐	2.000	2.870	73.33	0.0002	P	39.9	43.5
3	☐	5.000	4.848	106.67	0.0002	P	37.5	-3.0
4	☐	10.000	8.845	176.67	0.0004	P	11.2	-11.6
5	☐	100.000	107.228	1860.16	0.0041	P	3.4	7.2
6	☐	200.000	196.439	3300.48	0.0074	P	3.5	-1.8

y = 3.7571E-005 * x + 5.1169E-005
R = 0.9990
DL = 2.032 ppb
BEC = 1.362 ppb

Weight: <None>
Min Conc: <None>

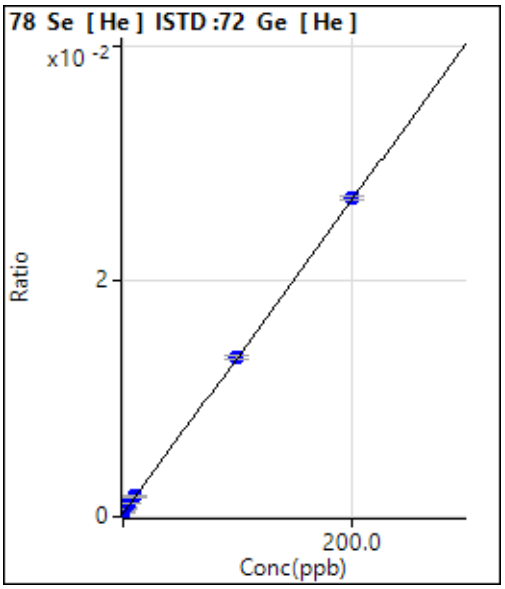
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18436.19	0.0103	P	1.5	
2	☐	2.000	2.044	19370.83	0.0107	P	0.4	2.2
3	☐	5.000	3.353	19948.38	0.0110	P	2.5	-32.9
4	☐	10.000	9.458	21901.51	0.0122	P	1.8	-5.4
5	☐	100.000	99.165	53486.33	0.0303	P	1.8	-0.8
6	☐	200.000	200.486	87123.87	0.0508	P	1.3	0.2

y = 2.0196E-004 * x + 0.0103
R = 1.0000
DL = 2.306 ppb
BEC = 51.04 ppb

Weight: <None>
Min Conc: <None>

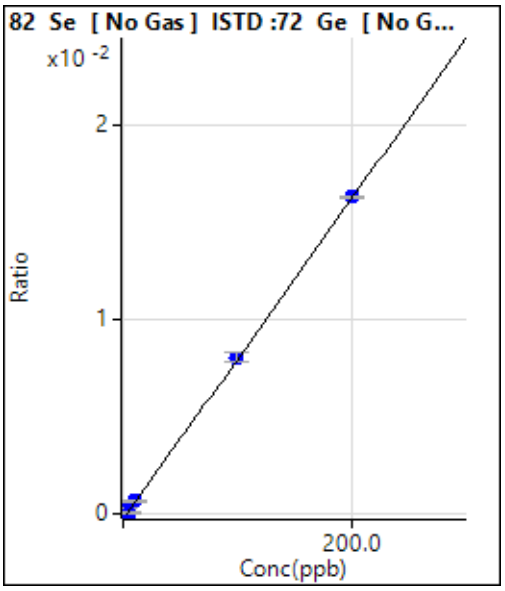


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	181.33	0.0004	P	10.3	
2	☐	2.000	2.853	358.67	0.0008	P	12.5	42.6
3	☐	5.000	5.485	514.01	0.0011	P	8.4	9.7
4	☐	10.000	9.943	791.36	0.0017	P	6.6	-0.6
5	☐	100.000	98.980	6182.10	0.0136	P	2.8	-1.0
6	☐	200.000	200.492	12014.69	0.0271	P	0.9	0.2

y = 1.3296E-004 * x + 3.9720E-004
R = 1.0000
DL = 0.9251 ppb
BEC = 2.987 ppb

Weight: <None>
Min Conc: <None>

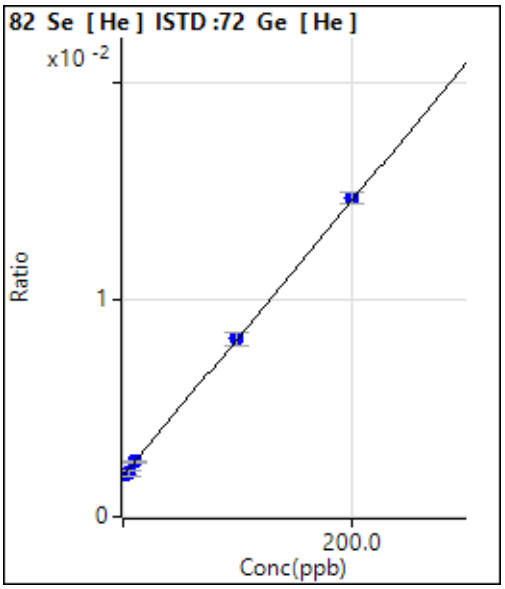
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-348.78	-0.0002	P	-44.4	
2	☐	2.000	4.745	353.18	0.0002	P	139.9	137.3
3	☐	5.000	2.830	69.70	0.0000	P	216.6	-43.4
4	☐	10.000	10.371	1182.27	0.0007	P	19.4	3.7
5	☐	100.000	100.071	14207.02	0.0081	P	5.4	0.1
6	☐	200.000	199.973	27950.12	0.0163	P	0.9	0.0

y = 8.2468E-005 * x - 1.9508E-004
R = 0.9998
DL = 3.149 ppb
BEC = -2.365 ppb

Weight: <None>
Min Conc: <None>

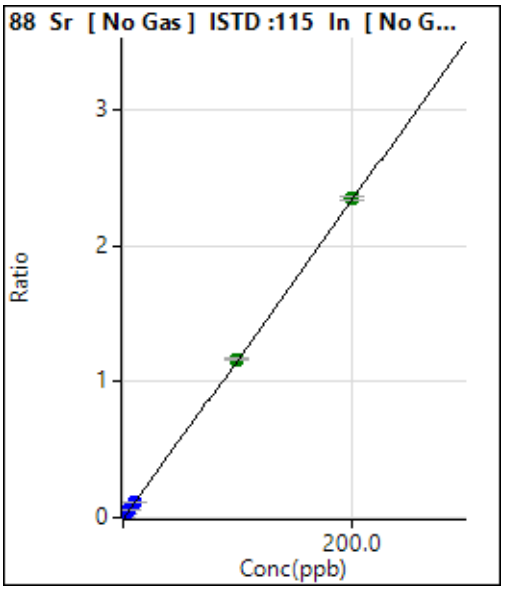


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	896.71	0.0020	P	13.6	
2	☐	2.000	-0.498	893.38	0.0019	P	4.6	-124.9
3	☐	5.000	0.475	910.05	0.0020	P	9.7	-90.5
4	☐	10.000	8.875	1163.41	0.0025	P	4.5	-11.3
5	☐	100.000	98.348	3737.25	0.0082	P	6.6	-1.7
6	☐	200.000	201.020	6528.37	0.0147	P	3.2	0.5

y = 6.3360E-005 * x + 0.0020
R = 0.9998
DL = 12.67 ppb
BEC = 31 ppb

Weight: <None>
Min Conc: <None>

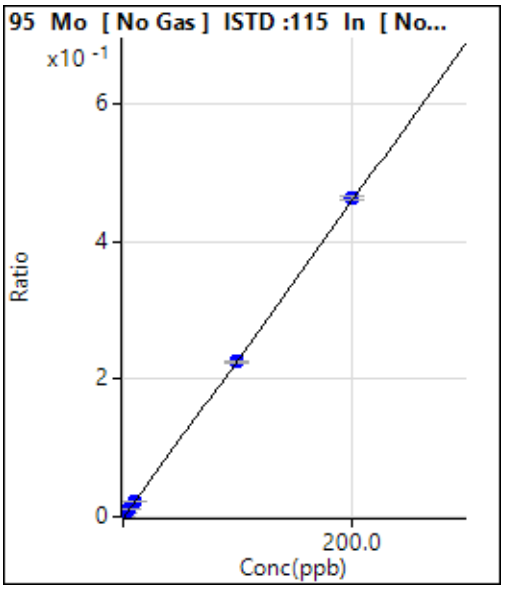
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1103.40	0.0005	P	12.7	
2	☐	2.000	2.301	58538.20	0.0276	P	2.9	15.1
3	☐	5.000	4.594	116180.61	0.0545	P	1.0	-8.1
4	☐	10.000	9.349	232143.45	0.1103	P	1.7	-6.5
5	☐	100.000	99.258	2420306.99	1.1661	A	0.8	-0.7
6	☐	200.000	200.411	4681137.43	2.3540	A	1.5	0.2

y = 0.0117 * x + 5.3040E-004
R = 1.0000
DL = 0.01716 ppb
BEC = 0.04517 ppb

Weight: <None>
Min Conc: <None>

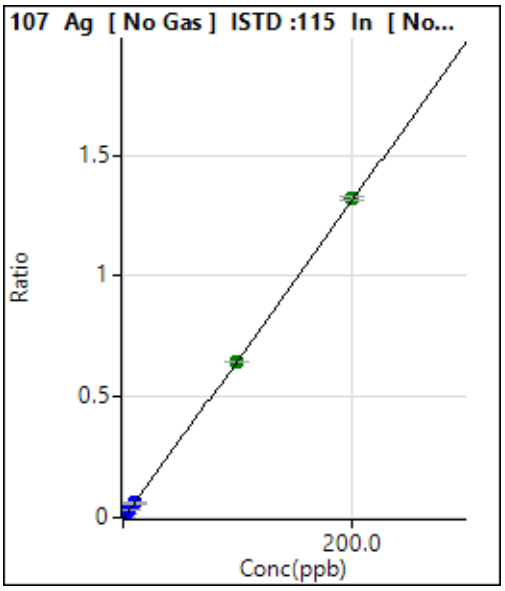


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0000	P	42.3	
2	☐	2.000	2.335	11468.45	0.0054	P	4.3	16.7
3	☐	5.000	4.611	22693.02	0.0106	P	1.2	-7.8
4	☐	10.000	9.546	46327.26	0.0220	P	1.5	-4.5
5	☐	100.000	97.611	466800.68	0.2249	P	0.9	-2.4
6	☐	200.000	201.223	921965.98	0.4636	P	0.8	0.6

y = 0.0023 * x + 1.9166E-005
R = 0.9999
DL = 0.01055 ppb
BEC = 0.008319 ppb

Weight: <None>
Min Conc: <None>

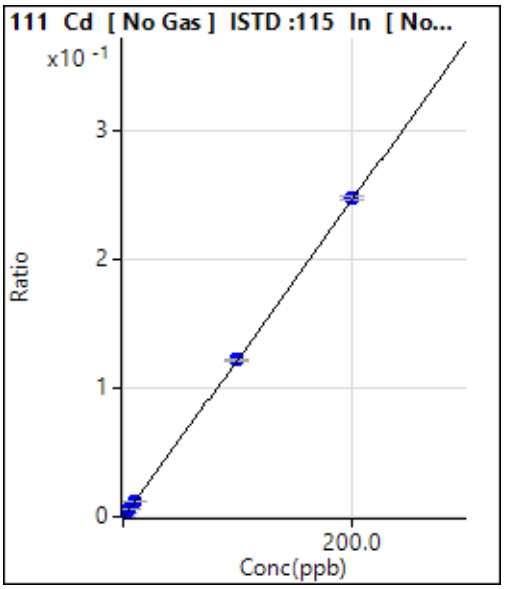
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	326.68	0.0002	P	11.9	
2	☐	2.000	2.230	31497.80	0.0148	P	1.2	11.5
3	☐	5.000	4.447	62688.62	0.0294	P	1.7	-11.1
4	☐	10.000	9.093	126157.07	0.0600	P	2.6	-9.1
5	☐	100.000	98.356	1342763.94	0.6470	A	0.4	-1.6
6	☐	200.000	200.879	2627149.65	1.3212	A	0.8	0.4

y = 0.0066 * x + 1.5715E-004
R = 0.9999
DL = 0.008503 ppb
BEC = 0.0239 ppb

Weight: <None>
Min Conc: <None>

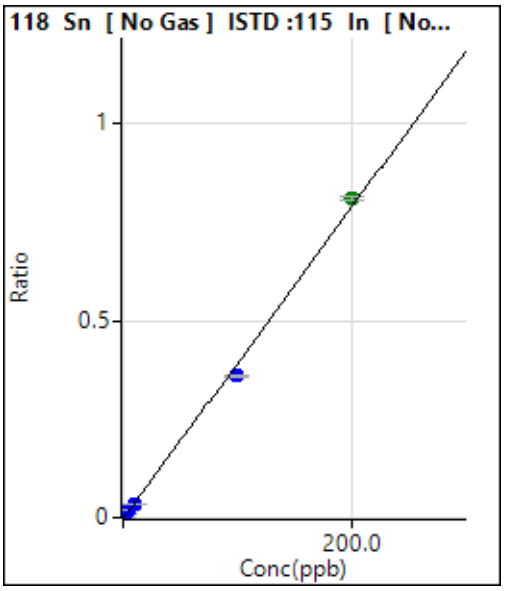


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	2.522	6615.12	0.0031	P	4.8	26.1
3	☐	5.000	4.865	12793.07	0.0060	P	4.0	-2.7
4	☐	10.000	9.713	25211.07	0.0120	P	0.9	-2.9
5	☐	100.000	98.781	252821.20	0.1218	P	1.2	-1.2
6	☐	200.000	200.622	491982.35	0.2474	P	0.6	0.3

y = 0.0012 * x + 1.6170E-006
R = 1.0000
DL = 0.006813 ppb
BEC = 0.001311 ppb

Weight: <None>
Min Conc: <None>

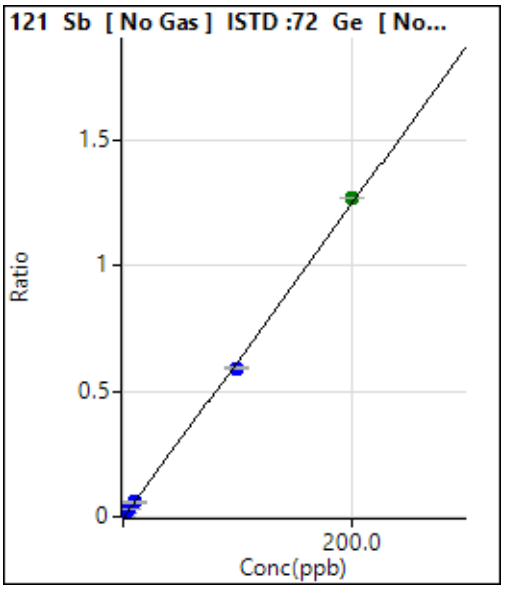
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1403.43	0.0007	P	16.7	
2	☐	2.000	2.192	19855.36	0.0093	P	1.1	9.6
3	☐	5.000	4.275	37490.48	0.0176	P	2.9	-14.5
4	☐	10.000	8.654	73461.40	0.0349	P	0.9	-13.5
5	☐	100.000	90.827	746993.35	0.3599	P	0.9	-9.2
6	☐	200.000	204.670	1611109.93	0.8102	A	0.7	2.3

y = 0.0040 * x + 6.7588E-004
R = 0.9986
DL = 0.08551 ppb
BEC = 0.1709 ppb

Weight: <None>
Min Conc: <None>

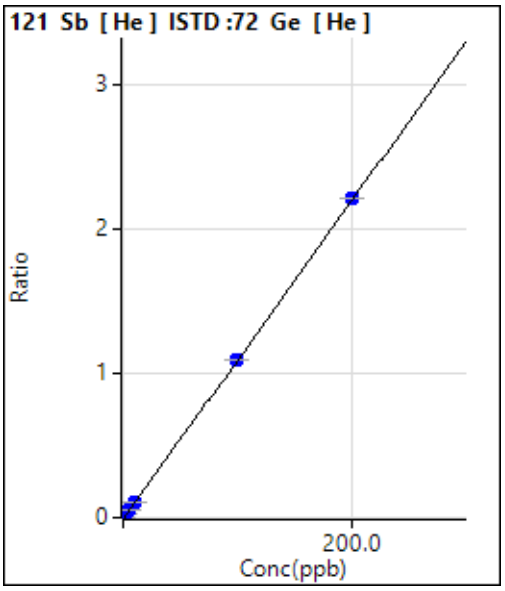


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	590.03	0.0003	P	18.2	
2	☐	2.000	2.323	26854.40	0.0149	P	1.4	16.2
3	☐	5.000	4.487	51568.19	0.0284	P	0.7	-10.3
4	☐	10.000	9.142	103106.47	0.0575	P	1.4	-8.6
5	☐	100.000	94.268	1040346.65	0.5900	P	1.1	-5.7
6	☐	200.000	202.919	2177601.74	1.2696	A	0.6	1.5

y = 0.0063 * x + 3.2971E-004
R = 0.9994
DL = 0.02874 ppb
BEC = 0.05271 ppb

Weight: <None>
Min Conc: <None>

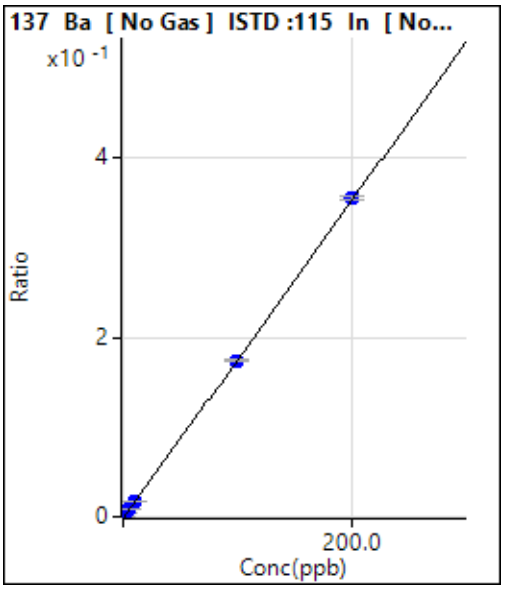
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	296.68	0.0006	P	1.6	
2	☐	2.000	2.423	12672.99	0.0274	P	2.3	21.2
3	☐	5.000	4.902	25020.70	0.0548	P	0.3	-2.0
4	☐	10.000	9.623	49262.74	0.1070	P	0.7	-3.8
5	☐	100.000	98.894	498527.92	1.0933	P	0.4	-1.1
6	☐	200.000	200.570	984432.75	2.2167	P	0.4	0.3

y = 0.0110 * x + 6.4964E-004
R = 1.0000
DL = 0.002772 ppb
BEC = 0.0588 ppb

Weight: <None>
Min Conc: <None>

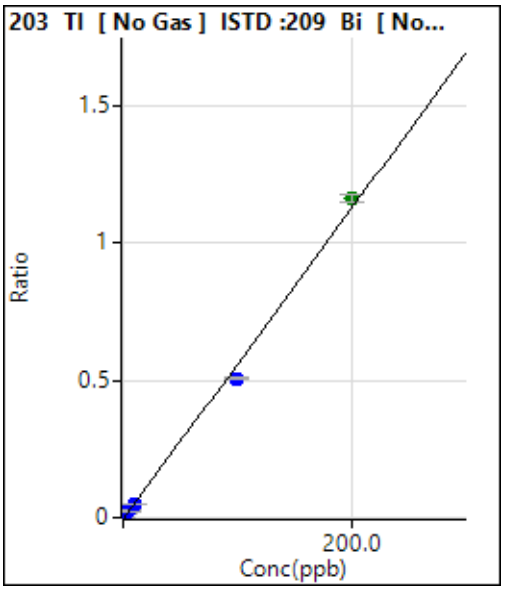


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	143.34	0.0001	P	24.8	
2	☐	2.000	2.334	8919.88	0.0042	P	0.9	16.7
3	☐	5.000	4.757	18096.17	0.0085	P	2.1	-4.9
4	☐	10.000	9.655	36097.10	0.0172	P	1.0	-3.5
5	☐	100.000	98.430	361608.34	0.1742	P	0.6	-1.6
6	☐	200.000	200.805	706675.23	0.3554	P	0.7	0.4

y = 0.0018 * x + 6.8789E-005
R = 1.0000
DL = 0.02893 ppb
BEC = 0.03888 ppb

Weight: <None>
Min Conc: <None>

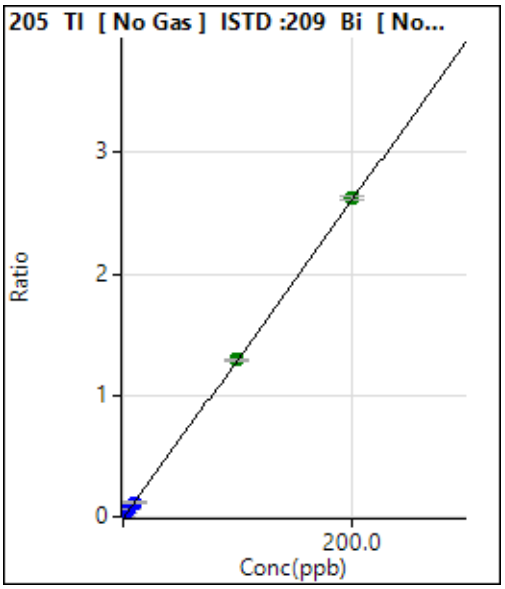
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	34.7	
2	☐	2.000	2.109	22774.40	0.0120	P	1.3	5.4
3	☐	5.000	4.379	46878.15	0.0248	P	3.7	-12.4
4	☐	10.000	8.709	92839.91	0.0493	P	1.5	-12.9
5	☐	100.000	89.301	945910.79	0.5057	P	1.2	-10.7
6	☐	200.000	205.429	2065782.16	1.1634	A	1.8	2.7

y = 0.0057 * x + 8.9151E-006
R = 0.9981
DL = 0.001637 ppb
BEC = 0.001574 ppb

Weight: <None>
Min Conc: <None>

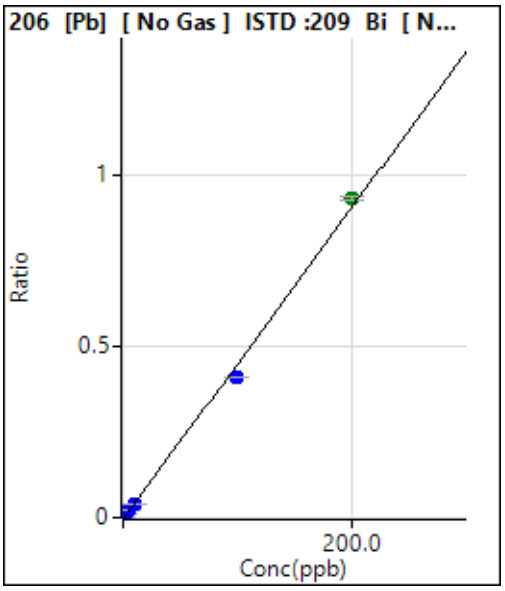


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0000	P	86.6	
2	☐	2.000	2.206	55061.60	0.0289	P	2.2	10.3
3	☐	5.000	4.488	111071.28	0.0588	P	2.9	-10.2
4	☐	10.000	9.020	222260.54	0.1181	P	2.1	-9.8
5	☐	100.000	98.679	2416161.58	1.2918	A	1.4	-1.3
6	☐	200.000	200.720	4665796.39	2.6276	A	1.7	0.4

y = 0.0131 * x + 2.1391E-005
R = 1.0000
DL = 0.004245 ppb
BEC = 0.001634 ppb

Weight: <None>
Min Conc: <None>

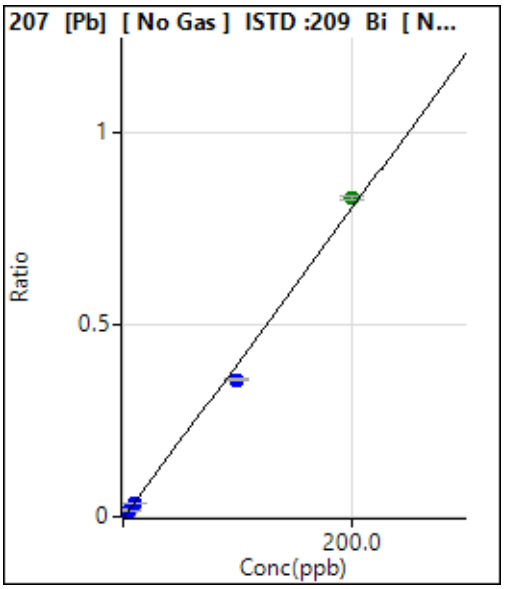
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	173.33	0.0001	P	14.6	
2	☐	2.000	2.222	19472.17	0.0102	P	1.8	11.1
3	☐	5.000	4.495	38904.32	0.0206	P	1.8	-10.1
4	☐	10.000	8.795	75618.69	0.0402	P	2.6	-12.0
5	☐	100.000	89.926	766906.65	0.4100	P	0.8	-10.1
6	☐	200.000	205.107	1660507.58	0.9350	A	0.8	2.6

y = 0.0046 * x + 9.2711E-005
R = 0.9983
DL = 0.008882 ppb
BEC = 0.02034 ppb

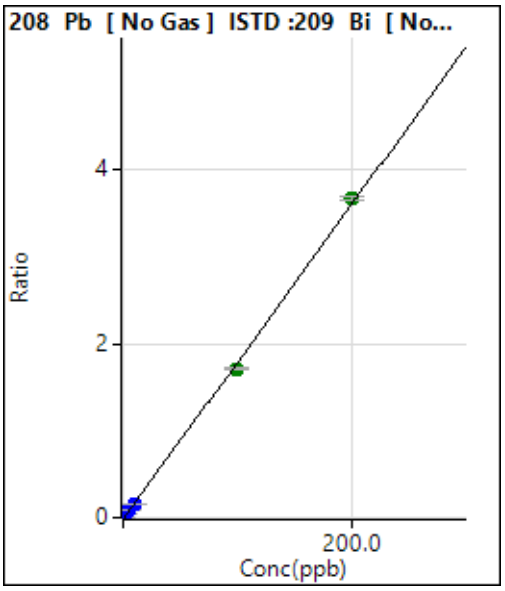
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	143.33	0.0001	P	4.0	
2	☐	2.000	2.137	16598.02	0.0087	P	2.7	6.8
3	☐	5.000	4.309	33037.61	0.0175	P	3.9	-13.8
4	☐	10.000	8.713	66389.78	0.0353	P	1.5	-12.9
5	☐	100.000	88.564	669429.10	0.3579	P	0.6	-11.4
6	☐	200.000	205.798	1476543.57	0.8315	A	1.5	2.9

y = 0.0040 * x + 7.6662E-005
R = 0.9978
DL = 0.002301 ppb
BEC = 0.01898 ppb

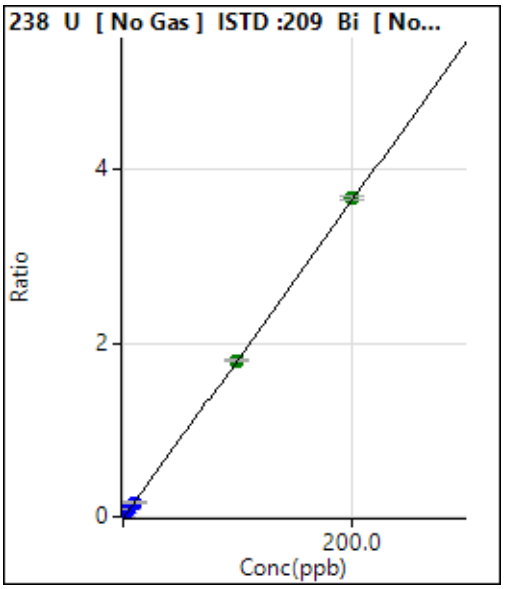
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	766.68	0.0004	P	6.0	
2	☐	2.000	2.189	76288.66	0.0400	P	1.5	9.4
3	☐	5.000	4.456	153209.79	0.0811	P	3.2	-10.9
4	☐	10.000	8.840	301948.43	0.1604	P	1.9	-11.6
5	☐	100.000	94.440	3198940.16	1.7102	A	0.7	-5.6
6	☐	200.000	202.850	6522086.83	3.6729	A	1.4	1.4

y = 0.0181 * x + 4.1006E-004
R = 0.9995
DL = 0.004104 ppb
BEC = 0.02265 ppb

Weight: <None>
Min Conc: <None>

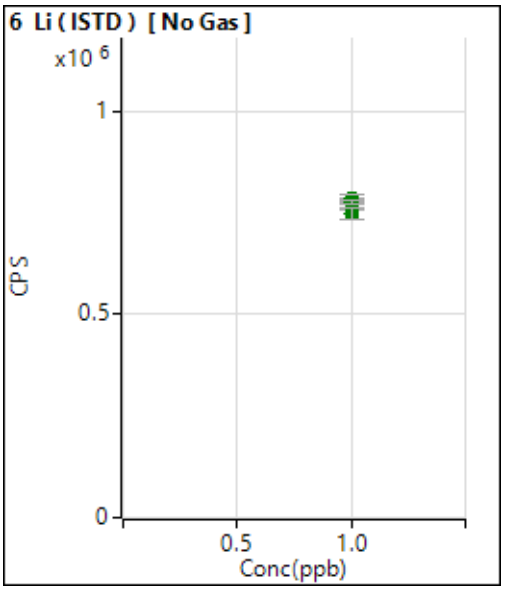


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	2.173	75773.76	0.0398	P	2.8	8.7
3	☐	5.000	4.492	155370.22	0.0822	P	2.2	-10.2
4	☐	10.000	9.063	312144.25	0.1659	P	1.0	-9.4
5	☐	100.000	98.265	3363733.91	1.7983	A	1.7	-1.7
6	☐	200.000	200.926	6530395.32	3.6771	A	1.4	0.5

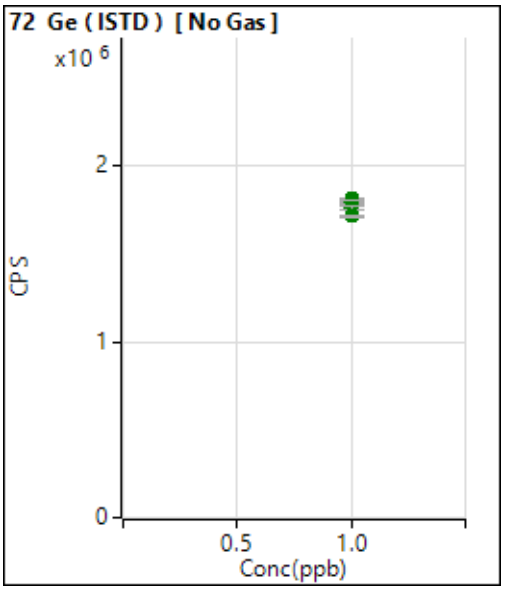
y = 0.0183 * x + 3.5654E-006
R = 0.9999
DL = 0.0005062 ppb
BEC = 0.0001948 ppb

Weight: <None>
Min Conc: <None>

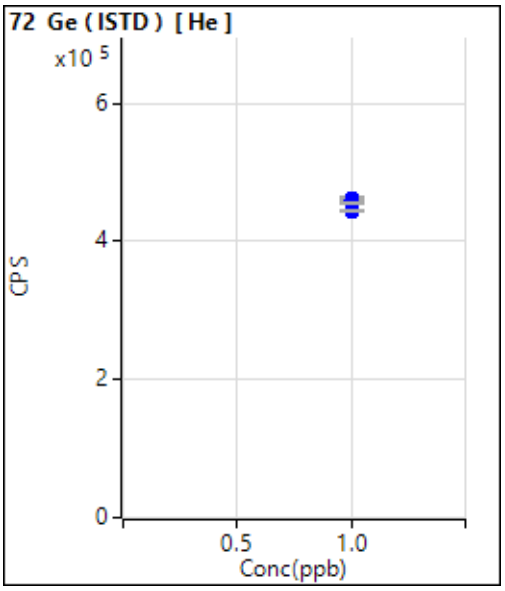
Calibration for 025_ICV.d



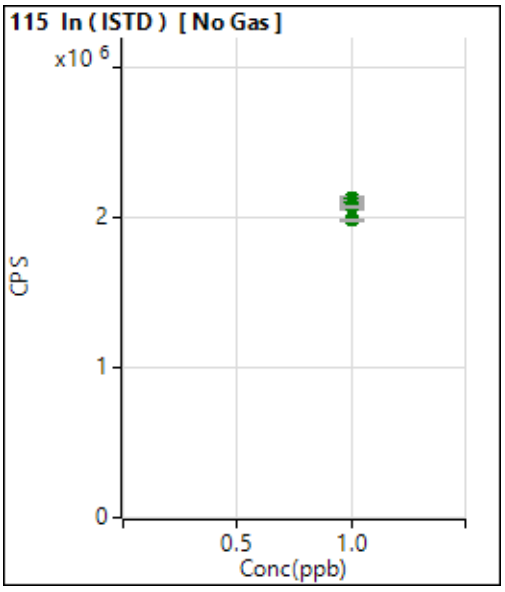
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		779901.77		A	2.3	
2	☐	1.000		786683.41		A	1.9	
3	☐	1.000		764885.19		A	1.6	
4	☐	1.000		773008.02		A	2.6	
5	☐	1.000		777283.77		A	1.3	
6	☐	1.000		748585.87		A	3.4	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1788655.65		A	0.8	
2	☐	1.000		1806932.89		A	0.7	
3	☐	1.000		1816122.99		A	0.5	
4	☐	1.000		1792612.57		A	0.8	
5	☐	1.000		1763466.22		A	1.4	
6	☐	1.000		1715150.18		A	0.4	

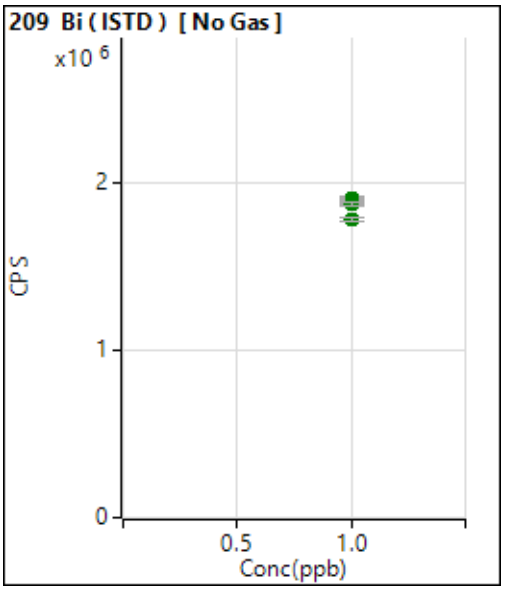


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		456662.66		P	0.5	
2	☐	1.000		462225.88		P	1.4	
3	☐	1.000		456508.14		P	0.8	
4	☐	1.000		460539.81		P	1.2	
5	☐	1.000		455980.69		P	0.4	
6	☐	1.000		444094.33		P	0.2	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		2077406.26		A	2.5	
2	☐	1.000		2125018.35		A	1.3	
3	☐	1.000		2132431.25		A	1.3	
4	☐	1.000		2104656.56		A	1.3	
5	☐	1.000		2075498.83		A	0.5	
6	☐	1.000		1988557.03		A	0.4	

Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1869675.08		A	0.0	
2	☐	1.000		1905803.93		A	1.7	
3	☐	1.000		1890434.50		A	2.0	
4	☐	1.000		1882141.85		A	1.0	
5	☐	1.000		1870567.16		A	1.0	
6	☐	1.000		1775926.79		A	1.3	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	026LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T12:59:45-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	018CALB.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	2.301	2.301	2.92	65275	0.00	2	
Be	9	1	No Gas	2.370	2.370	3.40	5950	0.04	2	
V	51	2	He	2.319	2.319	1.70	10436	0.02	2	
Cr	52	2	He	2.362	2.362	1.43	13333	0.02	2	
Fe	56	2	He	259.077	259.077	0.26	1232322	0.02	200	
Se	78	2	He	2.892	2.892	20.63	353	0.82	2	NewName Main CR1 Failed
As	75	2	He	2.383	2.383	1.67	1807	0.13	2	
Ca	44	2	He	291.692	291.692	3.11	7782	3.75	200	NewName Main CR1 Failed
Na	23	2	He	237.471	237.471	0.62	278451	0.09	200	
Mg	24	2	He	238.484	238.484	2.37	101438	0.24	200	
K	39	2	He	249.879	249.879	1.32	186381	0.13	200	
Mn	55	2	He	2.638	2.638	1.81	8813	0.03	2	NewName Main CR1 Failed
Co	59	2	He	2.294	2.294	2.87	18967	0.01	2	
Ni	60	2	He	2.480	2.480	1.44	5171	0.05	2	
Cu	63	2	He	2.416	2.416	4.40	13811	0.02	2	
Zn	66	2	He	4.057	4.057	3.69	4721	0.09	2	NewName Main CR1 Failed
Al	27	2	He	2.684	2.684	11.29	1103	0.24	2	NewName Main CR1 Failed
B	11	1	No Gas	24.287	24.287	7.07	41055	0.06	10	NewName Main CR1 Failed
Al	27	1	No Gas	2.543	2.543	1.57	57261	0.00	2	
Si	28	1	No Gas	17.318	17.318	2.06	388003	0.00	10	NewName Main CR1 Failed
Ag	107	1	No Gas	2.315	2.315	1.39	31147	0.01	2	
Cd	111	1	No Gas	2.498	2.498	0.34	6242	0.04	2	
Sr	88	1	No Gas	2.400	2.400	1.66	58143	0.00	2	
Mo	95	1	No Gas	2.535	2.535	3.35	11869	0.02	2	
Sn	118	1	No Gas	2.251	2.251	2.61	19401	0.01	2	
Sb	121	1	No Gas	2.447	2.447	2.91	27192	0.01	2	
Ba	137	1	No Gas	2.429	2.429	3.07	8843	0.03	2	
Tl	205	1	No Gas	2.242	2.242	1.59	54482	0.00	2	
Tl	203	1	No Gas	2.166	2.166	1.42	22778	0.01	2	
Pb	208	1	No Gas	2.247	2.247	0.78	76222	0.00	2	
U	238	1	No Gas	2.232	2.232	1.10	75804	0.00	2	
Ca	43	2	He	279.469	279.469	24.37	420	66.54	200	NewName Main CR1 Failed
Sb	121	2	He	2.484	2.484	2.88	12700	0.02	2	
Ti	47	2	He	2.308	2.308	15.25	350	0.66	200	
Cu	63	1	No Gas	2.372	2.372	2.95	26463	0.01	2	
Se	82	1	No Gas	1.050	1.050	204.72	-189	-0.56	2	NewName 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	779317	0.73	779902	99.92	70	120	
Ge	72	2	He	451970	0.33	456663	98.97	70	120	
Ge	72	1	No Gas	1738802	1.15	1788656	97.21	70	120	
In	115	1	No Gas	2025194	2.00	2077406	97.49	70	120	
Bi	209	1	No Gas	1855359	0.94	1869675	99.23	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	027LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T13:01:48-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	018CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.741	4.741	4.20	89553	0.01	5	
Be	9	1	No Gas	4.928	4.928	0.86	12182	0.04	5	
V	51	2	He	4.823	4.823	0.57	20871	0.02	5	
Cr	52	2	He	4.860	4.860	5.75	25871	0.02	5	
Fe	56	2	He	520.391	520.391	0.60	2472561	0.02	500	
Se	78	2	He	5.634	5.634	12.92	519	1.08	5	
As	75	2	He	5.073	5.073	5.51	3789	0.13	5	
Ca	44	2	He	495.495	495.495	2.43	12756	3.88	500	
Na	23	2	He	463.356	463.356	0.88	453820	0.10	500	
Mg	24	2	He	482.171	482.171	0.58	205310	0.23	500	
K	39	2	He	472.243	472.243	0.57	294285	0.16	500	
Mn	55	2	He	4.928	4.928	3.09	16360	0.03	5	
Co	59	2	He	4.520	4.520	1.90	37428	0.01	5	
Ni	60	2	He	5.084	5.084	1.86	10427	0.05	5	
Cu	63	2	He	4.918	4.918	1.82	27528	0.02	5	
Zn	66	2	He	5.027	5.027	1.09	5701	0.09	5	
Al	27	2	He	4.786	4.786	5.46	1540	0.31	5	
B	11	1	No Gas	28.148	28.148	1.07	46017	0.06	25	
Al	27	1	No Gas	5.106	5.106	1.74	87484	0.01	5	
Si	28	1	No Gas	26.149	26.149	3.62	436744	0.01	25	
Ag	107	1	No Gas	4.631	4.631	0.62	62508	0.01	5	
Cd	111	1	No Gas	5.027	5.027	0.77	12663	0.04	5	
Sr	88	1	No Gas	4.744	4.744	0.91	114843	0.00	5	
Mo	95	1	No Gas	4.909	4.909	0.70	23137	0.02	5	
Sn	118	1	No Gas	4.505	4.505	2.93	37765	0.01	5	
Sb	121	1	No Gas	4.672	4.672	1.10	51705	0.01	5	
Ba	137	1	No Gas	4.881	4.881	1.47	17776	0.03	5	
Tl	205	1	No Gas	4.513	4.513	2.50	109114	0.00	5	
Tl	203	1	No Gas	4.431	4.431	2.40	46343	0.01	5	
Pb	208	1	No Gas	4.507	4.507	2.74	151394	0.00	5	
U	238	1	No Gas	4.579	4.579	1.04	154745	0.00	5	
Ca	43	2	He	519.372	519.372	17.53	763	68.04	500	
Sb	121	2	He	5.073	5.073	1.99	25692	0.02	5	
Ti	47	2	He	5.467	5.467	3.06	827	0.66	5	
Cu	63	1	No Gas	4.646	4.646	1.58	50752	0.01	5	
Se	82	1	No Gas	5.895	5.895	22.86	509	1.16	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	767899	1.17	779902	98.46	70	120	
Ge	72	2	He	453061	0.55	456663	99.21	70	120	
Ge	72	1	No Gas	1749494	0.34	1788656	97.81	70	120	

Sample Report

In	115	1	No Gas	2042051	0.63	2077406	98.30	70	120	
Bi	209	1	No Gas	1846729	1.63	1869675	98.77	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	028_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T13:03:59-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	0.088	80.2	41566	2.0	0.5	
Be	9	1	No Gas	0.007	56.7	27	39.0	0.5	
V	51	2	He	-0.085	-8.5	461	6.7	2.5	
Cr	52	2	He	0.063	13.8	1823	2.8	2.5	
Fe	56	2	He	1.180	9.4	14021	3.6	100	
Se	78	2	He	0.576	15.9	211	2.9	1	
As	75	2	He	-0.018	-30.3	44	8.7	2.5	
Ca	44	2	He	-0.009	-27228.0	700	8.6	100	
Na	23	2	He	-4.730	-21.5	90371	0.5	100	
Mg	24	2	He	0.397	6.9	430	2.3	100	
K	39	2	He	-2.148	-84.2	64039	1.0	100	
Mn	55	2	He	0.047	45.5	317	22.4	2.5	
Co	59	2	He	0.009	66.5	107	44.3	2.5	
Ni	60	2	He	-0.008	-128.7	170	11.8	2.5	
Cu	63	2	He	0.021	110.0	727	17.2	1	
Zn	66	2	He	-0.119	-53.9	550	11.1	2.5	
Al	27	2	He	-1.362	-3.9	267	4.3	5	
B	11	1	No Gas	4.056	2.9	11396	1.7	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-1.062	-1.2	15582	0.5	5	
Si	28	1	No Gas	-8.150	-10.2	256397	0.7	10	
Ag	107	1	No Gas	0.000	1186.0	323	17.0	2.5	
Cd	111	1	No Gas	0.001	341.3	7	173.2	1	
Sr	88	1	No Gas	-0.017	-11.9	660	7.6	2.5	
Mo	95	1	No Gas	-0.002	-194.6	30	57.7	2.5	
Sn	118	1	No Gas	0.075	33.3	1974	10.3	5	
Sb	121	1	No Gas	0.043	44.4	1043	18.7	2.5	
Ba	137	1	No Gas	0.008	33.2	170	5.9	2.5	
Tl	205	1	No Gas	0.002	92.4	83	48.5	1	
Tl	203	1	No Gas	0.004	110.9	53	78.1	1	
Pb	208	1	No Gas	0.008	10.0	1023	1.5	2.5	
U	238	1	No Gas	0.001	56.3	43	48.0	2.5	
Ca	43	2	He	9.844	109.8	37	41.7	100	
Sb	121	2	He	0.046	18.2	517	7.8	2.5	
Ti	47	2	He	0.000	8241.7	3	173.2	2.5	
Se	82	1	No Gas	-2.262	-44.3	-666	-21.0	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	770683	0.25	779902	98.82	70	120	
Ge	72	2	He	446027	0.41	456663	97.67	70	120	
Ge	72	1	No Gas	1747827	1.29	1788656	97.72	70	120	
In	115	1	No Gas	2028019	0.11	2077406	97.62	70	120	
Bi	209	1	No Gas	1820660	1.28	1869675	97.38	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	029ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T13:09:36-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	0.632	0.6	45731	0.5	0	ICSA Main CR1 Failed
Be	9	1	No Gas	0.006	76.4	22	48.0	0	ICSA Main CR1 Failed
V	51	2	He	0.043	76.6	983	14.1	0	ICSA Main CR1 Failed
Cr	52	2	He	2.022	7.0	11478	5.6	0	ICSA Main CR1 Failed
Fe	56	2	He	98797.394	1.5	460542793	1.1	0	
Se	78	2	He	0.362	94.3	199	10.3	0	ICSA Main CR1 Failed
As	75	2	He	0.120	37.7	144	22.7	0	ICSA Main CR1 Failed
Ca	44	2	He	103306.439	1.4	2472937	0.8	0	
Na	23	2	He	100081.986	0.9	76302926	0.2	0	
Mg	24	2	He	100064.342	0.3	41895171	0.6	0	
K	39	2	He	100793.526	0.9	48016538	0.5	0	
Mn	55	2	He	0.470	10.9	1683	10.3	0	ICSA Main CR1 Failed
Co	59	2	He	0.129	22.3	1090	22.0	0	ICSA Main CR1 Failed
Ni	60	2	He	0.446	15.2	1070	13.2	0	ICSA Main CR1 Failed
Cu	63	2	He	0.172	21.6	1540	13.6	0	ICSA Main CR1 Failed
Zn	66	2	He	1.219	8.4	1867	6.0	0	ICSA Main CR1 Failed
Al	27	2	He	100904.067	0.2	20506736	0.5	0	
B	11	1	No Gas	11.019	3.3	20774	2.2	0	
Al	27	1	No Gas	93761.799	1.7	1080830384	0.4	0	
Si	28	1	No Gas	15.522	6.6	376858	0.7	0	ICSA Main CR1 Failed
Ag	107	1	No Gas	0.017	37.2	533	15.3	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	0.802	15.5	1950	14.2	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	2.315	3.0	54659	1.5	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	2111.476	0.7	9596326	1.3	0	
Sn	118	1	No Gas	0.130	9.0	2350	3.7	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.252	16.1	3294	12.2	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	1.374	3.8	4931	2.3	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.005	57.5	153	41.9	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.004	12.0	57	10.2	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.055	12.2	2500	7.2	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.022	5.1	713	5.7	0	ICSA Main CR1 Failed
Ca	43	2	He	96193.498	1.1	134916	0.8	0	
Sb	121	2	He	0.188	17.4	1213	12.6	0	ICSA Main CR1 Failed
Ti	47	2	He	2053.310	0.2	304482	0.5	0	
Se	82	1	No Gas	-0.476	-367.9	-406	-62.3	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	746356	0.41	779902	95.70	70	120	
Ge	72	2	He	446072	0.65	456663	97.68	70	120	
Ge	72	1	No Gas	1730879	1.51	1788656	96.77	70	120	
In	115	1	No Gas	1972654	1.53	2077406	94.96	70	120	
Bi	209	1	No Gas	1770073	2.12	1869675	94.67	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	030ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T13:11:41-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	102.007	2.670	1024458	1.18	100	102.0	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	101.219	2.189	233746	0.77	100	101.2	80	120	
V	51	2	He	98.944	0.460	407775	0.38	100	98.9	80	120	
Cr	52	2	He	96.672	0.495	480588	0.67	100	96.7	80	120	
Fe	56	2	He	107394.629	0.577	503123073	0.64	100	107394.6	80	120	
Se	78	2	He	96.197	2.533	5912	2.71	100	96.2	80	120	
As	75	2	He	98.326	0.435	71606	0.67	100	98.3	80	120	
Ca	44	2	He	110668.795	1.319	2662460	1.56	100	110668.8	80	120	ICSB Main CR1 Failed
Na	23	2	He	109417.977	0.364	83828299	0.47	100	109418.0	80	120	
Mg	24	2	He	108462.256	0.597	45635981	0.36	100	108462.3	80	120	
K	39	2	He	109553.586	0.876	52443564	0.64	100	109553.6	80	120	
Mn	55	2	He	98.342	0.190	319917	0.09	100	98.3	80	120	
Co	59	2	He	89.738	0.511	734620	0.27	100	89.7	80	120	
Ni	60	2	He	95.329	1.789	190139	1.56	100	95.3	80	120	
Cu	63	2	He	94.901	0.606	514312	0.47	100	94.9	80	120	
Zn	66	2	He	97.469	0.468	97042	0.71	100	97.5	80	120	
Al	27	2	He	99407.405	0.751	20302577	0.54	100	99407.4	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	500.654	1.859	678542	1.31	100	500.7	80	120	
Al	27	1	No Gas	93254.517	0.333	1054701958	0.32	100	93254.5	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	522.975	1.732	2955599	2.03	100	523.0	80	120	
Ag	107	1	No Gas	94.192	3.382	1217154	2.21	100	94.2	80	120	
Cd	111	1	No Gas	98.926	1.815	239690	0.63	100	98.9	80	120	
Sr	88	1	No Gas	104.302	1.122	2407664	0.38	100	104.3	80	120	
Mo	95	1	No Gas	2196.393	1.908	9942553	0.72	100	2196.4	80	120	
Sn	118	1	No Gas	92.004	2.036	716279	0.66	100	92.0	80	120	
Sb	121	1	No Gas	93.244	0.633	990911	0.46	100	93.2	80	120	
Ba	137	1	No Gas	101.420	1.534	352718	0.16	100	101.4	80	120	
Tl	205	1	No Gas	99.752	0.455	2248743	0.72	100	99.8	80	120	
Tl	203	1	No Gas	90.870	1.738	886134	1.03	100	90.9	80	120	
Pb	208	1	No Gas	97.335	2.442	3035035	1.57	100	97.3	80	120	
U	238	1	No Gas	103.804	0.526	3271438	0.66	100	103.8	80	120	
Ca	43	2	He	106531.914	0.398	150159	0.64	100	106531.9	80	120	
Sb	121	2	He	98.103	0.406	486198	0.28	100	98.1	80	120	
Ti	47	2	He	2141.835	0.843	319184	0.86	100	2141.8	80	120	
Cu	63	1	No Gas	90.812	0.719	936809	0.87	100	90.8	80	120	
Se	82	1	No Gas	98.977	5.006	13527	4.83	100	99.0	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	718074	3.00	779902	92.07	70	120	
Ge	72	2	He	448282	0.25	456663	98.16	70	120	
Ge	72	1	No Gas	1697955	0.56	1788656	94.93	70	120	
In	115	1	No Gas	1965049	1.37	2077406	94.59	70	120	
Bi	209	1	No Gas	1722147	1.16	1869675	92.11	70	120	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	136CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:07:01-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	Calibrate for DOD

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	35829	0.00
Be	9	1	No Gas	30	96.23
V	51	2	He	1057	0.62
Cr	52	2	He	1533	0.94
Fe	56	2	He	13323	0.02
Se	78	2	He	197	3.89
As	75	2	He	54	6.51
Ca	44	2	He	887	1.52
Na	23	2	He	113032	0.00
Mg	24	2	He	1483	0.96
K	39	2	He	65036	0.00
Mn	55	2	He	343	1.96
Co	59	2	He	47	132.55
Ni	60	2	He	247	9.35
Cu	63	2	He	607	1.37
Zn	66	2	He	730	1.31
Al	27	2	He	547	2.02
B	11	1	No Gas	5058	0.04
Al	27	1	No Gas	27428	0.01
Si	28	1	No Gas	255641	0.00
Ag	107	1	No Gas	317	13.83
Cd	111	1	No Gas	3	5196.15
Sr	88	1	No Gas	6061	1.00
Mo	95	1	No Gas	70	161.98
Sn	118	1	No Gas	1327	0.63
Sb	121	1	No Gas	993	1.40
Ba	137	1	No Gas	237	18.75
Tl	205	1	No Gas	253	26.55
Tl	203	1	No Gas	100	34.64
Pb	208	1	No Gas	737	2.77
U	238	1	No Gas	173	27.92
Ca	43	2	He	43	61.49
Sb	121	2	He	540	1.24
Cu	63	1	No Gas	1423	0.87

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	1	No Gas	654204	5.10

Calibration Blank Report

Ge	72	2	He	428589	0.86
Ge	72	1	No Gas	1641030	0.92
In	115	1	No Gas	1892969	3.15
Bi	209	1	No Gas	1736707	2.13

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	137CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:09:11-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	136CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	5566	0.05
V	51	2	He	10774	0.02
Cr	52	2	He	12856	0.02
Fe	56	2	He	1204661	0.00
Se	78	2	He	359	1.26
As	75	2	He	1765	0.12
Ca	44	2	He	7502	0.09
Na	23	2	He	290704	0.00
Mg	24	2	He	101419	0.00
K	39	2	He	183416	0.00
Mn	55	2	He	8883	0.03
Co	59	2	He	17962	0.02
Ni	60	2	He	5068	0.06
Cu	63	2	He	13040	0.01
Zn	66	2	He	4397	0.09
Al	27	2	He	937	1.05
B	11	1	No Gas	19624	0.01
Al	27	1	No Gas	54329	0.00
Si	28	1	No Gas	307648	0.00
Ag	107	1	No Gas	29874	0.02
Cd	111	1	No Gas	5751	0.10
Sr	88	1	No Gas	57038	0.00
Mo	95	1	No Gas	11025	0.01
Sn	118	1	No Gas	18076	0.02
Sb	121	1	No Gas	25542	0.01
Ba	137	1	No Gas	8396	0.02
Tl	205	1	No Gas	52009	0.00
Tl	203	1	No Gas	22013	0.01
Pb	208	1	No Gas	71260	0.00
U	238	1	No Gas	73111	0.00
Ca	43	2	He	467	3.96
Sb	121	2	He	12223	0.02
Cu	63	1	No Gas	24135	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	642757	0.51	654204	98.25	70	120	
Ge	72	2	He	429818	0.72	428589	100.29	70	120	
Ge	72	1	No Gas	1646033	0.85	1641030	100.30	70	120	

Calibration Standard Report

In	115	1	No Gas	1974580	0.38	1892969	104.31	70	120	
Bi	209	1	No Gas	1776311	0.32	1736707	102.28	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	138CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:11:20-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	136CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	11138	0.02
V	51	2	He	20750	0.01
Cr	52	2	He	24890	0.00
Fe	56	2	He	2404417	0.00
Se	78	2	He	523	1.38
As	75	2	He	3502	0.06
Ca	44	2	He	12039	0.02
Na	23	2	He	453678	0.00
Mg	24	2	He	203847	0.00
K	39	2	He	293536	0.00
Mn	55	2	He	15976	0.00
Co	59	2	He	36295	0.01
Ni	60	2	He	9577	0.02
Cu	63	2	He	26666	0.01
Zn	66	2	He	5448	0.07
Al	27	2	He	1530	0.71
B	11	1	No Gas	34708	0.01
Al	27	1	No Gas	82239	0.00
Si	28	1	No Gas	366306	0.00
Ag	107	1	No Gas	59845	0.00
Cd	111	1	No Gas	11916	0.01
Sr	88	1	No Gas	111590	0.00
Mo	95	1	No Gas	21741	0.01
Sn	118	1	No Gas	35819	0.00
Sb	121	1	No Gas	49965	0.00
Ba	137	1	No Gas	16905	0.00
Tl	205	1	No Gas	106472	0.00
Tl	203	1	No Gas	44269	0.00
Pb	208	1	No Gas	146253	0.00
U	238	1	No Gas	147785	0.00
Ca	43	2	He	727	1.26
Sb	121	2	He	24423	0.01
Cu	63	1	No Gas	48112	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	646519	0.82	654204	98.83	70	120	
Ge	72	2	He	431068	0.58	428589	100.58	70	120	
Ge	72	1	No Gas	1663363	1.58	1641030	101.36	70	120	

Calibration Standard Report

In	115	1	No Gas	1933270	0.63	1892969	102.13	70	120	
Bi	209	1	No Gas	1799894	1.61	1736707	103.64	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	139CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:13:30-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	136CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	22224	0.01
V	51	2	He	40613	0.00
Cr	52	2	He	47981	0.01
Fe	56	2	He	4609167	0.00
Se	78	2	He	787	0.13
As	75	2	He	6794	0.06
Ca	44	2	He	23914	0.02
Na	23	2	He	878190	0.00
Mg	24	2	He	403327	0.00
K	39	2	He	518556	0.00
Mn	55	2	He	31233	0.00
Co	59	2	He	72975	0.00
Ni	60	2	He	19304	0.03
Cu	63	2	He	52789	0.00
Zn	66	2	He	10274	0.04
Al	27	2	He	2820	0.06
B	11	1	No Gas	64192	0.00
Al	27	1	No Gas	137083	0.00
Si	28	1	No Gas	487645	0.00
Ag	107	1	No Gas	117391	0.00
Cd	111	1	No Gas	23080	0.01
Sr	88	1	No Gas	217716	0.00
Mo	95	1	No Gas	42361	0.00
Sn	118	1	No Gas	69842	0.00
Sb	121	1	No Gas	98438	0.00
Ba	137	1	No Gas	33681	0.00
Tl	205	1	No Gas	209823	0.00
Tl	203	1	No Gas	88516	0.00
Pb	208	1	No Gas	289429	0.00
U	238	1	No Gas	296938	0.00
Ca	43	2	He	1477	0.58
Sb	121	2	He	47630	0.00
Cu	63	1	No Gas	95360	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	642043	1.07	654204	98.14	70	120	
Ge	72	2	He	429569	0.18	428589	100.23	70	120	
Ge	72	1	No Gas	1664940	2.02	1641030	101.46	70	120	

Calibration Standard Report

In	115	1	No Gas	1927907	1.15	1892969	101.85	70	120	
Bi	209	1	No Gas	1767786	0.91	1736707	101.79	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	140CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:15:39-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	136CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	223721	0.00
V	51	2	He	396066	0.00
Cr	52	2	He	467699	0.00
Fe	56	2	He	44748616	0.00
Se	78	2	He	5951	0.02
As	75	2	He	68383	0.00
Ca	44	2	He	229704	0.00
Na	23	2	He	7589096	0.00
Mg	24	2	He	4133960	0.00
K	39	2	He	4734743	0.00
Mn	55	2	He	311125	0.00
Co	59	2	He	721618	0.00
Ni	60	2	He	189687	0.00
Cu	63	2	He	520743	0.00
Zn	66	2	He	96099	0.00
Al	27	2	He	20025	0.01
B	11	1	No Gas	598843	0.00
Al	27	1	No Gas	1116201	0.00
Si	28	1	No Gas	2717697	0.00
Ag	107	1	No Gas	1281525	0.00
Cd	111	1	No Gas	236747	0.00
Sr	88	1	No Gas	2313713	0.00
Mo	95	1	No Gas	439750	0.00
Sn	118	1	No Gas	699796	0.00
Sb	121	1	No Gas	973761	0.00
Ba	137	1	No Gas	338844	0.00
Tl	205	1	No Gas	2284434	0.00
Tl	203	1	No Gas	902116	0.00
Pb	208	1	No Gas	3038582	0.00
U	238	1	No Gas	3196736	0.00
Ca	43	2	He	13487	0.01
Sb	121	2	He	470993	0.00
Cu	63	1	No Gas	936585	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	687374	2.15	654204	105.07	70	120	
Ge	72	2	He	429476	0.89	428589	100.21	70	120	
Ge	72	1	No Gas	1661535	0.35	1641030	101.25	70	120	

Calibration Standard Report

In	115	1	No Gas	1903731	1.22	1892969	100.57	70	120	
Bi	209	1	No Gas	1728457	1.44	1736707	99.53	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	141CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:17:44-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	136CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	441698	0.00
V	51	2	He	786722	0.00
Cr	52	2	He	924953	0.00
Fe	56	2	He	88882519	0.00
Se	78	2	He	11255	0.00
As	75	2	He	136613	0.00
Ca	44	2	He	461330	0.00
Na	23	2	He	14970410	0.00
Mg	24	2	He	8092443	0.00
K	39	2	He	9203530	0.00
Mn	55	2	He	621107	0.00
Co	59	2	He	1603252	0.00
Ni	60	2	He	379221	0.00
Cu	63	2	He	1031003	0.00
Zn	66	2	He	186839	0.00
Al	27	2	He	39714	0.01
B	11	1	No Gas	1312190	0.00
Al	27	1	No Gas	2150141	0.00
Si	28	1	No Gas	4941113	0.00
Ag	107	1	No Gas	2502412	0.00
Cd	111	1	No Gas	465393	0.00
Sr	88	1	No Gas	4437570	0.00
Mo	95	1	No Gas	872577	0.00
Sn	118	1	No Gas	1531975	0.00
Sb	121	1	No Gas	2123042	0.00
Ba	137	1	No Gas	670622	0.00
Tl	205	1	No Gas	4431919	0.00
Tl	203	1	No Gas	1988286	0.00
Pb	208	1	No Gas	6274228	0.00
U	238	1	No Gas	6243706	0.00
Ca	43	2	He	27374	0.01
Sb	121	2	He	941929	0.00
Cu	63	1	No Gas	1975103	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	654294	0.96	654204	100.01	70	120	
Ge	72	2	He	421105	0.89	428589	98.25	70	120	
Ge	72	1	No Gas	1605769	0.14	1641030	97.85	70	120	

Calibration Standard Report

In	115	1	No Gas	1884405	0.49	1892969	99.55	70	120	
Bi	209	1	No Gas	1666933	1.39	1736707	95.98	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICCV
Data File Name	143_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:21:50-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	136CALB.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	104.565	0.834	1011782	1.64	100	104.6	90	110	
Be	9	1	No Gas	105.022	2.196	237474	0.39	100	105.0	90	110	
V	51	2	He	103.563	0.807	419958	0.52	100	103.6	90	110	
Cr	52	2	He	104.290	0.145	497745	0.56	100	104.3	90	110	
Fe	56	2	He	10136.572	0.856	46402534	0.44	10000	101.4	90	110	
Se	78	2	He	106.822	2.228	6326	1.86	100	106.8	90	110	
As	75	2	He	109.205	1.561	76751	1.14	100	109.2	90	110	
Ca	44	2	He	10058.083	0.835	238761	0.46	10000	100.6	90	110	
Na	23	2	He	9987.386	0.482	7755269	0.46	10000	99.9	90	110	
Mg	24	2	He	10100.637	1.641	4221612	1.99	10000	101.0	90	110	
K	39	2	He	10090.620	1.268	4828614	0.96	10000	100.9	90	110	
Mn	55	2	He	105.436	0.703	337001	0.38	100	105.4	90	110	
Co	59	2	He	105.999	0.535	774536	0.12	100	106.0	90	110	
Ni	60	2	He	104.952	1.306	204772	0.93	100	105.0	90	110	
Cu	63	2	He	104.339	0.914	554529	0.51	100	104.3	90	110	
Zn	66	2	He	106.666	0.739	103341	1.00	100	106.7	90	110	
Al	27	2	He	106.681	3.450	22031	3.17	100	106.7	90	110	
B	11	1	No Gas	481.863	4.014	636824	1.57	500	96.4	90	110	
Al	27	1	No Gas	104.091	1.553	1174524	1.73	100	104.1	90	110	
Si	28	1	No Gas	523.466	1.047	2818684	0.08	500	104.7	90	110	
Ag	107	1	No Gas	105.081	1.549	1336512	2.65	100	105.1	90	110	
Cd	111	1	No Gas	106.350	0.930	251199	0.49	100	106.3	90	110	
Sr	88	1	No Gas	103.591	0.277	2346964	0.82	100	103.6	90	110	
Mo	95	1	No Gas	100.522	0.686	444377	1.36	100	100.5	90	110	
Sn	118	1	No Gas	96.124	0.693	732466	0.40	100	96.1	90	110	
Sb	121	1	No Gas	95.285	1.089	1027705	0.08	100	95.3	90	110	
Ba	137	1	No Gas	105.954	0.869	360214	0.23	100	106.0	90	110	
Tl	205	1	No Gas	106.748	1.751	2479409	1.04	100	106.7	90	110	
Tl	203	1	No Gas	95.390	1.760	970039	1.01	100	95.4	90	110	
Pb	208	1	No Gas	98.510	1.495	3200347	0.94	100	98.5	90	110	
U	238	1	No Gas	99.215	1.036	3242226	0.80	100	99.2	90	110	
Ca	43	2	He	9779.092	2.715	13744	2.45	10000	97.8	90	110	
Sb	121	2	He	103.393	0.588	501028	0.43	100	103.4	90	110	
Ti	47	2	He	100.169	3.836	14898	3.45	100	100.2	90	110	
Cu	63	1	No Gas	98.131	0.520	990978	0.51	100	98.1	90	110	
Se	82	1	No Gas	104.029	1.224	14002	0.58	100	104.0	90	110	

QC ISTD Table

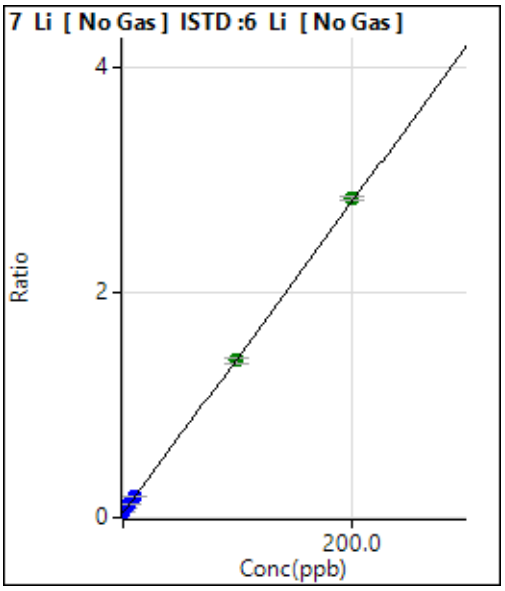
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	674805	2.43	654204	103.15	70	120	
Ge	72	2	He	434781	0.42	428589	101.44	70	120	
Ge	72	1	No Gas	1669204	1.02	1641030	101.72	70	120	
In	115	1	No Gas	1910216	1.10	1892969	100.91	70	120	
Bi	209	1	No Gas	1749539	0.76	1736707	100.74	70	120	

Calibration for 143_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\082222A.b\
Analysis File: 082222A.batch.bin
DA Date-Time: 08/22/2022 20:22:31
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	136CALB.d	CAL BLK	08/22/2022 20:07:01
2	137CALS.d	2/10/200	08/22/2022 20:09:11
3	138CALS.d	5/25/500	08/22/2022 20:11:20
4	139CALS.d	10/50/100	08/22/2022 20:13:30
5	140CALS.d	100/500/10K	08/22/2022 20:15:39
6	141CALS.d	200/1000/20K	08/22/2022 20:17:44

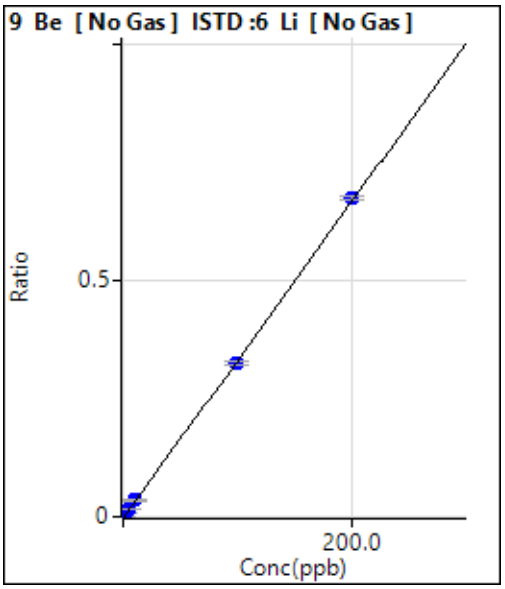
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35828.95	0.0549	P	5.5	
2	☐	2.000	2.481	57297.79	0.0891	P	0.3	24.0
3	☐	5.000	4.904	79275.14	0.1226	P	0.8	-1.9
4	☐	10.000	9.813	122261.24	0.1904	P	1.3	-1.9
5	☐	100.000	96.948	957901.00	1.3943	A	3.8	-3.1
6	☐	200.000	201.533	1857600.75	2.8393	A	1.6	0.8

y = 0.0138 * x + 0.0549
R = 0.9998
DL = 0.657 ppb
BEC = 3.971 ppb

Weight: <None>
Min Conc: <None>

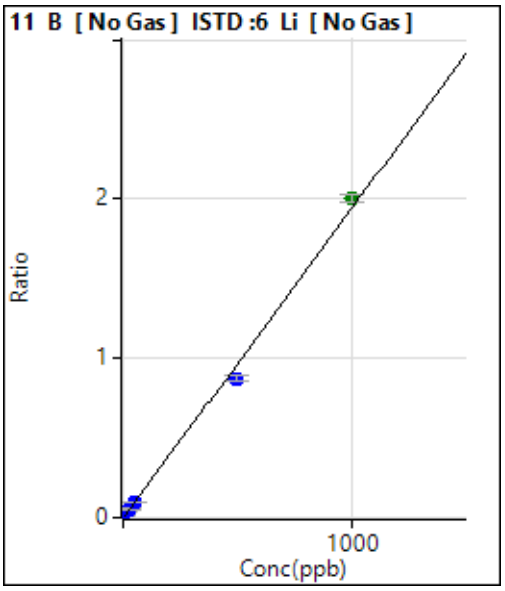


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0000	P	29.0	
2	☐	2.000	2.570	5566.15	0.0087	P	3.2	28.5
3	☐	5.000	5.127	11137.84	0.0172	P	3.1	2.5
4	☐	10.000	10.314	22224.32	0.0346	P	0.8	3.1
5	☐	100.000	97.127	223720.64	0.3256	P	2.4	-2.9
6	☐	200.000	201.412	441697.75	0.6751	P	0.7	0.7

y = 0.0034 * x + 4.5882E-005
R = 0.9998
DL = 0.0119 ppb
BEC = 0.01369 ppb

Weight: <None>
Min Conc: <None>

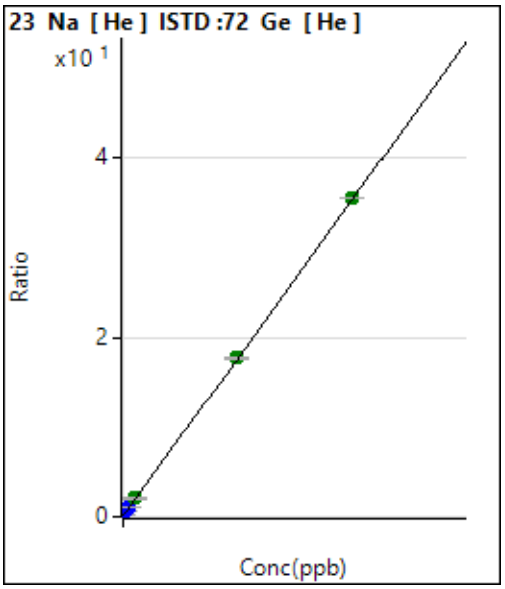
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5057.63	0.0077	P	6.0	
2	☐	10.000	11.723	19623.77	0.0305	P	1.8	17.2
3	☐	25.000	23.639	34707.87	0.0537	P	2.6	-5.4
4	☐	50.000	47.458	64192.46	0.1000	P	1.9	-5.1
5	☐	500.000	444.497	598843.28	0.8717	P	3.9	-11.1
6	☐	1000.000	1027.895	1312189.90	2.0056	A	2.6	2.8

y = 0.0019 * x + 0.0077
R = 0.9979
DL = 0.7188 ppb
BEC = 3.985 ppb

Weight: <None>
Min Conc: <None>

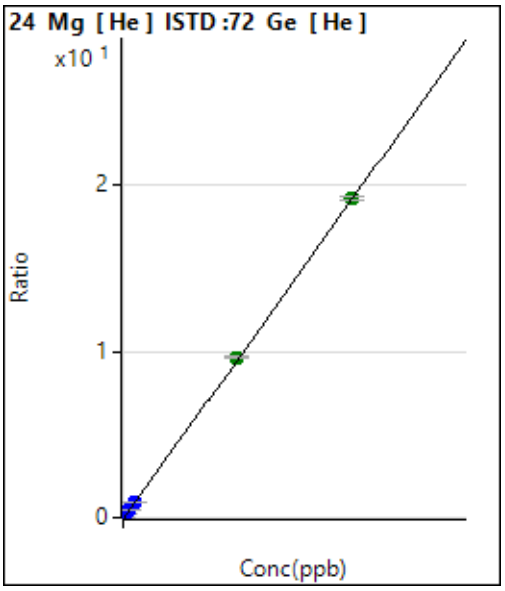


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	113031.74	0.2637	P	1.4	
2	☐	200.000	234.634	290704.16	0.6766	P	8.4	17.3
3	☐	500.000	448.263	453677.61	1.0525	P	0.6	-10.3
4	☐	1000.000	1011.984	878190.43	2.0444	A	1.0	1.2
5	☐	10000.00	9893.410	7589096.35	17.6719	A	1.4	-1.1
6	☐	20000.00	20053.64	14970410.1	35.5497	A	0.4	0.3

y = 0.0018 * x + 0.2637
R = 1.0000
DL = 6.104 ppb
BEC = 149.9 ppb

Weight: <None>
Min Conc: <None>

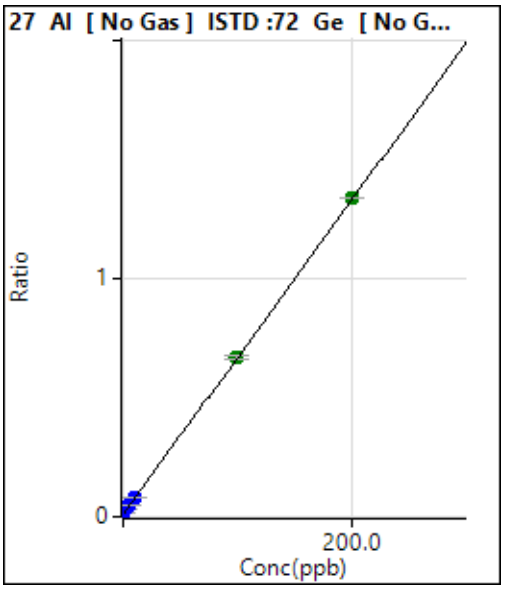
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1483.44	0.0035	P	14.1	
2	☐	200.000	241.967	101418.78	0.2360	P	1.3	21.0
3	☐	500.000	488.515	203846.72	0.4729	P	0.2	-2.3
4	☐	1000.000	973.493	403327.18	0.9389	P	0.3	-2.7
5	☐	10000.00	10013.87	4133960.04	9.6260	A	0.9	0.1
6	☐	20000.00	19994.25	8092443.42	19.2164	A	0.8	0.0

y = 9.6092E-004 * x + 0.0035
R = 1.0000
DL = 1.527 ppb
BEC = 3.601 ppb

Weight: <None>
Min Conc: <None>

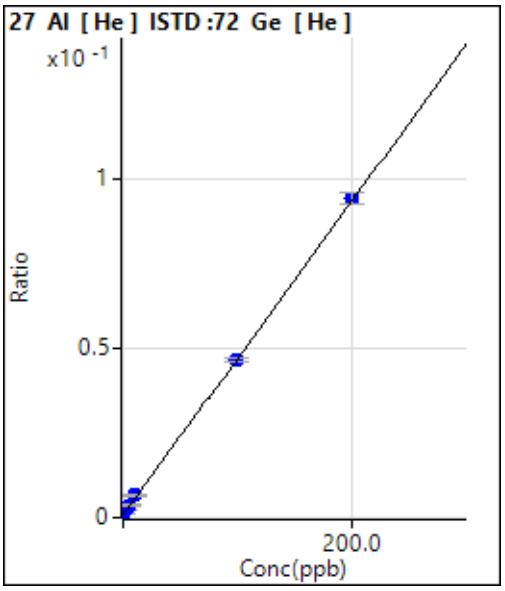


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	27428.04	0.0167	P	3.8	
2	☐	2.000	2.469	54329.47	0.0330	P	1.2	23.4
3	☐	5.000	4.961	82239.11	0.0495	P	2.6	-0.8
4	☐	10.000	9.945	137083.45	0.0824	P	1.5	-0.5
5	☐	100.000	99.263	1116201.15	0.6718	A	2.0	-0.7
6	☐	200.000	200.368	2150140.64	1.3390	A	0.4	0.2

y = 0.0066 * x + 0.0167
R = 1.0000
DL = 0.2863 ppb
BEC = 2.533 ppb

Weight: <None>
Min Conc: <None>

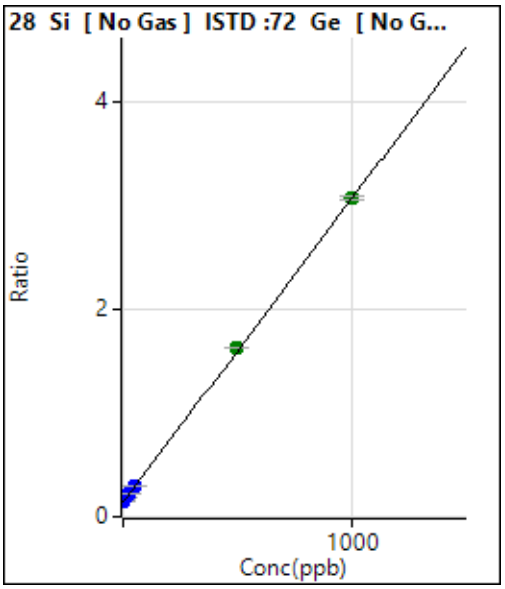
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	546.69	0.0013	P	10.8	
2	☐	2.000	1.954	936.71	0.0022	P	10.4	-2.3
3	☐	5.000	4.909	1530.11	0.0035	P	10.3	-1.8
4	☐	10.000	11.425	2820.34	0.0066	P	1.8	14.2
5	☐	100.000	97.953	20024.64	0.0466	P	3.4	-2.0
6	☐	200.000	200.955	39713.73	0.0943	P	3.9	0.5

y = 4.6305E-004 * x + 0.0013
R = 0.9999
DL = 0.8953 ppb
BEC = 2.754 ppb

Weight: <None>
Min Conc: <None>

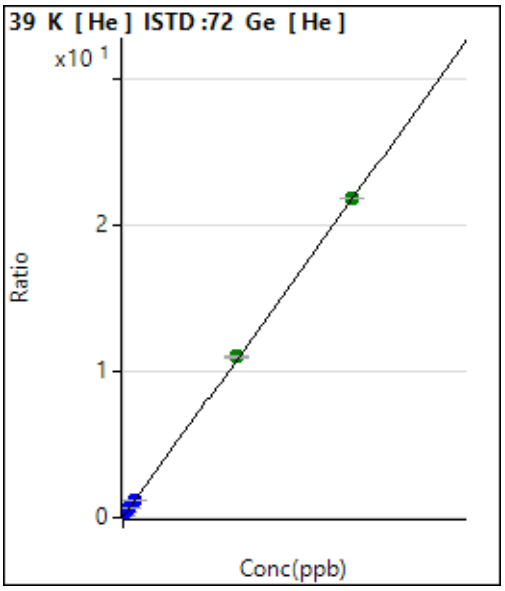


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	255640.52	0.1558	P	5.3	
2	☐	10.000	10.622	307648.20	0.1869	P	0.3	6.2
3	☐	25.000	22.013	366306.31	0.2203	P	2.0	-11.9
4	☐	50.000	46.822	487644.64	0.2929	P	0.7	-6.4
5	☐	500.000	505.336	2717696.94	1.6357	A	0.2	1.1
6	☐	1000.000	997.559	4941112.64	3.0771	A	0.8	-0.2

y = 0.0029 * x + 0.1558
R = 1.0000
DL = 8.512 ppb
BEC = 53.2 ppb

Weight: <None>
Min Conc: <None>

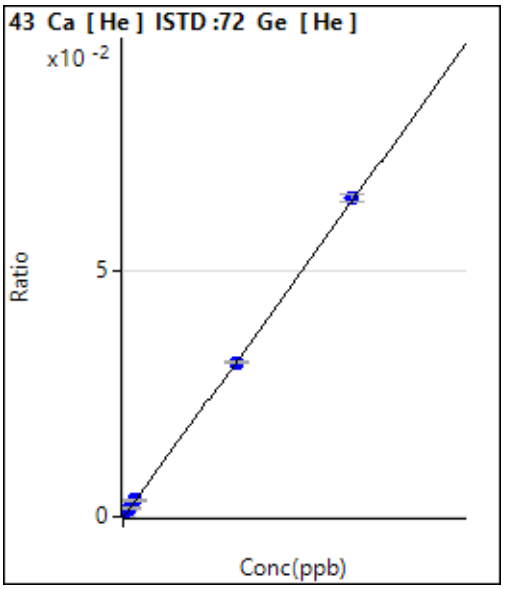
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	65036.44	0.1517	P	1.7	
2	☐	200.000	253.325	183416.25	0.4267	P	0.9	26.7
3	☐	500.000	487.523	293535.81	0.6810	P	1.7	-2.5
4	☐	1000.000	972.191	518555.67	1.2072	P	0.5	-2.8
5	☐	10000.00	10016.09	4734743.47	11.0252	A	1.3	0.2
6	☐	20000.00	19993.12	9203530.28	21.8563	A	0.5	0.0

y = 0.0011 * x + 0.1517
R = 1.0000
DL = 6.928 ppb
BEC = 139.8 ppb

Weight: <None>
Min Conc: <None>

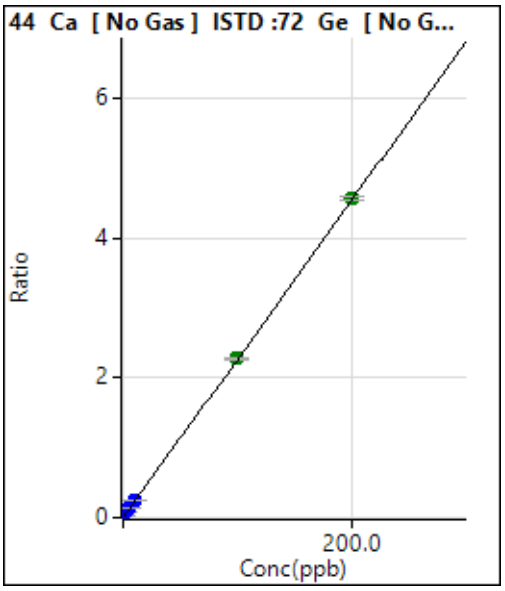


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43.33	0.0001	P	26.6	
2	☐	200.000	305.793	466.68	0.0011	P	19.0	52.9
3	☐	500.000	491.968	726.70	0.0017	P	9.7	-1.6
4	☐	1000.000	1035.615	1476.78	0.0034	P	8.7	3.6
5	☐	10000.00	9715.018	13486.81	0.0314	P	1.6	-2.8
6	☐	20000.00	20139.85	27374.25	0.0650	P	2.8	0.7

y = 3.2223E-006 * x + 1.0109E-004
R = 0.9998
DL = 25.03 ppb
BEC = 31.37 ppb

Weight: <None>
Min Conc: <None>

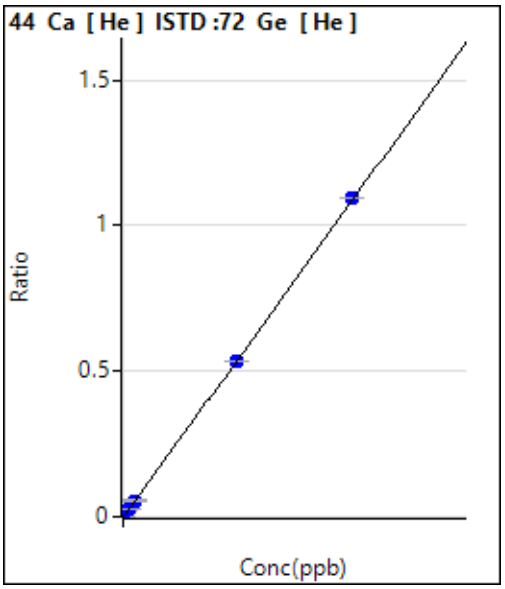
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	39223.36	0.0239	P	24.6	
2	☐	2.000	2.721	141111.44	0.0857	P	1.8	36.1
3	☐	5.000	4.614	214082.39	0.1287	P	1.8	-7.7
4	☐	10.000	9.466	397846.95	0.2390	P	0.6	-5.3
5	☐	100.000	99.518	3796434.73	2.2849	A	1.1	-0.5
6	☐	200.000	200.270	7344578.64	4.5738	A	1.3	0.1

y = 0.0227 * x + 0.0239
R = 1.0000
DL = 0.7761 ppb
BEC = 1.052 ppb

Weight: <None>
Min Conc: <None>

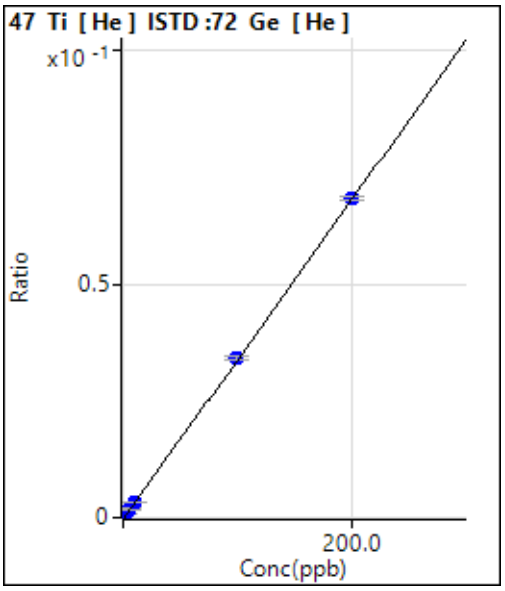


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	886.71	0.0021	P	12.7	
2	☐	200.000	282.978	7502.21	0.0175	P	7.5	41.5
3	☐	500.000	475.429	12038.81	0.0279	P	2.3	-4.9
4	☐	1000.000	985.422	23914.41	0.0557	P	3.5	-1.5
5	☐	10000.00	9795.089	229704.14	0.5349	P	0.4	-2.0
6	☐	20000.00	20102.96	461329.85	1.0955	P	0.4	0.5

y = 5.4394E-005 * x + 0.0021
R = 0.9999
DL = 14.52 ppb
BEC = 38.01 ppb

Weight: <None>
Min Conc: <None>

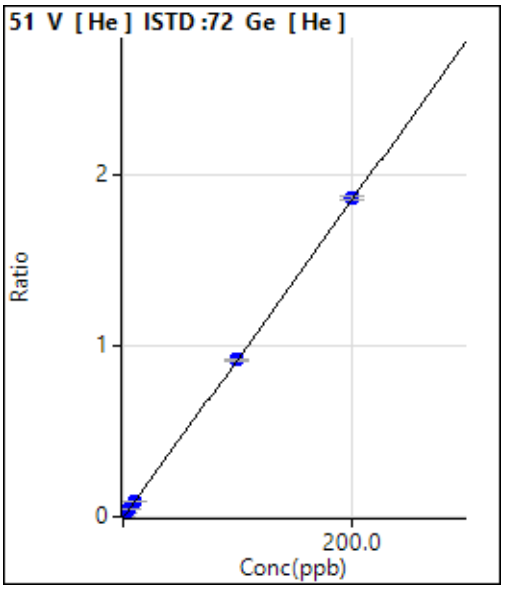
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	2.494	366.68	0.0009	P	3.2	24.7
3	☐	5.000	5.361	790.04	0.0018	P	18.2	7.2
4	☐	10.000	9.435	1386.77	0.0032	P	7.7	-5.6
5	☐	100.000	100.035	14698.03	0.0342	P	1.6	0.0
6	☐	200.000	199.997	28810.48	0.0684	P	1.7	0.0

y = 3.4212E-004 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

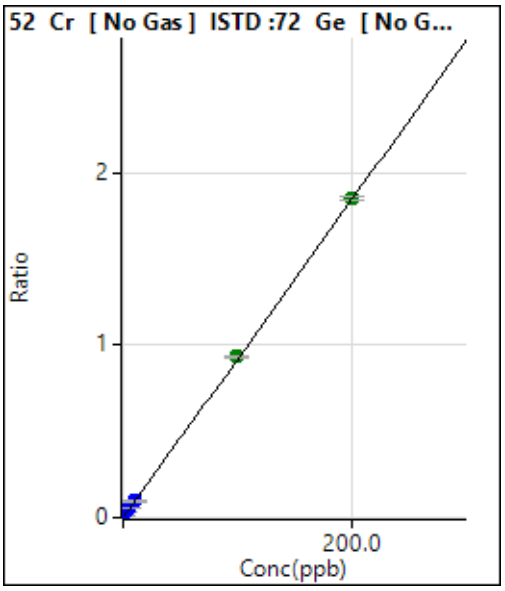


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1056.71	0.0025	P	6.1	
2	☐	2.000	2.430	10774.28	0.0251	P	1.9	21.5
3	☐	5.000	4.910	20750.21	0.0481	P	1.7	-1.8
4	☐	10.000	9.898	40613.28	0.0945	P	0.4	-1.0
5	☐	100.000	98.870	396065.52	0.9223	P	1.1	-1.1
6	☐	200.000	200.568	786721.67	1.8684	P	1.2	0.3

y = 0.0093 * x + 0.0025
R = 1.0000
DL = 0.04873 ppb
BEC = 0.265 ppb

Weight: <None>
Min Conc: <None>

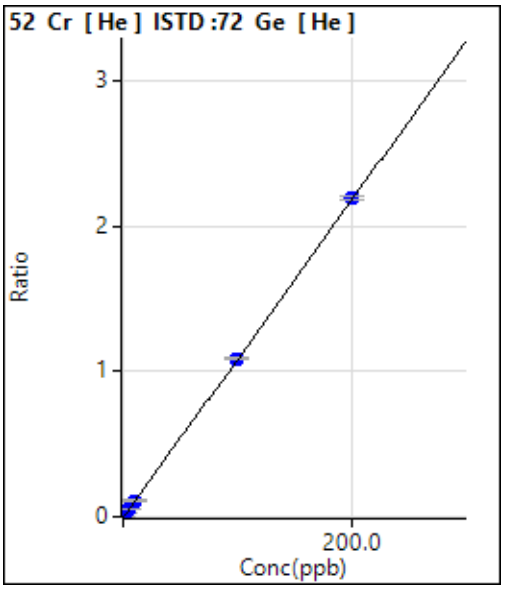
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13149.90	0.0080	P	4.2	
2	☐	2.000	2.299	48141.52	0.0292	P	2.0	15.0
3	☐	5.000	4.712	85680.49	0.0515	P	2.0	-5.8
4	☐	10.000	9.432	158341.00	0.0951	P	0.7	-5.7
5	☐	100.000	100.158	1549927.69	0.9329	A	1.2	0.2
6	☐	200.000	199.954	2977634.64	1.8543	A	0.9	0.0

y = 0.0092 * x + 0.0080
R = 1.0000
DL = 0.1091 ppb
BEC = 0.868 ppb

Weight: <None>
Min Conc: <None>

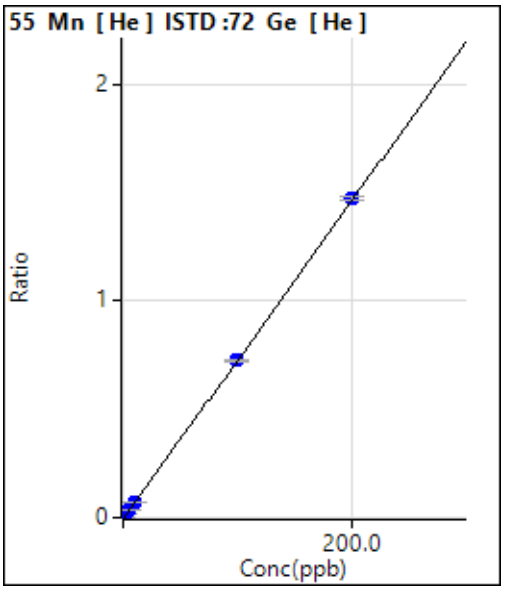


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1533.45	0.0036	P	14.8	
2	☐	2.000	2.406	12856.21	0.0299	P	2.1	20.3
3	☐	5.000	4.949	24889.53	0.0577	P	0.4	-1.0
4	☐	10.000	9.880	47981.23	0.1117	P	2.7	-1.2
5	☐	100.000	99.199	467698.70	1.0891	P	1.7	-0.8
6	☐	200.000	200.404	924952.80	2.1966	P	0.8	0.2

y = 0.0109 * x + 0.0036
R = 1.0000
DL = 0.145 ppb
BEC = 0.3271 ppb

Weight: <None>
Min Conc: <None>

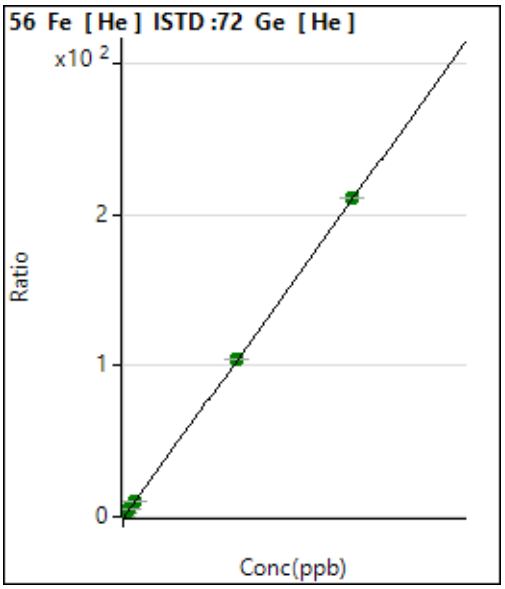
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	343.34	0.0008	P	5.9	
2	☐	2.000	2.705	8883.02	0.0207	P	2.6	35.3
3	☐	5.000	4.938	15976.29	0.0371	P	0.2	-1.2
4	☐	10.000	9.791	31232.54	0.0727	P	0.4	-2.1
5	☐	100.000	98.538	311125.05	0.7245	P	0.8	-1.5
6	☐	200.000	200.736	621107.14	1.4750	P	0.7	0.4

y = 0.0073 * x + 8.0086E-004
R = 1.0000
DL = 0.01936 ppb
BEC = 0.1091 ppb

Weight: <None>
Min Conc: <None>

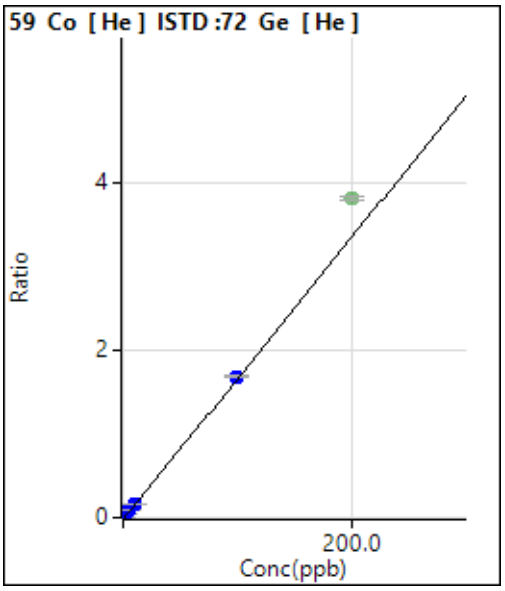


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13323.37	0.0311	P	2.5	
2	☐	200.000	263.301	1204661.23	2.8026	A	1.6	31.7
3	☐	500.000	526.954	2404416.58	5.5778	A	1.4	5.4
4	☐	1000.000	1016.407	4609167.22	10.7298	A	0.9	1.6
5	☐	10000.00	9896.057	44748616.0	104.197	A	0.6	-1.0
6	☐	20000.00	20049.84	88882518.6	211.075	A	0.6	0.2

y = 0.0105 * x + 0.0311
R = 1.0000
DL = 0.2238 ppb
BEC = 2.953 ppb

Weight: <None>
Min Conc: <None>

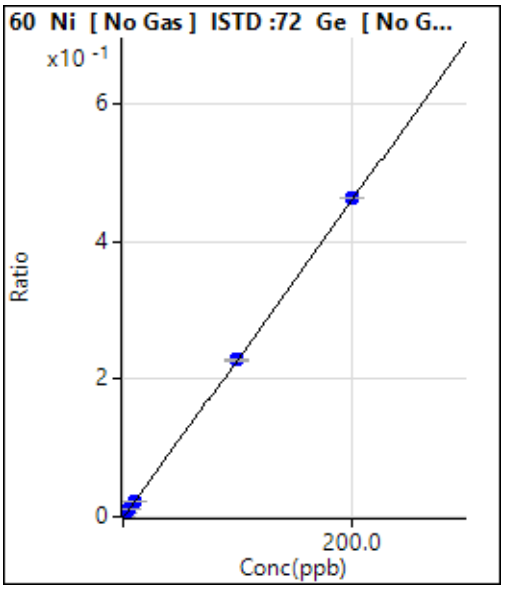
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0001	P	61.0	
2	☐	2.000	2.481	17962.08	0.0418	P	4.0	24.0
3	☐	5.000	5.003	36295.29	0.0842	P	1.5	0.1
4	☐	10.000	10.102	72975.22	0.1699	P	0.6	1.0
5	☐	100.000	99.980	721618.19	1.6803	P	1.2	0.0
6	☑	200.000		1603251.80	3.8075	A	1.3	

y = 0.0168 * x + 1.0854E-004
R = 1.0000
DL = 0.01182 ppb
BEC = 0.006458 ppb

Weight: <None>
Min Conc: <None>

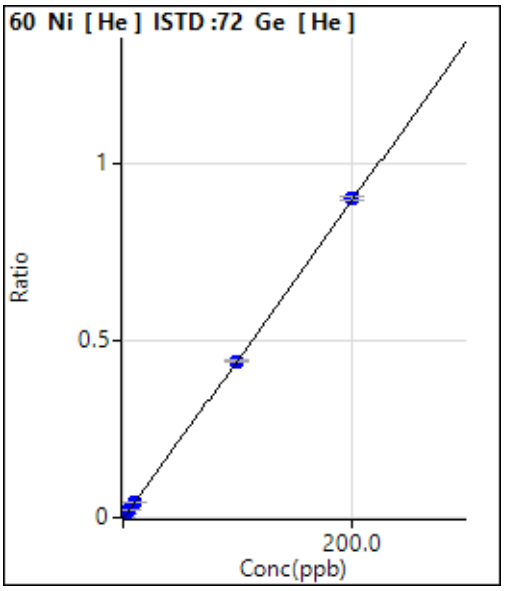


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	600.03	0.0004	P	35.2	
2	☐	2.000	2.528	10207.34	0.0062	P	1.0	26.4
3	☐	5.000	4.990	19767.89	0.0119	P	1.2	-0.2
4	☐	10.000	9.895	38638.35	0.0232	P	1.4	-1.0
5	☐	100.000	98.489	378361.73	0.2277	P	1.2	-1.5
6	☐	200.000	200.756	744756.74	0.4638	P	0.3	0.4

y = 0.0023 * x + 3.6597E-004
R = 1.0000
DL = 0.1672 ppb
BEC = 0.1585 ppb

Weight: <None>
Min Conc: <None>

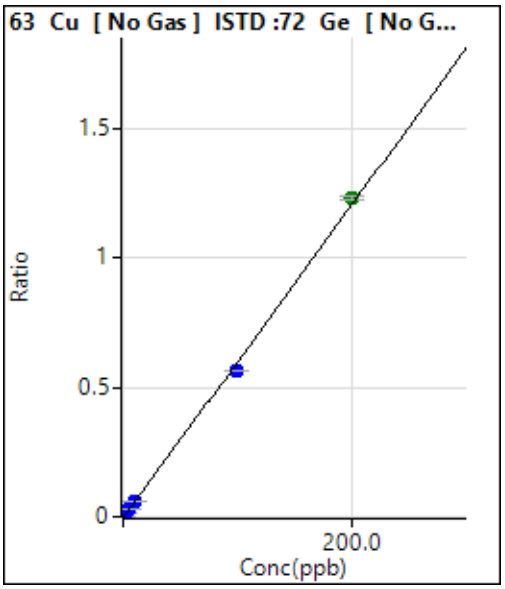
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	246.67	0.0006	P	23.7	
2	☐	2.000	2.502	5067.70	0.0118	P	2.2	25.1
3	☐	5.000	4.828	9576.86	0.0222	P	1.7	-3.4
4	☐	10.000	9.898	19303.89	0.0449	P	5.1	-1.0
5	☐	100.000	98.421	189686.73	0.4417	P	1.9	-1.6
6	☐	200.000	200.794	379220.76	0.9006	P	0.6	0.4

y = 0.0045 * x + 5.7605E-004
R = 1.0000
DL = 0.09134 ppb
BEC = 0.1285 ppb

Weight: <None>
Min Conc: <None>

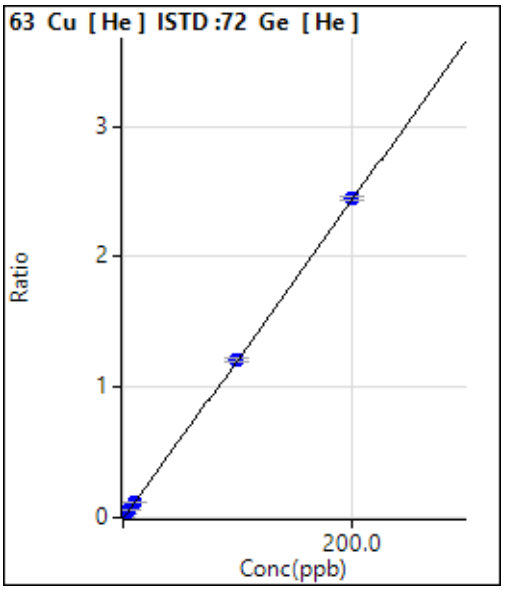


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1423.45	0.0009	P	12.4	
2	☐	2.000	2.284	24135.12	0.0147	P	1.9	14.2
3	☐	5.000	4.645	48111.93	0.0289	P	1.9	-7.1
4	☐	10.000	9.338	95359.66	0.0573	P	0.9	-6.6
5	☐	100.000	93.164	936585.06	0.5637	P	1.1	-6.8
6	☐	200.000	203.457	1975103.20	1.2300	A	1.4	1.7

y = 0.0060 * x + 8.6740E-004
R = 0.9992
DL = 0.05334 ppb
BEC = 0.1436 ppb

Weight: <None>
Min Conc: <None>

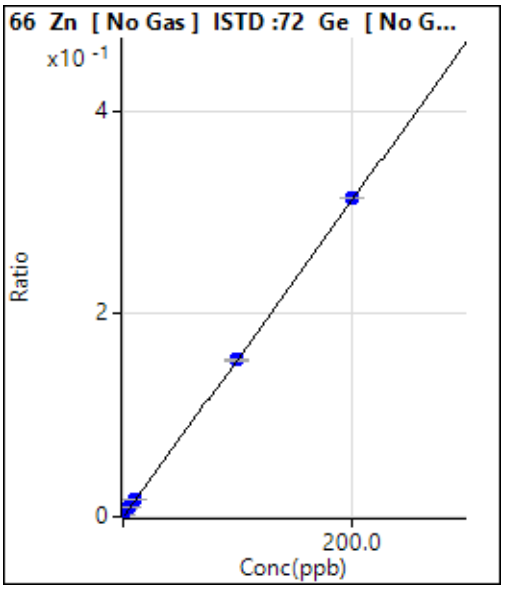
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	606.69	0.0014	P	8.1	
2	☐	2.000	2.369	13039.76	0.0303	P	2.4	18.4
3	☐	5.000	4.951	26666.45	0.0619	P	2.6	-1.0
4	☐	10.000	9.948	52789.37	0.1229	P	1.8	-0.5
5	☐	100.000	99.195	520742.92	1.2126	P	1.9	-0.8
6	☐	200.000	200.403	1031003.48	2.4485	P	0.9	0.2

y = 0.0122 * x + 0.0014
R = 1.0000
DL = 0.02823 ppb
BEC = 0.1159 ppb

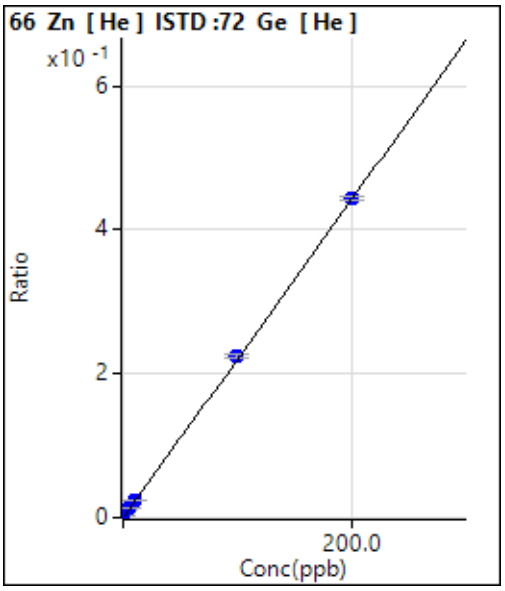
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1790.16	0.0011	P	6.6	
2	☐	2.000	3.912	11848.71	0.0072	P	2.0	95.6
3	☐	5.000	4.908	14558.01	0.0088	P	1.3	-1.8
4	☐	10.000	9.838	27377.90	0.0164	P	2.6	-1.6
5	☐	100.000	98.370	256979.08	0.1547	P	0.6	-1.6
6	☐	200.000	200.806	505140.93	0.3146	P	0.1	0.4

y = 0.0016 * x + 0.0011
R = 0.9999
DL = 0.1381 ppb
BEC = 0.6989 ppb

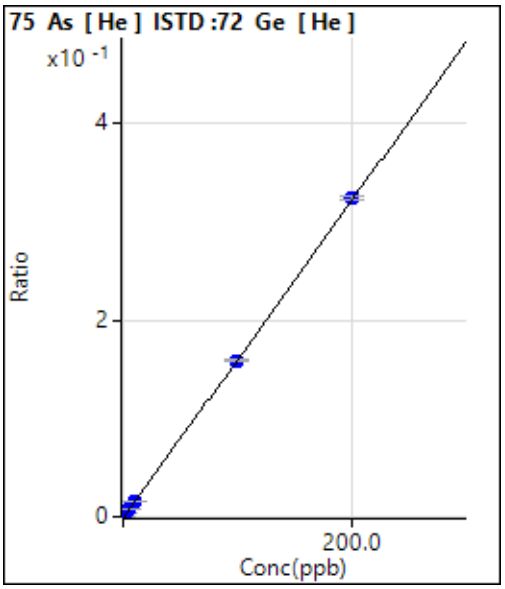
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	730.03	0.0017	P	10.1	
2	☐	2.000	3.854	4397.45	0.0102	P	3.2	92.7
3	☐	5.000	4.942	5447.87	0.0126	P	3.3	-1.2
4	☐	10.000	10.040	10274.05	0.0239	P	4.3	0.4
5	☐	100.000	100.385	96098.63	0.2238	P	2.7	0.4
6	☐	200.000	199.788	186839.01	0.4437	P	0.6	-0.1

y = 0.0022 * x + 0.0017
R = 1.0000
DL = 0.2329 ppb
BEC = 0.7702 ppb

Weight: <None>
Min Conc: <None>

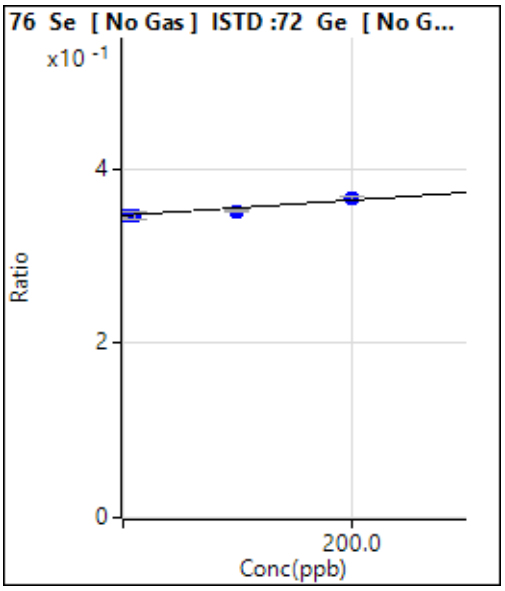


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	54.44	0.0001	P	2.8	
2	☐	2.000	2.463	1764.57	0.0041	P	2.8	23.2
3	☐	5.000	4.950	3501.58	0.0081	P	1.5	-1.0
4	☐	10.000	9.712	6793.96	0.0158	P	4.0	-2.9
5	☐	100.000	98.497	68383.17	0.1592	P	1.5	-1.5
6	☐	200.000	200.762	136613.26	0.3244	P	1.3	0.4

y = 0.0016 * x + 1.2701E-004
R = 1.0000
DL = 0.006506 ppb
BEC = 0.07863 ppb

Weight: <None>
Min Conc: <None>

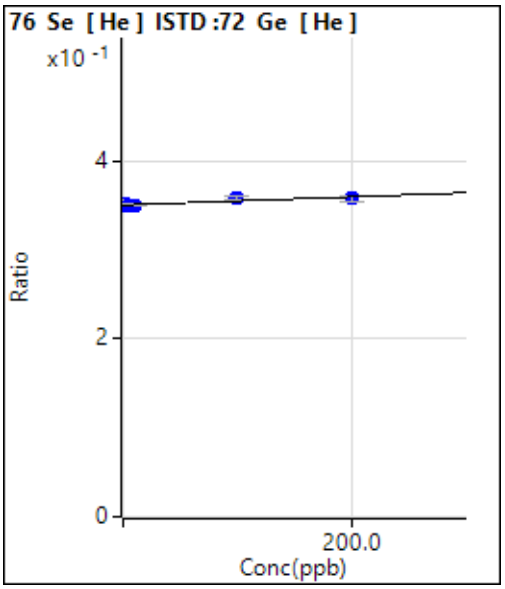
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	568809.15	0.3466	P	1.9	
2	☐	2.000	9.278	571898.82	0.3474	P	0.4	363.9
3	☐	5.000	8.452	577694.68	0.3474	P	1.9	69.0
4	☐	10.000	-1.625	576732.92	0.3465	P	2.0	-116.3
5	☐	100.000	55.270	584015.98	0.3515	P	0.3	-44.7
6	☐	200.000	222.787	588099.49	0.3662	P	0.7	11.4

y = 8.8035E-005 * x + 0.3466
R = 0.9657
DL = 229.6 ppb
BEC = 3937 ppb

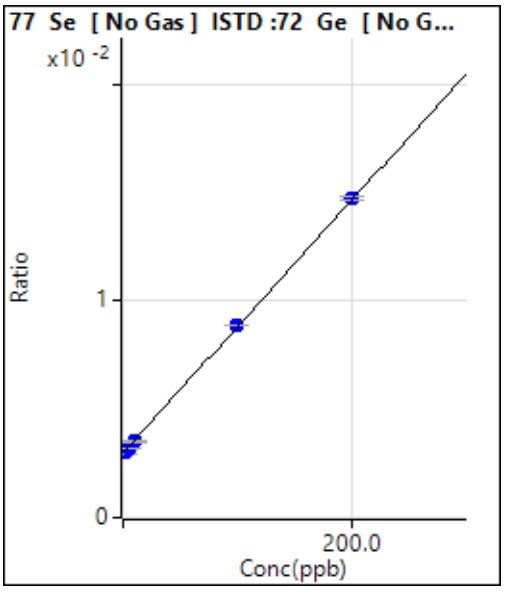
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150243.33	0.3506	P	0.8	
2	☐	2.000	54.149	151753.27	0.3531	P	2.2	2607.4
3	☐	5.000	-7.120	150974.64	0.3502	P	0.3	-242.4
4	☐	10.000	0.876	150610.39	0.3506	P	0.6	-91.2
5	☐	100.000	171.283	153991.03	0.3586	P	1.3	71.3
6	☐	200.000	164.596	150857.08	0.3583	P	1.7	-17.7

y = 4.6778E-005 * x + 0.3506
R = 0.8751
DL = 174.2 ppb
BEC = 7494 ppb

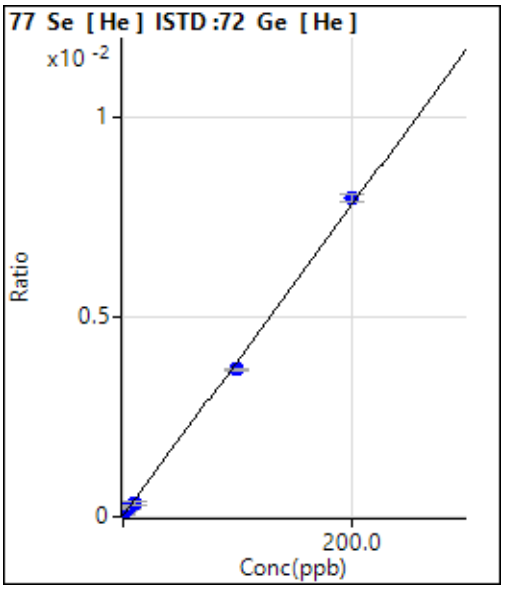
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5037.69	0.0031	P	3.2	
2	☐	2.000	-1.107	4947.65	0.0030	P	7.6	-155.4
3	☐	5.000	2.310	5331.18	0.0032	P	1.2	-53.8
4	☐	10.000	8.057	5891.39	0.0035	P	3.1	-19.4
5	☐	100.000	99.698	14744.96	0.0089	P	0.9	-0.3
6	☐	200.000	200.346	23657.71	0.0147	P	0.9	0.2

y = 5.8212E-005 * x + 0.0031
R = 0.9999
DL = 5.136 ppb
BEC = 52.75 ppb

Weight: <None>
Min Conc: <None>

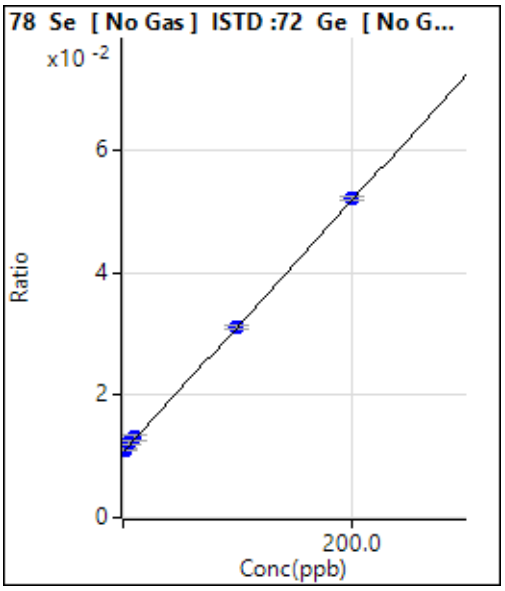


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0001	P	33.2	
2	☐	2.000	2.197	66.67	0.0002	P	17.3	9.8
3	☐	5.000	3.784	93.33	0.0002	P	12.9	-24.3
4	☐	10.000	7.202	150.00	0.0003	P	30.5	-28.0
5	☐	100.000	93.113	1580.13	0.0037	P	1.6	-6.9
6	☐	200.000	203.612	3353.81	0.0080	P	3.0	1.8

y = 3.8765E-005 * x + 6.9947E-005
R = 0.9992
DL = 1.796 ppb
BEC = 1.804 ppb

Weight: <None>
Min Conc: <None>

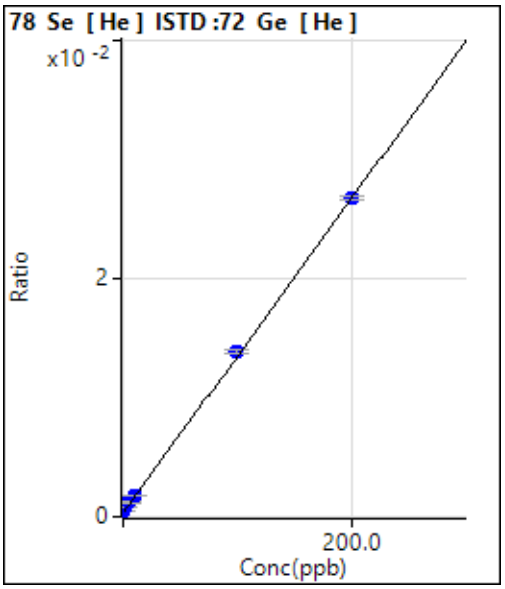
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18022.35	0.0110	P	1.8	
2	☐	2.000	0.391	18209.28	0.0111	P	3.5	-80.5
3	☐	5.000	6.111	20345.69	0.0122	P	3.6	22.2
4	☐	10.000	10.659	21904.81	0.0132	P	7.0	6.6
5	☐	100.000	98.198	51706.20	0.0311	P	1.6	-1.8
6	☐	200.000	200.856	83773.12	0.0522	P	1.0	0.4

y = 2.0505E-004 * x + 0.0110
R = 0.9999
DL = 2.875 ppb
BEC = 53.56 ppb

Weight: <None>
Min Conc: <None>

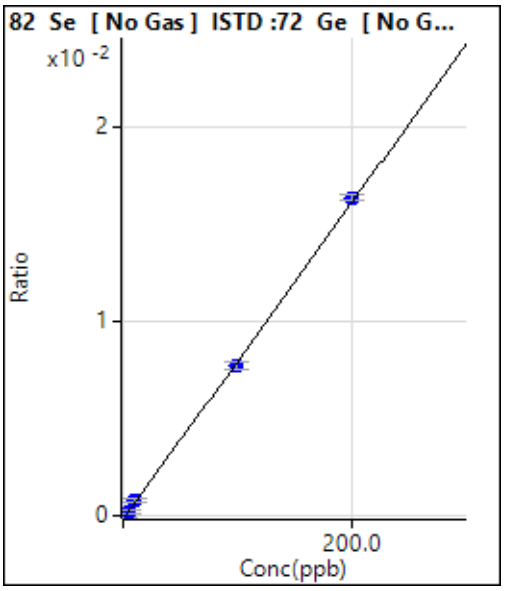


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	197.33	0.0005	P	8.5	
2	☐	2.000	2.845	359.34	0.0008	P	3.9	42.3
3	☐	5.000	5.703	522.68	0.0012	P	7.7	14.1
4	☐	10.000	10.393	786.69	0.0018	P	1.2	3.9
5	☐	100.000	101.582	5951.32	0.0139	P	1.6	1.6
6	☐	200.000	199.164	11254.72	0.0267	P	1.1	-0.4

y = 1.3189E-004 * x + 4.6064E-004
R = 1.0000
DL = 0.8877 ppb
BEC = 3.493 ppb

Weight: <None>
Min Conc: <None>

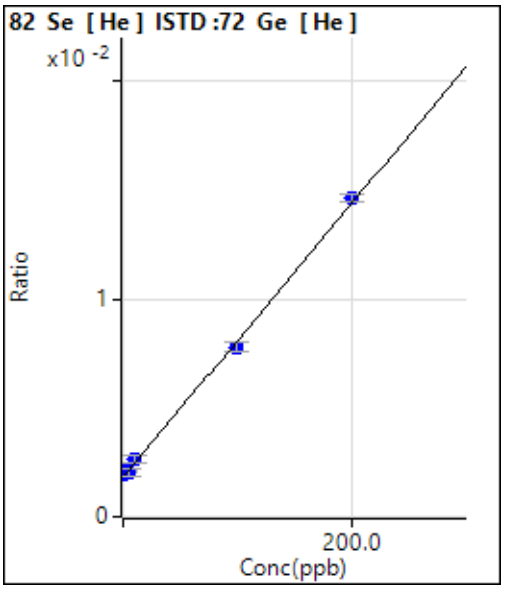
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-131.53	-0.0001	P	-224.	
2	☐	2.000	0.154	-112.84	-0.0001	P	-48.9	-92.3
3	☐	5.000	3.606	356.61	0.0002	P	93.1	-27.9
4	☐	10.000	11.227	1382.18	0.0008	P	24.3	12.3
5	☐	100.000	95.684	12808.95	0.0077	P	5.0	-4.3
6	☐	200.000	202.150	26300.29	0.0164	P	1.5	1.1

y = 8.1423E-005 * x - 8.1253E-005
R = 0.9996
DL = 6.723 ppb
BEC = -0.9979 ppb

Weight: <None>
Min Conc: <None>

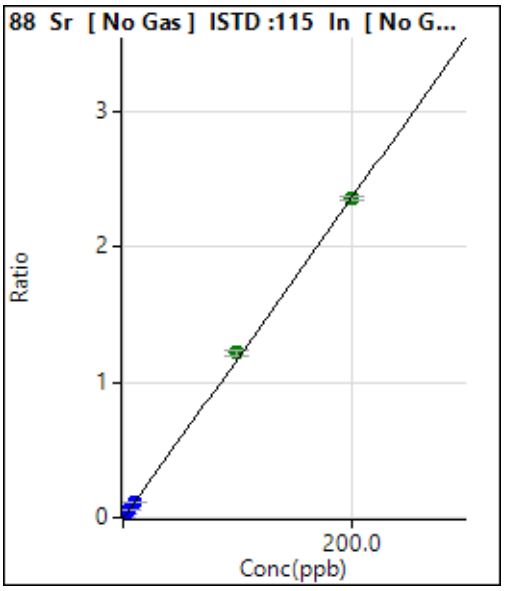


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	813.38	0.0019	P	4.3	
2	☐	2.000	2.864	893.38	0.0021	P	4.6	43.2
3	☐	5.000	2.643	890.05	0.0021	P	17.4	-47.1
4	☐	10.000	11.913	1136.73	0.0026	P	11.7	19.1
5	☐	100.000	94.002	3350.48	0.0078	P	5.3	-6.0
6	☐	200.000	202.953	6164.88	0.0146	P	2.8	1.5

y = 6.2792E-005 * x + 0.0019
R = 0.9992
DL = 3.932 ppb
BEC = 30.23 ppb

Weight: <None>
Min Conc: <None>

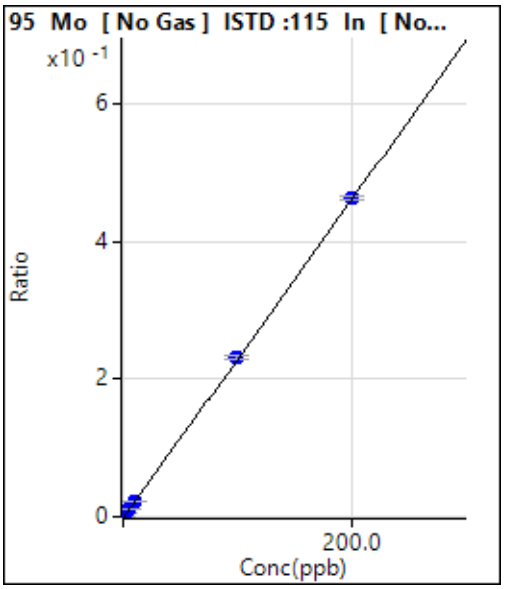
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6060.99	0.0032	P	58.7	
2	☐	2.000	2.173	57038.27	0.0289	P	1.6	8.6
3	☐	5.000	4.610	111590.01	0.0577	P	0.8	-7.8
4	☐	10.000	9.278	217716.00	0.1129	P	1.7	-7.2
5	☐	100.000	102.487	2313712.93	1.2156	A	3.0	2.5
6	☐	200.000	198.800	4437570.04	2.3550	A	1.4	-0.6

y = 0.0118 * x + 0.0032
R = 0.9999
DL = 0.4734 ppb
BEC = 0.2689 ppb

Weight: <None>
Min Conc: <None>

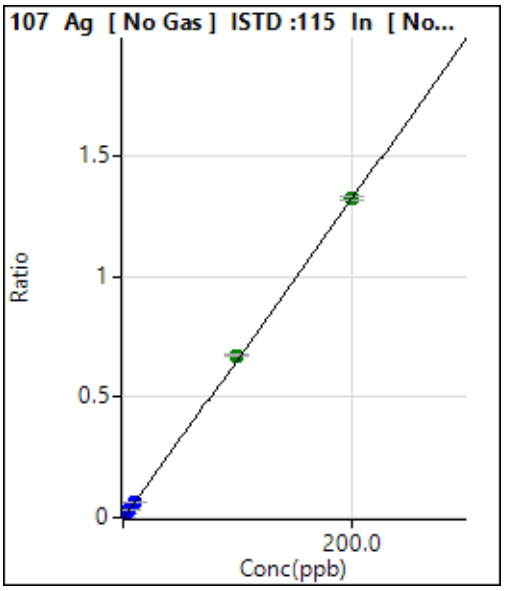


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	70.00	0.0000	P	111.5	
2	☐	2.000	2.397	11024.78	0.0056	P	1.5	19.9
3	☐	5.000	4.845	21741.35	0.0112	P	2.2	-3.1
4	☐	10.000	9.481	42360.99	0.0220	P	1.4	-5.2
5	☐	100.000	99.831	439750.20	0.2310	P	2.0	-0.2
6	☐	200.000	200.110	872576.60	0.4631	P	0.8	0.1

y = 0.0023 * x + 3.6670E-005
R = 1.0000
DL = 0.05302 ppb
BEC = 0.01585 ppb

Weight: <None>
Min Conc: <None>

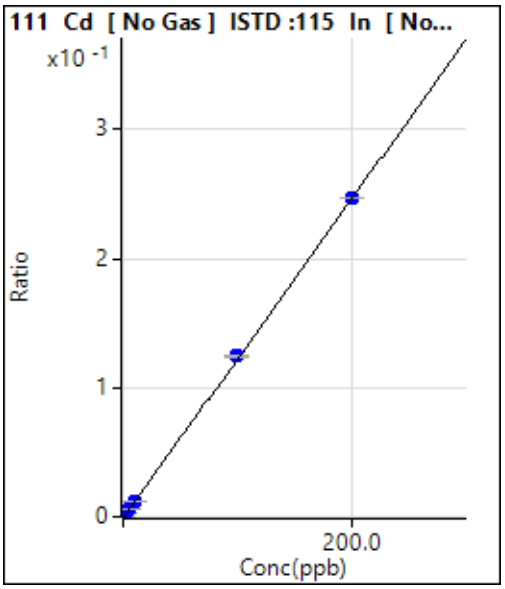
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	316.68	0.0002	P	42.4	
2	☐	2.000	2.248	29874.06	0.0151	P	4.3	12.4
3	☐	5.000	4.626	59845.49	0.0310	P	0.7	-7.5
4	☐	10.000	9.124	117390.72	0.0609	P	1.3	-8.8
5	☐	100.000	101.117	1281525.32	0.6732	A	0.8	1.1
6	☐	200.000	199.492	2502412.00	1.3280	A	1.1	-0.3

y = 0.0067 * x + 1.6697E-004
R = 1.0000
DL = 0.03189 ppb
BEC = 0.02509 ppb

Weight: <None>
Min Conc: <None>

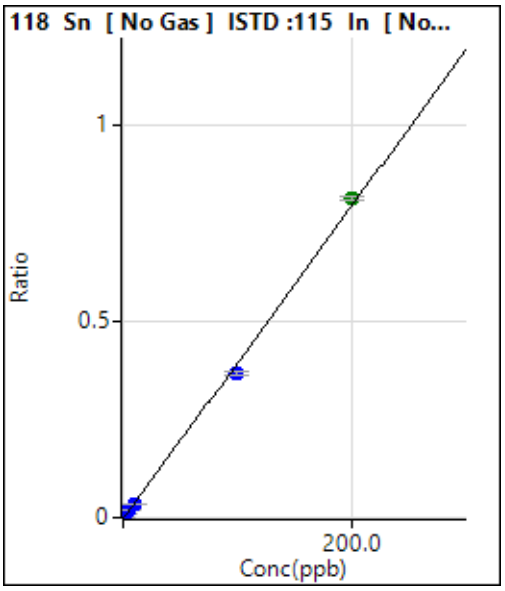


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	2.354	5751.36	0.0029	P	6.2	17.7
3	☐	5.000	4.983	11915.59	0.0062	P	1.7	-0.3
4	☐	10.000	9.680	23080.43	0.0120	P	1.7	-3.2
5	☐	100.000	100.576	236746.51	0.1244	P	1.2	0.6
6	☐	200.000	199.725	465393.09	0.2470	P	0.5	-0.1

y = 0.0012 * x + 1.7267E-006
R = 1.0000
DL = 0.007256 ppb
BEC = 0.001396 ppb

Weight: <None>
Min Conc: <None>

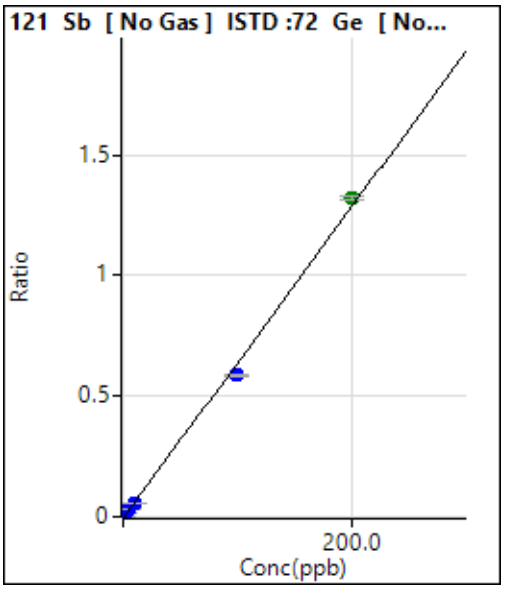
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1326.76	0.0007	P	10.6	
2	☐	2.000	2.122	18076.24	0.0092	P	3.1	6.1
3	☐	5.000	4.477	35819.19	0.0185	P	0.4	-10.5
4	☐	10.000	8.923	69841.97	0.0362	P	2.1	-10.8
5	☐	100.000	92.149	699795.90	0.3676	P	1.6	-7.9
6	☐	200.000	203.991	1531974.61	0.8130	A	0.8	2.0

y = 0.0040 * x + 7.0212E-004
R = 0.9989
DL = 0.05581 ppb
BEC = 0.1763 ppb

Weight: <None>
Min Conc: <None>

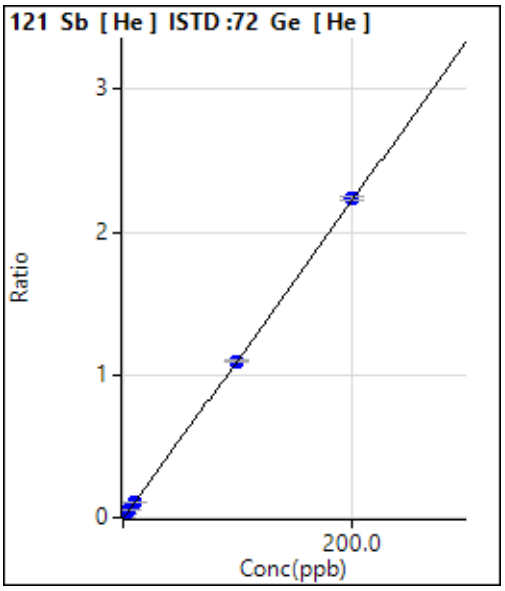


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	993.39	0.0006	P	14.1	
2	☐	2.000	2.310	25541.97	0.0155	P	4.5	15.5
3	☐	5.000	4.560	49965.38	0.0300	P	2.7	-8.8
4	☐	10.000	9.067	98437.55	0.0591	P	1.6	-9.3
5	☐	100.000	90.692	973761.03	0.5861	P	1.2	-9.3
6	☐	200.000	204.709	2123042.10	1.3221	A	1.0	2.4

y = 0.0065 * x + 6.0545E-004
R = 0.9985
DL = 0.03961 ppb
BEC = 0.09379 ppb

Weight: <None>
Min Conc: <None>

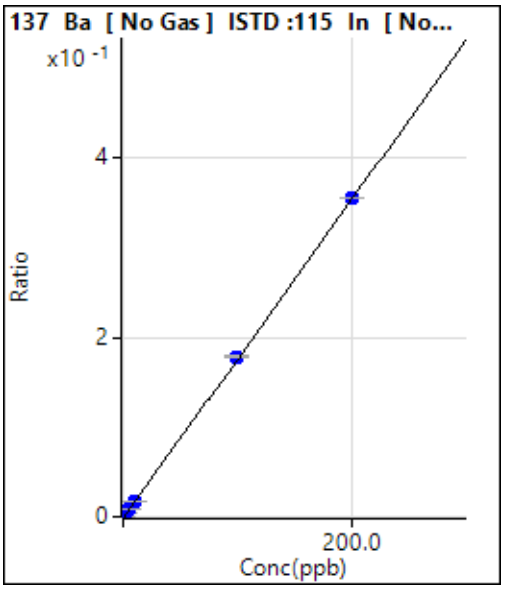
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	540.02	0.0013	P	7.5	
2	☐	2.000	2.441	12222.60	0.0284	P	2.5	22.1
3	☐	5.000	4.976	24423.06	0.0567	P	2.2	-0.5
4	☐	10.000	9.846	47629.97	0.1109	P	0.5	-1.5
5	☐	100.000	98.395	470992.86	1.0967	P	1.0	-1.6
6	☐	200.000	200.807	941929.21	2.2369	P	0.9	0.4

y = 0.0111 * x + 0.0013
R = 0.9999
DL = 0.02547 ppb
BEC = 0.1132 ppb

Weight: <None>
Min Conc: <None>

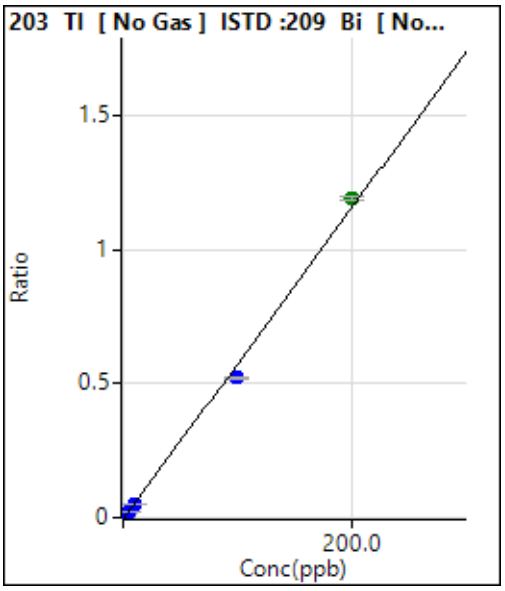


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	236.68	0.0001	P	42.3	
2	☐	2.000	2.321	8396.23	0.0043	P	1.6	16.0
3	☐	5.000	4.846	16904.60	0.0087	P	0.8	-3.1
4	☐	10.000	9.752	33680.76	0.0175	P	0.9	-2.5
5	☐	100.000	100.007	338844.25	0.1780	P	1.2	0.0
6	☐	200.000	200.009	670622.12	0.3559	P	0.2	0.0

y = 0.0018 * x + 1.2405E-004
R = 1.0000
DL = 0.08845 ppb
BEC = 0.06974 ppb

Weight: <None>
Min Conc: <None>

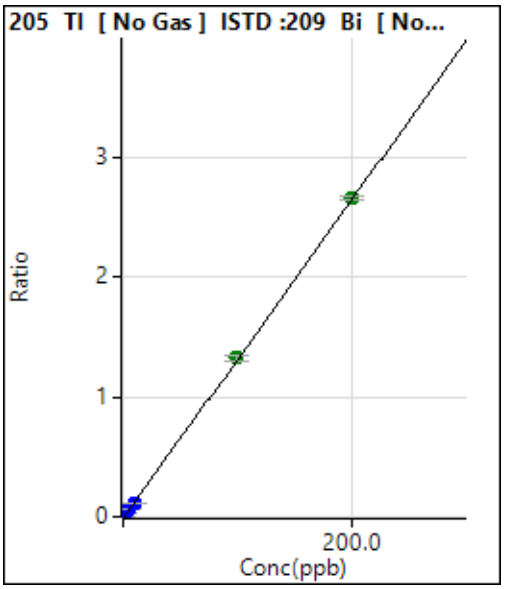
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	100.00	0.0001	P	33.3	
2	☐	2.000	2.122	22013.05	0.0124	P	2.1	6.1
3	☐	5.000	4.223	44268.64	0.0246	P	3.0	-15.5
4	☐	10.000	8.605	88515.67	0.0501	P	0.9	-13.9
5	☐	100.000	89.799	902115.92	0.5220	P	1.7	-10.2
6	☐	200.000	205.189	1988286.27	1.1927	A	1.2	2.6

y = 0.0058 * x + 5.7442E-005
R = 0.9982
DL = 0.009886 ppb
BEC = 0.009883 ppb

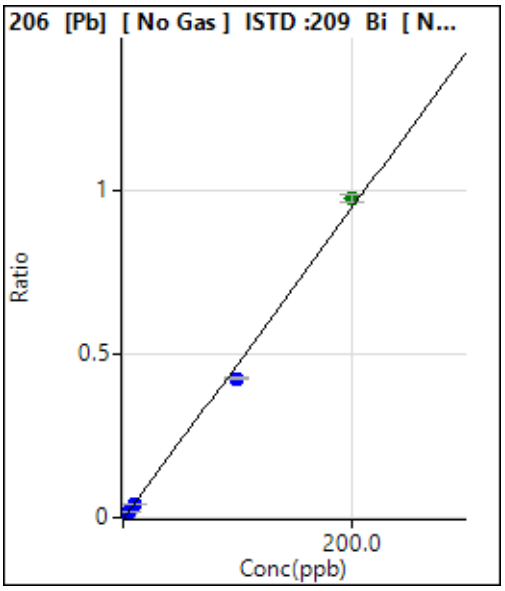
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	253.35	0.0001	P	66.0	
2	☐	2.000	2.195	52008.51	0.0293	P	1.2	9.7
3	☐	5.000	4.446	106471.84	0.0592	P	2.4	-11.1
4	☐	10.000	8.930	209823.37	0.1187	P	0.5	-10.7
5	☐	100.000	99.580	2284433.87	1.3221	A	3.8	-0.4
6	☐	200.000	200.276	4431918.99	2.6589	A	1.0	0.1

y = 0.0133 * x + 1.4518E-004
R = 1.0000
DL = 0.02165 ppb
BEC = 0.01094 ppb

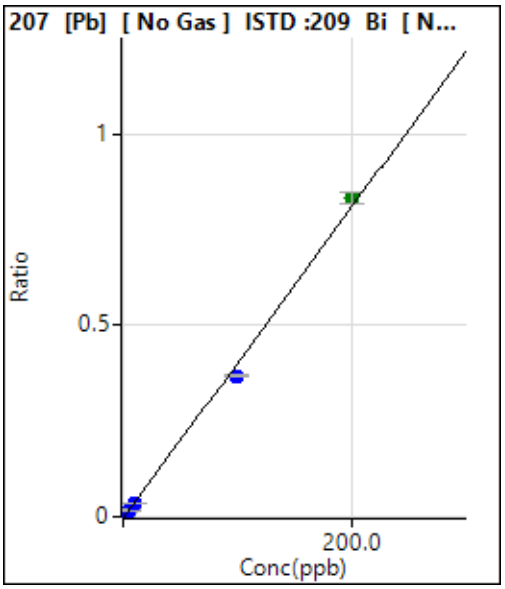
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	203.34	0.0001	P	15.2	
2	☐	2.000	2.153	18377.18	0.0103	P	2.9	7.7
3	☐	5.000	4.241	36470.44	0.0203	P	0.7	-15.2
4	☐	10.000	8.579	72259.18	0.0409	P	1.9	-14.2
5	☐	100.000	89.463	734674.78	0.4251	P	1.6	-10.5
6	☐	200.000	205.357	1626029.51	0.9757	A	2.3	2.7

y = 0.0048 * x + 1.1723E-004
R = 0.9981
DL = 0.01127 ppb
BEC = 0.02468 ppb

Weight: <None>
Min Conc: <None>

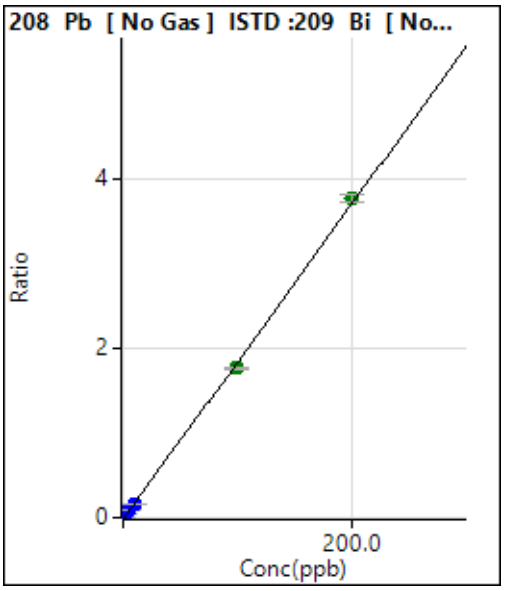


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	153.34	0.0001	P	40.0	
2	☐	2.000	2.129	15546.64	0.0088	P	4.9	6.4
3	☐	5.000	4.284	31536.99	0.0175	P	3.2	-14.3
4	☐	10.000	8.754	63139.75	0.0357	P	0.3	-12.5
5	☐	100.000	90.465	636464.52	0.3683	P	1.3	-9.5
6	☐	200.000	204.846	1389620.34	0.8338	A	4.0	2.4

y = 0.0041 * x + 8.7793E-005
R = 0.9985
DL = 0.0259 ppb
BEC = 0.02157 ppb

Weight: <None>
Min Conc: <None>

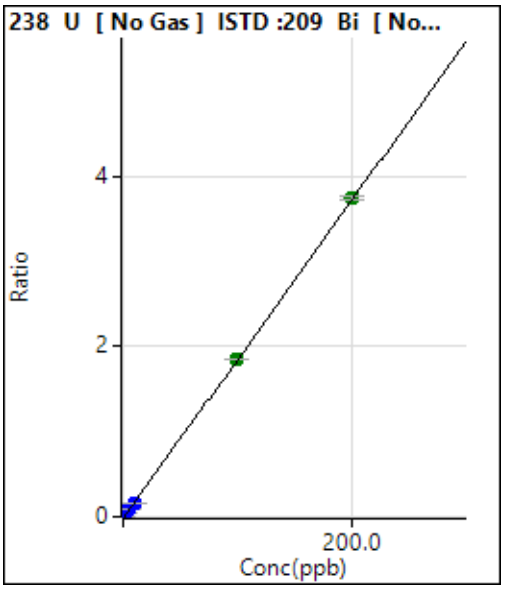
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	736.69	0.0004	P	19.1	
2	☐	2.000	2.138	71260.05	0.0401	P	1.9	6.9
3	☐	5.000	4.355	146252.66	0.0813	P	1.7	-12.9
4	☐	10.000	8.796	289429.19	0.1637	P	0.4	-12.0
5	☐	100.000	94.672	3038582.14	1.7581	A	1.0	-5.3
6	☐	200.000	202.739	6274227.82	3.7645	A	2.0	1.4

y = 0.0186 * x + 4.2356E-004
R = 0.9995
DL = 0.01307 ppb
BEC = 0.02281 ppb

Weight: <None>
Min Conc: <None>

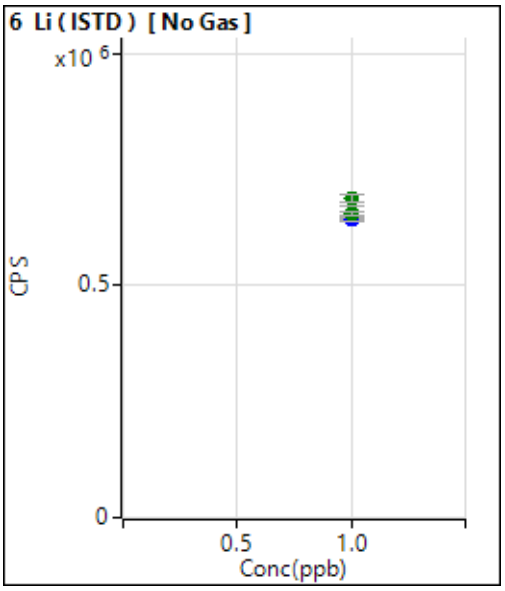


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	173.34	0.0001	P	47.1	
2	☐	2.000	2.198	73111.03	0.0412	P	0.5	9.9
3	☐	5.000	4.391	147784.51	0.0821	P	1.9	-12.2
4	☐	10.000	8.988	296937.60	0.1680	P	1.0	-10.1
5	☐	100.000	99.019	3196735.89	1.8496	A	0.7	-1.0
6	☐	200.000	200.554	6243705.95	3.7461	A	1.4	0.3

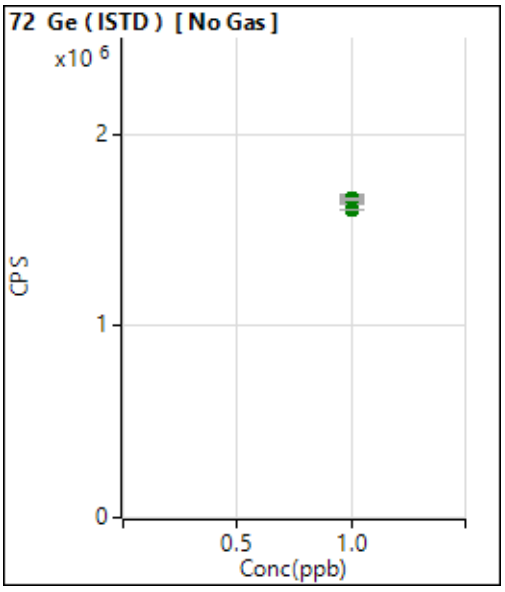
y = 0.0187 * x + 9.9495E-005
R = 1.0000
DL = 0.007528 ppb
BEC = 0.005327 ppb

Weight: <None>
Min Conc: <None>

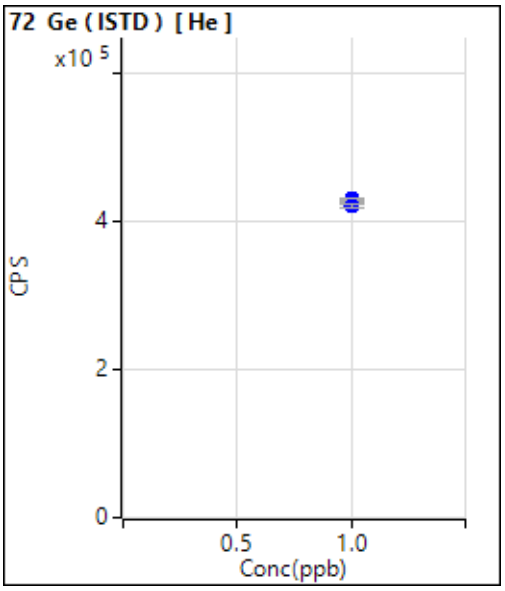
Calibration for 143_ICV.d



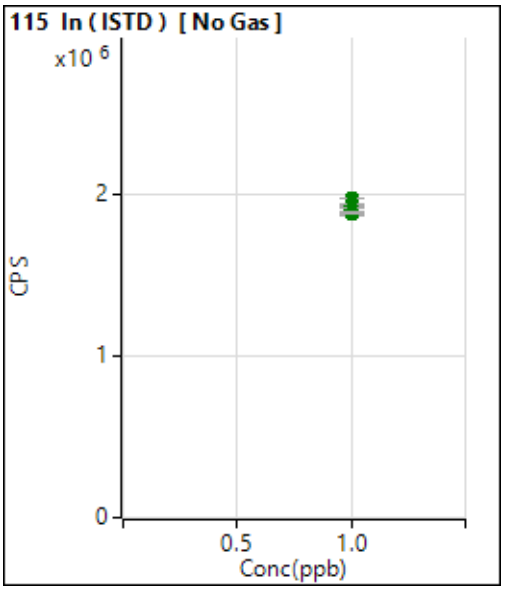
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		654203.84		M	5.1	
2	☐	1.000		642756.72		P	0.5	
3	☐	1.000		646519.35		P	0.8	
4	☐	1.000		642042.68		P	1.1	
5	☐	1.000		687374.41		A	2.1	
6	☐	1.000		654294.39		A	1.0	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1641029.93		A	0.9	
2	☐	1.000		1646033.05		A	0.9	
3	☐	1.000		1663363.15		A	1.6	
4	☐	1.000		1664939.98		A	2.0	
5	☐	1.000		1661534.92		A	0.3	
6	☐	1.000		1605769.19		A	0.1	

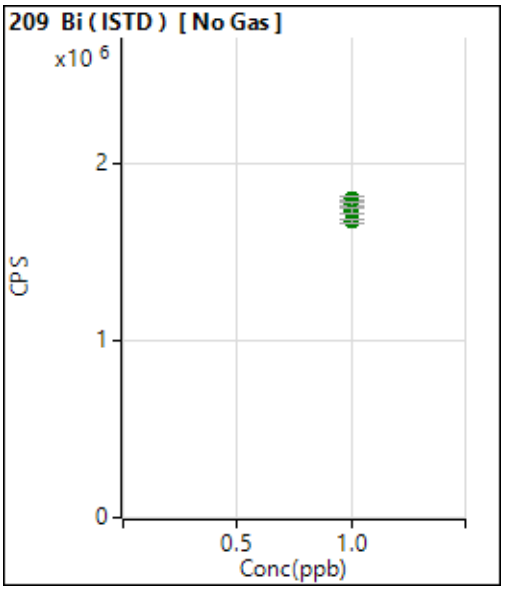


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		428589.26		P	0.9	
2	☐	1.000		429817.79		P	0.7	
3	☐	1.000		431068.07		P	0.6	
4	☐	1.000		429568.69		P	0.2	
5	☐	1.000		429476.35		P	0.9	
6	☐	1.000		421104.65		P	0.9	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1892968.90		A	3.1	
2	☐	1.000		1974579.56		A	0.4	
3	☐	1.000		1933270.49		A	0.6	
4	☐	1.000		1927907.23		A	1.2	
5	☐	1.000		1903731.32		A	1.2	
6	☐	1.000		1884405.19		A	0.5	

Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1736706.69		A	2.1	
2	☐	1.000		1776310.76		A	0.3	
3	☐	1.000		1799894.45		A	1.6	
4	☐	1.000		1767785.81		A	0.9	
5	☐	1.000		1728457.37		A	1.4	
6	☐	1.000		1666933.10		A	1.4	

Sample Report

Sample Table

Sample Name	LLCCV2
Data File Name	144LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:23:50-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	136CALB.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	2.526	2.526	3.06	57822	0.00	2	
Be	9	1	No Gas	2.493	2.493	3.53	5413	0.05	2	
V	51	2	He	2.309	2.309	3.25	10255	0.02	2	
Cr	52	2	He	2.454	2.454	1.80	13030	0.02	2	
Fe	56	2	He	266.315	266.315	1.01	1213664	0.02	200	NewName Main CR1 Failed
Se	78	2	He	2.835	2.835	5.27	357	0.79	2	NewName Main CR1 Failed
As	75	2	He	2.294	2.294	3.17	1641	0.14	2	
Ca	44	2	He	303.272	303.272	4.35	7949	3.82	200	NewName Main CR1 Failed
Na	23	2	He	216.873	216.873	1.32	276313	0.08	200	
Mg	24	2	He	237.836	237.836	0.95	99339	0.24	200	
K	39	2	He	250.613	250.613	0.36	181470	0.14	200	
Mn	55	2	He	2.666	2.666	3.04	8726	0.03	2	NewName Main CR1 Failed
Co	59	2	He	2.481	2.481	1.76	17895	0.01	2	
Ni	60	2	He	2.479	2.479	1.67	5004	0.05	2	
Cu	63	2	He	2.551	2.551	1.36	13944	0.02	2	
Zn	66	2	He	3.921	3.921	6.60	4444	0.09	2	NewName Main CR1 Failed
Al	27	2	He	2.692	2.692	13.91	1080	0.25	2	NewName Main CR1 Failed
B	11	1	No Gas	28.283	28.283	7.50	40403	0.07	10	NewName Main CR1 Failed
Al	27	1	No Gas	2.505	2.505	6.68	55486	0.00	2	
Si	28	1	No Gas	14.846	14.846	13.33	332556	0.00	10	NewName Main CR1 Failed
Ag	107	1	No Gas	2.249	2.249	1.60	29624	0.01	2	
Cd	111	1	No Gas	2.516	2.516	5.94	6092	0.04	2	
Sr	88	1	No Gas	2.241	2.241	7.66	58098	0.00	2	
Mo	95	1	No Gas	2.340	2.340	5.21	10664	0.02	2	
Sn	118	1	No Gas	2.246	2.246	2.44	18877	0.01	2	
Sb	121	1	No Gas	2.254	2.254	2.91	25291	0.01	2	
Ba	137	1	No Gas	2.364	2.364	6.16	8473	0.03	2	
Tl	205	1	No Gas	2.265	2.265	0.38	52769	0.00	2	
Tl	203	1	No Gas	2.221	2.221	4.20	22641	0.01	2	
Pb	208	1	No Gas	2.245	2.245	1.33	73516	0.00	2	
U	238	1	No Gas	2.273	2.273	2.16	74295	0.00	2	
Ca	43	2	He	302.141	302.141	13.79	460	65.68	200	NewName Main CR1 Failed
Sb	121	2	He	2.484	2.484	0.74	12383	0.02	2	
Ti	47	2	He	2.481	2.481	21.65	363	0.68	200	
Cu	63	1	No Gas	2.312	2.312	2.52	24756	0.01	2	
Se	82	1	No Gas	1.912	1.912	140.85	124	1.54	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	644154	0.17	654204	98.46	70	120	
Ge	72	2	He	428191	0.46	428589	99.91	70	120	
Ge	72	1	No Gas	1669306	1.61	1641030	101.72	70	120	
In	115	1	No Gas	1956859	0.62	1892969	103.38	70	120	
Bi	209	1	No Gas	1746277	0.55	1736707	100.55	70	120	

Sample Report

Sample Table

Sample Name	LLCCV5
Data File Name	145LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:25:54-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	136CALB.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	5.031	5.031	1.79	79143	0.01	5	
Be	9	1	No Gas	5.115	5.115	2.31	10938	0.05	5	
V	51	2	He	4.860	4.860	0.51	20279	0.02	5	
Cr	52	2	He	4.999	4.999	2.76	24796	0.02	5	
Fe	56	2	He	523.524	523.524	1.16	2357167	0.02	500	
Se	78	2	He	5.246	5.246	10.44	490	1.07	5	
As	75	2	He	5.073	5.073	4.03	3540	0.14	5	
Ca	44	2	He	488.047	488.047	3.36	12169	4.01	500	
Na	23	2	He	447.828	447.828	2.44	447340	0.10	500	
Mg	24	2	He	490.999	490.999	1.28	202150	0.24	500	
K	39	2	He	480.045	480.045	1.69	286200	0.17	500	
Mn	55	2	He	4.770	4.770	4.69	15235	0.03	5	
Co	59	2	He	5.093	5.093	1.53	36452	0.01	5	
Ni	60	2	He	5.117	5.117	3.56	10004	0.05	5	
Cu	63	2	He	5.040	5.040	3.17	26773	0.02	5	
Zn	66	2	He	4.930	4.930	7.67	5361	0.09	5	
Al	27	2	He	5.387	5.387	8.67	1603	0.34	5	
B	11	1	No Gas	31.066	31.066	1.38	43350	0.07	25	
Al	27	1	No Gas	5.259	5.259	2.72	83285	0.01	5	
Si	28	1	No Gas	27.719	27.719	3.46	383798	0.01	25	
Ag	107	1	No Gas	4.685	4.685	1.03	60304	0.01	5	
Cd	111	1	No Gas	5.048	5.048	3.28	12009	0.04	5	
Sr	88	1	No Gas	4.677	4.677	1.49	112561	0.00	5	
Mo	95	1	No Gas	4.775	4.775	0.94	21327	0.02	5	
Sn	118	1	No Gas	4.547	4.547	1.26	36187	0.01	5	
Sb	121	1	No Gas	4.724	4.724	1.67	50374	0.01	5	
Ba	137	1	No Gas	4.983	4.983	1.92	17288	0.03	5	
Tl	205	1	No Gas	4.425	4.425	2.04	105776	0.00	5	
Tl	203	1	No Gas	4.286	4.286	2.85	44834	0.01	5	
Pb	208	1	No Gas	4.397	4.397	2.42	147360	0.00	5	
U	238	1	No Gas	4.406	4.406	1.64	147984	0.00	5	
Ca	43	2	He	472.401	472.401	16.65	690	68.46	500	
Sb	121	2	He	4.995	4.995	1.36	24196	0.02	5	
Ti	47	2	He	5.130	5.130	5.62	747	0.69	5	
Cu	63	1	No Gas	4.777	4.777	0.76	48142	0.01	5	
Se	82	1	No Gas	3.181	3.181	98.45	287	1.11	5	NewName2 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	636311	0.55	654204	97.26	70	120	
Ge	72	2	He	425365	1.25	428589	99.25	70	120	
Ge	72	1	No Gas	1619640	0.51	1641030	98.70	70	120	
In	115	1	No Gas	1923830	1.46	1892969	101.63	70	120	
Bi	209	1	No Gas	1796482	2.41	1736707	103.44	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICCB
Data File Name	146_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:27:57-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	136CALB.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	0.111	29.1	35583	1.0	0.5	
Be	9	1	No Gas	-0.004	-54.5	20	25.0	0.5	
V	51	2	He	-0.143	-8.1	478	10.2	2.5	
Cr	52	2	He	0.043	82.6	1707	9.7	2.5	
Fe	56	2	He	0.860	15.4	16927	3.5	100	
Se	78	2	He	0.401	98.5	217	10.7	1	
As	75	2	He	-0.013	-200.8	44	41.3	2.5	
Ca	44	2	He	-10.554	-13.3	630	5.5	100	
Na	23	2	He	-31.560	-9.2	87798	2.5	100	
Mg	24	2	He	-1.282	-14.5	940	8.0	100	
K	39	2	He	0.837	244.7	64373	0.8	100	
Mn	55	2	He	0.035	23.2	447	5.6	2.5	
Co	59	2	He	0.013	37.9	140	24.7	2.5	
Ni	60	2	He	-0.042	-48.6	163	23.2	2.5	
Cu	63	2	He	0.019	103.5	693	14.2	1	
Zn	66	2	He	-0.181	-35.3	550	11.1	2.5	
Al	27	2	He	-1.218	-34.2	300	27.3	5	
B	11	1	No Gas	6.036	3.7	12289	2.1	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-1.088	-2.7	15409	1.2	5	
Si	28	1	No Gas	-9.085	-9.5	208725	0.5	10	
Ag	107	1	No Gas	-0.002	-205.3	293	17.5	2.5	
Cd	111	1	No Gas	0.006	113.8	17	91.7	1	
Sr	88	1	No Gas	-0.197	-2.4	1620	5.9	2.5	
Mo	95	1	No Gas	0.005	105.4	93	27.0	2.5	
Sn	118	1	No Gas	0.084	40.9	1977	13.8	5	
Sb	121	1	No Gas	-0.004	-325.3	940	13.8	2.5	
Ba	137	1	No Gas	0.010	110.6	270	12.8	2.5	
Tl	205	1	No Gas	-0.001	-196.9	233	17.3	1	
Tl	203	1	No Gas	0.003	90.3	130	20.4	1	
Pb	208	1	No Gas	0.008	36.9	1017	9.5	2.5	
U	238	1	No Gas	0.001	173.3	193	15.8	2.5	
Ca	43	2	He	-9.275	-137.9	30	57.7	100	
Sb	121	2	He	-0.027	-30.8	407	9.9	2.5	
Ti	47	2	He	0.000	#DIV/0!	0	#DIV/0!	2.5	
Se	82	1	No Gas	-0.203	-500.8	-158	-85.8	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	630952	0.60	654204	96.45	70	120	
Ge	72	2	He	421745	0.68	428589	98.40	70	120	
Ge	72	1	No Gas	1615908	1.54	1641030	98.47	70	120	
In	115	1	No Gas	1909458	1.03	1892969	100.87	70	120	
Bi	209	1	No Gas	1755681	1.21	1736707	101.09	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	148_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:32:05-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	136CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	106.314	2.365	969428	1.57	100	106.3	90	110	
Be	9	1	No Gas	105.197	1.427	224355	0.24	100	105.2	90	110	
V	51	2	He	100.024	0.271	402108	0.34	100	100.0	90	110	
Cr	52	2	He	100.691	0.429	476421	0.29	100	100.7	90	110	
Fe	56	2	He	10012.533	0.543	45435236	0.37	10000	100.1	90	110	
Se	78	2	He	102.088	2.241	6001	2.08	100	102.1	90	110	
As	75	2	He	101.078	0.966	70427	1.26	100	101.1	90	110	
Ca	44	2	He	9969.889	0.279	234612	0.27	10000	99.7	90	110	
Na	23	2	He	9804.360	0.287	7548743	0.17	10000	98.0	90	110	
Mg	24	2	He	9960.924	0.840	4126734	0.93	10000	99.6	90	110	
K	39	2	He	10014.514	0.340	4751000	0.69	10000	100.1	90	110	
Mn	55	2	He	100.542	0.316	318570	0.36	100	100.5	90	110	
Co	59	2	He	102.030	0.488	739045	0.78	100	102.0	90	110	
Ni	60	2	He	100.694	0.543	194766	0.92	100	100.7	90	110	
Cu	63	2	He	100.446	0.268	529219	0.61	100	100.4	90	110	
Zn	66	2	He	100.424	1.574	96488	1.70	100	100.4	90	110	
Al	27	2	He	104.547	3.018	21413	2.84	100	104.5	90	110	
B	11	1	No Gas	477.274	0.847	595227	1.81	500	95.5	90	110	
Al	27	1	No Gas	104.190	1.697	1165709	0.35	100	104.2	90	110	
Si	28	1	No Gas	504.401	0.108	2703082	1.32	5000	10.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	102.193	1.257	1291363	0.97	100	102.2	90	110	
Cd	111	1	No Gas	102.499	0.950	240573	0.10	100	102.5	90	110	
Sr	88	1	No Gas	102.333	2.085	2303656	1.24	100	102.3	90	110	
Mo	95	1	No Gas	99.456	1.104	436852	0.08	100	99.5	90	110	
Sn	118	1	No Gas	92.482	0.278	700343	0.87	100	92.5	90	110	
Sb	121	1	No Gas	91.369	1.249	977310	0.37	100	91.4	90	110	
Ba	137	1	No Gas	100.512	0.559	339592	1.30	100	100.5	90	110	
Tl	205	1	No Gas	100.296	2.009	2317544	0.98	100	100.3	90	110	
Tl	203	1	No Gas	89.564	0.909	906184	0.70	100	89.6	90	110	CCV Main CR1-2 Failed
Pb	208	1	No Gas	94.521	1.330	3055046	0.43	100	94.5	90	110	
U	238	1	No Gas	98.259	1.461	3194361	0.44	100	98.3	90	110	
Ca	43	2	He	9706.116	2.498	13524	2.73	10000	97.1	90	110	
Sb	121	2	He	99.515	0.447	478056	0.83	100	99.5	90	110	
Ti	47	2	He	99.115	0.945	14615	1.33	100	99.1	90	110	
Cu	63	1	No Gas	94.348	1.699	944826	0.40	100	94.3	90	110	
Se	82	1	No Gas	98.868	3.128	13193	4.00	100	98.9	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	636326	1.47	654204	97.27	70	120	
Ge	72	2	He	430984	0.39	428589	100.56	70	120	
Ge	72	1	No Gas	1655368	1.30	1641030	100.87	70	120	
In	115	1	No Gas	1898151	1.04	1892969	100.27	70	120	
Bi	209	1	No Gas	1740610	1.09	1736707	100.22	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	149_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:34:04-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	136CALB.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	0.165	18.6	35939	0.5	0.5	
Be	9	1	No Gas	0.020	42.0	70	24.7	0.5	
V	51	2	He	-0.140	-17.9	492	21.3	2.5	
Cr	52	2	He	0.075	41.7	1867	9.0	2.5	
Fe	56	2	He	2.598	84.2	24826	40.7	100	
Se	78	2	He	0.253	36.9	209	3.6	2	
As	75	2	He	0.017	66.8	66	12.8	2.5	
Ca	44	2	He	-5.237	-169.2	757	28.2	100	
Na	23	2	He	-19.184	-57.2	97474	9.5	100	
Mg	24	2	He	0.760	220.4	1780	39.6	100	
K	39	2	He	2.527	68.9	65439	1.4	100	
Mn	55	2	He	0.047	117.3	487	36.6	2.5	
Co	59	2	He	0.034	64.6	290	55.5	2.5	
Ni	60	2	He	-0.018	-98.3	210	17.2	2.5	
Cu	63	2	He	0.008	118.1	643	9.1	2	
Zn	66	2	He	-0.105	-54.9	623	9.8	2.5	
Al	27	2	He	-0.680	-33.0	407	9.9	5	
B	11	1	No Gas	13.020	12.2	20786	9.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.634	-6.9	20455	1.4	5	
Si	28	1	No Gas	-8.684	-12.4	212795	0.7	10	
Ag	107	1	No Gas	0.012	10.2	460	2.2	2.5	
Cd	111	1	No Gas	0.014	69.0	37	63.0	1	
Sr	88	1	No Gas	-0.167	-3.5	2277	5.1	2.5	
Mo	95	1	No Gas	0.027	45.3	187	27.5	2.5	
Sn	118	1	No Gas	0.096	37.4	2047	12.7	5	
Sb	121	1	No Gas	0.040	12.3	1407	4.3	2.5	
Ba	137	1	No Gas	0.021	40.9	303	10.6	2.5	
Tl	205	1	No Gas	0.012	19.8	540	11.3	1	
Tl	203	1	No Gas	0.018	32.8	287	20.1	1	
Pb	208	1	No Gas	0.025	10.5	1563	6.3	2.5	
U	238	1	No Gas	0.009	23.5	483	13.8	2.5	
Ca	43	2	He	7.622	140.7	53	28.6	100	
Sb	121	2	He	0.022	86.4	640	15.4	2.5	
Ti	47	2	He	0.161	25.4	23	24.7	2.5	
Cu	63	1	No Gas	-0.032	-41.7	1097	10.5	2.5	
Se	82	1	No Gas	-0.768	-142.2	-233	-60.3	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	628878	0.27	654204	96.13	70	120	
Ge	72	2	He	423620	1.11	428589	98.84	70	120	
Ge	72	1	No Gas	1632700	1.76	1641030	99.49	70	120	
In	115	1	No Gas	1886230	1.31	1892969	99.64	70	120	
Bi	209	1	No Gas	1771401	1.27	1736707	102.00	70	120	

Sample Report

Sample Table

Sample Name	MBLK-182618
Data File Name	150SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:36:08-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 182618
ISTD Ref FileName	136CALB.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	0.109	0.109	82.81	37722	0.00	2000	
Be	9	1	No Gas	-0.003	-0.003	-90.06	25	-0.01	2000	
V	51	2	He	-0.149	-0.149	-3.63	484	-0.03	2000	
Cr	52	2	He	-0.122	-0.122	-14.01	1007	-0.01	2000	
Fe	56	2	He	1.468	1.468	6.97	20867	0.01	200000	
Se	78	2	He	0.340	0.340	187.10	227	0.15	2000	
As	75	2	He	0.010	0.010	139.15	64	0.02	2000	
Ca	44	2	He	4.633	4.633	44.66	1040	0.45	200000	
Na	23	2	He	-33.962	-33.962	-1.96	91456	-0.04	200000	
Mg	24	2	He	14.080	14.080	6.44	7619	0.18	200000	
K	39	2	He	-5.914	-5.914	-24.14	65164	-0.01	200000	
Mn	55	2	He	0.056	0.056	77.46	543	0.01	2000	
Co	59	2	He	0.008	0.008	43.60	110	0.01	2000	
Ni	60	2	He	0.002	0.002	297.20	263	0.00	2000	
Cu	63	2	He	0.136	0.136	9.75	1377	0.01	2000	
Zn	66	2	He	-0.038	-0.038	-102.59	727	-0.01	2000	
Al	27	2	He	7.024	7.024	7.72	2030	0.35	2000	
B	11	1	No Gas	4.858	4.858	1.28	11501	0.04	2000	
Al	27	1	No Gas	6.114	6.114	2.81	99956	0.01	2000	
Si	28	1	No Gas	76.938	76.938	1.45	667559	0.01	2000	
Ag	107	1	No Gas	-0.005	-0.005	-129.50	277	0.00	2000	
Cd	111	1	No Gas	0.013	0.013	62.38	37	0.04	2000	
Sr	88	1	No Gas	-0.142	-0.142	-7.92	3054	0.00	2000	
Mo	95	1	No Gas	0.009	0.009	27.58	117	0.01	2000	
Sn	118	1	No Gas	0.048	0.048	17.26	1817	0.00	2000	
Sb	121	1	No Gas	0.021	0.021	49.11	1293	0.00	2000	
Ba	137	1	No Gas	0.171	0.171	9.87	870	0.02	2000	
Tl	205	1	No Gas	0.000	0.000	7241.03	277	0.00	2000	
Tl	203	1	No Gas	0.003	0.003	146.19	140	0.00	2000	
Pb	208	1	No Gas	0.023	0.023	3.67	1597	0.00	2000	
U	238	1	No Gas	0.005	0.005	45.05	363	0.00	2000	
Ca	43	2	He	-8.304	-8.304	-48.10	33	-24.91	200000	
Sb	121	2	He	0.006	0.006	434.53	593	0.00	2000	
Ti	47	2	He	0.195	0.195	66.36	30	0.65	2000	
Cu	63	1	No Gas	0.088	0.088	25.53	2450	0.00	2000	
Zn	66	1	No Gas	-0.022	-0.022	-86.28	1850	0.00	2000	
Se	82	1	No Gas	-2.390	-2.390	-41.19	-484	0.49	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	669149	0.71	654204	102.28	70	120	
Ge	72	2	He	448419	0.46	428589	104.63	70	120	
Ge	72	1	No Gas	1751764	1.43	1641030	106.75	70	120	
In	115	1	No Gas	2034916	0.41	1892969	107.50	70	120	

Sample Report

Bi	209	1	No Gas	1895108	0.35	1736707	109.12	70	120	

Sample Report

Sample Table

Sample Name	LCS-182618
Data File Name	151SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:38:12-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 182618
ISTD Ref FileName	136CALB.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	0.175	0.175	14.41	37682	0.00	2000	
Be	9	1	No Gas	58.582	58.582	0.60	129178	0.05	2000	
V	51	2	He	54.017	54.017	0.53	228671	0.02	2000	
Cr	52	2	He	53.843	53.843	1.20	268426	0.02	2000	
Fe	56	2	He	5326.354	5326.354	0.43	25401733	0.02	200000	
Se	78	2	He	57.531	57.531	0.54	3645	1.58	2000	
As	75	2	He	55.761	55.761	1.12	40846	0.14	2000	
Ca	44	2	He	5107.108	5107.108	1.99	126729	4.03	200000	
Na	23	2	He	5231.671	5231.671	0.39	4287904	0.12	200000	
Mg	24	2	He	5437.367	5437.367	0.80	2367517	0.23	200000	
K	39	2	He	5401.931	5401.931	1.27	2724226	0.20	200000	
Mn	55	2	He	54.797	54.797	0.41	182590	0.03	2000	
Co	59	2	He	55.531	55.531	0.69	422633	0.01	2000	
Ni	60	2	He	54.376	54.376	1.08	110624	0.05	2000	
Cu	63	2	He	55.204	55.204	0.81	305880	0.02	2000	
Zn	66	2	He	56.675	56.675	2.08	57549	0.10	2000	
Al	27	2	He	109.609	109.609	0.82	23560	0.47	2000	
B	11	1	No Gas	3.256	3.256	5.40	9258	0.04	2000	
Al	27	1	No Gas	113.283	113.283	0.20	1304366	0.01	2000	
Si	28	1	No Gas	107.104	107.104	3.01	801153	0.01	2000	
Ag	107	1	No Gas	44.471	44.471	2.02	597156	0.01	2000	
Cd	111	1	No Gas	55.906	55.906	2.13	139394	0.04	2000	
Sr	88	1	No Gas	-0.080	-0.080	-93.66	4504	0.00	2000	
Mo	95	1	No Gas	52.381	52.381	1.76	244463	0.02	2000	
Sn	118	1	No Gas	0.041	0.041	2.60	1743	0.00	2000	
Sb	121	1	No Gas	50.461	50.461	0.64	556954	0.01	2000	
Ba	137	1	No Gas	54.037	54.037	1.60	194060	0.03	2000	
Tl	205	1	No Gas	51.715	51.715	4.02	1270979	0.00	2000	
Tl	203	1	No Gas	47.934	47.934	1.86	515796	0.01	2000	
Pb	208	1	No Gas	48.923	48.923	1.64	1681961	0.00	2000	
U	238	1	No Gas	0.010	0.010	110.45	530	0.00	2000	
Ca	43	2	He	4899.887	4899.887	1.79	7195	68.10	200000	
Sb	121	2	He	53.240	53.240	0.15	268981	0.02	2000	
Ti	47	2	He	54.002	54.002	4.98	8366	0.65	2000	
Cu	63	1	No Gas	53.391	53.391	0.43	551940	0.01	2000	
Zn	66	1	No Gas	57.370	57.370	1.14	154711	0.04	2000	
Se	82	1	No Gas	59.847	59.847	7.58	8176	0.73	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	657753	0.25	654204	100.54	70	120	
Ge	72	2	He	452824	0.07	428589	105.65	70	120	
Ge	72	1	No Gas	1706582	0.40	1641030	103.99	70	120	
In	115	1	No Gas	2016761	1.71	1892969	106.54	70	120	

Sample Report

Bi	209	1	No Gas	1851222	1.65	1736707	106.59	70	120	

Sample Report

Sample Table

Sample Name	HS22080472-01SD
Data File Name	153SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:42:18-05:00
Sample Type	Sample
Dilution	25
Comment	DOD TW 182618
ISTD Ref FileName	136CALB.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	1.313	32.827	6.93	47115	0.00	2000	
Be	9	1	No Gas	-0.004	-0.111	-138.28	20	-0.02	2000	
V	51	2	He	-0.106	-2.652	-25.59	648	-0.02	2000	
Cr	52	2	He	0.001	0.033	837.49	1577	0.00	2000	
Fe	56	2	He	4.616	115.411	27.92	34915	0.01	200000	
Se	78	2	He	-0.036	-0.898	-586.61	200	-0.02	2000	
As	75	2	He	0.033	0.822	95.51	79	0.04	2000	
Ca	44	2	He	687.482	17187.041	2.91	17308	3.97	200000	
Na	23	2	He	30512.392	762809.809	0.82	23666608	0.13	200000	
Mg	24	2	He	691.552	17288.804	0.96	293015	0.24	200000	
K	39	2	He	91.287	2282.185	4.10	110029	0.08	200000	
Mn	55	2	He	2.938	73.438	1.85	9814	0.03	2000	
Co	59	2	He	0.031	0.768	51.67	273	0.01	2000	
Ni	60	2	He	-0.052	-1.303	-27.46	150	-0.03	2000	
Cu	63	2	He	0.131	3.272	35.64	1320	0.01	2000	
Zn	66	2	He	0.013	0.325	762.10	760	0.00	2000	
Al	27	2	He	-0.131	-3.284	-407.94	533	-0.02	2000	
B	11	1	No Gas	3.190	79.739	10.10	8998	0.04	2000	
Al	27	1	No Gas	-0.124	-3.090	-207.44	26388	0.00	2000	
Si	28	1	No Gas	766.720	19167.990	2.14	3982212	0.02	2000	
Ag	107	1	No Gas	-0.005	-0.129	-36.72	257	0.00	2000	
Cd	111	1	No Gas	0.004	0.105	115.26	13	0.03	2000	
Sr	88	1	No Gas	15.825	395.622	0.81	368159	0.00	2000	
Mo	95	1	No Gas	0.010	0.257	68.21	117	0.01	2000	
Sn	118	1	No Gas	0.022	0.541	112.86	1523	0.00	2000	
Sb	121	1	No Gas	-0.010	-0.248	-167.81	897	0.00	2000	
Ba	137	1	No Gas	13.729	343.229	1.31	47461	0.03	2000	
Tl	205	1	No Gas	0.004	0.093	32.20	340	0.00	2000	
Tl	203	1	No Gas	0.000	-0.009	-579.82	97	0.00	2000	
Pb	208	1	No Gas	0.019	0.465	9.91	1343	0.00	2000	
U	238	1	No Gas	0.004	0.095	88.53	297	0.00	2000	
Ca	43	2	He	676.580	16914.505	11.03	1000	67.65	200000	
Sb	121	2	He	-0.017	-0.419	-166.74	470	0.00	2000	
Ti	47	2	He	0.000	0.000	#DIV/0!	0	#DIV/0!	2000	
Cu	63	1	No Gas	0.225	5.622	14.90	3694	0.01	2000	
Zn	66	1	No Gas	0.076	1.890	101.59	2007	0.00	2000	
Se	82	1	No Gas	-0.985	-24.626	-166.69	-267	0.37	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	645323	0.77	654204	98.64	70	120	
Ge	72	2	He	438679	1.12	428589	102.35	70	120	
Ge	72	1	No Gas	1658731	1.10	1641030	101.08	70	120	
In	115	1	No Gas	1933841	1.28	1892969	102.16	70	120	
Bi	209	1	No Gas	1747581	0.90	1736707	100.63	70	120	

Sample Report

Sample Table

Sample Name	HS22080472-01PDS
Data File Name	156SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:48:30-05:00
Sample Type	Sample
Dilution	5
Comment	DOD TW 182618
ISTD Ref FileName	136CALB.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	5.875	29.375	0.50	89006	0.01	2000	
Be	9	1	No Gas	109.759	548.793	0.17	240718	0.05	2000	
V	51	2	He	105.806	529.031	0.92	435719	0.02	2000	
Cr	52	2	He	104.395	521.973	0.83	506015	0.02	2000	
Fe	56	2	He	10086.894	50434.471	1.23	46895036	0.02	200000	
Se	78	2	He	106.836	534.182	1.65	6425	1.66	2000	
As	75	2	He	107.702	538.512	0.25	76881	0.14	2000	
Ca	44	2	He	13567.851	67839.254	1.21	326775	4.15	200000	
Na	23	2	He	162305.213	811526.066	1.30	126215605	0.13	200000	
Mg	24	2	He	13592.036	67960.180	1.04	5768559	0.24	200000	
K	39	2	He	10745.284	53726.418	1.36	5217610	0.21	200000	
Mn	55	2	He	119.052	595.258	0.62	386419	0.03	2000	
Co	59	2	He	104.702	523.509	1.07	776982	0.01	2000	
Ni	60	2	He	102.827	514.133	0.62	203771	0.05	2000	
Cu	63	2	He	102.882	514.409	0.57	555340	0.02	2000	
Zn	66	2	He	105.911	529.555	0.60	104215	0.10	2000	
Al	27	2	He	103.770	518.848	2.10	21781	0.48	2000	
B	11	1	No Gas	8.489	42.447	2.87	15864	0.05	2000	
Al	27	1	No Gas	104.694	523.471	0.79	1171939	0.01	2000	
Si	28	1	No Gas	4025.298	20126.488	2.12	19778240	0.02	2000	>LDR
Ag	107	1	No Gas	105.184	525.921	0.75	1315278	0.01	2000	
Cd	111	1	No Gas	107.695	538.475	0.84	250128	0.04	2000	
Sr	88	1	No Gas	88.087	440.437	1.17	1963324	0.00	2000	
Mo	95	1	No Gas	105.522	527.611	1.22	458648	0.02	2000	
Sn	118	1	No Gas	0.034	0.168	21.63	1570	0.00	2000	
Sb	121	1	No Gas	94.647	473.237	0.87	1012894	0.01	2000	
Ba	137	1	No Gas	179.797	898.983	0.31	600909	0.03	2000	
Tl	205	1	No Gas	105.267	526.333	2.53	2327332	0.00	2000	
Tl	203	1	No Gas	94.326	471.632	1.77	913096	0.01	2000	
Pb	208	1	No Gas	102.066	510.330	2.06	3156235	0.00	2000	
U	238	1	No Gas	0.007	0.034	30.01	377	0.00	2000	
Ca	43	2	He	13473.346	67366.731	4.42	19214	70.12	200000	
Sb	121	2	He	100.657	503.285	1.51	495368	0.02	2000	
Ti	47	2	He	103.057	515.285	2.55	15569	0.66	2000	
Cu	63	1	No Gas	100.622	503.108	0.85	1008148	0.01	2000	
Zn	66	1	No Gas	106.848	534.239	0.94	278051	0.04	2000	
Se	82	1	No Gas	107.140	535.698	3.89	14311	0.75	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	654276	0.55	654204	100.01	70	120	
Ge	72	2	He	441576	0.92	428589	103.03	70	120	
Ge	72	1	No Gas	1656179	1.00	1641030	100.92	70	120	
In	115	1	No Gas	1878252	0.58	1892969	99.22	70	120	
Bi	209	1	No Gas	1665569	1.59	1736707	95.90	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	157_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:50:32-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	136CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	96.973	2.724	955299	2.02	100	97.0	90	110	
Be	9	1	No Gas	97.919	1.535	224836	0.63	100	97.9	90	110	
V	51	2	He	99.892	0.773	406065	0.29	100	99.9	90	110	
Cr	52	2	He	99.953	0.181	478240	0.57	100	100.0	90	110	
Fe	56	2	He	9943.807	1.214	45626746	0.49	10000	99.4	90	110	
Se	78	2	He	103.482	3.588	6149	3.49	100	103.5	90	110	
As	75	2	He	101.930	1.314	71812	1.10	100	101.9	90	110	
Ca	44	2	He	10032.644	0.689	238722	0.05	10000	100.3	90	110	
Na	23	2	He	9936.291	1.360	7734103	0.81	10000	99.4	90	110	
Mg	24	2	He	9932.814	1.575	4160876	0.86	10000	99.3	90	110	
K	39	2	He	10085.775	1.404	4837617	0.81	10000	100.9	90	110	
Mn	55	2	He	100.889	1.175	323235	0.59	100	100.9	90	110	
Co	59	2	He	101.588	1.003	744045	0.28	100	101.6	90	110	
Ni	60	2	He	100.647	0.809	196861	1.48	100	100.6	90	110	
Cu	63	2	He	100.468	0.336	535255	0.50	100	100.5	90	110	
Zn	66	2	He	101.277	1.256	98388	1.14	100	101.3	90	110	
Al	27	2	He	106.255	4.097	21994	3.31	100	106.3	90	110	
B	11	1	No Gas	440.212	1.714	591442	1.87	500	88.0	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	105.644	3.040	1174911	2.43	100	105.6	90	110	
Si	28	1	No Gas	517.706	0.671	2751885	1.09	5000	10.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	102.490	1.720	1297137	0.50	100	102.5	90	110	
Cd	111	1	No Gas	101.480	1.402	238564	0.65	100	101.5	90	110	
Sr	88	1	No Gas	103.209	1.480	2327156	0.43	100	103.2	90	110	
Mo	95	1	No Gas	99.826	1.126	439201	0.79	100	99.8	90	110	
Sn	118	1	No Gas	92.407	1.992	700814	0.42	100	92.4	90	110	
Sb	121	1	No Gas	92.205	1.144	980712	1.01	100	92.2	90	110	
Ba	137	1	No Gas	101.274	1.510	342685	0.70	100	101.3	90	110	
Tl	205	1	No Gas	100.810	1.049	2280283	1.17	100	100.8	90	110	
Tl	203	1	No Gas	90.944	0.974	900636	0.62	100	90.9	90	110	
Pb	208	1	No Gas	95.416	0.726	3018742	0.83	100	95.4	90	110	
U	238	1	No Gas	98.777	1.270	3143236	0.75	100	98.8	90	110	
Ca	43	2	He	9953.199	2.013	14021	1.67	10000	99.5	90	110	
Sb	121	2	He	99.948	0.480	485495	0.30	100	99.9	90	110	
Ti	47	2	He	98.649	0.980	14708	0.56	100	98.6	90	110	
Cu	63	1	No Gas	95.600	1.120	951999	0.60	100	95.6	90	110	
Se	82	1	No Gas	102.650	6.558	13614	4.91	100	102.6	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	685131	2.09	654204	104.73	70	120	
Ge	72	2	He	435813	0.74	428589	101.69	70	120	
Ge	72	1	No Gas	1646095	1.69	1641030	100.31	70	120	
In	115	1	No Gas	1901332	1.56	1892969	100.44	70	120	
Bi	209	1	No Gas	1703670	0.64	1736707	98.10	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	158_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:52:31-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	136CALB.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	0.195	30.0	36671	0.9	0.5	
Be	9	1	No Gas	0.005	2.5	40	0.0	0.5	
V	51	2	He	-0.154	-6.4	447	8.6	2.5	
Cr	52	2	He	0.043	75.1	1747	9.5	2.5	
Fe	56	2	He	1.225	19.6	18951	6.5	100	
Se	78	2	He	-0.006	-5920.0	198	9.6	2	
As	75	2	He	0.009	311.9	61	32.9	2.5	
Ca	44	2	He	-10.844	-25.2	637	10.1	100	
Na	23	2	He	-10.896	-21.3	105348	1.8	100	
Mg	24	2	He	-0.508	-37.4	1280	5.5	100	
K	39	2	He	1.636	128.4	66129	0.8	100	
Mn	55	2	He	0.030	34.1	440	8.2	2.5	
Co	59	2	He	0.021	69.7	200	54.1	2.5	
Ni	60	2	He	-0.028	-141.0	193	38.8	2.5	
Cu	63	2	He	0.015	92.2	687	10.9	2	
Zn	66	2	He	0.023	375.2	757	11.5	2.5	
Al	27	2	He	-0.883	-12.3	373	5.6	5	
B	11	1	No Gas	11.168	16.1	18774	12.5	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.634	-8.7	20522	2.4	5	
Si	28	1	No Gas	-7.351	-12.1	219914	1.6	10	
Ag	107	1	No Gas	0.015	50.1	500	17.8	2.5	
Cd	111	1	No Gas	0.014	76.0	37	68.6	1	
Sr	88	1	No Gas	-0.194	-3.9	1660	9.5	2.5	
Mo	95	1	No Gas	0.011	46.2	117	17.8	2.5	
Sn	118	1	No Gas	0.090	7.0	2000	2.2	5	
Sb	121	1	No Gas	0.077	17.9	1804	7.5	2.5	
Ba	137	1	No Gas	-0.002	-934.8	227	29.4	2.5	
Tl	205	1	No Gas	0.010	33.7	490	17.8	1	
Tl	203	1	No Gas	0.012	31.4	217	17.5	1	
Pb	208	1	No Gas	0.026	12.3	1547	7.5	2.5	
U	238	1	No Gas	0.007	28.2	410	14.8	2.5	
Ca	43	2	He	-2.536	-288.2	40	25.0	100	
Sb	121	2	He	0.042	35.6	747	10.1	2.5	
Ti	47	2	He	0.090	86.6	13	86.6	2.5	
Cu	63	1	No Gas	-0.007	-173.0	1353	8.7	2.5	
Se	82	1	No Gas	0.752	144.2	-33	-437.1	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	637135	0.67	654204	97.39	70	120	
Ge	72	2	He	430802	0.83	428589	100.52	70	120	
Ge	72	1	No Gas	1637913	0.60	1641030	99.81	70	120	
In	115	1	No Gas	1886054	0.96	1892969	99.63	70	120	
Bi	209	1	No Gas	1721548	1.52	1736707	99.13	70	120	

Sample Report

Sample Table

Sample Name	HS22080499-05
Data File Name	160SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:56:38-05:00
Sample Type	Sample
Dilution	5
Comment	DOD TW 182618
ISTD Ref FileName	136CALB.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	9.558	47.790	0.48	120187	0.01	2000	
Be	9	1	No Gas	0.027	0.133	65.58	87	0.03	2000	
V	51	2	He	0.094	0.469	44.66	1470	0.01	2000	
Cr	52	2	He	20.861	104.303	1.70	102129	0.02	2000	
Fe	56	2	He	18765.216	93826.082	0.50	87022772	0.02	200000	
Se	78	2	He	0.339	1.693	86.18	223	0.15	2000	
As	75	2	He	0.543	2.713	15.02	442	0.12	2000	
Ca	44	2	He	30133.507	150667.533	0.56	722924	4.17	200000	
Na	23	2	He	236804.614	1184023.069	0.90	183658624	0.13	200000	>LDR
Mg	24	2	He	16772.878	83864.389	0.42	7101454	0.24	200000	
K	39	2	He	939.046	4695.228	0.55	515913	0.18	200000	
Mn	55	2	He	732.936	3664.678	0.81	2371541	0.03	2000	
Co	59	2	He	2.967	14.834	0.51	22011	0.01	2000	
Ni	60	2	He	19.332	96.661	0.39	38424	0.05	2000	
Cu	63	2	He	1.228	6.140	1.31	7229	0.02	2000	
Zn	66	2	He	2.195	10.977	2.36	2890	0.08	2000	
Al	27	2	He	92.564	462.818	2.46	19441	0.48	2000	
B	11	1	No Gas	8.448	42.239	3.40	15537	0.05	2000	
Al	27	1	No Gas	87.768	438.840	2.63	985027	0.01	2000	
Si	28	1	No Gas	3262.598	16312.990	0.55	16047455	0.02	2000	>LDR
Ag	107	1	No Gas	-0.004	-0.019	-35.75	267	0.00	2000	
Cd	111	1	No Gas	0.105	0.525	25.23	247	0.04	2000	
Sr	88	1	No Gas	436.356	2181.781	0.93	9691157	0.00	2000	
Mo	95	1	No Gas	0.135	0.674	14.41	653	0.02	2000	
Sn	118	1	No Gas	0.048	0.241	30.70	1677	0.00	2000	
Sb	121	1	No Gas	0.059	0.295	23.74	1630	0.00	2000	
Ba	137	1	No Gas	50.540	252.698	1.10	168887	0.03	2000	
Tl	205	1	No Gas	-0.001	-0.003	-269.73	233	0.00	2000	
Tl	203	1	No Gas	0.002	0.010	231.28	117	0.00	2000	
Pb	208	1	No Gas	0.128	0.638	1.68	4714	0.00	2000	
U	238	1	No Gas	0.026	0.128	22.48	973	0.00	2000	
Ca	43	2	He	30428.352	152141.760	3.30	43235	70.38	200000	
Sb	121	2	He	0.033	0.165	69.63	717	0.00	2000	
Ti	47	2	He	0.992	4.962	64.99	150	0.66	2000	
Cu	63	1	No Gas	2.400	12.002	2.28	25401	0.01	2000	
Zn	66	1	No Gas	2.259	11.296	2.57	7632	0.03	2000	
Se	82	1	No Gas	1.994	9.968	101.76	132	1.51	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	642970	0.42	654204	98.28	70	120	
Ge	72	2	He	440510	0.67	428589	102.78	70	120	
Ge	72	1	No Gas	1652688	0.90	1641030	100.71	70	120	
In	115	1	No Gas	1876200	0.58	1892969	99.11	70	120	
Bi	209	1	No Gas	1687766	1.22	1736707	97.18	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	169_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T21:15:00-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	136CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	98.273	4.381	942316	1.16	100	98.3	90	110	
Be	9	1	No Gas	99.739	3.204	223069	0.43	100	99.7	90	110	
V	51	2	He	99.783	1.512	409352	0.41	100	99.8	90	110	
Cr	52	2	He	99.476	1.480	480338	0.76	100	99.5	90	110	
Fe	56	2	He	9938.872	2.123	46022411	0.93	10000	99.4	90	110	
Se	78	2	He	101.078	1.996	6066	1.80	100	101.1	90	110	
As	75	2	He	101.121	0.660	71904	0.73	100	101.1	90	110	
Ca	44	2	He	9920.306	1.425	238232	0.47	10000	99.2	90	110	
Na	23	2	He	9834.997	1.165	7727281	0.42	10000	98.3	90	110	
Mg	24	2	He	9952.135	1.076	4207633	0.21	10000	99.5	90	110	
K	39	2	He	10026.132	0.502	4854265	1.10	10000	100.3	90	110	
Mn	55	2	He	100.906	1.010	326281	0.25	100	100.9	90	110	
Co	59	2	He	101.981	1.609	753799	0.42	100	102.0	90	110	
Ni	60	2	He	100.634	1.973	198628	1.02	100	100.6	90	110	
Cu	63	2	He	100.307	1.604	539305	0.78	100	100.3	90	110	
Zn	66	2	He	100.114	1.067	98166	0.99	100	100.1	90	110	
Al	27	2	He	101.944	2.740	21323	2.55	100	101.9	90	110	
B	11	1	No Gas	450.464	3.719	589307	1.44	500	90.1	90	110	
Al	27	1	No Gas	105.867	0.431	1192228	1.39	100	105.9	90	110	
Si	28	1	No Gas	517.392	1.324	2784512	0.17	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	101.428	2.976	1291279	3.60	100	101.4	90	110	
Cd	111	1	No Gas	101.754	1.699	240561	0.58	100	101.8	90	110	
Sr	88	1	No Gas	103.665	0.134	2350952	1.09	100	103.7	90	110	
Mo	95	1	No Gas	99.540	0.859	440446	1.03	100	99.5	90	110	
Sn	118	1	No Gas	91.836	0.827	700532	0.74	100	91.8	90	110	
Sb	121	1	No Gas	90.650	1.482	976178	0.39	100	90.7	90	110	
Ba	137	1	No Gas	99.879	0.809	339905	0.57	100	99.9	90	110	
Tl	205	1	No Gas	99.524	0.801	2262967	0.16	100	99.5	90	110	
Tl	203	1	No Gas	89.865	0.651	894656	0.80	100	89.9	90	110	CCV Main CR1-2 Failed
Pb	208	1	No Gas	94.570	0.519	3007707	0.31	100	94.6	90	110	
U	238	1	No Gas	96.963	1.242	3101739	0.62	100	97.0	90	110	
Ca	43	2	He	9783.929	3.218	13914	4.03	10000	97.8	90	110	
Sb	121	2	He	97.702	1.106	478974	0.31	100	97.7	90	110	
Ti	47	2	He	100.510	1.166	15125	1.61	100	100.5	90	110	
Cu	63	1	No Gas	95.418	1.292	962035	0.32	100	95.4	90	110	
Se	82	1	No Gas	98.139	0.619	13182	1.62	100	98.1	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	667677	3.32	654204	102.06	70	120	
Ge	72	2	He	439859	1.20	428589	102.63	70	120	
Ge	72	1	No Gas	1666566	1.17	1641030	101.56	70	120	
In	115	1	No Gas	1912066	1.15	1892969	101.01	70	120	
Bi	209	1	No Gas	1712630	0.66	1736707	98.61	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	170_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T21:16:59-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	136CALB.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	0.185	30.0	35334	0.9	0.5	
Be	9	1	No Gas	0.011	121.9	50	52.9	0.5	
V	51	2	He	-0.128	-4.9	559	5.4	2.5	
Cr	52	2	He	0.023	127.6	1677	8.2	2.5	
Fe	56	2	He	2.593	15.1	25551	8.1	100	
Se	78	2	He	0.387	157.7	224	16.4	2	
As	75	2	He	0.008	267.7	61	24.6	2.5	
Ca	44	2	He	-6.920	-20.2	740	4.9	100	
Na	23	2	He	9.993	73.1	123082	5.1	100	
Mg	24	2	He	2.884	21.0	2727	9.8	100	
K	39	2	He	7.111	55.7	69749	1.6	100	
Mn	55	2	He	0.138	40.7	793	22.6	2.5	
Co	59	2	He	0.022	37.7	210	29.7	2.5	
Ni	60	2	He	-0.028	-155.1	197	42.6	2.5	
Cu	63	2	He	0.001	890.3	627	10.1	2	
Zn	66	2	He	0.032	124.5	777	5.8	2.5	
Al	27	2	He	-0.596	-67.2	437	17.5	5	
B	11	1	No Gas	11.475	18.5	18484	13.5	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.649	-4.9	20492	0.5	5	
Si	28	1	No Gas	-7.358	-18.7	221276	2.0	10	
Ag	107	1	No Gas	0.007	55.4	403	12.5	2.5	
Cd	111	1	No Gas	0.022	70.9	53	65.8	1	
Sr	88	1	No Gas	-0.138	-13.5	2917	15.0	2.5	
Mo	95	1	No Gas	0.009	147.6	107	51.6	2.5	
Sn	118	1	No Gas	0.056	34.3	1733	8.6	5	
Sb	121	1	No Gas	0.030	55.3	1313	13.1	2.5	
Ba	137	1	No Gas	0.054	11.4	413	5.6	2.5	
Tl	205	1	No Gas	0.013	25.5	553	13.7	1	
Tl	203	1	No Gas	0.008	128.2	177	55.8	1	
Pb	208	1	No Gas	0.020	36.9	1387	17.1	2.5	
U	238	1	No Gas	0.008	10.0	417	6.0	2.5	
Ca	43	2	He	-19.530	-21.3	17	34.6	100	
Sb	121	2	He	-0.004	-58.3	530	1.9	2.5	
Ti	47	2	He	0.022	173.2	3	173.2	2.5	
Cu	63	1	No Gas	-0.011	-83.8	1317	6.2	2.5	
Se	82	1	No Gas	-1.460	-250.4	-327	-148.4	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	615308	0.45	654204	94.05	70	120	
Ge	72	2	He	437506	1.13	428589	102.08	70	120	
Ge	72	1	No Gas	1648633	1.50	1641030	100.46	70	120	
In	115	1	No Gas	1877038	0.93	1892969	99.16	70	120	
Bi	209	1	No Gas	1730895	0.30	1736707	99.67	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	178_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T21:33:26-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	136CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	96.950	3.571	952999	2.93	100	97.0	90	110	
Be	9	1	No Gas	98.780	1.186	226324	0.30	100	98.8	90	110	
V	51	2	He	100.795	0.903	417183	0.63	100	100.8	90	110	
Cr	52	2	He	100.767	0.463	490885	0.07	100	100.8	90	110	
Fe	56	2	He	9980.842	0.389	46631749	0.25	10000	99.8	90	110	
Se	78	2	He	103.922	1.377	6286	0.90	100	103.9	90	110	
As	75	2	He	102.558	0.759	73569	0.35	100	102.6	90	110	
Ca	44	2	He	10070.430	0.197	243983	0.55	10000	100.7	90	110	
Na	23	2	He	9876.176	1.405	7827966	1.01	10000	98.8	90	110	
Mg	24	2	He	9972.648	0.235	4253821	0.26	10000	99.7	90	110	
K	39	2	He	10102.375	1.133	4933726	0.71	10000	101.0	90	110	
Mn	55	2	He	99.876	1.344	325815	0.91	100	99.9	90	110	
Co	59	2	He	101.612	0.175	757788	0.35	100	101.6	90	110	
Ni	60	2	He	101.111	0.530	201354	0.11	100	101.1	90	110	
Cu	63	2	He	100.571	0.327	545546	0.11	100	100.6	90	110	
Zn	66	2	He	99.704	1.725	98631	1.35	100	99.7	90	110	
Al	27	2	He	105.141	2.726	22168	2.24	100	105.1	90	110	
B	11	1	No Gas	441.674	1.807	592083	1.70	500	88.3	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	103.841	2.480	1199733	3.04	100	103.8	90	110	
Si	28	1	No Gas	504.162	1.685	2789191	1.61	5000	10.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	102.742	0.837	1297076	0.63	100	102.7	90	110	
Cd	111	1	No Gas	102.345	1.918	239986	1.77	100	102.3	90	110	
Sr	88	1	No Gas	104.685	2.155	2354298	1.63	100	104.7	90	110	
Mo	95	1	No Gas	100.616	0.710	441545	0.60	100	100.6	90	110	
Sn	118	1	No Gas	93.022	0.833	703724	0.29	100	93.0	90	110	
Sb	121	1	No Gas	88.889	0.903	981596	0.55	100	88.9	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	101.139	1.337	341359	0.82	100	101.1	90	110	
Tl	205	1	No Gas	99.177	1.493	2273956	1.79	100	99.2	90	110	
Tl	203	1	No Gas	89.315	1.426	896540	1.15	100	89.3	90	110	CCV Main CR1-2 Failed
Pb	208	1	No Gas	94.064	1.688	3016411	1.41	100	94.1	90	110	
U	238	1	No Gas	96.803	1.106	3122476	1.13	100	96.8	90	110	
Ca	43	2	He	10213.973	3.397	14648	2.98	10000	102.1	90	110	
Sb	121	2	He	98.320	0.925	486278	0.50	100	98.3	90	110	
Ti	47	2	He	102.305	3.374	15532	3.74	100	102.3	90	110	
Cu	63	1	No Gas	93.773	0.099	969555	0.71	100	93.8	90	110	
Se	82	1	No Gas	100.811	2.282	13886	1.56	100	100.8	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	683589	1.40	654204	104.49	70	120	
Ge	72	2	He	443738	0.43	428589	103.53	70	120	
Ge	72	1	No Gas	1708853	0.76	1641030	104.13	70	120	
In	115	1	No Gas	1896309	0.59	1892969	100.18	70	120	
Bi	209	1	No Gas	1726846	0.30	1736707	99.43	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	179_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T21:35:25-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	136CALB.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	0.174	47.4	35653	0.7	0.5	
Be	9	1	No Gas	0.029	14.2	90	11.1	0.5	
V	51	2	He	-0.137	-14.0	520	15.0	2.5	
Cr	52	2	He	0.012	150.6	1613	3.8	2.5	
Fe	56	2	He	1.197	40.4	19007	11.2	100	
Se	78	2	He	0.444	38.3	226	4.4	2	
As	75	2	He	-0.003	-803.9	53	28.6	2.5	
Ca	44	2	He	-10.032	-71.2	663	26.3	100	
Na	23	2	He	-15.554	-27.3	102850	2.4	100	
Mg	24	2	He	-0.363	-132.5	1353	13.9	100	
K	39	2	He	3.615	42.2	67750	1.3	100	
Mn	55	2	He	0.009	173.2	377	12.0	2.5	
Co	59	2	He	0.015	36.3	160	27.2	2.5	
Ni	60	2	He	-0.038	-133.3	177	54.4	2.5	
Cu	63	2	He	-0.007	-125.8	580	9.1	2	
Zn	66	2	He	-0.300	-23.7	453	16.7	2.5	
Al	27	2	He	-1.000	-33.7	353	18.8	5	
B	11	1	No Gas	10.994	16.0	18130	12.1	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.994	-3.9	16820	1.1	5	
Si	28	1	No Gas	-8.648	-8.9	216095	0.3	10	
Ag	107	1	No Gas	0.010	30.5	447	9.0	2.5	
Cd	111	1	No Gas	0.030	22.2	73	20.8	1	
Sr	88	1	No Gas	-0.157	-7.0	2530	9.6	2.5	
Mo	95	1	No Gas	0.017	83.1	143	42.1	2.5	
Sn	118	1	No Gas	0.060	37.4	1807	10.2	5	
Sb	121	1	No Gas	0.021	27.8	1230	4.9	2.5	
Ba	137	1	No Gas	0.010	78.2	273	10.6	2.5	
Tl	205	1	No Gas	0.018	14.3	663	8.8	1	
Tl	203	1	No Gas	0.019	50.9	287	33.2	1	
Pb	208	1	No Gas	0.026	24.9	1567	13.6	2.5	
U	238	1	No Gas	0.017	33.8	710	25.5	2.5	
Ca	43	2	He	-10.053	-67.5	30	33.3	100	
Sb	121	2	He	-0.014	-39.3	480	7.2	2.5	
Ti	47	2	He	0.157	65.9	23	65.5	2.5	
Cu	63	1	No Gas	-0.018	-34.3	1257	4.0	2.5	
Se	82	1	No Gas	-0.290	-1076.0	-173	-241.8	2	

QC ISTD Table

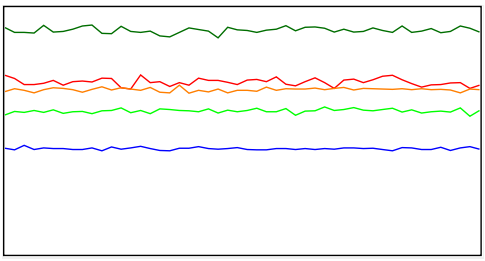
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	622650	1.54	654204	95.18	70	120	
Ge	72	2	He	435268	1.60	428589	101.56	70	120	
Ge	72	1	No Gas	1656530	1.63	1641030	100.94	70	120	
In	115	1	No Gas	1916738	0.68	1892969	101.26	70	120	
Bi	209	1	No Gas	1725213	0.43	1736707	99.34	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq. Date-Time	08/22/2022 11:24:08
Report Comment	---
Instrument Name	G8422A SG22121190

[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	3493	34928.18		
24	20000	11621	116206.37		
59	50000	21398	213984.60		
115	50000	33374	333741.79		
208	20000	18164	181638.49		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.041	5.000	
24	1.394	5.000	
59	1.127	5.000	
115	1.056	5.000	
208	1.321	5.000	

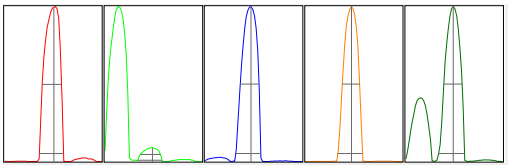
Mass	Background	Background (Required)	Background (Flag)
9	2.000		
24	0.800		
59	0.400		
115	0.900		
208	2.200		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.472 %
Doubly Charged	70 / 140 0.817 %

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	3440.55	9.05	8.90 - 9.10	
24	11669.81	24.00	23.90 - 24.10	
59	21898.29	58.95	58.90 - 59.10	
115	33768.52	114.95	114.90 - 115.10	
208	17948.16	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.59	0.737		
24	0.60	0.739		
59	0.58	0.764		
115	0.53	0.756		
208	0.56	0.791		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.85 L/min	Dilution Gas	0.20 L/min
RF Power	1550 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	10.6 V	Deflect	13.8 V
Extract 2	-200.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-75 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	122	Axis Gain	0.9994	QP Bias	-3.0 V
Mass Offset	126	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.3 mm

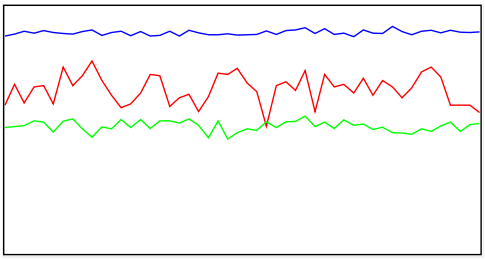
EM

Discriminator	4.4 mV	Analog HV	2112 V	Pulse HV	1056 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	133	1330.06		
24	1000	515	5149.55		
59	10000	8947	89465.16		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

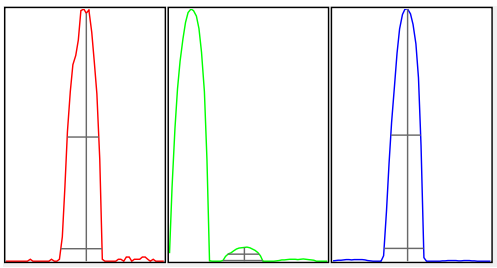
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	8.845	5.000	Fail
24	4.215	5.000	
59	1.042	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.200		
24	0.300		
59	0.100		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.262 %
Doubly Charged	70 / 140 0.912 %

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.24
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	119.76	9.05	8.90 - 9.10	
24	524.87	23.95	23.90 - 24.10	
59	9107.54	58.95	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.59	0.772		
24	0.59	0.743		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.56	0.738		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.85 L/min	Dilution Gas	0.20 L/min
RF Power	1550 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	9.5 V	Deflect	0.4 V
Extract 2	-200.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-85 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	4.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9994	QP Bias	-15.0 V
Mass Offset	126	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.3 mm

EM

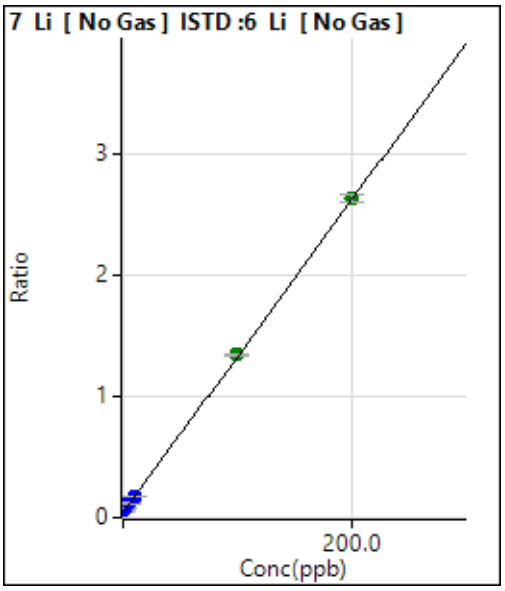
Discriminator	4.4 mV	Analog HV	2112 V	Pulse HV	1056 V

Calibration for 027_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\082322A.b\
Analysis File: 082322A.batch.bin
DA Date-Time: 08/23/2022 16:56:00
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	018CALB.d	CAL BLK	08/23/2022 11:56:38
2	025CALS.d	2/10/200	08/23/2022 12:18:35
3	020CALS.d	5/25/500	08/23/2022 12:01:17
4	021CALS.d	10/50/100	08/23/2022 12:03:35
5	022CALS.d	100/500/10K	08/23/2022 12:05:52
6	023CALS.d	200/1000/20K	08/23/2022 12:08:04

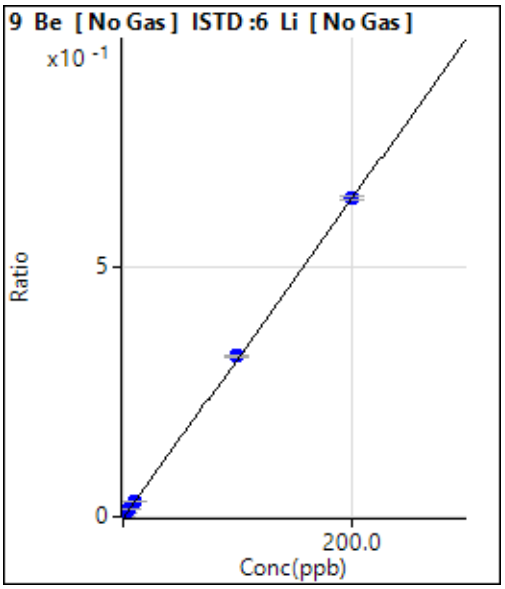
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	39627.41	0.0561	P	5.5	
2	☐	2.000	1.768	57893.61	0.0789	P	2.5	-11.6
3	☐	5.000	4.935	81298.73	0.1196	P	2.7	-1.3
4	☐	10.000	9.043	121501.18	0.1725	P	5.0	-9.6
5	☐	100.000	100.011	964275.01	1.3429	A	1.4	0.0
6	☐	200.000	200.047	1913964.97	2.6301	A	2.4	0.0

y = 0.0129 * x + 0.0561
R = 1.0000
DL = 0.7195 ppb
BEC = 4.362 ppb

Weight: <None>
Min Conc: <None>

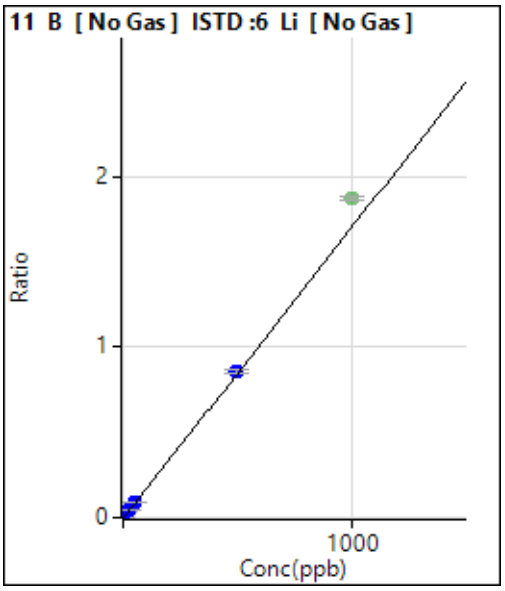


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	24.7	
2	☐	2.000	2.068	4884.23	0.0067	P	3.7	3.4
3	☐	5.000	5.199	11334.65	0.0167	P	2.1	4.0
4	☐	10.000	9.784	22064.04	0.0313	P	7.4	-2.2
5	☐	100.000	100.660	231288.15	0.3222	P	1.5	0.7
6	☐	200.000	199.675	465087.99	0.6391	P	1.2	-0.2

y = 0.0032 * x + 3.7941E-005
R = 1.0000
DL = 0.008778 ppb
BEC = 0.01186 ppb

Weight: <None>
Min Conc: <None>

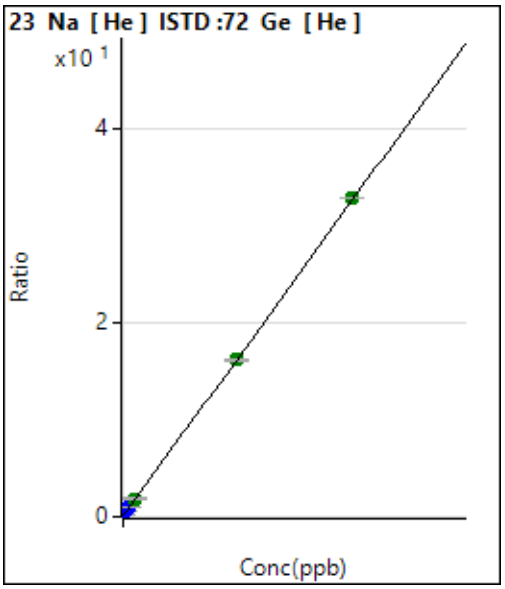
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2783.64	0.0039	P	5.9	
2	☐	10.000	14.721	21329.55	0.0291	P	2.7	47.2
3	☐	25.000	25.708	32495.91	0.0478	P	2.4	2.8
4	☐	50.000	49.569	62339.22	0.0885	P	6.4	-0.9
5	☐	500.000	499.913	615361.10	0.8572	P	1.5	0.0
6	☑	1000.000		1362985.19	1.8727	A	1.1	

y = 0.0017 * x + 0.0039
R = 1.0000
DL = 0.4104 ppb
BEC = 2.306 ppb

Weight: <None>
Min Conc: <None>

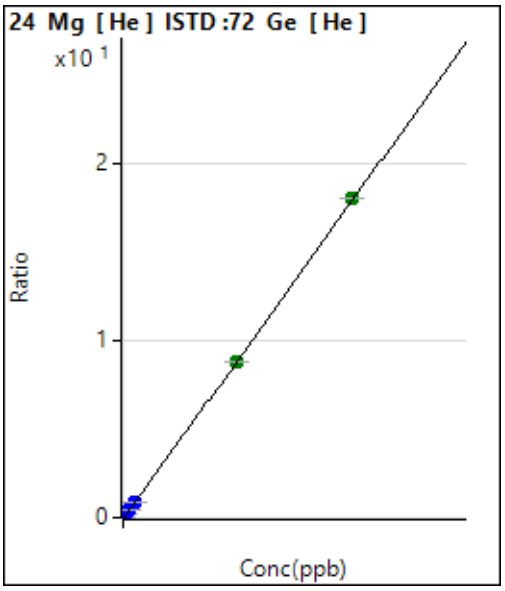


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	115515.39	0.2295	P	0.7	
2	☐	200.000	183.220	261828.98	0.5270	P	0.6	-8.4
3	☐	500.000	458.533	487322.20	0.9741	P	0.8	-8.3
4	☐	1000.000	1013.617	936687.02	1.8754	A	1.3	1.4
5	☐	10000.00	9833.702	8068826.13	16.1970	A	1.3	-1.7
6	☐	20000.00	20083.67	15984002.6	32.8403	A	0.4	0.4

y = 0.0016 * x + 0.2295
R = 1.0000
DL = 3.144 ppb
BEC = 141.4 ppb

Weight: <None>
Min Conc: <None>

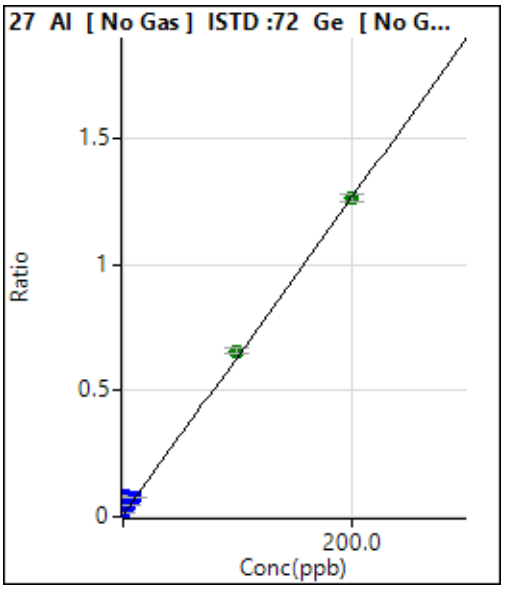
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	323.34	0.0006	P	3.8	
2	☐	200.000	195.341	87366.09	0.1759	P	1.2	-2.3
3	☐	500.000	474.154	213100.15	0.4260	P	0.4	-5.2
4	☐	1000.000	949.396	425665.05	0.8522	P	1.3	-5.1
5	☐	10000.00	9826.661	4391393.89	8.8151	A	0.6	-1.7
6	☐	20000.00	20089.89	8771039.87	18.0211	A	0.5	0.4

y = 8.9699E-004 * x + 6.4257E-004
R = 0.9999
DL = 0.08151 ppb
BEC = 0.7164 ppb

Weight: <None>
Min Conc: <None>

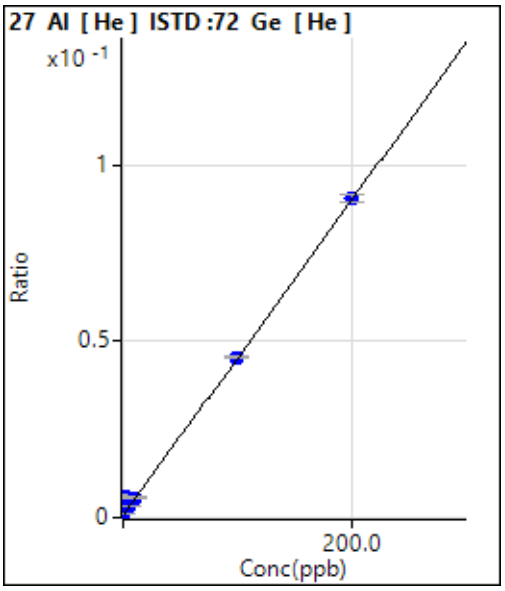


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	25821.48	0.0136	P	1.1	
2	☐	2.000	10.812	149992.86	0.0817	P	0.5	440.6
3	☐	5.000	4.956	84056.60	0.0449	P	1.8	-0.9
4	☐	10.000	9.574	139336.01	0.0739	P	0.9	-4.3
5	☐	100.000	102.236	1228020.32	0.6577	A	4.0	2.2
6	☐	200.000	198.816	2291512.88	1.2662	A	2.8	-0.6

y = 0.0063 * x + 0.0136
R = 0.9990
DL = 0.07459 ppb
BEC = 2.164 ppb

Weight: <None>
Min Conc: <None>

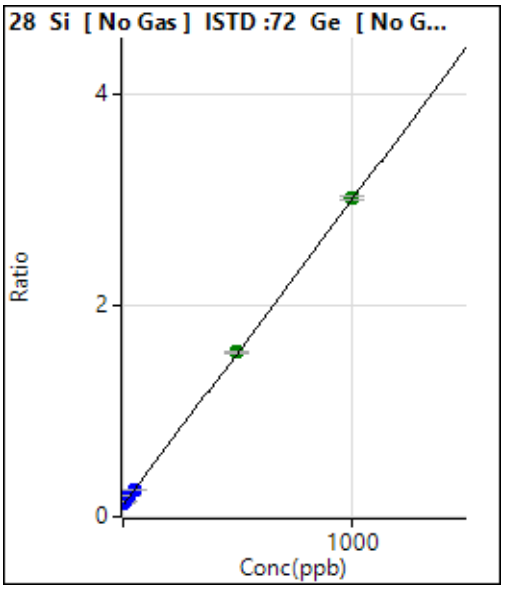
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	556.69	0.0011	P	12.1	
2	☐	2.000	11.488	3097.07	0.0062	P	6.0	474.4
3	☐	5.000	5.071	1686.80	0.0034	P	8.5	1.4
4	☐	10.000	10.286	2847.02	0.0057	P	5.2	2.9
5	☐	100.000	99.380	22651.95	0.0455	P	2.2	-0.6
6	☐	200.000	200.199	44039.95	0.0905	P	1.9	0.1

y = 4.4644E-004 * x + 0.0011
R = 0.9989
DL = 0.9018 ppb
BEC = 2.478 ppb

Weight: <None>
Min Conc: <None>

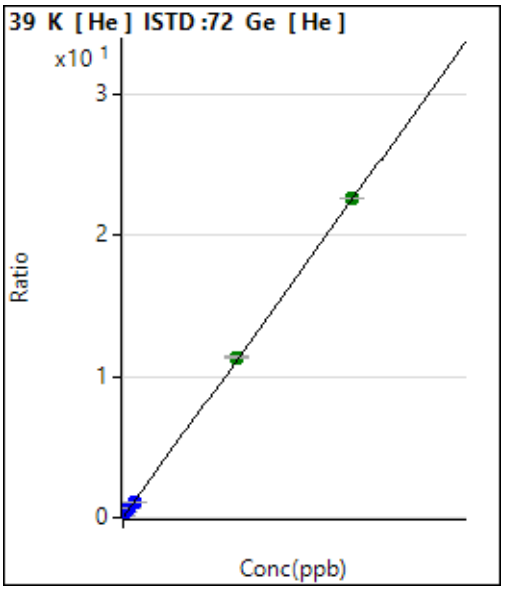


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	240032.29	0.1267	P	2.4	
2	☐	10.000	8.779	279066.13	0.1521	P	0.5	-12.2
3	☐	25.000	23.100	362514.89	0.1935	P	2.2	-7.6
4	☐	50.000	45.940	488898.33	0.2595	P	0.9	-8.1
5	☐	500.000	495.817	2912243.91	1.5595	A	1.6	-0.8
6	☐	1000.000	1002.354	5472169.92	3.0232	A	1.6	0.2

y = 0.0029 * x + 0.1267
R = 1.0000
DL = 3.094 ppb
BEC = 43.85 ppb

Weight: <None>
Min Conc: <None>

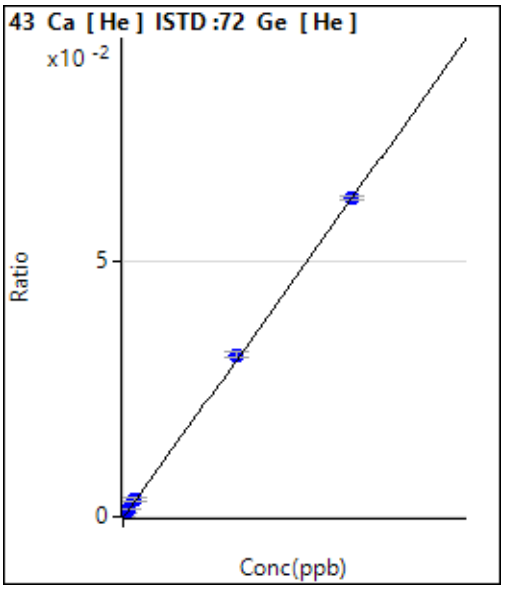
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	68034.03	0.1352	P	1.3	
2	☐	200.000	186.478	171089.75	0.3444	P	1.2	-6.8
3	☐	500.000	446.799	318404.99	0.6365	P	1.2	-10.6
4	☐	1000.000	892.216	567495.37	1.1362	P	0.7	-10.8
5	☐	10000.00	9986.499	5648741.79	11.3392	A	1.0	-0.1
6	☐	20000.00	20013.60	10994306.9	22.5887	A	0.2	0.1

y = 0.0011 * x + 0.1352
R = 1.0000
DL = 4.558 ppb
BEC = 120.5 ppb

Weight: <None>
Min Conc: <None>

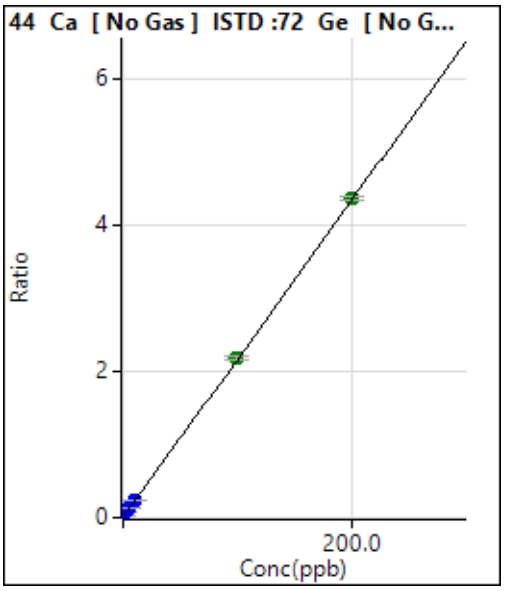


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0001	P	142.0	
2	☐	200.000	261.927	433.35	0.0009	P	6.3	31.0
3	☐	500.000	438.813	713.36	0.0014	P	2.9	-12.2
4	☐	1000.000	1061.621	1686.80	0.0034	P	13.1	6.2
5	☐	10000.00	10118.76	15799.35	0.0317	P	2.8	1.2
6	☐	20000.00	19938.44	30387.20	0.0624	P	1.2	-0.3

y = 3.1287E-006 * x + 5.2985E-005
R = 1.0000
DL = 72.17 ppb
BEC = 16.94 ppb

Weight: <None>
Min Conc: <None>

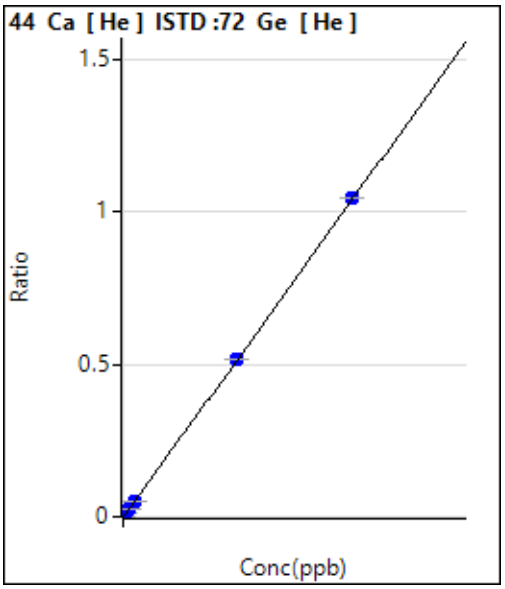
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46960.25	0.0248	P	1.1	
2	☐	2.000	2.243	134589.69	0.0733	P	1.3	12.2
3	☐	5.000	4.680	236302.31	0.1261	P	0.6	-6.4
4	☐	10.000	9.281	425277.44	0.2257	P	0.3	-7.2
5	☐	100.000	99.517	4068945.88	2.1790	A	2.3	-0.5
6	☐	200.000	200.283	7892641.13	4.3602	A	1.0	0.1

y = 0.0216 * x + 0.0248
R = 1.0000
DL = 0.03804 ppb
BEC = 1.145 ppb

Weight: <None>
Min Conc: <None>

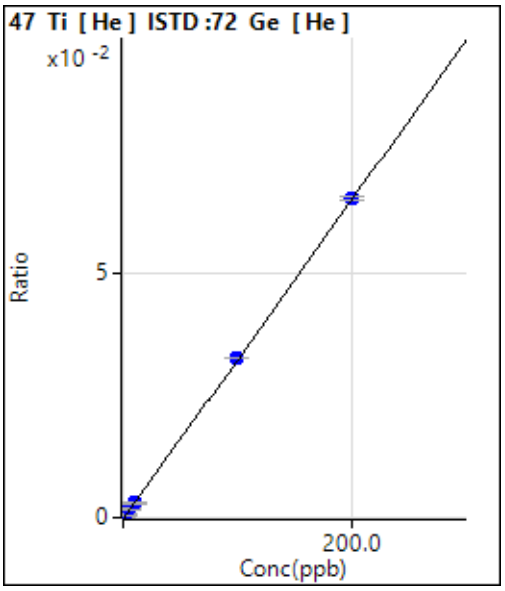


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	910.05	0.0018	P	2.3	
2	☐	200.000	226.482	6748.45	0.0136	P	1.5	13.2
3	☐	500.000	480.592	13403.40	0.0268	P	2.1	-3.9
4	☐	1000.000	969.199	26068.40	0.0522	P	2.3	-3.1
5	☐	10000.00	9901.321	257339.10	0.5166	P	0.8	-1.0
6	☐	20000.00	20051.10	508249.46	1.0442	P	0.4	0.3

y = 5.1989E-005 * x + 0.0018
R = 1.0000
DL = 2.448 ppb
BEC = 34.79 ppb

Weight: <None>
Min Conc: <None>

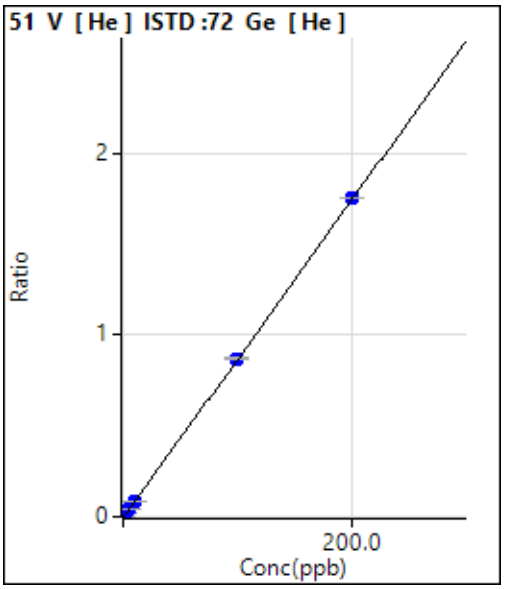
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	1.707	283.34	0.0006	P	14.8	-14.7
3	☐	5.000	5.386	886.71	0.0018	P	8.8	7.7
4	☐	10.000	9.257	1516.78	0.0030	P	13.3	-7.4
5	☐	100.000	99.928	16259.85	0.0326	P	1.0	-0.1
6	☐	200.000	200.067	31797.07	0.0653	P	0.9	0.0

y = 3.2648E-004 * x + 1.3232E-005
R = 1.0000
DL = 0.1053 ppb
BEC = 0.04053 ppb

Weight: <None>
Min Conc: <None>

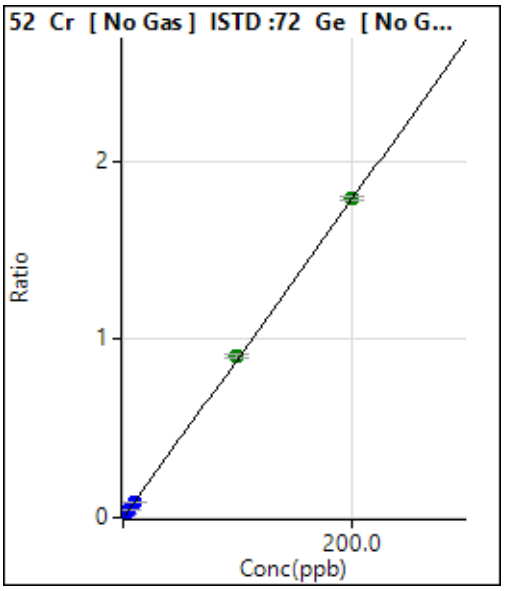


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	761.14	0.0015	P	6.2	
2	☐	2.000	1.920	9084.16	0.0183	P	0.6	-4.0
3	☐	5.000	4.712	21346.65	0.0427	P	2.5	-5.8
4	☐	10.000	9.564	42483.42	0.0851	P	1.7	-4.4
5	☐	100.000	99.263	432713.14	0.8686	P	0.7	-0.7
6	☐	200.000	200.398	852746.39	1.7521	P	0.4	0.2

y = 0.0087 * x + 0.0015
R = 1.0000
DL = 0.0324 ppb
BEC = 0.1731 ppb

Weight: <None>
Min Conc: <None>

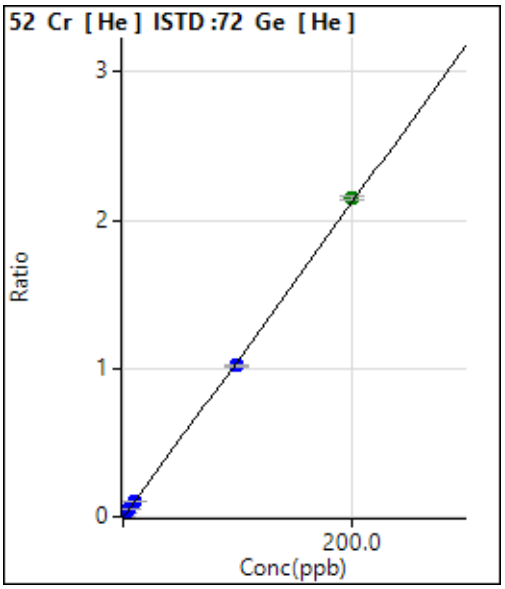
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12385.76	0.0065	P	1.7	
2	☐	2.000	1.699	39851.66	0.0217	P	2.1	-15.0
3	☐	5.000	4.583	88974.70	0.0475	P	3.3	-8.3
4	☐	10.000	9.087	165288.70	0.0877	P	0.7	-9.1
5	☐	100.000	100.562	1689945.86	0.9050	A	1.9	0.6
6	☐	200.000	199.778	3242681.41	1.7914	A	1.1	-0.1

y = 0.0089 * x + 0.0065
R = 1.0000
DL = 0.03633 ppb
BEC = 0.7318 ppb

Weight: <None>
Min Conc: <None>

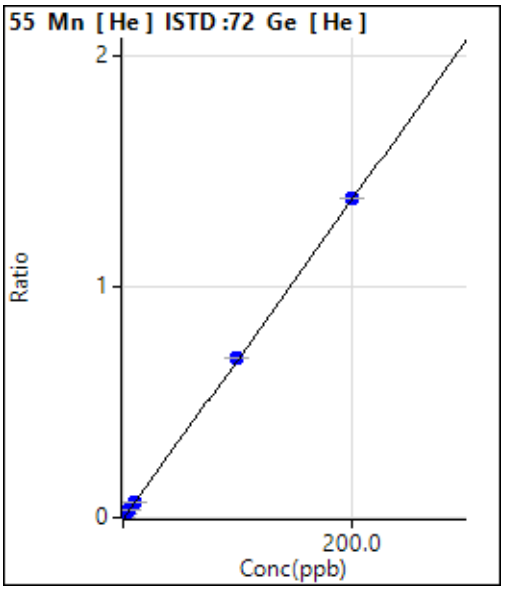


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1493.45	0.0030	P	5.4	
2	☐	2.000	1.727	10587.60	0.0213	P	4.0	-13.6
3	☐	5.000	4.625	26061.81	0.0521	P	2.1	-7.5
4	☐	10.000	9.130	49928.00	0.1000	P	1.2	-8.7
5	☐	100.000	95.750	508204.11	1.0202	P	1.1	-4.2
6	☐	200.000	202.180	1046800.64	2.1508	A	1.2	1.1

y = 0.0106 * x + 0.0030
R = 0.9997
DL = 0.04485 ppb
BEC = 0.2793 ppb

Weight: <None>
Min Conc: <None>

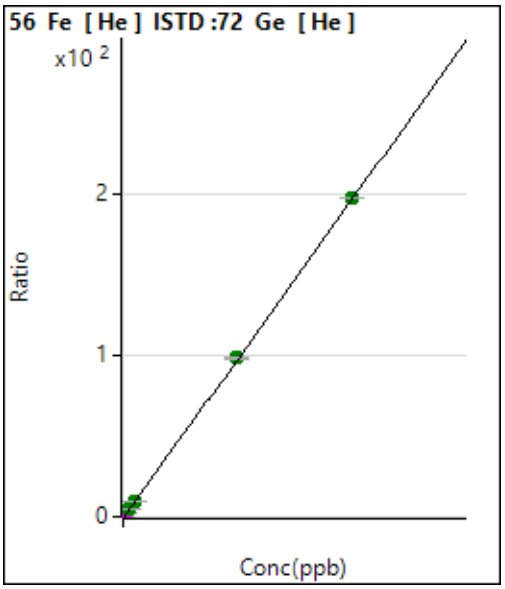
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	266.68	0.0005	P	12.9	
2	☐	2.000	1.970	7031.92	0.0142	P	4.0	-1.5
3	☐	5.000	4.945	17371.32	0.0347	P	1.2	-1.1
4	☐	10.000	9.727	33855.63	0.0678	P	2.6	-2.7
5	☐	100.000	99.620	343433.13	0.6894	P	0.2	-0.4
6	☐	200.000	200.205	674048.40	1.3849	P	0.4	0.1

y = 0.0069 * x + 5.2981E-004
R = 1.0000
DL = 0.02972 ppb
BEC = 0.07662 ppb

Weight: <None>
Min Conc: <None>

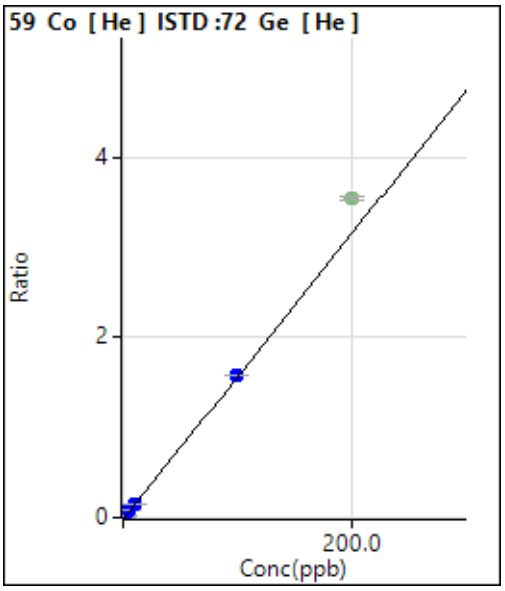


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9046.47	0.0180	P	2.0	
2	☐	200.000	195.717	968369.78	1.9493	M	2.5	-2.1
3	☐	500.000	511.273	2533056.47	5.0633	A	0.8	2.3
4	☐	1000.000	991.965	4898122.63	9.8068	A	1.1	-0.8
5	☐	10000.00	9955.601	48949927.6	98.2607	A	0.7	-0.4
6	☐	20000.00	20022.36	96175078.5	197.600	A	0.4	0.1

y = 0.0099 * x + 0.0180
R = 1.0000
DL = 0.1118 ppb
BEC = 1.822 ppb

Weight: <None>
Min Conc: <None>

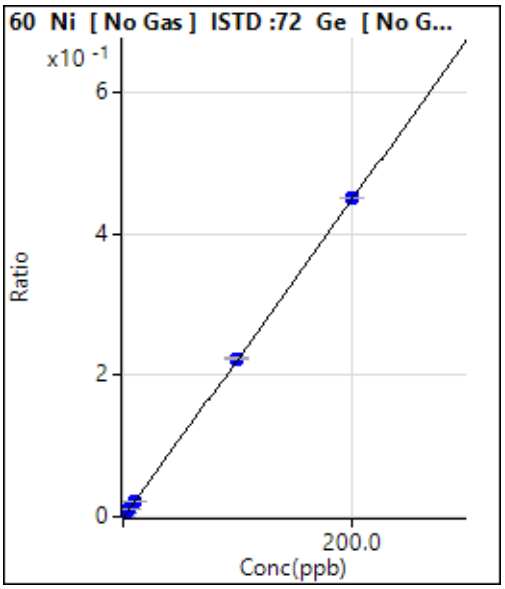
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	76.67	0.0002	P	37.7	
2	☐	2.000	1.990	15752.67	0.0317	P	0.4	-0.5
3	☐	5.000	4.932	39206.59	0.0784	P	2.0	-1.4
4	☐	10.000	9.778	77523.17	0.1552	P	3.2	-2.2
5	☐	100.000	100.026	790371.19	1.5865	P	0.2	0.0
6	☑	200.000		1727658.72	3.5495	A	1.4	

y = 0.0159 * x + 1.5236E-004
R = 1.0000
DL = 0.01086 ppb
BEC = 0.009606 ppb

Weight: <None>
Min Conc: <None>

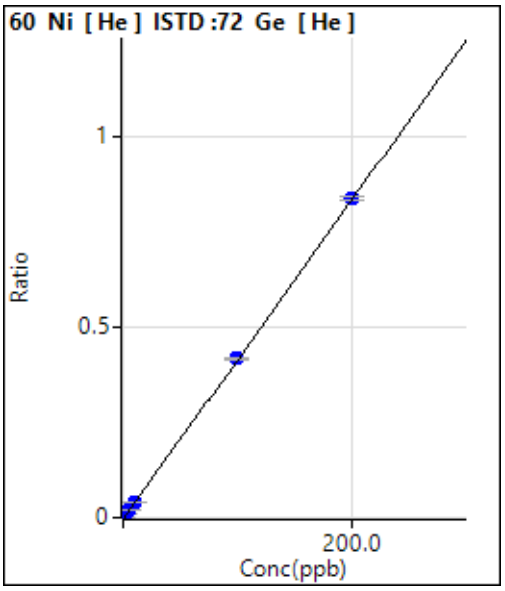


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	453.35	0.0002	P	6.2	
2	☐	2.000	1.922	8379.43	0.0046	P	3.3	-3.9
3	☐	5.000	4.930	21243.45	0.0113	P	0.9	-1.4
4	☐	10.000	9.559	40991.86	0.0218	P	1.2	-4.4
5	☐	100.000	99.392	418263.25	0.2240	P	0.3	-0.6
6	☐	200.000	200.329	816667.62	0.4512	P	0.6	0.2

y = 0.0023 * x + 2.3926E-004
R = 1.0000
DL = 0.01981 ppb
BEC = 0.1063 ppb

Weight: <None>
Min Conc: <None>

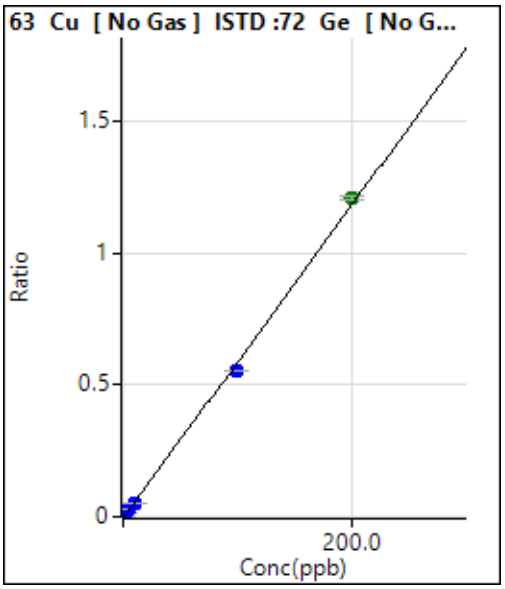
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	210.00	0.0004	P	34.6	
2	☐	2.000	1.977	4314.10	0.0087	P	9.4	-1.1
3	☐	5.000	4.922	10504.25	0.0210	P	5.4	-1.6
4	☐	10.000	9.830	20742.69	0.0415	P	0.8	-1.7
5	☐	100.000	99.656	207833.74	0.4172	P	0.8	-0.3
6	☐	200.000	200.182	407664.64	0.8376	P	0.9	0.1

y = 0.0042 * x + 4.1753E-004
R = 1.0000
DL = 0.1036 ppb
BEC = 0.09984 ppb

Weight: <None>
Min Conc: <None>

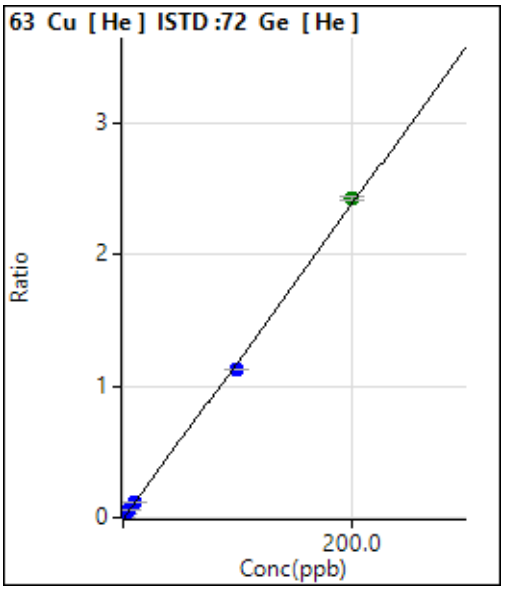


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1510.11	0.0008	P	6.1	
2	☐	2.000	1.860	21707.67	0.0118	P	1.4	-7.0
3	☐	5.000	4.550	52073.19	0.0278	P	1.7	-9.0
4	☐	10.000	8.934	101355.78	0.0538	P	1.2	-10.7
5	☐	100.000	92.908	1030767.80	0.5519	P	0.6	-7.1
6	☐	200.000	203.612	2187737.31	1.2087	A	1.2	1.8

y = 0.0059 * x + 7.9708E-004
R = 0.9991
DL = 0.02446 ppb
BEC = 0.1344 ppb

Weight: <None>
Min Conc: <None>

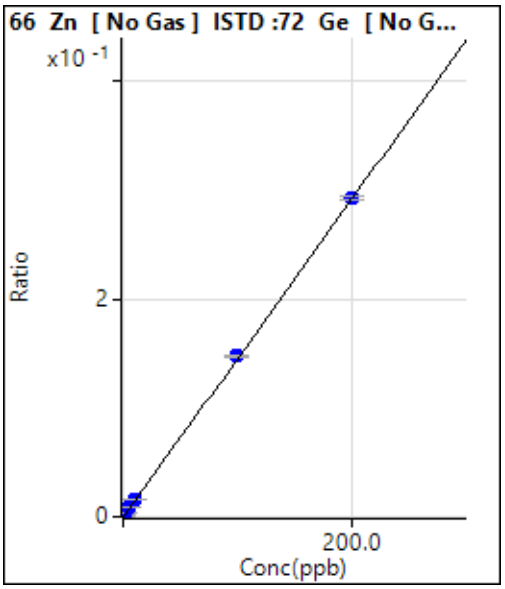
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	766.70	0.0015	P	21.4	
2	☐	2.000	1.884	11938.78	0.0240	P	3.2	-5.8
3	☐	5.000	4.668	28657.22	0.0573	P	1.8	-6.6
4	☐	10.000	9.103	55074.83	0.1103	P	0.2	-9.0
5	☐	100.000	94.195	561288.60	1.1267	P	0.7	-5.8
6	☐	200.000	202.957	1180757.59	2.4259	A	1.1	1.5

y = 0.0119 * x + 0.0015
R = 0.9994
DL = 0.08206 ppb
BEC = 0.1275 ppb

Weight: <None>
Min Conc: <None>

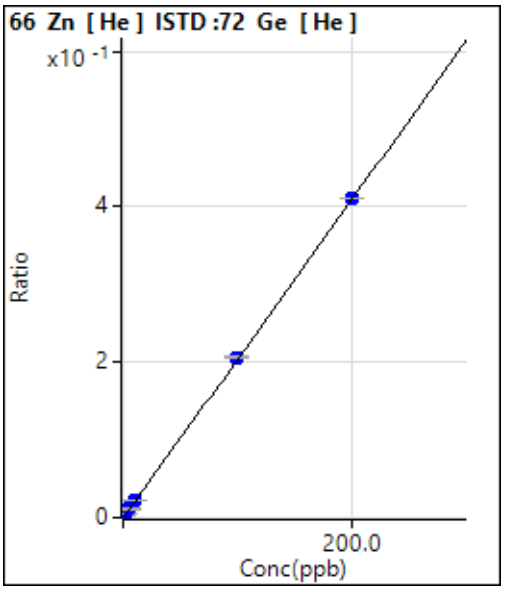


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1666.80	0.0009	P	4.8	
2	☐	2.000	1.636	6001.43	0.0033	P	3.2	-18.2
3	☐	5.000	5.116	15662.60	0.0084	P	1.0	2.3
4	☐	10.000	9.896	28911.16	0.0153	P	1.1	-1.0
5	☐	100.000	100.249	275275.18	0.1474	P	1.1	0.2
6	☐	200.000	199.882	530425.76	0.2930	P	1.2	-0.1

y = 0.0015 * x + 8.7965E-004
R = 1.0000
DL = 0.08686 ppb
BEC = 0.6018 ppb

Weight: <None>
Min Conc: <None>

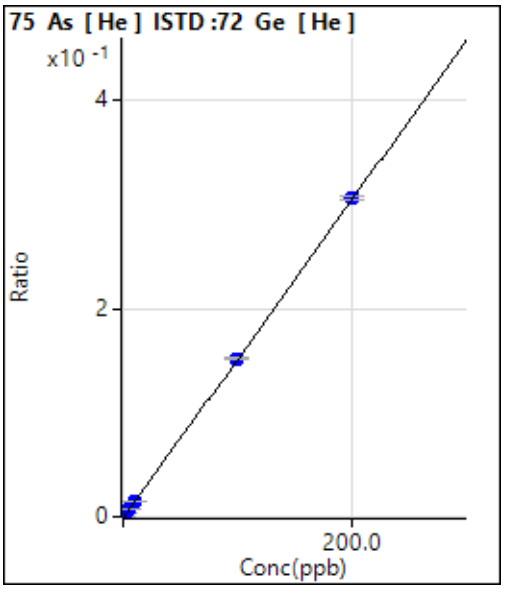
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	723.37	0.0014	P	10.5	
2	☐	2.000	1.699	2443.60	0.0049	P	3.5	-15.0
3	☐	5.000	4.811	5647.94	0.0113	P	6.1	-3.8
4	☐	10.000	10.216	11171.42	0.0224	P	2.1	2.2
5	☐	100.000	100.027	102811.58	0.2064	P	1.7	0.0
6	☐	200.000	199.984	200108.28	0.4111	P	0.1	0.0

y = 0.0020 * x + 0.0014
R = 1.0000
DL = 0.2207 ppb
BEC = 0.7015 ppb

Weight: <None>
Min Conc: <None>

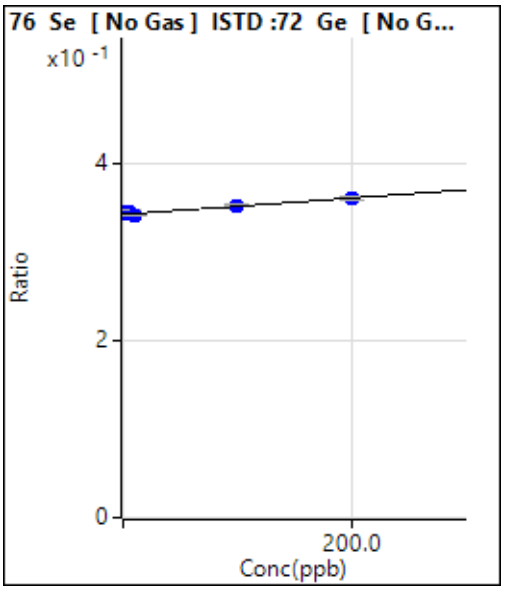


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	54.45	0.0001	P	19.7	
2	☐	2.000	1.920	1513.43	0.0030	P	1.6	-4.0
3	☐	5.000	4.810	3736.09	0.0075	P	0.4	-3.8
4	☐	10.000	9.622	7407.62	0.0148	P	0.5	-3.8
5	☐	100.000	99.325	75761.06	0.1521	P	1.2	-0.7
6	☐	200.000	200.362	149260.53	0.3067	P	0.9	0.2

y = 0.0015 * x + 1.0820E-004
R = 1.0000
DL = 0.04187 ppb
BEC = 0.07072 ppb

Weight: <None>
Min Conc: <None>

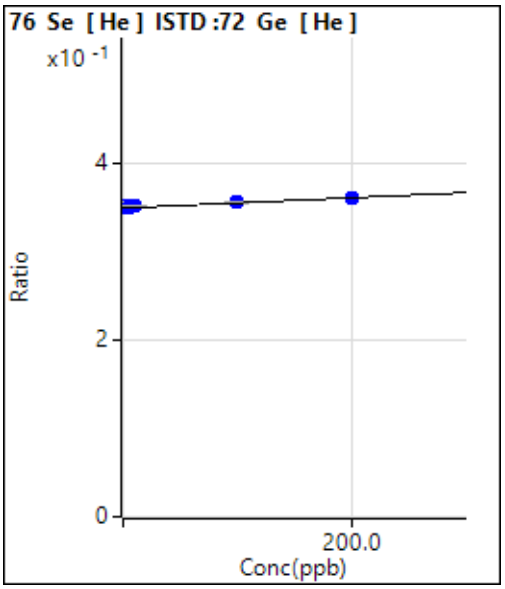
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	648911.77	0.3425	P	0.2	
2	☐	2.000	30.762	633826.06	0.3454	P	0.2	1438.1
3	☐	5.000	26.116	646454.87	0.3450	P	1.3	422.3
4	☐	10.000	-12.084	643311.00	0.3414	P	0.4	-220.8
5	☐	100.000	110.353	658979.92	0.3529	P	0.9	10.4
6	☐	200.000	195.112	653068.64	0.3608	P	1.0	-2.4

y = 9.3538E-005 * x + 0.3425
R = 0.9741
DL = 23.83 ppb
BEC = 3662 ppb

Weight: <None>
Min Conc: <None>

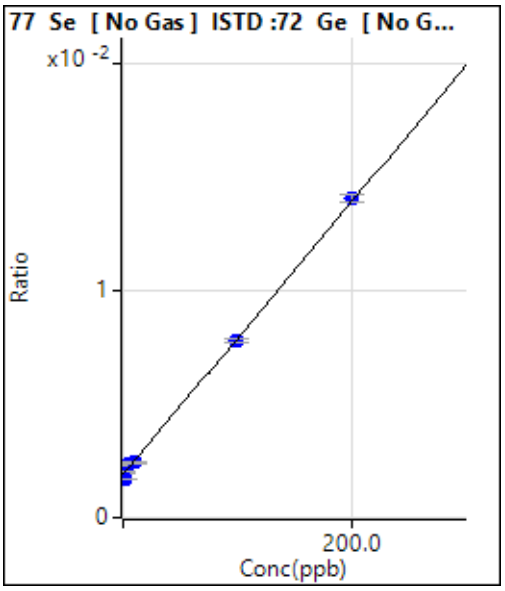


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	176246.73	0.3502	P	0.7	
2	☐	2.000	61.681	175793.67	0.3539	P	1.4	2984.0
3	☐	5.000	27.569	176027.38	0.3519	P	0.8	451.4
4	☐	10.000	45.979	176300.79	0.3529	P	0.6	359.8
5	☐	100.000	104.587	177560.42	0.3564	P	0.4	4.6
6	☐	200.000	194.746	176071.57	0.3618	P	0.4	-2.6

y = 5.9173E-005 * x + 0.3502
R = 0.9585
DL = 128.8 ppb
BEC = 5919 ppb

Weight: <None>
Min Conc: <None>

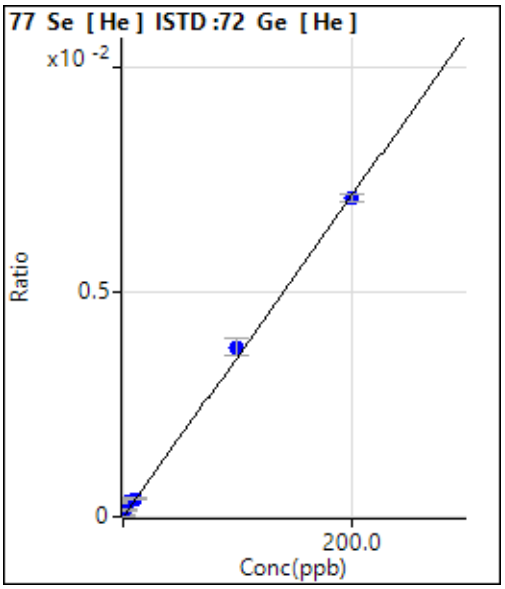
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3747.25	0.0020	P	6.1	
2	☐	2.000	-4.695	3113.75	0.0017	P	2.2	-334.8
3	☐	5.000	6.376	4420.81	0.0024	P	5.6	27.5
4	☐	10.000	7.455	4567.54	0.0024	P	5.8	-25.4
5	☐	100.000	97.370	14588.14	0.0078	P	2.2	-2.6
6	☐	200.000	201.475	25420.90	0.0140	P	2.5	0.7

y = 5.9897E-005 * x + 0.0020
R = 0.9994
DL = 6.067 ppb
BEC = 33.02 ppb

Weight: <None>
Min Conc: <None>

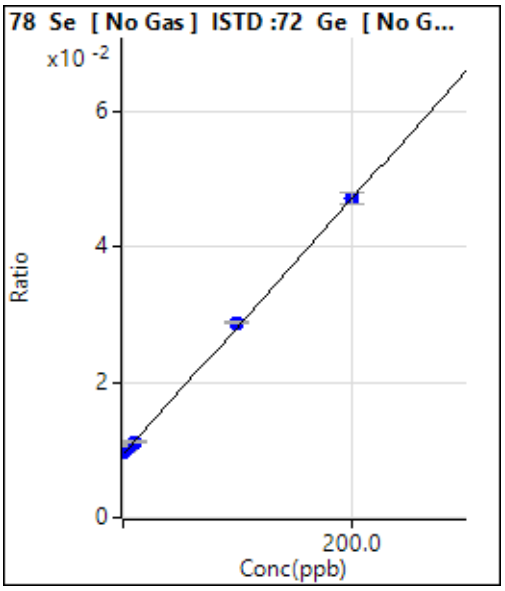


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	43.5	
2	☐	2.000	3.568	76.67	0.0002	P	20.1	78.4
3	☐	5.000	8.368	163.34	0.0003	P	21.0	67.4
4	☐	10.000	10.254	196.67	0.0004	P	6.6	2.5
5	☐	100.000	104.755	1883.49	0.0038	P	10.8	4.8
6	☐	200.000	197.510	3457.18	0.0071	P	2.1	-1.2

y = 3.5826E-005 * x + 2.6511E-005
R = 0.9996
DL = 0.9664 ppb
BEC = 0.74 ppb

Weight: <None>
Min Conc: <None>

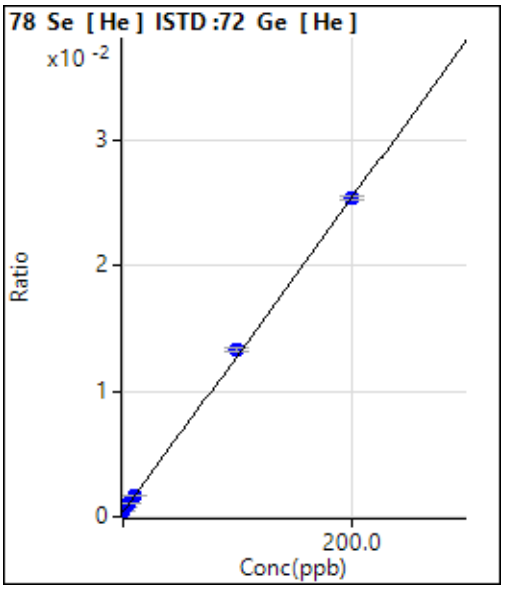
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18212.58	0.0096	P	1.7	
2	☐	2.000	1.495	18159.24	0.0099	P	0.7	-25.3
3	☐	5.000	5.097	19814.94	0.0106	P	2.2	1.9
4	☐	10.000	8.299	21063.43	0.0112	P	1.2	-17.0
5	☐	100.000	101.571	53713.83	0.0288	P	0.8	1.6
6	☐	200.000	199.302	85382.90	0.0472	P	3.5	-0.3

y = 1.8849E-004 * x + 0.0096
R = 0.9999
DL = 2.595 ppb
BEC = 51.01 ppb

Weight: <None>
Min Conc: <None>

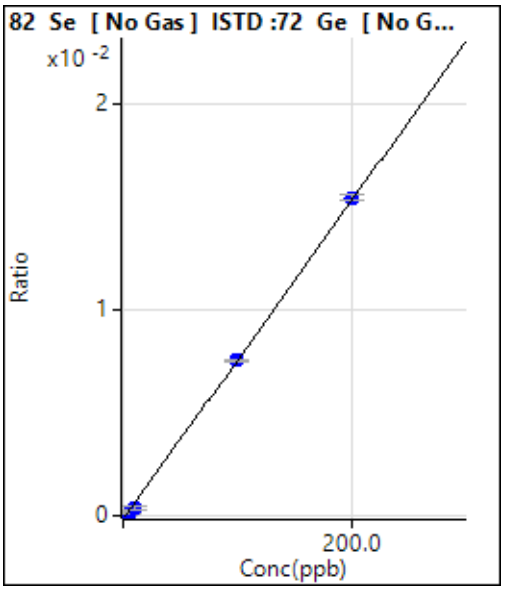


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	252.67	0.0005	P	11.8	
2	☐	2.000	1.803	361.34	0.0007	P	4.0	-9.9
3	☐	5.000	4.632	540.68	0.0011	P	5.2	-7.4
4	☐	10.000	9.440	840.03	0.0017	P	3.4	-5.6
5	☐	100.000	102.106	6606.97	0.0133	P	1.9	2.1
6	☐	200.000	198.986	12348.33	0.0254	P	1.5	-0.5

y = 1.2497E-004 * x + 5.0199E-004
R = 0.9999
DL = 1.427 ppb
BEC = 4.017 ppb

Weight: <None>
Min Conc: <None>

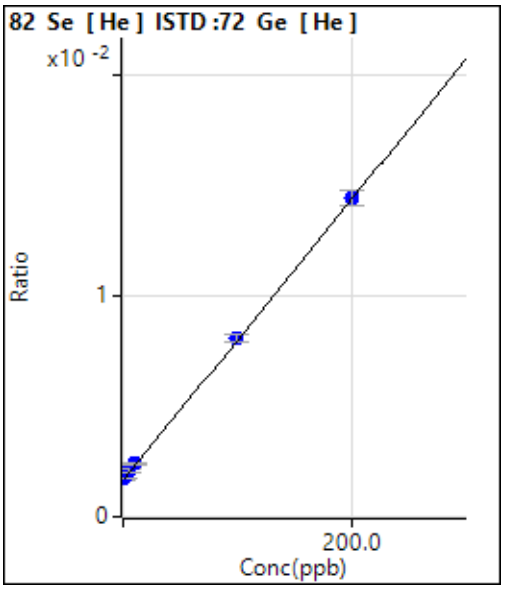
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-212.33	-0.0001	P	-275.	
2	☐	2.000	0.517	-129.70	-0.0001	P	-213.	-74.1
3	☐	5.000	2.993	226.83	0.0001	P	18.4	-40.1
4	☐	10.000	6.272	705.77	0.0004	P	35.9	-37.3
5	☐	100.000	98.734	14071.71	0.0075	P	1.7	-1.3
6	☐	200.000	200.884	27955.16	0.0154	P	2.1	0.4

y = 7.7435E-005 * x - 1.1069E-004
R = 0.9999
DL = 11.81 ppb
BEC = -1.429 ppb

Weight: <None>
Min Conc: <None>

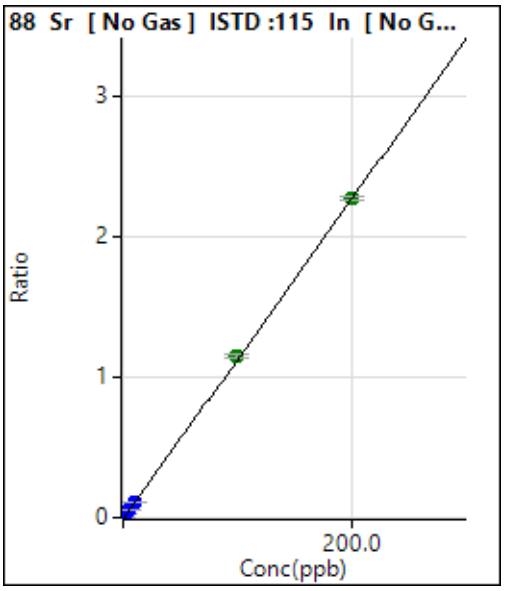


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	866.71	0.0017	P	3.8	
2	☐	2.000	1.953	916.72	0.0018	P	12.0	-2.3
3	☐	5.000	5.714	1043.39	0.0021	P	11.6	14.3
4	☐	10.000	10.513	1193.41	0.0024	P	5.8	5.1
5	☐	100.000	100.006	4017.35	0.0081	P	5.2	0.0
6	☐	200.000	199.954	7011.98	0.0144	P	4.9	0.0

y = 6.3426E-005 * x + 0.0017
R = 1.0000
DL = 3.068 ppb
BEC = 27.16 ppb

Weight: <None>
Min Conc: <None>

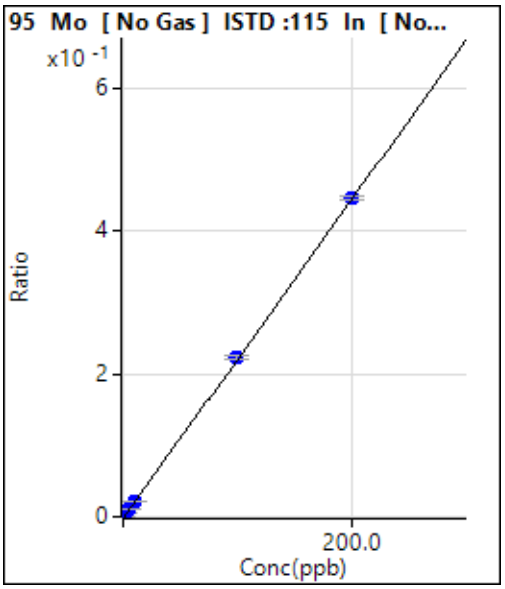
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1063.40	0.0005	P	11.8	
2	☐	2.000	2.051	49116.79	0.0239	P	0.4	2.6
3	☐	5.000	4.658	111720.05	0.0536	P	1.2	-6.8
4	☐	10.000	9.294	220710.69	0.1064	P	0.3	-7.1
5	☐	100.000	101.125	2394664.76	1.1524	A	1.8	1.1
6	☐	200.000	199.481	4616024.51	2.2727	A	1.3	-0.3

y = 0.0114 * x + 5.0731E-004
R = 1.0000
DL = 0.01581 ppb
BEC = 0.04454 ppb

Weight: <None>
Min Conc: <None>

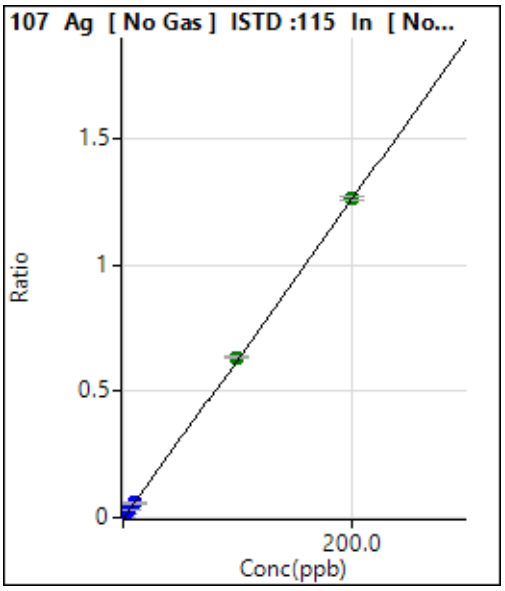


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	107.8	
2	☐	2.000	1.865	8586.24	0.0042	P	4.3	-6.8
3	☐	5.000	4.756	22168.68	0.0106	P	0.6	-4.9
4	☐	10.000	9.630	44628.31	0.0215	P	2.7	-3.7
5	☐	100.000	99.923	463556.73	0.2231	P	2.2	-0.1
6	☐	200.000	200.064	907191.99	0.4467	P	1.1	0.0

y = 0.0022 * x + 1.1178E-005
R = 1.0000
DL = 0.01619 ppb
BEC = 0.005007 ppb

Weight: <None>
Min Conc: <None>

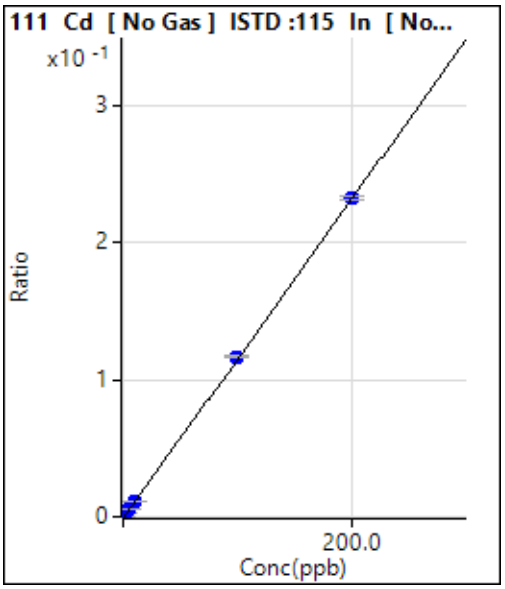
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	573.35	0.0003	P	10.6	
2	☐	2.000	1.828	24396.17	0.0119	P	0.4	-8.6
3	☐	5.000	4.539	60535.16	0.0290	P	1.5	-9.2
4	☐	10.000	9.056	119601.01	0.0576	P	2.2	-9.4
5	☐	100.000	100.407	1322337.79	0.6364	A	2.0	0.4
6	☐	200.000	199.857	2571998.19	1.2664	A	1.5	-0.1

y = 0.0063 * x + 2.7373E-004
R = 1.0000
DL = 0.01369 ppb
BEC = 0.04321 ppb

Weight: <None>
Min Conc: <None>

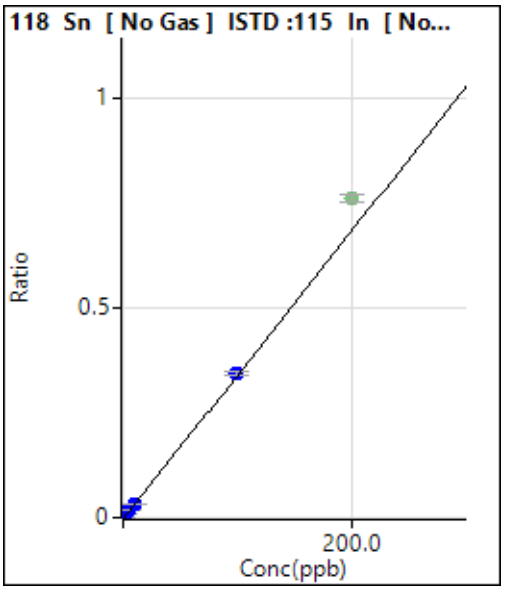


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	2.008	4804.31	0.0023	P	6.3	0.4
3	☐	5.000	4.863	11795.49	0.0057	P	1.8	-2.7
4	☐	10.000	9.824	23704.88	0.0114	P	1.3	-1.8
5	☐	100.000	100.469	242769.36	0.1168	P	2.0	0.5
6	☐	200.000	199.777	471787.86	0.2323	P	1.4	-0.1

y = 0.0012 * x + 1.5787E-006
R = 1.0000
DL = 0.007055 ppb
BEC = 0.001358 ppb

Weight: <None>
Min Conc: <None>

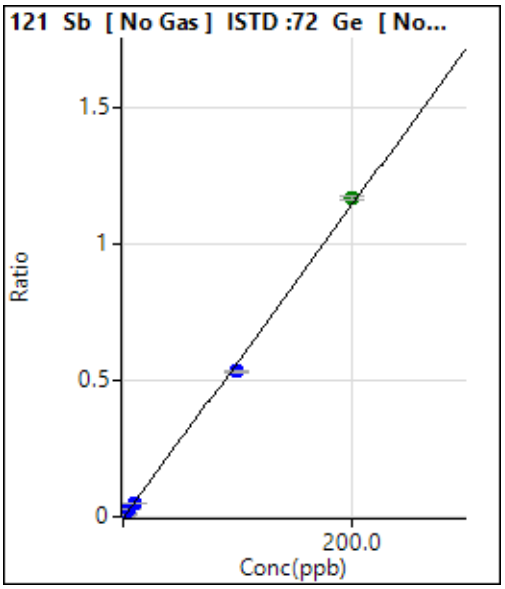
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1223.41	0.0006	P	9.2	
2	☐	2.000	2.000	15349.27	0.0075	P	1.6	0.0
3	☐	5.000	4.762	35358.18	0.0170	P	2.1	-4.8
4	☐	10.000	9.504	69010.76	0.0333	P	1.2	-5.0
5	☐	100.000	100.062	716077.93	0.3446	P	1.9	0.1
6	☑	200.000		1548352.53	0.7624	A	1.9	

y = 0.0034 * x + 5.8372E-004
R = 1.0000
DL = 0.04692 ppb
BEC = 0.1698 ppb

Weight: <None>
Min Conc: <None>

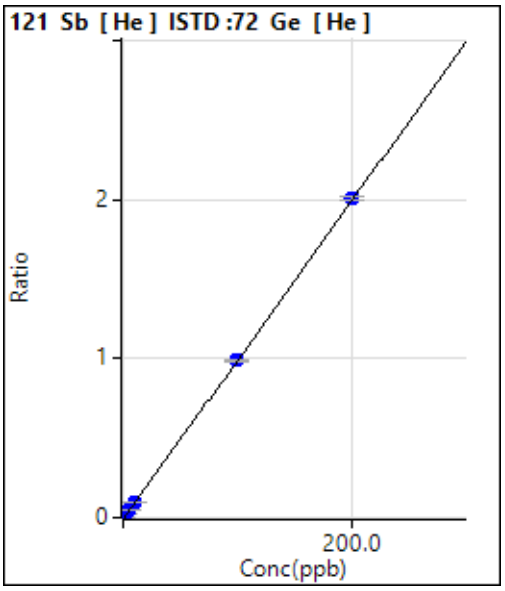


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	206.67	0.0001	P	30.8	
2	☐	2.000	1.853	19735.23	0.0108	P	5.0	-7.4
3	☐	5.000	4.507	48723.88	0.0260	P	2.8	-9.9
4	☐	10.000	9.000	97651.78	0.0518	P	0.9	-10.0
5	☐	100.000	92.733	995335.40	0.5330	P	1.1	-7.3
6	☐	200.000	203.697	2118884.66	1.1706	A	0.9	1.8

y = 0.0057 * x + 1.0896E-004
R = 0.9991
DL = 0.01754 ppb
BEC = 0.01896 ppb

Weight: <None>
Min Conc: <None>

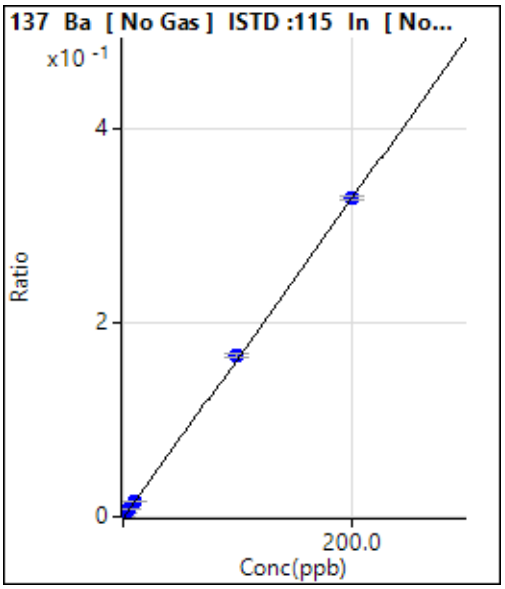
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	116.67	0.0002	P	47.3	
2	☐	2.000	1.993	10030.66	0.0202	P	4.0	-0.3
3	☐	5.000	4.966	24997.51	0.0500	P	0.8	-0.7
4	☐	10.000	9.551	47894.06	0.0959	P	0.5	-4.5
5	☐	100.000	98.656	492355.37	0.9883	P	0.5	-1.3
6	☐	200.000	200.695	978382.07	2.0102	P	0.9	0.3

y = 0.0100 * x + 2.3195E-004
R = 1.0000
DL = 0.03285 ppb
BEC = 0.02316 ppb

Weight: <None>
Min Conc: <None>

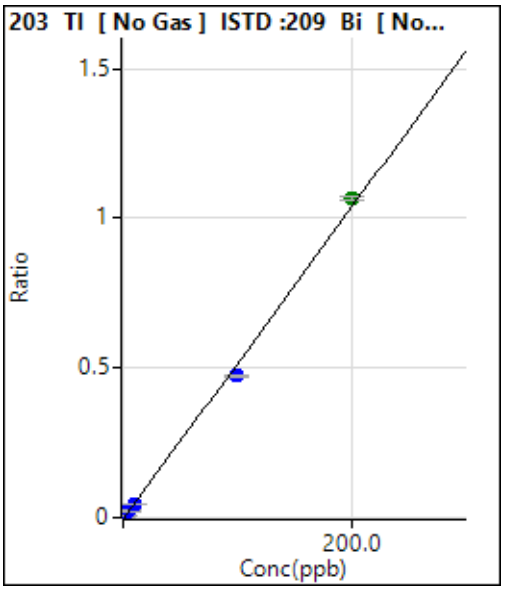


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	156.67	0.0001	P	13.8	
2	☐	2.000	2.053	7108.75	0.0035	P	5.0	2.6
3	☐	5.000	4.822	16720.95	0.0080	P	2.1	-3.6
4	☐	10.000	9.628	33059.07	0.0159	P	1.5	-3.7
5	☐	100.000	101.061	346083.24	0.1665	P	1.5	1.1
6	☐	200.000	199.492	667551.11	0.3287	P	1.6	-0.3

y = 0.0016 * x + 7.4815E-005
R = 1.0000
DL = 0.01882 ppb
BEC = 0.04542 ppb

Weight: <None>
Min Conc: <None>

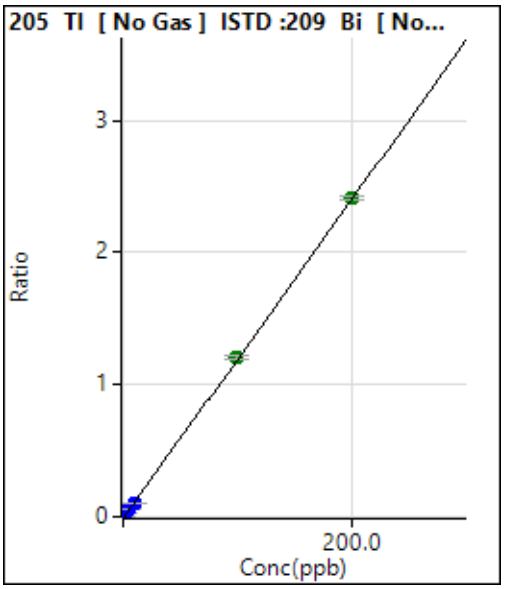
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	100.1	
2	☐	2.000	1.759	16467.82	0.0092	P	4.4	-12.0
3	☐	5.000	4.347	41435.68	0.0227	P	2.3	-13.1
4	☐	10.000	8.539	81672.47	0.0445	P	0.5	-14.6
5	☐	100.000	90.918	853228.79	0.4742	P	1.9	-9.1
6	☐	200.000	204.633	1873717.47	1.0673	A	1.3	2.3

y = 0.0052 * x + 1.0982E-005
R = 0.9986
DL = 0.006326 ppb
BEC = 0.002106 ppb

Weight: <None>
Min Conc: <None>

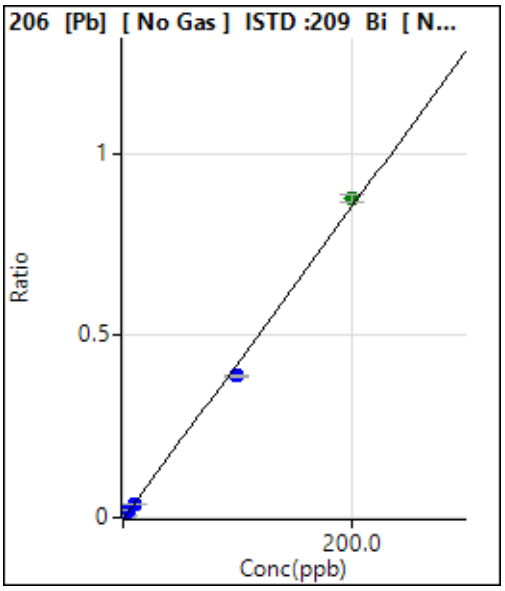


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43.33	0.0000	P	26.6	
2	☐	2.000	1.858	40191.85	0.0224	P	2.5	-7.1
3	☐	5.000	4.516	99504.66	0.0545	P	2.5	-9.7
4	☐	10.000	8.910	197014.94	0.1075	P	0.4	-10.9
5	☐	100.000	100.006	2169624.45	1.2059	A	2.1	0.0
6	☐	200.000	200.065	4235126.08	2.4123	A	1.0	0.0

y = 0.0121 * x + 2.3803E-005
R = 1.0000
DL = 0.001575 ppb
BEC = 0.001974 ppb

Weight: <None>
Min Conc: <None>

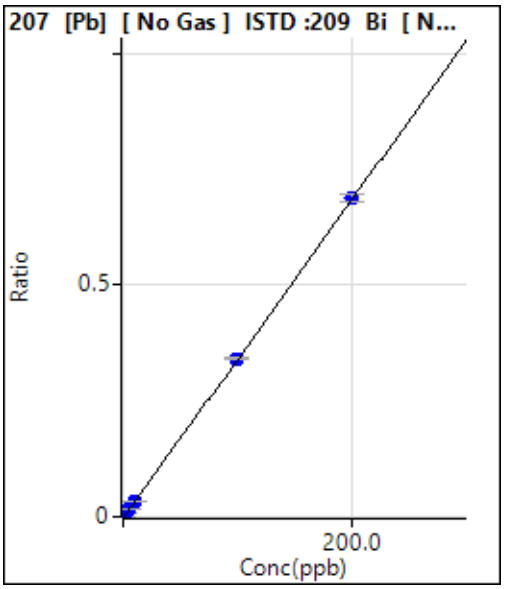
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	173.34	0.0001	P	18.7	
2	☐	2.000	1.793	13961.43	0.0078	P	2.8	-10.3
3	☐	5.000	4.448	35029.39	0.0192	P	2.8	-11.0
4	☐	10.000	8.706	68655.76	0.0374	P	0.9	-12.9
5	☐	100.000	90.964	702390.15	0.3903	P	1.3	-9.0
6	☐	200.000	204.598	1540981.12	0.8779	A	2.5	2.3

y = 0.0043 * x + 9.5241E-005
R = 0.9986
DL = 0.01243 ppb
BEC = 0.0222 ppb

Weight: <None>
Min Conc: <None>

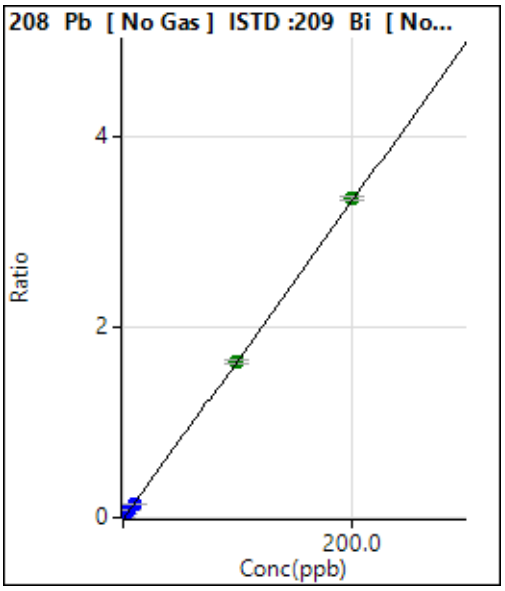


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	113.33	0.0001	P	5.2	
2	☐	2.000	1.864	11582.22	0.0065	P	1.4	-6.8
3	☐	5.000	4.788	30133.36	0.0165	P	1.3	-4.2
4	☐	10.000	9.609	60587.46	0.0330	P	1.6	-3.9
5	☐	100.000	99.445	614278.08	0.3414	P	2.1	-0.6
6	☐	200.000	200.304	1207124.54	0.6876	P	1.9	0.2

y = 0.0034 * x + 6.2264E-005
R = 1.0000
DL = 0.00282 ppb
BEC = 0.01814 ppb

Weight: <None>
Min Conc: <None>

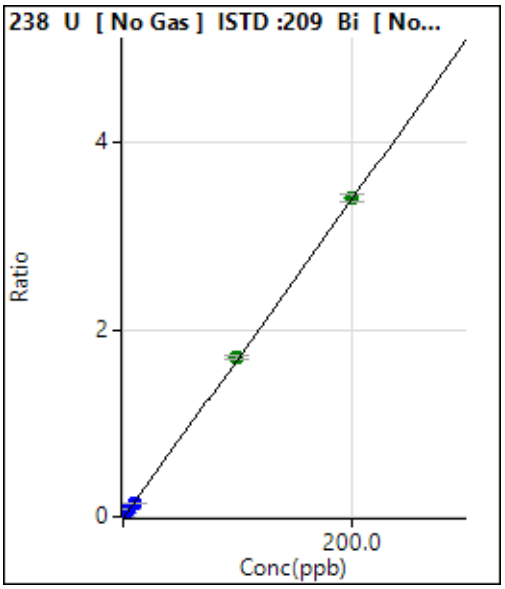
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	626.68	0.0003	P	9.6	
2	☐	2.000	1.829	55249.52	0.0308	P	0.8	-8.6
3	☐	5.000	4.528	138461.51	0.0758	P	1.0	-9.4
4	☐	10.000	8.955	274260.41	0.1496	P	0.6	-10.4
5	☐	100.000	98.029	2940299.03	1.6340	A	1.5	-2.0
6	☐	200.000	201.051	5882526.13	3.3509	A	1.6	0.5

y = 0.0167 * x + 3.4425E-004
R = 0.9999
DL = 0.005975 ppb
BEC = 0.02066 ppb

Weight: <None>
Min Conc: <None>

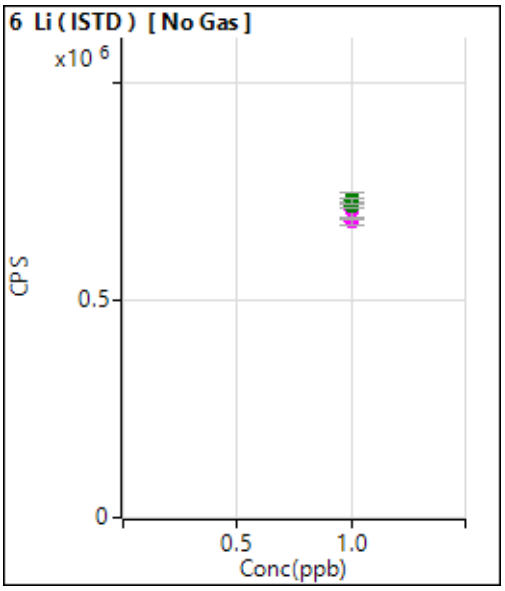


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	0.3	
2	☐	2.000	1.827	55877.73	0.0312	P	1.7	-8.7
3	☐	5.000	4.470	139319.05	0.0763	P	1.2	-10.6
4	☐	10.000	8.990	281255.10	0.1534	P	0.9	-10.1
5	☐	100.000	100.022	3070749.33	1.7067	A	1.8	0.0
6	☐	200.000	200.055	5992360.12	3.4135	A	1.8	0.0

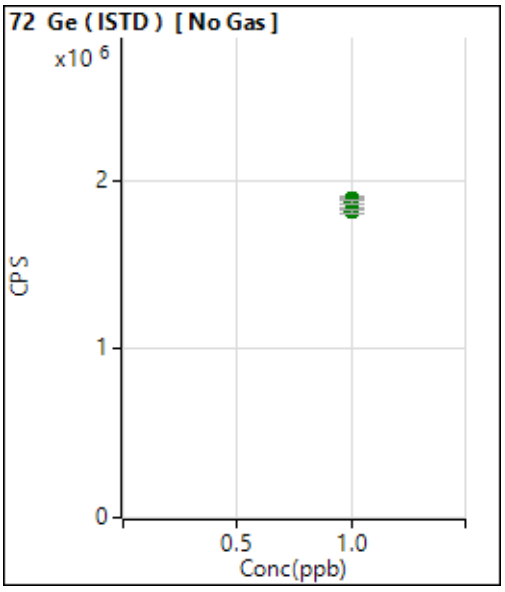
y = 0.0171 * x + 5.4938E-006
R = 1.0000
DL = 2.904E-06 ppb
BEC = 0.000322 ppb

Weight: <None>
Min Conc: <None>

Calibration for 027_ICV.d

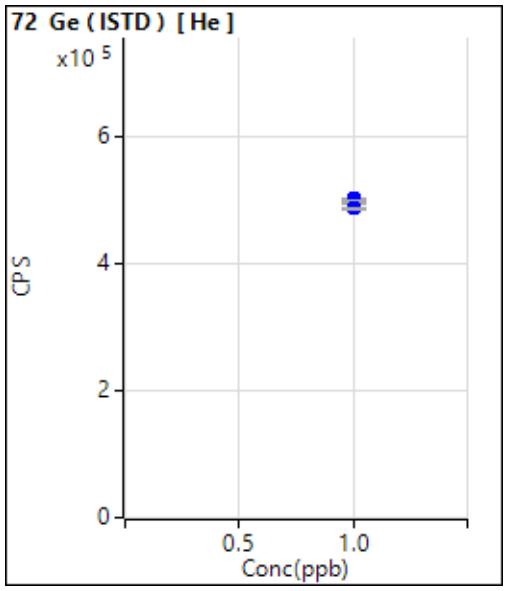


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		707162.97		M	4.5	
2	☐	1.000		734341.96		A	3.1	
3	☐	1.000		679921.55		M	2.7	
4	☐	1.000		705728.30		M	5.5	
5	☐	1.000		717957.42		A	1.2	
6	☐	1.000		727879.40		A	2.1	

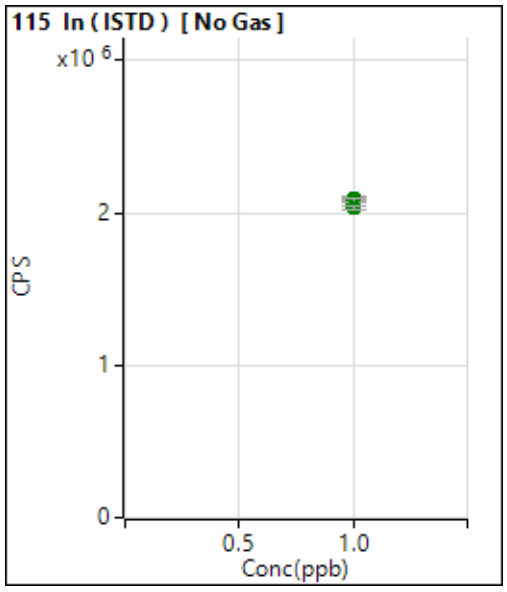


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1894389.81		A	0.8	
2	☐	1.000		1834946.07		A	0.6	
3	☐	1.000		1874036.12		A	1.1	
4	☐	1.000		1884282.00		A	0.6	
5	☐	1.000		1867616.48		A	1.1	
6	☐	1.000		1810243.62		A	1.3	

Calibration for 027_ICV.d

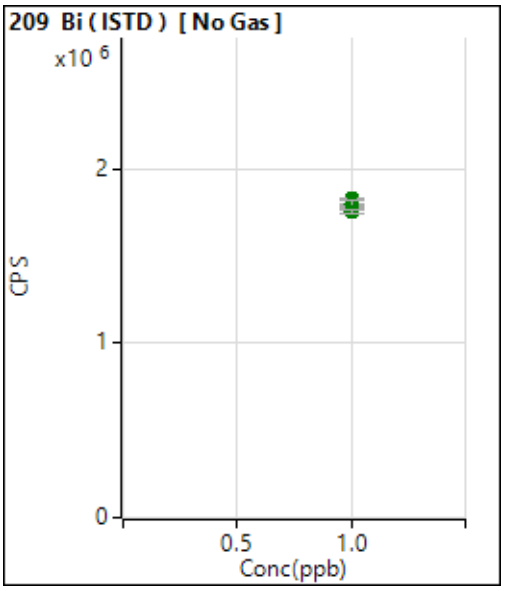


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		503235.58		P	0.2	
2	☐	1.000		496798.96		P	0.8	
3	☐	1.000		500296.88		P	0.8	
4	☐	1.000		499497.06		P	0.9	
5	☐	1.000		498178.42		P	0.7	
6	☐	1.000		486716.71		P	0.5	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		2095071.80		A	0.7	
2	☐	1.000		2057576.17		A	1.2	
3	☐	1.000		2085568.03		A	0.6	
4	☐	1.000		2074897.83		A	0.4	
5	☐	1.000		2078257.43		A	1.4	
6	☐	1.000		2031335.33		A	1.7	

Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1820259.97		A	0.3	
2	☐	1.000		1792519.87		A	0.3	
3	☐	1.000		1826739.09		A	0.8	
4	☐	1.000		1833487.79		A	0.5	
5	☐	1.000		1799733.31		A	2.3	
6	☐	1.000		1755763.72		A	1.4	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	018CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T11:56:38-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	39627	0.00
Be	9	1	No Gas	27	81.19
V	51	2	He	761	0.84
Cr	52	2	He	1493	0.36
Fe	56	2	He	9046	0.03
Se	78	2	He	253	4.79
As	75	2	He	54	36.15
Ca	44	2	He	910	0.24
Na	23	2	He	115515	0.00
Mg	24	2	He	323	1.10
K	39	2	He	68034	0.00
Mn	55	2	He	267	4.94
Co	59	2	He	77	49.11
Ni	60	2	He	210	16.35
Cu	63	2	He	767	2.81
Zn	66	2	He	723	1.48
Al	27	2	He	557	2.15
B	11	1	No Gas	2784	0.28
Al	27	1	No Gas	25821	0.00
Si	28	1	No Gas	240032	0.00
Ag	107	1	No Gas	573	1.78
Cd	111	1	No Gas	3	5196.15
Sr	88	1	No Gas	1063	1.18
Mo	95	1	No Gas	23	462.23
Sn	118	1	No Gas	1223	0.81
Sb	121	1	No Gas	207	15.23
Ba	137	1	No Gas	157	8.48
Tl	205	1	No Gas	43	61.49
Tl	203	1	No Gas	20	500.00
Pb	208	1	No Gas	627	1.56
U	238	1	No Gas	10	0.00
Ca	43	2	He	27	532.40
Sb	121	2	He	117	40.46
Ti	47	2	He	7	1299.04
Cu	63	1	No Gas	1510	0.42

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD

Calibration Blank Report

Li	6	1	No Gas	707163	4.48
Ge	72	2	He	503236	0.25
Ge	72	1	No Gas	1894390	0.77
In	115	1	No Gas	2095072	0.68

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	No Gas	1820260	0.30

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	019CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T11:58:58-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	5419	0.05
V	51	2	He	11229	0.03
Cr	52	2	He	13877	0.03
Fe	56	2	He	1271904	0.00
Se	78	2	He	370	2.46
As	75	2	He	1957	0.02
Ca	44	2	He	8653	0.02
Na	23	2	He	311525	0.00
Mg	24	2	He	105729	0.00
K	39	2	He	199604	0.00
Mn	55	2	He	9423	0.07
Co	59	2	He	19551	0.01
Ni	60	2	He	5561	0.02
Cu	63	2	He	15015	0.02
Zn	66	2	He	4838	0.10
Al	27	2	He	1180	0.50
B	11	1	No Gas	17244	0.01
Al	27	1	No Gas	54159	0.01
Si	28	1	No Gas	300387	0.00
Ag	107	1	No Gas	29968	0.01
Cd	111	1	No Gas	5835	0.06
Sr	88	1	No Gas	56985	0.00
Mo	95	1	No Gas	10895	0.03
Sn	118	1	No Gas	18119	0.01
Sb	121	1	No Gas	24807	0.00
Ba	137	1	No Gas	8303	0.02
Tl	205	1	No Gas	48585	0.00
Tl	203	1	No Gas	20804	0.01
Pb	208	1	No Gas	68869	0.00
U	238	1	No Gas	69524	0.00
Ca	43	2	He	540	2.40
Sb	121	2	He	12406	0.03
Cu	63	1	No Gas	26690	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	706795	4.80	707163	99.95	70	120	
Ge	72	2	He	501106	0.48	503236	99.58	70	120	
Ge	72	1	No Gas	1886313	1.07	1894390	99.57	70	120	

Calibration Standard Report

In	115	1	No Gas	2104865	0.49	2095072	100.47	70	120	
Bi	209	1	No Gas	1835467	1.30	1820260	100.84	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	020CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:01:17-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	11335	0.02
V	51	2	He	21347	0.01
Cr	52	2	He	26062	0.01
Fe	56	2	He	2533056	0.00
Se	78	2	He	541	0.91
As	75	2	He	3736	0.02
Ca	44	2	He	13403	0.01
Na	23	2	He	487322	0.00
Mg	24	2	He	213100	0.00
K	39	2	He	318405	0.00
Mn	55	2	He	17371	0.01
Co	59	2	He	39207	0.00
Ni	60	2	He	10504	0.04
Cu	63	2	He	28657	0.01
Zn	66	2	He	5648	0.10
Al	27	2	He	1687	0.54
B	11	1	No Gas	32496	0.00
Al	27	1	No Gas	84057	0.00
Si	28	1	No Gas	362515	0.00
Ag	107	1	No Gas	60535	0.00
Cd	111	1	No Gas	11795	0.01
Sr	88	1	No Gas	111720	0.00
Mo	95	1	No Gas	22169	0.00
Sn	118	1	No Gas	35358	0.00
Sb	121	1	No Gas	48724	0.00
Ba	137	1	No Gas	16721	0.01
Tl	205	1	No Gas	99505	0.00
Tl	203	1	No Gas	41436	0.00
Pb	208	1	No Gas	138462	0.00
U	238	1	No Gas	139319	0.00
Ca	43	2	He	713	0.41
Sb	121	2	He	24998	0.00
Cu	63	1	No Gas	52073	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	679922	2.67	707163	96.15	70	120	
Ge	72	2	He	500297	0.79	503236	99.42	70	120	
Ge	72	1	No Gas	1874036	1.07	1894390	98.93	70	120	

Calibration Standard Report

In	115	1	No Gas	2085568	0.60	2095072	99.55	70	120	
Bi	209	1	No Gas	1826739	0.76	1820260	100.36	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	021CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:03:35-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	22064	0.01
V	51	2	He	42483	0.00
Cr	52	2	He	49928	0.00
Fe	56	2	He	4898123	0.00
Se	78	2	He	840	0.45
As	75	2	He	7408	0.01
Ca	44	2	He	26068	0.01
Na	23	2	He	936687	0.00
Mg	24	2	He	425665	0.00
K	39	2	He	567495	0.00
Mn	55	2	He	33856	0.01
Co	59	2	He	77523	0.00
Ni	60	2	He	20743	0.01
Cu	63	2	He	55075	0.00
Zn	66	2	He	11171	0.02
Al	27	2	He	2847	0.21
B	11	1	No Gas	62339	0.00
Al	27	1	No Gas	139336	0.00
Si	28	1	No Gas	488898	0.00
Ag	107	1	No Gas	119601	0.00
Cd	111	1	No Gas	23705	0.01
Sr	88	1	No Gas	220711	0.00
Mo	95	1	No Gas	44628	0.01
Sn	118	1	No Gas	69011	0.00
Sb	121	1	No Gas	97652	0.00
Ba	137	1	No Gas	33059	0.00
Tl	205	1	No Gas	197015	0.00
Tl	203	1	No Gas	81672	0.00
Pb	208	1	No Gas	274260	0.00
U	238	1	No Gas	281255	0.00
Ca	43	2	He	1687	0.83
Sb	121	2	He	47894	0.00
Cu	63	1	No Gas	101356	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	705728	5.48	707163	99.80	70	120	
Ge	72	2	He	499497	0.92	503236	99.26	70	120	
Ge	72	1	No Gas	1884282	0.62	1894390	99.47	70	120	

Calibration Standard Report

In	115	1	No Gas	2074898	0.39	2095072	99.04	70	120	
Bi	209	1	No Gas	1833488	0.51	1820260	100.73	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	022CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:05:52-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	231288	0.00
V	51	2	He	432713	0.00
Cr	52	2	He	508204	0.00
Fe	56	2	He	48949928	0.00
Se	78	2	He	6607	0.03
As	75	2	He	75761	0.00
Ca	44	2	He	257339	0.00
Na	23	2	He	8068826	0.00
Mg	24	2	He	4391394	0.00
K	39	2	He	5648742	0.00
Mn	55	2	He	343433	0.00
Co	59	2	He	790371	0.00
Ni	60	2	He	207834	0.00
Cu	63	2	He	561289	0.00
Zn	66	2	He	102812	0.00
Al	27	2	He	22652	0.01
B	11	1	No Gas	615361	0.00
Al	27	1	No Gas	1228020	0.00
Si	28	1	No Gas	2912244	0.00
Ag	107	1	No Gas	1322338	0.00
Cd	111	1	No Gas	242769	0.00
Sr	88	1	No Gas	2394665	0.00
Mo	95	1	No Gas	463557	0.00
Sn	118	1	No Gas	716078	0.00
Sb	121	1	No Gas	995335	0.00
Ba	137	1	No Gas	346083	0.00
Tl	205	1	No Gas	2169624	0.00
Tl	203	1	No Gas	853229	0.00
Pb	208	1	No Gas	2940299	0.00
U	238	1	No Gas	3070749	0.00
Ca	43	2	He	15799	0.02
Sb	121	2	He	492355	0.00
Cu	63	1	No Gas	1030768	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	717957	1.19	707163	101.53	70	120	
Ge	72	2	He	498178	0.65	503236	99.00	70	120	
Ge	72	1	No Gas	1867616	1.05	1894390	98.59	70	120	

Calibration Standard Report

In	115	1	No Gas	2078257	1.39	2095072	99.20	70	120	
Bi	209	1	No Gas	1799733	2.26	1820260	98.87	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	023CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:08:04-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	465088	0.00
V	51	2	He	852746	0.00
Cr	52	2	He	1046801	0.00
Fe	56	2	He	96175079	0.00
Se	78	2	He	12348	0.02
As	75	2	He	149261	0.00
Ca	44	2	He	508249	0.00
Na	23	2	He	15984003	0.00
Mg	24	2	He	8771040	0.00
K	39	2	He	10994307	0.00
Mn	55	2	He	674048	0.00
Co	59	2	He	1727659	0.00
Ni	60	2	He	407665	0.00
Cu	63	2	He	1180758	0.00
Zn	66	2	He	200108	0.00
Al	27	2	He	44040	0.00
B	11	1	No Gas	1362985	0.00
Al	27	1	No Gas	2291513	0.00
Si	28	1	No Gas	5472170	0.00
Ag	107	1	No Gas	2571998	0.00
Cd	111	1	No Gas	471788	0.00
Sr	88	1	No Gas	4616025	0.00
Mo	95	1	No Gas	907192	0.00
Sn	118	1	No Gas	1548353	0.00
Sb	121	1	No Gas	2118885	0.00
Ba	137	1	No Gas	667551	0.00
Tl	205	1	No Gas	4235126	0.00
Tl	203	1	No Gas	1873717	0.00
Pb	208	1	No Gas	5882526	0.00
U	238	1	No Gas	5992360	0.00
Ca	43	2	He	30387	0.00
Sb	121	2	He	978382	0.00
Cu	63	1	No Gas	2187737	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	727879	2.13	707163	102.93	70	120	
Ge	72	2	He	486717	0.52	503236	96.72	70	120	
Ge	72	1	No Gas	1810244	1.31	1894390	95.56	70	120	

Calibration Standard Report

In	115	1	No Gas	2031335	1.70	2095072	96.96	70	120	
Bi	209	1	No Gas	1755764	1.37	1820260	96.46	70	120	

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	025CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:18:35-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	4884	0.02
V	51	2	He	9084	0.00
Cr	52	2	He	10588	0.03
Fe	56	2	He	968370	0.00
Se	78	2	He	361	1.19
As	75	2	He	1513	0.06
Ca	44	2	He	6748	0.03
Na	23	2	He	261829	0.00
Mg	24	2	He	87366	0.00
K	39	2	He	171090	0.00
Mn	55	2	He	7032	0.06
Co	59	2	He	15753	0.01
Ni	60	2	He	4314	0.20
Cu	63	2	He	11939	0.02
Zn	66	2	He	2444	0.17
Al	27	2	He	3097	0.18
B	11	1	No Gas	21330	0.00
Al	27	1	No Gas	149993	0.00
Si	28	1	No Gas	279066	0.00
Ag	107	1	No Gas	24396	0.01
Cd	111	1	No Gas	4804	0.11
Sr	88	1	No Gas	49117	0.00
Mo	95	1	No Gas	8586	0.04
Sn	118	1	No Gas	15349	0.02
Sb	121	1	No Gas	19735	0.03
Ba	137	1	No Gas	7109	0.05
Tl	205	1	No Gas	40192	0.01
Tl	203	1	No Gas	16468	0.02
Pb	208	1	No Gas	55250	0.00
U	238	1	No Gas	55878	0.00
Ca	43	2	He	433	1.34
Sb	121	2	He	10031	0.03
Cu	63	1	No Gas	21708	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	734342	3.10	707163	103.84	70	120	
Ge	72	2	He	496799	0.76	503236	98.72	70	120	
Ge	72	1	No Gas	1834946	0.62	1894390	96.86	70	120	

Calibration Standard Report

In	115	1	No Gas	2057576	1.21	2095072	98.21	70	120	
Bi	209	1	No Gas	1792520	0.32	1820260	98.48	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	027_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:24:36-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	104.364	2.028	1023442	2.35	100	104.4	90	110	
Be	9	1	No Gas	103.916	1.350	243306	0.91	100	103.9	90	110	
V	51	2	He	102.050	1.287	449454	0.59	100	102.1	90	110	
Cr	52	2	He	99.233	0.646	532126	0.63	100	99.2	90	110	
Fe	56	2	He	9980.514	0.651	49583253	0.35	10000	99.8	90	110	
Se	78	2	He	105.312	0.927	6878	1.68	100	105.3	90	110	
As	75	2	He	107.118	0.727	82553	0.59	100	107.1	90	110	
Ca	44	2	He	9959.956	0.988	261547	0.77	10000	99.6	90	110	
Na	23	2	He	9967.288	0.760	8261868	0.27	10000	99.7	90	110	
Mg	24	2	He	9990.013	0.600	4510851	0.50	10000	99.9	90	110	
K	39	2	He	9987.076	0.492	5708113	1.03	10000	99.9	90	110	
Mn	55	2	He	103.280	1.262	359726	0.56	100	103.3	90	110	
Co	59	2	He	103.310	0.869	824799	0.76	100	103.3	90	110	
Ni	60	2	He	100.940	1.566	212684	0.73	100	100.9	90	110	
Cu	63	2	He	97.193	1.260	585133	0.48	100	97.2	90	110	
Zn	66	2	He	104.597	1.679	108582	1.35	100	104.6	90	110	
Al	27	2	He	101.607	0.624	23390	0.58	100	101.6	90	110	
B	11	1	No Gas	465.568	1.143	628187	0.71	500	93.1	90	110	
Al	27	1	No Gas	104.986	2.483	1247773	1.49	100	105.0	90	110	
Si	28	1	No Gas	515.768	0.756	2989521	0.61	500	103.2	90	110	
Ag	107	1	No Gas	100.645	1.749	1303057	1.07	100	100.6	90	110	
Cd	111	1	No Gas	103.301	1.851	245367	0.60	100	103.3	90	110	
Sr	88	1	No Gas	103.449	0.753	2408381	0.62	100	103.4	90	110	
Mo	95	1	No Gas	98.480	1.360	449168	0.81	100	98.5	90	110	
Sn	118	1	No Gas	101.470	0.649	713941	0.70	100	101.5	90	110	
Sb	121	1	No Gas	94.013	0.940	998868	0.59	100	94.0	90	110	
Ba	137	1	No Gas	103.392	0.967	348076	0.54	100	103.4	90	110	
Tl	205	1	No Gas	107.205	0.617	2284189	0.54	100	107.2	90	110	
Tl	203	1	No Gas	96.190	1.423	886503	0.85	100	96.2	90	110	
Pb	208	1	No Gas	100.253	0.936	2952822	0.44	100	100.3	90	110	
U	238	1	No Gas	100.422	1.856	3027546	0.73	100	100.4	90	110	
Ca	43	2	He	9820.622	1.992	15492	1.85	10000	98.2	90	110	
Sb	121	2	He	101.235	1.005	510443	0.16	100	101.2	90	110	
Ti	47	2	He	97.282	0.989	15993	0.25	100	97.3	90	110	
Cu	63	1	No Gas	94.997	1.068	1043243	0.41	100	95.0	90	110	
Se	82	1	No Gas	104.429	5.674	14740	4.88	100	104.4	90	110	

QC ISTD Table

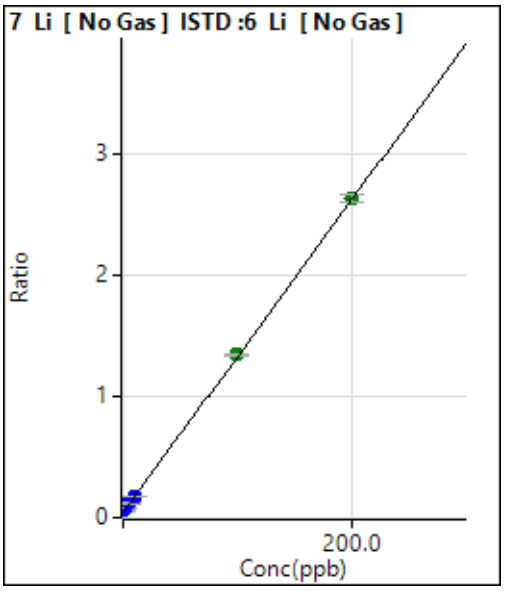
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	731541	0.43	707163	103.45	70	120	
Ge	72	2	He	503372	1.00	503236	100.03	70	120	
Ge	72	1	No Gas	1848742	0.94	1894390	97.59	70	120	
In	115	1	No Gas	2043114	1.35	2095072	97.52	70	120	
Bi	209	1	No Gas	1767137	1.16	1820260	97.08	70	120	

Calibration for 027_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\082322A.b\
Analysis File: 082322A.batch.bin
DA Date-Time: 08/23/2022 16:56:00
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	018CALB.d	CAL BLK	08/23/2022 11:56:38
2	025CALS.d	2/10/200	08/23/2022 12:18:35
3	020CALS.d	5/25/500	08/23/2022 12:01:17
4	021CALS.d	10/50/100	08/23/2022 12:03:35
5	022CALS.d	100/500/10K	08/23/2022 12:05:52
6	023CALS.d	200/1000/20K	08/23/2022 12:08:04

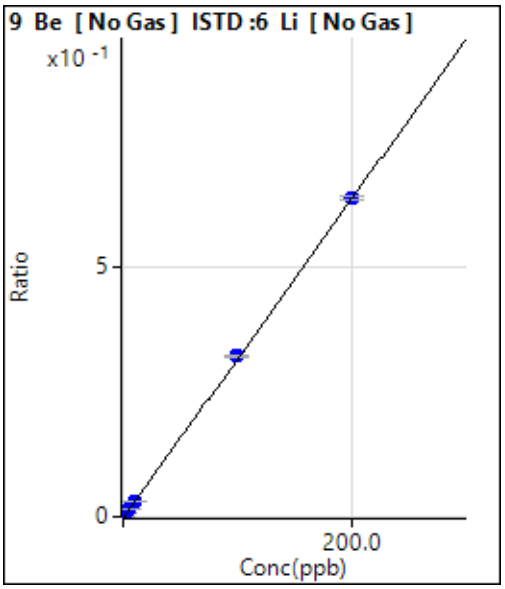
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	39627.41	0.0561	P	5.5	
2	☐	2.000	1.768	57893.61	0.0789	P	2.5	-11.6
3	☐	5.000	4.935	81298.73	0.1196	P	2.7	-1.3
4	☐	10.000	9.043	121501.18	0.1725	P	5.0	-9.6
5	☐	100.000	100.011	964275.01	1.3429	A	1.4	0.0
6	☐	200.000	200.047	1913964.97	2.6301	A	2.4	0.0

y = 0.0129 * x + 0.0561
R = 1.0000
DL = 0.7195 ppb
BEC = 4.362 ppb

Weight: <None>
Min Conc: <None>

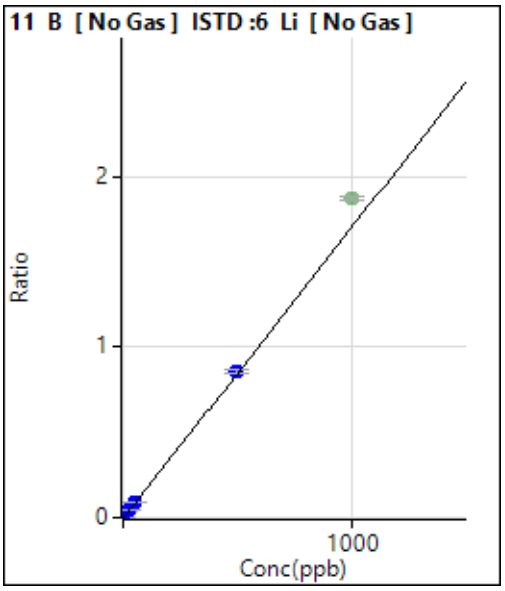


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	24.7	
2	☐	2.000	2.068	4884.23	0.0067	P	3.7	3.4
3	☐	5.000	5.199	11334.65	0.0167	P	2.1	4.0
4	☐	10.000	9.784	22064.04	0.0313	P	7.4	-2.2
5	☐	100.000	100.660	231288.15	0.3222	P	1.5	0.7
6	☐	200.000	199.675	465087.99	0.6391	P	1.2	-0.2

y = 0.0032 * x + 3.7941E-005
R = 1.0000
DL = 0.008778 ppb
BEC = 0.01186 ppb

Weight: <None>
Min Conc: <None>

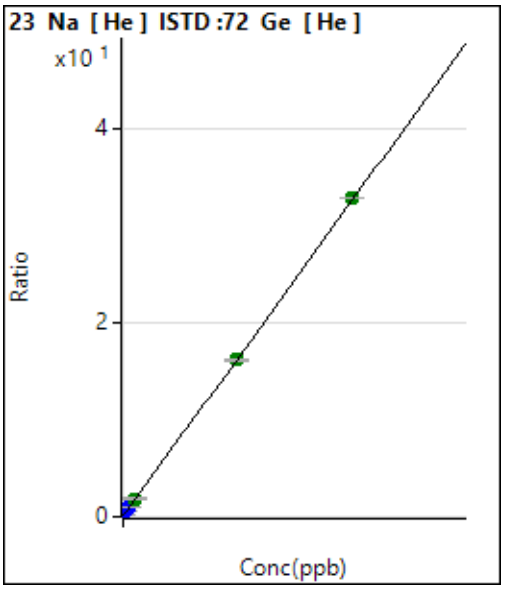
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2783.64	0.0039	P	5.9	
2	☐	10.000	14.721	21329.55	0.0291	P	2.7	47.2
3	☐	25.000	25.708	32495.91	0.0478	P	2.4	2.8
4	☐	50.000	49.569	62339.22	0.0885	P	6.4	-0.9
5	☐	500.000	499.913	615361.10	0.8572	P	1.5	0.0
6	☑	1000.000		1362985.19	1.8727	A	1.1	

y = 0.0017 * x + 0.0039
R = 1.0000
DL = 0.4104 ppb
BEC = 2.306 ppb

Weight: <None>
Min Conc: <None>

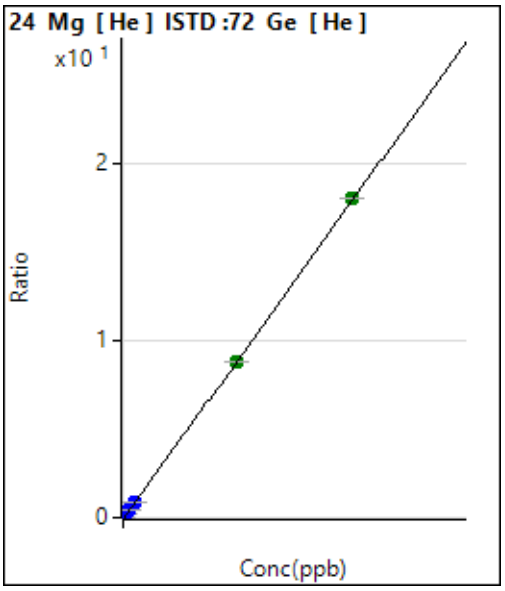


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	115515.39	0.2295	P	0.7	
2	☐	200.000	183.220	261828.98	0.5270	P	0.6	-8.4
3	☐	500.000	458.533	487322.20	0.9741	P	0.8	-8.3
4	☐	1000.000	1013.617	936687.02	1.8754	A	1.3	1.4
5	☐	10000.00	9833.702	8068826.13	16.1970	A	1.3	-1.7
6	☐	20000.00	20083.67	15984002.6	32.8403	A	0.4	0.4

y = 0.0016 * x + 0.2295
R = 1.0000
DL = 3.144 ppb
BEC = 141.4 ppb

Weight: <None>
Min Conc: <None>

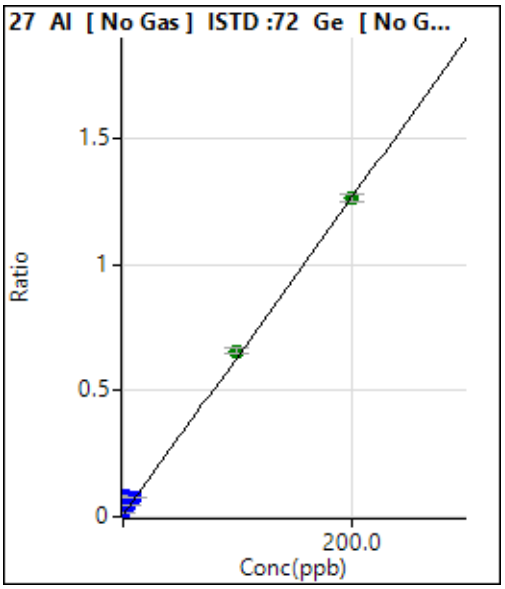
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	323.34	0.0006	P	3.8	
2	☐	200.000	195.341	87366.09	0.1759	P	1.2	-2.3
3	☐	500.000	474.154	213100.15	0.4260	P	0.4	-5.2
4	☐	1000.000	949.396	425665.05	0.8522	P	1.3	-5.1
5	☐	10000.00	9826.661	4391393.89	8.8151	A	0.6	-1.7
6	☐	20000.00	20089.89	8771039.87	18.0211	A	0.5	0.4

y = 8.9699E-004 * x + 6.4257E-004
R = 0.9999
DL = 0.08151 ppb
BEC = 0.7164 ppb

Weight: <None>
Min Conc: <None>

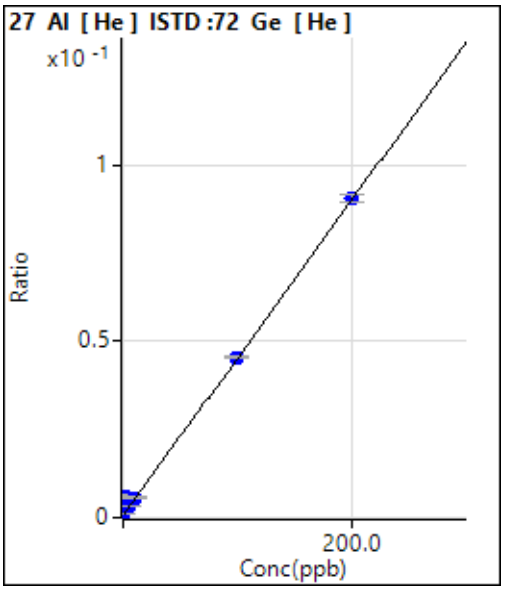


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	25821.48	0.0136	P	1.1	
2	☐	2.000	10.812	149992.86	0.0817	P	0.5	440.6
3	☐	5.000	4.956	84056.60	0.0449	P	1.8	-0.9
4	☐	10.000	9.574	139336.01	0.0739	P	0.9	-4.3
5	☐	100.000	102.236	1228020.32	0.6577	A	4.0	2.2
6	☐	200.000	198.816	2291512.88	1.2662	A	2.8	-0.6

y = 0.0063 * x + 0.0136
R = 0.9990
DL = 0.07459 ppb
BEC = 2.164 ppb

Weight: <None>
Min Conc: <None>

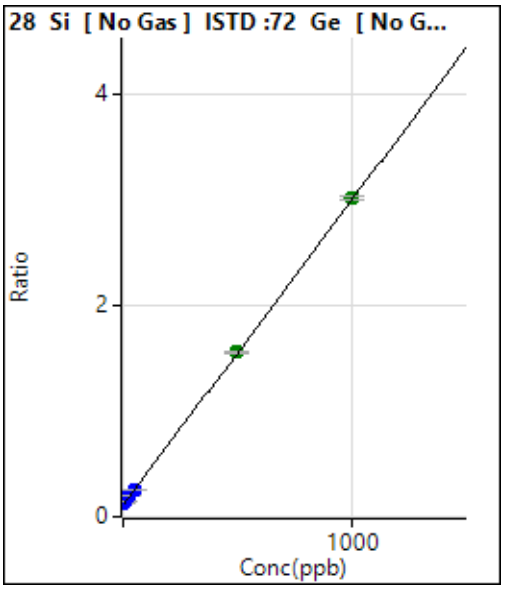
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	556.69	0.0011	P	12.1	
2	☐	2.000	11.488	3097.07	0.0062	P	6.0	474.4
3	☐	5.000	5.071	1686.80	0.0034	P	8.5	1.4
4	☐	10.000	10.286	2847.02	0.0057	P	5.2	2.9
5	☐	100.000	99.380	22651.95	0.0455	P	2.2	-0.6
6	☐	200.000	200.199	44039.95	0.0905	P	1.9	0.1

y = 4.4644E-004 * x + 0.0011
R = 0.9989
DL = 0.9018 ppb
BEC = 2.478 ppb

Weight: <None>
Min Conc: <None>

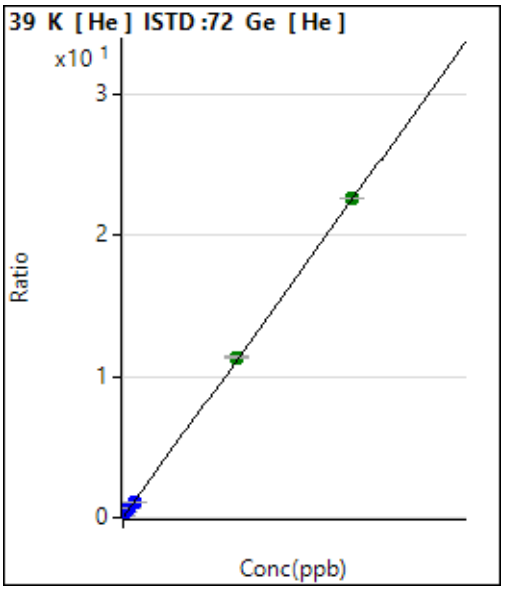


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	240032.29	0.1267	P	2.4	
2	☐	10.000	8.779	279066.13	0.1521	P	0.5	-12.2
3	☐	25.000	23.100	362514.89	0.1935	P	2.2	-7.6
4	☐	50.000	45.940	488898.33	0.2595	P	0.9	-8.1
5	☐	500.000	495.817	2912243.91	1.5595	A	1.6	-0.8
6	☐	1000.000	1002.354	5472169.92	3.0232	A	1.6	0.2

y = 0.0029 * x + 0.1267
R = 1.0000
DL = 3.094 ppb
BEC = 43.85 ppb

Weight: <None>
Min Conc: <None>

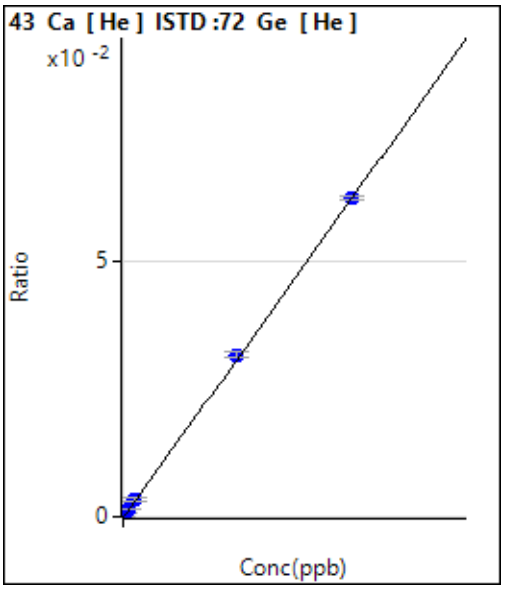
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	68034.03	0.1352	P	1.3	
2	☐	200.000	186.478	171089.75	0.3444	P	1.2	-6.8
3	☐	500.000	446.799	318404.99	0.6365	P	1.2	-10.6
4	☐	1000.000	892.216	567495.37	1.1362	P	0.7	-10.8
5	☐	10000.00	9986.499	5648741.79	11.3392	A	1.0	-0.1
6	☐	20000.00	20013.60	10994306.9	22.5887	A	0.2	0.1

y = 0.0011 * x + 0.1352
R = 1.0000
DL = 4.558 ppb
BEC = 120.5 ppb

Weight: <None>
Min Conc: <None>

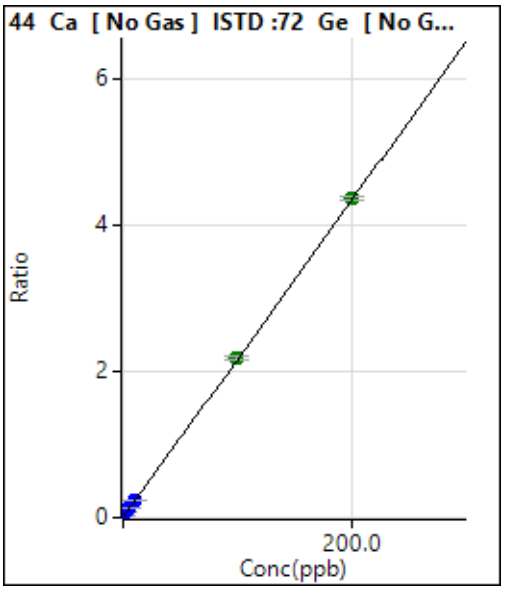


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0001	P	142.0	
2	☐	200.000	261.927	433.35	0.0009	P	6.3	31.0
3	☐	500.000	438.813	713.36	0.0014	P	2.9	-12.2
4	☐	1000.000	1061.621	1686.80	0.0034	P	13.1	6.2
5	☐	10000.00	10118.76	15799.35	0.0317	P	2.8	1.2
6	☐	20000.00	19938.44	30387.20	0.0624	P	1.2	-0.3

y = 3.1287E-006 * x + 5.2985E-005
R = 1.0000
DL = 72.17 ppb
BEC = 16.94 ppb

Weight: <None>
Min Conc: <None>

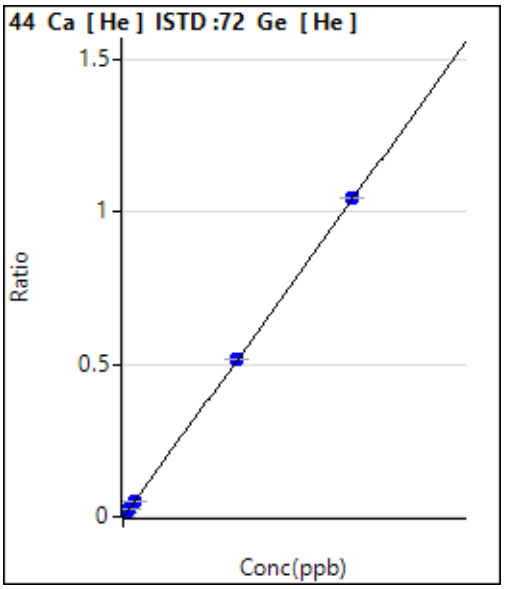
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46960.25	0.0248	P	1.1	
2	☐	2.000	2.243	134589.69	0.0733	P	1.3	12.2
3	☐	5.000	4.680	236302.31	0.1261	P	0.6	-6.4
4	☐	10.000	9.281	425277.44	0.2257	P	0.3	-7.2
5	☐	100.000	99.517	4068945.88	2.1790	A	2.3	-0.5
6	☐	200.000	200.283	7892641.13	4.3602	A	1.0	0.1

y = 0.0216 * x + 0.0248
R = 1.0000
DL = 0.03804 ppb
BEC = 1.145 ppb

Weight: <None>
Min Conc: <None>

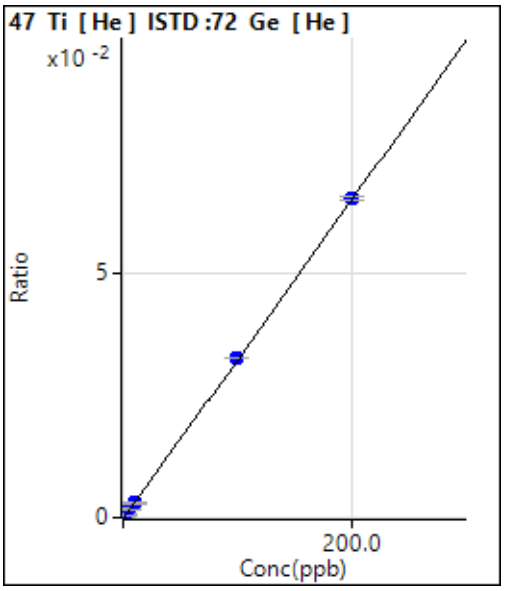


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	910.05	0.0018	P	2.3	
2	☐	200.000	226.482	6748.45	0.0136	P	1.5	13.2
3	☐	500.000	480.592	13403.40	0.0268	P	2.1	-3.9
4	☐	1000.000	969.199	26068.40	0.0522	P	2.3	-3.1
5	☐	10000.00	9901.321	257339.10	0.5166	P	0.8	-1.0
6	☐	20000.00	20051.10	508249.46	1.0442	P	0.4	0.3

y = 5.1989E-005 * x + 0.0018
R = 1.0000
DL = 2.448 ppb
BEC = 34.79 ppb

Weight: <None>
Min Conc: <None>

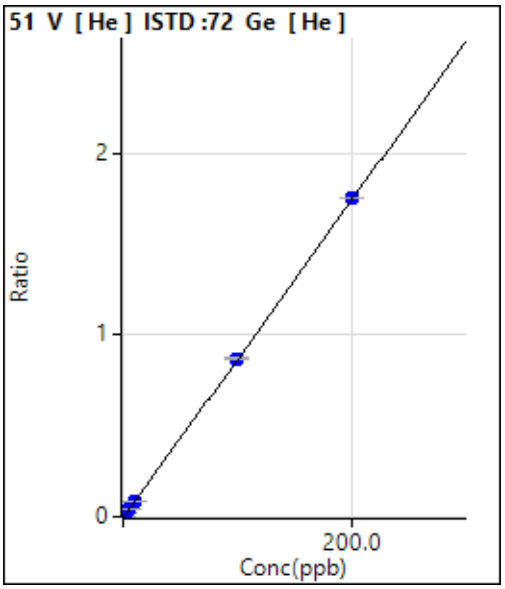
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	1.707	283.34	0.0006	P	14.8	-14.7
3	☐	5.000	5.386	886.71	0.0018	P	8.8	7.7
4	☐	10.000	9.257	1516.78	0.0030	P	13.3	-7.4
5	☐	100.000	99.928	16259.85	0.0326	P	1.0	-0.1
6	☐	200.000	200.067	31797.07	0.0653	P	0.9	0.0

y = 3.2648E-004 * x + 1.3232E-005
R = 1.0000
DL = 0.1053 ppb
BEC = 0.04053 ppb

Weight: <None>
Min Conc: <None>

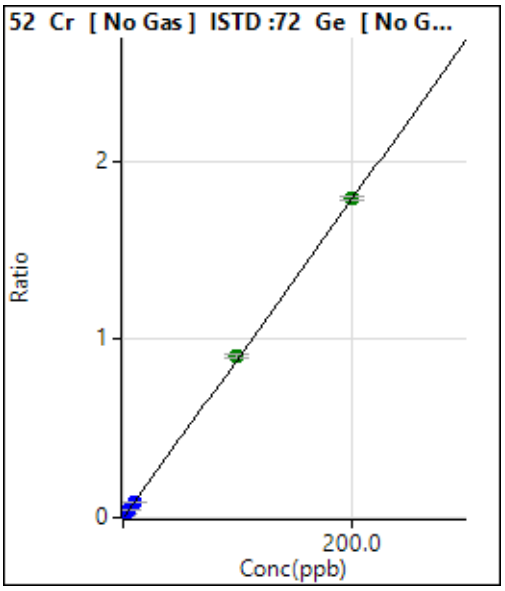


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	761.14	0.0015	P	6.2	
2	☐	2.000	1.920	9084.16	0.0183	P	0.6	-4.0
3	☐	5.000	4.712	21346.65	0.0427	P	2.5	-5.8
4	☐	10.000	9.564	42483.42	0.0851	P	1.7	-4.4
5	☐	100.000	99.263	432713.14	0.8686	P	0.7	-0.7
6	☐	200.000	200.398	852746.39	1.7521	P	0.4	0.2

y = 0.0087 * x + 0.0015
R = 1.0000
DL = 0.0324 ppb
BEC = 0.1731 ppb

Weight: <None>
Min Conc: <None>

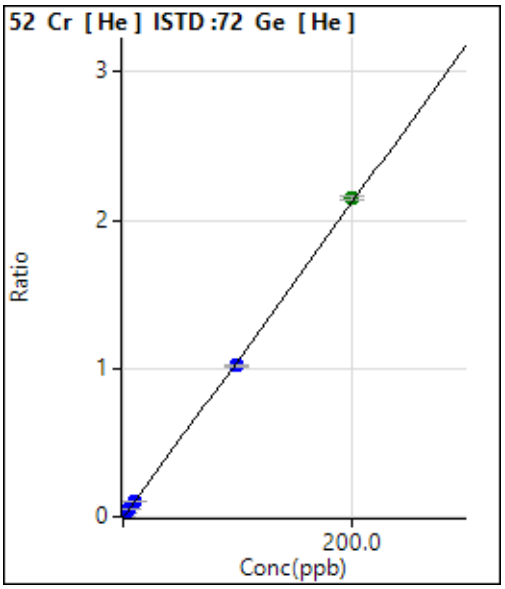
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12385.76	0.0065	P	1.7	
2	☐	2.000	1.699	39851.66	0.0217	P	2.1	-15.0
3	☐	5.000	4.583	88974.70	0.0475	P	3.3	-8.3
4	☐	10.000	9.087	165288.70	0.0877	P	0.7	-9.1
5	☐	100.000	100.562	1689945.86	0.9050	A	1.9	0.6
6	☐	200.000	199.778	3242681.41	1.7914	A	1.1	-0.1

y = 0.0089 * x + 0.0065
R = 1.0000
DL = 0.03633 ppb
BEC = 0.7318 ppb

Weight: <None>
Min Conc: <None>

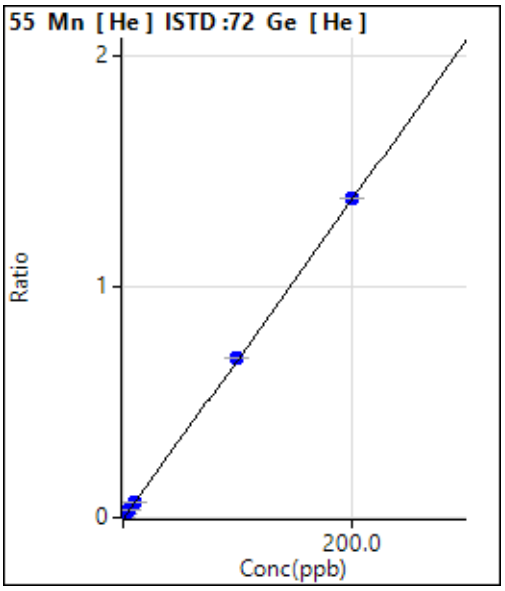


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1493.45	0.0030	P	5.4	
2	☐	2.000	1.727	10587.60	0.0213	P	4.0	-13.6
3	☐	5.000	4.625	26061.81	0.0521	P	2.1	-7.5
4	☐	10.000	9.130	49928.00	0.1000	P	1.2	-8.7
5	☐	100.000	95.750	508204.11	1.0202	P	1.1	-4.2
6	☐	200.000	202.180	1046800.64	2.1508	A	1.2	1.1

y = 0.0106 * x + 0.0030
R = 0.9997
DL = 0.04485 ppb
BEC = 0.2793 ppb

Weight: <None>
Min Conc: <None>

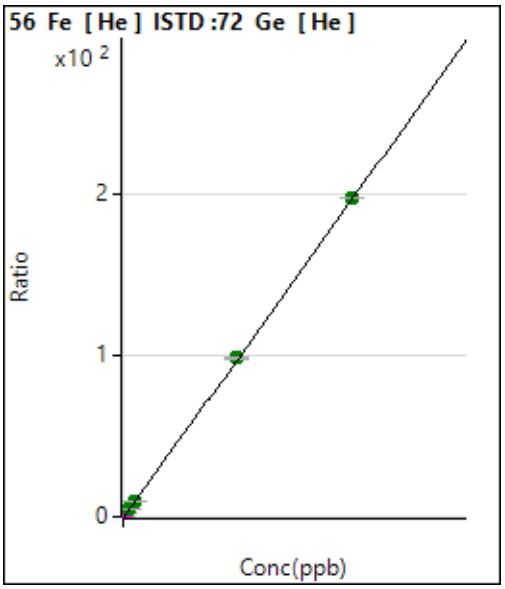
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	266.68	0.0005	P	12.9	
2	☐	2.000	1.970	7031.92	0.0142	P	4.0	-1.5
3	☐	5.000	4.945	17371.32	0.0347	P	1.2	-1.1
4	☐	10.000	9.727	33855.63	0.0678	P	2.6	-2.7
5	☐	100.000	99.620	343433.13	0.6894	P	0.2	-0.4
6	☐	200.000	200.205	674048.40	1.3849	P	0.4	0.1

y = 0.0069 * x + 5.2981E-004
R = 1.0000
DL = 0.02972 ppb
BEC = 0.07662 ppb

Weight: <None>
Min Conc: <None>

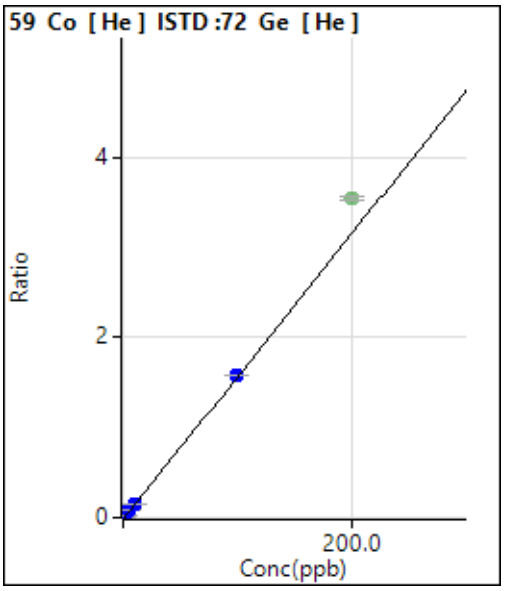


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9046.47	0.0180	P	2.0	
2	☐	200.000	195.717	968369.78	1.9493	M	2.5	-2.1
3	☐	500.000	511.273	2533056.47	5.0633	A	0.8	2.3
4	☐	1000.000	991.965	4898122.63	9.8068	A	1.1	-0.8
5	☐	10000.00	9955.601	48949927.6	98.2607	A	0.7	-0.4
6	☐	20000.00	20022.36	96175078.5	197.600	A	0.4	0.1

y = 0.0099 * x + 0.0180
R = 1.0000
DL = 0.1118 ppb
BEC = 1.822 ppb

Weight: <None>
Min Conc: <None>

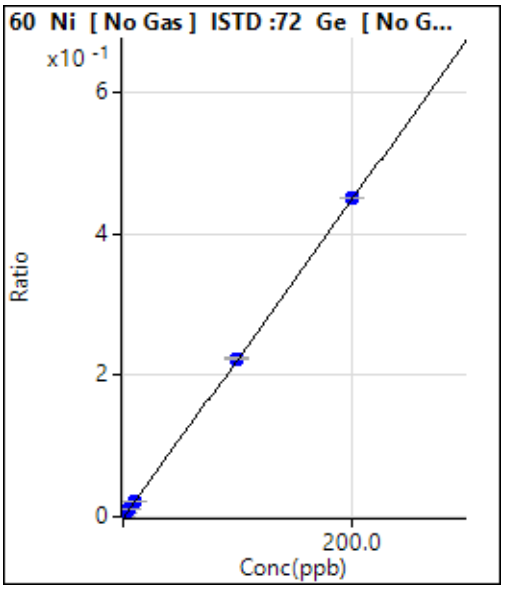
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	76.67	0.0002	P	37.7	
2	☐	2.000	1.990	15752.67	0.0317	P	0.4	-0.5
3	☐	5.000	4.932	39206.59	0.0784	P	2.0	-1.4
4	☐	10.000	9.778	77523.17	0.1552	P	3.2	-2.2
5	☐	100.000	100.026	790371.19	1.5865	P	0.2	0.0
6	☑	200.000		1727658.72	3.5495	A	1.4	

y = 0.0159 * x + 1.5236E-004
R = 1.0000
DL = 0.01086 ppb
BEC = 0.009606 ppb

Weight: <None>
Min Conc: <None>

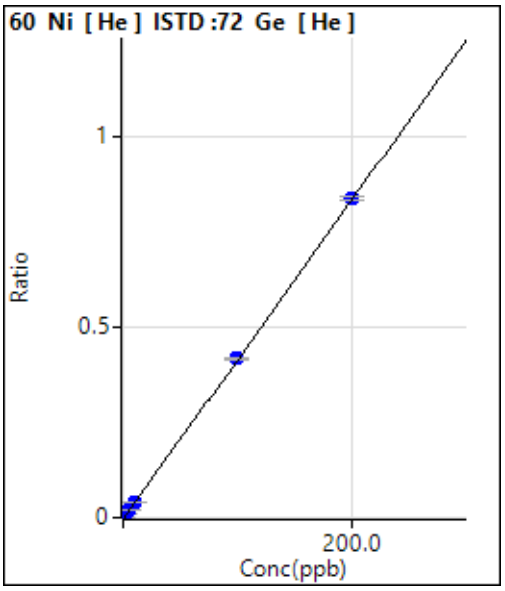


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	453.35	0.0002	P	6.2	
2	☐	2.000	1.922	8379.43	0.0046	P	3.3	-3.9
3	☐	5.000	4.930	21243.45	0.0113	P	0.9	-1.4
4	☐	10.000	9.559	40991.86	0.0218	P	1.2	-4.4
5	☐	100.000	99.392	418263.25	0.2240	P	0.3	-0.6
6	☐	200.000	200.329	816667.62	0.4512	P	0.6	0.2

y = 0.0023 * x + 2.3926E-004
R = 1.0000
DL = 0.01981 ppb
BEC = 0.1063 ppb

Weight: <None>
Min Conc: <None>

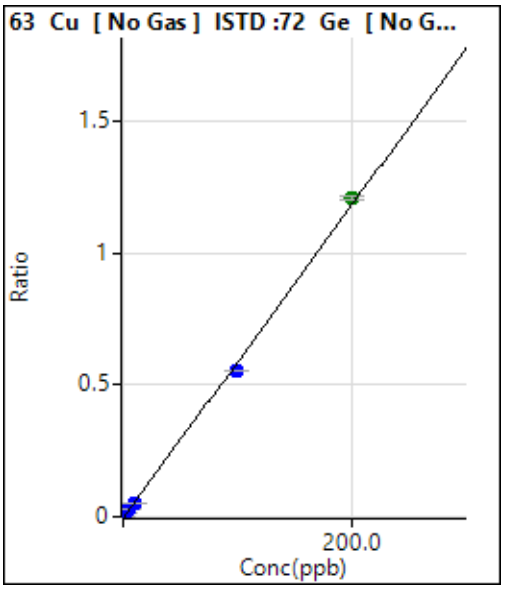
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	210.00	0.0004	P	34.6	
2	☐	2.000	1.977	4314.10	0.0087	P	9.4	-1.1
3	☐	5.000	4.922	10504.25	0.0210	P	5.4	-1.6
4	☐	10.000	9.830	20742.69	0.0415	P	0.8	-1.7
5	☐	100.000	99.656	207833.74	0.4172	P	0.8	-0.3
6	☐	200.000	200.182	407664.64	0.8376	P	0.9	0.1

y = 0.0042 * x + 4.1753E-004
R = 1.0000
DL = 0.1036 ppb
BEC = 0.09984 ppb

Weight: <None>
Min Conc: <None>

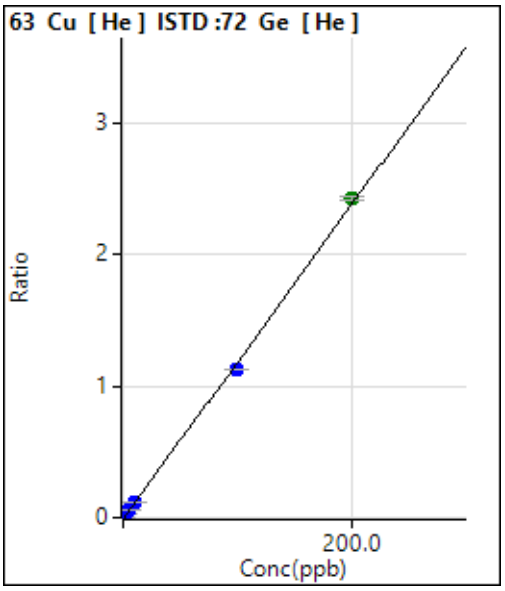


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1510.11	0.0008	P	6.1	
2	☐	2.000	1.860	21707.67	0.0118	P	1.4	-7.0
3	☐	5.000	4.550	52073.19	0.0278	P	1.7	-9.0
4	☐	10.000	8.934	101355.78	0.0538	P	1.2	-10.7
5	☐	100.000	92.908	1030767.80	0.5519	P	0.6	-7.1
6	☐	200.000	203.612	2187737.31	1.2087	A	1.2	1.8

y = 0.0059 * x + 7.9708E-004
R = 0.9991
DL = 0.02446 ppb
BEC = 0.1344 ppb

Weight: <None>
Min Conc: <None>

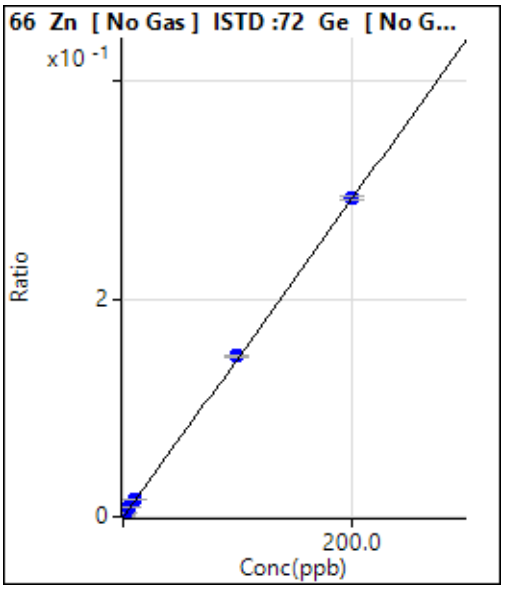
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	766.70	0.0015	P	21.4	
2	☐	2.000	1.884	11938.78	0.0240	P	3.2	-5.8
3	☐	5.000	4.668	28657.22	0.0573	P	1.8	-6.6
4	☐	10.000	9.103	55074.83	0.1103	P	0.2	-9.0
5	☐	100.000	94.195	561288.60	1.1267	P	0.7	-5.8
6	☐	200.000	202.957	1180757.59	2.4259	A	1.1	1.5

y = 0.0119 * x + 0.0015
R = 0.9994
DL = 0.08206 ppb
BEC = 0.1275 ppb

Weight: <None>
Min Conc: <None>

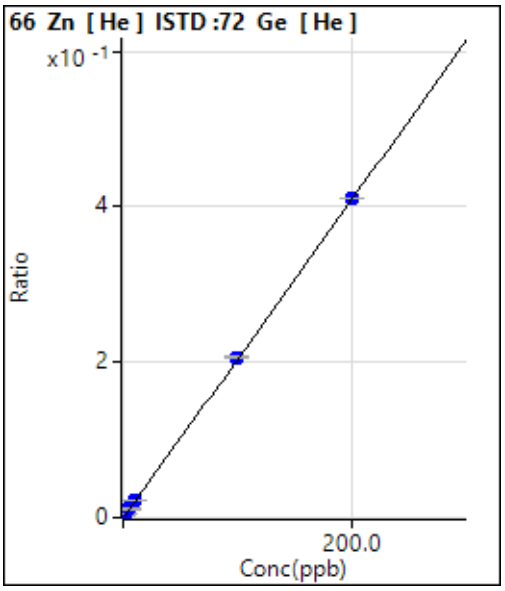


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1666.80	0.0009	P	4.8	
2	☐	2.000	1.636	6001.43	0.0033	P	3.2	-18.2
3	☐	5.000	5.116	15662.60	0.0084	P	1.0	2.3
4	☐	10.000	9.896	28911.16	0.0153	P	1.1	-1.0
5	☐	100.000	100.249	275275.18	0.1474	P	1.1	0.2
6	☐	200.000	199.882	530425.76	0.2930	P	1.2	-0.1

y = 0.0015 * x + 8.7965E-004
R = 1.0000
DL = 0.08686 ppb
BEC = 0.6018 ppb

Weight: <None>
Min Conc: <None>

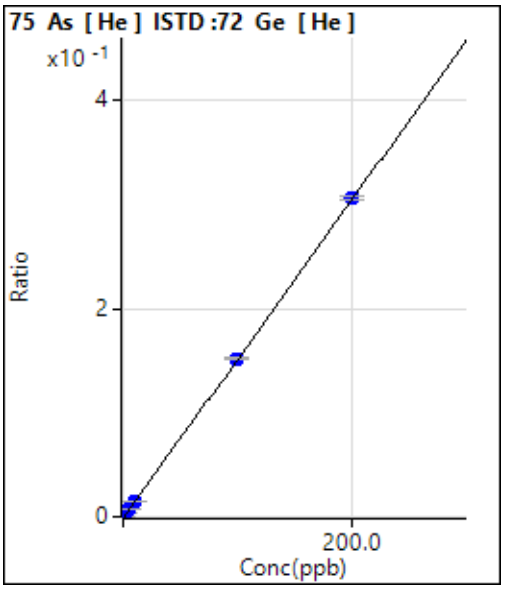
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	723.37	0.0014	P	10.5	
2	☐	2.000	1.699	2443.60	0.0049	P	3.5	-15.0
3	☐	5.000	4.811	5647.94	0.0113	P	6.1	-3.8
4	☐	10.000	10.216	11171.42	0.0224	P	2.1	2.2
5	☐	100.000	100.027	102811.58	0.2064	P	1.7	0.0
6	☐	200.000	199.984	200108.28	0.4111	P	0.1	0.0

y = 0.0020 * x + 0.0014
R = 1.0000
DL = 0.2207 ppb
BEC = 0.7015 ppb

Weight: <None>
Min Conc: <None>

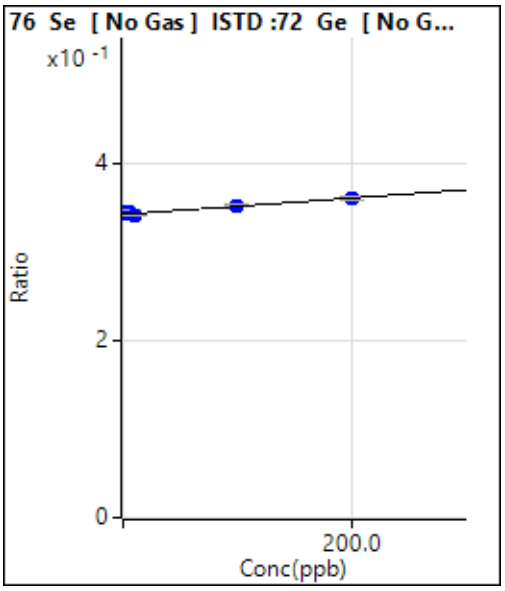


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	54.45	0.0001	P	19.7	
2	☐	2.000	1.920	1513.43	0.0030	P	1.6	-4.0
3	☐	5.000	4.810	3736.09	0.0075	P	0.4	-3.8
4	☐	10.000	9.622	7407.62	0.0148	P	0.5	-3.8
5	☐	100.000	99.325	75761.06	0.1521	P	1.2	-0.7
6	☐	200.000	200.362	149260.53	0.3067	P	0.9	0.2

y = 0.0015 * x + 1.0820E-004
R = 1.0000
DL = 0.04187 ppb
BEC = 0.07072 ppb

Weight: <None>
Min Conc: <None>

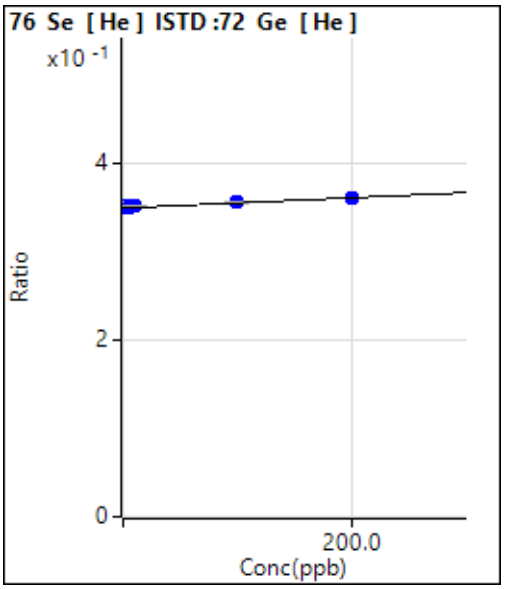
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	648911.77	0.3425	P	0.2	
2	☐	2.000	30.762	633826.06	0.3454	P	0.2	1438.1
3	☐	5.000	26.116	646454.87	0.3450	P	1.3	422.3
4	☐	10.000	-12.084	643311.00	0.3414	P	0.4	-220.8
5	☐	100.000	110.353	658979.92	0.3529	P	0.9	10.4
6	☐	200.000	195.112	653068.64	0.3608	P	1.0	-2.4

y = 9.3538E-005 * x + 0.3425
R = 0.9741
DL = 23.83 ppb
BEC = 3662 ppb

Weight: <None>
Min Conc: <None>

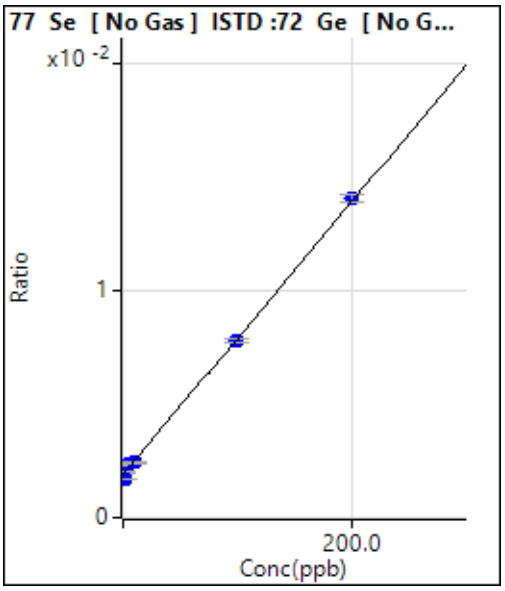


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	176246.73	0.3502	P	0.7	
2	☐	2.000	61.681	175793.67	0.3539	P	1.4	2984.0
3	☐	5.000	27.569	176027.38	0.3519	P	0.8	451.4
4	☐	10.000	45.979	176300.79	0.3529	P	0.6	359.8
5	☐	100.000	104.587	177560.42	0.3564	P	0.4	4.6
6	☐	200.000	194.746	176071.57	0.3618	P	0.4	-2.6

y = 5.9173E-005 * x + 0.3502
R = 0.9585
DL = 128.8 ppb
BEC = 5919 ppb

Weight: <None>
Min Conc: <None>

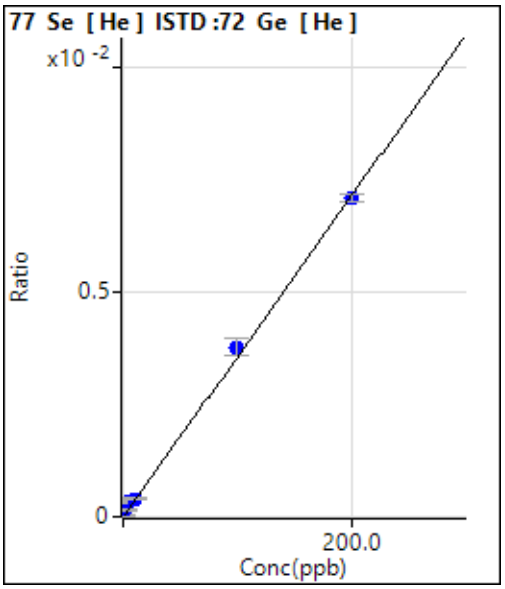
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3747.25	0.0020	P	6.1	
2	☐	2.000	-4.695	3113.75	0.0017	P	2.2	-334.8
3	☐	5.000	6.376	4420.81	0.0024	P	5.6	27.5
4	☐	10.000	7.455	4567.54	0.0024	P	5.8	-25.4
5	☐	100.000	97.370	14588.14	0.0078	P	2.2	-2.6
6	☐	200.000	201.475	25420.90	0.0140	P	2.5	0.7

y = 5.9897E-005 * x + 0.0020
R = 0.9994
DL = 6.067 ppb
BEC = 33.02 ppb

Weight: <None>
Min Conc: <None>

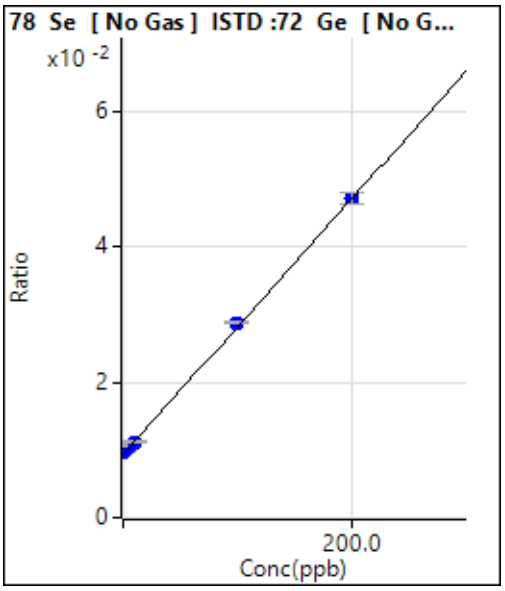


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	43.5	
2	☐	2.000	3.568	76.67	0.0002	P	20.1	78.4
3	☐	5.000	8.368	163.34	0.0003	P	21.0	67.4
4	☐	10.000	10.254	196.67	0.0004	P	6.6	2.5
5	☐	100.000	104.755	1883.49	0.0038	P	10.8	4.8
6	☐	200.000	197.510	3457.18	0.0071	P	2.1	-1.2

y = 3.5826E-005 * x + 2.6511E-005
R = 0.9996
DL = 0.9664 ppb
BEC = 0.74 ppb

Weight: <None>
Min Conc: <None>

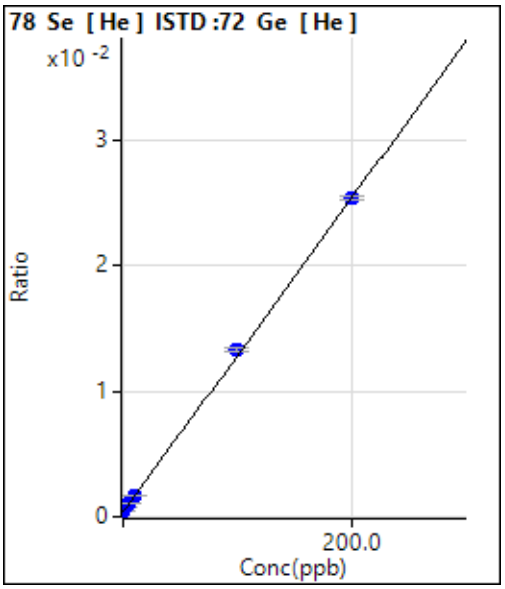
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18212.58	0.0096	P	1.7	
2	☐	2.000	1.495	18159.24	0.0099	P	0.7	-25.3
3	☐	5.000	5.097	19814.94	0.0106	P	2.2	1.9
4	☐	10.000	8.299	21063.43	0.0112	P	1.2	-17.0
5	☐	100.000	101.571	53713.83	0.0288	P	0.8	1.6
6	☐	200.000	199.302	85382.90	0.0472	P	3.5	-0.3

y = 1.8849E-004 * x + 0.0096
R = 0.9999
DL = 2.595 ppb
BEC = 51.01 ppb

Weight: <None>
Min Conc: <None>

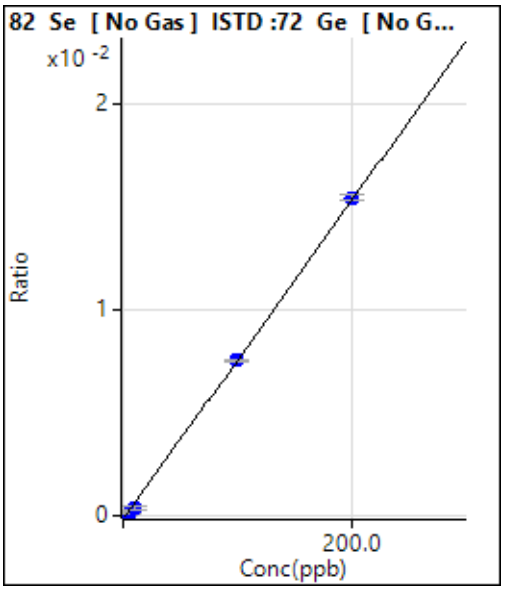


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	252.67	0.0005	P	11.8	
2	☐	2.000	1.803	361.34	0.0007	P	4.0	-9.9
3	☐	5.000	4.632	540.68	0.0011	P	5.2	-7.4
4	☐	10.000	9.440	840.03	0.0017	P	3.4	-5.6
5	☐	100.000	102.106	6606.97	0.0133	P	1.9	2.1
6	☐	200.000	198.986	12348.33	0.0254	P	1.5	-0.5

y = 1.2497E-004 * x + 5.0199E-004
R = 0.9999
DL = 1.427 ppb
BEC = 4.017 ppb

Weight: <None>
Min Conc: <None>

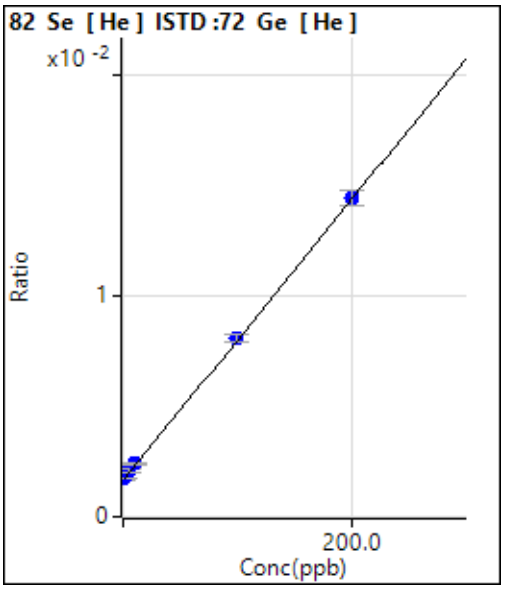
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-212.33	-0.0001	P	-275.	
2	☐	2.000	0.517	-129.70	-0.0001	P	-213.	-74.1
3	☐	5.000	2.993	226.83	0.0001	P	18.4	-40.1
4	☐	10.000	6.272	705.77	0.0004	P	35.9	-37.3
5	☐	100.000	98.734	14071.71	0.0075	P	1.7	-1.3
6	☐	200.000	200.884	27955.16	0.0154	P	2.1	0.4

y = 7.7435E-005 * x - 1.1069E-004
R = 0.9999
DL = 11.81 ppb
BEC = -1.429 ppb

Weight: <None>
Min Conc: <None>

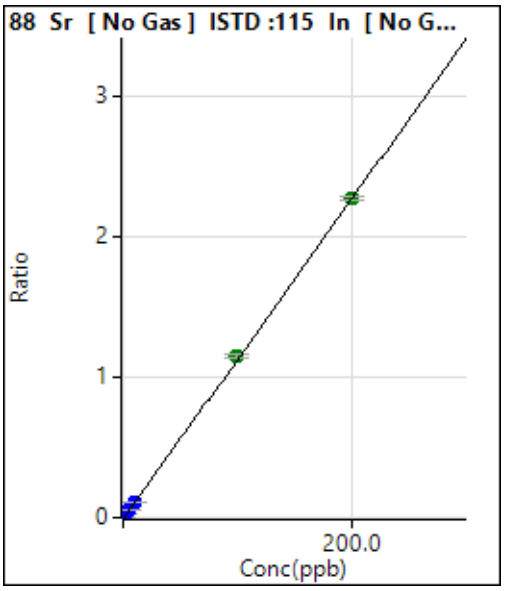


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	866.71	0.0017	P	3.8	
2	☐	2.000	1.953	916.72	0.0018	P	12.0	-2.3
3	☐	5.000	5.714	1043.39	0.0021	P	11.6	14.3
4	☐	10.000	10.513	1193.41	0.0024	P	5.8	5.1
5	☐	100.000	100.006	4017.35	0.0081	P	5.2	0.0
6	☐	200.000	199.954	7011.98	0.0144	P	4.9	0.0

y = 6.3426E-005 * x + 0.0017
R = 1.0000
DL = 3.068 ppb
BEC = 27.16 ppb

Weight: <None>
Min Conc: <None>

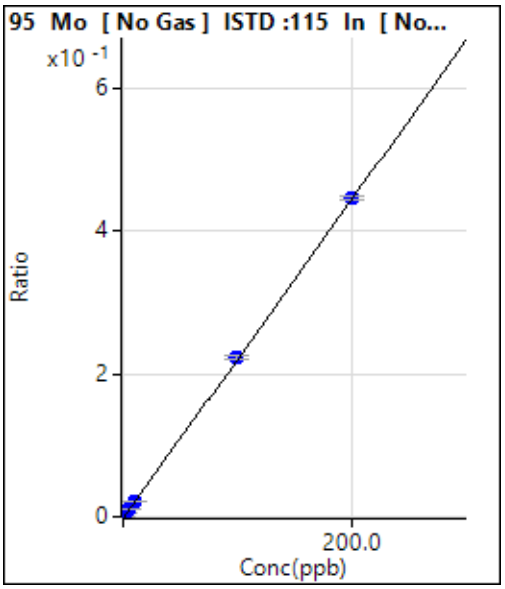
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1063.40	0.0005	P	11.8	
2	☐	2.000	2.051	49116.79	0.0239	P	0.4	2.6
3	☐	5.000	4.658	111720.05	0.0536	P	1.2	-6.8
4	☐	10.000	9.294	220710.69	0.1064	P	0.3	-7.1
5	☐	100.000	101.125	2394664.76	1.1524	A	1.8	1.1
6	☐	200.000	199.481	4616024.51	2.2727	A	1.3	-0.3

y = 0.0114 * x + 5.0731E-004
R = 1.0000
DL = 0.01581 ppb
BEC = 0.04454 ppb

Weight: <None>
Min Conc: <None>

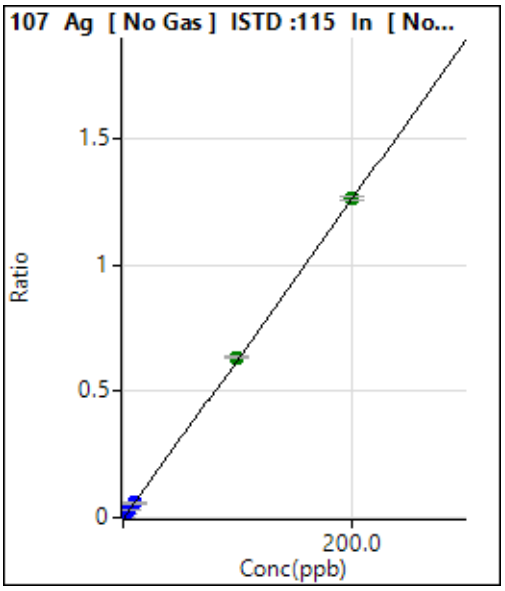


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	107.8	
2	☐	2.000	1.865	8586.24	0.0042	P	4.3	-6.8
3	☐	5.000	4.756	22168.68	0.0106	P	0.6	-4.9
4	☐	10.000	9.630	44628.31	0.0215	P	2.7	-3.7
5	☐	100.000	99.923	463556.73	0.2231	P	2.2	-0.1
6	☐	200.000	200.064	907191.99	0.4467	P	1.1	0.0

y = 0.0022 * x + 1.1178E-005
R = 1.0000
DL = 0.01619 ppb
BEC = 0.005007 ppb

Weight: <None>
Min Conc: <None>

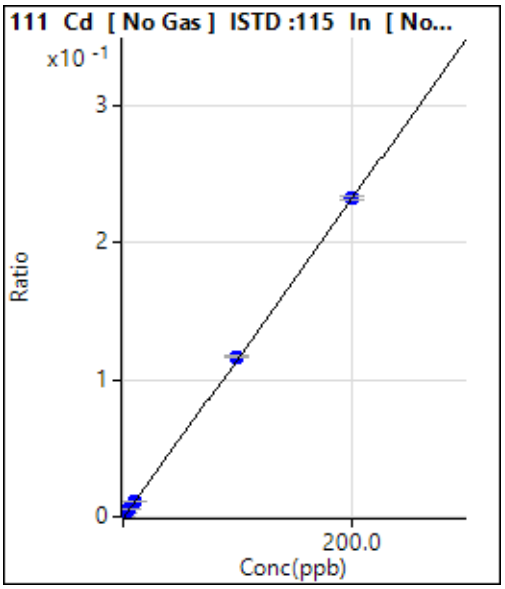
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	573.35	0.0003	P	10.6	
2	☐	2.000	1.828	24396.17	0.0119	P	0.4	-8.6
3	☐	5.000	4.539	60535.16	0.0290	P	1.5	-9.2
4	☐	10.000	9.056	119601.01	0.0576	P	2.2	-9.4
5	☐	100.000	100.407	1322337.79	0.6364	A	2.0	0.4
6	☐	200.000	199.857	2571998.19	1.2664	A	1.5	-0.1

y = 0.0063 * x + 2.7373E-004
R = 1.0000
DL = 0.01369 ppb
BEC = 0.04321 ppb

Weight: <None>
Min Conc: <None>

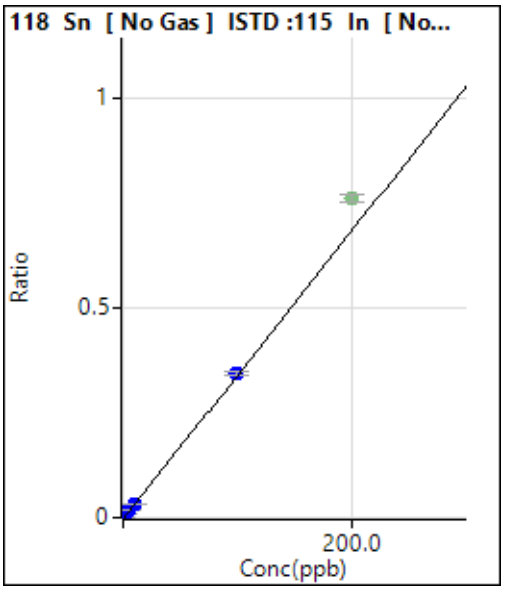


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	2.008	4804.31	0.0023	P	6.3	0.4
3	☐	5.000	4.863	11795.49	0.0057	P	1.8	-2.7
4	☐	10.000	9.824	23704.88	0.0114	P	1.3	-1.8
5	☐	100.000	100.469	242769.36	0.1168	P	2.0	0.5
6	☐	200.000	199.777	471787.86	0.2323	P	1.4	-0.1

y = 0.0012 * x + 1.5787E-006
R = 1.0000
DL = 0.007055 ppb
BEC = 0.001358 ppb

Weight: <None>
Min Conc: <None>

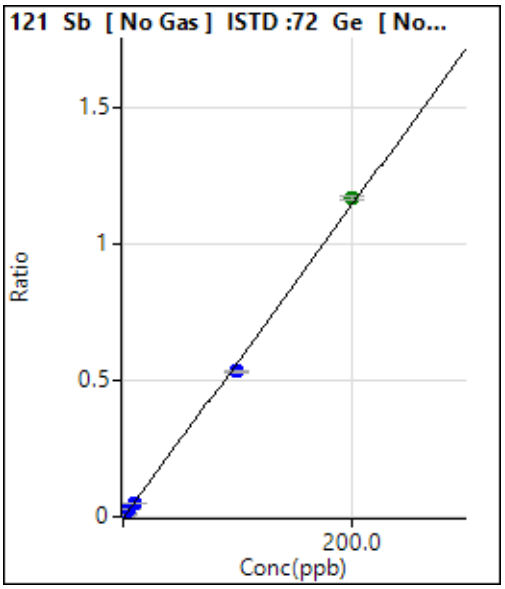
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1223.41	0.0006	P	9.2	
2	☐	2.000	2.000	15349.27	0.0075	P	1.6	0.0
3	☐	5.000	4.762	35358.18	0.0170	P	2.1	-4.8
4	☐	10.000	9.504	69010.76	0.0333	P	1.2	-5.0
5	☐	100.000	100.062	716077.93	0.3446	P	1.9	0.1
6	☑	200.000		1548352.53	0.7624	A	1.9	

y = 0.0034 * x + 5.8372E-004
R = 1.0000
DL = 0.04692 ppb
BEC = 0.1698 ppb

Weight: <None>
Min Conc: <None>

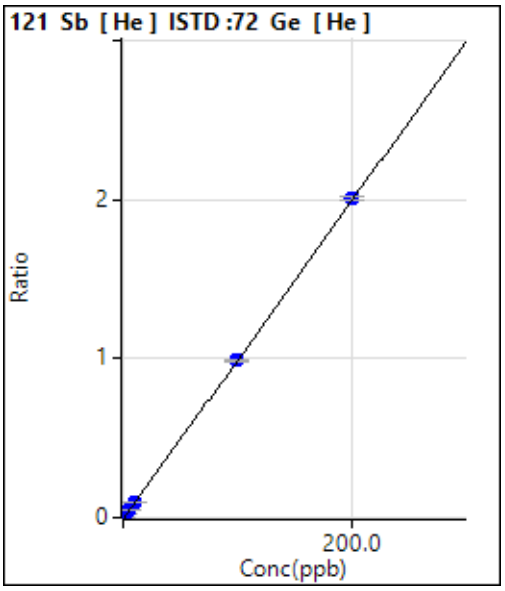


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	206.67	0.0001	P	30.8	
2	☐	2.000	1.853	19735.23	0.0108	P	5.0	-7.4
3	☐	5.000	4.507	48723.88	0.0260	P	2.8	-9.9
4	☐	10.000	9.000	97651.78	0.0518	P	0.9	-10.0
5	☐	100.000	92.733	995335.40	0.5330	P	1.1	-7.3
6	☐	200.000	203.697	2118884.66	1.1706	A	0.9	1.8

y = 0.0057 * x + 1.0896E-004
R = 0.9991
DL = 0.01754 ppb
BEC = 0.01896 ppb

Weight: <None>
Min Conc: <None>

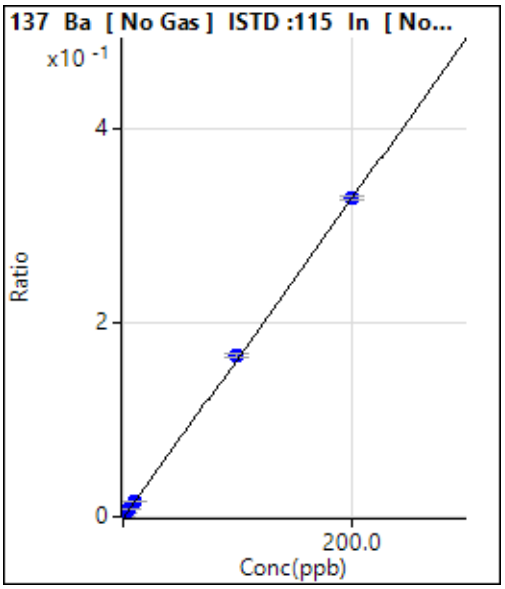
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	116.67	0.0002	P	47.3	
2	☐	2.000	1.993	10030.66	0.0202	P	4.0	-0.3
3	☐	5.000	4.966	24997.51	0.0500	P	0.8	-0.7
4	☐	10.000	9.551	47894.06	0.0959	P	0.5	-4.5
5	☐	100.000	98.656	492355.37	0.9883	P	0.5	-1.3
6	☐	200.000	200.695	978382.07	2.0102	P	0.9	0.3

y = 0.0100 * x + 2.3195E-004
R = 1.0000
DL = 0.03285 ppb
BEC = 0.02316 ppb

Weight: <None>
Min Conc: <None>

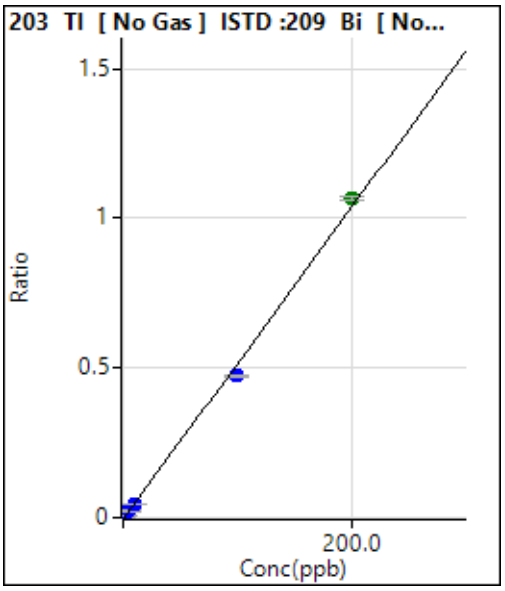


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	156.67	0.0001	P	13.8	
2	☐	2.000	2.053	7108.75	0.0035	P	5.0	2.6
3	☐	5.000	4.822	16720.95	0.0080	P	2.1	-3.6
4	☐	10.000	9.628	33059.07	0.0159	P	1.5	-3.7
5	☐	100.000	101.061	346083.24	0.1665	P	1.5	1.1
6	☐	200.000	199.492	667551.11	0.3287	P	1.6	-0.3

y = 0.0016 * x + 7.4815E-005
R = 1.0000
DL = 0.01882 ppb
BEC = 0.04542 ppb

Weight: <None>
Min Conc: <None>

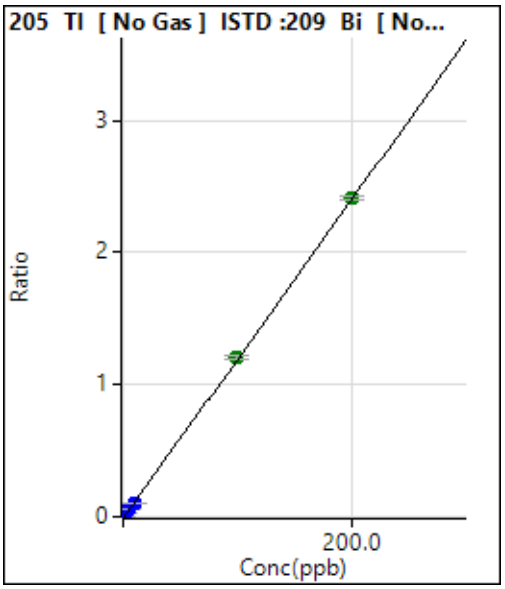
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	100.1	
2	☐	2.000	1.759	16467.82	0.0092	P	4.4	-12.0
3	☐	5.000	4.347	41435.68	0.0227	P	2.3	-13.1
4	☐	10.000	8.539	81672.47	0.0445	P	0.5	-14.6
5	☐	100.000	90.918	853228.79	0.4742	P	1.9	-9.1
6	☐	200.000	204.633	1873717.47	1.0673	A	1.3	2.3

y = 0.0052 * x + 1.0982E-005
R = 0.9986
DL = 0.006326 ppb
BEC = 0.002106 ppb

Weight: <None>
Min Conc: <None>

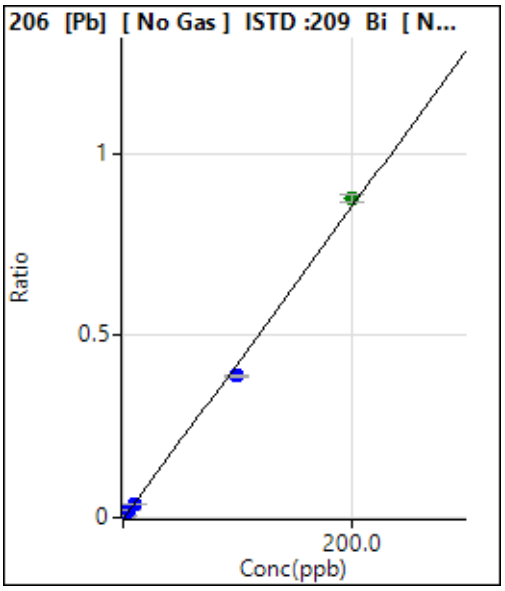


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43.33	0.0000	P	26.6	
2	☐	2.000	1.858	40191.85	0.0224	P	2.5	-7.1
3	☐	5.000	4.516	99504.66	0.0545	P	2.5	-9.7
4	☐	10.000	8.910	197014.94	0.1075	P	0.4	-10.9
5	☐	100.000	100.006	2169624.45	1.2059	A	2.1	0.0
6	☐	200.000	200.065	4235126.08	2.4123	A	1.0	0.0

y = 0.0121 * x + 2.3803E-005
R = 1.0000
DL = 0.001575 ppb
BEC = 0.001974 ppb

Weight: <None>
Min Conc: <None>

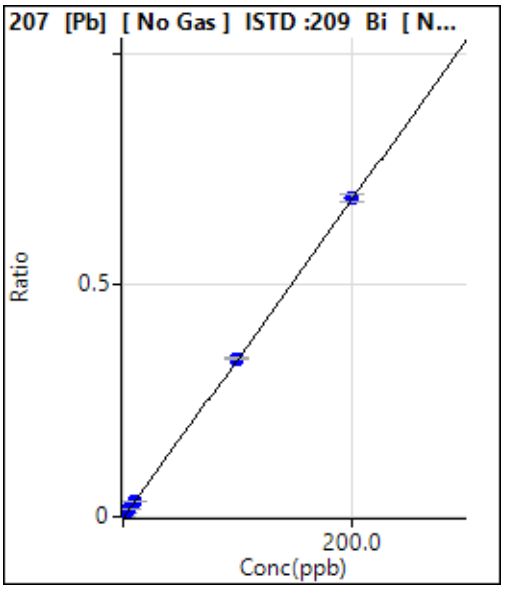
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	173.34	0.0001	P	18.7	
2	☐	2.000	1.793	13961.43	0.0078	P	2.8	-10.3
3	☐	5.000	4.448	35029.39	0.0192	P	2.8	-11.0
4	☐	10.000	8.706	68655.76	0.0374	P	0.9	-12.9
5	☐	100.000	90.964	702390.15	0.3903	P	1.3	-9.0
6	☐	200.000	204.598	1540981.12	0.8779	A	2.5	2.3

y = 0.0043 * x + 9.5241E-005
R = 0.9986
DL = 0.01243 ppb
BEC = 0.0222 ppb

Weight: <None>
Min Conc: <None>

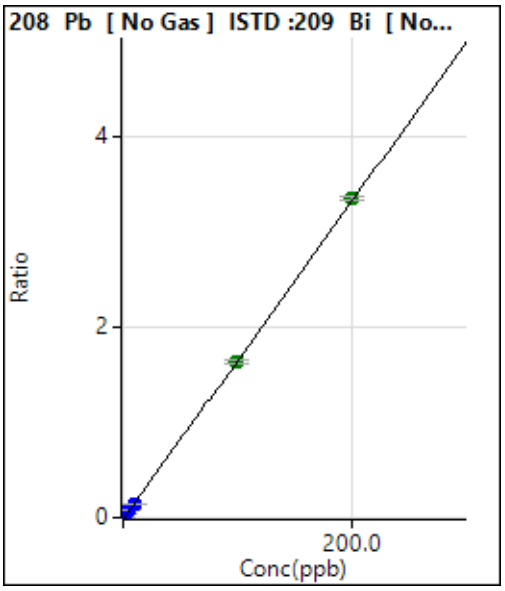


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	113.33	0.0001	P	5.2	
2	☐	2.000	1.864	11582.22	0.0065	P	1.4	-6.8
3	☐	5.000	4.788	30133.36	0.0165	P	1.3	-4.2
4	☐	10.000	9.609	60587.46	0.0330	P	1.6	-3.9
5	☐	100.000	99.445	614278.08	0.3414	P	2.1	-0.6
6	☐	200.000	200.304	1207124.54	0.6876	P	1.9	0.2

y = 0.0034 * x + 6.2264E-005
R = 1.0000
DL = 0.00282 ppb
BEC = 0.01814 ppb

Weight: <None>
Min Conc: <None>

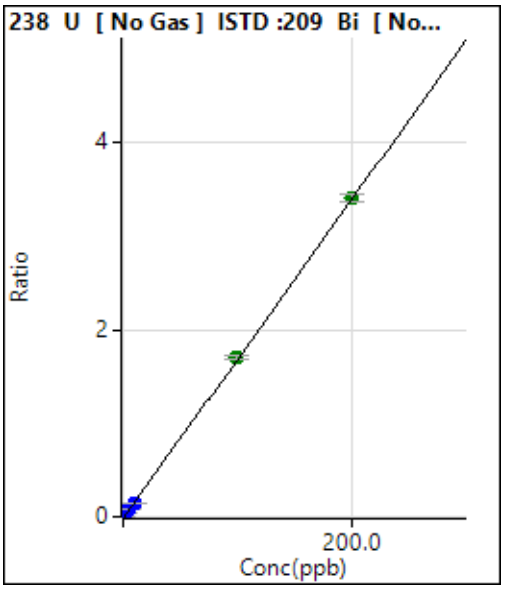
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	626.68	0.0003	P	9.6	
2	☐	2.000	1.829	55249.52	0.0308	P	0.8	-8.6
3	☐	5.000	4.528	138461.51	0.0758	P	1.0	-9.4
4	☐	10.000	8.955	274260.41	0.1496	P	0.6	-10.4
5	☐	100.000	98.029	2940299.03	1.6340	A	1.5	-2.0
6	☐	200.000	201.051	5882526.13	3.3509	A	1.6	0.5

y = 0.0167 * x + 3.4425E-004
R = 0.9999
DL = 0.005975 ppb
BEC = 0.02066 ppb

Weight: <None>
Min Conc: <None>

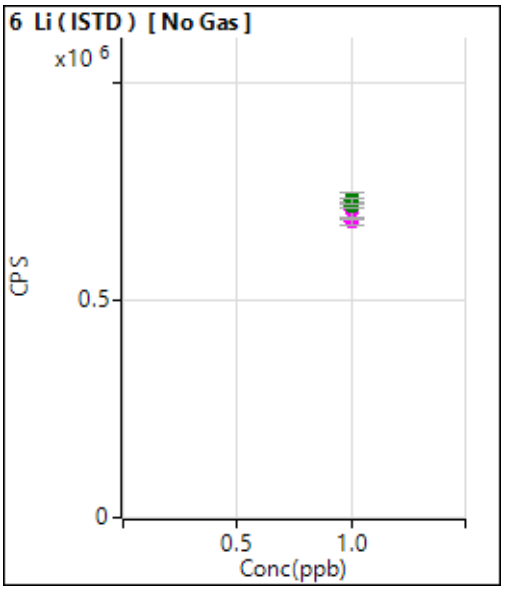


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	0.3	
2	☐	2.000	1.827	55877.73	0.0312	P	1.7	-8.7
3	☐	5.000	4.470	139319.05	0.0763	P	1.2	-10.6
4	☐	10.000	8.990	281255.10	0.1534	P	0.9	-10.1
5	☐	100.000	100.022	3070749.33	1.7067	A	1.8	0.0
6	☐	200.000	200.055	5992360.12	3.4135	A	1.8	0.0

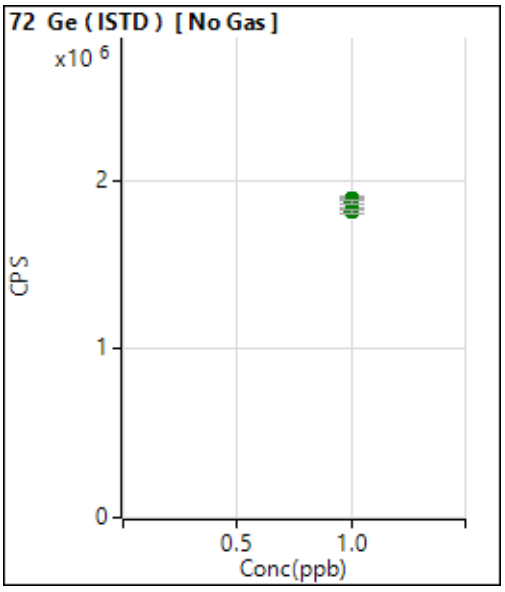
y = 0.0171 * x + 5.4938E-006
R = 1.0000
DL = 2.904E-06 ppb
BEC = 0.000322 ppb

Weight: <None>
Min Conc: <None>

Calibration for 027_ICV.d

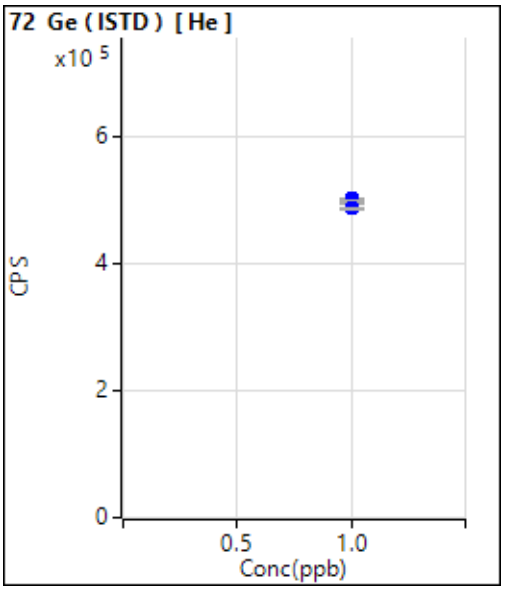


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		707162.97		M	4.5	
2	☐	1.000		734341.96		A	3.1	
3	☐	1.000		679921.55		M	2.7	
4	☐	1.000		705728.30		M	5.5	
5	☐	1.000		717957.42		A	1.2	
6	☐	1.000		727879.40		A	2.1	

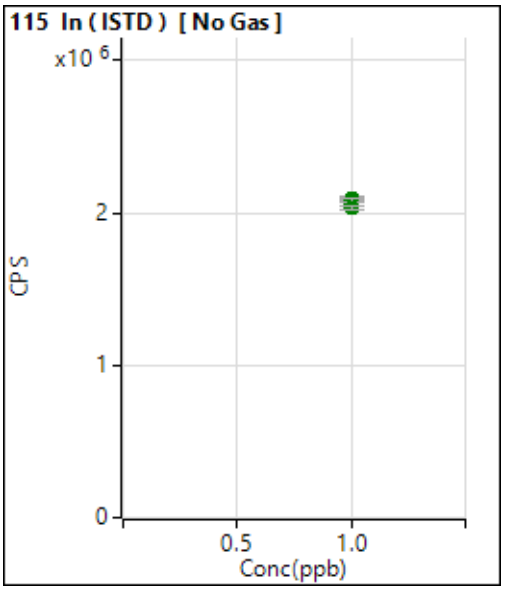


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1894389.81		A	0.8	
2	☐	1.000		1834946.07		A	0.6	
3	☐	1.000		1874036.12		A	1.1	
4	☐	1.000		1884282.00		A	0.6	
5	☐	1.000		1867616.48		A	1.1	
6	☐	1.000		1810243.62		A	1.3	

Calibration for 027_ICV.d

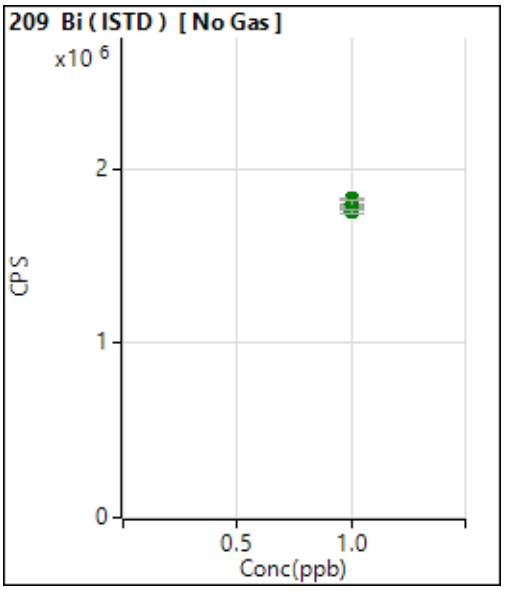


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		503235.58		P	0.2	
2	☐	1.000		496798.96		P	0.8	
3	☐	1.000		500296.88		P	0.8	
4	☐	1.000		499497.06		P	0.9	
5	☐	1.000		498178.42		P	0.7	
6	☐	1.000		486716.71		P	0.5	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		2095071.80		A	0.7	
2	☐	1.000		2057576.17		A	1.2	
3	☐	1.000		2085568.03		A	0.6	
4	☐	1.000		2074897.83		A	0.4	
5	☐	1.000		2078257.43		A	1.4	
6	☐	1.000		2031335.33		A	1.7	

Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1820259.97		A	0.3	
2	☐	1.000		1792519.87		A	0.3	
3	☐	1.000		1826739.09		A	0.8	
4	☐	1.000		1833487.79		A	0.5	
5	☐	1.000		1799733.31		A	2.3	
6	☐	1.000		1755763.72		A	1.4	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	028LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:26:35-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	018CALB.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	1.695	1.695	2.89	57868	0.00	2	
Be	9	1	No Gas	1.982	1.982	2.63	4738	0.04	2	
V	51	2	He	1.889	1.889	0.98	9034	0.02	2	
Cr	52	2	He	1.697	1.697	4.27	10528	0.02	2	
Fe	56	2	He	202.926	202.926	5.85	1013624	0.02	200	
Se	78	2	He	1.537	1.537	19.32	348	0.44	2	
As	75	2	He	1.968	1.968	8.80	1565	0.13	2	
Ca	44	2	He	240.000	240.000	5.89	7165	3.35	200	
Na	23	2	He	184.075	184.075	0.58	265018	0.07	200	
Mg	24	2	He	199.008	199.008	1.43	89852	0.22	200	
K	39	2	He	191.574	191.574	1.14	175582	0.11	200	
Mn	55	2	He	2.023	2.023	2.02	7282	0.03	2	
Co	59	2	He	2.054	2.054	1.37	16414	0.01	2	
Ni	60	2	He	1.977	1.977	4.22	4357	0.05	2	
Cu	63	2	He	1.891	1.891	2.05	12096	0.02	2	
Zn	66	2	He	1.651	1.651	3.43	2417	0.07	2	
Al	27	2	He	12.180	12.180	12.72	3280	0.37	2	NewName Main CR1 Failed
B	11	1	No Gas	21.801	21.801	8.27	32633	0.07	10	NewName Main CR1 Failed
Al	27	1	No Gas	10.815	10.815	1.81	150235	0.01	2	NewName Main CR1 Failed
Si	28	1	No Gas	12.660	12.660	6.10	300057	0.00	10	
Ag	107	1	No Gas	1.806	1.806	2.44	24386	0.01	2	
Cd	111	1	No Gas	1.938	1.938	4.51	4691	0.04	2	
Sr	88	1	No Gas	2.033	2.033	2.87	49257	0.00	2	
Mo	95	1	No Gas	1.993	1.993	4.74	9283	0.02	2	
Sn	118	1	No Gas	1.939	1.939	6.52	15079	0.01	2	
Sb	121	1	No Gas	1.842	1.842	3.11	19648	0.01	2	
Ba	137	1	No Gas	2.099	2.099	1.44	7352	0.03	2	
Tl	205	1	No Gas	1.857	1.857	2.05	40245	0.00	2	
Tl	203	1	No Gas	1.817	1.817	3.64	17032	0.01	2	
Pb	208	1	No Gas	1.877	1.877	2.30	56791	0.00	2	
U	238	1	No Gas	1.847	1.847	2.61	56604	0.00	2	
Ca	43	2	He	231.403	231.403	18.38	390	59.33	200	
Sb	121	2	He	2.045	2.045	1.11	10388	0.02	2	
Ti	47	2	He	2.178	2.178	12.75	363	0.60	200	
Cu	63	1	No Gas	1.833	1.833	1.17	21447	0.01	2	
Se	82	1	No Gas	-0.264	-0.264	-1527.43	-241	0.11	2	NewName 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	742512	0.74	707163	105.00	70	120	
Ge	72	2	He	501505	0.89	503236	99.66	70	120	
Ge	72	1	No Gas	1837472	0.51	1894390	97.00	70	120	
In	115	1	No Gas	2081702	1.87	2095072	99.36	70	120	
Bi	209	1	No Gas	1795733	1.26	1820260	98.65	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	029LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:28:38-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	018CALB.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	4.499	4.499	3.19	82660	0.01	5	
Be	9	1	No Gas	4.908	4.908	4.41	11410	0.04	5	
V	51	2	He	4.809	4.809	1.66	21653	0.02	5	
Cr	52	2	He	4.694	4.694	2.94	26286	0.02	5	
Fe	56	2	He	514.551	514.551	1.59	2535030	0.02	500	
Se	78	2	He	4.389	4.389	23.92	523	0.84	5	
As	75	2	He	4.942	4.942	2.72	3816	0.13	5	
Ca	44	2	He	499.918	499.918	1.65	13830	3.61	500	
Na	23	2	He	457.531	457.531	2.01	483792	0.09	500	
Mg	24	2	He	477.786	477.786	1.09	213536	0.22	500	
K	39	2	He	457.798	457.798	0.60	322784	0.14	500	
Mn	55	2	He	4.929	4.929	2.70	17218	0.03	5	
Co	59	2	He	4.939	4.939	0.36	39046	0.01	5	
Ni	60	2	He	4.981	4.981	3.91	10571	0.05	5	
Cu	63	2	He	4.669	4.669	0.35	28507	0.02	5	
Zn	66	2	He	4.987	4.987	4.73	5798	0.09	5	
Al	27	2	He	5.373	5.373	13.05	1743	0.31	5	
B	11	1	No Gas	27.798	27.798	1.48	39860	0.07	25	
Al	27	1	No Gas	5.087	5.087	5.12	85516	0.01	5	
Si	28	1	No Gas	25.456	25.456	3.88	375051	0.01	25	
Ag	107	1	No Gas	4.527	4.527	1.00	59708	0.01	5	
Cd	111	1	No Gas	4.825	4.825	4.35	11569	0.04	5	
Sr	88	1	No Gas	4.701	4.701	0.35	111468	0.00	5	
Mo	95	1	No Gas	4.627	4.627	2.12	21324	0.02	5	
Sn	118	1	No Gas	4.794	4.794	1.25	35198	0.01	5	
Sb	121	1	No Gas	4.465	4.465	0.59	48256	0.01	5	
Ba	137	1	No Gas	4.875	4.875	2.67	16714	0.03	5	
Tl	205	1	No Gas	4.498	4.498	0.22	98329	0.00	5	
Tl	203	1	No Gas	4.277	4.277	1.05	40449	0.01	5	
Pb	208	1	No Gas	4.511	4.511	0.68	136862	0.00	5	
U	238	1	No Gas	4.462	4.462	0.82	138009	0.00	5	
Ca	43	2	He	490.722	490.722	9.51	790	62.11	500	
Sb	121	2	He	4.972	4.972	1.89	24887	0.02	5	
Ti	47	2	He	4.434	4.434	4.63	727	0.61	5	
Cu	63	1	No Gas	4.531	4.531	1.32	51826	0.01	5	
Se	82	1	No Gas	3.158	3.158	78.04	254	1.24	5	NewName2 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	725145	2.42	707163	102.54	70	120	
Ge	72	2	He	497510	0.36	503236	98.86	70	120	
Ge	72	1	No Gas	1872900	1.67	1894390	98.87	70	120	
In	115	1	No Gas	2062276	1.18	2095072	98.43	70	120	
Bi	209	1	No Gas	1812322	0.57	1820260	99.56	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	030_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:30:41-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	-0.040	-102.4	39505	0.4	0.5	
Be	9	1	No Gas	0.012	44.4	53	21.7	0.5	
V	51	2	He	-0.029	-20.7	620	4.2	2.5	
Cr	52	2	He	0.023	202.6	1583	15.0	2.5	
Fe	56	2	He	1.317	12.7	15262	5.5	100	
Se	78	2	He	-0.618	-12.2	209	2.9	1	
As	75	2	He	0.015	93.6	64	15.8	2.5	
Ca	44	2	He	-4.312	-133.7	780	18.2	100	
Na	23	2	He	-7.947	-17.4	106756	0.6	100	
Mg	24	2	He	0.611	23.5	587	10.4	100	
K	39	2	He	6.283	32.0	70095	1.5	100	
Mn	55	2	He	0.023	74.5	340	17.6	2.5	
Co	59	2	He	0.004	47.9	110	15.7	2.5	
Ni	60	2	He	-0.030	-64.0	143	28.2	2.5	
Cu	63	2	He	0.056	21.9	1080	7.4	1	
Zn	66	2	He	-0.052	-272.8	657	22.2	2.5	
Al	27	2	He	-1.388	-16.1	240	20.8	5	
B	11	1	No Gas	4.345	7.4	8464	5.5	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-0.984	-6.9	13530	4.4	5	
Si	28	1	No Gas	-6.405	-13.1	197094	0.5	10	
Ag	107	1	No Gas	0.000	-1037.3	550	3.1	2.5	
Cd	111	1	No Gas	0.017	94.4	43	87.4	1	
Sr	88	1	No Gas	-0.011	-54.8	763	18.4	2.5	
Mo	95	1	No Gas	0.013	62.8	80	45.1	2.5	
Sn	118	1	No Gas	0.085	26.7	1763	9.4	5	
Sb	121	1	No Gas	0.013	16.0	330	5.2	2.5	
Ba	137	1	No Gas	0.029	88.3	247	35.0	2.5	
Tl	205	1	No Gas	0.008	60.3	217	48.5	1	
Tl	203	1	No Gas	0.010	68.8	113	56.7	1	
Pb	208	1	No Gas	0.014	32.6	1017	12.5	2.5	
U	238	1	No Gas	0.006	57.0	187	53.9	2.5	
Ca	43	2	He	8.932	189.7	40	66.1	100	
Sb	121	2	He	0.008	51.5	153	13.6	2.5	
Ti	47	2	He	0.063	112.9	17	69.3	2.5	
Se	82	1	No Gas	-2.479	-66.2	-553	-43.1	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	710367	1.30	707163	100.45	70	120	
Ge	72	2	He	492798	0.73	503236	97.93	70	120	
Ge	72	1	No Gas	1821929	1.86	1894390	96.17	70	120	
In	115	1	No Gas	2016484	0.73	2095072	96.25	70	120	
Bi	209	1	No Gas	1783567	0.48	1820260	97.98	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	031ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:34:00-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	0.286	29.6	44527	1.3	0	ICSA Main CR1 Failed
Be	9	1	No Gas	0.004	237.7	38	61.6	0	ICSA Main CR1 Failed
V	51	2	He	0.039	25.8	890	4.9	0	ICSA Main CR1 Failed
Cr	52	2	He	2.061	4.8	11949	4.3	0	ICSA Main CR1 Failed
Fe	56	2	He	99438.929	0.4	471623326	0.9	0	
Se	78	2	He	-0.310	-13.9	223	1.9	0	ICSA Main CR1 Failed
As	75	2	He	0.094	60.5	121	35.1	0	ICSA Main CR1 Failed
Ca	44	2	He	102358.629	1.5	2558486	1.8	0	
Na	23	2	He	101011.336	0.3	78938400	0.7	0	
Mg	24	2	He	100068.980	0.6	43139643	0.5	0	
K	39	2	He	100057.305	1.4	54015863	1.5	0	
Mn	55	2	He	0.433	6.6	1693	5.3	0	ICSA Main CR1 Failed
Co	59	2	He	0.128	12.5	1047	11.4	0	ICSA Main CR1 Failed
Ni	60	2	He	0.401	8.4	1007	7.3	0	ICSA Main CR1 Failed
Cu	63	2	He	0.122	11.0	1433	4.9	0	ICSA Main CR1 Failed
Zn	66	2	He	1.228	1.1	1900	0.0	0	ICSA Main CR1 Failed
Al	27	2	He	100555.674	1.3	21576430	1.5	0	
B	11	1	No Gas	10.881	3.0	17800	0.4	0	
Al	27	1	No Gas	95414.984	1.4	1084593291	0.4	0	
Si	28	1	No Gas	16.283	9.8	313487	1.0	0	ICSA Main CR1 Failed
Ag	107	1	No Gas	0.018	20.1	780	5.9	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	0.778	2.7	1833	2.7	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	2.265	1.1	53259	1.1	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	2084.309	0.4	9420073	0.4	0	
Sn	118	1	No Gas	0.135	10.4	2120	4.6	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.099	4.4	1223	4.5	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	1.358	4.0	4681	4.0	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.009	24.1	230	19.9	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.007	73.2	83	56.7	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.062	2.9	2360	2.2	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.024	22.2	707	22.2	0	ICSA Main CR1 Failed
Ca	43	2	He	94226.596	1.4	141710	1.4	0	
Sb	121	2	He	0.115	25.1	667	20.2	0	ICSA Main CR1 Failed
Ti	47	2	He	2030.549	0.7	318612	0.8	0	
Se	82	1	No Gas	-0.229	-583.8	-234	-82.0	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	744646	2.59	707163	105.30	70	120	
Ge	72	2	He	480612	0.72	503236	95.50	70	120	
Ge	72	1	No Gas	1804593	1.82	1894390	95.26	70	120	
In	115	1	No Gas	2024427	0.05	2095072	96.63	70	120	
Bi	209	1	No Gas	1719678	0.33	1820260	94.47	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	032ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:36:05-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	100.248	3.529	929476	2.64	100	100.2	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	99.724	2.398	220425	1.39	100	99.7	80	120	
V	51	2	He	99.231	0.436	422961	0.74	100	99.2	80	120	
Cr	52	2	He	96.189	0.861	499173	0.32	100	96.2	80	120	
Fe	56	2	He	107717.215	0.944	517755219	0.36	100	107717.2	80	120	
Se	78	2	He	100.452	0.454	6360	1.16	100	100.5	80	120	
As	75	2	He	99.870	1.217	74481	0.26	100	99.9	80	120	
Ca	44	2	He	111791.686	1.350	2831642	0.27	100	111791.7	80	120	
Na	23	2	He	108934.526	0.878	86267395	0.29	100	108934.5	80	120	ICSB Main CR1 Failed
Mg	24	2	He	108177.276	0.553	47264913	0.62	100	108177.3	80	120	
K	39	2	He	108935.364	1.232	59593316	0.28	100	108935.4	80	120	
Mn	55	2	He	98.785	1.787	332945	0.64	100	98.8	80	120	
Co	59	2	He	98.236	0.993	758939	0.19	100	98.2	80	120	
Ni	60	2	He	96.077	0.787	195916	0.55	100	96.1	80	120	
Cu	63	2	He	90.525	0.340	527475	1.14	100	90.5	80	120	
Zn	66	2	He	98.473	0.800	98976	1.97	100	98.5	80	120	
Al	27	2	He	99521.826	0.430	21642701	0.76	100	99521.8	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	495.401	2.179	630864	1.29	100	495.4	80	120	
Al	27	1	No Gas	93605.478	0.791	1045832598	0.51	100	93605.5	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	513.799	0.360	2857823	0.72	100	513.8	80	120	
Ag	107	1	No Gas	87.831	1.310	1090993	1.20	100	87.8	80	120	
Cd	111	1	No Gas	98.210	1.922	223780	0.92	100	98.2	80	120	
Sr	88	1	No Gas	106.036	1.033	2368081	0.92	100	106.0	80	120	
Mo	95	1	No Gas	2211.466	1.046	9675684	0.90	100	2211.5	80	120	ICSB Main CR1 Failed
Sn	118	1	No Gas	99.417	1.717	670983	0.60	100	99.4	80	120	
Sb	121	1	No Gas	91.342	0.543	931047	1.00	100	91.3	80	120	
Ba	137	1	No Gas	101.199	1.648	326805	0.31	100	101.2	80	120	
Tl	205	1	No Gas	102.924	1.841	2062501	0.86	100	102.9	80	120	
Tl	203	1	No Gas	91.109	1.331	789778	0.47	100	91.1	80	120	
Pb	208	1	No Gas	98.717	0.662	2734894	0.74	100	98.7	80	120	
U	238	1	No Gas	103.893	1.046	2946313	0.85	100	103.9	80	120	
Ca	43	2	He	103332.836	2.362	157479	1.28	100	103332.8	80	120	
Sb	121	2	He	97.974	0.397	478070	1.00	100	98.0	80	120	
Ti	47	2	He	2111.566	0.800	335791	0.50	100	2111.6	80	120	
Cu	63	1	No Gas	88.824	0.305	935908	1.08	100	88.8	80	120	
Se	82	1	No Gas	98.865	1.079	13380	0.08	100	98.9	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	690682	1.06	707163	97.67	70	120	
Ge	72	2	He	487113	1.17	503236	96.80	70	120	
Ge	72	1	No Gas	1773520	1.04	1894390	93.62	70	120	
In	115	1	No Gas	1960062	1.94	2095072	93.56	70	120	
Bi	209	1	No Gas	1662137	1.12	1820260	91.31	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	034_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:43:30-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	99.167	2.324	903537	1.33	100	99.2	90	110	
Be	9	1	No Gas	102.895	0.957	223409	0.35	100	102.9	90	110	
V	51	2	He	97.647	0.282	427245	0.28	100	97.6	90	110	
Cr	52	2	He	94.381	0.704	502804	0.25	100	94.4	90	110	
Fe	56	2	He	9856.296	0.430	48640906	0.65	10000	98.6	90	110	
Se	78	2	He	99.123	2.964	6444	2.34	100	99.1	90	110	
As	75	2	He	99.182	0.557	75932	0.38	100	99.2	90	110	
Ca	44	2	He	9839.277	0.258	256671	0.33	10000	98.4	90	110	
Na	23	2	He	9849.553	0.368	8111507	0.79	10000	98.5	90	110	
Mg	24	2	He	9873.967	0.326	4428813	0.63	10000	98.7	90	110	
K	39	2	He	9852.884	0.408	5594629	0.16	10000	98.5	90	110	
Mn	55	2	He	98.650	0.395	341342	0.83	100	98.7	90	110	
Co	59	2	He	98.916	0.252	784477	0.75	100	98.9	90	110	
Ni	60	2	He	97.374	1.181	203820	0.93	100	97.4	90	110	
Cu	63	2	He	92.963	0.902	555987	0.59	100	93.0	90	110	
Zn	66	2	He	101.260	1.375	104440	0.93	100	101.3	90	110	
Al	27	2	He	99.674	0.775	22802	0.25	100	99.7	90	110	
B	11	1	No Gas	468.978	0.901	586845	1.85	500	93.8	90	110	
Al	27	1	No Gas	103.211	3.104	1224471	1.92	100	103.2	90	110	
Si	28	1	No Gas	499.630	0.758	2897424	1.44	5000	10.0	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.945	1.568	1272041	2.65	100	98.9	90	110	
Cd	111	1	No Gas	99.400	0.449	234418	0.88	100	99.4	90	110	
Sr	88	1	No Gas	101.280	1.015	2340807	0.82	100	101.3	90	110	
Mo	95	1	No Gas	98.640	1.573	446644	1.34	100	98.6	90	110	
Sn	118	1	No Gas	97.442	1.931	680640	1.51	100	97.4	90	110	
Sb	121	1	No Gas	90.623	0.754	960869	0.72	100	90.6	90	110	
Ba	137	1	No Gas	98.764	1.549	330078	0.74	100	98.8	90	110	
Tl	205	1	No Gas	100.785	1.720	2143909	2.03	100	100.8	90	110	
Tl	203	1	No Gas	89.485	0.751	823374	0.90	100	89.5	90	110	CCV Main CR1-2 Failed
Pb	208	1	No Gas	95.951	0.461	2821566	1.09	100	96.0	90	110	
U	238	1	No Gas	99.501	1.901	2994761	0.84	100	99.5	90	110	
Ca	43	2	He	9661.434	5.192	15142	5.49	10000	96.6	90	110	
Sb	121	2	He	97.647	0.900	489083	0.44	100	97.6	90	110	
Ti	47	2	He	95.768	2.172	15639	1.94	100	95.8	90	110	
Cu	63	1	No Gas	90.601	0.926	993004	1.15	100	90.6	90	110	
Se	82	1	No Gas	98.893	3.549	13922	3.23	100	98.9	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	678389	0.95	707163	95.93	70	120	
Ge	72	2	He	500006	0.51	503236	99.36	70	120	
Ge	72	1	No Gas	1844916	1.16	1894390	97.39	70	120	
In	115	1	No Gas	2028255	1.09	2095072	96.81	70	120	
Bi	209	1	No Gas	1764169	1.06	1820260	96.92	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	035_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:45:28-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	0.182	46.7	37700	1.6	0.5	
Be	9	1	No Gas	0.012	86.0	50	43.6	0.5	
V	51	2	He	0.016	33.7	822	3.1	2.5	
Cr	52	2	He	0.031	50.3	1637	5.1	2.5	
Fe	56	2	He	0.774	1.7	12719	0.1	100	
Se	78	2	He	-0.190	-282.9	237	13.7	2	
As	75	2	He	0.023	165.6	71	40.4	2.5	
Ca	44	2	He	-6.764	-26.2	723	6.5	100	
Na	23	2	He	-2.770	-60.5	111735	0.8	100	
Mg	24	2	He	0.370	76.9	483	25.9	100	
K	39	2	He	7.995	28.9	71575	1.4	100	
Mn	55	2	He	0.024	43.6	347	10.9	2.5	
Co	59	2	He	-0.002	-30.0	57	10.2	2.5	
Ni	60	2	He	-0.057	-8.2	90	11.1	2.5	
Cu	63	2	He	0.042	24.5	1007	6.5	2	
Zn	66	2	He	-0.063	-65.7	650	6.7	2.5	
Al	27	2	He	-1.335	-10.6	253	12.1	5	
B	11	1	No Gas	14.431	13.3	19617	11.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.615	-52.4	17947	20.9	5	
Si	28	1	No Gas	-10.014	-3.5	179810	0.1	10	
Ag	107	1	No Gas	0.010	96.7	690	17.6	2.5	
Cd	111	1	No Gas	0.007	119.8	20	100.0	1	
Sr	88	1	No Gas	-0.008	-82.1	843	18.4	2.5	
Mo	95	1	No Gas	0.039	12.5	200	10.0	2.5	
Sn	118	1	No Gas	0.055	21.3	1590	6.1	5	
Sb	121	1	No Gas	0.026	27.0	473	15.3	2.5	
Ba	137	1	No Gas	-0.005	-454.5	137	53.9	2.5	
Tl	205	1	No Gas	0.013	40.7	333	35.2	1	
Tl	203	1	No Gas	0.017	59.8	173	52.0	1	
Pb	208	1	No Gas	0.021	30.5	1247	14.3	2.5	
U	238	1	No Gas	0.008	77.4	267	73.3	2.5	
Ca	43	2	He	-6.179	-159.6	17	91.7	100	
Sb	121	2	He	0.010	53.4	163	15.4	2.5	
Ti	47	2	He	-0.020	-176.7	3	173.2	2.5	
Cu	63	1	No Gas	0.040	17.6	1907	4.5	2.5	
Se	82	1	No Gas	-0.854	-360.2	-328	-134.2	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	644827	0.35	707163	91.19	70	120	
Ge	72	2	He	496508	0.41	503236	98.66	70	120	
Ge	72	1	No Gas	1839038	1.08	1894390	97.08	70	120	
In	115	1	No Gas	2056469	1.10	2095072	98.16	70	120	
Bi	209	1	No Gas	1788683	1.69	1820260	98.27	70	120	

Sample Report

Sample Table

Sample Name	HS22080472-01SD
Data File Name	039SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:06:36-05:00
Sample Type	Sample
Dilution	5
Comment	DOD TW 182618
ISTD Ref FileName	018CALB.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	5.077	25.383	4.54	93007	0.01	2000	
Be	9	1	No Gas	-0.006	-0.029	-36.13	15	-0.04	2000	
V	51	2	He	0.317	1.587	7.33	2177	0.01	2000	
Cr	52	2	He	-0.042	-0.210	-50.58	1280	0.00	2000	
Fe	56	2	He	18.219	91.097	2.32	100464	0.02	200000	
Se	78	2	He	-0.373	-1.864	-46.03	231	-0.16	2000	
As	75	2	He	0.139	0.697	24.16	163	0.09	2000	
Ca	44	2	He	3623.065	18115.324	0.61	96607	3.75	200000	
Na	23	2	He	154070.949	770354.744	0.60	127210931	0.12	200000	
Mg	24	2	He	3621.001	18105.006	0.12	1650389	0.22	200000	
K	39	2	He	481.868	2409.340	1.00	343319	0.14	200000	
Mn	55	2	He	15.040	75.198	0.57	53100	0.03	2000	
Co	59	2	He	0.028	0.138	36.01	300	0.01	2000	
Ni	60	2	He	0.021	0.105	110.72	257	0.01	2000	
Cu	63	2	He	0.229	1.143	16.96	2160	0.01	2000	
Zn	66	2	He	1.205	6.026	17.63	1984	0.06	2000	
Al	27	2	He	5.310	26.552	6.77	1767	0.30	2000	
B	11	1	No Gas	10.858	54.290	3.68	18282	0.06	2000	
Al	27	1	No Gas	5.364	26.819	2.68	88504	0.01	2000	
Si	28	1	No Gas	3927.106	19635.532	0.91	21414793	0.02	2000	>LDR
Ag	107	1	No Gas	0.005	0.027	106.83	613	0.00	2000	
Cd	111	1	No Gas	0.000	0.000	2801.68	3	0.00	2000	
Sr	88	1	No Gas	88.120	440.601	2.63	1996664	0.00	2000	
Mo	95	1	No Gas	0.042	0.208	35.11	207	0.02	2000	
Sn	118	1	No Gas	-0.001	-0.003	-744.42	1157	0.00	2000	
Sb	121	1	No Gas	0.032	0.159	24.34	543	0.01	2000	
Ba	137	1	No Gas	69.300	346.501	2.27	227091	0.03	2000	
Tl	205	1	No Gas	0.001	0.006	49.75	63	0.00	2000	
Tl	203	1	No Gas	0.001	0.003	297.32	23	0.00	2000	
Pb	208	1	No Gas	0.060	0.298	8.07	2217	0.00	2000	
U	238	1	No Gas	0.005	0.024	20.59	143	0.00	2000	
Ca	43	2	He	3574.199	17870.995	0.71	5708	62.62	200000	
Sb	121	2	He	0.024	0.120	56.14	240	0.01	2000	
Ti	47	2	He	0.161	0.807	132.13	33	0.48	2000	
Cu	63	1	No Gas	0.992	4.962	2.18	12473	0.01	2000	
Zn	66	1	No Gas	1.373	6.863	9.01	5388	0.03	2000	
Se	82	1	No Gas	-1.534	-7.670	-153.86	-429	0.36	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	765980	1.45	707163	108.32	70	120	
Ge	72	2	He	508022	0.67	503236	100.95	70	120	
Ge	72	1	No Gas	1866344	1.06	1894390	98.52	70	120	
In	115	1	No Gas	1988650	1.82	2095072	94.92	70	120	
Bi	209	1	No Gas	1659159	1.00	1820260	91.15	70	120	

Sample Report

Sample Table

Sample Name	HS22080472-01MS
Data File Name	040SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:08:40-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 182618
ISTD Ref FileName	018CALB.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	25.175	25.175	1.78	292287	0.01	2000	
Be	9	1	No Gas	55.326	55.326	1.56	136205	0.04	2000	
V	51	2	He	54.718	54.718	0.33	256937	0.02	2000	
Cr	52	2	He	50.632	50.632	0.14	289814	0.02	2000	
Fe	56	2	He	5221.578	5221.578	0.44	27620120	0.02	200000	
Se	78	2	He	49.534	49.534	1.93	3586	1.38	2000	
As	75	2	He	56.546	56.546	0.47	46418	0.12	2000	
Ca	44	2	He	22560.317	22560.317	0.58	629445	3.58	200000	
Na	23	2	He	726185.017	726185.017	0.91	631940844	0.11	200000	>LDR
Mg	24	2	He	22067.449	22067.449	2.17	10605994	0.21	200000	
K	39	2	He	7895.980	7895.980	1.13	4819515	0.16	200000	
Mn	55	2	He	124.501	124.501	0.90	461572	0.03	2000	
Co	59	2	He	52.148	52.148	0.05	443262	0.01	2000	
Ni	60	2	He	50.984	50.984	0.71	114478	0.04	2000	
Cu	63	2	He	49.010	49.010	1.18	314505	0.02	2000	
Zn	66	2	He	57.990	57.990	2.75	64430	0.09	2000	
Al	27	2	He	118.756	118.756	1.72	29001	0.41	2000	
B	11	1	No Gas	38.655	38.655	3.08	57603	0.07	2000	
Al	27	1	No Gas	121.369	121.369	1.20	1477095	0.01	2000	
Si	28	1	No Gas	19420.178	19420.178	1.59	106739638	0.02	2000	>LDR
Ag	107	1	No Gas	41.192	41.192	0.51	525043	0.01	2000	
Cd	111	1	No Gas	53.965	53.965	0.79	126115	0.04	2000	
Sr	88	1	No Gas	408.862	408.862	0.72	9361502	0.00	2000	
Mo	95	1	No Gas	54.784	54.784	1.09	245843	0.02	2000	
Sn	118	1	No Gas	0.054	0.054	38.94	1543	0.00	2000	
Sb	121	1	No Gas	47.736	47.736	1.58	520768	0.01	2000	
Ba	137	1	No Gas	452.049	452.049	1.30	1496626	0.03	2000	
Tl	205	1	No Gas	51.060	51.060	0.78	997574	0.01	2000	
Tl	203	1	No Gas	49.030	49.030	0.43	414377	0.01	2000	
Pb	208	1	No Gas	51.450	51.450	1.55	1389718	0.00	2000	
U	238	1	No Gas	0.019	0.019	9.48	543	0.00	2000	
Ca	43	2	He	22380.634	22380.634	0.79	37552	59.60	200000	
Sb	121	2	He	51.955	51.955	0.66	278946	0.02	2000	
Ti	47	2	He	53.839	53.839	4.52	9427	0.57	2000	
Cu	63	1	No Gas	53.537	53.537	1.99	604210	0.01	2000	
Zn	66	1	No Gas	58.514	58.514	1.84	163972	0.04	2000	
Se	82	1	No Gas	45.496	45.496	2.56	6477	0.70	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	769225	1.96	707163	108.78	70	120	
Ge	72	2	He	535853	0.86	503236	106.48	70	120	
Ge	72	1	No Gas	1898038	1.38	1894390	100.19	70	120	
In	115	1	No Gas	2009892	0.80	2095072	95.93	70	120	
Bi	209	1	No Gas	1620346	1.03	1820260	89.02	70	120	

Sample Report

Sample Table

Sample Name	HS22080472-01PDS
Data File Name	042SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:12:46-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 182618
ISTD Ref FileName	018CALB.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	24.661	24.661	2.33	290421	0.01	2000	
Be	9	1	No Gas	108.845	108.845	2.46	270909	0.04	2000	
V	51	2	He	106.974	106.974	0.80	513870	0.02	2000	
Cr	52	2	He	99.393	99.393	0.99	581335	0.02	2000	
Fe	56	2	He	10103.219	10103.219	0.65	54746921	0.02	200000	
Se	78	2	He	108.540	108.540	1.20	7723	1.41	2000	
As	75	2	He	110.443	110.443	0.83	92837	0.12	2000	
Ca	44	2	He	27522.527	27522.527	0.32	786570	3.50	200000	
Na	23	2	He	716085.860	716085.860	1.12	638510257	0.11	200000	>LDR
Mg	24	2	He	26683.685	26683.685	1.51	13141066	0.20	200000	
K	39	2	He	13020.484	13020.484	1.19	8094245	0.16	200000	
Mn	55	2	He	174.433	174.433	0.54	662497	0.03	2000	
Co	59	2	He	102.503	102.503	0.40	892622	0.01	2000	
Ni	60	2	He	98.864	98.864	1.03	227227	0.04	2000	
Cu	63	2	He	94.339	94.339	0.62	619539	0.02	2000	
Zn	66	2	He	108.264	108.264	1.39	122563	0.09	2000	
Al	27	2	He	116.190	116.190	2.42	29087	0.40	2000	
B	11	1	No Gas	36.991	36.991	1.65	55889	0.07	2000	
Al	27	1	No Gas	120.769	120.769	2.06	1499300	0.01	2000	
Si	28	1	No Gas	19124.533	19124.533	2.07	107214515	0.02	2000	>LDR
Ag	107	1	No Gas	103.496	103.496	1.51	1303765	0.01	2000	
Cd	111	1	No Gas	105.950	105.950	0.06	244888	0.04	2000	
Sr	88	1	No Gas	410.920	410.920	0.50	9305010	0.00	2000	
Mo	95	1	No Gas	109.179	109.179	0.50	484542	0.02	2000	
Sn	118	1	No Gas	0.079	0.079	49.10	1697	0.00	2000	
Sb	121	1	No Gas	90.279	90.279	1.13	1004381	0.01	2000	
Ba	137	1	No Gas	505.456	505.456	1.36	1655275	0.03	2000	
Tl	205	1	No Gas	109.862	109.862	2.39	2068562	0.01	2000	
Tl	203	1	No Gas	97.783	97.783	1.69	796414	0.01	2000	
Pb	208	1	No Gas	108.433	108.433	2.17	2822420	0.00	2000	
U	238	1	No Gas	0.026	0.026	11.93	707	0.00	2000	
Ca	43	2	He	26753.942	26753.942	2.24	45984	58.18	200000	
Sb	121	2	He	98.260	98.260	0.36	540422	0.02	2000	
Ti	47	2	He	105.050	105.050	1.37	18836	0.56	2000	
Cu	63	1	No Gas	110.025	110.025	1.88	1264838	0.01	2000	
Zn	66	1	No Gas	109.011	109.011	0.70	310134	0.04	2000	
Se	82	1	No Gas	102.718	102.718	1.29	15186	0.68	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	778044	3.39	707163	110.02	70	120	
Ge	72	2	He	549026	0.22	503236	109.10	70	120	
Ge	72	1	No Gas	1935916	1.53	1894390	102.19	70	120	
In	115	1	No Gas	1987822	1.05	2095072	94.88	70	120	
Bi	209	1	No Gas	1561764	1.31	1820260	85.80	70	120	

Sample Report

Sample Table

Sample Name	HS22080499-05
Data File Name	044SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:16:50-05:00
Sample Type	Sample
Dilution	50
Comment	DOD TW 182618
ISTD Ref FileName	018CALB.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	0.713	35.638	11.27	48878	0.00	2000	
Be	9	1	No Gas	-0.005	-0.243	-67.43	17	-0.03	2000	
V	51	2	He	0.403	20.131	7.25	2570	0.02	2000	
Cr	52	2	He	1.884	94.224	2.58	11749	0.02	2000	
Fe	56	2	He	1877.371	93868.533	0.72	9476963	0.02	200000	
Se	78	2	He	-0.144	-7.179	-273.88	247	-0.06	2000	
As	75	2	He	0.111	5.556	14.84	142	0.08	2000	
Ca	44	2	He	2990.800	149539.995	2.35	80384	3.72	200000	
Na	23	2	He	24269.370	1213468.484	0.59	20256568	0.12	200000	
Mg	24	2	He	1636.648	81832.382	1.03	750578	0.22	200000	
K	39	2	He	104.583	5229.154	1.06	129056	0.08	200000	
Mn	55	2	He	65.056	3252.819	0.80	230171	0.03	2000	
Co	59	2	He	0.289	14.473	7.09	2424	0.01	2000	
Ni	60	2	He	1.914	95.689	3.98	4304	0.04	2000	
Cu	63	2	He	0.214	10.688	1.23	2084	0.01	2000	
Zn	66	2	He	0.161	8.066	5.34	903	0.02	2000	
Al	27	2	He	7.894	394.707	11.49	2367	0.33	2000	
B	11	1	No Gas	2.527	126.364	8.97	6417	0.04	2000	
Al	27	1	No Gas	8.170	408.486	9.56	122255	0.01	2000	
Si	28	1	No Gas	338.389	16919.447	1.80	2073825	0.02	2000	
Ag	107	1	No Gas	0.020	0.989	21.02	793	0.00	2000	
Cd	111	1	No Gas	0.010	0.513	51.78	27	0.04	2000	
Sr	88	1	No Gas	41.824	2091.178	2.39	947275	0.00	2000	
Mo	95	1	No Gas	0.024	1.215	18.36	130	0.02	2000	
Sn	118	1	No Gas	-0.013	-0.671	-152.49	1070	0.00	2000	
Sb	121	1	No Gas	0.076	3.824	24.72	1030	0.01	2000	
Ba	137	1	No Gas	4.867	243.366	0.90	16077	0.03	2000	
Tl	205	1	No Gas	0.004	0.185	59.52	117	0.00	2000	
Tl	203	1	No Gas	0.001	0.064	89.04	30	0.00	2000	
Pb	208	1	No Gas	0.012	0.582	41.68	917	0.00	2000	
U	238	1	No Gas	0.002	0.099	70.89	67	0.00	2000	
Ca	43	2	He	2889.788	144489.392	1.93	4648	62.18	200000	
Sb	121	2	He	0.080	3.986	13.41	527	0.02	2000	
Ti	47	2	He	0.119	5.961	28.63	27	0.45	2000	
Cu	63	1	No Gas	0.403	20.147	2.43	5985	0.01	2000	
Zn	66	1	No Gas	0.284	14.199	28.31	2430	0.01	2000	
Se	82	1	No Gas	-0.817	-40.829	-425.30	-325	0.25	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	748549	1.41	707163	105.85	70	120	
Ge	72	2	He	511062	0.40	503236	101.56	70	120	
Ge	72	1	No Gas	1877635	0.59	1894390	99.12	70	120	
In	115	1	No Gas	1986974	2.15	2095072	94.84	70	120	

Sample Report

Bi	209	1	No Gas	1703079	0.47	1820260	93.56	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	046_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:20:55-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	102.109	1.078	1024463	0.54	100	102.1	90	110	
Be	9	1	No Gas	102.885	0.694	246267	0.45	100	102.9	90	110	
V	51	2	He	100.269	0.787	451290	0.31	100	100.3	90	110	
Cr	52	2	He	95.573	0.647	523758	0.47	100	95.6	90	110	
Fe	56	2	He	10023.980	1.018	50887533	0.69	10000	100.2	90	110	
Se	78	2	He	102.653	1.737	6856	1.15	100	102.7	90	110	
As	75	2	He	102.650	0.735	80844	0.98	100	102.7	90	110	
Ca	44	2	He	10154.228	0.897	272458	0.37	10000	101.5	90	110	
Na	23	2	He	10239.995	0.517	8670685	1.11	10000	102.4	90	110	
Mg	24	2	He	10077.358	1.739	4649524	1.13	10000	100.8	90	110	
K	39	2	He	10271.614	1.496	5996706	0.98	10000	102.7	90	110	
Mn	55	2	He	102.738	0.864	365670	0.47	100	102.7	90	110	
Co	59	2	He	100.729	0.899	821763	0.31	100	100.7	90	110	
Ni	60	2	He	99.300	0.300	213823	0.67	100	99.3	90	110	
Cu	63	2	He	93.663	1.037	576244	0.43	100	93.7	90	110	
Zn	66	2	He	101.152	0.288	107332	0.81	100	101.2	90	110	
Al	27	2	He	105.094	3.699	24699	3.01	100	105.1	90	110	
B	11	1	No Gas	450.854	1.204	621991	1.00	500	90.2	90	110	
Al	27	1	No Gas	106.102	3.989	1277443	1.19	100	106.1	90	110	
Si	28	1	No Gas	528.386	3.280	3097625	1.07	5000	10.6	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	102.841	2.196	1309846	1.56	100	102.8	90	110	
Cd	111	1	No Gas	101.782	1.518	237850	1.13	100	101.8	90	110	
Sr	88	1	No Gas	105.064	1.398	2406121	0.20	100	105.1	90	110	
Mo	95	1	No Gas	100.476	0.360	450855	0.84	100	100.5	90	110	
Sn	118	1	No Gas	99.450	0.778	688380	0.48	100	99.4	90	110	
Sb	121	1	No Gas	90.328	2.684	972559	0.85	100	90.3	90	110	
Ba	137	1	No Gas	100.759	0.625	333716	0.57	100	100.8	90	110	
Tl	205	1	No Gas	106.858	0.949	2173470	0.14	100	106.9	90	110	
Tl	203	1	No Gas	93.285	1.441	820736	0.83	100	93.3	90	110	
Pb	208	1	No Gas	99.672	0.631	2802671	0.84	100	99.7	90	110	
U	238	1	No Gas	100.437	0.406	2890974	0.64	100	100.4	90	110	
Ca	43	2	He	10107.671	2.865	16293	2.86	10000	101.1	90	110	
Sb	121	2	He	98.134	0.430	505646	0.31	100	98.1	90	110	
Ti	47	2	He	99.308	1.557	16684	1.76	100	99.3	90	110	
Cu	63	1	No Gas	92.849	2.505	1033400	1.21	100	92.8	90	110	
Se	82	1	No Gas	102.484	2.197	14664	2.61	100	102.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	747863	0.99	707163	105.76	70	120	
Ge	72	2	He	514366	0.60	503236	102.21	70	120	
Ge	72	1	No Gas	1874352	3.01	1894390	98.94	70	120	
In	115	1	No Gas	2009915	1.19	2095072	95.94	70	120	
Bi	209	1	No Gas	1686960	0.88	1820260	92.68	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	047_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:22:54-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	-0.240	-48.7	40329	1.6	0.5	
Be	9	1	No Gas	0.014	130.7	63	70.8	0.5	
V	51	2	He	0.127	13.2	1333	5.7	2.5	
Cr	52	2	He	0.045	104.9	1750	14.3	2.5	
Fe	56	2	He	0.802	15.4	13163	4.9	100	
Se	78	2	He	-0.449	-98.8	227	12.2	2	
As	75	2	He	0.045	78.6	90	30.3	2.5	
Ca	44	2	He	-8.045	-48.2	707	14.3	100	
Na	23	2	He	168.811	1.1	256077	0.7	100	CCB Main CR1 Failed
Mg	24	2	He	0.380	54.5	500	19.1	100	
K	39	2	He	14.217	12.9	76846	1.2	100	
Mn	55	2	He	0.020	136.4	340	28.4	2.5	
Co	59	2	He	0.002	79.0	90	11.1	2.5	
Ni	60	2	He	-0.059	-16.7	87	24.0	2.5	
Cu	63	2	He	0.149	17.5	1677	9.3	2	
Zn	66	2	He	-0.094	-58.7	633	9.3	2.5	
Al	27	2	He	-1.172	-21.8	297	19.8	5	
B	11	1	No Gas	10.284	12.4	17361	11.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.773	-48.2	16345	26.5	5	
Si	28	1	No Gas	-4.464	-6.3	212397	1.2	10	
Ag	107	1	No Gas	0.028	90.5	910	33.5	2.5	
Cd	111	1	No Gas	0.013	53.0	33	45.8	1	
Sr	88	1	No Gas	0.005	638.5	1127	60.7	2.5	
Mo	95	1	No Gas	0.025	93.8	133	75.9	2.5	
Sn	118	1	No Gas	0.085	25.0	1767	6.6	5	
Sb	121	1	No Gas	0.042	16.8	653	11.5	2.5	
Ba	137	1	No Gas	0.007	483.1	173	63.6	2.5	
Tl	205	1	No Gas	0.017	62.0	407	55.3	1	
Tl	203	1	No Gas	0.017	69.3	170	61.1	1	
Pb	208	1	No Gas	0.020	50.5	1180	24.7	2.5	
U	238	1	No Gas	0.016	103.1	483	100.6	2.5	
Ca	43	2	He	-6.474	-148.0	17	91.7	100	
Sb	121	2	He	0.023	87.1	233	42.9	2.5	
Ti	47	2	He	0.060	115.9	17	69.3	2.5	
Cu	63	1	No Gas	0.164	18.5	3297	9.9	2.5	
Se	82	1	No Gas	-2.016	-86.7	-499	-51.4	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	760533	1.97	707163	107.55	70	120	
Ge	72	2	He	508440	0.25	503236	101.03	70	120	
Ge	72	1	No Gas	1866088	0.65	1894390	98.51	70	120	
In	115	1	No Gas	2019528	2.09	2095072	96.39	70	120	
Bi	209	1	No Gas	1739488	1.04	1820260	95.56	70	120	

Sample Report

Sample Table

Sample Name	HS22080499-05
Data File Name	048SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:24:57-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 182618
ISTD Ref FileName	018CALB.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	43.169	43.169	2.89	435978	0.01	2000	
Be	9	1	No Gas	0.110	0.110	13.85	278	0.04	2000	
V	51	2	He	1.351	1.351	1.15	6885	0.02	2000	
Cr	52	2	He	97.068	97.068	0.66	534670	0.02	2000	
Fe	56	2	He	89891.917	89891.917	0.63	458630247	0.02	200000	
Se	78	2	He	0.038	0.038	1192.60	262	0.01	2000	
As	75	2	He	2.542	2.542	2.49	2067	0.12	2000	
Ca	44	2	He	153171.343	153171.343	0.81	4117975	3.72	200000	
Na	23	2	He	1157068.744	1157068.744	0.83	971470199	0.12	200000	>LDR
Mg	24	2	He	80796.172	80796.172	1.13	37469723	0.22	200000	
K	39	2	He	4972.395	4972.395	1.05	2954102	0.17	200000	
Mn	55	2	He	3446.422	3446.422	0.79	12321238	0.03	2000	>LDR
Co	59	2	He	13.610	13.610	1.33	111678	0.01	2000	
Ni	60	2	He	89.628	89.628	0.90	194009	0.05	2000	
Cu	63	2	He	5.269	5.269	1.58	33331	0.02	2000	
Zn	66	2	He	11.440	11.440	3.91	12860	0.09	2000	
Al	27	2	He	489.229	489.229	0.16	113495	0.43	2000	
B	11	1	No Gas	33.736	33.736	3.65	46958	0.07	2000	
Al	27	1	No Gas	471.772	471.772	2.02	5503460	0.01	2000	
Si	28	1	No Gas	16351.096	16351.096	1.28	87293955	0.02	2000	>LDR
Ag	107	1	No Gas	0.023	0.023	34.53	810	0.00	2000	
Cd	111	1	No Gas	0.474	0.474	14.74	1073	0.04	2000	
Sr	88	1	No Gas	2157.793	2157.793	0.78	47760536	0.00	2000	>LDR
Mo	95	1	No Gas	0.600	0.600	4.50	2624	0.02	2000	
Sn	118	1	No Gas	0.296	0.296	13.09	3110	0.01	2000	
Sb	121	1	No Gas	0.141	0.141	5.10	1697	0.01	2000	
Ba	137	1	No Gas	243.849	243.849	0.77	780627	0.03	2000	
Tl	205	1	No Gas	0.009	0.009	41.70	210	0.00	2000	
Tl	203	1	No Gas	0.009	0.009	24.00	90	0.01	2000	
Pb	208	1	No Gas	0.645	0.645	2.96	17549	0.00	2000	
U	238	1	No Gas	0.128	0.128	0.84	3451	0.00	2000	
Ca	43	2	He	148435.965	148435.965	1.07	240133	61.81	200000	
Sb	121	2	He	0.120	0.120	1.80	740	0.02	2000	
Ti	47	2	He	7.980	7.980	11.01	1354	0.59	2000	
Cu	63	1	No Gas	14.499	14.499	2.57	159976	0.01	2000	
Zn	66	1	No Gas	11.785	11.785	2.11	33358	0.04	2000	
Se	82	1	No Gas	4.136	4.136	24.79	387	1.07	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	713151	2.22	707163	100.85	70	120	
Ge	72	2	He	517019	0.32	503236	102.74	70	120	
Ge	72	1	No Gas	1842842	1.65	1894390	97.28	70	120	
In	115	1	No Gas	1943146	0.21	2095072	92.75	70	120	
Bi	209	1	No Gas	1581253	1.24	1820260	86.87	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	058_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:45:27-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	102.797	3.100	1034025	0.77	100	102.8	90	110	
Be	9	1	No Gas	101.777	2.693	244328	1.18	100	101.8	90	110	
V	51	2	He	101.516	0.728	458057	0.12	100	101.5	90	110	
Cr	52	2	He	96.667	0.775	531085	0.42	100	96.7	90	110	
Fe	56	2	He	10027.166	0.873	51033296	0.06	10000	100.3	90	110	
Se	78	2	He	102.331	3.969	6852	3.11	100	102.3	90	110	
As	75	2	He	102.511	0.473	80942	1.15	100	102.5	90	110	
Ca	44	2	He	10082.981	0.669	271246	0.24	10000	100.8	90	110	
Na	23	2	He	10466.792	1.114	8882470	1.15	10000	104.7	90	110	
Mg	24	2	He	10158.340	1.303	4698989	0.93	10000	101.6	90	110	
K	39	2	He	10192.502	1.474	5966182	0.74	10000	101.9	90	110	
Mn	55	2	He	101.968	1.779	363853	1.47	100	102.0	90	110	
Co	59	2	He	100.750	0.526	824054	0.54	100	100.7	90	110	
Ni	60	2	He	99.720	0.193	215278	0.87	100	99.7	90	110	
Cu	63	2	He	94.473	1.288	582704	0.78	100	94.5	90	110	
Zn	66	2	He	103.379	0.376	109956	0.53	100	103.4	90	110	
Al	27	2	He	101.342	2.679	23901	2.47	100	101.3	90	110	
B	11	1	No Gas	447.874	2.140	619758	0.95	500	89.6	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	107.489	2.187	1302359	1.13	100	107.5	90	110	
Si	28	1	No Gas	526.022	1.387	3104771	0.58	5000	10.5	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	101.546	1.095	1311185	0.64	100	101.5	90	110	
Cd	111	1	No Gas	100.284	1.870	237556	0.87	100	100.3	90	110	
Sr	88	1	No Gas	104.734	0.261	2431807	1.31	100	104.7	90	110	
Mo	95	1	No Gas	98.923	0.766	449982	0.91	100	98.9	90	110	
Sn	118	1	No Gas	98.312	1.306	689841	0.34	100	98.3	90	110	
Sb	121	1	No Gas	89.229	1.797	966842	0.20	100	89.2	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	99.523	0.539	334151	0.54	100	99.5	90	110	
Tl	205	1	No Gas	104.547	1.828	2150891	2.10	100	104.5	90	110	
Tl	203	1	No Gas	91.480	0.949	814070	0.77	100	91.5	90	110	
Pb	208	1	No Gas	99.466	0.845	2828782	1.01	100	99.5	90	110	
U	238	1	No Gas	101.237	0.509	2947259	0.79	100	101.2	90	110	
Ca	43	2	He	9734.922	3.163	15733	2.89	10000	97.3	90	110	
Sb	121	2	He	98.217	0.761	507363	0.67	100	98.2	90	110	
Ti	47	2	He	100.035	1.471	16847	0.71	100	100.0	90	110	
Cu	63	1	No Gas	94.558	5.744	1058515	3.87	100	94.6	90	110	
Se	82	1	No Gas	97.048	1.628	13959	0.47	100	97.0	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	750324	2.51	707163	106.10	70	120	
Ge	72	2	He	515685	0.81	503236	102.47	70	120	
Ge	72	1	No Gas	1885692	1.82	1894390	99.54	70	120	
In	115	1	No Gas	2037501	1.05	2095072	97.25	70	120	
Bi	209	1	No Gas	1706174	0.31	1820260	93.73	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	059_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:47:26-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	-0.140	-85.1	40965	0.8	0.5	
Be	9	1	No Gas	-0.006	-34.7	13	43.3	0.5	
V	51	2	He	0.002	2950.0	769	26.5	2.5	
Cr	52	2	He	0.099	76.9	2027	20.0	2.5	
Fe	56	2	He	4.206	143.8	29954	100.2	100	
Se	78	2	He	0.440	73.3	281	6.9	2	
As	75	2	He	0.043	86.2	88	32.7	2.5	
Ca	44	2	He	2.125	879.4	967	50.5	100	
Na	23	2	He	257.856	29.3	326639	18.8	100	CCB Main CR1 Failed
Mg	24	2	He	7.917	160.4	3898	147.0	100	
K	39	2	He	22.971	43.2	81115	6.8	100	
Mn	55	2	He	0.207	122.3	987	89.2	2.5	
Co	59	2	He	0.019	192.5	230	128.3	2.5	
Ni	60	2	He	0.011	740.3	233	73.0	2.5	
Cu	63	2	He	0.154	33.6	1693	18.2	2	
Zn	66	2	He	-0.111	-39.2	610	7.1	2.5	
Al	27	2	He	-1.307	-8.8	263	9.6	5	
B	11	1	No Gas	11.107	18.5	18290	12.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.132	-4.7	12212	5.2	5	
Si	28	1	No Gas	-5.787	-6.0	206668	1.0	10	
Ag	107	1	No Gas	0.011	75.4	713	14.7	2.5	
Cd	111	1	No Gas	0.008	30.2	23	24.7	1	
Sr	88	1	No Gas	0.005	427.5	1154	39.9	2.5	
Mo	95	1	No Gas	0.008	27.0	60	16.7	2.5	
Sn	118	1	No Gas	0.058	15.8	1613	3.7	5	
Sb	121	1	No Gas	0.021	47.5	433	24.7	2.5	
Ba	137	1	No Gas	0.001	1623.7	157	24.2	2.5	
Tl	205	1	No Gas	0.007	14.9	193	13.0	1	
Tl	203	1	No Gas	0.006	80.4	77	60.2	1	
Pb	208	1	No Gas	0.003	146.1	687	18.4	2.5	
U	238	1	No Gas	0.002	38.8	80	33.1	2.5	
Ca	43	2	He	8.475	270.3	40	90.1	100	
Sb	121	2	He	0.038	65.9	307	40.8	2.5	
Ti	47	2	He	0.020	298.3	10	100.0	2.5	
Cu	63	1	No Gas	0.185	3.9	3564	2.7	2.5	
Se	82	1	No Gas	-1.581	-264.2	-437	-138.6	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	754533	3.48	707163	106.70	70	120	
Ge	72	2	He	503973	0.57	503236	100.15	70	120	
Ge	72	1	No Gas	1878872	0.45	1894390	99.18	70	120	
In	115	1	No Gas	2061626	1.16	2095072	98.40	70	120	
Bi	209	1	No Gas	1729989	1.24	1820260	95.04	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	070_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T14:33:45-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	99.181	1.398	992177	1.20	100	99.2	90	110	
Be	9	1	No Gas	100.848	2.653	240341	0.58	100	100.8	90	110	
V	51	2	He	100.982	0.944	442699	0.27	100	101.0	90	110	
Cr	52	2	He	96.474	1.306	514945	0.51	100	96.5	90	110	
Fe	56	2	He	10044.644	1.245	49668221	0.48	10000	100.4	90	110	
Se	78	2	He	101.566	2.901	6610	1.58	100	101.6	90	110	
As	75	2	He	101.473	1.262	77838	0.35	100	101.5	90	110	
Ca	44	2	He	9972.599	0.932	260667	1.13	10000	99.7	90	110	
Na	23	2	He	10473.781	1.687	8635071	0.86	10000	104.7	90	110	
Mg	24	2	He	10246.304	1.697	4604740	0.79	10000	102.5	90	110	
K	39	2	He	10031.171	1.434	5705850	0.26	10000	100.3	90	110	
Mn	55	2	He	100.807	1.313	349487	0.67	100	100.8	90	110	
Co	59	2	He	101.463	0.858	806288	0.55	100	101.5	90	110	
Ni	60	2	He	101.233	0.678	212324	0.84	100	101.2	90	110	
Cu	63	2	He	94.890	0.447	568664	0.76	100	94.9	90	110	
Zn	66	2	He	103.677	0.991	107133	0.53	100	103.7	90	110	
Al	27	2	He	103.066	2.791	23614	3.90	100	103.1	90	110	
B	11	1	No Gas	482.524	1.509	616265	1.21	500	96.5	90	110	
Al	27	1	No Gas	102.172	4.476	1242511	3.38	100	102.2	90	110	
Si	28	1	No Gas	509.133	2.242	3020974	0.53	5000	10.2	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	101.343	1.479	1300001	0.68	100	101.3	90	110	
Cd	111	1	No Gas	101.819	1.044	239636	0.65	100	101.8	90	110	
Sr	88	1	No Gas	102.607	1.373	2366720	1.12	100	102.6	90	110	
Mo	95	1	No Gas	98.864	1.300	446759	0.59	100	98.9	90	110	
Sn	118	1	No Gas	100.105	0.473	697860	0.61	100	100.1	90	110	
Sb	121	1	No Gas	89.792	2.450	975616	1.00	100	89.8	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	100.305	1.533	334585	1.64	100	100.3	90	110	
Tl	205	1	No Gas	103.600	0.758	2226264	1.67	100	103.6	90	110	
Tl	203	1	No Gas	91.498	0.188	850482	1.14	100	91.5	90	110	
Pb	208	1	No Gas	98.736	0.719	2932972	1.21	100	98.7	90	110	
U	238	1	No Gas	99.356	0.730	3021029	0.29	100	99.4	90	110	
Ca	43	2	He	9810.164	2.718	15406	3.17	10000	98.1	90	110	
Sb	121	2	He	98.435	1.026	494023	0.21	100	98.4	90	110	
Ti	47	2	He	98.848	3.042	16173	2.27	100	98.8	90	110	
Cu	63	1	No Gas	89.557	1.592	1005935	0.35	100	89.6	90	110	CCV Main CR1-2 Failed
Se	82	1	No Gas	100.176	3.456	14457	3.28	100	100.2	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	744898	2.48	707163	105.34	70	120	
Ge	72	2	He	501040	1.20	503236	99.56	70	120	
Ge	72	1	No Gas	1890948	1.56	1894390	99.82	70	120	
In	115	1	No Gas	2024188	0.81	2095072	96.62	70	120	
Bi	209	1	No Gas	1782100	1.00	1820260	97.90	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	071_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T14:35:43-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	-0.113	-47.6	38845	1.5	0.5	
Be	9	1	No Gas	0.008	99.4	45	40.1	0.5	
V	51	2	He	0.142	16.5	1345	6.2	2.5	
Cr	52	2	He	0.036	39.4	1637	5.0	2.5	
Fe	56	2	He	2.114	30.0	18928	14.9	100	
Se	78	2	He	-0.191	-49.2	233	2.6	2	
As	75	2	He	0.070	39.1	106	20.5	2.5	
Ca	44	2	He	-3.605	-166.3	790	18.3	100	
Na	23	2	He	134.604	4.6	218642	1.1	100	CCB Main CR1 Failed
Mg	24	2	He	2.726	39.6	1503	30.3	100	
K	39	2	He	11.269	18.5	72138	0.9	100	
Mn	55	2	He	0.049	52.1	423	19.1	2.5	
Co	59	2	He	0.009	43.2	143	20.1	2.5	
Ni	60	2	He	-0.024	-154.6	153	49.0	2.5	
Cu	63	2	He	0.122	14.4	1453	6.6	2	
Zn	66	2	He	-0.139	-62.5	563	16.5	2.5	
Al	27	2	He	-1.161	-23.7	287	20.4	5	
B	11	1	No Gas	12.424	17.7	17818	12.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.121	-5.0	11745	6.2	5	
Si	28	1	No Gas	-6.744	-10.3	191661	2.0	10	
Ag	107	1	No Gas	0.007	126.5	653	20.0	2.5	
Cd	111	1	No Gas	0.010	129.2	27	114.6	1	
Sr	88	1	No Gas	0.033	131.5	1800	57.4	2.5	
Mo	95	1	No Gas	0.018	43.0	107	35.5	2.5	
Sn	118	1	No Gas	0.091	21.6	1823	9.1	5	
Sb	121	1	No Gas	0.031	15.7	517	8.7	2.5	
Ba	137	1	No Gas	0.011	153.6	190	32.0	2.5	
Tl	205	1	No Gas	0.017	38.6	413	34.4	1	
Tl	203	1	No Gas	0.014	40.6	153	35.9	1	
Pb	208	1	No Gas	0.020	52.4	1217	26.6	2.5	
U	238	1	No Gas	0.013	65.3	417	64.4	2.5	
Ca	43	2	He	-6.048	-60.8	17	34.6	100	
Sb	121	2	He	0.016	25.6	190	9.1	2.5	
Ti	47	2	He	-0.020	-183.0	3	173.2	2.5	
Cu	63	1	No Gas	0.140	10.1	2910	6.6	2.5	
Se	82	1	No Gas	-1.333	-188.3	-381	-90.2	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	710659	2.71	707163	100.49	70	120	
Ge	72	2	He	488008	1.20	503236	96.97	70	120	
Ge	72	1	No Gas	1787507	1.55	1894390	94.36	70	120	
In	115	1	No Gas	2031627	1.54	2095072	96.97	70	120	
Bi	209	1	No Gas	1791082	0.80	1820260	98.40	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	082_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T15:01:09-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	105.183	3.250	901785	0.67	100	105.2	90	110	
Be	9	1	No Gas	107.495	2.441	220155	0.28	100	107.5	90	110	
V	51	2	He	101.218	0.489	437086	0.62	100	101.2	90	110	
Cr	52	2	He	97.415	0.461	512203	1.31	100	97.4	90	110	
Fe	56	2	He	10045.331	0.346	48931064	1.31	10000	100.5	90	110	
Se	78	2	He	99.324	1.587	6374	2.48	100	99.3	90	110	
As	75	2	He	101.855	0.488	76963	0.63	100	101.9	90	110	
Ca	44	2	He	9797.234	0.792	252253	0.75	10000	98.0	90	110	
Na	23	2	He	10300.859	0.997	8367534	1.03	10000	103.0	90	110	
Mg	24	2	He	10135.693	0.714	4487403	1.75	10000	101.4	90	110	
K	39	2	He	9947.124	1.072	5574063	1.06	10000	99.5	90	110	
Mn	55	2	He	100.788	0.099	344206	1.15	100	100.8	90	110	
Co	59	2	He	102.328	0.524	801021	1.50	100	102.3	90	110	
Ni	60	2	He	101.016	1.228	208687	1.01	100	101.0	90	110	
Cu	63	2	He	96.148	0.221	567557	0.98	100	96.1	90	110	
Zn	66	2	He	104.027	1.057	105888	1.57	100	104.0	90	110	
Al	27	2	He	101.812	1.320	22976	0.20	100	101.8	90	110	
B	11	1	No Gas	523.354	0.618	574272	2.03	500	104.7	90	110	
Al	27	1	No Gas	97.827	2.570	1156431	1.32	100	97.8	90	110	
Si	28	1	No Gas	483.521	2.914	2797515	1.16	5000	9.7	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.609	1.991	1309958	1.59	100	100.6	90	110	
Cd	111	1	No Gas	101.837	1.523	243266	0.90	100	101.8	90	110	
Sr	88	1	No Gas	101.180	1.283	2368782	0.74	100	101.2	90	110	
Mo	95	1	No Gas	97.240	2.271	446009	1.89	100	97.2	90	110	
Sn	118	1	No Gas	99.718	1.125	705591	1.13	100	99.7	90	110	
Sb	121	1	No Gas	93.933	1.739	991179	1.14	100	93.9	90	110	
Ba	137	1	No Gas	101.132	1.532	342385	1.07	100	101.1	90	110	
Tl	205	1	No Gas	104.509	1.222	2355224	0.76	100	104.5	90	110	
Tl	203	1	No Gas	90.878	1.801	885907	1.48	100	90.9	90	110	
Pb	208	1	No Gas	99.251	2.438	3091939	2.01	100	99.3	90	110	
U	238	1	No Gas	100.315	1.179	3199122	0.80	100	100.3	90	110	
Ca	43	2	He	9649.284	3.969	14928	4.78	10000	96.5	90	110	
Sb	121	2	He	100.131	0.451	495024	1.06	100	100.1	90	110	
Ti	47	2	He	94.987	3.828	15312	4.26	100	95.0	90	110	
Cu	63	1	No Gas	90.052	2.112	982167	0.65	100	90.1	90	110	
Se	82	1	No Gas	99.843	2.227	13994	2.93	100	99.8	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	640129	2.49	707163	90.52	70	120	
Ge	72	2	He	493518	1.09	503236	98.07	70	120	
Ge	72	1	No Gas	1836258	1.71	1894390	96.93	70	120	
In	115	1	No Gas	2054567	0.94	2095072	98.07	70	120	
Bi	209	1	No Gas	1869089	0.59	1820260	102.68	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	083_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T15:03:08-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	0.082	73.5	35226	1.5	0.5	
Be	9	1	No Gas	0.013	50.9	48	26.0	0.5	
V	51	2	He	0.020	38.0	804	4.8	2.5	
Cr	52	2	He	0.035	6.9	1590	0.6	2.5	
Fe	56	2	He	1.751	26.8	16768	12.4	100	
Se	78	2	He	-0.530	-118.3	207	17.8	2	
As	75	2	He	0.009	411.0	58	44.8	2.5	
Ca	44	2	He	-5.784	-116.9	717	22.6	100	
Na	23	2	He	90.160	8.1	178882	2.4	100	
Mg	24	2	He	2.091	33.5	1197	24.2	100	
K	39	2	He	11.161	8.1	70295	0.2	100	
Mn	55	2	He	0.081	44.9	517	22.3	2.5	
Co	59	2	He	0.007	64.7	123	26.1	2.5	
Ni	60	2	He	-0.011	-99.8	177	13.1	2.5	
Cu	63	2	He	0.087	18.1	1217	6.7	2	
Zn	66	2	He	-0.018	-387.1	667	10.0	2.5	
Al	27	2	He	-1.427	-13.6	223	18.1	5	
B	11	1	No Gas	15.854	10.7	19098	9.7	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.198	-1.6	11138	2.7	5	
Si	28	1	No Gas	-10.051	-5.4	178757	1.2	10	
Ag	107	1	No Gas	0.005	154.3	630	16.6	2.5	
Cd	111	1	No Gas	0.014	17.0	37	15.7	1	
Sr	88	1	No Gas	0.027	176.0	1665	65.9	2.5	
Mo	95	1	No Gas	0.020	38.2	113	31.0	2.5	
Sn	118	1	No Gas	0.057	40.6	1597	10.1	5	
Sb	121	1	No Gas	0.043	20.4	650	14.8	2.5	
Ba	137	1	No Gas	0.012	119.9	193	24.4	2.5	
Tl	205	1	No Gas	0.017	3.0	437	3.5	1	
Tl	203	1	No Gas	0.013	67.1	143	58.5	1	
Pb	208	1	No Gas	0.024	19.6	1397	10.4	2.5	
U	238	1	No Gas	0.009	6.3	300	5.8	2.5	
Ca	43	2	He	-1.247	-320.0	23	24.7	100	
Sb	121	2	He	0.043	55.1	313	35.0	2.5	
Ti	47	2	He	0.002	1665.0	7	86.6	2.5	
Cu	63	1	No Gas	0.061	23.9	2120	6.7	2.5	
Se	82	1	No Gas	-2.347	-28.6	-535	-17.7	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	616025	0.36	707163	87.11	70	120	
Ge	72	2	He	475900	0.78	503236	94.57	70	120	
Ge	72	1	No Gas	1830311	1.15	1894390	96.62	70	120	
In	115	1	No Gas	2050635	0.51	2095072	97.88	70	120	
Bi	209	1	No Gas	1873987	1.21	1820260	102.95	70	120	

Sample Report

Sample Table

Sample Name	HS22080472-01MSD
Data File Name	084SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T15:05:12-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 182618
ISTD Ref FileName	018CALB.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	26.636	26.636	5.18	260546	0.01	2000	
Be	9	1	No Gas	58.898	58.898	4.03	123178	0.05	2000	
V	51	2	He	55.502	55.502	0.33	247798	0.02	2000	
Cr	52	2	He	52.009	52.009	1.35	283009	0.02	2000	
Fe	56	2	He	5322.135	5322.135	0.36	26768490	0.02	200000	
Se	78	2	He	46.883	46.883	5.14	3242	1.45	2000	
As	75	2	He	56.582	56.582	0.47	44166	0.13	2000	
Ca	44	2	He	22092.463	22092.463	0.81	586111	3.77	200000	
Na	23	2	He	751605.847	751605.847	0.76	621960604	0.12	200000	>LDR
Mg	24	2	He	22587.362	22587.362	0.78	10323489	0.22	200000	
K	39	2	He	7743.465	7743.465	0.49	4495241	0.17	200000	
Mn	55	2	He	124.910	124.910	1.23	440322	0.03	2000	
Co	59	2	He	53.887	53.887	1.18	435516	0.01	2000	
Ni	60	2	He	52.697	52.697	1.73	112498	0.05	2000	
Cu	63	2	He	50.649	50.649	1.27	309036	0.02	2000	
Zn	66	2	He	59.366	59.366	0.95	62698	0.09	2000	
Al	27	2	He	117.754	117.754	0.65	27350	0.43	2000	
B	11	1	No Gas	48.257	48.257	4.03	56388	0.09	2000	
Al	27	1	No Gas	112.639	112.639	2.98	1366659	0.01	2000	
Si	28	1	No Gas	17604.418	17604.418	1.50	96379769	0.02	2000	>LDR
Ag	107	1	No Gas	40.774	40.774	0.72	531676	0.01	2000	
Cd	111	1	No Gas	54.287	54.287	0.92	129800	0.04	2000	
Sr	88	1	No Gas	397.106	397.106	0.46	9302050	0.00	2000	
Mo	95	1	No Gas	53.178	53.178	0.22	244138	0.02	2000	
Sn	118	1	No Gas	0.084	0.084	10.14	1797	0.00	2000	
Sb	121	1	No Gas	49.281	49.281	0.96	535382	0.01	2000	
Ba	137	1	No Gas	446.688	446.688	0.66	1513122	0.03	2000	
Tl	205	1	No Gas	51.796	51.796	0.97	1076191	0.00	2000	
Tl	203	1	No Gas	49.889	49.889	1.30	448349	0.01	2000	
Pb	208	1	No Gas	52.339	52.339	0.80	1503510	0.00	2000	
U	238	1	No Gas	0.027	0.027	23.74	797	0.00	2000	
Ca	43	2	He	22311.878	22311.878	1.36	35593	62.69	200000	
Sb	121	2	He	52.853	52.853	0.93	269812	0.02	2000	
Ti	47	2	He	52.505	52.505	4.25	8740	0.60	2000	
Cu	63	1	No Gas	51.308	51.308	1.05	576740	0.01	2000	
Zn	66	1	No Gas	57.841	57.841	1.27	161438	0.04	2000	
Se	82	1	No Gas	43.774	43.774	2.07	6197	0.71	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	654269	5.26	707163	92.52	70	120	
Ge	72	2	He	509521	0.86	503236	101.25	70	120	
Ge	72	1	No Gas	1890051	1.22	1894390	99.77	70	120	
In	115	1	No Gas	2056233	0.64	2095072	98.15	70	120	
Bi	209	1	No Gas	1723188	1.25	1820260	94.67	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	094_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T15:29:37-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	107.262	6.693	919421	0.19	100	107.3	90	110	
Be	9	1	No Gas	108.809	6.346	222957	0.44	100	108.8	90	110	
V	51	2	He	102.940	0.617	448248	0.81	100	102.9	90	110	
Cr	52	2	He	97.878	1.002	518915	0.50	100	97.9	90	110	
Fe	56	2	He	10199.329	0.149	50096448	0.65	10000	102.0	90	110	
Se	78	2	He	101.045	1.554	6534	1.97	100	101.0	90	110	
As	75	2	He	102.283	0.308	77936	0.49	100	102.3	90	110	
Ca	44	2	He	10018.260	0.672	260088	0.28	10000	100.2	90	110	
Na	23	2	He	10740.563	0.419	8793072	0.18	10000	107.4	90	110	
Mg	24	2	He	10389.657	0.825	4638098	0.88	10000	103.9	90	110	
K	39	2	He	10183.845	0.765	5753203	1.15	10000	101.8	90	110	
Mn	55	2	He	101.739	0.331	350359	0.61	100	101.7	90	110	
Co	59	2	He	102.945	0.772	812576	0.94	100	102.9	90	110	
Ni	60	2	He	102.089	0.443	212678	0.70	100	102.1	90	110	
Cu	63	2	He	96.487	0.344	574319	0.22	100	96.5	90	110	
Zn	66	2	He	104.880	1.061	107640	0.79	100	104.9	90	110	
Al	27	2	He	103.247	3.039	23487	2.48	100	103.2	90	110	
B	11	1	No Gas	536.018	7.997	587802	1.43	500	107.2	90	110	
Al	27	1	No Gas	101.719	1.415	1192244	0.93	100	101.7	90	110	
Si	28	1	No Gas	503.174	1.196	2879644	0.18	5000	10.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	102.685	1.097	1319763	1.36	100	102.7	90	110	
Cd	111	1	No Gas	100.404	0.778	236748	0.52	100	100.4	90	110	
Sr	88	1	No Gas	103.264	1.190	2386317	0.97	100	103.3	90	110	
Mo	95	1	No Gas	97.287	0.572	440468	0.32	100	97.3	90	110	
Sn	118	1	No Gas	98.206	0.736	685907	0.48	100	98.2	90	110	
Sb	121	1	No Gas	92.464	0.793	968142	0.55	100	92.5	90	110	
Ba	137	1	No Gas	99.007	0.837	330865	0.59	100	99.0	90	110	
Tl	205	1	No Gas	104.276	3.297	2209878	1.88	100	104.3	90	110	
Tl	203	1	No Gas	92.734	1.806	850233	0.71	100	92.7	90	110	
Pb	208	1	No Gas	101.151	1.354	2964009	1.07	100	101.2	90	110	
U	238	1	No Gas	100.718	0.838	3021496	1.91	100	100.7	90	110	
Ca	43	2	He	9717.006	0.893	15155	0.67	10000	97.2	90	110	
Sb	121	2	He	99.497	0.380	496004	0.20	100	99.5	90	110	
Ti	47	2	He	101.171	1.238	16443	0.92	100	101.2	90	110	
Cu	63	1	No Gas	90.437	0.673	978826	0.81	100	90.4	90	110	
Se	82	1	No Gas	103.725	4.706	14432	4.93	100	103.7	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	641922	6.40	707163	90.77	70	120	
Ge	72	2	He	497648	0.50	503236	98.89	70	120	
Ge	72	1	No Gas	1821860	0.99	1894390	96.17	70	120	
In	115	1	No Gas	2027917	0.26	2095072	96.79	70	120	
Bi	209	1	No Gas	1758288	2.16	1820260	96.60	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	095_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T15:31:37-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	67.4	35567	1.0	0.5	
Be	9	1	No Gas	-0.003	-88.1	17	34.6	0.5	
V	51	2	He	0.228	8.1	1672	4.3	2.5	
Cr	52	2	He	0.009	87.7	1463	3.1	2.5	
Fe	56	2	He	1.026	8.4	13403	3.2	100	
Se	78	2	He	-0.214	-101.8	227	5.7	2	
As	75	2	He	0.034	83.9	77	27.2	2.5	
Ca	44	2	He	-8.034	-28.2	663	8.6	100	
Na	23	2	He	193.973	0.8	259699	0.2	100	CCB Main CR1 Failed
Mg	24	2	He	1.232	17.6	833	10.9	100	
K	39	2	He	21.641	7.8	76059	1.0	100	
Mn	55	2	He	0.048	43.6	410	17.1	2.5	
Co	59	2	He	0.001	521.1	77	27.2	2.5	
Ni	60	2	He	-0.035	-77.2	130	40.7	2.5	
Cu	63	2	He	0.070	10.8	1123	3.7	2	
Zn	66	2	He	-0.071	-117.5	617	13.5	2.5	
Al	27	2	He	-1.304	-9.3	250	10.6	5	
B	11	1	No Gas	29.062	6.5	32915	6.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.174	-3.8	11148	5.0	5	
Si	28	1	No Gas	-9.856	-5.4	175703	2.2	10	
Ag	107	1	No Gas	-0.002	-220.3	533	10.3	2.5	
Cd	111	1	No Gas	0.003	1.3	10	0.0	1	
Sr	88	1	No Gas	-0.010	-26.8	803	8.3	2.5	
Mo	95	1	No Gas	0.012	22.2	77	15.1	2.5	
Sn	118	1	No Gas	0.075	67.6	1710	20.9	5	
Sb	121	1	No Gas	0.024	49.3	443	28.2	2.5	
Ba	137	1	No Gas	-0.012	-73.8	113	25.5	2.5	
Tl	205	1	No Gas	0.010	30.1	270	25.7	1	
Tl	203	1	No Gas	0.006	43.8	80	33.1	1	
Pb	208	1	No Gas	0.006	34.9	800	8.2	2.5	
U	238	1	No Gas	0.006	38.9	190	36.8	2.5	
Ca	43	2	He	5.428	257.6	33	62.4	100	
Sb	121	2	He	0.010	20.8	160	6.3	2.5	
Ti	47	2	He	-0.019	-192.4	3	173.2	2.5	
Cu	63	1	No Gas	0.073	14.3	2200	5.0	2.5	
Se	82	1	No Gas	-0.505	-289.1	-267	-75.2	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	614824	1.03	707163	86.94	70	120	
Ge	72	2	He	476947	0.36	503236	94.78	70	120	
Ge	72	1	No Gas	1788440	0.63	1894390	94.41	70	120	
In	115	1	No Gas	2031398	0.87	2095072	96.96	70	120	
Bi	209	1	No Gas	1800637	0.35	1820260	98.92	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	104_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T16:17:29-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	101.527	1.660	928102	0.65	100	101.5	90	110	
Be	9	1	No Gas	102.296	2.486	223014	0.41	100	102.3	90	110	
V	51	2	He	102.187	0.197	415941	0.56	100	102.2	90	110	
Cr	52	2	He	97.682	0.954	484089	0.59	100	97.7	90	110	
Fe	56	2	He	10267.988	0.393	47143306	0.90	10000	102.7	90	110	
Se	78	2	He	99.411	2.373	6013	2.33	100	99.4	90	110	
As	75	2	He	100.372	0.238	71492	0.97	100	100.4	90	110	
Ca	44	2	He	9968.101	1.116	241901	0.69	10000	99.7	90	110	
Na	23	2	He	10644.223	1.066	8146692	1.19	10000	106.4	90	110	
Mg	24	2	He	10475.288	0.836	4371110	0.41	10000	104.8	90	110	
K	39	2	He	10153.494	1.145	5362000	1.47	10000	101.5	90	110	
Mn	55	2	He	101.485	0.483	326677	0.27	100	101.5	90	110	
Co	59	2	He	103.149	0.213	761061	0.52	100	103.1	90	110	
Ni	60	2	He	101.579	0.289	197810	0.64	100	101.6	90	110	
Cu	63	2	He	96.151	0.917	534979	0.71	100	96.2	90	110	
Zn	66	2	He	103.366	1.037	99174	0.78	100	103.4	90	110	
Al	27	2	He	103.704	3.612	22048	2.80	100	103.7	90	110	
B	11	1	No Gas	488.847	0.508	571152	1.81	500	97.8	90	110	
Al	27	1	No Gas	103.153	3.113	1170344	2.04	100	103.2	90	110	
Si	28	1	No Gas	500.967	3.453	2776929	2.02	5000	10.0	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.147	1.738	1238613	0.66	100	100.1	90	110	
Cd	111	1	No Gas	100.784	0.670	228728	1.72	100	100.8	90	110	
Sr	88	1	No Gas	101.669	0.923	2261116	0.61	100	101.7	90	110	
Mo	95	1	No Gas	97.057	0.948	422891	0.15	100	97.1	90	110	
Sn	118	1	No Gas	98.699	0.687	663421	0.43	100	98.7	90	110	
Sb	121	1	No Gas	92.173	2.077	934514	1.21	100	92.2	90	110	
Ba	137	1	No Gas	99.967	0.670	321519	1.03	100	100.0	90	110	
Tl	205	1	No Gas	103.714	0.874	2219572	0.41	100	103.7	90	110	
Tl	203	1	No Gas	90.015	0.878	833343	1.45	100	90.0	90	110	
Pb	208	1	No Gas	98.661	1.063	2918839	0.76	100	98.7	90	110	
U	238	1	No Gas	101.849	0.978	3084403	0.42	100	101.8	90	110	
Ca	43	2	He	9646.817	4.261	14064	4.14	10000	96.5	90	110	
Sb	121	2	He	100.097	0.734	466433	0.24	100	100.1	90	110	
Ti	47	2	He	101.926	0.647	15486	0.76	100	101.9	90	110	
Cu	63	1	No Gas	88.303	1.654	925486	0.76	100	88.3	90	110	CCV Main CR1-2 Failed
Se	82	1	No Gas	99.400	4.173	13386	4.66	100	99.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	681370	2.24	707163	96.35	70	120	
Ge	72	2	He	465182	0.74	503236	92.44	70	120	
Ge	72	1	No Gas	1764310	1.23	1894390	93.13	70	120	
In	115	1	No Gas	1951723	1.09	2095072	93.16	70	120	
Bi	209	1	No Gas	1774924	0.71	1820260	97.51	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	105_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T16:19:38-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	-0.007	-1875.2	36350	1.1	0.5	
Be	9	1	No Gas	-0.001	-823.7	22	96.1	0.5	
V	51	2	He	0.202	8.8	1507	3.9	2.5	
Cr	52	2	He	0.051	39.6	1613	5.2	2.5	
Fe	56	2	He	0.629	13.7	11105	3.0	100	
Se	78	2	He	-0.303	-121.2	213	11.0	2	
As	75	2	He	0.065	30.3	96	14.5	2.5	
Ca	44	2	He	-12.843	-31.8	523	17.8	100	
Na	23	2	He	98.808	4.1	179117	0.6	100	
Mg	24	2	He	0.108	133.7	340	18.4	100	
K	39	2	He	16.220	20.3	70460	2.6	100	
Mn	55	2	He	0.052	27.3	407	9.9	2.5	
Co	59	2	He	0.000	12847.9	70	49.5	2.5	
Ni	60	2	He	-0.051	-15.6	93	16.4	2.5	
Cu	63	2	He	0.059	51.3	1023	15.9	2	
Zn	66	2	He	-0.089	-37.3	577	6.6	2.5	
Al	27	2	He	-1.357	-2.7	230	4.3	5	
B	11	1	No Gas	15.680	16.8	19856	11.4	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.138	-2.7	11388	3.5	5	
Si	28	1	No Gas	-11.982	-3.0	162329	1.3	10	
Ag	107	1	No Gas	0.005	161.5	607	15.7	2.5	
Cd	111	1	No Gas	-0.001	0.0	0	#DIV/0!	1	
Sr	88	1	No Gas	-0.007	-62.6	857	11.5	2.5	
Mo	95	1	No Gas	0.008	1.1	60	0.0	2.5	
Sn	118	1	No Gas	0.086	47.5	1763	15.8	5	
Sb	121	1	No Gas	0.031	29.3	510	18.9	2.5	
Ba	137	1	No Gas	0.006	87.4	170	10.2	2.5	
Tl	205	1	No Gas	0.011	12.2	280	9.4	1	
Tl	203	1	No Gas	0.007	22.4	83	18.3	1	
Pb	208	1	No Gas	0.009	59.0	893	16.6	2.5	
U	238	1	No Gas	0.005	40.6	177	37.7	2.5	
Ca	43	2	He	-5.279	-275.4	17	124.9	100	
Sb	121	2	He	0.018	23.1	190	9.1	2.5	
Ti	47	2	He	0.026	2.8	10	0.0	2.5	
Cu	63	1	No Gas	0.040	16.2	1827	4.1	2.5	
Se	82	1	No Gas	-2.976	-61.7	-602	-42.3	2	

QC ISTD Table

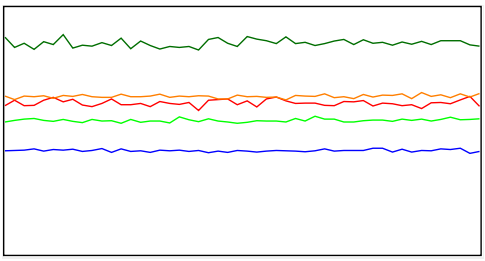
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	649090	3.85	707163	91.79	70	120	
Ge	72	2	He	459350	1.12	503236	91.28	70	120	
Ge	72	1	No Gas	1762623	0.58	1894390	93.04	70	120	
In	115	1	No Gas	2002956	0.67	2095072	95.60	70	120	
Bi	209	1	No Gas	1811829	1.38	1820260	99.54	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq. Date-Time	08/23/2022 10:50:19
Report Comment	---
Instrument Name	G8422A SG22121190

[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	3068	30680.77		
24	20000	10854	108537.73		
59	50000	21015	210150.68		
115	50000	32026	320261.73		
208	20000	17125	171254.68		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.007	5.000	
24	1.198	5.000	
59	1.183	5.000	
115	1.013	5.000	
208	1.716	5.000	

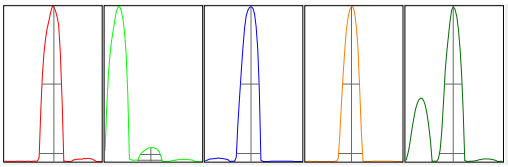
Mass	Background	Background (Required)	Background (Flag)
9	1.600		
24	0.700		
59	0.300		
115	2.400		
208	3.200		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.423 %
Doubly Charged	70 / 140 0.831 %

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	3122.06	9.05	8.90 - 9.10	
24	10743.43	23.95	23.90 - 24.10	
59	21270.33	58.95	58.90 - 59.10	
115	32162.70	114.95	114.90 - 115.10	
208	16980.99	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.59	0.740		
24	0.60	0.738		
59	0.57	0.740		
115	0.52	0.728		
208	0.54	0.765		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.85 L/min	Dilution Gas	0.20 L/min
RF Power	1550 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	10.6 V	Deflect	13.8 V
Extract 2	-200.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-75 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	123	Axis Gain	0.9994	QP Bias	-3.0 V
Mass Offset	126	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.3 mm

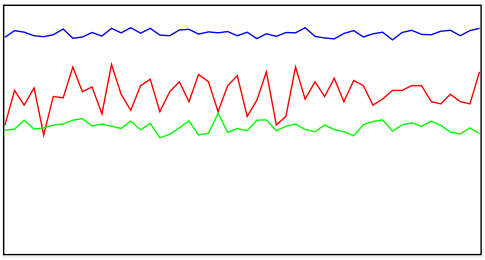
EM

Discriminator	4.4 mV	Analog HV	2112 V	Pulse HV	1056 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	129	1291.26		
24	1000	512	5120.34		
59	10000	8917	89167.46		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

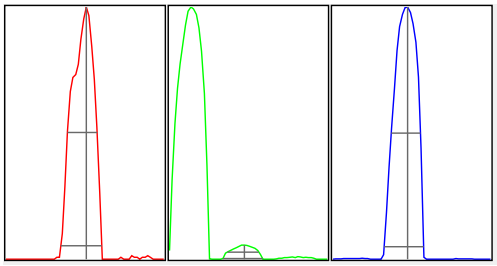
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	9.933	5.000	Fail
24	4.166	5.000	
59	1.442	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.100		
24	0.100		
59	0.000		

Oxide/Doubly Charged Ratio

Oxide 156 / 140 0.262 %
Doubly Charged 70 / 140 0.938 %

Resolution/Axis



Integration Time [sec] 0.1
Acquisition Time [sec] 22.24
Y Axis Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	137.76	9.05	8.90 - 9.10	
24	537.62	23.95	23.90 - 24.10	
59	9047.88	58.95	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.56	0.765		
24	0.59	0.742		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.55	0.736		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.85 L/min	Dilution Gas	0.20 L/min
RF Power	1550 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	9.5 V	Deflect	0.4 V
Extract 2	-200.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-85 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	4.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9994	QP Bias	-15.0 V
Mass Offset	126	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.3 mm

EM

Discriminator	4.4 mV	Analog HV	2112 V	Pulse HV	1056 V

HS22080499 ALS Kelso Level IV Report K2210032 (002)

ALS WO# HS22080499

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

September 01, 2022 **Analytical Report for Service Request No:** K2210032

Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

RE: HS22080499

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory August 31, 2022
For your reference, these analyses have been assigned our service request number **K2210032.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3260. You may also contact me via email at Luke.Rahn@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Luke Rahn
Project Manager

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

Table of Contents

Acronyms
Qualifiers
State Certifications, Accreditations, And Licenses
Case Narrative
Chain of Custody
Metals
Raw Data
    Metals

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
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.
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.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

1317 South 13th Ave, Kelso, WA 98626 | 1-360-577-7222 | www.alsglobal.com

Client: ALS Environmental - US
Project: HS22080499
Sample Matrix: Water

Service Request: K2210032
Date Received: 08/31/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

One water sample was received for analysis at ALS Environmental on 08/31/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The sample was stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by _____ Date 09/01/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

K2210032

~~K2204442~~ 4

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: **Texas** **COC ID:** **19688**

SUBCONTRACT TO:

ALS Environmental Kelso
1317 S. 13th Avenue
Kelso, WA 98626

Phone: +1 360 501 3312

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	Dane J. Wacasey
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	Dane.Wacasey@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:	HS22080499
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS22080499-05**	**MW19_080922**	**Water**	**09 Aug 2022 10:05**
	Mercury by 7470, DOD Tier II & IV;			06 Sep 2022

Comments: **Hg Expires 9/6/22**
Please analyze for 7470 Hg, DoD QSM 5.3 reporting, Excel EDD DL/LOD/LOQ; Tier II and Tier IV.
Send report to the emails shown above.

QC Level: DOD IV (DoD Data Package)

Relinquished By: LORETTA Date/Time: 8/30/22 1800

Received By: Date/Time: 8/31/22 1030

Cooler ID(s): Temperature(s):

K2210032 PM LR

Cooler Receipt and Preservation Form

Client AS Houston Service Request K22 [illegible]

Received: 8/31/22 Opened: 8/31/22 By: [illegible] Unloaded: 8/31/22 By: [illegible]

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other*_____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? 1 Front
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified if out of temp	Tracking Number NA	Filed
	21.9	TDel				578919974460	

4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA Y N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* No Cooling
7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
8. Were samples received in good condition (unbroken) NA Y N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
10. Did all sample labels and tags agree with custody papers? NA Y N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
14. Was C12/Res negative? NA Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Temp Not an issue. Samples for Metals analysis.

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	K2210032
Project:	HS22080499	**Date Collected:**	08/09/22 10:05
Sample Matrix:	Water	**Date Received:**	08/31/22 10:30
Sample Name:	MW19_080922	**Basis:**	NA
Lab Code:	K2210032-001		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Mercury	7470A	ND U	ug/L	0.20	0.05	0.02	1	09/01/22 12:56	08/31/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	K2210032
Project:	HS22080499	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2214876-01		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Mercury	7470A	ND U	ug/L	0.20	0.05	0.02	1	09/01/22 12:08	08/31/22	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080499
Sample Matrix: Water

Service Request: K2210032
Date Analyzed: 09/01/22

Lab Control Sample Summary
Total Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2214876-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Mercury	7470A	4.69	5.00	94	82-119

ALS Group USA, Corp.
dba ALS Environmental

Prep Summary Report

Client: ALS Environmental - US
Project: HS22080499
Sample Matrix: Water

Service Request: K2210032

Metals

Prep Method: Method
Analytical Method: 7470A

Extraction Lot: 405699
Extraction Date: 08/31/22 18:54

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
MW19_080922	K2210032-001	8/9/22	8/31/22	10.0000 mL	10 mL	
Method Blank	KQ2214876-01MB	NA	NA	10.0000 mL	10 mL	
Lab Control Sample	KQ2214876-02LCS	NA	NA	10.0000 mL	10 mL	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US **Service Request:** K2210032
Project: HS22080499

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID / Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
ICV 09/01/22 12:00						
Mercury	7470A	776149	4.99	5.00	100	90-110
CCV 09/01/22 12:05						
Mercury	7470A	776149	5.05	5.00	101	90-110
CCV 09/01/22 12:24						
Mercury	7470A	776149	5.03	5.00	101	90-110
CCV 09/01/22 12:43						
Mercury	7470A	776149	5.03	5.00	101	90-110
CCV 09/01/22 13:05						
Mercury	7470A	776149	5.05	5.00	101	90-110

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US **Service Request:** K2210032
Project: HS22080499

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID / Analyte	Method	Analysis Batch:	Result	C
ICB 09/01/22 12:01				
Mercury	7470A	776149	-0.0270	J
CCB 09/01/22 12:06				
Mercury	7470A	776149	-0.0210	J
CCB 09/01/22 12:26				
Mercury	7470A	776149	-0.0210	J
CCB 09/01/22 12:45				
Mercury	7470A	776149	-0.0200	J
CCB 09/01/22 13:06				
Mercury	7470A	776149	-0.0220	J

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US **Service Request:** K2210032
Project: HS22080499

LOW LEVEL INITIAL AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID / Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
LLICV							
Mercury	7470A	776149	0.20	0.2	99	50-150	09/01/22 12:03

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US **Service Request:** K2210032
Project: HS22080499/

Detection Limits

Instrument: K-CVAA-03 **Matrix:** Water

Analyte	Wavelength (nm)	Units	LOQ	LOD	MDL
Mercury	253	ug/L	0.2	0.05	0.02

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US **Service Request:** K2210032
Project: HS22080499/

ICP Linear Range (Quarterly)

Instrument: K-CVAA-03

Analyte	Concentration (ug/L)	Method
Mercury	10	7470A

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US **Service Request:** K2210032
Project: HS22080499/

Analysis Run Log

Instrument ID: **K-CVAA-03** **Analytical BatchID:** **776149**

Sample	Dilution Factor	Date/Time	Hg
ZZZZZZ	1	09/01/22 11:50	
ZZZZZZ	1	09/01/22 11:51	
ZZZZZZ	1	09/01/22 11:53	
ZZZZZZ	1	09/01/22 11:55	
ZZZZZZ	1	09/01/22 11:56	
ZZZZZZ	1	09/01/22 11:58	
ICV1	1	09/01/22 12:00	X
ICB1	1	09/01/22 12:01	X
LLICV1	1	09/01/22 12:03	X
CCV1	1	09/01/22 12:05	X
CCB1	1	09/01/22 12:06	X
KQ2214876-01MB	1	09/01/22 12:08	X
KQ2214876-02LCS	1	09/01/22 12:09	X
ZZZZZZ	1	09/01/22 12:11	
ZZZZZZ	1	09/01/22 12:13	
ZZZZZZ	1	09/01/22 12:14	
ZZZZZZ	1	09/01/22 12:16	
ZZZZZZ	1	09/01/22 12:17	
ZZZZZZ	1	09/01/22 12:19	
ZZZZZZ	1	09/01/22 12:21	
ZZZZZZ	1	09/01/22 12:22	
CCV2	1	09/01/22 12:24	X
CCB2	1	09/01/22 12:26	X
ZZZZZZ	1	09/01/22 12:27	
ZZZZZZ	1	09/01/22 12:29	
ZZZZZZ	1	09/01/22 12:30	
ZZZZZZ	1	09/01/22 12:32	
ZZZZZZ	1	09/01/22 12:34	
ZZZZZZ	1	09/01/22 12:35	
ZZZZZZ	1	09/01/22 12:37	
ZZZZZZ	1	09/01/22 12:39	
ZZZZZZ	1	09/01/22 12:40	
ZZZZZZ	1	09/01/22 12:42	
CCV3	1	09/01/22 12:43	X
CCB3	1	09/01/22 12:45	X
ZZZZZZ	1	09/01/22 12:47	
ZZZZZZ	1	09/01/22 12:48	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US **Service Request:** K2210032
Project: HS22080499/

Analysis Run Log

Instrument ID: **K-CVAA-03** **Analytical BatchID:** **776149**

Sample	Dilution Factor	Date/Time	Hg
ZZZZZZ	1	09/01/22 12:50	
ZZZZZZ	1	09/01/22 12:52	
ZZZZZZ	1	09/01/22 12:53	
ZZZZZZ	1	09/01/22 12:55	
K2210032-001	1	09/01/22 12:56	X
ZZZZZZ	1	09/01/22 12:58	
ZZZZZZ	1	09/01/22 13:00	
CCV4	1	09/01/22 13:05	X
CCB4	1	09/01/22 13:06	X

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

CVAA Mercury Water Data Review Form

K-CVAA-03

Element:	Hg		
Analysis Lot #:	090122A HG3		
Starlims #:	776149		
Cal. STD/CCV Source:	HG3-85-H		
Pipette IDs:	HG-41585305/HG-38883934		
16mL Tube Lot #:	P7554803		
KMnO4:	HG3-85-B	Expiration Date:	8/29/2023
K2S2O8:	HG3-84-L	Expiration Date:	8/4/2023
NH2OH-HCl/NaCl	HG3-84-T	Expiration Date:	8/25/2023
SnCl2/HCl:	HG3-85-E	Expiration Date:	7/1/2023

Service Request Numbers:

K2210027, K2210028, K2210030, K2210031, K2210032, K2210033

	Yes	No	NA
1) Appropriate standardization completed	X		
2) ICV within 10% of true value	X		
3) CCVs in control (+/- 10%)	X		
4) CCBs and or ICBs below MRL	X		
5) CCV/CCB check run every 10 samples	X		
6) All reported samples within calibration range	X		
7) Calculations correct	X		

Comments:

Data reviewed against service request(s) to ensure no samples were omitted: _____ (Initials)

Primary Reviewed By: _____ Date: 9/1/22

Secondary Reviewed By: _____ Date: 9/1/22

Data Review Form

Instrument ID#: **K-CVAA-03**
DataFile Name: **R:\ICP\WIP\DATA\K-CVAA-03 (M-7600)\090122A HG3.csv**
RUNNO: **776149**

K2210027

No exceptions to report.

K2210028

No exceptions to report.

K2210030

No exceptions to report.

K2210031

No exceptions to report.

K2210032

No exceptions to report.

K2210033

No exceptions to report.

Primary Approver: 9/1/22
Secondary Approver: 9/1/22

CVAA Hg ANALYTICAL WORKSHEET

Method: 7470	Cal. Inter. Std* (100ppb): HG3-85-J 2nd Source Inter Std** (1ppm): HG3-84-V

Analysis For: Hg **DATA**

Pos.	SAMPLE NUMBER	Measured (µg/L)	Dilution Factor	Recoveries (ICV, CCV, LCS, MS)		Comments:
1	Cal. Blk.	0.000	~	~		
2	Std 0.2*	0.200	~	(0.1-50mL)		
3	Std 0.5*	0.500	~	(0.25-50mL)		
4	Std 1.0*	1.000	~	(0.5-50mL)		
5	Std 5.0*	5.000	~	(2.5-50mL)		
6	Std 10.0*	10.000	~	(5.0-50mL)		
7	ICV1**	4.99	~	100%		
8	ICB1	-0.027	~			
9	LLICV1*	0.198	~	99%		
10	CCV1*	5.047	~	101%		
11	CCB1	-0.021	~			
12	KQ2214876-01	-0.014	~			
13	KQ2214876-02	4.690	~	94%		
14	K2210027-001	-0.035	~			
15	K2210027-002	-0.010	~			
16	K2210027-003	-0.010	~			
17	K2210027-004	-0.006	~			
18	K2210028-001	0.013	~			
19	K2210028-002	-0.009	~			
20	K2210030-001	-0.009	~			
21	K2210030-002	-0.005	~			
22	CCV2	5.031	~	101%		
23	CCB2	-0.021	~			
24	K2210030-003	-0.011	~			
25	K2210030-004	-0.009	~			
26	K2210031-001	0.033	~			
27	K2210031-002	-0.009	~			
28	K2210031-003	-0.008	~			
29	KQ2214876-03	4.650	~	93%		
30	KQ2214876-04	4.566	~	91%		
31	K2210031-003A	4.661	~	93%		
32	K2210031-004	-0.011	~			

Comments:

CVAA Hg ANALYTICAL WORKSHEET

Analysis For: Hg **DATA**

Pos.	SAMPLE NUMBER	Measured (µg/L)	Dilution Factor	Recoveries (ICV, CCV, LCS, MS)		Comments:
33	K2210031-005	0.104	~			
34	CCV3	5.033	~	101%		
35	CCB3	-0.020	~			
36	K2210031-006	0.000	~			
37	K2210031-007	-0.001	~			
38	K2210031-008	-0.002	~			
39	KQ2214876-05	4.647	~	93%		
40	KQ2214876-06	4.551	~	91%		
41	K2210031-008A	4.654	~	93%		
42	K2210032-001	-0.020	~			
43	K2210033-001	-0.013	~			
44	~~CCV4~~	~~2.564~~	~			Solution Empty 9/11/2217
45	CCV4	5.045	~	101%		
46	CCB4	-0.022	~			
47						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						

Comments:

Soil/Tissue Spike Level:

Method	Spike Level	MRL	LCS Limit	MS Limit	RPD	Post-Spike @ 5ppb
7470A Water	5.0 µg/L	0.2 µg/L	80-120%	75-125%	20%	+/- 20%
245.1 Water	5.0 µg/L	0.2 µg/L	85-115%	70-130%	20%	+/- 20%
7470A TCLP	5.0 µg/L	1.0 µg/L	80-120%	75-125%	20%	+/- 20%
7471A Soil LCSS	7.1mg/kg	0.02 mg/kg	51-149%	80-120%	20%	+/- 20%
7471A Tissue Dorm	0.41 mg/kg	0.02 mg/kg	68-136%	80-120%	20%	+/- 20%

[CVAA Controlled - HgRunForm 10-17-17] HG2.XLS

Report Generated By Teledyne Leeman QuickTrace

Analyst: alkls.nouser

Worksheet file: C:\Users\Public\Documents\Teledyne CETAC\QuickTrace\Worksheets\090122A HG3.wszf

Creation Date: 9/1/2022 11:38:50 AM

Comment:

Results

Sample Name	Aliq. Vol.	Diln. Vol	DF	Type	Spike Vol	Conc (ug/L)	% Recovery	µAbs	%RSD	Residual	Flags	Wt. (g)	Vol (ml)
Calibration Blank				STD		0.000		430	3.09	0.00			
		1.0000					N/A						
Replicates						442.8		438.2		412.9		427.7	
Standard #1 (0.2 ug/L)				STD		0.200		3765	2.63	0.62			
		1.0000					N/A						
Replicates						3851.4		3838.8		3729.3		3641.3	
Standard #2 (0.5 ug/L)				STD		0.500		8740	2.57	-0.11			
		1.0000					N/A						
Replicates						8965.8		8863.6		8674.8		8455.0	
Standard #3 (1 ug/L)				STD		1.000		17039	2.50	-0.85			
		1.0000					N/A						
Replicates						17447.8		17293.3		16922.3		16491.5	
Standard #4 (5 ug/L)				STD		5.000		84236	2.50	41.70			
		1.0000					N/A						
Replicates						86190.4		85503.5		83791.2		81458.0	
Standard #5 (10 ug/L)				STD		10.000		166310	2.27	-20.77			
		1.0000					N/A						
Replicates						169777.8		168614.8		165515.3		161330.4	

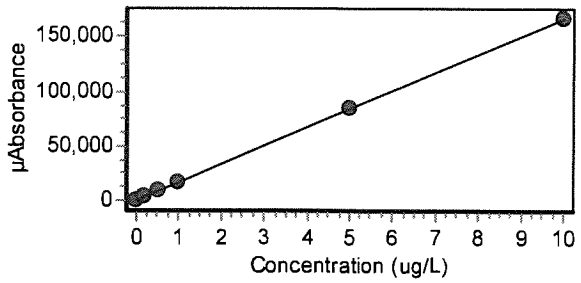
Calibration

Equation: Abs = 16622.443x + 430.405

R2: 0.99997

SEE: 447.2076

Flags:



ICV1				ICV		4.990		83379	2.40				
		1.0000					99.80						
Replicates						85183.5		84607.0		82984.1		80740.3	
ICB1				ICB		-0.027		-12	2.93				
		1.0000					N/A						
Replicates						4.8		-9.5		-16.5		-26.0	
LLICV1				CRDL		0.198		3714	3.00				
		1.0000					98.77						
Replicates						3799.9		3780.7		3691.0		3584.2	

Sample Name	Aliq. Vol.	Diln. Vol	DF	Type	Spike Vol	Conc (ug/L)	% Recovery	µAbs	%RSD	Residual Flags	Wt. (g)	Vol (ml)
CCV1				CCV		5.047		84330	2.50			
			1.0000				100.95					
Replicates	86245.4	85622.0	83902.3	81550.5								
CCB1				CCB		-0.021		80	5.31			
			1.0000				N/A					
Replicates	92.4	89.0	85.5	52.1								
KQ2214876-01				UNK		-0.014		202	6.91			
			1.0000				N/A					
Replicates	218.3	204.3	205.1	180.5								
KQ2214876-02				UNK		4.690		78386	2.30			
			1.0000				N/A					
Replicates	80102.2	79469.4	77890.4	76082.5								
K2210027-001				UNK		-0.035		-148	2.20			
			1.0000				N/A					
Replicates	-139.0	-135.3	-162.5	-153.8								
K2210027-002				UNK		-0.010		260	1.10			
			1.0000				N/A					
Replicates	258.0	262.4	259.2	260.4								
K2210027-003				UNK		-0.010		260	4.51			
			1.0000				N/A					
Replicates	271.2	260.7	256.0	254.0								
K2210027-004				UNK		-0.006		335	12.50			
			1.0000				N/A					
Replicates	317.7	344.5	337.3	340.5								
K2210028-001				UNK		0.013		653	8.48			
			1.0000				N/A					
Replicates	667.3	669.3	648.1	628.9								
K2210028-002				UNK		-0.009		289	9.70			
			1.0000				N/A					
Replicates	302.2	298.0	273.2	281.0								
K2210030-001				UNK		-0.009		281	8.28			
			1.0000				N/A					
Replicates	289.9	276.1	266.5	293.0								
K2210030-002				UNK		-0.005		350	24.29			
			1.0000				N/A					
Replicates	352.3	371.1	354.3	324.3								
CCV2				CCV		5.031		84053	2.39			
			1.0000				100.61					
Replicates	85869.9	85285.7	83657.9	81397.7								
CCB2				CCB		-0.021		85	5.37			
			1.0000				N/A					
Replicates	103.3	95.1	81.1	61.0								
K2210030-003				UNK		-0.011		253	7.99			
			1.0000				N/A					
Replicates	258.2	246.2	270.7	238.4								

Sample Name	Aliq. Vol.	Diln. Vol	DF	Type	Spike Vol	Conc (ug/L)	% Recovery	µAbs	%RSD	Residual Flags	Wt. (g)	Vol (ml)
K2210030-004			1.0000	UNK	N/A	-0.009		288	9.84			
Replicates	292.6	273.6	305.6	281.0								
K2210031-001			1.0000	UNK	N/A	0.033		980	4.66			
Replicates	1002.9	994.0	977.3	944.8								
K2210031-002			1.0000	UNK	N/A	-0.009		273	7.48			
Replicates	280.9	279.2	275.4	255.4								
K2210031-003			1.0000	UNK	N/A	-0.008		289	10.21			
Replicates	306.6	291.4	287.5	271.5								
KQ2214876-03			1.0000	UNK	N/A	4.650		77727	1.99			
Replicates	79296.9	78569.0	77240.0	75801.4								
KQ2214876-04			1.0000	UNK	N/A	4.566		76334	1.83			
Replicates	77724.1	77142.3	75863.8	74607.3								
K2210031-003A			1.0000	UNK	N/A	4.661		77911	2.07			
Replicates	79457.6	78850.1	77481.1	75853.3								
K2210031-004			1.0000	UNK	N/A	-0.011		247	17.03			
Replicates	276.9	253.1	254.8	203.0								
K2210031-005			1.0000	UNK	N/A	0.104		2161	2.94			
Replicates	2216.6	2180.8	2150.3	2096.3								
CCV3			1.0000	CCV	100.66	5.033		84090	2.32			
Replicates	85834.6	85290.1	83721.3	81512.6								
CCB3			1.0000	CCB	N/A	-0.020		98	11.44			
Replicates	137.6	121.0	77.5	55.3								
K2210031-006			1.0000	UNK	N/A	0.000		437	201.79			
Replicates	438.4	443.1	448.6	418.0								
K2210031-007			1.0000	UNK	N/A	-0.001		415	87.51			
Replicates	397.2	427.7	421.2	415.5								
K2210031-008			1.0000	UNK	N/A	-0.002		397	40.83			
Replicates	412.2	385.8	404.7	384.8								
KQ2214876-05			1.0000	UNK	N/A	4.647		77678	2.07			
Replicates	79108.8	78693.5	77349.9	75559.7								

Sample Name	Aliq. Vol.	Diln. Vol	DF	Type	Spike Vol	Conc (ug/L)	% Recovery	µAbs	%RSD	Residual	Flags	Wt. (g)	Vol (ml)
KQ2214876-06				UNK		4.551		76071	1.97				
			1.0000				N/A						
Replicates	77546.8	76922.0	75627.1	74188.1									
K2210031-008A				UNK		4.654		77790	1.98				
			1.0000				N/A						
Replicates	79302.4	78656.1	77363.2	75839.7									
K2210032-001				UNK		-0.020		94	2.71				
			1.0000				N/A						
Replicates	102.6	94.7	97.2	81.2									
K2210033-001				UNK		-0.013		219	4.72				
			1.0000				N/A						
Replicates	205.1	219.2	228.1	223.9									
CCV4				CCV		2.564		43047	0.79		Q		
			1.0000				51.28						
Replicates	43193.3	43361.8	43053.8	42578.8									
CCV4				CCV		5.045		84377	2.29				
			1.0000				100.90						
Replicates	86037.9	85620.9	84044.9	81803.3									
CCB4				CCB		-0.022		69	7.07				
			1.0000				N/A						
Replicates	77.9	99.6	58.2	40.2									

9/1/2022 1:07:27 PM

Preparation Information Benchsheet

Prep Run#: 405699
Team: Metals/JHINSON
Number of Copies to make: 6

Prep WorkFlow: HgDigAq
Prep Method: Method

Status: Prepped
Prep Date/Time: 8/31/22 18:54

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2214876-01	MB		7470A/Hg T		Liquid	10.0000mL	10.00mL	
2	KQ2214876-02	LCS		7470A/Hg T		Liquid	10.0000mL	10.00mL	
3	K2210027-001	18CPTMW04SW_081022	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
4	K2210027-002	MW21_081022	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
5	K2210027-003	18WW02_081022	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
6	K2210027-004	MW13_081022	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
7	K2210028-001	18CPTMW18_081222	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
8	K2210028-002	18WW17_081222	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
9	K2210030-001	19CPTMW035W_081522	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
10	K2210030-002	MW14_081522	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
11	K2210030-003	19WW25_081522	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
12	K2210030-004	CO6_081522	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
13	K2210031-001	129_081722	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
14	K2210031-002	MW1_081722	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
15	K2210031-003	MW6_081722	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
16	KQ2214876-03	K2210031-003 MS	.01	7470A/Hg T		Liquid	10.0000mL	10.00mL	
17	KQ2214876-04	K2210031-003 DMS	.01	7470A/Hg T		Liquid	10.0000mL	10.00mL	
18	K2210031-004	126_081722	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
19	K2210031-005	AWD4_081722	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
20	K2210031-006	18WW22_081722	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
21	K2210031-007	18WW22_081722_a	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
22	K2210031-008	18WW14_081722	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
23	KQ2214876-05	K2210031-008 MS	.01	7470A/Hg T		Liquid	10.0000mL	10.00mL	
24	KQ2214876-06	K2210031-008 DMS	.01	7470A/Hg T		Liquid	10.0000mL	10.00mL	
25	K2210032-001	MW19_080922	.01	7470A/Hg T		Water	10.0000mL	10.00mL	
26	K2210033-001	2208151030	.01	7470A/Hg T		Ground Water	5.0000mL	10.00mL	

Spiking Solutions

Name: K-MET Hg Source Standard 1000 ug/L Inventory ID 224676 Logbook Ref: HG3-84-V Expires On: 09/25/2022

KQ2214876-02 0.05mL KQ2214876-03 0.05mL KQ2214876-04 0.05mL KQ2214876-05 0.05mL KQ2214876-06 0.05mL

Preparation Materials

K-MET 100ml Centrifuge Tube 2106023 (220673) K-MET 16 mL Tube GL5221 (223546) K-MET H2SO4 Hg 61139 (219381)
K-MET HNO3 Hg 22E1062003 (223986)

Preparation Information Benchsheet

Prep Run#: 405699
Team: Metals/JHINSON

Prep WorkFlow: HgDigAq
Prep Method: Method

Status: Prepped
Prep Date/Time: 8/31/22 18:54

Preparation Steps

Step: Digestion
Started: 8/31/22 18:54
Finished: 8/31/22 20:54
By: JHINSON
Comments

Preparation Equipment

K-Block-Digester-14	Digestion	IR Thermometer ID: IR03		K-Block-Digester-14	Digestion	Temperature	94.9 deg C
K-Block-Digester-14	Digestion	Temperature Check Location	20	K-BlockDigester-17	Digestion	IR Thermometer ID: IR03	
K-BlockDigester-17	Digestion	Temperature	94.3 deg C	K-BlockDigester-17	Digestion	Temperature Check Location	63
K-U72662	Digestion			HG-39591307	Digestion		
K-U52540	Digestion						

Comments: Cal Std: HG3-85-J

Reviewed By: _____ Date: 9/1/22

Preparation Information Benchsheet

Prep Run#: 405699 **Prep WorkFlow:** HgDigAq **Status:** Draft
Team: Metals **Prep Method:** **Prep Date/Time:** 8/31/22 05:21 PM
Number of Copies to make: 6

#	Lab Code	Client ID	B#	√	Test	Matrix	Amt Ext.	pH	Int Vol	Final Vol	Surr Added	Spike Added
1	KQ2214876-01	Method Blank			7470A/Hg T	Liquid						
2	KQ2214876-02	Lab Control Sample			7470A/Hg T	Liquid						
3	K2210027-001	18CPTMW04SW_081022	.01		7470A/Hg T	Water						
4	K2210027-002	MW21_081022	.01		7470A/Hg T	Water						
5	K2210027-003	18WW02_081022	.01		7470A/Hg T	Water						
6	K2210027-004	MW13_081022	.01		7470A/Hg T	Water						
7	K2210028-001	18CPTMW18_081222	.01		7470A/Hg T	Water						
8	K2210028-002	18WW17_081222	.01		7470A/Hg T	Water						
9	K2210030-001	19CPTMW035W_081522	.01		7470A/Hg T	Water						
10	K2210030-002	MW14_081522	.01		7470A/Hg T	Water						
11	K2210030-003	19WW25_081522	.01		7470A/Hg T	Water						
12	K2210030-004	CO6_081522	.01		7470A/Hg T	Water						
13	K2210031-001	129_081722	.01		7470A/Hg T	Water						
14	K2210031-002	MW1_081722	.01		7470A/Hg T	Water						
15	K2210031-003	MW6_081722	.01		7470A/Hg T	Water						
16	KQ2214876-03	Matrix Spike	.01		7470A/Hg T	Liquid						
17	KQ2214876-04	Duplicate Matrix Spike	.01		7470A/Hg T	Liquid						
18	K2210031-004	126_081722	.01		7470A/Hg T	Water						
19	K2210031-005	AWD4_081722	.01		7470A/Hg T	Water						
20	K2210031-006	18WW22_081722	.01		7470A/Hg T	Water						
21	K2210031-007	18WW22_081722_a	.01		7470A/Hg T	Water						
22	K2210031-008	18WW14_081722	.01		7470A/Hg T	Water						
23	KQ2214876-05	Matrix Spike	.01		7470A/Hg T	Liquid						
24	KQ2214876-06	Duplicate Matrix Spike	.01		7470A/Hg T	Liquid						
25	K2210032-001	MW19_080922	.01		7470A/Hg T	Water						
26	K2210033-001	2208151030 2x dil due to coloring	.01		7470A/Hg T	Water						

Comments: Cal Std Used-35-3 BLK 14/94 9/20 1630-1830 BLK 17/94 3/63 1859-2054

Surrogate ID: _____ Spike ID: _____

Witnessed By: _____

Analyst: _____ Assisted By: _____

HS22080499-E2200780-Level IV Final Perch Report

ALS WO# HS22080499

August 24, 2022 Service Request No:E2200780

Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

Laboratory Results for: HS22080499

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory August 10, 2022
For your reference, these analyses have been assigned our service request number **E2200780.**

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.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Corey Grandits
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 HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Environmental

Client:	ALS Environmental - US	**Service Request No.:**	E2200780
Project:	HS22080499	**Date Received:**	08/10/22
Sample Matrix:	Water		

CASE NARRATIVE

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

Sample Receipt

Seven samples were received for analysis at ALS Environmental in Houston on 08/10/22.

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:

EQ2200345-02/03: 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 LCS/DLCS recoveries passed.

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:**E2200780
Project: HS22080499

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2200780-001	MW5_080922	8/9/2022	0705
E2200780-002	18CPTMW08DW_080922	8/9/2022	0750
E2200780-003	18CPTMW08SW_080922	8/9/2022	0835
E2200780-004	MW19_080922	8/9/2022	1005
E2200780-005	MW10_080922	8/9/2022	1050
E2200780-006	18WW10_080922	8/9/2022	1135
E2200780-007	MW17_080922	8/9/2022	1225

Service Request Summary

Folder #: **E2200780**
Client Name: ALS Environmental - US
Project Name: HS22080499
Project Number:

Report To: Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-575-2190
Cell Number:
Fax Number: 281-530-5887
E-mail: dane.wacasey@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/10/22
Internal Due Date: 8/24/2022
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS22080499
EDD: BASIC_WQC_CASNo_LOD

7 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2200780-001	MW5_080922	Water	08/09/22 0705	**IV**
E2200780-002	18CPTMW08DW_080922	Water	08/09/22 0750	**IV**
E2200780-003	18CPTMW08SW_080922	Water	08/09/22 0835	**IV**
E2200780-004	MW19_080922	Water	08/09/22 1005	**IV**
E2200780-005	MW10_080922	Water	08/09/22 1050	**IV**
E2200780-006	18WW10_080922	Water	08/09/22 1135	**IV**
E2200780-007	MW17_080922	Water	08/09/22 1225	**IV**

Service Request Summary

Folder #:	**E2200780**
Client Name:	ALS Environmental - US
Project Name:	HS22080499
Project Number:	

Report To:	Dane Wacasey ALS Group USA, Corp. 10450 Stancliff Road Houston, TX 77099-4338 USA
Phone Number:	281-575-2190
Cell Number:	
Fax Number:	281-530-5887
E-mail:	dane.wacasey@alsglobal.com

Project Chemist:	Corey Grandits
Originating Lab:	HOUSTON
Logged By:	CGRANDITS
Date Received:	08/10/22
Internal Due Date:	8/24/2022
QAP:	LAB QAP
Qualifier Set:	Lab Standard
Formset:	Lab Standard
Merged?:	Y
Report to MDL?:	Y
P.O. Number:	HS22080499
EDD:	BASIC_WQC_CASNo_LOD

7 120 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	Internal standard not within the specified limits. See case narrative.
J	Estimated Value. Concentration found below MRL.
K	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
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.
M1	Matrix interference due to coelution with a non-target compound; results may be biased high.

Data Qualifiers

Lab Standard

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	5/27/2023
Arkansas Department of Environmental Quality	22-041-0	3/27/2023
California Department of Health Services	2919-2023	4/30/2023
Department of Defense	L22-90	3/31/2024
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Hawaii Department of Health	2022	4/30/2023
Illinois Environmental Protection Agency	2000322022-9	5/9/2023
Kansas Department of Health and Environment	E-10352 2022-2023	7/31/2023
Louisiana Department of Environmental Quality	03087-2022	6/30/2023
Louisiana Department of Health and Hospitals	LA028	12/31/2022
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343	6/30/2023
Michigan Depratment of Environmental Quality	9971-2022	4/30/2023
Minnesota Department of Health	2228443	12/31/2022
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2023
Nevada Department of Conservation and Natural Resources	TX026932023-1	7/31/2023
New Hampshire Environmental Laboratory Accreditation Program	209422	4/24/2023
New Jersey Department of Environmental Protection	TX008-2023	6/30/2023
New York Department of Health	11707	3/31/2023
Oklahoma Department of Environmental Quality	2021-080	8/31/2022
Oregon Environmental Laboratory Accreditation Program	TX200002	5/15/2023
Pennsylvania Department of Environmental Protection	68-03441-016	6/30/2023
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	04016-2022	4/30/2023
Texas Commision on Environmental Quality	T104704231-22-29	4/30/2023
United States Department of Agriculture	P330-19-00299	10/10/2022
Washington Department of Health	C819-2022	11/14/2022

ALS

Chain of Custody

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
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: Texas **COC ID:** 19353

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	Ragen Giga
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	RagenP.Giga@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:	HS22080499
TSR:	Sonia West

	LAB SAMPLE ID / ANALYSIS REQUESTED	CLIENT SAMPLE ID	MATRIX	COLLECT DATE / DUE DATE
1.	**HS22080499-01**	**MW5_080922**	**Water**	**09 Aug 2022 07:05**
	Provide Level II and Level IV reports in separate pdf			24 Aug 2022
2.	**HS22080499-02**	**18CPTMW08DW_080922**	**Water**	**09 Aug 2022 07:50**
	Provide Level II and Level IV reports in separate pdf			24 Aug 2022
3.	**HS22080499-03**	**18CPTMW08SW_080922**	**Water**	**09 Aug 2022 08:35**
	Provide Level II and Level IV reports in separate pdf			24 Aug 2022
4.	**HS22080499-05**	**MW19_080922**	**Water**	**09 Aug 2022 10:05**
	Provide Level II and Level IV reports in separate pdf			24 Aug 2022
5.	**HS22080499-06**	**MW10_080922**	**Water**	**09 Aug 2022 10:50**
	Provide Level II and Level IV reports in separate pdf			24 Aug 2022
6.	**HS22080499-07**	**18WW10_080922**	**Water**	**09 Aug 2022 11:35**
	Provide Level II and Level IV reports in separate pdf			24 Aug 2022
7.	**HS22080499-08**	**MW17_080922**	**Water**	**09 Aug 2022 12:25**
	Provide Level II and Level IV reports in separate pdf			24 Aug 2022

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

Subcontract Chain of Custody

SAMPLING STATE: Texas

COC ID: 19353

QC Level: DOD IV (DoD Data Package)

Relinquished By: NR

Date/Time:

Received By: Conner

Date/Time: 8/10/22 1710

Cooler ID(s):

Temperature(s):

ALS Environmental

Cooler Receipt Form

Project Chemist CG

Client/Project ALS-H

Thermometer ID IR21

Date/Time Received: 8/10/22 Initials: CG Date/Time Logged in: 8/10/22 Initials CG

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

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

3. Were custody seals on coolers? ○ Yes ☒ No
   Were they intact? ○ Yes ○ No ☒ N/A
   Were they signed and dated? ○ Yes ○ No ☒ N/A
   If yes, how many and where?

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

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

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		8/10/22	1700	CG	4.1°C	☑
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ☒ Yes ○ No
7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ☒ Yes ○ No
8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ☒ Yes ○ No
9. Were appropriate bottles/containers and volumes received for the requested tests? ☒ Yes ○ No
10. Did sample labels and tags agree with custody documents? ☒ Yes ○ No

Notes, Discrepancies, & Resolutions:

Service request Label:

10450 Stancliff Rd., Suite 210
Houston, TX 77099
T: +1 713 266 1599
F: +1 713 266 1599
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 HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 404399 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 8/22/22 11:04

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2200780-001	MW5_080922	.01	6850/ClO4 DOD			Water	10mL	
2	E2200780-002	18CPTMW08DW_080922	.01	6850/ClO4 DOD			Water	10mL	
3	E2200780-003	18CPTMW08SW_080922	.01	6850/ClO4 DOD			Water	10mL	
4	E2200780-004	MW19_080922	.01	6850/ClO4 DOD			Water	10mL	
5	E2200780-005	MW10_080922	.01	6850/ClO4 DOD			Water	10mL	
6	E2200780-006	18WW10_080922	.01	6850/ClO4 DOD			Water	10mL	
7	E2200780-007	MW17_080922	.01	6850/ClO4 DOD			Water	10mL	
8	E2200781-001	MW2_080822	.01	6850/ClO4 DOD			Water	10mL	
9	E2200781-002	MW2_080822_a	.01	6850/ClO4 DOD			Water	10mL	
10	E2200781-003	18CPTMW01DW_080822	.01	6850/ClO4 DOD			Water	10mL	
11	E2200781-004	18CPTMW01SW_080822	.01	6850/ClO4 DOD			Water	10mL	
12	E2200781-005	MW23_080822	.01	6850/ClO4 DOD			Water	10mL	
13	E2200781-006	17WW08_080822	.01	6850/ClO4 DOD			Water	10mL	
14	E2200781-007	17WW08_080822_a	.01	6850/ClO4 DOD			Water	10mL	
15	E2200781-008	MW8_080822	.01	6850/ClO4 DOD			Water	10mL	
16	E2200781-009	18CPTMW23SW_080822	.01	6850/ClO4 DOD			Water	10mL	
17	E2200781-010	18CPTMW23SW_080822	.01	6850/ClO4 DOD			Water	10mL	
18	E2200781-011	18WW24_080822	.01	6850/ClO4 DOD			Water	10mL	
19	EQ2200345-01	MB		6850/ClO4 DOD			Liquid	10mL	
20	EQ2200345-02	LCS		6850/ClO4 DOD			Liquid	10mL	
21	EQ2200345-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
22	EQ2200345-04	MW23_080822 MS	.01	6850/ClO4 DOD			Liquid	10mL	
23	EQ2200345-05	MW23_080822 DMS	.01	6850/ClO4 DOD			Liquid	10mL	
24	R2207269-006	2208030912Y ST-5-985	.01	6850/ClO4			Water	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 222798 Logbook Ref: Perchlorate (1st Source) Expires On: 10/29/2022

EQ2200345-02	1.00µL	EQ2200345-02	1.00µL	EQ2200345-03	1.00µL	EQ2200345-03	1.00µL	EQ2200345-04	1.00µL	EQ2200345-05	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 223118 Logbook Ref: Perchlorate Internal Standard Expires On: 10/31/2022

E2200780-001	100.00µL	E2200780-002	100.00µL	E2200780-003	100.00µL	E2200780-004	100.00µL	E2200780-005	100.00µL	E2200780-006	100.00µL
E2200780-007	100.00µL	E2200781-001	100.00µL	E2200781-002	100.00µL	E2200781-003	100.00µL	E2200781-004	100.00µL	E2200781-005	100.00µL
E2200781-006	100.00µL	E2200781-007	100.00µL	E2200781-008	100.00µL	E2200781-009	100.00µL	E2200781-010	100.00µL	E2200781-011	100.00µL
EQ2200345-01	100.00µL	EQ2200345-01	100.00µL	EQ2200345-02	100.00µL	EQ2200345-02	100.00µL	EQ2200345-03	100.00µL	EQ2200345-03	100.00µL

Preparation Information Benchsheet

Prep Run#: 404399 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 8/22/22 11:04

EQ2200345-04 100.00µL EQ2200345-05 100.00µL R2207269-006 100.00µL

Preparation Materials

Water HPLC Grade	5/12/2022 Water (223056)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 Syringe Filters (224414)
6850 Luer-Lok Syringes	Luer-Lok Syringes (221305)	6850 Pipette Tips 50-1000 uL	6850 Pipette Tips (221929)		

Preparation Steps

Step: Preparation
Started: 8/22/22 11:04
Finished: 8/22/22 11:55
By: GRIVERA
Comments

Comments: _____

Reviewed By: GR Date: 08/22/22

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200780
Project:	HS22080499	**Date Collected:**	8/ 9/22 0705
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	MW5_080922	**Units:**	µg/L
Lab Code:	E2200780-001	**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	**28700**		100	50.0	25.0	1000	8/22/22	8/23/22 19:22	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200780
Project:	HS22080499	**Date Collected:**	8/ 9/22 0750
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	18CPTMW08DW_080922	**Units:**	µg/L
Lab Code:	E2200780-002	**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	**4930**		50.0	25.0	12.5	500	8/22/22	8/23/22 19:31	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200780
Project:	HS22080499	**Date Collected:**	8/ 9/22 0835
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	18CPTMW08SW_080922	**Units:**	µg/L
Lab Code:	E2200780-003	**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	**13800**		100	50.0	25.0	1000	8/22/22	8/23/22 19:40	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200780
Project:	HS22080499	**Date Collected:**	8/ 9/22 1005
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	MW19_080922	**Units:**	µg/L
Lab Code:	E2200780-004	**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	**0.0637**	J	0.100	0.0500	0.0250	1	8/22/22	8/24/22 11:43	404399	775163	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200780
Project:	HS22080499	**Date Collected:**	8/ 9/22 1050
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	MW10_080922	**Units:**	µg/L
Lab Code:	E2200780-005	**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	ND	U	0.100	0.0500	0.0250	1	8/22/22	8/23/22 18:29	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200780
Project:	HS22080499	**Date Collected:**	8/ 9/22 1135
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	18WW10_080922	**Units:**	µg/L
Lab Code:	E2200780-006	**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	**0.0340**	J	0.100	0.0500	0.0250	1	8/22/22	8/24/22 12:46	404399	775163	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200780
Project:	HS22080499	**Date Collected:**	8/ 9/22 1225
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	MW17_080922	**Units:**	µg/L
Lab Code:	E2200780-007	**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	8/22/22	8/23/22 13:43	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200780
Project:	HS22080499	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2200345-01	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	8/22/22	8/23/22 09:50	404399	775090	

Accuracy & Precision

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080499
Sample Matrix: Water

Service Request: E2200780
Date Analyzed: 8/23/22

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: 404399

	Lab Control Sample EQ2200345-02			Duplicate Lab Control Sample EQ2200345-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.102	0.100	102	0.0909	0.100	91	84 - 119	12	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:**	E2200780
Project:	HS22080499	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2200345-02	**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	**0.102**		0.100	0.0500	0.0250	1	8/22/22	8/23/22 09:59	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200780
Project:	HS22080499	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2200345-03	**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	**0.0909**	J	0.100	0.0500	0.0250	1	8/22/22	8/23/22 10:08	404399	775090	

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

20220816

1st Review: GRivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 8/16/2022
Cal. Std. xp: 10/29/2022
ICAL ID: **EC2200012**

Mobile Phases **A:** 0.10% Formic Acid/Water 3100820-05 **B:** MeOH 218535

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	PERCHLORATE1		20220816_023	Perchlorate6850c.lcm	1x	☒	224623	8/16/2022 19:03
2	PERCHLORATE2		20220816_024	Perchlorate6850c.lcm	1x	☒	224624	8/16/2022 19:12
3	PERCHLORATE3		20220816_025	Perchlorate6850c.lcm	1x	☒	224625	8/16/2022 19:21
4	PERCHLORATE4		20220816_026	Perchlorate6850c.lcm	1x	☒	224626	8/16/2022 19:30
5	PERCHLORATE5		20220816_027	Perchlorate6850c.lcm	1x	☒	224628	8/16/2022 19:39
6	PERCHLORATE6		20220816_028	Perchlorate6850c.lcm	1x	☒	224629	8/16/2022 19:47
7	PERCHLORATE7		20220816_029	Perchlorate6850c.lcm	1x	☒	224631	8/16/2022 19:56
8	PERCHLORATE8		20220816_030	Perchlorate6850c.lcm	1x	☒	224632	8/16/2022 20:05
9	PERCHLORATE9		20220816_031	Perchlorate6850c.lcm	1x	☒	224634	8/16/2022 20:14
10	PERCHLORATE10		20220816_032	Perchlorate6850c.lcm	1x	☒	224636	8/16/2022 20:23
11	PERCHLORATEICV		20220816_034	Perchlorate6850c.lcm	1x	☒	224637	8/16/2022 20:41
12								
13								
14								
15								

Initial Calibration - Detailed Report

Calibration ID: EC2200012 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2200012-01	PERCHLORATE1	20220816_023	08/16/2022 19:03
02	EC2200012-02	PERCHLORATE2	20220816_024	08/16/2022 19:12
03	EC2200012-03	PERCHLORATE3	20220816_025	08/16/2022 19:21
04	EC2200012-04	PERCHLORATE4	20220816_026	08/16/2022 19:30
05	EC2200012-05	PERCHLORATE5	20220816_027	08/16/2022 19:39
06	EC2200012-06	PERCHLORATE6	20220816_028	08/16/2022 19:47
07	EC2200012-07	PERCHLORATE7	20220816_029	08/16/2022 19:56
08	EC2200012-08	PERCHLORATE8	20220816_030	08/16/2022 20:05
09	EC2200012-09	PERCHLORATE9	20220816_031	08/16/2022 20:14
10	EC2200012-10	PERCHLORATE10	20220816_032	08/16/2022 20:23

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

Perchlorate **Average RF** **RSD = 9.533** **Average RF = 0.1459**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.1843	02	0.5000	0.1408	03	0.7000	0.144	04	1.0000	0.1462
05	2.0000	0.1397	06	5.0000	0.1363	07	10.0000	0.1469	08	20.0000	0.1435
09	30.0000	0.1392	10	50.0000	0.1386						

Analyte

Perchlorate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.126	26.3	02	0.5000	0.482	-3.6	03	0.7000	0.691	-1.3
04	1.0000	1.00	0.2	05	2.0000	1.91	-4.3	06	5.0000	4.67	-6.6
07	10.0000	10.1	0.7	08	20.0000	19.7	-1.7	09	30.0000	28.6	-4.7
10	50.0000	47.5	-5.0								

Initial Calibration Verification Summary Report

Calibration ID:	EC2200012	**Instrument ID:**	E-LCMS-01
Datafile ID:	20220816_034	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2200012-11	T	Average RF	10	9.206	ng/mL	-7.9	<= 15

Insight Report

Printed at 8/18/2022 4:03:16 PM

Method File: I:\LCMS01\DATA\20220816\20220816.lcm
Project File: I:\LCMS01\DATA\20220816\20220816-ICAL.damlp

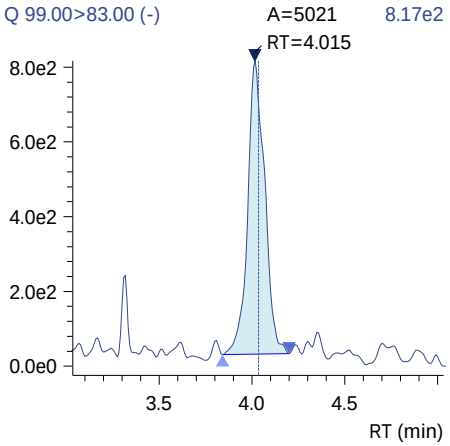
PERCHLORATE1

Sample ID: PERCHLORATE1
Date Acquired: 8/16/2022 7:03:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220816\20220816_023.lcd
Vial: 20 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.015	5021	272391	0.1263	ng/mL	38.86	21.39-39.72
Perchlorate 2	Auto	4.018	1951	272391	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.028	272391	272391	1.0000	ng/mL	----	

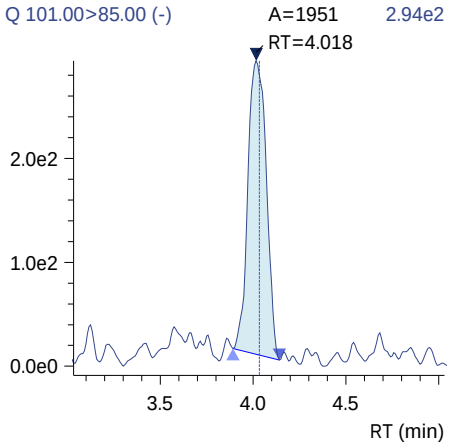
Perchlorate

Conc 0.1263



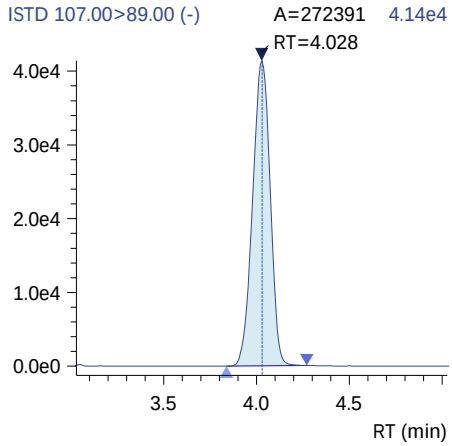
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/18/2022 4:03:16 PM

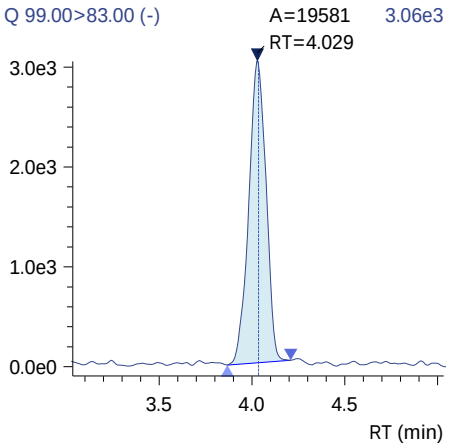
PERCHLORATE2

Sample ID: PERCHLORATE2
Date Acquired: 8/16/2022 7:12:18 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220816\20220816_024.lcd
Vial: 21 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.029	19581	278225	0.4822	ng/mL	39.99	21.39-39.72
Perchlorate 2	Auto	4.031	7831	278225	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.029	278225	278225	1.0000	ng/mL	----	

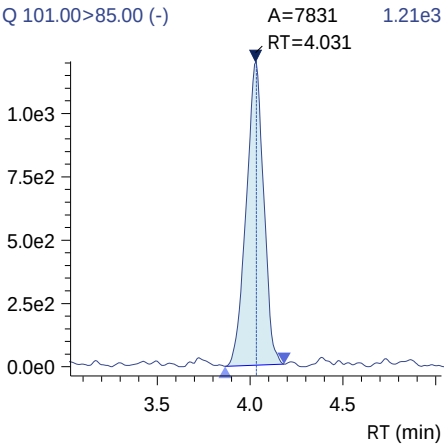
Perchlorate

Conc 0.4822



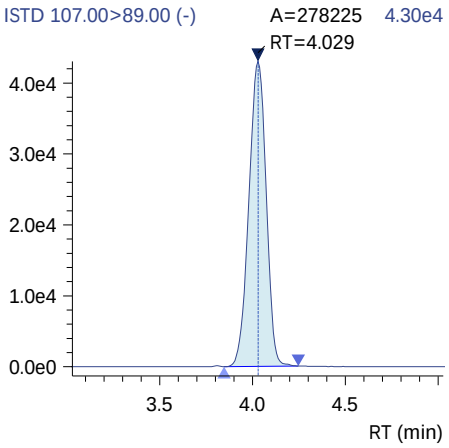
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/18/2022 4:03:16 PM

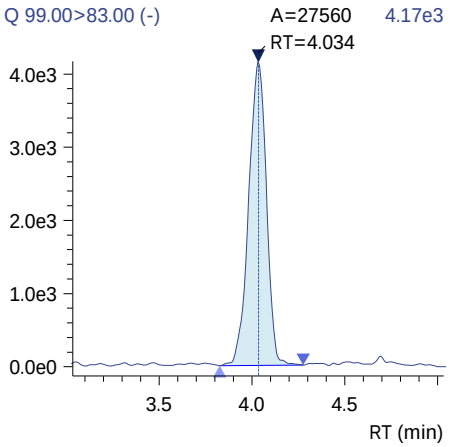
PERCHLORATE3

Sample ID: PERCHLORATE3
Date Acquired: 8/16/2022 7:21:14 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220816\20220816_025.lcd
Vial: 22 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.034	27560	273395	0.6907	ng/mL	39.49	21.39-39.72
Perchlorate 2	Auto	4.032	10884	273395	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.031	273395	273395	1.0000	ng/mL	----	

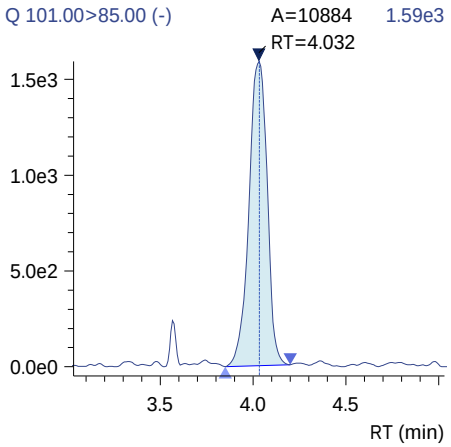
Perchlorate

Conc 0.6907



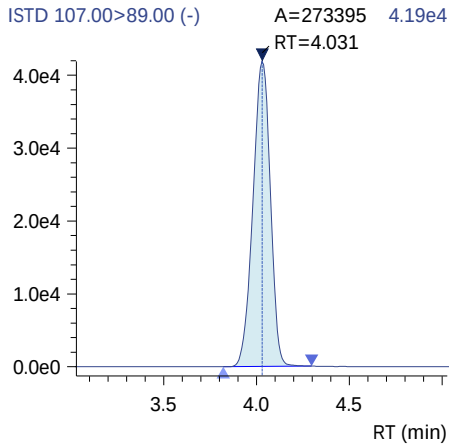
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/18/2022 4:03:16 PM

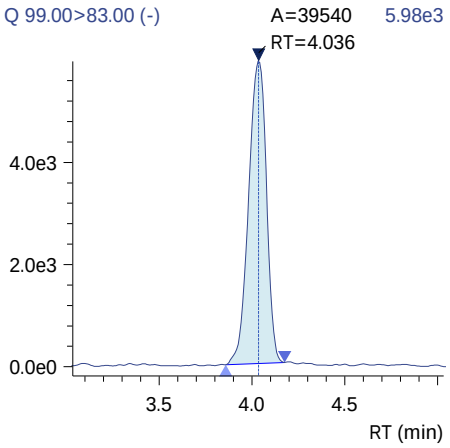
PERCHLORATE4

Sample ID: PERCHLORATE4
Date Acquired: 8/16/2022 7:30:08 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220816\20220816_026.lcd
Vial: 23 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.036	39540	270477	1.0016	ng/mL	37.85	21.39-39.72
Perchlorate 2	Auto	4.026	14965	270477	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.029	270477	270477	1.0000	ng/mL	----	

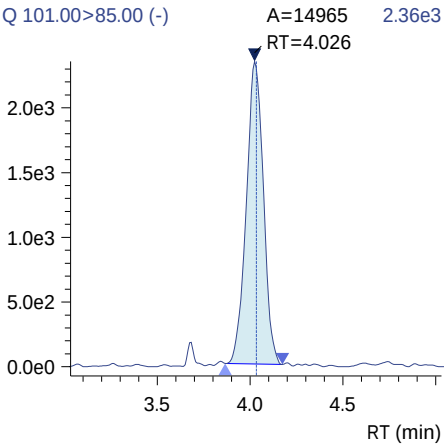
Perchlorate

Conc 1.0016



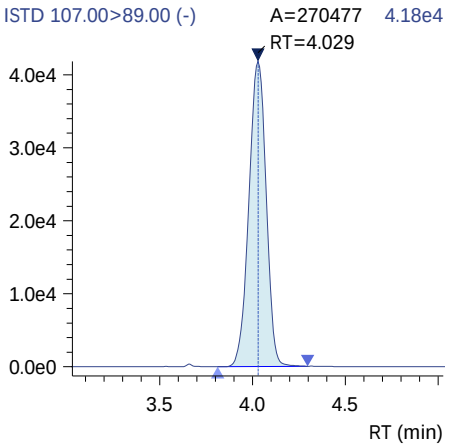
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/18/2022 4:03:16 PM

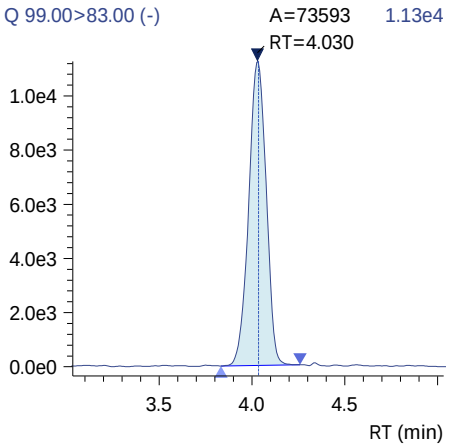
PERCHLORATE5

Sample ID: PERCHLORATE5
Date Acquired: 8/16/2022 7:39:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220816\20220816_027.lcd
Vial: 24 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.030	73593	263417	1.9142	ng/mL	39.18	21.39-39.72
Perchlorate 2	Auto	4.029	28831	263417	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.028	263417	263417	1.0000	ng/mL	----	

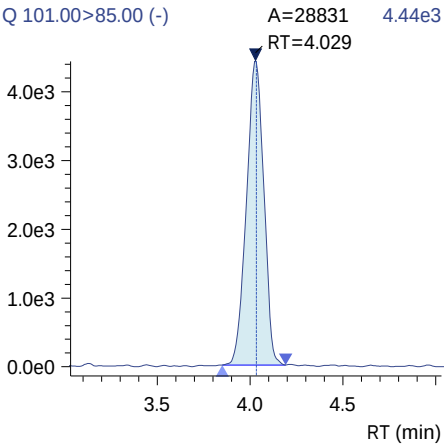
Perchlorate

Conc 1.9142



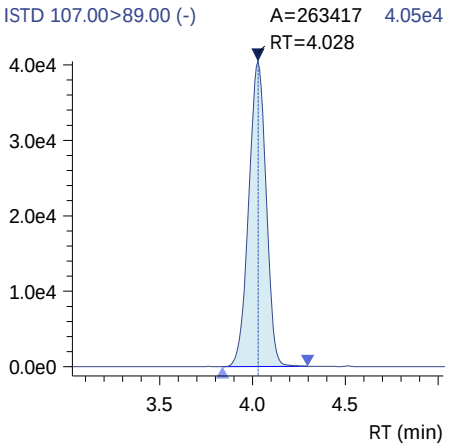
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/18/2022 4:03:16 PM

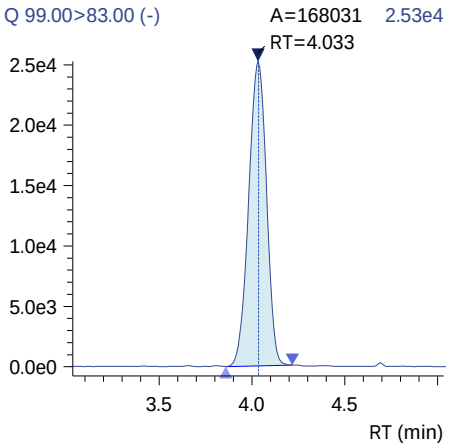
PERCHLORATE6

Sample ID: PERCHLORATE6
Date Acquired: 8/16/2022 7:47:52 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220816\20220816_028.lcd
Vial: 25 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.033	168031	246481	4.6709	ng/mL	38.82	21.39-39.72
Perchlorate 2	Auto	4.027	65225	246481	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.028	246481	246481	1.0000	ng/mL	----	

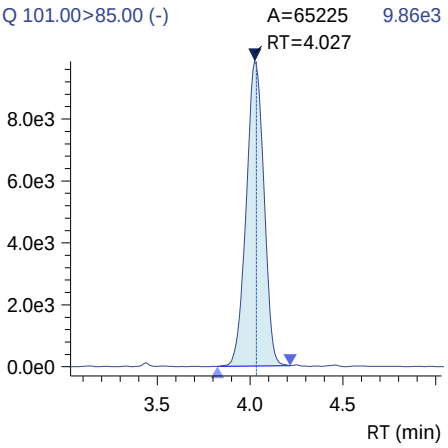
Perchlorate

Conc 4.6709



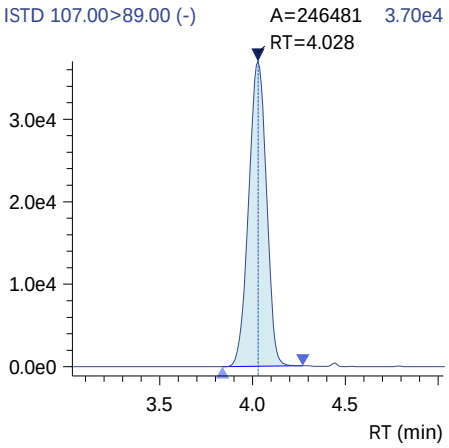
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/18/2022 4:03:16 PM

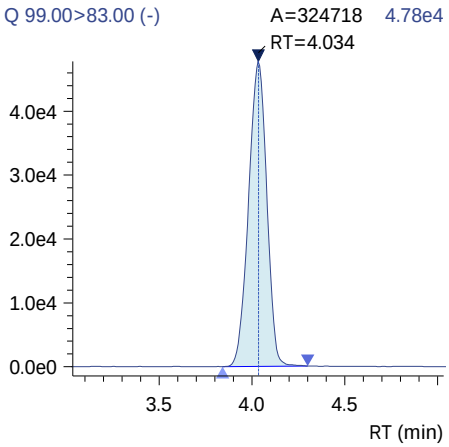
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 8/16/2022 7:56:45 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220816\20220816_029.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.034	324718	221048	10.0651	ng/mL	38.60	21.39-39.72
Perchlorate 2	Auto	4.033	125348	221048	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.029	221048	221048	1.0000	ng/mL	----	

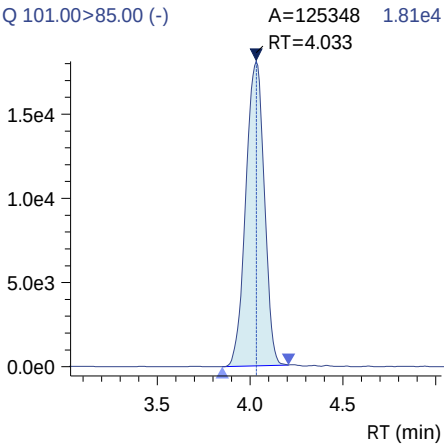
Perchlorate

Conc 10.0651



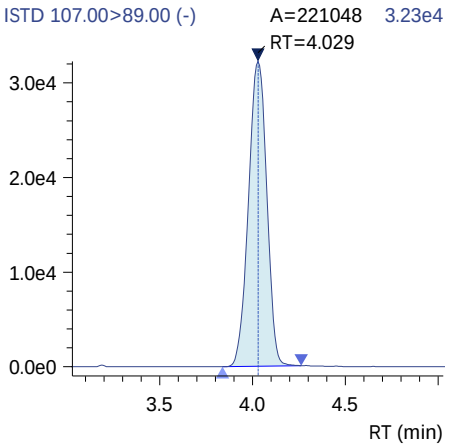
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/18/2022 4:03:16 PM

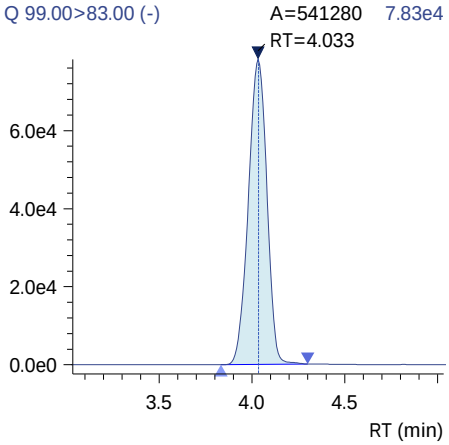
PERCHLORATE8

Sample ID: PERCHLORATE8
Date Acquired: 8/16/2022 8:05:37 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220816\20220816_030.lcd
Vial: 27 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.033	541280	188580	19.6663	ng/mL	38.63	21.39-39.72
Perchlorate 2	Auto	4.032	209073	188580	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.031	188580	188580	1.0000	ng/mL	----	

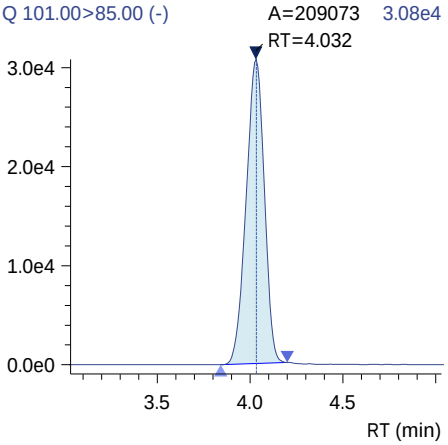
Perchlorate

Conc 19.6663



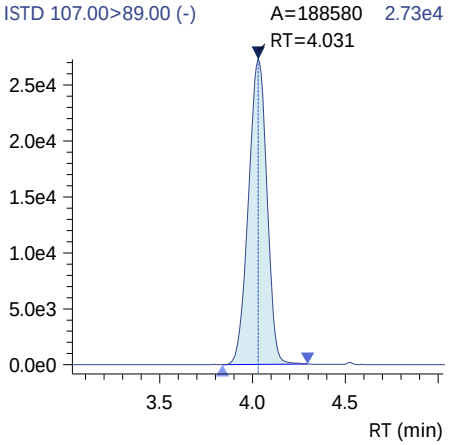
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/18/2022 4:03:16 PM

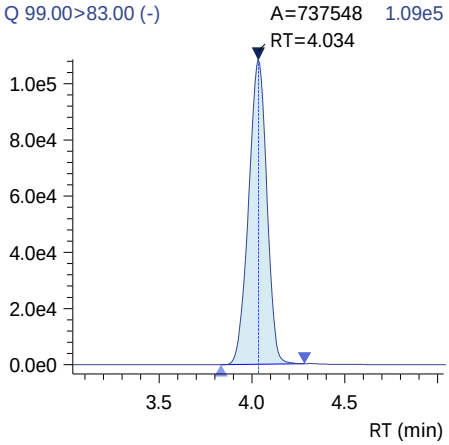
PERCHLORATE9

Sample ID: PERCHLORATE9
Date Acquired: 8/16/2022 8:14:30 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220816\20220816_031.lcd
Vial: 28 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.034	737548	176672	28.6035	ng/mL	39.06	21.39-39.72
Perchlorate 2	Auto	4.032	288078	176672	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.031	176672	176672	1.0000	ng/mL	----	

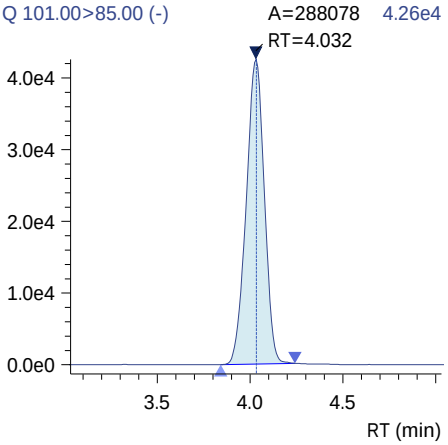
Perchlorate

Conc 28.6035



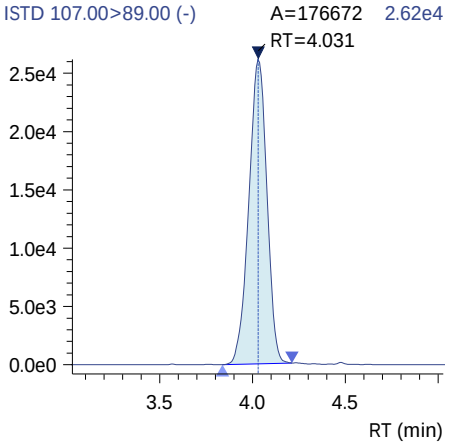
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/18/2022 4:03:16 PM

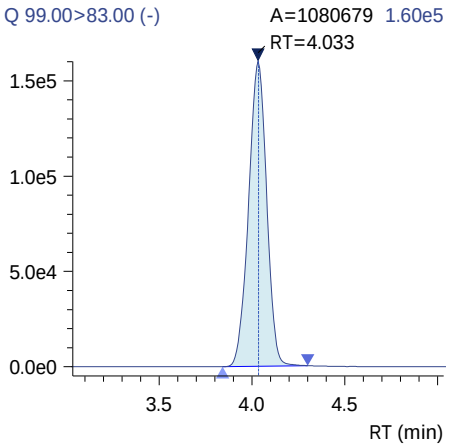
PERCHLORATE10

Sample ID: PERCHLORATE10
Date Acquired: 8/16/2022 8:23:24 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220816\20220816_032.lcd
Vial: 29 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.033	1080679	155928	47.4864	ng/mL	39.09	21.39-39.72
Perchlorate 2	Auto	4.029	422395	155928	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.028	155928	155928	1.0000	ng/mL	----	

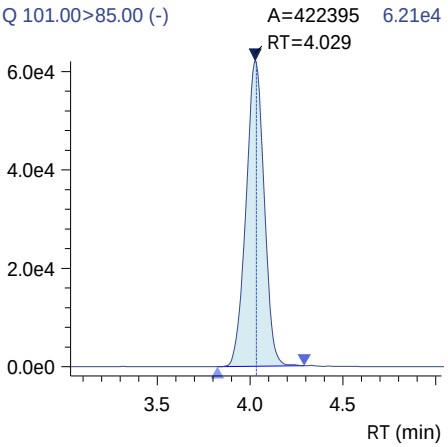
Perchlorate

Conc 47.4864



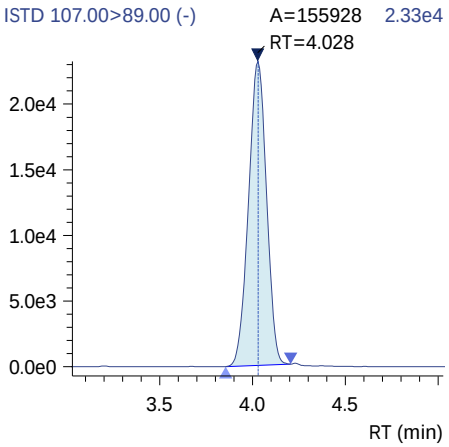
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/18/2022 4:03:16 PM

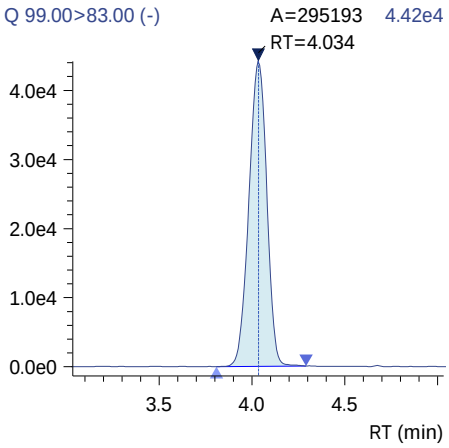
PERCHLORATEICV

Sample ID: PERCHLORATEICV
Date Acquired: 8/16/2022 8:41:13 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220816\20220816_034.lcd
Vial: 30 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	4.034	295193	219691	9.2064	ng/mL	38.90	21.39-39.72
Perchlorate 2	M	4.031	114819	219691	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.030	219691	219691	1.0000	ng/mL	----	

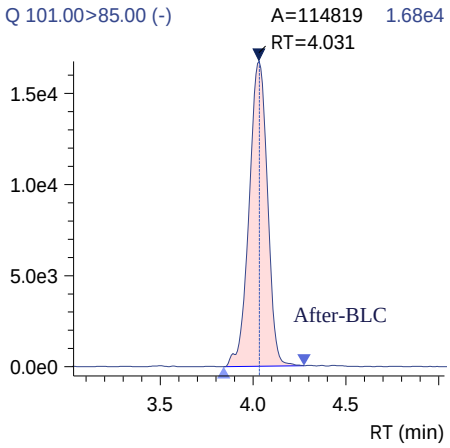
Perchlorate

Conc 9.2064



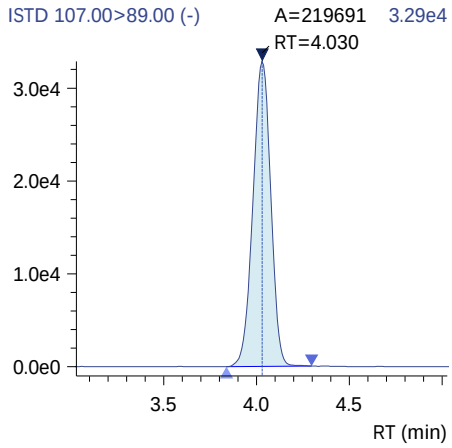
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/18/2022 4:05:28 PM

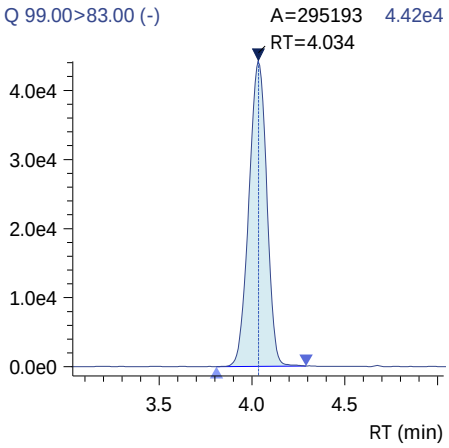
PERCHLORATEICV

Sample ID: PERCHLORATEICV
Date Acquired: 8/16/2022 8:41:13 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220816\20220816_034.lcd
Vial: 30 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.034	295193	219691	9.2064	ng/mL	36.05	21.39-39.72
Perchlorate 2	Auto	4.031	106424	219691	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.030	219691	219691	1.0000	ng/mL	----	

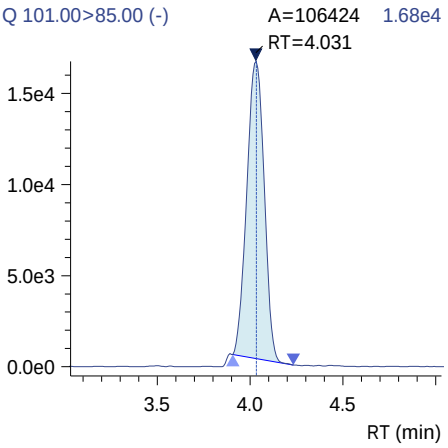
Perchlorate

Conc 9.2064



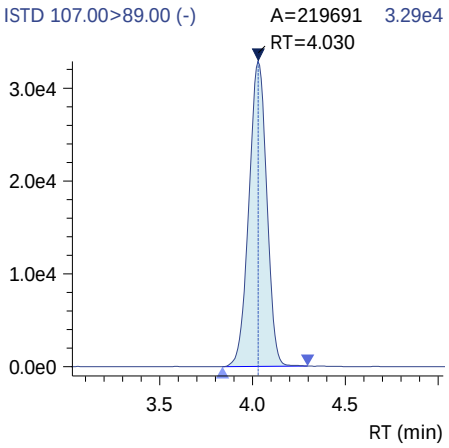
Perchlorate 2

Conc 0.0000



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

20220823

1st Review: GRivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 8/16/2022
Cal. Std. xp: 10/29/2022
ICAL ID: **EC2200012**

Mobile Phases **A:** 0.10% Formic Acid/Water 3100820-05 **B:** MeOH 218535

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	null		20220823_001	Perchlorate6850c.lcm	1x	☒		8/23/2022 8:27
2	null		20220823_002	Perchlorate6850c.lcm	1x	☒		8/23/2022 8:33
3	IB		20220823_003	Perchlorate6850c.lcm	1x	☒		8/23/2022 8:39
4	IB		20220823_004	Perchlorate6850c.lcm	1x	☒		8/23/2022 8:48
5	IB		20220823_005	Perchlorate6850c.lcm	1x	☒		8/23/2022 8:57
6	IB		20220823_006	Perchlorate6850c.lcm	1x	☒		8/23/2022 9:06
7	ICS		20220823_008	Perchlorate6850c.lcm	1x	☒		8/23/2022 9:23
8	LODV		20220823_009	Perchlorate6850c.lcm	1x	☒	224622	8/23/2022 9:32
9	PERCHLORATE7		20220823_010	Perchlorate6850c.lcm	1x	☒	224631	8/23/2022 9:41
10	EQ2200345-01		20220823_011	Perchlorate6850c.lcm	1x	☒		8/23/2022 9:50
11	EQ2200345-02		20220823_012	Perchlorate6850c.lcm	1x	☒		8/23/2022 9:59
12	EQ2200345-03		20220823_013	Perchlorate6850c.lcm	1x	☒		8/23/2022 10:08
13	EQ2200345-04		20220823_014	Perchlorate6850c.lcm	1x	☒	E qualifier	8/23/2022 10:17
14	EQ2200345-05		20220823_015	Perchlorate6850c.lcm	1x	☒	E qualifier	8/23/2022 10:27
15	IB		20220823_016	Perchlorate6850c.lcm	1x	☒		8/23/2022 10:36
16	IB		20220823_017	Perchlorate6850c.lcm	1x	☒		8/23/2022 10:45
17	IB		20220823_018	Perchlorate6850c.lcm	1x	☒		8/23/2022 10:54
18	E2200780-001		20220823_019	Perchlorate6850c.lcm	1x	☒	DNU-over ICAL range	8/23/2022 11:02
19	E2200780-002		20220823_020	Perchlorate6850c.lcm	1x	☒	DNU-over ICAL range	8/23/2022 11:11
20	PERCHLORATE7		20220823_021	Perchlorate6850c.lcm	1x	☒	224631	8/23/2022 11:29
21	E2200780-003		20220823_022	Perchlorate6850c.lcm	1x	☒	DNU-over ICAL range	8/23/2022 11:38
22	E2200780-004		20220823_023	Perchlorate6850c.lcm	1x	☒	Reanalyze: carryover	8/23/2022 11:47
23	E2200780-005		20220823_024	Perchlorate6850c.lcm	1x	☒	Reanalyze: carryover	8/23/2022 11:56
24	E2200780-006		20220823_025	Perchlorate6850c.lcm	1x	☒	Reanalyze: carryover	8/23/2022 12:05
25	IB		20220823_026	Perchlorate6850c.lcm	1x	☒		8/23/2022 12:20
26	IB		20220823_027	Perchlorate6850c.lcm	1x	☒		8/23/2022 12:29
27	IB		20220823_028	Perchlorate6850c.lcm	1x	☒		8/23/2022 13:16
28	IB		20220823_029	Perchlorate6850c.lcm	1x	☒		8/23/2022 13:25
29	PERCHLORATE7		20220823_030	Perchlorate6850c.lcm	1x	☒	224631	8/23/2022 13:34
30	E2200780-007		20220823_031	Perchlorate6850c.lcm	1x	☒		8/23/2022 13:43
31	E2200781-001		20220823_032	Perchlorate6850c.lcm	1x	☒		8/23/2022 13:52
32	E2200781-002		20220823_033	Perchlorate6850c.lcm	1x	☒		8/23/2022 14:01
33	E2200781-003		20220823_034	Perchlorate6850c.lcm	1x	☒		8/23/2022 14:09
34	E2200781-004		20220823_035	Perchlorate6850c.lcm	1x	☒	Reanalyze-IR	8/23/2022 14:18
35	PERCHLORATE7		20220823_036	Perchlorate6850c.lcm	1x	☒	224631	8/23/2022 14:27
36	IB		20220823_037	Perchlorate6850c.lcm	1x	☒		8/23/2022 14:36
37	E2200781-004		20220823_038	Perchlorate6850c.lcm	1x	☒		8/23/2022 14:45
38	E2200781-003		20220823_039	Perchlorate6850c.lcm	1x	☒	DNU report original: confirms	8/23/2022 14:54
39	E2200781-006		20220823_040	Perchlorate6850c.lcm	1x	☒		8/23/2022 15:03
40	E2200781-007		20220823_041	Perchlorate6850c.lcm	1x	☒		8/23/2022 15:12
41	E2200781-008		20220823_042	Perchlorate6850c.lcm	1x	☒	DNU-over ICAL range	8/23/2022 15:21
42	E2200781-009		20220823_043	Perchlorate6850c.lcm	1x	☒	Reanalyze: carryover	8/23/2022 15:30
43	E2200781-010		20220823_044	Perchlorate6850c.lcm	1x	☒	DNU-IS out of range	8/23/2022 15:39
44	E2200781-011		20220823_045	Perchlorate6850c.lcm	1x	☒	DNU reanalyze	8/23/2022 15:48
45	R2207269-006		20220823_046	Perchlorate6850c.lcm	1x	☒		8/23/2022 15:56
46	PERCHLORATE7		20220823_047	Perchlorate6850c.lcm	1x	☒	224631	8/23/2022 16:05
47	IB		20220823_048	Perchlorate6850c.lcm	1x	☒		8/23/2022 16:14
48	IB		20220823_049	Perchlorate6850c.lcm	1x	☒		8/23/2022 16:23
49	IB		20220823_050	Perchlorate6850c.lcm	1x	☒		8/23/2022 17:44
50	IB		20220823_051	Perchlorate6850c.lcm	1x	☒		8/23/2022 17:53
51	IB		20220823_052	Perchlorate6850c.lcm	1x	☒		8/23/2022 18:02
52	PERCHLORATE7		20220823_053	Perchlorate6850c.lcm	1x	☒	224631	8/23/2022 18:11
53	E2200780-004		20220823_054	Perchlorate6850c.lcm	1x	☒	DNU-IR	8/23/2022 18:20
54	E2200780-005		20220823_055	Perchlorate6850c.lcm	1x	☒		8/23/2022 18:29
55	E2200780-006		20220823_056	Perchlorate6850c.lcm	1x	☒	DNU-IR	8/23/2022 18:38
56	E2200781-009		20220823_057	Perchlorate6850c.lcm	1x	☒		8/23/2022 18:47
57	E2200781-010		20220823_058	Perchlorate6850c.lcm	1x	☒		8/23/2022 18:56
58	E2200781-011		20220823_059	Perchlorate6850c.lcm	1x	☒		8/23/2022 19:05
59	PERCHLORATE7		20220823_060	Perchlorate6850c.lcm	1x	☒	224631	8/23/2022 19:13
60	E2200780-001x1000		20220823_061	Perchlorate6850c.lcm	1000x	☒		8/23/2022 19:22
61	E2200780-002x500		20220823_062	Perchlorate6850c.lcm	500x	☒		8/23/2022 19:31
62	E2200780-003x1000		20220823_063	Perchlorate6850c.lcm	1000x	☒		8/23/2022 19:40
63	E2200781-005x5000		20220823_064	Perchlorate6850c.lcm	5000x	☒		8/23/2022 19:49
64	E2200781-008X100		20220823_065	Perchlorate6850c.lcm	100x	☒		8/23/2022 19:58
65	PERCHLORATE7		20220823_066	Perchlorate6850c.lcm	1x	☒	224631	8/23/2022 20:07
66	IB		20220823_067	Perchlorate6850c.lcm	1x	☒		8/23/2022 20:16

20220823

1st Review: GRivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 8/16/2022
Cal. Std. xp: 10/29/2022
ICAL ID: **EC2200012**

Mobile Phases **A:** 0.10% Formic Acid/Water 3100820-05 **B:** MeOH 218535

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
67	IB		20220823_068	Perchlorate6850c.lcm	1x	☒		8/23/2022 20:25
68	null		20220823_069	Perchlorate6850c.lcm	1x	☒		8/23/2022 20:31
69	null		20220823_070	Perchlorate6850c.lcm	1x	☒		8/23/2022 20:36

20220824

1st Review: GRivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 8/16/2022
Cal. Std. xp: 10/29/2022
ICAL ID: **EC2200012**

Mobile Phases **A:** 0.10% Formic Acid/Water 3100820-05 **B:** MeOH 218535

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	null		20220824_001	Perchlorate6850c.lcm	1x	☒		8/24/2022 9:45
2	null		20220824_002	Perchlorate6850c.lcm	1x	☒		8/24/2022 9:51
3	IB		20220824_003	Perchlorate6850c.lcm	1x	☒		8/24/2022 9:57
4	IB		20220824_004	Perchlorate6850c.lcm	1x	☒		8/24/2022 10:06
5	IB		20220824_005	Perchlorate6850c.lcm	1x	☒		8/24/2022 10:15
6	IB		20220824_006	Perchlorate6850c.lcm	1x	☒		8/24/2022 11:07
7	LODV		20220824_007	Perchlorate6850c.lcm	1x	☒	224622	8/24/2022 11:16
8	ICS		20220824_008	Perchlorate6850c.lcm	1x	☒		8/24/2022 11:25
9	PERCHLORATE7		20220824_009	Perchlorate6850c.lcm	1x	☒	224631	8/24/2022 11:34
10	E2200780-004		20220824_010	Perchlorate6850c.lcm	1x	☒		8/24/2022 11:43
11	E2200780-006		20220824_011	Perchlorate6850c.lcm	1x	☒		8/24/2022 12:46
12	PERCHLORATE7		20220824_012	Perchlorate6850c.lcm	1x	☒	224631	8/24/2022 13:13
13	E2200791-001		20220824_013	Perchlorate6850c.lcm	1x	☒		8/24/2022 13:31
14	E2200791-003		20220824_014	Perchlorate6850c.lcm	1x	☒		8/24/2022 13:40
15	E2200791-004		20220824_015	Perchlorate6850c.lcm	1x	☒		8/24/2022 13:49
16	E2200791-006		20220824_016	Perchlorate6850c.lcm	1x	☒		8/24/2022 13:58
17	E2200791-007		20220824_017	Perchlorate6850c.lcm	1x	☒		8/24/2022 14:07
18	E2200791-008		20220824_018	Perchlorate6850c.lcm	1x	☒		8/24/2022 14:16
19	PERCHLORATE7		20220824_019	Perchlorate6850c.lcm	1x	☒	224631	8/24/2022 14:25
20	E2200792-001		20220824_020	Perchlorate6850c.lcm	1x	☒		8/24/2022 14:33
21	E2200792-005		20220824_021	Perchlorate6850c.lcm	1x	☒		8/24/2022 14:42
22	E2200792-006		20220824_022	Perchlorate6850c.lcm	1x	☒		8/24/2022 14:51
23	E2200792-007		20220824_023	Perchlorate6850c.lcm	1x	☒		8/24/2022 14:59
24	E2200792-008		20220824_024	Perchlorate6850c.lcm	1x	☒		8/24/2022 15:08
25	PERCHLORATE7		20220824_025	Perchlorate6850c.lcm	1x	☒	224631	8/24/2022 15:16
26	IB		20220824_026	Perchlorate6850c.lcm	1x	☒		8/24/2022 16:56
27	IB		20220824_027	Perchlorate6850c.lcm	1x	☒		8/24/2022 17:04
28	PERCHLORATE7		20220824_028	Perchlorate6850c.lcm	1x	☒	224631	8/24/2022 17:13
29	E2200791-002x100		20220824_029	Perchlorate6850c.lcm	100x	☒		8/24/2022 17:22
30	E2200791-005x1k		20220824_030	Perchlorate6850c.lcm	1000x	☒		8/24/2022 17:30
31	E2200792-002x10		20220824_031	Perchlorate6850c.lcm	10x	☒		8/24/2022 17:39
32	E2200792-003x500		20220824_032	Perchlorate6850c.lcm	500x	☒		8/24/2022 17:47
33	E2200792-004x500		20220824_033	Perchlorate6850c.lcm	500x	☒		8/24/2022 17:56
34	PERCHLORATE7		20220824_034	Perchlorate6850c.lcm	1x	☒	224631	8/24/2022 18:05
35	IB		20220824_035	Perchlorate6850c.lcm	1x	☒		8/24/2022 18:13
36	IB		20220824_036	Perchlorate6850c.lcm	1x	☒		8/24/2022 18:22
37	null		20220824_037	Perchlorate6850c.lcm	1x	☒		8/24/2022 18:28
38	null		20220824_038	Perchlorate6850c.lcm	1x	☒		8/24/2022 18:33

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080499

Service Request: E2200780
Date Analyzed: 8/23/22

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\20220823\20220823_010

Calibration Date: 8/16/22
Calibration ID: EC2200012
Analysis Lot: 775090
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.91	0.1459	0.1447	-0.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080499

Service Request: E2200780
Date Analyzed: 8/23/22

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\20220823\20220823_021

Calibration Date: 8/16/22
Calibration ID: EC2200012
Analysis Lot: 775090
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.2	0.1459	0.1487	1.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080499

Service Request: E2200780
Date Analyzed: 8/23/22

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\20220823\20220823_030

Calibration Date: 8/16/22
Calibration ID: EC2200012
Analysis Lot: 775090
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.3	0.1459	0.1505	3.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080499

Service Request: E2200780
Date Analyzed: 8/23/22

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\20220823\20220823_036

Calibration Date: 8/16/22
Calibration ID: EC2200012
Analysis Lot: 775090
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1459	0.1463	0.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080499

Service Request: E2200780
Date Analyzed: 8/23/22

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\20220823\20220823_047

Calibration Date: 8/16/22
Calibration ID: EC2200012
Analysis Lot: 775090
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1459	0.1479	1.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080499

Service Request: E2200780
Date Analyzed: 8/23/22

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\20220823\20220823_053

Calibration Date: 8/16/22
Calibration ID: EC2200012
Analysis Lot: 775090
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.90	0.1459	0.1445	-1.0	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080499

Service Request: E2200780
Date Analyzed: 8/23/22

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\20220823\20220823_060

Calibration Date: 8/16/22
Calibration ID: EC2200012
Analysis Lot: 775090
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.5	0.1459	0.1532	4.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080499

Service Request: E2200780
Date Analyzed: 8/23/22

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\20220823\20220823_066

Calibration Date: 8/16/22
Calibration ID: EC2200012
Analysis Lot: 775090
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.3	0.1459	0.1506	3.2	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080499

Service Request: E2200780
Date Analyzed: 8/24/22

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\20220824\20220824_009

Calibration Date: 8/16/22
Calibration ID: EC2200012
Analysis Lot: 775163
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1459	0.1476	1.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080499

Service Request: E2200780
Date Analyzed: 8/24/22

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\20220824\20220824_012

Calibration Date: 8/16/22
Calibration ID: EC2200012
Analysis Lot: 775163
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.22	0.1459	0.1346	-7.8	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080499

Service Request: E2200780
Date Analyzed: 8/24/22

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\20220824\20220824_019

Calibration Date: 8/16/22
Calibration ID: EC2200012
Analysis Lot: 775163
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.39	0.1459	0.1370	-6.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080499

Service Request: E2200780
Date Analyzed: 8/24/22

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\20220824\20220824_025

Calibration Date: 8/16/22
Calibration ID: EC2200012
Analysis Lot: 775163
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.29	0.1459	0.1356	-7.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080499

Service Request: E2200780
Date Analyzed: 8/24/22

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\20220824\20220824_028

Calibration Date: 8/16/22
Calibration ID: EC2200012
Analysis Lot: 775163
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.19	0.1459	0.1341	-8.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080499

Service Request: E2200780
Date Analyzed: 8/24/22

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\20220824\20220824_034

Calibration Date: 8/16/22
Calibration ID: EC2200012
Analysis Lot: 775163
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.31	0.1459	0.1359	-6.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200780
Project:	HS22080499	**Date Analyzed:**	8/23/22 09:41

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

File ID:	I:\LCMS01\DATA\20220823\20220823_010	**Lab Code:**	EQ2200366-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	775090
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	234,661	4.03
	Upper Limit ==>	351,992	6.03
	Lower Limit ==>	117,331	2.03
Associated Analyses			
Continuing Calibration Verification	EQ2200366-01	244,550	3.99
Method Blank	EQ2200345-01	313,654	3.99
Lab Control Sample	EQ2200345-02	317,122	3.99
Duplicate Lab Control Sample	EQ2200345-03	307,847	3.99

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:**	E2200780
Project:	HS22080499	**Date Analyzed:**	8/23/22 11:29

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

File ID:	I:\LCMS01\DATA\20220823\20220823_021	**Lab Code:**	EQ2200366-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	775090
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	234,661	4.03
	Upper Limit ==>	351,992	6.03
	Lower Limit ==>	117,331	2.03
Associated Analyses			
Continuing Calibration Verification	EQ2200366-02	228,232	3.97

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:**	E2200780
Project:	HS22080499	**Date Analyzed:**	8/23/22 13:34

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

File ID:	I:\LCMS01\DATA\20220823\20220823_030	**Lab Code:**	EQ2200366-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	775090
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	234,661	4.03
	Upper Limit ==>	351,992	6.03
	Lower Limit ==>	117,331	2.03
Associated Analyses			
Continuing Calibration Verification	EQ2200366-03	220,799	3.99
MW17_080922	E2200780-007	296,041	3.96

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:**	E2200780
Project:	HS22080499	**Date Analyzed:**	8/23/22 14:27

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

File ID:	I:\LCMS01\DATA\20220823\20220823_036	**Lab Code:**	EQ2200366-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	775090
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	234,661	4.03
	Upper Limit ==>	351,992	6.03
	Lower Limit ==>	117,331	2.03
Associated Analyses			
Continuing Calibration Verification	EQ2200366-04	226,388	3.98

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:**	E2200780
Project:	HS22080499	**Date Analyzed:**	8/23/22 16:05

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

File ID:	I:\LCMS01\DATA\20220823\20220823_047	**Lab Code:**	EQ2200366-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	775090
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	234,661	4.03
	Upper Limit ==>	351,992	6.03
	Lower Limit ==>	117,331	2.03
Associated Analyses			
Continuing Calibration Verification	EQ2200366-05	206,284	3.98

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:**	E2200780
Project:	HS22080499	**Date Analyzed:**	8/23/22 18:11

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

File ID:	I:\LCMS01\DATA\20220823\20220823_053	**Lab Code:**	EQ2200366-06
Instrument ID:	E-LCMS-01	**Analysis Lot:**	775090
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	234,661	4.03
	Upper Limit ==>	351,992	6.03
	Lower Limit ==>	117,331	2.03
Associated Analyses			
Continuing Calibration Verification	EQ2200366-06	246,848	4.05
MW10_080922	E2200780-005	274,088	4.01

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:**	E2200780
Project:	HS22080499	**Date Analyzed:**	8/23/22 19:13

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20220823\20220823_060	**Lab Code:**	EQ2200366-07
Instrument ID:	E-LCMS-01	**Analysis Lot:**	775090
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	234,661	4.03
	Upper Limit ==>	351,992	6.03
	Lower Limit ==>	117,331	2.03
Associated Analyses			
Continuing Calibration Verification	EQ2200366-07	230,046	4.05
MW5_080922	E2200780-001	173,593	4.05
18CPTMW08DW_080922	E2200780-002	230,981	4.05
18CPTMW08SW_080922	E2200780-003	218,418	4.05

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:**	E2200780
Project:	HS22080499	**Date Analyzed:**	8/23/22 20:07

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

File ID:	I:\LCMS01\DATA\20220823\20220823_066	**Lab Code:**	EQ2200366-08
Instrument ID:	E-LCMS-01	**Analysis Lot:**	775090
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	234,661	4.03
	Upper Limit ==>	351,992	6.03
	Lower Limit ==>	117,331	2.03
Associated Analyses			
Continuing Calibration Verification	EQ2200366-08	229,495	4.05

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:**	E2200780
Project:	HS22080499	**Date Analyzed:**	8/24/22 11:34

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20220824\20220824_009	**Lab Code:**	EQ2200367-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	775163
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	234,661	4.03
	Upper Limit ==>	351,992	6.03
	Lower Limit ==>	117,331	2.03
Associated Analyses			
Continuing Calibration Verification	EQ2200367-01	275,988	4.06
MW19_080922	E2200780-004	263,706	3.89
18WW10_080922	E2200780-006	309,119	3.99

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:**	E2200780
Project:	HS22080499	**Date Analyzed:**	8/24/22 13:13

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

File ID:	I:\LCMS01\DATA\20220824\20220824_012	**Lab Code:**	EQ2200367-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	775163
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	234,661	4.03
	Upper Limit ==>	351,992	6.03
	Lower Limit ==>	117,331	2.03
Associated Analyses			
Continuing Calibration Verification	EQ2200367-02	233,632	4.06

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:**	E2200780
Project:	HS22080499	**Date Analyzed:**	8/24/22 14:25

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

File ID:	I:\LCMS01\DATA\20220824\20220824_019	**Lab Code:**	EQ2200367-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	775163
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	234,661	4.03
	Upper Limit ==>	351,992	6.03
	Lower Limit ==>	117,331	2.03
Associated Analyses			
Continuing Calibration Verification	EQ2200367-03	230,598	4.03

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:**	E2200780
Project:	HS22080499	**Date Analyzed:**	8/24/22 15:16

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

File ID:	I:\LCMS01\DATA\20220824\20220824_025	**Lab Code:**	EQ2200367-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	775163
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	234,661	4.03
	Upper Limit ==>	351,992	6.03
	Lower Limit ==>	117,331	2.03
Associated Analyses			
Continuing Calibration Verification	EQ2200367-04	238,129	4.06

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:**	E2200780
Project:	HS22080499	**Date Analyzed:**	8/24/22 17:13

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20220824\20220824_028	**Lab Code:**	EQ2200367-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	775163
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	234,661	4.03
	Upper Limit ==>	351,992	6.03
	Lower Limit ==>	117,331	2.03
Associated Analyses			
Continuing Calibration Verification	EQ2200367-05	235,843	3.89

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:**	E2200780
Project:	HS22080499	**Date Analyzed:**	8/24/22 18:05

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

File ID:	I:\LCMS01\DATA\20220824\20220824_034	**Lab Code:**	EQ2200367-06
Instrument ID:	E-LCMS-01	**Analysis Lot:**	775163
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	234,661	4.03
	Upper Limit ==>	351,992	6.03
	Lower Limit ==>	117,331	2.03
Associated Analyses			
Continuing Calibration Verification	EQ2200367-06	214,406	3.89

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

Insight Report

Printed at 8/24/2022 11:03:47 AM

Method File: I:\LCMS01\DATA\20220823\20220816.lcm
Project File: I:\LCMS01\DATA\20220823\20220823.damlp

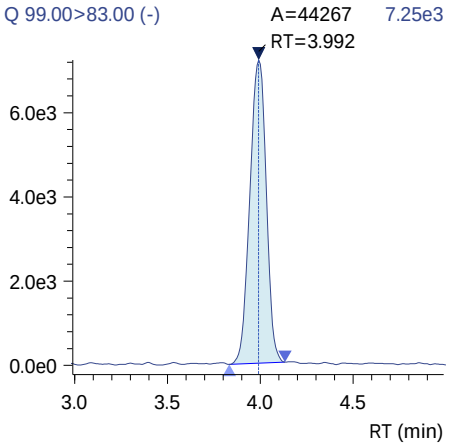
ICS

Sample ID: ICS
Date Acquired: 8/23/2022 9:23:52 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_008.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.992	44267	309338	0.9805	ng/mL	38.39	27.43-50.94
Perchlorate 2	Auto	3.983	16993	309338	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	3.986	309338	309338	1.0000	ng/mL	----	

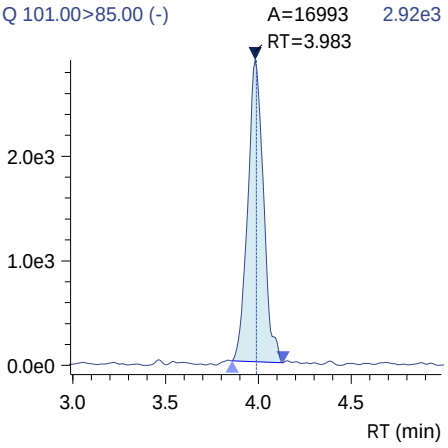
Perchlorate

Conc 0.9805



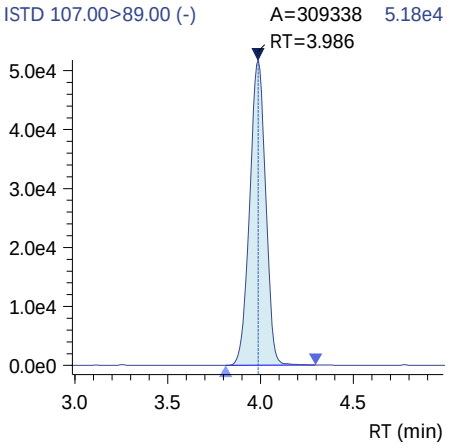
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/24/2022 11:09:42 AM

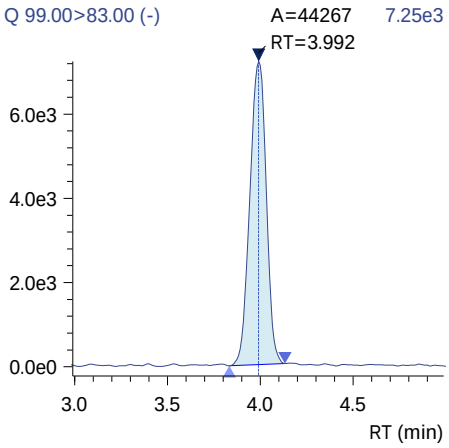
Method File: I:\LCMS01\DATA\20220823\20220816.lcm
Project File: I:\LCMS01\DATA\20220823\20220823.damlp

ICS

Sample ID: ICS
Date Acquired: 8/23/2022 9:23:52 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_008.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 1

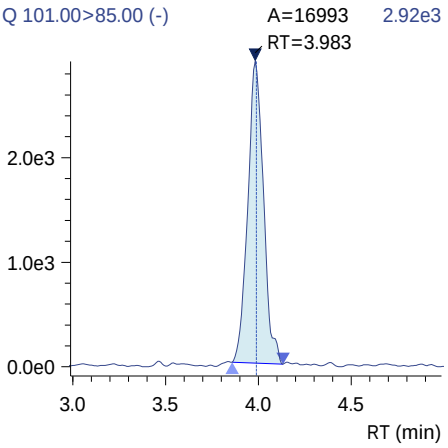
Perchlorate

Conc 0.9805



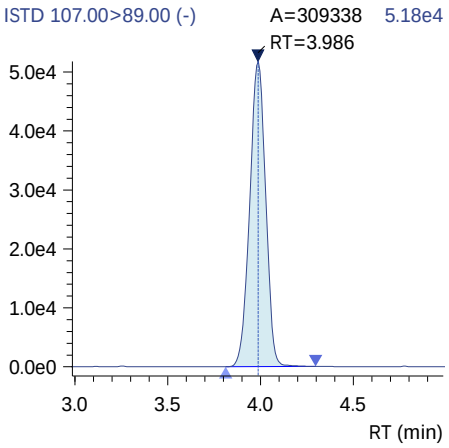
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/24/2022 11:03:47 AM

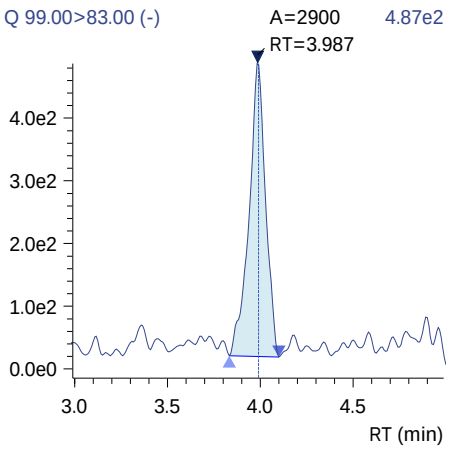
LODV

Sample ID: LODV
Date Acquired: 8/23/2022 9:32:47 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_009.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.987	2900	327636	0.0606	ng/mL	44.03	27.43-50.94
Perchlorate 2	M	3.997	1277	327636	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	3.987	327636	327636	1.0000	ng/mL	----	

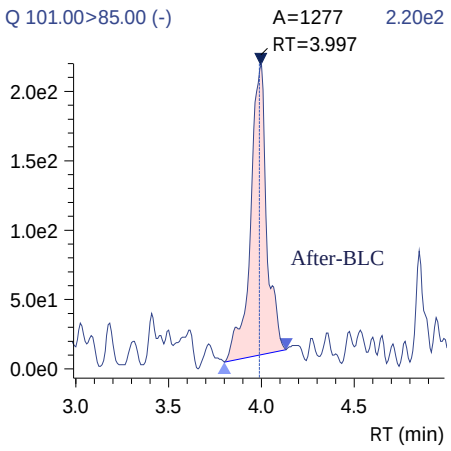
Perchlorate

Conc 0.0606



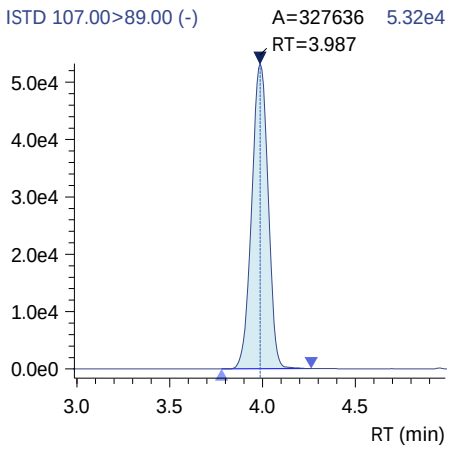
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

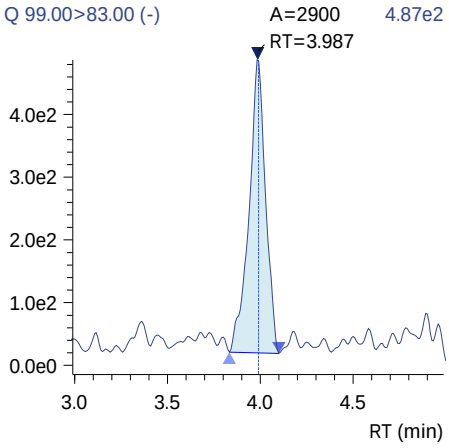
Printed at 8/24/2022 11:09:42 AM

LODV

Sample ID: LODV
Date Acquired: 8/23/2022 9:32:47 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_009.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 1

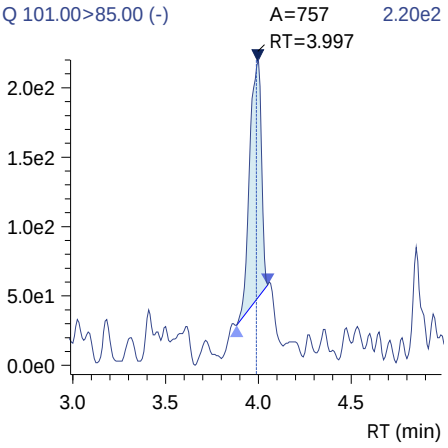
Perchlorate

Conc 0.0606



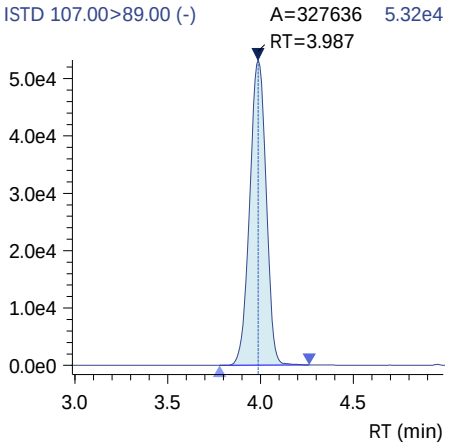
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/24/2022 11:03:47 AM

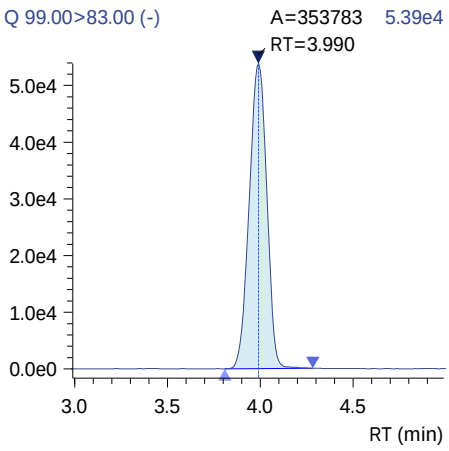
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 8/23/2022 9:41:40 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_010.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.990	353783	244550	9.9121	ng/mL	38.13	27.43-50.94
Perchlorate 2	Auto	3.988	134895	244550	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	3.986	244550	244550	1.0000	ng/mL	----	

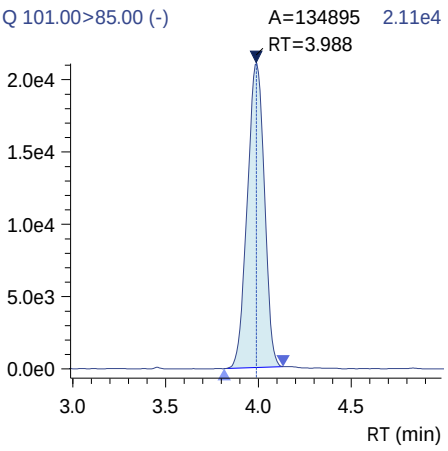
Perchlorate

Conc 9.9121



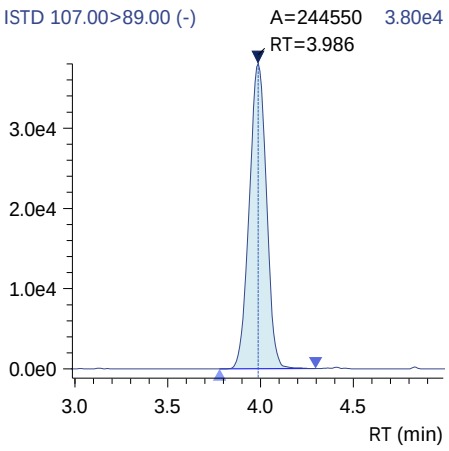
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

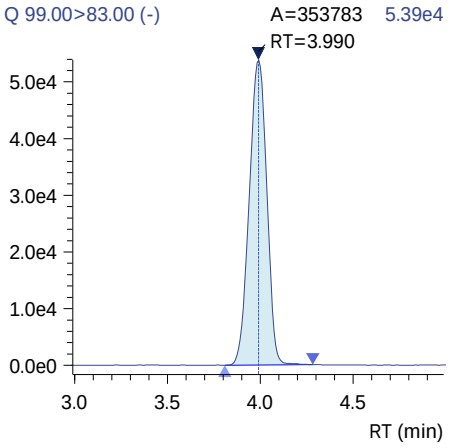
Printed at 8/24/2022 11:09:42 AM

PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 8/23/2022 9:41:40 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_010.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

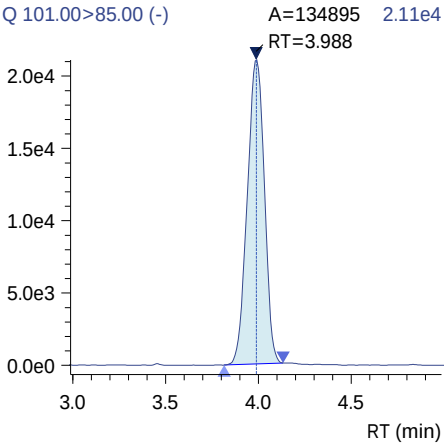
Perchlorate

Conc 9.9121



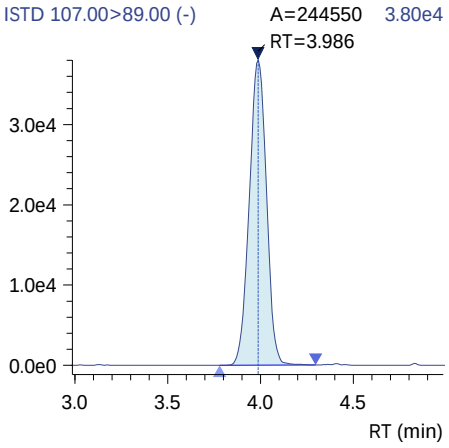
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/24/2022 11:03:47 AM

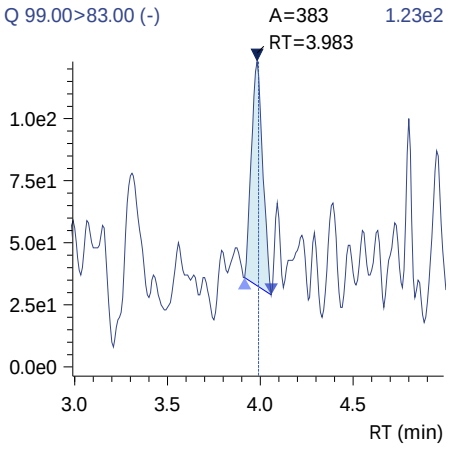
EQ2200345-01

Sample ID: EQ2200345-01
Date Acquired: 8/23/2022 9:50:34 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_011.lcd
Vial: 19 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.983	383	313654	0.0084	ng/mL	60.31	27.43-50.94
Perchlorate 2	Auto	4.003	231	313654	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	3.987	313654	313654	1.0000	ng/mL	----	

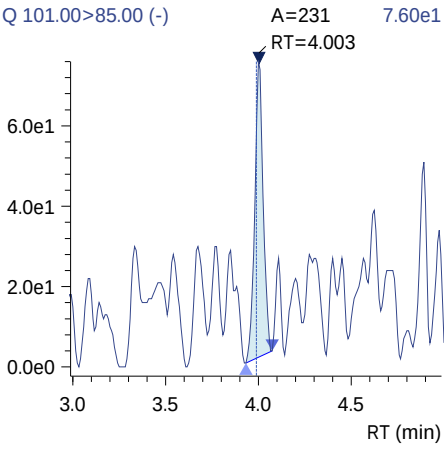
Perchlorate

Conc 0.0084



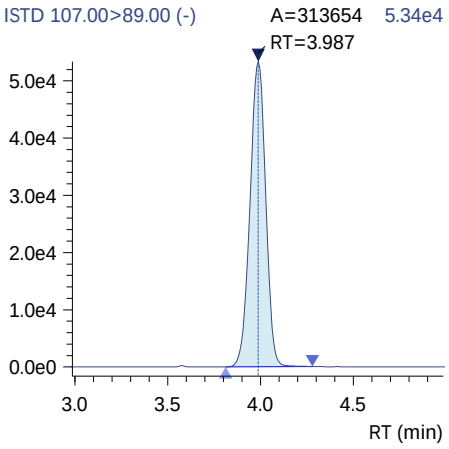
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

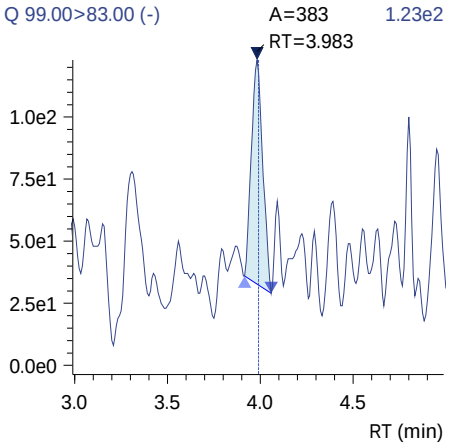
Printed at 8/24/2022 11:09:42 AM

EQ2200345-01

Sample ID: EQ2200345-01
Date Acquired: 8/23/2022 9:50:34 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_011.lcd
Vial: 19 | Inj. Volume: 25.0000uL | Tray: 2

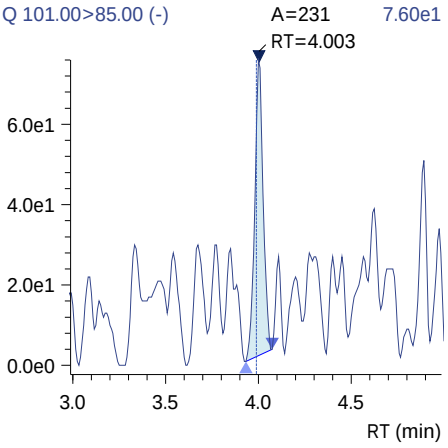
Perchlorate

Conc 0.0084



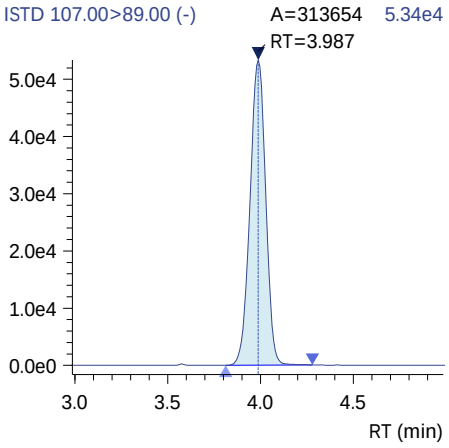
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/24/2022 11:03:47 AM

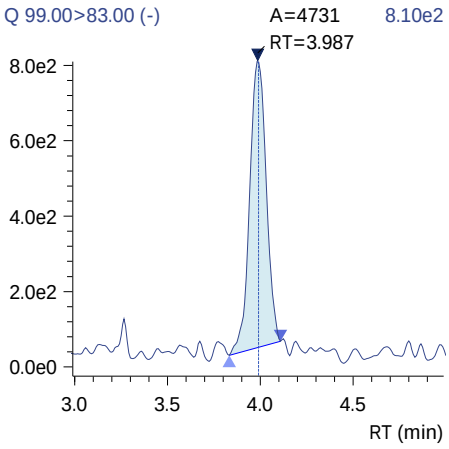
EQ2200345-02

Sample ID: EQ2200345-02
Date Acquired: 8/23/2022 9:59:29 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_012.lcd
Vial: 20 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.987	4731	317122	0.1022	ng/mL	40.41	27.43-50.94
Perchlorate 2	Auto	4.000	1912	317122	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	3.985	317122	317122	1.0000	ng/mL	----	

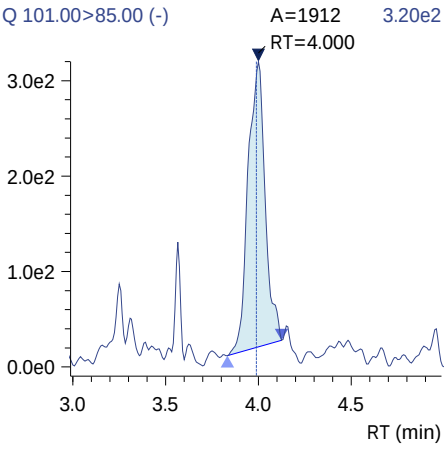
Perchlorate

Conc 0.1022



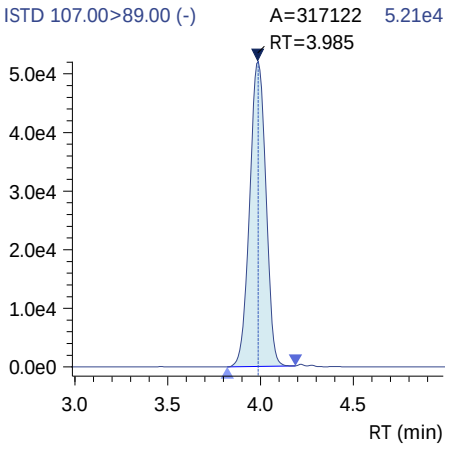
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

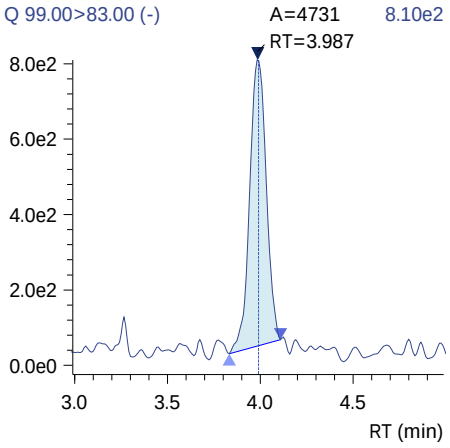
Printed at 8/24/2022 11:09:42 AM

EQ2200345-02

Sample ID: EQ2200345-02
Date Acquired: 8/23/2022 9:59:29 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_012.lcd
Vial: 20 | Inj. Volume: 25.0000uL | Tray: 2

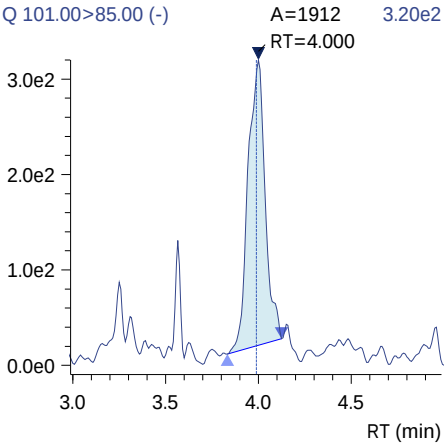
Perchlorate

Conc 0.1022



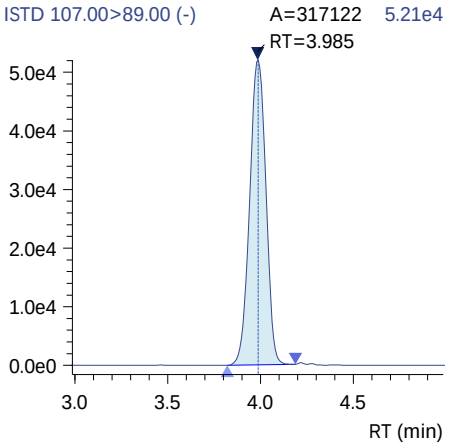
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/24/2022 11:03:47 AM

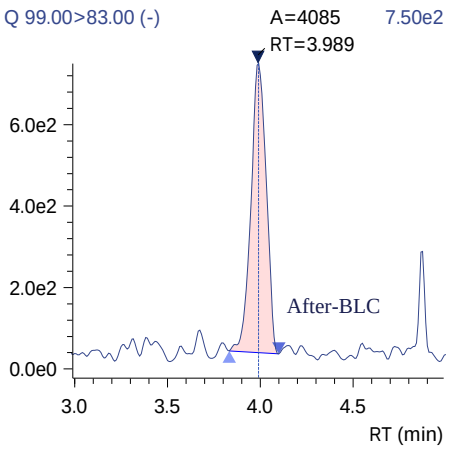
EQ2200345-03

Sample ID: EQ2200345-03
Date Acquired: 8/23/2022 10:08:21 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_013.lcd
Vial: 21 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	3.989	4085	307847	0.0909	ng/mL	46.14	27.43-50.94
Perchlorate 2	Auto	4.005	1885	307847	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	3.990	307847	307847	1.0000	ng/mL	----	

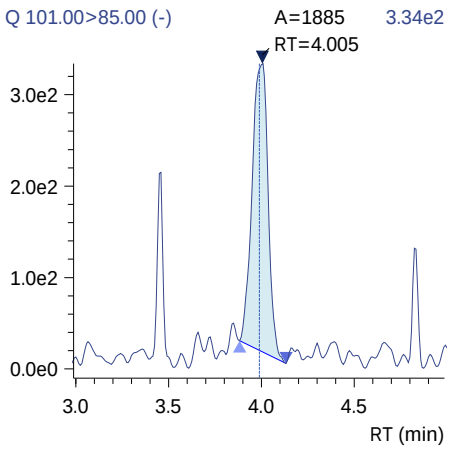
Perchlorate

Conc 0.0909



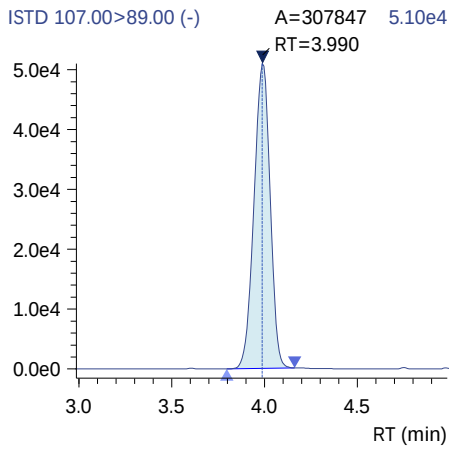
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/24/2022 11:09:42 AM

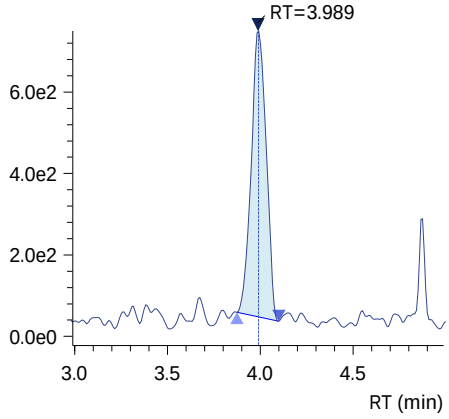
EQ2200345-03

Sample ID: EQ2200345-03
Date Acquired: 8/23/2022 10:08:21 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_013.lcd
Vial: 21 | Inj. Volume: 25.0000uL | Tray: 2

Perchlorate

Conc 0.0879

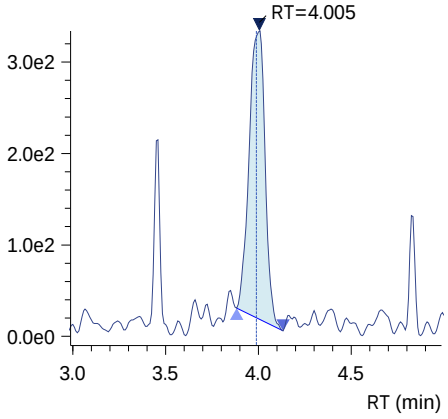
Q 99.00>83.00 (-) A=3948 7.50e2



Perchlorate 2

Conc 0.0000

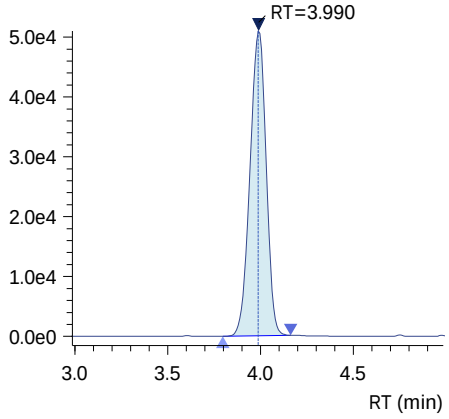
Q 101.00>85.00 (-) A=1885 3.34e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=307847 5.10e4



Insight Report

Printed at 8/24/2022 11:03:47 AM

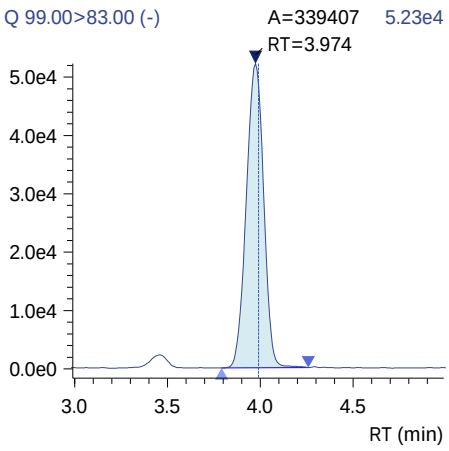
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 8/23/2022 11:29:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_021.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.974	339407	228232	10.1892	ng/mL	38.94	27.43-50.94
Perchlorate 2	Auto	3.972	132150	228232	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	3.972	228232	228232	1.0000	ng/mL	----	

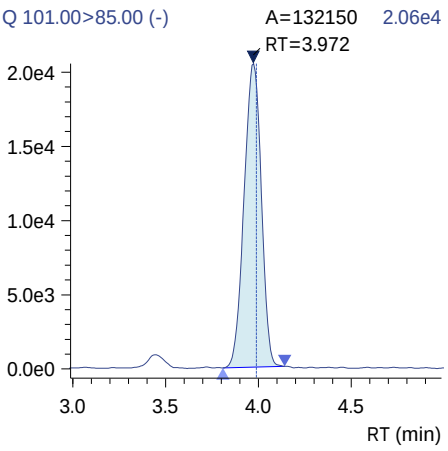
Perchlorate

Conc 10.1892



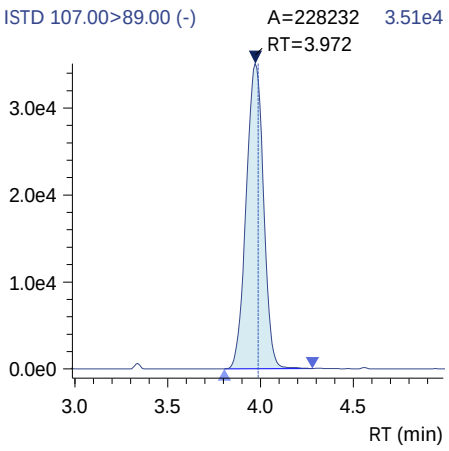
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/24/2022 11:09:42 AM

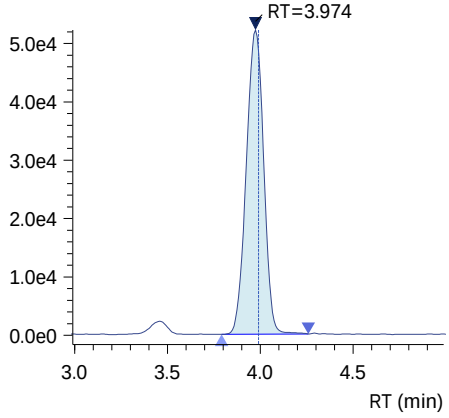
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 8/23/2022 11:29:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_021.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.1892

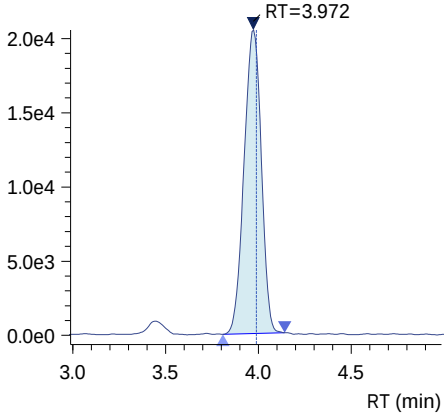
Q 99.00>83.00 (-) A=339407 5.23e4 RT=3.974



Perchlorate 2

Conc 0.0000

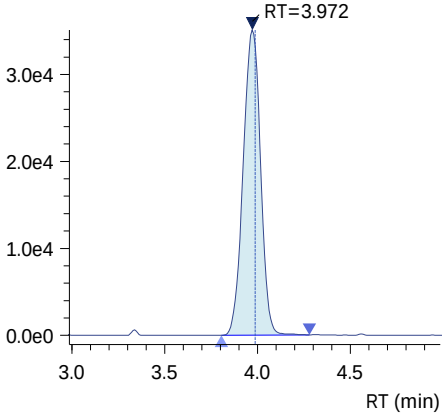
Q 101.00>85.00 (-) A=132150 2.06e4 RT=3.972



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=228232 3.51e4 RT=3.972



Insight Report

Printed at 8/24/2022 11:03:47 AM

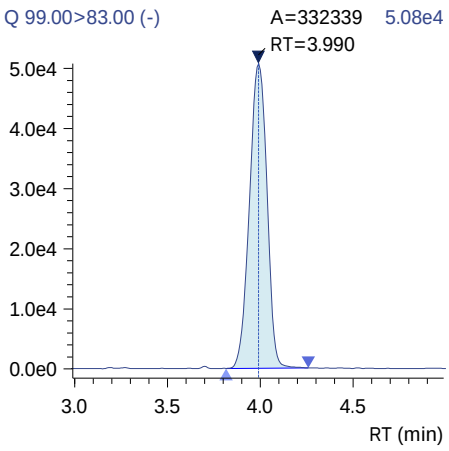
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 8/23/2022 1:34:18 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_030.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.990	332339	220799	10.3129	ng/mL	39.92	27.43-50.94
Perchlorate 2	Auto	3.988	132660	220799	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	3.988	220799	220799	1.0000	ng/mL	----	

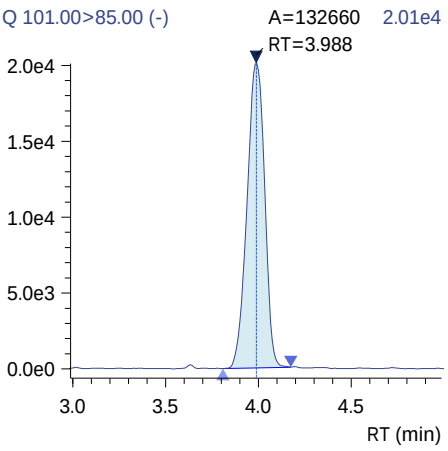
Perchlorate

Conc 10.3129



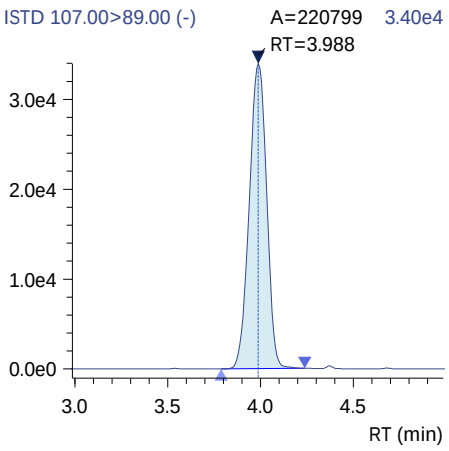
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

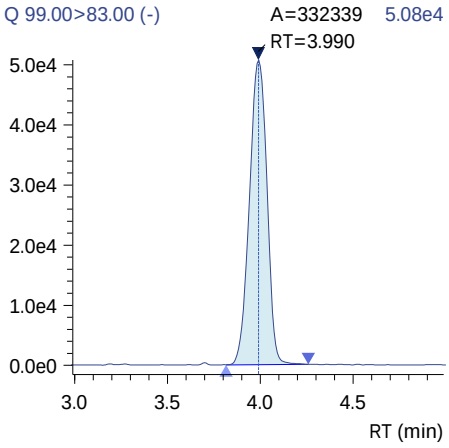
Printed at 8/24/2022 11:09:42 AM

PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 8/23/2022 1:34:18 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_030.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

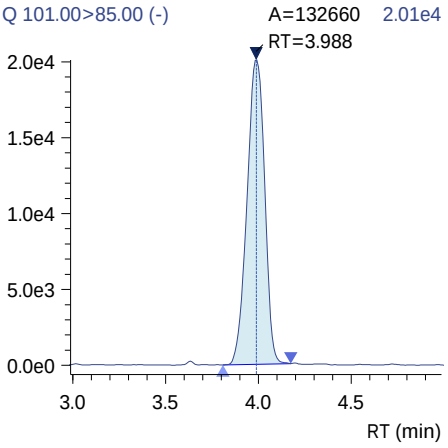
Perchlorate

Conc 10.3129



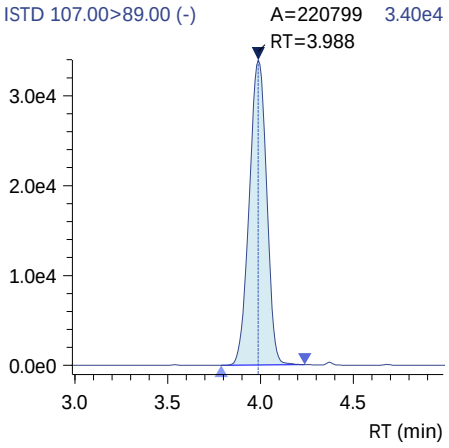
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/24/2022 11:03:47 AM

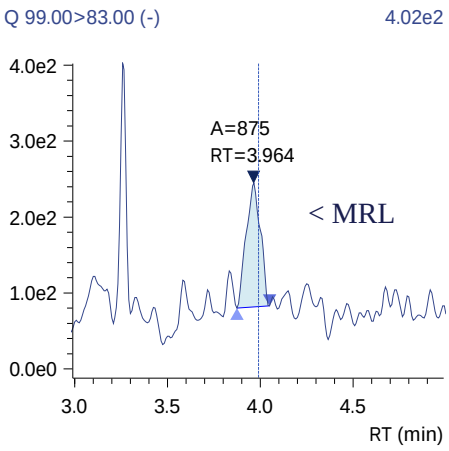
E2200780-007

Sample ID: E2200780-007
Date Acquired: 8/23/2022 1:43:12 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_031.lcd
Vial: 30 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.964	875	296041	0.0203	ng/mL	44.69	27.43-50.94
Perchlorate 2	M	3.932	391	296041	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	3.958	296041	296041	1.0000	ng/mL	----	

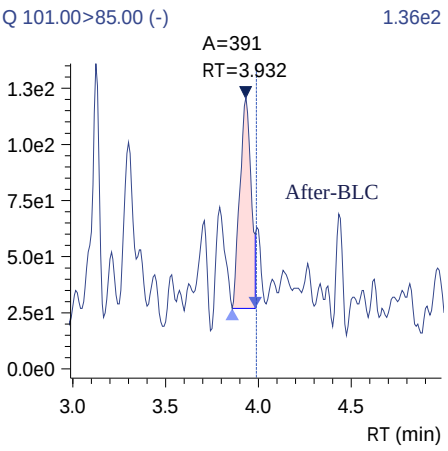
Perchlorate

Conc 0.0203



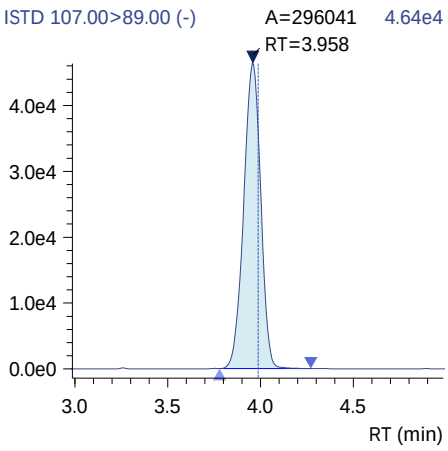
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

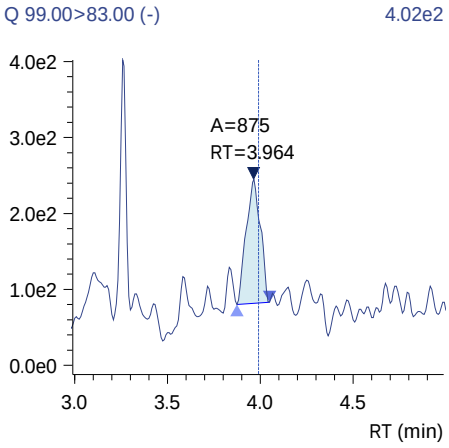
Printed at 8/24/2022 11:09:42 AM

E2200780-007

Sample ID: E2200780-007
Date Acquired: 8/23/2022 1:43:12 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_031.lcd
Vial: 30 | Inj. Volume: 25.0000uL | Tray: 2

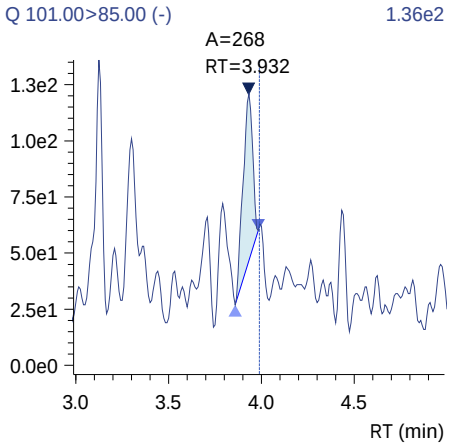
Perchlorate

Conc 0.0203



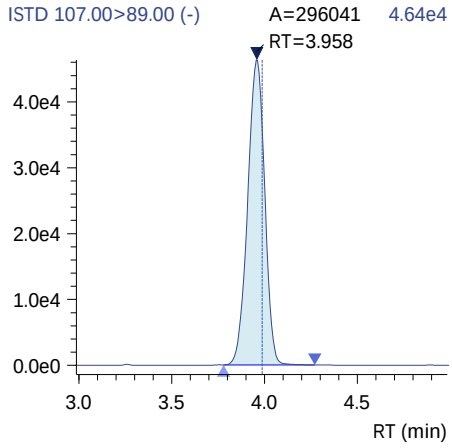
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/24/2022 11:03:47 AM

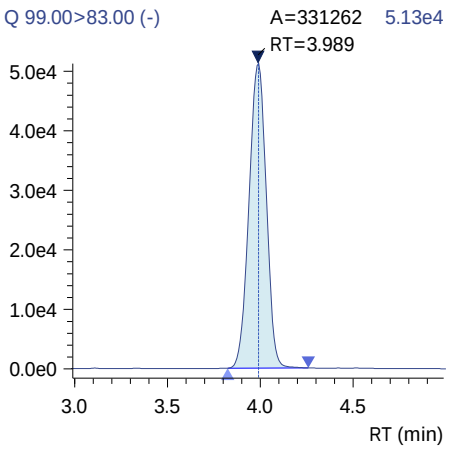
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 8/23/2022 2:27:48 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_036.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.989	331262	226388	10.0257	ng/mL	39.30	27.43-50.94
Perchlorate 2	Auto	3.990	130171	226388	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	3.984	226388	226388	1.0000	ng/mL	----	

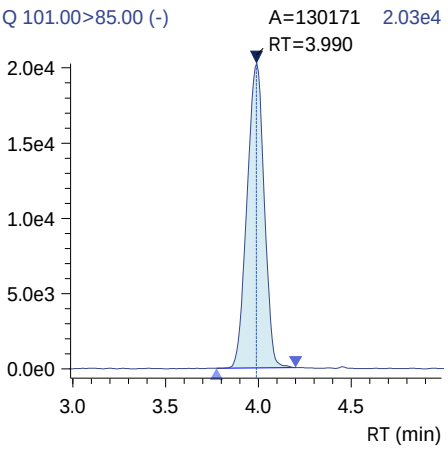
Perchlorate

Conc 10.0257



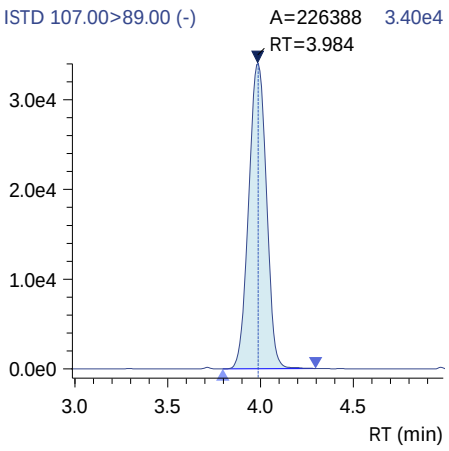
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/24/2022 11:09:42 AM

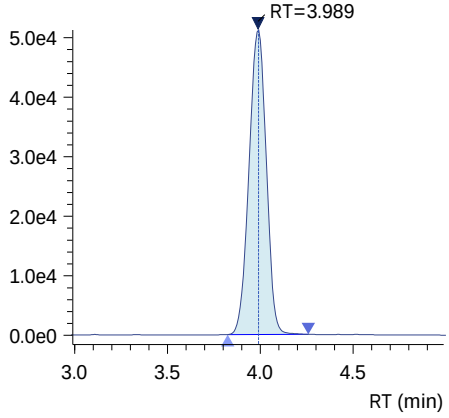
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 8/23/2022 2:27:48 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_036.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.0257

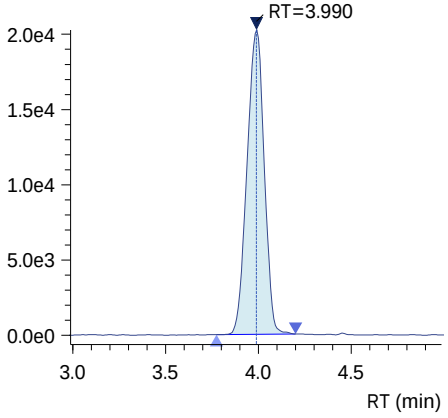
Q 99.00>83.00 (-) A=331262 5.13e4 RT=3.989



Perchlorate 2

Conc 0.0000

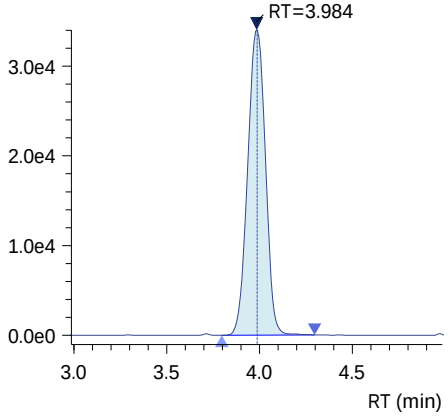
Q 101.00>85.00 (-) A=130171 2.03e4 RT=3.990



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=226388 3.40e4 RT=3.984



Insight Report

Printed at 8/24/2022 11:03:47 AM

PERCHLORATE7

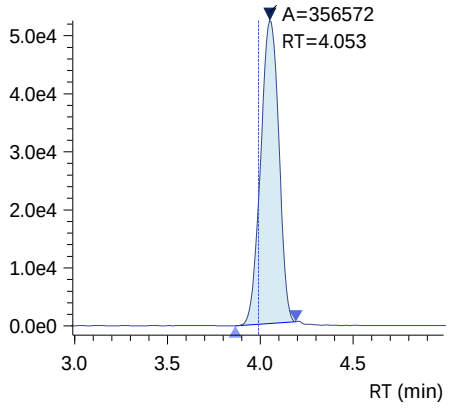
Sample ID: PERCHLORATE7
Date Acquired: 8/23/2022 6:11:43 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_053.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.053	356572	246848	9.8972	ng/mL	40.40	27.43-50.94
Perchlorate 2	Auto	4.050	144046	246848	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.053	246848	246848	1.0000	ng/mL	----	

Perchlorate

Conc 9.8972

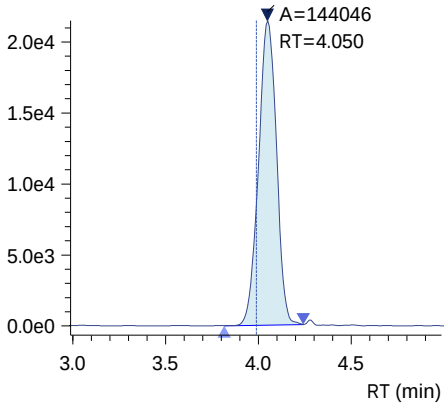
Q 99.00>83.00 (-) 5.26e4



Perchlorate 2

Conc 0.0000

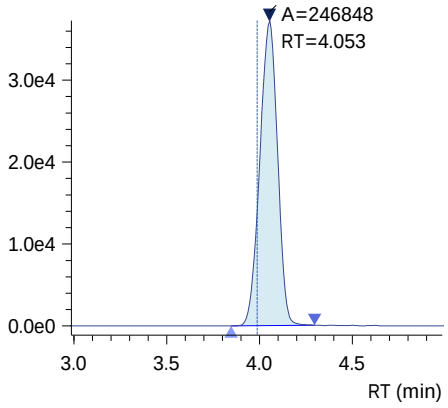
Q 101.00>85.00 (-) 2.15e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.73e4



Insight Report

Printed at 8/24/2022 11:09:42 AM

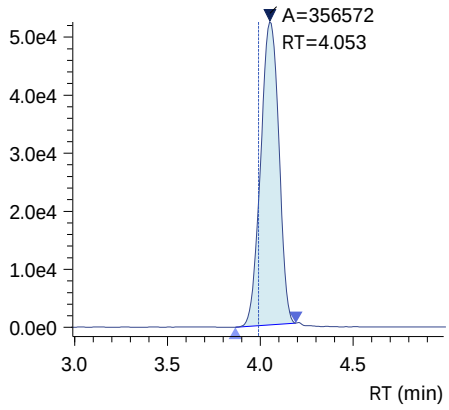
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 8/23/2022 6:11:43 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_053.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 9.8972

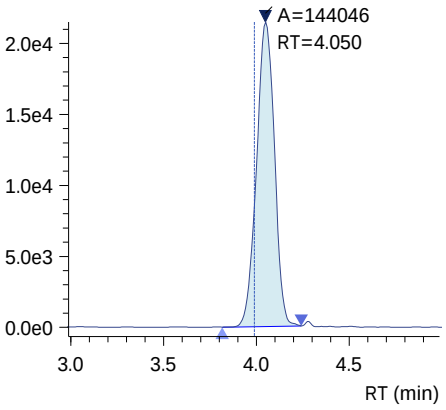
Q 99.00>83.00 (-) 5.26e4



Perchlorate 2

Conc 0.0000

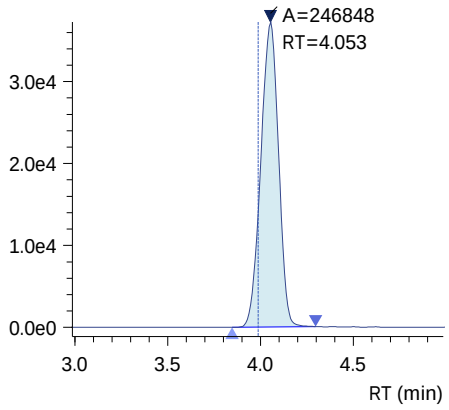
Q 101.00>85.00 (-) 2.15e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.73e4



Insight Report

Printed at 8/24/2022 11:03:47 AM

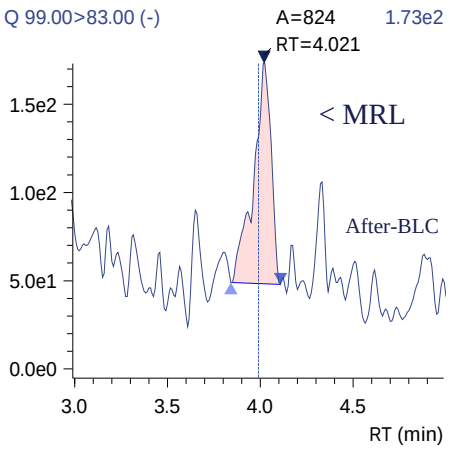
E2200780-005

Sample ID: E2200780-005
Date Acquired: 8/23/2022 6:29:30 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_055.lcd
Vial: 28 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	4.021	824	274088	0.0206	ng/mL	68.45	27.43-50.94
Perchlorate 2	Auto	3.998	564	274088	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.013	274088	274088	1.0000	ng/mL	----	

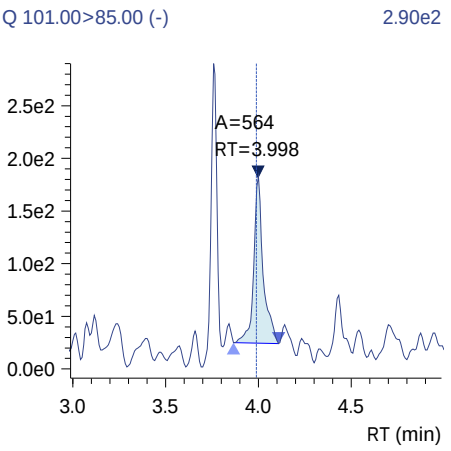
Perchlorate

Conc 0.0206



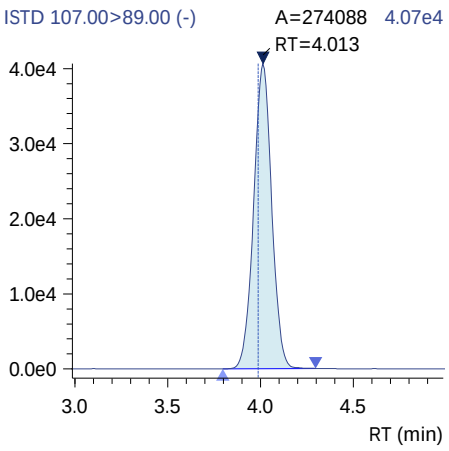
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

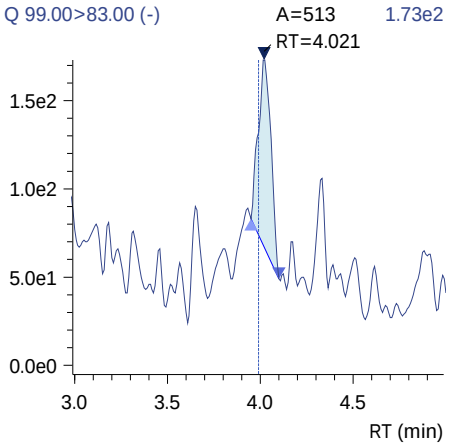
Printed at 8/24/2022 11:09:42 AM

E2200780-005

Sample ID: E2200780-005
Date Acquired: 8/23/2022 6:29:30 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_055.lcd
Vial: 28 | Inj. Volume: 25.0000uL | Tray: 2

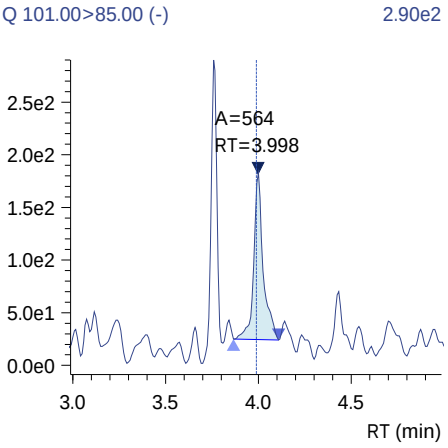
Perchlorate

Conc 0.0128



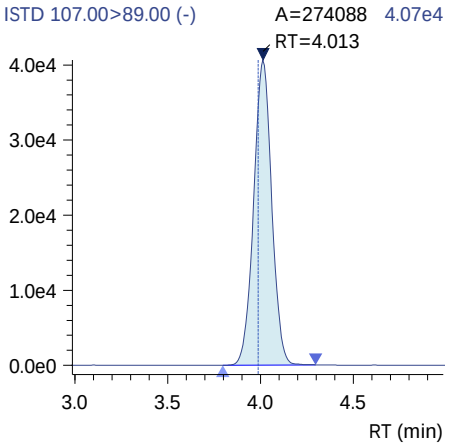
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/24/2022 11:03:47 AM

PERCHLORATE7

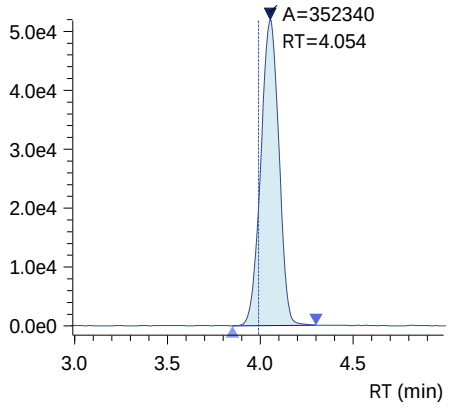
Sample ID: PERCHLORATE7
Date Acquired: 8/23/2022 7:13:56 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_060.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.054	352340	230046	10.4941	ng/mL	38.26	27.43-50.94
Perchlorate 2	Auto	4.051	134803	230046	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.051	230046	230046	1.0000	ng/mL	----	

Perchlorate

Conc 10.4941

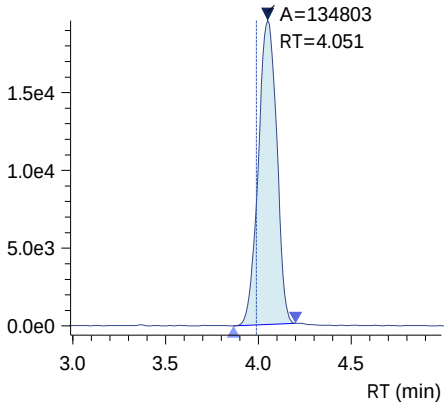
Q 99.00>83.00 (-) 5.18e4



Perchlorate 2

Conc 0.0000

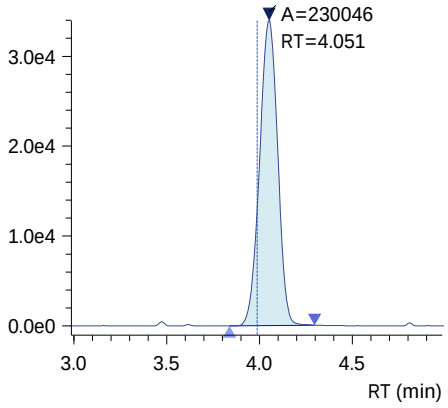
Q 101.00>85.00 (-) 1.96e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.40e4



Insight Report

Printed at 8/24/2022 11:09:42 AM

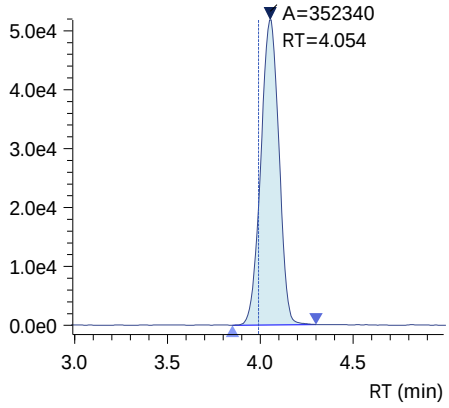
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 8/23/2022 7:13:56 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_060.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.4941

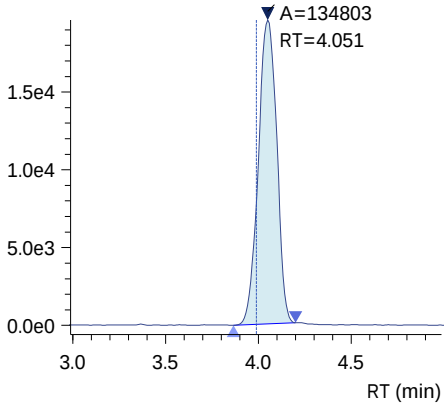
Q 99.00>83.00 (-) 5.18e4



Perchlorate 2

Conc 0.0000

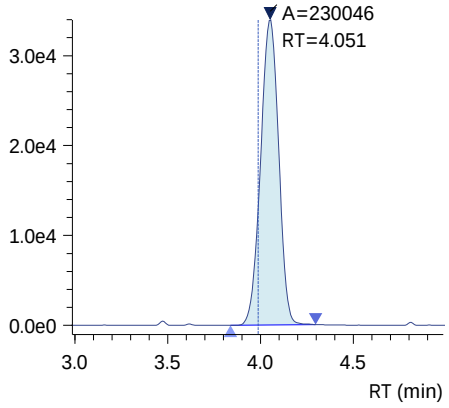
Q 101.00>85.00 (-) 1.96e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.40e4



Insight Report

Printed at 8/24/2022 11:03:47 AM

E2200780-001x1000

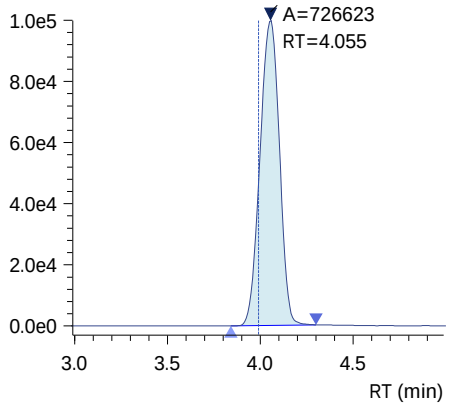
Sample ID: E2200780-001x1000
Date Acquired: 8/23/2022 7:22:52 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_061.lcd
Vial: 24 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.055	726623	173593	28.6796	ng/mL	39.80	27.43-50.94
Perchlorate 2	Auto	4.052	289211	173593	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.048	173593	173593	1.0000	ng/mL	----	

Perchlorate

Conc 28.6796

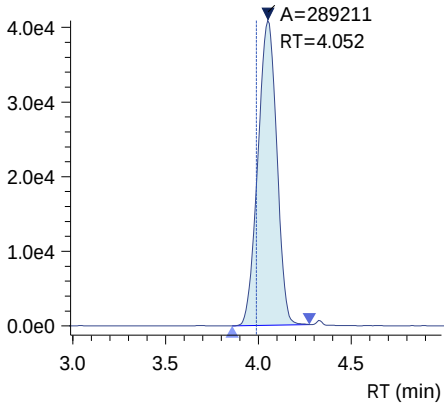
Q 99.00>83.00 (-) 9.99e4



Perchlorate 2

Conc 0.0000

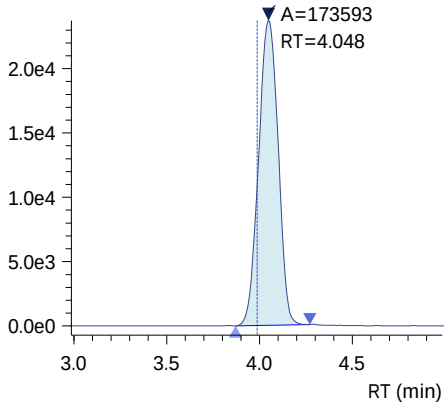
Q 101.00>85.00 (-) 4.09e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.37e4



Insight Report

Printed at 8/24/2022 11:09:42 AM

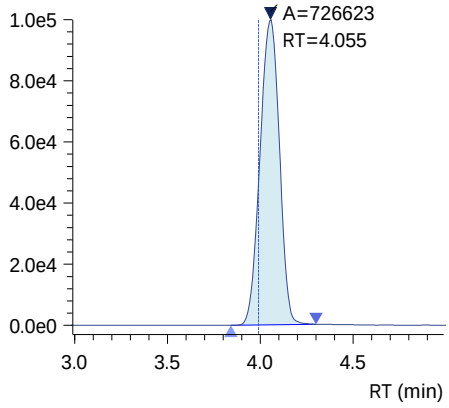
E2200780-001x1000

Sample ID: E2200780-001x1000
Date Acquired: 8/23/2022 7:22:52 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_061.lcd
Vial: 24 | Inj. Volume: 25.0000uL | Tray: 2

Perchlorate

Conc 28.6796

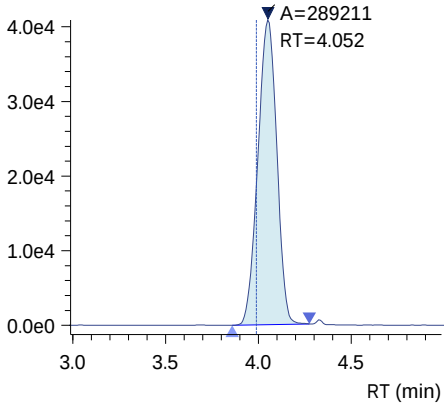
Q 99.00>83.00 (-) 9.99e4



Perchlorate 2

Conc 0.0000

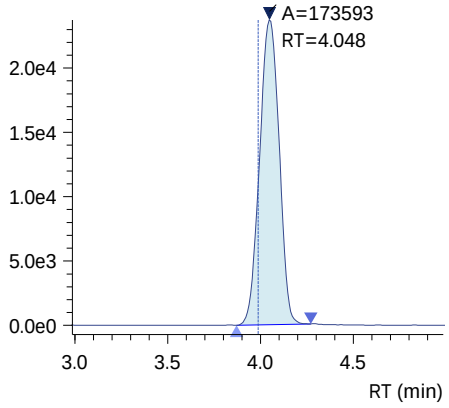
Q 101.00>85.00 (-) 4.09e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.37e4



Insight Report

Printed at 8/24/2022 11:03:47 AM

E2200780-002x500

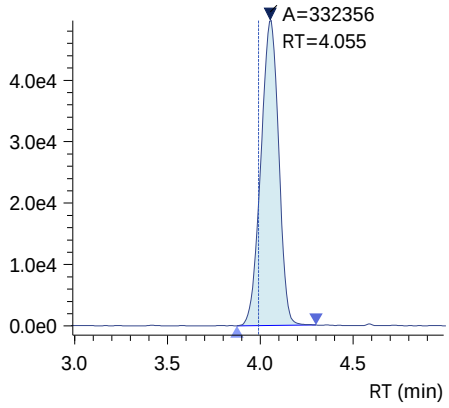
Sample ID: E2200780-002x500
Date Acquired: 8/23/2022 7:31:48 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_062.lcd
Vial: 25 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.055	332356	230981	9.8588	ng/mL	39.62	27.43-50.94
Perchlorate 2	Auto	4.050	131691	230981	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.052	230981	230981	1.0000	ng/mL	----	

Perchlorate

Conc 9.8588

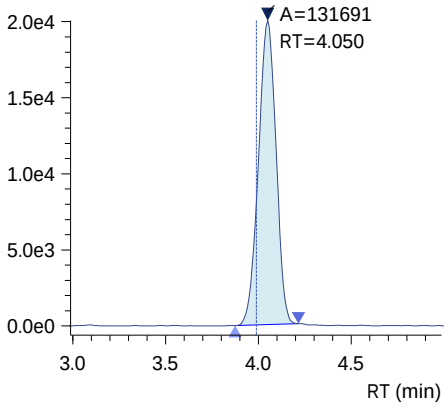
Q 99.00>83.00 (-) 4.97e4



Perchlorate 2

Conc 0.0000

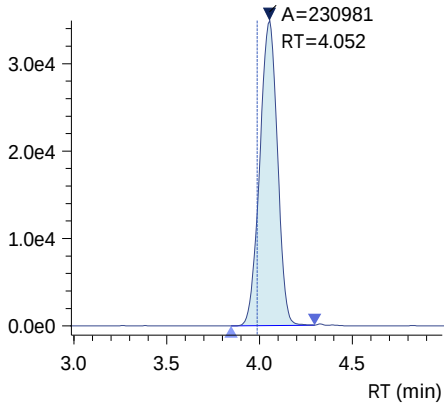
Q 101.00>85.00 (-) 2.01e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.49e4



Insight Report

Printed at 8/24/2022 11:09:42 AM

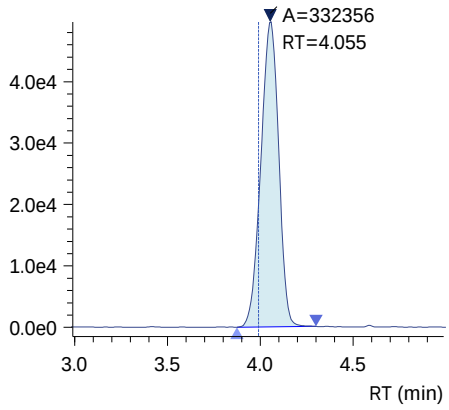
E2200780-002x500

Sample ID: E2200780-002x500
Date Acquired: 8/23/2022 7:31:48 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_062.lcd
Vial: 25 | Inj. Volume: 25.0000uL | Tray: 2

Perchlorate

Conc 9.8588

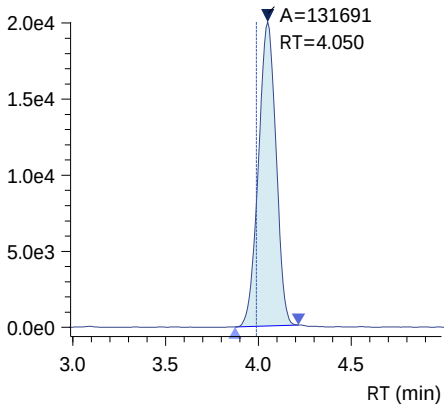
Q 99.00>83.00 (-) 4.97e4



Perchlorate 2

Conc 0.0000

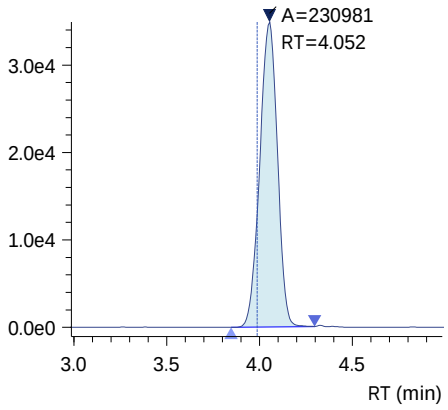
Q 101.00>85.00 (-) 2.01e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.49e4



Insight Report

Printed at 8/24/2022 11:03:47 AM

E2200780-003x1000

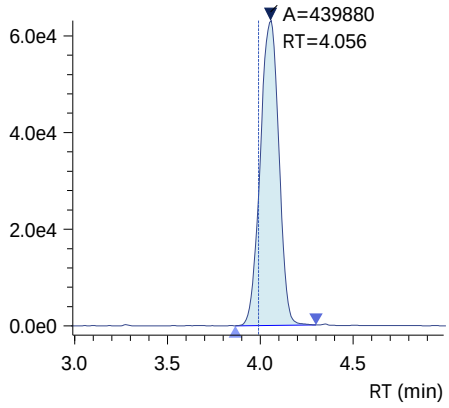
Sample ID: E2200780-003x1000
Date Acquired: 8/23/2022 7:40:41 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_063.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.056	439880	218418	13.7988	ng/mL	41.46	27.43-50.94
Perchlorate 2	Auto	4.052	182378	218418	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.050	218418	218418	1.0000	ng/mL	----	

Perchlorate

Conc 13.7988

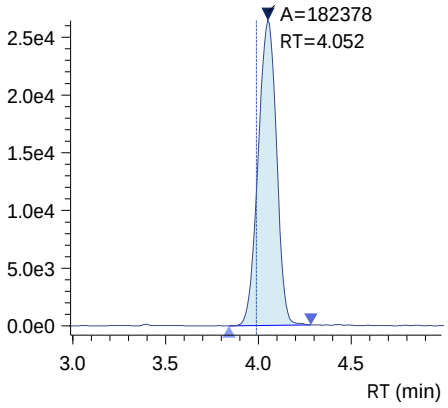
Q 99.00>83.00 (-) 6.32e4



Perchlorate 2

Conc 0.0000

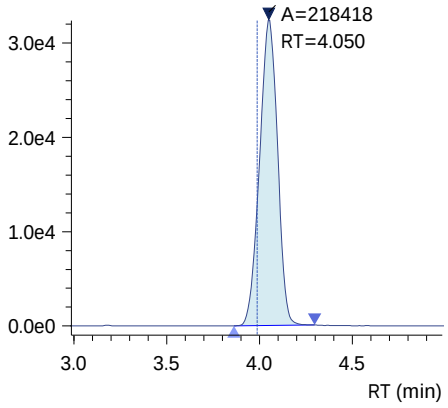
Q 101.00>85.00 (-) 2.64e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.24e4



Insight Report

Printed at 8/24/2022 11:09:42 AM

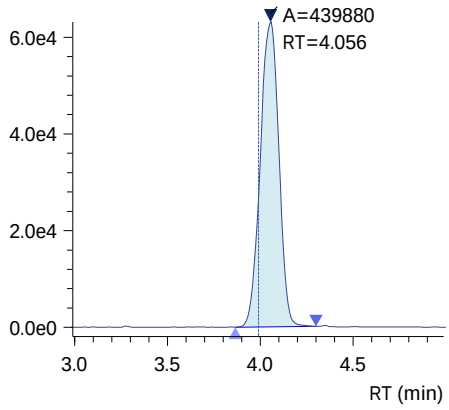
E2200780-003x1000

Sample ID: E2200780-003x1000
Date Acquired: 8/23/2022 7:40:41 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_063.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 2

Perchlorate

Conc 13.7988

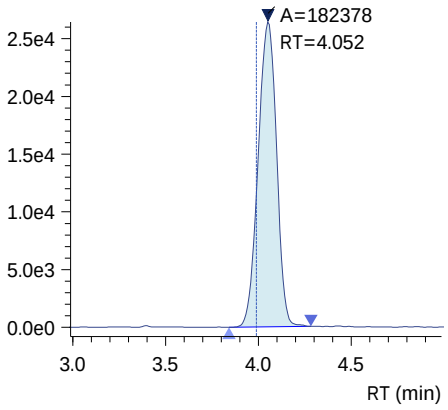
Q 99.00>83.00 (-) 6.32e4



Perchlorate 2

Conc 0.0000

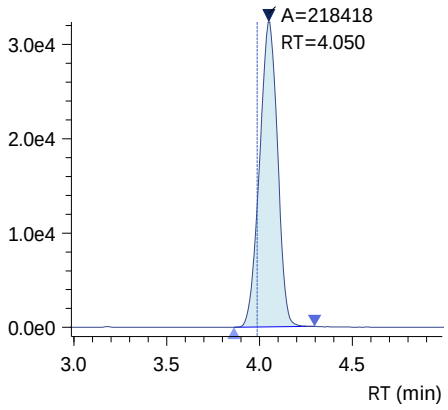
Q 101.00>85.00 (-) 2.64e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.24e4



Insight Report

Printed at 8/24/2022 11:03:47 AM

PERCHLORATE7

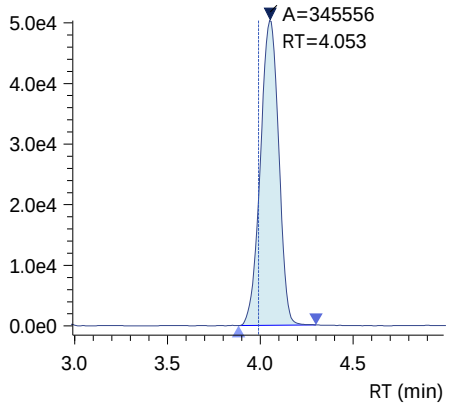
Sample ID: PERCHLORATE7
Date Acquired: 8/23/2022 8:07:27 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_066.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.053	345556	229495	10.3167	ng/mL	39.16	27.43-50.94
Perchlorate 2	Auto	4.050	135308	229495	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.050	229495	229495	1.0000	ng/mL	----	

Perchlorate

Conc 10.3167

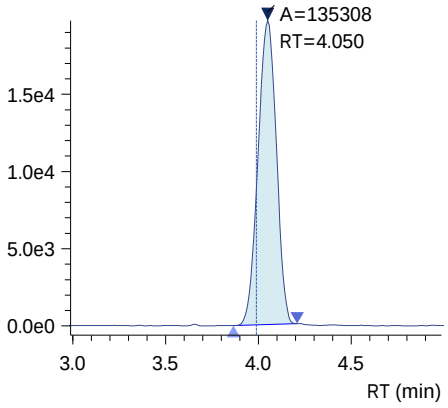
Q 99.00>83.00 (-) 5.04e4



Perchlorate 2

Conc 0.0000

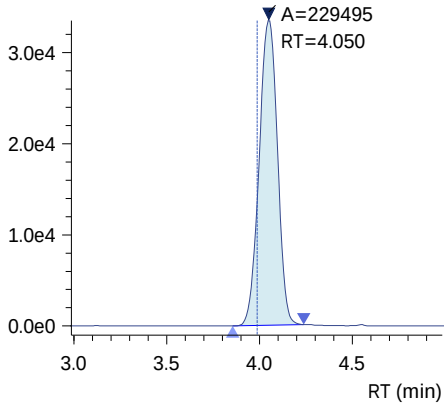
Q 101.00>85.00 (-) 1.98e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.35e4



Manual Integration- Before

Insight Report

Printed at 8/24/2022 11:09:42 AM

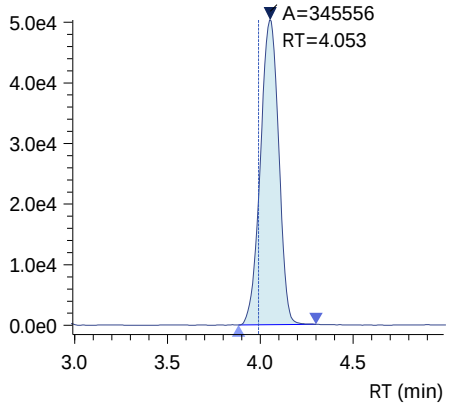
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 8/23/2022 8:07:27 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220823\20220823_066.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.3167

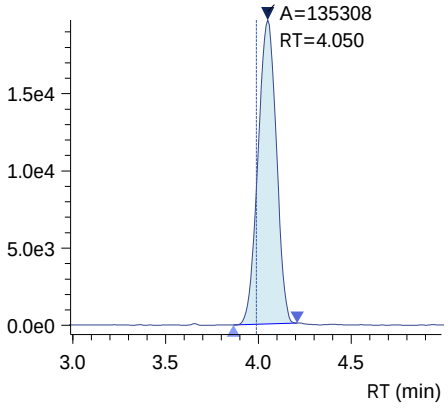
Q 99.00>83.00 (-) 5.04e4



Perchlorate 2

Conc 0.0000

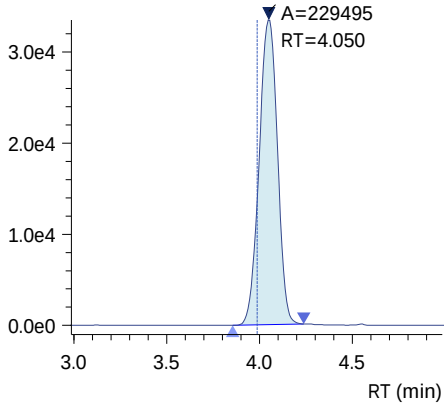
Q 101.00>85.00 (-) 1.98e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.35e4



Insight Report

Printed at 8/25/2022 9:52:37 AM

Method File: I:\LCMS01\DATA\20220824\20220824.lcm
Project File: I:\LCMS01\DATA\20220824\20220824.damlp

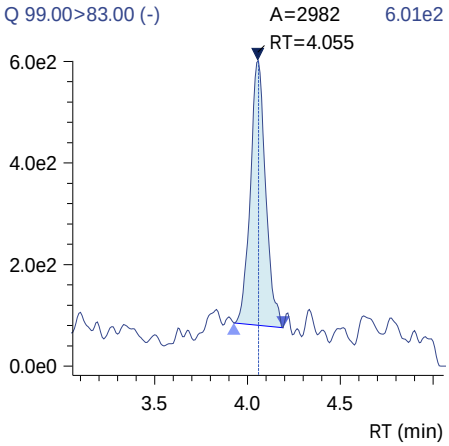
LODV

Sample ID: LODV
Date Acquired: 8/24/2022 11:16:32 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220824\20220824_007.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.055	2982	342967	0.0596	ng/mL	43.90	27.84-51.71
Perchlorate 2	Auto	4.077	1309	342967	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.060	342967	342967	1.0000	ng/mL	----	

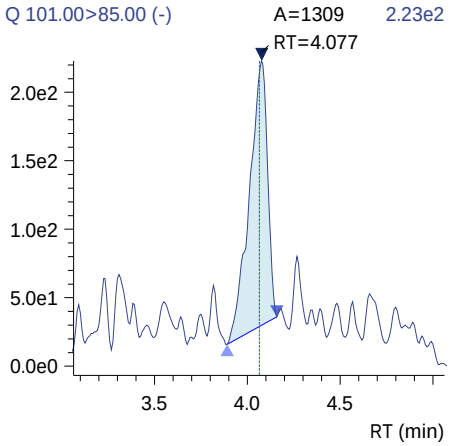
Perchlorate

Conc 0.0596



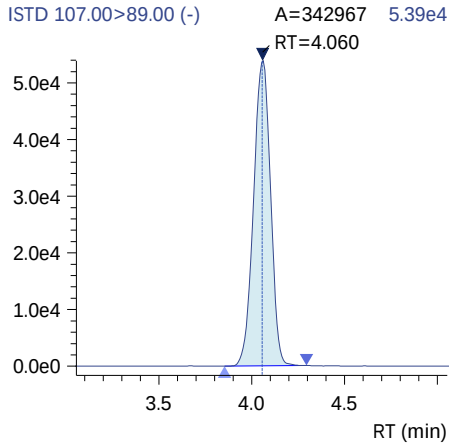
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/25/2022 9:54:27 AM

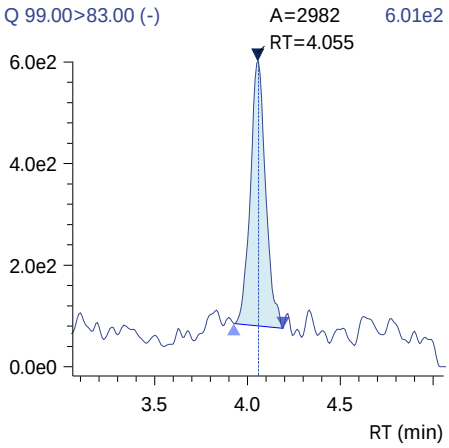
Method File: I:\LCMS01\DATA\20220824\20220824.lcm
Project File: I:\LCMS01\DATA\20220824\20220824.damlp

LODV

Sample ID: LODV
Date Acquired: 8/24/2022 11:16:32 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220824\20220824_007.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 1

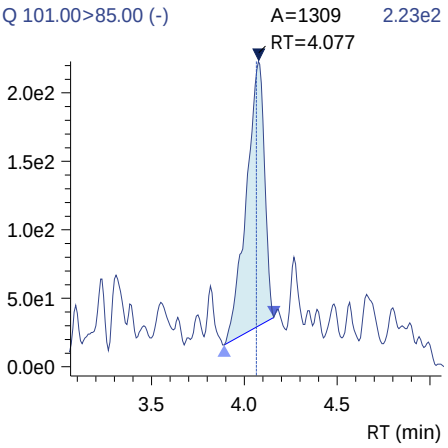
Perchlorate

Conc 0.0596



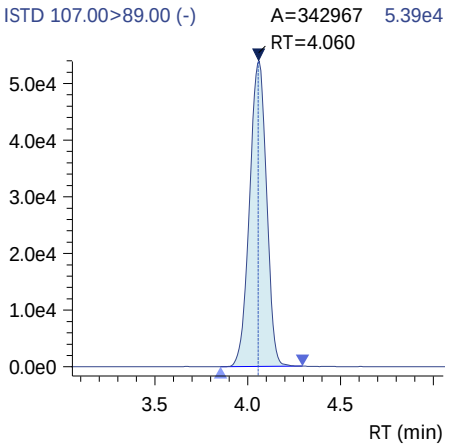
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/25/2022 9:52:37 AM

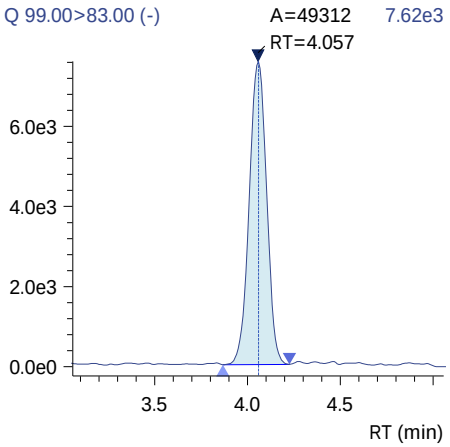
ICS

Sample ID: ICS
Date Acquired: 8/24/2022 11:25:27 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220824\20220824_008.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.057	49312	339786	0.9944	ng/mL	39.64	27.84-51.71
Perchlorate 2	Auto	4.037	19548	339786	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.054	339786	339786	1.0000	ng/mL	----	

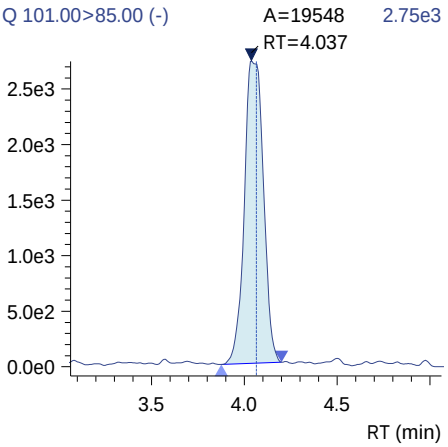
Perchlorate

Conc 0.9944



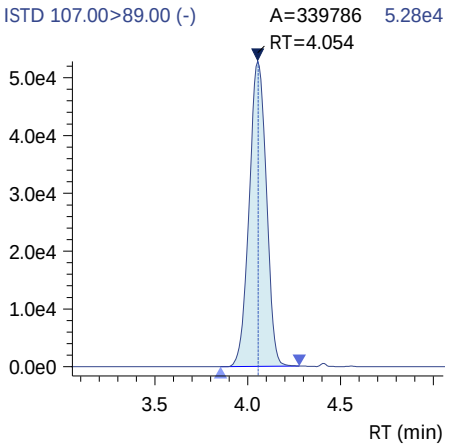
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

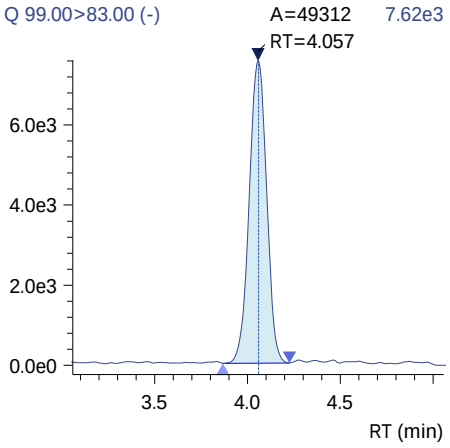
Printed at 8/25/2022 9:54:27 AM

ICS

Sample ID: ICS
Date Acquired: 8/24/2022 11:25:27 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220824\20220824_008.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 1

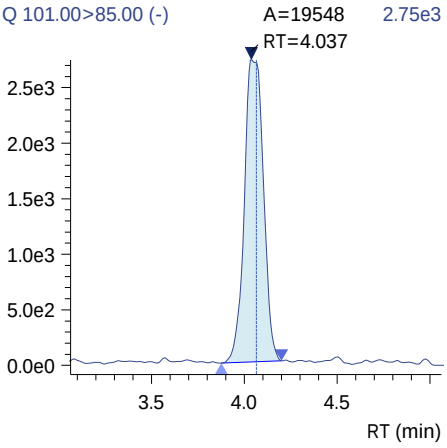
Perchlorate

Conc 0.9944



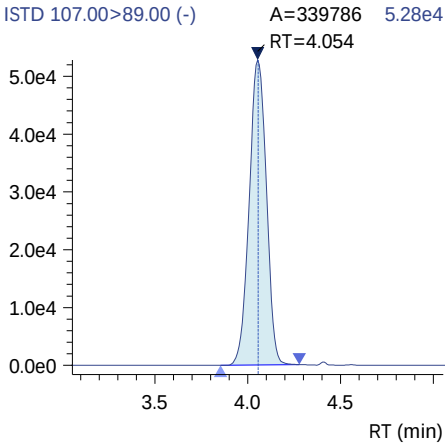
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/25/2022 9:52:37 AM

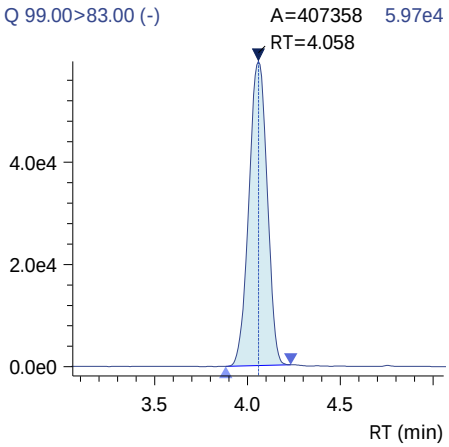
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 8/24/2022 11:34:19 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220824\20220824_009.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.058	407358	275988	10.1131	ng/mL	38.34	27.84-51.71
Perchlorate 2	Auto	4.064	156181	275988	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.056	275988	275988	1.0000	ng/mL	----	

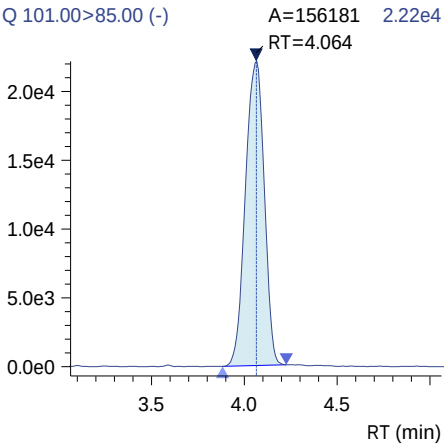
Perchlorate

Conc 10.1131



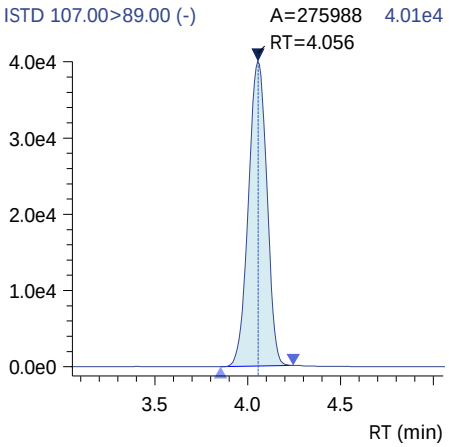
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

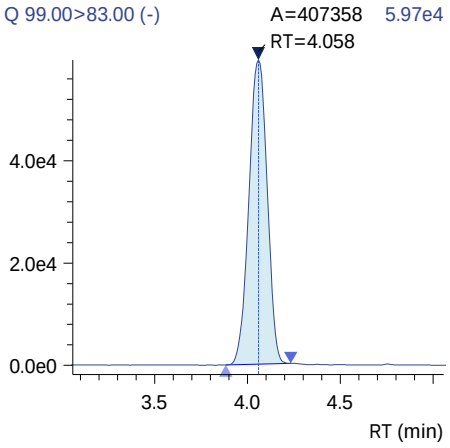
Printed at 8/25/2022 9:54:27 AM

PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 8/24/2022 11:34:19 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220824\20220824_009.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

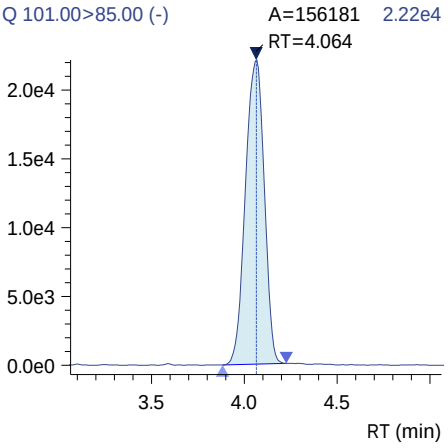
Perchlorate

Conc 10.1131



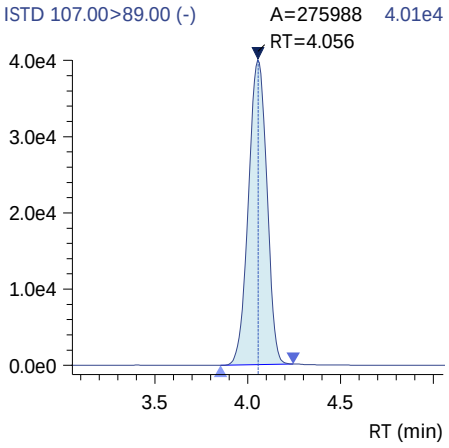
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/25/2022 9:52:37 AM

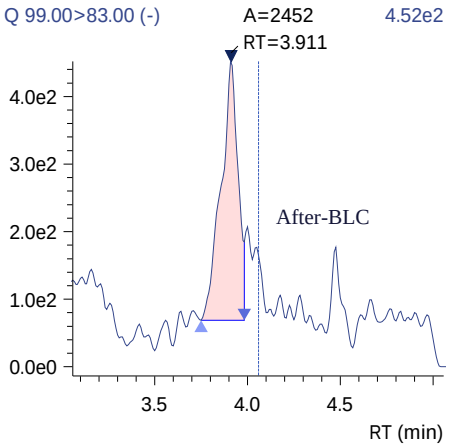
E2200780-004

Sample ID: E2200780-004
Date Acquired: 8/24/2022 11:43:15 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220824\20220824_010.lcd
Vial: 27 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	3.911	2452	263706	0.0637	ng/mL	32.02	27.84-51.71
Perchlorate 2	M	3.915	785	263706	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	M	3.892	263706	263706	1.0000	ng/mL	----	

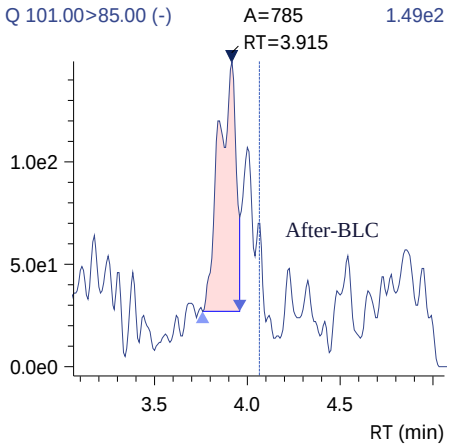
Perchlorate

Conc 0.0637



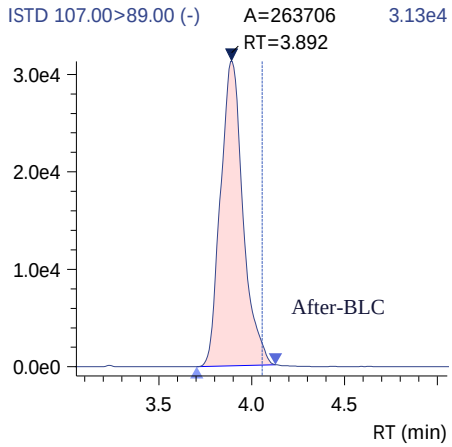
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

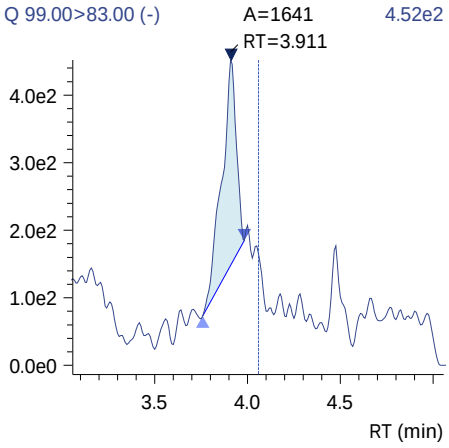
Printed at 8/25/2022 9:54:27 AM

E2200780-004

Sample ID: E2200780-004
Date Acquired: 8/24/2022 11:43:15 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220824\20220824_010.lcd
Vial: 27 | Inj. Volume: 25.0000uL | Tray: 2

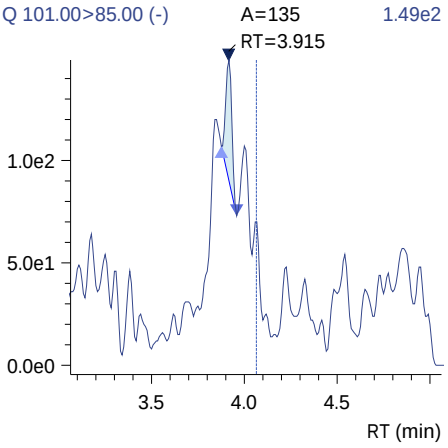
Perchlorate

Conc 0.0438



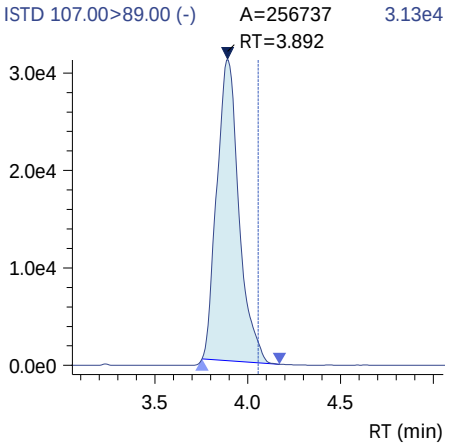
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/25/2022 9:52:37 AM

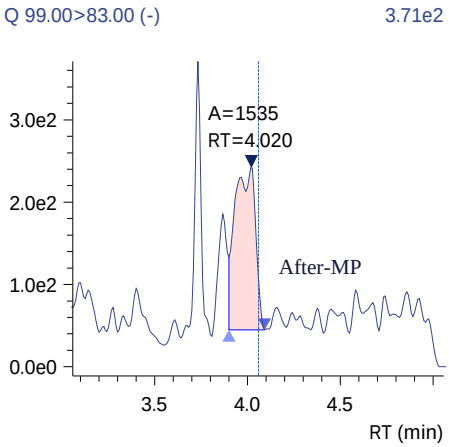
E2200780-006

Sample ID: E2200780-006
Date Acquired: 8/24/2022 12:46:37 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220824\20220824_011.lcd
Vial: 29 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	4.020	1535	309119	0.0340	ng/mL	27.82	27.84-51.71
Perchlorate 2	M	4.005	427	309119	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	3.987	309119	309119	1.0000	ng/mL	----	

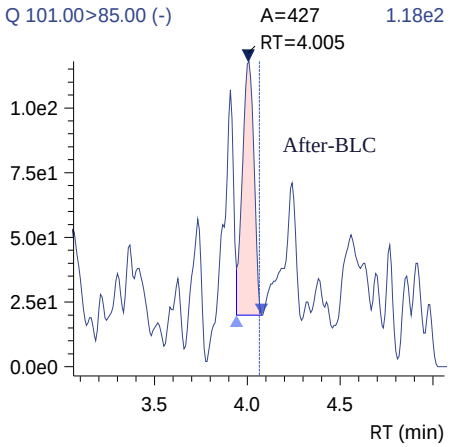
Perchlorate

Conc 0.0340



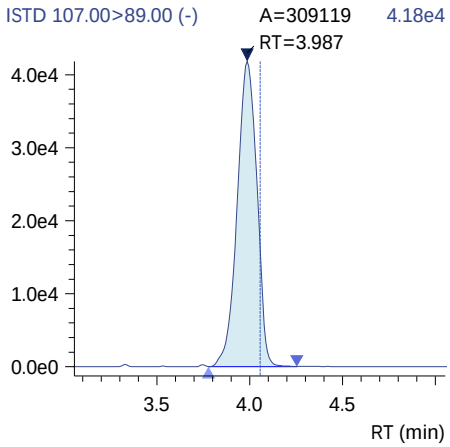
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

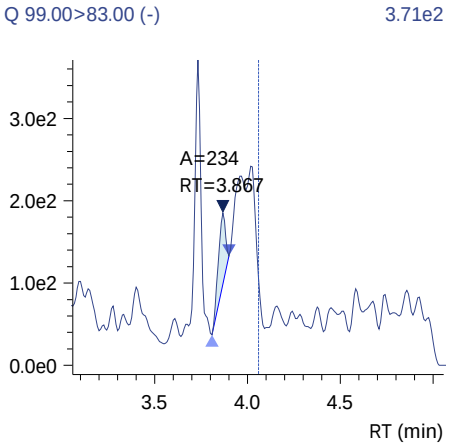
Printed at 8/25/2022 9:54:27 AM

E2200780-006

Sample ID: E2200780-006
Date Acquired: 8/24/2022 12:46:37 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220824\20220824_011.lcd
Vial: 29 | Inj. Volume: 25.0000uL | Tray: 2

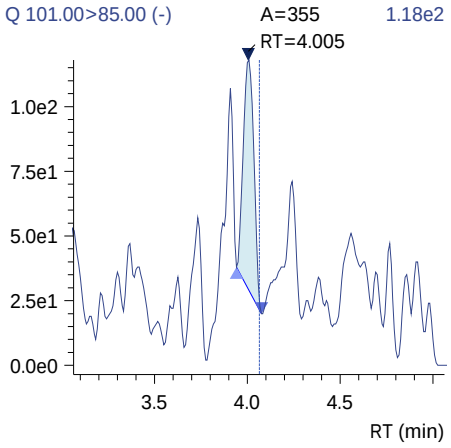
Perchlorate

Conc 0.0052



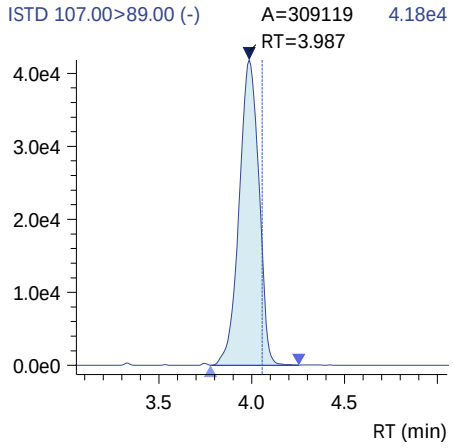
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/25/2022 9:52:37 AM

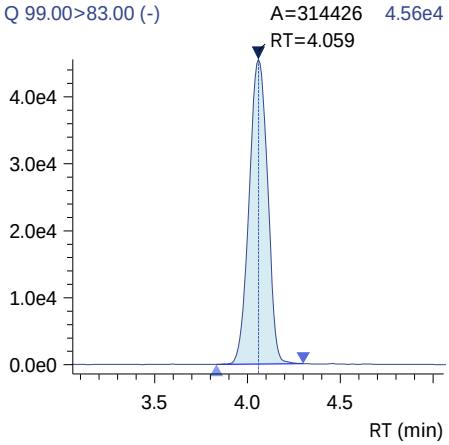
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 8/24/2022 1:13:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220824\20220824_012.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	4.059	314426	233632	9.2211	ng/mL	39.31	27.84-51.71
Perchlorate 2	Auto	4.061	123598	233632	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	4.059	233632	233632	1.0000	ng/mL	----	

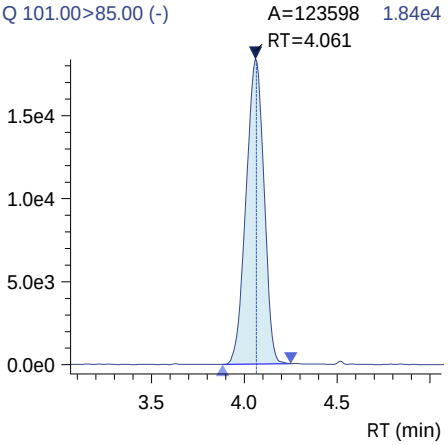
Perchlorate

Conc 9.2211



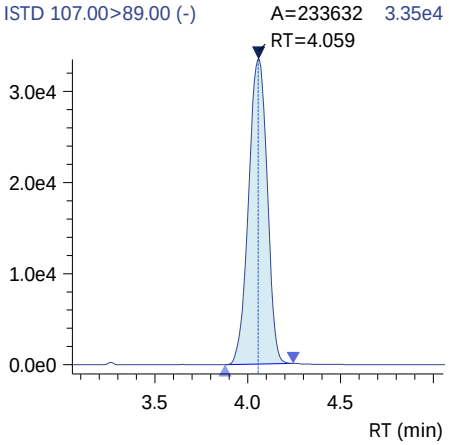
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

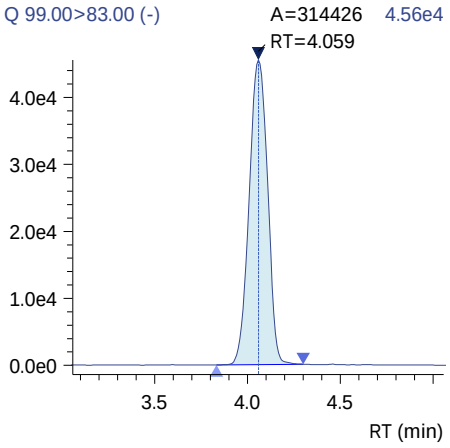
Printed at 8/25/2022 9:54:27 AM

PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 8/24/2022 1:13:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220824\20220824_012.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

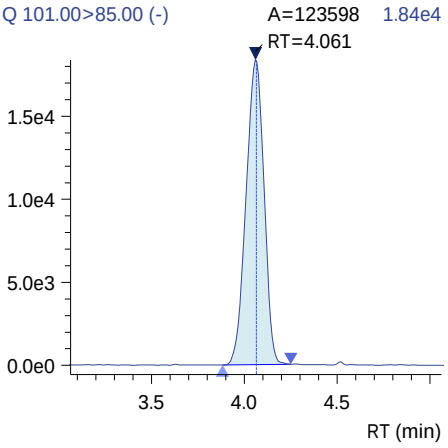
Perchlorate

Conc 9.2211



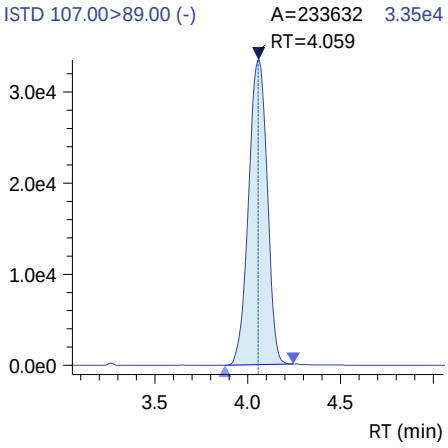
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



HS22080522 LHAAP 18 24 Cover Page

ALS WO# HS22080522

ALS Environmental
ALS Group USA, Corp
10450 Stancliff Road, Suite 210
Houston, TX 77099
T : +1 281 530 5656
F : +1 281 530 5887
www.alsglobal.com

Table of Contents

HS22080522 LHAAP 18 24 Cover Page
- CoverPage
- HS22080522 LHAAP 18 24 Final
  - CoverLetter
  - Sample Summary
  - CaseNarrative
  - MW2_080822
  - MW2_080822_a
  - 18CPTMW01DW_080822
  - 18CPTMW01SW_080822
  - MW23_080822
  - 17WW08_080822
  - 17WW08_080822_a
  - MW8_080822
  - 18CPTMW23SW_080822
  - 18CPTMW23_080822
  - 18WW24_080822
  - Trip Blank
  - Weight/Volume Log
  - Dates Report
  - QC
  - Acronyms

Table of Contents (continued)

Certifications

SampleReceiptCheckList

COC

HS22080522-E2200781-Level II Perch Report

HS22080522 ALS Kelso Report K2210064

HS22080522-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 413360

Raw Data VOA6 414932

Raw Data VOA6 414991

HS22080522-MSSEMI-SW8270SIM

Form 1 - Sample Results

Form 2 - Surrogates

Form 3B - LCS/LCSD

Form 4 - MB Assoc

Form 5 - TUNE

Form 6 - ICAL

Form 6I - ICV

Form 7- CCV

Form 8 - ISTD

Prep Log

Run Log

Raw Data SV-6 410398

Raw Data SV-6 415764

HS22080522 - ME - ICP_W_DOD

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
alsglobal.com

WorkOrder: HS22080522

LHAAP 18 24

Bhate Environmental Associates, Inc.

Marcia Olive
445 Union Blvd Ste 129
Lakewood CO 80228

19-Aug-2022

HS22080522 LHAAP 18 24 Final

ALS WO# HS22080522

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

September 05, 2022

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

Work Order: **HS22080522**

Laboratory Results for: **LHAAP 18 24**

Dear Marcia Olive,

ALS Environmental received 12 sample(s) on Aug 10, 2022 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
Dane J. Wacasey

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Work Order: HS22080522

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS22080522-01	MW2_080822	Water		08-Aug-2022 07:15	10-Aug-2022 09:45	☐
HS22080522-02	MW2_080822_a	Water		08-Aug-2022 07:15	10-Aug-2022 09:45	☐
HS22080522-03	18CPTMW01DW_080822	Water		08-Aug-2022 08:05	10-Aug-2022 09:45	☐
HS22080522-04	18CPTMW01SW_080822	Water		08-Aug-2022 08:50	10-Aug-2022 09:45	☐
HS22080522-05	MW23_080822	Water		08-Aug-2022 09:35	10-Aug-2022 09:45	☐
HS22080522-06	17WW08_080822	Water		08-Aug-2022 10:20	10-Aug-2022 09:45	☐
HS22080522-07	17WW08_080822_a	Water		08-Aug-2022 10:20	10-Aug-2022 09:45	☐
HS22080522-08	MW8_080822	Water		08-Aug-2022 11:05	10-Aug-2022 09:45	☐
HS22080522-09	18CPTMW23SW_080822	Water		08-Aug-2022 11:50	10-Aug-2022 09:45	☐
HS22080522-10	18CPTMW23_080822	Water		08-Aug-2022 12:35	10-Aug-2022 09:45	☐
HS22080522-11	18WW24_080822	Water		08-Aug-2022 13:20	10-Aug-2022 09:45	☐
HS22080522-12	Trip Blank	Water	cg-061422-299	08-Aug-2022 00:00	10-Aug-2022 09:45	☐

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc. **CASE NARRATIVE**
Project: LHAAP 18 24
Work Order: HS22080522

Work Order Comments

• The analysis for Mercury Method 7470 was subcontracted to ALS Environmental in Kelso WA. Final report attached

The analysis for Perchlorate was subcontracted to our ALS Houston TX, High Resolution Lab. Final report attached

GCMS Semivolatiles by Method SW8270SIM

Batch ID: 182382

Sample ID: 18CPTMW01DW_080822 (HS22080522-03)

• The surrogate recoveries could not be determined due to dilution below the calibration range.

Sample ID: 18CPTMW23_080822 (HS22080522-10)

• The surrogate recoveries could not be determined due to dilution below the calibration range.

Sample ID: MW2_080822 (HS22080522-01)

• The surrogate recoveries could not be determined due to dilution below the calibration range.

Sample ID: MW2_080822_a (HS22080522-02)

• The surrogate recoveries could not be determined due to dilution below the calibration range.

GCMS Volatiles by Method SW8260

Batch ID: R414932

Sample ID: MW23_080822 (HS22080522-05MSD)

• Some target analytes are outside recovery/RPD limits on MSD due to matrix interference.

Batch ID: R414991

Sample ID: HS22080490-02MSD

• The RPD between the MS and MSD was outside of the control limit.

Metals by Method SW6020A

Batch ID: 182618

Sample ID: HS22080472-01MS

• MS and MSD are for an unrelated sample

Sample ID: HS22080472-01SD

• SD is for an unrelated sample (Potassium)

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW2_080822
Collection Date: 08-Aug-2022 07:15

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-01
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
1,1,1-Trichloroethane	12	U	5.0	12	25	ug/L	25	11-Aug-2022 13:58
1,1,2,2-Tetrachloroethane	25	U	12	25	25	ug/L	25	11-Aug-2022 13:58
1,1,2-Trichloroethane	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
1,1-Dichloroethane	**31**		**5.0**	**12**	**25**	**ug/L**	25	11-Aug-2022 13:58
1,1-Dichloroethene	12	U	5.0	12	25	ug/L	25	11-Aug-2022 13:58
1,1-Dichloropropene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
1,2,3-Trichlorobenzene	25	U	10	25	25	ug/L	25	11-Aug-2022 13:58
1,2,3-Trichloropropane	25	U	12	25	25	ug/L	25	11-Aug-2022 13:58
1,2,4-Trichlorobenzene	25	U	12	25	25	ug/L	25	11-Aug-2022 13:58
1,2,4-Trimethylbenzene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
1,2-Dibromo-3-chloropropane	25	U	5.0	25	25	ug/L	25	11-Aug-2022 13:58
1,2-Dibromoethane	12	U	5.0	12	25	ug/L	25	11-Aug-2022 13:58
1,2-Dichlorobenzene	25	U	12	25	25	ug/L	25	11-Aug-2022 13:58
1,2-Dichloroethane	12	U	5.0	12	25	ug/L	25	11-Aug-2022 13:58
1,2-Dichloropropane	25	U	12	25	25	ug/L	25	11-Aug-2022 13:58
1,3,5-Trimethylbenzene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
1,3-Dichlorobenzene	25	U	10	25	25	ug/L	25	11-Aug-2022 13:58
1,3-Dichloropropane	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
1,4-Dichlorobenzene	25	U	10	25	25	ug/L	25	11-Aug-2022 13:58
2,2-Dichloropropane	12	U	5.0	12	25	ug/L	25	11-Aug-2022 13:58
2-Butanone	25	U	12	25	50	ug/L	25	11-Aug-2022 13:58
2-Chlorotoluene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
2-Hexanone	50	U	25	50	50	ug/L	25	11-Aug-2022 13:58
4-Chlorotoluene	25	U	10	25	25	ug/L	25	11-Aug-2022 13:58
4-Isopropyltoluene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
4-Methyl-2-pentanone	50	U	18	50	50	ug/L	25	11-Aug-2022 13:58
Acetone	50	U	10	50	50	ug/L	25	11-Aug-2022 13:58
Benzene	12	U	5.0	12	25	ug/L	25	11-Aug-2022 13:58
Bromobenzene	25	U	10	25	25	ug/L	25	11-Aug-2022 13:58
Bromochloromethane	12	U	5.0	12	25	ug/L	25	11-Aug-2022 13:58
Bromodichloromethane	12	U	5.0	12	25	ug/L	25	11-Aug-2022 13:58
Bromoform	25	U	10	25	25	ug/L	25	11-Aug-2022 13:58
Bromomethane	25	U	10	25	25	ug/L	25	11-Aug-2022 13:58
Carbon disulfide	50	U	15	50	50	ug/L	25	11-Aug-2022 13:58
Carbon tetrachloride	25	U	12	25	25	ug/L	25	11-Aug-2022 13:58
Chlorobenzene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
Chloroethane	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
Chloroform	**97**		**5.0**	**12**	**25**	**ug/L**	25	11-Aug-2022 13:58

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW2_080822
Collection Date: 08-Aug-2022 07:15

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-01
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
Chloromethane	12	U	5.0	12	25	ug/L	25	11-Aug-2022 13:58
cis-1,2-Dichloroethene	**68,000**		**200**	**500**	**1000**	**ug/L**	1000	11-Aug-2022 15:43
cis-1,3-Dichloropropene	12	U	5.0	12	25	ug/L	25	11-Aug-2022 13:58
Dibromochloromethane	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
Dibromomethane	12	U	5.0	12	25	ug/L	25	11-Aug-2022 13:58
Dichlorodifluoromethane	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
Ethylbenzene	**31**		**7.5**	**25**	**25**	**ug/L**	25	11-Aug-2022 13:58
Hexachlorobutadiene	25	U	25	25	25	ug/L	25	11-Aug-2022 13:58
Isopropylbenzene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
m,p-Xylene	25	U	12	25	50	ug/L	25	11-Aug-2022 13:58
Methylene chloride	**15,000**		**400**	**2000**	**2000**	**ug/L**	1000	11-Aug-2022 15:43
n-Butylbenzene	25	U	10	25	25	ug/L	25	11-Aug-2022 13:58
n-Propylbenzene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
Naphthalene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
o-Xylene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
sec-Butylbenzene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
Styrene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
tert-Butylbenzene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
Tetrachloroethene	**30**		**7.5**	**25**	**25**	**ug/L**	25	11-Aug-2022 13:58
Toluene	**26**		**5.0**	**12**	**25**	**ug/L**	25	11-Aug-2022 13:58
trans-1,2-Dichloroethene	**150**		**5.0**	**12**	**25**	**ug/L**	25	11-Aug-2022 13:58
trans-1,3-Dichloropropene	12	U	5.0	12	25	ug/L	25	11-Aug-2022 13:58
Trichloroethene	**980**		**5.0**	**12**	**25**	**ug/L**	25	11-Aug-2022 13:58
Trichlorofluoromethane	25	U	7.5	25	25	ug/L	25	11-Aug-2022 13:58
Vinyl chloride	**25**	J	**5.0**	**12**	**25**	**ug/L**	25	11-Aug-2022 13:58
Surr: 1,2-Dichloroethane-d4	*95.2*			**0**	*81-118*	*%REC*	*25*	*11-Aug-2022 13:58*
Surr: 1,2-Dichloroethane-d4	*96.3*			**0**	*81-118*	*%REC*	*1000*	*11-Aug-2022 15:43*
Surr: 4-Bromofluorobenzene	*97.1*			**0**	*85-114*	*%REC*	*25*	*11-Aug-2022 13:58*
Surr: 4-Bromofluorobenzene	*96.0*			**0**	*85-114*	*%REC*	*1000*	*11-Aug-2022 15:43*
Surr: Dibromofluoromethane	*95.0*			**0**	*80-119*	*%REC*	*1000*	*11-Aug-2022 15:43*
Surr: Dibromofluoromethane	*97.2*			**0**	*80-119*	*%REC*	*25*	*11-Aug-2022 13:58*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*25*	*11-Aug-2022 13:58*
Surr: Toluene-d8	*107*			**0**	*89-112*	*%REC*	*1000*	*11-Aug-2022 15:43*
SEMIVOLATILES SIM		**Method:SW8270SIM**				Prep:SW3510 / 12-Aug-2022		Analyst: MBG
1,4-Dioxane	**11**		**1.0**	**1.0**	**1.0**	**ug/L**	100	24-Aug-2022 14:37
Surr: 2-Fluorobiphenyl	*0*	*S*		0	*40-140*	*%REC*	*100*	*24-Aug-2022 14:37*
Surr: 4-Terphenyl-d14	*0*	*S*		0	*40-140*	*%REC*	*100*	*24-Aug-2022 14:37*
Surr: Nitrobenzene-d5	*0*	*S*		0	*40-140*	*%REC*	*100*	*24-Aug-2022 14:37*

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW2_080822
Collection Date: 08-Aug-2022 07:15

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-01
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: JGG
Subcontract Analysis	See Attached		0	0		NA	1	24-Aug-2022 16:27

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW2_080822_a
Collection Date: 08-Aug-2022 07:15

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-02
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
1,1,1-Trichloroethane	12	U	5.0	12	25	ug/L	25	11-Aug-2022 14:19
1,1,2,2-Tetrachloroethane	25	U	12	25	25	ug/L	25	11-Aug-2022 14:19
1,1,2-Trichloroethane	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
1,1-Dichloroethane	**30**		**5.0**	**12**	**25**	**ug/L**	25	11-Aug-2022 14:19
1,1-Dichloroethene	12	U	5.0	12	25	ug/L	25	11-Aug-2022 14:19
1,1-Dichloropropene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
1,2,3-Trichlorobenzene	25	U	10	25	25	ug/L	25	11-Aug-2022 14:19
1,2,3-Trichloropropane	25	U	12	25	25	ug/L	25	11-Aug-2022 14:19
1,2,4-Trichlorobenzene	25	U	12	25	25	ug/L	25	11-Aug-2022 14:19
1,2,4-Trimethylbenzene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
1,2-Dibromo-3-chloropropane	25	U	5.0	25	25	ug/L	25	11-Aug-2022 14:19
1,2-Dibromoethane	12	U	5.0	12	25	ug/L	25	11-Aug-2022 14:19
1,2-Dichlorobenzene	25	U	12	25	25	ug/L	25	11-Aug-2022 14:19
1,2-Dichloroethane	12	U	5.0	12	25	ug/L	25	11-Aug-2022 14:19
1,2-Dichloropropane	25	U	12	25	25	ug/L	25	11-Aug-2022 14:19
1,3,5-Trimethylbenzene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
1,3-Dichlorobenzene	25	U	10	25	25	ug/L	25	11-Aug-2022 14:19
1,3-Dichloropropane	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
1,4-Dichlorobenzene	25	U	10	25	25	ug/L	25	11-Aug-2022 14:19
2,2-Dichloropropane	12	U	5.0	12	25	ug/L	25	11-Aug-2022 14:19
2-Butanone	25	U	12	25	50	ug/L	25	11-Aug-2022 14:19
2-Chlorotoluene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
2-Hexanone	50	U	25	50	50	ug/L	25	11-Aug-2022 14:19
4-Chlorotoluene	25	U	10	25	25	ug/L	25	11-Aug-2022 14:19
4-Isopropyltoluene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
4-Methyl-2-pentanone	50	U	18	50	50	ug/L	25	11-Aug-2022 14:19
Acetone	50	U	10	50	50	ug/L	25	11-Aug-2022 14:19
Benzene	12	U	5.0	12	25	ug/L	25	11-Aug-2022 14:19
Bromobenzene	25	U	10	25	25	ug/L	25	11-Aug-2022 14:19
Bromochloromethane	12	U	5.0	12	25	ug/L	25	11-Aug-2022 14:19
Bromodichloromethane	12	U	5.0	12	25	ug/L	25	11-Aug-2022 14:19
Bromoform	25	U	10	25	25	ug/L	25	11-Aug-2022 14:19
Bromomethane	25	U	10	25	25	ug/L	25	11-Aug-2022 14:19
Carbon disulfide	50	U	15	50	50	ug/L	25	11-Aug-2022 14:19
Carbon tetrachloride	25	U	12	25	25	ug/L	25	11-Aug-2022 14:19
Chlorobenzene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
Chloroethane	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
Chloroform	**97**		**5.0**	**12**	**25**	**ug/L**	25	11-Aug-2022 14:19

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW2_080822_a
Collection Date: 08-Aug-2022 07:15

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-02
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
Chloromethane	12	U	5.0	12	25	ug/L	25	11-Aug-2022 14:19
cis-1,2-Dichloroethene	**66,000**		**200**	**500**	**1000**	**ug/L**	1000	11-Aug-2022 16:04
cis-1,3-Dichloropropene	12	U	5.0	12	25	ug/L	25	11-Aug-2022 14:19
Dibromochloromethane	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
Dibromomethane	12	U	5.0	12	25	ug/L	25	11-Aug-2022 14:19
Dichlorodifluoromethane	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
Ethylbenzene	**35**		**7.5**	**25**	**25**	**ug/L**	25	11-Aug-2022 14:19
Hexachlorobutadiene	25	U	25	25	25	ug/L	25	11-Aug-2022 14:19
Isopropylbenzene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
m,p-Xylene	25	U	12	25	50	ug/L	25	11-Aug-2022 14:19
Methylene chloride	**14,000**		**400**	**2000**	**2000**	**ug/L**	1000	11-Aug-2022 16:04
n-Butylbenzene	25	U	10	25	25	ug/L	25	11-Aug-2022 14:19
n-Propylbenzene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
Naphthalene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
o-Xylene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
sec-Butylbenzene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
Styrene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
tert-Butylbenzene	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
Tetrachloroethene	**32**		**7.5**	**25**	**25**	**ug/L**	25	11-Aug-2022 14:19
Toluene	**27**		**5.0**	**12**	**25**	**ug/L**	25	11-Aug-2022 14:19
trans-1,2-Dichloroethene	**150**		**5.0**	**12**	**25**	**ug/L**	25	11-Aug-2022 14:19
trans-1,3-Dichloropropene	12	U	5.0	12	25	ug/L	25	11-Aug-2022 14:19
Trichloroethene	**1,000**		**5.0**	**12**	**25**	**ug/L**	25	11-Aug-2022 14:19
Trichlorofluoromethane	25	U	7.5	25	25	ug/L	25	11-Aug-2022 14:19
Vinyl chloride	**25**		**5.0**	**12**	**25**	**ug/L**	25	11-Aug-2022 14:19
Surr: 1,2-Dichloroethane-d4	*94.1*			**0**	*81-118*	*%REC*	*25*	*11-Aug-2022 14:19*
Surr: 1,2-Dichloroethane-d4	*95.5*			**0**	*81-118*	*%REC*	*1000*	*11-Aug-2022 16:04*
Surr: 4-Bromofluorobenzene	*96.2*			**0**	*85-114*	*%REC*	*25*	*11-Aug-2022 14:19*
Surr: 4-Bromofluorobenzene	*97.3*			**0**	*85-114*	*%REC*	*1000*	*11-Aug-2022 16:04*
Surr: Dibromofluoromethane	*94.9*			**0**	*80-119*	*%REC*	*25*	*11-Aug-2022 14:19*
Surr: Dibromofluoromethane	*95.4*			**0**	*80-119*	*%REC*	*1000*	*11-Aug-2022 16:04*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*25*	*11-Aug-2022 14:19*
Surr: Toluene-d8	*107*			**0**	*89-112*	*%REC*	*1000*	*11-Aug-2022 16:04*
SEMIVOLATILES SIM	**Method:SW8270SIM**					Prep:SW3510 / 12-Aug-2022		Analyst: MBG
1,4-Dioxane	**17**		**1.0**	**1.0**	**1.0**	**ug/L**	100	24-Aug-2022 14:55
Surr: 2-Fluorobiphenyl	*0*	*S*		0	*40-140*	*%REC*	*100*	*24-Aug-2022 14:55*
Surr: 4-Terphenyl-d14	*0*	*S*		0	*40-140*	*%REC*	*100*	*24-Aug-2022 14:55*
Surr: Nitrobenzene-d5	*0*	*S*		0	*40-140*	*%REC*	*100*	*24-Aug-2022 14:55*

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW2_080822_a
Collection Date: 08-Aug-2022 07:15

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-02
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: JGG
Subcontract Analysis	See Attached		0	0		NA	1	24-Aug-2022 16:27

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18CPTMW01DW_080822
Collection Date: 08-Aug-2022 08:05

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-03
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:11
1,1,2,2-Tetrachloroethane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 18:11
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
1,1-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:11
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:11
1,1-Dichloropropene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
1,2,3-Trichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:11
1,2,3-Trichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 18:11
1,2,4-Trichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 18:11
1,2,4-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
1,2-Dibromo-3-chloropropane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2022 18:11
1,2-Dibromoethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:11
1,2-Dichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 18:11
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:11
1,2-Dichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 18:11
1,3,5-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
1,3-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:11
1,3-Dichloropropane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
1,4-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:11
2,2-Dichloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:11
2-Butanone	1.0	U	0.50	1.0	2.0	ug/L	1	11-Aug-2022 18:11
2-Chlorotoluene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
2-Hexanone	2.0	U	1.0	2.0	2.0	ug/L	1	11-Aug-2022 18:11
4-Chlorotoluene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:11
4-Isopropyltoluene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
4-Methyl-2-pentanone	2.0	U	0.70	2.0	2.0	ug/L	1	11-Aug-2022 18:11
Acetone	2.0	U	0.40	2.0	2.0	ug/L	1	11-Aug-2022 18:11
Benzene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:11
Bromobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:11
Bromochloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:11
Bromodichloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:11
Bromoform	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:11
Bromomethane	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:11
Carbon disulfide	2.0	U	0.60	2.0	2.0	ug/L	1	11-Aug-2022 18:11
Carbon tetrachloride	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 18:11
Chlorobenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
Chloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
Chloroform	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:11

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18CPTMW01DW_080822
Collection Date: 08-Aug-2022 08:05

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-03
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
Chloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:11
cis-1,2-Dichloroethene	**2.2**		**0.20**	**0.50**	**1.0**	**ug/L**	1	11-Aug-2022 18:11
cis-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:11
Dibromochloromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
Dibromomethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:11
Dichlorodifluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
Ethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
Hexachlorobutadiene	1.0	U	1.0	1.0	1.0	ug/L	1	11-Aug-2022 18:11
Isopropylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
m,p-Xylene	1.0	U	0.50	1.0	2.0	ug/L	1	11-Aug-2022 18:11
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	11-Aug-2022 18:11
n-Butylbenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:11
n-Propylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
Naphthalene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
o-Xylene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
sec-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
Styrene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
tert-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
Tetrachloroethene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
Toluene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:11
trans-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:11
trans-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:11
Trichloroethene	**0.55**	J	**0.20**	**0.50**	**1.0**	**ug/L**	1	11-Aug-2022 18:11
Trichlorofluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:11
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:11
Surr: 1,2-Dichloroethane-d4	*96.3*			**0**	*81-118*	*%REC*	*1*	*11-Aug-2022 18:11*
Surr: 4-Bromofluorobenzene	*96.9*			**0**	*85-114*	*%REC*	*1*	*11-Aug-2022 18:11*
Surr: Dibromofluoromethane	*96.3*			**0**	*80-119*	*%REC*	*1*	*11-Aug-2022 18:11*
Surr: Toluene-d8	*107*			**0**	*89-112*	*%REC*	*1*	*11-Aug-2022 18:11*
SEMIVOLATILES SIM		**Method:SW8270SIM**				Prep:SW3510 / 12-Aug-2022		Analyst: MBG
1,4-Dioxane	**1.7**		**1.0**	**1.0**	**1.0**	**ug/L**	100	24-Aug-2022 15:13
Surr: 2-Fluorobiphenyl	*0*	*S*		0	*40-140*	*%REC*	*100*	*24-Aug-2022 15:13*
Surr: 4-Terphenyl-d14	*0*	*S*		0	*40-140*	*%REC*	*100*	*24-Aug-2022 15:13*
Surr: Nitrobenzene-d5	*0*	*S*		0	*40-140*	*%REC*	*100*	*24-Aug-2022 15:13*

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18CPTMW01DW_080822
Collection Date: 08-Aug-2022 08:05

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-03
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 19-Aug-2022		Analyst: YP
Aluminum	**0.0208**		**0.00180**	**0.00500**	**0.0100**	**mg/L**	1	23-Aug-2022 13:27
Antimony	0.00125	U	0.000400	0.00125	0.00500	mg/L	1	23-Aug-2022 13:27
Arsenic	**0.000865**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	23-Aug-2022 13:27
Barium	**0.375**		**0.00190**	**0.00250**	**0.00500**	**mg/L**	1	23-Aug-2022 13:27
Beryllium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Aug-2022 13:27
Cadmium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Aug-2022 13:27
Calcium	**30.0**		**0.0340**	**0.0500**	**0.500**	**mg/L**	1	23-Aug-2022 13:27
Chromium	**0.00426**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	23-Aug-2022 13:27
Cobalt	**0.000303**	J	**0.000100**	**0.000500**	**0.00500**	**mg/L**	1	23-Aug-2022 13:27
Copper	0.00250	U	0.00100	0.00250	0.00500	mg/L	1	23-Aug-2022 13:27
Iron	**0.238**		**0.0120**	**0.0500**	**0.200**	**mg/L**	1	23-Aug-2022 13:27
Lead	0.00125	U	0.000600	0.00125	0.00500	mg/L	1	23-Aug-2022 13:27
Magnesium	**13.6**		**0.0100**	**0.0500**	**0.200**	**mg/L**	1	23-Aug-2022 13:27
Manganese	**0.0194**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	23-Aug-2022 13:27
Nickel	**0.00313**	J	**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	23-Aug-2022 13:27
Potassium	**103**		**0.0180**	**0.0500**	**0.200**	**mg/L**	1	23-Aug-2022 13:27
Selenium	0.00250	U	0.00110	0.00250	0.00500	mg/L	1	23-Aug-2022 13:27
Silver	0.000500	U	0.000200	0.000500	0.00500	mg/L	1	23-Aug-2022 13:27
Sodium	**490**		**0.0700**	**0.250**	**1.00**	**mg/L**	5	22-Aug-2022 20:58
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Aug-2022 13:27
Vanadium	0.00125	U	0.000600	0.00125	0.00500	mg/L	1	23-Aug-2022 13:27
Zinc	**0.00312**	J	**0.00200**	**0.00250**	**0.00500**	**mg/L**	1	23-Aug-2022 13:27
SUBCONTRACT ANALYSIS - MERCURY LOW		**Method:NA**						Analyst: SUBK
Subcontract Analysis	See Attached		0	0		NA	1	02-Sep-2022 13:50
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: JGG
Subcontract Analysis	See Attached		0	0		NA	1	24-Aug-2022 16:27

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18CPTMW01SW_080822
Collection Date: 08-Aug-2022 08:50

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-04
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
1,1,1-Trichloroethane	5.0	U	2.0	5.0	10	ug/L	10	12-Aug-2022 13:31
1,1,2,2-Tetrachloroethane	10	U	5.0	10	10	ug/L	10	12-Aug-2022 13:31
1,1,2-Trichloroethane	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
1,1-Dichloroethane	5.0	U	2.0	5.0	10	ug/L	10	12-Aug-2022 13:31
1,1-Dichloroethene	5.0	U	2.0	5.0	10	ug/L	10	12-Aug-2022 13:31
1,1-Dichloropropene	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
1,2,3-Trichlorobenzene	10	U	4.0	10	10	ug/L	10	12-Aug-2022 13:31
1,2,3-Trichloropropane	10	U	5.0	10	10	ug/L	10	12-Aug-2022 13:31
1,2,4-Trichlorobenzene	10	U	5.0	10	10	ug/L	10	12-Aug-2022 13:31
1,2,4-Trimethylbenzene	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
1,2-Dibromo-3-chloropropane	10	U	2.0	10	10	ug/L	10	12-Aug-2022 13:31
1,2-Dibromoethane	5.0	U	2.0	5.0	10	ug/L	10	12-Aug-2022 13:31
1,2-Dichlorobenzene	10	U	5.0	10	10	ug/L	10	12-Aug-2022 13:31
1,2-Dichloroethane	5.0	U	2.0	5.0	10	ug/L	10	12-Aug-2022 13:31
1,2-Dichloropropane	10	U	5.0	10	10	ug/L	10	12-Aug-2022 13:31
1,3,5-Trimethylbenzene	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
1,3-Dichlorobenzene	10	U	4.0	10	10	ug/L	10	12-Aug-2022 13:31
1,3-Dichloropropane	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
1,4-Dichlorobenzene	10	U	4.0	10	10	ug/L	10	12-Aug-2022 13:31
2,2-Dichloropropane	5.0	U	2.0	5.0	10	ug/L	10	12-Aug-2022 13:31
2-Butanone	10	U	5.0	10	20	ug/L	10	12-Aug-2022 13:31
2-Chlorotoluene	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
2-Hexanone	20	U	10	20	20	ug/L	10	12-Aug-2022 13:31
4-Chlorotoluene	10	U	4.0	10	10	ug/L	10	12-Aug-2022 13:31
4-Isopropyltoluene	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
4-Methyl-2-pentanone	20	U	7.0	20	20	ug/L	10	12-Aug-2022 13:31
Acetone	20	U	4.0	20	20	ug/L	10	12-Aug-2022 13:31
Benzene	5.0	U	2.0	5.0	10	ug/L	10	12-Aug-2022 13:31
Bromobenzene	10	U	4.0	10	10	ug/L	10	12-Aug-2022 13:31
Bromochloromethane	**19**		**2.0**	**5.0**	**10**	**ug/L**	10	12-Aug-2022 13:31
Bromodichloromethane	5.0	U	2.0	5.0	10	ug/L	10	12-Aug-2022 13:31
Bromoform	10	U	4.0	10	10	ug/L	10	12-Aug-2022 13:31
Bromomethane	10	U	4.0	10	10	ug/L	10	12-Aug-2022 13:31
Carbon disulfide	20	U	6.0	20	20	ug/L	10	12-Aug-2022 13:31
Carbon tetrachloride	10	U	5.0	10	10	ug/L	10	12-Aug-2022 13:31
Chlorobenzene	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
Chloroethane	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
Chloroform	5.0	U	2.0	5.0	10	ug/L	10	12-Aug-2022 13:31

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18CPTMW01SW_080822
Collection Date: 08-Aug-2022 08:50

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-04
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
Chloromethane	5.0	U	2.0	5.0	10	ug/L	10	12-Aug-2022 13:31
cis-1,2-Dichloroethene	**1,700**		**2.0**	**5.0**	**10**	**ug/L**	10	12-Aug-2022 13:31
cis-1,3-Dichloropropene	5.0	U	2.0	5.0	10	ug/L	10	12-Aug-2022 13:31
Dibromochloromethane	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
Dibromomethane	5.0	U	2.0	5.0	10	ug/L	10	12-Aug-2022 13:31
Dichlorodifluoromethane	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
Ethylbenzene	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
Hexachlorobutadiene	10	U	10	10	10	ug/L	10	12-Aug-2022 13:31
Isopropylbenzene	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
m,p-Xylene	10	U	5.0	10	20	ug/L	10	12-Aug-2022 13:31
Methylene chloride	**11,000**		**40**	**200**	**200**	**ug/L**	100	12-Aug-2022 20:11
n-Butylbenzene	10	U	4.0	10	10	ug/L	10	12-Aug-2022 13:31
n-Propylbenzene	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
Naphthalene	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
o-Xylene	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
sec-Butylbenzene	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
Styrene	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
tert-Butylbenzene	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
Tetrachloroethene	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
Toluene	5.0	U	2.0	5.0	10	ug/L	10	12-Aug-2022 13:31
trans-1,2-Dichloroethene	5.0	U	2.0	5.0	10	ug/L	10	12-Aug-2022 13:31
trans-1,3-Dichloropropene	5.0	U	2.0	5.0	10	ug/L	10	12-Aug-2022 13:31
Trichloroethene	**91**		**2.0**	**5.0**	**10**	**ug/L**	10	12-Aug-2022 13:31
Trichlorofluoromethane	10	U	3.0	10	10	ug/L	10	12-Aug-2022 13:31
Vinyl chloride	5.0	U	2.0	5.0	10	ug/L	10	12-Aug-2022 13:31
Surr: 1,2-Dichloroethane-d4	*97.5*			**0**	*81-118*	*%REC*	*10*	*12-Aug-2022 13:31*
Surr: 1,2-Dichloroethane-d4	*97.3*			**0**	*81-118*	*%REC*	*100*	*12-Aug-2022 20:11*
Surr: 4-Bromofluorobenzene	*96.0*			**0**	*85-114*	*%REC*	*10*	*12-Aug-2022 13:31*
Surr: 4-Bromofluorobenzene	*95.9*			**0**	*85-114*	*%REC*	*100*	*12-Aug-2022 20:11*
Surr: Dibromofluoromethane	*96.2*			**0**	*80-119*	*%REC*	*10*	*12-Aug-2022 13:31*
Surr: Dibromofluoromethane	*94.2*			**0**	*80-119*	*%REC*	*100*	*12-Aug-2022 20:11*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*10*	*12-Aug-2022 13:31*
Surr: Toluene-d8	*110*			**0**	*89-112*	*%REC*	*100*	*12-Aug-2022 20:11*
SEMIVOLATILES SIM		**Method:SW8270SIM**				Prep:SW3510 / 12-Aug-2022		Analyst: MBG
1,4-Dioxane	**0.42**		**0.010**	**0.010**	**0.010**	**ug/L**	1	23-Aug-2022 17:15
Surr: 2-Fluorobiphenyl	*68.3*			**0**	*40-140*	*%REC*	*1*	*23-Aug-2022 17:15*
Surr: 4-Terphenyl-d14	*60.1*			**0**	*40-140*	*%REC*	*1*	*23-Aug-2022 17:15*
Surr: Nitrobenzene-d5	*99.0*			**0**	*40-140*	*%REC*	*1*	*23-Aug-2022 17:15*

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18CPTMW01SW_080822
Collection Date: 08-Aug-2022 08:50

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-04
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 19-Aug-2022		Analyst: YP
Aluminum	**0.0242**		**0.00180**	**0.00500**	**0.0100**	**mg/L**	1	23-Aug-2022 13:29
Antimony	0.00125	U	0.000400	0.00125	0.00500	mg/L	1	23-Aug-2022 13:29
Arsenic	**0.00747**		**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	23-Aug-2022 13:29
Barium	**1.19**		**0.00190**	**0.00250**	**0.00500**	**mg/L**	1	23-Aug-2022 13:29
Beryllium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Aug-2022 13:29
Cadmium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Aug-2022 13:29
Calcium	**38.1**		**0.0340**	**0.0500**	**0.500**	**mg/L**	1	23-Aug-2022 13:29
Chromium	**0.00230**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	23-Aug-2022 13:29
Cobalt	**0.000832**	J	**0.000100**	**0.000500**	**0.00500**	**mg/L**	1	23-Aug-2022 13:29
Copper	0.00250	U	0.00100	0.00250	0.00500	mg/L	1	23-Aug-2022 13:29
Iron	**45.1**		**0.0120**	**0.0500**	**0.200**	**mg/L**	1	23-Aug-2022 13:29
Lead	0.00125	U	0.000600	0.00125	0.00500	mg/L	1	23-Aug-2022 13:29
Magnesium	**22.6**		**0.0100**	**0.0500**	**0.200**	**mg/L**	1	23-Aug-2022 13:29
Manganese	**0.647**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	23-Aug-2022 13:29
Nickel	**0.00177**	J	**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	23-Aug-2022 13:29
Potassium	**11.1**		**0.0180**	**0.0500**	**0.200**	**mg/L**	1	23-Aug-2022 13:29
Selenium	0.00250	U	0.00110	0.00250	0.00500	mg/L	1	23-Aug-2022 13:29
Silver	0.000500	U	0.000200	0.000500	0.00500	mg/L	1	23-Aug-2022 13:29
Sodium	**104**		**0.0140**	**0.0500**	**0.200**	**mg/L**	1	23-Aug-2022 13:29
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Aug-2022 13:29
Vanadium	0.00125	U	0.000600	0.00125	0.00500	mg/L	1	23-Aug-2022 13:29
Zinc	**0.00303**	J	**0.00200**	**0.00250**	**0.00500**	**mg/L**	1	23-Aug-2022 13:29
SUBCONTRACT ANALYSIS - MERCURY LOW		**Method:NA**						Analyst: SUBK
Subcontract Analysis	See Attached		0	0		NA	1	02-Sep-2022 13:50
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: JGG
Subcontract Analysis	See Attached		0	0		NA	1	24-Aug-2022 16:27

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW23_080822
Collection Date: 08-Aug-2022 09:35

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-05
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
1,1,1-Trichloroethane	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 13:37
1,1,2,2-Tetrachloroethane	5.0	U	2.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
1,1-Dichloroethane	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 13:37
1,1-Dichloroethene	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 13:37
1,1-Dichloropropene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
1,2,3-Trichlorobenzene	5.0	U	2.0	5.0	5.0	ug/L	5	11-Aug-2022 13:37
1,2,3-Trichloropropane	5.0	U	2.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
1,2,4-Trichlorobenzene	5.0	U	2.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
1,2,4-Trimethylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
1,2-Dibromo-3-chloropropane	5.0	U	1.0	5.0	5.0	ug/L	5	11-Aug-2022 13:37
1,2-Dibromoethane	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 13:37
1,2-Dichlorobenzene	5.0	U	2.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
1,2-Dichloroethane	**66**		**1.0**	**2.5**	**5.0**	**ug/L**	5	11-Aug-2022 13:37
1,2-Dichloropropane	5.0	U	2.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
1,3,5-Trimethylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
1,3-Dichlorobenzene	5.0	U	2.0	5.0	5.0	ug/L	5	11-Aug-2022 13:37
1,3-Dichloropropane	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
1,4-Dichlorobenzene	5.0	U	2.0	5.0	5.0	ug/L	5	11-Aug-2022 13:37
2,2-Dichloropropane	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 13:37
2-Butanone	5.0	U	2.5	5.0	10	ug/L	5	11-Aug-2022 13:37
2-Chlorotoluene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
2-Hexanone	10	U	5.0	10	10	ug/L	5	11-Aug-2022 13:37
4-Chlorotoluene	5.0	U	2.0	5.0	5.0	ug/L	5	11-Aug-2022 13:37
4-Isopropyltoluene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
4-Methyl-2-pentanone	10	U	3.5	10	10	ug/L	5	11-Aug-2022 13:37
Acetone	10	U	2.0	10	10	ug/L	5	11-Aug-2022 13:37
Benzene	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 13:37
Bromobenzene	5.0	U	2.0	5.0	5.0	ug/L	5	11-Aug-2022 13:37
Bromochloromethane	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 13:37
Bromodichloromethane	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 13:37
Bromoform	5.0	U	2.0	5.0	5.0	ug/L	5	11-Aug-2022 13:37
Bromomethane	5.0	U	2.0	5.0	5.0	ug/L	5	11-Aug-2022 13:37
Carbon disulfide	10	U	3.0	10	10	ug/L	5	11-Aug-2022 13:37
Carbon tetrachloride	**5.0**		**2.5**	**5.0**	**5.0**	**ug/L**	5	11-Aug-2022 13:37
Chlorobenzene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
Chloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
Chloroform	**10**		**1.0**	**2.5**	**5.0**	**ug/L**	5	11-Aug-2022 13:37

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW23_080822
Collection Date: 08-Aug-2022 09:35

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-05
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
Chloromethane	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 13:37
cis-1,2-Dichloroethene	**21**		**1.0**	**2.5**	**5.0**	**ug/L**	5	11-Aug-2022 13:37
cis-1,3-Dichloropropene	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 13:37
Dibromochloromethane	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
Dibromomethane	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 13:37
Dichlorodifluoromethane	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
Ethylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
Hexachlorobutadiene	5.0	U	5.0	5.0	5.0	ug/L	5	11-Aug-2022 13:37
Isopropylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
m,p-Xylene	5.0	U	2.5	5.0	10	ug/L	5	11-Aug-2022 13:37
Methylene chloride	10	U	2.0	10	10	ug/L	5	11-Aug-2022 13:37
n-Butylbenzene	5.0	U	2.0	5.0	5.0	ug/L	5	11-Aug-2022 13:37
n-Propylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
Naphthalene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
o-Xylene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
sec-Butylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
Styrene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
tert-Butylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
Tetrachloroethene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
Toluene	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 13:37
trans-1,2-Dichloroethene	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 13:37
trans-1,3-Dichloropropene	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 13:37
Trichloroethene	**2,600**		**10**	**25**	**50**	**ug/L**	50	11-Aug-2022 14:40
Trichlorofluoromethane	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 13:37
Vinyl chloride	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 13:37
Surr: 1,2-Dichloroethane-d4	*96.8*			**0**	*81-118*	*%REC*	*5*	*11-Aug-2022 13:37*
Surr: 1,2-Dichloroethane-d4	*95.4*			**0**	*81-118*	*%REC*	*50*	*11-Aug-2022 14:40*
Surr: 4-Bromofluorobenzene	*97.2*			**0**	*85-114*	*%REC*	*5*	*11-Aug-2022 13:37*
Surr: 4-Bromofluorobenzene	*96.0*			**0**	*85-114*	*%REC*	*50*	*11-Aug-2022 14:40*
Surr: Dibromofluoromethane	*95.2*			**0**	*80-119*	*%REC*	*5*	*11-Aug-2022 13:37*
Surr: Dibromofluoromethane	*95.5*			**0**	*80-119*	*%REC*	*50*	*11-Aug-2022 14:40*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*5*	*11-Aug-2022 13:37*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*50*	*11-Aug-2022 14:40*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: JGG
Subcontract Analysis	See Attached		0	0		NA	1	24-Aug-2022 16:27

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 17WW08_080822
Collection Date: 08-Aug-2022 10:20

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-06
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32
1,1,2,2-Tetrachloroethane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 18:32
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
1,1-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32
1,1-Dichloropropene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
1,2,3-Trichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:32
1,2,3-Trichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 18:32
1,2,4-Trichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 18:32
1,2,4-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
1,2-Dibromo-3-chloropropane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2022 18:32
1,2-Dibromoethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32
1,2-Dichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 18:32
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32
1,2-Dichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 18:32
1,3,5-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
1,3-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:32
1,3-Dichloropropane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
1,4-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:32
2,2-Dichloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32
2-Butanone	1.0	U	0.50	1.0	2.0	ug/L	1	11-Aug-2022 18:32
2-Chlorotoluene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
2-Hexanone	2.0	U	1.0	2.0	2.0	ug/L	1	11-Aug-2022 18:32
4-Chlorotoluene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:32
4-Isopropyltoluene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
4-Methyl-2-pentanone	2.0	U	0.70	2.0	2.0	ug/L	1	11-Aug-2022 18:32
Acetone	2.0	U	0.40	2.0	2.0	ug/L	1	11-Aug-2022 18:32
Benzene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32
Bromobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:32
Bromochloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32
Bromodichloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32
Bromoform	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:32
Bromomethane	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:32
Carbon disulfide	2.0	U	0.60	2.0	2.0	ug/L	1	11-Aug-2022 18:32
Carbon tetrachloride	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 18:32
Chlorobenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
Chloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
Chloroform	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 17WW08_080822
Collection Date: 08-Aug-2022 10:20

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-06
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
Chloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32
cis-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32
cis-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32
Dibromochloromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
Dibromomethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32
Dichlorodifluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
Ethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
Hexachlorobutadiene	1.0	U	1.0	1.0	1.0	ug/L	1	11-Aug-2022 18:32
Isopropylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
m,p-Xylene	1.0	U	0.50	1.0	2.0	ug/L	1	11-Aug-2022 18:32
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	11-Aug-2022 18:32
n-Butylbenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:32
n-Propylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
Naphthalene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
o-Xylene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
sec-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
Styrene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
tert-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
Tetrachloroethene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
Toluene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32
trans-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32
trans-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32
Trichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32
Trichlorofluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:32
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:32
Surr: 1,2-Dichloroethane-d4	*95.6*			**0**	*81-118*	*%REC*	*1*	*11-Aug-2022 18:32*
Surr: 4-Bromofluorobenzene	*96.7*			**0**	*85-114*	*%REC*	*1*	*11-Aug-2022 18:32*
Surr: Dibromofluoromethane	*95.6*			**0**	*80-119*	*%REC*	*1*	*11-Aug-2022 18:32*
Surr: Toluene-d8	*108*			**0**	*89-112*	*%REC*	*1*	*11-Aug-2022 18:32*

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 17WW08_080822
Collection Date: 08-Aug-2022 10:20

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-06
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 19-Aug-2022		Analyst: YP
Aluminum	**0.0360**		**0.00180**	**0.00500**	**0.0100**	**mg/L**	1	23-Aug-2022 13:31
Antimony	0.00125	U	0.000400	0.00125	0.00500	mg/L	1	23-Aug-2022 13:31
Arsenic	**0.00628**		**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	23-Aug-2022 13:31
Barium	**0.631**		**0.00190**	**0.00250**	**0.00500**	**mg/L**	1	23-Aug-2022 13:31
Beryllium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Aug-2022 13:31
Cadmium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Aug-2022 13:31
Calcium	**117**		**0.0340**	**0.0500**	**0.500**	**mg/L**	1	23-Aug-2022 13:31
Chromium	**1.17**		**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	23-Aug-2022 13:31
Cobalt	**0.0169**		**0.000100**	**0.000500**	**0.00500**	**mg/L**	1	23-Aug-2022 13:31
Copper	**0.0161**		**0.00100**	**0.00250**	**0.00500**	**mg/L**	1	23-Aug-2022 13:31
Iron	**20.3**		**0.0120**	**0.0500**	**0.200**	**mg/L**	1	23-Aug-2022 13:31
Lead	0.00125	U	0.000600	0.00125	0.00500	mg/L	1	23-Aug-2022 13:31
Magnesium	**72.9**		**0.0100**	**0.0500**	**0.200**	**mg/L**	1	23-Aug-2022 13:31
Manganese	**1.58**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	23-Aug-2022 13:31
Nickel	**0.614**		**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	23-Aug-2022 13:31
Potassium	**2.32**		**0.0180**	**0.0500**	**0.200**	**mg/L**	1	23-Aug-2022 13:31
Selenium	0.00250	U	0.00110	0.00250	0.00500	mg/L	1	23-Aug-2022 13:31
Silver	0.000500	U	0.000200	0.000500	0.00500	mg/L	1	23-Aug-2022 13:31
Sodium	**442**		**0.0700**	**0.250**	**1.00**	**mg/L**	5	22-Aug-2022 21:02
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Aug-2022 13:31
Vanadium	**0.00324**	J	**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	23-Aug-2022 13:31
Zinc	**0.0122**		**0.00200**	**0.00250**	**0.00500**	**mg/L**	1	23-Aug-2022 13:31
SUBCONTRACT ANALYSIS - MERCURY LOW		**Method:NA**						Analyst: SUBK
Subcontract Analysis	See Attached		0	0		NA	1	02-Sep-2022 13:50
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: JGG
Subcontract Analysis	See Attached		0	0		NA	1	24-Aug-2022 16:27

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 17WW08_080822_a
Collection Date: 08-Aug-2022 10:20

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-07
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53
1,1,2,2-Tetrachloroethane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 18:53
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
1,1-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53
1,1-Dichloropropene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
1,2,3-Trichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:53
1,2,3-Trichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 18:53
1,2,4-Trichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 18:53
1,2,4-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
1,2-Dibromo-3-chloropropane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2022 18:53
1,2-Dibromoethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53
1,2-Dichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 18:53
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53
1,2-Dichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 18:53
1,3,5-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
1,3-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:53
1,3-Dichloropropane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
1,4-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:53
2,2-Dichloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53
2-Butanone	1.0	U	0.50	1.0	2.0	ug/L	1	11-Aug-2022 18:53
2-Chlorotoluene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
2-Hexanone	2.0	U	1.0	2.0	2.0	ug/L	1	11-Aug-2022 18:53
4-Chlorotoluene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:53
4-Isopropyltoluene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
4-Methyl-2-pentanone	2.0	U	0.70	2.0	2.0	ug/L	1	11-Aug-2022 18:53
Acetone	2.0	U	0.40	2.0	2.0	ug/L	1	11-Aug-2022 18:53
Benzene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53
Bromobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:53
Bromochloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53
Bromodichloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53
Bromoform	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:53
Bromomethane	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:53
Carbon disulfide	2.0	U	0.60	2.0	2.0	ug/L	1	11-Aug-2022 18:53
Carbon tetrachloride	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 18:53
Chlorobenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
Chloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
Chloroform	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 17WW08_080822_a
Collection Date: 08-Aug-2022 10:20

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-07
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
Chloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53
cis-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53
cis-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53
Dibromochloromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
Dibromomethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53
Dichlorodifluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
Ethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
Hexachlorobutadiene	1.0	U	1.0	1.0	1.0	ug/L	1	11-Aug-2022 18:53
Isopropylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
m,p-Xylene	1.0	U	0.50	1.0	2.0	ug/L	1	11-Aug-2022 18:53
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	11-Aug-2022 18:53
n-Butylbenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 18:53
n-Propylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
Naphthalene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
o-Xylene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
sec-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
Styrene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
tert-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
Tetrachloroethene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
Toluene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53
trans-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53
trans-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53
Trichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53
Trichlorofluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 18:53
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 18:53
Surr: 1,2-Dichloroethane-d4	*95.2*			**0**	*81-118*	*%REC*	*1*	*11-Aug-2022 18:53*
Surr: 4-Bromofluorobenzene	*95.1*			**0**	*85-114*	*%REC*	*1*	*11-Aug-2022 18:53*
Surr: Dibromofluoromethane	*93.9*			**0**	*80-119*	*%REC*	*1*	*11-Aug-2022 18:53*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*1*	*11-Aug-2022 18:53*

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 17WW08_080822_a
Collection Date: 08-Aug-2022 10:20

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-07
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 19-Aug-2022		Analyst: YP
Aluminum	**0.0378**		**0.00180**	**0.00500**	**0.0100**	**mg/L**	1	23-Aug-2022 13:33
Antimony	0.00125	U	0.000400	0.00125	0.00500	mg/L	1	23-Aug-2022 13:33
Arsenic	**0.00656**		**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	23-Aug-2022 13:33
Barium	**0.669**		**0.00190**	**0.00250**	**0.00500**	**mg/L**	1	23-Aug-2022 13:33
Beryllium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Aug-2022 13:33
Cadmium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Aug-2022 13:33
Calcium	**124**		**0.0340**	**0.0500**	**0.500**	**mg/L**	1	23-Aug-2022 13:33
Chromium	**1.38**		**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	23-Aug-2022 13:33
Cobalt	**0.0183**		**0.000100**	**0.000500**	**0.00500**	**mg/L**	1	23-Aug-2022 13:33
Copper	**0.0182**		**0.00100**	**0.00250**	**0.00500**	**mg/L**	1	23-Aug-2022 13:33
Iron	**21.7**		**0.0120**	**0.0500**	**0.200**	**mg/L**	1	23-Aug-2022 13:33
Lead	0.00125	U	0.000600	0.00125	0.00500	mg/L	1	23-Aug-2022 13:33
Magnesium	**78.2**		**0.0100**	**0.0500**	**0.200**	**mg/L**	1	23-Aug-2022 13:33
Manganese	**1.70**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	23-Aug-2022 13:33
Nickel	**0.674**		**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	23-Aug-2022 13:33
Potassium	**2.48**		**0.0180**	**0.0500**	**0.200**	**mg/L**	1	23-Aug-2022 13:33
Selenium	0.00250	U	0.00110	0.00250	0.00500	mg/L	1	23-Aug-2022 13:33
Silver	0.000500	U	0.000200	0.000500	0.00500	mg/L	1	23-Aug-2022 13:33
Sodium	**464**		**0.0700**	**0.250**	**1.00**	**mg/L**	5	22-Aug-2022 21:04
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Aug-2022 13:33
Vanadium	**0.00332**	J	**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	23-Aug-2022 13:33
Zinc	**0.00842**		**0.00200**	**0.00250**	**0.00500**	**mg/L**	1	23-Aug-2022 13:33
SUBCONTRACT ANALYSIS - MERCURY LOW		**Method:NA**						Analyst: SUBK
Subcontract Analysis	See Attached		0	0		NA	1	02-Sep-2022 13:50
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: JGG
Subcontract Analysis	See Attached		0	0		NA	1	24-Aug-2022 16:27

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW8_080822
Collection Date: 08-Aug-2022 11:05

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-08
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:56
1,1,2,2-Tetrachloroethane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 19:56
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
1,1-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:56
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:56
1,1-Dichloropropene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
1,2,3-Trichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:56
1,2,3-Trichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 19:56
1,2,4-Trichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 19:56
1,2,4-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
1,2-Dibromo-3-chloropropane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2022 19:56
1,2-Dibromoethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:56
1,2-Dichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 19:56
1,2-Dichloroethane	**3.0**		**0.20**	**0.50**	**1.0**	**ug/L**	1	11-Aug-2022 19:56
1,2-Dichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 19:56
1,3,5-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
1,3-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:56
1,3-Dichloropropane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
1,4-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:56
2,2-Dichloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:56
2-Butanone	1.0	U	0.50	1.0	2.0	ug/L	1	11-Aug-2022 19:56
2-Chlorotoluene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
2-Hexanone	2.0	U	1.0	2.0	2.0	ug/L	1	11-Aug-2022 19:56
4-Chlorotoluene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:56
4-Isopropyltoluene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
4-Methyl-2-pentanone	2.0	U	0.70	2.0	2.0	ug/L	1	11-Aug-2022 19:56
Acetone	2.0	U	0.40	2.0	2.0	ug/L	1	11-Aug-2022 19:56
Benzene	**0.67**	J	**0.20**	**0.50**	**1.0**	**ug/L**	1	11-Aug-2022 19:56
Bromobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:56
Bromochloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:56
Bromodichloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:56
Bromoform	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:56
Bromomethane	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:56
Carbon disulfide	2.0	U	0.60	2.0	2.0	ug/L	1	11-Aug-2022 19:56
Carbon tetrachloride	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 19:56
Chlorobenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
Chloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
Chloroform	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:56

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW8_080822
Collection Date: 08-Aug-2022 11:05

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-08
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
Chloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:56
cis-1,2-Dichloroethene	**20**		**0.20**	**0.50**	**1.0**	**ug/L**	1	11-Aug-2022 19:56
cis-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:56
Dibromochloromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
Dibromomethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:56
Dichlorodifluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
Ethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
Hexachlorobutadiene	1.0	U	1.0	1.0	1.0	ug/L	1	11-Aug-2022 19:56
Isopropylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
m,p-Xylene	1.0	U	0.50	1.0	2.0	ug/L	1	11-Aug-2022 19:56
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	11-Aug-2022 19:56
n-Butylbenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:56
n-Propylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
Naphthalene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
o-Xylene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
sec-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
Styrene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
tert-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
Tetrachloroethene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
Toluene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:56
trans-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:56
trans-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:56
Trichloroethene	**200**		**1.0**	**2.5**	**5.0**	**ug/L**	5	12-Aug-2022 14:34
Trichlorofluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:56
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:56
Surr: 1,2-Dichloroethane-d4	*97.1*			**0**	*81-118*	*%REC*	*1*	*11-Aug-2022 19:56*
Surr: 1,2-Dichloroethane-d4	*95.8*			**0**	*81-118*	*%REC*	*5*	*12-Aug-2022 14:34*
Surr: 4-Bromofluorobenzene	*95.2*			**0**	*85-114*	*%REC*	*1*	*11-Aug-2022 19:56*
Surr: 4-Bromofluorobenzene	*98.3*			**0**	*85-114*	*%REC*	*5*	*12-Aug-2022 14:34*
Surr: Dibromofluoromethane	*94.1*			**0**	*80-119*	*%REC*	*1*	*11-Aug-2022 19:56*
Surr: Dibromofluoromethane	*94.1*			**0**	*80-119*	*%REC*	*5*	*12-Aug-2022 14:34*
Surr: Toluene-d8	*107*			**0**	*89-112*	*%REC*	*1*	*11-Aug-2022 19:56*
Surr: Toluene-d8	*107*			**0**	*89-112*	*%REC*	*5*	*12-Aug-2022 14:34*
SEMIVOLATILES SIM		**Method:SW8270SIM**				Prep:SW3510 / 12-Aug-2022		Analyst: MBG
1,4-Dioxane	**4.7**		**0.20**	**0.20**	**0.20**	**ug/L**	20	24-Aug-2022 15:31
Surr: 2-Fluorobiphenyl	*71.0*			**0**	*40-140*	*%REC*	*20*	*24-Aug-2022 15:31*
Surr: 4-Terphenyl-d14	*73.2*			**0**	*40-140*	*%REC*	*20*	*24-Aug-2022 15:31*
Surr: Nitrobenzene-d5	*77.6*			**0**	*40-140*	*%REC*	*20*	*24-Aug-2022 15:31*

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW8_080822
Collection Date: 08-Aug-2022 11:05

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-08
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: JGG
Subcontract Analysis	See Attached		0	0		NA	1	24-Aug-2022 16:27

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18CPTMW23SW_080822
Collection Date: 08-Aug-2022 11:50

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-09
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14
1,1,2,2-Tetrachloroethane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 19:14
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
1,1-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14
1,1-Dichloropropene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
1,2,3-Trichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:14
1,2,3-Trichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 19:14
1,2,4-Trichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 19:14
1,2,4-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
1,2-Dibromo-3-chloropropane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2022 19:14
1,2-Dibromoethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14
1,2-Dichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 19:14
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14
1,2-Dichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 19:14
1,3,5-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
1,3-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:14
1,3-Dichloropropane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
1,4-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:14
2,2-Dichloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14
2-Butanone	1.0	U	0.50	1.0	2.0	ug/L	1	11-Aug-2022 19:14
2-Chlorotoluene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
2-Hexanone	2.0	U	1.0	2.0	2.0	ug/L	1	11-Aug-2022 19:14
4-Chlorotoluene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:14
4-Isopropyltoluene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
4-Methyl-2-pentanone	2.0	U	0.70	2.0	2.0	ug/L	1	11-Aug-2022 19:14
Acetone	2.0	U	0.40	2.0	2.0	ug/L	1	11-Aug-2022 19:14
Benzene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14
Bromobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:14
Bromochloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14
Bromodichloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14
Bromoform	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:14
Bromomethane	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:14
Carbon disulfide	2.0	U	0.60	2.0	2.0	ug/L	1	11-Aug-2022 19:14
Carbon tetrachloride	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 19:14
Chlorobenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
Chloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
Chloroform	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18CPTMW23SW_080822
Collection Date: 08-Aug-2022 11:50

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-09
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
Chloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14
cis-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14
cis-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14
Dibromochloromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
Dibromomethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14
Dichlorodifluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
Ethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
Hexachlorobutadiene	1.0	U	1.0	1.0	1.0	ug/L	1	11-Aug-2022 19:14
Isopropylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
m,p-Xylene	1.0	U	0.50	1.0	2.0	ug/L	1	11-Aug-2022 19:14
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	11-Aug-2022 19:14
n-Butylbenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:14
n-Propylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
Naphthalene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
o-Xylene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
sec-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
Styrene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
tert-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
Tetrachloroethene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
Toluene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14
trans-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14
trans-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14
Trichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14
Trichlorofluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:14
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:14
Surr: 1,2-Dichloroethane-d4	*97.4*			**0**	*81-118*	*%REC*	*1*	*11-Aug-2022 19:14*
Surr: 4-Bromofluorobenzene	*95.2*			**0**	*85-114*	*%REC*	*1*	*11-Aug-2022 19:14*
Surr: Dibromofluoromethane	*95.7*			**0**	*80-119*	*%REC*	*1*	*11-Aug-2022 19:14*
Surr: Toluene-d8	*109*			**0**	*89-112*	*%REC*	*1*	*11-Aug-2022 19:14*
SEMIVOLATILES SIM		**Method:SW8270SIM**				Prep:SW3510 / 12-Aug-2022		Analyst: MBG
1,4-Dioxane	**0.089**		**0.010**	**0.010**	**0.010**	**ug/L**	1	23-Aug-2022 17:51
Surr: 2-Fluorobiphenyl	*43.0*			**0**	*40-140*	*%REC*	*1*	*23-Aug-2022 17:51*
Surr: 4-Terphenyl-d14	*55.0*			**0**	*40-140*	*%REC*	*1*	*23-Aug-2022 17:51*
Surr: Nitrobenzene-d5	*94.2*			**0**	*40-140*	*%REC*	*1*	*23-Aug-2022 17:51*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: JGG
Subcontract Analysis	See Attached		0	0		NA	1	24-Aug-2022 16:27

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18CPTMW23_080822
Collection Date: 08-Aug-2022 12:35

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-10
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
1,1,1-Trichloroethane	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 20:17
1,1,2,2-Tetrachloroethane	5.0	U	2.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
1,1-Dichloroethane	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 20:17
1,1-Dichloroethene	**3.2**	J	**1.0**	**2.5**	**5.0**	**ug/L**	5	11-Aug-2022 20:17
1,1-Dichloropropene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
1,2,3-Trichlorobenzene	5.0	U	2.0	5.0	5.0	ug/L	5	11-Aug-2022 20:17
1,2,3-Trichloropropane	5.0	U	2.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
1,2,4-Trichlorobenzene	5.0	U	2.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
1,2,4-Trimethylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
1,2-Dibromo-3-chloropropane	5.0	U	1.0	5.0	5.0	ug/L	5	11-Aug-2022 20:17
1,2-Dibromoethane	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 20:17
1,2-Dichlorobenzene	5.0	U	2.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
1,2-Dichloroethane	**100**		**1.0**	**2.5**	**5.0**	**ug/L**	5	11-Aug-2022 20:17
1,2-Dichloropropane	5.0	U	2.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
1,3,5-Trimethylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
1,3-Dichlorobenzene	5.0	U	2.0	5.0	5.0	ug/L	5	11-Aug-2022 20:17
1,3-Dichloropropane	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
1,4-Dichlorobenzene	5.0	U	2.0	5.0	5.0	ug/L	5	11-Aug-2022 20:17
2,2-Dichloropropane	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 20:17
2-Butanone	5.0	U	2.5	5.0	10	ug/L	5	11-Aug-2022 20:17
2-Chlorotoluene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
2-Hexanone	10	U	5.0	10	10	ug/L	5	11-Aug-2022 20:17
4-Chlorotoluene	5.0	U	2.0	5.0	5.0	ug/L	5	11-Aug-2022 20:17
4-Isopropyltoluene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
4-Methyl-2-pentanone	10	U	3.5	10	10	ug/L	5	11-Aug-2022 20:17
Acetone	10	U	2.0	10	10	ug/L	5	11-Aug-2022 20:17
Benzene	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 20:17
Bromobenzene	5.0	U	2.0	5.0	5.0	ug/L	5	11-Aug-2022 20:17
Bromochloromethane	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 20:17
Bromodichloromethane	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 20:17
Bromoform	5.0	U	2.0	5.0	5.0	ug/L	5	11-Aug-2022 20:17
Bromomethane	5.0	U	2.0	5.0	5.0	ug/L	5	11-Aug-2022 20:17
Carbon disulfide	10	U	3.0	10	10	ug/L	5	11-Aug-2022 20:17
Carbon tetrachloride	5.0	U	2.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
Chlorobenzene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
Chloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
Chloroform	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 20:17

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18CPTMW23_080822
Collection Date: 08-Aug-2022 12:35

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-10
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
Chloromethane	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 20:17
cis-1,2-Dichloroethene	**240**		**1.0**	**2.5**	**5.0**	**ug/L**	5	11-Aug-2022 20:17
cis-1,3-Dichloropropene	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 20:17
Dibromochloromethane	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
Dibromomethane	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 20:17
Dichlorodifluoromethane	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
Ethylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
Hexachlorobutadiene	5.0	U	5.0	5.0	5.0	ug/L	5	11-Aug-2022 20:17
Isopropylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
m,p-Xylene	5.0	U	2.5	5.0	10	ug/L	5	11-Aug-2022 20:17
Methylene chloride	10	U	2.0	10	10	ug/L	5	11-Aug-2022 20:17
n-Butylbenzene	5.0	U	2.0	5.0	5.0	ug/L	5	11-Aug-2022 20:17
n-Propylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
Naphthalene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
o-Xylene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
sec-Butylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
Styrene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
tert-Butylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
Tetrachloroethene	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
Toluene	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 20:17
trans-1,2-Dichloroethene	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 20:17
trans-1,3-Dichloropropene	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 20:17
Trichloroethene	**580**		**2.0**	**5.0**	**10**	**ug/L**	10	12-Aug-2022 14:55
Trichlorofluoromethane	5.0	U	1.5	5.0	5.0	ug/L	5	11-Aug-2022 20:17
Vinyl chloride	2.5	U	1.0	2.5	5.0	ug/L	5	11-Aug-2022 20:17
Surr: 1,2-Dichloroethane-d4	*98.7*			**0**	*81-118*	*%REC*	*5*	*11-Aug-2022 20:17*
Surr: 1,2-Dichloroethane-d4	*95.7*			**0**	*81-118*	*%REC*	*10*	*12-Aug-2022 14:55*
Surr: 4-Bromofluorobenzene	*96.8*			**0**	*85-114*	*%REC*	*5*	*11-Aug-2022 20:17*
Surr: 4-Bromofluorobenzene	*95.5*			**0**	*85-114*	*%REC*	*10*	*12-Aug-2022 14:55*
Surr: Dibromofluoromethane	*95.3*			**0**	*80-119*	*%REC*	*5*	*11-Aug-2022 20:17*
Surr: Dibromofluoromethane	*94.0*			**0**	*80-119*	*%REC*	*10*	*12-Aug-2022 14:55*
Surr: Toluene-d8	*108*			**0**	*89-112*	*%REC*	*5*	*11-Aug-2022 20:17*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*10*	*12-Aug-2022 14:55*
SEMIVOLATILES SIM		**Method:SW8270SIM**				Prep:SW3510 / 12-Aug-2022		Analyst: MBG
1,4-Dioxane	**15**		**1.0**	**1.0**	**1.0**	**ug/L**	100	24-Aug-2022 15:49
Surr: 2-Fluorobiphenyl	*0*	*S*		0	*40-140*	*%REC*	*100*	*24-Aug-2022 15:49*
Surr: 4-Terphenyl-d14	*0*	*S*		0	*40-140*	*%REC*	*100*	*24-Aug-2022 15:49*
Surr: Nitrobenzene-d5	*0*	*S*		0	*40-140*	*%REC*	*100*	*24-Aug-2022 15:49*

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18CPTMW23_080822
Collection Date: 08-Aug-2022 12:35

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-10
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: JGG
Subcontract Analysis	See Attached		0	0		NA	1	24-Aug-2022 16:27

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18WW24_080822
Collection Date: 08-Aug-2022 13:20

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-11
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35
1,1,2,2-Tetrachloroethane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 19:35
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
1,1-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35
1,1-Dichloropropene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
1,2,3-Trichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:35
1,2,3-Trichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 19:35
1,2,4-Trichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 19:35
1,2,4-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
1,2-Dibromo-3-chloropropane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2022 19:35
1,2-Dibromoethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35
1,2-Dichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 19:35
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35
1,2-Dichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 19:35
1,3,5-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
1,3-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:35
1,3-Dichloropropane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
1,4-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:35
2,2-Dichloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35
2-Butanone	1.0	U	0.50	1.0	2.0	ug/L	1	11-Aug-2022 19:35
2-Chlorotoluene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
2-Hexanone	2.0	U	1.0	2.0	2.0	ug/L	1	11-Aug-2022 19:35
4-Chlorotoluene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:35
4-Isopropyltoluene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
4-Methyl-2-pentanone	2.0	U	0.70	2.0	2.0	ug/L	1	11-Aug-2022 19:35
Acetone	2.0	U	0.40	2.0	2.0	ug/L	1	11-Aug-2022 19:35
Benzene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35
Bromobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:35
Bromochloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35
Bromodichloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35
Bromoform	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:35
Bromomethane	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:35
Carbon disulfide	2.0	U	0.60	2.0	2.0	ug/L	1	11-Aug-2022 19:35
Carbon tetrachloride	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 19:35
Chlorobenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
Chloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
Chloroform	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18WW24_080822
Collection Date: 08-Aug-2022 13:20

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-11
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
Chloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35
cis-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35
cis-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35
Dibromochloromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
Dibromomethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35
Dichlorodifluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
Ethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
Hexachlorobutadiene	1.0	U	1.0	1.0	1.0	ug/L	1	11-Aug-2022 19:35
Isopropylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
m,p-Xylene	1.0	U	0.50	1.0	2.0	ug/L	1	11-Aug-2022 19:35
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	11-Aug-2022 19:35
n-Butylbenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 19:35
n-Propylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
Naphthalene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
o-Xylene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
sec-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
Styrene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
tert-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
Tetrachloroethene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
Toluene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35
trans-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35
trans-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35
Trichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35
Trichlorofluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 19:35
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 19:35
Surr: 1,2-Dichloroethane-d4	*96.5*			**0**	*81-118*	*%REC*	*1*	*11-Aug-2022 19:35*
Surr: 4-Bromofluorobenzene	*97.4*			**0**	*85-114*	*%REC*	*1*	*11-Aug-2022 19:35*
Surr: Dibromofluoromethane	*94.4*			**0**	*80-119*	*%REC*	*1*	*11-Aug-2022 19:35*
Surr: Toluene-d8	*107*			**0**	*89-112*	*%REC*	*1*	*11-Aug-2022 19:35*

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18WW24_080822
Collection Date: 08-Aug-2022 13:20

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-11
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 19-Aug-2022		Analyst: YP
Aluminum	**0.147**		**0.00180**	**0.00500**	**0.0100**	**mg/L**	1	23-Aug-2022 13:35
Antimony	0.00125	U	0.000400	0.00125	0.00500	mg/L	1	23-Aug-2022 13:35
Arsenic	**0.000661**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	23-Aug-2022 13:35
Barium	**0.0491**		**0.00190**	**0.00250**	**0.00500**	**mg/L**	1	23-Aug-2022 13:35
Beryllium	**0.000747**	J	**0.000200**	**0.000500**	**0.00200**	**mg/L**	1	23-Aug-2022 13:35
Cadmium	**0.000209**	J	**0.000200**	**0.000500**	**0.00200**	**mg/L**	1	23-Aug-2022 13:35
Calcium	**73.3**		**0.0340**	**0.0500**	**0.500**	**mg/L**	1	23-Aug-2022 13:35
Chromium	**0.000584**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	23-Aug-2022 13:35
Cobalt	**0.0645**		**0.000100**	**0.000500**	**0.00500**	**mg/L**	1	23-Aug-2022 13:35
Copper	**0.00230**	J	**0.00100**	**0.00250**	**0.00500**	**mg/L**	1	23-Aug-2022 13:35
Iron	**0.312**		**0.0120**	**0.0500**	**0.200**	**mg/L**	1	23-Aug-2022 13:35
Lead	0.00125	U	0.000600	0.00125	0.00500	mg/L	1	23-Aug-2022 13:35
Magnesium	**57.8**		**0.0100**	**0.0500**	**0.200**	**mg/L**	1	23-Aug-2022 13:35
Manganese	**9.63**		**0.0350**	**0.125**	**0.250**	**mg/L**	50	23-Aug-2022 13:37
Nickel	**0.154**		**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	23-Aug-2022 13:35
Potassium	**0.684**		**0.0180**	**0.0500**	**0.200**	**mg/L**	1	23-Aug-2022 13:35
Selenium	0.00250	U	0.00110	0.00250	0.00500	mg/L	1	23-Aug-2022 13:35
Silver	0.000500	U	0.000200	0.000500	0.00500	mg/L	1	23-Aug-2022 13:35
Sodium	**966**		**0.700**	**2.50**	**10.0**	**mg/L**	50	23-Aug-2022 13:37
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Aug-2022 13:35
Vanadium	0.00125	U	0.000600	0.00125	0.00500	mg/L	1	23-Aug-2022 13:35
Zinc	**0.0456**		**0.00200**	**0.00250**	**0.00500**	**mg/L**	1	23-Aug-2022 13:35
SUBCONTRACT ANALYSIS - MERCURY LOW		**Method:NA**						Analyst: SUBK
Subcontract Analysis	See Attached		0	0		NA	1	02-Sep-2022 13:50
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: JGG
Subcontract Analysis	See Attached		0	0		NA	1	24-Aug-2022 16:27

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: Trip Blank
Collection Date: 08-Aug-2022 00:00

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-12
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16
1,1,2,2-Tetrachloroethane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 13:16
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
1,1-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16
1,1-Dichloropropene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
1,2,3-Trichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 13:16
1,2,3-Trichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 13:16
1,2,4-Trichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 13:16
1,2,4-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
1,2-Dibromo-3-chloropropane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2022 13:16
1,2-Dibromoethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16
1,2-Dichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 13:16
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16
1,2-Dichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 13:16
1,3,5-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
1,3-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 13:16
1,3-Dichloropropane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
1,4-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 13:16
2,2-Dichloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16
2-Butanone	1.0	U	0.50	1.0	2.0	ug/L	1	11-Aug-2022 13:16
2-Chlorotoluene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
2-Hexanone	2.0	U	1.0	2.0	2.0	ug/L	1	11-Aug-2022 13:16
4-Chlorotoluene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 13:16
4-Isopropyltoluene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
4-Methyl-2-pentanone	2.0	U	0.70	2.0	2.0	ug/L	1	11-Aug-2022 13:16
Acetone	2.0	U	0.40	2.0	2.0	ug/L	1	11-Aug-2022 13:16
Benzene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16
Bromobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 13:16
Bromochloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16
Bromodichloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16
Bromoform	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 13:16
Bromomethane	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 13:16
Carbon disulfide	2.0	U	0.60	2.0	2.0	ug/L	1	11-Aug-2022 13:16
Carbon tetrachloride	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2022 13:16
Chlorobenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
Chloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
Chloroform	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: Trip Blank
Collection Date: 08-Aug-2022 00:00

ANALYTICAL REPORT
WorkOrder:HS22080522
Lab ID:HS22080522-12
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
Chloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16
cis-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16
cis-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16
Dibromochloromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
Dibromomethane	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16
Dichlorodifluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
Ethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
Hexachlorobutadiene	1.0	U	1.0	1.0	1.0	ug/L	1	11-Aug-2022 13:16
Isopropylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
m,p-Xylene	1.0	U	0.50	1.0	2.0	ug/L	1	11-Aug-2022 13:16
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	11-Aug-2022 13:16
n-Butylbenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2022 13:16
n-Propylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
Naphthalene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
o-Xylene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
sec-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
Styrene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
tert-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
Tetrachloroethene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
Toluene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16
trans-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16
trans-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16
Trichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16
Trichlorofluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2022 13:16
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	11-Aug-2022 13:16
Surr: 1,2-Dichloroethane-d4	*95.0*			**0**	*81-118*	*%REC*	*1*	*11-Aug-2022 13:16*
Surr: 4-Bromofluorobenzene	*94.5*			**0**	*85-114*	*%REC*	*1*	*11-Aug-2022 13:16*
Surr: Dibromofluoromethane	*95.2*			**0**	*80-119*	*%REC*	*1*	*11-Aug-2022 13:16*
Surr: Toluene-d8	*108*			**0**	*89-112*	*%REC*	*1*	*11-Aug-2022 13:16*

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

Weight / Prep Log

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Batch ID: 182382 **Start Date:** 12 Aug 2022 10:30 **End Date:** 12 Aug 2022 14:30
Method: SV AQ SEP FUN EXTRACT-LOWLEV - 3510C **Prep Code:** 3510_B_SIM

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22080522-01	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat
HS22080522-02	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat
HS22080522-03	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat
HS22080522-04	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat
HS22080522-08	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat
HS22080522-09	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat
HS22080522-10	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat

Batch ID: 182618 **Start Date:** 19 Aug 2022 09:00 **End Date:** 19 Aug 2022 13:00
Method: WATER - SW3010A **Prep Code:** 3010A

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22080522-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22080522-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22080522-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22080522-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22080522-11		10 (mL)	10 (mL)	1	120 plastic HNO3

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 182382 (0)	**Test Name :** SEMIVOLATILES SIM				**Matrix:** Water	
HS22080522-01	MW2_080822	08 Aug 2022 07:15		12 Aug 2022 13:02	24 Aug 2022 14:37	100
HS22080522-02	MW2_080822_a	08 Aug 2022 07:15		12 Aug 2022 13:02	24 Aug 2022 14:55	100
HS22080522-03	18CPTMW01DW_080822	08 Aug 2022 08:05		12 Aug 2022 13:02	24 Aug 2022 15:13	100
HS22080522-04	18CPTMW01SW_080822	08 Aug 2022 08:50		12 Aug 2022 13:02	23 Aug 2022 17:15	1
HS22080522-08	MW8_080822	08 Aug 2022 11:05		12 Aug 2022 13:02	24 Aug 2022 15:31	20
HS22080522-09	18CPTMW23SW_080822	08 Aug 2022 11:50		12 Aug 2022 13:02	23 Aug 2022 17:51	1
HS22080522-10	18CPTMW23_080822	08 Aug 2022 12:35		12 Aug 2022 13:02	24 Aug 2022 15:49	100
Batch ID: 182618 (0)	**Test Name :** METALS BY ICPMS BY SW6020A				**Matrix:** Water	
HS22080522-03	18CPTMW01DW_080822	08 Aug 2022 08:05		19 Aug 2022 09:00	23 Aug 2022 13:27	1
HS22080522-03	18CPTMW01DW_080822	08 Aug 2022 08:05		19 Aug 2022 09:00	22 Aug 2022 20:58	5
HS22080522-04	18CPTMW01SW_080822	08 Aug 2022 08:50		19 Aug 2022 09:00	23 Aug 2022 13:29	1
HS22080522-06	17WW08_080822	08 Aug 2022 10:20		19 Aug 2022 09:00	23 Aug 2022 13:31	1
HS22080522-06	17WW08_080822	08 Aug 2022 10:20		19 Aug 2022 09:00	22 Aug 2022 21:02	5
HS22080522-07	17WW08_080822_a	08 Aug 2022 10:20		19 Aug 2022 09:00	23 Aug 2022 13:33	1
HS22080522-07	17WW08_080822_a	08 Aug 2022 10:20		19 Aug 2022 09:00	22 Aug 2022 21:04	5
HS22080522-11	18WW24_080822	08 Aug 2022 13:20		19 Aug 2022 09:00	23 Aug 2022 13:37	50
HS22080522-11	18WW24_080822	08 Aug 2022 13:20		19 Aug 2022 09:00	23 Aug 2022 13:35	1
Batch ID: R414932 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS22080522-01	MW2_080822	08 Aug 2022 07:15			11 Aug 2022 15:43	1000
HS22080522-01	MW2_080822	08 Aug 2022 07:15			11 Aug 2022 13:58	25
HS22080522-02	MW2_080822_a	08 Aug 2022 07:15			11 Aug 2022 16:04	1000
HS22080522-02	MW2_080822_a	08 Aug 2022 07:15			11 Aug 2022 14:19	25
HS22080522-03	18CPTMW01DW_080822	08 Aug 2022 08:05			11 Aug 2022 18:11	1
HS22080522-05	MW23_080822	08 Aug 2022 09:35			11 Aug 2022 14:40	50
HS22080522-05	MW23_080822	08 Aug 2022 09:35			11 Aug 2022 13:37	5
HS22080522-06	17WW08_080822	08 Aug 2022 10:20			11 Aug 2022 18:32	1
HS22080522-07	17WW08_080822_a	08 Aug 2022 10:20			11 Aug 2022 18:53	1
HS22080522-08	MW8_080822	08 Aug 2022 11:05			11 Aug 2022 19:56	1
HS22080522-09	18CPTMW23SW_080822	08 Aug 2022 11:50			11 Aug 2022 19:14	1
HS22080522-10	18CPTMW23_080822	08 Aug 2022 12:35			11 Aug 2022 20:17	5
HS22080522-11	18WW24_080822	08 Aug 2022 13:20			11 Aug 2022 19:35	1
HS22080522-12	Trip Blank	08 Aug 2022 00:00			11 Aug 2022 13:16	1
Batch ID: R414991 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS22080522-04	18CPTMW01SW_080822	08 Aug 2022 08:50			12 Aug 2022 20:11	100
HS22080522-04	18CPTMW01SW_080822	08 Aug 2022 08:50			12 Aug 2022 13:31	10
HS22080522-08	MW8_080822	08 Aug 2022 11:05			12 Aug 2022 14:34	5
HS22080522-10	18CPTMW23_080822	08 Aug 2022 12:35			12 Aug 2022 14:55	10

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R415773 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Water	
HS22080522-01	MW2_080822	08 Aug 2022 07:15			24 Aug 2022 16:27	1
HS22080522-02	MW2_080822_a	08 Aug 2022 07:15			24 Aug 2022 16:27	1
HS22080522-03	18CPTMW01DW_080822	08 Aug 2022 08:05			24 Aug 2022 16:27	1
HS22080522-04	18CPTMW01SW_080822	08 Aug 2022 08:50			24 Aug 2022 16:27	1
HS22080522-05	MW23_080822	08 Aug 2022 09:35			24 Aug 2022 16:27	1
HS22080522-06	17WW08_080822	08 Aug 2022 10:20			24 Aug 2022 16:27	1
HS22080522-07	17WW08_080822_a	08 Aug 2022 10:20			24 Aug 2022 16:27	1
HS22080522-08	MW8_080822	08 Aug 2022 11:05			24 Aug 2022 16:27	1
HS22080522-09	18CPTMW23SW_080822	08 Aug 2022 11:50			24 Aug 2022 16:27	1
HS22080522-10	18CPTMW23_080822	08 Aug 2022 12:35			24 Aug 2022 16:27	1
HS22080522-11	18WW24_080822	08 Aug 2022 13:20			24 Aug 2022 16:27	1
Batch ID: R416444 (0)	**Test Name :** SUBCONTRACT ANALYSIS - MERCURY LOW				**Matrix:** Water	
HS22080522-03	18CPTMW01DW_080822	08 Aug 2022 08:05			02 Sep 2022 13:50	1
HS22080522-04	18CPTMW01SW_080822	08 Aug 2022 08:50			02 Sep 2022 13:50	1
HS22080522-06	17WW08_080822	08 Aug 2022 10:20			02 Sep 2022 13:50	1
HS22080522-07	17WW08_080822_a	08 Aug 2022 10:20			02 Sep 2022 13:50	1
HS22080522-11	18WW24_080822	08 Aug 2022 13:20			02 Sep 2022 13:50	1

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: 182618 (0) **Instrument: ICPMS07** **Method: METALS BY ICPMS BY SW6020A**

MBLK Sample ID: **MBLK-182618** Units: **mg/L** Analysis Date: **22-Aug-2022 20:36**
Client ID: Run ID: **ICPMS07_415559** SeqNo: **6813234** PrepDate: **19-Aug-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.007024	0.0100								J
Antimony	0.00125	0.00500								U
Arsenic	0.00125	0.00500								U
Barium	0.00250	0.00500								U
Beryllium	0.000500	0.00200								U
Cadmium	0.000500	0.00200								U
Calcium	0.0500	0.500								U
Chromium	0.00125	0.00500								U
Cobalt	0.000500	0.00500								U
Copper	0.00250	0.00500								U
Iron	0.0500	0.200								U
Lead	0.00125	0.00500								U
Magnesium	0.01408	0.200								J
Manganese	0.00250	0.00500								U
Nickel	0.00125	0.00500								U
Potassium	0.0500	0.200								U
Selenium	0.00250	0.00500								U
Silver	0.000500	0.00500								U
Sodium	0.0500	0.200								U
Thallium	0.000500	0.00200								U
Vanadium	0.00125	0.00500								U
Zinc	0.00250	0.00500								U

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: 182618 (0) **Instrument: ICPMS07** **Method: METALS BY ICPMS BY SW6020A**

LCS Sample ID: **LCS-182618** Units: **mg/L** Analysis Date: **22-Aug-2022 20:38**
Client ID: Run ID: **ICPMS07_415559** SeqNo: **6813235** PrepDate: **19-Aug-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.1096	0.0100	0.1	0	110	84 - 117				
Antimony	0.05324	0.00500	0.05	0	106	85 - 117				
Arsenic	0.05576	0.00500	0.05	0	112	84 - 116				
Barium	0.05404	0.00500	0.05	0	108	86 - 114				
Beryllium	0.05858	0.00200	0.05	0	117	83 - 121				
Cadmium	0.05591	0.00200	0.05	0	112	87 - 115				
Calcium	5.107	0.500	5	0	102	87 - 118				
Chromium	0.05384	0.00500	0.05	0	108	85 - 116				
Cobalt	0.05553	0.00500	0.05	0	111	86 - 115				
Copper	0.0552	0.00500	0.05	0	110	85 - 118				
Iron	5.326	0.200	5	0	107	87 - 118				
Lead	0.04892	0.00500	0.05	0	97.8	88 - 115				
Magnesium	5.437	0.200	5	0	109	83 - 118				
Manganese	0.0548	0.00500	0.05	0	110	87 - 115				
Nickel	0.05438	0.00500	0.05	0	109	85 - 117				
Potassium	5.402	0.200	5	0	108	87 - 115				
Selenium	0.05753	0.00500	0.05	0	115	80 - 120				
Silver	0.04447	0.00500	0.05	0	88.9	85 - 116				
Sodium	5.232	0.200	5	0	105	85 - 117				
Thallium	0.05171	0.00200	0.05	0	103	82 - 116				
Vanadium	0.05402	0.00500	0.05	0	108	86 - 115				
Zinc	0.05668	0.00500	0.05	0	113	83 - 119				

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: 182618 (0) **Instrument: ICPMS07** **Method: METALS BY ICPMS BY SW6020A**

MS Sample ID: **HS22080472-01MS** Units: **mg/L** Analysis Date: **23-Aug-2022 13:08**
Client ID: Run ID: **ICPMS07_415638** SeqNo: **6815411** PrepDate: **19-Aug-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.1188	0.0100	0.1	0.0141	105	84 - 117				
Antimony	0.05196	0.00500	0.05	0.000109	104	85 - 117				
Arsenic	0.05655	0.00500	0.05	0.00038	112	84 - 116				
Barium	0.452	0.00500	0.05	0.3987	107	86 - 114				O
Beryllium	0.05533	0.00200	0.05	-0.000003	111	83 - 121				
Cadmium	0.05396	0.00200	0.05	0.000007	108	87 - 115				
Calcium	22.56	0.500	5	18.19	87.3	87 - 118				
Chromium	0.05063	0.00500	0.05	0.000418	100	85 - 116				
Cobalt	0.05215	0.00500	0.05	0.000176	104	86 - 115				
Copper	0.04901	0.00500	0.05	0.000772	96.5	85 - 118				
Iron	5.222	0.200	5	0.09066	103	87 - 118				
Lead	0.05145	0.00500	0.05	0.000298	102	88 - 115				
Magnesium	22.07	0.200	5	18.09	79.6	83 - 118				S
Manganese	0.1245	0.00500	0.05	0.07429	100	87 - 115				
Nickel	0.05098	0.00500	0.05	0.000377	101	85 - 117				
Potassium	7.896	0.200	5	2.681	104	87 - 115				
Selenium	0.04953	0.00500	0.05	0.000217	98.6	80 - 120				
Silver	0.04119	0.00500	0.05	0.000012	82.4	85 - 116				S
Sodium	726.2	0.200	5	768.4	-845	85 - 117				SEO
Thallium	0.05106	0.00200	0.05	0	102	82 - 116				
Vanadium	0.05472	0.00500	0.05	0.000185	109	86 - 115				
Zinc	0.05799	0.00500	0.05	0.00497	106	83 - 119				

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: 182618 (0) **Instrument: ICPMS07** **Method: METALS BY ICPMS BY SW6020A**

MSD Sample ID: **HS22080472-01MSD** Units: **mg/L** Analysis Date: **23-Aug-2022 15:05**
Client ID: Run ID: **ICPMS07_415638** SeqNo: **6815479** PrepDate: **19-Aug-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.1178	0.0100	0.1	0.0141	104	84 - 117	0.1188	0.847	20	
Antimony	0.05285	0.00500	0.05	0	106	85 - 117	0.05196	1.71	20	
Arsenic	0.05658	0.00500	0.05	0	113	84 - 116	0.05655	0.0636	20	
Barium	0.4467	0.00500	0.05	0.3987	96.0	86 - 114	0.452	1.19	20	O
Beryllium	0.0589	0.00200	0.05	0	118	83 - 121	0.05533	6.25	20	
Cadmium	0.05429	0.00200	0.05	0	109	87 - 115	0.05396	0.595	20	
Calcium	22.09	0.500	5	18.19	78.0	87 - 118	22.56	2.1	20	S
Chromium	0.05201	0.00500	0.05	0.000418	103	85 - 116	0.05063	2.68	20	
Cobalt	0.05389	0.00500	0.05	0.000176	107	86 - 115	0.05215	3.28	20	
Copper	0.05065	0.00500	0.05	0	101	85 - 118	0.04901	3.29	20	
Iron	5.322	0.200	5	0.09066	105	87 - 118	5.222	1.91	20	
Lead	0.05234	0.00500	0.05	0	105	88 - 115	0.05145	1.71	20	
Magnesium	22.59	0.200	5	18.09	90.0	83 - 118	22.07	2.33	20	
Manganese	0.1249	0.00500	0.05	0.07429	101	87 - 115	0.1245	0.328	20	
Nickel	0.0527	0.00500	0.05	0	105	85 - 117	0.05098	3.3	20	
Potassium	7.743	0.200	5	2.681	101	87 - 115	7.896	1.95	20	
Selenium	0.04688	0.00500	0.05	0	93.8	80 - 120	0.04953	5.5	20	
Silver	0.04077	0.00500	0.05	0	81.5	85 - 116	0.04119	1.02	20	S
Sodium	751.6	0.200	5	768.4	-337	85 - 117	726.2	3.44	20	SEO
Thallium	0.0518	0.00200	0.05	0	104	82 - 116	0.05106	1.43	20	
Vanadium	0.0555	0.00500	0.05	0	111	86 - 115	0.05472	1.42	20	
Zinc	0.05937	0.00500	0.05	0.00497	109	83 - 119	0.05799	2.35	20	

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: 182618 (0) **Instrument: ICPMS07** **Method: METALS BY ICPMS BY SW6020A**

PDS Sample ID: **HS22080472-01PDS** Units: **mg/L** Analysis Date: **23-Aug-2022 13:12**
Client ID: Run ID: **ICPMS07_415638** SeqNo: **6815413** PrepDate: **19-Aug-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.1162	0.0100	0.1	0.0141	102	80 - 120				
Antimony	0.09826	0.00500	0.1	0.000109	98.2	80 - 120				
Arsenic	0.1104	0.00500	0.1	0.00038	110	80 - 120				
Beryllium	0.1088	0.00200	0.1	-0.000003	109	80 - 120				
Cadmium	0.106	0.00200	0.1	0.000007	106	80 - 120				
Calcium	27.52	0.500	10	18.19	93.3	80 - 120				
Chromium	0.09939	0.00500	0.1	0.000418	99.0	80 - 120				
Cobalt	0.1025	0.00500	0.1	0.000176	102	80 - 120				
Copper	0.09434	0.00500	0.1	0.000772	93.6	80 - 120				
Iron	10.1	0.200	10	0.09066	100	80 - 120				
Lead	0.1084	0.00500	0.1	0.000298	108	80 - 120				
Magnesium	26.68	0.200	10	18.09	86.0	80 - 120				
Manganese	0.1744	0.00500	0.1	0.07429	100	80 - 120				
Nickel	0.09886	0.00500	0.1	0.000377	98.5	80 - 120				
Potassium	13.02	0.200	10	2.681	103	80 - 120				
Selenium	0.1085	0.00500	0.1	0.000217	108	80 - 120				
Silver	0.1035	0.00500	0.1	0.000012	103	80 - 120				
Thallium	0.1099	0.00200	0.1	0	110	80 - 120				
Vanadium	0.107	0.00500	0.1	0.000185	107	80 - 120				
Zinc	0.1083	0.00500	0.1	0.00497	103	80 - 120				

PDS Sample ID: **HS22080472-01PDS** Units: **mg/L** Analysis Date: **22-Aug-2022 20:48**
Client ID: Run ID: **ICPMS07_415559** SeqNo: **6813240** PrepDate: **19-Aug-2022** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	0.899	0.0250	0.5	0.3548	109	80 - 120				
Sodium	811.5	1.00	50	765.6	91.9	80 - 120				O

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: 182618 (0) **Instrument: ICPMS07** **Method: METALS BY ICPMS BY SW6020A**

SD Sample ID: **HS22080472-01SD** Units: **mg/L** Analysis Date: **23-Aug-2022 13:06**
Client ID: Run ID: **ICPMS07_415638** SeqNo: **6815410** PrepDate: **19-Aug-2022** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Aluminum	0.02655	0.0500					0.0141	0	10	J
Antimony	0.00625	0.0250					0.000109	0	10	U
Arsenic	0.00625	0.0250					0.00038	0	10	U
Beryllium	0.00250	0.0100					-0.000003	0	10	U
Cadmium	0.00250	0.0100					0.000007	0	10	U
Calcium	18.12	2.50					18.19	0.434	10	
Chromium	0.00625	0.0250					0.000418	0	10	U
Cobalt	0.00250	0.0250					0.000176	0	10	U
Copper	0.0125	0.0250					0.000772	0	10	U
Iron	0.0911	1.00					0.09066	0	10	J
Lead	0.00625	0.0250					0.000298	0	10	U
Magnesium	18.11	1.00					18.09	0.111	10	
Manganese	0.0752	0.0250					0.07429	1.22	10	
Nickel	0.00625	0.0250					0.000377	0	10	U
Potassium	2.409	1.00					2.681	10.1	10	R
Selenium	0.0125	0.0250					0.000217	0	10	U
Silver	0.00250	0.0250					0.000012	0	10	U
Thallium	0.00250	0.0100					0	0	10	U
Vanadium	0.00625	0.0250					0.000185	0	10	U
Zinc	0.0125	0.0250					0.00497	0	10	U

SD Sample ID: **HS22080472-01SD** Units: **mg/L** Analysis Date: **22-Aug-2022 20:42**
Client ID: Run ID: **ICPMS07_415559** SeqNo: **6813237** PrepDate: **19-Aug-2022** DF: **25**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Barium	0.3432	0.125					0.3548	3.27	10	
Sodium	762.8	5.00					765.6	0.364	10	

The following samples were analyzed in this batch: HS22080522-03 HS22080522-04 HS22080522-06 HS22080522-07 HS22080522-11

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: 182382 (0) **Instrument: SV-6** **Method: SEMIVOLATILES SIM**

MBLK Sample ID: **MBLK-182382** Units: **ug/L** Analysis Date: **23-Aug-2022 11:16**
Client ID: Run ID: **SV-6_415764** SeqNo: **6817428** PrepDate: **12-Aug-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dioxane	0.010	0.010								U
Surr: 2-Fluorobiphenyl	*0.0349*	*0*	*0.08*	*0*	*43.6*	*40 - 140*				
Surr: 4-Terphenyl-d14	*0.05239*	*0*	*0.08*	*0*	*65.5*	*40 - 140*				
Surr: Nitrobenzene-d5	*0.07908*	*0*	*0.08*	*0*	*98.9*	*40 - 140*				

LCS Sample ID: **LCS-182382** Units: **ug/L** Analysis Date: **23-Aug-2022 11:34**
Client ID: Run ID: **SV-6_415764** SeqNo: **6817429** PrepDate: **12-Aug-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dioxane	0.1057	0.010	0.08	0	132	40 - 140				
Surr: 2-Fluorobiphenyl	*0.03441*	*0*	*0.08*	*0*	*43.0*	*40 - 140*				
Surr: 4-Terphenyl-d14	*0.05302*	*0*	*0.08*	*0*	*66.3*	*40 - 140*				
Surr: Nitrobenzene-d5	*0.07408*	*0*	*0.08*	*0*	*92.6*	*40 - 140*				

LCSD Sample ID: **LCSD-182382** Units: **ug/L** Analysis Date: **23-Aug-2022 11:52**
Client ID: Run ID: **SV-6_415764** SeqNo: **6817430** PrepDate: **12-Aug-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dioxane	0.1071	0.010	0.08	0	134	40 - 140	0.1057	1.31	20	
Surr: 2-Fluorobiphenyl	*0.03726*	*0*	*0.08*	*0*	*46.6*	*40 - 140*	*0.03441*	*7.97*	*20*	
Surr: 4-Terphenyl-d14	*0.05532*	*0*	*0.08*	*0*	*69.2*	*40 - 140*	*0.05302*	*4.26*	*20*	
Surr: Nitrobenzene-d5	*0.07327*	*0*	*0.08*	*0*	*91.6*	*40 - 140*	*0.07408*	*1.1*	*20*	

The following samples were analyzed in this batch:

HS22080522-01	HS22080522-02	HS22080522-03	HS22080522-04
HS22080522-08	HS22080522-09	HS22080522-10	

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: R414932 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-220811** Units: **ug/L** Analysis Date: **11-Aug-2022 12:34**
Client ID: Run ID: **VOA6_414932** SeqNo: **6799017** PrepDate: DF: **1**

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: R414932 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-220811** Units: **ug/L** Analysis Date: **11-Aug-2022 12:34**
Client ID: Run ID: **VOA6_414932** SeqNo: **6799017** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Carbon disulfide	2.0	2.0								U
Carbon tetrachloride	1.0	1.0								U
Chlorobenzene	1.0	1.0								U
Chloroethane	1.0	1.0								U
Chloroform	0.50	1.0								U
Chloromethane	0.50	1.0								U
cis-1,2-Dichloroethene	0.50	1.0								U
cis-1,3-Dichloropropene	0.50	1.0								U
Dibromochloromethane	1.0	1.0								U
Dibromomethane	0.50	1.0								U
Dichlorodifluoromethane	1.0	1.0								U
Ethylbenzene	1.0	1.0								U
Hexachlorobutadiene	1.0	1.0								U
Isopropylbenzene	1.0	1.0								U
m,p-Xylene	1.0	2.0								U
Methylene chloride	2.0	2.0								U
Naphthalene	1.0	1.0								U
n-Butylbenzene	1.0	1.0								U
n-Propylbenzene	1.0	1.0								U
o-Xylene	1.0	1.0								U
sec-Butylbenzene	1.0	1.0								U
Styrene	1.0	1.0								U
tert-Butylbenzene	1.0	1.0								U
Tetrachloroethene	1.0	1.0								U
Toluene	0.50	1.0								U
trans-1,2-Dichloroethene	0.50	1.0								U
trans-1,3-Dichloropropene	0.50	1.0								U
Trichloroethene	0.50	1.0								U
Trichlorofluoromethane	1.0	1.0								U
Vinyl chloride	0.50	1.0								U
Surr: 1,2-Dichloroethane-d4	*47.5*	*1.0*	*50*	*0*	*95.0*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*48.89*	*1.0*	*50*	*0*	*97.8*	*85 - 114*				
Surr: Dibromofluoromethane	*47.55*	*1.0*	*50*	*0*	*95.1*	*80 - 119*				
Surr: Toluene-d8	*53.99*	*1.0*	*50*	*0*	*108*	*89 - 112*				

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: R414932 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

LCS Sample ID: **VLCSW-220811** Units: **ug/L** Analysis Date: **11-Aug-2022 11:52**
Client ID: Run ID: **VOA6_414932** SeqNo: **6799016** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	20.58	1.0	20	0	103	78 - 124				
1,1,1-Trichloroethane	21.31	1.0	20	0	107	74 - 131				
1,1,2,2-Tetrachloroethane	20.08	1.0	20	0	100	71 - 121				
1,1,2-Trichloroethane	19.97	1.0	20	0	99.8	80 - 119				
1,1-Dichloroethane	20.47	1.0	20	0	102	77 - 125				
1,1-Dichloroethene	19.49	1.0	20	0	97.4	71 - 131				
1,1-Dichloropropene	21.3	1.0	20	0	107	78 - 125				
1,2,3-Trichlorobenzene	21.2	1.0	20	0	106	69 - 129				
1,2,3-Trichloropropane	20.03	1.0	20	0	100	73 - 122				
1,2,4-Trichlorobenzene	22.11	1.0	20	0	111	69 - 130				
1,2,4-Trimethylbenzene	21.72	1.0	20	0	109	76 - 124				
1,2-Dibromo-3-chloropropane	21.31	1.0	20	0	107	62 - 128				
1,2-Dibromoethane	20.37	1.0	20	0	102	77 - 121				
1,2-Dichlorobenzene	20.8	1.0	20	0	104	80 - 119				
1,2-Dichloroethane	20.98	1.0	20	0	105	73 - 128				
1,2-Dichloropropane	20.51	1.0	20	0	103	78 - 122				
1,3,5-Trimethylbenzene	21.77	1.0	20	0	109	75 - 124				
1,3-Dichlorobenzene	20.93	1.0	20	0	105	80 - 119				
1,3-Dichloropropane	20.46	1.0	20	0	102	80 - 119				
1,4-Dichlorobenzene	20.94	1.0	20	0	105	79 - 118				
2,2-Dichloropropane	22.26	1.0	20	0	111	60 - 139				
2-Butanone	36.34	2.0	40	0	90.8	56 - 143				
2-Chlorotoluene	20.95	1.0	20	0	105	79 - 122				
2-Hexanone	39.82	2.0	40	0	99.6	57 - 139				
4-Chlorotoluene	21.47	1.0	20	0	107	78 - 122				
4-Isopropyltoluene	22.44	1.0	20	0	112	77 - 127				
4-Methyl-2-pentanone	42.03	2.0	40	0	105	67 - 130				
Acetone	38.3	2.0	40	0	95.7	39 - 160				
Benzene	20.56	1.0	20	0	103	79 - 120				
Bromobenzene	21.44	1.0	20	0	107	80 - 120				
Bromochloromethane	20.05	1.0	20	0	100	78 - 123				
Bromodichloromethane	21.05	1.0	20	0	105	79 - 125				
Bromoform	19.03	1.0	20	0	95.2	66 - 130				
Bromomethane	21.11	1.0	20	0	106	53 - 141				

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: R414932 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

LCS Sample ID: **VLCSW-220811** Units: **ug/L** Analysis Date: **11-Aug-2022 11:52**
Client ID: Run ID: **VOA6_414932** SeqNo: **6799016** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Carbon disulfide	40.84	2.0	40	0	102	64 - 133				
Carbon tetrachloride	20.46	1.0	20	0	102	72 - 136				
Chlorobenzene	20.93	1.0	20	0	105	82 - 118				
Chloroethane	20.4	1.0	20	0	102	60 - 138				
Chloroform	20.95	1.0	20	0	105	79 - 124				
Chloromethane	22.49	1.0	20	0	112	50 - 139				
cis-1,2-Dichloroethene	21.76	1.0	20	0	109	78 - 123				
cis-1,3-Dichloropropene	21.05	1.0	20	0	105	75 - 124				
Dibromochloromethane	20.28	1.0	20	0	101	74 - 126				
Dibromomethane	20.6	1.0	20	0	103	79 - 123				
Dichlorodifluoromethane	22.75	1.0	20	0	114	32 - 152				
Ethylbenzene	21.33	1.0	20	0	107	79 - 121				
Hexachlorobutadiene	21.49	1.0	20	0	107	66 - 134				
Isopropylbenzene	21.27	1.0	20	0	106	72 - 131				
m,p-Xylene	42.51	2.0	40	0	106	80 - 121				
Methylene chloride	21.82	2.0	20	0	109	74 - 124				
Naphthalene	21.26	1.0	20	0	106	61 - 128				
n-Butylbenzene	23.03	1.0	20	0	115	75 - 128				
n-Propylbenzene	22.39	1.0	20	0	112	76 - 126				
o-Xylene	20.86	1.0	20	0	104	78 - 122				
sec-Butylbenzene	22.25	1.0	20	0	111	77 - 126				
Styrene	20.83	1.0	20	0	104	78 - 123				
tert-Butylbenzene	21.71	1.0	20	0	109	78 - 124				
Tetrachloroethene	20.49	1.0	20	0	102	74 - 129				
Toluene	20.73	1.0	20	0	104	80 - 121				
trans-1,2-Dichloroethene	21.23	1.0	20	0	106	75 - 124				
trans-1,3-Dichloropropene	20.82	1.0	20	0	104	73 - 127				
Trichloroethene	20.76	1.0	20	0	104	79 - 123				
Trichlorofluoromethane	20.38	1.0	20	0	102	65 - 141				
Vinyl chloride	19.58	1.0	20	0	97.9	58 - 137				
Surr: 1,2-Dichloroethane-d4	*54.09*	*1.0*	*50*	*0*	*108*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*52.04*	*1.0*	*50*	*0*	*104*	*85 - 114*				
Surr: Dibromofluoromethane	*54.58*	*1.0*	*50*	*0*	*109*	*80 - 119*				
Surr: Toluene-d8	*51.63*	*1.0*	*50*	*0*	*103*	*89 - 112*				

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: R414932 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS22080522-05MS** Units: **ug/L** Analysis Date: **11-Aug-2022 15:01**
Client ID: **MW23_080822** Run ID: **VOA6_414932** SeqNo: **6799024** PrepDate: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	1104	50	1000	0	110	78 - 124				
1,1,1-Trichloroethane	1105	50	1000	0	110	74 - 131				
1,1,2,2-Tetrachloroethane	1025	50	1000	0	103	71 - 121				
1,1,2-Trichloroethane	1044	50	1000	0	104	80 - 119				
1,1-Dichloroethane	1050	50	1000	0	105	77 - 125				
1,1-Dichloroethene	1044	50	1000	0	104	71 - 131				
1,1-Dichloropropene	1140	50	1000	0	114	78 - 125				
1,2,3-Trichlorobenzene	872.2	50	1000	0	87.2	69 - 129				
1,2,3-Trichloropropane	1037	50	1000	0	104	73 - 122				
1,2,4-Trichlorobenzene	993.3	50	1000	0	99.3	69 - 130				
1,2,4-Trimethylbenzene	1163	50	1000	0	116	76 - 124				
1,2-Dibromo-3-chloropropane	932.3	50	1000	0	93.2	62 - 128				
1,2-Dibromoethane	1058	50	1000	0	106	77 - 121				
1,2-Dichlorobenzene	1090	50	1000	0	109	80 - 119				
1,2-Dichloroethane	1121	50	1000	68.64	105	73 - 128				
1,2-Dichloropropane	1044	50	1000	0	104	78 - 122				
1,3,5-Trimethylbenzene	1185	50	1000	0	118	75 - 124				
1,3-Dichlorobenzene	1104	50	1000	0	110	80 - 119				
1,3-Dichloropropane	1066	50	1000	0	107	80 - 119				
1,4-Dichlorobenzene	1096	50	1000	0	110	79 - 118				
2,2-Dichloropropane	1108	50	1000	0	111	60 - 139				
2-Butanone	1671	100	2000	0	83.5	56 - 143				
2-Chlorotoluene	1127	50	1000	0	113	79 - 122				
2-Hexanone	1983	100	2000	0	99.2	57 - 139				
4-Chlorotoluene	1153	50	1000	0	115	78 - 122				
4-Isopropyltoluene	1220	50	1000	0	122	77 - 127				
4-Methyl-2-pentanone	2101	100	2000	0	105	67 - 130				
Acetone	1551	100	2000	0	77.5	39 - 160				
Benzene	1069	50	1000	0	107	79 - 120				
Bromobenzene	1102	50	1000	0	110	80 - 120				
Bromochloromethane	964.7	50	1000	0	96.5	78 - 123				
Bromodichloromethane	1046	50	1000	0	105	79 - 125				
Bromoform	1002	50	1000	0	100	66 - 130				
Bromomethane	1061	50	1000	0	106	53 - 141				

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: R414932 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS22080522-05MS** Units: **ug/L** Analysis Date: **11-Aug-2022 15:01**
Client ID: **MW23_080822** Run ID: **VOA6_414932** SeqNo: **6799024** PrepDate: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Carbon disulfide	2195	100	2000	0	110	64 - 133				
Carbon tetrachloride	1113	50	1000	0	111	72 - 136				
Chlorobenzene	1131	50	1000	0	113	82 - 118				
Chloroethane	974.7	50	1000	0	97.5	60 - 138				
Chloroform	1048	50	1000	0	105	79 - 124				
Chloromethane	1121	50	1000	0	112	50 - 139				
cis-1,2-Dichloroethene	1118	50	1000	150.7	96.7	78 - 123				
cis-1,3-Dichloropropene	1048	50	1000	0	105	75 - 124				
Dibromochloromethane	1054	50	1000	0	105	74 - 126				
Dibromomethane	1014	50	1000	0	101	79 - 123				
Dichlorodifluoromethane	1009	50	1000	0	101	32 - 152				
Ethylbenzene	1152	50	1000	0	115	79 - 121				
Hexachlorobutadiene	1158	50	1000	0	116	66 - 134				
Isopropylbenzene	1192	50	1000	0	119	72 - 131				
m,p-Xylene	2337	100	2000	0	117	80 - 121				
Methylene chloride	1020	100	1000	0	102	74 - 124				
Naphthalene	808.4	50	1000	0	80.8	61 - 128				
n-Butylbenzene	1259	50	1000	0	126	75 - 128				
n-Propylbenzene	1243	50	1000	0	124	76 - 126				
o-Xylene	1120	50	1000	0	112	78 - 122				
sec-Butylbenzene	1240	50	1000	0	124	77 - 126				
Styrene	1117	50	1000	0	112	78 - 123				
tert-Butylbenzene	1208	50	1000	0	121	78 - 124				
Tetrachloroethene	1170	50	1000	0	117	74 - 129				
Toluene	1132	50	1000	0	113	80 - 121				
trans-1,2-Dichloroethene	1070	50	1000	0	107	75 - 124				
trans-1,3-Dichloropropene	1042	50	1000	0	104	73 - 127				
Trichloroethene	3694	50	1000	2615	108	79 - 123				
Trichlorofluoromethane	1085	50	1000	0	109	65 - 141				
Vinyl chloride	969.7	50	1000	0	97.0	58 - 137				
Surr: 1,2-Dichloroethane-d4	*2455*	*50*	*2500*	*0*	*98.2*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*2513*	*50*	*2500*	*0*	*101*	*85 - 114*				
Surr: Dibromofluoromethane	*2423*	*50*	*2500*	*0*	*96.9*	*80 - 119*				
Surr: Toluene-d8	*2659*	*50*	*2500*	*0*	*106*	*89 - 112*				

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: R414932 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS22080522-05MSD** Units: **ug/L** Analysis Date: **11-Aug-2022 15:22**
Client ID: **MW23_080822** Run ID: **VOA6_414932** SeqNo: **6799025** PrepDate: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	1088	50	1000	0	109	78 - 124	1104	1.48	20	
1,1,1-Trichloroethane	1060	50	1000	0	106	74 - 131	1105	4.17	20	
1,1,2,2-Tetrachloroethane	1108	50	1000	0	111	71 - 121	1025	7.75	20	
1,1,2-Trichloroethane	1056	50	1000	0	106	80 - 119	1044	1.13	20	
1,1-Dichloroethane	1017	50	1000	0	102	77 - 125	1050	3.22	20	
1,1-Dichloroethene	961.8	50	1000	0	96.2	71 - 131	1044	8.19	20	
1,1-Dichloropropene	1093	50	1000	0	109	78 - 125	1140	4.17	20	
1,2,3-Trichlorobenzene	1131	50	1000	0	113	69 - 129	872.2	25.8	20	R
1,2,3-Trichloropropane	1109	50	1000	0	111	73 - 122	1037	6.64	20	
1,2,4-Trichlorobenzene	1144	50	1000	0	114	69 - 130	993.3	14.1	20	
1,2,4-Trimethylbenzene	1212	50	1000	0	121	76 - 124	1163	4.13	20	
1,2-Dibromo-3-chloropropane	1145	50	1000	0	115	62 - 128	932.3	20.5	20	R
1,2-Dibromoethane	1065	50	1000	0	107	77 - 121	1058	0.705	20	
1,2-Dichlorobenzene	1161	50	1000	0	116	80 - 119	1090	6.31	20	
1,2-Dichloroethane	1116	50	1000	68.64	105	73 - 128	1121	0.404	20	
1,2-Dichloropropane	1004	50	1000	0	100	78 - 122	1044	3.89	20	
1,3,5-Trimethylbenzene	1223	50	1000	0	122	75 - 124	1185	3.16	20	
1,3-Dichlorobenzene	1187	50	1000	0	119	80 - 119	1104	7.18	20	
1,3-Dichloropropane	1058	50	1000	0	106	80 - 119	1066	0.711	20	
1,4-Dichlorobenzene	1164	50	1000	0	116	79 - 118	1096	6.08	20	
2,2-Dichloropropane	1034	50	1000	0	103	60 - 139	1108	6.85	20	
2-Butanone	1743	100	2000	0	87.2	56 - 143	1671	4.23	20	
2-Chlorotoluene	1170	50	1000	0	117	79 - 122	1127	3.79	20	
2-Hexanone	1992	100	2000	0	99.6	57 - 139	1983	0.442	20	
4-Chlorotoluene	1196	50	1000	0	120	78 - 122	1153	3.68	20	
4-Isopropyltoluene	1281	50	1000	0	128	77 - 127	1220	4.89	20	S
4-Methyl-2-pentanone	2161	100	2000	0	108	67 - 130	2101	2.78	20	
Acetone	1514	100	2000	0	75.7	39 - 160	1551	2.41	20	
Benzene	1035	50	1000	0	103	79 - 120	1069	3.31	20	
Bromobenzene	1167	50	1000	0	117	80 - 120	1102	5.74	20	
Bromochloromethane	938.9	50	1000	0	93.9	78 - 123	964.7	2.71	20	
Bromodichloromethane	1038	50	1000	0	104	79 - 125	1046	0.694	20	
Bromoform	999.8	50	1000	0	100.0	66 - 130	1002	0.171	20	
Bromomethane	949.8	50	1000	0	95.0	53 - 141	1061	11	20	

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: R414932 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS22080522-05MSD** Units: **ug/L** Analysis Date: **11-Aug-2022 15:22**
Client ID: **MW23_080822** Run ID: **VOA6_414932** SeqNo: **6799025** PrepDate: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Carbon disulfide	2048	100	2000	0	102	64 - 133	2195	6.94	20	
Carbon tetrachloride	1073	50	1000	0	107	72 - 136	1113	3.69	20	
Chlorobenzene	1111	50	1000	0	111	82 - 118	1131	1.74	20	
Chloroethane	941.8	50	1000	0	94.2	60 - 138	974.7	3.43	20	
Chloroform	1007	50	1000	0	101	79 - 124	1048	4.05	20	
Chloromethane	1016	50	1000	0	102	50 - 139	1121	9.81	20	
cis-1,2-Dichloroethene	1061	50	1000	150.7	91.0	78 - 123	1118	5.24	20	
cis-1,3-Dichloropropene	1034	50	1000	0	103	75 - 124	1048	1.34	20	
Dibromochloromethane	1067	50	1000	0	107	74 - 126	1054	1.2	20	
Dibromomethane	1013	50	1000	0	101	79 - 123	1014	0.106	20	
Dichlorodifluoromethane	954.4	50	1000	0	95.4	32 - 152	1009	5.59	20	
Ethylbenzene	1138	50	1000	0	114	79 - 121	1152	1.24	20	
Hexachlorobutadiene	1236	50	1000	0	124	66 - 134	1158	6.53	20	
Isopropylbenzene	1171	50	1000	0	117	72 - 131	1192	1.8	20	
m,p-Xylene	2288	100	2000	0	114	80 - 121	2337	2.08	20	
Methylene chloride	980.4	100	1000	0	98.0	74 - 124	1020	3.92	20	
Naphthalene	1050	50	1000	0	105	61 - 128	808.4	26	20	R
n-Butylbenzene	1303	50	1000	0	130	75 - 128	1259	3.42	20	S
n-Propylbenzene	1273	50	1000	0	127	76 - 126	1243	2.4	20	S
o-Xylene	1115	50	1000	0	111	78 - 122	1120	0.448	20	
sec-Butylbenzene	1277	50	1000	0	128	77 - 126	1240	2.92	20	S
Styrene	1111	50	1000	0	111	78 - 123	1117	0.488	20	
tert-Butylbenzene	1249	50	1000	0	125	78 - 124	1208	3.29	20	S
Tetrachloroethene	1137	50	1000	0	114	74 - 129	1170	2.86	20	
Toluene	1114	50	1000	0	111	80 - 121	1132	1.59	20	
trans-1,2-Dichloroethene	1007	50	1000	0	101	75 - 124	1070	6.09	20	
trans-1,3-Dichloropropene	1027	50	1000	0	103	73 - 127	1042	1.44	20	
Trichloroethene	3509	50	1000	2615	89.4	79 - 123	3694	5.13	20	
Trichlorofluoromethane	1017	50	1000	0	102	65 - 141	1085	6.53	20	
Vinyl chloride	915.2	50	1000	0	91.5	58 - 137	969.7	5.78	20	
Surr: 1,2-Dichloroethane-d4	*2368*	*50*	*2500*	*0*	*94.7*	*81 - 118*	*2455*	*3.59*	*20*	
Surr: 4-Bromofluorobenzene	*2494*	*50*	*2500*	*0*	*99.8*	*85 - 114*	*2513*	*0.74*	*20*	
Surr: Dibromofluoromethane	*2387*	*50*	*2500*	*0*	*95.5*	*80 - 119*	*2423*	*1.49*	*20*	
Surr: Toluene-d8	*2693*	*50*	*2500*	*0*	*108*	*89 - 112*	*2659*	*1.29*	*20*	

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: R414932 (0)	Instrument: VOA6	Method: VOLATILES ORGANICS BY METHOD 8260C

The following samples were analyzed in this batch:

HS22080522-01	HS22080522-02	HS22080522-03	HS22080522-05
HS22080522-06	HS22080522-07	HS22080522-08	HS22080522-09
HS22080522-10	HS22080522-11	HS22080522-12	

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: R414991 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-220812** Units: **ug/L** Analysis Date: **12-Aug-2022 12:27**
Client ID: Run ID: **VOA6_414991** SeqNo: **6800130** PrepDate: DF: **1**

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

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: R414991 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-220812** Units: **ug/L** Analysis Date: **12-Aug-2022 12:27**
Client ID: Run ID: **VOA6_414991** SeqNo: **6800130** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Carbon disulfide	2.0	2.0								U
Carbon tetrachloride	1.0	1.0								U
Chlorobenzene	1.0	1.0								U
Chloroethane	1.0	1.0								U
Chloroform	0.50	1.0								U
Chloromethane	0.50	1.0								U
cis-1,2-Dichloroethene	0.50	1.0								U
cis-1,3-Dichloropropene	0.50	1.0								U
Dibromochloromethane	1.0	1.0								U
Dibromomethane	0.50	1.0								U
Dichlorodifluoromethane	1.0	1.0								U
Ethylbenzene	1.0	1.0								U
Hexachlorobutadiene	1.0	1.0								U
Isopropylbenzene	1.0	1.0								U
m,p-Xylene	1.0	2.0								U
Methylene chloride	2.0	2.0								U
Naphthalene	1.0	1.0								U
n-Butylbenzene	1.0	1.0								U
n-Propylbenzene	1.0	1.0								U
o-Xylene	1.0	1.0								U
sec-Butylbenzene	1.0	1.0								U
Styrene	1.0	1.0								U
tert-Butylbenzene	1.0	1.0								U
Tetrachloroethene	1.0	1.0								U
Toluene	0.50	1.0								U
trans-1,2-Dichloroethene	0.50	1.0								U
trans-1,3-Dichloropropene	0.50	1.0								U
Trichloroethene	0.50	1.0								U
Trichlorofluoromethane	1.0	1.0								U
Vinyl chloride	0.50	1.0								U
Surr: 1,2-Dichloroethane-d4	*47.69*	*1.0*	*50*	*0*	*95.4*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*48.68*	*1.0*	*50*	*0*	*97.4*	*85 - 114*				
Surr: Dibromofluoromethane	*47.85*	*1.0*	*50*	*0*	*95.7*	*80 - 119*				
Surr: Toluene-d8	*53.92*	*1.0*	*50*	*0*	*108*	*89 - 112*				

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: R414991 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

LCS Sample ID: **VLCSW-220812** Units: **ug/L** Analysis Date: **12-Aug-2022 11:45**
Client ID: Run ID: **VOA6_414991** SeqNo: **6800129** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	19.54	1.0	20	0	97.7	78 - 124				
1,1,1-Trichloroethane	18.91	1.0	20	0	94.6	74 - 131				
1,1,2,2-Tetrachloroethane	19.94	1.0	20	0	99.7	71 - 121				
1,1,2-Trichloroethane	18.94	1.0	20	0	94.7	80 - 119				
1,1-Dichloroethane	19.35	1.0	20	0	96.7	77 - 125				
1,1-Dichloroethene	16.83	1.0	20	0	84.1	71 - 131				
1,1-Dichloropropene	18.86	1.0	20	0	94.3	78 - 125				
1,2,3-Trichlorobenzene	20.45	1.0	20	0	102	69 - 129				
1,2,3-Trichloropropane	19.01	1.0	20	0	95.0	73 - 122				
1,2,4-Trichlorobenzene	20.1	1.0	20	0	101	69 - 130				
1,2,4-Trimethylbenzene	19.47	1.0	20	0	97.4	76 - 124				
1,2-Dibromo-3-chloropropane	19.04	1.0	20	0	95.2	62 - 128				
1,2-Dibromoethane	19.41	1.0	20	0	97.1	77 - 121				
1,2-Dichlorobenzene	19.34	1.0	20	0	96.7	80 - 119				
1,2-Dichloroethane	19.32	1.0	20	0	96.6	73 - 128				
1,2-Dichloropropane	18.72	1.0	20	0	93.6	78 - 122				
1,3,5-Trimethylbenzene	19.26	1.0	20	0	96.3	75 - 124				
1,3-Dichlorobenzene	19.34	1.0	20	0	96.7	80 - 119				
1,3-Dichloropropane	19.25	1.0	20	0	96.3	80 - 119				
1,4-Dichlorobenzene	19.08	1.0	20	0	95.4	79 - 118				
2,2-Dichloropropane	19.55	1.0	20	0	97.7	60 - 139				
2-Butanone	34.79	2.0	40	0	87.0	56 - 143				
2-Chlorotoluene	18.98	1.0	20	0	94.9	79 - 122				
2-Hexanone	39.73	2.0	40	0	99.3	57 - 139				
4-Chlorotoluene	19.55	1.0	20	0	97.8	78 - 122				
4-Isopropyltoluene	19.27	1.0	20	0	96.4	77 - 127				
4-Methyl-2-pentanone	40.38	2.0	40	0	101	67 - 130				
Acetone	36.87	2.0	40	0	92.2	39 - 160				
Benzene	18.73	1.0	20	0	93.6	79 - 120				
Bromobenzene	19.72	1.0	20	0	98.6	80 - 120				
Bromochloromethane	18.53	1.0	20	0	92.7	78 - 123				
Bromodichloromethane	19.66	1.0	20	0	98.3	79 - 125				
Bromoform	18.61	1.0	20	0	93.0	66 - 130				
Bromomethane	19.41	1.0	20	0	97.0	53 - 141				

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: R414991 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

LCS Sample ID: **VLCSW-220812** Units: **ug/L** Analysis Date: **12-Aug-2022 11:45**
Client ID: Run ID: **VOA6_414991** SeqNo: **6800129** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Carbon disulfide	35.99	2.0	40	0	90.0	64 - 133				
Carbon tetrachloride	17.34	1.0	20	0	86.7	72 - 136				
Chlorobenzene	19.24	1.0	20	0	96.2	82 - 118				
Chloroethane	18.16	1.0	20	0	90.8	60 - 138				
Chloroform	19.39	1.0	20	0	97.0	79 - 124				
Chloromethane	20.39	1.0	20	0	102	50 - 139				
cis-1,2-Dichloroethene	19.6	1.0	20	0	98.0	78 - 123				
cis-1,3-Dichloropropene	19.69	1.0	20	0	98.4	75 - 124				
Dibromochloromethane	19.15	1.0	20	0	95.8	74 - 126				
Dibromomethane	19.48	1.0	20	0	97.4	79 - 123				
Dichlorodifluoromethane	18.95	1.0	20	0	94.7	32 - 152				
Ethylbenzene	19.12	1.0	20	0	95.6	79 - 121				
Hexachlorobutadiene	19.68	1.0	20	0	98.4	66 - 134				
Isopropylbenzene	18.73	1.0	20	0	93.7	72 - 131				
m,p-Xylene	38.92	2.0	40	0	97.3	80 - 121				
Methylene chloride	20.08	2.0	20	0	100	74 - 124				
Naphthalene	19.74	1.0	20	0	98.7	61 - 128				
n-Butylbenzene	19.73	1.0	20	0	98.6	75 - 128				
n-Propylbenzene	19.42	1.0	20	0	97.1	76 - 126				
o-Xylene	18.98	1.0	20	0	94.9	78 - 122				
sec-Butylbenzene	18.9	1.0	20	0	94.5	77 - 126				
Styrene	19.48	1.0	20	0	97.4	78 - 123				
tert-Butylbenzene	18.72	1.0	20	0	93.6	78 - 124				
Tetrachloroethene	18.06	1.0	20	0	90.3	74 - 129				
Toluene	19	1.0	20	0	95.0	80 - 121				
trans-1,2-Dichloroethene	19.27	1.0	20	0	96.3	75 - 124				
trans-1,3-Dichloropropene	19.84	1.0	20	0	99.2	73 - 127				
Trichloroethene	18.83	1.0	20	0	94.2	79 - 123				
Trichlorofluoromethane	17.31	1.0	20	0	86.5	65 - 141				
Vinyl chloride	17.23	1.0	20	0	86.2	58 - 137				
Surr: 1,2-Dichloroethane-d4	*52.78*	*1.0*	*50*	*0*	*106*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.02*	*1.0*	*50*	*0*	*102*	*85 - 114*				
Surr: Dibromofluoromethane	*53.23*	*1.0*	*50*	*0*	*106*	*80 - 119*				
Surr: Toluene-d8	*51.09*	*1.0*	*50*	*0*	*102*	*89 - 112*				

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: R414991 (0) **Instrument: VOA6** **Method: VOLATILES ORGANICS BY METHOD 8260C**

MS Sample ID: **HS22080490-02MS** Units: **ug/L** Analysis Date: **12-Aug-2022 13:52**
Client ID: Run ID: **VOA6_414991** SeqNo: **6800134** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	20.82	1.0	20	0	104	78 - 124				
1,1,1-Trichloroethane	20.98	1.0	20	0	105	74 - 131				
1,1,2,2-Tetrachloroethane	20.03	1.0	20	0	100	71 - 121				
1,1,2-Trichloroethane	20.19	1.0	20	0	101	80 - 119				
1,1-Dichloroethane	19.81	1.0	20	0	99.0	77 - 125				
1,1-Dichloroethene	18.92	1.0	20	0	94.6	71 - 131				
1,1-Dichloropropene	22.12	1.0	20	0	111	78 - 125				
1,2,3-Trichlorobenzene	16.63	1.0	20	0	83.1	69 - 129				
1,2,3-Trichloropropane	19.43	1.0	20	0	97.2	73 - 122				
1,2,4-Trichlorobenzene	18.27	1.0	20	0	91.3	69 - 130				
1,2,4-Trimethylbenzene	21.49	1.0	20	0	107	76 - 124				
1,2-Dibromo-3-chloropropane	19.43	1.0	20	0	97.1	62 - 128				
1,2-Dibromoethane	20.35	1.0	20	0	102	77 - 121				
1,2-Dichlorobenzene	20.49	1.0	20	0	102	80 - 119				
1,2-Dichloroethane	20.18	1.0	20	0	101	73 - 128				
1,2-Dichloropropane	20.16	1.0	20	0	101	78 - 122				
1,3,5-Trimethylbenzene	21.75	1.0	20	0	109	75 - 124				
1,3-Dichlorobenzene	21.2	1.0	20	0	106	80 - 119				
1,3-Dichloropropane	20.09	1.0	20	0	100	80 - 119				
1,4-Dichlorobenzene	20.25	1.0	20	0	101	79 - 118				
2,2-Dichloropropane	21.22	1.0	20	0	106	60 - 139				
2-Butanone	32.53	2.0	40	0	81.3	56 - 143				
2-Chlorotoluene	21.05	1.0	20	0	105	79 - 122				
2-Hexanone	38.8	2.0	40	0	97.0	57 - 139				
4-Chlorotoluene	21.25	1.0	20	0	106	78 - 122				
4-Isopropyltoluene	21.9	1.0	20	0	110	77 - 127				
4-Methyl-2-pentanone	41.08	2.0	40	0	103	67 - 130				
Acetone	27.65	2.0	40	0	69.1	39 - 160				
Benzene	20.47	1.0	20	0	102	79 - 120				
Bromobenzene	21.31	1.0	20	0	107	80 - 120				
Bromochloromethane	18.58	1.0	20	0	92.9	78 - 123				
Bromodichloromethane	20.45	1.0	20	0	102	79 - 125				
Bromoform	18.93	1.0	20	0	94.7	66 - 130				
Bromomethane	18.08	1.0	20	0	90.4	53 - 141				

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: R414991 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS22080490-02MS** Units: **ug/L** Analysis Date: **12-Aug-2022 13:52**
Client ID: Run ID: **VOA6_414991** SeqNo: **6800134** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Carbon disulfide	41.3	2.0	40	0	103	64 - 133				
Carbon tetrachloride	21.41	1.0	20	0	107	72 - 136				
Chlorobenzene	21.29	1.0	20	0	106	82 - 118				
Chloroethane	18.74	1.0	20	0	93.7	60 - 138				
Chloroform	19.82	1.0	20	0	99.1	79 - 124				
Chloromethane	22.41	1.0	20	0	112	50 - 139				
cis-1,2-Dichloroethene	20.05	1.0	20	0	100	78 - 123				
cis-1,3-Dichloropropene	20.13	1.0	20	0	101	75 - 124				
Dibromochloromethane	20.14	1.0	20	0	101	74 - 126				
Dibromomethane	19.83	1.0	20	0	99.2	79 - 123				
Dichlorodifluoromethane	18.2	1.0	20	0	91.0	32 - 152				
Ethylbenzene	21.46	1.0	20	0	107	79 - 121				
Hexachlorobutadiene	20.92	1.0	20	0	105	66 - 134				
Isopropylbenzene	21.73	1.0	20	0	109	72 - 131				
m,p-Xylene	44	2.0	40	0	110	80 - 121				
Methylene chloride	19.95	2.0	20	0	99.7	74 - 124				
Naphthalene	15.41	1.0	20	0	77.1	61 - 128				
n-Butylbenzene	22.22	1.0	20	0	111	75 - 128				
n-Propylbenzene	22.64	1.0	20	0	113	76 - 126				
o-Xylene	21.07	1.0	20	0	105	78 - 122				
sec-Butylbenzene	22	1.0	20	0	110	77 - 126				
Styrene	21.05	1.0	20	0	105	78 - 123				
tert-Butylbenzene	21.69	1.0	20	0	108	78 - 124				
Tetrachloroethene	21.75	1.0	20	0	109	74 - 129				
Toluene	21.26	1.0	20	0	106	80 - 121				
trans-1,2-Dichloroethene	19.98	1.0	20	0	99.9	75 - 124				
trans-1,3-Dichloropropene	20.15	1.0	20	0	101	73 - 127				
Trichloroethene	27.37	1.0	20	6.554	104	79 - 123				
Trichlorofluoromethane	19.99	1.0	20	0	99.9	65 - 141				
Vinyl chloride	18.67	1.0	20	0	93.3	58 - 137				
Surr: 1,2-Dichloroethane-d4	*47.76*	*1.0*	*50*	*0*	*95.5*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.04*	*1.0*	*50*	*0*	*100*	*85 - 114*				
Surr: Dibromofluoromethane	*48.05*	*1.0*	*50*	*0*	*96.1*	*80 - 119*				
Surr: Toluene-d8	*52.53*	*1.0*	*50*	*0*	*105*	*89 - 112*				

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: R414991 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS22080490-02MSD** Units: **ug/L** Analysis Date: **12-Aug-2022 14:13**
Client ID: Run ID: **VOA6_414991** SeqNo: **6800135** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	20.17	1.0	20	0	101	78 - 124	20.82	3.2	20	
1,1,1-Trichloroethane	20.05	1.0	20	0	100	74 - 131	20.98	4.56	20	
1,1,2,2-Tetrachloroethane	19.91	1.0	20	0	99.5	71 - 121	20.03	0.625	20	
1,1,2-Trichloroethane	19.88	1.0	20	0	99.4	80 - 119	20.19	1.53	20	
1,1-Dichloroethane	18.88	1.0	20	0	94.4	77 - 125	19.81	4.8	20	
1,1-Dichloroethene	18.11	1.0	20	0	90.6	71 - 131	18.92	4.36	20	
1,1-Dichloropropene	20.85	1.0	20	0	104	78 - 125	22.12	5.9	20	
1,2,3-Trichlorobenzene	20.64	1.0	20	0	103	69 - 129	16.63	21.5	20	R
1,2,3-Trichloropropane	19.91	1.0	20	0	99.6	73 - 122	19.43	2.44	20	
1,2,4-Trichlorobenzene	20.27	1.0	20	0	101	69 - 130	18.27	10.4	20	
1,2,4-Trimethylbenzene	21.26	1.0	20	0	106	76 - 124	21.49	1.08	20	
1,2-Dibromo-3-chloropropane	19.44	1.0	20	0	97.2	62 - 128	19.43	0.0875	20	
1,2-Dibromoethane	20.16	1.0	20	0	101	77 - 121	20.35	0.918	20	
1,2-Dichlorobenzene	20.82	1.0	20	0	104	80 - 119	20.49	1.58	20	
1,2-Dichloroethane	19.85	1.0	20	0	99.3	73 - 128	20.18	1.64	20	
1,2-Dichloropropane	19.62	1.0	20	0	98.1	78 - 122	20.16	2.7	20	
1,3,5-Trimethylbenzene	21.5	1.0	20	0	107	75 - 124	21.75	1.19	20	
1,3-Dichlorobenzene	20.74	1.0	20	0	104	80 - 119	21.2	2.17	20	
1,3-Dichloropropane	20.11	1.0	20	0	101	80 - 119	20.09	0.0684	20	
1,4-Dichlorobenzene	20.78	1.0	20	0	104	79 - 118	20.25	2.59	20	
2,2-Dichloropropane	20.32	1.0	20	0	102	60 - 139	21.22	4.34	20	
2-Butanone	32.42	2.0	40	0	81.0	56 - 143	32.53	0.354	20	
2-Chlorotoluene	20.61	1.0	20	0	103	79 - 122	21.05	2.12	20	
2-Hexanone	39.24	2.0	40	0	98.1	57 - 139	38.8	1.14	20	
4-Chlorotoluene	21.1	1.0	20	0	105	78 - 122	21.25	0.728	20	
4-Isopropyltoluene	21.8	1.0	20	0	109	77 - 127	21.9	0.449	20	
4-Methyl-2-pentanone	38.73	2.0	40	0	96.8	67 - 130	41.08	5.91	20	
Acetone	28.8	2.0	40	0	72.0	39 - 160	27.65	4.1	20	
Benzene	19.65	1.0	20	0	98.2	79 - 120	20.47	4.08	20	
Bromobenzene	20.95	1.0	20	0	105	80 - 120	21.31	1.73	20	
Bromochloromethane	18.17	1.0	20	0	90.9	78 - 123	18.58	2.24	20	
Bromodichloromethane	19.92	1.0	20	0	99.6	79 - 125	20.45	2.59	20	
Bromoform	18.71	1.0	20	0	93.5	66 - 130	18.93	1.19	20	
Bromomethane	17.56	1.0	20	0	87.8	53 - 141	18.08	2.91	20	

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

QC BATCH REPORT

Batch ID: R414991 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS22080490-02MSD** Units: **ug/L** Analysis Date: **12-Aug-2022 14:13**
Client ID: Run ID: **VOA6_414991** SeqNo: **6800135** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Carbon disulfide	40.02	2.0	40	0	100	64 - 133	41.3	3.15	20	
Carbon tetrachloride	20.23	1.0	20	0	101	72 - 136	21.41	5.64	20	
Chlorobenzene	20.36	1.0	20	0	102	82 - 118	21.29	4.5	20	
Chloroethane	18.25	1.0	20	0	91.3	60 - 138	18.74	2.61	20	
Chloroform	19.41	1.0	20	0	97.1	79 - 124	19.82	2.08	20	
Chloromethane	20.96	1.0	20	0	105	50 - 139	22.41	6.69	20	
cis-1,2-Dichloroethene	19.44	1.0	20	0	97.2	78 - 123	20.05	3.09	20	
cis-1,3-Dichloropropene	19.74	1.0	20	0	98.7	75 - 124	20.13	1.96	20	
Dibromochloromethane	19.93	1.0	20	0	99.7	74 - 126	20.14	1.05	20	
Dibromomethane	19.54	1.0	20	0	97.7	79 - 123	19.83	1.5	20	
Dichlorodifluoromethane	17.85	1.0	20	0	89.3	32 - 152	18.2	1.92	20	
Ethylbenzene	20.65	1.0	20	0	103	79 - 121	21.46	3.87	20	
Hexachlorobutadiene	21.4	1.0	20	0	107	66 - 134	20.92	2.29	20	
Isopropylbenzene	20.99	1.0	20	0	105	72 - 131	21.73	3.43	20	
m,p-Xylene	42.34	2.0	40	0	106	80 - 121	44	3.85	20	
Methylene chloride	19.46	2.0	20	0	97.3	74 - 124	19.95	2.45	20	
Naphthalene	18.62	1.0	20	0	93.1	61 - 128	15.41	18.9	20	
n-Butylbenzene	22.3	1.0	20	0	112	75 - 128	22.22	0.377	20	
n-Propylbenzene	22.21	1.0	20	0	111	76 - 126	22.64	1.91	20	
o-Xylene	20.15	1.0	20	0	101	78 - 122	21.07	4.46	20	
sec-Butylbenzene	21.87	1.0	20	0	109	77 - 126	22	0.573	20	
Styrene	20.43	1.0	20	0	102	78 - 123	21.05	3.03	20	
tert-Butylbenzene	21.57	1.0	20	0	108	78 - 124	21.69	0.541	20	
Tetrachloroethene	21.16	1.0	20	0	106	74 - 129	21.75	2.71	20	
Toluene	20.56	1.0	20	0	103	80 - 121	21.26	3.38	20	
trans-1,2-Dichloroethene	19.87	1.0	20	0	99.3	75 - 124	19.98	0.549	20	
trans-1,3-Dichloropropene	19.57	1.0	20	0	97.9	73 - 127	20.15	2.89	20	
Trichloroethene	26.26	1.0	20	6.554	98.5	79 - 123	27.37	4.15	20	
Trichlorofluoromethane	19.48	1.0	20	0	97.4	65 - 141	19.99	2.54	20	
Vinyl chloride	17.78	1.0	20	0	88.9	58 - 137	18.67	4.87	20	
Surr: 1,2-Dichloroethane-d4	*47.66*	*1.0*	*50*	*0*	*95.3*	*81 - 118*	*47.76*	*0.222*	*20*	
Surr: 4-Bromofluorobenzene	*50.93*	*1.0*	*50*	*0*	*102*	*85 - 114*	*50.04*	*1.76*	*20*	
Surr: Dibromofluoromethane	*48.53*	*1.0*	*50*	*0*	*97.1*	*80 - 119*	*48.05*	*0.999*	*20*	
Surr: Toluene-d8	*52.77*	*1.0*	*50*	*0*	*106*	*89 - 112*	*52.53*	*0.47*	*20*	

ALS Houston, US Date: 05-Sep-22

Client:	Bhate Environmental Associates, Inc.
Project:	LHAAP 18 24
WorkOrder:	HS22080522

QC BATCH REPORT

Batch ID:	**R414991 (0)**	**Instrument:**	**VOA6**	**Method:**	**VOLATILES ORGANICS BY METHOD 8260C**

The following samples were analyzed in this batch:	HS22080522-04	HS22080522-08	HS22080522-10

ALS Houston, US Date: 05-Sep-22

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: **HS22080522**

QUALIFIERS, ACRONYMS, UNITS

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

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

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	22-041-0	27-Mar-2023
California	2919 2022-2023	30-Apr-2023
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-36	30-Jun-2023
Illinois	2000322022-9	09-May-2023
Kansas	E-10352; 2022-2023	31-Jul-2023
Kentucky	123043, 2022-2023	30-Apr-2023
Louisiana	03087, 2022-2023	30-Jun-2023
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2022	31-Dec-2022
North Dakota	R-193 2022-2023	30-Apr-2023
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-22-29	30-Apr-2023
Utah	TX026932022-13	31-Jul-2023

ALS Houston, US Date: 05-Sep-22

Sample Receipt Checklist

Work Order ID: HS22080522 **Date/Time Received:** 10-Aug-2022 09:45

Client Name: Bhate Environmental **Received by:** Pablo Marinez

Completed By:	/S/ Nilesh D. Ranchod	10-Aug-2022 16:52	**Reviewed by:**	/S/ Ragen Giga	17-Aug-2022 09:22
	eSignature	Date/Time		eSignature	Date/Time

Matrices: W Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	2 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):	0.3uc/0.8c	IR31
Cooler(s)/Kit(s):	47818	
Date/Time sample(s) sent to storage:	8/10/2022	

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
Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

Page: ____ of ____

Project/Phase No: NWO1312.0150

COC Number(1): ____

LIMS Number: ____

Facility/Base I.D.: LHAAP

Project/Site Name: LHAAP / Site 18/24

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	PERCHLORATE	TOTAL METALS	1, 4 - DIOXANE	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
MW2_080822	08 AUG 2022	0715	-	N		WG	5	X	X		X				
MW2_080822_a	08 AUG 2022	0715	-	FD		WG	5	X	X		X				
18CPTMW01DW_080822	08 AUG 2022	0805	-	N		WG	6	X	X	X	X				
18CPTMW01SW_080822	08 AUG 2022	0850		N		WG	6	X	X	X	X				
MW23_080822	08 AUG 2022	0935		N		WG	4	X	X						
MW23_080822_MS	08 AUG 2022	0935	-	MS		WG	4	X	X						
MW23_080822_MSD	08 AUG 2022	0935	-	SD		WG	4	X	X						
17WW08_080822	08 AUG 2022	1020	-	N		WG	5	X	X	X					
17WW08_080822_a	08 AUG 2022	1020	-	FD		WG	5	X	X	X					
MW8_080822	08 AUG 2022	1105	-	N		WG	5	X	X		X				
18CPTMW23SW_080822	08 AUG 2022	1150	-	N		WG	5	X	X		X				

Sample Analysis Requested (5) | Quality Assurance Samples (6)

HS22080522

Bhate Environmental Associates, Inc.

LHAAP 18 24

COMMENTS:

STANDARD TAT

Custody Transfers Prior to Receipt By Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Scott Beesinger	8/9/22	1300	1. [signature]	8/10/22	0945
2.			2.		0815
3.			3.		IR 3.1 / FA 2.5

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: SONIA WEST 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

bhate ENVIRONMENTAL ASSOCIATES

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: NWO1312.0150

COC Number(1):

LIMS Number:

Facility/Base I.D.: LHAAP

Project/Site Name: LHAAP / Site 18/24

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	PERCHLORATE	TOTAL METALS	1,4 - DIOXANE	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
18CPTmw23_080822	08 AUG 2022	1235	-	N		WG	5	X	X		X				
18WW24_080822	08 AUG 2022	1320	-	N		WG	5	X	X	X					
TRIP BLANK	08 AUG 2022		-	TB		W	2	X							
			-												
			-												
			-												
			-												
			-												
			-												
			-												

Sample Analysis Requested (5) | Quality Assurance Samples (6)

HS22080522
Bhate Environmental Associates, Inc.
LHAAP 18 24

COMMENTS: STANDARD TAT

Custody Transfers Prior to Receipt By Laboratory

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1.	Scott Beesinger	8/9/22	1300	Pauline	8/10/22	9:45
2.						4 °C
3.						IR3: LP10.5

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:

Method of Shipment:

Fed Ex Airbill Number:

Analytical Lab: ALS 10450 Stancliff Rd. Suite 210 Houston, TX 77099 (281) 530-5656

ATTN: SONIA WEST 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 5656
Fax. +1 281 530 5887

47818

CUSTODY SEAL

Date: 8/9/22 Time: 1300

Name: Scott Berger

Company: BHETS

Seal Broken By:

Date: 08/10/22

47818

FedEx
TRK# 0221 5789 1995 2554

WED - 10 AUG AA
PRIORITY OVERNIGHT

AB SGRA 47818

77099
TX-US
IAH

August 24, 2022 Service Request No:E2200781

Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

Laboratory Results for: HS22080522

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory August 10, 2022
For your reference, these analyses have been assigned our service request number **E2200781.**

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.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Corey Grandits
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 HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Environmental

Client:	ALS Environmental	**Service Request No.:**	E2200781
Project:	HS22080522	**Date Received:**	08/10/22
Sample Matrix:	Water		

CASE NARRATIVE

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

Sample Receipt

Eleven samples were received for analysis at ALS Environmental in Houston on 08/10/22.

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:

EQ2200345-02/03: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in addition to a MS/MSD for this extraction batch. The LCS/DLCS recoveries passed.

The batch precision (MS/DMS) measurements were determined on sample E2200781-005 (MW23_080822) in the extraction batch. The MS/MSD samples are outside of control limits with parent sample confirming result of 58400. MS/MSD results flagged with a pound (#) indicate control criteria is not applicable.

Samples flagged with "J" are estimated values with results lower than the MRL.

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:**E2200781
Project: HS22080522

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2200781-001	MW2_080822	8/8/2022	0715
E2200781-002	MW2_080822_a	8/8/2022	0715
E2200781-003	18CPTMW01DW_080822	8/8/2022	0805
E2200781-004	18CPTMW01SW_080822	8/8/2022	0850
E2200781-005	MW23_080822	8/8/2022	0935
E2200781-006	17WW08_080822	8/8/2022	1020
E2200781-007	17WW08_080822_a	8/8/2022	1020
E2200781-008	MW8_080822	8/8/2022	1105
E2200781-009	18CPTMW23SW_080822	8/8/2022	1150
E2200781-010	18CPTMW23SW_080822	8/8/2022	1235
E2200781-011	18WW24_080822	8/8/2022	1320

Service Request Summary

Folder #: **E2200781**
Client Name: ALS Environmental - US
Project Name: HS22080522
Project Number:

Report To: Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-575-2190
Cell Number:
Fax Number: 281-530-5887
E-mail: dane.wacasey@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/10/22
Internal Due Date: 8/24/2022
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS22080522
EDD: No EDD Specified

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
E2200781-001	MW2_080822	Water	08/08/22 0715	**IV**
E2200781-002	MW2_080822_a	Water	08/08/22 0715	**IV**
E2200781-003	18CPTMW01DW_080822	Water	08/08/22 0805	**IV**
E2200781-004	18CPTMW01SW_080822	Water	08/08/22 0850	**IV**
E2200781-005	MW23_080822	Water	08/08/22 0935	**IV**
E2200781-006	17WW08_080822	Water	08/08/22 1020	**IV**
E2200781-007	17WW08_080822_a	Water	08/08/22 1020	**IV**
E2200781-008	MW8_080822	Water	08/08/22 1105	**IV**
E2200781-009	18CPTMW23SW_080822	Water	08/08/22 1150	**IV**
E2200781-010	18CPTMW23SW_080822	Water	08/08/22 1235	**IV**
E2200781-011	18WW24_080822	Water	08/08/22 1320	**IV**

Service Request Summary

Folder #: **E2200781**
Client Name: ALS Environmental - US
Project Name: HS22080522
Project Number:

Report To: Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-575-2190
Cell Number:
Fax Number: 281-530-5887
E-mail: dane.wacasey@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/10/22
Internal Due Date: 8/24/2022
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS22080522
EDD: No EDD Specified

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	Internal standard not within the specified limits. See case narrative.
J	Estimated Value. Concentration found below MRL.
K	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
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.
M1	Matrix interference due to coelution with a non-target compound; results may be biased high.

Data Qualifiers

Lab Standard

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	5/27/2023
Arkansas Department of Environmental Quality	22-041-0	3/27/2023
California Department of Health Services	2919-2023	4/30/2023
Department of Defense	L22-90	3/31/2024
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Hawaii Department of Health	2022	4/30/2023
Illinois Environmental Protection Agency	2000322022-9	5/9/2023
Kansas Department of Health and Environment	E-10352 2022-2023	7/31/2023
Louisiana Department of Environmental Quality	03087-2022	6/30/2023
Louisiana Department of Health and Hospitals	LA028	12/31/2022
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343	6/30/2023
Michigan Depratment of Environmental Quality	9971-2022	4/30/2023
Minnesota Department of Health	2228443	12/31/2022
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2023
Nevada Department of Conservation and Natural Resources	TX026932023-1	7/31/2023
New Hampshire Environmental Laboratory Accreditation Program	209422	4/24/2023
New Jersey Department of Environmental Protection	TX008-2023	6/30/2023
New York Department of Health	11707	3/31/2023
Oklahoma Department of Environmental Quality	2021-080	8/31/2022
Oregon Environmental Laboratory Accreditation Program	TX200002	5/15/2023
Pennsylvania Department of Environmental Protection	68-03441-016	6/30/2023
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	04016-2022	4/30/2023
Texas Commision on Environmental Quality	T104704231-22-29	4/30/2023
United States Department of Agriculture	P330-19-00299	10/10/2022
Washington Department of Health	C819-2022	11/14/2022

Chain of Custody

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
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: Texas **COC ID:** 19355

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	Dane J. Wacasey
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	Dane.Wacasey@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:	HS22080522
TSR:	Houston House Acct

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS22080522-01**	**MW2_080822**	**Water**	**08 Aug 2022 07:15**
	Provide Level II and Level IV reports in separate pdf			24 Aug 2022
2.	**HS22080522-02**	**MW2_080822_a**	**Water**	**08 Aug 2022 07:15**
	Provide Level II and Level IV reports in separate pdf			24 Aug 2022
3.	**HS22080522-03**	**18CPTMW01DW_080822**	**Water**	**08 Aug 2022 08:05**
	Provide Level II and Level IV reports in separate pdf			24 Aug 2022
4.	**HS22080522-04**	**18CPTMW01SW_080822**	**Water**	**08 Aug 2022 08:50**
	Provide Level II and Level IV reports in separate pdf			24 Aug 2022
5.	**HS22080522-05**	**MW23_080822**	**Water**	**08 Aug 2022 09:35**
	Provide Level II and Level IV reports in separate pdf			24 Aug 2022
6.	**HS22080522-06**	**17WW08_080822**	**Water**	**08 Aug 2022 10:20**
	Provide Level II and Level IV reports in separate pdf			24 Aug 2022
7.	**HS22080522-07**	**17WW08_080822_a**	**Water**	**08 Aug 2022 10:20**
	Provide Level II and Level IV reports in separate pdf			24 Aug 2022
8.	**HS22080522-08**	**MW8_080822**	**Water**	**08 Aug 2022 11:05**
	Provide Level II and Level IV reports in separate pdf			24 Aug 2022
9.	**HS22080522-09**	**18CPTMW23SW_080822**	**Water**	**08 Aug 2022 11:50**

RIGHT SOLUTIONS | RIGHT PARTNER

Subcontract Chain of Custody

SAMPLING STATE: **Texas** **COC ID:** **19355**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Provide Level II and Level IV reports in separate pdf			24 Aug 2022
10.	**HS22080522-10**	**18CPTMW23_080822**	**Water**	**08 Aug 2022 12:35**
	Provide Level II and Level IV reports in separate pdf			24 Aug 2022
11.	**HS22080522-11**	**18WW24_080822**	**Water**	**08 Aug 2022 13:20**
	Provide Level II and Level IV reports in separate pdf			24 Aug 2022

Comments: HS22080522-05 MS/MSD

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: [illegible] Date/Time: 8/10/22 1316

Cooler ID(s): Temperature(s):

Cooler Receipt Form

ALS Environmental

Project Chemist CG

Client/Project ALS-H

Thermometer ID IR21

Date/Time Received: 8/10/22 Initials: CG Date/Time Logged in: 8/10/22 Initials CG

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

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

3. Were custody seals on coolers? ○ Yes ☒ No
   Were they intact? ○ Yes ○ No ☒ N/A
   Were they signed and dated? ○ Yes ○ No ☒ N/A
   If yes, how many and where?

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

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

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		8/10/22	1700	CG	4.1°C	☑
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ☒ Yes ○ No
7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ☒ Yes ○ No
8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ☒ Yes ○ No
9. Were appropriate bottles/containers and volumes received for the requested tests? ☒ Yes ○ No
10. Did sample labels and tags agree with custody documents? ☒ Yes ○ No

Notes, Discrepancies, & Resolutions:

Service request Label:

10450 Stancliff Rd., Suite 210
Houston, TX 77099
T: +1 713 266 1599
F: +1 713 266 1599
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 HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 404399 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 8/22/22 11:04

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2200780-001	MW5_080922	.01	6850/ClO4 DOD			Water	10mL	
2	E2200780-002	18CPTMW08DW_080922	.01	6850/ClO4 DOD			Water	10mL	
3	E2200780-003	18CPTMW08SW_080922	.01	6850/ClO4 DOD			Water	10mL	
4	E2200780-004	MW19_080922	.01	6850/ClO4 DOD			Water	10mL	
5	E2200780-005	MW10_080922	.01	6850/ClO4 DOD			Water	10mL	
6	E2200780-006	18WW10_080922	.01	6850/ClO4 DOD			Water	10mL	
7	E2200780-007	MW17_080922	.01	6850/ClO4 DOD			Water	10mL	
8	E2200781-001	MW2_080822	.01	6850/ClO4 DOD			Water	10mL	
9	E2200781-002	MW2_080822_a	.01	6850/ClO4 DOD			Water	10mL	
10	E2200781-003	18CPTMW01DW_080822	.01	6850/ClO4 DOD			Water	10mL	
11	E2200781-004	18CPTMW01SW_080822	.01	6850/ClO4 DOD			Water	10mL	
12	E2200781-005	MW23_080822	.01	6850/ClO4 DOD			Water	10mL	
13	E2200781-006	17WW08_080822	.01	6850/ClO4 DOD			Water	10mL	
14	E2200781-007	17WW08_080822_a	.01	6850/ClO4 DOD			Water	10mL	
15	E2200781-008	MW8_080822	.01	6850/ClO4 DOD			Water	10mL	
16	E2200781-009	18CPTMW23SW_080822	.01	6850/ClO4 DOD			Water	10mL	
17	E2200781-010	18CPTMW23SW_080822	.01	6850/ClO4 DOD			Water	10mL	
18	E2200781-011	18WW24_080822	.01	6850/ClO4 DOD			Water	10mL	
19	EQ2200345-01	MB		6850/ClO4 DOD			Liquid	10mL	
20	EQ2200345-02	LCS		6850/ClO4 DOD			Liquid	10mL	
21	EQ2200345-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
22	EQ2200345-04	MW23_080822 MS	.01	6850/ClO4 DOD			Liquid	10mL	
23	EQ2200345-05	MW23_080822 DMS	.01	6850/ClO4 DOD			Liquid	10mL	
24	R2207269-006	2208030912Y ST-5-985	.01	6850/ClO4			Water	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 222798 Logbook Ref: Perchlorate (1st Source) Expires On: 10/29/2022

EQ2200345-02	1.00µL	EQ2200345-02	1.00µL	EQ2200345-03	1.00µL	EQ2200345-03	1.00µL	EQ2200345-04	1.00µL	EQ2200345-05	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 223118 Logbook Ref: Perchlorate Internal Standard Expires On: 10/31/2022

E2200780-001	100.00µL	E2200780-002	100.00µL	E2200780-003	100.00µL	E2200780-004	100.00µL	E2200780-005	100.00µL	E2200780-006	100.00µL
E2200780-007	100.00µL	E2200781-001	100.00µL	E2200781-002	100.00µL	E2200781-003	100.00µL	E2200781-004	100.00µL	E2200781-005	100.00µL
E2200781-006	100.00µL	E2200781-007	100.00µL	E2200781-008	100.00µL	E2200781-009	100.00µL	E2200781-010	100.00µL	E2200781-011	100.00µL
EQ2200345-01	100.00µL	EQ2200345-01	100.00µL	EQ2200345-02	100.00µL	EQ2200345-02	100.00µL	EQ2200345-03	100.00µL	EQ2200345-03	100.00µL

Preparation Information Benchsheet

Prep Run#: 404399 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 8/22/22 11:04

EQ2200345-04 100.00µL EQ2200345-05 100.00µL R2207269-006 100.00µL

Preparation Materials

Water HPLC Grade	5/12/2022 Water (223056)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 Syringe Filters (224414)
6850 Luer-Lok Syringes	Luer-Lok Syringes (221305)	6850 Pipette Tips 50-1000 uL	6850 Pipette Tips (221929)		

Preparation Steps

Step: Preparation
Started: 8/22/22 11:04
Finished: 8/22/22 11:55
By: GRIVERA
Comments

Comments: _____

Reviewed By: GR Date: 08/22/22

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200781
Project:	HS22080522	**Date Collected:**	8/ 8/22 0715
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	MW2_080822	**Units:**	µg/L
Lab Code:	E2200781-001	**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	8/22/22	8/23/22 13:52	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200781
Project:	HS22080522	**Date Collected:**	8/ 8/22 0715
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	MW2_080822_a	**Units:**	µg/L
Lab Code:	E2200781-002	**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	ND	U	0.100	0.0500	0.0250	1	8/22/22	8/23/22 14:01	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200781
Project:	HS22080522	**Date Collected:**	8/ 8/22 0805
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	18CPTMW01DW_080822	**Units:**	µg/L
Lab Code:	E2200781-003	**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	**0.0383**	J	0.100	0.0500	0.0250	1	8/22/22	8/23/22 14:09	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200781
Project:	HS22080522	**Date Collected:**	8/ 8/22 0850
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	18CPTMW01SW_080822	**Units:**	µg/L
Lab Code:	E2200781-004	**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	**0.0266**	J	0.100	0.0500	0.0250	1	8/22/22	8/23/22 14:45	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200781
Project:	HS22080522	**Date Collected:**	8/ 8/22 0935
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	MW23_080822	**Units:**	µg/L
Lab Code:	E2200781-005	**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	**58400**		500	250	125	5000	8/22/22	8/23/22 19:49	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200781
Project:	HS22080522	**Date Collected:**	8/ 8/22 1020
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	17WW08_080822	**Units:**	µg/L
Lab Code:	E2200781-006	**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	**0.119**		0.100	0.0500	0.0250	1	8/22/22	8/23/22 15:03	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200781
Project:	HS22080522	**Date Collected:**	8/ 8/22 1020
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	17WW08_080822_a	**Units:**	µg/L
Lab Code:	E2200781-007	**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	**0.138**		0.100	0.0500	0.0250	1	8/22/22	8/23/22 15:12	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200781
Project:	HS22080522	**Date Collected:**	8/ 8/22 1105
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	MW8_080822	**Units:**	µg/L
Lab Code:	E2200781-008	**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	**1890**		10.0	5.00	2.50	100	8/22/22	8/23/22 19:58	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200781
Project:	HS22080522	**Date Collected:**	8/ 8/22 1150
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	18CPTMW23SW_080822	**Units:**	µg/L
Lab Code:	E2200781-009	**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	ND	U	0.100	0.0500	0.0250	1	8/22/22	8/23/22 18:47	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200781
Project:	HS22080522	**Date Collected:**	8/ 8/22 1235
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	18CPTMW23SW_080822	**Units:**	µg/L
Lab Code:	E2200781-010	**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	**2.98**		0.100	0.0500	0.0250	1	8/22/22	8/23/22 18:56	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200781
Project:	HS22080522	**Date Collected:**	8/ 8/22 1320
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	18WW24_080822	**Units:**	µg/L
Lab Code:	E2200781-011	**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	**0.0683**	J	0.100	0.0500	0.0250	1	8/22/22	8/23/22 19:05	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200781
Project:	HS22080522	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2200345-01	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	8/22/22	8/23/22 09:50	404399	775090	

Accuracy & Precision

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080522
Sample Matrix: Water

Service Request: E2200781
Date Analyzed: 8/23/22

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: 404399

	Lab Control Sample EQ2200345-02			Duplicate Lab Control Sample EQ2200345-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.102	0.100	102	0.0909	0.100	91	84 - 119	12	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:**	E2200781
Project:	HS22080522	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2200345-02	**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	**0.102**		0.100	0.0500	0.0250	1	8/22/22	8/23/22 09:59	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200781
Project:	HS22080522	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2200345-03	**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	**0.0909**	J	0.100	0.0500	0.0250	1	8/22/22	8/23/22 10:08	404399	775090	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200781
Project:	HS22080522	**Date Collected:**	8/8/22
Sample Matrix:	Water	**Date Received:**	8/10/22
		Date Analyzed:	8/23/22

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

Sample Name:	MW23_080822	**Units:**	µg/L
Lab Code:	E2200781-005	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		MW23_080822MS				MW23_080822DMS					
		Matrix Spike				**Duplicate Matrix Spike**					
		EQ2200345-04				EQ2200345-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	58400	53600	0.100	-4759069#		52800	0.100	-5612412#	84 - 119	2	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:**	E2200781
Project:	HS22080522	**Date Collected:**	8/ 8/22 0935
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	MW23_080822	**Units:**	µg/L
Lab Code:	EQ2200345-04	**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	**53600**	E	0.100	0.0500	0.0250	1	8/22/22	8/23/22 10:17	404399	775090	*

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200781
Project:	HS22080522	**Date Collected:**	8/ 8/22 0935
Sample Matrix:	Water	**Date Received:**	8/10/22
Sample Name:	MW23_080822	**Units:**	µg/L
Lab Code:	EQ2200345-05	**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	**52800**	E	0.100	0.0500	0.0250	1	8/22/22	8/23/22 10:27	404399	775090	*

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

September 02, 2022 **Analytical Report for Service Request No:** K2210064

Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

RE: HS22080522

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory September 01, 2022
For your reference, these analyses have been assigned our service request number **K2210064.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3260. You may also contact me via email at Luke.Rahn@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Luke Rahn
Project Manager

RIGHT SOLUTIONS | RIGHT PARTNER

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

Table of Contents

Acronyms
Qualifiers
State Certifications, Accreditations, And Licenses
Case Narrative
Chain of Custody
Metals
Raw Data
    Metals

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
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.
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.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

1317 South 13th Ave, Kelso, WA 98626 | 1-360-577-7222 | www.alsglobal.com

Client: ALS Environmental - US
Project: HS22080522
Sample Matrix: Water

Service Request: K2210064
Date Received: 09/01/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Five water samples were received for analysis at ALS Environmental on 09/01/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by _____ Date 09/02/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

K2260064

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: **Texas** **COC ID:** **19667**

SUBCONTRACT TO:

ALS Environmental Kelso
1317 S. 13th Avenue
Kelso, WA 98626

Phone: +1 360 501 3312

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	Dane J. Wacasey
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	Dane.Wacasey@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:	HS22080522
TSR:	Houston House Acct

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS22080522-03**	**18CPTMW01DW_080822**	**Water**	**08 Aug 2022 08:05**
	Mercury by 7470, DOD samples			24 Aug 2022
2.	**HS22080522-04**	**18CPTMW01SW_080822**	**Water**	**08 Aug 2022 08:50**
	Mercury by 7470, DOD samples			24 Aug 2022
3.	**HS22080522-06**	**17WW08_080822**	**Water**	**08 Aug 2022 10:20**
	Mercury by 7470, DOD samples			24 Aug 2022
4.	**HS22080522-07**	**17WW08_080822_a**	**Water**	**08 Aug 2022 10:20**
	Mercury by 7470, DOD samples			24 Aug 2022
5.	**HS22080522-11**	**18WW24_080822**	**Water**	**08 Aug 2022 13:20**
	Mercury by 7470, DOD samples			24 Aug 2022

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

QC Level: DOD IV (DoD Data Package)

K2200064

Subcontract Chain of Custody

SAMPLING STATE: **Texas**

COC ID: **19667**

Relinquished By: _____ Date/Time: AUG 29 2022 18.0

Received By: _____ Date/Time: 9/1/22 1010

Cooler ID(s): _____ Temperature(s): _____

PM LR

Cooler Receipt and Preservation Form

Client ALS Houston Service Request K22 100641

Received: 9/1/22 Opened: 9/1/22 By: ZH Unloaded: 9/1/22 By: ZH

1. Samples were received via? *USPS* (*Fed Ex*) *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other*_____ *NA*
3. Were custody seals on coolers? NA (N) N If yes, how many and where? 1 front
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified if out of temp	Tracking Number NA	Filed
	21.4	IR2	19647			578919974353	

4. Was a Temperature Blank present in cooler? NA Y (N) If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA Y (N)
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. (NA) Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* *Baggies* (*Bubble Wrap*) *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
8. Were samples received in good condition (unbroken) NA (Y) N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA (Y) N
10. Did all sample labels and tags agree with custody papers? NA (Y) N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA (Y) N
13. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
14. Was C12/Res negative? (NA) Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? (NA) Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

RUSH

Notes, Discrepancies, Resolutions: Temp not an issue, Samples for metals analysis.

1/13/22 *Page* ____ *of* ____

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	K2210064
Project:	HS22080522	**Date Collected:**	08/08/22 08:05
Sample Matrix:	Water	**Date Received:**	09/01/22 10:10
Sample Name:	18CPTMW01DW_080822	**Basis:**	NA
Lab Code:	K2210064-001		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Mercury	7470A	ND U	ug/L	0.20	0.05	0.02	1	09/02/22 17:11	09/02/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	K2210064
Project:	HS22080522	**Date Collected:**	08/08/22 08:50
Sample Matrix:	Water	**Date Received:**	09/01/22 10:10
Sample Name:	18CPTMW01SW_080822	**Basis:**	NA
Lab Code:	K2210064-002		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Mercury	7470A	ND U	ug/L	0.20	0.05	0.02	1	09/02/22 17:12	09/02/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	K2210064
Project:	HS22080522	**Date Collected:**	08/08/22 10:20
Sample Matrix:	Water	**Date Received:**	09/01/22 10:10
Sample Name:	17WW08_080822	**Basis:**	NA
Lab Code:	K2210064-003		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Mercury	7470A	ND U	ug/L	0.20	0.05	0.02	1	09/02/22 17:14	09/02/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	K2210064
Project:	HS22080522	**Date Collected:**	08/08/22 10:20
Sample Matrix:	Water	**Date Received:**	09/01/22 10:10
Sample Name:	17WW08_080822_a	**Basis:**	NA
Lab Code:	K2210064-004		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Mercury	7470A	ND U	ug/L	0.20	0.05	0.02	1	09/02/22 17:16	09/02/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	K2210064
Project:	HS22080522	**Date Collected:**	08/08/22 13:20
Sample Matrix:	Water	**Date Received:**	09/01/22 10:10
Sample Name:	18WW24_080822	**Basis:**	NA
Lab Code:	K2210064-005		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Mercury	7470A	ND U	ug/L	0.20	0.05	0.02	1	09/02/22 17:17	09/02/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	K2210064
Project:	HS22080522	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2214966-03		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Mercury	7470A	ND U	ug/L	0.20	0.05	0.02	1	09/02/22 16:32	09/02/22	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080522
Sample Matrix: Water

Service Request: K2210064
Date Analyzed: 09/02/22

Lab Control Sample Summary
Total Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2214966-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Mercury	7470A	4.73	5.00	95	82-119

ALS Group USA, Corp.
dba ALS Environmental

Prep Summary Report

Client: ALS Environmental - US **Service Request:** K2210064
Project: HS22080522
Sample Matrix: Water

Metals

Extraction Lot: 405793
Analytical Method: 7470A **Extraction Date:** 09/02/22 13:45

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
18CPTMW01DW_080822	K2210064-001	8/8/22	9/1/22	10.0000 mL	10 mL	
18CPTMW01SW_080822	K2210064-002	8/8/22	9/1/22	10.0000 mL	10 mL	
17WW08_080822	K2210064-003	8/8/22	9/1/22	10.0000 mL	10 mL	
17WW08_080822_a	K2210064-004	8/8/22	9/1/22	10.0000 mL	10 mL	
18WW24_080822	K2210064-005	8/8/22	9/1/22	10.0000 mL	10 mL	
Method Blank	KQ2214966-03MB	NA	NA	10.0000 mL	10 mL	
Lab Control Sample	KQ2214966-04LCS	NA	NA	10.0000 mL	10 mL	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US **Service Request:** K2210064
Project: HS22080522

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID / Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
ICV 09/02/22 16:24						
Mercury	7470A	776342	4.88	5.00	98	90-110
CCV 09/02/22 16:29						
Mercury	7470A	776342	4.99	5.00	100	90-110
CCV 09/02/22 16:48						
Mercury	7470A	776342	4.94	5.00	99	90-110
CCV 09/02/22 17:08						
Mercury	7470A	776342	4.92	5.00	98	90-110
CCV 09/02/22 17:19						
Mercury	7470A	776342	4.91	5.00	98	90-110

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US **Service Request:** K2210064
Project: HS22080522

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID / Analyte	Method	Analysis Batch:	Result	C
ICB 09/02/22 16:25				
Mercury	7470A	776342	-0.0260	J
CCB 09/02/22 16:30				
Mercury	7470A	776342	-0.0260	J
CCB 09/02/22 16:50				
Mercury	7470A	776342	-0.0230	J
CCB 09/02/22 17:09				
Mercury	7470A	776342	-0.0260	J
CCB 09/02/22 17:21				
Mercury	7470A	776342	-0.0230	J

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US **Service Request:** K2210064
Project: HS22080522

LOW LEVEL INITIAL AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID / Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
LLICV							
Mercury	7470A	776342	0.20	0.2	98	50-150	09/02/22 16:27

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US **Service Request:** K2210064
Project: HS22080522/

Detection Limits

Instrument: K-CVAA-03 **Matrix:** Water

Analyte	Wavelength (nm)	Units	LOQ	LOD	MDL
Mercury	253	ug/L	0.2	0.05	0.02

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US **Service Request:** K2210064
Project: HS22080522/

ICP Linear Range (Quarterly)

Instrument: K-CVAA-03

Analyte	Concentration (ug/L)	Method
Mercury	10	7470A

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US **Service Request:** K2210064
Project: HS22080522/

Analysis Run Log

Instrument ID: **K-CVAA-03** **Analytical BatchID:** **776342**

Sample	Dilution Factor	Date/Time	Hg
ZZZZZZ	1	09/02/22 16:14	
ZZZZZZ	1	09/02/22 16:16	
ZZZZZZ	1	09/02/22 16:17	
ZZZZZZ	1	09/02/22 16:19	
ZZZZZZ	1	09/02/22 16:21	
ZZZZZZ	1	09/02/22 16:22	
ICV1	1	09/02/22 16:24	X
ICB1	1	09/02/22 16:25	X
LLICV1	1	09/02/22 16:27	X
CCV1	1	09/02/22 16:29	X
CCB1	1	09/02/22 16:30	X
KQ2214966-03MB	1	09/02/22 16:32	X
KQ2214966-04LCS	1	09/02/22 16:34	X
ZZZZZZ	1	09/02/22 16:35	
ZZZZZZ	1	09/02/22 16:37	
ZZZZZZ	1	09/02/22 16:38	
ZZZZZZ	1	09/02/22 16:40	
ZZZZZZ	1	09/02/22 16:42	
ZZZZZZ	1	09/02/22 16:43	
ZZZZZZ	1	09/02/22 16:45	
ZZZZZZ	1	09/02/22 16:47	
CCV2	1	09/02/22 16:48	X
CCB2	1	09/02/22 16:50	X
ZZZZZZ	1	09/02/22 16:51	
ZZZZZZ	1	09/02/22 16:53	
ZZZZZZ	1	09/02/22 16:55	
ZZZZZZ	1	09/02/22 16:56	
ZZZZZZ	1	09/02/22 16:58	
ZZZZZZ	1	09/02/22 16:59	
ZZZZZZ	1	09/02/22 17:01	
ZZZZZZ	1	09/02/22 17:03	
ZZZZZZ	1	09/02/22 17:04	
ZZZZZZ	1	09/02/22 17:06	
CCV3	1	09/02/22 17:08	X
CCB3	1	09/02/22 17:09	X
K2210064-001	1	09/02/22 17:11	X
K2210064-002	1	09/02/22 17:12	X

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US **Service Request:** K2210064
Project: HS22080522/

Analysis Run Log

Instrument ID: **K-CVAA-03** **Analytical BatchID:** **776342**

Sample	Dilution Factor	Date/Time	Hg
K2210064-003	1	09/02/22 17:14	X
K2210064-004	1	09/02/22 17:16	X
K2210064-005	1	09/02/22 17:17	X
CCV4	1	09/02/22 17:19	X
CCB4	1	09/02/22 17:21	X

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

CVAA Mercury Water Data Review Form

K-CVAA-03

Element:	Hg		
Analysis Lot #:	090222C HG3		
Starlims #:	776342		
Cal. STD/CCV Source:	HG3-85-M		
Pipette IDs:	HG-41585305/HG-38883934		
16mL Tube Lot #:	P7554803		
KMnO4:	HG3-85-B	Expiration Date:	8/29/2023
K2S2O8:	HG3-84-L	Expiration Date:	8/4/2023
NH2OH-HCl/NaCl	HG3-84-T	Expiration Date:	8/25/2023
SnCl2/HCl:	HG3-85-F 9/2/22	Expiration Date:	7/1/2023

Service Request Numbers:

K2210054, K2210056, K2210061, K2210062, K2210064

	Yes	No	NA
1) Appropriate standardization completed	X		
2) ICV within 10% of true value	X		
3) CCVs in control (+/- 10%)	X		
4) CCBs and or ICBs below MRL	X		
5) CCV/CCB check run every 10 samples	X		
6) All reported samples within calibration range	X		
7) Calculations correct	X		

Comments:

Data reviewed against service request(s) to ensure no samples were omitted: _____ (Initials)

Primary Reviewed By: _____ Date: 9/2/22

Secondary Reviewed By: _____ Date: 9/2/22

Data Review Form

Instrument ID#: **K-CVAA-03**
DataFile Name: **R:\ICP\WIP\DATA\K-CVAA-03 (M-7600)\090222C HG3.csv**
RUNNO: **776342**

K2210054

No exceptions to report.

K2210056

No exceptions to report.

K2210061

No exceptions to report.

K2210062

No exceptions to report.

K2210064

No exceptions to report.

Primary Approver: 9/2/22
Secondary Approver: 9/2/22

CVAA Hg ANALYTICAL WORKSHEET

Method: 7470	Cal. Inter. Std* (100ppb): HG3-85-M 2nd Source Inter Std** (1ppm): HG3-84-V

Analysis For: Hg **DATA**

Pos.	SAMPLE NUMBER	Measured (µg/L)	Dilution Factor	Recoveries (ICV, CCV, LCS, MS)		Comments:
1	Cal. Blk.	0.000	~	~		
2	Std 0.2*	0.200	~	(0.1-50mL)		
3	Std 0.5*	0.500	~	(0.25-50mL)		
4	Std 1.0*	1.000	~	(0.5-50mL)		
5	Std 5.0*	5.000	~	(2.5-50mL)		
6	Std 10.0*	10.000	~	(5.0-50mL)		
7	ICV1**	4.884	~	98%		
8	ICB1	-0.026	~			
9	LLICV1*	0.196	~	98%		
10	CCV1*	4.987	~	100%		
11	CCB1	-0.026	~			
12	KQ2214966-03	-0.004	~			
13	KQ2214966-04	4.731	~	95%		
14	K2210054-001	-0.023	~			
15	K2210054-002	0.016	~			
16	K2210054-003	0.001	~			
17	K2210056-001	-0.003	~			
18	K2210061-001	-0.002	~			
19	K2210061-002	0.012	~			
20	K2210061-003	0.005	~			
21	K2210061-004	0.257	~			
22	CCV2	4.941	~	99%		
23	CCB2	-0.023	~			
24	K2210061-005	0.018	~			
25	K2210061-006	0.067	~			
26	K2210061-007	0.005	~			
27	K2210062-001	-0.001	~			
28	K2210062-002	0.000	~			
29	K2210062-003	0.001	~			
30	K2210062-003A	4.768	~	95%		
31	KQ2214966-01	4.571	~	91%		
32	KQ2214966-02	4.589	~	92%		

Comments:

CVAA Hg ANALYTICAL WORKSHEET

Analysis For: Hg **DATA**

Pos.	SAMPLE NUMBER	Measured (µg/L)	Dilution Factor	Recoveries (ICV, CCV, LCS, MS)		Comments:
33	K2210062-004	-0.021	~			
34	CCV3	4.923	~	98%		
35	CCB3	-0.026	~			
36	K2210064-001	-0.004	~			
37	K2210064-002	-0.004	~			
38	K2210064-003	-0.001	~			
39	K2210064-004	-0.002	~			
40	K2210064-005	0.000	~			
41	CCV4	4.908	~	98%		
42	CCB4	-0.023	~			
43						
44						
45						
46						
47						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						

Comments:

Soil/Tissue Spike Level:

Method	Spike Level	MRL	LCS Limit	MS Limit	RPD	Post-Spike @ 5ppb
7470A Water	5.0 µg/L	0.2 µg/L	80-120%	75-125%	20%	+/- 20%
245.1 Water	5.0 µg/L	0.2 µg/L	85-115%	70-130%	20%	+/- 20%
7470A TCLP	5.0 µg/L	1.0 µg/L	80-120%	75-125%	20%	+/- 20%
7471A Soil LCSS	7.1mg/kg	0.02 mg/kg	51-149%	80-120%	20%	+/- 20%
7471A Tissue Dorm	0.41 mg/kg	0.02 mg/kg	68-136%	80-120%	20%	+/- 20%

Report Generated By Teledyne Leeman QuickTrace

Analyst: alkls.nouser

Worksheet file: C:\Users\Public\Documents\Teledyne CETAC\QuickTrace\Worksheets\090222C HG3.wszf

Creation Date: 9/2/2022 3:59:08 PM

Comment:

Results

Sample Name	Aliq. Vol.	Diln. Vol	DF	Type	Spike Vol	Conc (ug/L)	% Recovery	µAbs	%RSD	Residual	Flags	Wt. (g)	Vol (ml)
Calibration Blank			1.0000	STD	N/A	0.000		217	1.98	0.00			
Replicates						210.5		217.9	218.7	220.1			
Standard #1 (0.2 ug/L)			1.0000	STD	N/A	0.200		3652	2.11	7.28			
Replicates						3719.5		3712.8	3616.0	3561.3			
Standard #2 (0.5 ug/L)			1.0000	STD	N/A	0.500		8760	2.24	15.43			
Replicates						8927.6		8880.4	8740.8	8490.8			
Standard #3 (1 ug/L)			1.0000	STD	N/A	1.000		17317	2.28	31.73			
Replicates						17652.8		17587.0	17237.8	16792.0			
Standard #4 (5 ug/L)			1.0000	STD	N/A	5.000		84841	1.86	105.62			
Replicates						86226.1		85817.3	84607.5	82711.3			
Standard #5 (10 ug/L)			1.0000	STD	N/A	10.000		165020	0.93	-56.90			
Replicates						165310.1		166440.5	165487.7	162841.2			
ICV1			1.0000	ICV	97.67	4.884		81162	0.90				
Replicates						81185.8		81848.7	81460.2	80154.3			
ICB1			1.0000	ICB	N/A	-0.026		-221	5.41				
Replicates						-191.5		-214.1	-244.3	-236.1			
LLICV1			1.0000	CRDL	98.16	0.196		3471	1.19				
Replicates						3490.1		3502.6	3474.6	3415.1			

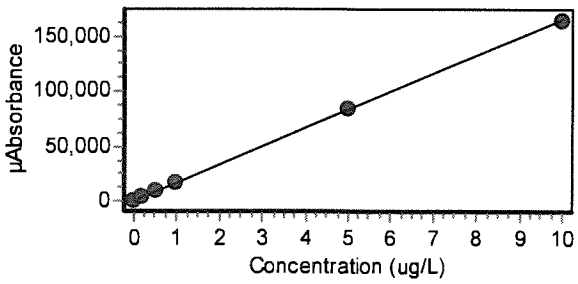
Calibration

Equation: Abs = 16574.619x + 216.810

R2: 0.99978

SEE: 1198.7490

Flags:



Sample Name	Type	Conc (ug/L)	µAbs	%RSD	Residual Flags	Wt. (g)	Vol (ml)
Aliq. Vol.	Diln. Vol	DF	Spike Vol	% Recovery			
CCV1	CCV	4.987	82880	0.96			
	1.0000			99.75			
Replicates	83002.8	83611.9	83146.9	81759.9			
CCB1	CCB	-0.026	-206	2.69			
	1.0000			N/A			
Replicates	-192.6	-201.4	-216.4	-215.0			
KQ2214966-03	UNK	-0.004	144	25.50			
	1.0000			N/A			
Replicates	143.0	153.3	118.0	160.7			
KQ2214966-04	UNK	4.731	78638	1.00			
	1.0000			N/A			
Replicates	78959.2	79328.9	78742.9	77519.9			
K2210054-001	UNK	-0.023	-160	3.67			
	1.0000			N/A			
Replicates	-143.7	-161.0	-158.0	-177.4			
K2210054-002	UNK	0.016	482	6.62			
	1.0000			N/A			
Replicates	494.6	495.7	481.5	457.9			
K2210054-003	UNK	0.001	241	22.92			
	1.0000			N/A			
Replicates	240.5	239.5	249.5	236.3			
K2210056-001	UNK	-0.003	159	28.41			
	1.0000			N/A			
Replicates	154.4	155.1	182.6	144.4			
K2210061-001	UNK	-0.002	191	25.13			
	1.0000			N/A			
Replicates	187.2	183.8	196.3	196.7			
K2210061-002	UNK	0.012	424	9.19			
	1.0000			N/A			
Replicates	398.5	436.9	419.4	439.7			
K2210061-003	UNK	0.005	295	9.00			
	1.0000			N/A			
Replicates	303.0	288.6	300.0	290.3			
K2210061-004	UNK	0.257	4474	0.40			
	1.0000			N/A			
Replicates	4463.0	4478.3	4495.8	4457.7			
CCV2	CCV	4.941	82107	1.00			
	1.0000			98.81			
Replicates	82323.1	82838.2	82334.7	80930.7			
CCB2	CCB	-0.023	-167	2.07			
	1.0000			N/A			
Replicates	-167.0	-156.6	-175.3	-170.8			
K2210061-005	UNK	0.018	523	2.72			
	1.0000			N/A			
Replicates	520.6	512.2	529.0	530.0			

Sample Name	Aliq. Vol.	Diln. Vol	DF	Type	Spike Vol	Conc (ug/L)	% Recovery	µAbs	%RSD	Residual	Flags	Wt. (g)	Vol (ml)
K2210061-006				UNK		0.067		1324	1.06				
			1.0000				N/A						
Replicates	1309.1	1320.7	1333.2	1333.9									
K2210061-007				UNK		0.005		303	12.17				
			1.0000				N/A						
Replicates	318.2	301.7	297.4	294.9									
K2210062-001				UNK		-0.001		202	70.59				
			1.0000				N/A						
Replicates	188.0	213.4	205.9	198.9									
K2210062-002				UNK		0.000		215	504.64				
			1.0000				N/A						
Replicates	216.9	205.9	213.5	224.7									
K2210062-003				UNK		0.001		238	37.56				
			1.0000				N/A						
Replicates	235.0	239.0	230.0	249.0									
K2210062-003A				UNK		4.768		79239	0.83				
			1.0000				N/A						
Replicates	79422.2	79881.7	79326.7	78325.4									
KQ2214966-01				UNK		4.571		75975	0.92				
			1.0000				N/A						
Replicates	76194.2	76632.9	76083.4	74991.4									
KQ2214966-02				UNK		4.589		76281	0.92				
			1.0000				N/A						
Replicates	76493.8	76937.0	76402.9	75290.0									
K2210062-004				UNK		-0.021		-135	2.98				
			1.0000				N/A						
Replicates	-125.7	-136.7	-129.5	-149.5									
CCV3				CCV		4.923		81810	0.99				
			1.0000				98.46						
Replicates	82037.1	82515.2	82045.1	80641.7									
CCB3				CCB		-0.026		-215	5.43				
			1.0000				N/A						
Replicates	-195.0	-195.7	-240.9	-229.5									
K2210064-001				UNK		-0.004		150	6.82				
			1.0000				N/A						
Replicates	153.7	145.2	154.7	148.2									
K2210064-002				UNK		-0.004		156	16.79				
			1.0000				N/A						
Replicates	158.2	145.2	153.0	169.4									
K2210064-003				UNK		-0.001		199	9.22				
			1.0000				N/A						
Replicates	196.7	200.2	199.0	200.2									
K2210064-004				UNK		-0.002		186	17.38				
			1.0000				N/A						
Replicates	185.6	193.1	180.8	182.6									

Sample Name	Aliq. Vol.	Diln. Vol	DF	Type	Spike Vol	Conc (ug/L)	% Recovery	µAbs	%RSD	Residual	Flags	Wt. (g)	Vol (ml)
K2210064-005				UNK		0.000		220	346.03				
			1.0000				N/A						
Replicates	235.3	211.6	210.9	222.7									
CCV4				CCV		4.908		81559	0.95				
			1.0000				98.15						
Replicates	81712.0	82258.2	81811.6	80456.1									
CCB4				CCB		-0.023		-172	4.64				
			1.0000				N/A						
Replicates	-149.3	-173.3	-172.6	-193.5									

Preparation Information Benchsheet

Prep Run#: 405793
Team: Metals/JHINSON
Number of Copies to make: 5

Prep WorkFlow: HgDigAq
Prep Method: Method

Status: Prepped
Prep Date/Time: 9/2/22 13:45

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2214966-03	MB		7470A/Hg T		Liquid	10.0000mL	10.00mL	
2	KQ2214966-04	LCS		7470A/Hg T		Liquid	10.0000mL	10.00mL	
3	K2210054-001	ICT2_082522	.01	7470A/Hg T		Water	10.0000mL	10.00mL	
4	K2210054-002	ICT4_082522	.01	7470A/Hg T		Water	10.0000mL	10.00mL	
5	K2210054-003	ICT7_082522	.01	7470A/Hg T		Water	10.0000mL	10.00mL	
6	K2210056-001	Air Compressor	.01	7470A/Hg T		Water	10.0000mL	10.00mL	
7	K2210061-001	MW-4	.01	7470A/Hg T		Water	10.0000mL	10.00mL	
8	K2210061-002	MW-11R	.01	7470A/Hg T		Water	10.0000mL	10.00mL	
9	K2210061-003	MW-17	.01	7470A/Hg T		Water	10.0000mL	10.00mL	
10	K2210061-004	MW-20	.01	7470A/Hg T		Water	5.0000mL	10.00mL	
11	K2210061-005	MW-22R	.01	7470A/Hg T		Water	10.0000mL	10.00mL	
12	K2210061-006	MW-10R	.01	7470A/Hg T		Water	10.0000mL	10.00mL	
13	K2210061-007	MW-5R	.01	7470A/Hg T		Water	10.0000mL	10.00mL	
14	K2210062-001	130_082422	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
15	K2210062-002	130_082422_a	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
16	K2210062-003	CO9_082422	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
17	KQ2214966-01	K2210062-003 MS	.01	7470A/Hg T		Liquid	10.0000mL	10.00mL	
18	KQ2214966-02	K2210062-003 DMS	.01	7470A/Hg T		Liquid	10.0000mL	10.00mL	
19	K2210062-004	125_082422	.01	7470A/Hg T		Ground Water	10.0000mL	10.00mL	
20	K2210064-001	18CPTMW01DW_080822	.01	7470A/Hg T		Water	10.0000mL	10.00mL	
21	K2210064-002	18CPTMW01SW_080822	.01	7470A/Hg T		Water	10.0000mL	10.00mL	
22	K2210064-003	17WW08_080822	.01	7470A/Hg T		Water	10.0000mL	10.00mL	
23	K2210064-004	17WW08_080822_a	.01	7470A/Hg T		Water	10.0000mL	10.00mL	
24	K2210064-005	18WW24_080822	.01	7470A/Hg T		Water	10.0000mL	10.00mL	

Spiking Solutions

Name: K-MET Hg Source Standard 1000 ug/L Inventory ID 224676 Logbook Ref: HG3-84-V Expires On: 09/25/2022

KQ2214966-01 0.05mL KQ2214966-02 0.05mL KQ2214966-04 0.05mL

Preparation Materials

K-MET 100ml Centrifuge Tube 2106023 (220673)
K-MET 16 mL Tube GL5221 (223546)
K-MET H2SO4 Hg 61139 (219381)
K-MET HNO3 Hg 22E1062003 (223986)

Preparation Information Benchsheet

Prep Run#: 405793
Team: Metals/JHINSON

Prep WorkFlow: HgDigAq
Prep Method:

Status: Prepped
Prep Date/Time: 9/2/22 13:45

Preparation Steps

Step: Digestion
Started: 9/2/22 13:45
Finished: 9/2/22 15:45
By: JHINSON
Comments

Preparation Equipment

K-BlockDigester-15	Digestion	IR Thermometer ID: IR03	
K-BlockDigester-15	Digestion	Temperature Check Location	22
K-BlockDigester-17	Digestion	Temperature	94.8 deg C
HG-39591307	Digestion		
K-U52540	Digestion		
K-BlockDigester-15	Digestion	Temperature	94.7 deg C
K-BlockDigester-17	Digestion	IR Thermometer ID: IR03	
K-BlockDigester-17	Digestion	Temperature Check Location	65
K-U72662	Digestion		

Comments: Cal Std: HG3-85-M.

Reviewed By: Rachel Date: 9/2/22

RUSH! 9/2

Preparation Information Benchsheet *DOP

Prep Run#: 405793
Team: Metals
Number of Copies to make: 5

Prep WorkFlow: HgDigAq
Prep Method: Method

Status: Draft
Prep Date/Time: 9/2/22 08:20 AM

#	Lab Code	Client ID	B#	√	Test	Matrix	Amt Ext.	pH	Int Vol	Final Vol	Surr Added	Spike Added
1	KQ2214966-03	Method Blank			7470A/Hg T	Liquid						
2	KQ2214966-04	Lab Control Sample			7470A/Hg T	Liquid						
3	K2210054-001	ICT2_082522	.01		7470A/Hg T	Water						
4	K2210054-002	ICT4_082522	.01		7470A/Hg T	Water						
5	K2210054-003	ICT7_082522	.01		7470A/Hg T	Water						
6	K2210056-001	Air Compressor	.01		7470A/Hg T	Water						
7	K2210061-001	MW-4	.01		7470A/Hg T	Water						
8	K2210061-002	MW-11R	.01		7470A/Hg T	Water						
9	K2210061-003	MW-17	.01		7470A/Hg T	Water						
10	K2210061-004	MW-20	.01		7470A/Hg T	Water	5?					
11	K2210061-005	MW-22R	.01		7470A/Hg T	Water						
12	K2210061-006	MW-10R	.01		7470A/Hg T	Water						
13	K2210061-007	MW-5R	.01		7470A/Hg T	Water						
14	K2210062-001	130_082422	.01		7470A/Hg T	Ground Water						
15	K2210062-002	130_082422_a	.01		7470A/Hg T	Ground Water						
16	K2210062-003	CO9_082422	.01		7470A/Hg T	Ground Water						
17	KQ2214966-01	Matrix Spike	.01		7470A/Hg T	Liquid						
18	KQ2214966-02	Duplicate Matrix Spike	.01		7470A/Hg T	Liquid						
19	K2210062-004	125_082422	.01		7470A/Hg T	Ground Water						
20	K2210064-001	18CPTMW01DW_080822	.01		7470A/Hg T	Water						
21	K2210064-002	18CPTMW01SW_080822	.01		7470A/Hg T	Water						
22	K2210064-003	17WW08_080822	.01		7470A/Hg T	Water						
23	K2210064-004	17WW08_080822_a	.01		7470A/Hg T	Water						
24	K2210064-005	18WW24_080822	.01		7470A/Hg T	Water						

Comments: Cal Std: HG3-85-M BLK 15/94 9/2/22 1315-1515 BLK 17/94.8/65 1315-1515

Surrogate ID: _____ Spike ID: _____

Witnessed By: _____

Analyst: _____ Assisted By: _____

HS22080522-MSVOA-SW8260

ALS WO# HS22080522

right solutions.
right partner.

Form 1

Organic Analysis Data Sheet

Volatiles Organics by Method 8260C

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/19/2022

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-01
MW2_080822

Collected	Received	Matrix	Units
08/08/22 07:15	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,1,2-Tetrachloroethane	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,1,1-Trichloroethane	12	U	5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,1,2,2-Tetrachloroethane	25	U	12	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,1,2-Trichloroethane	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,1-Dichloroethane	31		5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,1-Dichloroethene	12	U	5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,1-Dichloropropene	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,2,3-Trichlorobenzene	25	U	10	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,2,3-Trichloropropane	25	U	12	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,2,4-Trichlorobenzene	25	U	12	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,2,4-Trimethylbenzene	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,2-Dibromo-3-chloropropane	25	U	5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,2-Dibromoethane	12	U	5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,2-Dichlorobenzene	25	U	12	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,2-Dichloroethane	12	U	5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,2-Dichloropropane	25	U	12	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,3,5-Trimethylbenzene	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,3-Dichlorobenzene	25	U	10	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,3-Dichloropropane	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
1,4-Dichlorobenzene	25	U	10	25	25	25	08/11/22 13:58	VOA6_414932	X081111
2,2-Dichloropropane	12	U	5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111
2-Butanone	25	U	12	50	50	25	08/11/22 13:58	VOA6_414932	X081111
2-Chlorotoluene	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
2-Hexanone	50	U	25	50	50	25	08/11/22 13:58	VOA6_414932	X081111
4-Chlorotoluene	25	U	10	25	25	25	08/11/22 13:58	VOA6_414932	X081111
4-Isopropyltoluene	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
4-Methyl-2-pentanone	50	U	18	50	50	25	08/11/22 13:58	VOA6_414932	X081111
Acetone	50	U	10	50	50	25	08/11/22 13:58	VOA6_414932	X081111
Benzene	12	U	5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Bromobenzene	25	U	10	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Bromochloromethane	12	U	5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Bromodichloromethane	12	U	5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-01
MW2_080822

Collected	Received	Matrix	Units
08/08/22 07:15	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
Bromoform	25	U	10	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Bromomethane	25	U	10	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Carbon disulfide	50	U	15	50	50	25	08/11/22 13:58	VOA6_414932	X081111
Carbon tetrachloride	25	U	12	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Chlorobenzene	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Chloroethane	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Chloroform	97		5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Chloromethane	12	U	5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111
cis-1,3-Dichloropropene	12	U	5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Dibromochloromethane	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Dibromomethane	12	U	5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Dichlorodifluoromethane	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Ethylbenzene	31		7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Hexachlorobutadiene	25	U	25	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Isopropylbenzene	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
m,p-Xylene	25	U	12	50	50	25	08/11/22 13:58	VOA6_414932	X081111
Naphthalene	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
n-Butylbenzene	25	U	10	25	25	25	08/11/22 13:58	VOA6_414932	X081111
n-Propylbenzene	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
o-Xylene	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
sec-Butylbenzene	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Styrene	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
tert-Butylbenzene	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Tetrachloroethene	30		7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Toluene	26		5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111
trans-1,2-Dichloroethene	150		5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111
trans-1,3-Dichloropropene	12	U	5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Trichloroethene	980		5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Trichlorofluoromethane	25	U	7.5	25	25	25	08/11/22 13:58	VOA6_414932	X081111
Vinyl chloride	25	J	5.0	25	25	25	08/11/22 13:58	VOA6_414932	X081111
cis-1,2-Dichloroethene	68000		200	1000	1000	1000	08/11/22 15:43	VOA6_414932	X081116
Methylene chloride	15000		400	2000	2000	1000	08/11/22 15:43	VOA6_414932	X081116

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-02
MW2_080822_a

Collected	Received	Matrix	Units
08/08/22 07:15	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,1,2-Tetrachloroethane	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,1,1-Trichloroethane	12	U	5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,1,2,2-Tetrachloroethane	25	U	12	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,1,2-Trichloroethane	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,1-Dichloroethane	30		5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,1-Dichloroethene	12	U	5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,1-Dichloropropene	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,2,3-Trichlorobenzene	25	U	10	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,2,3-Trichloropropane	25	U	12	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,2,4-Trichlorobenzene	25	U	12	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,2,4-Trimethylbenzene	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,2-Dibromo-3-chloropropane	25	U	5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,2-Dibromoethane	12	U	5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,2-Dichlorobenzene	25	U	12	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,2-Dichloroethane	12	U	5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,2-Dichloropropane	25	U	12	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,3,5-Trimethylbenzene	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,3-Dichlorobenzene	25	U	10	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,3-Dichloropropane	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
1,4-Dichlorobenzene	25	U	10	25	25	25	08/11/22 14:19	VOA6_414932	X081112
2,2-Dichloropropane	12	U	5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112
2-Butanone	25	U	12	50	50	25	08/11/22 14:19	VOA6_414932	X081112
2-Chlorotoluene	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
2-Hexanone	50	U	25	50	50	25	08/11/22 14:19	VOA6_414932	X081112
4-Chlorotoluene	25	U	10	25	25	25	08/11/22 14:19	VOA6_414932	X081112
4-Isopropyltoluene	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
4-Methyl-2-pentanone	50	U	18	50	50	25	08/11/22 14:19	VOA6_414932	X081112
Acetone	50	U	10	50	50	25	08/11/22 14:19	VOA6_414932	X081112
Benzene	12	U	5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Bromobenzene	25	U	10	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Bromochloromethane	12	U	5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Bromodichloromethane	12	U	5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-02
MW2_080822_a

Collected	Received	Matrix	Units
08/08/22 07:15	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
Bromoform	25	U	10	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Bromomethane	25	U	10	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Carbon disulfide	50	U	15	50	50	25	08/11/22 14:19	VOA6_414932	X081112
Carbon tetrachloride	25	U	12	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Chlorobenzene	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Chloroethane	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Chloroform	97		5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Chloromethane	12	U	5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112
cis-1,3-Dichloropropene	12	U	5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Dibromochloromethane	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Dibromomethane	12	U	5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Dichlorodifluoromethane	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Ethylbenzene	35		7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Hexachlorobutadiene	25	U	25	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Isopropylbenzene	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
m,p-Xylene	25	U	12	50	50	25	08/11/22 14:19	VOA6_414932	X081112
Naphthalene	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
n-Butylbenzene	25	U	10	25	25	25	08/11/22 14:19	VOA6_414932	X081112
n-Propylbenzene	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
o-Xylene	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
sec-Butylbenzene	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Styrene	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
tert-Butylbenzene	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Tetrachloroethene	32		7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Toluene	27		5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112
trans-1,2-Dichloroethene	150		5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112
trans-1,3-Dichloropropene	12	U	5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Trichloroethene	1000		5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Trichlorofluoromethane	25	U	7.5	25	25	25	08/11/22 14:19	VOA6_414932	X081112
Vinyl chloride	25		5.0	25	25	25	08/11/22 14:19	VOA6_414932	X081112
cis-1,2-Dichloroethene	66000		200	1000	1000	1000	08/11/22 16:04	VOA6_414932	X081117
Methylene chloride	14000		400	2000	2000	1000	08/11/22 16:04	VOA6_414932	X081117

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-03
18CPTMW01DW_080822

Collected	Received	Matrix	Units
08/08/22 08:05	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,1,2-Tetrachloroethane	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,1,1-Trichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,1,2,2-Tetrachloroethane	1	U	0.50	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,1-Dichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,1-Dichloropropene	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,2,3-Trichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,2,3-Trichloropropane	1	U	0.50	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,2,4-Trichlorobenzene	1	U	0.50	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,2,4-Trimethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,2-Dibromo-3-chloropropane	1	U	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,2-Dibromoethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,2-Dichlorobenzene	1	U	0.50	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,2-Dichloropropane	1	U	0.50	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,3,5-Trimethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,3-Dichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,3-Dichloropropane	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
1,4-Dichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
2,2-Dichloropropane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
2-Butanone	1	U	0.50	2.0	2.0	1	08/11/22 18:11	VOA6_414932	X081123
2-Chlorotoluene	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
2-Hexanone	2	U	1.0	2.0	2.0	1	08/11/22 18:11	VOA6_414932	X081123
4-Chlorotoluene	1	U	0.40	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
4-Isopropyltoluene	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
4-Methyl-2-pentanone	2	U	0.70	2.0	2.0	1	08/11/22 18:11	VOA6_414932	X081123
Acetone	2	U	0.40	2.0	2.0	1	08/11/22 18:11	VOA6_414932	X081123
Benzene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Bromobenzene	1	U	0.40	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Bromochloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Bromodichloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-03
18CPTMW01DW_080822

Collected	Received	Matrix	Units
08/08/22 08:05	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
Bromoform	1	U	0.40	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Bromomethane	1	U	0.40	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Carbon disulfide	2	U	0.60	2.0	2.0	1	08/11/22 18:11	VOA6_414932	X081123
Carbon tetrachloride	1	U	0.50	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Chlorobenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Chloroethane	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Chloroform	0.5	U	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Chloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
cis-1,2-Dichloroethene	2.2		0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
cis-1,3-Dichloropropene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Dibromochloromethane	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Dibromomethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Dichlorodifluoromethane	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Ethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Hexachlorobutadiene	1	U	1.0	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Isopropylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
m,p-Xylene	1	U	0.50	2.0	2.0	1	08/11/22 18:11	VOA6_414932	X081123
Methylene chloride	2	U	0.40	2.0	2.0	1	08/11/22 18:11	VOA6_414932	X081123
Naphthalene	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
n-Butylbenzene	1	U	0.40	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
n-Propylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
o-Xylene	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
sec-Butylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Styrene	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
tert-Butylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Tetrachloroethene	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Toluene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
trans-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
trans-1,3-Dichloropropene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Trichloroethene	0.55	J	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Trichlorofluoromethane	1	U	0.30	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	08/11/22 18:11	VOA6_414932	X081123

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-04
18CPTMW01SW_080822

Collected	Received	Matrix	Units
08/08/22 08:50	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,1,2-Tetrachloroethane	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,1,1-Trichloroethane	5	U	2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,1,2,2-Tetrachloroethane	10	U	5.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,1,2-Trichloroethane	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,1-Dichloroethane	5	U	2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,1-Dichloroethene	5	U	2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,1-Dichloropropene	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,2,3-Trichlorobenzene	10	U	4.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,2,3-Trichloropropane	10	U	5.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,2,4-Trichlorobenzene	10	U	5.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,2,4-Trimethylbenzene	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,2-Dibromo-3-chloropropane	10	U	2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,2-Dibromoethane	5	U	2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,2-Dichlorobenzene	10	U	5.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,2-Dichloroethane	5	U	2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,2-Dichloropropane	10	U	5.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,3,5-Trimethylbenzene	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,3-Dichlorobenzene	10	U	4.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,3-Dichloropropane	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
1,4-Dichlorobenzene	10	U	4.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
2,2-Dichloropropane	5	U	2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
2-Butanone	10	U	5.0	20	20	10	08/12/22 13:31	VOA6_414991	X081210
2-Chlorotoluene	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
2-Hexanone	20	U	10	20	20	10	08/12/22 13:31	VOA6_414991	X081210
4-Chlorotoluene	10	U	4.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
4-Isopropyltoluene	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
4-Methyl-2-pentanone	20	U	7.0	20	20	10	08/12/22 13:31	VOA6_414991	X081210
Acetone	20	U	4.0	20	20	10	08/12/22 13:31	VOA6_414991	X081210
Benzene	5	U	2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Bromobenzene	10	U	4.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Bromochloromethane	19		2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Bromodichloromethane	5	U	2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-04
18CPTMW01SW_080822

Collected	Received	Matrix	Units
08/08/22 08:50	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
Bromoform	10	U	4.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Bromomethane	10	U	4.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Carbon disulfide	20	U	6.0	20	20	10	08/12/22 13:31	VOA6_414991	X081210
Carbon tetrachloride	10	U	5.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Chlorobenzene	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Chloroethane	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Chloroform	5	U	2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Chloromethane	5	U	2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
cis-1,2-Dichloroethene	1700		2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
cis-1,3-Dichloropropene	5	U	2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Dibromochloromethane	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Dibromomethane	5	U	2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Dichlorodifluoromethane	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Ethylbenzene	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Hexachlorobutadiene	10	U	10	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Isopropylbenzene	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
m,p-Xylene	10	U	5.0	20	20	10	08/12/22 13:31	VOA6_414991	X081210
Naphthalene	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
n-Butylbenzene	10	U	4.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
n-Propylbenzene	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
o-Xylene	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
sec-Butylbenzene	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Styrene	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
tert-Butylbenzene	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Tetrachloroethene	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Toluene	5	U	2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
trans-1,2-Dichloroethene	5	U	2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
trans-1,3-Dichloropropene	5	U	2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Trichloroethene	91		2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Trichlorofluoromethane	10	U	3.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Vinyl chloride	5	U	2.0	10	10	10	08/12/22 13:31	VOA6_414991	X081210
Methylene chloride	11000		40	200	200	100	08/12/22 20:11	VOA6_414991	X081229

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-05
MW23_080822

Collected	Received	Matrix	Units
08/08/22 09:35	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,1,2-Tetrachloroethane	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,1,1-Trichloroethane	2.5	U	1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,1,2,2-Tetrachloroethane	5	U	2.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,1,2-Trichloroethane	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,1-Dichloroethane	2.5	U	1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,1-Dichloroethene	2.5	U	1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,1-Dichloropropene	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,2,3-Trichlorobenzene	5	U	2.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,2,3-Trichloropropane	5	U	2.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,2,4-Trichlorobenzene	5	U	2.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,2,4-Trimethylbenzene	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,2-Dibromo-3-chloropropane	5	U	1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,2-Dibromoethane	2.5	U	1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,2-Dichlorobenzene	5	U	2.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,2-Dichloroethane	66		1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,2-Dichloropropane	5	U	2.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,3,5-Trimethylbenzene	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,3-Dichlorobenzene	5	U	2.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,3-Dichloropropane	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
1,4-Dichlorobenzene	5	U	2.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
2,2-Dichloropropane	2.5	U	1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
2-Butanone	5	U	2.5	10	10	5	08/11/22 13:37	VOA6_414932	X081110
2-Chlorotoluene	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
2-Hexanone	10	U	5.0	10	10	5	08/11/22 13:37	VOA6_414932	X081110
4-Chlorotoluene	5	U	2.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
4-Isopropyltoluene	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
4-Methyl-2-pentanone	10	U	3.5	10	10	5	08/11/22 13:37	VOA6_414932	X081110
Acetone	10	U	2.0	10	10	5	08/11/22 13:37	VOA6_414932	X081110
Benzene	2.5	U	1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Bromobenzene	5	U	2.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Bromochloromethane	2.5	U	1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Bromodichloromethane	2.5	U	1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-05
MW23_080822

Collected	Received	Matrix	Units
08/08/22 09:35	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
Bromoform	5	U	2.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Bromomethane	5	U	2.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Carbon disulfide	10	U	3.0	10	10	5	08/11/22 13:37	VOA6_414932	X081110
Carbon tetrachloride	5		2.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Chlorobenzene	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Chloroethane	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Chloroform	10		1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Chloromethane	2.5	U	1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
cis-1,2-Dichloroethene	21		1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
cis-1,3-Dichloropropene	2.5	U	1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Dibromochloromethane	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Dibromomethane	2.5	U	1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Dichlorodifluoromethane	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Ethylbenzene	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Hexachlorobutadiene	5	U	5.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Isopropylbenzene	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
m,p-Xylene	5	U	2.5	10	10	5	08/11/22 13:37	VOA6_414932	X081110
Methylene chloride	10	U	2.0	10	10	5	08/11/22 13:37	VOA6_414932	X081110
Naphthalene	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
n-Butylbenzene	5	U	2.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
n-Propylbenzene	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
o-Xylene	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
sec-Butylbenzene	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Styrene	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
tert-Butylbenzene	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Tetrachloroethene	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Toluene	2.5	U	1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
trans-1,2-Dichloroethene	2.5	U	1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
trans-1,3-Dichloropropene	2.5	U	1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Trichlorofluoromethane	5	U	1.5	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Vinyl chloride	2.5	U	1.0	5.0	5.0	5	08/11/22 13:37	VOA6_414932	X081110
Trichloroethene	2600		10	50	50	50	08/11/22 14:40	VOA6_414932	X081113

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-06
17WW08_080822

Collected	Received	Matrix	Units
08/08/22 10:20	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,1,2-Tetrachloroethane	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,1,1-Trichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,1,2,2-Tetrachloroethane	1	U	0.50	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,1-Dichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,1-Dichloropropene	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,2,3-Trichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,2,3-Trichloropropane	1	U	0.50	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,2,4-Trichlorobenzene	1	U	0.50	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,2,4-Trimethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,2-Dibromo-3-chloropropane	1	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,2-Dibromoethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,2-Dichlorobenzene	1	U	0.50	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,2-Dichloropropane	1	U	0.50	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,3,5-Trimethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,3-Dichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,3-Dichloropropane	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
1,4-Dichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
2,2-Dichloropropane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
2-Butanone	1	U	0.50	2.0	2.0	1	08/11/22 18:32	VOA6_414932	X081124
2-Chlorotoluene	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
2-Hexanone	2	U	1.0	2.0	2.0	1	08/11/22 18:32	VOA6_414932	X081124
4-Chlorotoluene	1	U	0.40	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
4-Isopropyltoluene	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
4-Methyl-2-pentanone	2	U	0.70	2.0	2.0	1	08/11/22 18:32	VOA6_414932	X081124
Acetone	2	U	0.40	2.0	2.0	1	08/11/22 18:32	VOA6_414932	X081124
Benzene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Bromobenzene	1	U	0.40	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Bromochloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Bromodichloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-06
17WW08_080822

Collected	Received	Matrix	Units
08/08/22 10:20	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
Bromoform	1	U	0.40	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Bromomethane	1	U	0.40	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Carbon disulfide	2	U	0.60	2.0	2.0	1	08/11/22 18:32	VOA6_414932	X081124
Carbon tetrachloride	1	U	0.50	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Chlorobenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Chloroethane	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Chloroform	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Chloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
cis-1,3-Dichloropropene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Dibromochloromethane	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Dibromomethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Dichlorodifluoromethane	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Ethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Hexachlorobutadiene	1	U	1.0	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Isopropylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
m,p-Xylene	1	U	0.50	2.0	2.0	1	08/11/22 18:32	VOA6_414932	X081124
Methylene chloride	2	U	0.40	2.0	2.0	1	08/11/22 18:32	VOA6_414932	X081124
Naphthalene	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
n-Butylbenzene	1	U	0.40	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
n-Propylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
o-Xylene	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
sec-Butylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Styrene	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
tert-Butylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Tetrachloroethene	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Toluene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
trans-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
trans-1,3-Dichloropropene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Trichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Trichlorofluoromethane	1	U	0.30	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	08/11/22 18:32	VOA6_414932	X081124

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-07
17WW08_080822_a

Collected	Received	Matrix	Units
08/08/22 10:20	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,1,2-Tetrachloroethane	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,1,1-Trichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,1,2,2-Tetrachloroethane	1	U	0.50	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,1-Dichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,1-Dichloropropene	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,2,3-Trichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,2,3-Trichloropropane	1	U	0.50	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,2,4-Trichlorobenzene	1	U	0.50	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,2,4-Trimethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,2-Dibromo-3-chloropropane	1	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,2-Dibromoethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,2-Dichlorobenzene	1	U	0.50	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,2-Dichloropropane	1	U	0.50	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,3,5-Trimethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,3-Dichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,3-Dichloropropane	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
1,4-Dichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
2,2-Dichloropropane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
2-Butanone	1	U	0.50	2.0	2.0	1	08/11/22 18:53	VOA6_414932	X081125
2-Chlorotoluene	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
2-Hexanone	2	U	1.0	2.0	2.0	1	08/11/22 18:53	VOA6_414932	X081125
4-Chlorotoluene	1	U	0.40	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
4-Isopropyltoluene	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
4-Methyl-2-pentanone	2	U	0.70	2.0	2.0	1	08/11/22 18:53	VOA6_414932	X081125
Acetone	2	U	0.40	2.0	2.0	1	08/11/22 18:53	VOA6_414932	X081125
Benzene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Bromobenzene	1	U	0.40	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Bromochloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Bromodichloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-07
17WW08_080822_a

Collected	Received	Matrix	Units
08/08/22 10:20	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
Bromoform	1	U	0.40	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Bromomethane	1	U	0.40	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Carbon disulfide	2	U	0.60	2.0	2.0	1	08/11/22 18:53	VOA6_414932	X081125
Carbon tetrachloride	1	U	0.50	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Chlorobenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Chloroethane	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Chloroform	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Chloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
cis-1,3-Dichloropropene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Dibromochloromethane	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Dibromomethane	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Dichlorodifluoromethane	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Ethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Hexachlorobutadiene	1	U	1.0	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Isopropylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
m,p-Xylene	1	U	0.50	2.0	2.0	1	08/11/22 18:53	VOA6_414932	X081125
Methylene chloride	2	U	0.40	2.0	2.0	1	08/11/22 18:53	VOA6_414932	X081125
Naphthalene	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
n-Butylbenzene	1	U	0.40	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
n-Propylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
o-Xylene	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
sec-Butylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Styrene	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
tert-Butylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Tetrachloroethene	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Toluene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
trans-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
trans-1,3-Dichloropropene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Trichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Trichlorofluoromethane	1	U	0.30	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	08/11/22 18:53	VOA6_414932	X081125

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-08
MW8_080822

Collected	Received	Matrix	Units
08/08/22 11:05	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,1,2-Tetrachloroethane	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,1,1-Trichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,1,2,2-Tetrachloroethane	1	U	0.50	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,1-Dichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,1-Dichloropropene	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,2,3-Trichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,2,3-Trichloropropane	1	U	0.50	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,2,4-Trichlorobenzene	1	U	0.50	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,2,4-Trimethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,2-Dibromo-3-chloropropane	1	U	0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,2-Dibromoethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,2-Dichlorobenzene	1	U	0.50	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,2-Dichloroethane	3		0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,2-Dichloropropane	1	U	0.50	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,3,5-Trimethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,3-Dichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,3-Dichloropropane	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
1,4-Dichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
2,2-Dichloropropane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
2-Butanone	1	U	0.50	2.0	2.0	1	08/11/22 19:56	VOA6_414932	X081128
2-Chlorotoluene	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
2-Hexanone	2	U	1.0	2.0	2.0	1	08/11/22 19:56	VOA6_414932	X081128
4-Chlorotoluene	1	U	0.40	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
4-Isopropyltoluene	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
4-Methyl-2-pentanone	2	U	0.70	2.0	2.0	1	08/11/22 19:56	VOA6_414932	X081128
Acetone	2	U	0.40	2.0	2.0	1	08/11/22 19:56	VOA6_414932	X081128
Benzene	0.67	J	0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Bromobenzene	1	U	0.40	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Bromochloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Bromodichloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-08
MW8_080822

Collected	Received	Matrix	Units
08/08/22 11:05	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
Bromoform	1	U	0.40	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Bromomethane	1	U	0.40	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Carbon disulfide	2	U	0.60	2.0	2.0	1	08/11/22 19:56	VOA6_414932	X081128
Carbon tetrachloride	1	U	0.50	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Chlorobenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Chloroethane	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Chloroform	0.5	U	0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Chloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
cis-1,2-Dichloroethene	20		0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
cis-1,3-Dichloropropene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Dibromochloromethane	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Dibromomethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Dichlorodifluoromethane	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Ethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Hexachlorobutadiene	1	U	1.0	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Isopropylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
m,p-Xylene	1	U	0.50	2.0	2.0	1	08/11/22 19:56	VOA6_414932	X081128
Methylene chloride	2	U	0.40	2.0	2.0	1	08/11/22 19:56	VOA6_414932	X081128
Naphthalene	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
n-Butylbenzene	1	U	0.40	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
n-Propylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
o-Xylene	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
sec-Butylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Styrene	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
tert-Butylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Tetrachloroethene	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Toluene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
trans-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
trans-1,3-Dichloropropene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Trichlorofluoromethane	1	U	0.30	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	08/11/22 19:56	VOA6_414932	X081128
Trichloroethene	200		1.0	5.0	5.0	5	08/12/22 14:34	VOA6_414991	X081213

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-09
18CPTMW23SW_080822

Collected	Received	Matrix	Units
08/08/22 11:50	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,1,2-Tetrachloroethane	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,1,1-Trichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,1,2,2-Tetrachloroethane	1	U	0.50	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,1-Dichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,1-Dichloropropene	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,2,3-Trichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,2,3-Trichloropropane	1	U	0.50	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,2,4-Trichlorobenzene	1	U	0.50	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,2,4-Trimethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,2-Dibromo-3-chloropropane	1	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,2-Dibromoethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,2-Dichlorobenzene	1	U	0.50	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,2-Dichloropropane	1	U	0.50	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,3,5-Trimethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,3-Dichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,3-Dichloropropane	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
1,4-Dichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
2,2-Dichloropropane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
2-Butanone	1	U	0.50	2.0	2.0	1	08/11/22 19:14	VOA6_414932	X081126
2-Chlorotoluene	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
2-Hexanone	2	U	1.0	2.0	2.0	1	08/11/22 19:14	VOA6_414932	X081126
4-Chlorotoluene	1	U	0.40	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
4-Isopropyltoluene	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
4-Methyl-2-pentanone	2	U	0.70	2.0	2.0	1	08/11/22 19:14	VOA6_414932	X081126
Acetone	2	U	0.40	2.0	2.0	1	08/11/22 19:14	VOA6_414932	X081126
Benzene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Bromobenzene	1	U	0.40	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Bromochloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Bromodichloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-09
18CPTMW23SW_080822

Collected	Received	Matrix	Units
08/08/22 11:50	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
Bromoform	1	U	0.40	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Bromomethane	1	U	0.40	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Carbon disulfide	2	U	0.60	2.0	2.0	1	08/11/22 19:14	VOA6_414932	X081126
Carbon tetrachloride	1	U	0.50	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Chlorobenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Chloroethane	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Chloroform	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Chloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
cis-1,3-Dichloropropene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Dibromochloromethane	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Dibromomethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Dichlorodifluoromethane	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Ethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Hexachlorobutadiene	1	U	1.0	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Isopropylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
m,p-Xylene	1	U	0.50	2.0	2.0	1	08/11/22 19:14	VOA6_414932	X081126
Methylene chloride	2	U	0.40	2.0	2.0	1	08/11/22 19:14	VOA6_414932	X081126
Naphthalene	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
n-Butylbenzene	1	U	0.40	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
n-Propylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
o-Xylene	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
sec-Butylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Styrene	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
tert-Butylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Tetrachloroethene	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Toluene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
trans-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
trans-1,3-Dichloropropene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Trichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Trichlorofluoromethane	1	U	0.30	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	08/11/22 19:14	VOA6_414932	X081126

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-10
18CPTMW23_080822

Collected	Received	Matrix	Units
08/08/22 12:35	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,1,2-Tetrachloroethane	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,1,1-Trichloroethane	2.5	U	1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,1,2,2-Tetrachloroethane	5	U	2.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,1,2-Trichloroethane	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,1-Dichloroethane	2.5	U	1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,1-Dichloroethene	3.2	J	1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,1-Dichloropropene	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,2,3-Trichlorobenzene	5	U	2.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,2,3-Trichloropropane	5	U	2.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,2,4-Trichlorobenzene	5	U	2.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,2,4-Trimethylbenzene	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,2-Dibromo-3-chloropropane	5	U	1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,2-Dibromoethane	2.5	U	1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,2-Dichlorobenzene	5	U	2.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,2-Dichloroethane	100		1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,2-Dichloropropane	5	U	2.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,3,5-Trimethylbenzene	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,3-Dichlorobenzene	5	U	2.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,3-Dichloropropane	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
1,4-Dichlorobenzene	5	U	2.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
2,2-Dichloropropane	2.5	U	1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
2-Butanone	5	U	2.5	10	10	5	08/11/22 20:17	VOA6_414932	X081129
2-Chlorotoluene	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
2-Hexanone	10	U	5.0	10	10	5	08/11/22 20:17	VOA6_414932	X081129
4-Chlorotoluene	5	U	2.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
4-Isopropyltoluene	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
4-Methyl-2-pentanone	10	U	3.5	10	10	5	08/11/22 20:17	VOA6_414932	X081129
Acetone	10	U	2.0	10	10	5	08/11/22 20:17	VOA6_414932	X081129
Benzene	2.5	U	1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Bromobenzene	5	U	2.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Bromochloromethane	2.5	U	1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Bromodichloromethane	2.5	U	1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-10
18CPTMW23_080822

Collected	Received	Matrix	Units
08/08/22 12:35	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
Bromoform	5	U	2.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Bromomethane	5	U	2.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Carbon disulfide	10	U	3.0	10	10	5	08/11/22 20:17	VOA6_414932	X081129
Carbon tetrachloride	5	U	2.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Chlorobenzene	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Chloroethane	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Chloroform	2.5	U	1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Chloromethane	2.5	U	1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
cis-1,2-Dichloroethene	240		1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
cis-1,3-Dichloropropene	2.5	U	1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Dibromochloromethane	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Dibromomethane	2.5	U	1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Dichlorodifluoromethane	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Ethylbenzene	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Hexachlorobutadiene	5	U	5.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Isopropylbenzene	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
m,p-Xylene	5	U	2.5	10	10	5	08/11/22 20:17	VOA6_414932	X081129
Methylene chloride	10	U	2.0	10	10	5	08/11/22 20:17	VOA6_414932	X081129
Naphthalene	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
n-Butylbenzene	5	U	2.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
n-Propylbenzene	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
o-Xylene	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
sec-Butylbenzene	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Styrene	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
tert-Butylbenzene	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Tetrachloroethene	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Toluene	2.5	U	1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
trans-1,2-Dichloroethene	2.5	U	1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
trans-1,3-Dichloropropene	2.5	U	1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Trichlorofluoromethane	5	U	1.5	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Vinyl chloride	2.5	U	1.0	5.0	5.0	5	08/11/22 20:17	VOA6_414932	X081129
Trichloroethene	580		2.0	10	10	10	08/12/22 14:55	VOA6_414991	X081214

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-11
18WW24_080822

Collected	Received	Matrix	Units
08/08/22 13:20	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,1,2-Tetrachloroethane	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,1,1-Trichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,1,2,2-Tetrachloroethane	1	U	0.50	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,1-Dichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,1-Dichloropropene	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,2,3-Trichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,2,3-Trichloropropane	1	U	0.50	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,2,4-Trichlorobenzene	1	U	0.50	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,2,4-Trimethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,2-Dibromo-3-chloropropane	1	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,2-Dibromoethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,2-Dichlorobenzene	1	U	0.50	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,2-Dichloropropane	1	U	0.50	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,3,5-Trimethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,3-Dichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,3-Dichloropropane	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
1,4-Dichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
2,2-Dichloropropane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
2-Butanone	1	U	0.50	2.0	2.0	1	08/11/22 19:35	VOA6_414932	X081127
2-Chlorotoluene	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
2-Hexanone	2	U	1.0	2.0	2.0	1	08/11/22 19:35	VOA6_414932	X081127
4-Chlorotoluene	1	U	0.40	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
4-Isopropyltoluene	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
4-Methyl-2-pentanone	2	U	0.70	2.0	2.0	1	08/11/22 19:35	VOA6_414932	X081127
Acetone	2	U	0.40	2.0	2.0	1	08/11/22 19:35	VOA6_414932	X081127
Benzene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Bromobenzene	1	U	0.40	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Bromochloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Bromodichloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-11
18WW24_080822

Collected	Received	Matrix	Units
08/08/22 13:20	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
Bromoform	1	U	0.40	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Bromomethane	1	U	0.40	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Carbon disulfide	2	U	0.60	2.0	2.0	1	08/11/22 19:35	VOA6_414932	X081127
Carbon tetrachloride	1	U	0.50	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Chlorobenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Chloroethane	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Chloroform	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Chloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
cis-1,3-Dichloropropene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Dibromochloromethane	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Dibromomethane	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Dichlorodifluoromethane	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Ethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Hexachlorobutadiene	1	U	1.0	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Isopropylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
m,p-Xylene	1	U	0.50	2.0	2.0	1	08/11/22 19:35	VOA6_414932	X081127
Methylene chloride	2	U	0.40	2.0	2.0	1	08/11/22 19:35	VOA6_414932	X081127
Naphthalene	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
n-Butylbenzene	1	U	0.40	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
n-Propylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
o-Xylene	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
sec-Butylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Styrene	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
tert-Butylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Tetrachloroethene	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Toluene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
trans-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
trans-1,3-Dichloropropene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Trichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Trichlorofluoromethane	1	U	0.30	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	08/11/22 19:35	VOA6_414932	X081127

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-12
Trip Blank

Collected	Received	Matrix	Units
08/08/22 00:00	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,1,2-Tetrachloroethane	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,1,1-Trichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,1,2,2-Tetrachloroethane	1	U	0.50	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,1-Dichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,1-Dichloropropene	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,2,3-Trichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,2,3-Trichloropropane	1	U	0.50	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,2,4-Trichlorobenzene	1	U	0.50	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,2,4-Trimethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,2-Dibromo-3-chloropropane	1	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,2-Dibromoethane	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,2-Dichlorobenzene	1	U	0.50	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,2-Dichloropropane	1	U	0.50	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,3,5-Trimethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,3-Dichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,3-Dichloropropane	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
1,4-Dichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
2,2-Dichloropropane	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
2-Butanone	1	U	0.50	2.0	2.0	1	08/11/22 13:16	VOA6_414932	X081109
2-Chlorotoluene	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
2-Hexanone	2	U	1.0	2.0	2.0	1	08/11/22 13:16	VOA6_414932	X081109
4-Chlorotoluene	1	U	0.40	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
4-Isopropyltoluene	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
4-Methyl-2-pentanone	2	U	0.70	2.0	2.0	1	08/11/22 13:16	VOA6_414932	X081109
Acetone	2	U	0.40	2.0	2.0	1	08/11/22 13:16	VOA6_414932	X081109
Benzene	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Bromobenzene	1	U	0.40	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Bromochloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Bromodichloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

HS22080522-12
Trip Blank

Collected	Received	Matrix	Units
08/08/22 00:00	08/10/22 09:45	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
Bromoform	1	U	0.40	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Bromomethane	1	U	0.40	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Carbon disulfide	2	U	0.60	2.0	2.0	1	08/11/22 13:16	VOA6_414932	X081109
Carbon tetrachloride	1	U	0.50	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Chlorobenzene	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Chloroethane	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Chloroform	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Chloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
cis-1,3-Dichloropropene	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Dibromochloromethane	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Dibromomethane	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Dichlorodifluoromethane	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Ethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Hexachlorobutadiene	1	U	1.0	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Isopropylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
m,p-Xylene	1	U	0.50	2.0	2.0	1	08/11/22 13:16	VOA6_414932	X081109
Methylene chloride	2	U	0.40	2.0	2.0	1	08/11/22 13:16	VOA6_414932	X081109
Naphthalene	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
n-Butylbenzene	1	U	0.40	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
n-Propylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
o-Xylene	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
sec-Butylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Styrene	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
tert-Butylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Tetrachloroethene	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Toluene	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
trans-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
trans-1,3-Dichloropropene	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Trichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Trichlorofluoromethane	1	U	0.30	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	08/11/22 13:16	VOA6_414932	X081109

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

VBLKW-220811
VBLKW-220811

Collected	Received	Matrix	Units
NA	NA	Aqueous	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,1,2-Tetrachloroethane	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,1,1-Trichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,1,2,2-Tetrachloroethane	1	U	0.50	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,1-Dichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,1-Dichloropropene	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,2,3-Trichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,2,3-Trichloropropane	1	U	0.50	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,2,4-Trichlorobenzene	1	U	0.50	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,2,4-Trimethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,2-Dibromo-3-chloropropane	1	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,2-Dibromoethane	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,2-Dichlorobenzene	1	U	0.50	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,2-Dichloropropane	1	U	0.50	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,3,5-Trimethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,3-Dichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,3-Dichloropropane	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
1,4-Dichlorobenzene	1	U	0.40	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
2,2-Dichloropropane	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
2-Butanone	1	U	0.50	2.0	2.0	1	08/11/22 12:34	VOA6_414932	X081107
2-Chlorotoluene	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
2-Hexanone	2	U	1.0	2.0	2.0	1	08/11/22 12:34	VOA6_414932	X081107
4-Chlorotoluene	1	U	0.40	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
4-Isopropyltoluene	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
4-Methyl-2-pentanone	2	U	0.70	2.0	2.0	1	08/11/22 12:34	VOA6_414932	X081107
Acetone	2	U	0.40	2.0	2.0	1	08/11/22 12:34	VOA6_414932	X081107
Benzene	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Bromobenzene	1	U	0.40	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Bromochloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Bromodichloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

VBLKW-220811
VBLKW-220811

Collected	Received	Matrix	Units
NA	NA	Aqueous	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
Bromoform	1	U	0.40	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Bromomethane	1	U	0.40	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Carbon disulfide	2	U	0.60	2.0	2.0	1	08/11/22 12:34	VOA6_414932	X081107
Carbon tetrachloride	1	U	0.50	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Chlorobenzene	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Chloroethane	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Chloroform	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Chloromethane	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
cis-1,3-Dichloropropene	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Dibromochloromethane	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Dibromomethane	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Dichlorodifluoromethane	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Ethylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Hexachlorobutadiene	1	U	1.0	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Isopropylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
m,p-Xylene	1	U	0.50	2.0	2.0	1	08/11/22 12:34	VOA6_414932	X081107
Methylene chloride	2	U	0.40	2.0	2.0	1	08/11/22 12:34	VOA6_414932	X081107
Naphthalene	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
n-Butylbenzene	1	U	0.40	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
n-Propylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
o-Xylene	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
sec-Butylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Styrene	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
tert-Butylbenzene	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Tetrachloroethene	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Toluene	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
trans-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
trans-1,3-Dichloropropene	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Trichloroethene	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Trichlorofluoromethane	1	U	0.30	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	08/11/22 12:34	VOA6_414932	X081107

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

VBLKW-220812
VBLKW-220812

Collected	Received	Matrix	Units
NA	NA	Aqueous	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,1,2-Tetrachloroethane	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,1,1-Trichloroethane	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,1,2,2-Tetrachloroethane	1	U	0.50	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,1-Dichloroethane	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,1-Dichloropropene	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,2,3-Trichlorobenzene	1	U	0.40	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,2,3-Trichloropropane	1	U	0.50	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,2,4-Trichlorobenzene	1	U	0.50	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,2,4-Trimethylbenzene	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,2-Dibromo-3-chloropropane	1	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,2-Dibromoethane	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,2-Dichlorobenzene	1	U	0.50	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,2-Dichloropropane	1	U	0.50	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,3,5-Trimethylbenzene	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,3-Dichlorobenzene	1	U	0.40	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,3-Dichloropropane	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
1,4-Dichlorobenzene	1	U	0.40	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
2,2-Dichloropropane	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
2-Butanone	1	U	0.50	2.0	2.0	1	08/12/22 12:27	VOA6_414991	X081207
2-Chlorotoluene	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
2-Hexanone	2	U	1.0	2.0	2.0	1	08/12/22 12:27	VOA6_414991	X081207
4-Chlorotoluene	1	U	0.40	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
4-Isopropyltoluene	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
4-Methyl-2-pentanone	2	U	0.70	2.0	2.0	1	08/12/22 12:27	VOA6_414991	X081207
Acetone	2	U	0.40	2.0	2.0	1	08/12/22 12:27	VOA6_414991	X081207
Benzene	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Bromobenzene	1	U	0.40	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Bromochloromethane	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Bromodichloromethane	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

VBLKW-220812
VBLKW-220812

Collected	Received	Matrix	Units
NA	NA	Aqueous	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
Bromoform	1	U	0.40	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Bromomethane	1	U	0.40	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Carbon disulfide	2	U	0.60	2.0	2.0	1	08/12/22 12:27	VOA6_414991	X081207
Carbon tetrachloride	1	U	0.50	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Chlorobenzene	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Chloroethane	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Chloroform	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Chloromethane	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
cis-1,3-Dichloropropene	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Dibromochloromethane	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Dibromomethane	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Dichlorodifluoromethane	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Ethylbenzene	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Hexachlorobutadiene	1	U	1.0	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Isopropylbenzene	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
m,p-Xylene	1	U	0.50	2.0	2.0	1	08/12/22 12:27	VOA6_414991	X081207
Methylene chloride	2	U	0.40	2.0	2.0	1	08/12/22 12:27	VOA6_414991	X081207
Naphthalene	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
n-Butylbenzene	1	U	0.40	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
n-Propylbenzene	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
o-Xylene	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
sec-Butylbenzene	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Styrene	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
tert-Butylbenzene	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Tetrachloroethene	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Toluene	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
trans-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
trans-1,3-Dichloropropene	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Trichloroethene	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Trichlorofluoromethane	1	U	0.30	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	08/12/22 12:27	VOA6_414991	X081207

right solutions.
right partner.

Form 2

System Monitoring Compound Recovery

Volatiles Organics by Method 8260C

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/19/2022

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

RunID
VOA6_414932

Volatiles Organics by Method 8260C

VLCSW-220811 (6799016) Analyzed 08/11/22 11:52 Conc Units µg/L DF 1

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
Dibromofluoromethane	54.58	50.00	109	80 - 119	
Toluene-d8	51.63	50.00	103	89 - 112	
4-Bromofluorobenzene	52.04	50.00	104	85 - 114	
1,2-Dichloroethane-d4	54.09	50.00	108	81 - 118	

VBLKW-220811 (6799017) Analyzed 08/11/22 12:34 Conc Units µg/L DF 1

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	47.50	50.00	95	81 - 118	
Dibromofluoromethane	47.55	50.00	95	80 - 119	
Toluene-d8	53.99	50.00	108	89 - 112	
4-Bromofluorobenzene	48.89	50.00	98	85 - 114	

HS22080522-12 (6799019) Analyzed 08/11/22 13:16 Conc Units µg/L DF 1

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	47.48	50.00	95	81 - 118	
Dibromofluoromethane	47.59	50.00	95	80 - 119	
Toluene-d8	54.01	50.00	108	89 - 112	
4-Bromofluorobenzene	47.25	50.00	95	85 - 114	

HS22080522-05 (6799020) Analyzed 08/11/22 13:37 Conc Units µg/L DF 5

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	241.9	250.0	97	81 - 118	
Dibromofluoromethane	238.1	250.0	95	80 - 119	
Toluene-d8	265.2	250.0	106	89 - 112	
4-Bromofluorobenzene	243.0	250.0	97	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

RunID
VOA6_414932

Volatiles Organics by Method 8260C

HS22080522-01 (6799021) Analyzed 08/11/22 13:58 Conc Units µg/L DF 25

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	1190	1250	95	81 - 118	
Dibromofluoromethane	1215	1250	97	80 - 119	
Toluene-d8	1326	1250	106	89 - 112	
4-Bromofluorobenzene	1214	1250	97	85 - 114	

HS22080522-02 (6799022) Analyzed 08/11/22 14:19 Conc Units µg/L DF 25

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	1176	1250	94	81 - 118	
Dibromofluoromethane	1186	1250	95	80 - 119	
Toluene-d8	1326	1250	106	89 - 112	
4-Bromofluorobenzene	1203	1250	96	85 - 114	

HS22080522-05 (6799023) Analyzed 08/11/22 14:40 Conc Units µg/L DF 50

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	2385	2500	95	81 - 118	
Dibromofluoromethane	2388	2500	96	80 - 119	
Toluene-d8	2643	2500	106	89 - 112	
4-Bromofluorobenzene	2399	2500	96	85 - 114	

HS22080522-05MS (6799024) Analyzed 08/11/22 15:01 Conc Units µg/L DF 50

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	2455	2500	98	81 - 118	
Dibromofluoromethane	2423	2500	97	80 - 119	
Toluene-d8	2659	2500	106	89 - 112	
4-Bromofluorobenzene	2513	2500	101	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

RunID
VOA6_414932

Volatiles Organics by Method 8260C

HS22080522-05MSD (6799025) Analyzed 08/11/22 15:22 Conc Units µg/L DF 50

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	2368	2500	95	81 - 118	
Dibromofluoromethane	2387	2500	96	80 - 119	
Toluene-d8	2693	2500	108	89 - 112	
4-Bromofluorobenzene	2494	2500	100	85 - 114	

HS22080522-01 (6799026) Analyzed 08/11/22 15:43 Conc Units µg/L DF 1000

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	48140	50000	96	81 - 118	
Dibromofluoromethane	47510	50000	95	80 - 119	
Toluene-d8	53390	50000	107	89 - 112	
4-Bromofluorobenzene	48020	50000	96	85 - 114	

HS22080522-02 (6799027) Analyzed 08/11/22 16:04 Conc Units µg/L DF 1000

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	47740	50000	96	81 - 118	
Dibromofluoromethane	47690	50000	95	80 - 119	
Toluene-d8	53400	50000	107	89 - 112	
4-Bromofluorobenzene	48640	50000	97	85 - 114	

HS22080522-03 (6799033) Analyzed 08/11/22 18:11 Conc Units µg/L DF 1

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	48.17	50.00	96	81 - 118	
Dibromofluoromethane	48.17	50.00	96	80 - 119	
Toluene-d8	53.42	50.00	107	89 - 112	
4-Bromofluorobenzene	48.46	50.00	97	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

RunID
VOA6_414932

Volatiles Organics by Method 8260C

HS22080522-06 (6799034) Analyzed 08/11/22 18:32 Conc Units µg/L DF 1

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	47.81	50.00	96	81 - 118	
Dibromofluoromethane	47.80	50.00	96	80 - 119	
Toluene-d8	53.83	50.00	108	89 - 112	
4-Bromofluorobenzene	48.36	50.00	97	85 - 114	

HS22080522-07 (6799035) Analyzed 08/11/22 18:53 Conc Units µg/L DF 1

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	47.58	50.00	95	81 - 118	
Dibromofluoromethane	46.95	50.00	94	80 - 119	
Toluene-d8	53.21	50.00	106	89 - 112	
4-Bromofluorobenzene	47.54	50.00	95	85 - 114	

HS22080522-09 (6799036) Analyzed 08/11/22 19:14 Conc Units µg/L DF 1

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	48.71	50.00	97	81 - 118	
Dibromofluoromethane	47.87	50.00	96	80 - 119	
Toluene-d8	54.28	50.00	109	89 - 112	
4-Bromofluorobenzene	47.60	50.00	95	85 - 114	

HS22080522-11 (6799037) Analyzed 08/11/22 19:35 Conc Units µg/L DF 1

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	48.27	50.00	97	81 - 118	
Dibromofluoromethane	47.18	50.00	94	80 - 119	
Toluene-d8	53.51	50.00	107	89 - 112	
4-Bromofluorobenzene	48.69	50.00	97	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

RunID
VOA6_414932

Volatiles Organics by Method 8260C

HS22080522-08 (6799038)	Analyzed 08/11/22 19:56		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	48.55	50.00	97	81 - 118	
Dibromofluoromethane	47.04	50.00	94	80 - 119	
Toluene-d8	53.47	50.00	107	89 - 112	
4-Bromofluorobenzene	47.58	50.00	95	85 - 114	

HS22080522-10 (6799039)	Analyzed 08/11/22 20:17		Conc Units µg/L		DF 5
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	246.7	250.0	99	81 - 118	
Dibromofluoromethane	238.2	250.0	95	80 - 119	
Toluene-d8	269.7	250.0	108	89 - 112	
4-Bromofluorobenzene	242.0	250.0	97	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

RunID
VOA6_414991

Volatiles Organics by Method 8260C

VLCSW-220812 (6800129)	Analyzed 08/12/22 11:45	Conc Units µg/L	DF 1	
Surrogate	**Result Conc**	**Spike Conc**	**%Recovery**	**%Recovery Limits**	**#**
Dibromofluoromethane	53.23	50.00	106	80 - 119	
Toluene-d8	51.09	50.00	102	89 - 112	
4-Bromofluorobenzene	51.02	50.00	102	85 - 114	
1,2-Dichloroethane-d4	52.78	50.00	106	81 - 118	

VBLKW-220812 (6800130)	Analyzed 08/12/22 12:27	Conc Units µg/L	DF 1	
Surrogate	**Result Conc**	**Spike Conc**	**%Recovery**	**%Recovery Limits**	**#**
1,2-Dichloroethane-d4	47.69	50.00	95	81 - 118	
Dibromofluoromethane	47.85	50.00	96	80 - 119	
Toluene-d8	53.92	50.00	108	89 - 112	
4-Bromofluorobenzene	48.68	50.00	97	85 - 114	

HS22080522-04 (6800133)	Analyzed 08/12/22 13:31	Conc Units µg/L	DF 10	
Surrogate	**Result Conc**	**Spike Conc**	**%Recovery**	**%Recovery Limits**	**#**
1,2-Dichloroethane-d4	487.5	500.0	98	81 - 118	
Dibromofluoromethane	481.0	500.0	96	80 - 119	
Toluene-d8	531.4	500.0	106	89 - 112	
4-Bromofluorobenzene	480.2	500.0	96	85 - 114	

ZZZZZZMS (6800134)	Analyzed 08/12/22 13:52	Conc Units µg/L	DF 1	
Surrogate	**Result Conc**	**Spike Conc**	**%Recovery**	**%Recovery Limits**	**#**
1,2-Dichloroethane-d4	47.76	50.00	96	81 - 118	
Dibromofluoromethane	48.05	50.00	96	80 - 119	
Toluene-d8	52.53	50.00	105	89 - 112	
4-Bromofluorobenzene	50.04	50.00	100	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

RunID
VOA6_414991

Volatiles Organics by Method 8260C

ZZZZZZMSD (6800135) Analyzed 08/12/22 14:13 Conc Units µg/L DF 1

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	47.66	50.00	95	81 - 118	
Dibromofluoromethane	48.53	50.00	97	80 - 119	
Toluene-d8	52.77	50.00	106	89 - 112	
4-Bromofluorobenzene	50.93	50.00	102	85 - 114	

HS22080522-08 (6800136) Analyzed 08/12/22 14:34 Conc Units µg/L DF 5

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	239.6	250.0	96	81 - 118	
Dibromofluoromethane	235.3	250.0	94	80 - 119	
Toluene-d8	267.2	250.0	107	89 - 112	
4-Bromofluorobenzene	245.7	250.0	98	85 - 114	

HS22080522-10 (6800137) Analyzed 08/12/22 14:55 Conc Units µg/L DF 10

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	478.3	500.0	96	81 - 118	
Dibromofluoromethane	469.9	500.0	94	80 - 119	
Toluene-d8	529.9	500.0	106	89 - 112	
4-Bromofluorobenzene	477.6	500.0	96	85 - 114	

HS22080522-04 (6800152) Analyzed 08/12/22 20:11 Conc Units µg/L DF 100

Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	4864	5000	97	81 - 118	
Dibromofluoromethane	4711	5000	94	80 - 119	
Toluene-d8	5499	5000	110	89 - 112	
4-Bromofluorobenzene	4797	5000	96	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

right solutions.
right partner.

Form 3A

Matrix Spike/Spike Duplicate Recovery

Volatiles Organics by Method 8260C

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/19/2022

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

MW23_080822		HS22080522-05		HS22080522-05MS				HS22080522-05MSD						
Sample Matrix	Aqueous	Run Date	08/11/22			08/11/22				08/11/22				
Units	µg/L	Run Time	14:40			15:01				15:22				
		Data File	X081113.D			X081114.D				X081115.D				
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
1,1,1,2-Tetrachloroethane	78-124	50	0	1104	1000	110		1088	1000	109		20	1.50	
1,1,1-Trichloroethane	74-131	50	0	1105	1000	110		1060	1000	106		20	4.20	
1,1,2,2-Tetrachloroethane	71-121	50	0	1025	1000	103		1108	1000	111		20	7.70	
1,1,2-Trichloroethane	80-119	50	0	1044	1000	104		1056	1000	106		20	1.10	
1,1-Dichloroethane	77-125	50	0	1050	1000	105		1017	1000	102		20	3.20	
1,1-Dichloroethene	71-131	50	0	1044	1000	104		961.8	1000	96		20	8.20	
1,1-Dichloropropene	78-125	50	0	1140	1000	114		1093	1000	109		20	4.20	
1,2,3-Trichlorobenzene	69-129	50	0	872.2	1000	87		1131	1000	113		20	25.8	
1,2,3-Trichloropropane	73-122	50	0	1037	1000	104		1109	1000	111		20	6.60	
1,2,4-Trichlorobenzene	69-130	50	0	993.3	1000	99		1144	1000	114		20	14.1	
1,2,4-Trimethylbenzene	76-124	50	0	1163	1000	116		1212	1000	121		20	4.10	
1,2-Dibromo-3-	62-128	50	0	932.3	1000	93		1145	1000	115		20	20.5	
1,2-Dibromoethane	77-121	50	0	1058	1000	106		1065	1000	107		20	0.700	
1,2-Dichlorobenzene	80-119	50	0	1090	1000	109		1161	1000	116		20	6.30	
1,2-Dichloroethane	73-128	50	68.64	1121	1000	105		1116	1000	105		20	0.400	
1,2-Dichloropropane	78-122	50	0	1044	1000	104		1004	1000	100		20	3.90	
1,3,5-Trimethylbenzene	75-124	50	0	1185	1000	118		1223	1000	122		20	3.20	
1,3-Dichlorobenzene	80-119	50	0	1104	1000	110		1187	1000	119		20	7.20	
1,3-Dichloropropane	80-119	50	0	1066	1000	107		1058	1000	106		20	0.700	
1,4-Dichlorobenzene	79-118	50	0	1096	1000	110		1164	1000	116		20	6.10	
2,2-Dichloropropane	60-139	50	0	1108	1000	111		1034	1000	103		20	6.80	
2-Butanone	56-143	50	0	1671	2000	84		1743	2000	87		20	4.20	
2-Chlorotoluene	79-122	50	0	1127	1000	113		1170	1000	117		20	3.80	
2-Hexanone	57-139	50	0	1983	2000	99		1992	2000	100		20	0.400	
4-Chlorotoluene	78-122	50	0	1153	1000	115		1196	1000	120		20	3.70	
4-Isopropyltoluene	77-127	50	0	1220	1000	122		1281	1000	128	*	20	4.90	
4-Methyl-2-pentanone	67-130	50	0	2101	2000	105		2161	2000	108		20	2.80	
Acetone	39-160	50	0	1551	2000	78		1514	2000	76		20	2.40	
Benzene	79-120	50	0	1069	1000	107		1035	1000	103		20	3.30	
Bromobenzene	80-120	50	0	1102	1000	110		1167	1000	117		20	5.70	
Bromochloromethane	78-123	50	0	964.7	1000	97		938.9	1000	94		20	2.70	
Bromodichloromethane	79-125	50	0	1046	1000	105		1038	1000	104		20	0.700	
Bromoform	66-130	50	0	1002	1000	100		999.8	1000	100		20	0.200	
Bromomethane	53-141	50	0	1061	1000	106		949.8	1000	95		20	11.0	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

MW23_080822		HS22080522-05		HS22080522-05MS				HS22080522-05MSD						
Sample Matrix	Aqueous	Run Date	08/11/22			08/11/22				08/11/22				
Units	µg/L	Run Time	14:40			15:01				15:22				
		Data File	X081113.D			X081114.D				X081115.D				
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
Carbon disulfide	64-133	50	0	2195	2000	110		2048	2000	102		20	6.90	
Carbon tetrachloride	72-136	50	0	1113	1000	111		1073	1000	107		20	3.70	
Chlorobenzene	82-118	50	0	1131	1000	113		1111	1000	111		20	1.70	
Chloroethane	60-138	50	0	974.7	1000	98		941.8	1000	94		20	3.40	
Chloroform	79-124	50	0	1048	1000	105		1007	1000	101		20	4.10	
Chloromethane	50-139	50	0	1121	1000	112		1016	1000	102		20	9.80	
cis-1,2-Dichloroethene	78-123	50	150.7	1118	1000	97		1061	1000	91		20	5.20	
cis-1,3-Dichloropropene	75-124	50	0	1048	1000	105		1034	1000	103		20	1.30	
Dibromochloromethane	74-126	50	0	1054	1000	105		1067	1000	107		20	1.20	
Dibromomethane	79-123	50	0	1014	1000	101		1013	1000	101		20	0.100	
Dichlorodifluoromethane	32-152	50	0	1009	1000	101		954.4	1000	95		20	5.60	
Ethylbenzene	79-121	50	0	1152	1000	115		1138	1000	114		20	1.20	
Hexachlorobutadiene	66-134	50	0	1158	1000	116		1236	1000	124		20	6.50	
Isopropylbenzene	72-131	50	0	1192	1000	119		1171	1000	117		20	1.80	
m,p-Xylene	80-121	50	0	2337	2000	117		2288	2000	114		20	2.10	
Methylene chloride	74-124	50	0	1020	1000	102		980.4	1000	98		20	3.90	
n-Butylbenzene	75-128	50	0	1259	1000	126		1303	1000	130	*	20	3.40	
n-Propylbenzene	76-126	50	0	1243	1000	124		1273	1000	127	*	20	2.40	
Naphthalene	61-128	50	0	808.4	1000	81		1050	1000	105		20	26.0	
o-Xylene	78-122	50	0	1120	1000	112		1115	1000	111		20	0.400	
sec-Butylbenzene	77-126	50	0	1240	1000	124		1277	1000	128	*	20	2.90	
Styrene	78-123	50	0	1117	1000	112		1111	1000	111		20	0.500	
tert-Butylbenzene	78-124	50	0	1208	1000	121		1249	1000	125	*	20	3.30	
Tetrachloroethene	74-129	50	0	1170	1000	117		1137	1000	114		20	2.90	
Toluene	80-121	50	0	1132	1000	113		1114	1000	111		20	1.60	
trans-1,2-Dichloroethene	75-124	50	0	1070	1000	107		1007	1000	101		20	6.10	
trans-1,3-Dichloropropene	73-127	50	0	1042	1000	104		1027	1000	103		20	1.40	
Trichloroethene	79-123	50	2615	3694	1000	108		3509	1000	89		20	5.10	
Trichlorofluoromethane	65-141	50	0	1085	1000	109		1017	1000	102		20	6.50	
Vinyl chloride	58-137	50	0	969.7	1000	97		915.2	1000	92		20	5.80	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

		HS22080490-02		HS22080490-02MS				HS22080490-02MSD						
Sample Matrix	Aqueous	**Run Date**	08/12/22			08/12/22				08/12/22				
Units	µg/L	**Run Time**	13:09			13:52				14:13				
		Data File	X081209.D			X081211.D				X081212.D				
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
1,1,1,2-Tetrachloroethane	78-124	1	0	20.82	20.00	104		20.17	20.00	101		20	3.20	
1,1,1-Trichloroethane	74-131	1	0	20.98	20.00	105		20.05	20.00	100		20	4.60	
1,1,2,2-Tetrachloroethane	71-121	1	0	20.03	20.00	100		19.91	20.00	100		20	0.600	
1,1,2-Trichloroethane	80-119	1	0	20.19	20.00	101		19.88	20.00	99		20	1.50	
1,1-Dichloroethane	77-125	1	0	19.81	20.00	99		18.88	20.00	94		20	4.80	
1,1-Dichloroethene	71-131	1	0	18.92	20.00	95		18.11	20.00	91		20	4.40	
1,1-Dichloropropene	78-125	1	0	22.12	20.00	111		20.85	20.00	104		20	5.90	
1,2,3-Trichlorobenzene	69-129	1	0	16.63	20.00	83		20.64	20.00	103		20	21.5	
1,2,3-Trichloropropane	73-122	1	0	19.43	20.00	97		19.91	20.00	100		20	2.40	
1,2,4-Trichlorobenzene	69-130	1	0	18.27	20.00	91		20.27	20.00	101		20	10.4	
1,2,4-Trimethylbenzene	76-124	1	0	21.49	20.00	107		21.26	20.00	106		20	1.10	
1,2-Dibromo-3-	62-128	1	0	19.43	20.00	97		19.44	20.00	97		20	0.100	
1,2-Dibromoethane	77-121	1	0	20.35	20.00	102		20.16	20.00	101		20	0.900	
1,2-Dichlorobenzene	80-119	1	0	20.49	20.00	102		20.82	20.00	104		20	1.60	
1,2-Dichloroethane	73-128	1	0	20.18	20.00	101		19.85	20.00	99		20	1.60	
1,2-Dichloropropane	78-122	1	0	20.16	20.00	101		19.62	20.00	98		20	2.70	
1,3,5-Trimethylbenzene	75-124	1	0	21.75	20.00	109		21.5	20.00	107		20	1.20	
1,3-Dichlorobenzene	80-119	1	0	21.20	20.00	106		20.74	20.00	104		20	2.20	
1,3-Dichloropropane	80-119	1	0	20.09	20.00	100		20.11	20.00	101		20	0.100	
1,4-Dichlorobenzene	79-118	1	0	20.25	20.00	101		20.78	20.00	104		20	2.60	
2,2-Dichloropropane	60-139	1	0	21.22	20.00	106		20.32	20.00	102		20	4.30	
2-Butanone	56-143	1	0	32.53	40.00	81		32.42	40.00	81		20	0.400	
2-Chlorotoluene	79-122	1	0	21.05	20.00	105		20.61	20.00	103		20	2.10	
2-Hexanone	57-139	1	0	38.80	40.00	97		39.24	40.00	98		20	1.10	
4-Chlorotoluene	78-122	1	0	21.25	20.00	106		21.1	20.00	105		20	0.700	
4-Isopropyltoluene	77-127	1	0	21.90	20.00	110		21.8	20.00	109		20	0.400	
4-Methyl-2-pentanone	67-130	1	0	41.08	40.00	103		38.73	40.00	97		20	5.90	
Acetone	39-160	1	0	27.65	40.00	69		28.8	40.00	72		20	4.10	
Benzene	79-120	1	0	20.47	20.00	102		19.65	20.00	98		20	4.10	
Bromobenzene	80-120	1	0	21.31	20.00	107		20.95	20.00	105		20	1.70	
Bromochloromethane	78-123	1	0	18.58	20.00	93		18.17	20.00	91		20	2.20	
Bromodichloromethane	79-125	1	0	20.45	20.00	102		19.92	20.00	100		20	2.60	
Bromoform	66-130	1	0	18.93	20.00	95		18.71	20.00	94		20	1.20	
Bromomethane	53-141	1	0	18.08	20.00	90		17.56	20.00	88		20	2.90	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

		HS22080490-02		HS22080490-02MS				HS22080490-02MSD						
Sample Matrix	Aqueous	**Run Date**	08/12/22			08/12/22				08/12/22				
Units	µg/L	**Run Time**	13:09			13:52				14:13				
		Data File	X081209.D			X081211.D				X081212.D				
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
Carbon disulfide	64-133	1	0	41.30	40.00	103		40.02	40.00	100		20	3.10	
Carbon tetrachloride	72-136	1	0	21.41	20.00	107		20.23	20.00	101		20	5.60	
Chlorobenzene	82-118	1	0	21.29	20.00	106		20.36	20.00	102		20	4.50	
Chloroethane	60-138	1	0	18.74	20.00	94		18.25	20.00	91		20	2.60	
Chloroform	79-124	1	0	19.82	20.00	99		19.41	20.00	97		20	2.10	
Chloromethane	50-139	1	0	22.41	20.00	112		20.96	20.00	105		20	6.70	
cis-1,2-Dichloroethene	78-123	1	0	20.05	20.00	100		19.44	20.00	97		20	3.10	
cis-1,3-Dichloropropene	75-124	1	0	20.13	20.00	101		19.74	20.00	99		20	2.00	
Dibromochloromethane	74-126	1	0	20.14	20.00	101		19.93	20.00	100		20	1.10	
Dibromomethane	79-123	1	0	19.83	20.00	99		19.54	20.00	98		20	1.50	
Dichlorodifluoromethane	32-152	1	0	18.20	20.00	91		17.85	20.00	89		20	1.90	
Ethylbenzene	79-121	1	0	21.46	20.00	107		20.65	20.00	103		20	3.90	
Hexachlorobutadiene	66-134	1	0	20.92	20.00	105		21.4	20.00	107		20	2.30	
Isopropylbenzene	72-131	1	0	21.73	20.00	109		20.99	20.00	105		20	3.40	
m,p-Xylene	80-121	1	0	44.00	40.00	110		42.34	40.00	106		20	3.90	
Methylene chloride	74-124	1	0	19.95	20.00	100		19.46	20.00	97		20	2.50	
n-Butylbenzene	75-128	1	0	22.22	20.00	111		22.3	20.00	112		20	0.400	
n-Propylbenzene	76-126	1	0	22.64	20.00	113		22.21	20.00	111		20	1.90	
Naphthalene	61-128	1	0	15.41	20.00	77		18.62	20.00	93		20	18.9	
o-Xylene	78-122	1	0	21.07	20.00	105		20.15	20.00	101		20	4.50	
sec-Butylbenzene	77-126	1	0	22.00	20.00	110		21.87	20.00	109		20	0.600	
Styrene	78-123	1	0	21.05	20.00	105		20.43	20.00	102		20	3.00	
tert-Butylbenzene	78-124	1	0	21.69	20.00	108		21.57	20.00	108		20	0.500	
Tetrachloroethene	74-129	1	0	21.75	20.00	109		21.16	20.00	106		20	2.70	
Toluene	80-121	1	0	21.26	20.00	106		20.56	20.00	103		20	3.40	
trans-1,2-Dichloroethene	75-124	1	0	19.98	20.00	100		19.87	20.00	99		20	0.500	
trans-1,3-Dichloropropene	73-127	1	0	20.15	20.00	101		19.57	20.00	98		20	2.90	
Trichloroethene	79-123	1	6.554	27.37	20.00	104		26.26	20.00	99		20	4.10	
Trichlorofluoromethane	65-141	1	0	19.99	20.00	100		19.48	20.00	97		20	2.50	
Vinyl chloride	58-137	1	0	18.67	20.00	93		17.78	20.00	89		20	4.90	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits

right solutions.
right partner.

Form 3B

Laboratory Control Sample Recovery

Volatiles Organics by Method 8260C

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/19/2022

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

VOA6_414932			VLCSW-220811		
QC Matrix: Aqueous	Units: ug/L	Run Date / Run Time	08/11/22 11:52		
Analyte	%R Limits	Spike Added	LCS Result	%R	Q
1,1,1,2-Tetrachloroethane	78-124	20	20.58	103	
1,1,1-Trichloroethane	74-131	20	21.31	107	
1,1,2,2-Tetrachloroethane	71-121	20	20.08	100	
1,1,2-Trichloroethane	80-119	20	19.97	100	
1,1-Dichloroethane	77-125	20	20.47	102	
1,1-Dichloroethene	71-131	20	19.49	97	
1,1-Dichloropropene	78-125	20	21.3	107	
1,2,3-Trichlorobenzene	69-129	20	21.2	106	
1,2,3-Trichloropropane	73-122	20	20.03	100	
1,2,4-Trichlorobenzene	69-130	20	22.11	111	
1,2,4-Trimethylbenzene	76-124	20	21.72	109	
1,2-Dibromo-3-chloropropane	62-128	20	21.31	107	
1,2-Dibromoethane	77-121	20	20.37	102	
1,2-Dichlorobenzene	80-119	20	20.8	104	
1,2-Dichloroethane	73-128	20	20.98	105	
1,2-Dichloroethane-d4	81-118	50	54.09	108	
1,2-Dichloropropane	78-122	20	20.51	103	
1,3,5-Trimethylbenzene	75-124	20	21.77	109	
1,3-Dichlorobenzene	80-119	20	20.93	105	
1,3-Dichloropropane	80-119	20	20.46	102	
1,4-Dichlorobenzene	79-118	20	20.94	105	
2,2-Dichloropropane	60-139	20	22.26	111	
2-Butanone	56-143	40	36.34	91	
2-Chlorotoluene	79-122	20	20.95	105	
2-Hexanone	57-139	40	39.82	100	
4-Bromofluorobenzene	85-114	50	52.04	104	
4-Chlorotoluene	78-122	20	21.47	107	
4-Isopropyltoluene	77-127	20	22.44	112	
4-Methyl-2-pentanone	67-130	40	42.03	105	
Acetone	39-160	40	38.3	96	
Benzene	79-120	20	20.56	103	
Bromobenzene	80-120	20	21.44	107	
Bromochloromethane	78-123	20	20.05	100	
Bromodichloromethane	79-125	20	21.05	105	
Bromoform	66-130	20	19.03	95	
Bromomethane	53-141	20	21.11	106	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

VOA6_414932			VLCSW-220811		
QC Matrix: Aqueous	Units: ug/L	Run Date / Run Time	08/11/22 11:52		
Analyte	%R Limits	Spike Added	LCS Result	%R	Q
Carbon disulfide	64-133	40	40.84	102	
Carbon tetrachloride	72-136	20	20.46	102	
Chlorobenzene	82-118	20	20.93	105	
Chloroethane	60-138	20	20.4	102	
Chloroform	79-124	20	20.95	105	
Chloromethane	50-139	20	22.49	112	
cis-1,2-Dichloroethene	78-123	20	21.76	109	
cis-1,3-Dichloropropene	75-124	20	21.05	105	
Dibromochloromethane	74-126	20	20.28	101	
Dibromofluoromethane	80-119	50	54.58	109	
Dibromomethane	79-123	20	20.6	103	
Dichlorodifluoromethane	32-152	20	22.75	114	
Ethylbenzene	79-121	20	21.33	107	
Hexachlorobutadiene	66-134	20	21.49	107	
Isopropylbenzene	72-131	20	21.27	106	
m,p-Xylene	80-121	40	42.51	106	
Methylene chloride	74-124	20	21.82	109	
Naphthalene	61-128	20	21.26	106	
n-Butylbenzene	75-128	20	23.03	115	
n-Propylbenzene	76-126	20	22.39	112	
o-Xylene	78-122	20	20.86	104	
sec-Butylbenzene	77-126	20	22.25	111	
Styrene	78-123	20	20.83	104	
tert-Butylbenzene	78-124	20	21.71	109	
Tetrachloroethene	74-129	20	20.49	102	
Toluene	80-121	20	20.73	104	
Toluene-d8	89-112	50	51.63	103	
trans-1,2-Dichloroethene	75-124	20	21.23	106	
trans-1,3-Dichloropropene	73-127	20	20.82	104	
Trichloroethene	79-123	20	20.76	104	
Trichlorofluoromethane	65-141	20	20.38	102	
Vinyl chloride	58-137	20	19.58	98	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

VOA6_414991			VLCSW-220812		
QC Matrix: Aqueous	Units: ug/L	Run Date / Run Time	08/12/22 11:45		
Analyte	%R Limits	Spike Added	LCS Result	%R	Q
1,1,1,2-Tetrachloroethane	78-124	20	19.54	98	
1,1,1-Trichloroethane	74-131	20	18.91	95	
1,1,2,2-Tetrachloroethane	71-121	20	19.94	100	
1,1,2-Trichloroethane	80-119	20	18.94	95	
1,1-Dichloroethane	77-125	20	19.35	97	
1,1-Dichloroethene	71-131	20	16.83	84	
1,1-Dichloropropene	78-125	20	18.86	94	
1,2,3-Trichlorobenzene	69-129	20	20.45	102	
1,2,3-Trichloropropane	73-122	20	19.01	95	
1,2,4-Trichlorobenzene	69-130	20	20.1	101	
1,2,4-Trimethylbenzene	76-124	20	19.47	97	
1,2-Dibromo-3-chloropropane	62-128	20	19.04	95	
1,2-Dibromoethane	77-121	20	19.41	97	
1,2-Dichlorobenzene	80-119	20	19.34	97	
1,2-Dichloroethane	73-128	20	19.32	97	
1,2-Dichloroethane-d4	81-118	50	52.78	106	
1,2-Dichloropropane	78-122	20	18.72	94	
1,3,5-Trimethylbenzene	75-124	20	19.26	96	
1,3-Dichlorobenzene	80-119	20	19.34	97	
1,3-Dichloropropane	80-119	20	19.25	96	
1,4-Dichlorobenzene	79-118	20	19.08	95	
2,2-Dichloropropane	60-139	20	19.55	98	
2-Butanone	56-143	40	34.79	87	
2-Chlorotoluene	79-122	20	18.98	95	
2-Hexanone	57-139	40	39.73	99	
4-Bromofluorobenzene	85-114	50	51.02	102	
4-Chlorotoluene	78-122	20	19.55	98	
4-Isopropyltoluene	77-127	20	19.27	96	
4-Methyl-2-pentanone	67-130	40	40.38	101	
Acetone	39-160	40	36.87	92	
Benzene	79-120	20	18.73	94	
Bromobenzene	80-120	20	19.72	99	
Bromochloromethane	78-123	20	18.53	93	
Bromodichloromethane	79-125	20	19.66	98	
Bromoform	66-130	20	18.61	93	
Bromomethane	53-141	20	19.41	97	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

VOA6_414991			VLCSW-220812		
QC Matrix: Aqueous	Units: ug/L	Run Date / Run Time	08/12/22 11:45		
Analyte	%R Limits	Spike Added	LCS Result	%R	Q
Carbon disulfide	64-133	40	35.99	90	
Carbon tetrachloride	72-136	20	17.34	87	
Chlorobenzene	82-118	20	19.24	96	
Chloroethane	60-138	20	18.16	91	
Chloroform	79-124	20	19.39	97	
Chloromethane	50-139	20	20.39	102	
cis-1,2-Dichloroethene	78-123	20	19.6	98	
cis-1,3-Dichloropropene	75-124	20	19.69	98	
Dibromochloromethane	74-126	20	19.15	96	
Dibromofluoromethane	80-119	50	53.23	106	
Dibromomethane	79-123	20	19.48	97	
Dichlorodifluoromethane	32-152	20	18.95	95	
Ethylbenzene	79-121	20	19.12	96	
Hexachlorobutadiene	66-134	20	19.68	98	
Isopropylbenzene	72-131	20	18.73	94	
m,p-Xylene	80-121	40	38.92	97	
Methylene chloride	74-124	20	20.08	100	
Naphthalene	61-128	20	19.74	99	
n-Butylbenzene	75-128	20	19.73	99	
n-Propylbenzene	76-126	20	19.42	97	
o-Xylene	78-122	20	18.98	95	
sec-Butylbenzene	77-126	20	18.9	94	
Styrene	78-123	20	19.48	97	
tert-Butylbenzene	78-124	20	18.72	94	
Tetrachloroethene	74-129	20	18.06	90	
Toluene	80-121	20	19	95	
Toluene-d8	89-112	50	51.09	102	
trans-1,2-Dichloroethene	75-124	20	19.27	96	
trans-1,3-Dichloropropene	73-127	20	19.84	99	
Trichloroethene	79-123	20	18.83	94	
Trichlorofluoromethane	65-141	20	17.31	86	
Vinyl chloride	58-137	20	17.23	86	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits

right solutions.
right partner.

Form 4

Method Blank Summary

Volatiles Organics by Method 8260C

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/19/2022

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

BatchID
R414932

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	VBLKW-220811	X081107.D	08/11/22 12:34	VOA6_414932
VLCSW-220811	VLCSW-220811	X081105.D	08/11/22 11:52	VOA6_414932
ZZZZZZ	HS22080499-09	X081108.D	08/11/22 12:55	VOA6_414932
Trip Blank	HS22080522-12	X081109.D	08/11/22 13:16	VOA6_414932
MW23_080822	HS22080522-05	X081110.D	08/11/22 13:37	VOA6_414932
MW2_080822	HS22080522-01	X081111.D	08/11/22 13:58	VOA6_414932
MW2_080822_a	HS22080522-02	X081112.D	08/11/22 14:19	VOA6_414932
MW23_080822	HS22080522-05	X081113.D	08/11/22 14:40	VOA6_414932
HS22080522-05MS	HS22080522-05MS	X081114.D	08/11/22 15:01	VOA6_414932
HS22080522-05MSD	HS22080522-05MSD	X081115.D	08/11/22 15:22	VOA6_414932
MW2_080822	HS22080522-01	X081116.D	08/11/22 15:43	VOA6_414932
MW2_080822_a	HS22080522-02	X081117.D	08/11/22 16:04	VOA6_414932
ZZZZZZ	HS22080499-01	X081118.D	08/11/22 16:26	VOA6_414932
ZZZZZZ	HS22080499-03	X081119.D	08/11/22 16:47	VOA6_414932
ZZZZZZ	HS22080499-05	X081120.D	08/11/22 17:08	VOA6_414932
ZZZZZZ	HS22080499-06	X081121.D	08/11/22 17:29	VOA6_414932
ZZZZZZ	HS22080499-07	X081122.D	08/11/22 17:50	VOA6_414932
18CPTMW01DW_080822	HS22080522-03	X081123.D	08/11/22 18:11	VOA6_414932
17WW08_080822	HS22080522-06	X081124.D	08/11/22 18:32	VOA6_414932
17WW08_080822_a	HS22080522-07	X081125.D	08/11/22 18:53	VOA6_414932
18CPTMW23SW_080822	HS22080522-09	X081126.D	08/11/22 19:14	VOA6_414932
18WW24_080822	HS22080522-11	X081127.D	08/11/22 19:35	VOA6_414932
MW8_080822	HS22080522-08	X081128.D	08/11/22 19:56	VOA6_414932
18CPTMW23_080822	HS22080522-10	X081129.D	08/11/22 20:17	VOA6_414932

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

BatchID
R414991

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	VBLKW-220812	X081207.D	08/12/22 12:27	VOA6_414991
VLCSW-220812	VLCSW-220812	X081205.D	08/12/22 11:45	VOA6_414991
ZZZZZZ	HS22080490-01	X081208.D	08/12/22 12:48	VOA6_414991
ZZZZZZ	HS22080490-02	X081209.D	08/12/22 13:09	VOA6_414991
18CPTMW01SW_080822	HS22080522-04	X081210.D	08/12/22 13:31	VOA6_414991
ZZZZZZMS	HS22080490-02MS	X081211.D	08/12/22 13:52	VOA6_414991
ZZZZZZMSD	HS22080490-02MSD	X081212.D	08/12/22 14:13	VOA6_414991
MW8_080822	HS22080522-08	X081213.D	08/12/22 14:34	VOA6_414991
18CPTMW23_080822	HS22080522-10	X081214.D	08/12/22 14:55	VOA6_414991
ZZZZZZ	HS22080611-09	X081215.D	08/12/22 15:16	VOA6_414991
ZZZZZZ	HS22080611-01	X081216.D	08/12/22 15:37	VOA6_414991
ZZZZZZ	HS22080611-07	X081217.D	08/12/22 15:58	VOA6_414991
ZZZZZZ	HS22080611-05	X081218.D	08/12/22 16:19	VOA6_414991
ZZZZZZ	HS22080611-06	X081219.D	08/12/22 16:40	VOA6_414991
ZZZZZZ	HS22080490-03	X081220.D	08/12/22 17:01	VOA6_414991
ZZZZZZ	HS22080490-04	X081221.D	08/12/22 17:22	VOA6_414991
ZZZZZZ	HS22080490-05	X081222.D	08/12/22 17:43	VOA6_414991
ZZZZZZ	HS22080490-06	X081223.D	08/12/22 18:04	VOA6_414991
ZZZZZZ	HS22080490-07	X081224.D	08/12/22 18:25	VOA6_414991
ZZZZZZ	HS22080611-08	X081225.D	08/12/22 18:46	VOA6_414991
ZZZZZZ	HS22080611-02	X081226.D	08/12/22 19:07	VOA6_414991
ZZZZZZ	HS22080611-03	X081227.D	08/12/22 19:29	VOA6_414991
ZZZZZZ	HS22080611-04	X081228.D	08/12/22 19:50	VOA6_414991
18CPTMW01SW_080822	HS22080522-04	X081229.D	08/12/22 20:11	VOA6_414991

right solutions.
right partner.

Form 5

Instrument Performance Check

Volatiles Organics by Method 8260C

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/19/2022

Form 5 - Instrument Performance Check

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

RunID
VOA6_413360

Tune File X071901.D 07/19/22 11:06

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	16 (16)
75	30.0 - 60.0% of mass 95	50.1 (50.1)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.3 (6.29)
173	Less than 2.0% of mass 174	0.5 (0.527) 1
174	50.0 - 120.0% of mass 95	99.8 (99.8)
175	4.0 - 9.0% of mass 174	6.4 (6.41) 1
176	93.0 - 101.0% of mass 174	99.2 (99.4) 1
177	5.0 - 9.0% of mass 176	5.4 (5.48) 2

Value is % of mass 1) 174 2) 176 RA - Relative Abundance

This check applies to the following analyses

	Type	Date Analyzed	Lab File ID	Sample ID
1	ICAL1	07/19/22 11:27	X071902	VSTD000.25
2	ICAL2	07/19/22 12:08	X071903	VSTD000.5
3	ICAL3	07/19/22 12:29	X071904	VSTD001
4	ICAL4	07/19/22 12:50	X071905	VSTD002
5	ICAL5	07/19/22 13:11	X071906	VSTD005
6	ICAL6	07/19/22 13:32	X071907	VSTD020
7	ICAL7	07/19/22 13:53	X071908	VSTD050
8	ICAL8	07/19/22 14:14	X071909	VSTD100
9	ICAL9	07/19/22 14:35	X071910	VSTD150
10	ICAL	07/19/22 14:56	X071911	VSTD200
11	ICV	07/19/22 16:20	X071915	CCV

Form 5 - Instrument Performance Check

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

RunID
VOA6_414932

Tune File X081101.D 08/11/22 10:28

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	17.9 (17.9)
75	30.0 - 60.0% of mass 95	47.3 (47.3)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	7.2 (7.2)
173	Less than 2.0% of mass 174	0.6 (0.755) 1
174	50.0 - 120.0% of mass 95	83.3 (83.3)
175	4.0 - 9.0% of mass 174	6.3 (7.52) 1
176	93.0 - 101.0% of mass 174	81.3 (97.6) 1
177	5.0 - 9.0% of mass 176	6.4 (7.89) 2

Value is % of mass 1) 174 2) 176 RA - Relative Abundance

This check applies to the following analyses

	Type	Date Analyzed	Lab File ID	Sample ID
1	CCV	08/11/22 11:10	X081103	CCV
2	CCB	08/11/22 11:31	X081104	CCB
3	LCS	08/11/22 11:52	X081105	VLCSW-220811
4	MBLK	08/11/22 12:34	X081107	VBLKW-220811
5	SAMP	08/11/22 13:16	X081109	Trip Blank
6	SAMP	08/11/22 13:37	X081110	MW23_080822
7	SAMP	08/11/22 13:58	X081111	MW2_080822
8	SAMP	08/11/22 14:19	X081112	MW2_080822_a
9	SAMP	08/11/22 14:40	X081113	MW23_080822
10	MS	08/11/22 15:01	X081114	HS22080522-05MS
11	MSD	08/11/22 15:22	X081115	HS22080522-05MSD
12	SAMP	08/11/22 15:43	X081116	MW2_080822
13	SAMP	08/11/22 16:04	X081117	MW2_080822_a
14	SAMP	08/11/22 18:11	X081123	18CPTMW01DW_080822
15	SAMP	08/11/22 18:32	X081124	17WW08_080822
16	SAMP	08/11/22 18:53	X081125	17WW08_080822_a
17	SAMP	08/11/22 19:14	X081126	18CPTMW23SW_080822
18	SAMP	08/11/22 19:35	X081127	18WW24_080822
19	SAMP	08/11/22 19:56	X081128	MW8_080822
20	SAMP	08/11/22 20:17	X081129	18CPTMW23_080822
21	CCV_EN	08/11/22 20:38	X081130	CCV-END

Form 5 - Instrument Performance Check

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

RunID
VOA6_414991

Tune File X081201.D 08/12/22 10:21

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	20.8 (20.8)
75	30.0 - 60.0% of mass 95	50.2 (50.2)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	7.3 (7.25)
173	Less than 2.0% of mass 174	0.6 (0.698) 1
174	50.0 - 120.0% of mass 95	84.7 (84.7)
175	4.0 - 9.0% of mass 174	6.5 (7.64) 1
176	93.0 - 101.0% of mass 174	80.6 (95.2) 1
177	5.0 - 9.0% of mass 176	6.8 (8.39) 2

Value is % of mass 1) 174 2) 176 RA - Relative Abundance

This check applies to the following analyses

	Type	Date Analyzed	Lab File ID	Sample ID
1	CCV	08/12/22 10:42	X081202	CCV
2	CCB	08/12/22 11:24	X081204	CCB
3	LCS	08/12/22 11:45	X081205	VLCSW-220812
4	MBLK	08/12/22 12:27	X081207	VBLKW-220812
5	SAMP	08/12/22 13:31	X081210	18CPTMW01SW_080822
6	MS	08/12/22 13:52	X081211	ZZZZZZMS
7	MSD	08/12/22 14:13	X081212	ZZZZZZMSD
8	SAMP	08/12/22 14:34	X081213	MW8_080822
9	SAMP	08/12/22 14:55	X081214	18CPTMW23_080822
10	SAMP	08/12/22 20:11	X081229	18CPTMW01SW_080822
11	CCV_EN	08/12/22 20:32	X081230	CCV-END

right solutions.
right partner.

Form 6

Initial Calibration Data

Volatiles Organics by Method 8260C

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/19/2022

Initial Calibration Data

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_413360

Volatiles Organics by Method 8260C

ICAL Start Date 19-JUL-2022 1127
ICAL End Date 19-JUL-2022 1456

Calibration Files

Level 1 ..Voa6.i\X220719.b\X071902.D
Level 2 ..Voa6.i\X220719.b\X071903.D
Level 3 ..Voa6.i\X220719.b\X071904.D
Level 4 ..Voa6.i\X220719.b\X071905.D
Level 5 ..Voa6.i\X220719.b\X071906.D
Level 6 ..Voa6.i\X220719.b\X071907.D
Level 7 ..Voa6.i\X220719.b\X071908.D
Level 8 ..Voa6.i\X220719.b\X071909.D
Level 9 ..Voa6.i\X220719.b\X071910.D
Level 10 ..Voa6.i\X220719.b\X071911.D

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Dichlorodifluoromethane	NE 341283	3857 739202	7427 1136547	12732 NE	38222	148427	LINR	-0.00347	0.47469		0.99986	
Chloromethane	NE 337031	3959 703134	7297 1102492	13594 1500734	37005	141389	LINR	0.00105	0.46342		0.99980	
Propionitrile	NE 0.04685	0.04689 0.04773	0.05107 0.04839	0.04322 0.04906	0.04144	0.04294	AVRG		0.04640		6.88983	
Vinyl Chloride	NE 0.50451	0.55489 0.50140	0.58340 0.49744	0.49436 0.48578	0.56842	0.52845	AVRG		0.52429		6.88014	
Bromomethane	NE 257164	3413 532992	6763 802069	13133 1068317	30861	109055	LINR	-0.02742	0.33247		0.99976	
Chloroethane	NE 0.31358	0.31871 0.31044	0.34212 0.30725	0.31021 0.30357	0.35840	0.32202	AVRG		0.32070		5.64994	
Trichlorofluoromethane	NE 0.74240	0.79460 0.77510	0.87952 0.75654	0.73879 0.72528	0.85434	0.81961	AVRG		0.78735		6.86979	
Acrolein	NE 0.01514	0.01840 0.01585	0.01873 0.01488	0.01554 0.01505	0.01690	0.01630	AVRG		0.01631		8.76506	
Acetone	NE 169593	1762 331360	3509 485174	7337 633758	20021	78540	LINR	-0.12005	0.09934		0.99768	*
1,1-Dichloroethene	NE 0.39243	0.44979 0.40203	0.47002 0.39497	0.39454 0.38464	0.44374	0.42427	AVRG		0.41738		7.34470	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_413360

Volatiles Organics by Method 8260C

ICAL Start Date 19-JUL-2022 1127 **ICAL End Date** 19-JUL-2022 1456

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Isobutyl Alcohol	NE 0.05563	0.05761 0.05548	0.05786 0.05559	0.05329 0.05721	0.05282	0.05451	AVRG		0.05555		3.24430	
Acetonitrile	NE 0.05038	0.05433 0.05104	0.05949 0.04930	0.04820 0.04928	0.04730	0.04952	AVRG		0.05098		7.37463	
Allyl Chloride	NE 0.87043	0.91865 0.89062	0.89575 0.86951	0.81071 0.88679	0.78896	0.84343	AVRG		0.86387		4.87488	
Iodomethane	NE 813391	3948 1806137	9058 2818279	17343 3905197	59955	294206	QUAD	0.03933	1.79246	-0.03172	0.99991	
Acrylonitrile	NE 0.13361	0.13013 0.13802	0.12726 0.13703	0.13561 0.13954	0.12102	0.11542	AVRG		0.13085		6.30029	
Methylene Chloride	NE 346955	4801 702932	7303 1078247	16740 1463710	40888	145583	LINR	-0.01749	0.45185		0.99986	
Methyl tert-butyl ether	NE 1.22369	1.35179 1.22448	1.30218 1.22206	1.22875 1.22105	1.18813	1.17183	AVRG		1.23711		4.51341	
Carbon Disulfide	NE 1.07589	1.14212 1.08991	1.20180 1.08317	0.98938 1.07302	1.17686	1.11263	AVRG		1.10497		5.71600	
trans-1,2-Dichloroethene	NE 0.43451	0.45777 0.43639	0.45194 0.43767	0.39448 0.43557	0.47805	0.43234	AVRG		0.43986		5.15003	
Vinyl Acetate	NE 1.11301	1.13062 1.10686	1.03088 1.12408	0.95722 1.13780	0.99794	1.07050	AVRG		1.07432		6.03941	
1,1-Dichloroethane	NE 0.75448	0.75835 0.74965	0.85338 0.75001	0.72477 0.75483	0.81381	0.76849	AVRG		0.76975		5.10213	
Chloroprene	NE 0.16690	0.21590 0.17780	0.23095 0.18053	0.17755 0.17676	0.18690	0.18468	AVRG		0.18866		11.04258	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_413360

Volatiles Organics by Method 8260C

ICAL Start Date 19-JUL-2022 1127 **ICAL End Date** 19-JUL-2022 1456

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
2-Butanone	NE 0.13168	0.11904 0.13218	0.11583 0.13456	0.12216 0.13704	0.11648	0.11993	AVRG		0.12543		6.65094	
Methacrylonitrile	NE 0.32070	0.35509 0.33333	0.36384 0.33543	0.30560 0.33996	0.30364	0.30600	AVRG		0.32929		6.67277	
2,2-Dichloropropane	NE 492680	5133 1068902	10957 1641201	20343 2176392	53750	205808	LINR	-0.00496	0.68028		0.99988	
cis-1,2-Dichloroethene	NE 0.50885	0.49172 0.50016	0.51104 0.50493	0.43069 0.50547	0.52098	0.49999	AVRG		0.49709		5.27080	
Chloroform	NE 0.83760	0.83735 0.82434	0.92168 0.82894	0.76299 0.83133	0.90532	0.84083	AVRG		0.84337		5.50143	
Bromochloromethane	NE 0.27357	0.30545 0.26970	0.30730 0.27351	0.26532 0.27768	0.29021	0.27450	AVRG		0.28191		5.47324	
1,1,1-Trichloroethane	NE 0.68374	0.74347 0.71284	0.70340 0.71494	0.62292 0.70114	0.77773	0.72356	AVRG		0.70930		5.96362	
1,1-Dichloropropene	NE 0.38166	0.44685 0.40803	0.40731 0.41082	0.36152 0.39353	0.41314	0.40896	AVRG		0.40353		5.83045	
1,2-Dichloroethane	NE 0.43158	0.45202 0.42458	0.44506 0.42168	0.42796 0.41752	0.47269	0.45348	AVRG		0.43851		4.18588	
Carbon Tetrachloride	NE 0.39118	0.50908 0.41598	0.46963 0.42471	0.38975 0.40844	0.44487	0.42801	AVRG		0.43130		8.92384	
Benzene	NE 1.15995	1.25620 1.14622	1.26876 1.15552	1.10904 1.13526	1.24627	1.18606	AVRG		1.18481		4.91091	
Trichloroethene	NE 0.34061	0.35992 0.34803	0.35732 0.35175	0.32377 0.34179	0.37398	0.36156	AVRG		0.35097		4.15640	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_413360

Volatiles Organics by Method 8260C

ICAL Start Date 19-JUL-2022 1127 **ICAL End Date** 19-JUL-2022 1456

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Bromodichloromethane	NE 0.42664	0.41476 0.42188	0.41935 0.43361	0.38632 0.43009	0.43854	0.42924	AVRG		0.42227		3.63023	
Methyl Methacrylate	NE 0.33810	0.35428 0.35297	0.36797 0.35384	0.32032 0.35264	0.31605	0.32716	AVRG		0.34259		5.23642	
2-Chloroethylvinyl ether	NE 223234	1850 504631	3725 819469	7768 1149192	17033	78395	LINR	0.10536	0.11870		0.99822	
1,2-Dichloropropane	NE 0.30337	0.35770 0.29927	0.28731 0.30442	0.28964 0.30096	0.32153	0.30561	AVRG		0.30776		6.87676	
2-Nitropropane	NE 0.12611	0.12797 0.13069	0.19178 0.13385	0.11350 0.13391	0.11279	0.11227	AVRG		0.13143		18.50296	*
Dibromomethane	NE 0.20622	0.21251 0.20334	0.21510 0.20760	0.19090 0.20586	0.21208	0.20478	AVRG		0.20649		3.42073	
4-Methyl-2-Pentanone	NE 0.24472	0.22983 0.24442	0.24561 0.25282	0.22592 0.25229	0.25146	0.24562	AVRG		0.24363		3.93284	
cis-1,3-Dichloropropene	NE 0.53443	0.49743 0.52810	0.50399 0.54559	0.46440 0.54209	0.52744	0.52481	AVRG		0.51870		4.97948	
Ethyl Methacrylate	NE 0.39459	0.42724 0.41348	0.44487 0.42518	0.37757 0.41767	0.36951	0.36730	AVRG		0.40416		6.92090	
Toluene	NE 1.35111	1.48534 1.35558	1.47874 1.39012	1.31998 1.34136	1.50056	1.42688	AVRG		1.40552		4.92585	
trans-1,3-Dichloropropene	NE 0.45411	0.43482 0.45430	0.34886 0.46709	0.39948 0.46507	0.40882	0.43356	AVRG		0.42957		8.93088	
2-Hexanone	NE 0.15866	0.15729 0.16217	0.14268 0.16863	0.14354 0.16860	0.15261	0.16082	AVRG		0.15722		6.02939	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_413360

Volatiles Organics by Method 8260C

ICAL Start Date 19-JUL-2022 1127 **ICAL End Date** 19-JUL-2022 1456

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
1,1,2-Trichloroethane	NE 0.25236	0.26865 0.25133	0.25359 0.25533	0.25161 0.25253	0.27292	0.25536	AVRG		0.25708		3.10239	
1,3-Dichloropropane	NE 0.51727	0.53853 0.51284	0.53548 0.52419	0.47624 0.51694	0.55751	0.52730	AVRG		0.52292		4.25815	
Dibromochloromethane	NE 0.37149	0.37697 0.37484	0.36224 0.39045	0.34884 0.38784	0.35529	0.37202	AVRG		0.37111		3.72423	
Tetrachloroethene	NE 0.29942	0.33218 0.31397	0.34917 0.31997	0.30195 0.30320	0.35645	0.34172	AVRG		0.32423		6.63880	
1,2-Dibromoethane	NE 0.32860	0.33970 0.32537	0.30962 0.33375	0.29367 0.33265	0.34003	0.33026	AVRG		0.32596		4.63664	
1-Chlorohexane	NE 0.22707	0.27669 0.26138	0.25539 0.26751	0.22698 0.25288	0.26192	0.26587	AVRG		0.25508		6.79509	
Chlorobenzene	NE 0.92599	0.94815 0.93555	0.96085 0.95703	0.89814 0.93363	1.00628	0.96687	AVRG		0.94805		3.19309	
1,1,1,2-Tetrachloroethane	NE 0.34858	0.35679 0.35393	0.35956 0.36522	0.30262 0.35850	0.36041	0.35591	AVRG		0.35128		5.35668	
Ethylbenzene	NE 0.45868	0.48108 0.47563	0.48827 0.48606	0.43327 0.46961	0.51619	0.50151	AVRG		0.47892		5.02565	
m,p-Xylenes	NE 0.57839	0.55805 0.59729	0.59871 0.61406	0.56232 0.58838	0.63413	0.62999	AVRG		0.59570		4.55362	
o-Xylene	NE 0.55697	0.59290 0.57740	0.58091 0.58940	0.53642 0.57361	0.60968	0.59466	AVRG		0.57911		3.77403	
Styrene	NE 0.95759	0.91159 0.99020	0.92976 1.01045	0.83032 0.98766	0.97583	0.98950	AVRG		0.95366		5.86887	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_413360

Volatiles Organics by Method 8260C

ICAL Start Date 19-JUL-2022 1127 **ICAL End Date** 19-JUL-2022 1456

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Bromoform	NE 238426	1755 516716	3730 810870	7169 1117306	20344	88254	LINR	0.02467	0.24853		0.99965	
Isopropylbenzene	NE 1.35695	1.43849 1.44809	1.47443 1.47877	1.30268 1.40439	1.54245	1.51550	AVRG		1.44020		5.26370	
1,1,2,2-Tetrachloroethane	NE 0.66696	0.78144 0.66668	0.76770 0.68892	0.65338 0.69597	0.70660	0.69246	AVRG		0.70224		6.32540	
1,2,3-Trichloropropane	NE 0.49473	0.58784 0.49603	0.58996 0.56553	0.54572 0.52662	0.53765	0.52889	AVRG		0.54144		6.44455	
trans-1,4-Dichloro-2-butene	NE 0.08441	0.08639 0.08926	0.07814 0.09300	0.07380 0.09316	0.07809	0.08014	AVRG		0.08404		8.27424	
n-Propylbenzene	NE 3.09097	3.25257 3.29325	3.29066 3.37575	2.95890 3.28483	3.57342	3.56584	AVRG		3.29846		6.00434	
Bromobenzene	NE 0.81720	0.87451 0.82902	0.85594 0.85910	0.81226 0.85431	0.91203	0.87056	AVRG		0.85388		3.65984	
1,3,5-Trimethylbenzene	NE 2.25194	2.59658 2.36457	2.46258 2.43329	2.25441 2.36654	2.59000	2.53828	AVRG		2.42869		5.38765	
2-Chlorotoluene	NE 1.93372	2.44781 1.97524	2.37660 2.01189	2.08294 2.01003	2.31087	2.13956	AVRG		2.14319		8.82358	
4-Chlorotoluene	NE 2.23415	2.65636 2.28193	2.51503 2.35478	2.21178 2.34073	2.48509	2.44971	AVRG		2.39217		6.10354	
tert-Butylbenzene	NE 1.87857	2.09660 2.01729	2.17146 2.06018	1.85260 1.99143	2.27190	2.18568	AVRG		2.05841		6.80340	
1,2,4-Trimethylbenzene	NE 2.26858	2.54200 2.34756	2.45760 2.40073	2.18686 2.36591	2.52880	2.48717	AVRG		2.39836		4.98293	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_413360

Volatiles Organics by Method 8260C

ICAL Start Date 19-JUL-2022 1127 **ICAL End Date** 19-JUL-2022 1456

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
sec-Butylbenzene	NE 2.56004	2.95435 2.79338	2.91853 2.87407	2.53800 2.77273	2.97323	2.98357	AVRG		2.81866		6.02795	
p-Isopropyltoluene	NE 2.27539	2.49491 2.44665	2.57620 2.52369	2.05158 2.45478	2.51906	2.60761	AVRG		2.43888		7.11852	
1,3-Dichlorobenzene	NE 1.33559	1.42838 1.36835	1.38167 1.40273	1.27970 1.39635	1.47031	1.42236	AVRG		1.38727		4.01099	
1,4-Dichlorobenzene	NE 1.38400	1.63964 1.39934	1.49121 1.43248	1.51626 1.42707	1.47011	1.49485	AVRG		1.47277		5.23516	
Benzyl Chloride	NE 0.39135	0.43855 0.44029	0.35095 0.47061	0.36716 0.48435	0.33474	0.36186	AVRG		0.40443		13.62917	
n-Butylbenzene	NE 1.93301	2.09569 2.10694	1.88248 2.19365	1.73548 2.12379	1.99640	2.17139	AVRG		2.02654		7.49858	
1,2-Dichlorobenzene	NE 1.20556	1.25628 1.22245	1.27315 1.26196	1.17606 1.26277	1.33041	1.27128	AVRG		1.25110		3.57355	
1,2-Dibromo-3-Chloropropane	NE 25520	270 61674	348 99187	994 141749	2347	9850	QUAD	0.00789	19.55533	-15.65262	0.99973	*
1,2,4-Trichlorobenzene	NE 0.43214	0.45967 0.47716	0.38549 0.51475	0.41755 0.51794	0.44197	0.45194	AVRG		0.45540		9.50182	
Hexachlorobutadiene	NE 0.36108	0.50564 0.42134	0.40894 0.43716	0.38476 0.43414	0.40071	0.43144	AVRG		0.42058		9.64578	
Naphthalene	NE 0.46478	0.50994 0.51932	0.48404 0.57671	0.47311 0.61432	0.48572	0.45717	AVRG		0.50946		10.49645	
1,2,3-Trichlorobenzene	NE 0.23796	0.28871 0.26010	0.23370 0.29029	0.23930 0.30074	0.24443	0.24414	AVRG		0.25993		10.08886	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_413360

Volatiles Organics by Method 8260C

ICAL Start Date 19-JUL-2022 1127 **ICAL End Date** 19-JUL-2022 1456

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Ethyl Acetate	NE 0.37468	0.40866 0.36462	0.36149 0.36571	0.38433 0.37416	0.37402	0.38793	AVRG		0.37729		3.88483	
Methyl Acrylate	NE 0.41135	NE 0.42110	0.08197 0.42509	0.18205 0.42984	0.32449	0.34779	AVRG		0.32796		39.52952	*
n-Butanol	NE 92515	245 210846	576 347477	1120 481768	5230	31323	LINR	1.40108	0.00747		0.99785	*
Ethyl Acrylate	NE 1.02705	NE 1.03586	0.33536 1.03173	0.44170 1.03664	0.52229	0.97049	AVRG		0.80014		38.58861	*
Cyclohexanone	NE 0.01354	0.02999 0.01391	0.02591 0.01452	0.01565 0.01455	0.01586	0.01385	AVRG		0.01753		34.47473	*
1,4-Dioxane	0.00383 0.00352	0.00344 0.00359	0.00432 0.00382	0.00347 0.00389	0.00372	0.00373	AVRG		0.00373		6.94690	
n-Hexane	NE 0.38690	0.44005 0.45615	0.48427 0.45806	0.38126 0.43794	0.43490	0.47909	AVRG		0.43985		8.18722	
Freon TF	NE 0.37612	0.42449 0.41014	0.45970 0.40358	0.37786 0.38444	0.46969	0.44805	AVRG		0.41712		8.52239	
Methyl Acetate	NE 0.23356	0.25878 0.23289	0.22048 0.23995	0.22103 0.24622	0.21722	0.22389	AVRG		0.23267		5.92161	
Methylcyclohexane	NE 0.69515	0.67480 0.69631	0.68095 0.70106	0.62360 0.69110	0.60827	0.66355	AVRG		0.67053		4.96855	
Isopropyl alcohol	NE 225158	3316 475723	4535 762854	7686 1075115	21076	91055	LINR	0.58093	0.01644		0.99840	
Amyl alcohol	NE NE	NE NE	NE NE	0.00150 0.00580	0.00100	0.00119	AVRG		0.00237		96.60442	*

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_413360

Volatiles Organics by Method 8260C

ICAL Start Date 19-JUL-2022 1127 **ICAL End Date** 19-JUL-2022 1456

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Allyl alcohol	NE 0.01935	0.02200 0.02281	0.02421 0.02290	0.01906 0.02190	0.02175	0.02395	AVRG		0.02199		8.18722	
4-Methyl-2-pentanol	NE 0.03573	0.05681 0.04032	0.05065 0.04227	0.04072 0.04253	0.03508	0.03609	AVRG		0.04224		17.16161	*
Tert-butyl alcohol	NE 0.02887	0.03495 0.02931	0.03178 0.02975	0.02713 0.03113	0.03008	0.02915	AVRG		0.03024		7.32692	
Diethyl ether	NE 0.30552	0.35577 0.30995	0.38001 0.30402	0.32336 0.30495	0.30084	0.30367	AVRG		0.32090		8.75260	
1,3-Butadiene	NE 0.34821	0.41434 0.36545	0.39518 0.36900	0.35913 0.35842	0.42141	0.38099	AVRG		0.37913		6.82959	
Cyclohexane	NE 0.53317	0.60481 0.59663	0.62314 0.59826	0.52543 0.57664	0.60938	0.60593	AVRG		0.58593		5.87736	
alpha-Methylstyrene	NE 1.08513	1.07038 1.12750	1.08091 1.16571	0.96349 1.16247	1.14232	1.15146	AVRG		1.10549		5.83113	
Diisopropyl ether	NE 1.26380	1.39968 1.27752	1.86885 1.26796	1.23209 1.27650	1.19970	1.22713	AVRG		1.33480		15.58023	*
Dichlorofluoromethane	NE 0.83117	NE 0.83166	NE 0.79161	0.86084 0.78977	0.77145	0.83721	AVRG		0.81624		3.93915	*
Propylene oxide	NE 0.04772	0.08712 0.04576	0.10974 0.04255	0.03868 0.04249	0.05506	0.04912	AVRG		0.05758		42.17888	*
3-Methyl-1-butanol	NE 0.00447	NE 0.00494	NE 0.00549	0.00237 0.00565	0.00347	0.00444	AVRG		0.00440		26.26662	*
Butyl acrylate	NE 0.50164	0.30448 0.56732	0.59325 0.61418	0.42297 0.61867	0.44119	0.46640	AVRG		0.50334		20.95468	*

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_413360

Volatiles Organics by Method 8260C

ICAL Start Date 19-JUL-2022 1127 **ICAL End Date** 19-JUL-2022 1456

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
1,2,3-Trimethylbenzene	NE 2.31984	2.92740 2.29092	3.22779 2.27588	2.21255 2.25601	2.09670	2.30114	AVRG		2.43425		15.53604	*
Ethanol	NE 0.00232	NE 0.00216	0.00334 0.00200	0.00286 0.00196	0.00237	0.00232	AVRG		0.00242		19.26668	*
tert-Butyl formate	NE 0.22700	NE 0.22636	NE 0.23607	0.18272 0.24972	0.27854	0.22563	AVRG		0.23229		12.45420	*
3,3-Dimethyl-1-butanol	NE 0.01872	NE 0.01954	NE 0.02065	NE 0.02030	0.01892	0.01905	AVRG		0.01953		4.03874	*
tert-Amyl methyl ether	NE 1.39217	2.10676 1.38747	2.26865 1.41592	1.57527 1.40512	1.57965	1.34448	AVRG		1.60839		21.19632	*
tert-Butyl ethyl ether	NE 1.34295	1.74247 1.34765	1.95381 1.34309	1.30884 1.34382	1.28219	1.29607	AVRG		1.44010		16.55837	*
tert-Amyl alcohol	NE 0.02270	0.03356 0.02264	0.02895 0.02361	0.01827 0.02454	0.02785	0.02256	AVRG		0.02496		17.98305	*
Epichlorohydrin	NE 0.01961	0.02675 0.01958	0.02118 0.02021	NE 0.01986	0.01652	0.01783	AVRG		0.02019		14.96144	*
Isoprene	NE 0.14709	0.19912 0.15073	0.26507 0.14545	0.34024 0.14053	0.20189	0.16573	AVRG		0.19510		34.67071	*
n-Amyl acetate	NE 0.39560	NE 0.41555	NE 0.45595	NE 0.47052	0.44323	0.39671	AVRG		0.42959		7.35377	*
Isopropyl acetate	NE 0.75305	NE 0.74717	0.96396 0.75576	0.66183 0.76345	0.82124	0.74749	AVRG		0.77674		11.21768	*
n-Butyl acetate	NE 0.16576	0.27205 0.16246	0.23390 0.17091	0.20429 0.16666	0.19245	0.17604	AVRG		0.19384		19.29181	*

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_413360

Volatiles Organics by Method 8260C

ICAL Start Date 19-JUL-2022 1127 **ICAL End Date** 19-JUL-2022 1456

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Acetaldehyde	NE 0.03193	NE 0.02386	0.05959 0.02374	0.05176 0.02405	0.03872	0.03091	AVRG		0.03557		38.21836	*
Methyl Amyl Ketone	NE 0.46461	0.23961 0.50221	0.44401 0.52577	0.33336 0.52518	0.41392	0.43757	AVRG		0.43180		21.77319	*
Dimethyl Disulfide	NE 0.67315	0.69299 0.70100	0.77600 0.71236	0.57117 0.70344	0.54730	0.62588	AVRG		0.66703		10.90625	
1,2-Dichloroethylene (total)	NE 0.47168	0.47474 0.46828	0.48149 0.47130	0.41258 0.47052	0.49952	0.46616	AVRG		0.46847		4.96279	
Xylenes (total)	NE 0.53624	0.51161 0.55294	0.53945 0.56412	0.49606 0.54437	0.57109	0.56990	AVRG		0.54286		4.74421	
Dibromofluoromethane	NE 346983	4991 746005	9308 1092576	18364 1508056	40606	142500	LINR	-0.01456	0.46506		0.99958	
1,2-Dichloroethane-d4	NE 382235	5362 809230	8675 1212903	15130 1659515	40441	154444	LINR	-0.00656	0.51338		0.99986	
Toluene-d8	NE 1.21663	1.45682 1.22523	1.25577 1.14163	1.35456 1.15509	1.16759	1.25429	AVRG		1.24751		8.16353	
4-Bromofluorobenzene	NE 453323	6586 977060	11894 1441404	19061 1974506	56818	180100	LINR	-0.01650	0.43895		0.99984	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

right solutions.
right partner.

Form 6I

Initial Calibration Verification (ICV)

Volatiles Organics by Method 8260C

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/19/2022

Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_413360

Volatiles Organics by Method 8260C

Instrument ID voa6.i ICAL Date 19-JUL-2022
Lab File ID X071915.D ICAL Time 1353
?VAL? ?VAL? Conc Units ug/L
Analysis Type VOA Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
1,1,1,2-Tetrachlor	50.00	48.60	97.20	80-120	
1,1,1-Trichloroeth	50.00	47.27	94.55	80-120	
1,1,2,2-Tetrachlor	50.00	47.91	95.82	80-120	
Freon TF	50.00	47.39	94.80	80-120	
Methyl Acetate	50.00	48.74	97.49	80-120	
Cyclohexane	50.00	49.16	98.32	80-120	
Methylcyclohexane	50.00	49.18	98.36	80-120	
Carbon Disulfide	100.00	94.16	94.17	80-120	
2-Hexanone	100.00	104.32	104.33	80-120	
1,1,2-Trichloroeth	50.00	47.73	95.46	80-120	
1,1-Dichloroethane	50.00	46.55	93.12	80-120	
1,1-Dichloroethene	50.00	45.69	91.38	80-120	
1,1-Dichloropropen	50.00	47.92	95.85	80-120	
1,2,3-Trichloroben	50.00	58.54	117.10	80-120	
1,2,3-Trichloropro	50.00	46.25	92.50	80-120	
1,2,4-Trichloroben	50.00	56.47	112.95	80-120	
1,2,4-Trimethylben	50.00	48.76	97.53	80-120	
1,2-Dibromo-3-Chlo	50.00	54.31	108.62	80-120	
1,2-Dibromoethane	50.00	49.55	99.12	80-120	
1,2-Dichlorobenzen	50.00	49.77	99.55	80-120	
1,2-Dichloroethane	50.00	47.21	94.43	80-120	
1,2-Dichloropropan	50.00	47.16	94.33	80-120	
1,3,5-Trimethylben	50.00	47.69	95.39	80-120	
1,3-Dichlorobenzen	50.00	49.18	98.38	80-120	
1,3-Dichloropropan	50.00	48.03	96.07	80-120	
1,4-Dichlorobenzen	50.00	48.10	96.21	80-120	
1-Chlorohexane	50.00	47.00	94.02	80-120	
2,2-Dichloropropan	50.00	48.90	97.81	80-120	
2-Butanone	100.00	106.54	106.54	80-120	
2-Chlorotoluene	50.00	45.50	91.01	80-120	
4-Chlorotoluene	50.00	47.59	95.20	80-120	
p-Isopropyltoluene	50.00	48.81	97.64	80-120	
4-Methyl-2-Pentano	100.00	101.12	101.12	80-120	
Acetone	100.00	117.86	117.87	80-120	

Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_413360

Volatiles Organics by Method 8260C

Instrument ID voa6.i ICAL Date 19-JUL-2022
Lab File ID X071915.D ICAL Time 1353
?VAL? ?VAL? Conc Units ug/L
Analysis Type VOA Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
Acetonitrile	50.00	464.45	928.91*	80-120	
Benzene	50.00	46.73	93.48	80-120	
Bromobenzene	50.00	48.10	96.21	80-120	
Bromochloromethane	50.00	46.01	92.02	80-120	
Bromodichlorometha	50.00	48.71	97.43	80-120	
Bromoform	50.00	48.27	96.55	80-120	
Bromomethane	50.00	48.45	96.92	80-120	
Carbon Tetrachlori	50.00	45.89	91.79	80-120	
Chlorobenzene	50.00	48.25	96.51	80-120	
Chloroethane	50.00	46.05	92.11	80-120	
Chloroform	50.00	47.08	94.16	80-120	
Chloromethane	50.00	47.90	95.81	80-120	
cis-1,2-Dichloroet	50.00	48.42	96.85	80-120	
cis-1,3-Dichloropr	50.00	50.10	100.21	80-120	
Dibromochlorometha	50.00	49.75	99.50	80-120	
Dibromomethane	50.00	48.27	96.55	80-120	
Dichlorodifluorome	50.00	49.07	98.16	80-120	
Ethylbenzene	50.00	48.53	97.07	80-120	
Hexachlorobutadien	50.00	51.08	102.17	80-120	
Isopropylbenzene	50.00	48.21	96.42	80-120	
m,p-Xylenes	100.00	99.09	99.09	80-120	
Methyl tert-butyl	50.00	46.68	93.37	80-120	
Methylene Chloride	50.00	47.96	95.92	80-120	
n-Butylbenzene	50.00	50.58	101.18	80-120	
n-Propylbenzene	50.00	48.36	96.73	80-120	
Naphthalene	50.00	59.28	118.57	80-120	
o-Xylene	50.00	48.22	96.45	80-120	
sec-Butylbenzene	50.00	47.71	95.44	80-120	
Styrene	50.00	50.47	100.96	80-120	
tert-Butylbenzene	50.00	47.36	94.73	80-120	
Tetrachloroethene	50.00	47.11	94.22	80-120	
Toluene	50.00	47.23	94.48	80-120	
trans-1,2-Dichloro	50.00	47.08	94.17	80-120	
trans-1,3-Dichloro	50.00	50.76	101.54	80-120	

Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_413360

Volatiles Organics by Method 8260C

Instrument ID voa6.i ICAL Date 19-JUL-2022
Lab File ID X071915.D ICAL Time 1353
?VAL? ?VAL? Conc Units ug/L
Analysis Type VOA Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
Trichloroethene	50.00	47.65	95.31	80-120	
Trichlorofluoromet	50.00	47.02	94.04	80-120	
Vinyl Chloride	50.00	45.66	91.34	80-120	
1,2-Dichloroethyle	50.00	95.51	191.02*	80-120	
Xylenes (total)	150.00	147.31	98.21	80-120	
Tert-butyl alcohol	1000.00	983.68	98.37	80-120	
Dibromofluorometha	50.00	51.93	103.87	80-120	
1,2-Dichloroethane	50.00	50.89	101.79	80-120	
Toluene-d8	50.00	50.01	100.04	80-120	
4-Bromofluorobenze	50.00	52.16	104.34	80-120	
Dibromofluorometha	50.00	51.93	103.87	0-130	
1,2-Dichloroethane	50.00	50.89	101.79	0-130	
Toluene-d8	50.00	50.01	100.04	0-130	
4-Bromofluorobenze	50.00	52.16	104.34	0-130	

right solutions.
right partner.

Form 7

Continuing Calibration Verification (CCV)

Volatiles Organics by Method 8260C

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/19/2022

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_414932

Volatiles Organics by Method 8260C

Instrument ID voa6.i Injection Date 11-AUG-2022 1110
Lab File ID X081103.D ICAL Date(s) 19-JUL-2022 19-JUL-2022
Analysis Type WATER ICAL Times 1127 1456
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Dibromofluoromethane	50.0	54.65168	0.51510	0.100	-9.30336	20.0	Linear	
1,2-Dichloroethane-d4	50.0	54.73014	0.56532	0.100	-9.46029	20.0	Linear	
Toluene-d8	1.24751	1.29175	1.29175	0.100	-3.54637	20.0	Averaged	
4-Bromofluorobenzene	50.0	52.82721	0.47101	0.100	-5.65443	20.0	Linear	
1,1,1,2-Tetrachloroethane	0.35128	0.38362	0.38362	0.100	-9.20609	20.0	Averaged	
1,1,1-Trichloroethane	0.70930	0.79243	0.79243	0.100	-11.71896	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.70224	0.74434	0.74434	0.300	-5.99549	20.0	Averaged	
1,1,2-Trichloroethane	0.25708	0.26641	0.26641	0.100	-3.63156	20.0	Averaged	
1,1-Dichloroethane	0.76975	0.85637	0.85637	0.200	-11.25297	20.0	Averaged	
1,1-Dichloroethene	0.41738	0.41869	0.41869	0.100	-0.31413	20.0	Averaged	
1,1-Dichloropropene	0.40353	0.45224	0.45224	0.100	-12.06928	20.0	Averaged	
1,2,3-Trichlorobenzene	0.25993	0.28966	0.28966	0.010	-11.43743	20.0	Averaged	
1,2,3-Trichloropropane	0.54144	0.55276	0.55276	0.100	-2.09028	20.0	Averaged	
1,2,4-Trichlorobenzene	0.45540	0.51588	0.51588	0.100	-13.28096	20.0	Averaged	
1,2,4-Trimethylbenzene	2.39836	2.70744	2.70744	0.100	-12.88706	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	57.18432	0.06107	0.040	-14.36864	20.0	Quadratic	
1,2-Dibromoethane	0.32596	0.34750	0.34750	0.100	-6.60917	20.0	Averaged	
1,2-Dichlorobenzene	1.25110	1.37634	1.37634	0.400	-10.01005	20.0	Averaged	
1,2-Dichloroethane	0.43851	0.46276	0.46276	0.100	-5.52927	20.0	Averaged	
1,2-Dichloropropane	0.30776	0.33148	0.33148	0.100	-7.70732	20.0	Averaged	
1,3,5-Trimethylbenzene	2.42869	2.71876	2.71876	0.100	-11.94338	20.0	Averaged	
1,3-Dichlorobenzene	1.38727	1.51970	1.51970	0.600	-9.54622	20.0	Averaged	
1,3-Dichloropropane	0.52292	0.55274	0.55274	0.100	-5.70163	20.0	Averaged	
1,4-Dichlorobenzene	1.47277	1.57802	1.57802	0.400	-7.14630	20.0	Averaged	
2,2-Dichloropropane	50.0	56.96788	0.77845	0.100	-13.93576	20.0	Linear	
2-Butanone	0.12543	0.14345	0.14345	0.100	-14.36180	20.0	Averaged	
2-Chlorotoluene	2.14319	2.26293	2.26293	0.100	-5.58734	20.0	Averaged	
2-Hexanone	0.15722	0.17511	0.17511	0.100	-11.37513	20.0	Averaged	
4-Chlorotoluene	2.39217	2.60515	2.60515	0.100	-8.90289	20.0	Averaged	
p-Isopropyltoluene	2.43888	2.82057	2.82057	0.100	-15.65032	20.0	Averaged	
4-Methyl-2-Pentanone	0.24363	0.27220	0.27220	0.100	-11.72597	20.0	Averaged	
Acetone	100	101	0.10673	0.100	-1.43567	20.0	Linear	
Benzene	1.18481	1.26602	1.26602	0.500	-6.85469	20.0	Averaged	
Bromobenzene	0.85388	0.91888	0.91888	0.100	-7.61198	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder
HS22080522

RunID
VOA6_414932

Volatiles Organics by Method 8260C

Instrument ID voa6.i Injection Date 11-AUG-2022 1110
Lab File ID X081103.D ICAL Date(s) 19-JUL-2022 19-JUL-2022
Analysis Type WATER ICAL Times 1127 1456
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Bromochloromethane	0.28191	0.29458	0.29458	0.100	-4.49439	20.0	Averaged	
Bromodichloromethane	0.42227	0.46030	0.46030	0.200	-9.00516	20.0	Averaged	
Bromoform	50.0	51.58742	0.25028	0.100	-3.17484	20.0	Linear	
Bromomethane	50.0	53.35380	0.36388	0.100	-6.70760	20.0	Linear	
Carbon Disulfide	1.10497	1.19547	1.19547	0.100	-8.18968	20.0	Averaged	
Carbon Tetrachloride	0.43130	0.46473	0.46473	0.100	-7.75114	20.0	Averaged	
Chlorobenzene	0.94805	1.01859	1.01859	0.500	-7.44052	20.0	Averaged	
Chloroethane	0.32070	0.36339	0.36339	0.100	-13.31308	20.0	Averaged	
Chloroform	0.84337	0.90932	0.90932	0.200	-7.81984	20.0	Averaged	
Chloromethane	50.0	58.15895	0.53855	0.100	-16.31790	20.0	Linear	
cis-1,2-Dichloroethene	0.49709	0.55145	0.55145	0.100	-10.93513	20.0	Averaged	
cis-1,3-Dichloropropene	0.51870	0.57512	0.57512	0.200	-10.87851	20.0	Averaged	
Dibromochloromethane	0.37111	0.39856	0.39856	0.100	-7.39838	20.0	Averaged	
Dibromomethane	0.20649	0.21767	0.21767	0.100	-5.41547	20.0	Averaged	
Dichlorodifluoromethane	50.0	59.88374	0.57017	0.100	-19.76747	20.0	Linear	
Ethylbenzene	0.47892	0.52580	0.52580	0.100	-9.78865	20.0	Averaged	
Hexachlorobutadiene	0.42058	0.45473	0.45473	0.100	-8.12041	20.0	Averaged	
Isopropylbenzene	1.44020	1.61822	1.61822	0.100	-12.36134	20.0	Averaged	
m,p-Xylenes	0.59570	0.66171	0.66171	0.100	-11.08069	20.0	Averaged	
Methylene Chloride	50.0	56.41739	0.51775	0.100	-12.83477	20.0	Linear	
n-Butylbenzene	2.02654	2.43066	2.43066	0.500	-19.94147	20.0	Averaged	
n-Propylbenzene	3.29846	3.78401	3.78401	0.100	-14.72033	20.0	Averaged	
Naphthalene	0.50946	0.58868	0.58868	0.200	-15.55141	20.0	Averaged	
o-Xylene	0.57911	0.62604	0.62604	0.300	-8.10421	20.0	Averaged	
sec-Butylbenzene	2.81866	3.23733	3.23733	0.100	-14.85355	20.0	Averaged	
Styrene	0.95366	1.06230	1.06230	0.300	-11.39213	20.0	Averaged	
tert-Butylbenzene	2.05841	2.29041	2.29041	0.100	-11.27048	20.0	Averaged	
Tetrachloroethene	0.32423	0.34068	0.34068	0.200	-5.07458	20.0	Averaged	
Toluene	1.40552	1.49636	1.49636	0.400	-6.46322	20.0	Averaged	
trans-1,2-Dichloroethene	0.43986	0.48639	0.48639	0.100	-10.57879	20.0	Averaged	
trans-1,3-Dichloropropene	0.42957	0.48745	0.48745	0.100	-13.47398	20.0	Averaged	
Trichloroethene	0.35097	0.37603	0.37603	0.200	-7.13987	20.0	Averaged	
Trichlorofluoromethane	0.78735	0.82976	0.82976	0.100	-5.38650	20.0	Averaged	
Vinyl Chloride	0.52429	0.54287	0.54287	0.100	-3.54340	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_414932

Volatiles Organics by Method 8260C

Instrument ID voa6.i Injection Date 11-AUG-2022 2038
Lab File ID X081130.D ICAL Date(s) 19-JUL-2022 19-JUL-2022
Analysis Type WATER ICAL Times 1127 1456
Lab Sample ID CCV-END Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Dibromofluoromethane	50.0	55.28431	0.52098	0.100	-10.56863	50.0	Linear	
1,2-Dichloroethane-d4	50.0	55.18143	0.56995	0.100	-10.36286	50.0	Linear	
Toluene-d8	1.24751	1.25464	1.25464	0.100	-0.57146	50.0	Averaged	
4-Bromofluorobenzene	50.0	50.95821	0.45460	0.100	-1.91641	50.0	Linear	
1,1,1,2-Tetrachloroethane	0.35128	0.36721	0.36721	0.100	-4.53479	50.0	Averaged	
1,1,1-Trichloroethane	0.70930	0.78359	0.78359	0.100	-10.47281	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.70224	0.68814	0.68814	0.300	2.00659	50.0	Averaged	
1,1,2-Trichloroethane	0.25708	0.25914	0.25914	0.100	-0.80369	50.0	Averaged	
1,1-Dichloroethane	0.76975	0.83478	0.83478	0.200	-8.44838	50.0	Averaged	
1,1-Dichloroethene	0.41738	0.41043	0.41043	0.100	1.66487	50.0	Averaged	
1,1-Dichloropropene	0.40353	0.43035	0.43035	0.100	-6.64391	50.0	Averaged	
1,2,3-Trichlorobenzene	0.25993	0.22719	0.22719	0.010	12.59460	50.0	Averaged	
1,2,3-Trichloropropane	0.54144	0.55044	0.55044	0.100	-1.66187	50.0	Averaged	
1,2,4-Trichlorobenzene	0.45540	0.43447	0.43447	0.100	4.59602	50.0	Averaged	
1,2,4-Trimethylbenzene	2.39836	2.53009	2.53009	0.100	-5.49270	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	44.41397	0.04677	0.040	11.17207	50.0	Quadratic	
1,2-Dibromoethane	0.32596	0.33126	0.33126	0.100	-1.62454	50.0	Averaged	
1,2-Dichlorobenzene	1.25110	1.26284	1.26284	0.400	-0.93813	50.0	Averaged	
1,2-Dichloroethane	0.43851	0.45652	0.45652	0.100	-4.10666	50.0	Averaged	
1,2-Dichloropropane	0.30776	0.31548	0.31548	0.100	-2.51092	50.0	Averaged	
1,3,5-Trimethylbenzene	2.42869	2.57028	2.57028	0.100	-5.82975	50.0	Averaged	
1,3-Dichlorobenzene	1.38727	1.41933	1.41933	0.600	-2.31074	50.0	Averaged	
1,3-Dichloropropane	0.52292	0.52467	0.52467	0.100	-0.33438	50.0	Averaged	
1,4-Dichlorobenzene	1.47277	1.45779	1.45779	0.400	1.01718	50.0	Averaged	
2,2-Dichloropropane	50.0	52.03600	0.71135	0.100	-4.07201	50.0	Linear	
2-Butanone	0.12543	0.13102	0.13102	0.100	-4.45552	50.0	Averaged	
2-Chlorotoluene	2.14319	2.13765	2.13765	0.100	0.25833	50.0	Averaged	
2-Hexanone	0.15722	0.15820	0.15820	0.100	-0.62344	50.0	Averaged	
4-Chlorotoluene	2.39217	2.45447	2.45447	0.100	-2.60400	50.0	Averaged	
p-Isopropyltoluene	2.43888	2.61437	2.61437	0.100	-7.19592	50.0	Averaged	
4-Methyl-2-Pentanone	0.24363	0.25280	0.25280	0.100	-3.76186	50.0	Averaged	
Acetone	100	97.58163	0.10290	0.100	2.41837	50.0	Linear	
Benzene	1.18481	1.21329	1.21329	0.500	-2.40415	50.0	Averaged	
Bromobenzene	0.85388	0.87326	0.87326	0.100	-2.26940	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_414932

Volatiles Organics by Method 8260C

Instrument ID voa6.i Injection Date 11-AUG-2022 2038
Lab File ID X081130.D ICAL Date(s) 19-JUL-2022 19-JUL-2022
Analysis Type WATER ICAL Times 1127 1456
Lab Sample ID CCV-END Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Bromochloromethane	0.28191	0.28305	0.28305	0.100	-0.40159	50.0	Averaged	
Bromodichloromethane	0.42227	0.43717	0.43717	0.200	-3.52905	50.0	Averaged	
Bromoform	50.0	47.40714	0.22951	0.100	5.18573	50.0	Linear	
Bromomethane	50.0	51.14877	0.34922	0.100	-2.29754	50.0	Linear	
Carbon Disulfide	1.10497	1.11311	1.11311	0.100	-0.73587	50.0	Averaged	
Carbon Tetrachloride	0.43130	0.44028	0.44028	0.100	-2.08348	50.0	Averaged	
Chlorobenzene	0.94805	0.97203	0.97203	0.500	-2.52929	50.0	Averaged	
Chloroethane	0.32070	0.31439	0.31439	0.100	1.96869	50.0	Averaged	
Chloroform	0.84337	0.90912	0.90912	0.200	-7.79598	50.0	Averaged	
Chloromethane	50.0	48.24126	0.44663	0.100	3.51748	50.0	Linear	
cis-1,2-Dichloroethene	0.49709	0.54237	0.54237	0.100	-9.10790	50.0	Averaged	
cis-1,3-Dichloropropene	0.51870	0.53422	0.53422	0.200	-2.99339	50.0	Averaged	
Dibromochloromethane	0.37111	0.37666	0.37666	0.100	-1.49482	50.0	Averaged	
Dibromomethane	0.20649	0.20992	0.20992	0.100	-1.66303	50.0	Averaged	
Dichlorodifluoromethane	50.0	40.43380	0.38552	0.100	19.13240	50.0	Linear	
Ethylbenzene	0.47892	0.50558	0.50558	0.100	-5.56681	50.0	Averaged	
Hexachlorobutadiene	0.42058	0.40763	0.40763	0.100	3.07901	50.0	Averaged	
Isopropylbenzene	1.44020	1.53655	1.53655	0.100	-6.69033	50.0	Averaged	
m,p-Xylenes	0.59570	0.63459	0.63459	0.100	-6.52882	50.0	Averaged	
Methylene Chloride	50.0	54.52896	0.50068	0.100	-9.05792	50.0	Linear	
n-Butylbenzene	2.02654	2.18955	2.18955	0.500	-8.04385	50.0	Averaged	
n-Propylbenzene	3.29846	3.56114	3.56114	0.100	-7.96370	50.0	Averaged	
Naphthalene	0.50946	0.42681	0.42681	0.200	16.22220	50.0	Averaged	
o-Xylene	0.57911	0.60195	0.60195	0.300	-3.94553	50.0	Averaged	
sec-Butylbenzene	2.81866	2.98355	2.98355	0.100	-5.84999	50.0	Averaged	
Styrene	0.95366	0.99955	0.99955	0.300	-4.81242	50.0	Averaged	
tert-Butylbenzene	2.05841	2.16435	2.16435	0.100	-5.14652	50.0	Averaged	
Tetrachloroethene	0.32423	0.32821	0.32821	0.200	-1.23013	50.0	Averaged	
Toluene	1.40552	1.43420	1.43420	0.400	-2.04065	50.0	Averaged	
trans-1,2-Dichloroethene	0.43986	0.47241	0.47241	0.100	-7.40125	50.0	Averaged	
trans-1,3-Dichloropropene	0.42957	0.45057	0.45057	0.100	-4.88874	50.0	Averaged	
Trichloroethene	0.35097	0.36252	0.36252	0.200	-3.29062	50.0	Averaged	
Trichlorofluoromethane	0.78735	0.80059	0.80059	0.100	-1.68144	50.0	Averaged	
Vinyl Chloride	0.52429	0.48275	0.48275	0.100	7.92388	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_414991

Volatiles Organics by Method 8260C

Instrument ID voa6.i Injection Date 12-AUG-2022 1042
Lab File ID X081202.D ICAL Date(s) 19-JUL-2022 19-JUL-2022
Analysis Type WATER ICAL Times 1127 1456
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Dibromofluoromethane	50.0	54.70747	0.51562	0.100	-9.41493	20.0	Linear	
1,2-Dichloroethane-d4	50.0	54.47365	0.56269	0.100	-8.94729	20.0	Linear	
Toluene-d8	1.24751	1.27648	1.27648	0.100	-2.32178	20.0	Averaged	
4-Bromofluorobenzene	50.0	52.52712	0.46837	0.100	-5.05424	20.0	Linear	
1,1,1,2-Tetrachloroethane	0.35128	0.38334	0.38334	0.100	-9.12801	20.0	Averaged	
1,1,1-Trichloroethane	0.70930	0.77357	0.77357	0.100	-9.06041	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.70224	0.74726	0.74726	0.300	-6.41108	20.0	Averaged	
1,1,2-Trichloroethane	0.25708	0.26720	0.26720	0.100	-3.93853	20.0	Averaged	
1,1-Dichloroethane	0.76975	0.82780	0.82780	0.200	-7.54079	20.0	Averaged	
1,1-Dichloroethene	0.41738	0.40265	0.40265	0.100	3.52938	20.0	Averaged	
1,1-Dichloropropene	0.40353	0.43558	0.43558	0.100	-7.94174	20.0	Averaged	
1,2,3-Trichlorobenzene	0.25993	0.24058	0.24058	0.010	7.44274	20.0	Averaged	
1,2,3-Trichloropropane	0.54144	0.60383	0.60383	0.100	-11.52343	20.0	Averaged	
1,2,4-Trichlorobenzene	0.45540	0.44801	0.44801	0.100	1.62248	20.0	Averaged	
1,2,4-Trimethylbenzene	2.39836	2.72340	2.72340	0.100	-13.55287	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	50.94242	0.05403	0.040	-1.88484	20.0	Quadratic	
1,2-Dibromoethane	0.32596	0.34136	0.34136	0.100	-4.72488	20.0	Averaged	
1,2-Dichlorobenzene	1.25110	1.35539	1.35539	0.400	-8.33582	20.0	Averaged	
1,2-Dichloroethane	0.43851	0.46557	0.46557	0.100	-6.17217	20.0	Averaged	
1,2-Dichloropropane	0.30776	0.32484	0.32484	0.100	-5.54948	20.0	Averaged	
1,3,5-Trimethylbenzene	2.42869	2.72012	2.72012	0.100	-11.99946	20.0	Averaged	
1,3-Dichlorobenzene	1.38727	1.54499	1.54499	0.600	-11.36915	20.0	Averaged	
1,3-Dichloropropane	0.52292	0.54844	0.54844	0.100	-4.88003	20.0	Averaged	
1,4-Dichlorobenzene	1.47277	1.56897	1.56897	0.400	-6.53207	20.0	Averaged	
2,2-Dichloropropane	50.0	57.22694	0.78197	0.100	-14.45388	20.0	Linear	
2-Butanone	0.12543	0.13592	0.13592	0.100	-8.36063	20.0	Averaged	
2-Chlorotoluene	2.14319	2.28269	2.28269	0.100	-6.50907	20.0	Averaged	
2-Hexanone	0.15722	0.16895	0.16895	0.100	-7.45841	20.0	Averaged	
4-Chlorotoluene	2.39217	2.65365	2.65365	0.100	-10.93060	20.0	Averaged	
p-Isopropyltoluene	2.43888	2.82232	2.82232	0.100	-15.72222	20.0	Averaged	
4-Methyl-2-Pentanone	0.24363	0.26402	0.26402	0.100	-8.37073	20.0	Averaged	
Acetone	100	104	0.10920	0.100	-3.92335	20.0	Linear	
Benzene	1.18481	1.23207	1.23207	0.500	-3.98885	20.0	Averaged	
Bromobenzene	0.85388	0.93273	0.93273	0.100	-9.23389	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_414991

Volatiles Organics by Method 8260C

Instrument ID voa6.i Injection Date 12-AUG-2022 1042
Lab File ID X081202.D ICAL Date(s) 19-JUL-2022 19-JUL-2022
Analysis Type WATER ICAL Times 1127 1456
Lab Sample ID CCV Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Bromochloromethane	0.28191	0.28771	0.28771	0.100	-2.05584	20.0	Averaged	
Bromodichloromethane	0.42227	0.45934	0.45934	0.200	-8.77944	20.0	Averaged	
Bromoform	50.0	50.41217	0.24444	0.100	-0.82435	20.0	Linear	
Bromomethane	50.0	51.69609	0.35286	0.100	-3.39218	20.0	Linear	
Carbon Disulfide	1.10497	1.14279	1.14279	0.100	-3.42221	20.0	Averaged	
Carbon Tetrachloride	0.43130	0.43987	0.43987	0.100	-1.98799	20.0	Averaged	
Chlorobenzene	0.94805	1.00700	1.00700	0.500	-6.21753	20.0	Averaged	
Chloroethane	0.32070	0.32698	0.32698	0.100	-1.95951	20.0	Averaged	
Chloroform	0.84337	0.90697	0.90697	0.200	-7.54031	20.0	Averaged	
Chloromethane	50.0	56.41981	0.52243	0.100	-12.83961	20.0	Linear	
cis-1,2-Dichloroethene	0.49709	0.54226	0.54226	0.100	-9.08615	20.0	Averaged	
cis-1,3-Dichloropropene	0.51870	0.57074	0.57074	0.200	-10.03402	20.0	Averaged	
Dibromochloromethane	0.37111	0.39729	0.39729	0.100	-7.05480	20.0	Averaged	
Dibromomethane	0.20649	0.21481	0.21481	0.100	-4.02832	20.0	Averaged	
Dichlorodifluoromethane	50.0	58.16979	0.55390	0.100	-16.33958	20.0	Linear	
Ethylbenzene	0.47892	0.51687	0.51687	0.100	-7.92351	20.0	Averaged	
Hexachlorobutadiene	0.42058	0.43348	0.43348	0.100	-3.06878	20.0	Averaged	
Isopropylbenzene	1.44020	1.56194	1.56194	0.100	-8.45316	20.0	Averaged	
m,p-Xylenes	0.59570	0.64729	0.64729	0.100	-8.66010	20.0	Averaged	
Methylene Chloride	50.0	54.94039	0.50440	0.100	-9.88078	20.0	Linear	
n-Butylbenzene	2.02654	2.42854	2.42854	0.500	-19.83713	20.0	Averaged	
n-Propylbenzene	3.29846	3.83893	3.83893	0.100	-16.38545	20.0	Averaged	
Naphthalene	0.50946	0.47312	0.47312	0.200	7.13159	20.0	Averaged	
o-Xylene	0.57911	0.61739	0.61739	0.300	-6.61013	20.0	Averaged	
sec-Butylbenzene	2.81866	3.22629	3.22629	0.100	-14.46182	20.0	Averaged	
Styrene	0.95366	1.04444	1.04444	0.300	-9.51969	20.0	Averaged	
tert-Butylbenzene	2.05841	2.32573	2.32573	0.100	-12.98680	20.0	Averaged	
Tetrachloroethene	0.32423	0.33013	0.33013	0.200	-1.82096	20.0	Averaged	
Toluene	1.40552	1.46934	1.46934	0.400	-4.54084	20.0	Averaged	
trans-1,2-Dichloroethene	0.43986	0.47541	0.47541	0.100	-8.08299	20.0	Averaged	
trans-1,3-Dichloropropene	0.42957	0.48454	0.48454	0.100	-12.79847	20.0	Averaged	
Trichloroethene	0.35097	0.36235	0.36235	0.200	-3.24128	20.0	Averaged	
Trichlorofluoromethane	0.78735	0.79772	0.79772	0.100	-1.31618	20.0	Averaged	
Vinyl Chloride	0.52429	0.51891	0.51891	0.100	1.02718	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_414991

Volatiles Organics by Method 8260C

Instrument ID voa6.i Injection Date 12-AUG-2022 2032
Lab File ID X081230.D ICAL Date(s) 19-JUL-2022 19-JUL-2022
Analysis Type WATER ICAL Times 1127 1456
Lab Sample ID CCV-END Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Dibromofluoromethane	50.0	54.70357	0.51558	0.100	-9.40713	50.0	Linear	
1,2-Dichloroethane-d4	50.0	54.85570	0.56661	0.100	-9.71141	50.0	Linear	
Toluene-d8	1.24751	1.25800	1.25800	0.100	-0.84075	50.0	Averaged	
4-Bromofluorobenzene	50.0	50.91288	0.45420	0.100	-1.82577	50.0	Linear	
1,1,1,2-Tetrachloroethane	0.35128	0.35217	0.35217	0.100	-0.25469	50.0	Averaged	
1,1,1-Trichloroethane	0.70930	0.71712	0.71712	0.100	-1.10161	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.70224	0.65527	0.65527	0.300	6.68779	50.0	Averaged	
1,1,2-Trichloroethane	0.25708	0.24596	0.24596	0.100	4.32301	50.0	Averaged	
1,1-Dichloroethane	0.76975	0.76054	0.76054	0.200	1.19646	50.0	Averaged	
1,1-Dichloroethene	0.41738	0.37197	0.37197	0.100	10.88101	50.0	Averaged	
1,1-Dichloropropene	0.40353	0.39232	0.39232	0.100	2.77945	50.0	Averaged	
1,2,3-Trichlorobenzene	0.25993	0.20863	0.20863	0.010	19.73633	50.0	Averaged	
1,2,3-Trichloropropane	0.54144	0.52627	0.52627	0.100	2.80286	50.0	Averaged	
1,2,4-Trichlorobenzene	0.45540	0.38959	0.38959	0.100	14.45141	50.0	Averaged	
1,2,4-Trimethylbenzene	2.39836	2.37695	2.37695	0.100	0.89274	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	45.80094	0.04831	0.040	8.39811	50.0	Quadratic	
1,2-Dibromoethane	0.32596	0.32086	0.32086	0.100	1.56354	50.0	Averaged	
1,2-Dichlorobenzene	1.25110	1.21187	1.21187	0.400	3.13543	50.0	Averaged	
1,2-Dichloroethane	0.43851	0.45403	0.45403	0.100	-3.53989	50.0	Averaged	
1,2-Dichloropropane	0.30776	0.30570	0.30570	0.100	0.66764	50.0	Averaged	
1,3,5-Trimethylbenzene	2.42869	2.38783	2.38783	0.100	1.68221	50.0	Averaged	
1,3-Dichlorobenzene	1.38727	1.34533	1.34533	0.600	3.02293	50.0	Averaged	
1,3-Dichloropropane	0.52292	0.51014	0.51014	0.100	2.44409	50.0	Averaged	
1,4-Dichlorobenzene	1.47277	1.38932	1.38932	0.400	5.66601	50.0	Averaged	
2,2-Dichloropropane	50.0	48.41938	0.66214	0.100	3.16125	50.0	Linear	
2-Butanone	0.12543	0.12478	0.12478	0.100	0.51705	50.0	Averaged	
2-Chlorotoluene	2.14319	2.02433	2.02433	0.100	5.54571	50.0	Averaged	
2-Hexanone	0.15722	0.15006	0.15006	0.100	4.55228	50.0	Averaged	
4-Chlorotoluene	2.39217	2.32133	2.32133	0.100	2.96145	50.0	Averaged	
p-Isopropyltoluene	2.43888	2.39374	2.39374	0.100	1.85051	50.0	Averaged	
4-Methyl-2-Pentanone	0.24363	0.24008	0.24008	0.100	1.45886	50.0	Averaged	
Acetone	100	94.71176	0.10005	0.100	5.28824	50.0	Linear	
Benzene	1.18481	1.15612	1.15612	0.500	2.42171	50.0	Averaged	
Bromobenzene	0.85388	0.83722	0.83722	0.100	1.95185	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID VOA6_414991

Volatiles Organics by Method 8260C

Instrument ID voa6.i Injection Date 12-AUG-2022 2032
Lab File ID X081230.D ICAL Date(s) 19-JUL-2022 19-JUL-2022
Analysis Type WATER ICAL Times 1127 1456
Lab Sample ID CCV-END Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Bromochloromethane	0.28191	0.28047	0.28047	0.100	0.51109	50.0	Averaged	
Bromodichloromethane	0.42227	0.42842	0.42842	0.200	-1.45663	50.0	Averaged	
Bromoform	50.0	45.43865	0.21972	0.100	9.12270	50.0	Linear	
Bromomethane	50.0	47.63188	0.32583	0.100	4.73625	50.0	Linear	
Carbon Disulfide	1.10497	1.01203	1.01203	0.100	8.41126	50.0	Averaged	
Carbon Tetrachloride	0.43130	0.39951	0.39951	0.100	7.36970	50.0	Averaged	
Chlorobenzene	0.94805	0.92991	0.92991	0.500	1.91330	50.0	Averaged	
Chloroethane	0.32070	0.29065	0.29065	0.100	9.37083	50.0	Averaged	
Chloroform	0.84337	0.87027	0.87027	0.200	-3.18919	50.0	Averaged	
Chloromethane	50.0	44.11584	0.40839	0.100	11.76832	50.0	Linear	
cis-1,2-Dichloroethene	0.49709	0.52033	0.52033	0.100	-4.67384	50.0	Averaged	
cis-1,3-Dichloropropene	0.51870	0.51512	0.51512	0.200	0.68921	50.0	Averaged	
Dibromochloromethane	0.37111	0.36273	0.36273	0.100	2.25743	50.0	Averaged	
Dibromomethane	0.20649	0.20640	0.20640	0.100	0.04356	50.0	Averaged	
Dichlorodifluoromethane	50.0	32.05901	0.30601	0.100	35.88198	50.0	Linear	
Ethylbenzene	0.47892	0.46619	0.46619	0.100	2.65769	50.0	Averaged	
Hexachlorobutadiene	0.42058	0.37154	0.37154	0.100	11.65966	50.0	Averaged	
Isopropylbenzene	1.44020	1.41134	1.41134	0.100	2.00342	50.0	Averaged	
m,p-Xylenes	0.59570	0.59169	0.59169	0.100	0.67370	50.0	Averaged	
Methylene Chloride	50.0	52.42588	0.48168	0.100	-4.85176	50.0	Linear	
n-Butylbenzene	2.02654	2.00830	2.00830	0.500	0.89983	50.0	Averaged	
n-Propylbenzene	3.29846	3.25566	3.25566	0.100	1.29786	50.0	Averaged	
Naphthalene	0.50946	0.40383	0.40383	0.200	20.73418	50.0	Averaged	
o-Xylene	0.57911	0.56809	0.56809	0.300	1.90145	50.0	Averaged	
sec-Butylbenzene	2.81866	2.70186	2.70186	0.100	4.14369	50.0	Averaged	
Styrene	0.95366	0.95933	0.95933	0.300	-0.59521	50.0	Averaged	
tert-Butylbenzene	2.05841	1.98142	1.98142	0.100	3.74016	50.0	Averaged	
Tetrachloroethene	0.32423	0.29554	0.29554	0.200	8.84847	50.0	Averaged	
Toluene	1.40552	1.36567	1.36567	0.400	2.83517	50.0	Averaged	
trans-1,2-Dichloroethene	0.43986	0.44665	0.44665	0.100	-1.54539	50.0	Averaged	
trans-1,3-Dichloropropene	0.42957	0.43787	0.43787	0.100	-1.93312	50.0	Averaged	
Trichloroethene	0.35097	0.34042	0.34042	0.200	3.00619	50.0	Averaged	
Trichlorofluoromethane	0.78735	0.70963	0.70963	0.100	9.87095	50.0	Averaged	
Vinyl Chloride	0.52429	0.43062	0.43062	0.100	17.86587	50.0	Averaged	

right solutions.
right partner.

Form 8

Internal Standard Area and RT Summary

Volatiles Organics by Method 8260C

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/19/2022

Form 8 - Internal Standard Area and RT Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

RunID
VOA6_414932

		IS1		IS2		IS3		IS4	
Sample ID	File ID	Area	RT	Area	RT	Area	RT	Area	RT
12-HOUR STD (CCV)	X081103	606308 #	4.19 #	912569 #	4.97 #	852798 #	7.67 #	419644 #	9.66 #
CCB	X081104	695996	4.19	976548	4.97	838888	7.68	354216	9.67
VLCSW-220811	X081105	583274	4.19	873927	4.97	811653	7.67	391164	9.67
VBLKW-220811	X081107	679155	4.19	967095	4.97	826020	7.67	348323	9.67
HS22080522-12	X081109	665233	4.19	950202	4.97	816963	7.67	345551	9.67
HS22080522-05	X081110	677370	4.19	967719	4.97	840854	7.67	372794	9.67
HS22080522-01	X081111	665363	4.19	950373	4.97	833903	7.67	361029	9.67
HS22080522-02	X081112	673642	4.19	946960	4.97	834692	7.67	363683	9.67
HS22080522-05	X081113	664201	4.19	942836	4.97	830252	7.67	364768	9.67
HS22080522-05MS	X081114	664479	4.19	957035	4.97	840559	7.67	403245	9.67
HS22080522-05MSD	X081115	676677	4.19	957979	4.97	832744	7.67	382896	9.66
HS22080522-01	X081116	663683	4.19	945756	4.97	829456	7.67	362870	9.67
HS22080522-02	X081117	666779	4.19	953376	4.97	832023	7.67	371864	9.67
HS22080522-03	X081123	658792	4.19	942830	4.97	822573	7.67	359396	9.67
HS22080522-06	X081124	662939	4.19	951620	4.97	816988	7.67	351342	9.67
HS22080522-07	X081125	667710	4.19	944847	4.97	829834	7.67	361349	9.67
HS22080522-09	X081126	668776	4.19	952882	4.97	823892	7.67	343890	9.67
HS22080522-11	X081127	662841	4.19	947866	4.97	818737	7.67	366542	9.67
HS22080522-08	X081128	659723	4.19	939073	4.97	811284	7.67	351914	9.67
HS22080522-10	X081129	656876	4.19	937712	4.97	803865	7.67	358905	9.67
CCV-END	X081130	569313	4.19	882986	4.97	830230	7.67	408946	9.66

IS1 - Pentafluorobenzene IS2 - 1,4-Difluorobenzene IS3 - Chlorobenzene-d5 IS4 - 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of 12H STD IS Area
AREA LOWER LIMIT = - 50% of 12H STD IS Area
RT - Retention Time IS - Internal Standard

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

Form 8 - Internal Standard Area and RT Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

RunID
VOA6_414991

		IS1		IS2		IS3		IS4	
Sample ID	File ID	Area	RT	Area	RT	Area	RT	Area	RT
12-HOUR STD (CCV)	X081202	593782 #	4.19 #	898849 #	4.97 #	835766 #	7.67 #	398487 #	9.67 #
CCB	X081204	694288	4.19	982293	4.97	846853	7.67	356740	9.67
VLCSW-220812	X081205	598260	4.19	890316	4.97	821570	7.67	395344	9.67
VBLKW-220812	X081207	669041	4.19	947634	4.97	823289	7.67	364085	9.67
HS22080522-04	X081210	655922	4.19	943945	4.97	824208	7.67	363807	9.67
ZZZZZZMS	X081211	671459	4.19	953375	4.97	854231	7.67	405427	9.67
ZZZZZZMSD	X081212	669821	4.19	962498	4.97	861398	7.67	408999	9.67
HS22080522-08	X081213	671818	4.19	952946	4.97	828493	7.67	358490	9.67
HS22080522-10	X081214	671542	4.19	951948	4.97	838649	7.67	362725	9.67
HS22080522-04	X081229	644919	4.19	917187	4.97	776672	7.67	339370	9.67
CCV-END	X081230	559668	4.19	858284	4.97	813683	7.67	401020	9.66

IS1 - Pentafluorobenzene IS2 - 1,4-Difluorobenzene IS3 - Chlorobenzene-d5 IS4 - 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of 12H STD IS Area
AREA LOWER LIMIT = - 50% of 12H STD IS Area
RT - Retention Time IS - Internal Standard

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

right solutions.
right partner.

Analysis Run Log

Volatiles Organics by Method 8260C

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/19/2022

Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

RunID
VOA6_413360

Instrument ID VOA6 **Matrix** R413360 **Start Date** 07/19/2022 **EndDate** 07/19/2022

Client Sample ID	Type	Lab Sample ID	DF	Analysis Date	File ID
BFB	TUNE	BFB	1	07/19/22 11:06	X071901.D
VSTD000.25	ICAL1	VSTD000.25	1	07/19/22 11:27	X071902.D
VSTD000.5	ICAL2	VSTD000.5	1	07/19/22 12:08	X071903.D
VSTD001	ICAL3	VSTD001	1	07/19/22 12:29	X071904.D
VSTD002	ICAL4	VSTD002	1	07/19/22 12:50	X071905.D
VSTD005	ICAL5	VSTD005	1	07/19/22 13:11	X071906.D
VSTD020	ICAL6	VSTD020	1	07/19/22 13:32	X071907.D
VSTD050	ICAL7	VSTD050	1	07/19/22 13:53	X071908.D
VSTD100	ICAL8	VSTD100	1	07/19/22 14:14	X071909.D
VSTD150	ICAL9	VSTD150	1	07/19/22 14:35	X071910.D
VSTD200	ICAL	VSTD200	1	07/19/22 14:56	X071911.D
CCV	ICV	CCV	1	07/19/22 16:20	X071915.D

Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

RunID
VOA6_414932

Instrument ID VOA6 **Matrix** R414932 **Start Date** 08/11/2022 **EndDate** 08/11/2022

Client Sample ID	Type	Lab Sample ID	DF	Analysis Date	File ID
BFB	TUNE	BFB	1	08/11/22 10:28	X081101.D
CCV	CCV	CCV	1	08/11/22 11:10	X081103.D
CCB	CCB	CCB	1	08/11/22 11:31	X081104.D
VLCSW-220811	LCS	VLCSW-220811	1	08/11/22 11:52	X081105.D
VBLKW-220811	MBLK	VBLKW-220811	1	08/11/22 12:34	X081107.D
ZZZZZZZZZZ	SAMP	HS22080499-09	1	08/11/22 12:55	X081108.D
Trip Blank	SAMP	HS22080522-12	1	08/11/22 13:16	X081109.D
MW23_080822	SAMP	HS22080522-05	5	08/11/22 13:37	X081110.D
MW2_080822	SAMP	HS22080522-01	25	08/11/22 13:58	X081111.D
MW2_080822_a	SAMP	HS22080522-02	25	08/11/22 14:19	X081112.D
MW23_080822	SAMP	HS22080522-05	50	08/11/22 14:40	X081113.D
HS22080522-05MS	MS	HS22080522-05MS	50	08/11/22 15:01	X081114.D
HS22080522-05MSD	MSD	HS22080522-05MSD	50	08/11/22 15:22	X081115.D
MW2_080822	SAMP	HS22080522-01	1000	08/11/22 15:43	X081116.D
MW2_080822_a	SAMP	HS22080522-02	1000	08/11/22 16:04	X081117.D
ZZZZZZZZZZ	SAMP	HS22080499-01	1	08/11/22 16:26	X081118.D
ZZZZZZZZZZ	SAMP	HS22080499-03	1	08/11/22 16:47	X081119.D
ZZZZZZZZZZ	SAMP	HS22080499-05	1	08/11/22 17:08	X081120.D
ZZZZZZZZZZ	SAMP	HS22080499-06	1	08/11/22 17:29	X081121.D
ZZZZZZZZZZ	SAMP	HS22080499-07	1	08/11/22 17:50	X081122.D
18CPTMW01DW_080822	SAMP	HS22080522-03	1	08/11/22 18:11	X081123.D
17WW08_080822	SAMP	HS22080522-06	1	08/11/22 18:32	X081124.D
17WW08_080822_a	SAMP	HS22080522-07	1	08/11/22 18:53	X081125.D
18CPTMW23SW_080822	SAMP	HS22080522-09	1	08/11/22 19:14	X081126.D
18WW24_080822	SAMP	HS22080522-11	1	08/11/22 19:35	X081127.D
MW8_080822	SAMP	HS22080522-08	1	08/11/22 19:56	X081128.D
18CPTMW23_080822	SAMP	HS22080522-10	5	08/11/22 20:17	X081129.D
CCV-END	CCV_END	CCV-END	1	08/11/22 20:38	X081130.D

Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

Volatiles Organics by Method 8260C

RunID
VOA6_414991

Instrument ID VOA6 **Matrix** R414991 **Start Date** 08/12/2022 **EndDate** 08/12/2022

Client Sample ID	Type	Lab Sample ID	DF	Analysis Date	File ID
BFB	TUNE	BFB	1	08/12/22 10:21	X081201.D
CCV	CCV	CCV	1	08/12/22 10:42	X081202.D
CCB	CCB	CCB	1	08/12/22 11:24	X081204.D
VLCSW-220812	LCS	VLCSW-220812	1	08/12/22 11:45	X081205.D
VBLKW-220812	MBLK	VBLKW-220812	1	08/12/22 12:27	X081207.D
ZZZZZZZZZZ	SAMP	HS22080490-01	1	08/12/22 12:48	X081208.D
ZZZZZZZZZZ	SAMP	HS22080490-02	1	08/12/22 13:09	X081209.D
18CPTMW01SW_080822	SAMP	HS22080522-04	10	08/12/22 13:31	X081210.D
ZZZZZZMS	MS	HS22080490-02MS	1	08/12/22 13:52	X081211.D
ZZZZZZMSD	MSD	HS22080490-02MSD	1	08/12/22 14:13	X081212.D
MW8_080822	SAMP	HS22080522-08	5	08/12/22 14:34	X081213.D
18CPTMW23_080822	SAMP	HS22080522-10	10	08/12/22 14:55	X081214.D
ZZZZZZZZZZ	SAMP	HS22080611-09	1	08/12/22 15:16	X081215.D
ZZZZZZZZZZ	SAMP	HS22080611-01	1	08/12/22 15:37	X081216.D
ZZZZZZZZZZ	SAMP	HS22080611-07	1	08/12/22 15:58	X081217.D
ZZZZZZZZZZ	SAMP	HS22080611-05	1	08/12/22 16:19	X081218.D
ZZZZZZZZZZ	SAMP	HS22080611-06	1	08/12/22 16:40	X081219.D
ZZZZZZZZZZ	SAMP	HS22080490-03	1	08/12/22 17:01	X081220.D
ZZZZZZZZZZ	SAMP	HS22080490-04	1	08/12/22 17:22	X081221.D
ZZZZZZZZZZ	SAMP	HS22080490-05	1	08/12/22 17:43	X081222.D
ZZZZZZZZZZ	SAMP	HS22080490-06	1	08/12/22 18:04	X081223.D
ZZZZZZZZZZ	SAMP	HS22080490-07	1	08/12/22 18:25	X081224.D
ZZZZZZZZZZ	SAMP	HS22080611-08	1	08/12/22 18:46	X081225.D
ZZZZZZZZZZ	SAMP	HS22080611-02	1	08/12/22 19:07	X081226.D
ZZZZZZZZZZ	SAMP	HS22080611-03	5	08/12/22 19:29	X081227.D
ZZZZZZZZZZ	SAMP	HS22080611-04	20	08/12/22 19:50	X081228.D
18CPTMW01SW_080822	SAMP	HS22080522-04	100	08/12/22 20:11	X081229.D
CCV-END	CCV_END	CCV-END	1	08/12/22 20:32	X081230.D

right solutions.
right partner.

Raw Data VOA6 413360

Volatiles Organics by Method 8260C

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/19/2022

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220719.b\X071901.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 19-JUL-2022 11:06
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : HS22052000V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\Voa6.i\X220719.b\bfb.m
Meth Date : 14-Jun-2022 12:47 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	
8.698	8.889	(0.000)	95	32320			0.00- 100.00	100.00
8.698	8.889	(0.000)	50	5179			15.00- 40.00	16.02
8.698	8.889	(0.000)	75	16180			30.00- 60.00	50.06
8.698	8.889	(0.000)	96	2034			5.00- 9.00	6.29
8.698	8.889	(0.000)	173	170			0.00- 2.00	0.53
8.698	8.889	(0.000)	174	32248			50.00- 0.00	99.78
8.698	8.889	(0.000)	175	2068			5.00- 9.00	6.41
8.698	8.889	(0.000)	176	32048			95.00- 101.00	99.38
8.698	8.889	(0.000)	177	1757			5.00- 9.00	5.48

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.02
75	30.00 - 60.00% of mass 95	50.06
96	5.00 - 9.00% of mass 95	6.29
173	Less than 2.00% of mass 174	0.53 (0.53)
174	Greater than 50.00% of mass 95	99.78
175	5.00 - 9.00% of mass 174	6.40 (6.41)
176	95.00 - 101.00% of mass 174	99.16 (99.38)
177	5.00 - 9.00% of mass 176	5.44 (5.48)

Data File: X071901.D
Spectrum: Scan 2165 (8.70)
Location of Maximum: 95.00
Number of points: 83

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	403	61.90	879	87.90	1444	128.80	207
37.10	1658	63.00	1157	90.90	136	129.80	301
38.10	1647	64.00	301	92.00	847	137.00	117
39.00	908	65.00	56	93.10	1045	139.00	107
40.10	707	65.80	80	94.00	3846	141.00	494
41.00	93	67.00	143	95.00	32320	141.90	76
44.00	900	68.00	3426	96.00	2034	142.90	211
45.00	387	69.10	3149	97.00	70	147.80	82
47.10	310	70.10	316	103.70	114	149.70	61
47.80	125	71.90	395	104.10	107	155.10	64
48.30	97	72.90	1771	104.80	86	156.80	105
49.00	1195	74.00	5297	105.90	90	170.00	130
50.00	5179	75.00	16180	106.60	55	172.90	170
51.00	1985	76.00	1271	109.10	59	173.90	32248
52.20	111	77.00	406	109.90	93	175.00	2068
54.90	93	77.90	329	112.80	52	175.90	32048
56.10	488	78.90	1240	115.90	314	177.00	1757
56.90	1104	79.80	364	116.80	350	177.90	82
58.00	145	80.90	1270	118.00	96	186.10	221
60.00	255	81.90	202	118.80	198	262.00	64
61.00	1500	86.90	1378	128.00	111		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220719.b\X071901.D Page 1

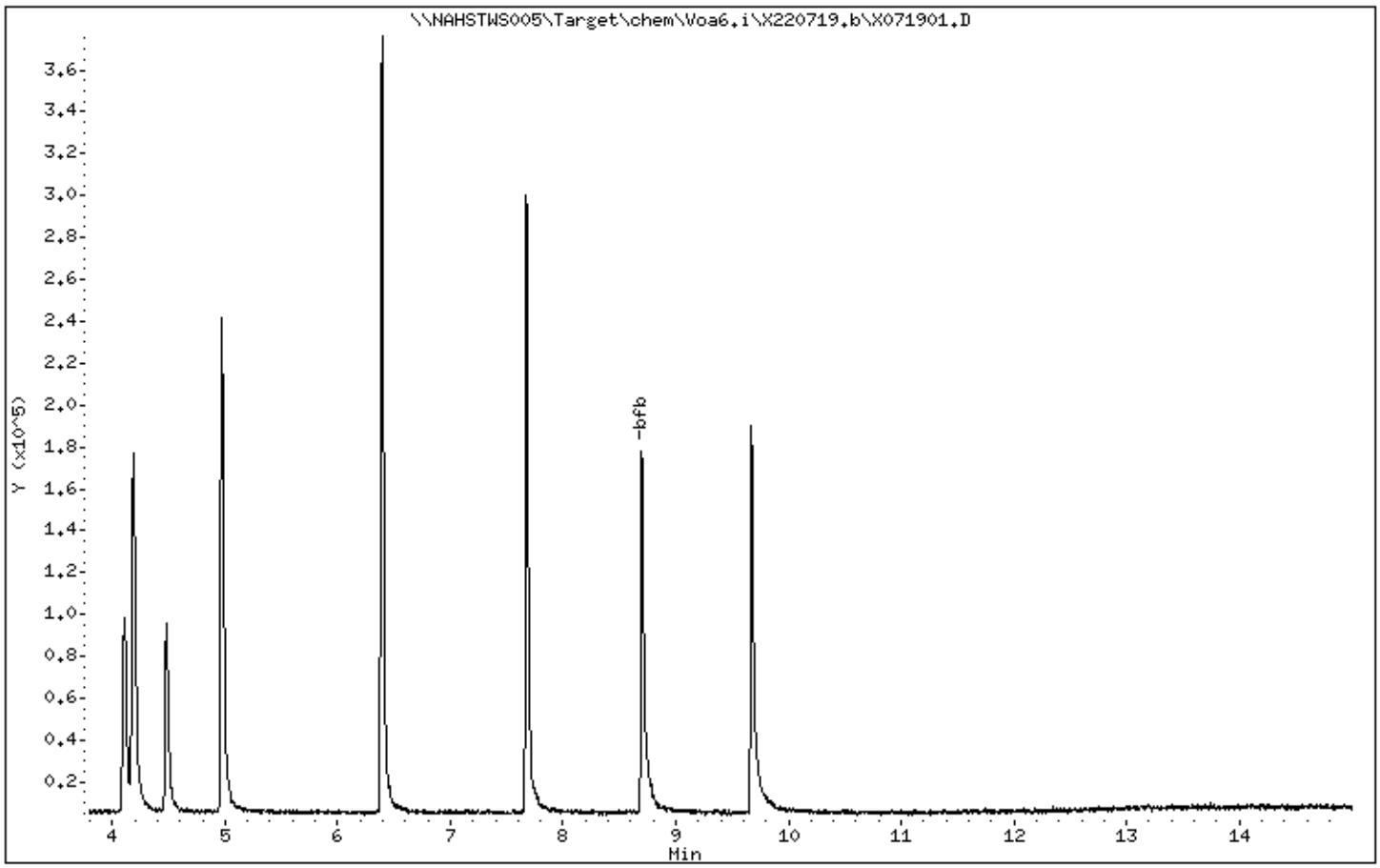
Date : 19-JUL-2022 11:06

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\X220719.b\X071901.D Page 2

Date : 19-JUL-2022 11:06

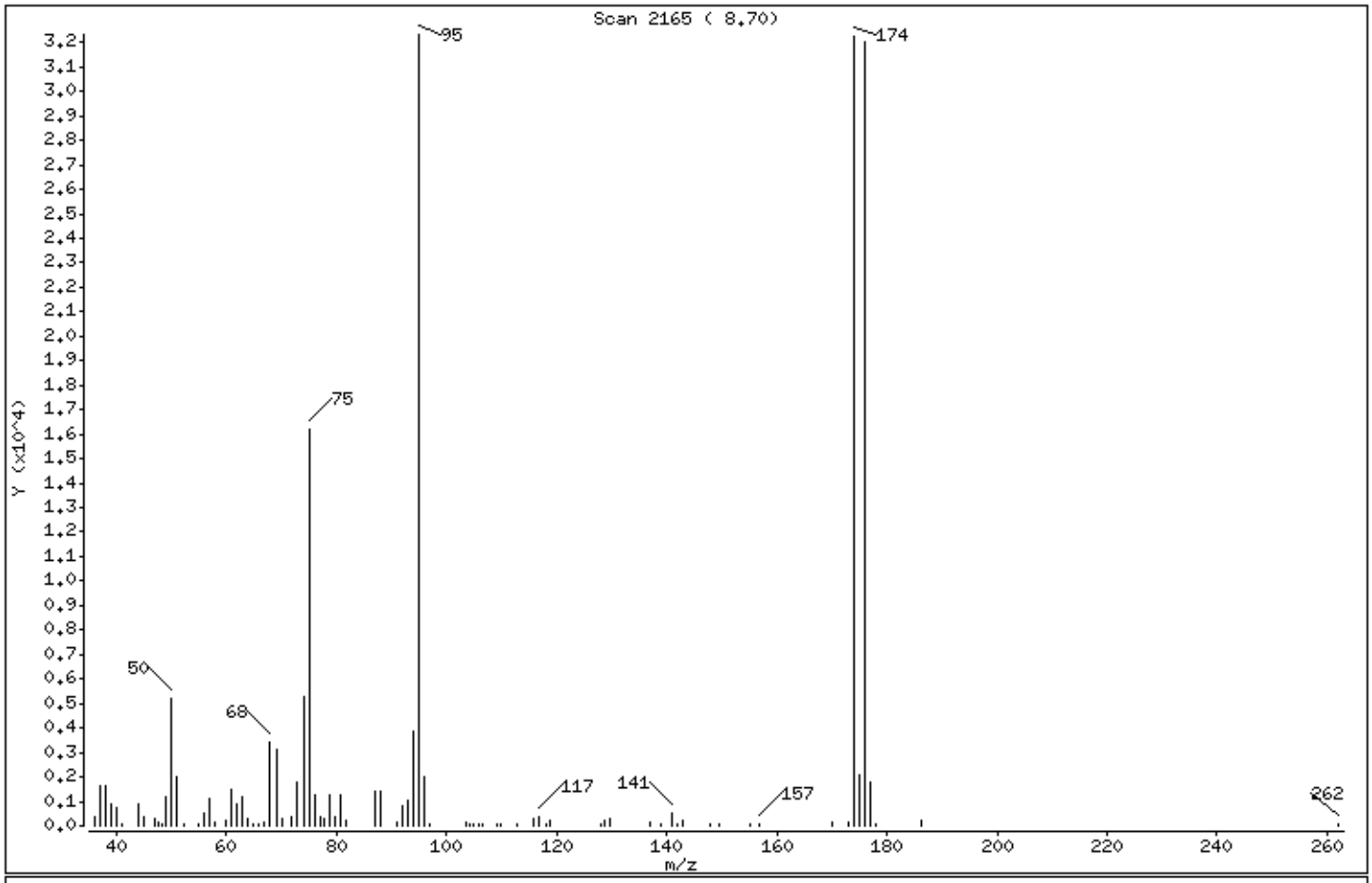
Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.02
75	30.00 - 60.00% of mass 95	50.06
96	5.00 - 9.00% of mass 95	6.29
173	Less than 2.00% of mass 174	0.53 (0.53)
174	Greater than 50.00% of mass 95	99.78
175	5.00 - 9.00% of mass 174	6.40 (6.41)
176	95.00 - 101.00% of mass 174	99.16 (99.38)
177	5.00 - 9.00% of mass 176	5.44 (5.48)

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220719.b\X071901.D

Date : 19-JUL-2022 11:06

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: X071901.D
Spectrum: Scan 2165 (8.70)
Location of Maximum: 95.00
Number of points: 83

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	403	61.90	879	87.90	1444	128.80	207
37.10	1658	63.00	1157	90.90	136	129.80	301
38.10	1647	64.00	301	92.00	847	137.00	117
39.00	908	65.00	56	93.10	1045	139.00	107
40.10	707	65.80	80	94.00	3846	141.00	494
41.00	93	67.00	143	95.00	32320	141.90	76
44.00	900	68.00	3426	96.00	2034	142.90	211
45.00	387	69.10	3149	97.00	70	147.80	82
47.10	310	70.10	316	103.70	114	149.70	61
47.80	125	71.90	395	104.10	107	155.10	64
48.30	97	72.90	1771	104.80	86	156.80	105
49.00	1195	74.00	5297	105.90	90	170.00	130
50.00	5179	75.00	16180	106.60	55	172.90	170
51.00	1985	76.00	1271	109.10	59	173.90	32248
52.20	111	77.00	406	109.90	93	175.00	2068
54.90	93	77.90	329	112.80	52	175.90	32048
56.10	488	78.90	1240	115.90	314	177.00	1757
56.90	1104	79.80	364	116.80	350	177.90	82
58.00	145	80.90	1270	118.00	96	186.10	221
60.00	255	81.90	202	118.80	198	262.00	64
61.00	1500	86.90	1378	128.00	111		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071902.D Page 1
Report Date: 19-Aug-2022 10:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071902.D
Lab Smp Id: VSTD000.25 Client Smp ID: VSTD000.25
Inj Date : 19-JUL-2022 11:27
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.25;VSTD000.25;1;1;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\8260W.m
Meth Date : 19-Aug-2022 10:59 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 14:56 Cal File: X071911.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.185	(1.000)	835764	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	1243619	50.0000	
* 47 Chlorobenzene-d5	117	7.675	7.675	(1.000)	1125944	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	516358	50.0000	
$ 30 Dibromofluoromethane	113	4.110	4.110	(0.982)	2821	0.25000	(a)
$ 35 1,2-Dichloroethane-d4	65	4.489	4.489	(1.073)	3098	0.25000	0.03(aM)
$ 48 Toluene-d8	98	6.404	6.404	(0.834)	8187	0.25000	0.29(aM)
$ 69 4-Bromofluorobenzene	95	8.717	8.717	(1.136)	4127	0.25000	(aM)
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.013)	2061	0.25000	0.26(a)
31 1,1,1-Trichloroethane	97	4.091	4.091	(0.978)	2586	0.25000	0.21(a)
68 1,1,2,2-Tetrachloroethane	83	8.852	8.852	(0.916)	2066	0.25000	0.28(aM)
53 1,1,2-Trichloroethane	83	6.854	6.854	(0.893)	1586	0.25000	0.27(a)
22 1,1-Dichloroethane	63	2.933	2.933	(0.701)	3255	0.25000	0.25(Ta)
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	1876	0.25000	0.26(a)
32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	3123	0.25000	0.31(a)
93 1,2,3-Trichlorobenzene	180	11.791	11.791	(1.220)	365	0.25000	0.13(aM)
71 1,2,3-Trichloropropane	75	8.878	8.878	(0.919)	898	0.25000	0.16(a)
90 1,2,4-Trichlorobenzene	180	11.427	11.427	(1.182)	737	0.25000	0.15(aM)
79 1,2,4-Trimethylbenzene	105	9.392	9.392	(0.972)	5841	0.25000	0.23(a)
57 1,2-Dibromoethane	107	7.281	7.281	(0.949)	1909	0.25000	0.26(a)

88 1,2-Dichlorobenzene	146	10.018	10.018 (1.036)	2967	0.25000	0.22(a)
33 1,2-Dichloroethane	62	4.571	4.571 (0.920)	2679	0.25000	0.24(a)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071902.D Page 2
Report Date: 19-Aug-2022 10:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
42	1,2-Dichloropropane	63	5.452	5.452	(1.097)	1860	0.25000	0.24(a)
75	1,3,5-Trimethylbenzene	105	9.081	9.081	(0.940)	5704	0.25000	0.22(a)
83	1,3-Dichlorobenzene	146	9.617	9.617	(0.995)	3278	0.25000	0.22(a)
54	1,3-Dichloropropane	76	7.000	7.000	(0.912)	3168	0.25000	0.26(a)
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	4292	0.25000	0.28(a)
26	2,2-Dichloropropane	77	3.522	3.522	(0.841)	2918	0.25000	0.00(aM)
24	2-Butanone	43	3.709	3.709	(0.886)	1011	0.50000	0.48(aM)
76	2-Chlorotoluene	91	8.991	8.991	(0.930)	5527	0.25000	0.24(a)
52	2-Hexanone	43	7.139	7.139	(0.930)	1144	0.50000	0.32(a)
77	4-Chlorotoluene	91	9.103	9.103	(0.942)	5589	0.25000	0.22(a)
82	p-Isopropyltoluene	119	9.654	9.654	(0.999)	5688	0.25000	0.22(a)
45	4-Methyl-2-Pentanone	43	6.352	6.352	(0.828)	1814	0.50000	0.33(a)
10	Acetone	43	1.973	1.973	(0.472)	1327	0.50000	(aM)
37	Benzene	78	4.530	4.530	(0.912)	7348	0.25000	0.24(a)
74	Bromobenzene	156	8.833	8.833	(0.914)	1831	0.25000	0.20(a)
29	Bromochloromethane	128	3.810	3.810	(0.910)	1379	0.25000	0.29(a)
39	Bromodichloromethane	83	5.741	5.741	(1.155)	2545	0.25000	0.24(aM)
66	Bromoform	173	8.421	8.421	(1.097)	995	0.25000	1.41(aM)
6	Bromomethane	94	1.351	1.351	(0.323)	3274	0.25000	(a)
19	Carbon Disulfide	76	2.082	2.082	(0.498)	9996	0.50000	0.54(a)
34	Carbon Tetrachloride	117	4.268	4.268	(0.859)	2941	0.25000	0.27(aM)
59	Chlorobenzene	112	7.698	7.698	(1.003)	5699	0.25000	0.26(a)
7	Chloroethane	64	1.407	1.407	(0.336)	1480	0.25000	0.27(aM)
28	Chloroform	83	3.919	3.919	(0.936)	3577	0.25000	0.25(a)
3	Chloromethane	50	1.081	1.081	(0.258)	2143	0.25000	0.32(a)
27	cis-1,2-Dichloroethene	96	3.555	3.555	(0.850)	2176	0.25000	0.26(aM)
46	cis-1,3-Dichloropropene	75	6.176	6.176	(1.243)	3069	0.25000	0.23(aM)
55	Dibromochloromethane	129	7.191	7.191	(0.937)	1966	0.25000	0.23(a)
44	Dibromomethane	93	5.565	5.565	(1.120)	1155	0.25000	0.22(a)
2	Dichlorodifluoromethane	85	0.976	0.976	(0.233)	1741	0.25000	0.04(a)
61	Ethylbenzene	106	7.810	7.810	(1.018)	2551	0.25000	0.23(a)
91	Hexachlorobutadiene	225	11.491	11.491	(1.189)	656	0.25000	0.15(aM)
67	Isopropylbenzene	105	8.575	8.575	(1.117)	7326	0.25000	0.22(a)
62	m,p-Xylenes	106	7.915	7.915	(1.031)	5956	0.50000	0.44(a)
17	Methylene Chloride	84	2.303	2.303	(0.550)	2179	0.25000	(aM)
87	n-Butylbenzene	91	10.022	10.022	(1.037)	2636	0.25000	0.12(aM)
73	n-Propylbenzene	91	8.935	8.935	(0.924)	8239	0.25000	0.24(a)
92	Naphthalene	128	11.671	11.671	(1.207)	1028	0.25000	0.19(aM)
63	o-Xylene	106	8.264	8.264	(1.077)	3336	0.25000	0.25(a)
81	sec-Butylbenzene	105	9.527	9.527	(0.986)	7167	0.25000	0.24(a)
64	Styrene	104	8.309	8.309	(1.083)	4361	0.25000	0.20(a)
78	tert-Butylbenzene	119	9.339	9.339	(0.966)	4918	0.25000	0.23(a)
56	Tetrachloroethene	164	6.933	6.933	(0.903)	1792	0.25000	0.24(a)
50	Toluene	91	6.460	6.460	(0.842)	8059	0.25000	0.25(a)
20	trans-1,2-Dichloroethene	96	2.543	2.543	(0.608)	1679	0.25000	0.22(a)
51	trans-1,3-Dichloropropene	75	6.715	6.715	(1.352)	2385	0.25000	0.22(a)
38	Trichloroethene	130	5.220	5.220	(1.051)	2042	0.25000	0.23(a)
8	Trichlorofluoromethane	101	1.565	1.565	(0.374)	2838	0.25000	0.21(a)
5	Vinyl Chloride	62	1.149	1.149	(0.275)	2270	0.25000	0.25(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\X220719.b\X071902.D
Date : 19-JUL-2022 11:27
Client ID: VSTD000.25
Sample Info: VSTD000.25;VSTD000.25;1;1;
Purge Volume: 5.0
Column phase: DB624

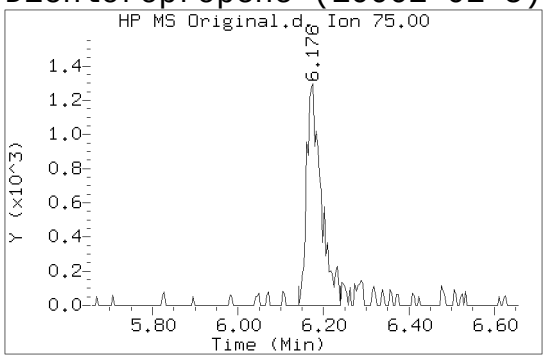
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071902.D
Inj Date : 19-JUL-2022 11:27
InstruID : voa6.i
LabSampID : VSTD000.25

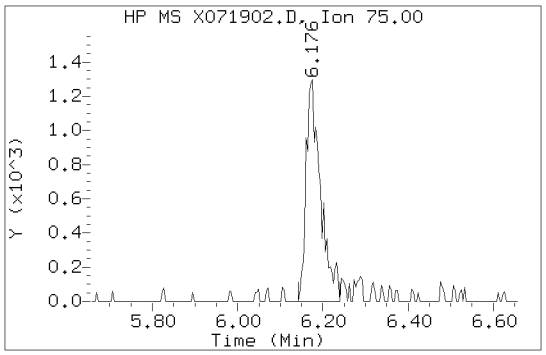
cis-1,3-Dichloropropene (10061-01-5)

Reason Code:

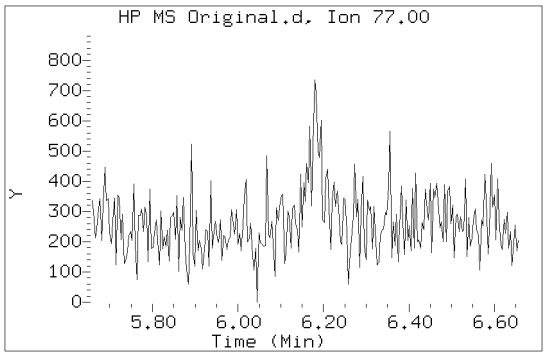
BEFORE
MASS
128
AREA
1379
HEIGHT
582
25-Jul-2022
09:00
linh
pham



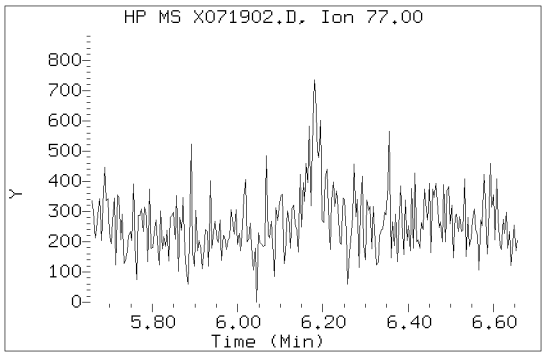
AFTER
MASS
75
AREA
3069
HEIGHT
1297
19-Aug-2022
10:59
linh
pham



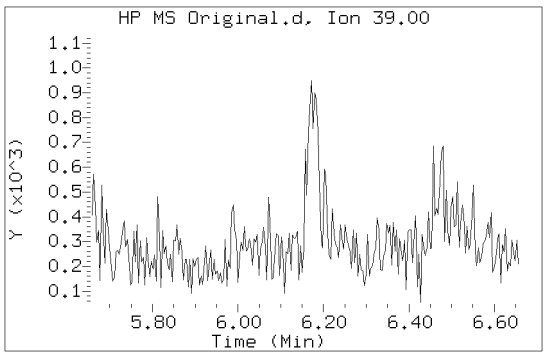
BEFORE
MASS
49
AREA
1593
HEIGHT
651
25-Jul-2022
09:00
linh
pham



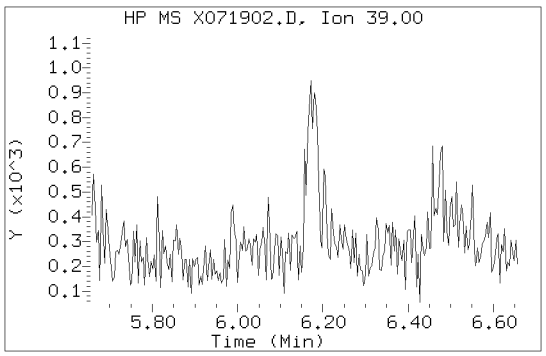
AFTER
MASS
77
AREA
0
HEIGHT
0
19-Aug-2022
10:59
linh
pham



BEFORE
MASS
130
AREA
1583
HEIGHT
689
25-Jul-2022
09:00
linh
pham



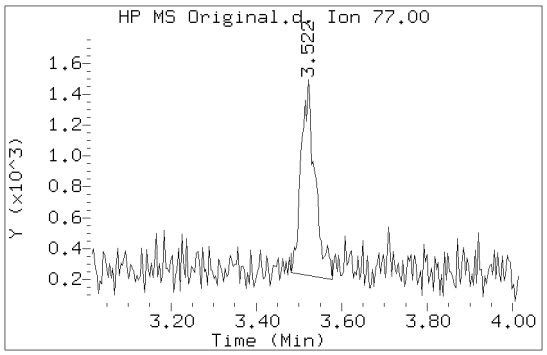
AFTER
MASS
39
AREA
0
HEIGHT
0
19-Aug-2022
10:59
linh
pham



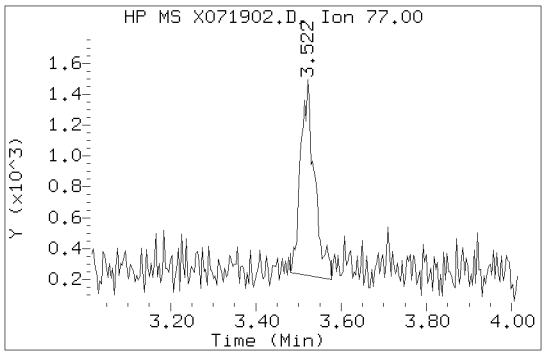
2,2-Dichloropropane (594-20-7)

Reason Code:

BEFORE
MASS
43
AREA
1144
HEIGHT
523
25-Jul-2022
09:00
linh
pham



AFTER
MASS
77
AREA
2918
HEIGHT
1268
19-Aug-2022
10:59
linh
pham



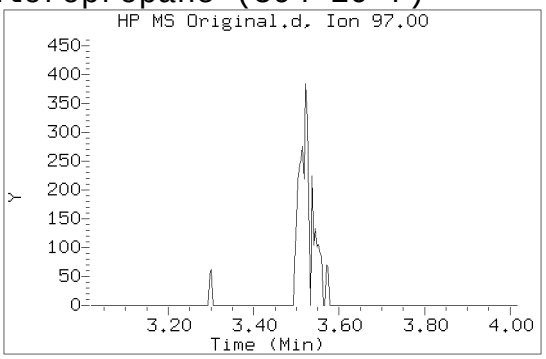
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071902.D
Inj Date : 19-JUL-2022 11:27
InstruID : voa6.i
LabSampID : VSTD000.25

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

Reason Code:

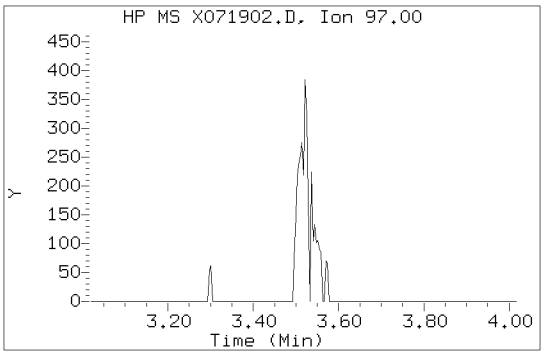
BEFORE

MASS
58
AREA
718
HEIGHT
357
25-Jul-2022
09:00
linh
pham



AFTER

MASS
97
AREA
0
HEIGHT
0
19-Aug-2022
10:59
linh
pham

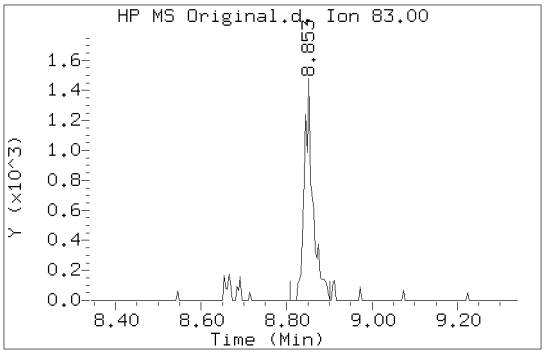


1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

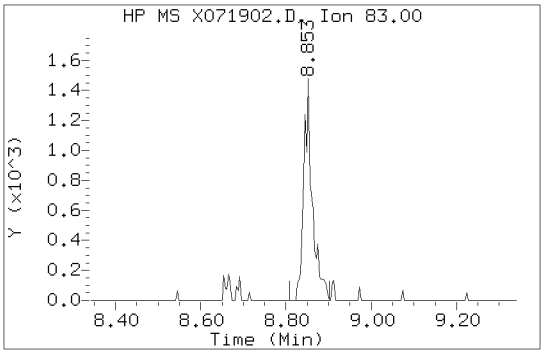
BEFORE

MASS
101
AREA
1540
HEIGHT
826
25-Jul-2022
09:00
linh
pham



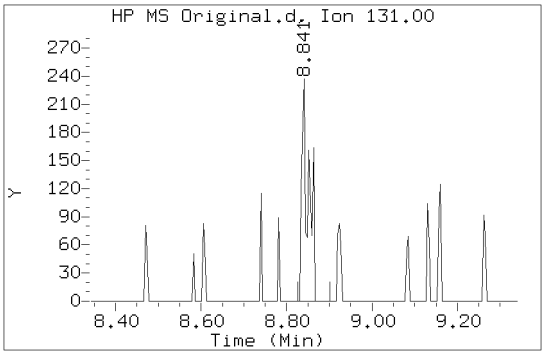
AFTER

MASS
83
AREA
2066
HEIGHT
1478
19-Aug-2022
10:59
linh
pham



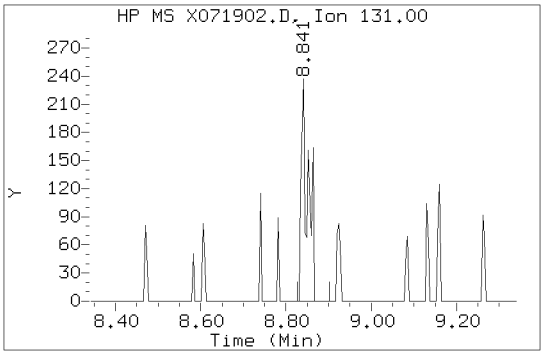
BEFORE

MASS
151
AREA
1093
HEIGHT
601
25-Jul-2022
09:00
linh
pham



AFTER

MASS
131
AREA
261
HEIGHT
237
19-Aug-2022
10:59
linh
pham

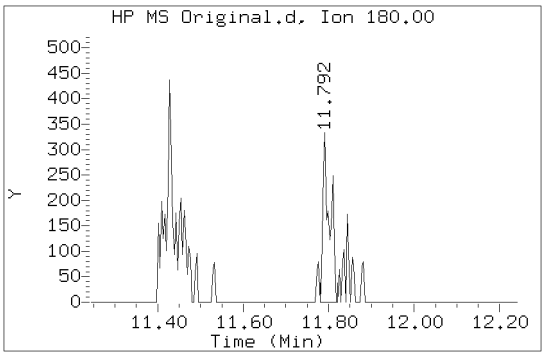


1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

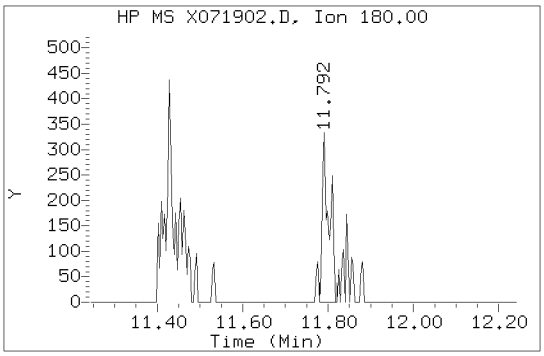
BEFORE

MASS
77
AREA
2918
HEIGHT
1268
25-Jul-2022
09:00
linh
pham



AFTER

MASS
180
AREA
365
HEIGHT
333
19-Aug-2022
10:59
linh
pham

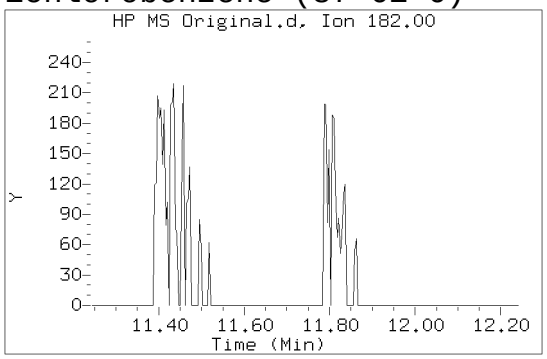


Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071902.D
Inj Date : 19-JUL-2022 11:27
InstruID : voa6.i
LabSampID : VSTD000.25

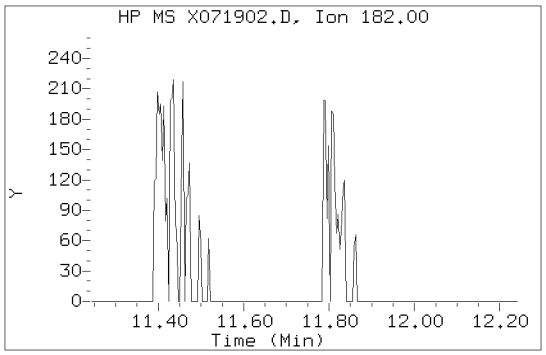
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

BEFORE
MASS
97
AREA
0
HEIGHT
0
25-Jul-2022
09:00
linh
pham



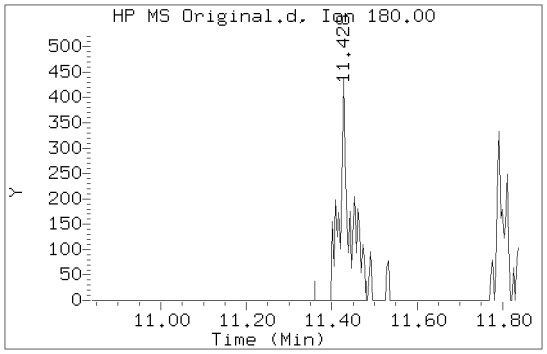
AFTER
MASS
182
AREA
0
HEIGHT
0
19-Aug-2022
10:59
linh
pham



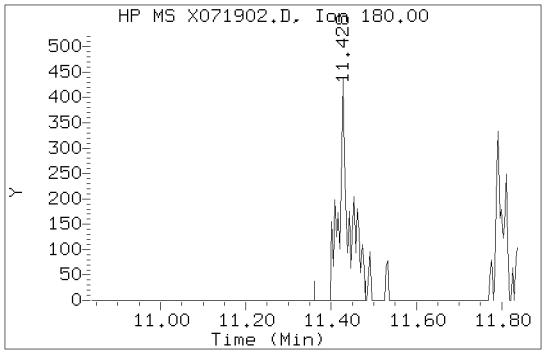
1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

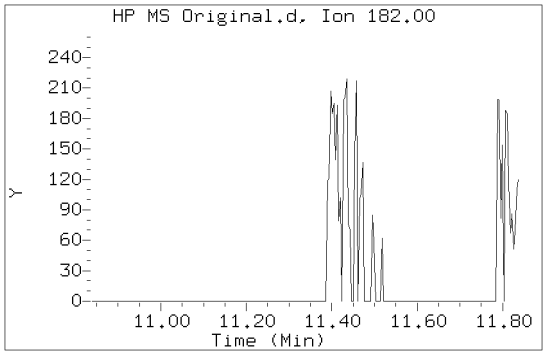
BEFORE
MASS
93
AREA
1155
HEIGHT
850
25-Jul-2022
09:00
linh
pham



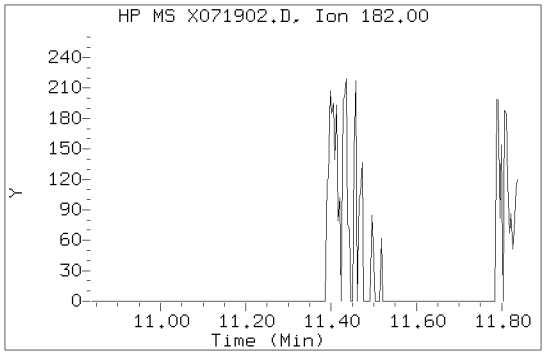
AFTER
MASS
180
AREA
737
HEIGHT
437
19-Aug-2022
10:59
linh
pham



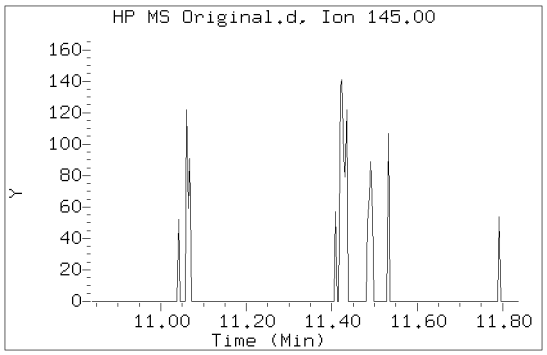
BEFORE
MASS
95
AREA
1189
HEIGHT
756
25-Jul-2022
09:00
linh
pham



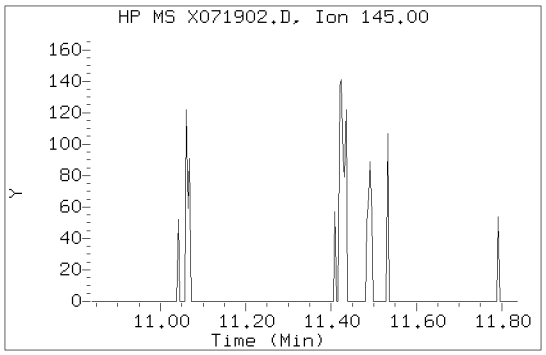
AFTER
MASS
182
AREA
0
HEIGHT
0
19-Aug-2022
10:59
linh
pham



BEFORE
MASS
174
AREA
1408
HEIGHT
628
25-Jul-2022
09:00
linh
pham



AFTER
MASS
145
AREA
0
HEIGHT
0
19-Aug-2022
10:59
linh
pham



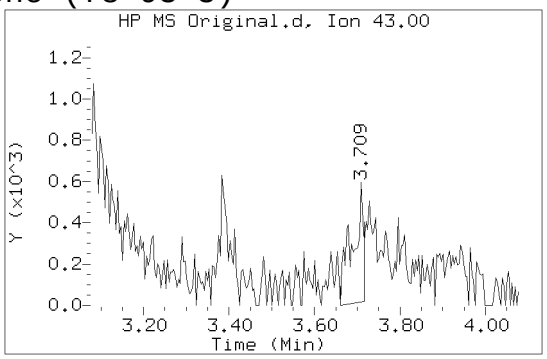
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071902.D
Inj Date : 19-JUL-2022 11:27
InstruID : voa6.i
LabSampID : VSTD000.25

2-Butanone (78-93-3)

Reason Code:

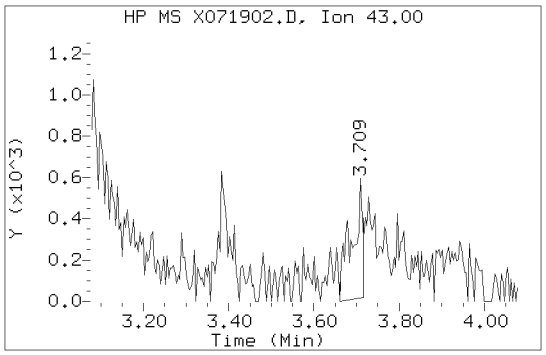
BEFORE

MASS
83
AREA
2066
HEIGHT
1478
25-Jul-2022
09:00
linh
pham



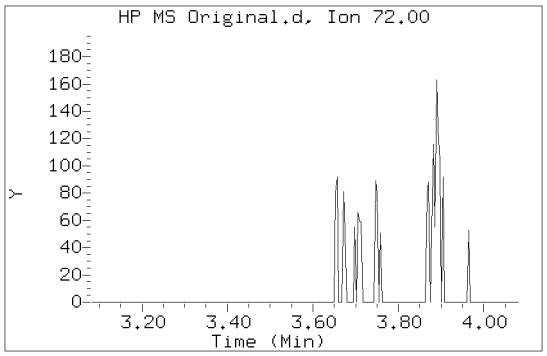
AFTER

MASS
43
AREA
1011
HEIGHT
580
19-Aug-2022
10:59
linh
pham



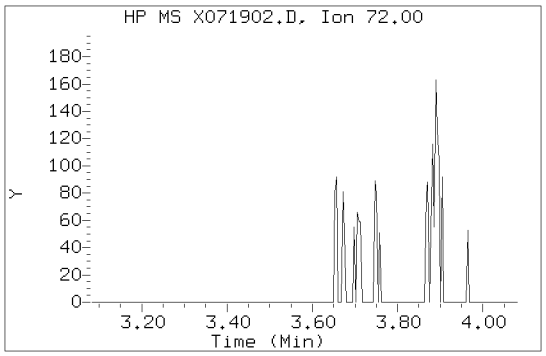
BEFORE

MASS
131
AREA
261
HEIGHT
237
25-Jul-2022
09:00
linh
pham



AFTER

MASS
72
AREA
0
HEIGHT
0
19-Aug-2022
10:59
linh
pham

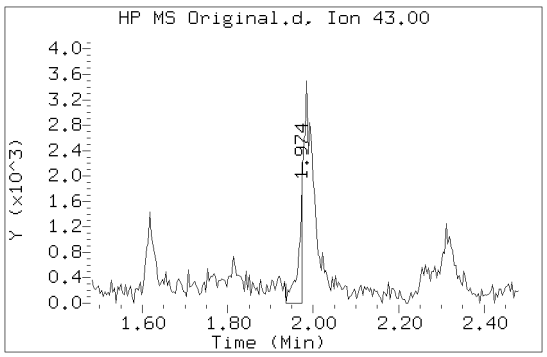


Acetone (67-64-1)

Reason Code:

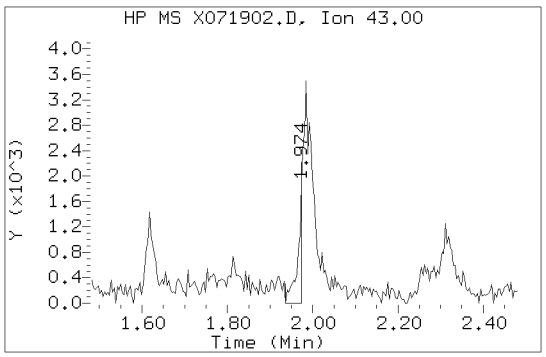
BEFORE

MASS
62
AREA
2270
HEIGHT
1999
25-Jul-2022
09:00
linh
pham



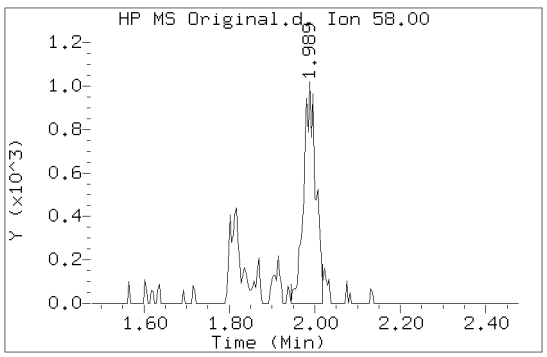
AFTER

MASS
43
AREA
1327
HEIGHT
1915
19-Aug-2022
10:59
linh
pham



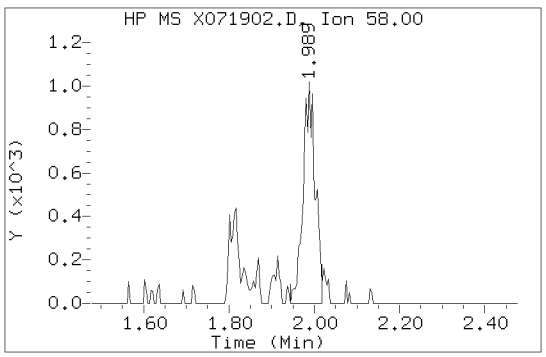
BEFORE

MASS
64
AREA
1357
HEIGHT
893
25-Jul-2022
09:00
linh
pham



AFTER

MASS
58
AREA
2032
HEIGHT
1020
19-Aug-2022
10:59
linh
pham



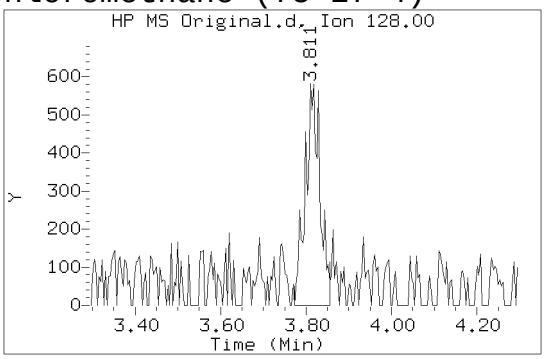
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071902.D
Inj Date : 19-JUL-2022 11:27
InstruID : voa6.i
LabSampID : VSTD000.25

Bromodichloromethane (75-27-4)

Reason Code:

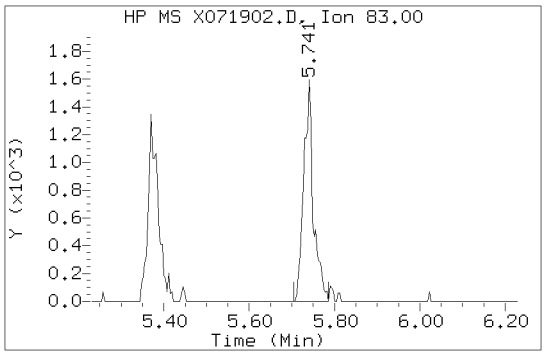
BEFORE

MASS
112
AREA
5699
HEIGHT
4160
25-Jul-2022
09:00
linh
pham



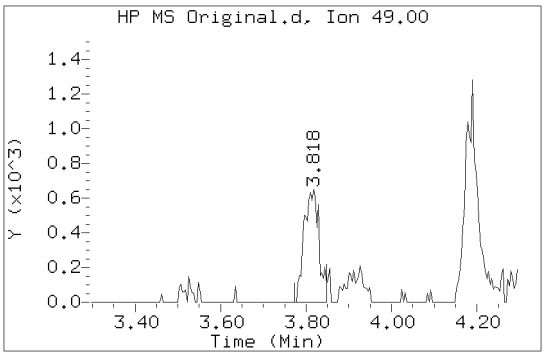
AFTER

MASS
83
AREA
2545
HEIGHT
1596
19-Aug-2022
10:59
linh
pham



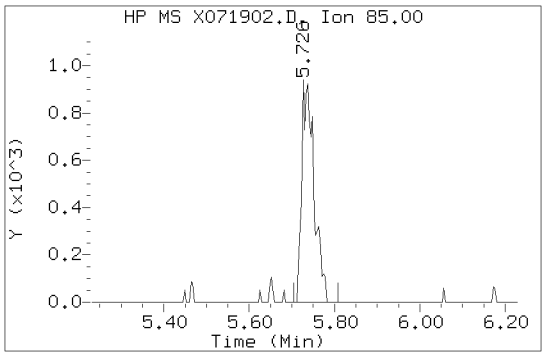
BEFORE

MASS
77
AREA
13059
HEIGHT
6542
25-Jul-2022
09:00
linh
pham



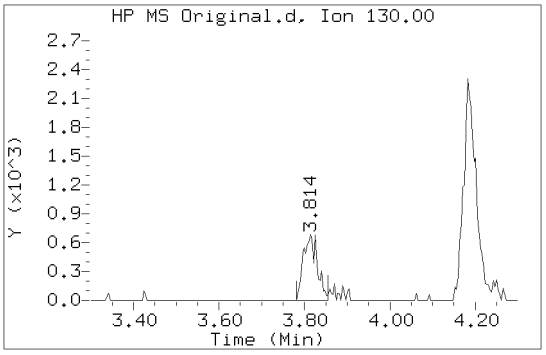
AFTER

MASS
85
AREA
1904
HEIGHT
940
19-Aug-2022
10:59
linh
pham



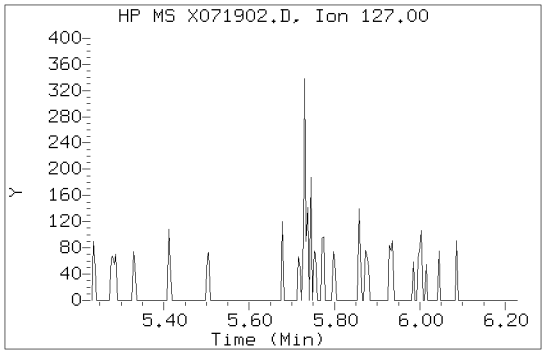
BEFORE

MASS
114
AREA
1994
HEIGHT
1227
25-Jul-2022
09:00
linh
pham



AFTER

MASS
127
AREA
0
HEIGHT
0
19-Aug-2022
10:59
linh
pham

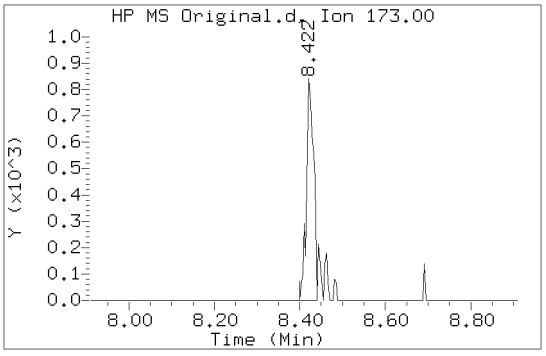


Bromoform (75-25-2)

Reason Code:

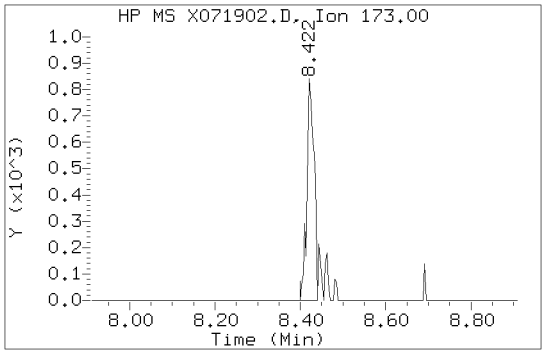
BEFORE

MASS
64
AREA
1480
HEIGHT
1248
25-Jul-2022
09:00
linh
pham



AFTER

MASS
173
AREA
995
HEIGHT
841
19-Aug-2022
10:59
linh
pham



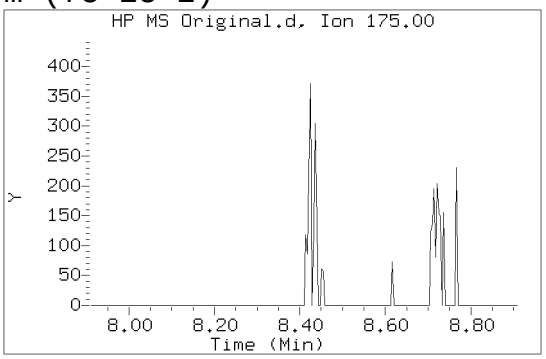
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071902.D
Inj Date : 19-JUL-2022 11:27
InstruID : voa6.i
LabSampID : VSTD000.25

Bromoform (75-25-2)

Reason Code:

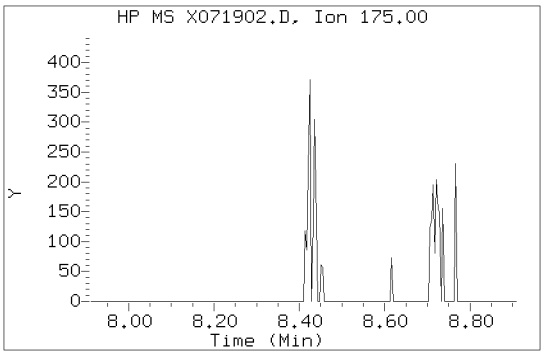
BEFORE

MASS
66
AREA
908
HEIGHT
577
25-Jul-2022
09:00
linh
pham



AFTER

MASS
175
AREA
0
HEIGHT
0
19-Aug-2022
10:59
linh
pham

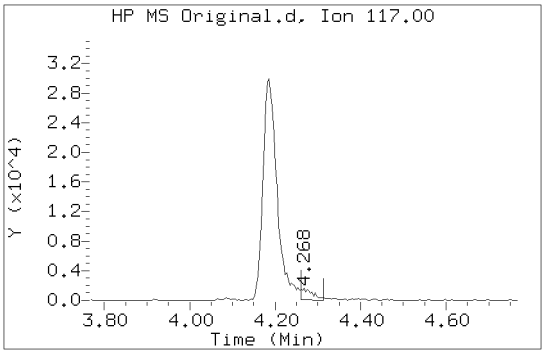


Carbon Tetrachloride (56-23-5)

Reason Code:

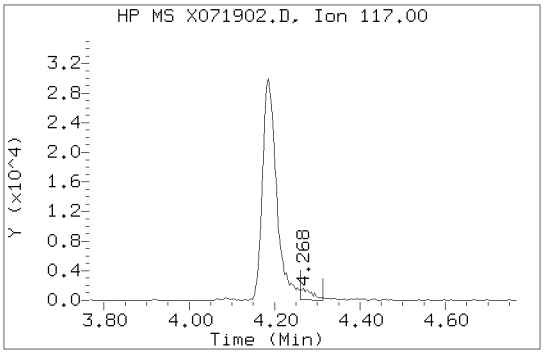
BEFORE

MASS
96
AREA
2176
HEIGHT
1100
25-Jul-2022
09:00
linh
pham



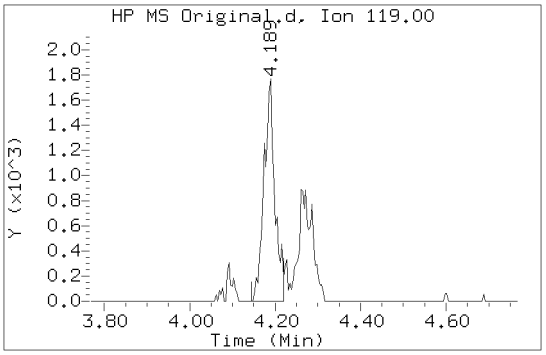
AFTER

MASS
117
AREA
2941
HEIGHT
1575
19-Aug-2022
10:59
linh
pham



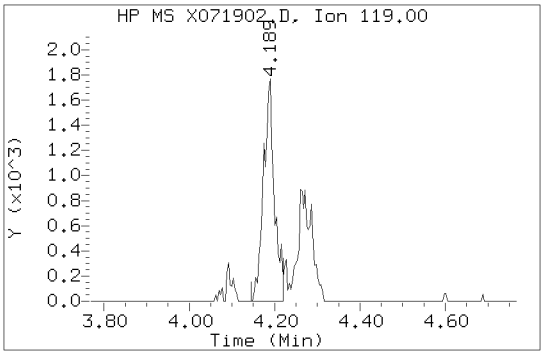
BEFORE

MASS
61
AREA
2985
HEIGHT
1241
25-Jul-2022
09:00
linh
pham



AFTER

MASS
119
AREA
3120
HEIGHT
1768
19-Aug-2022
10:59
linh
pham

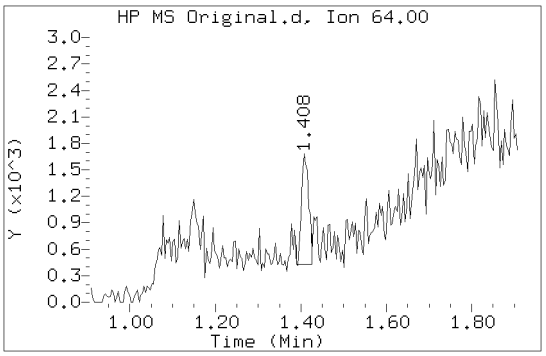


Chloroethane (75-00-3)

Reason Code:

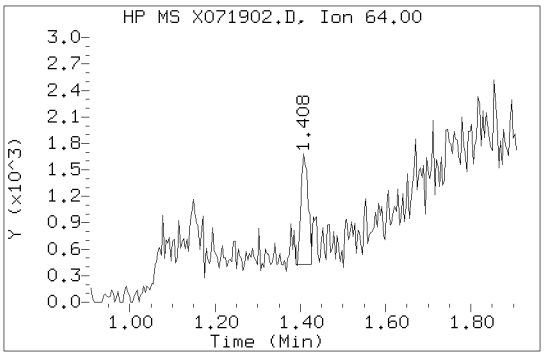
BEFORE

MASS
117
AREA
1125944
HEIGHT
749184
25-Jul-2022
09:00
linh
pham



AFTER

MASS
64
AREA
1480
HEIGHT
1248
19-Aug-2022
10:59
linh
pham



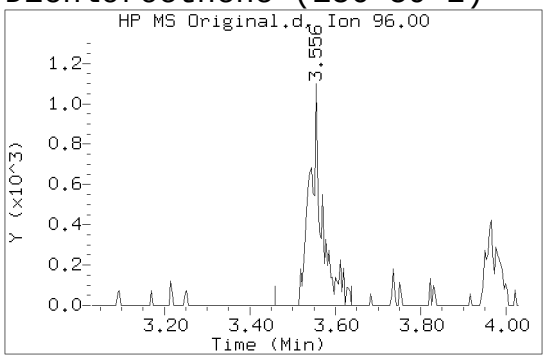
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071902.D
Inj Date : 19-JUL-2022 11:27
InstruID : voa6.i
LabSampID : VSTD000.25

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

Reason Code:

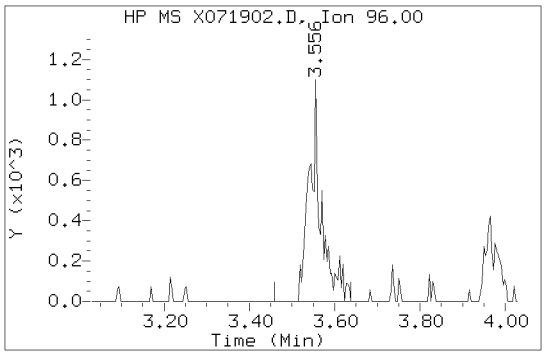
BEFORE

MASS
106
AREA
2551
HEIGHT
1284
25-Jul-2022
09:00
linh
pham



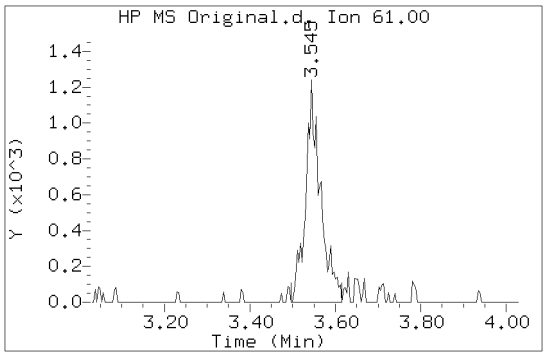
AFTER

MASS
96
AREA
2176
HEIGHT
1100
19-Aug-2022
10:59
linh
pham



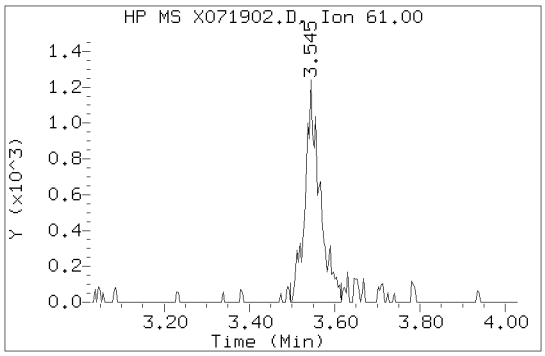
BEFORE

MASS
91
AREA
8845
HEIGHT
4301
25-Jul-2022
09:00
linh
pham



AFTER

MASS
61
AREA
2985
HEIGHT
1241
19-Aug-2022
10:59
linh
pham

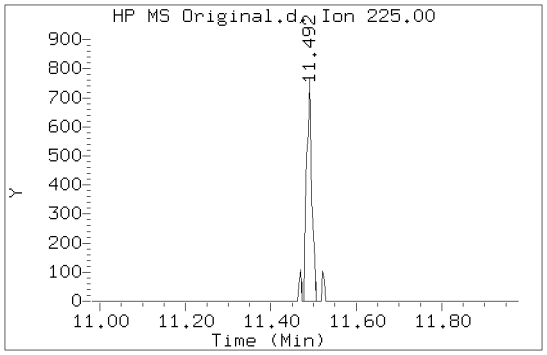


Hexachlorobutadiene (87-68-3)

Reason Code:

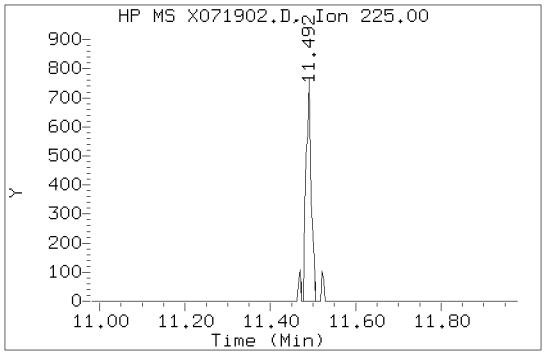
BEFORE

MASS
91
AREA
8239
HEIGHT
3499
25-Jul-2022
09:00
linh
pham



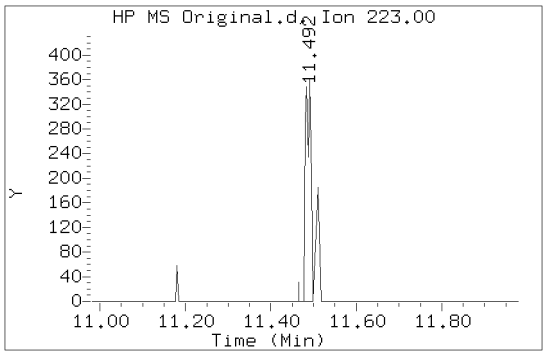
AFTER

MASS
225
AREA
656
HEIGHT
765
19-Aug-2022
10:59
linh
pham



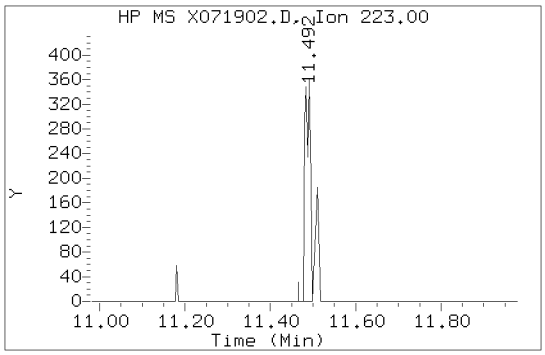
BEFORE

MASS
120
AREA
2347
HEIGHT
1333
25-Jul-2022
09:00
linh
pham



AFTER

MASS
223
AREA
322
HEIGHT
360
19-Aug-2022
10:59
linh
pham



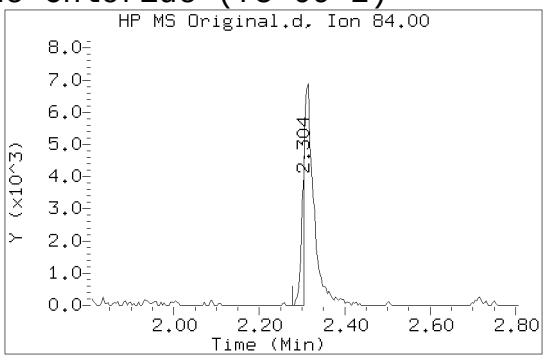
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071902.D
Inj Date : 19-JUL-2022 11:27
InstruID : voa6.i
LabSampID : VSTD000.25

Methylene Chloride (75-09-2)

Reason Code:

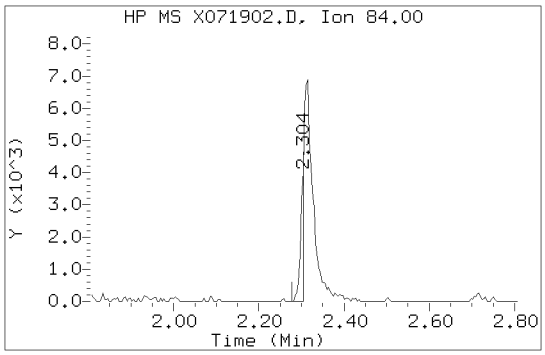
BEFORE

MASS
91
AREA
5589
HEIGHT
2011
25-Jul-2022
09:00
linh
pham



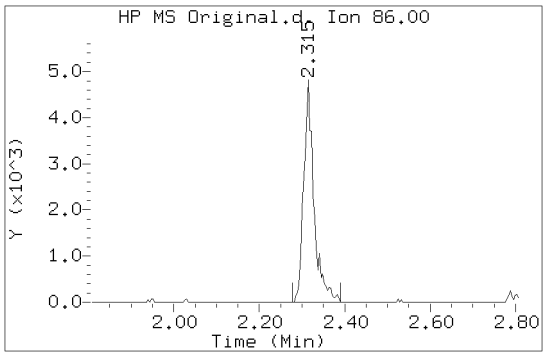
AFTER

MASS
84
AREA
2179
HEIGHT
4047
19-Aug-2022
10:59
linh
pham



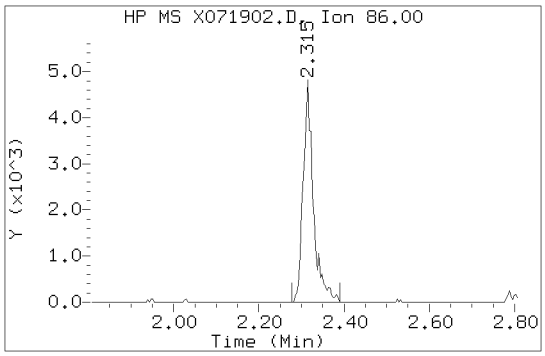
BEFORE

MASS
126
AREA
1833
HEIGHT
712
25-Jul-2022
09:00
linh
pham



AFTER

MASS
86
AREA
8177
HEIGHT
4819
19-Aug-2022
10:59
linh
pham

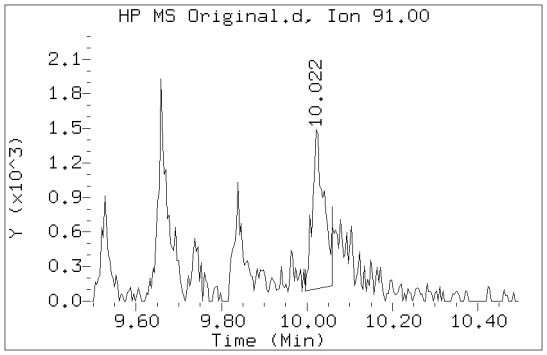


n-Butylbenzene (104-51-8)

Reason Code:

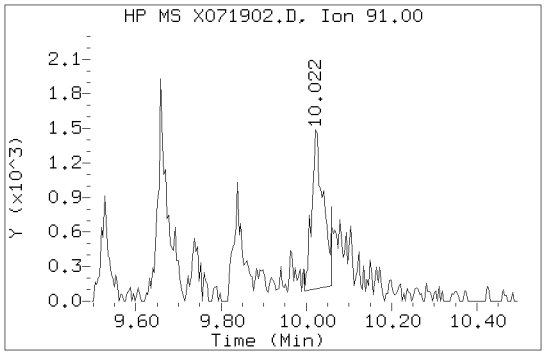
BEFORE

MASS
119
AREA
4918
HEIGHT
3300
25-Jul-2022
09:00
linh
pham



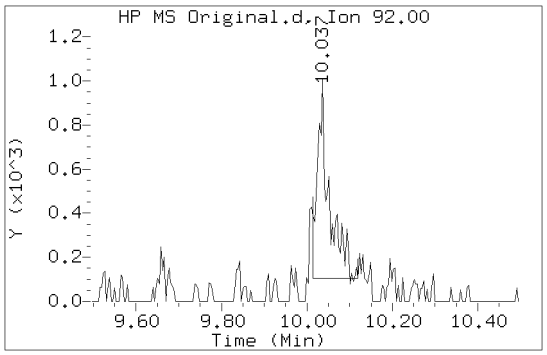
AFTER

MASS
91
AREA
2636
HEIGHT
1379
19-Aug-2022
10:59
linh
pham



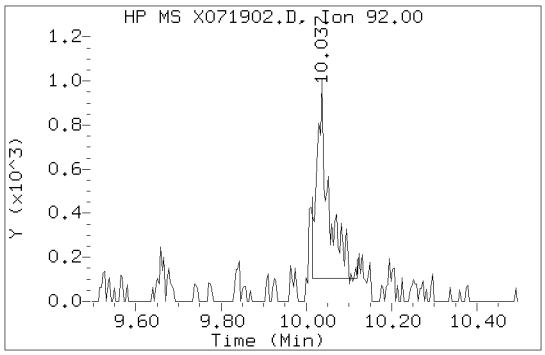
BEFORE

MASS
91
AREA
3272
HEIGHT
2266
25-Jul-2022
09:00
linh
pham



AFTER

MASS
92
AREA
1706
HEIGHT
901
19-Aug-2022
10:59
linh
pham

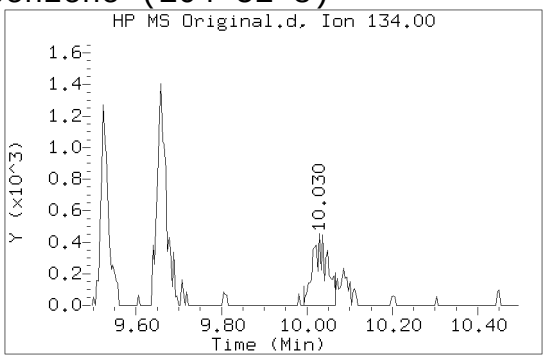


Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071902.D
Inj Date : 19-JUL-2022 11:27
InstruID : voa6.i
LabSampID : VSTD000.25

n-Butylbenzene (104-51-8)

BEFORE

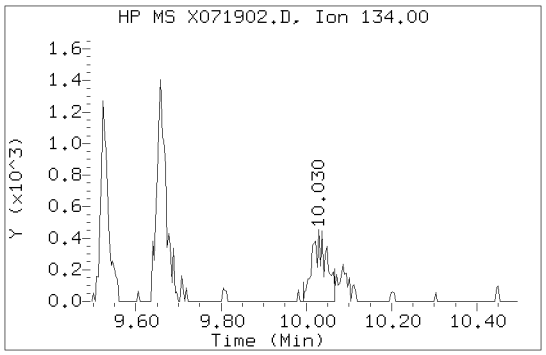
MASS
134
AREA
1291
HEIGHT
839
25-Jul-2022
09:00
linh
pham



AFTER

MASS
134
AREA
1039
HEIGHT
456
19-Aug-2022
10:59
linh
pham

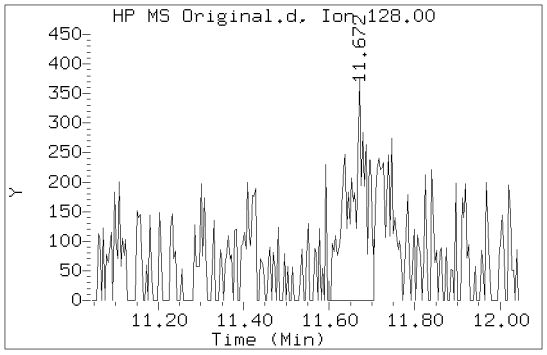
Reason Code:



Naphthalene (91-20-3)

BEFORE

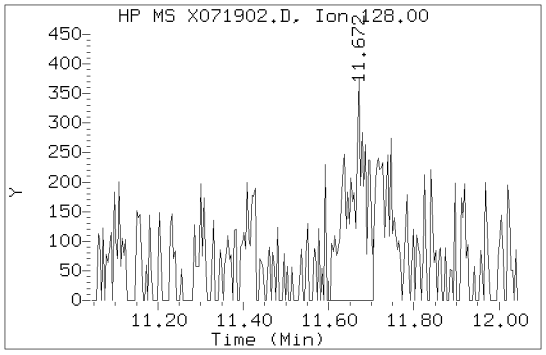
MASS
105
AREA
7167
HEIGHT
4920
25-Jul-2022
09:00
linh
pham



AFTER

MASS
128
AREA
1028
HEIGHT
375
19-Aug-2022
10:59
linh
pham

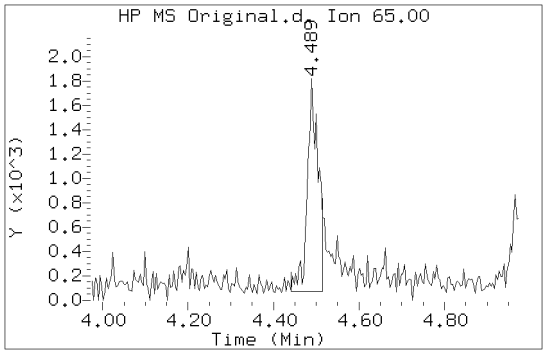
Reason Code:



1,2-Dichloroethane-d4 (17060-07-0)

BEFORE

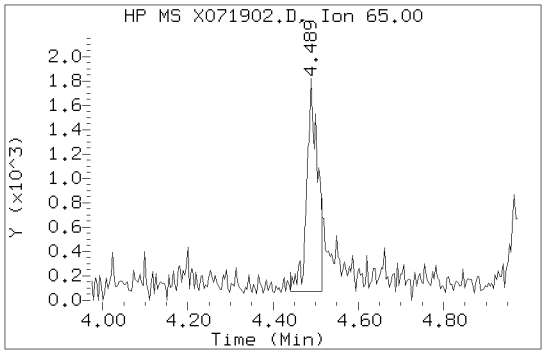
MASS
113
AREA
2821
HEIGHT
1201
25-Jul-2022
09:00
linh
pham



AFTER

MASS
65
AREA
3098
HEIGHT
1743
19-Aug-2022
10:59
linh
pham

Reason Code:



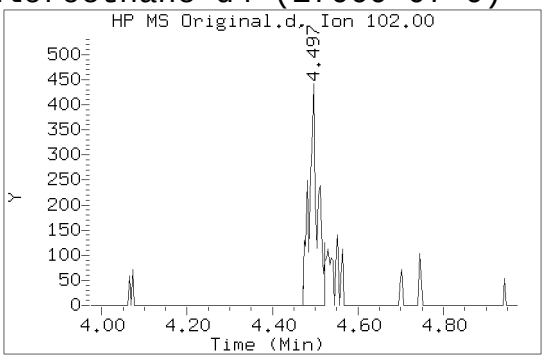
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071902.D
Inj Date : 19-JUL-2022 11:27
InstruID : voa6.i
LabSampID : VSTD000.25

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

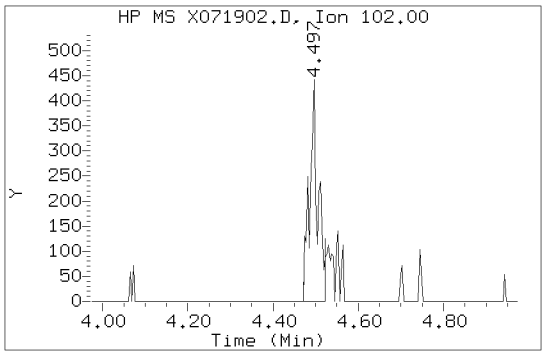
BEFORE

MASS
111
AREA
2894
HEIGHT
1282
25-Jul-2022
09:00
linh
pham



AFTER

MASS
102
AREA
606
HEIGHT
442
19-Aug-2022
10:59
linh
pham

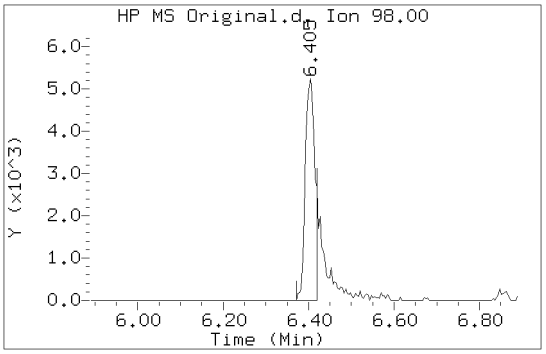


Toluene-d8 (2037-26-5)

Reason Code:

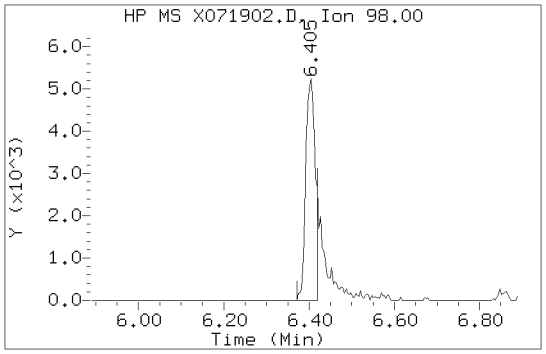
BEFORE

MASS
65
AREA
3098
HEIGHT
1743
25-Jul-2022
09:00
linh
pham



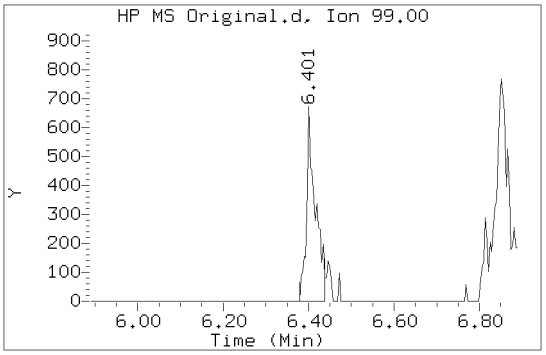
AFTER

MASS
98
AREA
8187
HEIGHT
5242
19-Aug-2022
10:59
linh
pham



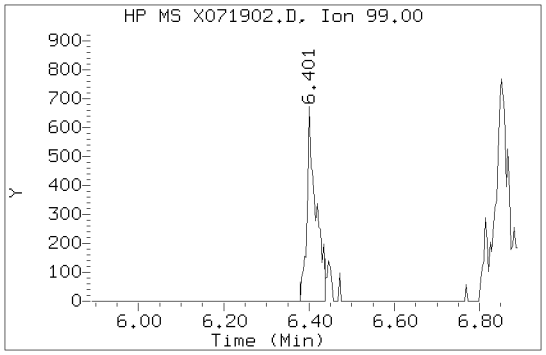
BEFORE

MASS
102
AREA
606
HEIGHT
442
25-Jul-2022
09:00
linh
pham



AFTER

MASS
99
AREA
978
HEIGHT
672
19-Aug-2022
10:59
linh
pham

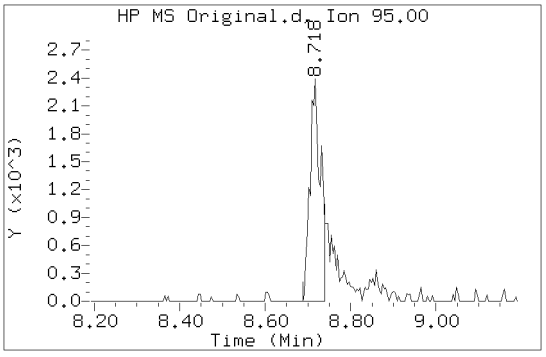


4-Bromofluorobenzene (460-00-4)

Reason Code:

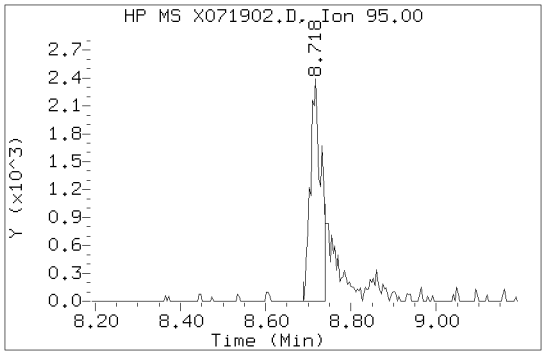
BEFORE

MASS
95
AREA
4127
HEIGHT
2390
25-Jul-2022
09:00
linh
pham



AFTER

MASS
95
AREA
4127
HEIGHT
2390
19-Aug-2022
10:59
linh
pham



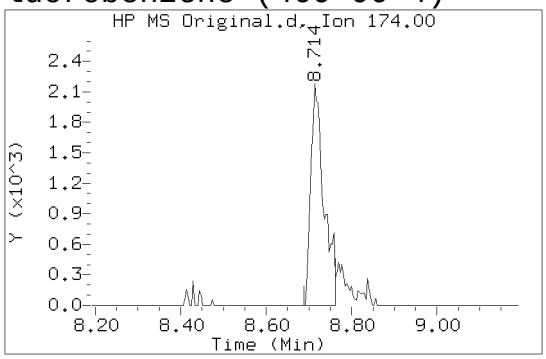
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071902.D
Inj Date : 19-JUL-2022 11:27
InstruID : voa6.i
LabSampID : VSTD000.25

4-Bromofluorobenzene (460-00-4)

Reason Code:

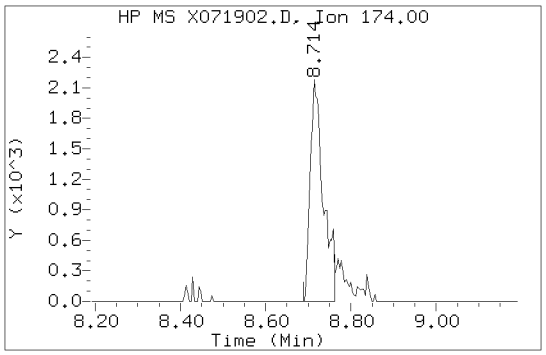
BEFORE

MASS
174
AREA
4648
HEIGHT
2180
25-Jul-2022
09:00
linh
pham



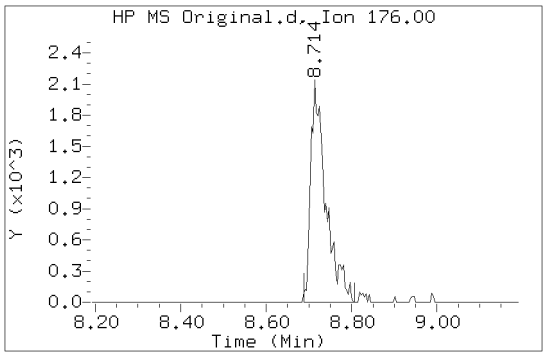
AFTER

MASS
174
AREA
4648
HEIGHT
2180
19-Aug-2022
10:59
linh
pham



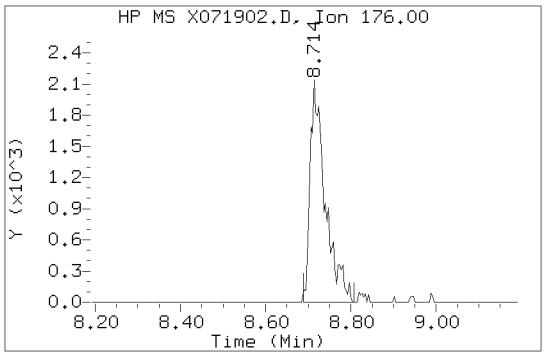
BEFORE

MASS
176
AREA
5254
HEIGHT
2140
25-Jul-2022
09:00
linh
pham



AFTER

MASS
176
AREA
5254
HEIGHT
2140
19-Aug-2022
10:59
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D Page 1
Report Date: 19-Aug-2022 11:00

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Lab Smp Id: VSTD000.5 Client Smp ID: VSTD000.5
Inj Date : 19-JUL-2022 12:08
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.5;VSTD000.5;1;2;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\8260W.m
Meth Date : 19-Aug-2022 11:00 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 11:27 Cal File: X071902.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

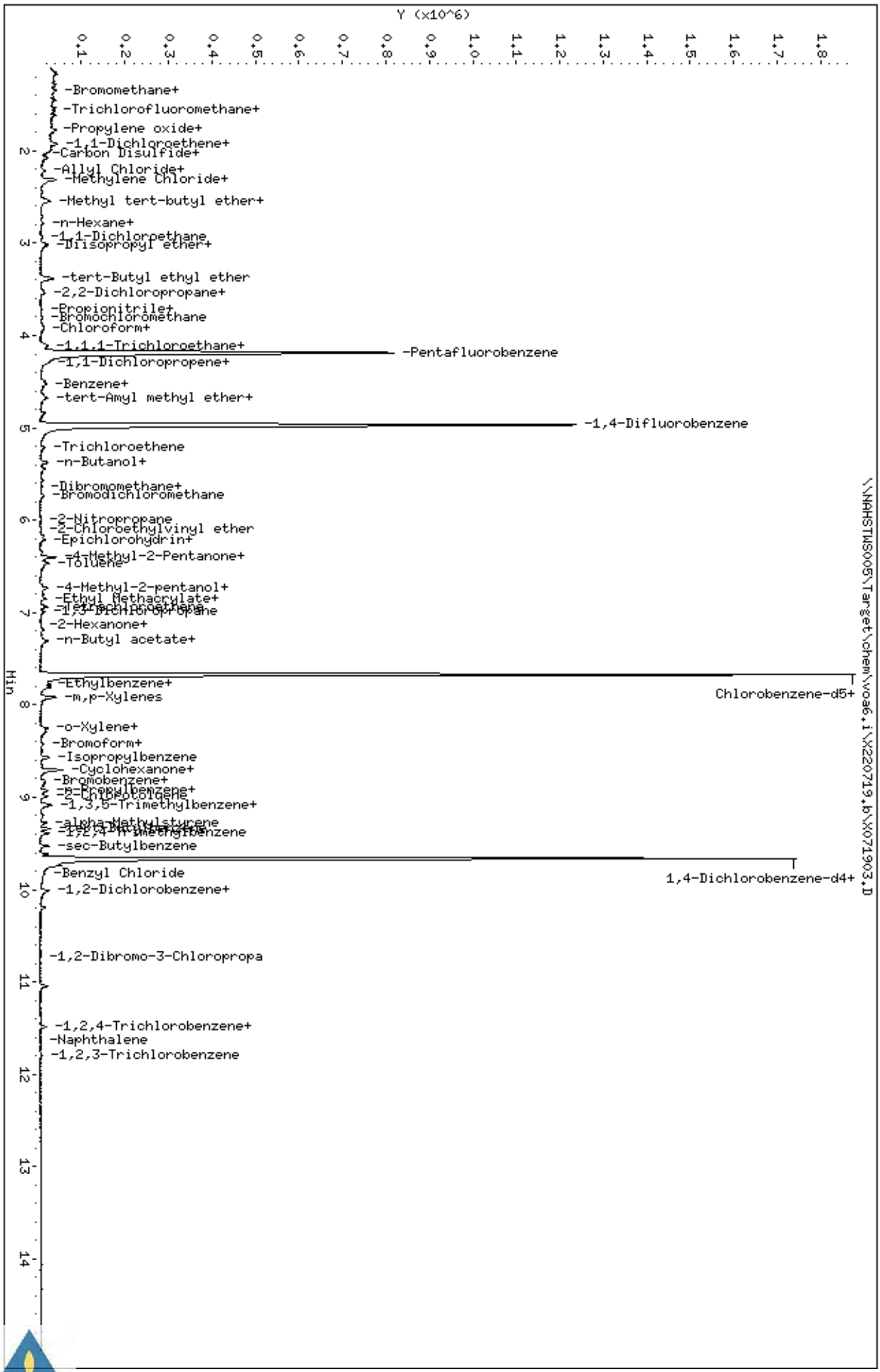
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	739240	50.0000	
*	36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	1081359	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	971157	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	441620	50.0000	
$	30 Dibromofluoromethane	113	4.106	4.106	(0.981)	4991	0.50000	(aM)
$	35 1,2-Dichloroethane-d4	65	4.492	4.492	(1.073)	5362	0.50000	0.37(aM)
$	48 Toluene-d8	98	6.400	6.400	(0.834)	14148	0.50000	0.58(aM)
$	69 4-Bromofluorobenzene	95	8.702	8.702	(1.134)	6586	0.50000	(aM)
	60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	3465	0.50000	0.50(aM)
	31 1,1,1-Trichloroethane	97	4.099	4.099	(0.979)	5496	0.50000	0.52(a)
	68 1,1,2,2-Tetrachloroethane	83	8.848	8.848	(0.915)	3451	0.50000	0.55(aM)
	53 1,1,2-Trichloroethane	83	6.850	6.850	(0.893)	2609	0.50000	0.52(aM)
	22 1,1-Dichloroethane	63	2.933	2.933	(0.701)	5606	0.50000	0.49(a)
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	3325	0.50000	0.53(aM)
	32 1,1-Dichloropropene	75	4.290	4.290	(0.863)	4832	0.50000	0.55(a)
	93 1,2,3-Trichlorobenzene	180	11.791	11.791	(1.220)	1275	0.50000	0.55(aM)
	71 1,2,3-Trichloropropane	75	8.878	8.878	(0.919)	2596	0.50000	0.54(aM)
	90 1,2,4-Trichlorobenzene	180	11.401	11.401	(1.180)	2030	0.50000	0.50(aM)
	79 1,2,4-Trimethylbenzene	105	9.392	9.392	(0.972)	11226	0.50000	0.52(aM)
	89 1,2-Dibromo-3-Chloropropane	155	10.726	10.726	(1.110)	270	0.50000	0.99(aM)

57	1,2-Dibromoethane	107	7.278	7.278 (0.949)	3299	0.50000	0.52(aM)
88	1,2-Dichlorobenzene	146	10.010	10.010 (1.036)	5548	0.50000	0.50(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.567	4.567	(0.919)	4888	0.50000	0.51(aM)
42	1,2-Dichloropropane	63	5.456	5.456	(1.098)	3868	0.50000	0.58(aM)
75	1,3,5-Trimethylbenzene	105	9.073	9.073	(0.939)	11467	0.50000	0.53(a)
83	1,3-Dichlorobenzene	146	9.617	9.617	(0.995)	6308	0.50000	0.51(a)
54	1,3-Dichloropropane	76	6.993	6.993	(0.912)	5230	0.50000	0.51(aM)
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	7241	0.50000	0.55(a)
26	2,2-Dichloropropane	77	3.525	3.525	(0.842)	5133	0.50000	0.26(a)
24	2-Butanone	43	3.694	3.694	(0.883)	1760	1.00000	0.94(aM)
76	2-Chlorotoluene	91	8.987	8.987	(0.930)	10810	0.50000	0.57(aM)
52	2-Hexanone	43	7.131	7.131	(0.930)	3055	1.00000	1.00(aM)
77	4-Chlorotoluene	91	9.099	9.099	(0.941)	11731	0.50000	0.55(a)
82	p-Isopropyltoluene	119	9.654	9.654	(0.999)	11018	0.50000	0.51(aM)
45	4-Methyl-2-Pentanone	43	6.352	6.352	(0.828)	4464	1.00000	0.94(a)
10	Acetone	43	1.977	1.977	(0.472)	1762	1.00000	(aM)
37	Benzene	78	4.534	4.534	(0.912)	13584	0.50000	0.53(a)
74	Bromobenzene	156	8.826	8.826	(0.913)	3862	0.50000	0.51(a)
29	Bromochloromethane	128	3.810	3.810	(0.910)	2258	0.50000	0.54(a)
39	Bromodichloromethane	83	5.733	5.733	(1.154)	4485	0.50000	0.49(aM)
66	Bromoform	173	8.421	8.421	(1.098)	1755	0.50000	1.59(Ta)
6	Bromomethane	94	1.347	1.347	(0.322)	3413	0.50000	(aM)
19	Carbon Disulfide	76	2.078	2.078	(0.497)	16886	1.00000	1.03(a)
34	Carbon Tetrachloride	117	4.260	4.260	(0.857)	5505	0.50000	0.59(aMH)
59	Chlorobenzene	112	7.701	7.701	(1.004)	9208	0.50000	0.50(a)
7	Chloroethane	64	1.411	1.411	(0.337)	2356	0.50000	0.49(aM)
28	Chloroform	83	3.919	3.919	(0.936)	6190	0.50000	0.49(a)
3	Chloromethane	50	1.085	1.085	(0.259)	3959	0.50000	0.63(aM)
27	cis-1,2-Dichloroethene	96	3.551	3.551	(0.849)	3635	0.50000	0.49(a)
46	cis-1,3-Dichloropropene	75	6.172	6.172	(1.242)	5379	0.50000	0.47(aM)
55	Dibromochloromethane	129	7.191	7.191	(0.937)	3661	0.50000	0.50(aM)
44	Dibromomethane	93	5.564	5.564	(1.120)	2298	0.50000	0.51(a)
2	Dichlorodifluoromethane	85	0.976	0.976	(0.233)	3857	0.50000	0.37(a)
61	Ethylbenzene	106	7.810	7.810	(1.018)	4672	0.50000	0.50(a)
91	Hexachlorobutadiene	225	11.487	11.487	(1.188)	2233	0.50000	0.60(aM)
67	Isopropylbenzene	105	8.567	8.567	(1.117)	13970	0.50000	0.49(aM)
62	m,p-Xylenes	106	7.919	7.919	(1.032)	10839	1.00000	0.93(a)
17	Methylene Chloride	84	2.311	2.311	(0.552)	4801	0.50000	(aM)
87	n-Butylbenzene	91	10.018	10.018	(1.036)	9255	0.50000	0.51(aM)
73	n-Propylbenzene	91	8.927	8.927	(0.924)	14364	0.50000	0.49(a)
92	Naphthalene	128	11.637	11.637	(1.204)	2252	0.50000	0.50(aM)
63	o-Xylene	106	8.256	8.256	(1.076)	5758	0.50000	0.51(a)
81	sec-Butylbenzene	105	9.527	9.527	(0.986)	13047	0.50000	0.52(a)
64	Styrene	104	8.293	8.293	(1.081)	8853	0.50000	0.47(aM)
78	tert-Butylbenzene	119	9.343	9.343	(0.967)	9259	0.50000	0.50(a)
56	Tetrachloroethene	164	6.940	6.940	(0.905)	3226	0.50000	0.51(aM)
50	Toluene	91	6.464	6.464	(0.843)	14425	0.50000	0.52(a)
20	trans-1,2-Dichloroethene	96	2.547	2.547	(0.609)	3384	0.50000	0.52(a)
51	trans-1,3-Dichloropropene	75	6.708	6.708	(1.350)	4702	0.50000	0.50(aM)
38	Trichloroethene	130	5.216	5.216	(1.050)	3892	0.50000	0.51(a)
8	Trichlorofluoromethane	101	1.565	1.565	(0.374)	5874	0.50000	0.50(a)
5	Vinyl Chloride	62	1.149	1.149	(0.275)	4102	0.50000	0.52(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.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Date : 19-JUL-2022 12:08
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

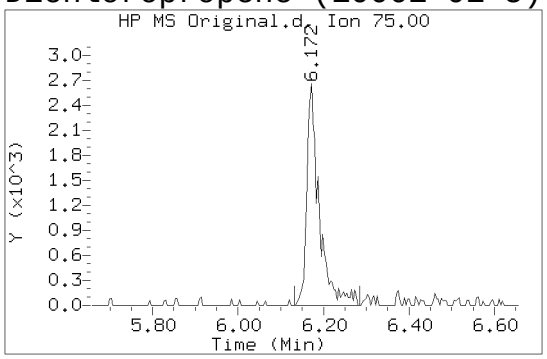
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

cis-1,3-Dichloropropene (10061-01-5)

Reason Code:

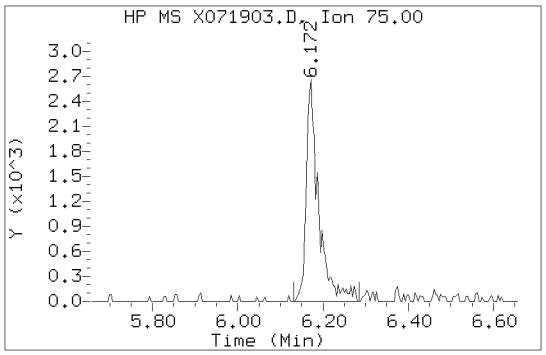
BEFORE

MASS
128
AREA
2258
HEIGHT
1011
25-Jul-2022
09:00
linh
pham



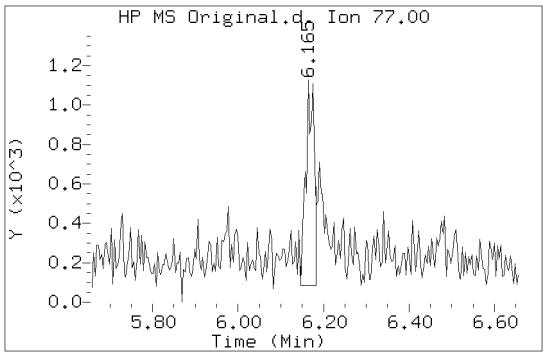
AFTER

MASS
75
AREA
5379
HEIGHT
2657
19-Aug-2022
10:59
linh
pham



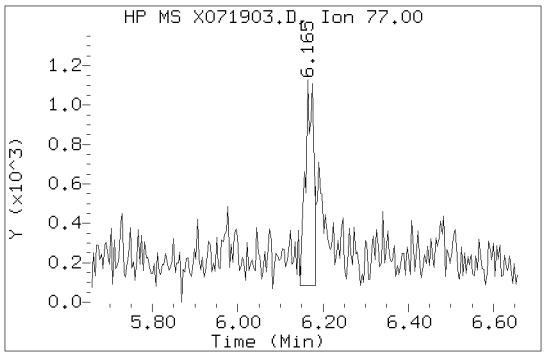
BEFORE

MASS
49
AREA
2606
HEIGHT
1091
25-Jul-2022
09:00
linh
pham



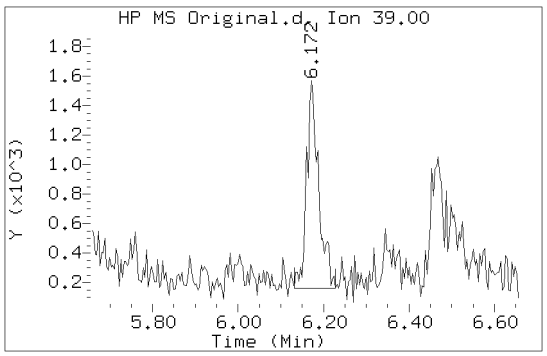
AFTER

MASS
77
AREA
1442
HEIGHT
1044
19-Aug-2022
10:59
linh
pham



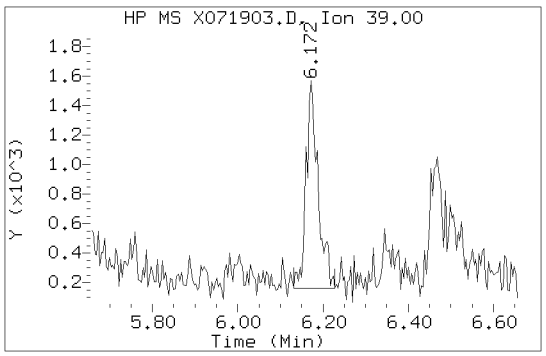
BEFORE

MASS
130
AREA
2598
HEIGHT
1041
25-Jul-2022
09:00
linh
pham



AFTER

MASS
39
AREA
2778
HEIGHT
1408
19-Aug-2022
10:59
linh
pham

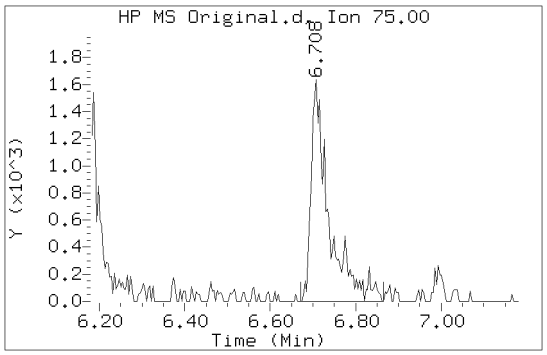


trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

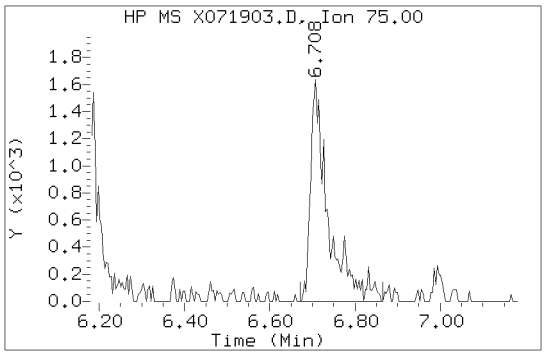
BEFORE

MASS
43
AREA
1760
HEIGHT
747
25-Jul-2022
09:00
linh
pham



AFTER

MASS
75
AREA
4702
HEIGHT
1636
19-Aug-2022
10:59
linh
pham



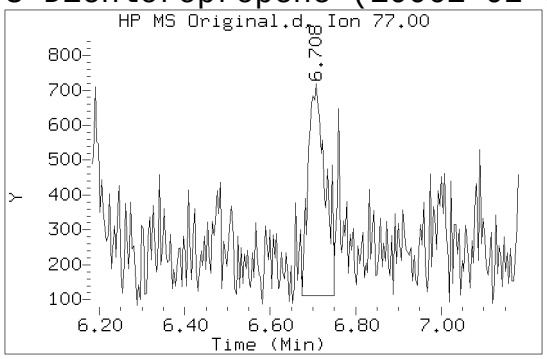
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

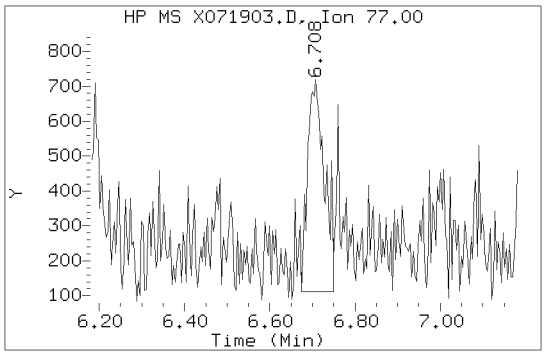
BEFORE

MASS
72
AREA
0
HEIGHT
0
25-Jul-2022
09:00
linh
pham



AFTER

MASS
77
AREA
1672
HEIGHT
607
19-Aug-2022
10:59
linh
pham

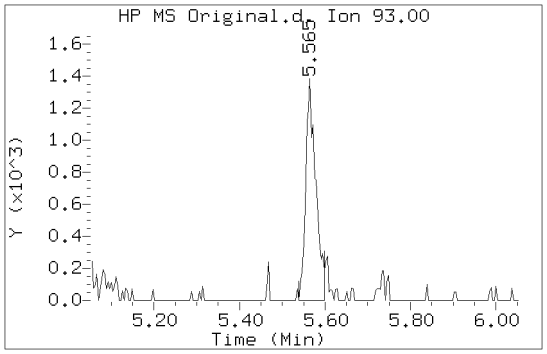


1,2-Dibromoethane (106-93-4)

Reason Code:

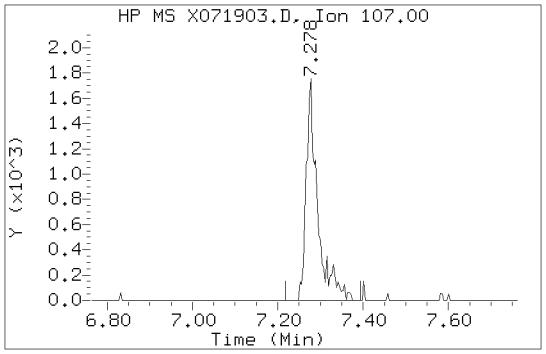
BEFORE

MASS
75
AREA
4702
HEIGHT
1636
25-Jul-2022
09:00
linh
pham



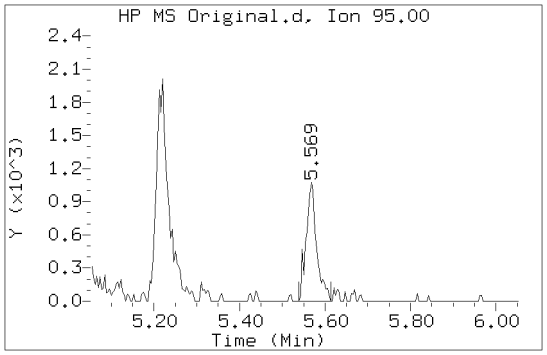
AFTER

MASS
107
AREA
3299
HEIGHT
1755
19-Aug-2022
10:59
linh
pham



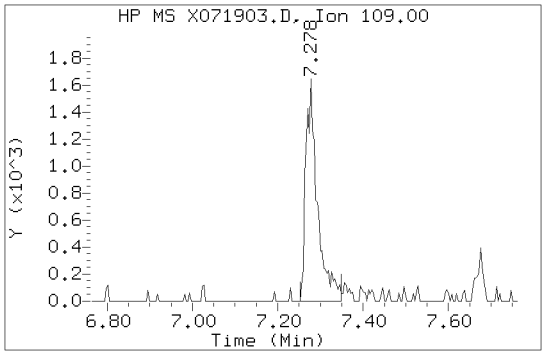
BEFORE

MASS
77
AREA
1672
HEIGHT
607
25-Jul-2022
09:00
linh
pham



AFTER

MASS
109
AREA
3147
HEIGHT
1645
19-Aug-2022
10:59
linh
pham

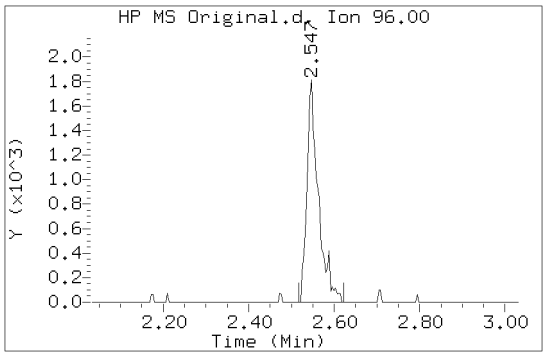


1,1,1,2-Tetrachloroethane (630-20-6)

Reason Code:

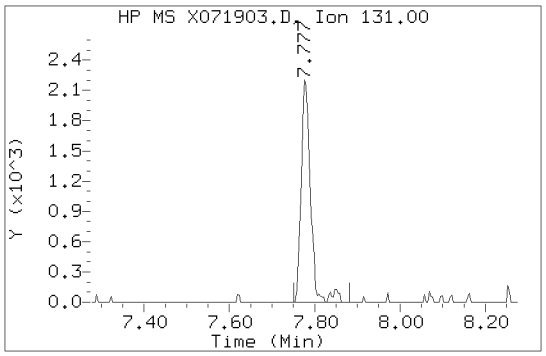
BEFORE

MASS
43
AREA
4464
HEIGHT
1764
25-Jul-2022
09:00
linh
pham



AFTER

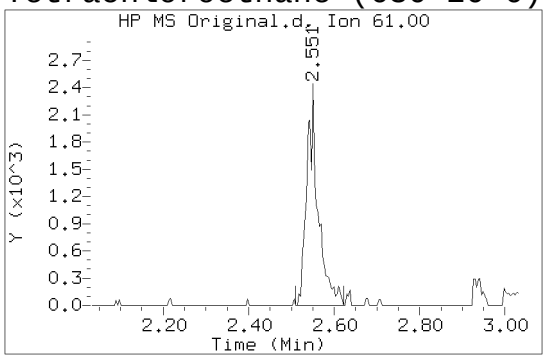
MASS
131
AREA
3465
HEIGHT
2203
19-Aug-2022
10:59
linh
pham



Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

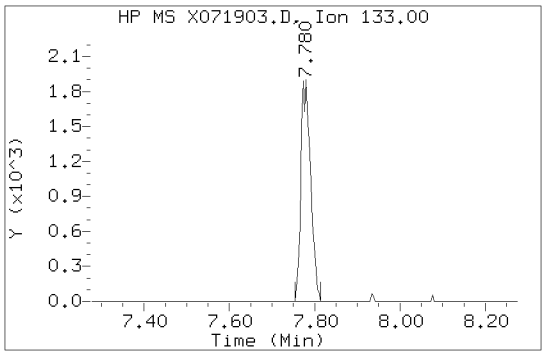
1,1,1,2-Tetrachloroethane (630-20-6)

BEFORE
MASS
58
AREA
1503
HEIGHT
1051
25-Jul-2022
09:00
linh
pham

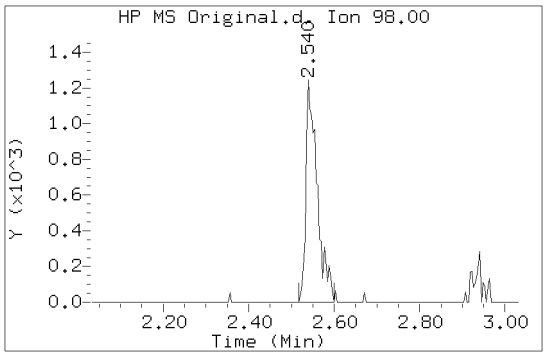


Reason Code:

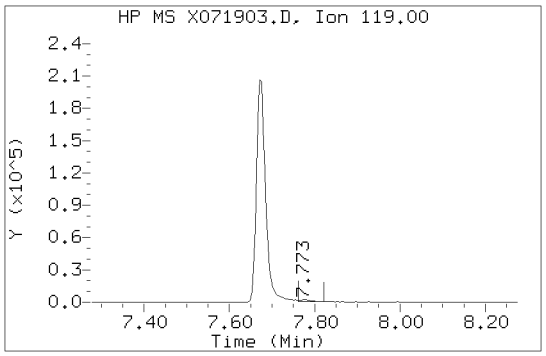
AFTER
MASS
133
AREA
3076
HEIGHT
1901
19-Aug-2022
10:59
linh
pham



BEFORE
MASS
100
AREA
16954
HEIGHT
9045
25-Jul-2022
09:00
linh
pham

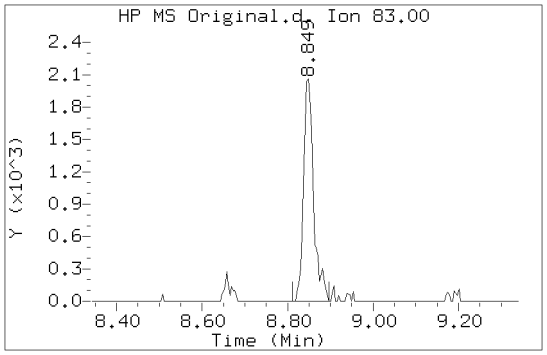


AFTER
MASS
119
AREA
3743
HEIGHT
2153
19-Aug-2022
10:59
linh
pham



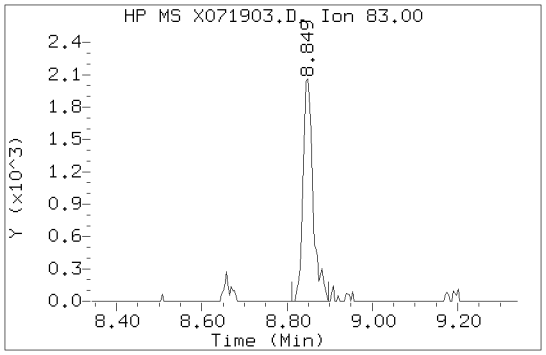
1,1,2,2-Tetrachloroethane (79-34-5)

BEFORE
MASS
101
AREA
3138
HEIGHT
2150
25-Jul-2022
09:00
linh
pham

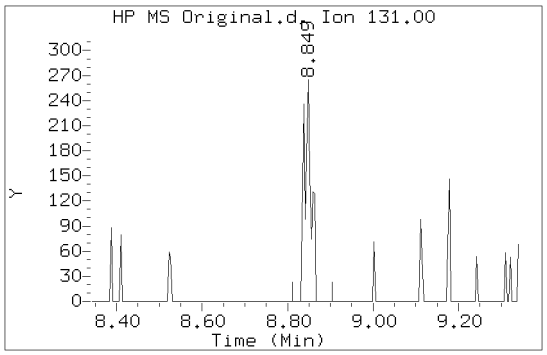


Reason Code:

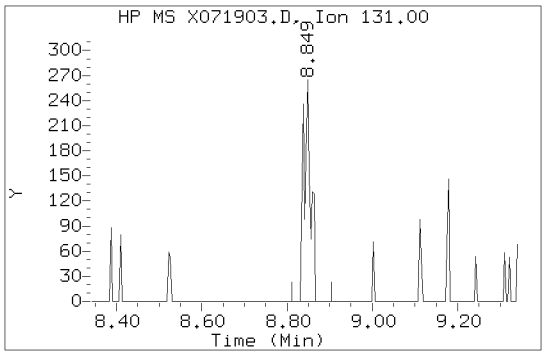
AFTER
MASS
83
AREA
3451
HEIGHT
2061
19-Aug-2022
10:59
linh
pham



BEFORE
MASS
151
AREA
2944
HEIGHT
1769
25-Jul-2022
09:00
linh
pham



AFTER
MASS
131
AREA
304
HEIGHT
265
19-Aug-2022
10:59
linh
pham



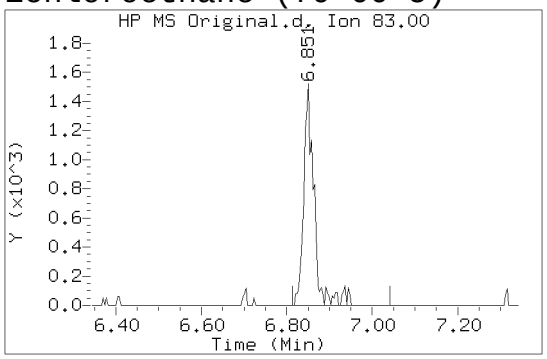
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

1,1,2-Trichloroethane (79-00-5)

Reason Code:

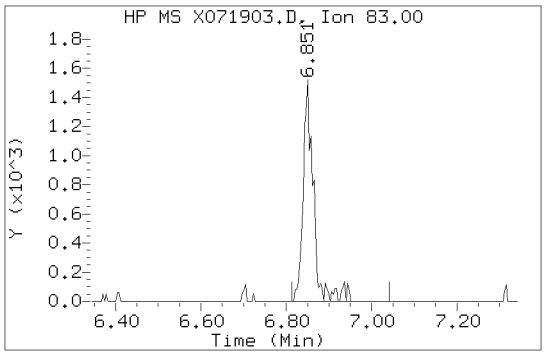
BEFORE

MASS
104
AREA
8853
HEIGHT
3020
25-Jul-2022
09:00
linh
pham



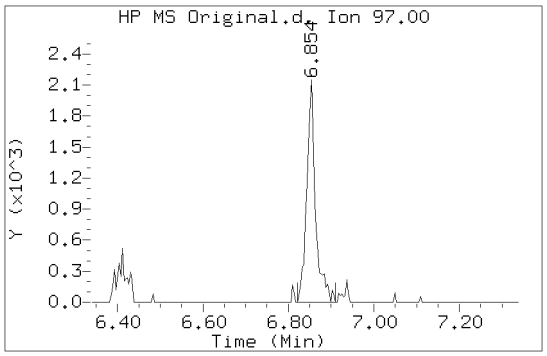
AFTER

MASS
83
AREA
2609
HEIGHT
1522
19-Aug-2022
10:59
linh
pham



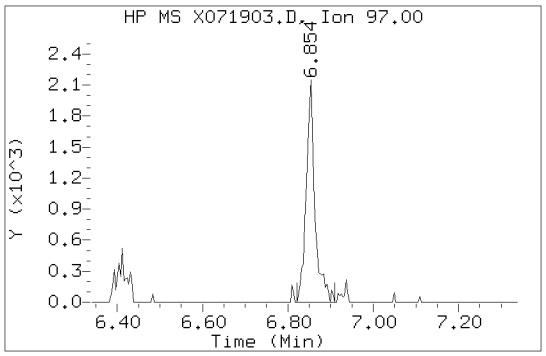
BEFORE

MASS
78
AREA
3427
HEIGHT
1842
25-Jul-2022
09:00
linh
pham



AFTER

MASS
97
AREA
3118
HEIGHT
2149
19-Aug-2022
10:59
linh
pham

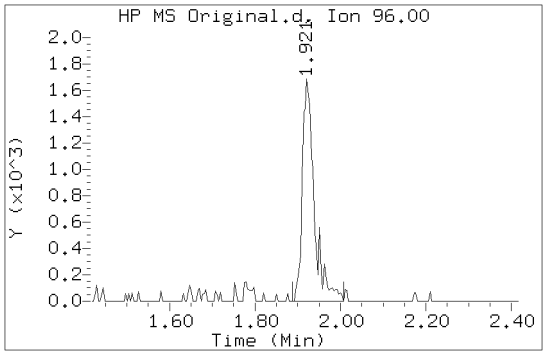


1,1-Dichloroethene (75-35-4)

Reason Code:

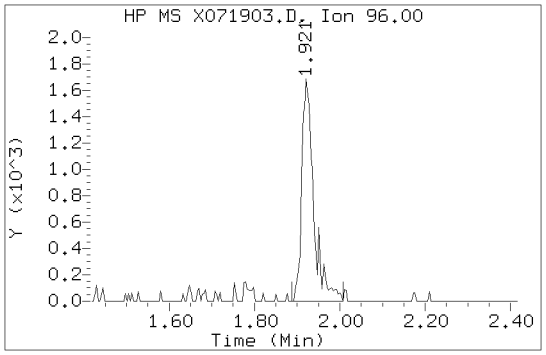
BEFORE

MASS
76
AREA
16886
HEIGHT
10303
25-Jul-2022
09:00
linh
pham



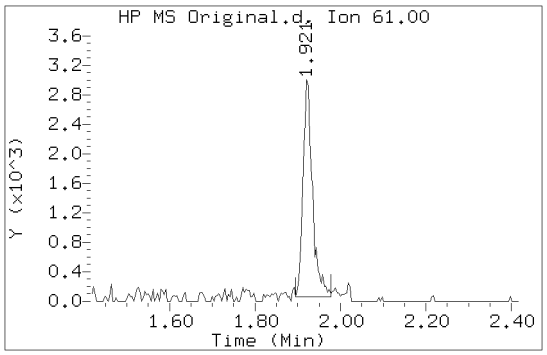
AFTER

MASS
96
AREA
3325
HEIGHT
1685
19-Aug-2022
10:59
linh
pham



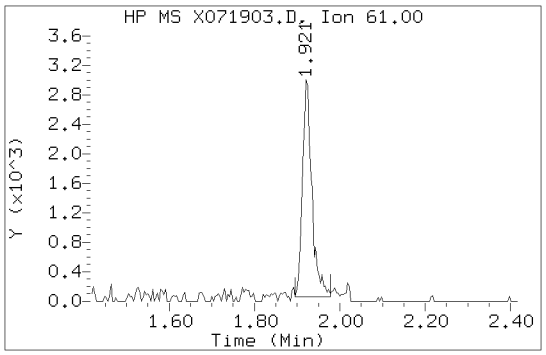
BEFORE

MASS
78
AREA
1233
HEIGHT
871
25-Jul-2022
09:00
linh
pham



AFTER

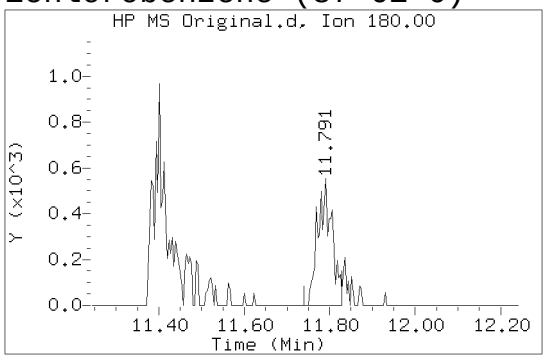
MASS
61
AREA
4630
HEIGHT
2947
19-Aug-2022
10:59
linh
pham



Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

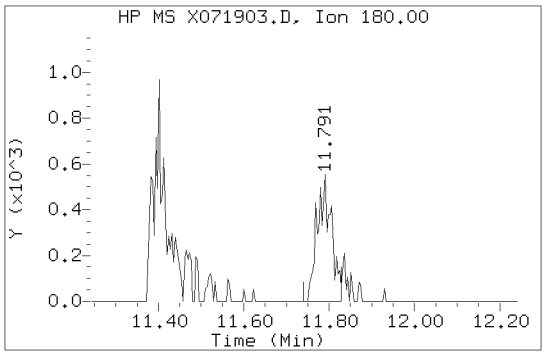
1,2,3-Trichlorobenzene (87-61-6)

BEFORE
MASS
77
AREA
5133
HEIGHT
2125
25-Jul-2022
09:00
linh
pham

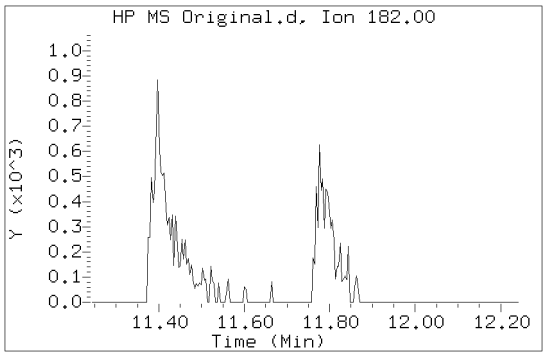


Reason Code:

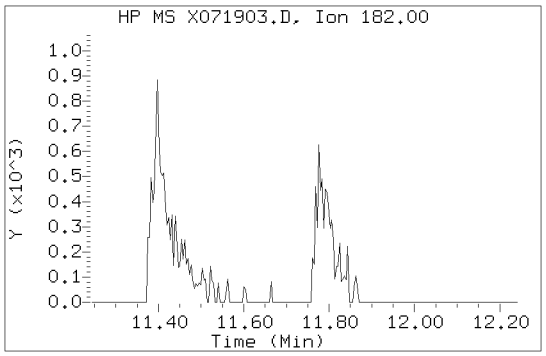
AFTER
MASS
180
AREA
1275
HEIGHT
555
19-Aug-2022
10:59
linh
pham



BEFORE
MASS
97
AREA
728
HEIGHT
479
25-Jul-2022
09:00
linh
pham

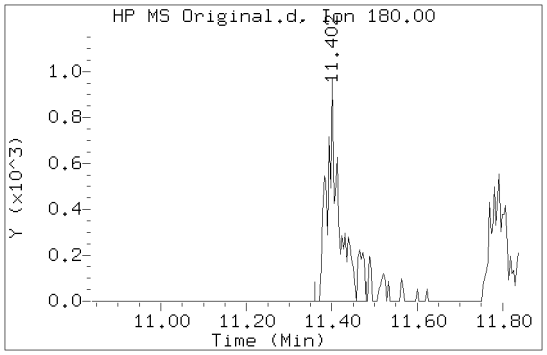


AFTER
MASS
182
AREA
0
HEIGHT
0
19-Aug-2022
10:59
linh
pham



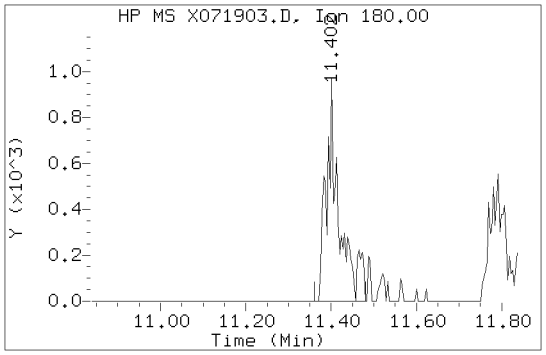
1,2,4-Trichlorobenzene (120-82-1)

BEFORE
MASS
93
AREA
2298
HEIGHT
1384
25-Jul-2022
09:00
linh
pham

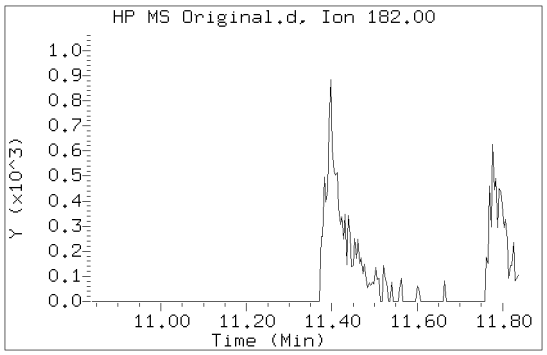


Reason Code:

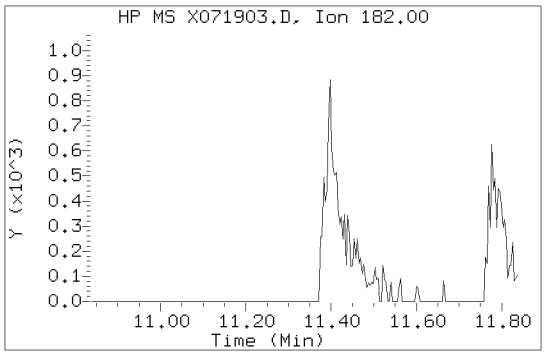
AFTER
MASS
180
AREA
2030
HEIGHT
968
19-Aug-2022
10:59
linh
pham



BEFORE
MASS
95
AREA
1884
HEIGHT
1077
25-Jul-2022
09:00
linh
pham



AFTER
MASS
182
AREA
0
HEIGHT
0
19-Aug-2022
10:59
linh
pham



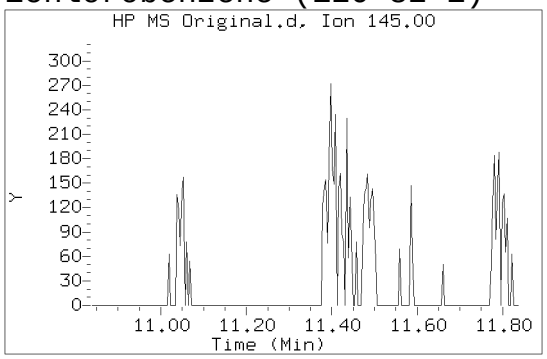
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

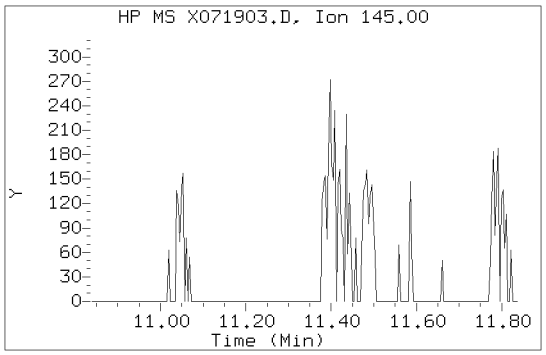
BEFORE

MASS
174
AREA
2657
HEIGHT
1337
25-Jul-2022
09:00
linh
pham



AFTER

MASS
145
AREA
0
HEIGHT
0
19-Aug-2022
10:59
linh
pham

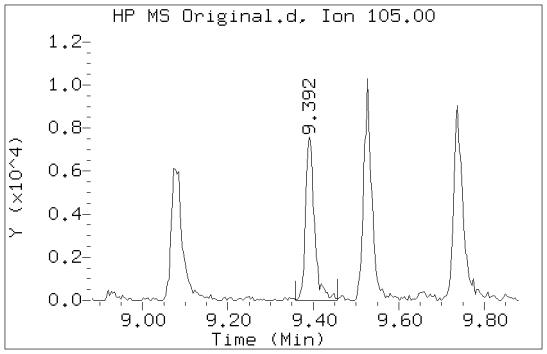


1,2,4-Trimethylbenzene (95-63-6)

Reason Code:

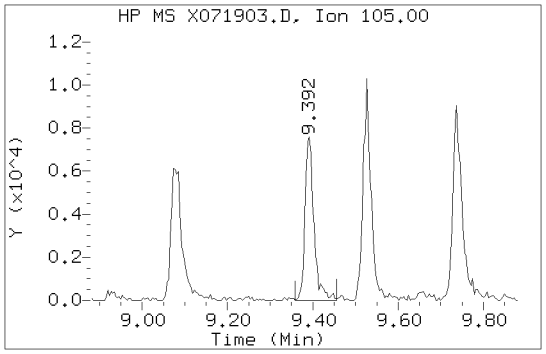
BEFORE

MASS
76
AREA
5230
HEIGHT
3017
25-Jul-2022
09:00
linh
pham



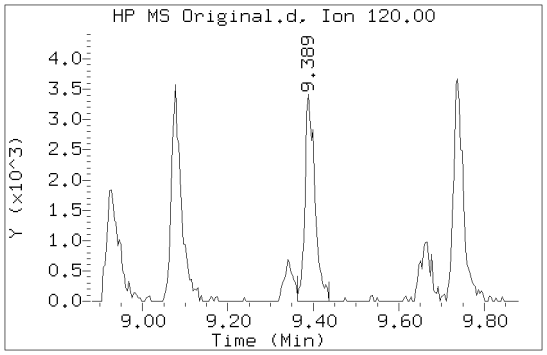
AFTER

MASS
105
AREA
11226
HEIGHT
7596
19-Aug-2022
10:59
linh
pham



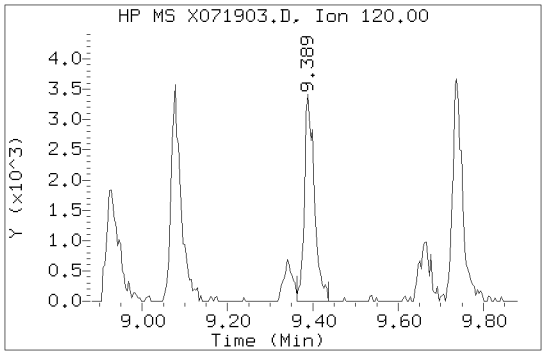
BEFORE

MASS
78
AREA
2030
HEIGHT
1255
25-Jul-2022
09:00
linh
pham



AFTER

MASS
120
AREA
5587
HEIGHT
3418
19-Aug-2022
10:59
linh
pham

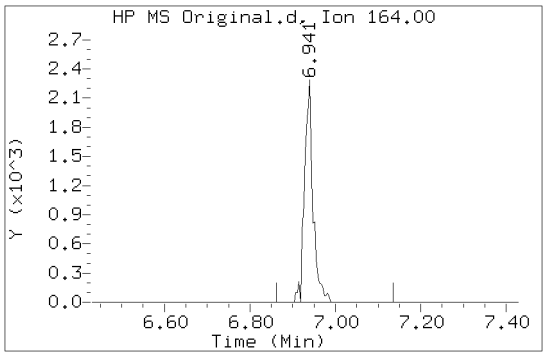


Tetrachloroethene (127-18-4)

Reason Code:

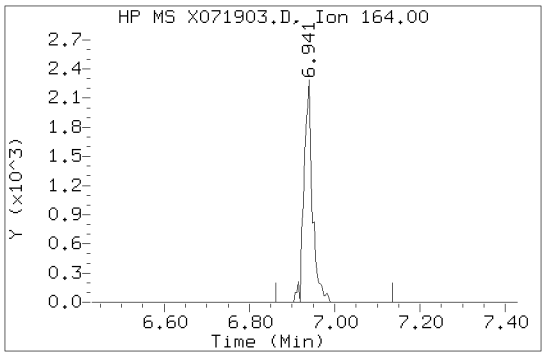
BEFORE

MASS
63
AREA
3868
HEIGHT
1977
25-Jul-2022
09:00
linh
pham



AFTER

MASS
164
AREA
3226
HEIGHT
2287
19-Aug-2022
10:59
linh
pham



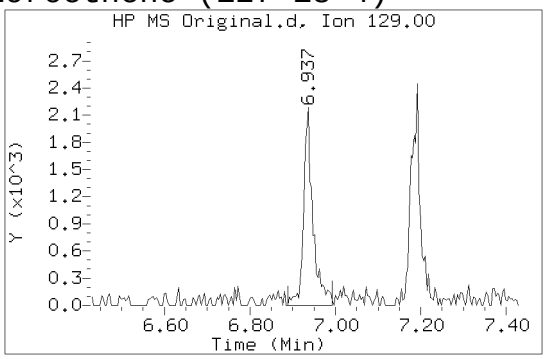
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

Tetrachloroethene (127-18-4)

Reason Code:

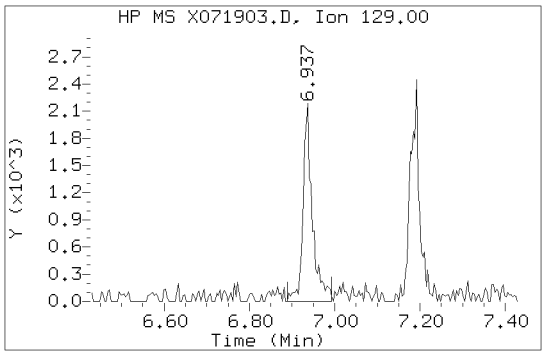
BEFORE

MASS
112
AREA
91
HEIGHT
181
25-Jul-2022
09:00
linh
pham



AFTER

MASS
129
AREA
3404
HEIGHT
2186
19-Aug-2022
10:59
linh
pham

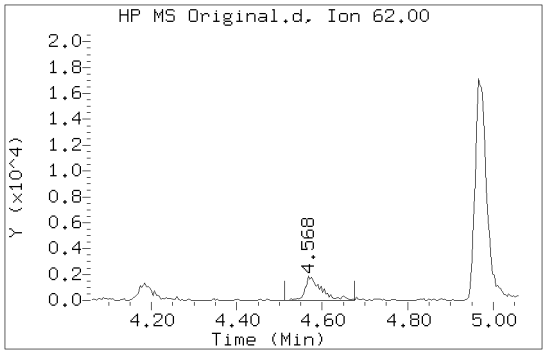


1,2-Dichloroethane (107-06-2)

Reason Code:

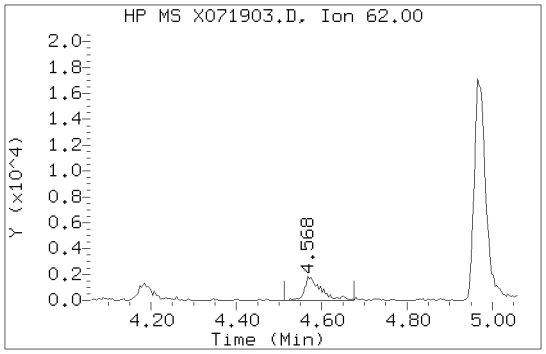
BEFORE

MASS
146
AREA
5548
HEIGHT
3293
25-Jul-2022
09:00
linh
pham



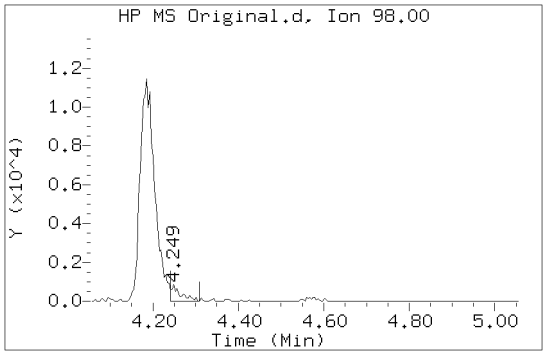
AFTER

MASS
62
AREA
4888
HEIGHT
1898
19-Aug-2022
10:59
linh
pham



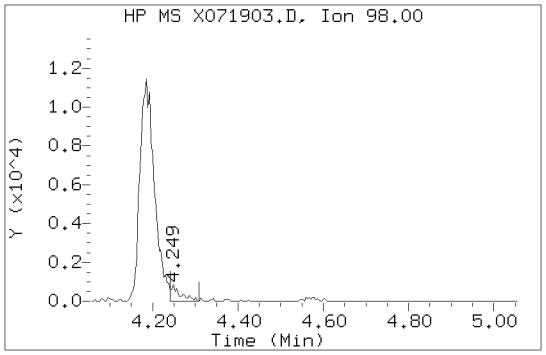
BEFORE

MASS
111
AREA
2270
HEIGHT
1209
25-Jul-2022
09:00
linh
pham



AFTER

MASS
98
AREA
1332
HEIGHT
847
19-Aug-2022
10:59
linh
pham

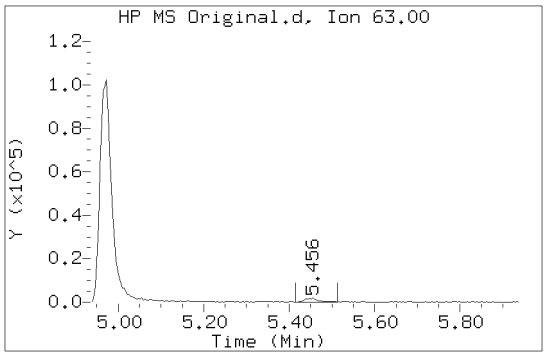


1,2-Dichloropropane (78-87-5)

Reason Code:

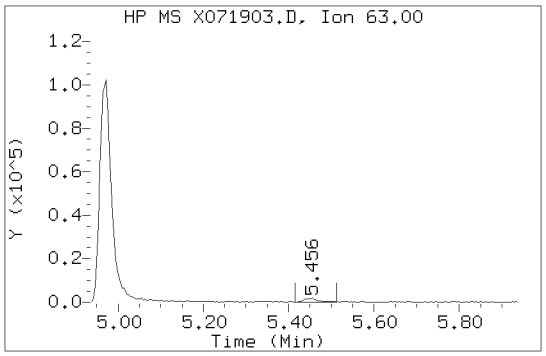
BEFORE

MASS
96
AREA
3384
HEIGHT
1813
25-Jul-2022
09:00
linh
pham



AFTER

MASS
63
AREA
3868
HEIGHT
1977
19-Aug-2022
10:59
linh
pham



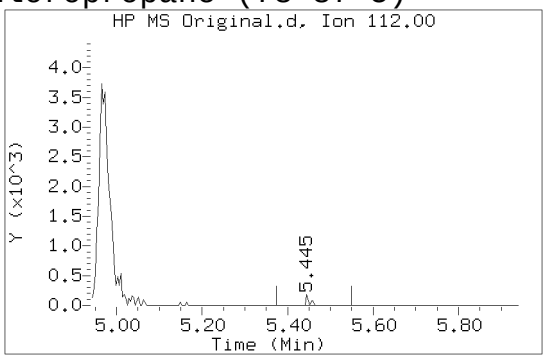
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

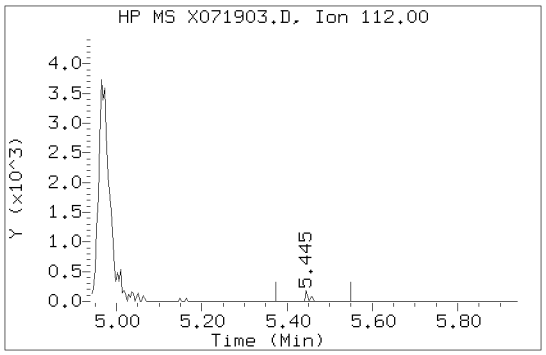
BEFORE

MASS
61
AREA
4515
HEIGHT
2443
25-Jul-2022
09:00
linh
pham



AFTER

MASS
112
AREA
91
HEIGHT
181
19-Aug-2022
10:59
linh
pham

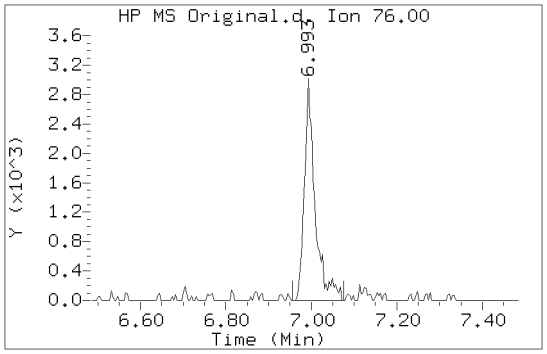


1,3-Dichloropropane (142-28-9)

Reason Code:

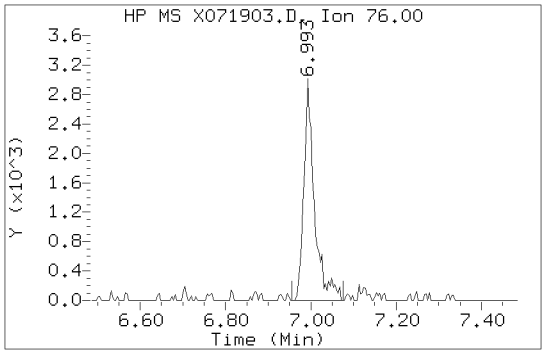
BEFORE

MASS
63
AREA
5606
HEIGHT
2531
25-Jul-2022
09:00
linh
pham



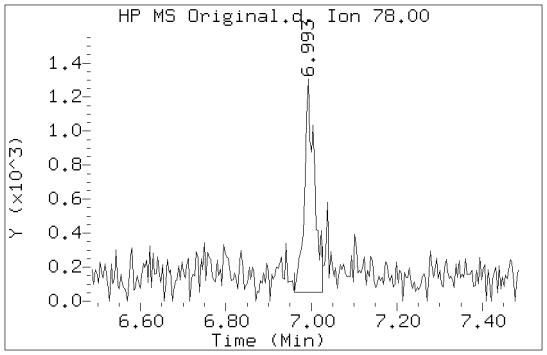
AFTER

MASS
76
AREA
5230
HEIGHT
3017
19-Aug-2022
10:59
linh
pham



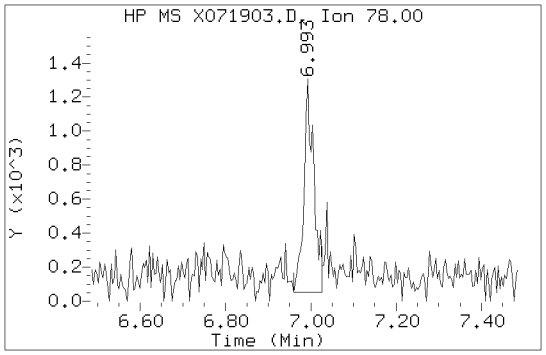
BEFORE

MASS
65
AREA
1710
HEIGHT
852
25-Jul-2022
09:00
linh
pham



AFTER

MASS
78
AREA
2030
HEIGHT
1255
19-Aug-2022
10:59
linh
pham

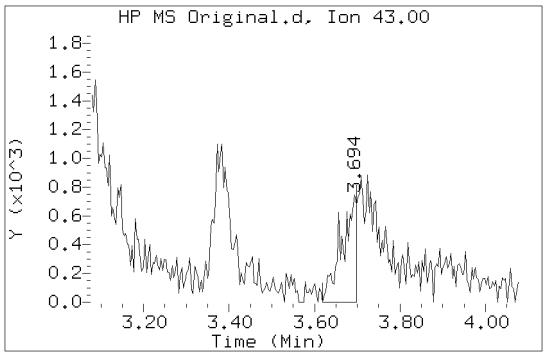


2-Butanone (78-93-3)

Reason Code:

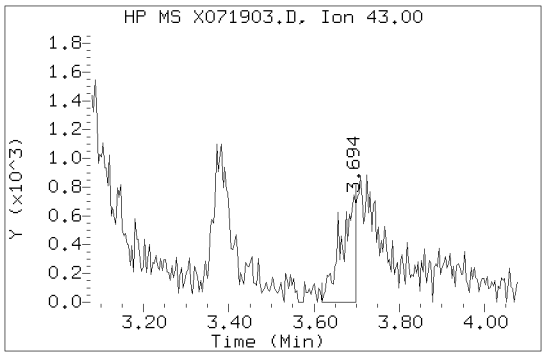
BEFORE

MASS
83
AREA
3451
HEIGHT
2061
25-Jul-2022
09:00
linh
pham



AFTER

MASS
43
AREA
1760
HEIGHT
747
19-Aug-2022
10:59
linh
pham



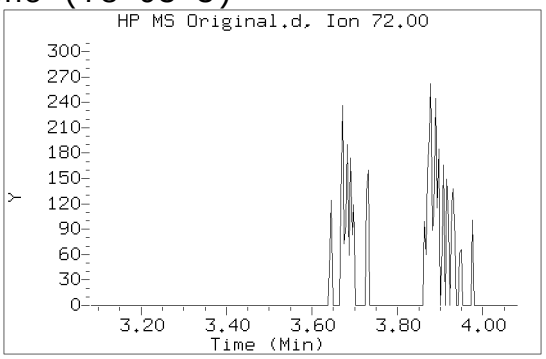
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

2-Butanone (78-93-3)

Reason Code:

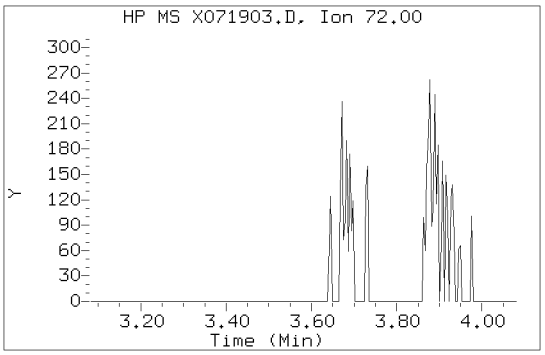
BEFORE

MASS
131
AREA
304
HEIGHT
265
25-Jul-2022
09:00
linh
pham



AFTER

MASS
72
AREA
0
HEIGHT
0
19-Aug-2022
10:59
linh
pham

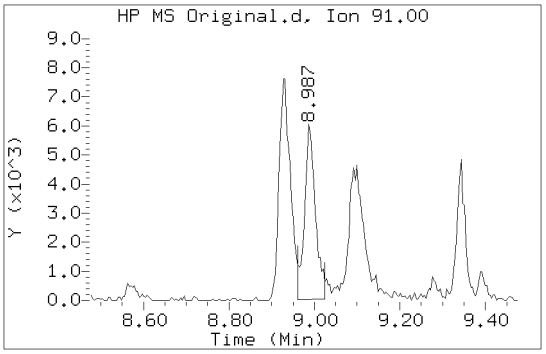


2-Chlorotoluene (95-49-8)

Reason Code:

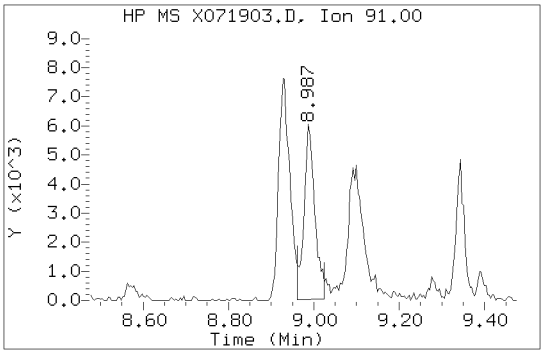
BEFORE

MASS
164
AREA
3226
HEIGHT
2287
25-Jul-2022
09:00
linh
pham



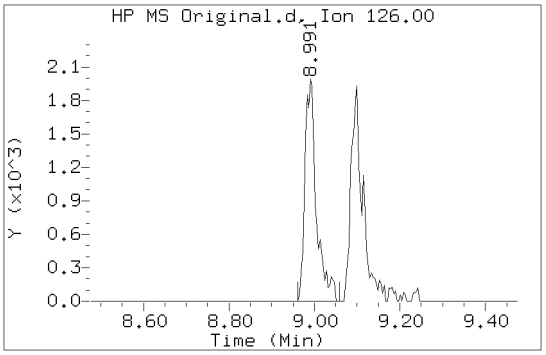
AFTER

MASS
91
AREA
10810
HEIGHT
6020
19-Aug-2022
10:59
linh
pham



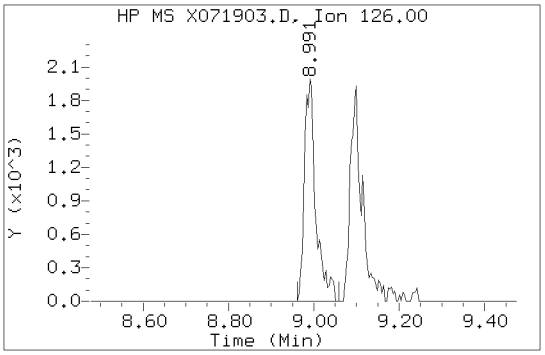
BEFORE

MASS
129
AREA
3404
HEIGHT
2186
25-Jul-2022
09:00
linh
pham



AFTER

MASS
126
AREA
3731
HEIGHT
1993
19-Aug-2022
10:59
linh
pham

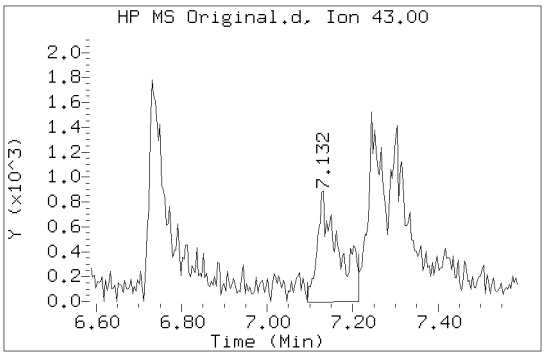


2-Hexanone (591-78-6)

Reason Code:

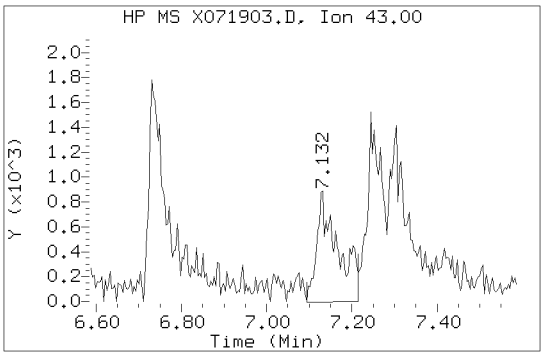
BEFORE

MASS
97
AREA
5496
HEIGHT
2194
25-Jul-2022
09:00
linh
pham



AFTER

MASS
43
AREA
3055
HEIGHT
891
19-Aug-2022
10:59
linh
pham



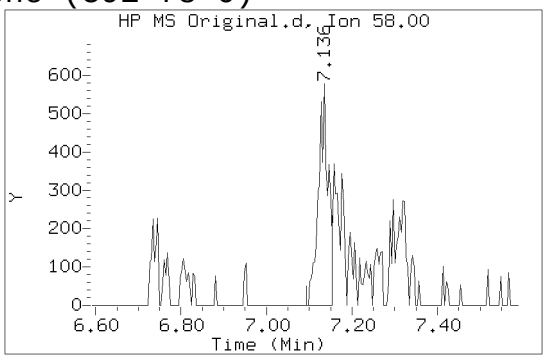
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

2-Hexanone (591-78-6)

Reason Code:

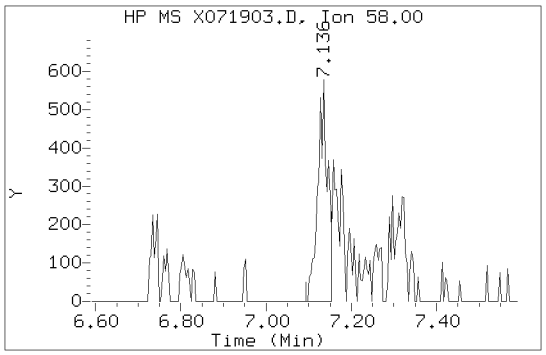
BEFORE

MASS
99
AREA
3434
HEIGHT
1650
25-Jul-2022
09:00
linh
pham



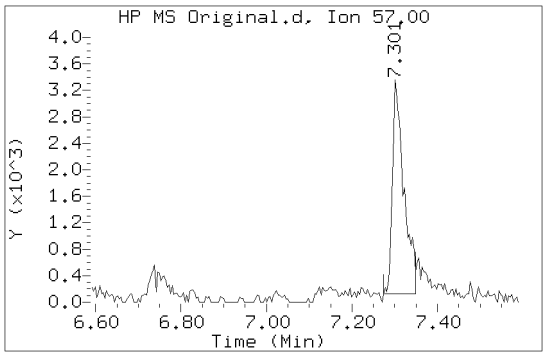
AFTER

MASS
58
AREA
919
HEIGHT
578
19-Aug-2022
10:59
linh
pham



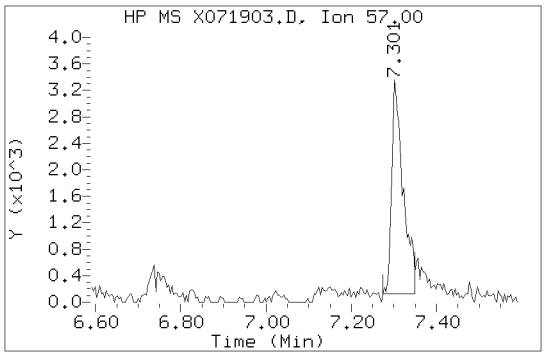
BEFORE

MASS
61
AREA
2652
HEIGHT
1251
25-Jul-2022
09:00
linh
pham



AFTER

MASS
57
AREA
5980
HEIGHT
3228
19-Aug-2022
10:59
linh
pham

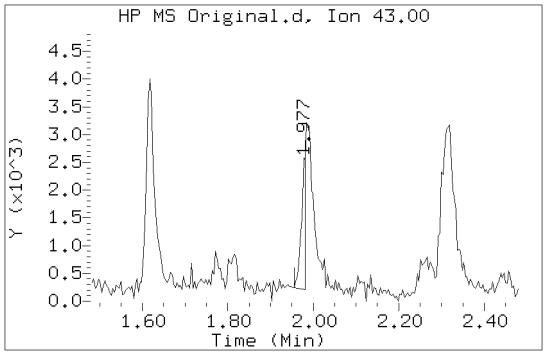


Acetone (67-64-1)

Reason Code:

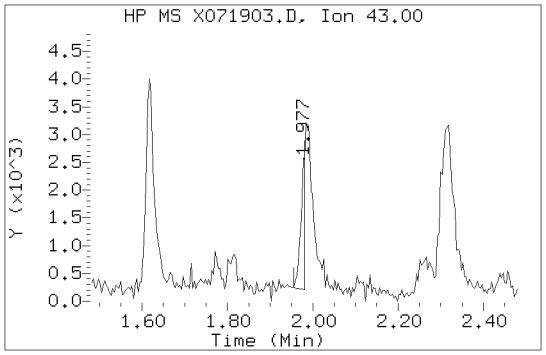
BEFORE

MASS
62
AREA
4102
HEIGHT
3481
25-Jul-2022
09:00
linh
pham



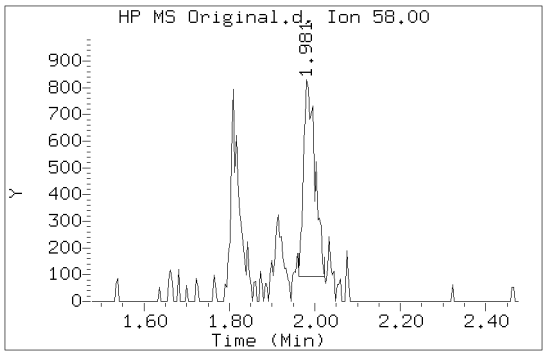
AFTER

MASS
43
AREA
1762
HEIGHT
2368
19-Aug-2022
10:59
linh
pham



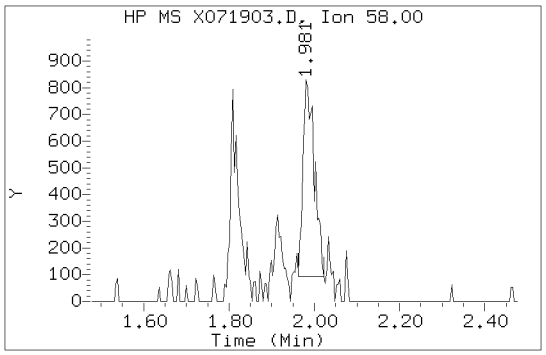
BEFORE

MASS
64
AREA
3620
HEIGHT
1767
25-Jul-2022
09:00
linh
pham



AFTER

MASS
58
AREA
1379
HEIGHT
737
19-Aug-2022
10:59
linh
pham



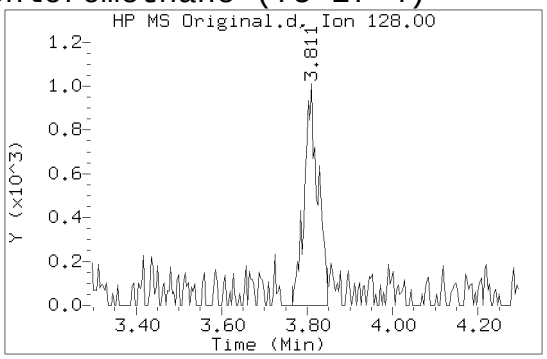
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

Bromodichloromethane (75-27-4)

Reason Code:

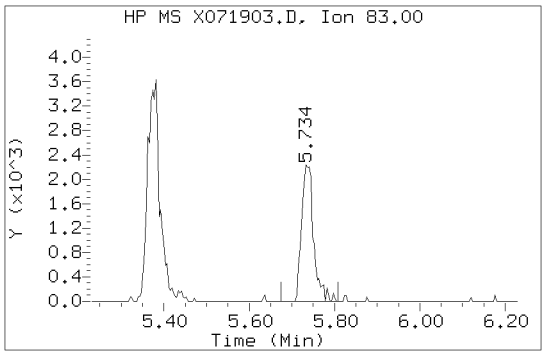
BEFORE

MASS
112
AREA
9208
HEIGHT
5442
25-Jul-2022
09:00
linh
pham



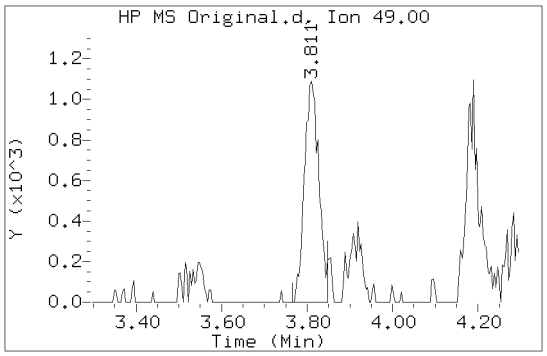
AFTER

MASS
83
AREA
4485
HEIGHT
2236
19-Aug-2022
10:59
linh
pham



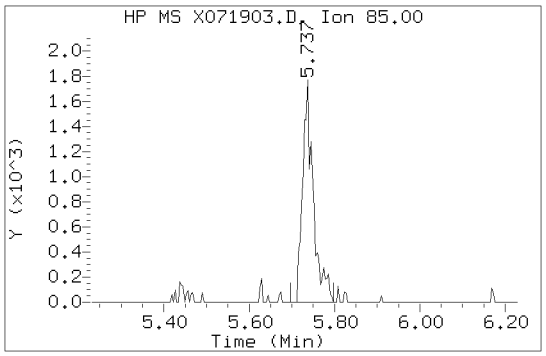
BEFORE

MASS
77
AREA
6659
HEIGHT
3709
25-Jul-2022
09:00
linh
pham



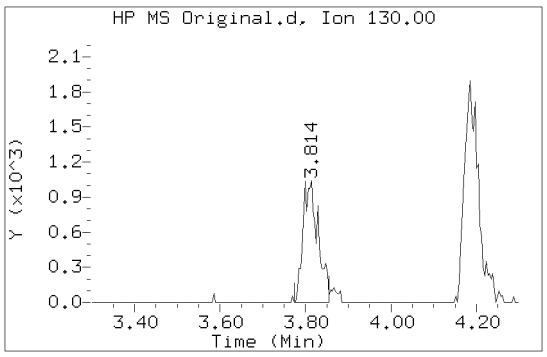
AFTER

MASS
85
AREA
3124
HEIGHT
1771
19-Aug-2022
10:59
linh
pham



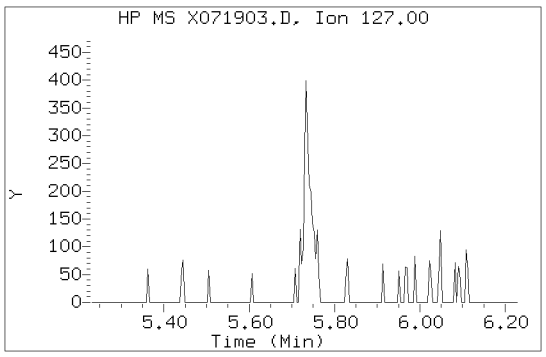
BEFORE

MASS
114
AREA
3227
HEIGHT
1854
25-Jul-2022
09:00
linh
pham



AFTER

MASS
127
AREA
0
HEIGHT
0
19-Aug-2022
10:59
linh
pham

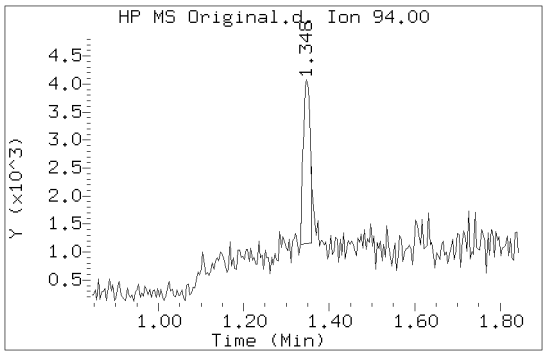


Bromomethane (74-83-9)

Reason Code:

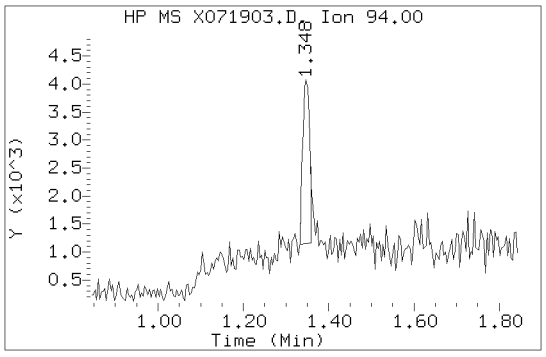
BEFORE

MASS
83
AREA
6190
HEIGHT
2614
25-Jul-2022
09:00
linh
pham



AFTER

MASS
94
AREA
3413
HEIGHT
2924
19-Aug-2022
10:59
linh
pham



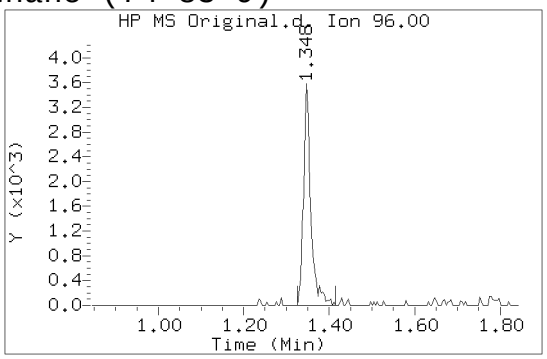
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

Bromomethane (74-83-9)

Reason Code:

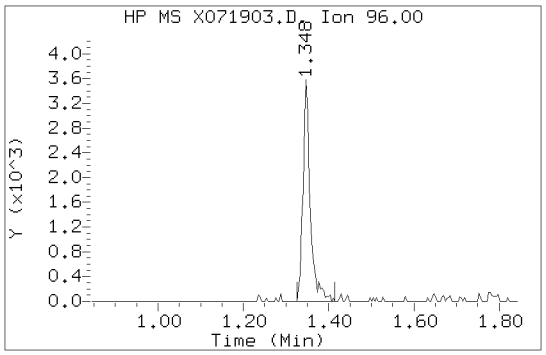
BEFORE

MASS
85
AREA
4424
HEIGHT
1752
25-Jul-2022
09:00
linh
pham



AFTER

MASS
96
AREA
4393
HEIGHT
3581
19-Aug-2022
10:59
linh
pham

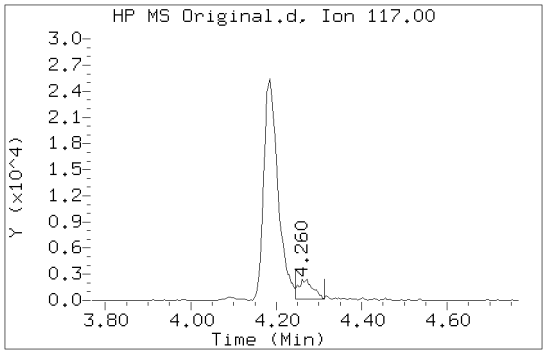


Carbon Tetrachloride (56-23-5)

Reason Code:

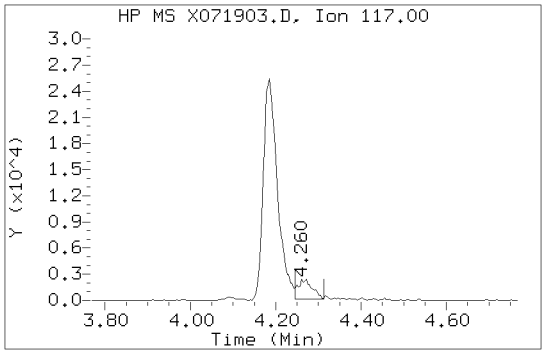
BEFORE

MASS
96
AREA
3635
HEIGHT
1411
25-Jul-2022
09:00
linh
pham



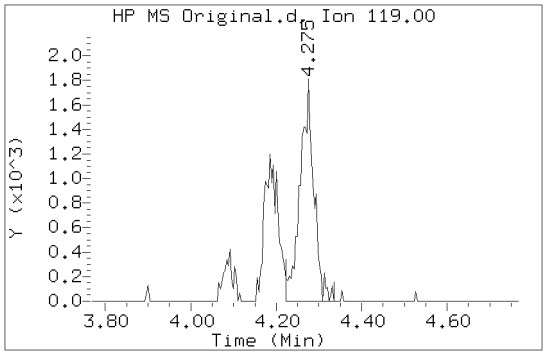
AFTER

MASS
117
AREA
5505
HEIGHT
2312
19-Aug-2022
10:59
linh
pham



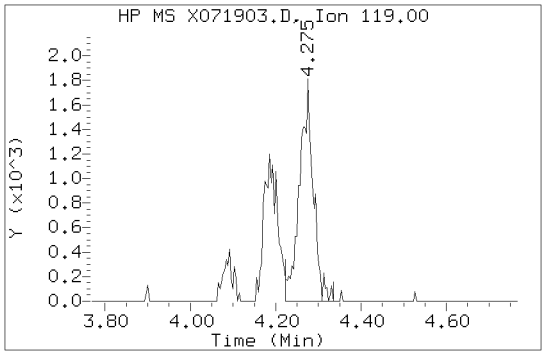
BEFORE

MASS
61
AREA
5502
HEIGHT
1984
25-Jul-2022
09:00
linh
pham



AFTER

MASS
119
AREA
4116
HEIGHT
1812
19-Aug-2022
10:59
linh
pham

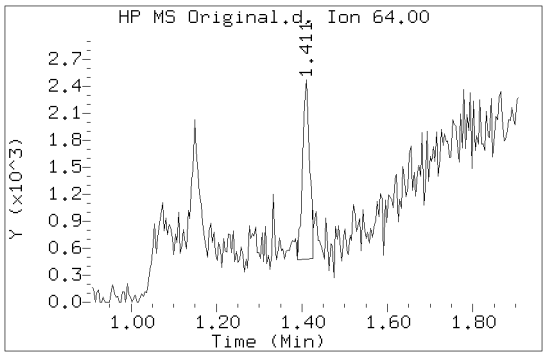


Chloroethane (75-00-3)

Reason Code:

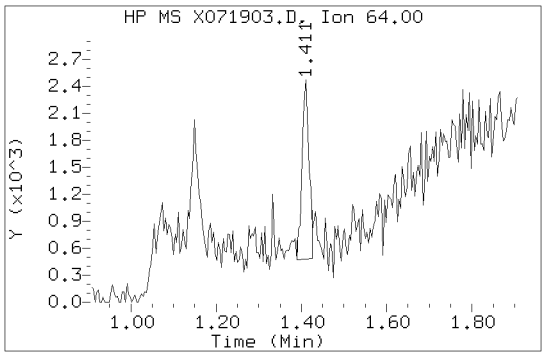
BEFORE

MASS
117
AREA
971157
HEIGHT
655204
25-Jul-2022
09:00
linh
pham



AFTER

MASS
64
AREA
2356
HEIGHT
1989
19-Aug-2022
10:59
linh
pham



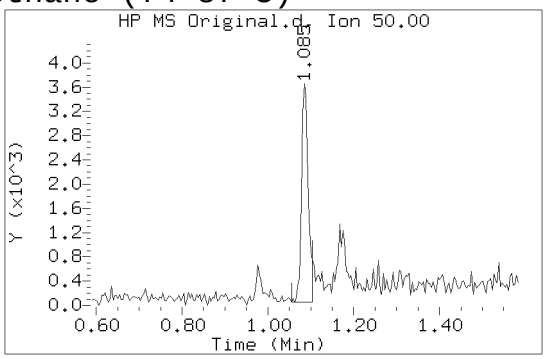
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

Chloromethane (74-87-3)

Reason Code:

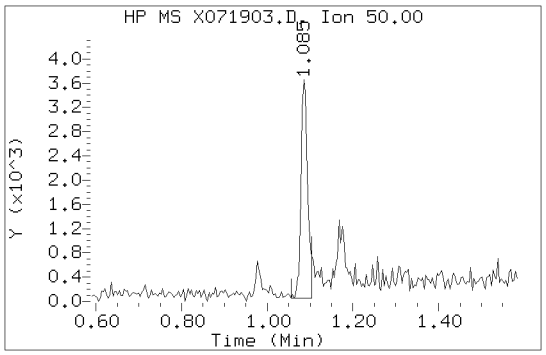
BEFORE

MASS
114
AREA
1081359
HEIGHT
557626
25-Jul-2022
09:00
linh
pham



AFTER

MASS
50
AREA
3959
HEIGHT
3607
19-Aug-2022
10:59
linh
pham

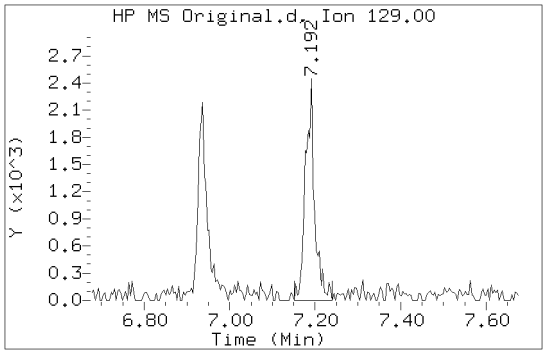


Dibromochloromethane (124-48-1)

Reason Code:

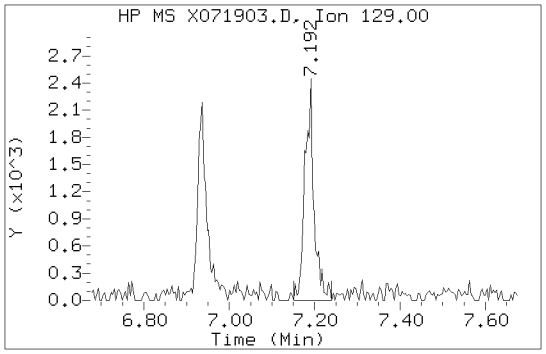
BEFORE

MASS
106
AREA
10839
HEIGHT
5861
25-Jul-2022
09:00
linh
pham



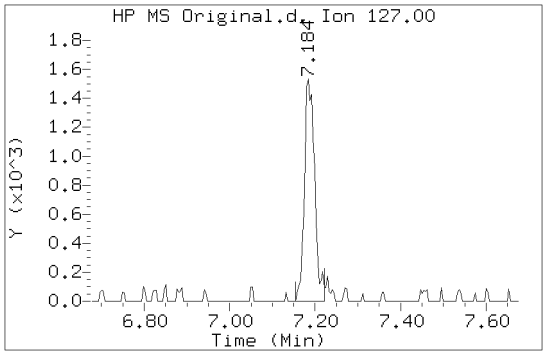
AFTER

MASS
129
AREA
3661
HEIGHT
2448
19-Aug-2022
10:59
linh
pham



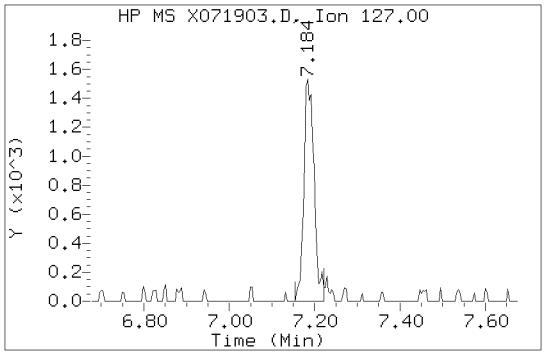
BEFORE

MASS
91
AREA
22202
HEIGHT
11255
25-Jul-2022
09:00
linh
pham



AFTER

MASS
127
AREA
2593
HEIGHT
1534
19-Aug-2022
10:59
linh
pham

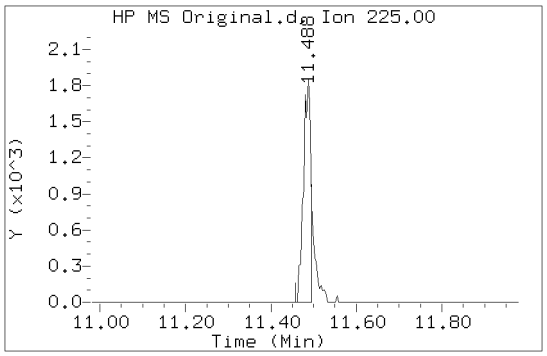


Hexachlorobutadiene (87-68-3)

Reason Code:

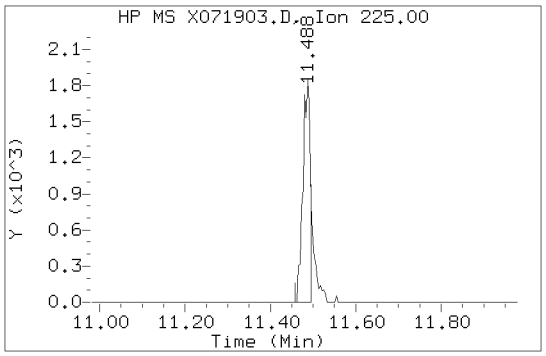
BEFORE

MASS
91
AREA
14364
HEIGHT
7624
25-Jul-2022
09:00
linh
pham



AFTER

MASS
225
AREA
2233
HEIGHT
1848
19-Aug-2022
10:59
linh
pham



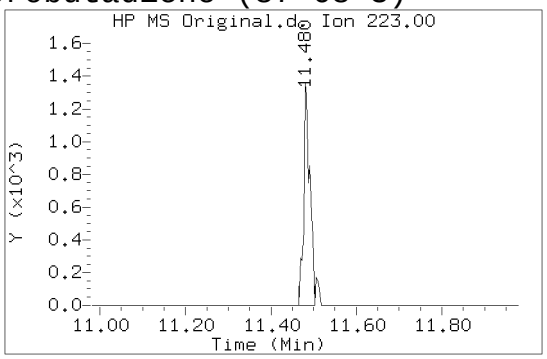
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

Hexachlorobutadiene (87-68-3)

Reason Code:

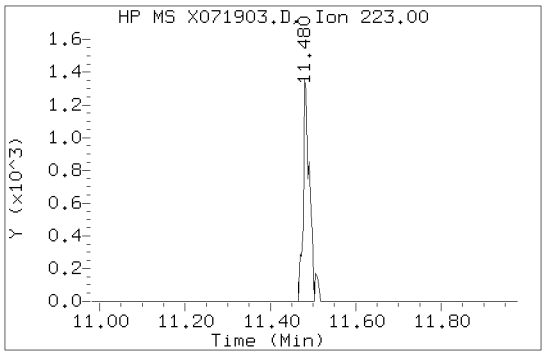
BEFORE

MASS
120
AREA
3739
HEIGHT
1832
25-Jul-2022
09:00
linh
pham



AFTER

MASS
223
AREA
1401
HEIGHT
1354
19-Aug-2022
10:59
linh
pham

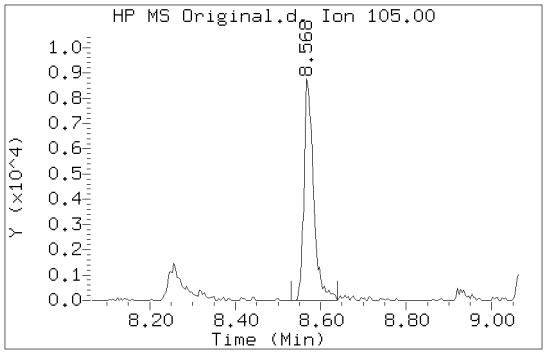


Isopropylbenzene (98-82-8)

Reason Code:

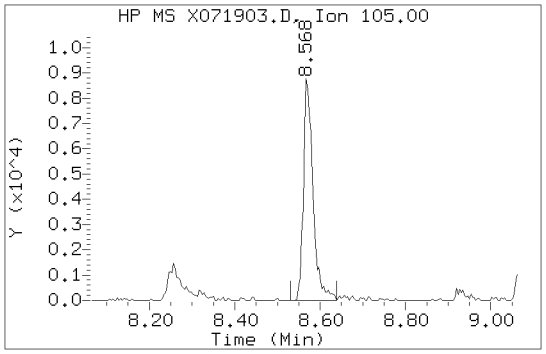
BEFORE

MASS
91
AREA
10810
HEIGHT
6020
25-Jul-2022
09:00
linh
pham



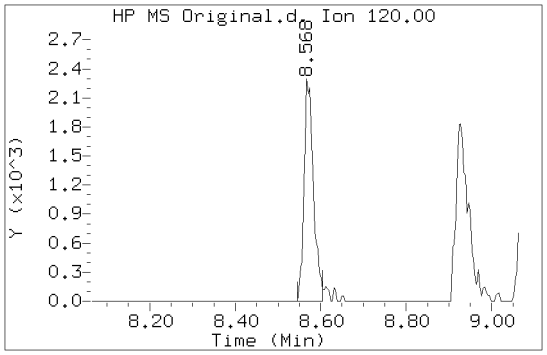
AFTER

MASS
105
AREA
13970
HEIGHT
8770
19-Aug-2022
10:59
linh
pham



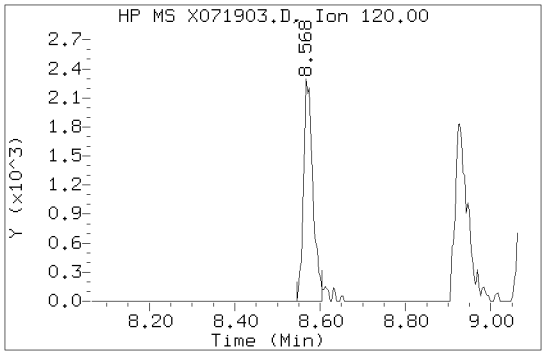
BEFORE

MASS
126
AREA
3731
HEIGHT
1993
25-Jul-2022
09:00
linh
pham



AFTER

MASS
120
AREA
3569
HEIGHT
2296
19-Aug-2022
10:59
linh
pham

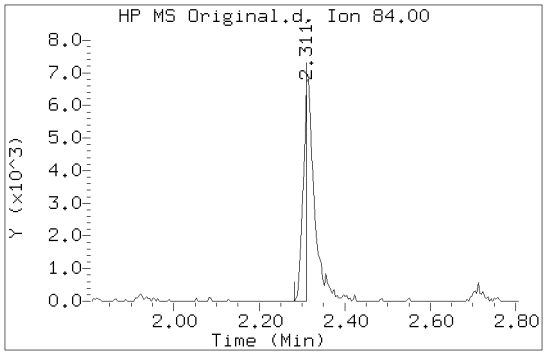


Methylene Chloride (75-09-2)

Reason Code:

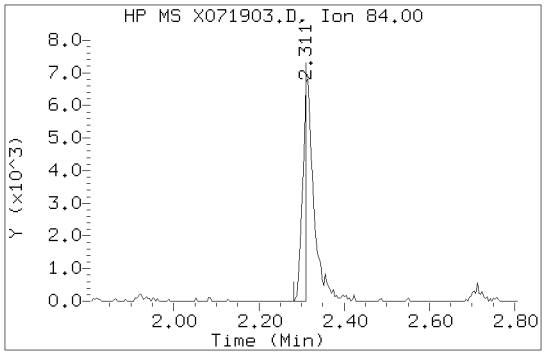
BEFORE

MASS
91
AREA
11731
HEIGHT
4585
25-Jul-2022
09:00
linh
pham



AFTER

MASS
84
AREA
4801
HEIGHT
6706
19-Aug-2022
10:59
linh
pham



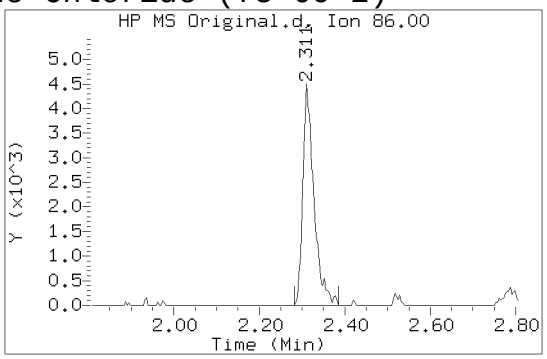
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

Methylene Chloride (75-09-2)

Reason Code:

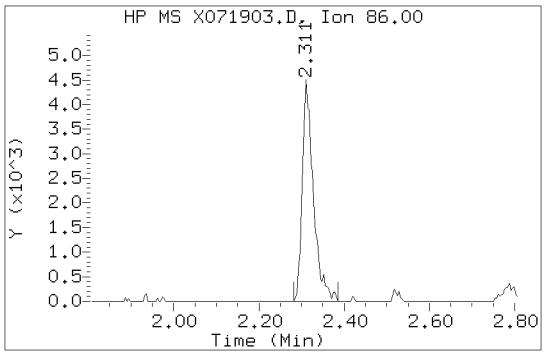
BEFORE

MASS
126
AREA
3659
HEIGHT
1928
25-Jul-2022
09:00
linh
pham



AFTER

MASS
86
AREA
8290
HEIGHT
4505
19-Aug-2022
10:59
linh
pham

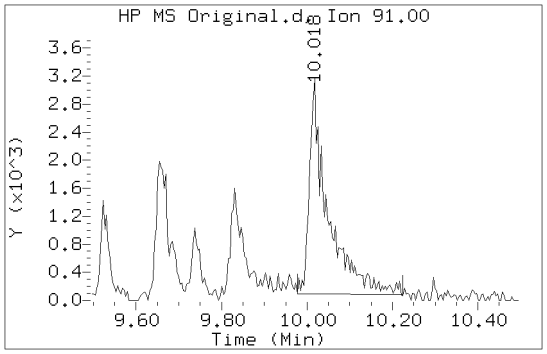


n-Butylbenzene (104-51-8)

Reason Code:

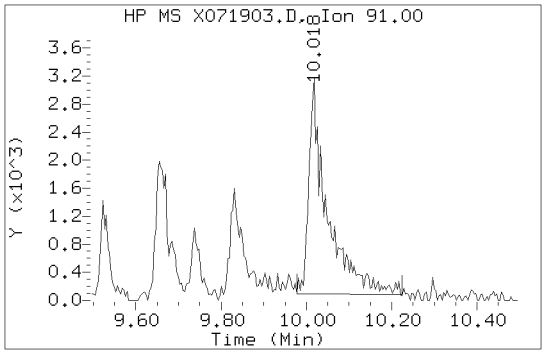
BEFORE

MASS
119
AREA
9259
HEIGHT
6692
25-Jul-2022
09:00
linh
pham



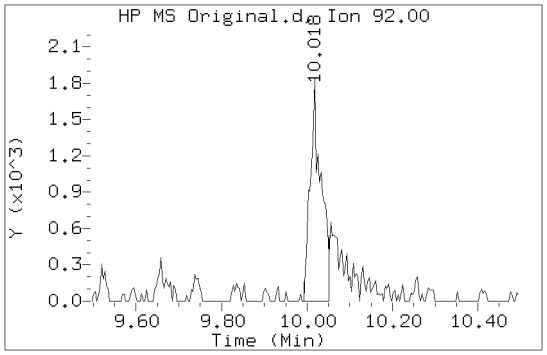
AFTER

MASS
91
AREA
9255
HEIGHT
3074
19-Aug-2022
10:59
linh
pham



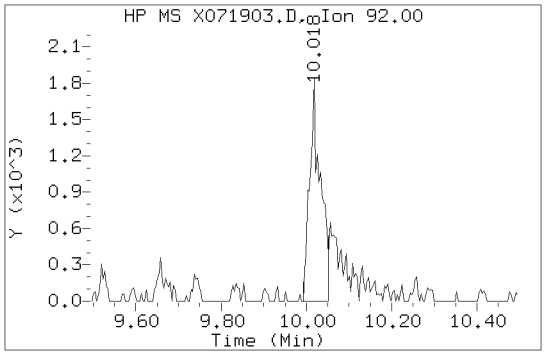
BEFORE

MASS
91
AREA
6295
HEIGHT
4785
25-Jul-2022
09:00
linh
pham



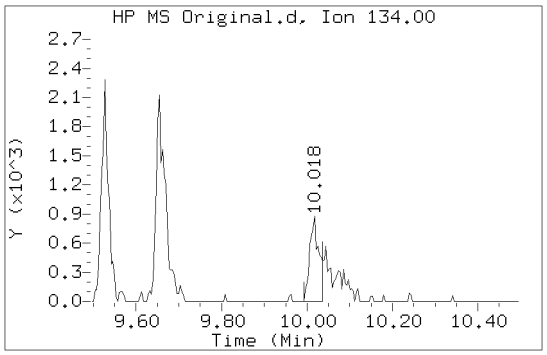
AFTER

MASS
92
AREA
3270
HEIGHT
1836
19-Aug-2022
10:59
linh
pham



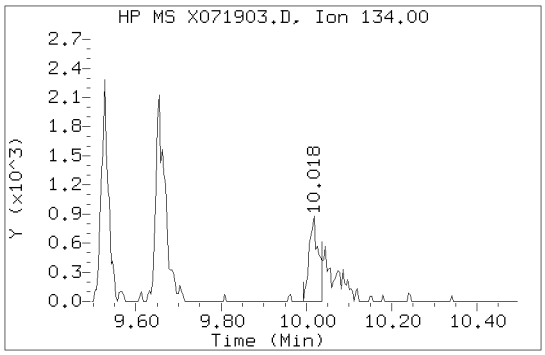
BEFORE

MASS
134
AREA
2791
HEIGHT
2284
25-Jul-2022
09:00
linh
pham



AFTER

MASS
134
AREA
1329
HEIGHT
881
19-Aug-2022
10:59
linh
pham



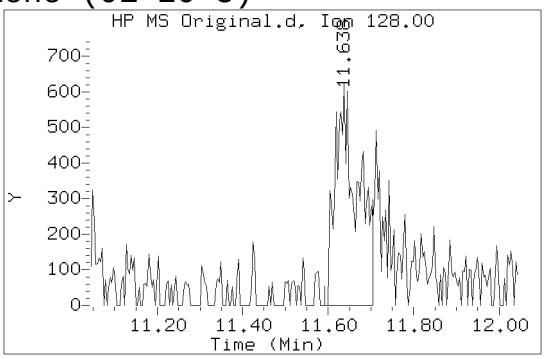
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

Naphthalene (91-20-3)

Reason Code:

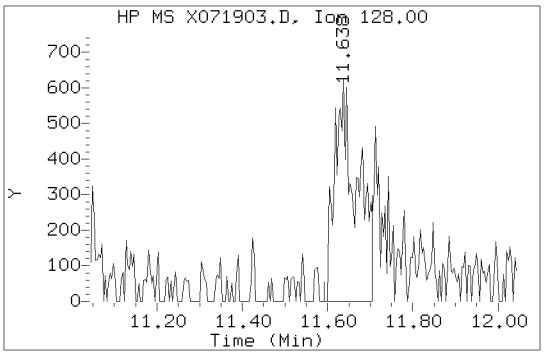
BEFORE

MASS
105
AREA
13047
HEIGHT
10290
25-Jul-2022
09:00
linh
pham



AFTER

MASS
128
AREA
2252
HEIGHT
623
19-Aug-2022
10:59
linh
pham

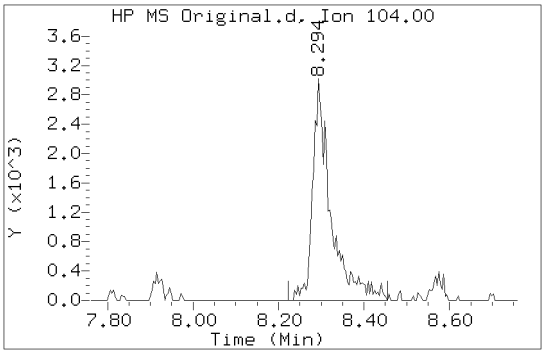


Styrene (100-42-5)

Reason Code:

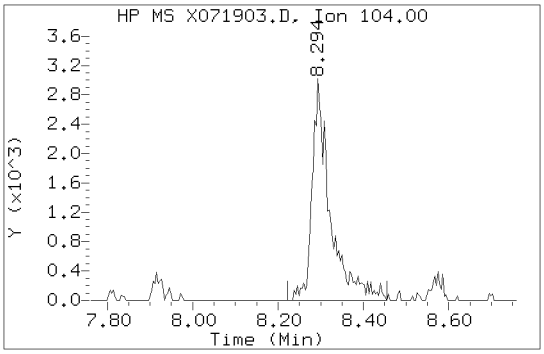
BEFORE

MASS
225
AREA
2233
HEIGHT
1848
25-Jul-2022
09:00
linh
pham



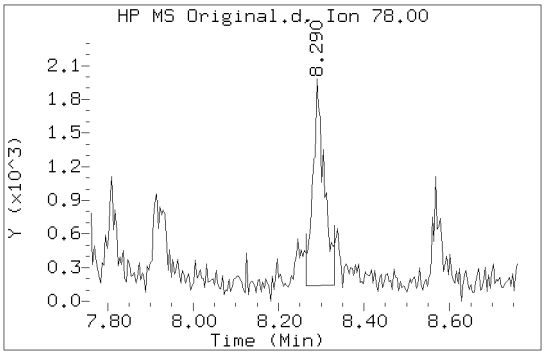
AFTER

MASS
104
AREA
8853
HEIGHT
3020
19-Aug-2022
10:59
linh
pham



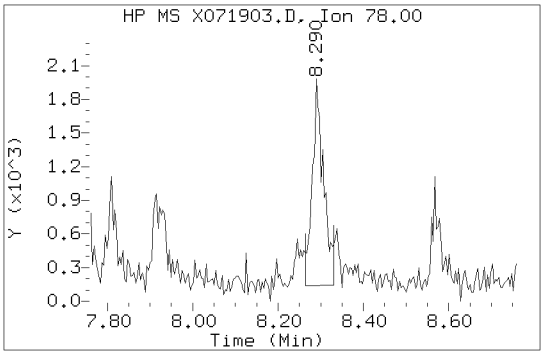
BEFORE

MASS
223
AREA
1401
HEIGHT
1354
25-Jul-2022
09:00
linh
pham



AFTER

MASS
78
AREA
3427
HEIGHT
1842
19-Aug-2022
10:59
linh
pham

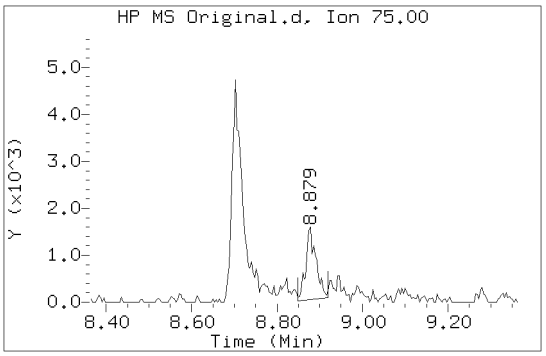


1,2,3-Trichloropropane (96-18-4)

Reason Code:

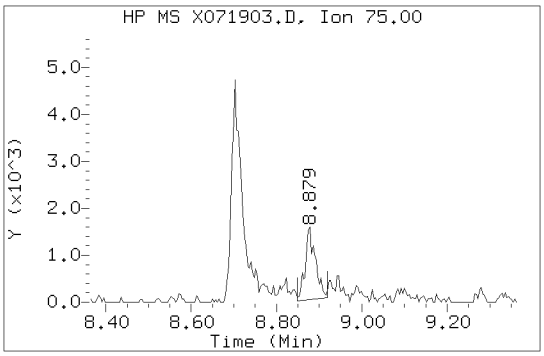
BEFORE

MASS
180
AREA
1275
HEIGHT
555
25-Jul-2022
09:00
linh
pham



AFTER

MASS
75
AREA
2596
HEIGHT
1548
19-Aug-2022
10:59
linh
pham



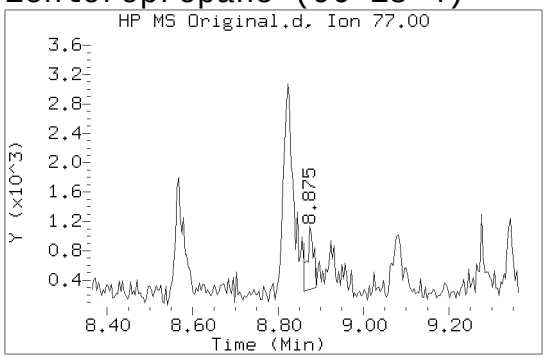
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

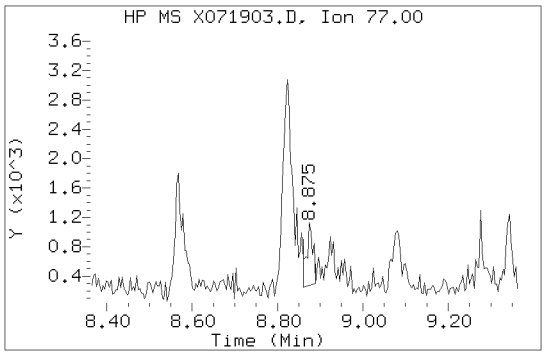
BEFORE

MASS
182
AREA
0
HEIGHT
0
25-Jul-2022
09:00
linh
pham



AFTER

MASS
77
AREA
920
HEIGHT
859
19-Aug-2022
10:59
linh
pham

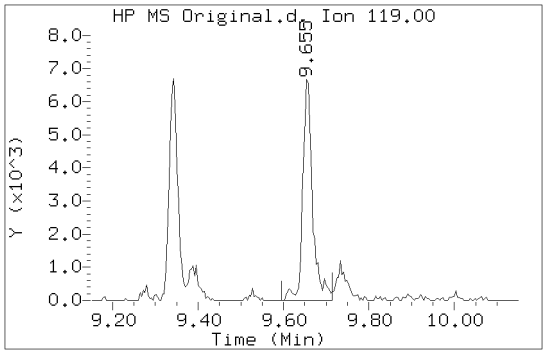


p-Isopropyltoluene (99-87-6)

Reason Code:

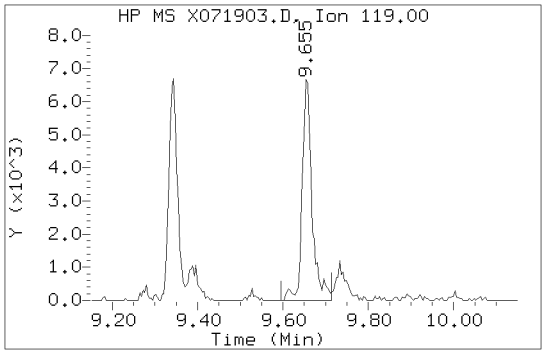
BEFORE

MASS
106
AREA
16597
HEIGHT
9320
25-Jul-2022
09:00
linh
pham



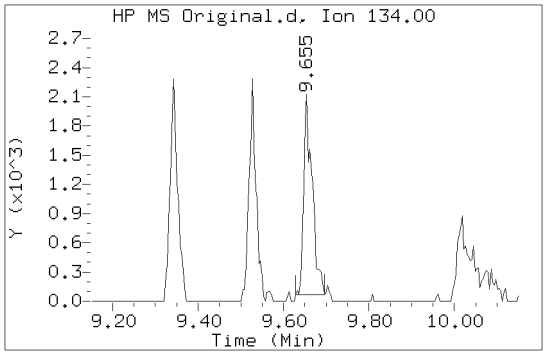
AFTER

MASS
119
AREA
11018
HEIGHT
6684
19-Aug-2022
10:59
linh
pham



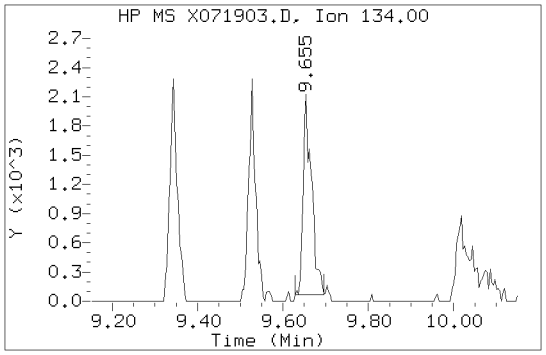
BEFORE

MASS
91
AREA
0
HEIGHT
0
25-Jul-2022
09:00
linh
pham



AFTER

MASS
134
AREA
2906
HEIGHT
2066
19-Aug-2022
10:59
linh
pham

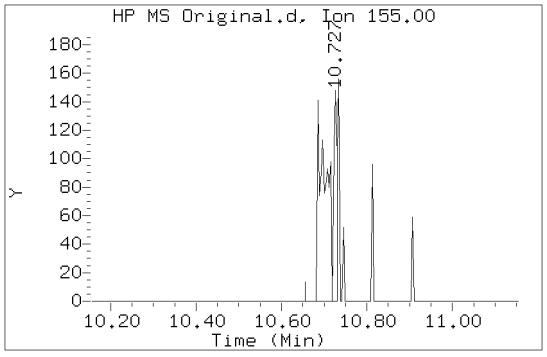


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

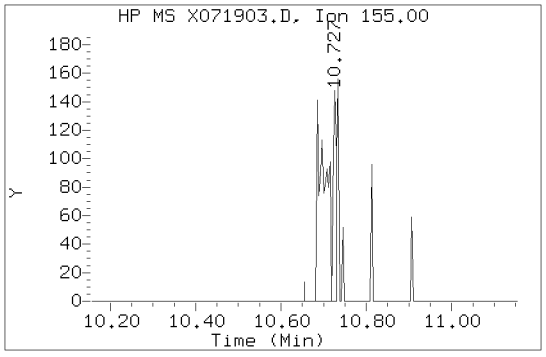
BEFORE

MASS
73
AREA
9993
HEIGHT
5235
25-Jul-2022
09:00
linh
pham



AFTER

MASS
155
AREA
270
HEIGHT
148
19-Aug-2022
10:59
linh
pham



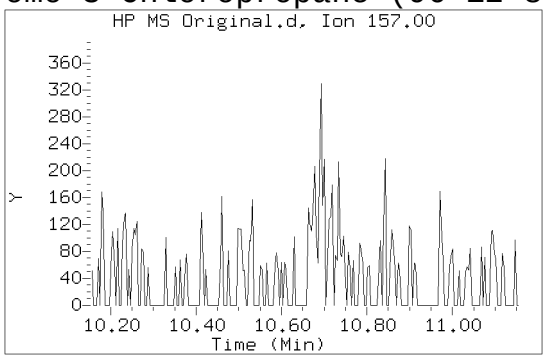
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

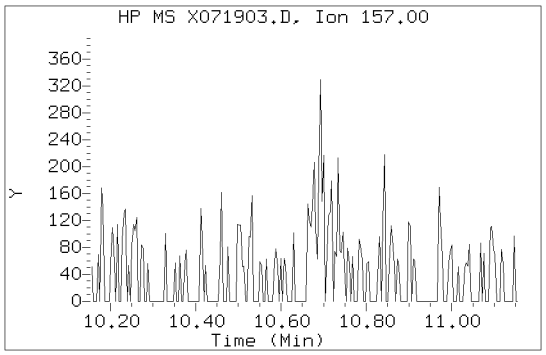
BEFORE

MASS
57
AREA
7497
HEIGHT
3757
25-Jul-2022
09:00
linh
pham



AFTER

MASS
157
AREA
0
HEIGHT
0
19-Aug-2022
10:59
linh
pham

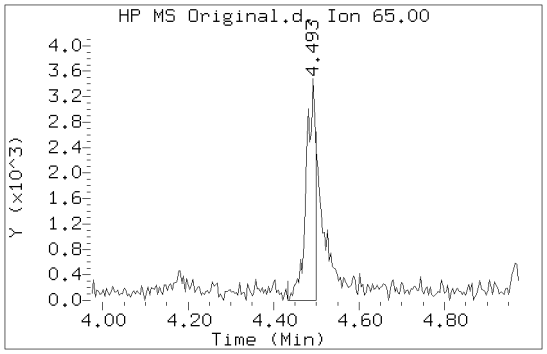


1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

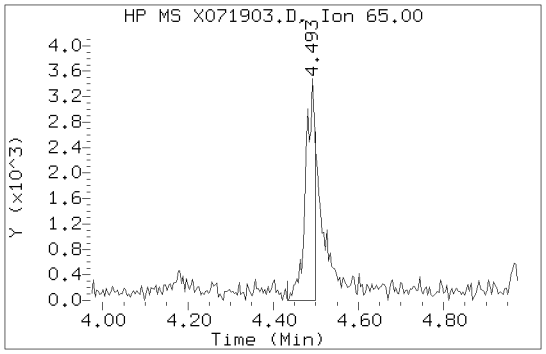
BEFORE

MASS
113
AREA
4991
HEIGHT
2969
25-Jul-2022
09:00
linh
pham



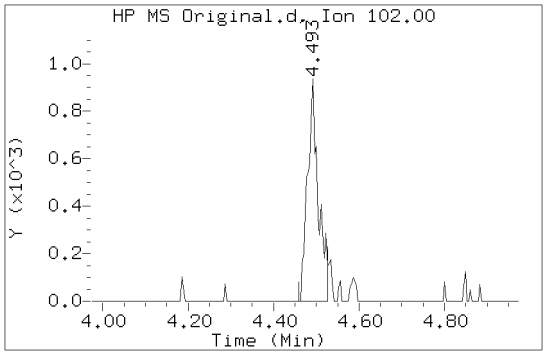
AFTER

MASS
65
AREA
5362
HEIGHT
3482
19-Aug-2022
10:59
linh
pham



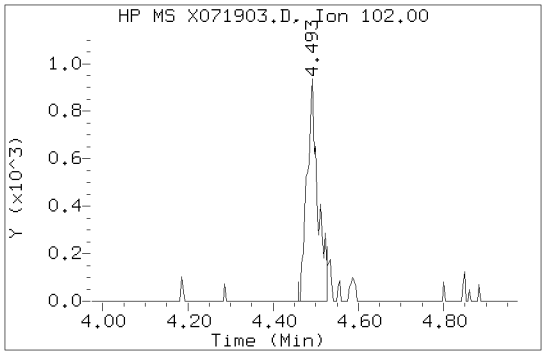
BEFORE

MASS
111
AREA
6845
HEIGHT
2797
25-Jul-2022
09:00
linh
pham



AFTER

MASS
102
AREA
1658
HEIGHT
936
19-Aug-2022
10:59
linh
pham

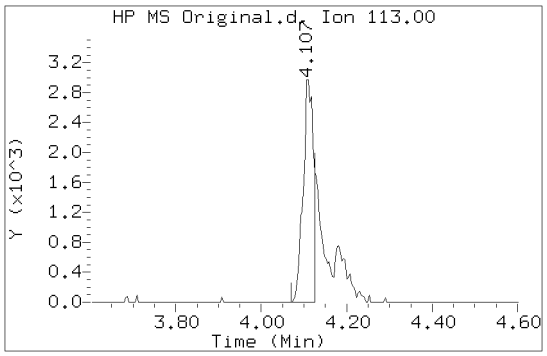


Dibromofluoromethane (1868-53-7)

Reason Code:

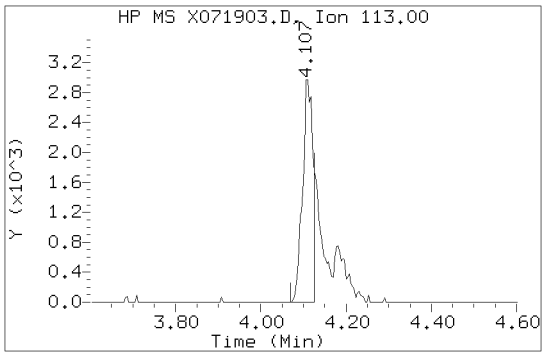
BEFORE

MASS
98
AREA
14148
HEIGHT
13268
25-Jul-2022
09:00
linh
pham



AFTER

MASS
113
AREA
4991
HEIGHT
2969
19-Aug-2022
10:59
linh
pham



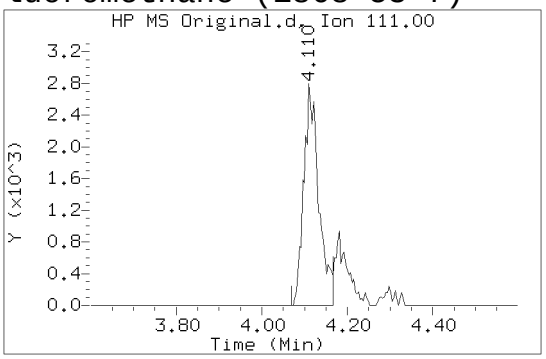
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

Dibromofluoromethane (1868-53-7)

Reason Code:

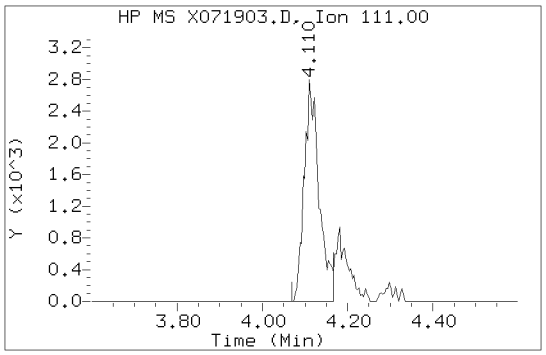
BEFORE

MASS
99
AREA
2541
HEIGHT
1372
25-Jul-2022
09:00
linh
pham



AFTER

MASS
111
AREA
6845
HEIGHT
2797
19-Aug-2022
10:59
linh
pham

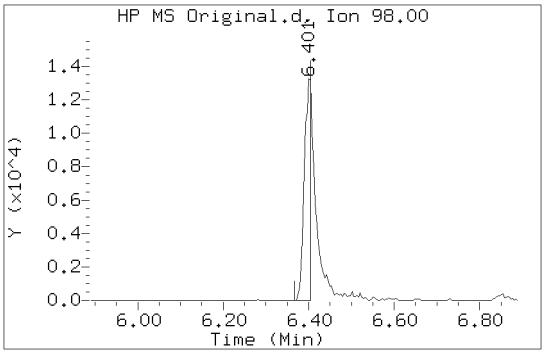


Toluene-d8 (2037-26-5)

Reason Code:

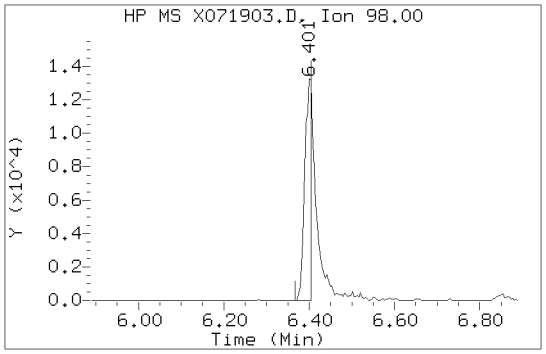
BEFORE

MASS
65
AREA
5362
HEIGHT
3482
25-Jul-2022
09:00
linh
pham



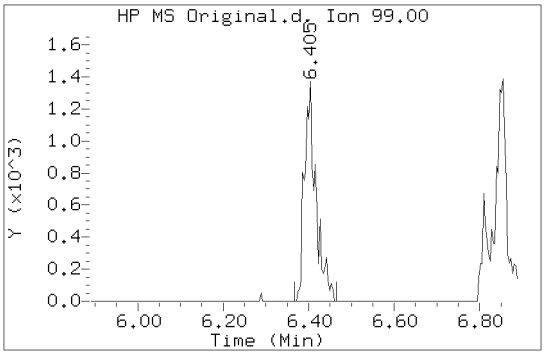
AFTER

MASS
98
AREA
14148
HEIGHT
13268
19-Aug-2022
10:59
linh
pham



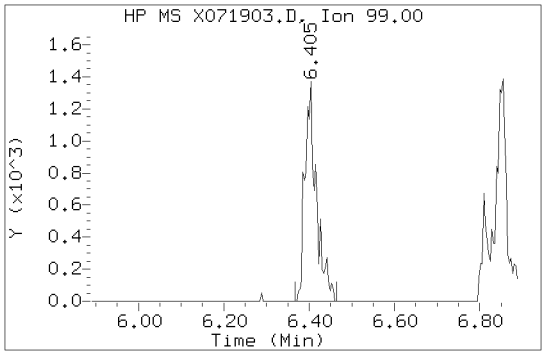
BEFORE

MASS
102
AREA
1658
HEIGHT
936
25-Jul-2022
09:00
linh
pham



AFTER

MASS
99
AREA
2541
HEIGHT
1372
19-Aug-2022
10:59
linh
pham

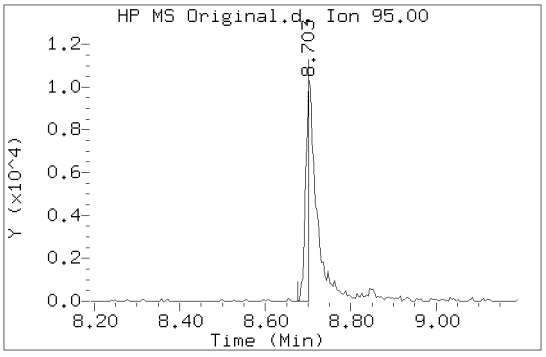


4-Bromofluorobenzene (460-00-4)

Reason Code:

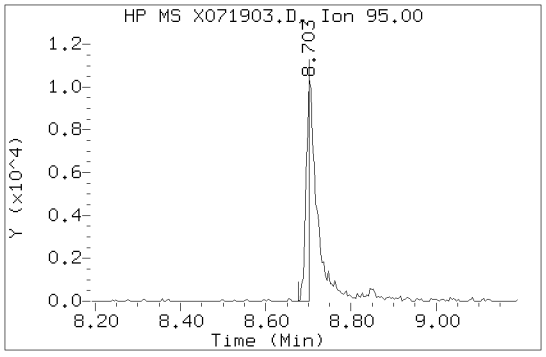
BEFORE

MASS
95
AREA
6586
HEIGHT
10380
25-Jul-2022
09:00
linh
pham



AFTER

MASS
95
AREA
6586
HEIGHT
10380
19-Aug-2022
10:59
linh
pham



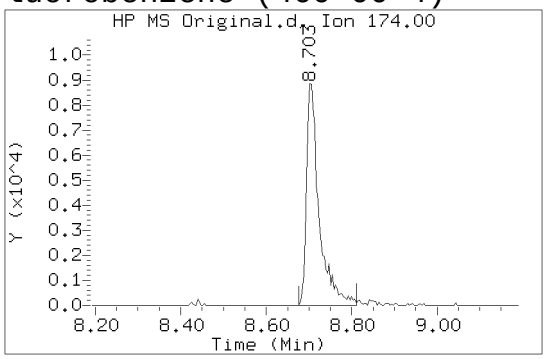
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071903.D
Inj Date : 19-JUL-2022 12:08
InstruID : voa6.i
LabSampID : VSTD000.5

4-Bromofluorobenzene (460-00-4)

Reason Code:

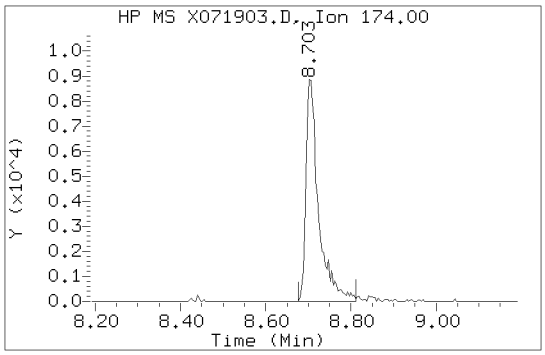
BEFORE

MASS
174
AREA
18280
HEIGHT
8855
25-Jul-2022
09:00
linh
pham



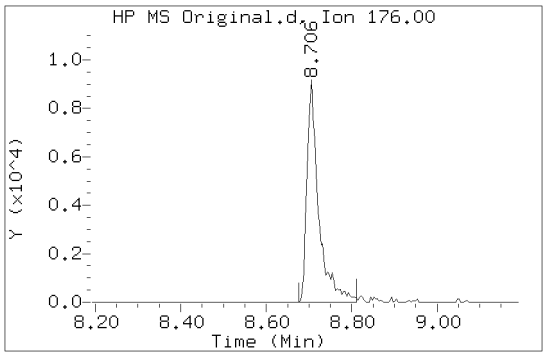
AFTER

MASS
174
AREA
18280
HEIGHT
8855
19-Aug-2022
10:59
linh
pham



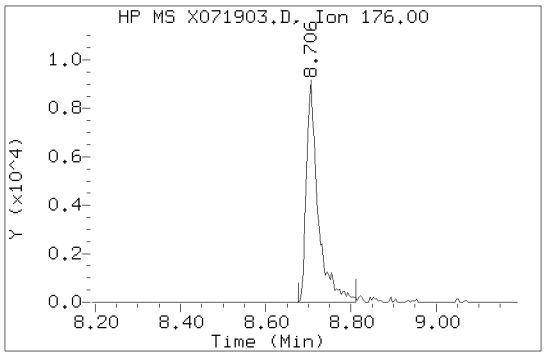
BEFORE

MASS
176
AREA
17656
HEIGHT
9174
25-Jul-2022
09:00
linh
pham



AFTER

MASS
176
AREA
17656
HEIGHT
9174
19-Aug-2022
10:59
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071904.D Page 1
Report Date: 19-Aug-2022 11:00

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071904.D
Lab Smp Id: VSTD001 Client Smp ID: VSTD001
Inj Date : 19-JUL-2022 12:29
Operator : PC Inst ID: voa6.i
Smp Info : VSTD001;VSTD001;1;3;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\8260W.m
Meth Date : 19-Aug-2022 11:00 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 12:08 Cal File: X071903.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

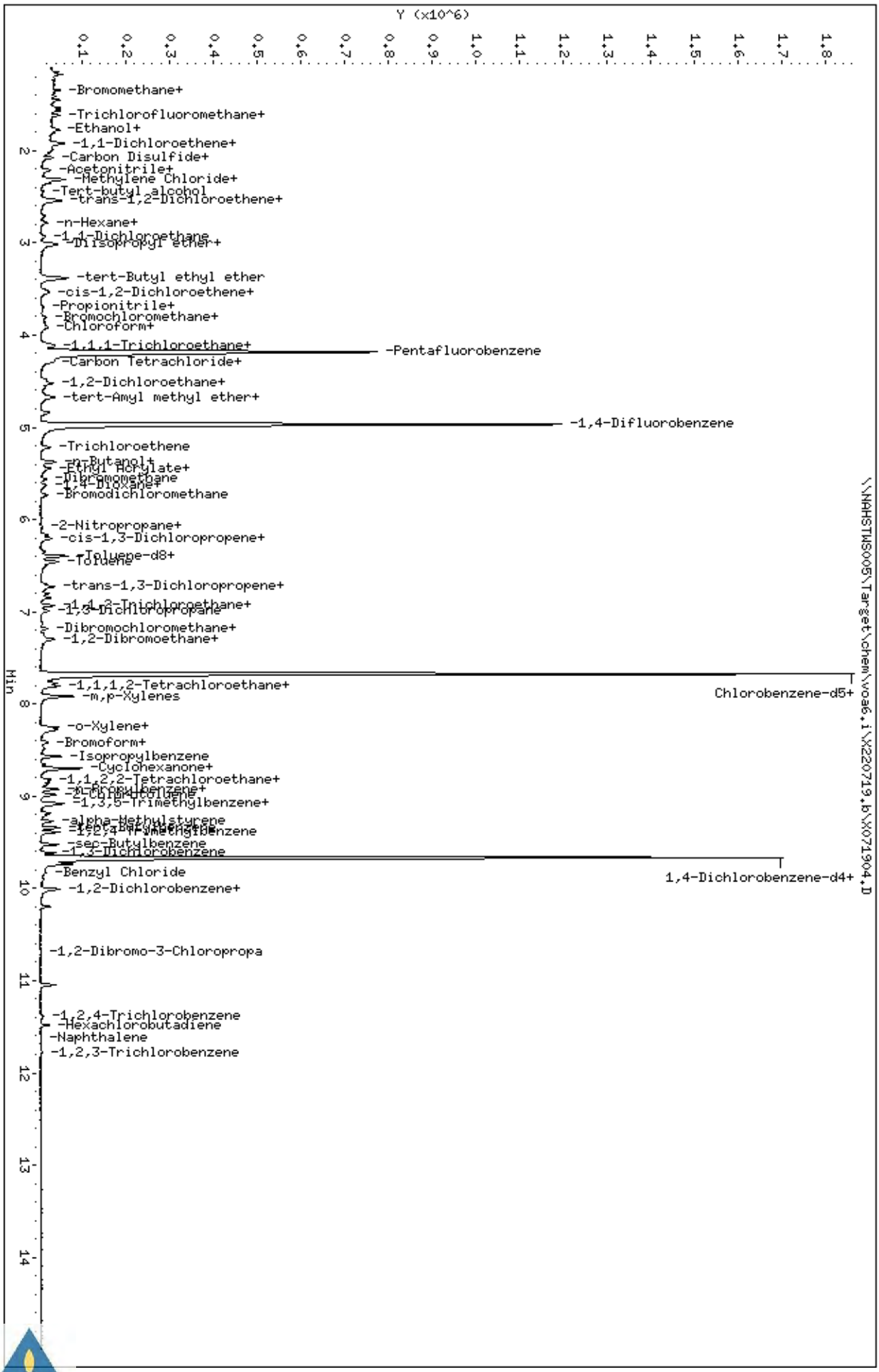
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	702091	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	1046256	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	952128	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	441386	50.0000	
$ 30 Dibromofluoromethane	113	4.110	4.110	(0.982)	9308	1.00000	0.69(aM)
$ 35 1,2-Dichloroethane-d4	65	4.489	4.489	(1.073)	8675	1.00000	0.87(aM)
$ 48 Toluene-d8	98	6.397	6.397	(0.834)	23913	1.00000	1.00(aM)
$ 69 4-Bromofluorobenzene	95	8.698	8.698	(1.134)	11894	1.00000	0.59(aM)
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	6847	1.00000	1.02(a)
31 1,1,1-Trichloroethane	97	4.087	4.087	(0.977)	9877	1.00000	0.99(a)
68 1,1,2,2-Tetrachloroethane	83	8.848	8.848	(0.915)	6777	1.00000	1.09(a)
53 1,1,2-Trichloroethane	83	6.846	6.846	(0.893)	4829	1.00000	0.98(a)
22 1,1-Dichloroethane	63	2.933	2.933	(0.701)	11983	1.00000	1.10(a)
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	6600	1.00000	1.12(a)
32 1,1-Dichloropropene	75	4.290	4.290	(0.863)	8523	1.00000	1.00(aM)
93 1,2,3-Trichlorobenzene	180	11.776	11.776	(1.218)	2063	1.00000	0.89(a)
71 1,2,3-Trichloropropane	75	8.874	8.874	(0.918)	5208	1.00000	1.08(aM)
90 1,2,4-Trichlorobenzene	180	11.382	11.382	(1.178)	3403	1.00000	0.84(aM)
79 1,2,4-Trimethylbenzene	105	9.388	9.388	(0.971)	21695	1.00000	1.02(a)
89 1,2-Dibromo-3-Chloropropane	155	10.689	10.689	(1.106)	348	1.00000	1.16(aM)

57	1,2-Dibromoethane	107	7.274	7.274 (0.948)	5896	1.00000	0.94(a)
88	1,2-Dichlorobenzene	146	10.007	10.007 (1.035)	11239	1.00000	1.01(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.575	4.575	(0.921)	9313	1.00000	1.01(a)
42	1,2-Dichloropropane	63	5.444	5.444	(1.096)	6012	1.00000	0.93(aM)
75	1,3,5-Trimethylbenzene	105	9.073	9.073	(0.939)	21739	1.00000	1.01(a)
83	1,3-Dichlorobenzene	146	9.613	9.613	(0.995)	12197	1.00000	0.99(a)
54	1,3-Dichloropropane	76	6.993	6.993	(0.912)	10197	1.00000	1.02(a)
84	1,4-Dichlorobenzene	146	9.688	9.688	(1.002)	13164	1.00000	1.01(a)
26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	10957	1.00000	0.89(aM)
24	2-Butanone	43	3.679	3.679	(0.879)	3253	2.00000	1.84(aM)
76	2-Chlorotoluene	91	8.987	8.987	(0.930)	20980	1.00000	1.10(a)
52	2-Hexanone	43	7.116	7.116	(0.928)	5434	2.00000	1.81(aM)
77	4-Chlorotoluene	91	9.088	9.088	(0.940)	22202	1.00000	1.05(a)
82	p-Isopropyltoluene	119	9.654	9.654	(0.999)	22742	1.00000	1.05(a)
45	4-Methyl-2-Pentanone	43	6.340	6.340	(0.827)	9354	2.00000	2.01(aM)
10	Acetone	43	1.984	1.984	(0.474)	3509	2.00000	(aM)
37	Benzene	78	4.519	4.519	(0.909)	26549	1.00000	1.07(a)
74	Bromobenzene	156	8.818	8.818	(0.912)	7556	1.00000	1.00(a)
29	Bromochloromethane	128	3.810	3.810	(0.910)	4315	1.00000	1.09(a)
39	Bromodichloromethane	83	5.737	5.737	(1.155)	8775	1.00000	0.99(a)
66	Bromoform	173	8.417	8.417	(1.097)	3730	1.00000	2.02(Ta)
6	Bromomethane	94	1.347	1.347	(0.322)	6763	1.00000	0.07(aM)
19	Carbon Disulfide	76	2.074	2.074	(0.496)	33751	2.00000	2.17(a)
34	Carbon Tetrachloride	117	4.271	4.271	(0.860)	9827	1.00000	1.08(aH)
59	Chlorobenzene	112	7.697	7.697	(1.003)	18297	1.00000	1.01(a)
7	Chloroethane	64	1.407	1.407	(0.336)	4804	1.00000	1.06(aM)
28	Chloroform	83	3.919	3.919	(0.936)	12942	1.00000	1.09(a)
3	Chloromethane	50	1.085	1.085	(0.259)	7297	1.00000	1.17(aM)
27	cis-1,2-Dichloroethene	96	3.540	3.540	(0.846)	7176	1.00000	1.02(a)
46	cis-1,3-Dichloropropene	75	6.168	6.168	(1.241)	10546	1.00000	0.97(a)
55	Dibromochloromethane	129	7.188	7.188	(0.937)	6898	1.00000	0.97(a)
44	Dibromomethane	93	5.564	5.564	(1.120)	4501	1.00000	1.04(a)
2	Dichlorodifluoromethane	85	0.976	0.976	(0.233)	7427	1.00000	0.94(a)
61	Ethylbenzene	106	7.810	7.810	(1.018)	9298	1.00000	1.01(a)
91	Hexachlorobutadiene	225	11.487	11.487	(1.188)	3610	1.00000	0.97(a)
67	Isopropylbenzene	105	8.567	8.567	(1.117)	28077	1.00000	1.02(a)
62	m,p-Xylenes	106	7.915	7.915	(1.032)	22802	2.00000	2.01(a)
17	Methylene Chloride	84	2.311	2.311	(0.552)	7303	1.00000	0.27(aM)
87	n-Butylbenzene	91	10.007	10.007	(1.035)	16618	1.00000	0.92(aM)
73	n-Propylbenzene	91	8.923	8.923	(0.923)	29049	1.00000	0.99(a)
92	Naphthalene	128	11.622	11.622	(1.202)	4273	1.00000	0.95(aM)
63	o-Xylene	106	8.248	8.248	(1.075)	11062	1.00000	1.00(a)
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	25764	1.00000	1.03(a)
64	Styrene	104	8.282	8.282	(1.080)	17705	1.00000	0.97(aM)
78	tert-Butylbenzene	119	9.343	9.343	(0.967)	19169	1.00000	1.05(a)
56	Tetrachloroethene	164	6.936	6.936	(0.904)	6649	1.00000	1.07(a)
50	Toluene	91	6.457	6.457	(0.842)	28159	1.00000	1.05(a)
20	trans-1,2-Dichloroethene	96	2.543	2.543	(0.608)	6346	1.00000	1.02(a)
51	trans-1,3-Dichloropropene	75	6.697	6.697	(1.348)	7300	1.00000	0.81(a)
38	Trichloroethene	130	5.216	5.216	(1.050)	7477	1.00000	1.01(a)
8	Trichlorofluoromethane	101	1.568	1.568	(0.375)	12350	1.00000	1.11(a)
5	Vinyl Chloride	62	1.149	1.149	(0.275)	8192	1.00000	1.11(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.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071904.D
Date : 19-JUL-2022 12:29
Client ID: VSTD001
Sample Info: VSTD001;VSTD001;1;3;
Purge Volume: 5.0
Column phase: DB624

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

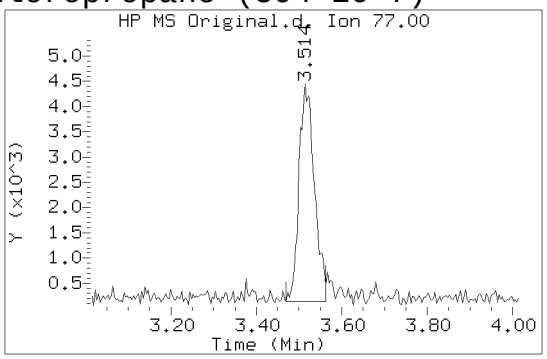
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071904.D
Inj Date : 19-JUL-2022 12:29
InstruID : voa6.i
LabSampID : VSTD001

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

Reason Code:

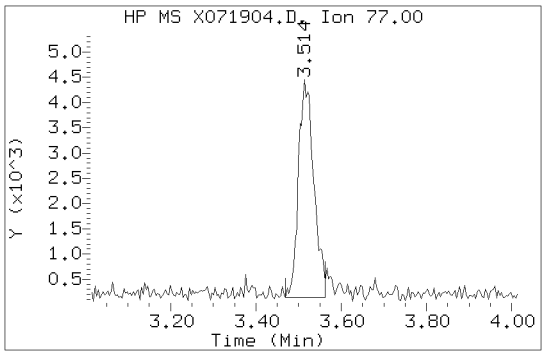
BEFORE

MASS
43
AREA
5434
HEIGHT
1935
25-Jul-2022
09:00
linh
pham



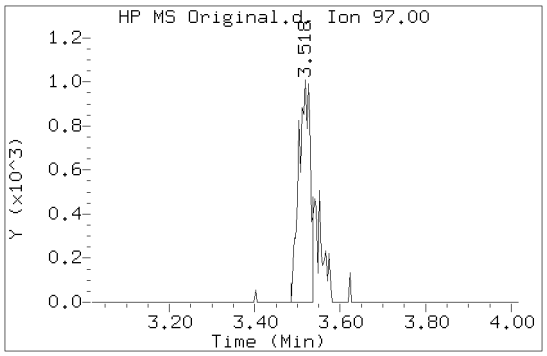
AFTER

MASS
77
AREA
10957
HEIGHT
4315
19-Aug-2022
10:59
linh
pham



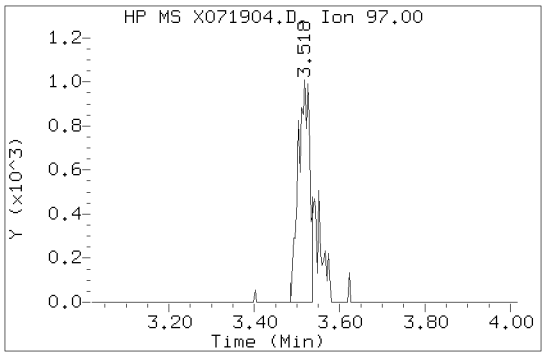
BEFORE

MASS
58
AREA
2625
HEIGHT
1002
25-Jul-2022
09:00
linh
pham



AFTER

MASS
97
AREA
1951
HEIGHT
1009
19-Aug-2022
10:59
linh
pham

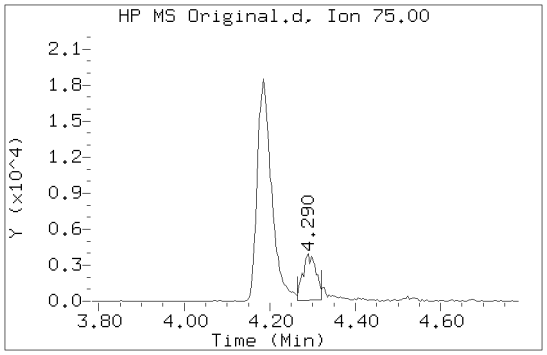


1,1-Dichloropropene (563-58-6)

Reason Code:

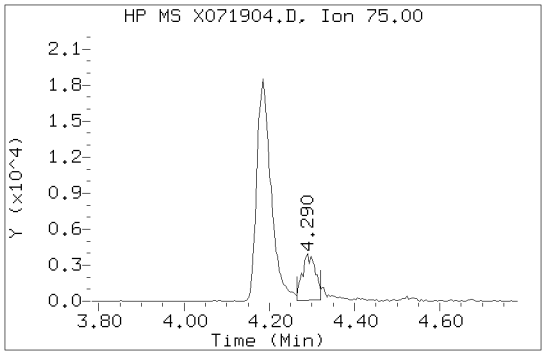
BEFORE

MASS
85
AREA
7427
HEIGHT
7372
25-Jul-2022
09:00
linh
pham



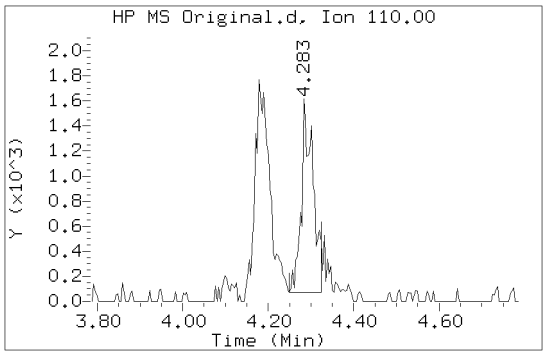
AFTER

MASS
75
AREA
8523
HEIGHT
3906
19-Aug-2022
10:59
linh
pham



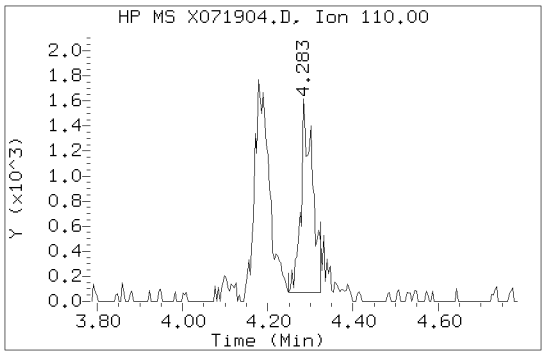
BEFORE

MASS
87
AREA
2411
HEIGHT
2358
25-Jul-2022
09:00
linh
pham



AFTER

MASS
110
AREA
2985
HEIGHT
1543
19-Aug-2022
10:59
linh
pham



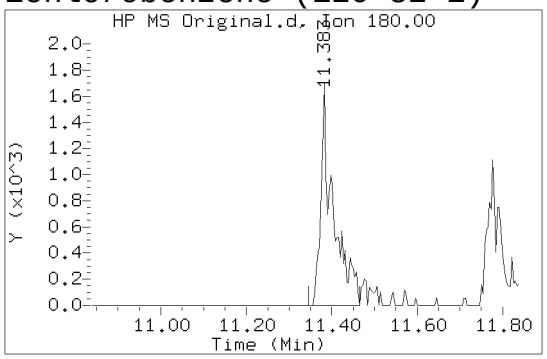
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071904.D
Inj Date : 19-JUL-2022 12:29
InstruID : voa6.i
LabSampID : VSTD001

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

Reason Code:

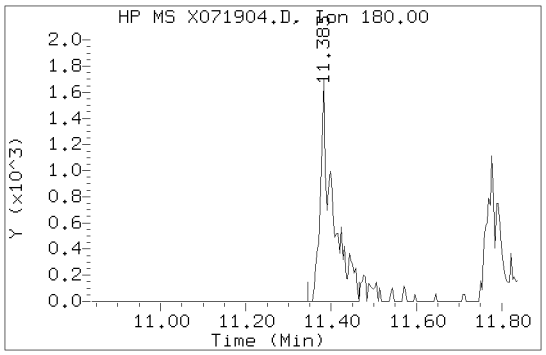
BEFORE

MASS
93
AREA
4501
HEIGHT
2456
25-Jul-2022
09:00
linh
pham



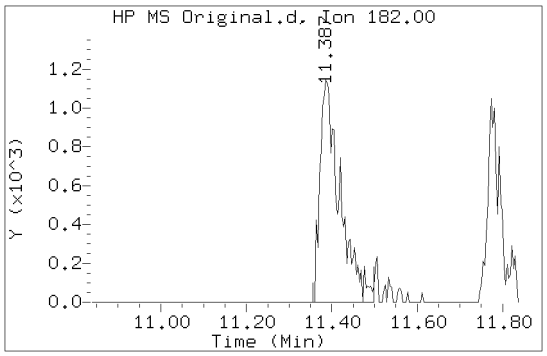
AFTER

MASS
180
AREA
3403
HEIGHT
1696
19-Aug-2022
10:59
linh
pham



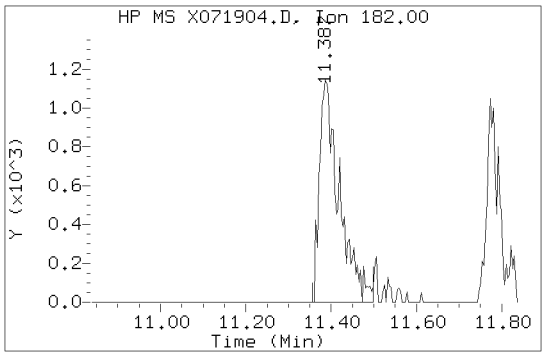
BEFORE

MASS
95
AREA
3651
HEIGHT
2025
25-Jul-2022
09:00
linh
pham



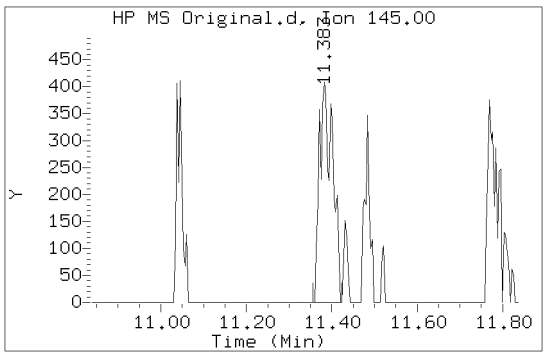
AFTER

MASS
182
AREA
3687
HEIGHT
1145
19-Aug-2022
10:59
linh
pham



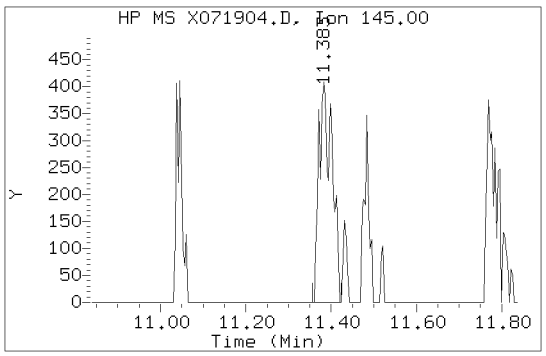
BEFORE

MASS
174
AREA
5101
HEIGHT
2883
25-Jul-2022
09:00
linh
pham



AFTER

MASS
145
AREA
871
HEIGHT
409
19-Aug-2022
10:59
linh
pham

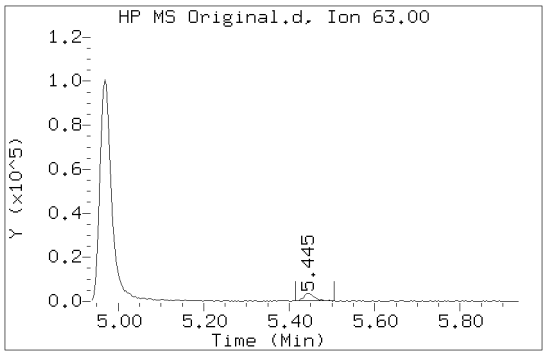


1,2-Dichloropropane (78-87-5)

Reason Code:

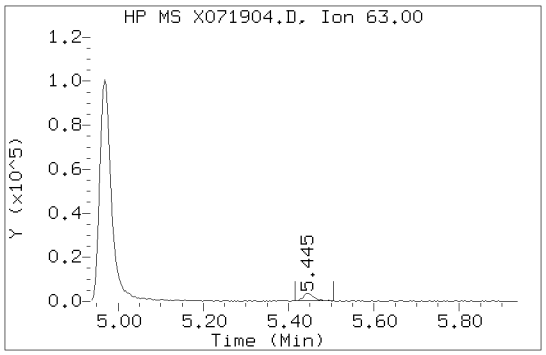
BEFORE

MASS
96
AREA
6346
HEIGHT
3278
25-Jul-2022
09:00
linh
pham



AFTER

MASS
63
AREA
6012
HEIGHT
3388
19-Aug-2022
10:59
linh
pham



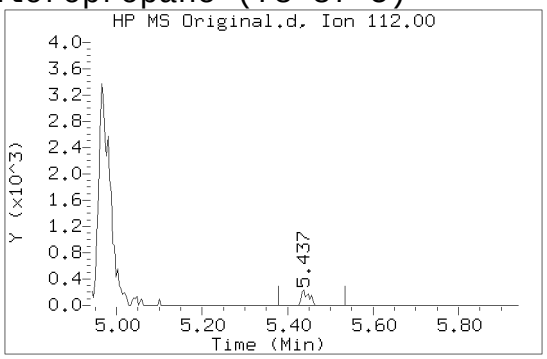
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071904.D
Inj Date : 19-JUL-2022 12:29
InstruID : voa6.i
LabSampID : VSTD001

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

Reason Code:

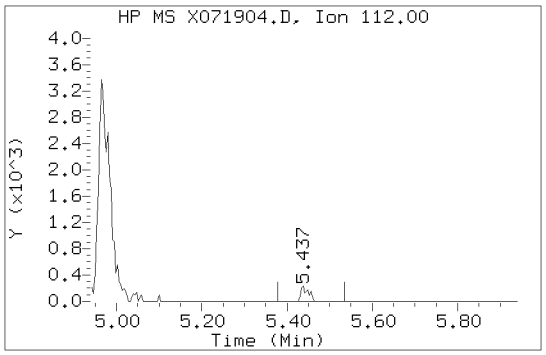
BEFORE

MASS
61
AREA
8277
HEIGHT
5006
25-Jul-2022
09:00
linh
pham



AFTER

MASS
112
AREA
289
HEIGHT
238
19-Aug-2022
10:59
linh
pham

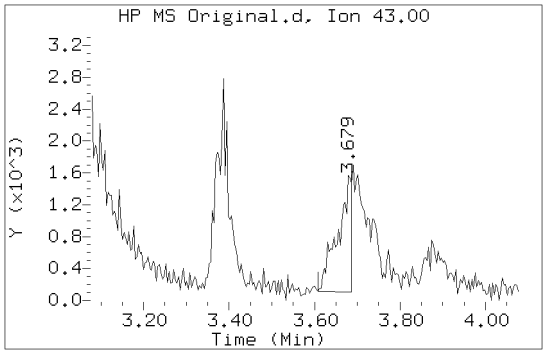


2-Butanone (78-93-3)

Reason Code:

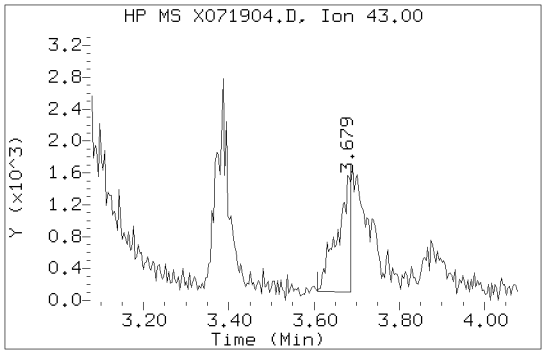
BEFORE

MASS
83
AREA
6777
HEIGHT
4379
25-Jul-2022
09:00
linh
pham



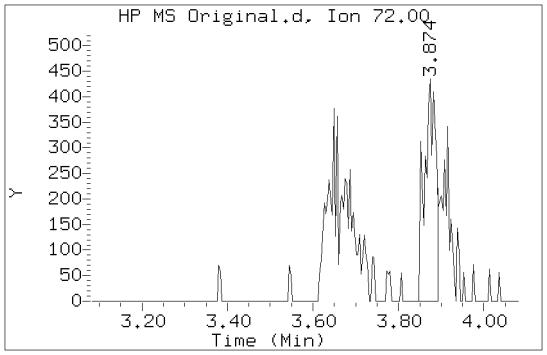
AFTER

MASS
43
AREA
3253
HEIGHT
1462
19-Aug-2022
10:59
linh
pham



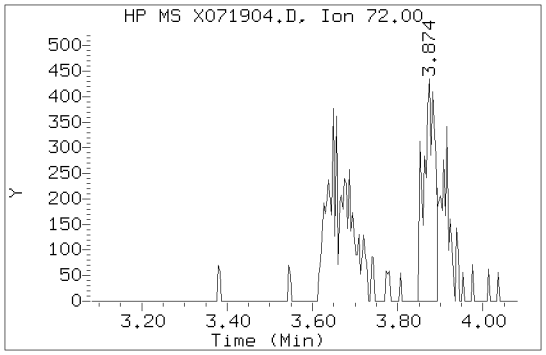
BEFORE

MASS
131
AREA
649
HEIGHT
716
25-Jul-2022
09:00
linh
pham



AFTER

MASS
72
AREA
797
HEIGHT
435
19-Aug-2022
10:59
linh
pham

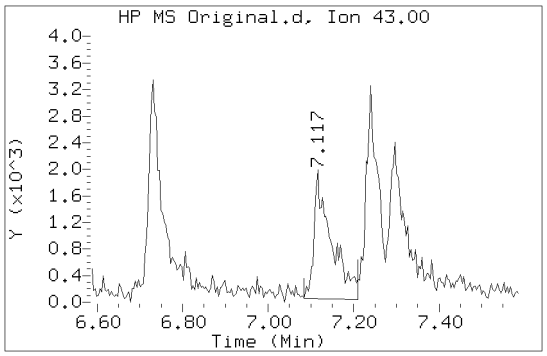


2-Hexanone (591-78-6)

Reason Code:

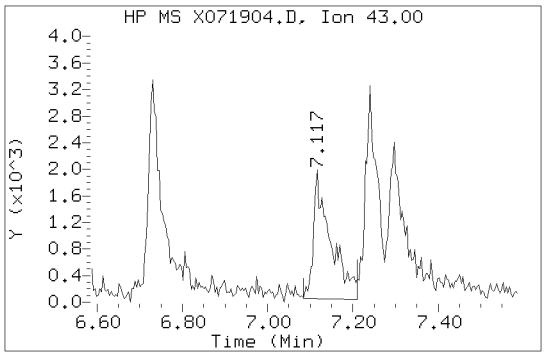
BEFORE

MASS
97
AREA
9877
HEIGHT
4344
25-Jul-2022
09:00
linh
pham



AFTER

MASS
43
AREA
5434
HEIGHT
1935
19-Aug-2022
10:59
linh
pham

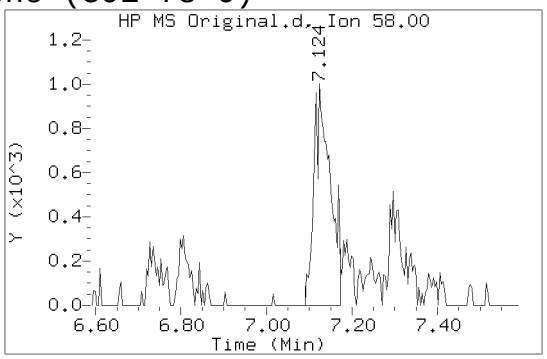


Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071904.D
Inj Date : 19-JUL-2022 12:29
InstruID : voa6.i
LabSampID : VSTD001

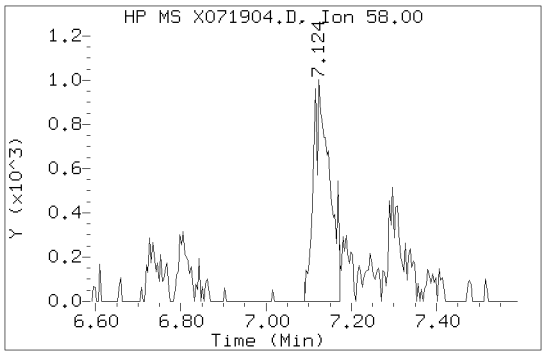
2-Hexanone (591-78-6)

Reason Code:

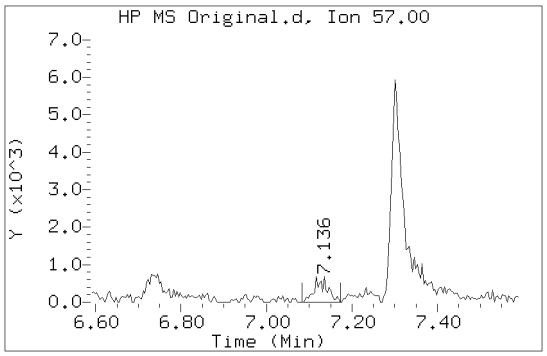
BEFORE
MASS
99
AREA
6792
HEIGHT
3028
25-Jul-2022
09:00
linh
pham



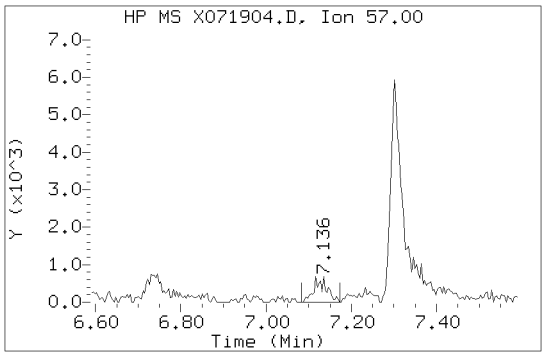
AFTER
MASS
58
AREA
2625
HEIGHT
1002
19-Aug-2022
10:59
linh
pham



BEFORE
MASS
61
AREA
4664
HEIGHT
2056
25-Jul-2022
09:00
linh
pham



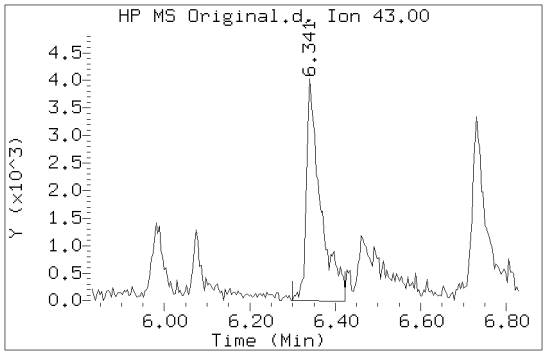
AFTER
MASS
57
AREA
1391
HEIGHT
685
19-Aug-2022
10:59
linh
pham



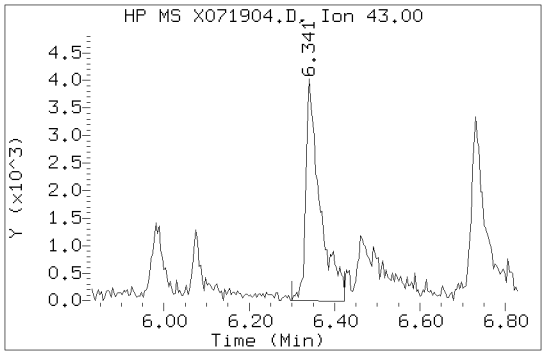
4-Methyl-2-Pentanone (108-10-1)

Reason Code:

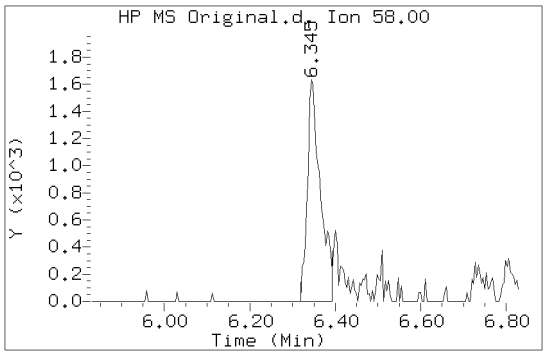
BEFORE
MASS
106
AREA
11062
HEIGHT
7011
25-Jul-2022
09:00
linh
pham



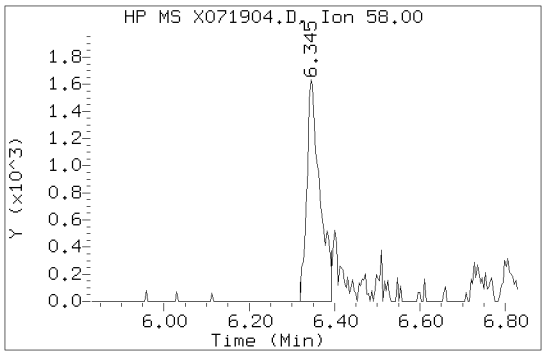
AFTER
MASS
43
AREA
9354
HEIGHT
4027
19-Aug-2022
10:59
linh
pham



BEFORE
MASS
91
AREA
23370
HEIGHT
14388
25-Jul-2022
09:00
linh
pham



AFTER
MASS
58
AREA
3489
HEIGHT
1634
19-Aug-2022
10:59
linh
pham

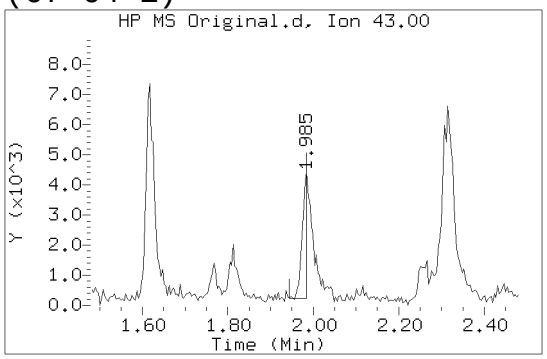


Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071904.D
Inj Date : 19-JUL-2022 12:29
InstruID : voa6.i
LabSampID : VSTD001

Acetone (67-64-1)

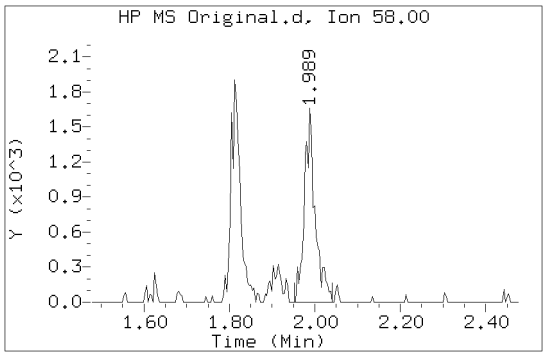
BEFORE

MASS
62
AREA
8192
HEIGHT
7615
25-Jul-2022
09:00
linh
pham



BEFORE

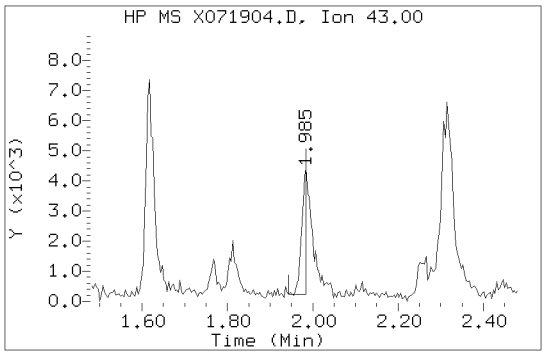
MASS
64
AREA
4092
HEIGHT
2828
25-Jul-2022
09:00
linh
pham



Reason Code:

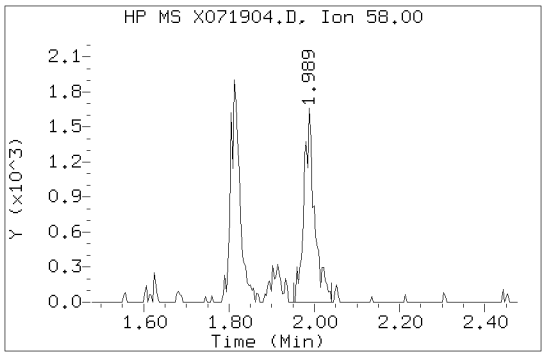
AFTER

MASS
43
AREA
3509
HEIGHT
4193
19-Aug-2022
10:59
linh
pham



AFTER

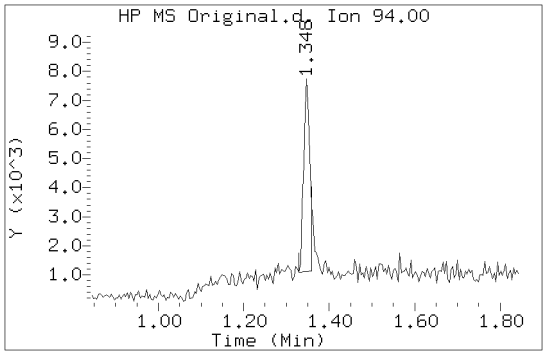
MASS
58
AREA
2928
HEIGHT
1664
19-Aug-2022
10:59
linh
pham



Bromomethane (74-83-9)

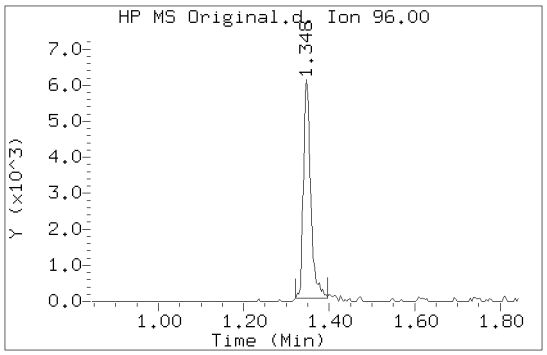
BEFORE

MASS
83
AREA
12942
HEIGHT
4946
25-Jul-2022
09:00
linh
pham



BEFORE

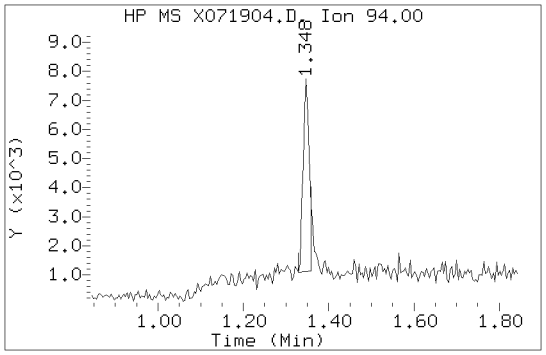
MASS
85
AREA
8582
HEIGHT
3366
25-Jul-2022
09:00
linh
pham



Reason Code:

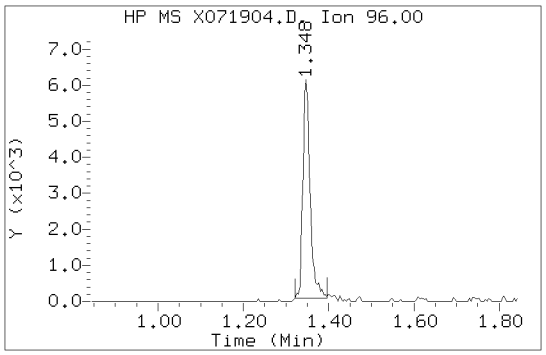
AFTER

MASS
94
AREA
6763
HEIGHT
6617
19-Aug-2022
10:59
linh
pham



AFTER

MASS
96
AREA
7441
HEIGHT
6061
19-Aug-2022
10:59
linh
pham

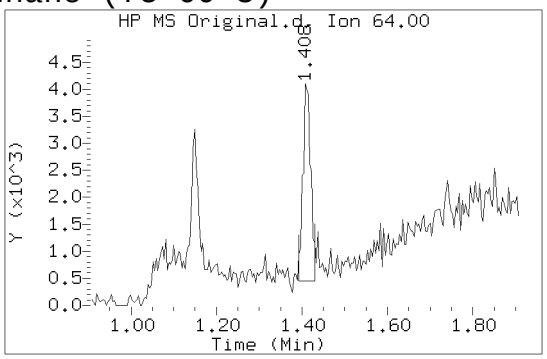


Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071904.D
Inj Date : 19-JUL-2022 12:29
InstruID : voa6.i
LabSampID : VSTD001

Chloroethane (75-00-3)

BEFORE

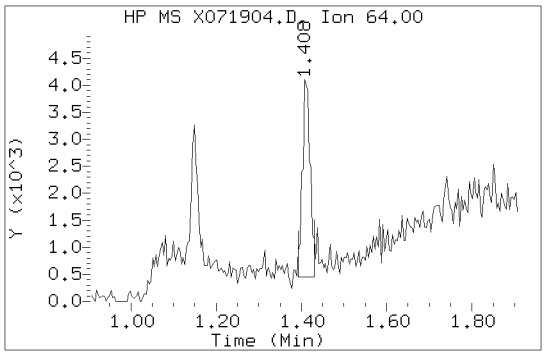
MASS
117
AREA
952128
HEIGHT
650496
25-Jul-2022
09:00
linh
pham



AFTER

MASS
64
AREA
4804
HEIGHT
3652
19-Aug-2022
10:59
linh
pham

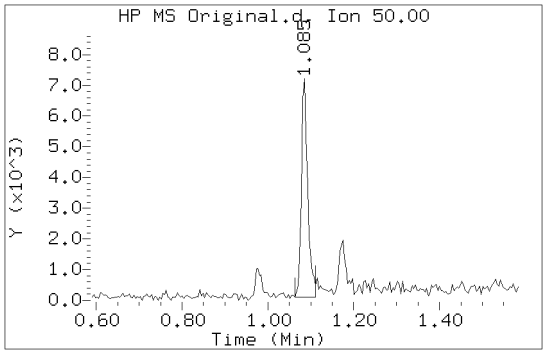
Reason Code:



Chloromethane (74-87-3)

BEFORE

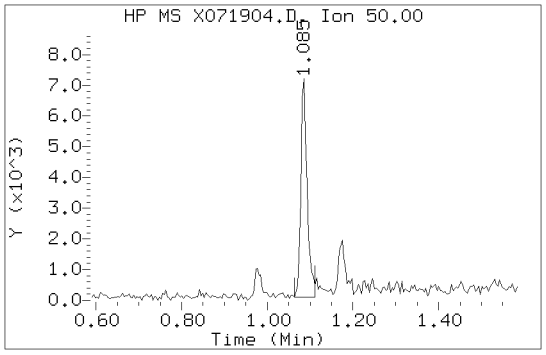
MASS
114
AREA
1046256
HEIGHT
538865
25-Jul-2022
09:00
linh
pham



AFTER

MASS
50
AREA
7297
HEIGHT
7110
19-Aug-2022
10:59
linh
pham

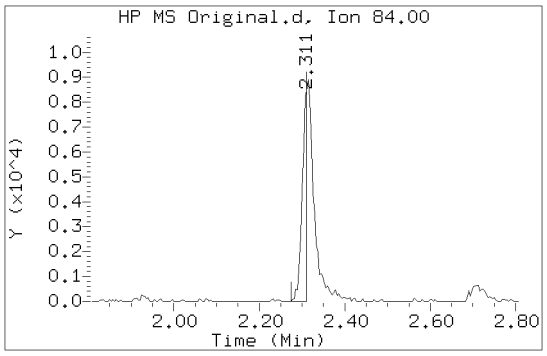
Reason Code:



Methylene Chloride (75-09-2)

BEFORE

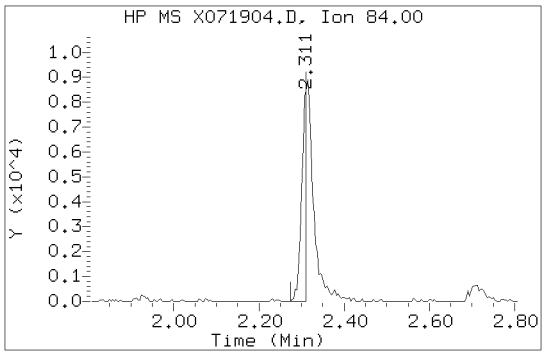
MASS
91
AREA
22202
HEIGHT
10908
25-Jul-2022
09:00
linh
pham



AFTER

MASS
84
AREA
7303
HEIGHT
8457
19-Aug-2022
10:59
linh
pham

Reason Code:



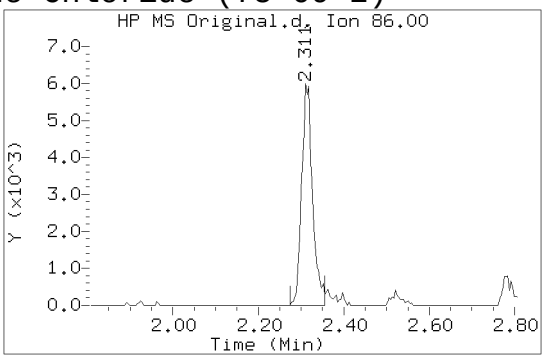
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071904.D
Inj Date : 19-JUL-2022 12:29
InstruID : voa6.i
LabSampID : VSTD001

Methylene Chloride (75-09-2)

Reason Code:

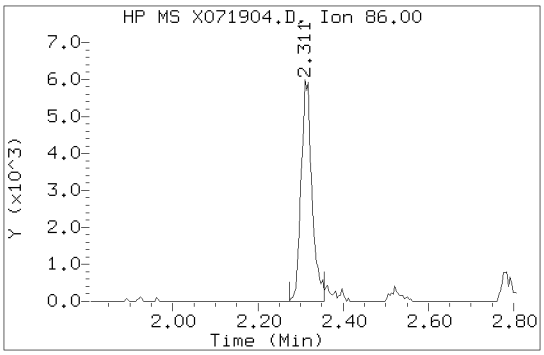
BEFORE

MASS
126
AREA
6411
HEIGHT
3382
25-Jul-2022
09:00
linh
pham



AFTER

MASS
86
AREA
10799
HEIGHT
5994
19-Aug-2022
10:59
linh
pham

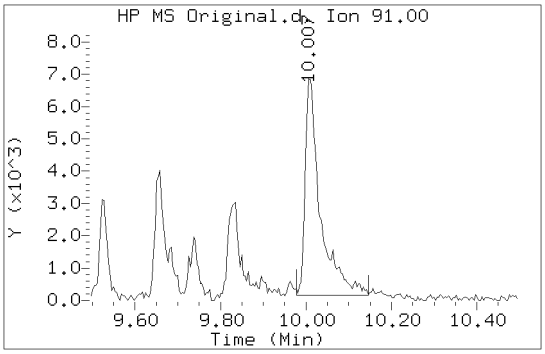


n-Butylbenzene (104-51-8)

Reason Code:

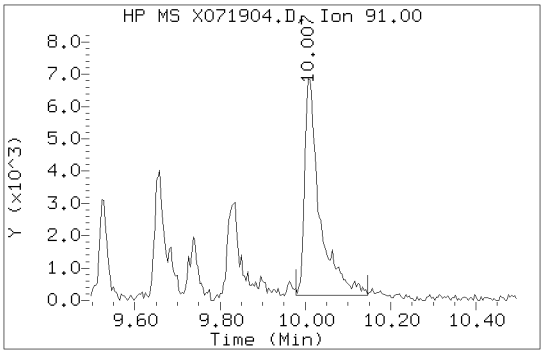
BEFORE

MASS
119
AREA
19169
HEIGHT
13613
25-Jul-2022
09:00
linh
pham



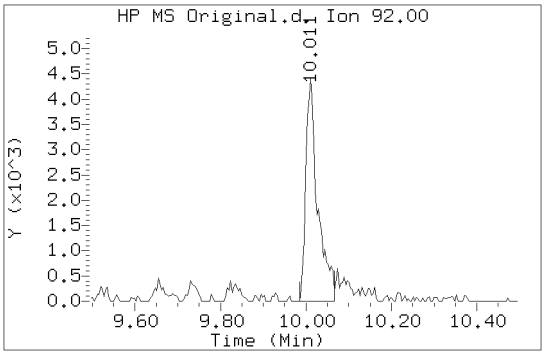
AFTER

MASS
91
AREA
16618
HEIGHT
6707
19-Aug-2022
10:59
linh
pham



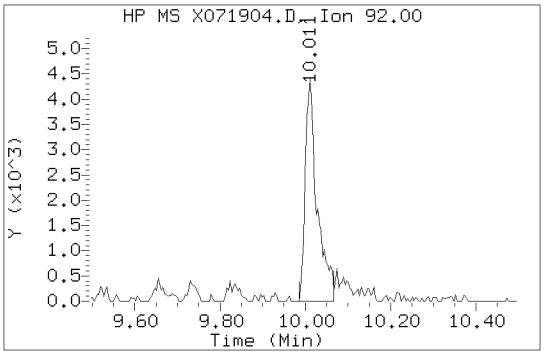
BEFORE

MASS
91
AREA
13199
HEIGHT
9373
25-Jul-2022
09:00
linh
pham



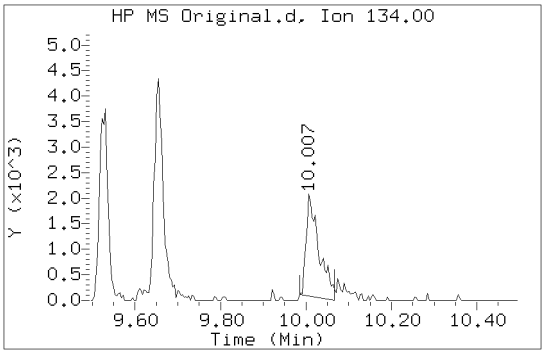
AFTER

MASS
92
AREA
8511
HEIGHT
4402
19-Aug-2022
10:59
linh
pham



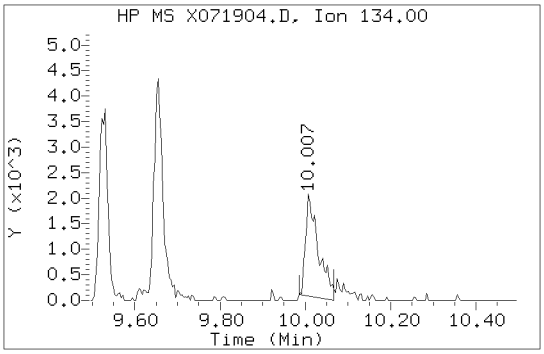
BEFORE

MASS
134
AREA
4688
HEIGHT
3532
25-Jul-2022
09:00
linh
pham



AFTER

MASS
134
AREA
4171
HEIGHT
1996
19-Aug-2022
10:59
linh
pham

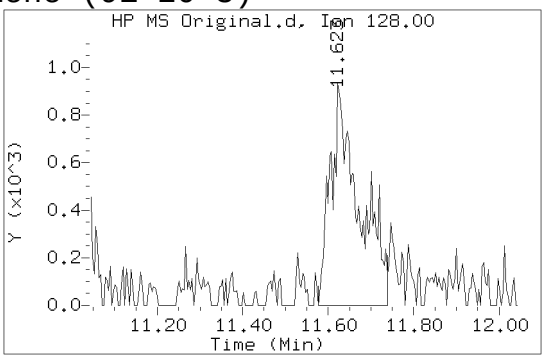


Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071904.D
Inj Date : 19-JUL-2022 12:29
InstruID : voa6.i
LabSampID : VSTD001

Naphthalene (91-20-3)

BEFORE

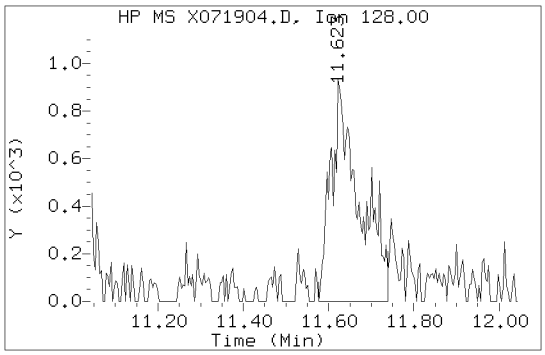
MASS
105
AREA
25764
HEIGHT
19832
25-Jul-2022
09:00
linh
pham



Reason Code:

AFTER

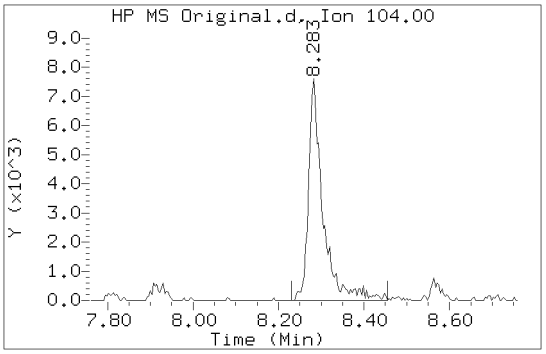
MASS
128
AREA
4273
HEIGHT
932
19-Aug-2022
10:59
linh
pham



Styrene (100-42-5)

BEFORE

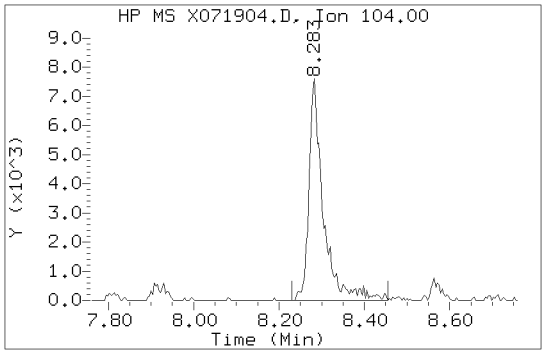
MASS
225
AREA
3610
HEIGHT
2711
25-Jul-2022
09:00
linh
pham



Reason Code:

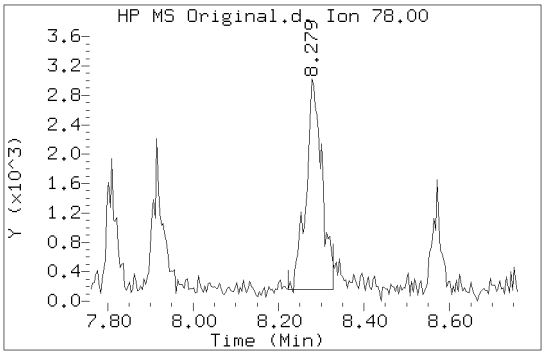
AFTER

MASS
104
AREA
17705
HEIGHT
7602
19-Aug-2022
10:59
linh
pham



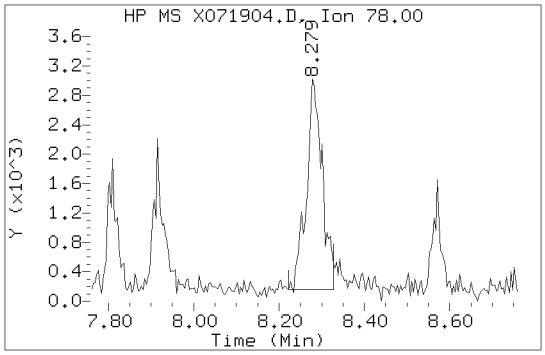
BEFORE

MASS
223
AREA
2686
HEIGHT
2055
25-Jul-2022
09:00
linh
pham



AFTER

MASS
78
AREA
7412
HEIGHT
2867
19-Aug-2022
10:59
linh
pham

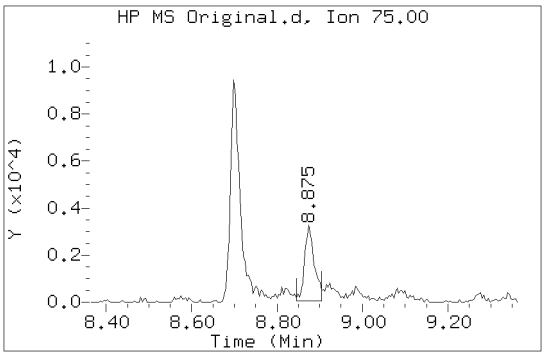


1,2,3-Trichloropropane (96-18-4)

Reason Code:

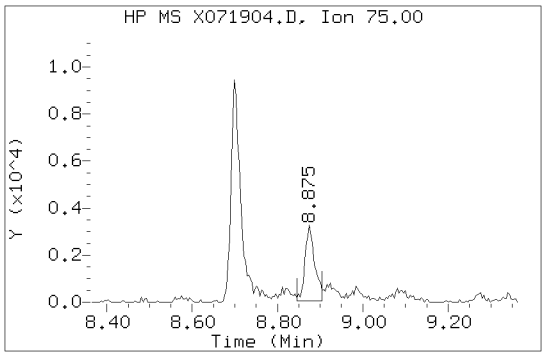
BEFORE

MASS
180
AREA
2063
HEIGHT
1112
25-Jul-2022
09:00
linh
pham



AFTER

MASS
75
AREA
5208
HEIGHT
3218
19-Aug-2022
10:59
linh
pham



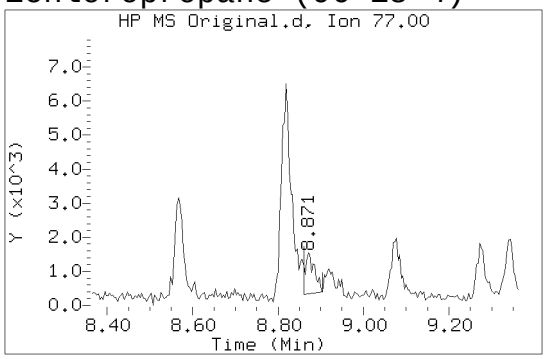
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071904.D
Inj Date : 19-JUL-2022 12:29
InstruID : voa6.i
LabSampID : VSTD001

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

Reason Code:

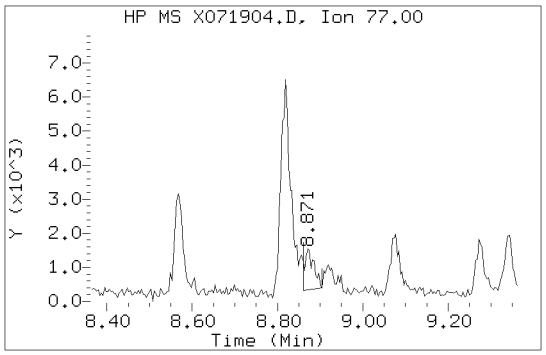
BEFORE

MASS
182
AREA
2188
HEIGHT
1051
25-Jul-2022
09:00
linh
pham



AFTER

MASS
77
AREA
1868
HEIGHT
1205
19-Aug-2022
10:59
linh
pham

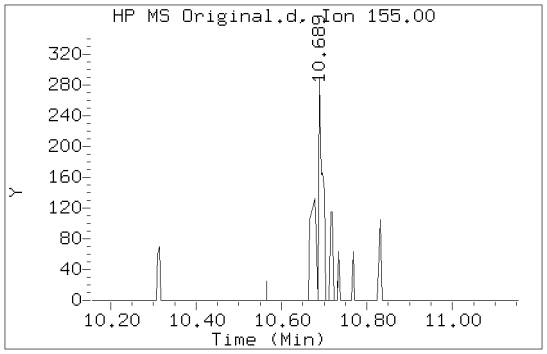


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

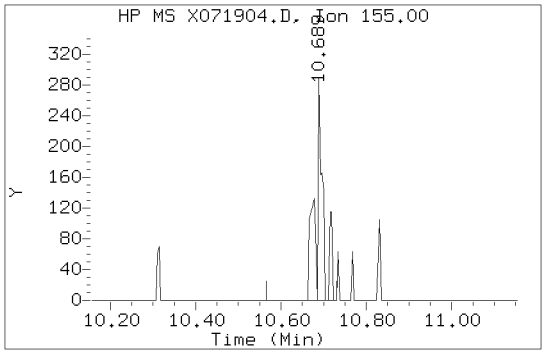
BEFORE

MASS
73
AREA
18285
HEIGHT
11966
25-Jul-2022
09:00
linh
pham



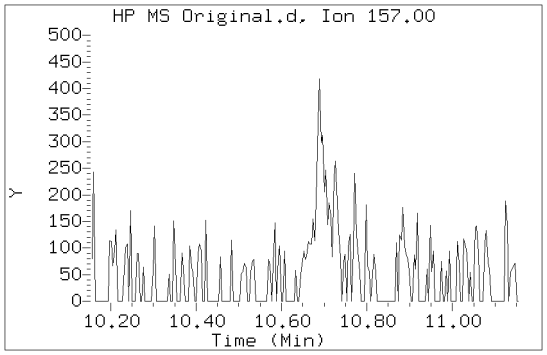
AFTER

MASS
155
AREA
348
HEIGHT
288
19-Aug-2022
10:59
linh
pham



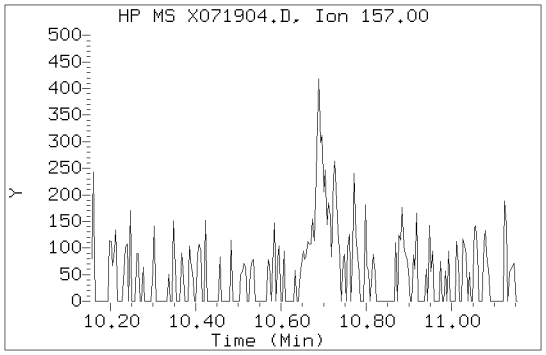
BEFORE

MASS
57
AREA
17060
HEIGHT
6448
25-Jul-2022
09:00
linh
pham



AFTER

MASS
157
AREA
0
HEIGHT
0
19-Aug-2022
10:59
linh
pham

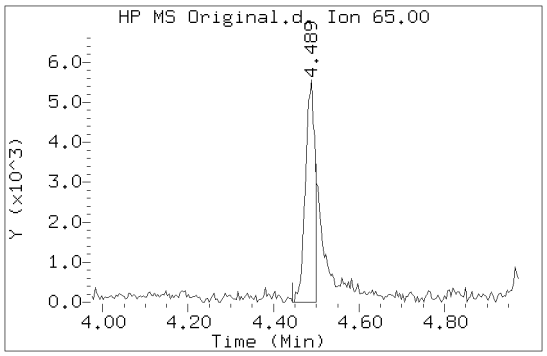


1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

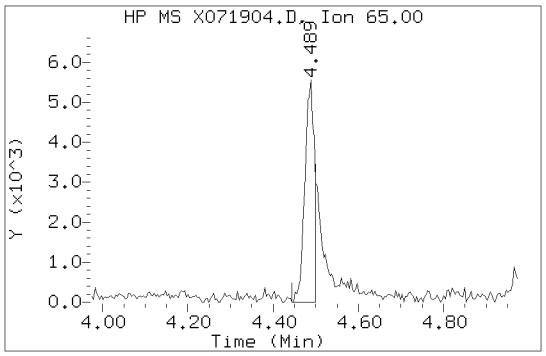
BEFORE

MASS
113
AREA
9308
HEIGHT
5059
25-Jul-2022
09:00
linh
pham



AFTER

MASS
65
AREA
8675
HEIGHT
5560
19-Aug-2022
10:59
linh
pham



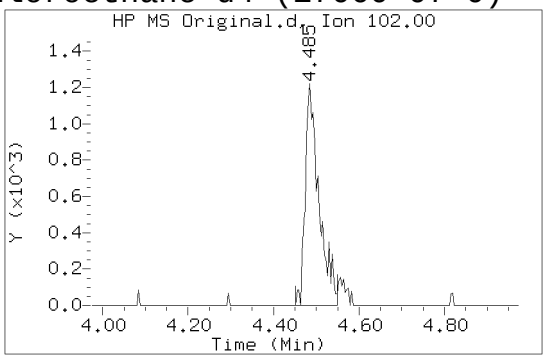
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071904.D
Inj Date : 19-JUL-2022 12:29
InstruID : voa6.i
LabSampID : VSTD001

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

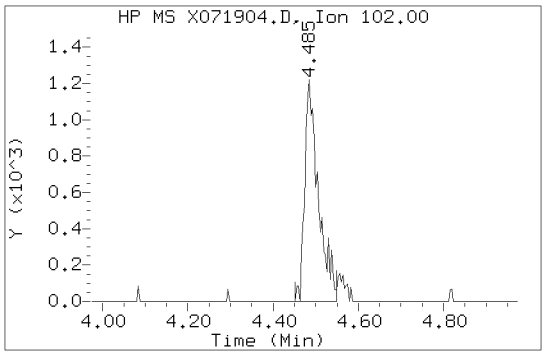
BEFORE

MASS
111
AREA
12165
HEIGHT
5300
25-Jul-2022
09:00
linh
pham



AFTER

MASS
102
AREA
2723
HEIGHT
1221
19-Aug-2022
10:59
linh
pham

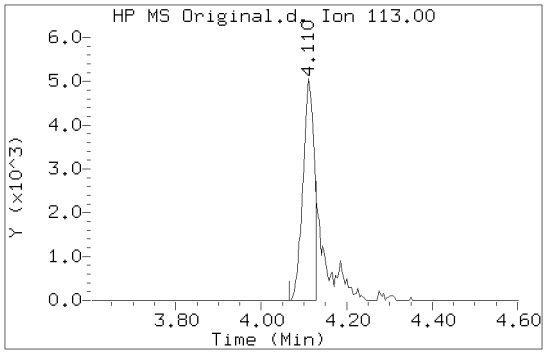


Dibromofluoromethane (1868-53-7)

Reason Code:

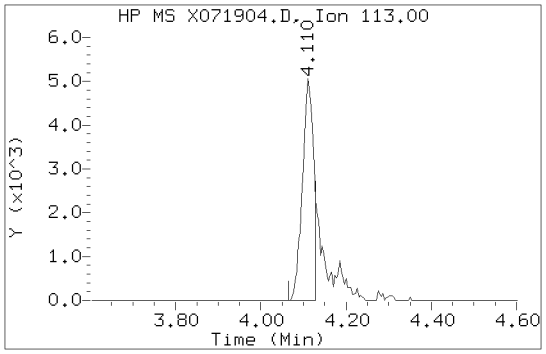
BEFORE

MASS
98
AREA
23913
HEIGHT
24224
25-Jul-2022
09:00
linh
pham



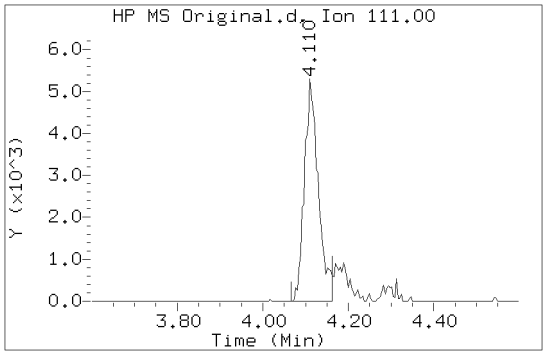
AFTER

MASS
113
AREA
9308
HEIGHT
5059
19-Aug-2022
10:59
linh
pham



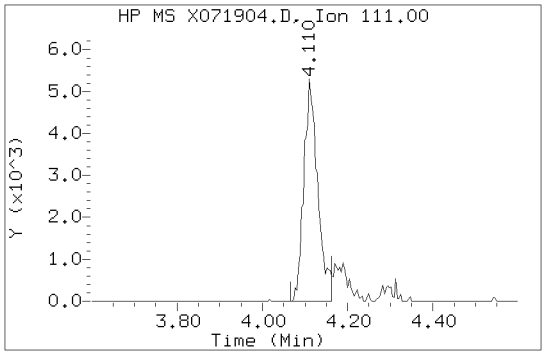
BEFORE

MASS
99
AREA
4207
HEIGHT
2158
25-Jul-2022
09:00
linh
pham



AFTER

MASS
111
AREA
12165
HEIGHT
5300
19-Aug-2022
10:59
linh
pham

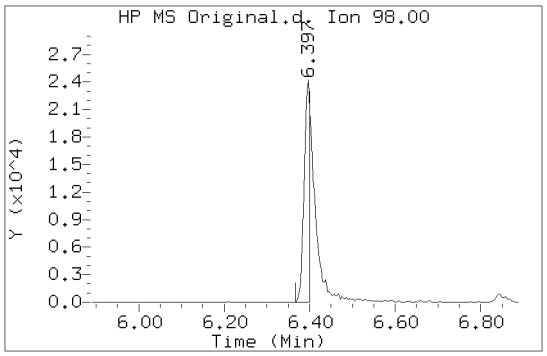


Toluene-d8 (2037-26-5)

Reason Code:

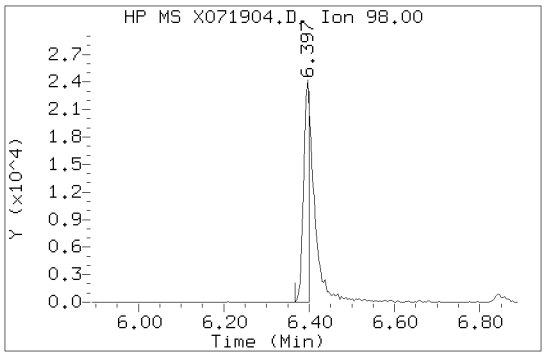
BEFORE

MASS
65
AREA
8675
HEIGHT
5560
25-Jul-2022
09:00
linh
pham



AFTER

MASS
98
AREA
23913
HEIGHT
24224
19-Aug-2022
10:59
linh
pham



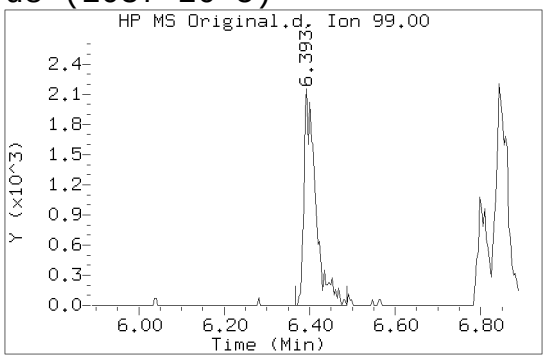
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071904.D
Inj Date : 19-JUL-2022 12:29
InstruID : voa6.i
LabSampID : VSTD001

Toluene-d8 (2037-26-5)

Reason Code:

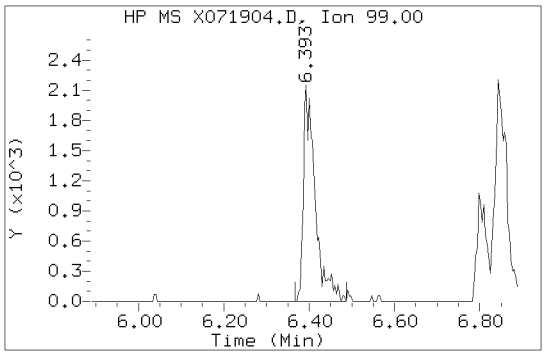
BEFORE

MASS
102
AREA
2723
HEIGHT
1221
25-Jul-2022
09:00
linh
pham



AFTER

MASS
99
AREA
4207
HEIGHT
2158
19-Aug-2022
10:59
linh
pham

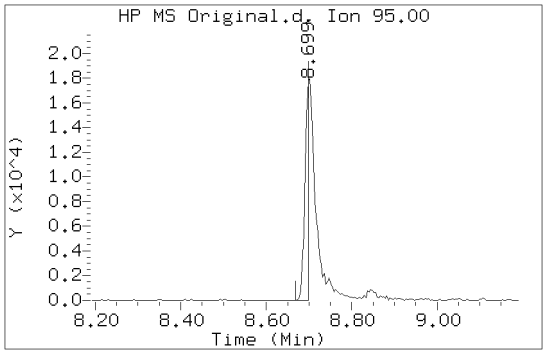


4-Bromofluorobenzene (460-00-4)

Reason Code:

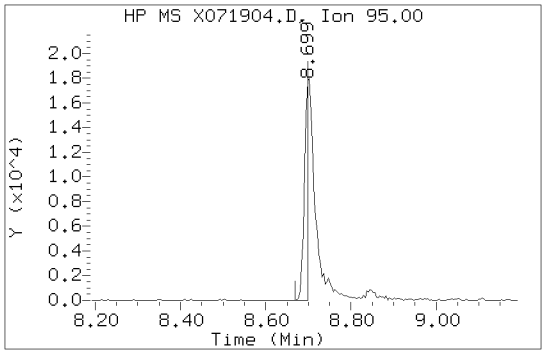
BEFORE

MASS
95
AREA
11894
HEIGHT
17792
25-Jul-2022
09:00
linh
pham



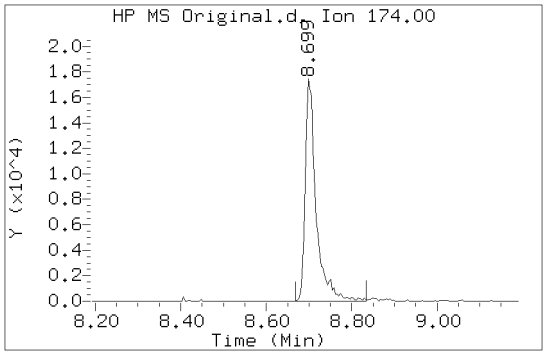
AFTER

MASS
95
AREA
11894
HEIGHT
17792
19-Aug-2022
10:59
linh
pham



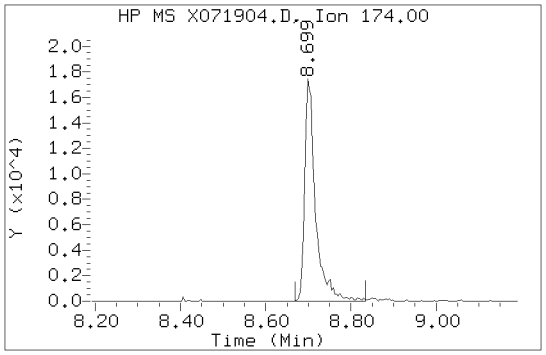
BEFORE

MASS
174
AREA
31362
HEIGHT
17448
25-Jul-2022
09:00
linh
pham



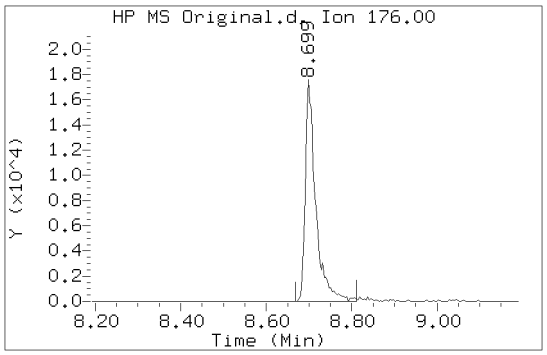
AFTER

MASS
174
AREA
31362
HEIGHT
17448
19-Aug-2022
10:59
linh
pham



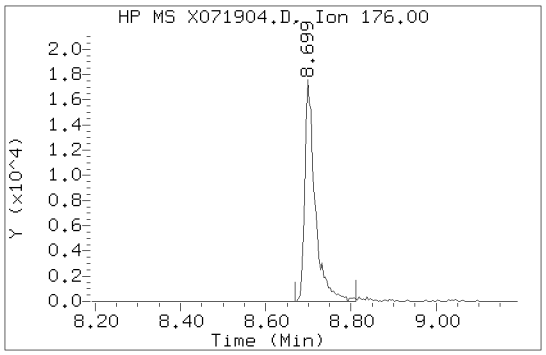
BEFORE

MASS
176
AREA
30039
HEIGHT
17592
25-Jul-2022
09:00
linh
pham



AFTER

MASS
176
AREA
30039
HEIGHT
17592
19-Aug-2022
10:59
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D Page 1
Report Date: 19-Aug-2022 11:00

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Lab Smp Id: VSTD002 Client Smp ID: VSTD002
Inj Date : 19-JUL-2022 12:50
Operator : PC Inst ID: voa6.i
Smp Info : VSTD002;VSTD002;1;4;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\8260W.m
Meth Date : 19-Aug-2022 11:00 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 12:29 Cal File: X071904.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.185	(1.000)	749096	50.0000	
*	36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	1092048	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	978384	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	454442	50.0000	
$	30 Dibromofluoromethane	113	4.110	4.110	(0.982)	18364	2.00000	1.90(a)
$	35 1,2-Dichloroethane-d4	65	4.481	4.481	(1.071)	15130	2.00000	1.63(aM)
$	48 Toluene-d8	98	6.397	6.397	(0.834)	53011	2.00000	2.17(aM)
$	69 4-Bromofluorobenzene	95	8.698	8.698	(1.134)	19061	2.00000	1.39(aM)
	60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	11843	2.00000	1.72(aM)
	31 1,1,1-Trichloroethane	97	4.091	4.091	(0.978)	18665	2.00000	1.75(a)
	68 1,1,2,2-Tetrachloroethane	83	8.845	8.845	(0.915)	11877	2.00000	1.86(a)
	53 1,1,2-Trichloroethane	83	6.846	6.846	(0.893)	9847	2.00000	1.95(a)
	22 1,1-Dichloroethane	63	2.937	2.937	(0.702)	21717	2.00000	1.88(a)
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	11822	2.00000	1.89(a)
	32 1,1-Dichloropropene	75	4.290	4.290	(0.863)	15792	2.00000	1.79(a)
	93 1,2,3-Trichlorobenzene	180	11.765	11.765	(1.217)	4350	2.00000	1.84(aM)
	71 1,2,3-Trichloropropane	75	8.874	8.874	(0.918)	9920	2.00000	2.01(aM)
	90 1,2,4-Trichlorobenzene	180	11.367	11.367	(1.176)	7590	2.00000	1.83(aM)
	79 1,2,4-Trimethylbenzene	105	9.384	9.384	(0.971)	39752	2.00000	1.82(a)
	89 1,2-Dibromo-3-Chloropropane	155	10.719	10.719	(1.109)	994	2.00000	2.52(aM)

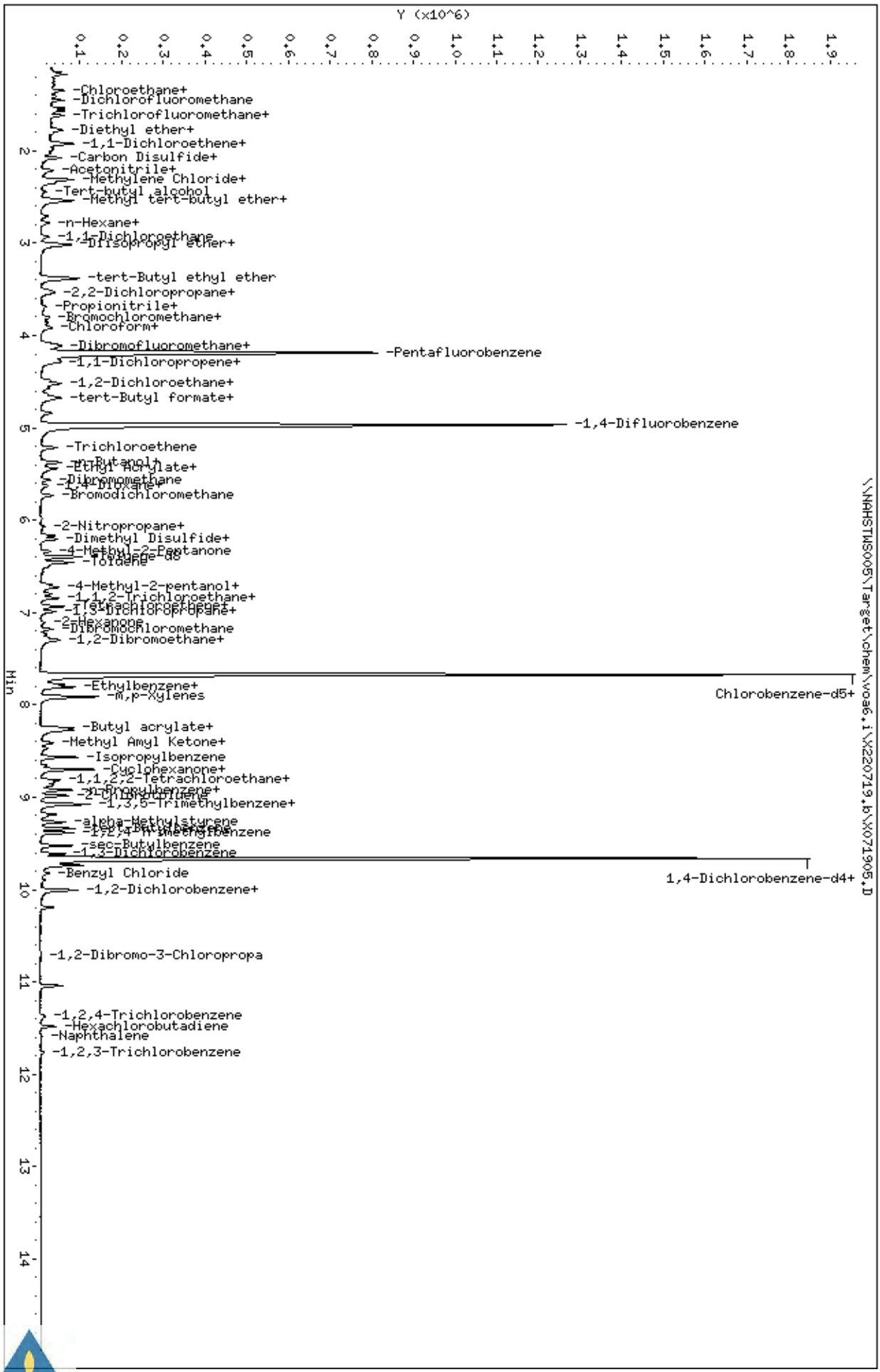
57	1,2-Dibromoethane	107	7.266	7.266 (0.947)	11493	2.00000	1.80(a)
88	1,2-Dichlorobenzene	146	10.003	10.003 (1.035)	21378	2.00000	1.88(a)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D Page 2
Report Date: 19-Aug-2022 11:00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.571	4.571	(0.920)	18694	2.00000	1.95(a)
42	1,2-Dichloropropane	63	5.441	5.441	(1.095)	12652	2.00000	1.88(aM)
75	1,3,5-Trimethylbenzene	105	9.073	9.073	(0.939)	40980	2.00000	1.85(a)
83	1,3-Dichlorobenzene	146	9.613	9.613	(0.995)	23262	2.00000	1.84(a)
54	1,3-Dichloropropane	76	6.989	6.989	(0.911)	18638	2.00000	1.82(a)
84	1,4-Dichlorobenzene	146	9.688	9.688	(1.002)	27562	2.00000	2.05(a)
26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	20343	2.00000	1.74(a)
24	2-Butanone	43	3.675	3.675	(0.878)	7321	4.00000	3.89(aM)
76	2-Chlorotoluene	91	8.979	8.979	(0.929)	37863	2.00000	1.94(aM)
52	2-Hexanone	43	7.105	7.105	(0.926)	11235	4.00000	3.65(aM)
77	4-Chlorotoluene	91	9.081	9.081	(0.940)	40205	2.00000	1.84(a)
82	p-Isopropyltoluene	119	9.654	9.654	(0.999)	37293	2.00000	1.68(a)
45	4-Methyl-2-Pentanone	43	6.340	6.340	(0.827)	17683	4.00000	3.70(a)
10	Acetone	43	1.981	1.981	(0.473)	7337	4.00000	(aM)
37	Benzene	78	4.519	4.519	(0.909)	48445	2.00000	1.87(a)
74	Bromobenzene	156	8.815	8.815	(0.912)	14765	2.00000	1.90(a)
29	Bromochloromethane	128	3.799	3.799	(0.908)	7950	2.00000	1.88(a)
39	Bromodichloromethane	83	5.733	5.733	(1.154)	16875	2.00000	1.82(a)
66	Bromoform	173	8.417	8.417	(1.097)	7169	2.00000	2.70(TaM)
6	Bromomethane	94	1.347	1.347	(0.322)	13133	2.00000	1.26(aM)
19	Carbon Disulfide	76	2.078	2.078	(0.497)	59291	4.00000	3.58(a)
34	Carbon Tetrachloride	117	4.271	4.271	(0.860)	17025	2.00000	1.80(aMH)
59	Chlorobenzene	112	7.697	7.697	(1.003)	35149	2.00000	1.89(a)
7	Chloroethane	64	1.411	1.411	(0.337)	9295	2.00000	1.93(a)
28	Chloroform	83	3.919	3.919	(0.936)	22862	2.00000	1.80(a)
3	Chloromethane	50	1.085	1.085	(0.259)	13594	2.00000	2.01(a)
27	cis-1,2-Dichloroethene	96	3.544	3.544	(0.847)	12905	2.00000	1.73(a)
46	cis-1,3-Dichloropropene	75	6.164	6.164	(1.241)	20286	2.00000	1.79(aM)
55	Dibromochloromethane	129	7.180	7.180	(0.936)	13652	2.00000	1.87(a)
44	Dibromomethane	93	5.564	5.564	(1.120)	8339	2.00000	1.84(a)
2	Dichlorodifluoromethane	85	0.976	0.976	(0.233)	12732	2.00000	1.61(a)
61	Ethylbenzene	106	7.806	7.806	(1.018)	16956	2.00000	1.80(a)
91	Hexachlorobutadiene	225	11.484	11.484	(1.188)	6994	2.00000	1.82(aM)
67	Isopropylbenzene	105	8.567	8.567	(1.117)	50981	2.00000	1.80(a)
62	m,p-Xylenes	106	7.911	7.911	(1.031)	44013	4.00000	3.77(aM)
17	Methylene Chloride	84	2.311	2.311	(0.552)	16740	2.00000	1.59(aM)
87	n-Butylbenzene	91	10.007	10.007	(1.035)	31547	2.00000	1.71(aM)
73	n-Propylbenzene	91	8.919	8.919	(0.923)	53786	2.00000	1.79(a)
92	Naphthalene	128	11.592	11.592	(1.199)	8600	2.00000	1.85(aM)
63	o-Xylene	106	8.248	8.248	(1.075)	20993	2.00000	1.85(aM)
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	46135	2.00000	1.80(a)
64	Styrene	104	8.271	8.271	(1.078)	32495	2.00000	1.74(aM)
78	tert-Butylbenzene	119	9.339	9.339	(0.966)	33676	2.00000	1.80(a)
56	Tetrachloroethene	164	6.933	6.933	(0.904)	11817	2.00000	1.86(a)
50	Toluene	91	6.457	6.457	(0.842)	51658	2.00000	1.87(a)
20	trans-1,2-Dichloroethene	96	2.543	2.543	(0.608)	11820	2.00000	1.79(aM)
51	trans-1,3-Dichloropropene	75	6.697	6.697	(1.348)	17450	2.00000	1.85(aM)
38	Trichloroethene	130	5.216	5.216	(1.050)	14143	2.00000	1.84(a)
8	Trichlorofluoromethane	101	1.565	1.565	(0.374)	22137	2.00000	1.87(a)
5	Vinyl Chloride	62	1.149	1.149	(0.275)	14813	2.00000	1.88(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.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Date : 19-JUL-2022 12:50
Client ID: VSTD002
Sample Info: VSTD002;VSTD002;1;4;
Purge Volume: 5.0
Column phase: DB624

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

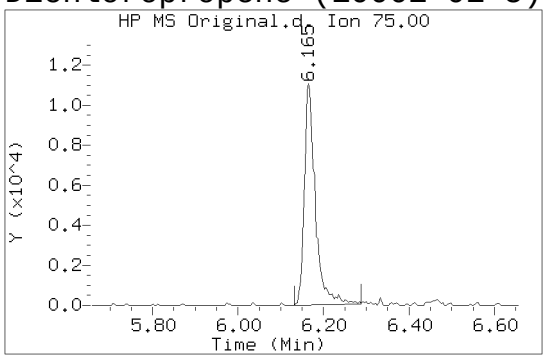
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

cis-1,3-Dichloropropene (10061-01-5)

Reason Code:

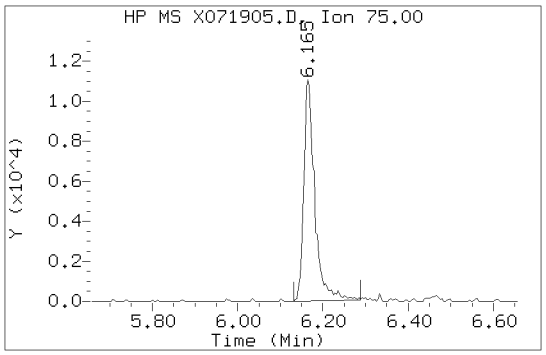
BEFORE

MASS
128
AREA
7950
HEIGHT
3264
25-Jul-2022
09:00
linh
pham



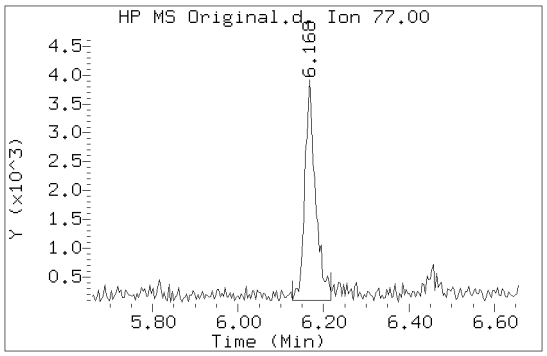
AFTER

MASS
75
AREA
20286
HEIGHT
11063
19-Aug-2022
10:59
linh
pham



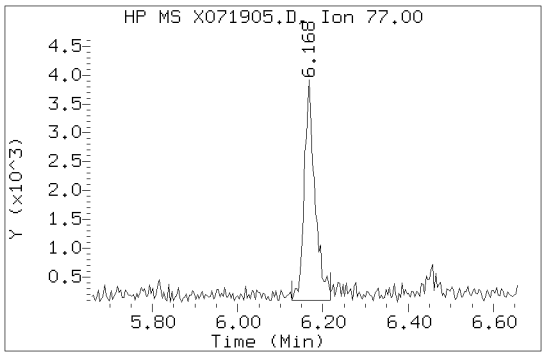
BEFORE

MASS
49
AREA
10115
HEIGHT
4742
25-Jul-2022
09:00
linh
pham



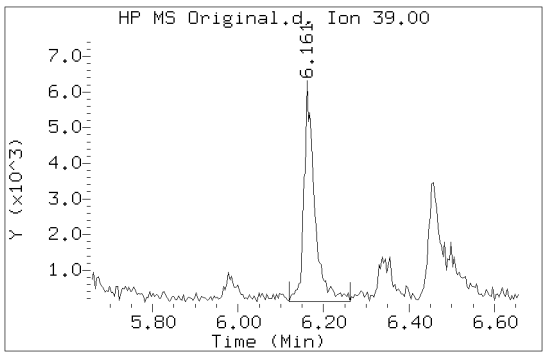
AFTER

MASS
77
AREA
6769
HEIGHT
3822
19-Aug-2022
10:59
linh
pham



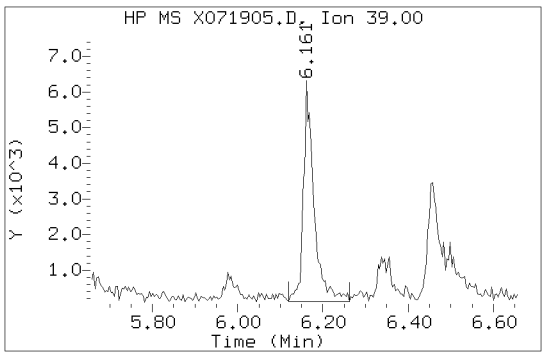
BEFORE

MASS
130
AREA
9849
HEIGHT
3928
25-Jul-2022
09:00
linh
pham



AFTER

MASS
39
AREA
10962
HEIGHT
6193
19-Aug-2022
10:59
linh
pham

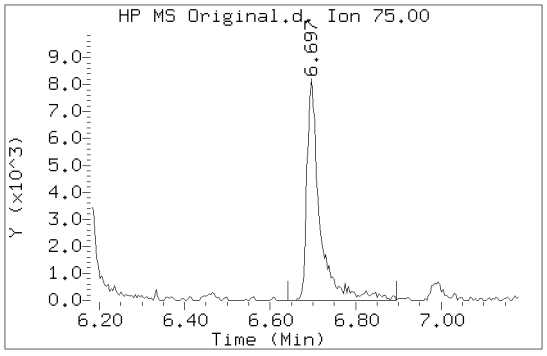


trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

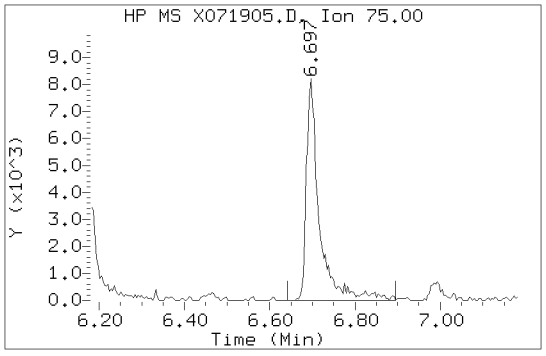
BEFORE

MASS
43
AREA
7321
HEIGHT
2938
25-Jul-2022
09:00
linh
pham



AFTER

MASS
75
AREA
17450
HEIGHT
8215
19-Aug-2022
10:59
linh
pham



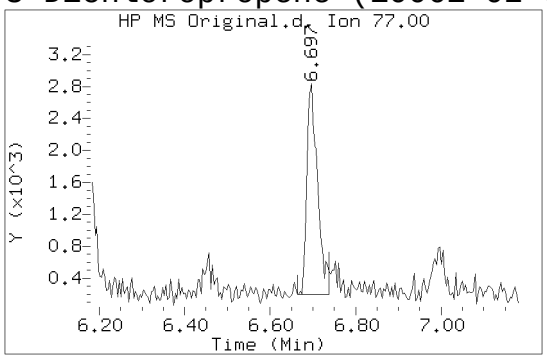
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

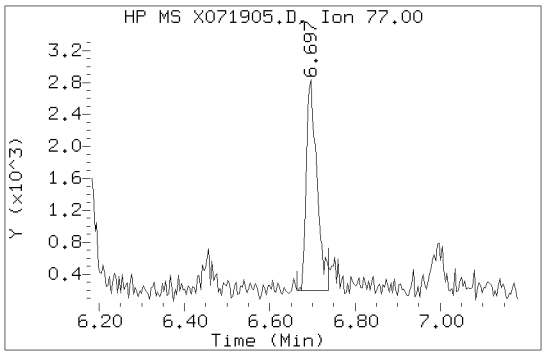
BEFORE

MASS
72
AREA
1160
HEIGHT
768
25-Jul-2022
09:00
linh
pham



AFTER

MASS
77
AREA
4630
HEIGHT
2637
19-Aug-2022
10:59
linh
pham

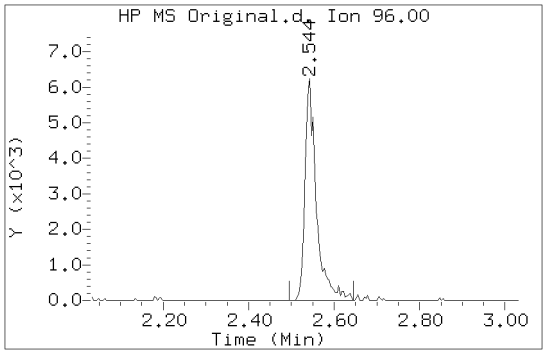


trans-1,2-Dichloroethene (156-60-5)

Reason Code:

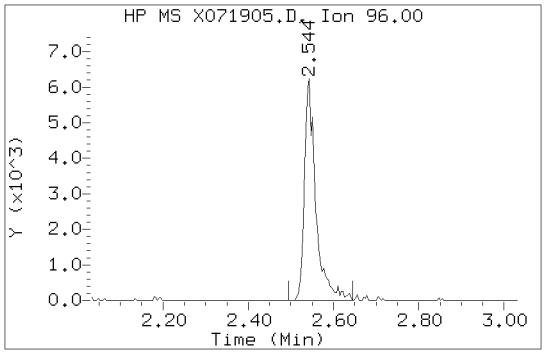
BEFORE

MASS
129
AREA
13652
HEIGHT
8676
25-Jul-2022
09:00
linh
pham



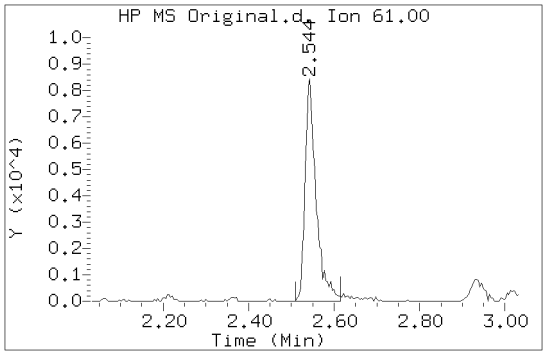
AFTER

MASS
96
AREA
11820
HEIGHT
6241
19-Aug-2022
10:59
linh
pham



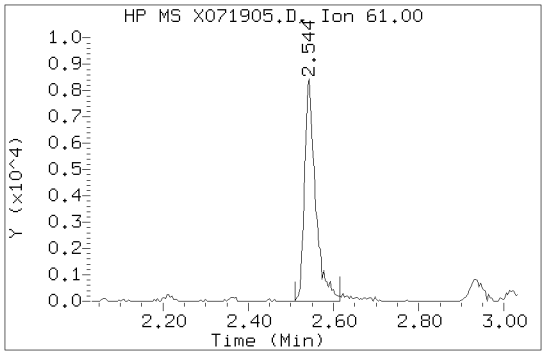
BEFORE

MASS
127
AREA
9867
HEIGHT
6422
25-Jul-2022
09:00
linh
pham



AFTER

MASS
61
AREA
15499
HEIGHT
8443
19-Aug-2022
10:59
linh
pham

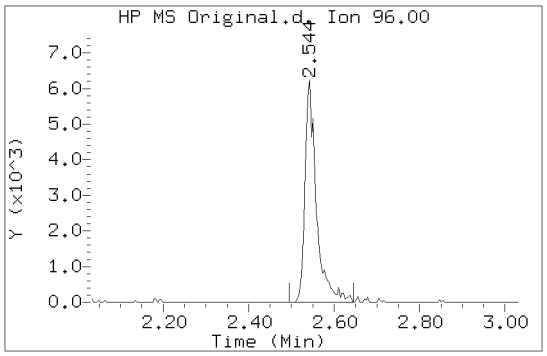


1,1,1,2-Tetrachloroethane (630-20-6)

Reason Code:

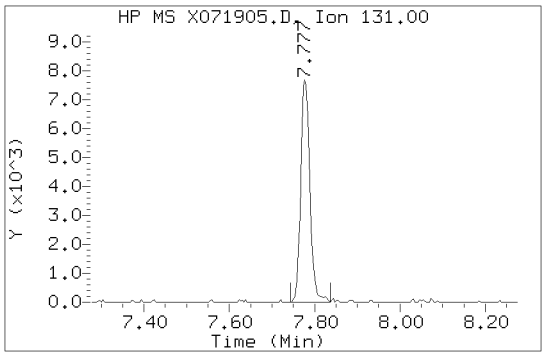
BEFORE

MASS
43
AREA
17683
HEIGHT
8385
25-Jul-2022
09:00
linh
pham



AFTER

MASS
131
AREA
11843
HEIGHT
7685
19-Aug-2022
10:59
linh
pham

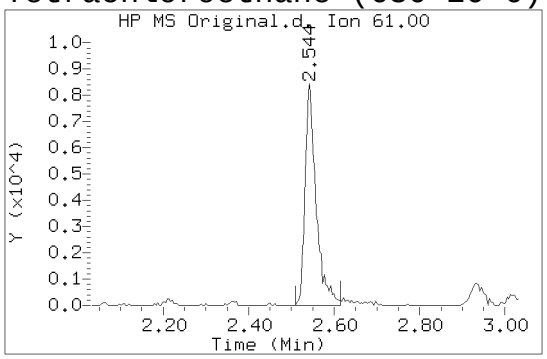


Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

1,1,1,2-Tetrachloroethane (630-20-6)

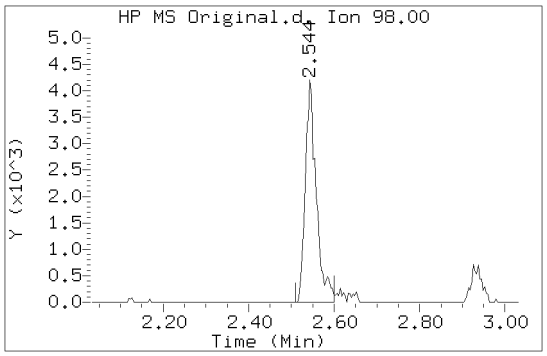
BEFORE

MASS
58
AREA
6197
HEIGHT
3721
25-Jul-2022
09:00
linh
pham



BEFORE

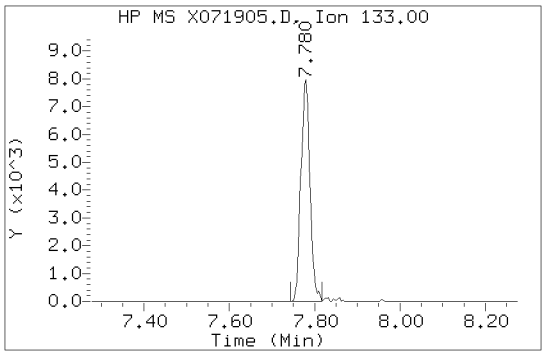
MASS
100
AREA
2577
HEIGHT
1669
25-Jul-2022
09:00
linh
pham



Reason Code:

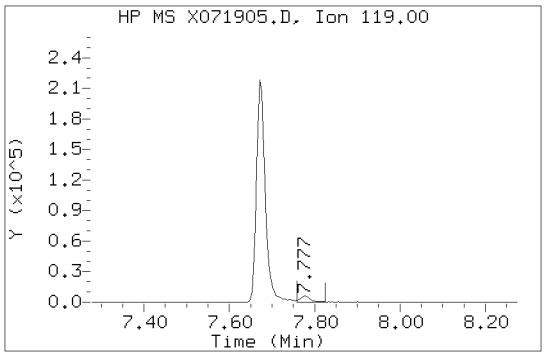
AFTER

MASS
133
AREA
12135
HEIGHT
7970
19-Aug-2022
10:59
linh
pham



AFTER

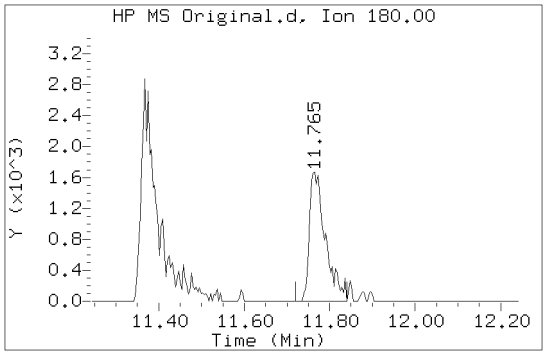
MASS
119
AREA
9417
HEIGHT
5791
19-Aug-2022
10:59
linh
pham



1,2,3-Trichlorobenzene (87-61-6)

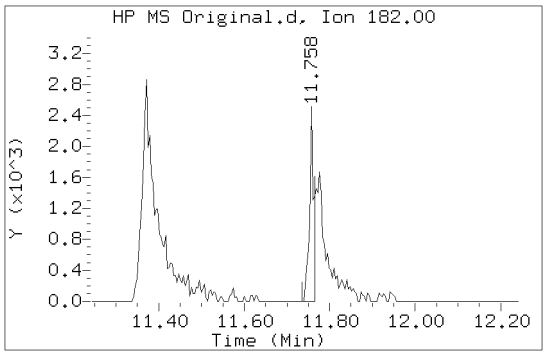
BEFORE

MASS
77
AREA
20343
HEIGHT
7624
25-Jul-2022
09:00
linh
pham



BEFORE

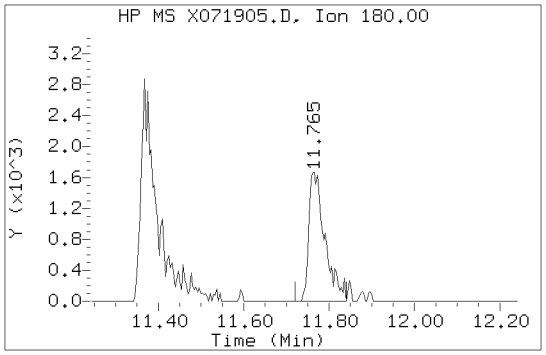
MASS
97
AREA
4262
HEIGHT
1855
25-Jul-2022
09:00
linh
pham



Reason Code:

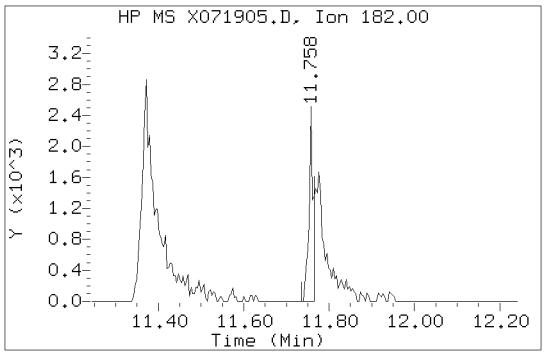
AFTER

MASS
180
AREA
4350
HEIGHT
1674
19-Aug-2022
10:59
linh
pham



AFTER

MASS
182
AREA
1686
HEIGHT
2516
19-Aug-2022
10:59
linh
pham



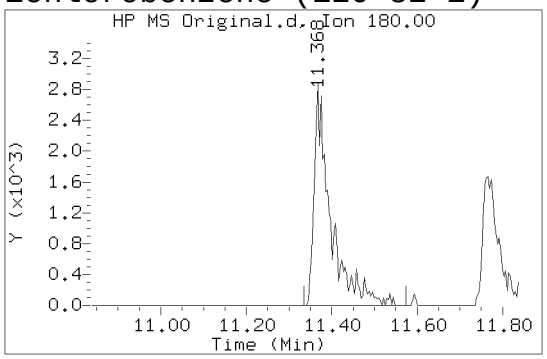
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

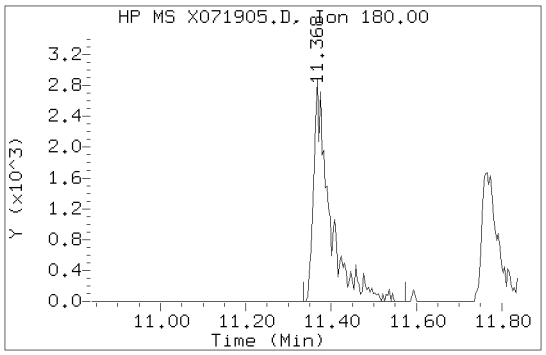
BEFORE

MASS
93
AREA
8339
HEIGHT
4545
25-Jul-2022
09:00
linh
pham



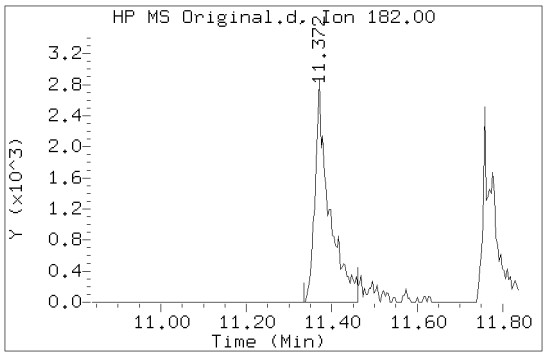
AFTER

MASS
180
AREA
7590
HEIGHT
2875
19-Aug-2022
10:59
linh
pham



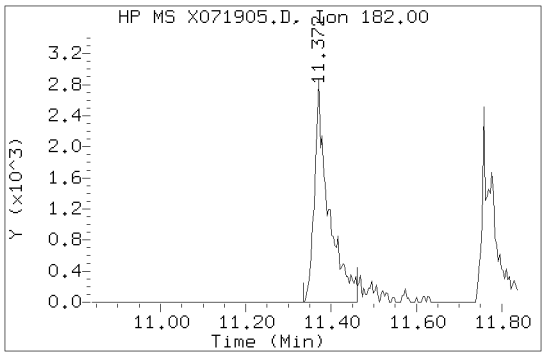
BEFORE

MASS
95
AREA
6507
HEIGHT
3494
25-Jul-2022
09:00
linh
pham



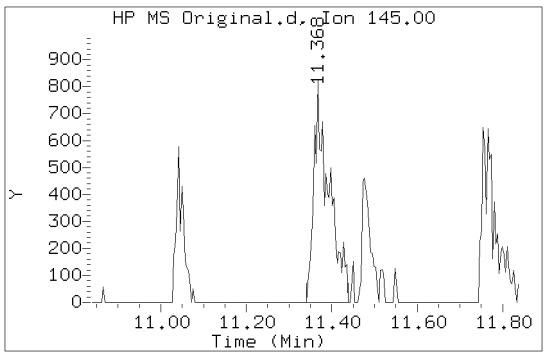
AFTER

MASS
182
AREA
6596
HEIGHT
2861
19-Aug-2022
10:59
linh
pham



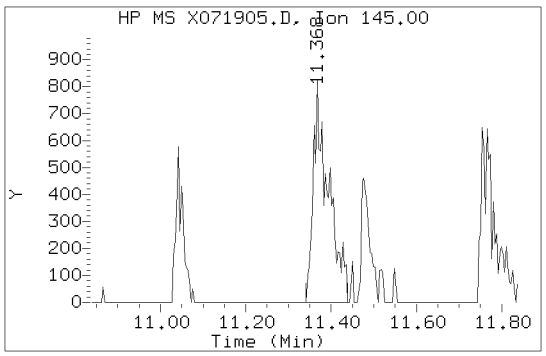
BEFORE

MASS
174
AREA
9376
HEIGHT
4902
25-Jul-2022
09:00
linh
pham



AFTER

MASS
145
AREA
1993
HEIGHT
822
19-Aug-2022
10:59
linh
pham

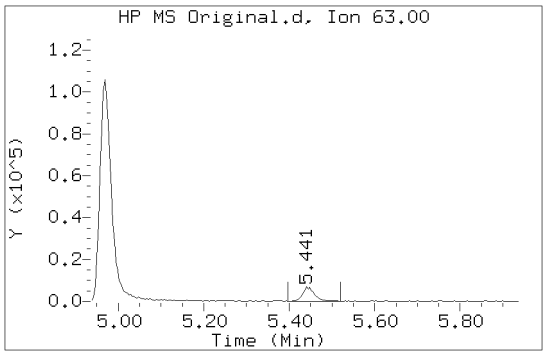


1,2-Dichloropropane (78-87-5)

Reason Code:

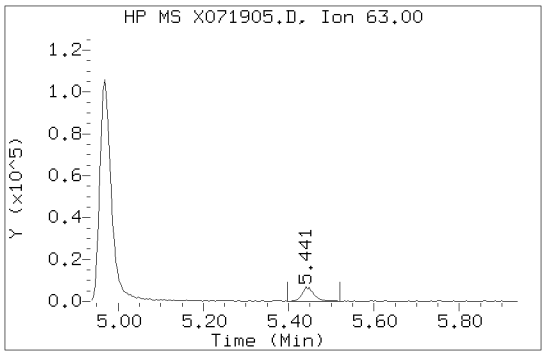
BEFORE

MASS
96
AREA
11820
HEIGHT
6241
25-Jul-2022
09:00
linh
pham



AFTER

MASS
63
AREA
12652
HEIGHT
7049
19-Aug-2022
10:59
linh
pham



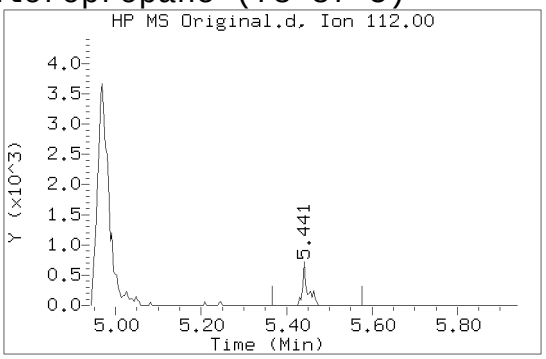
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

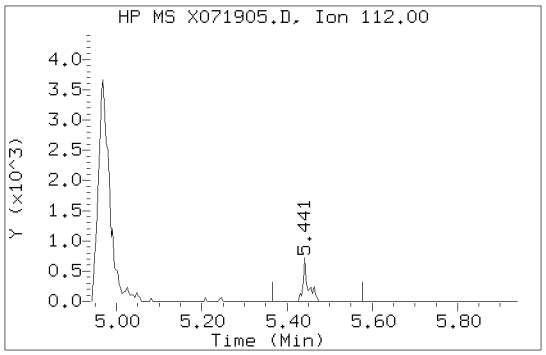
BEFORE

MASS
61
AREA
15499
HEIGHT
8443
25-Jul-2022
09:00
linh
pham



AFTER

MASS
112
AREA
621
HEIGHT
722
19-Aug-2022
10:59
linh
pham

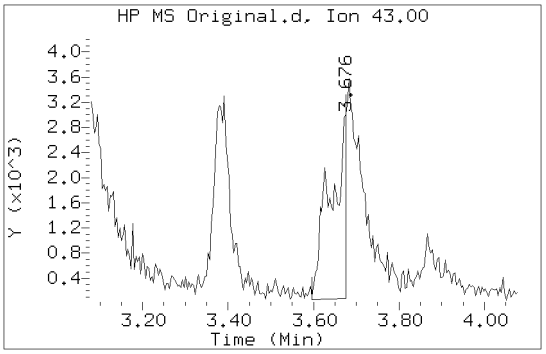


2-Butanone (78-93-3)

Reason Code:

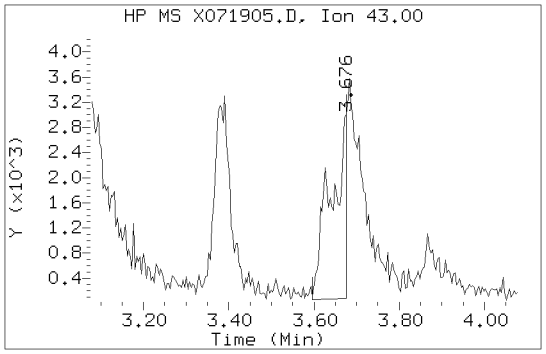
BEFORE

MASS
83
AREA
11877
HEIGHT
7406
25-Jul-2022
09:00
linh
pham



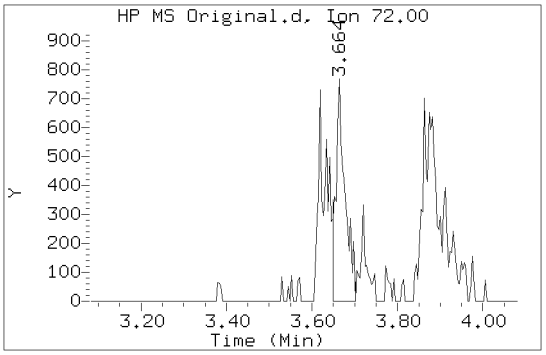
AFTER

MASS
43
AREA
7321
HEIGHT
2938
19-Aug-2022
10:59
linh
pham



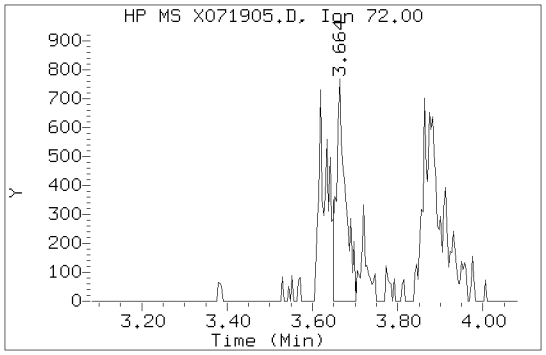
BEFORE

MASS
131
AREA
1518
HEIGHT
1092
25-Jul-2022
09:00
linh
pham



AFTER

MASS
72
AREA
1160
HEIGHT
768
19-Aug-2022
10:59
linh
pham

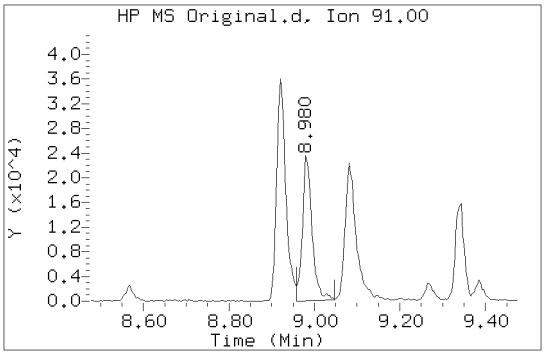


2-Chlorotoluene (95-49-8)

Reason Code:

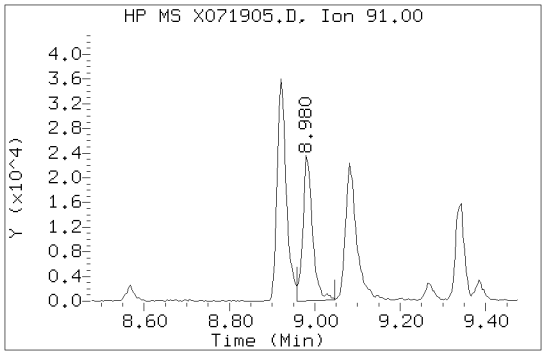
BEFORE

MASS
164
AREA
11817
HEIGHT
8696
25-Jul-2022
09:00
linh
pham



AFTER

MASS
91
AREA
37863
HEIGHT
23522
19-Aug-2022
10:59
linh
pham



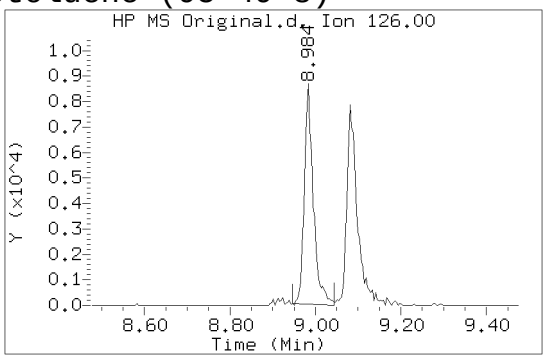
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

2-Chlorotoluene (95-49-8)

Reason Code:

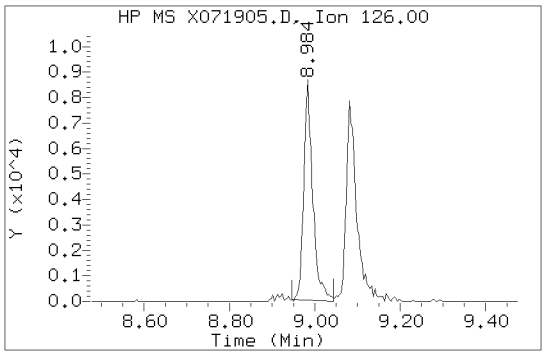
BEFORE

MASS
129
AREA
10743
HEIGHT
6687
25-Jul-2022
09:00
linh
pham



AFTER

MASS
126
AREA
12835
HEIGHT
8653
19-Aug-2022
10:59
linh
pham

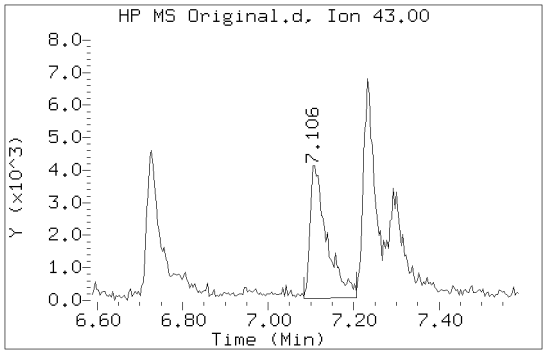


2-Hexanone (591-78-6)

Reason Code:

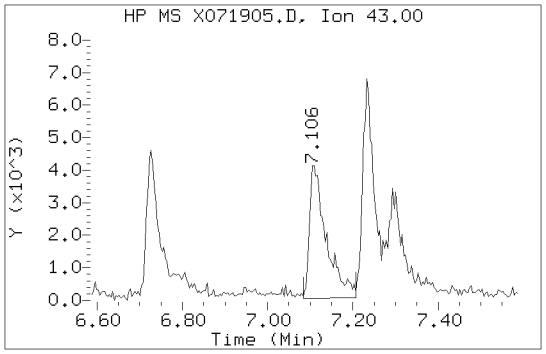
BEFORE

MASS
97
AREA
18665
HEIGHT
7822
25-Jul-2022
09:00
linh
pham



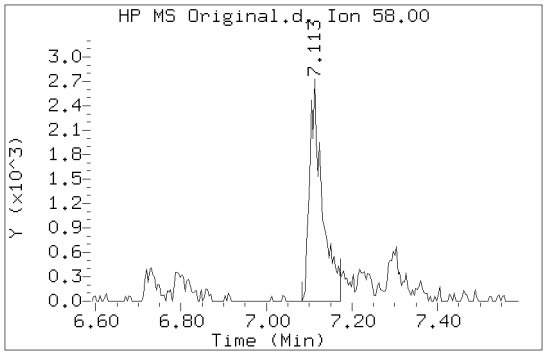
AFTER

MASS
43
AREA
11235
HEIGHT
4065
19-Aug-2022
10:59
linh
pham



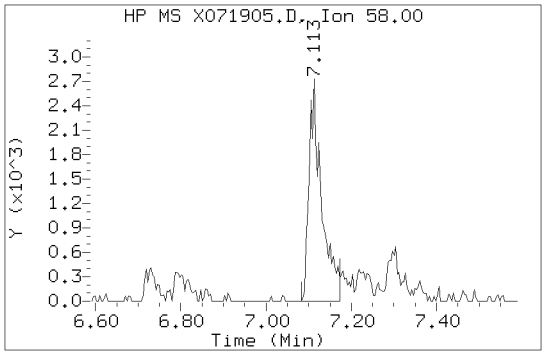
BEFORE

MASS
99
AREA
11761
HEIGHT
5110
25-Jul-2022
09:00
linh
pham



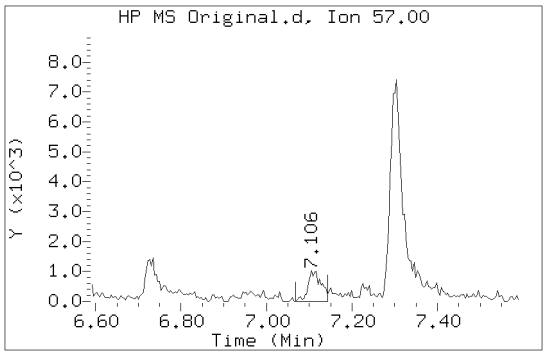
AFTER

MASS
58
AREA
5567
HEIGHT
2731
19-Aug-2022
10:59
linh
pham



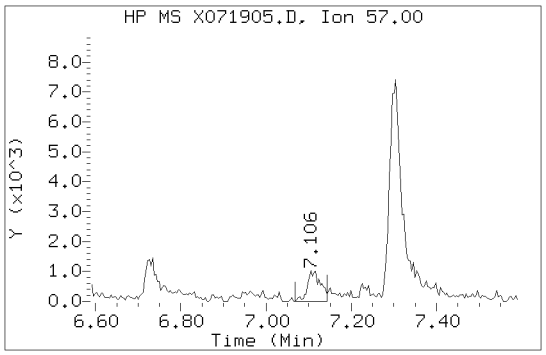
BEFORE

MASS
61
AREA
8134
HEIGHT
3813
25-Jul-2022
09:00
linh
pham



AFTER

MASS
57
AREA
2199
HEIGHT
1027
19-Aug-2022
10:59
linh
pham

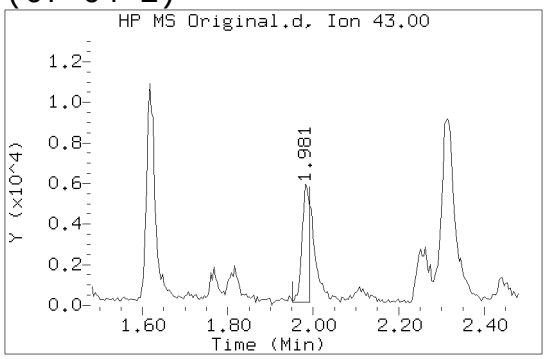


Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

Acetone (67-64-1)

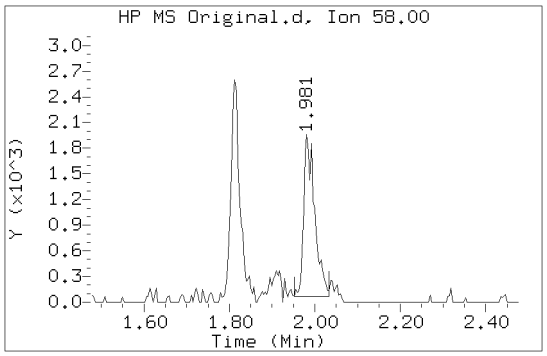
BEFORE

MASS
62
AREA
14813
HEIGHT
12919
25-Jul-2022
09:00
linh
pham



BEFORE

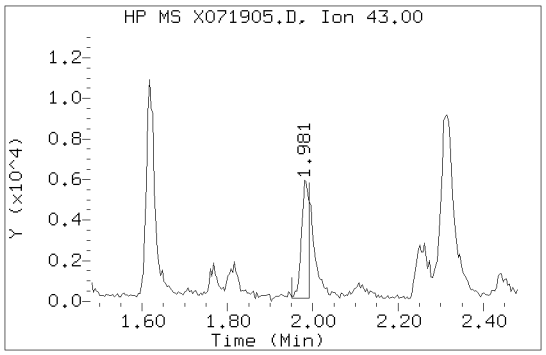
MASS
64
AREA
4927
HEIGHT
4173
25-Jul-2022
09:00
linh
pham



Reason Code:

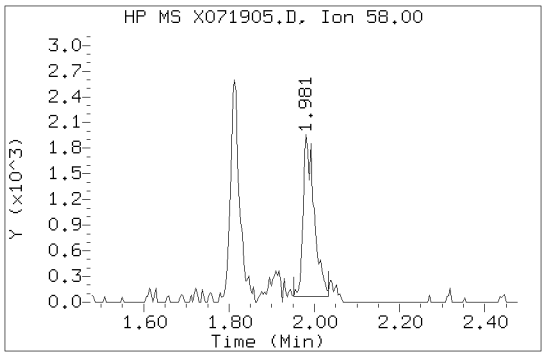
AFTER

MASS
43
AREA
7337
HEIGHT
5791
19-Aug-2022
10:59
linh
pham



AFTER

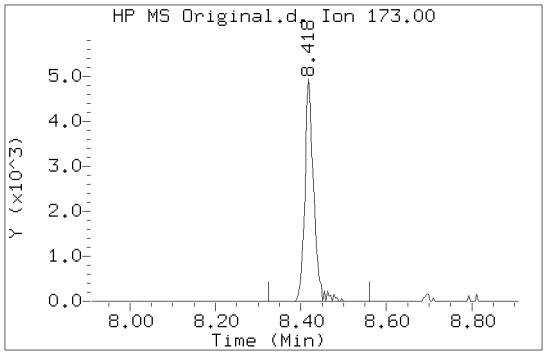
MASS
58
AREA
3464
HEIGHT
1894
19-Aug-2022
10:59
linh
pham



Bromoform (75-25-2)

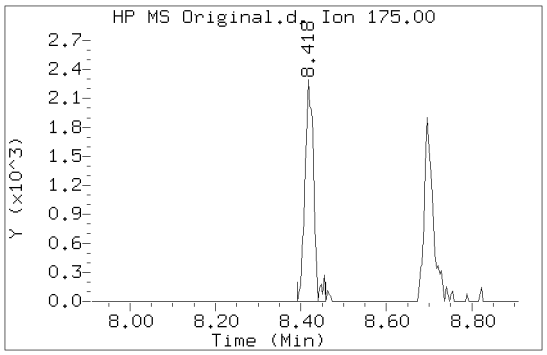
BEFORE

MASS
64
AREA
9295
HEIGHT
7022
25-Jul-2022
09:00
linh
pham



BEFORE

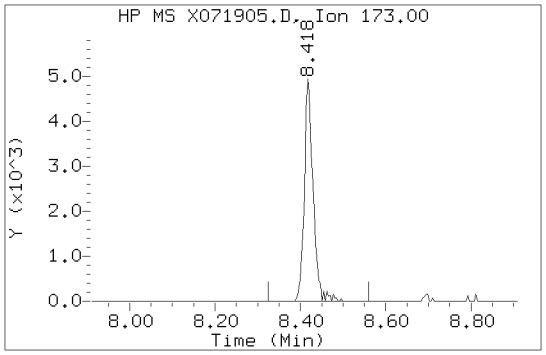
MASS
66
AREA
2894
HEIGHT
2425
25-Jul-2022
09:00
linh
pham



Reason Code:

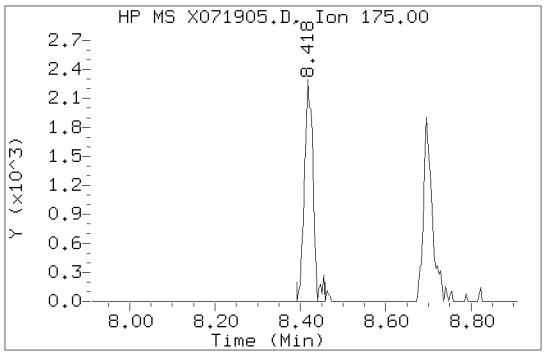
AFTER

MASS
173
AREA
7169
HEIGHT
4944
19-Aug-2022
10:59
linh
pham



AFTER

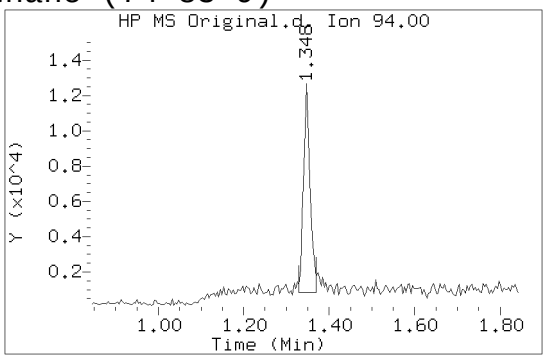
MASS
175
AREA
3299
HEIGHT
2294
19-Aug-2022
10:59
linh
pham



Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

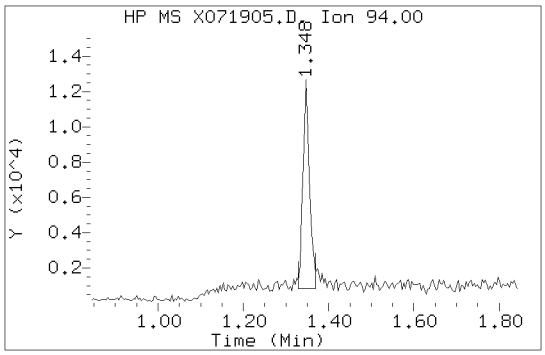
Bromomethane (74-83-9)

BEFORE
MASS
83
AREA
22862
HEIGHT
9582
25-Jul-2022
09:00
linh
pham

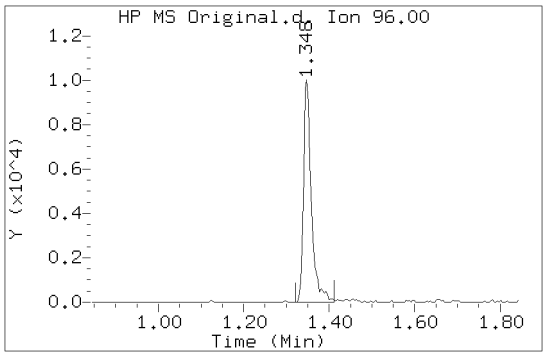


Reason Code:

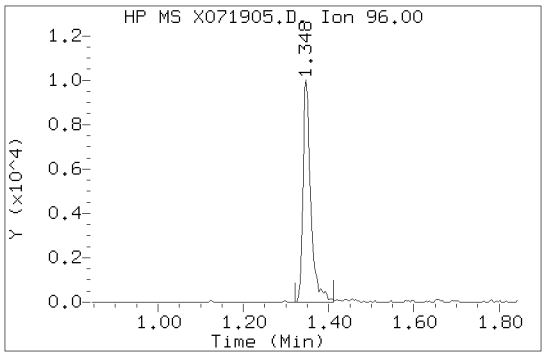
AFTER
MASS
94
AREA
13133
HEIGHT
11831
19-Aug-2022
10:59
linh
pham



BEFORE
MASS
85
AREA
13889
HEIGHT
5732
25-Jul-2022
09:00
linh
pham

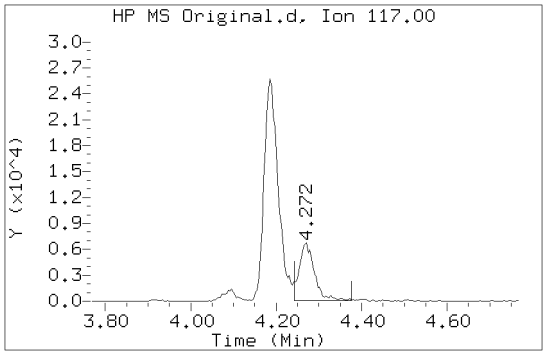


AFTER
MASS
96
AREA
13187
HEIGHT
10014
19-Aug-2022
10:59
linh
pham



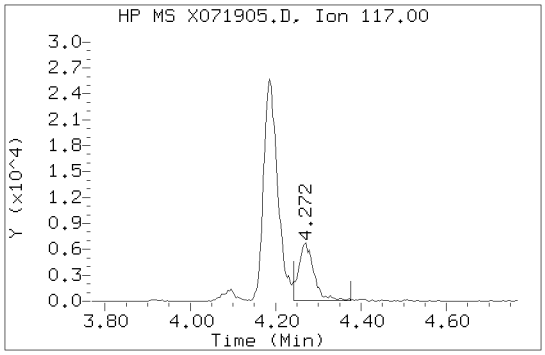
Carbon Tetrachloride (56-23-5)

BEFORE
MASS
96
AREA
12905
HEIGHT
5109
25-Jul-2022
09:00
linh
pham

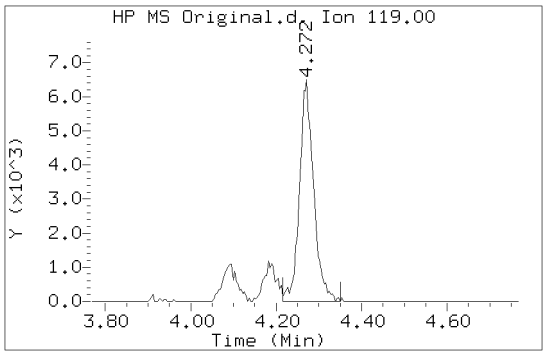


Reason Code:

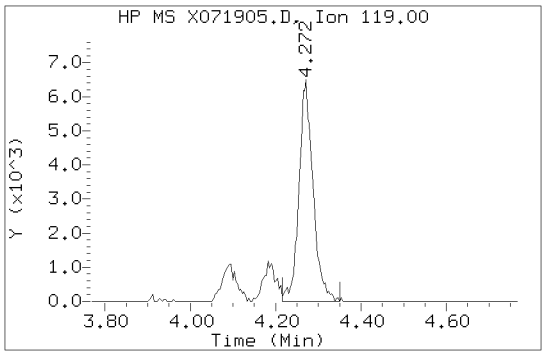
AFTER
MASS
117
AREA
17025
HEIGHT
6726
19-Aug-2022
10:59
linh
pham



BEFORE
MASS
61
AREA
18838
HEIGHT
7221
25-Jul-2022
09:00
linh
pham



AFTER
MASS
119
AREA
15166
HEIGHT
6498
19-Aug-2022
10:59
linh
pham



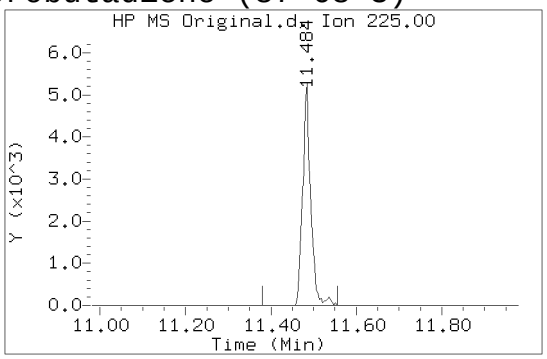
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

Hexachlorobutadiene (87-68-3)

Reason Code:

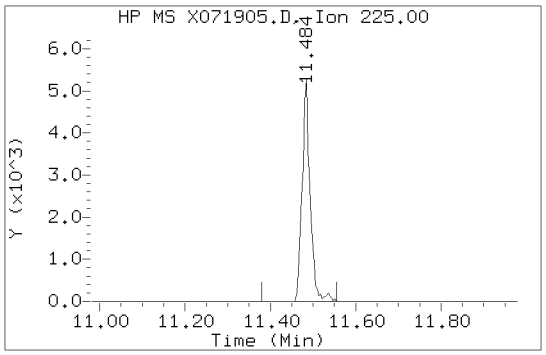
BEFORE

MASS
91
AREA
53786
HEIGHT
35911
25-Jul-2022
09:00
linh
pham



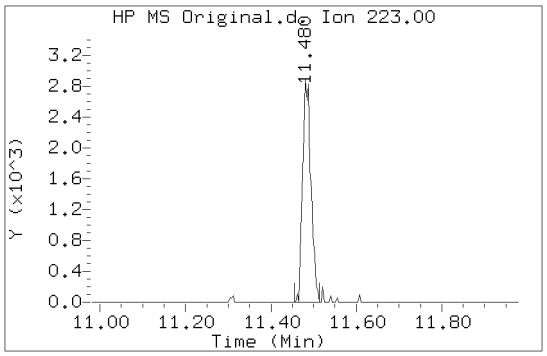
AFTER

MASS
225
AREA
6994
HEIGHT
5264
19-Aug-2022
10:59
linh
pham



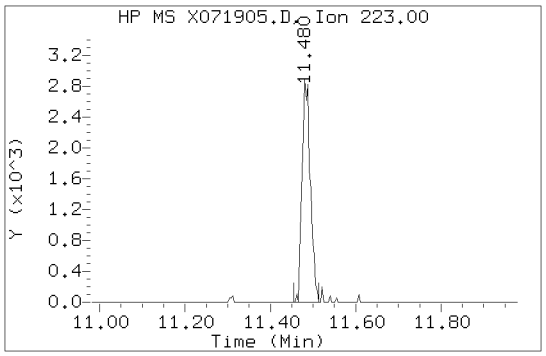
BEFORE

MASS
120
AREA
13286
HEIGHT
8412
25-Jul-2022
09:00
linh
pham



AFTER

MASS
223
AREA
4036
HEIGHT
2879
19-Aug-2022
10:59
linh
pham

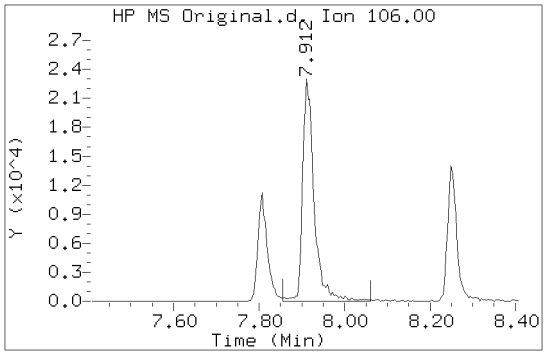


m,p-Xylenes ()

Reason Code:

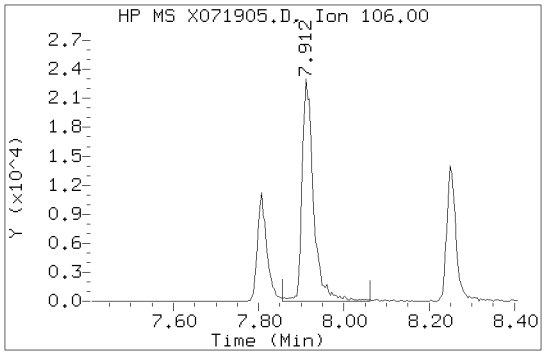
BEFORE

MASS
105
AREA
40980
HEIGHT
28240
25-Jul-2022
09:00
linh
pham



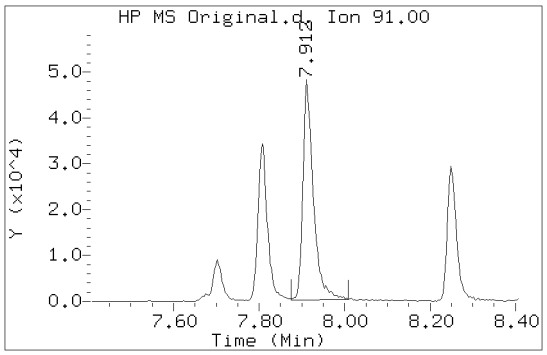
AFTER

MASS
106
AREA
44013
HEIGHT
23003
19-Aug-2022
10:59
linh
pham



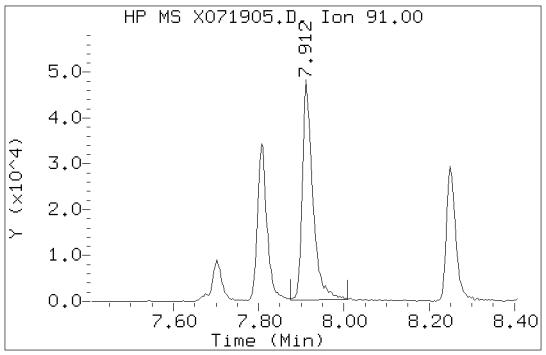
BEFORE

MASS
120
AREA
20601
HEIGHT
14139
25-Jul-2022
09:00
linh
pham



AFTER

MASS
91
AREA
83080
HEIGHT
48028
19-Aug-2022
10:59
linh
pham

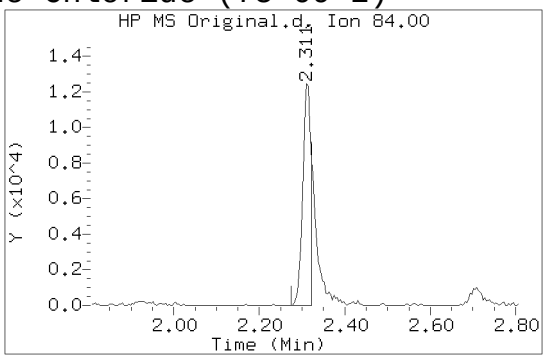


Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

Methylene Chloride (75-09-2)

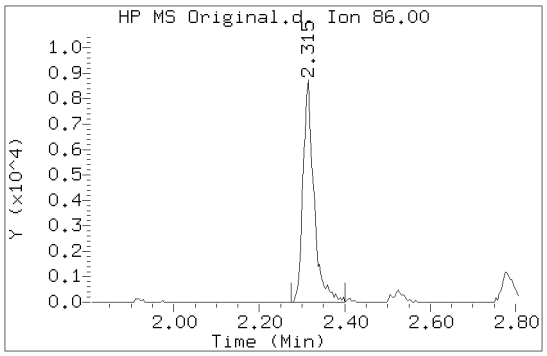
BEFORE

MASS
91
AREA
40205
HEIGHT
22168
25-Jul-2022
09:00
linh
pham



BEFORE

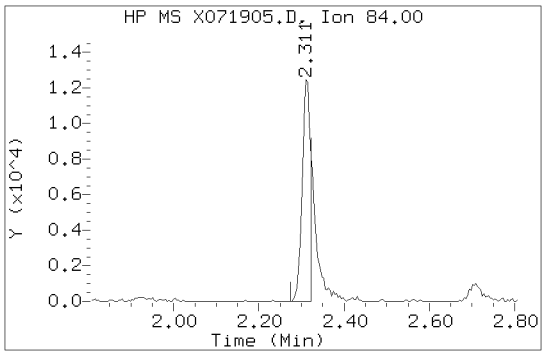
MASS
126
AREA
12421
HEIGHT
7742
25-Jul-2022
09:00
linh
pham



Reason Code:

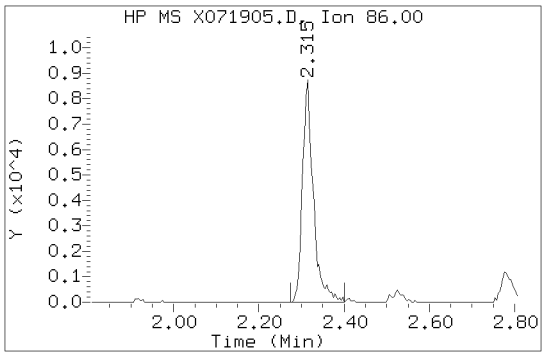
AFTER

MASS
84
AREA
16740
HEIGHT
12461
19-Aug-2022
10:59
linh
pham



AFTER

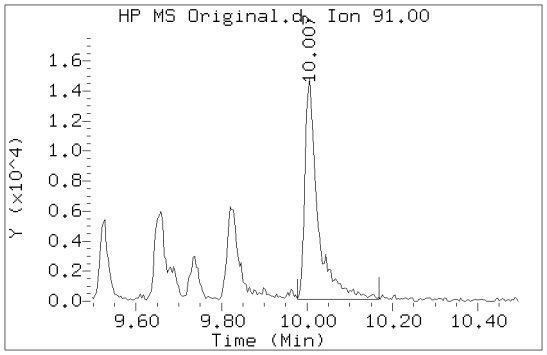
MASS
86
AREA
15829
HEIGHT
8738
19-Aug-2022
10:59
linh
pham



n-Butylbenzene (104-51-8)

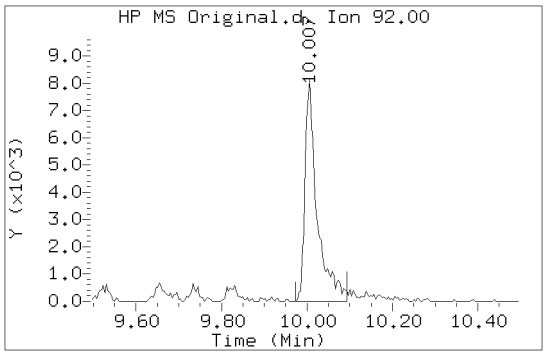
BEFORE

MASS
119
AREA
33676
HEIGHT
24527
25-Jul-2022
09:00
linh
pham



BEFORE

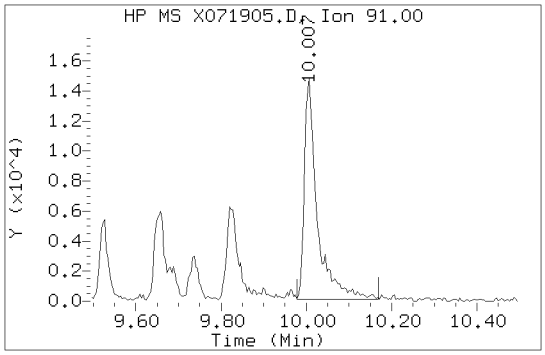
MASS
91
AREA
22780
HEIGHT
15724
25-Jul-2022
09:00
linh
pham



Reason Code:

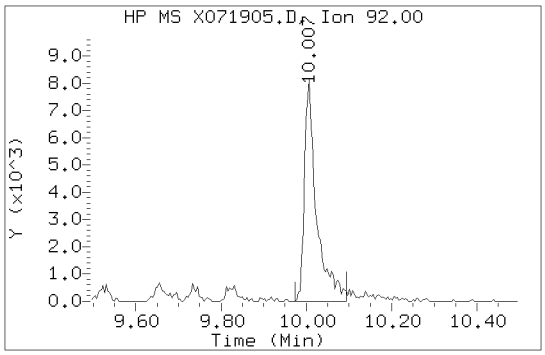
AFTER

MASS
91
AREA
31547
HEIGHT
14685
19-Aug-2022
10:59
linh
pham



AFTER

MASS
92
AREA
16277
HEIGHT
8132
19-Aug-2022
10:59
linh
pham



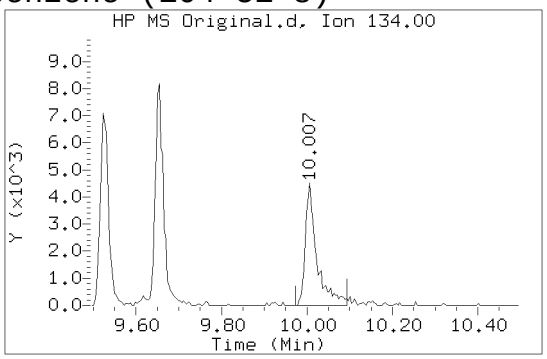
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

n-Butylbenzene (104-51-8)

Reason Code:

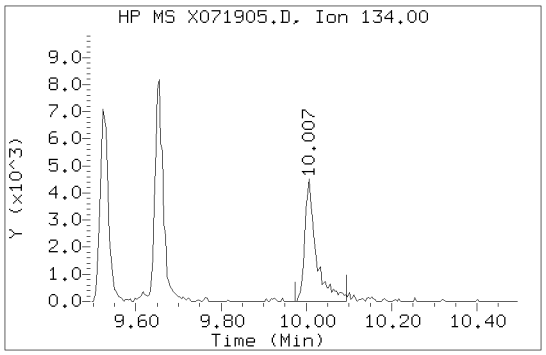
BEFORE

MASS
134
AREA
8589
HEIGHT
6039
25-Jul-2022
09:00
linh
pham



AFTER

MASS
134
AREA
8536
HEIGHT
4525
19-Aug-2022
10:59
linh
pham

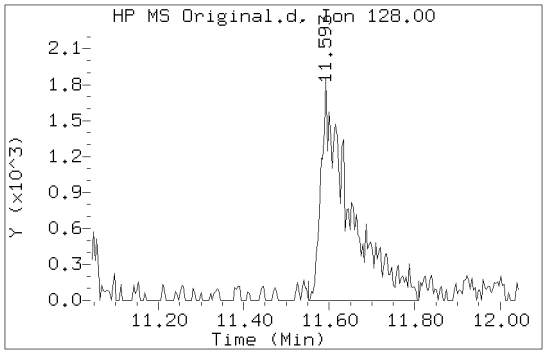


Naphthalene (91-20-3)

Reason Code:

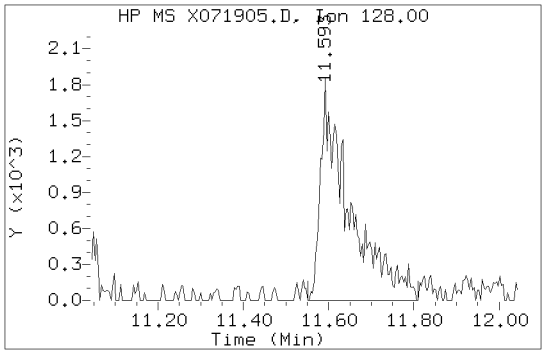
BEFORE

MASS
105
AREA
46135
HEIGHT
33982
25-Jul-2022
09:00
linh
pham



AFTER

MASS
128
AREA
8600
HEIGHT
1850
19-Aug-2022
10:59
linh
pham

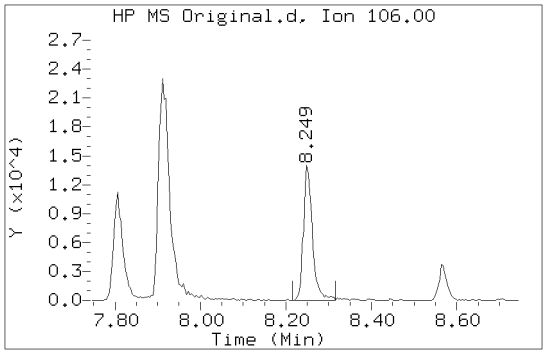


o-Xylene (95-47-6)

Reason Code:

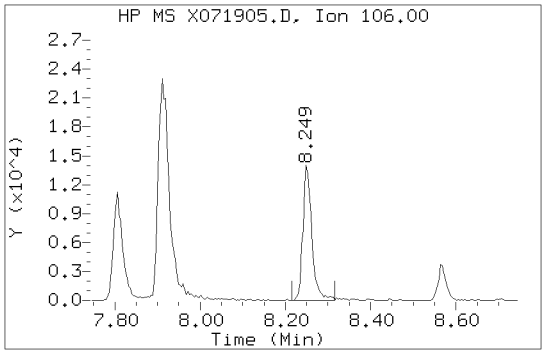
BEFORE

MASS
119
AREA
37293
HEIGHT
26906
25-Jul-2022
09:00
linh
pham



AFTER

MASS
106
AREA
20993
HEIGHT
14051
19-Aug-2022
10:59
linh
pham

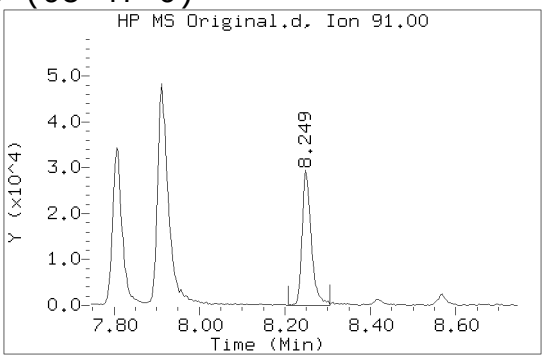


Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

o-Xylene (95-47-6)

BEFORE

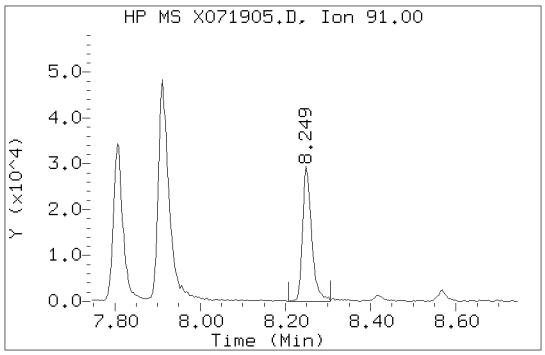
MASS
134
AREA
11044
HEIGHT
8181
25-Jul-2022
09:00
linh
pham



Reason Code:

AFTER

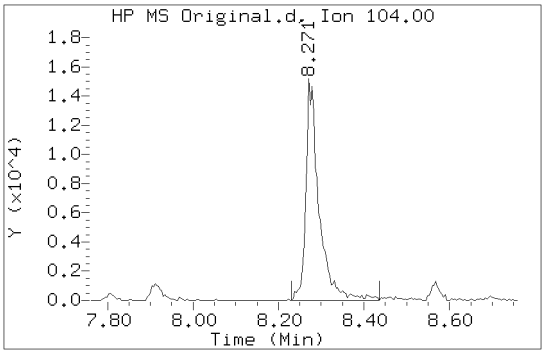
MASS
91
AREA
44875
HEIGHT
29536
19-Aug-2022
10:59
linh
pham



Styrene (100-42-5)

BEFORE

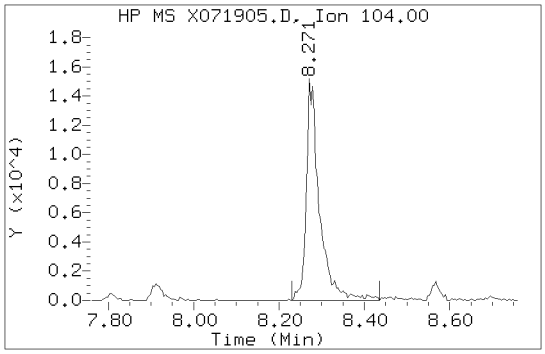
MASS
225
AREA
6994
HEIGHT
5264
25-Jul-2022
09:00
linh
pham



Reason Code:

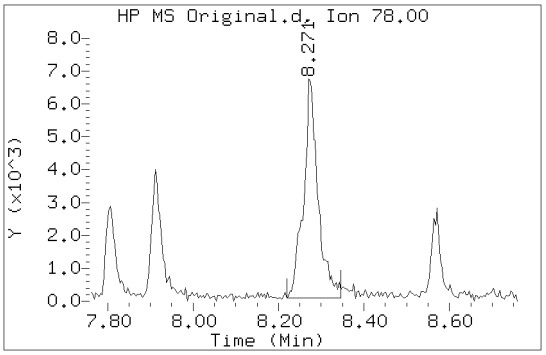
AFTER

MASS
104
AREA
32495
HEIGHT
15189
19-Aug-2022
10:59
linh
pham



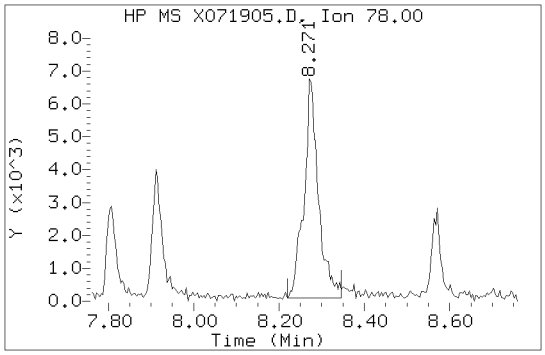
BEFORE

MASS
223
AREA
4036
HEIGHT
2879
25-Jul-2022
09:00
linh
pham



AFTER

MASS
78
AREA
15931
HEIGHT
6670
19-Aug-2022
10:59
linh
pham

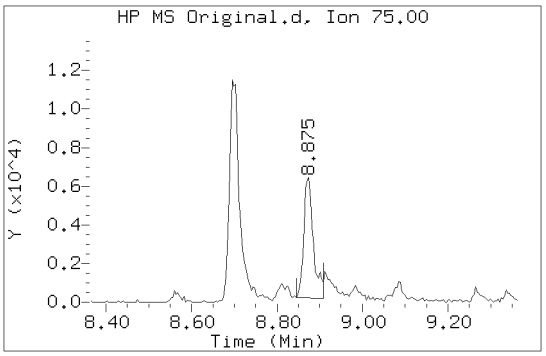


1,2,3-Trichloropropane (96-18-4)

Reason Code:

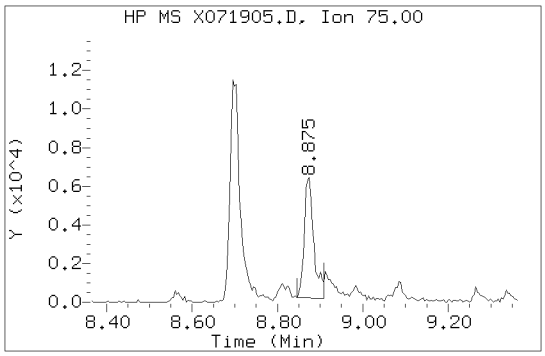
BEFORE

MASS
180
AREA
4350
HEIGHT
1674
25-Jul-2022
09:00
linh
pham



AFTER

MASS
75
AREA
9920
HEIGHT
6237
19-Aug-2022
10:59
linh
pham

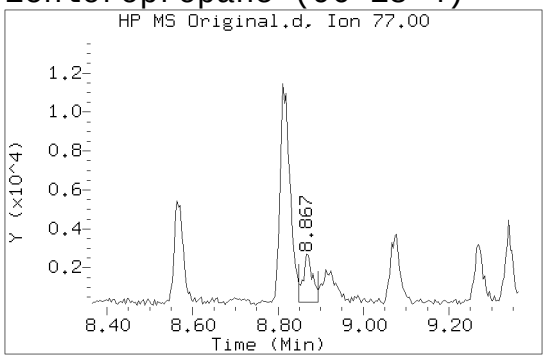


Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

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

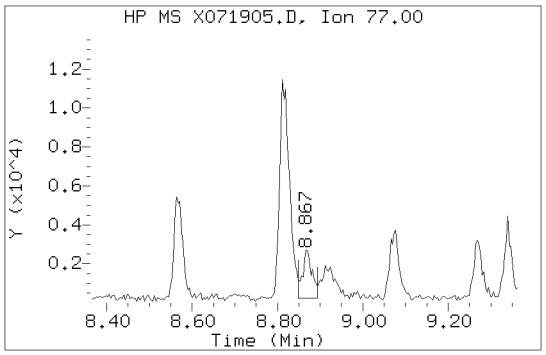
Reason Code:

BEFORE



MASS
182
AREA
1686
HEIGHT
2516
25-Jul-2022
09:00
linh
pham

AFTER

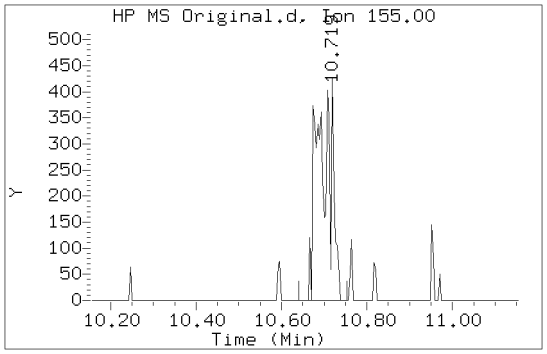


MASS
77
AREA
4022
HEIGHT
2476
19-Aug-2022
10:59
linh
pham

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

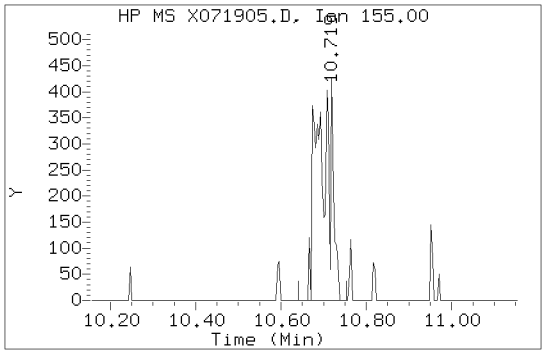
Reason Code:

BEFORE



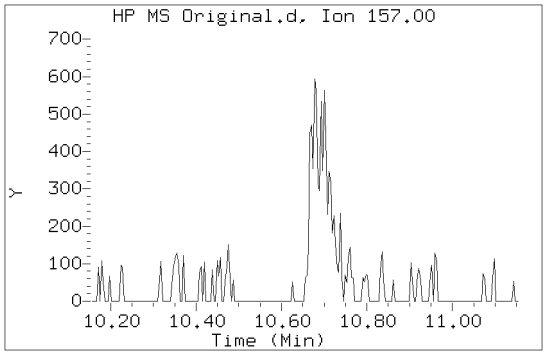
MASS
73
AREA
36818
HEIGHT
16808
25-Jul-2022
09:00
linh
pham

AFTER



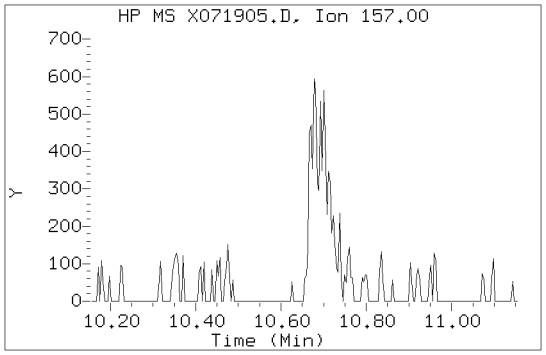
MASS
155
AREA
994
HEIGHT
425
19-Aug-2022
10:59
linh
pham

BEFORE



MASS
57
AREA
25396
HEIGHT
9800
25-Jul-2022
09:00
linh
pham

AFTER

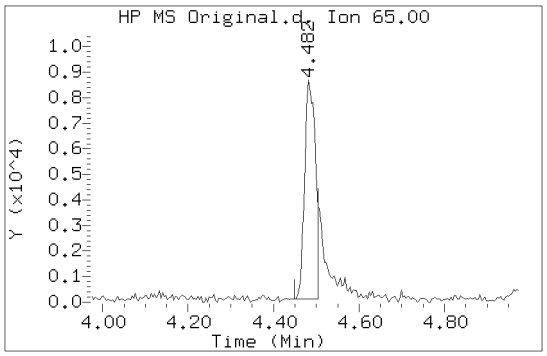


MASS
157
AREA
0
HEIGHT
0
19-Aug-2022
10:59
linh
pham

1,2-Dichloroethane-d4 (17060-07-0)

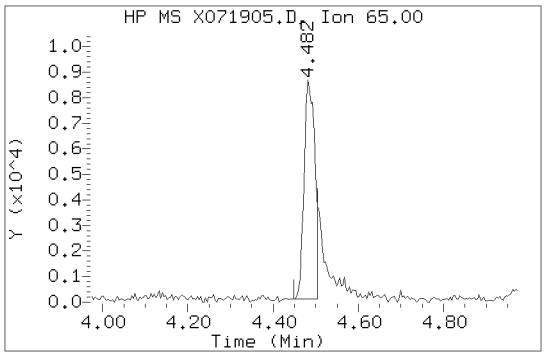
Reason Code:

BEFORE



MASS
113
AREA
18364
HEIGHT
8101
25-Jul-2022
09:00
linh
pham

AFTER



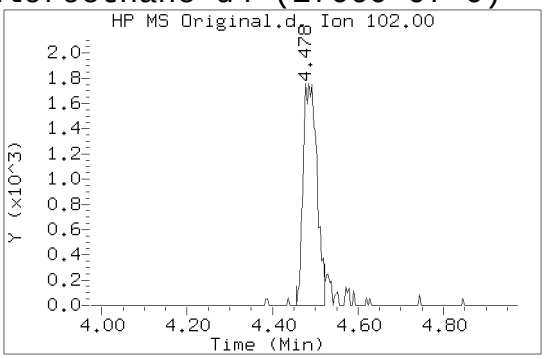
MASS
65
AREA
15130
HEIGHT
8575
19-Aug-2022
10:59
linh
pham

Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

1,2-Dichloroethane-d4 (17060-07-0)

BEFORE

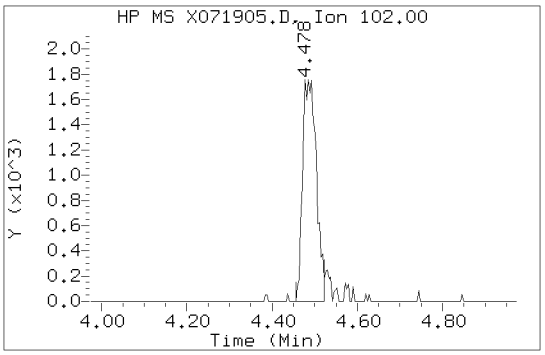
MASS
111
AREA
18785
HEIGHT
8137
25-Jul-2022
09:00
linh
pham



AFTER

MASS
102
AREA
4011
HEIGHT
1757
19-Aug-2022
10:59
linh
pham

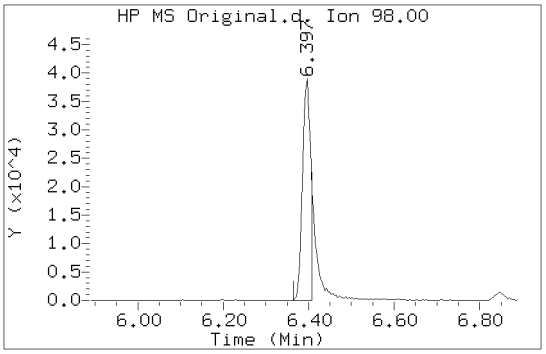
Reason Code:



Toluene-d8 (2037-26-5)

BEFORE

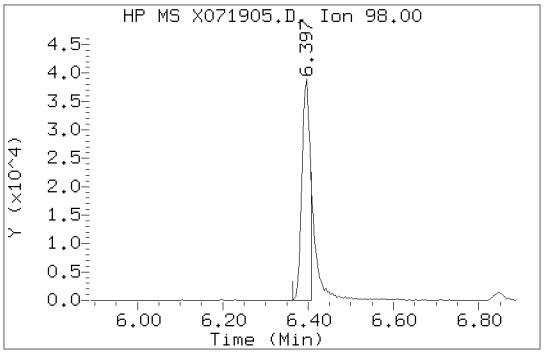
MASS
65
AREA
15130
HEIGHT
8575
25-Jul-2022
09:00
linh
pham



AFTER

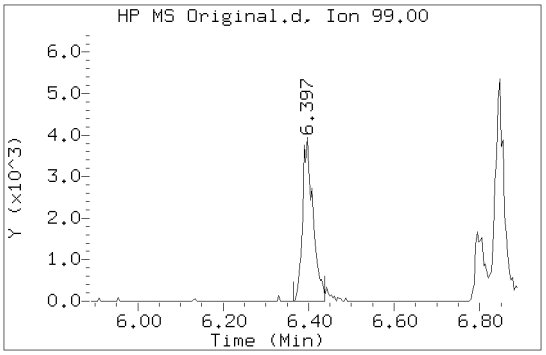
MASS
98
AREA
53011
HEIGHT
39000
19-Aug-2022
10:59
linh
pham

Reason Code:



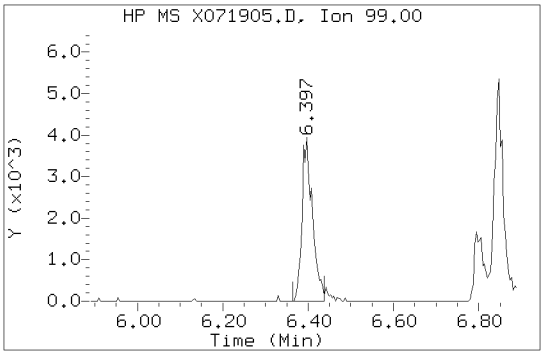
BEFORE

MASS
102
AREA
4011
HEIGHT
1757
25-Jul-2022
09:00
linh
pham



AFTER

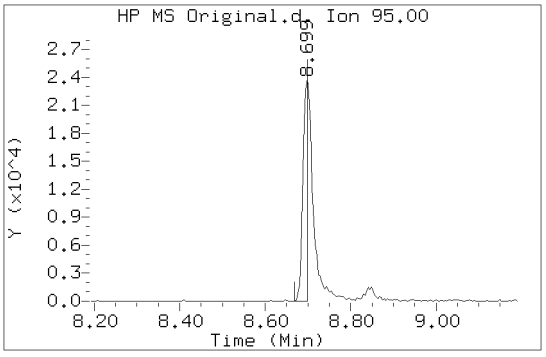
MASS
99
AREA
6827
HEIGHT
3949
19-Aug-2022
10:59
linh
pham



4-Bromofluorobenzene (460-00-4)

BEFORE

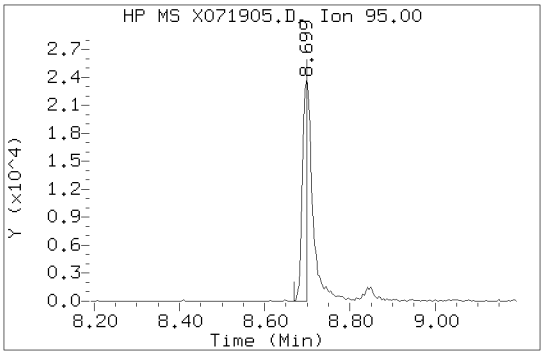
MASS
95
AREA
19061
HEIGHT
23832
25-Jul-2022
09:00
linh
pham



AFTER

MASS
95
AREA
19061
HEIGHT
23832
19-Aug-2022
10:59
linh
pham

Reason Code:



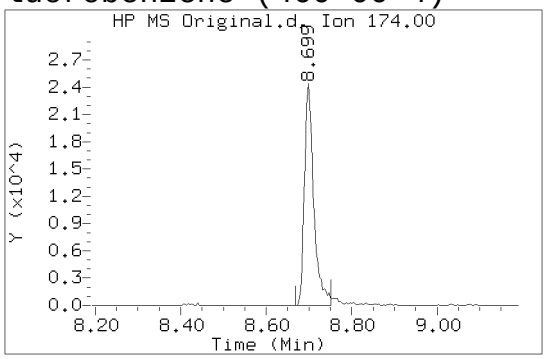
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071905.D
Inj Date : 19-JUL-2022 12:50
InstruID : voa6.i
LabSampID : VSTD002

4-Bromofluorobenzene (460-00-4)

Reason Code:

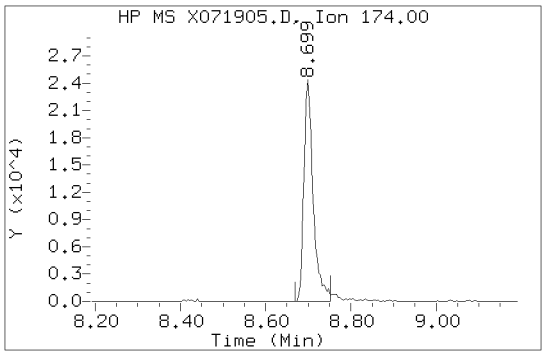
BEFORE

MASS
174
AREA
37206
HEIGHT
24384
25-Jul-2022
09:00
linh
pham



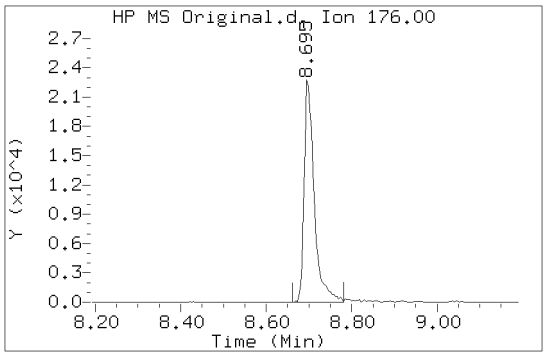
AFTER

MASS
174
AREA
37206
HEIGHT
24384
19-Aug-2022
10:59
linh
pham



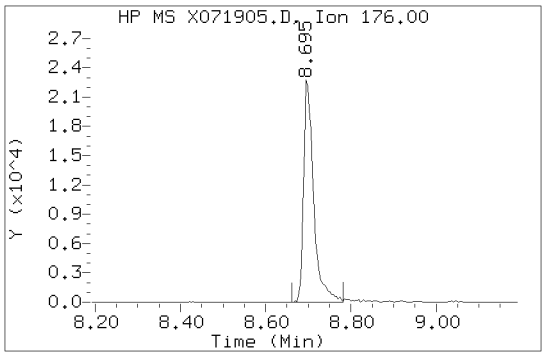
BEFORE

MASS
176
AREA
37461
HEIGHT
22760
25-Jul-2022
09:00
linh
pham



AFTER

MASS
176
AREA
37461
HEIGHT
22760
19-Aug-2022
10:59
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D Page 1
Report Date: 19-Aug-2022 11:00

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D
Lab Smp Id: VSTD005 Client Smp ID: VSTD005
Inj Date : 19-JUL-2022 13:11
Operator : PC Inst ID: voa6.i
Smp Info : VSTD005;VSTD005;1;5;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\8260W.m
Meth Date : 19-Aug-2022 11:00 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 12:50 Cal File: X071905.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.189	4.189	(1.000)	701809	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	1041373	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	950052	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	449830	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.106	(0.980)	40606	5.00000	5.49
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.069)	40441	5.00000	5.28(M)
$ 48 Toluene-d8	98	6.393	6.393	(0.833)	110927	5.00000	4.67(aM)
$ 69 4-Bromofluorobenzene	95	8.695	8.695	(1.133)	56818	5.00000	5.98
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	34241	5.00000	5.12
31 1,1,1-Trichloroethane	97	4.091	4.091	(0.977)	54582	5.00000	5.48
68 1,1,2,2-Tetrachloroethane	83	8.844	8.844	(0.915)	31785	5.00000	5.03
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	25929	5.00000	5.30
22 1,1-Dichloroethane	63	2.929	2.929	(0.699)	57114	5.00000	5.28
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	31142	5.00000	5.31
32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	43023	5.00000	5.11
93 1,2,3-Trichlorobenzene	180	11.757	11.757	(1.216)	10995	5.00000	4.70(aM)
71 1,2,3-Trichloropropane	75	8.867	8.867	(0.917)	24185	5.00000	4.96(aM)
90 1,2,4-Trichlorobenzene	180	11.352	11.352	(1.175)	19881	5.00000	4.85(aM)
79 1,2,4-Trimethylbenzene	105	9.384	9.384	(0.971)	113753	5.00000	5.27
89 1,2-Dibromo-3-Chloropropane	155	10.670	10.670	(1.104)	2347	5.00000	5.47

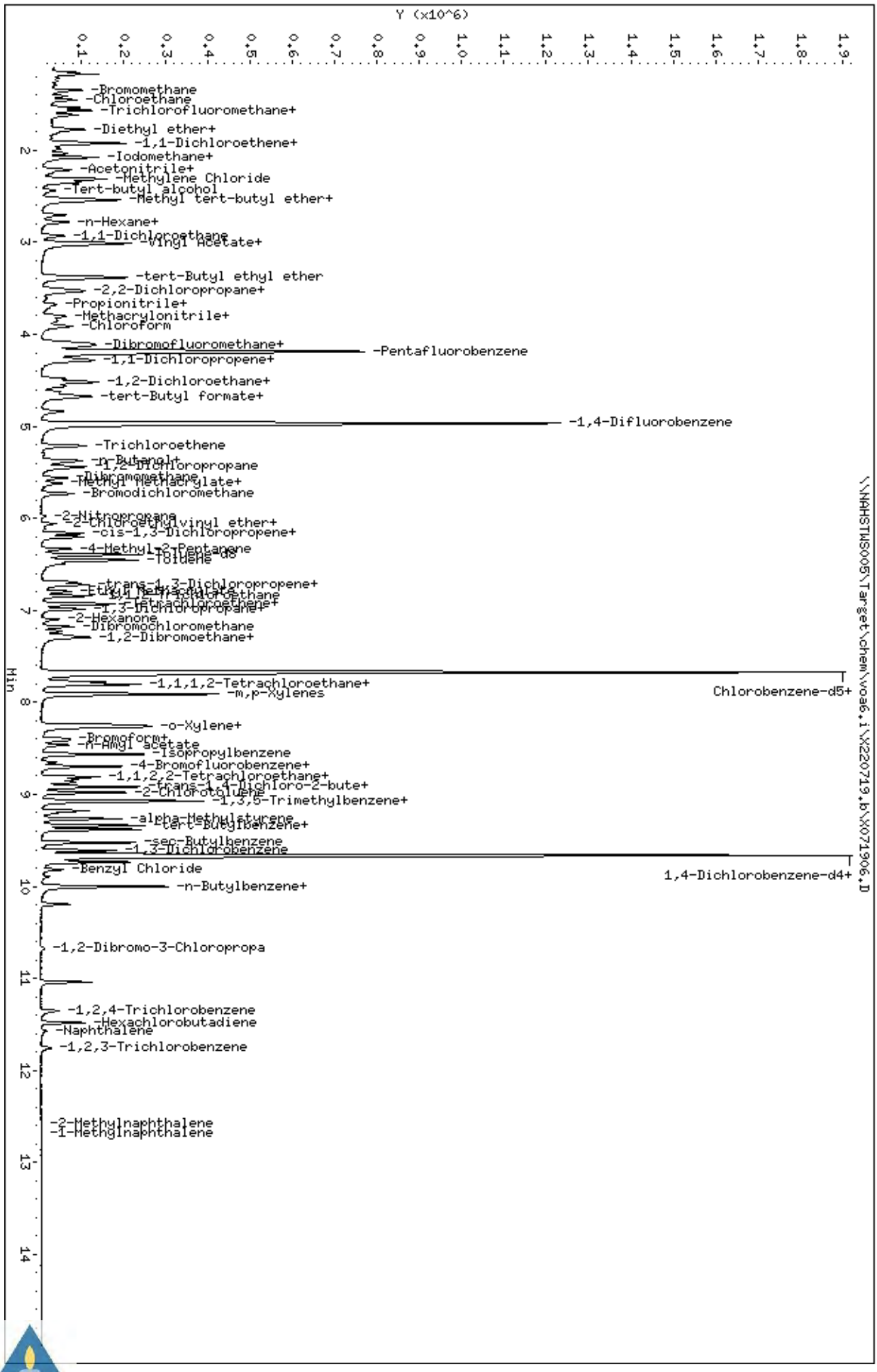
57	1,2-Dibromoethane	107	7.266	7.266 (0.947)	32305	5.00000	5.21
88	1,2-Dichlorobenzene	146	10.003	10.003 (1.035)	59846	5.00000	5.31

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D Page 2
Report Date: 19-Aug-2022 11:00

						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
33	1,2-Dichloroethane	62	4.567	4.567	(0.919)	49225	5.00000	5.38
42	1,2-Dichloropropane	63	5.441	5.441	(1.095)	33483	5.00000	5.22
75	1,3,5-Trimethylbenzene	105	9.069	9.069	(0.938)	116506	5.00000	5.33
83	1,3-Dichlorobenzene	146	9.609	9.609	(0.994)	66139	5.00000	5.29
54	1,3-Dichloropropane	76	6.985	6.985	(0.911)	52966	5.00000	5.33
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	66130	5.00000	4.99(a)
26	2,2-Dichloropropane	77	3.518	3.518	(0.840)	53750	5.00000	5.38
24	2-Butanone	43	3.604	3.604	(0.860)	16349	10.0000	9.28(M)
76	2-Chlorotoluene	91	8.979	8.979	(0.929)	103950	5.00000	5.39
52	2-Hexanone	43	7.098	7.098	(0.925)	28998	10.0000	9.70
77	4-Chlorotoluene	91	9.077	9.077	(0.939)	111787	5.00000	5.19
82	p-Isopropyltoluene	119	9.654	9.654	(0.999)	113315	5.00000	5.16
45	4-Methyl-2-Pentanone	43	6.333	6.333	(0.826)	47780	10.0000	10.32
10	Acetone	43	1.984	1.984	(0.474)	20021	10.0000	8.35(M)
37	Benzene	78	4.519	4.519	(0.909)	129783	5.00000	5.25
74	Bromobenzene	156	8.811	8.811	(0.912)	41026	5.00000	5.34
29	Bromochloromethane	128	3.799	3.799	(0.907)	20367	5.00000	5.14
39	Bromodichloromethane	83	5.729	5.729	(1.153)	45668	5.00000	5.19
66	Bromoform	173	8.417	8.417	(1.097)	20344	5.00000	5.54
6	Bromomethane	94	1.347	1.347	(0.322)	30861	5.00000	5.24(M)
19	Carbon Disulfide	76	2.078	2.078	(0.496)	165186	10.0000	10.65
34	Carbon Tetrachloride	117	4.271	4.271	(0.860)	46328	5.00000	5.15(H)
59	Chlorobenzene	112	7.697	7.697	(1.003)	95602	5.00000	5.30
7	Chloroethane	64	1.411	1.411	(0.337)	25153	5.00000	5.58
28	Chloroform	83	3.915	3.915	(0.935)	63536	5.00000	5.36
3	Chloromethane	50	1.085	1.085	(0.259)	37005	5.00000	5.74
27	cis-1,2-Dichloroethene	96	3.536	3.536	(0.844)	36563	5.00000	5.24
46	cis-1,3-Dichloropropene	75	6.164	6.164	(1.241)	54926	5.00000	5.08
55	Dibromochloromethane	129	7.180	7.180	(0.936)	33754	5.00000	4.78(a)
44	Dibromomethane	93	5.557	5.557	(1.118)	22085	5.00000	5.13
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	38222	5.00000	5.56
61	Ethylbenzene	106	7.806	7.806	(1.018)	49041	5.00000	5.38
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	18025	5.00000	4.76(a)
67	Isopropylbenzene	105	8.563	8.563	(1.116)	146541	5.00000	5.35
62	m,p-Xylenes	106	7.911	7.911	(1.031)	120491	10.0000	10.64
17	Methylene Chloride	84	2.311	2.311	(0.552)	40888	5.00000	5.57(M)
87	n-Butylbenzene	91	9.999	9.999	(1.035)	89804	5.00000	4.92(a)
73	n-Propylbenzene	91	8.916	8.916	(0.922)	160743	5.00000	5.41
92	Naphthalene	128	11.570	11.570	(1.197)	21849	5.00000	4.76(aM)
63	o-Xylene	106	8.248	8.248	(1.075)	57923	5.00000	5.26
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	133745	5.00000	5.27
64	Styrene	104	8.271	8.271	(1.078)	92709	5.00000	5.11
78	tert-Butylbenzene	119	9.339	9.339	(0.966)	102197	5.00000	5.51
56	Tetrachloroethene	164	6.929	6.929	(0.903)	33865	5.00000	5.49
50	Toluene	91	6.453	6.453	(0.841)	142561	5.00000	5.33
20	trans-1,2-Dichloroethene	96	2.539	2.539	(0.606)	33550	5.00000	5.43
51	trans-1,3-Dichloropropene	75	6.689	6.689	(1.346)	42573	5.00000	4.75(a)
38	Trichloroethene	130	5.216	5.216	(1.050)	38945	5.00000	5.32
8	Trichlorofluoromethane	101	1.568	1.568	(0.375)	59958	5.00000	5.42
5	Vinyl Chloride	62	1.149	1.149	(0.274)	39892	5.00000	5.42

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.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D
Date : 19-JUL-2022 13:11
Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;5;
Purge Volume: 5.0
Column phase: DB624

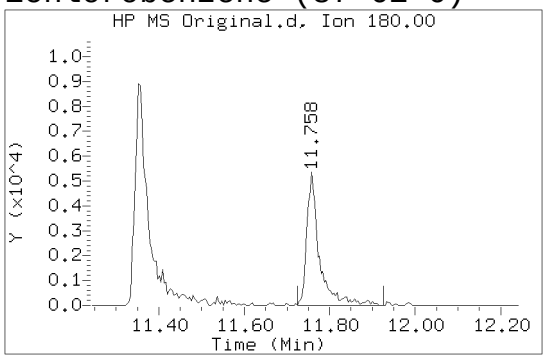
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D
Inj Date : 19-JUL-2022 13:11
InstruID : voa6.i
LabSampID : VSTD005

1,2,3-Trichlorobenzene (87-61-6)

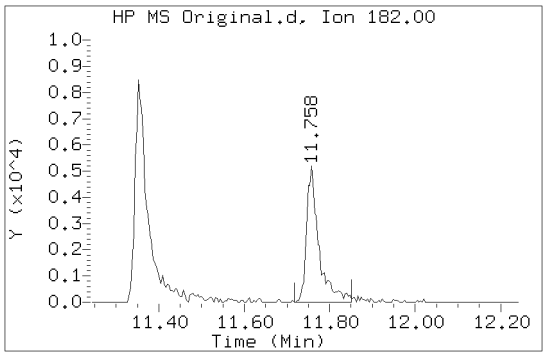
BEFORE

MASS
77
AREA
53750
HEIGHT
21214
25-Jul-2022
09:00
linh
pham



BEFORE

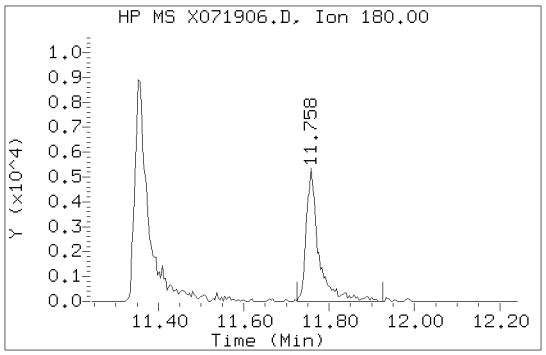
MASS
97
AREA
12044
HEIGHT
4815
25-Jul-2022
09:00
linh
pham



Reason Code:

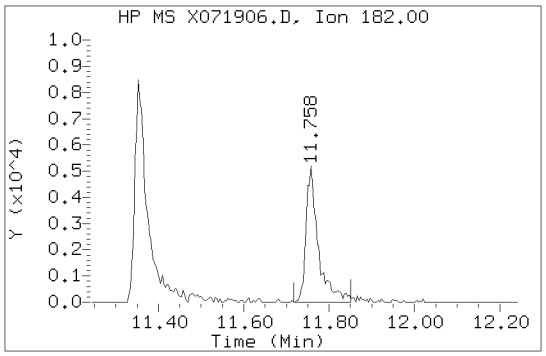
AFTER

MASS
180
AREA
10995
HEIGHT
5351
19-Aug-2022
10:59
linh
pham



AFTER

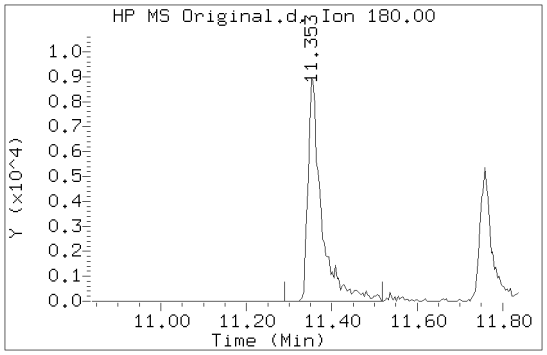
MASS
182
AREA
10507
HEIGHT
5207
19-Aug-2022
10:59
linh
pham



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

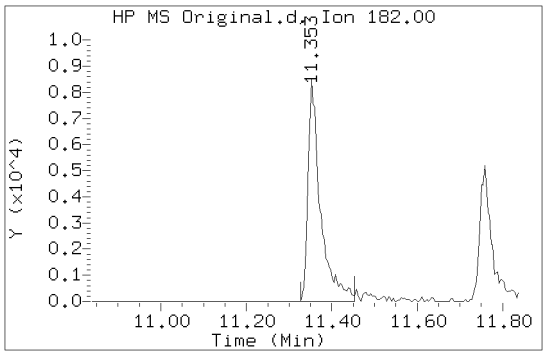
BEFORE

MASS
93
AREA
22085
HEIGHT
11803
25-Jul-2022
09:00
linh
pham



BEFORE

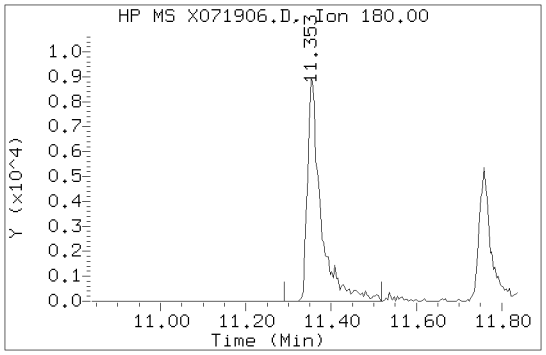
MASS
95
AREA
18493
HEIGHT
9552
25-Jul-2022
09:00
linh
pham



Reason Code:

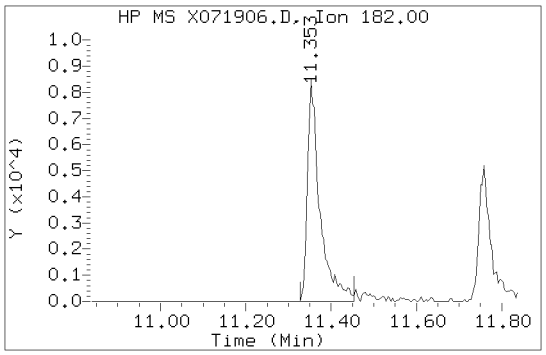
AFTER

MASS
180
AREA
19881
HEIGHT
8916
19-Aug-2022
10:59
linh
pham



AFTER

MASS
182
AREA
17243
HEIGHT
8485
19-Aug-2022
10:59
linh
pham



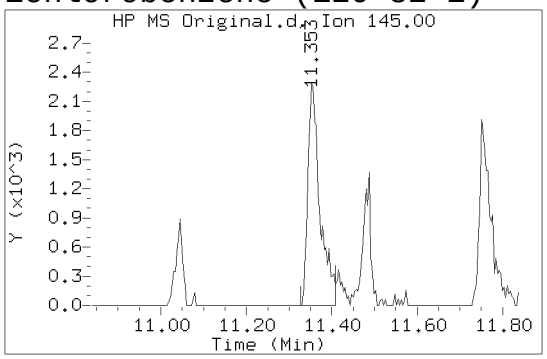
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D
Inj Date : 19-JUL-2022 13:11
InstruID : voa6.i
LabSampID : VSTD005

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

Reason Code:

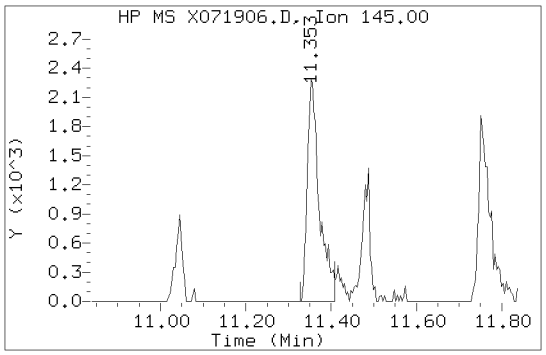
BEFORE

MASS
174
AREA
26074
HEIGHT
14180
25-Jul-2022
09:00
linh
pham



AFTER

MASS
145
AREA
4517
HEIGHT
2282
19-Aug-2022
10:59
linh
pham

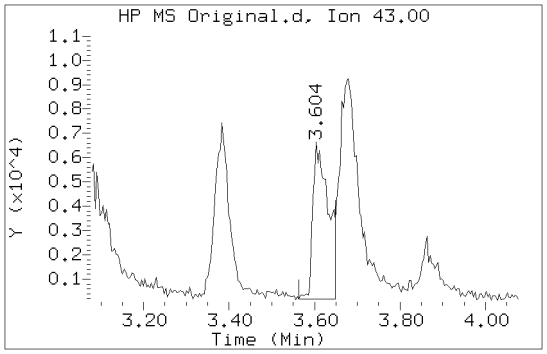


2-Butanone (78-93-3)

Reason Code:

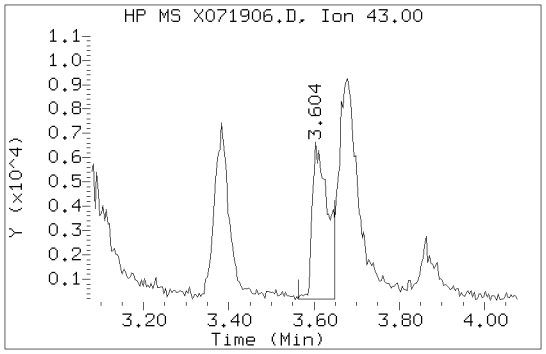
BEFORE

MASS
83
AREA
31785
HEIGHT
21915
25-Jul-2022
09:00
linh
pham



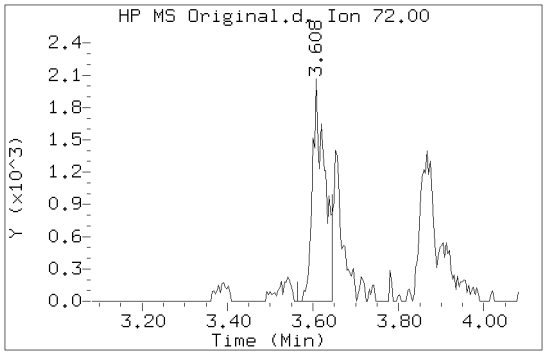
AFTER

MASS
43
AREA
16349
HEIGHT
6447
19-Aug-2022
10:59
linh
pham



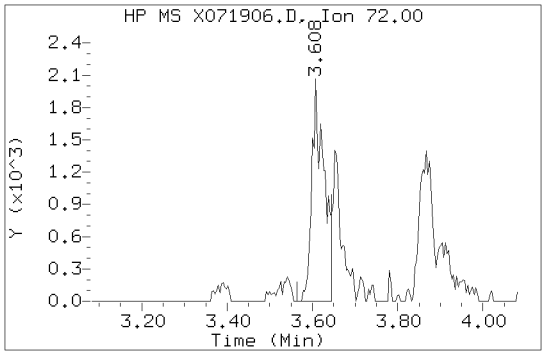
BEFORE

MASS
131
AREA
3365
HEIGHT
2107
25-Jul-2022
09:00
linh
pham



AFTER

MASS
72
AREA
4154
HEIGHT
2067
19-Aug-2022
10:59
linh
pham

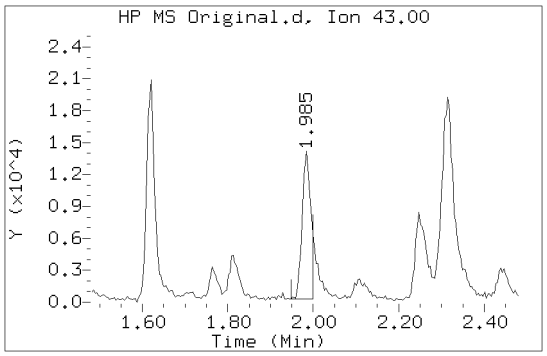


Acetone (67-64-1)

Reason Code:

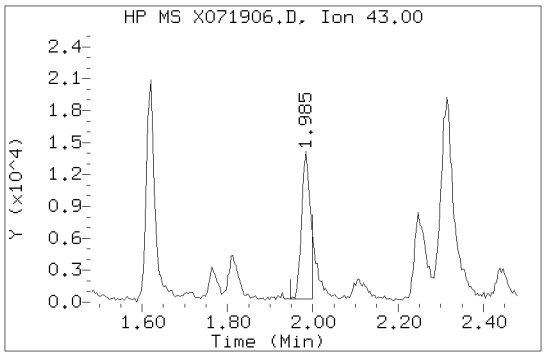
BEFORE

MASS
62
AREA
39892
HEIGHT
32857
25-Jul-2022
09:00
linh
pham



AFTER

MASS
43
AREA
20021
HEIGHT
13907
19-Aug-2022
10:59
linh
pham



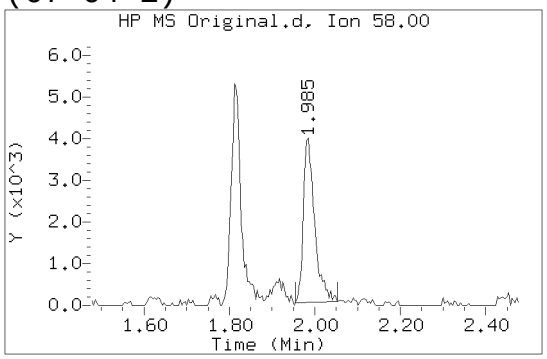
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D
Inj Date : 19-JUL-2022 13:11
InstruID : voa6.i
LabSampID : VSTD005

Acetone (67-64-1)

Reason Code:

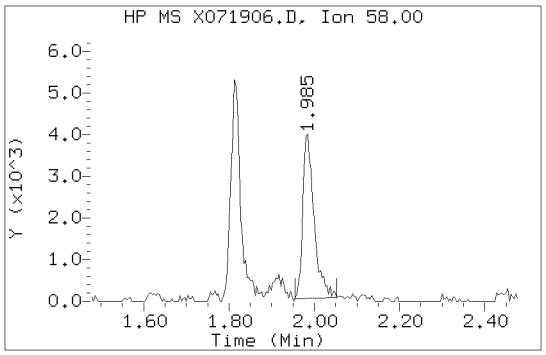
BEFORE

MASS
64
AREA
14366
HEIGHT
11106
25-Jul-2022
09:00
linh
pham



AFTER

MASS
58
AREA
7398
HEIGHT
3945
19-Aug-2022
10:59
linh
pham

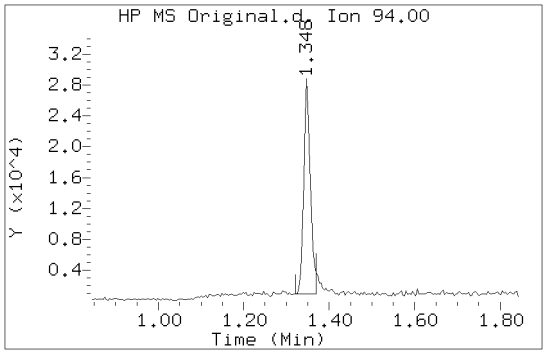


Bromomethane (74-83-9)

Reason Code:

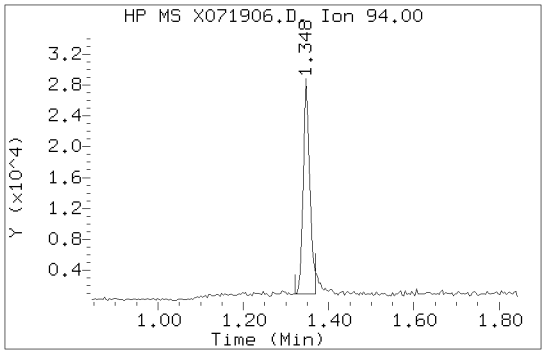
BEFORE

MASS
83
AREA
63536
HEIGHT
25192
25-Jul-2022
09:00
linh
pham



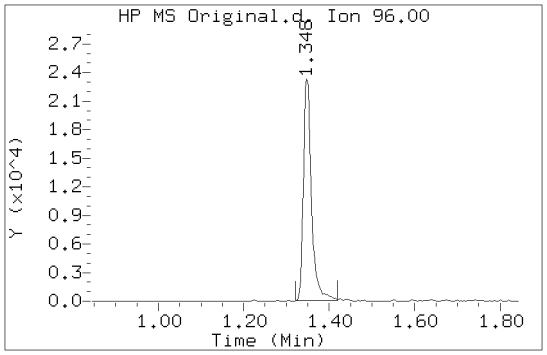
AFTER

MASS
94
AREA
30861
HEIGHT
27868
19-Aug-2022
10:59
linh
pham



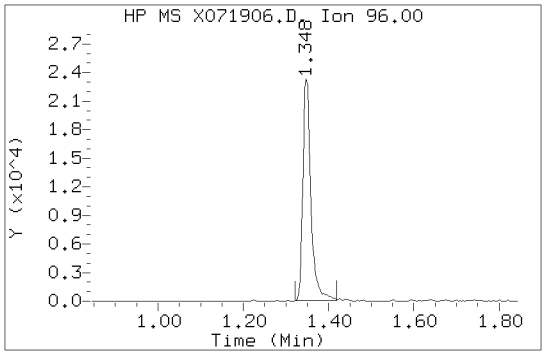
BEFORE

MASS
85
AREA
39697
HEIGHT
16538
25-Jul-2022
09:00
linh
pham



AFTER

MASS
96
AREA
31710
HEIGHT
23276
19-Aug-2022
10:59
linh
pham

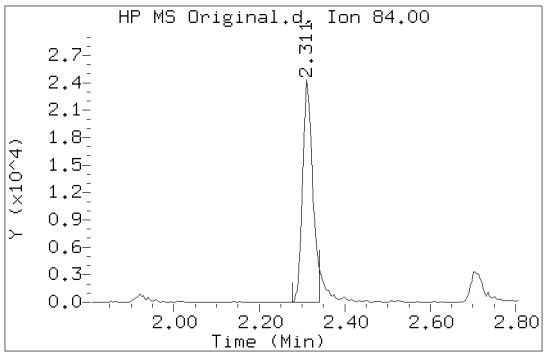


Methylene Chloride (75-09-2)

Reason Code:

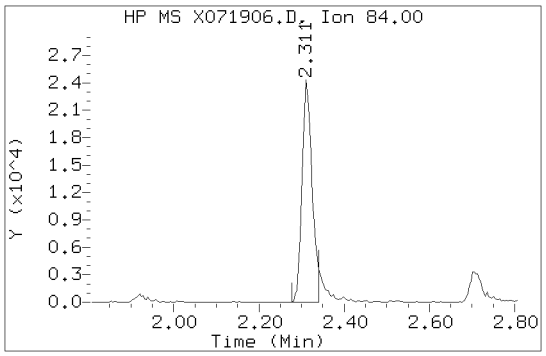
BEFORE

MASS
91
AREA
111787
HEIGHT
72323
25-Jul-2022
09:00
linh
pham



AFTER

MASS
84
AREA
40888
HEIGHT
24320
19-Aug-2022
10:59
linh
pham



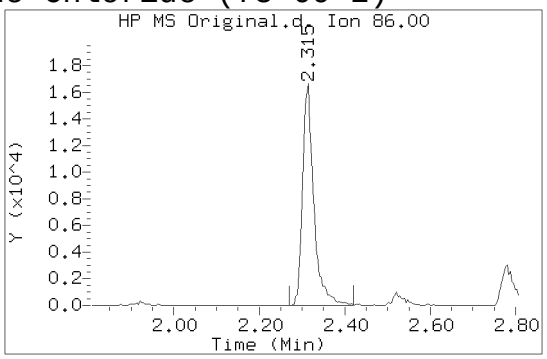
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D
Inj Date : 19-JUL-2022 13:11
InstruID : voa6.i
LabSampID : VSTD005

Methylene Chloride (75-09-2)

Reason Code:

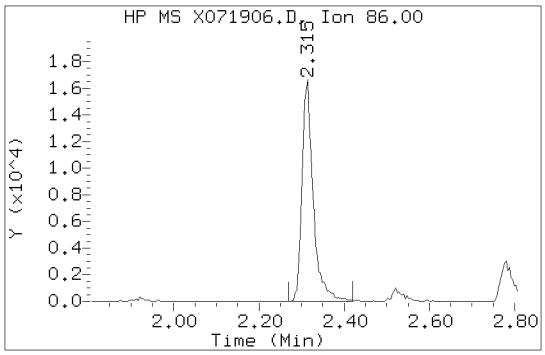
BEFORE

MASS
126
AREA
36519
HEIGHT
23180
25-Jul-2022
09:00
linh
pham



AFTER

MASS
86
AREA
31050
HEIGHT
16648
19-Aug-2022
10:59
linh
pham

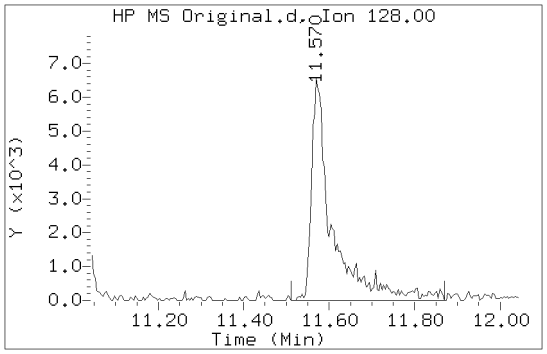


Naphthalene (91-20-3)

Reason Code:

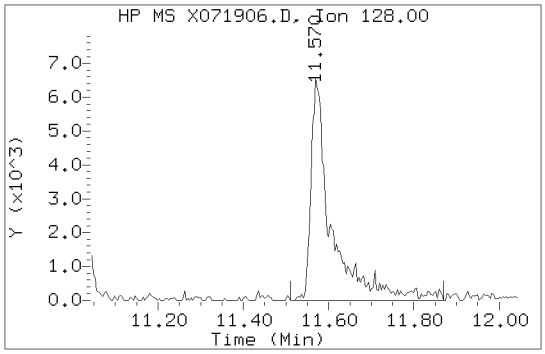
BEFORE

MASS
105
AREA
133745
HEIGHT
99939
25-Jul-2022
09:00
linh
pham



AFTER

MASS
128
AREA
21849
HEIGHT
6546
19-Aug-2022
10:59
linh
pham

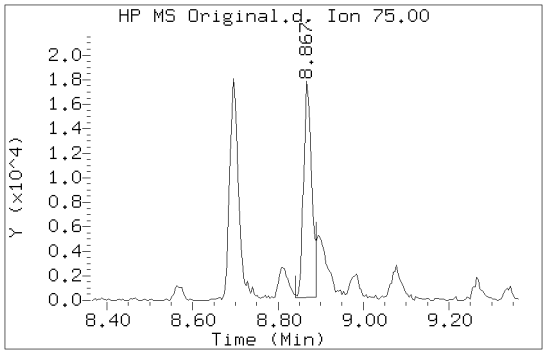


1,2,3-Trichloropropane (96-18-4)

Reason Code:

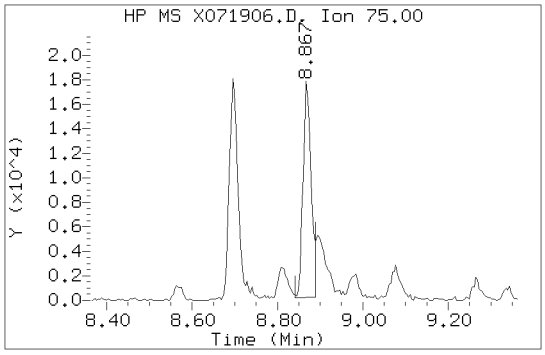
BEFORE

MASS
180
AREA
10995
HEIGHT
5351
25-Jul-2022
09:00
linh
pham



AFTER

MASS
75
AREA
24185
HEIGHT
17647
19-Aug-2022
10:59
linh
pham



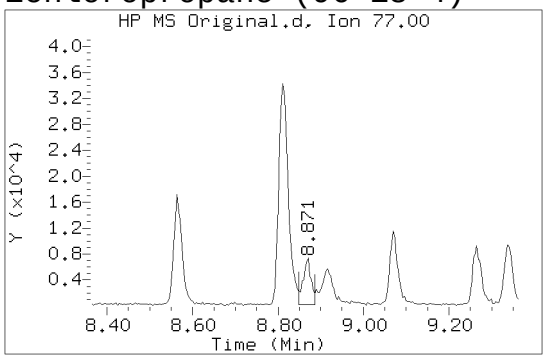
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D
Inj Date : 19-JUL-2022 13:11
InstruID : voa6.i
LabSampID : VSTD005

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

Reason Code:

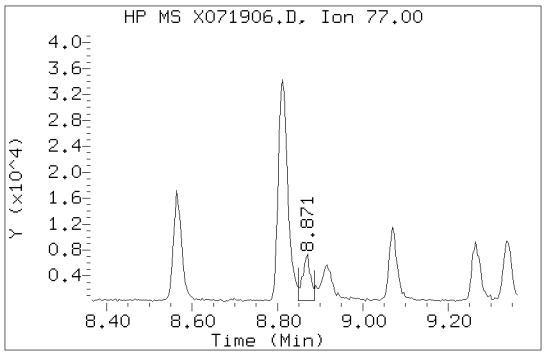
BEFORE

MASS
182
AREA
10507
HEIGHT
5207
25-Jul-2022
09:00
linh
pham



AFTER

MASS
77
AREA
9709
HEIGHT
7172
19-Aug-2022
10:59
linh
pham

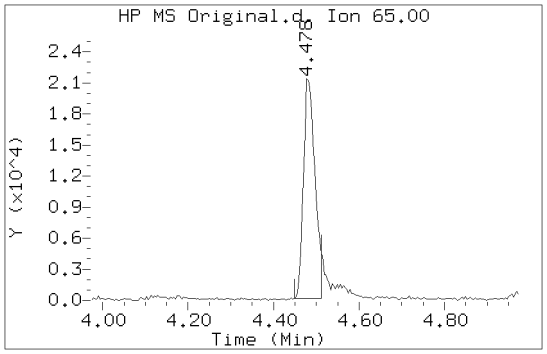


1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

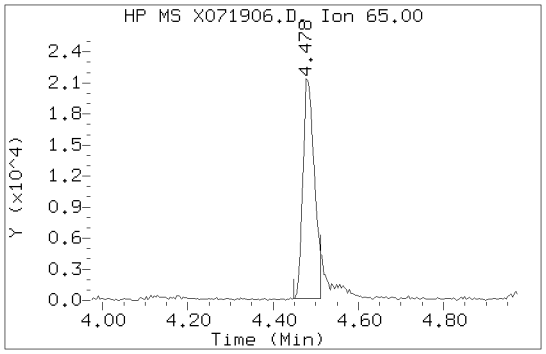
BEFORE

MASS
113
AREA
40606
HEIGHT
18160
25-Jul-2022
09:00
linh
pham



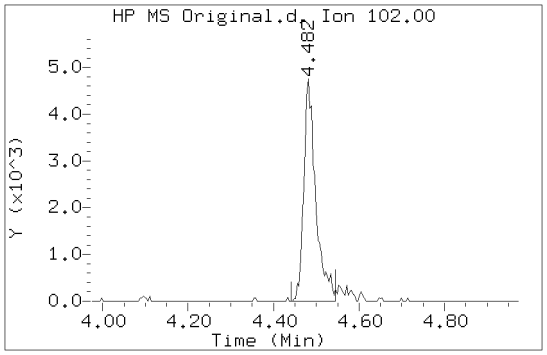
AFTER

MASS
65
AREA
40441
HEIGHT
21216
19-Aug-2022
10:59
linh
pham



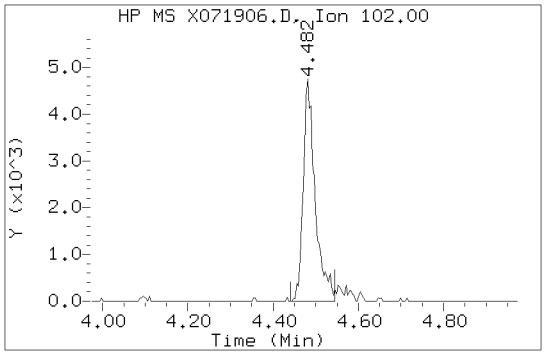
BEFORE

MASS
111
AREA
43698
HEIGHT
16952
25-Jul-2022
09:00
linh
pham



AFTER

MASS
102
AREA
9413
HEIGHT
4753
19-Aug-2022
10:59
linh
pham

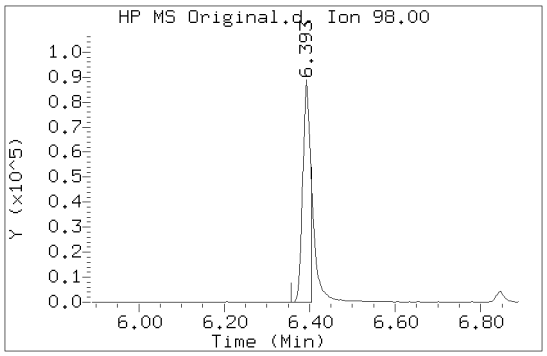


Toluene-d8 (2037-26-5)

Reason Code:

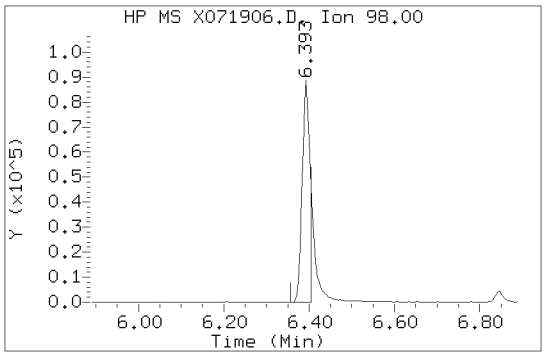
BEFORE

MASS
65
AREA
40441
HEIGHT
21216
25-Jul-2022
09:00
linh
pham



AFTER

MASS
98
AREA
110927
HEIGHT
88856
19-Aug-2022
10:59
linh
pham



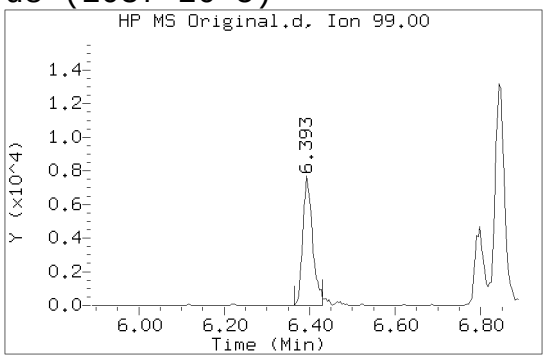
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071906.D
Inj Date : 19-JUL-2022 13:11
InstruID : voa6.i
LabSampID : VSTD005

Toluene-d8 (2037-26-5)

Reason Code:

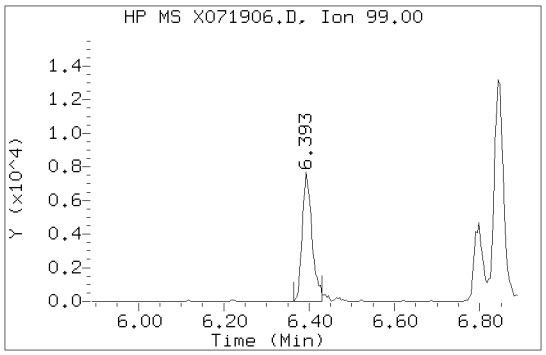
BEFORE

MASS
102
AREA
9413
HEIGHT
4753
25-Jul-2022
09:00
linh
pham



AFTER

MASS
99
AREA
12492
HEIGHT
7694
19-Aug-2022
10:59
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071907.D Page 1
Report Date: 19-Aug-2022 11:00

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071907.D
Lab Smp Id: VSTD020 Client Smp ID: VSTD020
Inj Date : 19-JUL-2022 13:32
Operator : PC Inst ID: voa6.i
Smp Info : VSTD020;VSTD020;1;6;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\8260W.m
Meth Date : 19-Aug-2022 11:00 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:11 Cal File: X071906.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	739593	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	1081697	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	997162	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	485715	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	142500	20.0000	19.98
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	154444	20.0000	20.00
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	500293	20.0000	20.10
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	180100	20.0000	19.74
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	141960	20.0000	20.26
31 1,1,1-Trichloroethane	97	4.084	4.084	(0.976)	214055	20.0000	20.40
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	134536	20.0000	19.72
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	101856	20.0000	19.86
22 1,1-Dichloroethane	63	2.929	2.929	(0.700)	227348	20.0000	19.96
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	125514	20.0000	20.33
32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	176949	20.0000	20.26
93 1,2,3-Trichlorobenzene	180	11.746	11.746	(1.215)	47433	20.0000	18.78
71 1,2,3-Trichloropropane	75	8.867	8.867	(0.917)	102755	20.0000	19.53(M)
90 1,2,4-Trichlorobenzene	180	11.341	11.341	(1.173)	87805	20.0000	19.84
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	483222	20.0000	20.74
89 1,2-Dibromo-3-Chloropropane	155	10.663	10.663	(1.103)	9850	20.0000	19.90

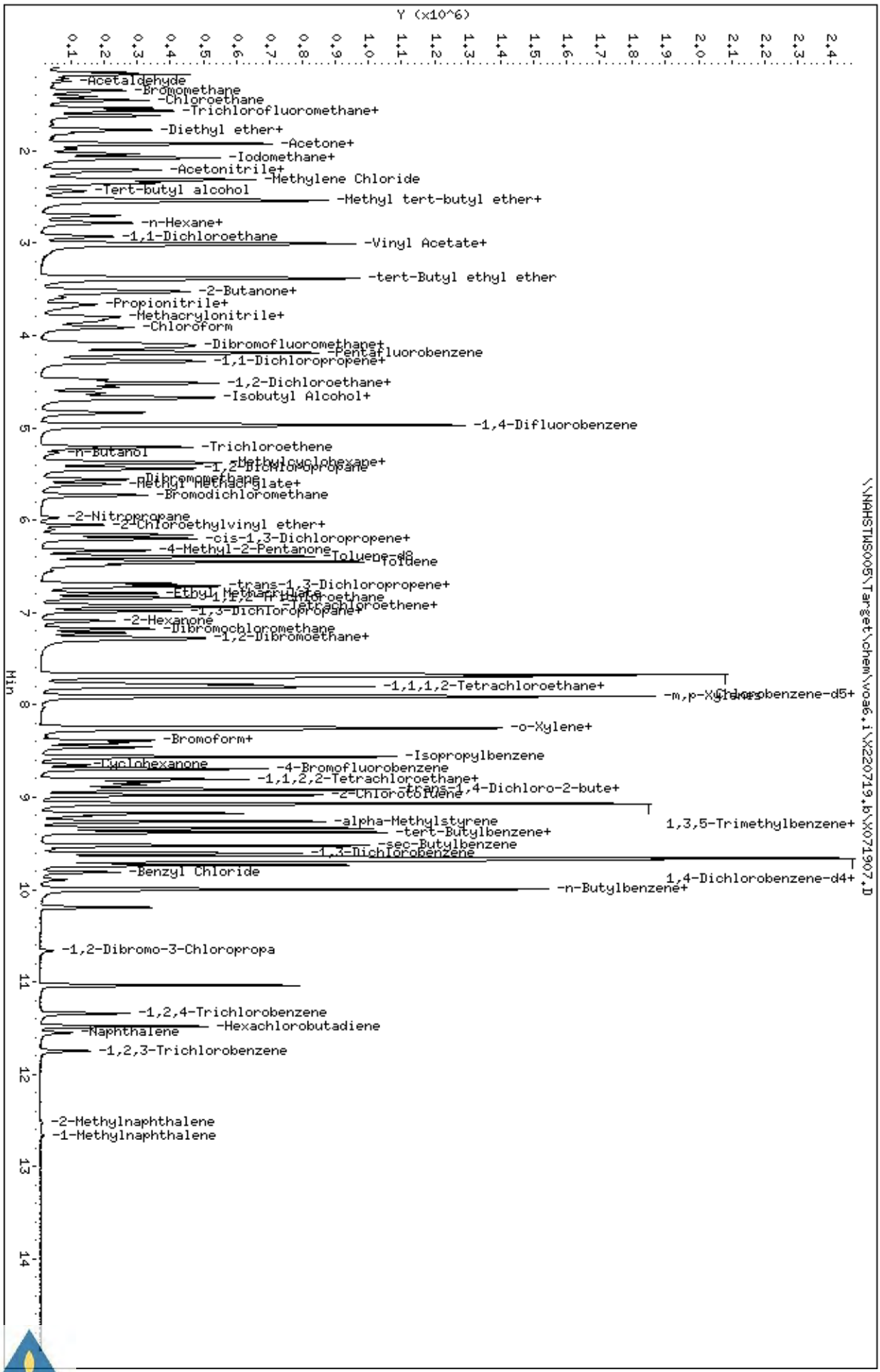
57 1,2-Dibromoethane	107	7.263	7.263 (0.947)	131728	20.0000	20.26
88 1,2-Dichlorobenzene	146	9.995	9.995 (1.034)	246991	20.0000	20.32

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071907.D Page 2
Report Date: 19-Aug-2022 11:00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	196212	20.0000	20.68
42	1,2-Dichloropropane	63	5.441	5.441	(1.095)	132233	20.0000	19.86
75	1,3,5-Trimethylbenzene	105	9.070	9.070	(0.938)	493153	20.0000	20.90
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	276344	20.0000	20.50
54	1,3-Dichloropropane	76	6.985	6.985	(0.911)	210322	20.0000	20.16
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	290428	20.0000	20.29
26	2,2-Dichloropropane	77	3.518	3.518	(0.841)	205808	20.0000	20.20
24	2-Butanone	43	3.589	3.589	(0.858)	70958	40.0000	38.24
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	415686	20.0000	19.96
52	2-Hexanone	43	7.090	7.090	(0.924)	128291	40.0000	40.91
77	4-Chlorotoluene	91	9.073	9.073	(0.939)	475945	20.0000	20.48
82	p-Isopropyltoluene	119	9.651	9.651	(0.998)	506622	20.0000	21.38
45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	195937	40.0000	40.32
10	Acetone	43	1.981	1.981	(0.473)	78540	40.0000	47.44
37	Benzene	78	4.519	4.519	(0.909)	513182	20.0000	20.02
74	Bromobenzene	156	8.807	8.807	(0.911)	169138	20.0000	20.39
29	Bromochloromethane	128	3.799	3.799	(0.908)	81206	20.0000	19.47
39	Bromodichloromethane	83	5.730	5.730	(1.153)	185723	20.0000	20.33
66	Bromoform	173	8.414	8.414	(1.097)	88254	20.0000	19.03
6	Bromomethane	94	1.347	1.347	(0.322)	109055	20.0000	20.80
19	Carbon Disulfide	76	2.078	2.078	(0.497)	658312	40.0000	40.27
34	Carbon Tetrachloride	117	4.268	4.268	(0.859)	185192	20.0000	19.84(H)
59	Chlorobenzene	112	7.698	7.698	(1.003)	385649	20.0000	20.39
7	Chloroethane	64	1.411	1.411	(0.337)	95266	20.0000	20.08
28	Chloroform	83	3.911	3.911	(0.935)	248749	20.0000	19.93
3	Chloromethane	50	1.085	1.085	(0.259)	141389	20.0000	20.67
27	cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	147915	20.0000	20.11
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	227076	20.0000	20.23
55	Dibromochloromethane	129	7.176	7.176	(0.935)	148385	20.0000	20.04
44	Dibromomethane	93	5.557	5.557	(1.118)	88603	20.0000	19.83
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	148427	20.0000	20.96
61	Ethylbenzene	106	7.803	7.803	(1.017)	200036	20.0000	20.94
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	83822	20.0000	20.51
67	Isopropylbenzene	105	8.563	8.563	(1.116)	604478	20.0000	21.04
62	m,p-Xylenes	106	7.907	7.907	(1.031)	502559	40.0000	42.30
17	Methylene Chloride	84	2.311	2.311	(0.552)	145583	20.0000	20.90
87	n-Butylbenzene	91	9.995	9.995	(1.034)	421870	20.0000	21.42
73	n-Propylbenzene	91	8.912	8.912	(0.922)	692792	20.0000	21.62
92	Naphthalene	128	11.551	11.551	(1.195)	88822	20.0000	17.94
63	o-Xylene	106	8.245	8.245	(1.075)	237188	20.0000	20.53
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	579666	20.0000	21.17
64	Styrene	104	8.264	8.264	(1.077)	394677	20.0000	20.75
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	424647	20.0000	21.23
56	Tetrachloroethene	164	6.929	6.929	(0.903)	136299	20.0000	21.07
50	Toluene	91	6.449	6.449	(0.841)	569133	20.0000	20.30
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.606)	127901	20.0000	19.65
51	trans-1,3-Dichloropropene	75	6.685	6.685	(1.346)	187591	20.0000	20.18
38	Trichloroethene	130	5.212	5.212	(1.049)	156440	20.0000	20.60
8	Trichlorofluoromethane	101	1.569	1.569	(0.375)	242471	20.0000	20.81
5	Vinyl Chloride	62	1.149	1.149	(0.275)	156334	20.0000	20.15

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071907.D
Date : 19-JUL-2022 13:32
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

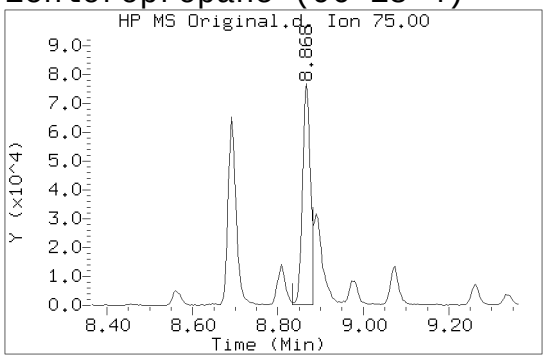
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071907.D
Inj Date : 19-JUL-2022 13:32
InstruID : voa6.i
LabSampID : VSTD020

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

Reason Code:

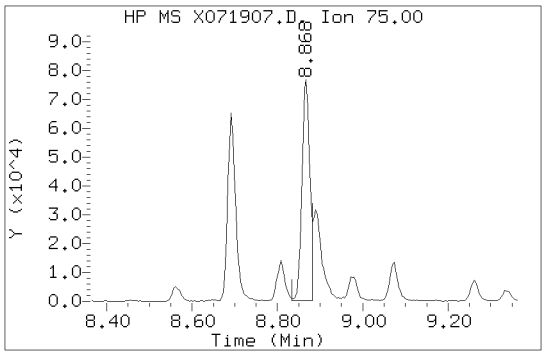
BEFORE

MASS
180
AREA
47433
HEIGHT
30757
25-Jul-2022
09:00
linh
pham



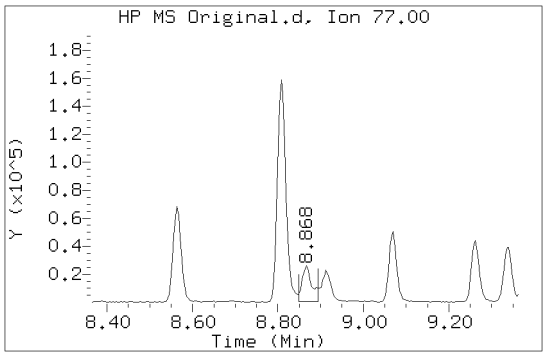
AFTER

MASS
75
AREA
102755
HEIGHT
76577
19-Aug-2022
10:59
linh
pham



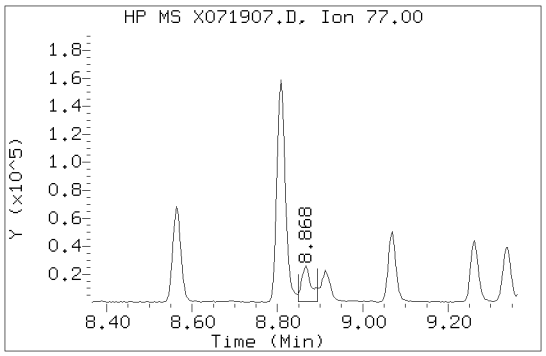
BEFORE

MASS
182
AREA
47169
HEIGHT
29608
25-Jul-2022
09:00
linh
pham



AFTER

MASS
77
AREA
42603
HEIGHT
25788
19-Aug-2022
10:59
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071908.D Page 1
Report Date: 19-Aug-2022 11:00

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071908.D
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 19-JUL-2022 13:53
Operator : PC Inst ID: voa6.i
Smp Info : VSTD050;VSTD050;1;7;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\8260W.m
Meth Date : 19-Aug-2022 11:00 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:32 Cal File: X071907.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.185	(1.000)	734958	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	1085873	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	1019317	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	512315	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	346983	50.0000	50.03
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	382235	50.0000	50.32
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1240134	50.0000	48.76
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	453323	50.0000	49.83
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	355310	50.0000	49.61
31 1,1,1-Trichloroethane	97	4.088	4.088	(0.977)	502522	50.0000	48.19
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	341695	50.0000	47.48
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	257236	50.0000	49.08
22 1,1-Dichloroethane	63	2.926	2.926	(0.699)	554513	50.0000	49.00
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	288416	50.0000	47.01
32 1,1-Dichloropropene	75	4.283	4.283	(0.862)	414434	50.0000	47.28
93 1,2,3-Trichlorobenzene	180	11.746	11.746	(1.216)	121908	50.0000	45.77
71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	253459	50.0000	45.68
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	221394	50.0000	47.44
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	1162230	50.0000	47.29
89 1,2-Dibromo-3-Chloropropane	155	10.659	10.659	(1.103)	25520	50.0000	47.15

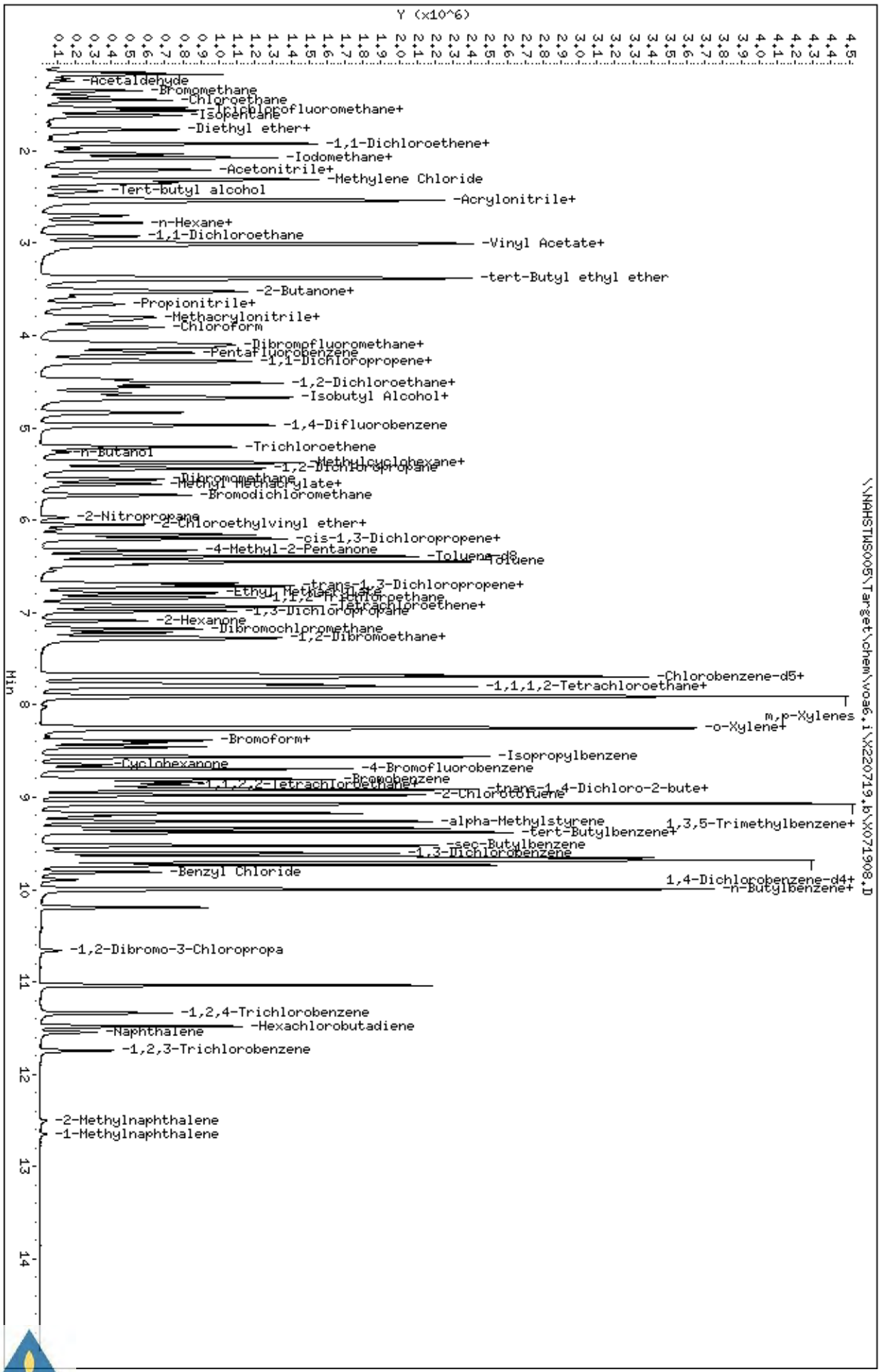
57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	334944	50.0000	50.40
88	1,2-Dichlorobenzene	146	9.996	9.996 (1.035)	617625	50.0000	48.17

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071908.D Page 2
Report Date: 19-Aug-2022 11:00

		QUANT SIG					AMOUNTS CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	468638	50.0000	49.20
42	1,2-Dichloropropane	63	5.437	5.437	(1.094)	329416	50.0000	49.28
75	1,3,5-Trimethylbenzene	105	9.070	9.070	(0.939)	1153705	50.0000	46.36
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	684242	50.0000	48.13
54	1,3-Dichloropropane	76	6.982	6.982	(0.910)	527266	50.0000	49.45
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	709045	50.0000	46.98
26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	492680	50.0000	49.02
24	2-Butanone	43	3.585	3.585	(0.857)	193554	100.000	104.97
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	990675	50.0000	45.11
52	2-Hexanone	43	7.090	7.090	(0.924)	323452	100.000	100.91
77	4-Chlorotoluene	91	9.070	9.070	(0.939)	1144586	50.0000	46.69
82	p-Isopropyltoluene	119	9.651	9.651	(0.999)	1165718	50.0000	46.64
45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	498897	100.000	100.44
10	Acetone	43	1.977	1.977	(0.472)	169593	100.000	110.14(M)
37	Benzene	78	4.515	4.515	(0.909)	1259556	50.0000	48.95
74	Bromobenzene	156	8.807	8.807	(0.912)	418666	50.0000	47.85
29	Bromochloromethane	128	3.799	3.799	(0.908)	201063	50.0000	48.52
39	Bromodichloromethane	83	5.730	5.730	(1.153)	463273	50.0000	50.51
66	Bromoform	173	8.410	8.410	(1.096)	238426	50.0000	48.29
6	Bromomethane	94	1.347	1.347	(0.322)	257164	50.0000	51.25
19	Carbon Disulfide	76	2.075	2.075	(0.496)	1581472	100.000	97.36
34	Carbon Tetrachloride	117	4.268	4.268	(0.859)	424773	50.0000	45.34(H)
59	Chlorobenzene	112	7.698	7.698	(1.003)	943881	50.0000	48.83
7	Chloroethane	64	1.407	1.407	(0.336)	230467	50.0000	48.88
28	Chloroform	83	3.908	3.908	(0.934)	615600	50.0000	49.65
3	Chloromethane	50	1.085	1.085	(0.259)	337031	50.0000	49.52
27	cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	373987	50.0000	51.18
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	580323	50.0000	51.51
55	Dibromochloromethane	129	7.177	7.177	(0.936)	378662	50.0000	50.05
44	Dibromomethane	93	5.557	5.557	(1.118)	223928	50.0000	49.93
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	341283	50.0000	48.73
61	Ethylbenzene	106	7.803	7.803	(1.017)	467536	50.0000	47.88
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	184987	50.0000	42.92
67	Isopropylbenzene	105	8.564	8.564	(1.116)	1383160	50.0000	47.10
62	m,p-Xylenes	106	7.908	7.908	(1.031)	1179120	100.000	97.09
17	Methylene Chloride	84	2.311	2.311	(0.552)	346955	50.0000	51.36
87	n-Butylbenzene	91	9.996	9.996	(1.035)	990308	50.0000	47.69
73	n-Propylbenzene	91	8.916	8.916	(0.923)	1583552	50.0000	46.85
92	Naphthalene	128	11.548	11.548	(1.195)	238116	50.0000	45.61
63	o-Xylene	106	8.241	8.241	(1.074)	567732	50.0000	48.08
81	sec-Butylbenzene	105	9.523	9.523	(0.986)	1311547	50.0000	45.41
64	Styrene	104	8.264	8.264	(1.077)	976088	50.0000	50.20
78	tert-Butylbenzene	119	9.340	9.340	(0.967)	962419	50.0000	45.63
56	Tetrachloroethene	164	6.929	6.929	(0.903)	305207	50.0000	46.17
50	Toluene	91	6.449	6.449	(0.841)	1377205	50.0000	48.06
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.606)	319350	50.0000	49.39
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.345)	493101	50.0000	52.85
38	Trichloroethene	130	5.209	5.209	(1.048)	369860	50.0000	48.52
8	Trichlorofluoromethane	101	1.565	1.565	(0.374)	545635	50.0000	47.14
5	Vinyl Chloride	62	1.149	1.149	(0.275)	370791	50.0000	48.11

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071908.D
Date : 19-JUL-2022 13:53
Client ID: VSTD050
Sample Info: VSTD050;VSTD050;1;7;
Purge Volume: 5.0
Column phase: DB624

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

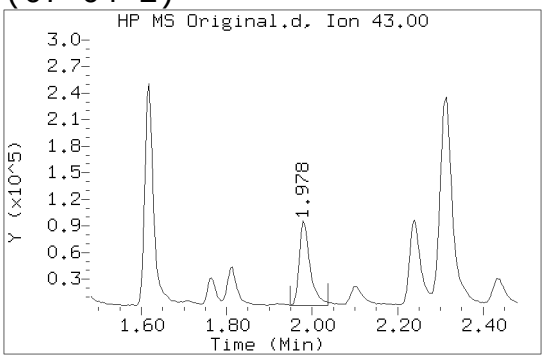
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071908.D
Inj Date : 19-JUL-2022 13:53
InstruID : voa6.i
LabSampID : VSTD050

Acetone (67-64-1)

Reason Code:

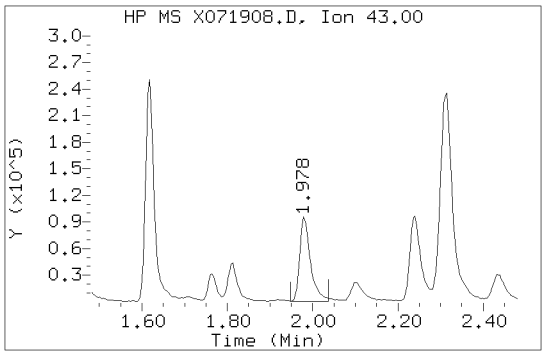
BEFORE

MASS
62
AREA
370791
HEIGHT
328896
25-Jul-2022
09:00
linh
pham



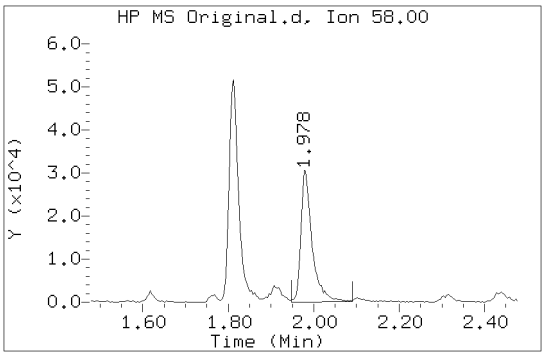
AFTER

MASS
43
AREA
169593
HEIGHT
95333
19-Aug-2022
10:59
linh
pham



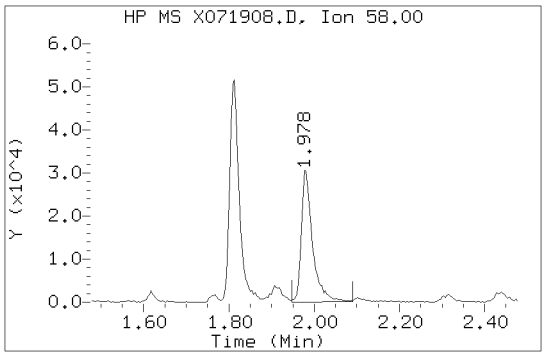
BEFORE

MASS
64
AREA
122861
HEIGHT
107460
25-Jul-2022
09:00
linh
pham



AFTER

MASS
58
AREA
56937
HEIGHT
30574
19-Aug-2022
10:59
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071909.D Page 1
Report Date: 19-Aug-2022 11:00

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071909.D
Lab Smp Id: VSTD100 Client Smp ID: VSTD100
Inj Date : 19-JUL-2022 14:14
Operator : PC Inst ID: voa6.i
Smp Info : VSTD100;VSTD100;1;8;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\8260W.m
Meth Date : 19-Aug-2022 11:00 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.185	(1.000)	776308	50.0000	
*	36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	1154877	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	1081115	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	547857	50.0000	
$	30 Dibromofluoromethane	113	4.102	4.102	(0.980)	746005	100.000	102.58
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	809230	100.000	101.19
$	48 Toluene-d8	98	6.389	6.389	(0.833)	2649228	100.000	98.21
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	977060	100.000	102.12
	60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	765283	100.000	100.75
	31 1,1,1-Trichloroethane	97	4.087	4.087	(0.977)	1106771	100.000	100.49
	68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	730488	100.000	94.93
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	543440	100.000	97.76
	22 1,1-Dichloroethane	63	2.925	2.925	(0.699)	1163915	100.000	97.38
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	624202	100.000	96.32
	32 1,1-Dichloropropene	75	4.282	4.282	(0.862)	942439	100.000	101.11
	93 1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	284991	100.000	100.06
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	543511	100.000	91.61
	90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	522833	100.000	104.77
	79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	2572257	100.000	97.88
	89 1,2-Dibromo-3-Chloropropane	155	10.659	10.659	(1.103)	61674	100.000	100.54

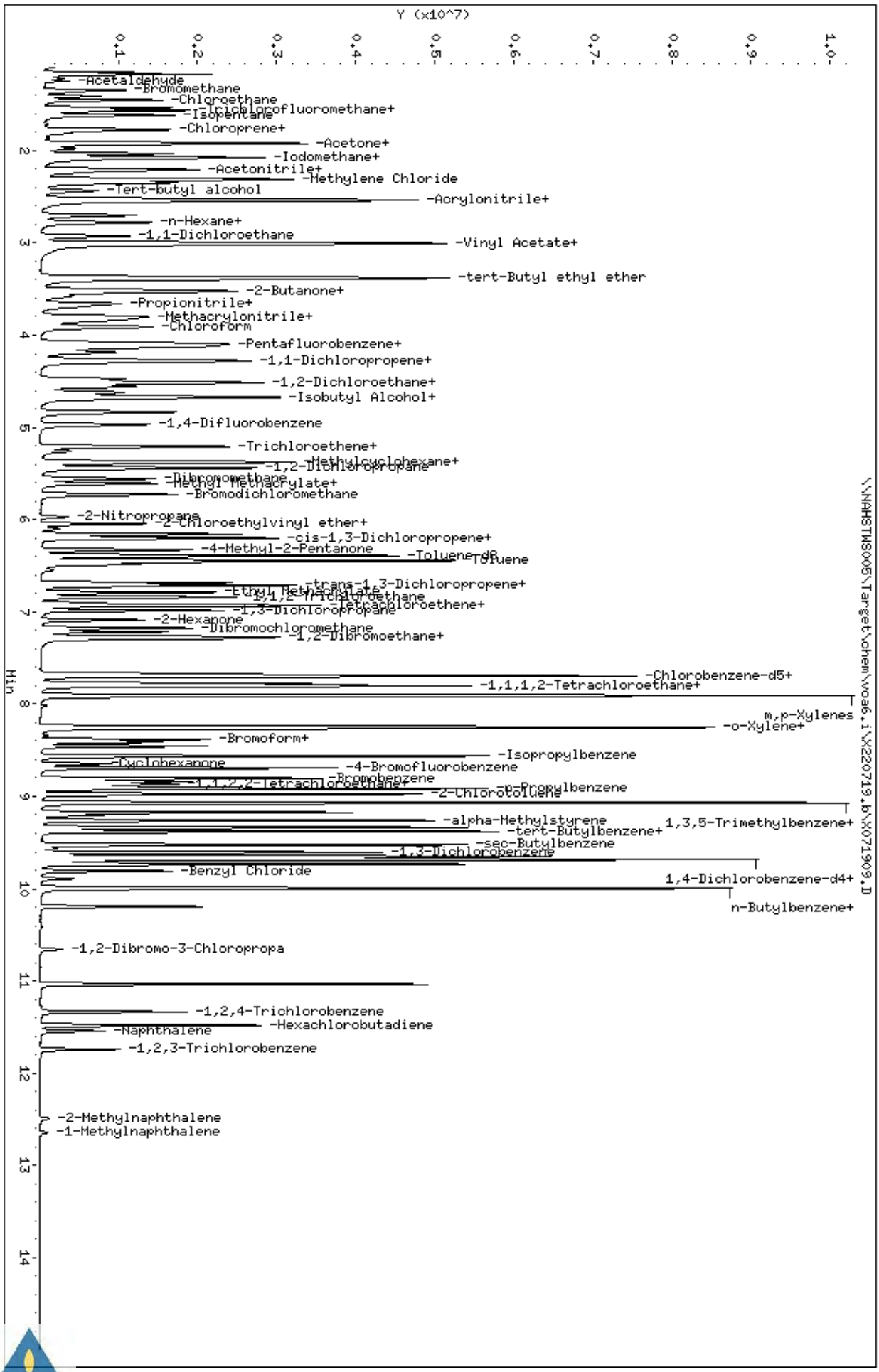
57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	703523	100.000	99.81
88	1,2-Dichlorobenzene	146	9.992	9.992 (1.034)	1339459	100.000	97.71

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071909.D Page 2
Report Date: 19-Aug-2022 11:00

						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	980664	100.000	96.82
42	1,2-Dichloropropane	63	5.441	5.441	(1.095)	691249	100.000	97.24
75	1,3,5-Trimethylbenzene	105	9.069	9.069	(0.938)	2590896	100.000	97.36
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	1499323	100.000	98.63
54	1,3-Dichloropropane	76	6.981	6.981	(0.910)	1108876	100.000	98.07
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	1533271	100.000	95.01
26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	1068902	100.000	100.95
24	2-Butanone	43	3.581	3.581	(0.856)	410442	200.000	210.75(A)
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	2164299	100.000	92.16
52	2-Hexanone	43	7.086	7.086	(0.924)	701293	200.000	206.29(A)
77	4-Chlorotoluene	91	9.069	9.069	(0.938)	2500348	100.000	95.39
82	p-Isopropyltoluene	119	9.650	9.650	(0.998)	2680829	100.000	100.31
45	4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	1056968	200.000	200.64(A)
10	Acetone	43	1.977	1.977	(0.472)	331360	200.000	208.83(A)
37	Benzene	78	4.515	4.515	(0.909)	2647487	100.000	96.74
74	Bromobenzene	156	8.807	8.807	(0.911)	908365	100.000	97.08
29	Bromochloromethane	128	3.799	3.799	(0.908)	418744	100.000	95.66
39	Bromodichloromethane	83	5.726	5.726	(1.152)	974443	100.000	99.90
66	Bromoform	173	8.410	8.410	(1.096)	516716	100.000	97.39
6	Bromomethane	94	1.343	1.343	(0.321)	532992	100.000	101.88
19	Carbon Disulfide	76	2.074	2.074	(0.496)	3384413	200.000	197.27
34	Carbon Tetrachloride	117	4.267	4.267	(0.859)	960811	100.000	96.44(H)
59	Chlorobenzene	112	7.694	7.694	(1.003)	2022869	100.000	98.68
7	Chloroethane	64	1.407	1.407	(0.336)	481997	100.000	96.80
28	Chloroform	83	3.911	3.911	(0.935)	1279887	100.000	97.74
3	Chloromethane	50	1.085	1.085	(0.259)	703134	100.000	97.77
27	cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	776558	100.000	100.61
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	1219777	100.000	101.81
55	Dibromochloromethane	129	7.176	7.176	(0.936)	810497	100.000	101.00
44	Dibromomethane	93	5.553	5.553	(1.118)	469656	100.000	98.47
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	739202	100.000	100.12
61	Ethylbenzene	106	7.802	7.802	(1.017)	1028416	100.000	99.31
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	461667	100.000	100.18
67	Isopropylbenzene	105	8.563	8.563	(1.116)	3131111	100.000	100.54
62	m,p-Xylenes	106	7.907	7.907	(1.031)	2582956	200.000	200.53(A)
17	Methylene Chloride	84	2.311	2.311	(0.552)	702932	100.000	99.32
87	n-Butylbenzene	91	9.995	9.995	(1.034)	2308605	100.000	103.96
73	n-Propylbenzene	91	8.916	8.916	(0.922)	3608465	100.000	99.84
92	Naphthalene	128	11.543	11.543	(1.194)	569028	100.000	101.93
63	o-Xylene	106	8.245	8.245	(1.075)	1248477	100.000	99.70
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	3060744	100.000	99.10
64	Styrene	104	8.260	8.260	(1.077)	2141037	100.000	103.83
78	tert-Butylbenzene	119	9.339	9.339	(0.966)	2210374	100.000	98.00
56	Tetrachloroethene	164	6.929	6.929	(0.903)	678866	100.000	96.83
50	Toluene	91	6.449	6.449	(0.841)	2931075	100.000	96.44
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.606)	677550	100.000	99.21
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.345)	1049314	100.000	105.75
38	Trichloroethene	130	5.208	5.208	(1.048)	803862	100.000	99.16
8	Trichlorofluoromethane	101	1.565	1.565	(0.374)	1203433	100.000	98.44
5	Vinyl Chloride	62	1.149	1.149	(0.275)	778484	100.000	95.63

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.
H - Operator selected an alternate compound hit.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071909.D
Date : 19-JUL-2022 14:14
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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071909.D
Inj Date : 19-JUL-2022 14:14
InstruID : voa6.i
LabSampID : VSTD100

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071910.D Page 1
Report Date: 19-Aug-2022 11:00

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071910.D
Lab Smp Id: VSTD150 Client Smp ID: VSTD150
Inj Date : 19-JUL-2022 14:35
Operator : PC Inst ID: voa6.i
Smp Info : VSTD150;VSTD150;1;9;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\8260W.m
Meth Date : 19-Aug-2022 11:00 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 14:14 Cal File: X071909.D
Als bottle: 11 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

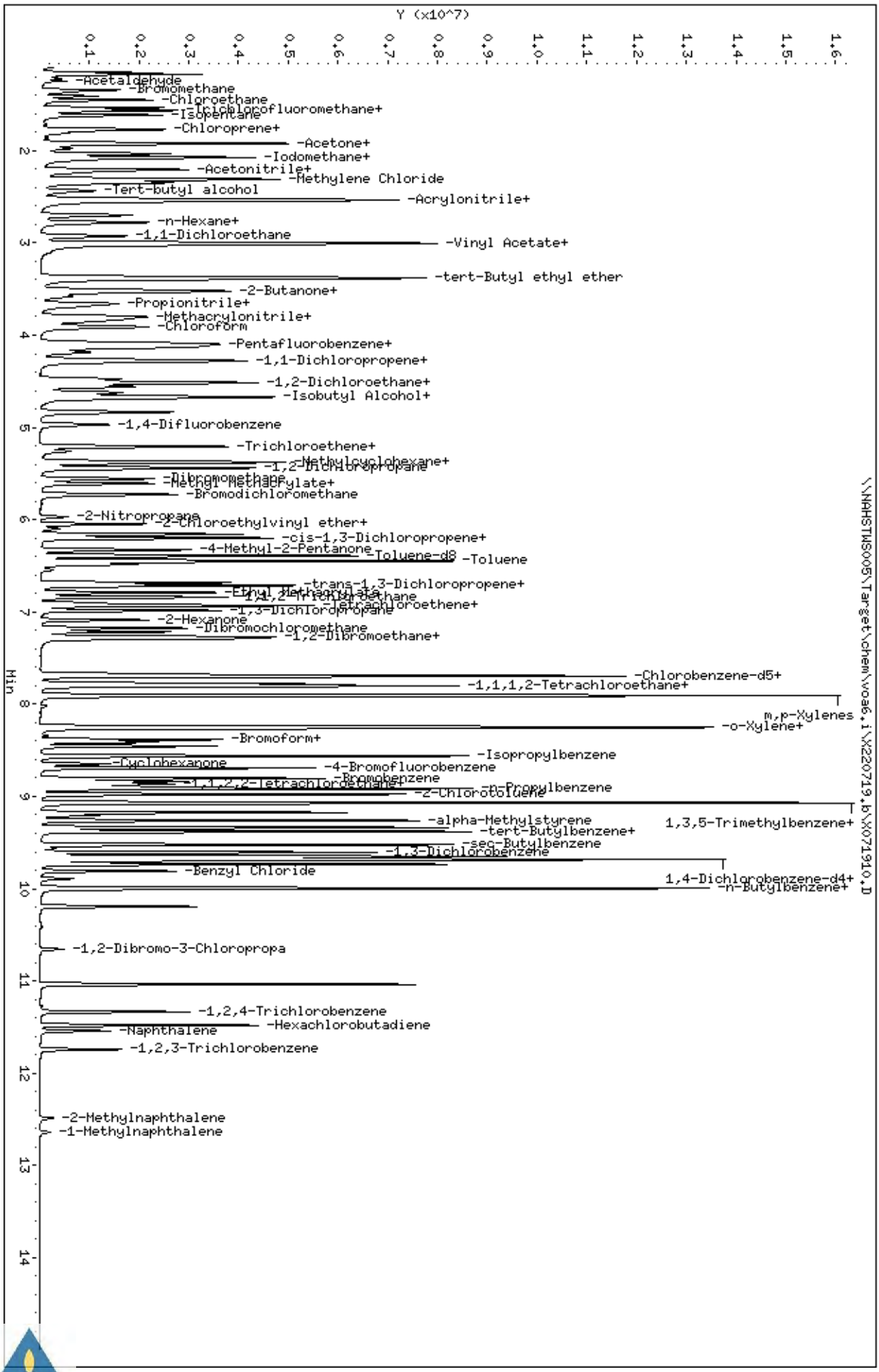
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	796235	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	1171801	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	1091116	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	549184	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	1092576	150.000	146.79
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	1212903	150.000	148.03
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	3736951	150.000	137.26
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	1441404	150.000	149.65
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	1195482	150.000	155.95
31 1,1,1-Trichloroethane	97	4.084	4.084	(0.976)	1707773	150.000	151.19
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	1135034	150.000	147.15
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	835768	150.000	148.97
22 1,1-Dichloroethane	63	2.926	2.926	(0.699)	1791548	150.000	146.15
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	943462	150.000	141.94
32 1,1-Dichloropropene	75	4.283	4.283	(0.862)	1444196	150.000	152.70
93 1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	478272	150.000	167.52
71 1,2,3-Trichloropropane	75	8.867	8.867	(0.917)	931744	150.000	156.67(M)
90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	848085	150.000	169.54
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	3955329	150.000	150.14
89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.102)	99187	150.000	151.45

57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	1092479	150.000	153.58
88	1,2-Dichlorobenzene	146	9.992	9.992 (1.034)	2079140	150.000	151.30

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	1482391	150.000	144.24
42	1,2-Dichloropropane	63	5.441	5.441	(1.095)	1070151	150.000	148.37
75	1,3,5-Trimethylbenzene	105	9.070	9.070	(0.938)	4008964	150.000	150.28
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	2311073	150.000	151.67
54	1,3-Dichloropropane	76	6.982	6.982	(0.910)	1715864	150.000	150.36
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	2360078	150.000	145.89
26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	1641201	150.000	151.24
24	2-Butanone	43	3.582	3.582	(0.856)	642842	300.000	321.82(A)
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	3314698	150.000	140.81
52	2-Hexanone	43	7.087	7.087	(0.924)	1103937	300.000	321.75(A)
77	4-Chlorotoluene	91	9.070	9.070	(0.938)	3879627	150.000	147.65
82	p-Isopropyltoluene	119	9.651	9.651	(0.998)	4157908	150.000	155.21
45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	1655136	300.000	311.31(A)
10	Acetone	43	1.977	1.977	(0.472)	485174	300.000	300.69(A)
37	Benzene	78	4.515	4.515	(0.909)	4062135	150.000	146.29
74	Bromobenzene	156	8.807	8.807	(0.911)	1415416	150.000	150.91
29	Bromochloromethane	128	3.799	3.799	(0.908)	653335	150.000	145.52
39	Bromodichloromethane	83	5.726	5.726	(1.152)	1524319	150.000	154.02
66	Bromoform	173	8.410	8.410	(1.096)	810870	150.000	150.74
6	Bromomethane	94	1.344	1.344	(0.321)	802069	150.000	150.12
19	Carbon Disulfide	76	2.075	2.075	(0.496)	5174750	300.000	294.08(A)
34	Carbon Tetrachloride	117	4.268	4.268	(0.859)	1493025	150.000	147.70(H)
59	Chlorobenzene	112	7.694	7.694	(1.003)	3132676	150.000	151.41
7	Chloroethane	64	1.407	1.407	(0.336)	733919	150.000	143.70
28	Chloroform	83	3.911	3.911	(0.935)	1980101	150.000	147.43
3	Chloromethane	50	1.085	1.085	(0.259)	1102492	150.000	149.44
27	cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	1206122	150.000	152.36
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	1917971	150.000	157.77
55	Dibromochloromethane	129	7.176	7.176	(0.935)	1278087	150.000	157.81
44	Dibromomethane	93	5.553	5.553	(1.118)	729812	150.000	150.81
2	Dichlorodifluoromethane	85	0.976	0.976	(0.233)	1136547	150.000	150.17
61	Ethylbenzene	106	7.803	7.803	(1.017)	1591049	150.000	152.23
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	720247	150.000	155.91
67	Isopropylbenzene	105	8.563	8.563	(1.116)	4840536	150.000	154.01
62	m,p-Xylenes	106	7.907	7.907	(1.031)	4020049	300.000	309.24(A)
17	Methylene Chloride	84	2.307	2.307	(0.551)	1078247	150.000	148.97
87	n-Butylbenzene	91	9.995	9.995	(1.034)	3614158	150.000	162.36
73	n-Propylbenzene	91	8.916	8.916	(0.922)	5561718	150.000	153.51
92	Naphthalene	128	11.544	11.544	(1.194)	950153	150.000	169.80
63	o-Xylene	106	8.245	8.245	(1.075)	1929311	150.000	152.66
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	4735185	150.000	152.94
64	Styrene	104	8.260	8.260	(1.077)	3307549	150.000	158.93
78	tert-Butylbenzene	119	9.339	9.339	(0.966)	3394260	150.000	150.12
56	Tetrachloroethene	164	6.929	6.929	(0.903)	1047361	150.000	148.02
50	Toluene	91	6.449	6.449	(0.841)	4550354	150.000	148.35
20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.605)	1045463	150.000	149.25
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.345)	1642003	150.000	163.10
38	Trichloroethene	130	5.208	5.208	(1.048)	1236555	150.000	150.33
8	Trichlorofluoromethane	101	1.565	1.565	(0.374)	1807152	150.000	144.12
5	Vinyl Chloride	62	1.149	1.149	(0.275)	1188248	150.000	142.31

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071910.D
Date : 19-JUL-2022 14:35
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

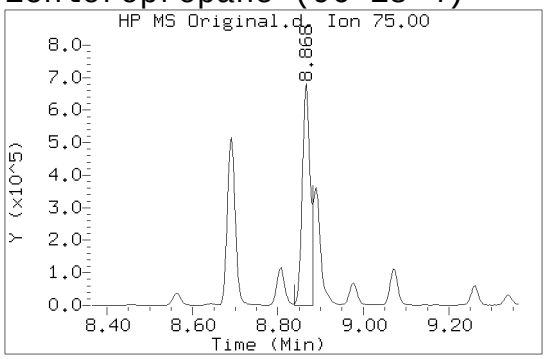
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071910.D
Inj Date : 19-JUL-2022 14:35
InstruID : voa6.i
LabSampID : VSTD150

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

Reason Code:

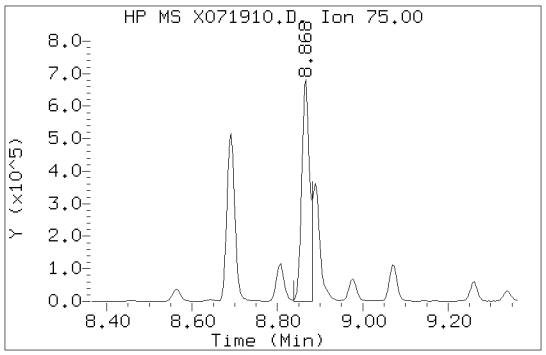
BEFORE

MASS
180
AREA
478272
HEIGHT
343057
25-Jul-2022
09:00
linh
pham



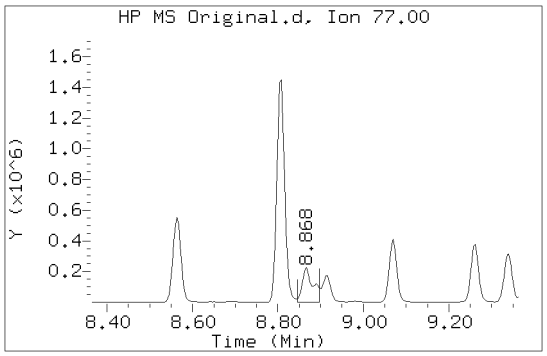
AFTER

MASS
75
AREA
931744
HEIGHT
680724
19-Aug-2022
10:59
linh
pham



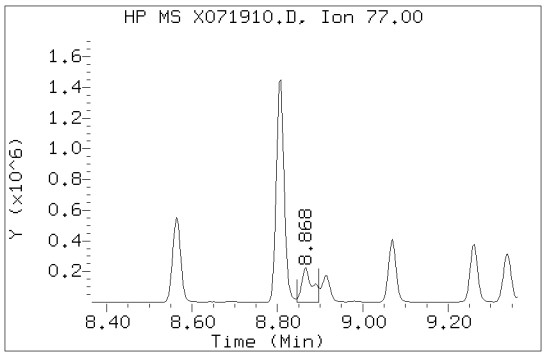
BEFORE

MASS
182
AREA
460546
HEIGHT
324767
25-Jul-2022
09:00
linh
pham



AFTER

MASS
77
AREA
405506
HEIGHT
224343
19-Aug-2022
10:59
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071911.D Page 1
Report Date: 19-Aug-2022 11:00

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071911.D
Lab Smp Id: VSTD200 Client Smp ID: VSTD200
Inj Date : 19-JUL-2022 14:56
Operator : PC Inst ID: voa6.i
Smp Info : VSTD200;VSTD200;1;10;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\8260W.m
Meth Date : 19-Aug-2022 11:00 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 14:35 Cal File: X071910.D
Als bottle: 12 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.185	(1.000)	803738	50.0000	
*	36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	1205073	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	1124346	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	554221	50.0000	
$	30 Dibromofluoromethane	113	4.103	4.103	(0.980)	1508056	200.000	200.99(A)
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	1659515	200.000	200.76(A)
$	48 Toluene-d8	98	6.389	6.389	(0.833)	5194877	200.000	185.18
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	1974506	200.000	199.21
	60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	1612294	200.000	204.10(A)
	31 1,1,1-Trichloroethane	97	4.088	4.088	(0.977)	2254143	200.000	197.69
	68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	1542895	200.000	198.21
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	1135727	200.000	196.46
	22 1,1-Dichloroethane	63	2.925	2.925	(0.699)	2426731	200.000	196.12
	11 1,1-Dichloroethene	96	1.917	1.917	(0.458)	1236595	200.000	184.31
	32 1,1-Dichloropropene	75	4.282	4.282	(0.862)	1896946	200.000	195.04
	93 1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	666695	200.000	231.39(A)
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	1167458	200.000	194.52
	90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	1148206	200.000	227.46(A)
	79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	5244947	200.000	197.29
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.102)	141749	200.000	199.27

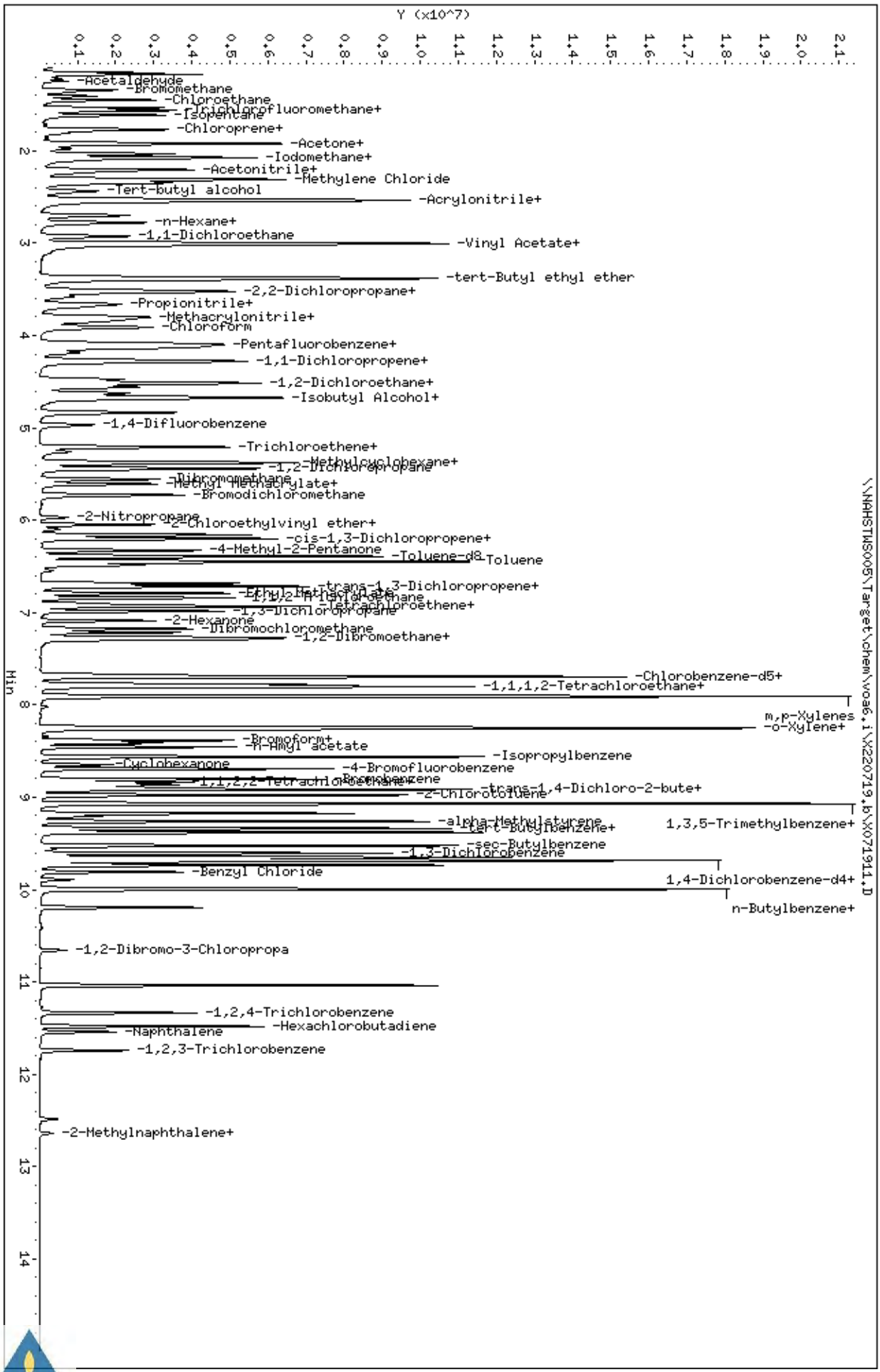
57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	1496052	200.000	204.10(A)
88	1,2-Dichlorobenzene	146	9.992	9.992 (1.034)	2799420	200.000	201.86(A)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071911.D Page 2
Report Date: 19-Aug-2022 11:00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	2012582	200.000	190.42
42	1,2-Dichloropropane	63	5.437	5.437	(1.094)	1450727	200.000	195.58
75	1,3,5-Trimethylbenzene	105	9.070	9.070	(0.938)	5246350	200.000	194.88
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	3095537	200.000	201.30(A)
54	1,3-Dichloropropane	76	6.985	6.985	(0.911)	2324887	200.000	197.71
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	3163641	200.000	193.79
26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	2176392	200.000	198.77
24	2-Butanone	43	3.578	3.578	(0.855)	881176	400.000	437.02(AH)
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	4456010	200.000	187.57
52	2-Hexanone	43	7.086	7.086	(0.924)	1516523	400.000	428.94(A)
77	4-Chlorotoluene	91	9.070	9.070	(0.938)	5189116	200.000	195.69
82	p-Isopropyltoluene	119	9.651	9.651	(0.998)	5441966	200.000	201.30(A)
45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	2269263	400.000	414.21(A)
10	Acetone	43	1.981	1.981	(0.473)	633758	400.000	390.88(A)
37	Benzene	78	4.515	4.515	(0.909)	5472288	200.000	191.63
74	Bromobenzene	156	8.807	8.807	(0.911)	1893902	200.000	200.09(A)
29	Bromochloromethane	128	3.795	3.795	(0.907)	892720	200.000	196.99
39	Bromodichloromethane	83	5.729	5.729	(1.153)	2073168	200.000	203.70(A)
66	Bromoform	173	8.410	8.410	(1.096)	1117306	200.000	201.16(A)
6	Bromomethane	94	1.344	1.344	(0.321)	1068317	200.000	198.52
19	Carbon Disulfide	76	2.075	2.075	(0.496)	6899401	400.000	388.43(A)
34	Carbon Tetrachloride	117	4.268	4.268	(0.859)	1968804	200.000	189.40(H)
59	Chlorobenzene	112	7.694	7.694	(1.003)	4198880	200.000	196.95
7	Chloroethane	64	1.407	1.407	(0.336)	975969	200.000	189.31
28	Chloroform	83	3.911	3.911	(0.935)	2672684	200.000	197.14
3	Chloromethane	50	1.085	1.085	(0.259)	1500734	200.000	201.51(A)
27	cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	1625068	200.000	203.37(A)
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	2613041	200.000	209.02(A)
55	Dibromochloromethane	129	7.176	7.176	(0.935)	1744246	200.000	209.01(A)
44	Dibromomethane	93	5.553	5.553	(1.118)	992325	200.000	199.39
2	Dichlorodifluoromethane	85	0.976	0.976	(0.233)	1493067	200.000	195.49
61	Ethylbenzene	106	7.802	7.802	(1.017)	2112026	200.000	196.11
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	962444	200.000	206.45(A)
67	Isopropylbenzene	105	8.563	8.563	(1.116)	6316064	200.000	195.02
62	m,p-Xylenes	106	7.907	7.907	(1.031)	5292303	400.000	395.08(A)
17	Methylene Chloride	84	2.307	2.307	(0.551)	1463710	200.000	200.64(A)
87	n-Butylbenzene	91	9.995	9.995	(1.034)	4708202	200.000	209.59(A)
73	n-Propylbenzene	91	8.916	8.916	(0.922)	7282081	200.000	199.17
92	Naphthalene	128	11.544	11.544	(1.194)	1361878	200.000	241.16(A)
63	o-Xylene	106	8.245	8.245	(1.075)	2579739	200.000	198.10
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	6146815	200.000	196.74
64	Styrene	104	8.260	8.260	(1.077)	4441868	200.000	207.13(A)
78	tert-Butylbenzene	119	9.339	9.339	(0.966)	4414774	200.000	193.49
56	Tetrachloroethene	164	6.929	6.929	(0.903)	1363627	200.000	187.03
50	Toluene	91	6.449	6.449	(0.841)	6032619	200.000	190.87
20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.605)	1400331	200.000	198.05
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.345)	2241759	200.000	216.52(A)
38	Trichloroethene	130	5.208	5.208	(1.048)	1647543	200.000	194.77
8	Trichlorofluoromethane	101	1.565	1.565	(0.374)	2331731	200.000	184.23
5	Vinyl Chloride	62	1.149	1.149	(0.275)	1561762	200.000	185.30

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.
H - Operator selected an alternate compound hit.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071911.D
Date : 19-JUL-2022 14:56
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\X220719.b\X071911.D
Inj Date : 19-JUL-2022 14:56
InstruID : voa6.i
LabSampID : VSTD200

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071915.D Page 1
Report Date: 19-Aug-2022 11:00

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071915.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 19-JUL-2022 16:20
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;ICV
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\8260W.m
Meth Date : 19-Aug-2022 11:00 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 14:56 Cal File: X071911.D
Als bottle: 16 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

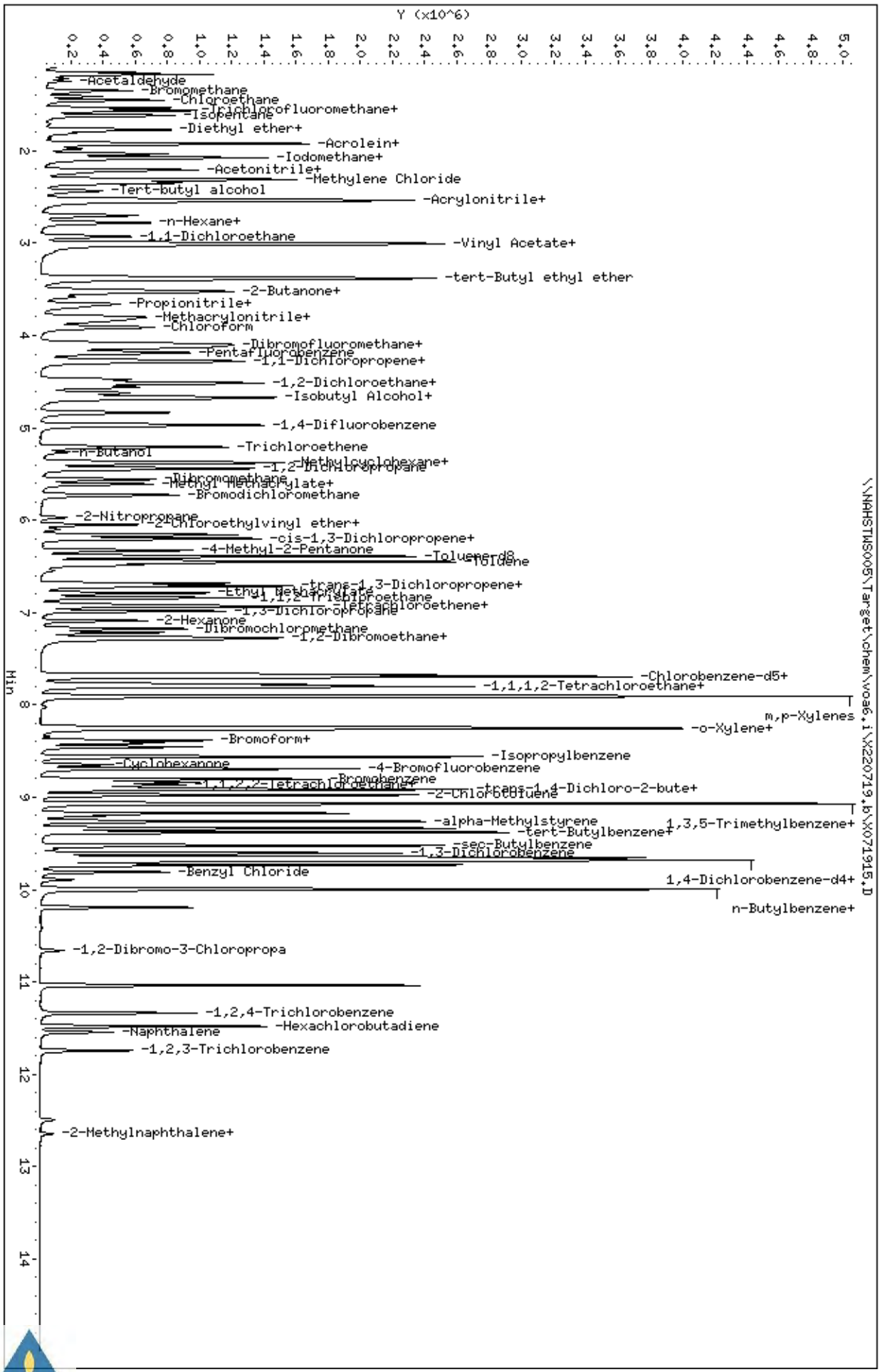
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	803279	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	1177898	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	1099931	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.666	(1.000)	554211	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	393451	51.9327	51.93
$ 35 1,2-Dichloroethane-d4	65	4.478	4.474	(1.070)	422461	50.8929	50.89
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1372695	50.0189	50.01
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	511712	52.1682	52.16
60 1,1,1,2-Tetrachloroethane	131	7.773	7.776	(1.013)	375568	48.6005	48.60
31 1,1,1-Trichloroethane	97	4.088	4.088	(0.977)	538729	47.2761	47.27
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	372935	47.9121	47.91
53 1,1,2-Trichloroethane	83	6.839	6.843	(0.892)	269933	47.7307	47.73
22 1,1-Dichloroethane	63	2.929	2.925	(0.700)	575772	46.5590	46.55
11 1,1-Dichloroethene	96	1.921	1.917	(0.459)	306381	45.6913	45.69
32 1,1-Dichloropropene	75	4.283	4.282	(0.862)	455600	47.9253	47.92
93 1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	168688	58.5498	58.54
71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	277578	46.2518	46.25
90 1,2,4-Trichlorobenzene	180	11.338	11.337	(1.173)	285078	56.4761	56.47
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	1296372	48.7653	48.76
89 1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	32044	54.3117	54.31

57 1,2-Dibromoethane	107	7.263	7.263 (0.947)	355369	49.5585	49.55
88 1,2-Dichlorobenzene	146	9.992	9.992 (1.034)	690253	49.7749	49.77

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	487745	47.2147	47.21
42	1,2-Dichloropropane	63	5.437	5.437	(1.094)	341934	47.1626	47.16
75	1,3,5-Trimethylbenzene	105	9.070	9.070	(0.939)	1283913	47.6934	47.69
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	756362	49.1885	49.18
54	1,3-Dichloropropane	76	6.982	6.985	(0.910)	552590	48.0362	48.03
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	785297	48.1053	48.10
26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	537177	48.9036	48.90
24	2-Butanone	43	3.582	3.578	(0.856)	214703	106.544	106.54
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	1080955	45.5033	45.50
52	2-Hexanone	43	7.090	7.086	(0.924)	360829	104.326	104.32
77	4-Chlorotoluene	91	9.070	9.070	(0.939)	1262067	47.5975	47.59
82	p-Isopropyltoluene	119	9.651	9.651	(0.999)	1319696	48.8179	48.81
45	4-Methyl-2-Pentanone	43	6.326	6.329	(0.825)	541981	101.124	101.12
10	Acetone	43	1.981	1.981	(0.473)	197688	117.868	117.86(M)
37	Benzene	78	4.515	4.515	(0.909)	1304561	46.7389	46.73
74	Bromobenzene	156	8.807	8.807	(0.912)	455307	48.1063	48.10
29	Bromochloromethane	128	3.799	3.795	(0.908)	208389	46.0110	46.01
39	Bromodichloromethane	83	5.726	5.729	(1.152)	484620	48.7163	48.71
66	Bromoform	173	8.410	8.410	(1.096)	257179	48.2740	48.27
6	Bromomethane	94	1.347	1.344	(0.322)	266154	48.4591	48.45
19	Carbon Disulfide	76	2.075	2.075	(0.496)	1671660	94.1671	94.16
34	Carbon Tetrachloride	117	4.268	4.268	(0.859)	466337	45.8974	45.89
59	Chlorobenzene	112	7.694	7.694	(1.003)	1006409	48.2555	48.25
7	Chloroethane	64	1.411	1.407	(0.337)	237277	46.0533	46.05
28	Chloroform	83	3.911	3.911	(0.935)	637932	47.0823	47.08
3	Chloromethane	50	1.085	1.085	(0.259)	356275	47.9064	47.90
27	cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	386717	48.4238	48.42
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	612279	50.1068	50.10
55	Dibromochloromethane	129	7.177	7.176	(0.936)	406162	49.7511	49.75
44	Dibromomethane	93	5.553	5.553	(1.118)	234821	48.2731	48.27
2	Dichlorodifluoromethane	85	0.976	0.976	(0.233)	375605	49.0784	49.07
61	Ethylbenzene	106	7.803	7.802	(1.017)	511365	48.5367	48.53
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	238144	51.0844	51.08
67	Isopropylbenzene	105	8.564	8.563	(1.116)	1527409	48.2102	48.21
62	m,p-Xylenes	106	7.908	7.907	(1.031)	1298578	99.0935	99.09
17	Methylene Chloride	84	2.311	2.307	(0.552)	354520	47.9623	47.96
87	n-Butylbenzene	91	9.995	9.995	(1.035)	1136334	50.5879	50.58
73	n-Propylbenzene	91	8.912	8.916	(0.922)	1768242	48.3643	48.36
92	Naphthalene	128	11.544	11.544	(1.195)	334786	59.2863	59.28
63	o-Xylene	106	8.245	8.245	(1.075)	614343	48.2233	48.22
81	sec-Butylbenzene	105	9.523	9.523	(0.986)	1490865	47.7190	47.71
64	Styrene	104	8.260	8.260	(1.077)	1058982	50.4779	50.47
78	tert-Butylbenzene	119	9.336	9.339	(0.966)	1080631	47.3631	47.36
56	Tetrachloroethene	164	6.929	6.929	(0.903)	336020	47.1110	47.11
50	Toluene	91	6.449	6.449	(0.841)	1460598	47.2387	47.23
20	trans-1,2-Dichloroethene	96	2.536	2.532	(0.606)	332737	47.0862	47.08
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.345)	513764	50.7687	50.76
38	Trichloroethene	130	5.208	5.208	(1.048)	394013	47.6543	47.65
8	Trichlorofluoromethane	101	1.565	1.565	(0.374)	594796	47.0222	47.02
5	Vinyl Chloride	62	1.149	1.149	(0.275)	384663	45.6676	45.66

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071915.D
Date : 19-JUL-2022 16:20
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

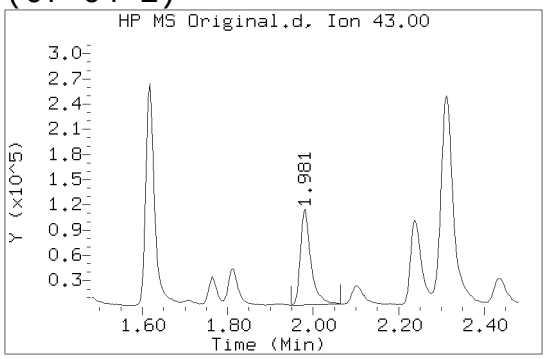
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220719.b\X071915.D
Inj Date : 19-JUL-2022 16:20
InstruID : voa6.i
LabSampID : ICV

Acetone (67-64-1)

Reason Code:

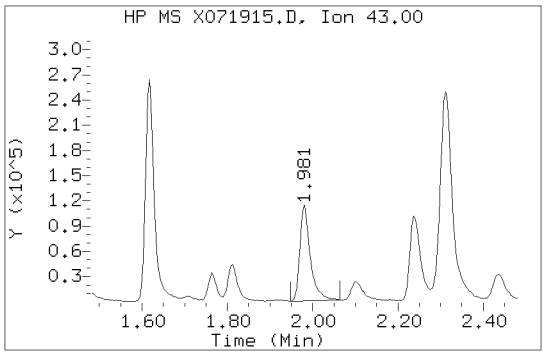
BEFORE

MASS
62
AREA
384663
HEIGHT
343232
25-Jul-2022
09:00
linh
pham



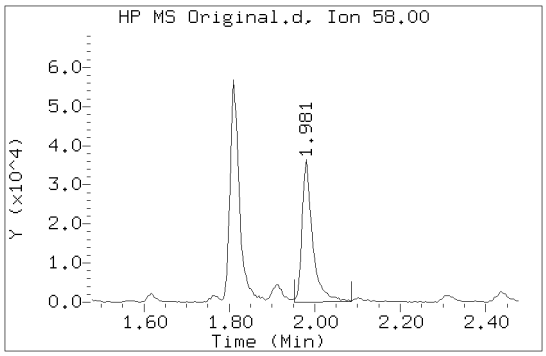
AFTER

MASS
43
AREA
197688
HEIGHT
114035
19-Aug-2022
10:59
linh
pham



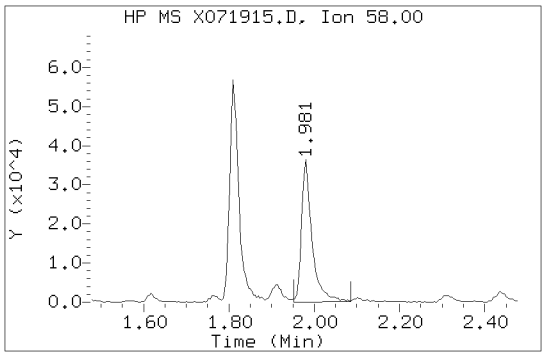
BEFORE

MASS
64
AREA
124297
HEIGHT
107814
25-Jul-2022
09:00
linh
pham



AFTER

MASS
58
AREA
63852
HEIGHT
36330
19-Aug-2022
10:59
linh
pham



right solutions.
right partner.

Raw Data VOA6 414932

Volatiles Organics by Method 8260C

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/19/2022

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081101.D Page 1
Report Date: 11-Aug-2022 11:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081101.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 11-AUG-2022 10:28
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\bfb.m
Meth Date : 26-Jul-2022 15:17 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	
8.691	8.889	(0.000)	95	135616			0.00- 100.00	100.00
8.691	8.889	(0.000)	50	24312			15.00- 40.00	17.93
8.691	8.889	(0.000)	75	64160			30.00- 60.00	47.31
8.691	8.889	(0.000)	96	9758			5.00- 9.00	7.20
8.691	8.889	(0.000)	173	853			0.00- 2.00	0.76
8.691	8.889	(0.000)	174	112976			50.00- 0.00	83.31
8.691	8.889	(0.000)	175	8496			5.00- 9.00	7.52
8.691	8.889	(0.000)	176	110272			95.00- 101.00	97.61
8.691	8.889	(0.000)	177	8701			5.00- 9.00	7.89

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.93
75	30.00 - 60.00% of mass 95	47.31
96	5.00 - 9.00% of mass 95	7.20
173	Less than 2.00% of mass 174	0.63 (0.76)
174	Greater than 50.00% of mass 95	83.31
175	5.00 - 9.00% of mass 174	6.26 (7.52)
176	95.00 - 101.00% of mass 174	81.31 (97.61)
177	5.00 - 9.00% of mass 176	6.42 (7.89)

Data File: X081101.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 123

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.90	1219	68.00	13091	103.90	842	144.00	160
37.10	6720	69.00	14742	105.00	867	145.10	115
38.10	5990	70.10	1915	105.90	642	146.00	269
39.10	3347	71.00	205	106.90	146	147.90	328
39.90	889	72.00	727	108.90	154	149.00	103
41.10	1733	73.10	5577	110.00	108	149.80	178
42.00	2375	74.00	22272	110.70	150	151.90	94
43.10	1214	75.00	64160	112.10	61	152.80	68
44.00	1979	76.10	5743	112.90	216	153.80	89
45.00	1480	77.00	1144	114.80	446	154.80	267
46.10	76	78.00	834	116.00	598	156.90	448
47.00	1282	78.90	3885	116.90	784	157.70	70
48.00	732	79.90	1253	117.90	548	158.70	154
49.00	5563	81.00	3916	118.80	715	160.80	261
50.00	24312	81.90	819	120.00	78	167.80	66
51.00	7711	83.10	496	124.00	92	168.80	155
51.90	437	83.90	57	126.00	152	169.90	200
52.80	132	85.00	162	126.80	166	171.70	75
54.00	231	86.00	239	128.00	630	173.00	853
55.00	3599	87.00	5146	129.00	348	173.90	112976
56.00	2876	87.90	6023	129.80	415	174.90	8496
57.00	4165	91.00	621	131.00	292	175.90	110272
58.00	545	92.00	3387	133.80	108	176.90	8701
60.00	1395	93.00	5511	134.70	102	178.00	192
61.00	6211	94.00	14832	136.90	309	184.10	93
62.00	6095	95.00	135616	139.10	85	184.90	82
63.00	4842	96.00	9758	140.10	149	186.10	597
64.10	406	97.00	269	140.90	1369	186.70	92
64.90	288	98.10	1699	141.80	256	262.10	323
66.00	150	98.90	151	142.90	1161	278.10	71
66.90	396	102.80	79	143.80	164		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081101.D

Date : 11-AUG-2022 10:28

Client ID: BFB

Instrument: voa6.i

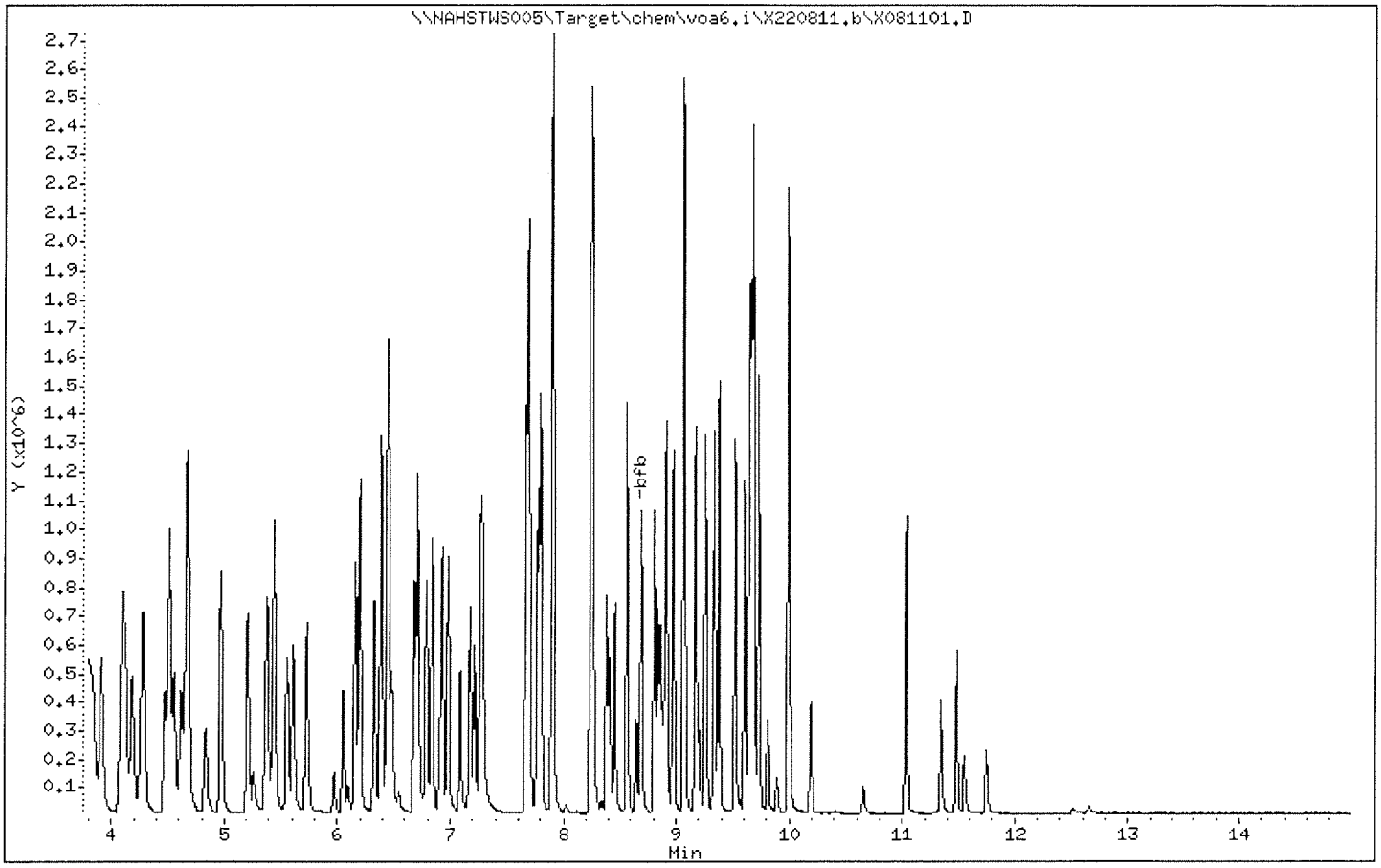
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081101.D

Date : 11-AUG-2022 10:28

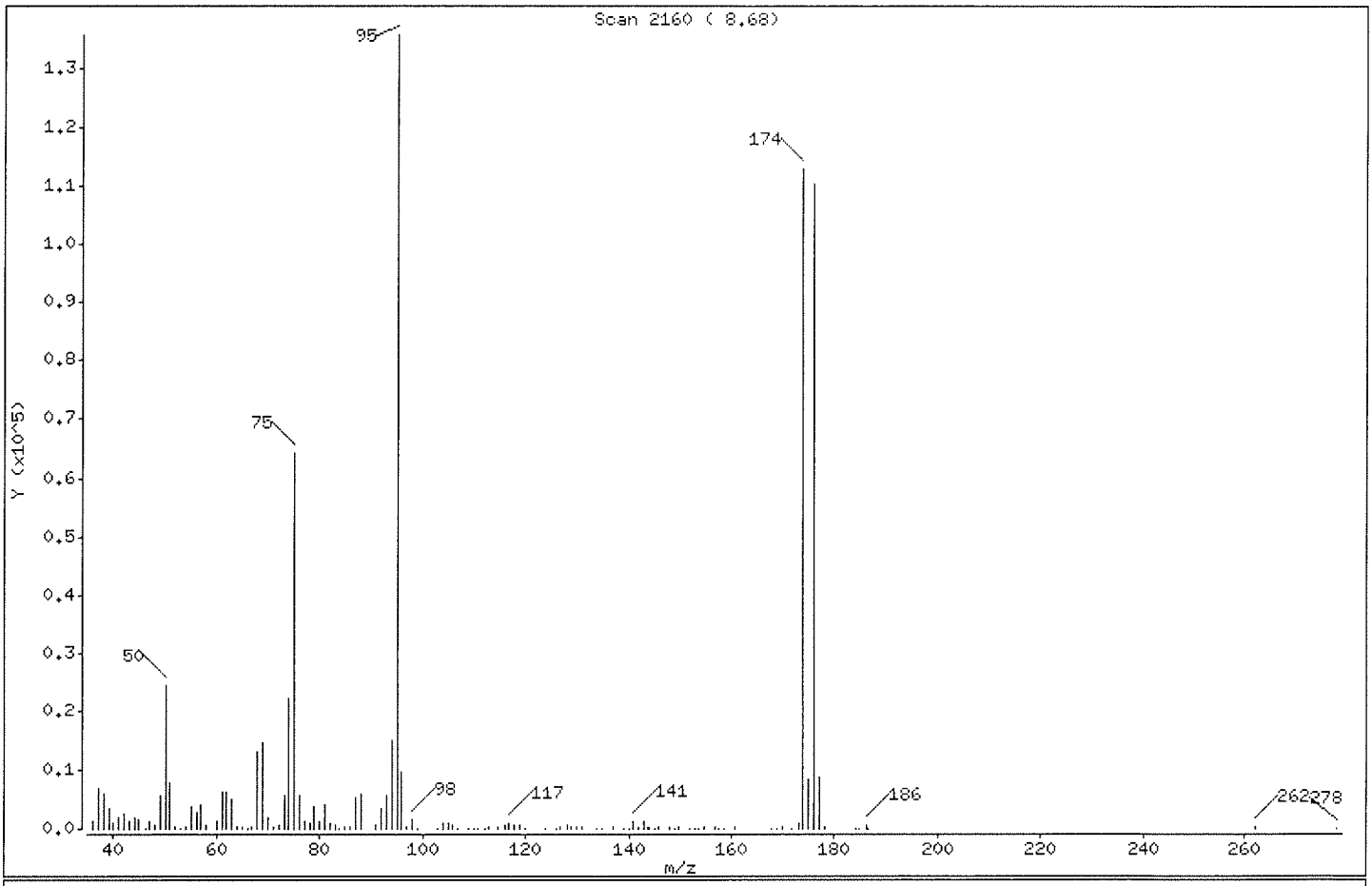
Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.93
75	30.00 - 60.00% of mass 95	47.31
96	5.00 - 9.00% of mass 95	7.20
173	Less than 2.00% of mass 174	0.63 (0.76)
174	Greater than 50.00% of mass 95	83.31
175	5.00 - 9.00% of mass 174	6.26 (7.52)
176	95.00 - 101.00% of mass 174	81.31 (97.61)
177	5.00 - 9.00% of mass 176	6.42 (7.89)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081101.D

Date : 11-AUG-2022 10:28

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: X081101.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 123

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.90	1219	68.00	13091	103.90	842	144.00	160
37.10	6720	69.00	14742	105.00	867	145.10	115
38.10	5990	70.10	1915	105.90	642	146.00	269
39.10	3347	71.00	205	106.90	146	147.90	328
39.90	889	72.00	727	108.90	154	149.00	103
41.10	1733	73.10	5577	110.00	108	149.80	178
42.00	2375	74.00	22272	110.70	150	151.90	94
43.10	1214	75.00	64160	112.10	61	152.80	68
44.00	1979	76.10	5743	112.90	216	153.80	89
45.00	1480	77.00	1144	114.80	446	154.80	267
46.10	76	78.00	834	116.00	598	156.90	448
47.00	1282	78.90	3885	116.90	784	157.70	70
48.00	732	79.90	1253	117.90	548	158.70	154
49.00	5563	81.00	3916	118.80	715	160.80	261
50.00	24312	81.90	819	120.00	78	167.80	66
51.00	7711	83.10	496	124.00	92	168.80	155
51.90	437	83.90	57	126.00	152	169.90	200
52.80	132	85.00	162	126.80	166	171.70	75
54.00	231	86.00	239	128.00	630	173.00	853
55.00	3599	87.00	5146	129.00	348	173.90	112976
56.00	2876	87.90	6023	129.80	415	174.90	8496
57.00	4165	91.00	621	131.00	292	175.90	110272
58.00	545	92.00	3387	133.80	108	176.90	8701
60.00	1395	93.00	5511	134.70	102	178.00	192
61.00	6211	94.00	14832	136.90	309	184.10	93
62.00	6095	95.00	135616	139.10	85	184.90	82
63.00	4842	96.00	9758	140.10	149	186.10	597
64.10	406	97.00	269	140.90	1369	186.70	92
64.90	288	98.10	1699	141.80	256	262.10	323
66.00	150	98.90	151	142.90	1161	278.10	71
66.90	396	102.80	79	143.80	164		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081103.D Page 1
Report Date: 19-Aug-2022 11:16

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081103.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 11-AUG-2022 11:10
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

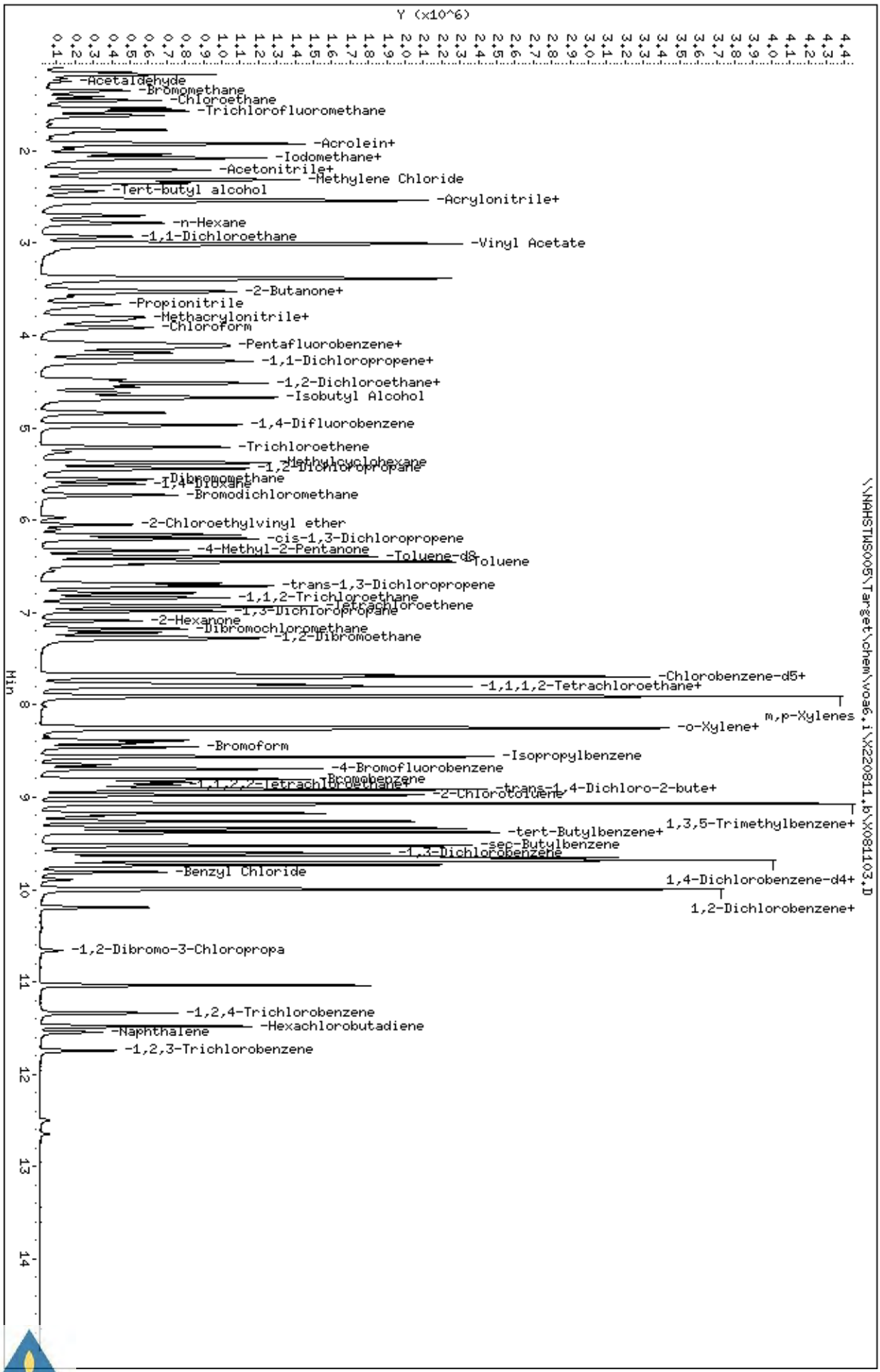
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.189	4.189	(1.000)	606308	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	912569	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	852798	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	419644	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.979)	312307	50.0000	54.65
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.069)	342758	50.0000	54.73
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1101604	50.0000	51.77
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	401674	50.0000	52.82
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	327149	50.0000	54.60
31 1,1,1-Trichloroethane	97	4.087	4.087	(0.976)	480455	50.0000	55.85
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	312357	50.0000	52.99
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	227196	50.0000	51.81
22 1,1-Dichloroethane	63	2.929	2.929	(0.699)	519225	50.0000	55.62
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	253856	50.0000	50.15
32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	412699	50.0000	56.03
93 1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	121553	50.0000	55.71
71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	231962	50.0000	51.04
90 1,2,4-Trichlorobenzene	180	11.341	11.341	(1.174)	216487	50.0000	56.64
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	1136159	50.0000	56.44
89 1,2-Dibromo-3-Chloropropane	155	10.659	10.659	(1.103)	25626	50.0000	57.18

57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	296351	50.0000	53.30
88	1,2-Dichlorobenzene	146	9.992	9.992 (1.034)	577572	50.0000	55.00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	422296	50.0000	52.76
42	1,2-Dichloropropane	63	5.437	5.437	(1.094)	302495	50.0000	53.85
75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	1140910	50.0000	55.97
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	637734	50.0000	54.77
54	1,3-Dichloropropane	76	6.981	6.981	(0.910)	471375	50.0000	52.85
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	662207	50.0000	53.57
26	2,2-Dichloropropane	77	3.514	3.514	(0.839)	471980	50.0000	56.96
24	2-Butanone	43	3.585	3.585	(0.856)	173947	100.000	114.36
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	949626	50.0000	52.79
52	2-Hexanone	43	7.090	7.090	(0.924)	298660	100.000	111.37
77	4-Chlorotoluene	91	9.069	9.069	(0.939)	1093234	50.0000	54.45
82	p-Isopropyltoluene	119	9.650	9.650	(0.999)	1183634	50.0000	57.82
45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	464262	100.000	111.72
10	Acetone	43	1.981	1.981	(0.473)	129419	100.000	101.43
37	Benzene	78	4.515	4.515	(0.909)	1155334	50.0000	53.42
74	Bromobenzene	156	8.807	8.807	(0.912)	385602	50.0000	53.80
29	Bromochloromethane	128	3.799	3.799	(0.907)	178609	50.0000	52.24
39	Bromodichloromethane	83	5.729	5.729	(1.153)	420051	50.0000	54.50
66	Bromoform	173	8.410	8.410	(1.096)	213441	50.0000	51.58
6	Bromomethane	94	1.347	1.347	(0.322)	220624	50.0000	53.35
19	Carbon Disulfide	76	2.078	2.078	(0.496)	1449644	100.000	108.18
34	Carbon Tetrachloride	117	4.267	4.267	(0.859)	424094	50.0000	53.87
59	Chlorobenzene	112	7.694	7.694	(1.003)	868654	50.0000	53.72
7	Chloroethane	64	1.411	1.411	(0.337)	220329	50.0000	56.65
28	Chloroform	83	3.911	3.911	(0.934)	551331	50.0000	53.90
3	Chloromethane	50	1.085	1.085	(0.259)	326527	50.0000	58.15
27	cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	334349	50.0000	55.46
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	524841	50.0000	55.43
55	Dibromochloromethane	129	7.176	7.176	(0.936)	339895	50.0000	53.69
44	Dibromomethane	93	5.553	5.553	(1.118)	198639	50.0000	52.70
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	345701	50.0000	59.88(M)
61	Ethylbenzene	106	7.802	7.802	(1.017)	448403	50.0000	54.89
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	190825	50.0000	54.06
67	Isopropylbenzene	105	8.563	8.563	(1.116)	1380017	50.0000	56.18
62	m,p-Xylenes	106	7.907	7.907	(1.031)	1128606	100.000	111.08
17	Methylene Chloride	84	2.311	2.311	(0.552)	313916	50.0000	56.41
87	n-Butylbenzene	91	9.995	9.995	(1.035)	1020011	50.0000	59.97(M)
73	n-Propylbenzene	91	8.912	8.912	(0.922)	1587937	50.0000	57.36
92	Naphthalene	128	11.544	11.544	(1.195)	247038	50.0000	57.77
63	o-Xylene	106	8.241	8.241	(1.074)	533884	50.0000	54.05
81	sec-Butylbenzene	105	9.523	9.523	(0.986)	1358525	50.0000	57.42
64	Styrene	104	8.260	8.260	(1.077)	905925	50.0000	55.69
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	961155	50.0000	55.63
56	Tetrachloroethene	164	6.929	6.929	(0.903)	290530	50.0000	52.53
50	Toluene	91	6.449	6.449	(0.841)	1276094	50.0000	53.23
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.605)	294901	50.0000	55.28
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.345)	444828	50.0000	56.73
38	Trichloroethene	130	5.208	5.208	(1.048)	343153	50.0000	53.56
8	Trichlorofluoromethane	101	1.568	1.568	(0.375)	503092	50.0000	52.69
5	Vinyl Chloride	62	1.152	1.152	(0.275)	329148	50.0000	51.77

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081103.D
Date : 11-AUG-2022 11:10
Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

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

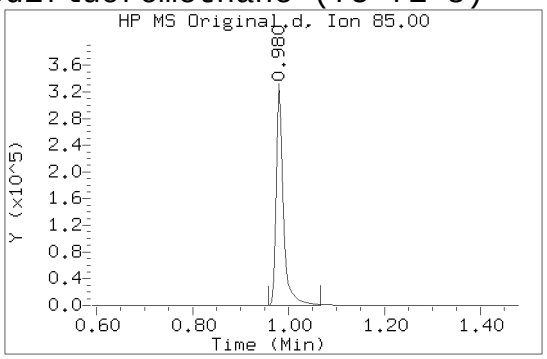
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081103.D
Inj Date : 11-AUG-2022 11:10
InstruID : voa6.i
LabSampID : CCV

Dichlorodifluoromethane (75-71-8)

Reason Code:

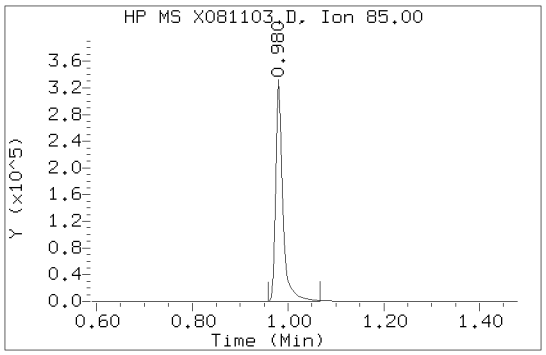
BEFORE

MASS
85
AREA
345701
HEIGHT
332224
19-Aug-2022
11:16
Linh
Pham



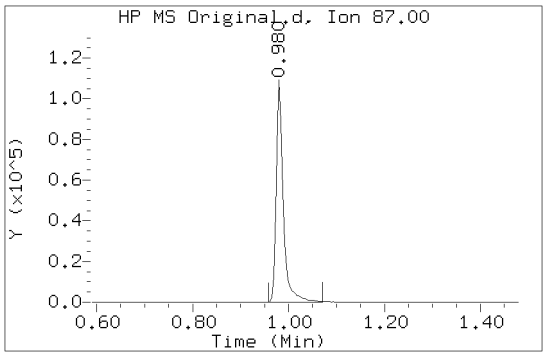
AFTER

MASS
85
AREA
345701
HEIGHT
332224
19-Aug-2022
11:16
Linh
Pham



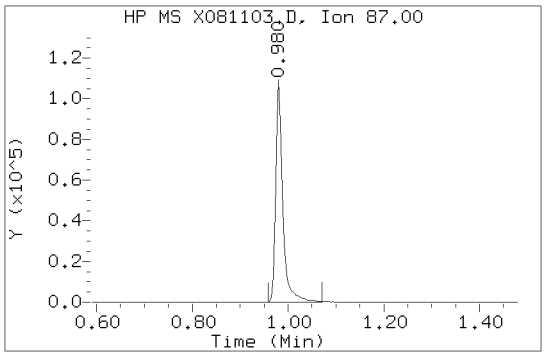
BEFORE

MASS
87
AREA
112802
HEIGHT
109264
19-Aug-2022
11:16
Linh
Pham



AFTER

MASS
87
AREA
112802
HEIGHT
109264
19-Aug-2022
11:16
Linh
Pham

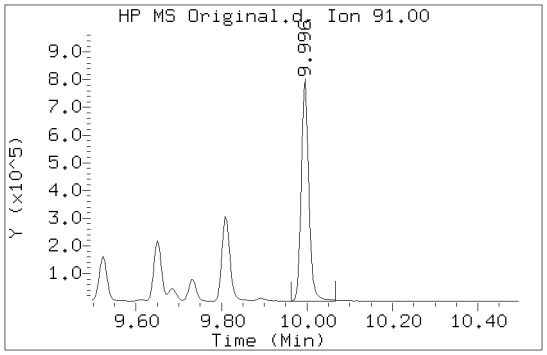


n-Butylbenzene (104-51-8)

Reason Code:

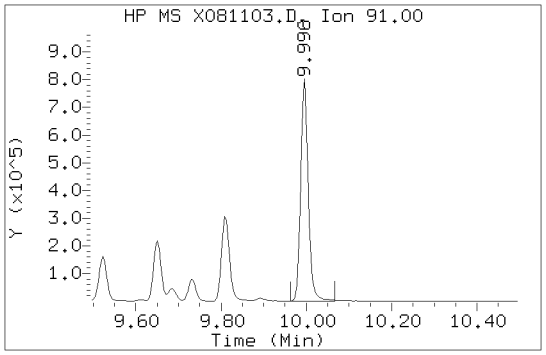
BEFORE

MASS
91
AREA
1020011
HEIGHT
802275
19-Aug-2022
11:16
Linh
Pham



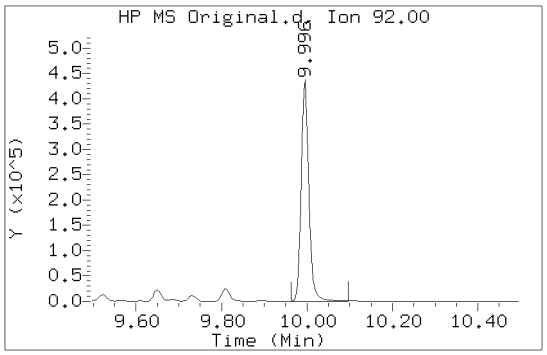
AFTER

MASS
91
AREA
1020011
HEIGHT
802275
19-Aug-2022
11:16
Linh
Pham



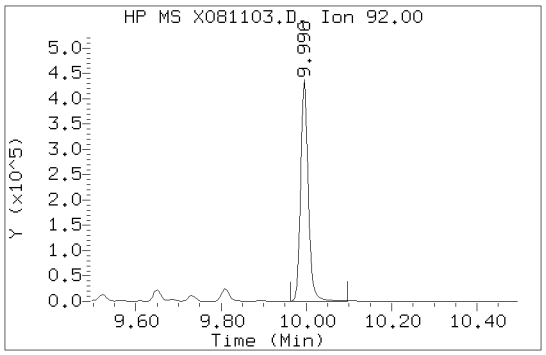
BEFORE

MASS
92
AREA
560031
HEIGHT
437331
19-Aug-2022
11:16
Linh
Pham



AFTER

MASS
92
AREA
560031
HEIGHT
437331
19-Aug-2022
11:16
Linh
Pham



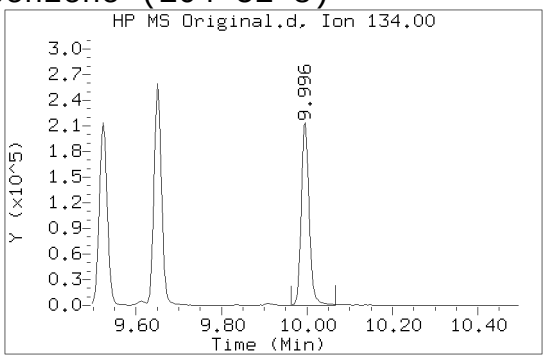
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081103.D
Inj Date : 11-AUG-2022 11:10
InstruID : voa6.i
LabSampID : CCV

n-Butylbenzene (104-51-8)

Reason Code:

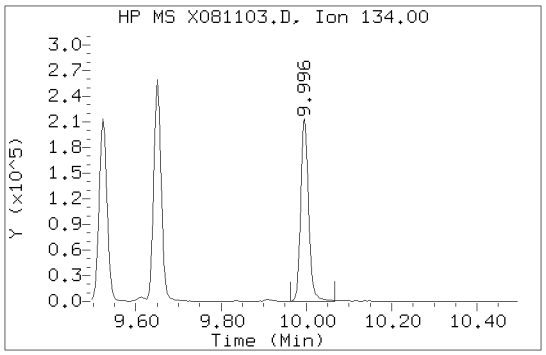
BEFORE

MASS
134
AREA
283923
HEIGHT
213292
19-Aug-2022
11:16
Linh
Pham



AFTER

MASS
134
AREA
283923
HEIGHT
213292
19-Aug-2022
11:16
Linh
Pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081104.D Page 1
Report Date: 12-Aug-2022 10:32

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081104.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 11-AUG-2022 11:31
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 11-Aug-2022 20:54 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.189	(1.000)	695996	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	308763	46.9679	46.96
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	340485	47.3171	47.31
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	976548	50.0000	
* 47 Chlorobenzene-d5	117	7.675	7.671	(1.000)	838888	50.0000	
$ 48 Toluene-d8	98	6.389	6.389	(0.832)	1140746	54.5018	54.50
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.132)	354798	47.3517	47.35
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	354216	50.0000	

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081105.D Page 1
Report Date: 19-Aug-2022 11:16

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081105.D
Lab Smp Id: VLCSW-220811 Client Smp ID: VLCSW-220811
Inj Date : 11-AUG-2022 11:52
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-220811;VLCSW-220811;3;;LCS
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

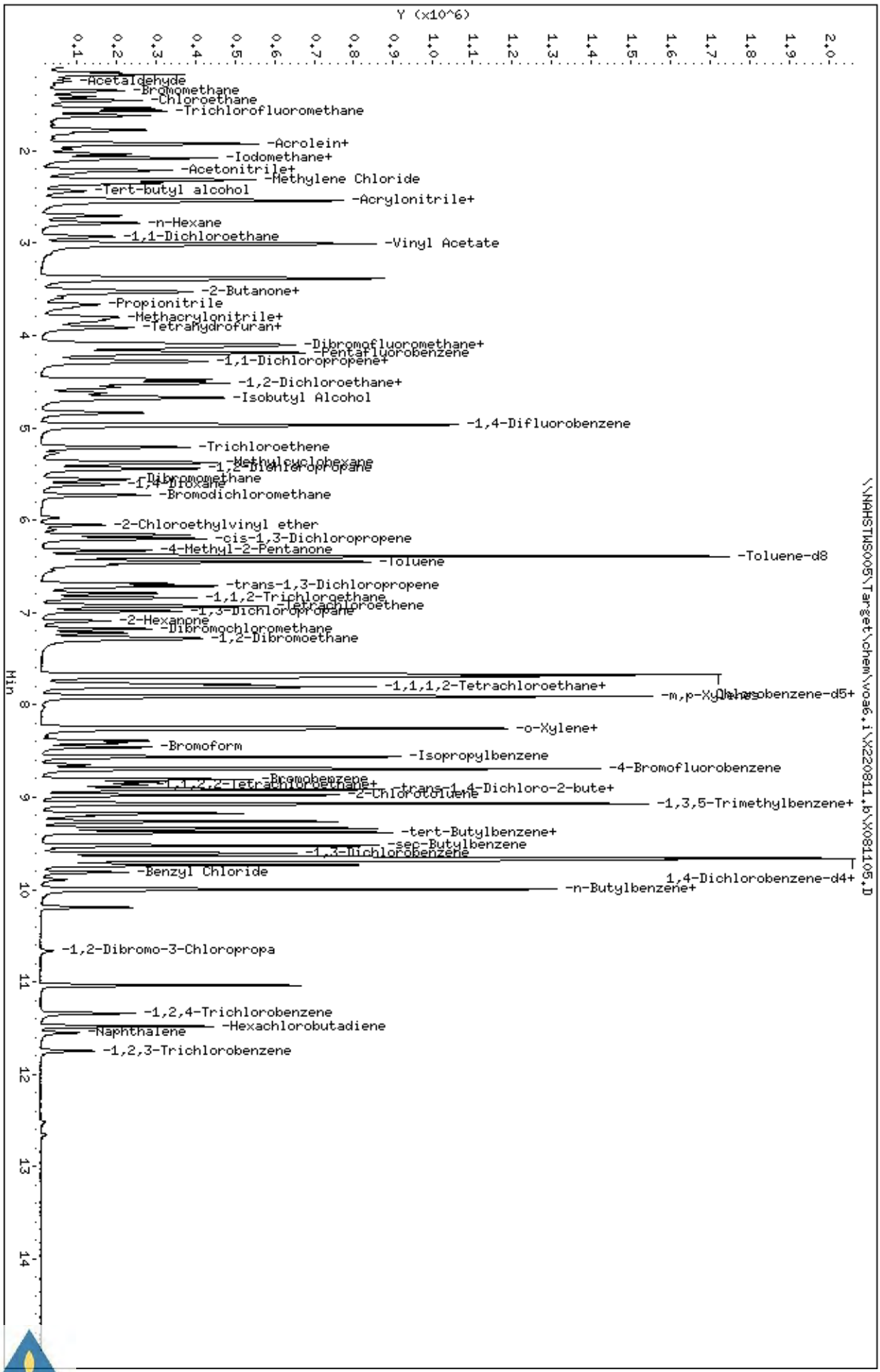
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.189	(1.000)	583274	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	873927	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	811653	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	391164	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	300071	54.5832	54.58
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	325905	54.0904	54.09
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1045467	51.6256	51.62
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	376697	52.0417	52.04
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	117364	20.5817	20.58
31 1,1,1-Trichloroethane	97	4.087	4.087	(0.977)	176343	21.3119	21.31
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	110330	20.0827	20.08
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	83329	19.9679	19.96
22 1,1-Dichloroethane	63	2.929	2.929	(0.700)	183768	20.4652	20.46
11 1,1-Dichloroethene	96	1.925	1.921	(0.460)	94881	19.4870	19.48
32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	150267	21.3048	21.30
93 1,2,3-Trichlorobenzene	180	11.746	11.742	(1.215)	43118	21.2039	21.20
71 1,2,3-Trichloropropane	75	8.867	8.863	(0.917)	84828	20.0262	20.02(M)
90 1,2,4-Trichlorobenzene	180	11.341	11.341	(1.173)	78782	22.1128	22.11
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	407492	21.7178	21.71
89 1,2-Dibromo-3-Chloropropane	155	10.663	10.659	(1.103)	8515	21.3080	21.30

57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	107768	20.3668	20.36
88	1,2-Dichlorobenzene	146	9.995	9.992 (1.034)	203609	20.8025	20.80

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	160836	20.9846	20.98
42	1,2-Dichloropropane	63	5.437	5.437	(1.094)	110345	20.5135	20.51
75	1,3,5-Trimethylbenzene	105	9.069	9.066	(0.938)	413590	21.7675	21.76
83	1,3-Dichlorobenzene	146	9.609	9.605	(0.994)	227150	20.9297	20.92
54	1,3-Dichloropropane	76	6.985	6.981	(0.911)	173708	20.4635	20.46
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	241315	20.9440	20.94
26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	178580	22.2554	22.25
24	2-Butanone	43	3.593	3.585	(0.858)	53171	36.3379	36.33
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	351314	20.9530	20.95
52	2-Hexanone	43	7.090	7.090	(0.924)	101631	39.8211	39.82
77	4-Chlorotoluene	91	9.073	9.069	(0.939)	401885	21.4744	21.47
82	p-Isopropyltoluene	119	9.650	9.650	(0.998)	428204	22.4426	22.44
45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	166207	42.0258	42.02
10	Acetone	43	1.984	1.981	(0.474)	51336	38.2974	38.29
37	Benzene	78	4.515	4.515	(0.909)	425757	20.5593	20.55
74	Bromobenzene	156	8.807	8.807	(0.911)	143199	21.4365	21.43
29	Bromochloromethane	128	3.799	3.799	(0.908)	65954	20.0549	20.05
39	Bromodichloromethane	83	5.729	5.729	(1.153)	155366	21.0505	21.05
66	Bromoform	173	8.413	8.410	(1.097)	71808	19.0330	19.03
6	Bromomethane	94	1.347	1.347	(0.322)	87200	21.1128	21.11
19	Carbon Disulfide	76	2.078	2.078	(0.497)	526374	40.8357	40.83
34	Carbon Tetrachloride	117	4.271	4.267	(0.860)	154257	20.4628	20.46
59	Chlorobenzene	112	7.697	7.694	(1.003)	322169	20.9339	20.93
7	Chloroethane	64	1.411	1.411	(0.337)	76305	20.3963	20.39
28	Chloroform	83	3.911	3.911	(0.935)	206095	20.9481	20.94
3	Chloromethane	50	1.085	1.085	(0.259)	121323	22.4948	22.49
27	cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	126203	21.7635	21.76
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	190803	21.0458	21.04
55	Dibromochloromethane	129	7.176	7.176	(0.936)	122142	20.2751	20.27
44	Dibromomethane	93	5.557	5.553	(1.118)	74347	20.5998	20.59
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	126919	22.7464	22.74
61	Ethylbenzene	106	7.802	7.802	(1.017)	165842	21.3319	21.33
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	70714	21.4917	21.49
67	Isopropylbenzene	105	8.563	8.563	(1.116)	497290	21.2710	21.27
62	m,p-Xylenes	106	7.907	7.907	(1.031)	411072	42.5099	42.50
17	Methylene Chloride	84	2.311	2.311	(0.552)	119636	21.8223	21.82
87	n-Butylbenzene	91	9.995	9.995	(1.034)	365179	23.0336	23.03
73	n-Propylbenzene	91	8.916	8.912	(0.922)	577722	22.3881	22.38
92	Naphthalene	128	11.551	11.544	(1.195)	84749	21.2637	21.26
63	o-Xylene	106	8.245	8.241	(1.075)	196097	20.8599	20.85
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	490716	22.2535	22.25
64	Styrene	104	8.263	8.260	(1.077)	322476	20.8308	20.83
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	349591	21.7090	21.70
56	Tetrachloroethene	164	6.933	6.929	(0.904)	107838	20.4892	20.48
50	Toluene	91	6.449	6.449	(0.841)	473016	20.7319	20.73
20	trans-1,2-Dichloroethene	96	2.539	2.536	(0.607)	108952	21.2335	21.23
51	trans-1,3-Dichloropropene	75	6.685	6.682	(1.346)	156328	20.8210	20.82
38	Trichloroethene	130	5.212	5.208	(1.049)	127323	20.7554	20.75
8	Trichlorofluoromethane	101	1.568	1.568	(0.375)	187228	20.3845	20.38
5	Vinyl Chloride	62	1.152	1.152	(0.275)	119749	19.5791	19.57

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081105.D
Date : 11-AUG-2022 11:52
Client ID: VLCSW-220811
Sample Info: VLCSW-220811;VLCSW-220811;3;LCS
Purge Volume: 5.0
Column phase: DB624

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

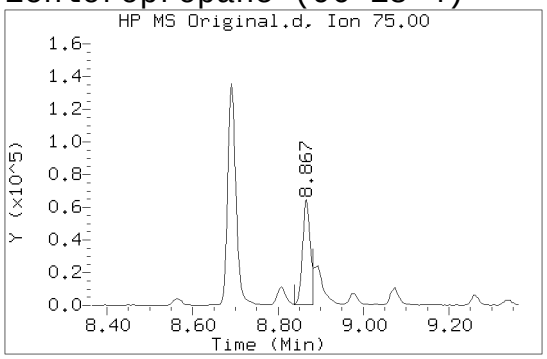
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081105.D
Inj Date : 11-AUG-2022 11:52
InstruID : voa6.i
LabSampID : VLCSW-220811

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

Reason Code:

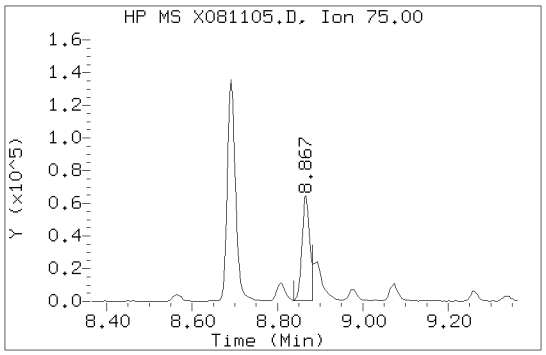
BEFORE

MASS
75
AREA
84828
HEIGHT
64415
19-Aug-2022
11:16
Linh
Pham



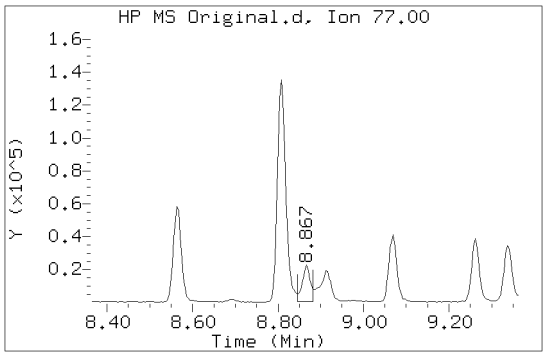
AFTER

MASS
75
AREA
84828
HEIGHT
64415
19-Aug-2022
11:16
Linh
Pham



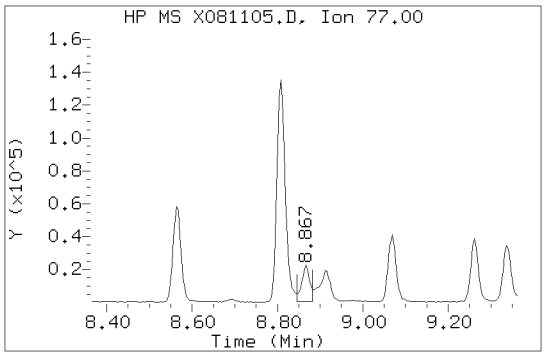
BEFORE

MASS
77
AREA
30650
HEIGHT
22463
19-Aug-2022
11:16
Linh
Pham



AFTER

MASS
77
AREA
30650
HEIGHT
22463
19-Aug-2022
11:16
Linh
Pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081107.D Page 1
Report Date: 19-Aug-2022 11:16

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081107.D
Lab Smp Id: VBLKW-220811 Client Smp ID: VBLKW-220811
Inj Date : 11-AUG-2022 12:34
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-220811;VBLKW-220811;3;;BLANK
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	679155	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	967095	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	826020	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	348323	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	304950	47.5470	47.54
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	333501	47.4970	47.49
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1112607	53.9855	53.98
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	360540	48.8941	48.89

01135062

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081107.D

Date : 11-AUG-2022 12:34

Client ID: VBLKW-220811

Instrument: voa6.i

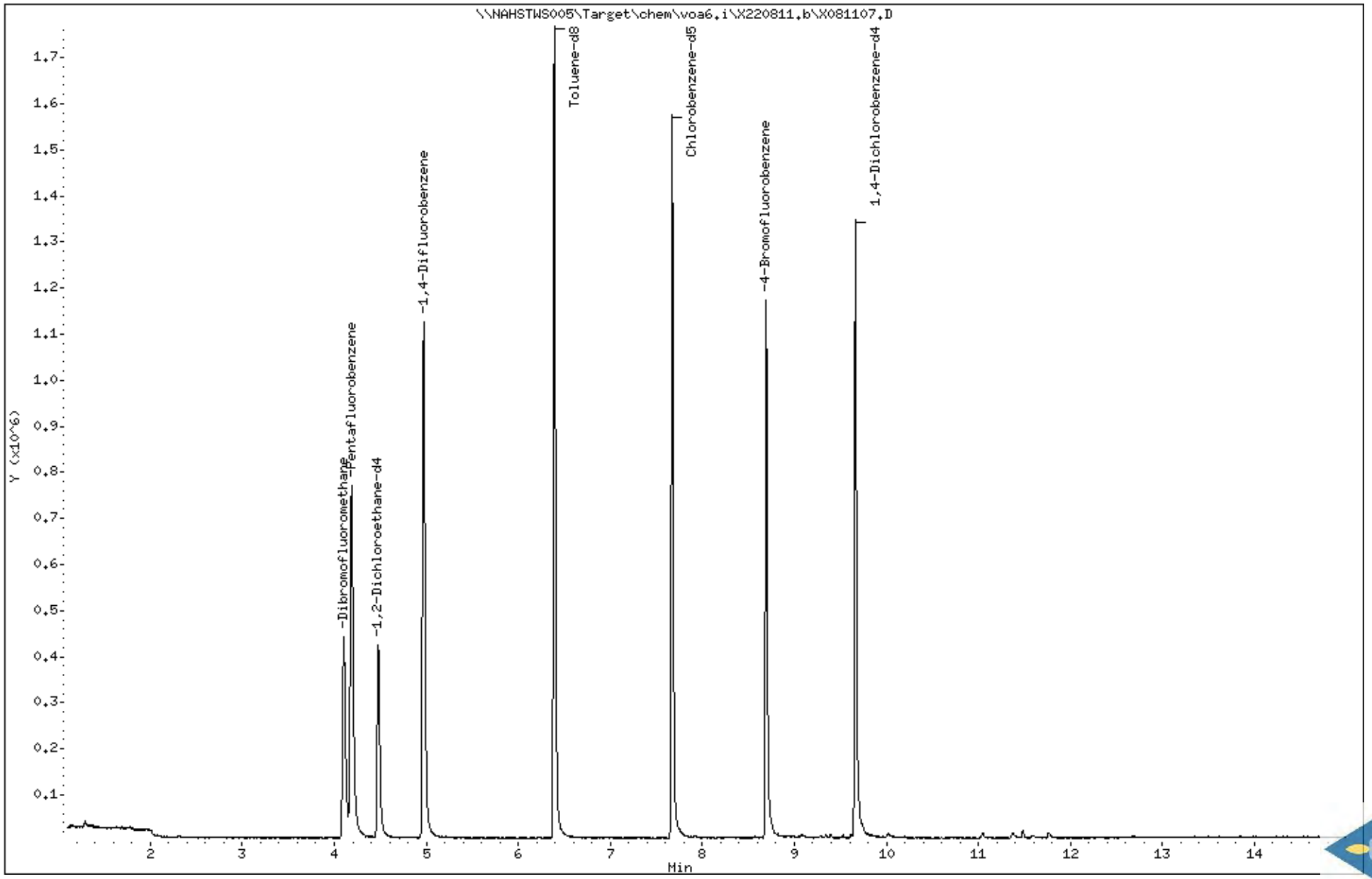
Sample Info: VBLKW-220811;VBLKW-220811;3;;BLANK

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081107.D
Inj Date : 11-AUG-2022 12:34
InstruID : voa6.i
LabSampID : VBLKW-220811

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081109.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081109.D
Lab Smp Id: HS22080522-12 Client Smp ID: HS22080522-12
Inj Date : 11-AUG-2022 13:16
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-12;HS22080522-12;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.189	4.189	(1.000)	665233	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	950202	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	816963	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	345551	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.102	(0.980)	298965	47.5900	47.58
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.069)	326521	47.4760	47.47
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1100943	54.0117	54.01
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	344819	47.2533	47.25

01135065

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081109.D

Page 1

Date : 11-AUG-2022 13:16

Client ID: HS22080522-12

Instrument: voa6.i

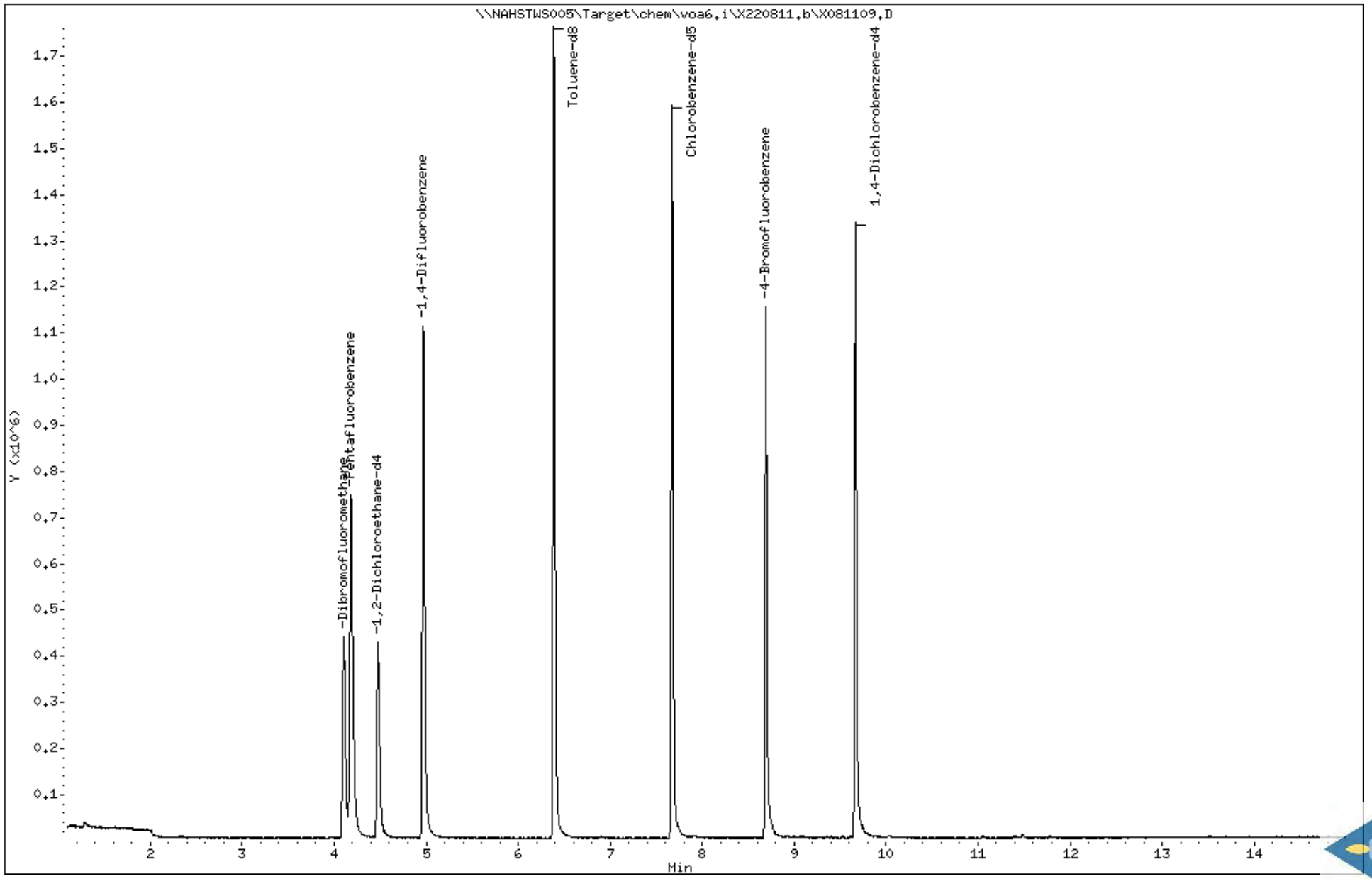
Sample Info: HS22080522-12;HS22080522-12;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081109.D
Inj Date : 11-AUG-2022 13:16
InstruID : voa6.i
LabSampID : HS22080522-12

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081110.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081110.D
Lab Smp Id: HS22080522-05 Client Smp ID: HS22080522-05
Inj Date : 11-AUG-2022 13:37
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-05;HS22080522-05;;;
Misc Info : HS22052000V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 10
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	677370	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	967719	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	840854	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	372794	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.102	(0.981)	304559	47.6121	47.61
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	338773	48.3811	48.38
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1112756	53.0402	53.04
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	364877	48.6045	48.60
33 1,2-Dichloroethane	62	4.563	4.560	(0.919)	111415	13.1276	65.63
34 Carbon Tetrachloride	117	4.271	4.267	(0.860)	8417	1.00833	5.04(a)
28 Chloroform	83	3.915	3.911	(0.936)	22957	2.00927	10.04(a)
27 cis-1,2-Dichloroethene	96	3.536	3.529	(0.845)	27813	4.13004	20.65(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	3831547	564.058	2820.29(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.

01135069

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081110.D

Date : 11-AUG-2022 13:37

Client ID: HS22080522-05

Instrument: voa6.i

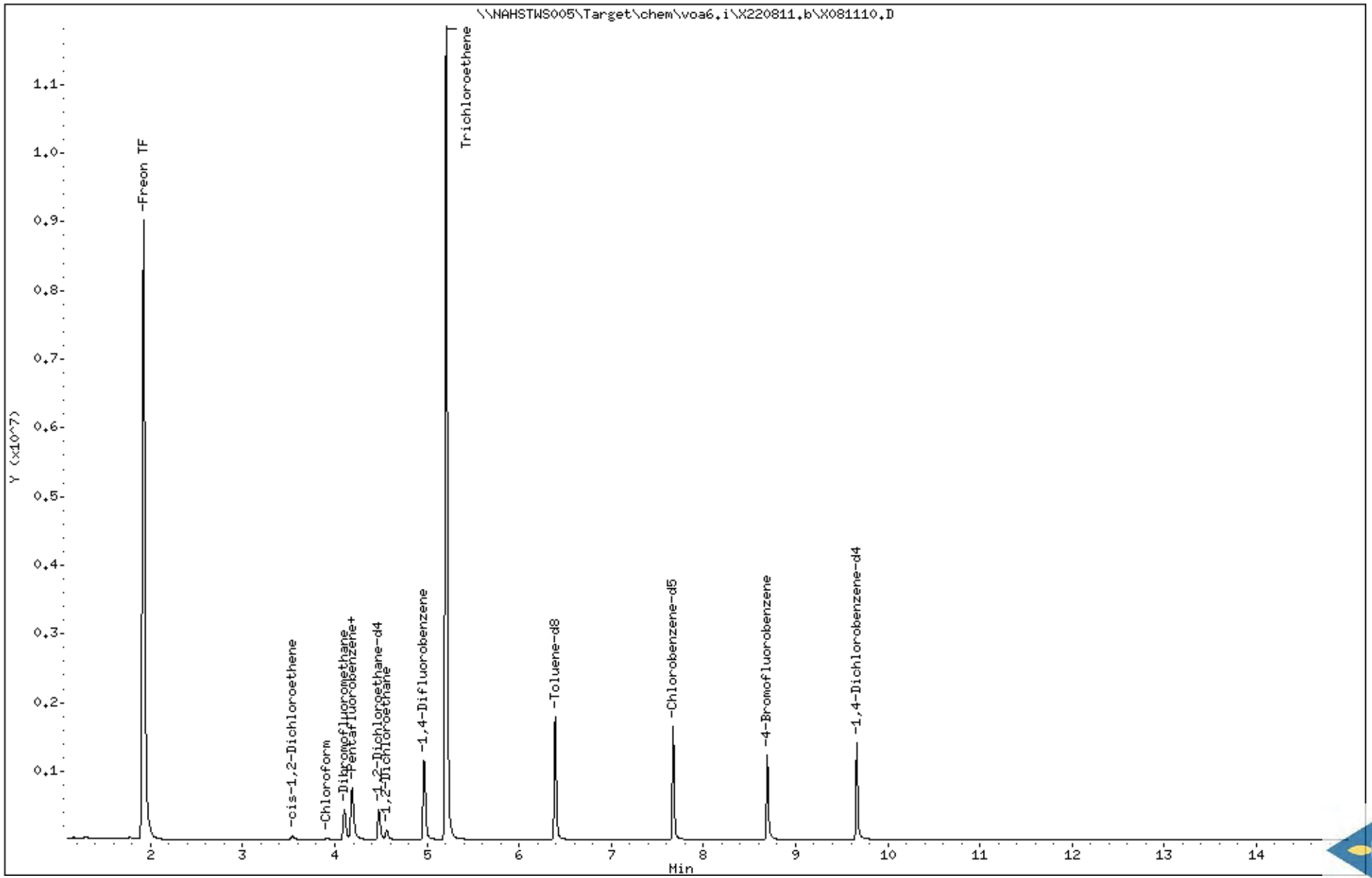
Sample Info: HS22080522-05;HS22080522-05;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081110.D

Date : 11-AUG-2022 13:37

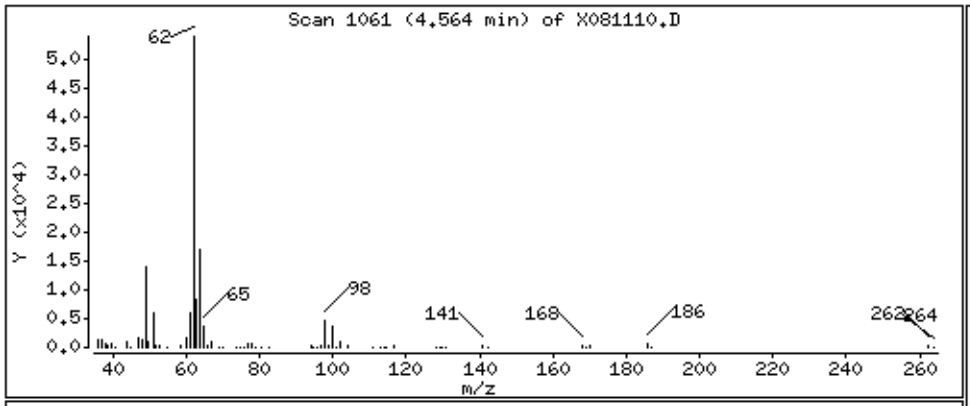
Client ID: HS22080522-05 Instrument: voa6.i

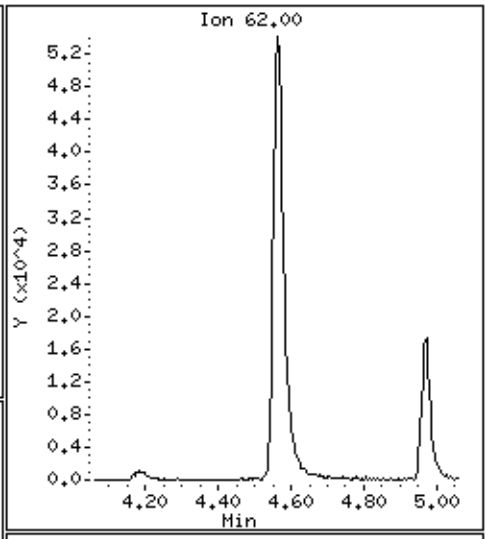
Sample Info: HS22080522-05;HS22080522-05;;;

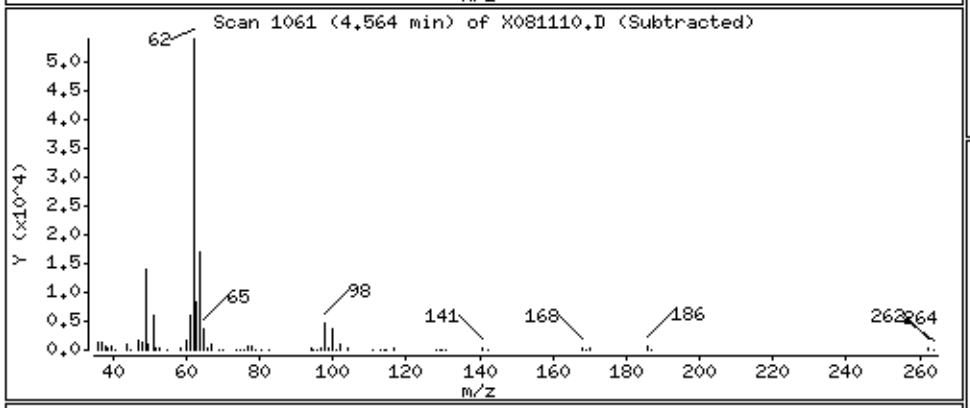
Purge Volume: 5.0 Operator: PC

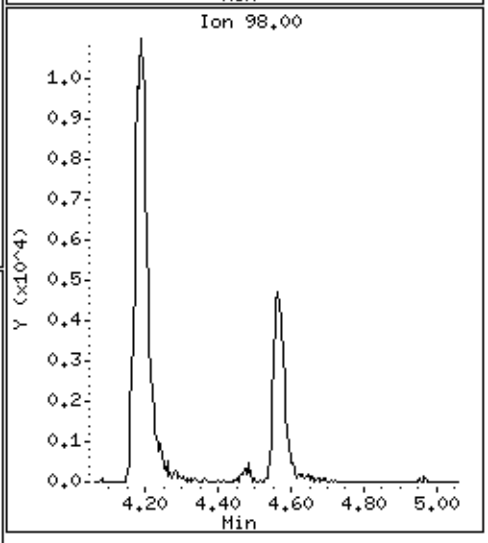
Column phase: DB624 Column diameter: 0.18

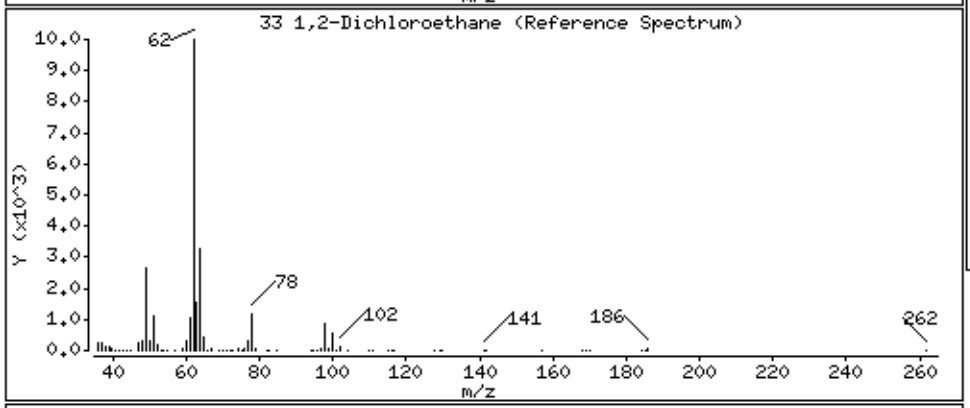
33 1,2-Dichloroethane Concentration: 65.63 ug/l

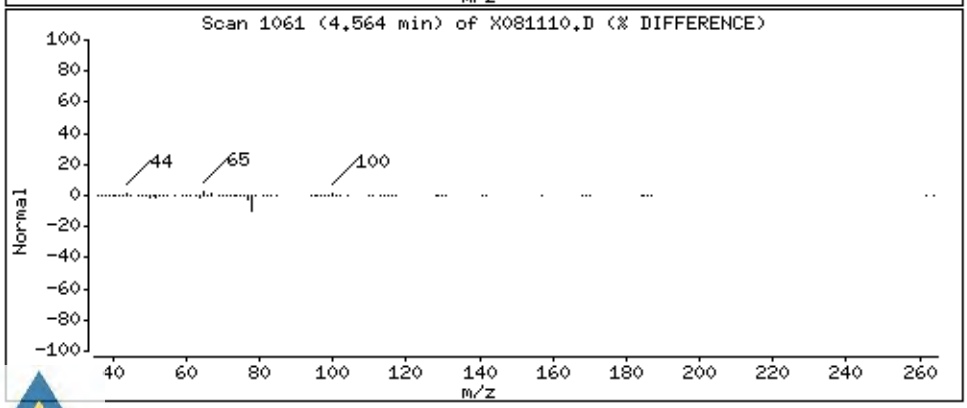












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081110.D

Date : 11-AUG-2022 13:37

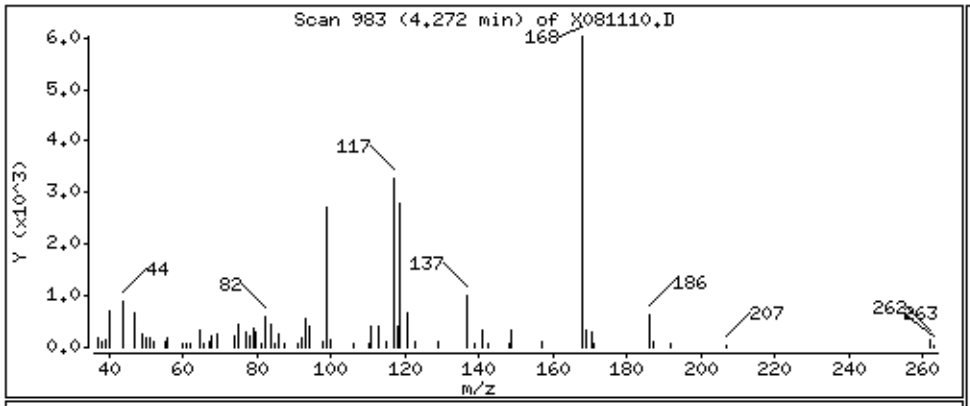
Client ID: HS22080522-05 Instrument: voa6.i

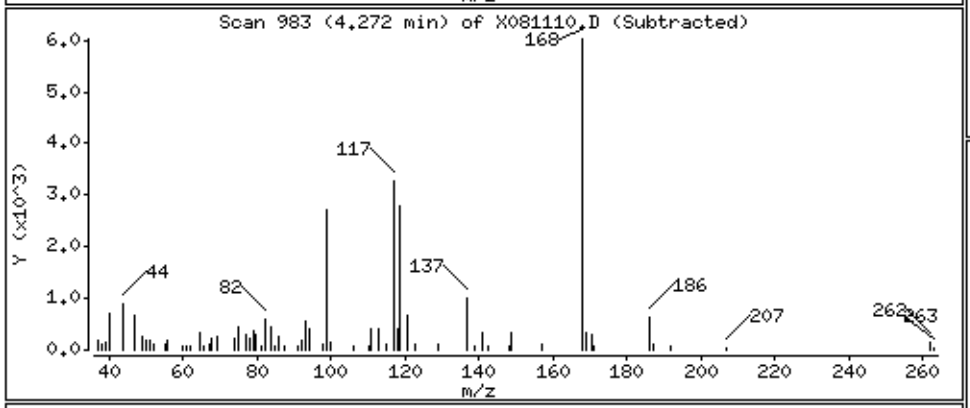
Sample Info: HS22080522-05;HS22080522-05;;;

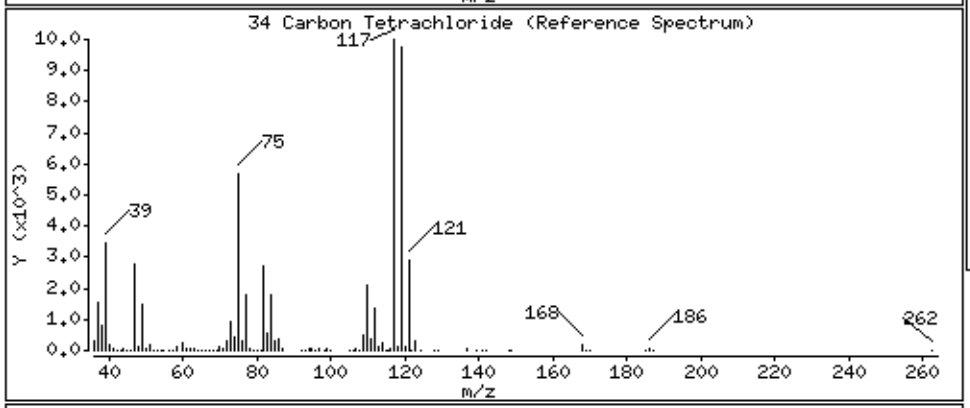
Purge Volume: 5.0 Operator: PC

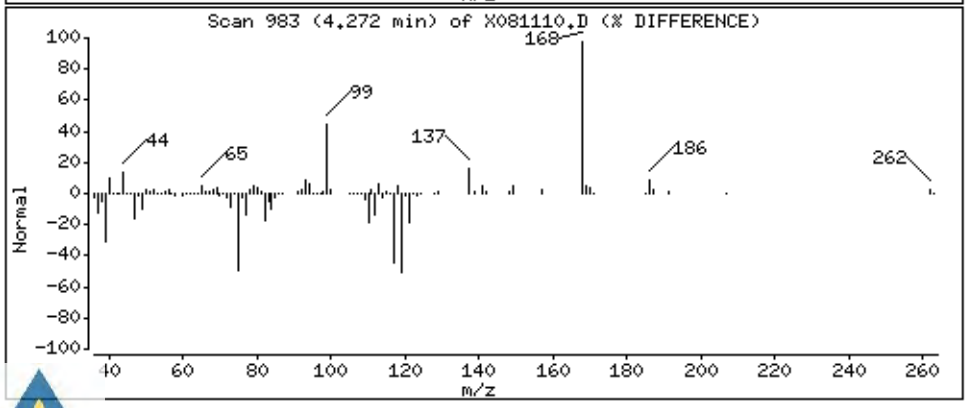
Column phase: DB624 Column diameter: 0.18

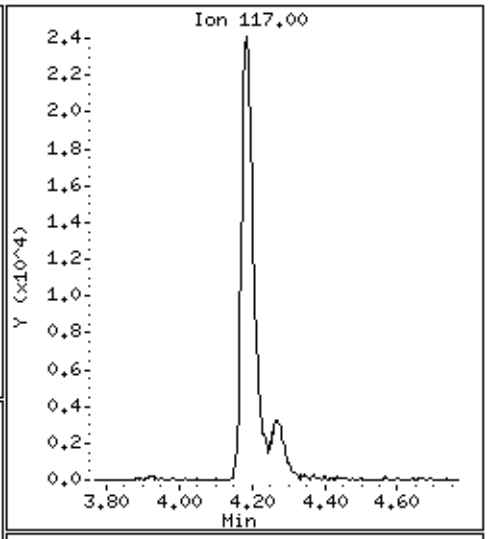
34 Carbon Tetrachloride Concentration: 5.04 ug/l

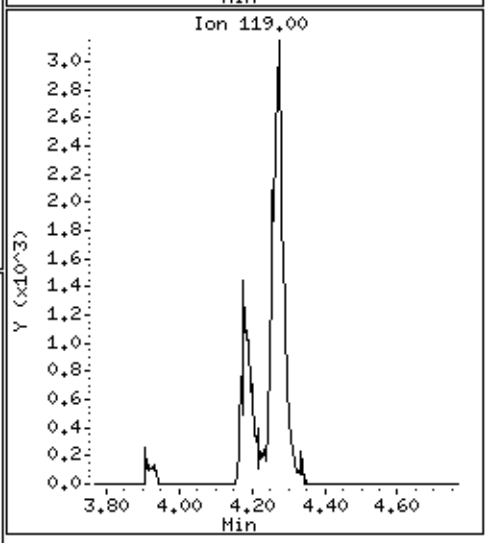












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081110.D Page 4

Date : 11-AUG-2022 13:37

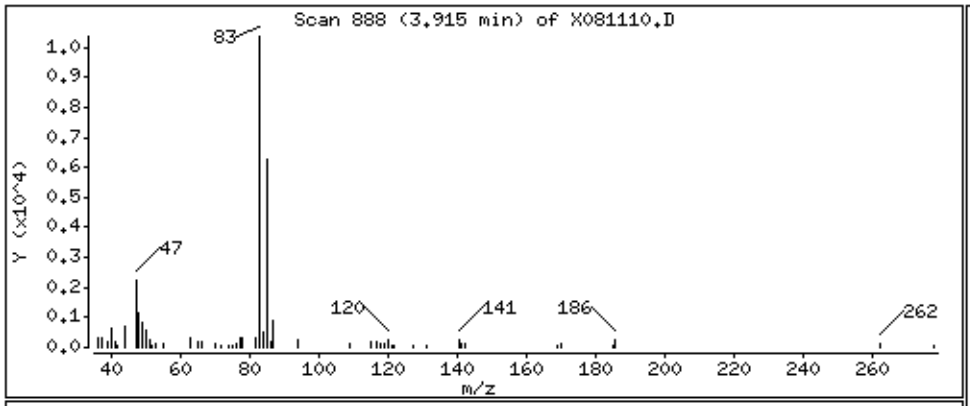
Client ID: HS22080522-05 Instrument: voa6.i

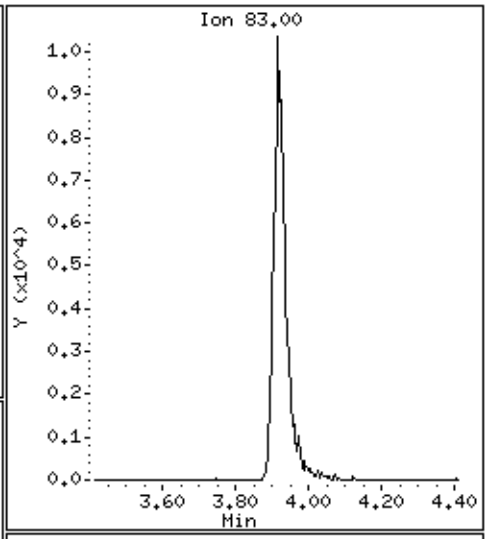
Sample Info: HS22080522-05;HS22080522-05;;;

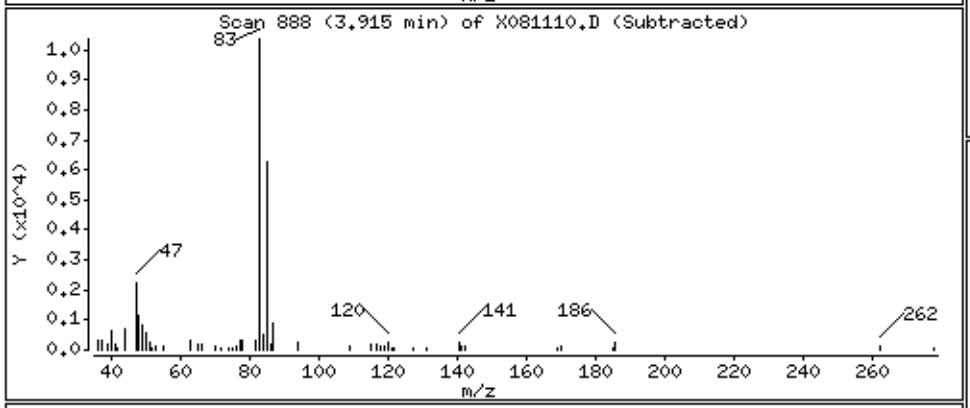
Purge Volume: 5.0 Operator: PC

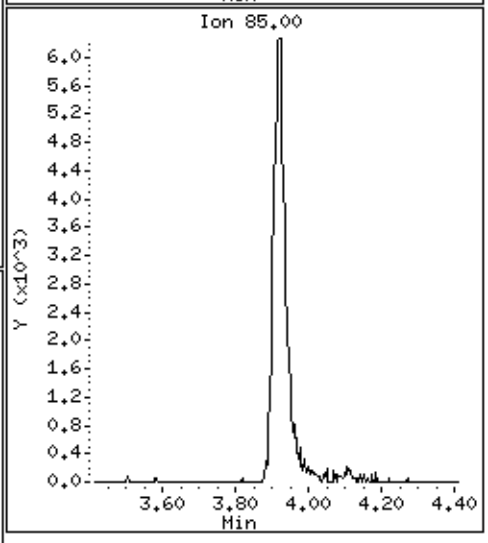
Column phase: DB624 Column diameter: 0.18

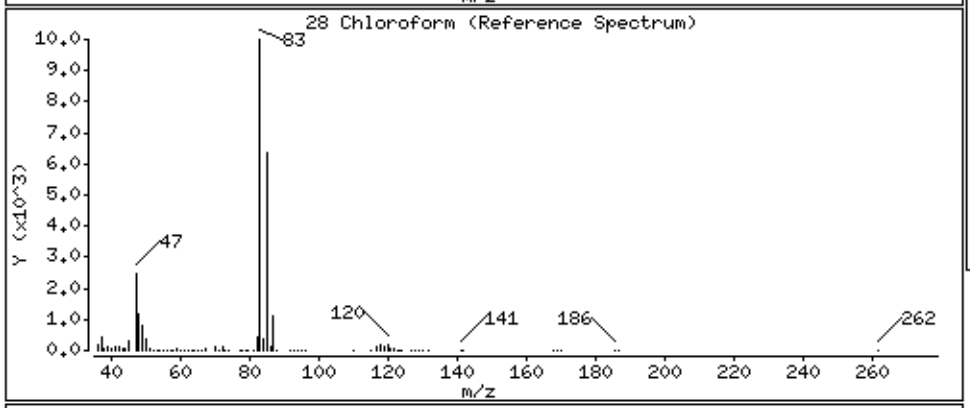
28 Chloroform Concentration: 10.04 ug/l

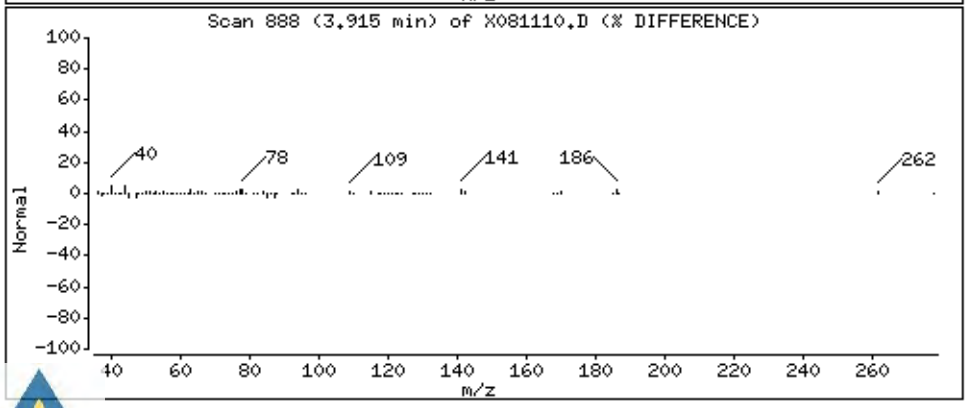












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081110.D Page 5

Date : 11-AUG-2022 13:37

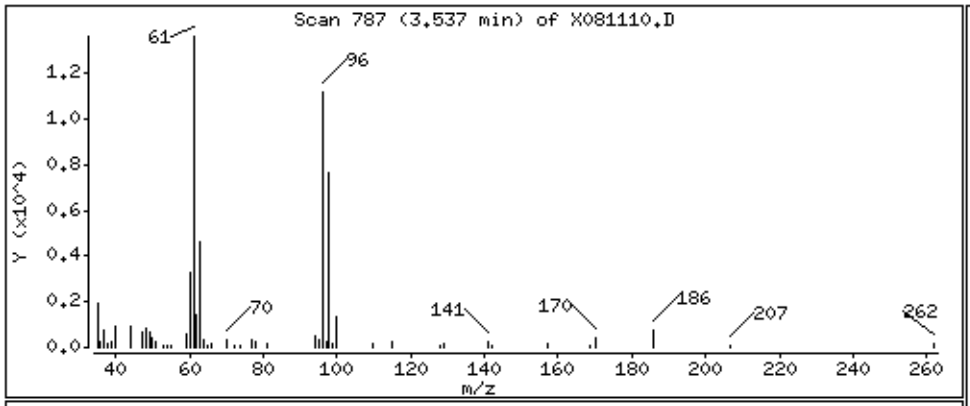
Client ID: HS22080522-05 Instrument: voa6.i

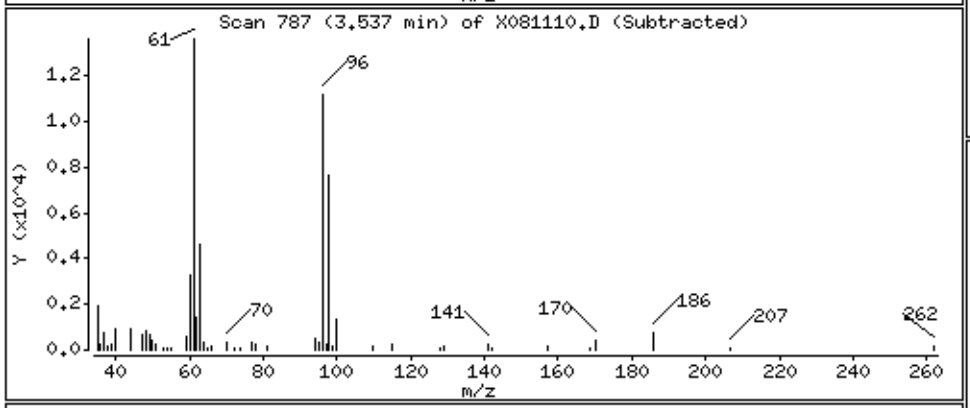
Sample Info: HS22080522-05;HS22080522-05;;;

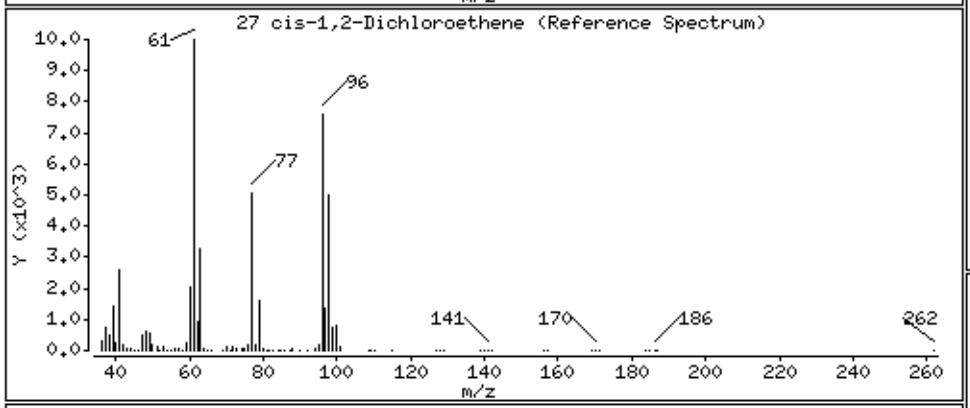
Purge Volume: 5.0 Operator: PC

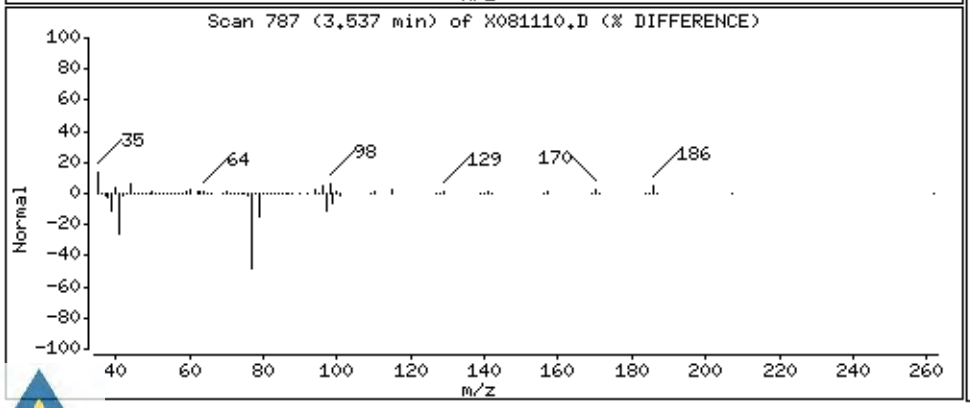
Column phase: DB624 Column diameter: 0.18

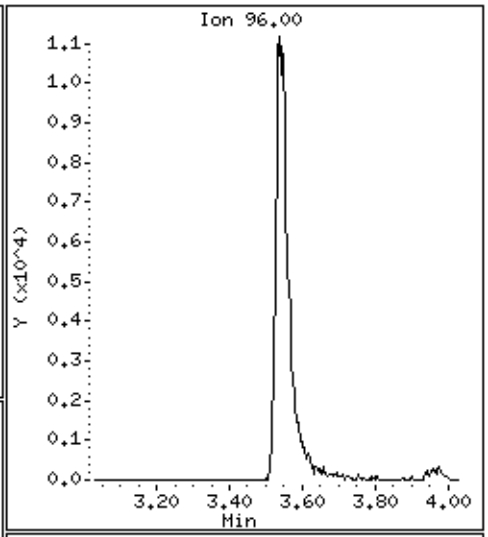
27 cis-1,2-Dichloroethene Concentration: 20.65 ug/l

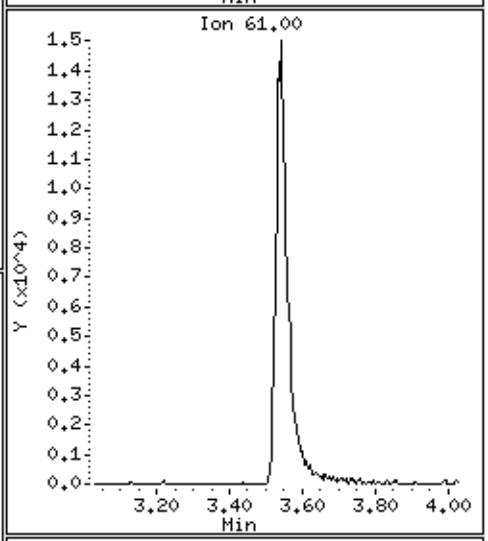


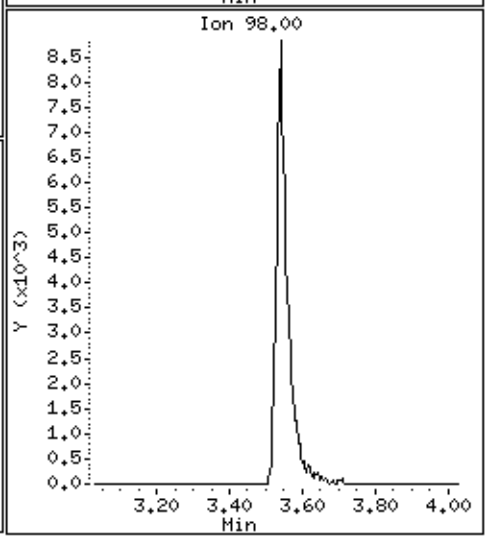












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081110.D Page 6

Date : 11-AUG-2022 13:37

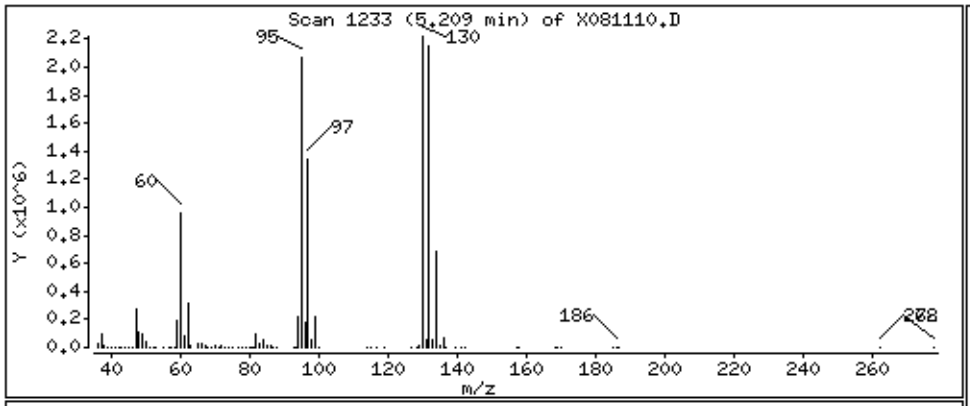
Client ID: HS22080522-05 Instrument: voa6.i

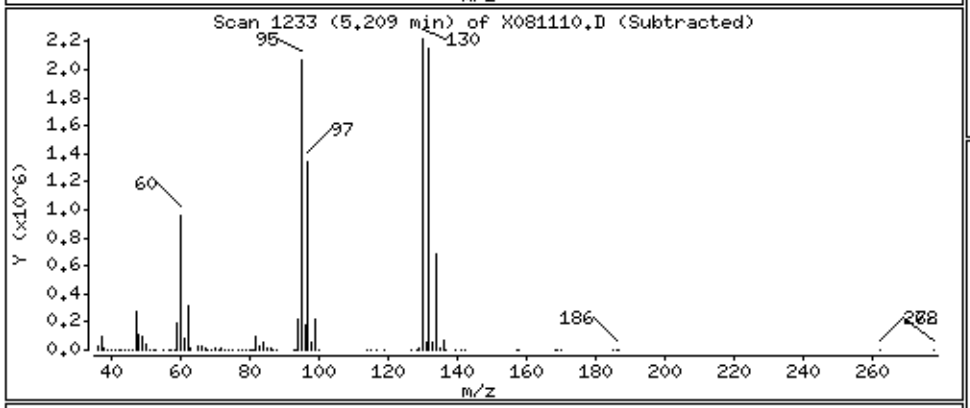
Sample Info: HS22080522-05;HS22080522-05;;;

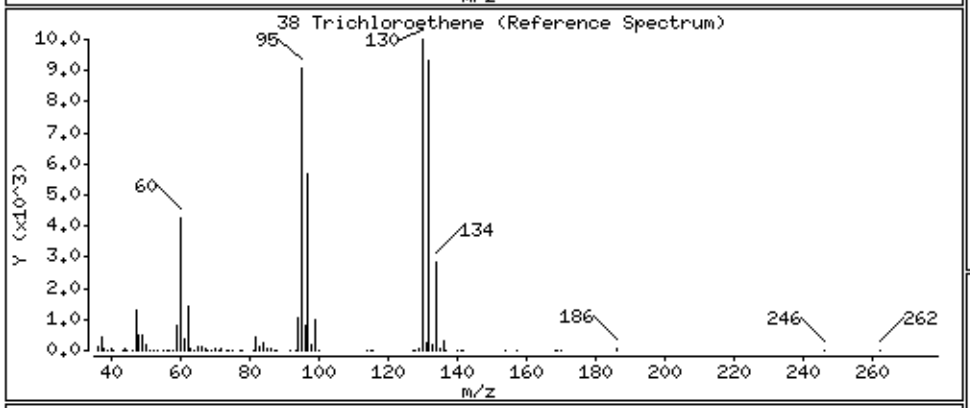
Purge Volume: 5.0 Operator: PC

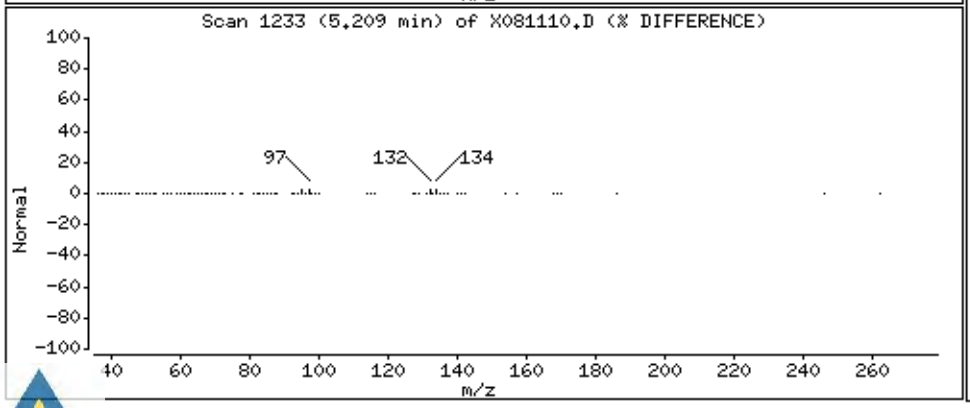
Column phase: DB624 Column diameter: 0.18

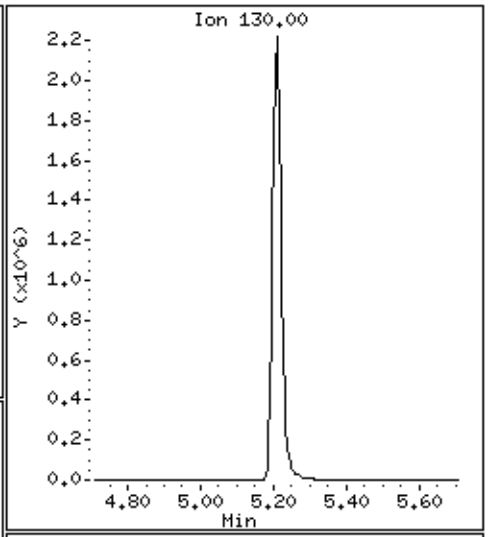
38 Trichloroethene Concentration: 2820.29 ug/l

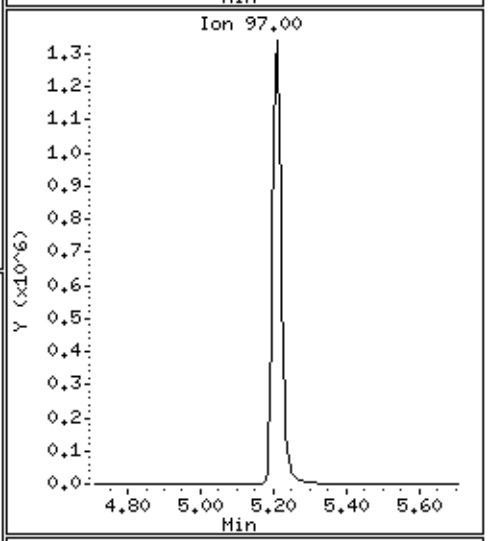


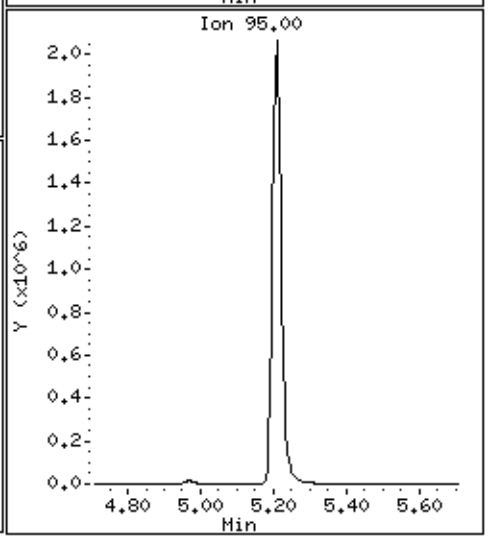












Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081110.D
Inj Date : 11-AUG-2022 13:37
InstruID : voa6.i
LabSampID : HS22080522-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081111.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081111.D
Lab Smp Id: HS22080522-01 Client Smp ID: HS22080522-01
Inj Date : 11-AUG-2022 13:58
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-01;HS22080522-01;;;
Misc Info : HS22052000V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 11
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	665363	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	950373	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	833903	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	361029	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	305395	48.6195	48.61
$ 35 1,2-Dichloroethane-d4	65	4.478	4.477	(1.070)	327316	47.5831	47.58
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1103854	53.0544	53.05
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	361523	48.5584	48.55
22 1,1-Dichloroethane	63	2.937	2.929	(0.702)	12740	1.24374	31.09(a)
28 Chloroform	83	3.915	3.911	(0.936)	43736	3.89700	97.42(a)
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	15048212	2274.88	56872.01(A)
61 Ethylbenzene	106	7.806	7.802	(1.018)	9963	1.24733	31.18(a)
17 Methylene Chloride	84	2.311	2.311	(0.552)	3269941	542.942	13573.55(A)
56 Tetrachloroethene	164	6.937	6.929	(0.904)	6501	1.20223	30.05(a)
50 Toluene	91	6.457	6.449	(0.842)	24442	1.04269	26.06(a)
20 trans-1,2-Dichloroethene	96	2.540	2.536	(0.607)	35429	6.05284	151.32
38 Trichloroethene	130	5.212	5.208	(1.049)	261860	39.2531	981.32
5 Vinyl Chloride	62	1.153	1.152	(0.275)	6973	0.99944	24.98(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.

01135078

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081111.D

Page 1

Date : 11-AUG-2022 13:58

Client ID: HS22080522-01

Instrument: voa6.i

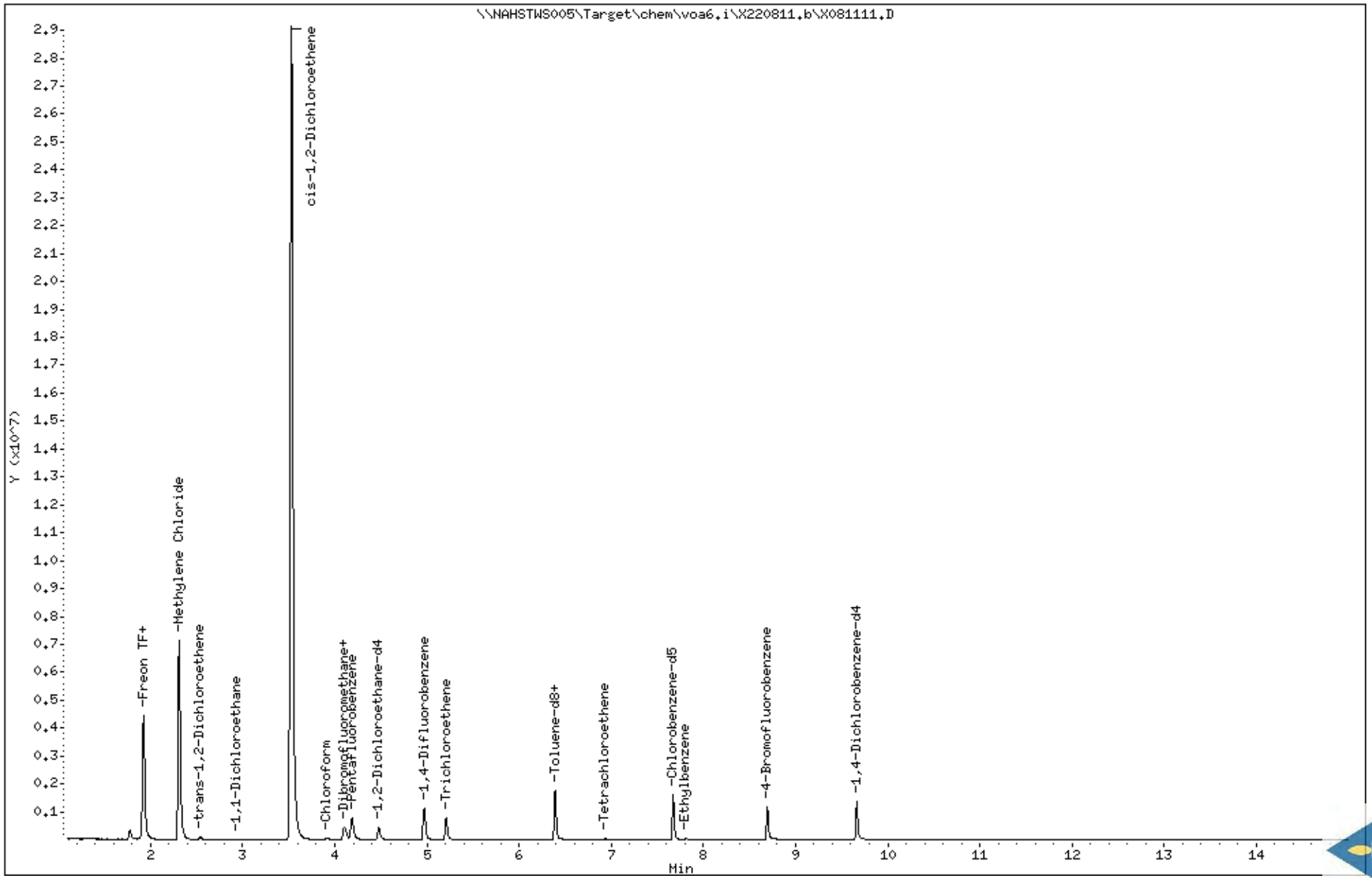
Sample Info: HS22080522-01;HS22080522-01;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081111.D

Date : 11-AUG-2022 13:58

Client ID: HS22080522-01

Instrument: voa6.i

Sample Info: HS22080522-01;HS22080522-01;;;

Purge Volume: 5.0

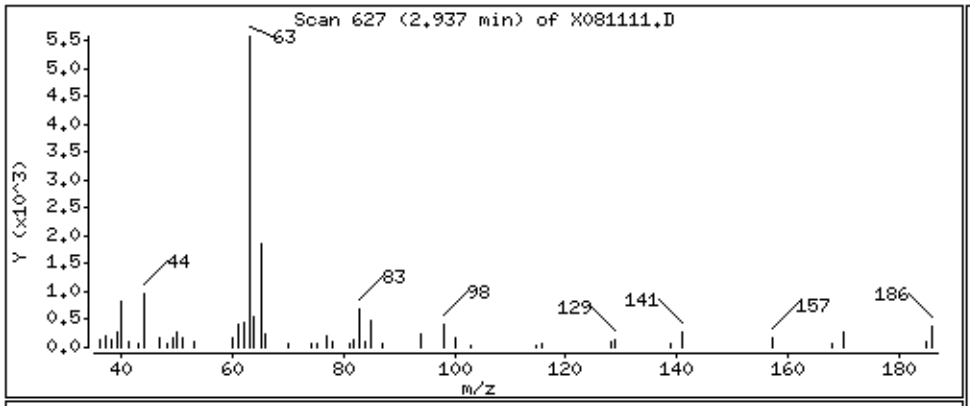
Operator: PC

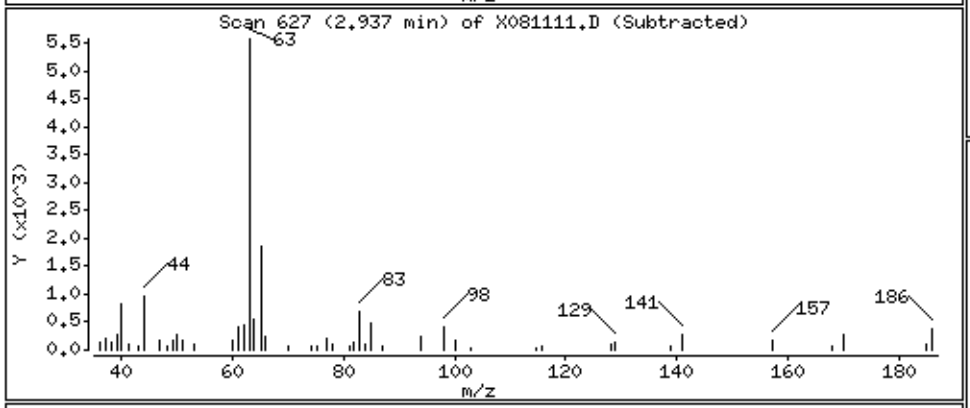
Column phase: DB624

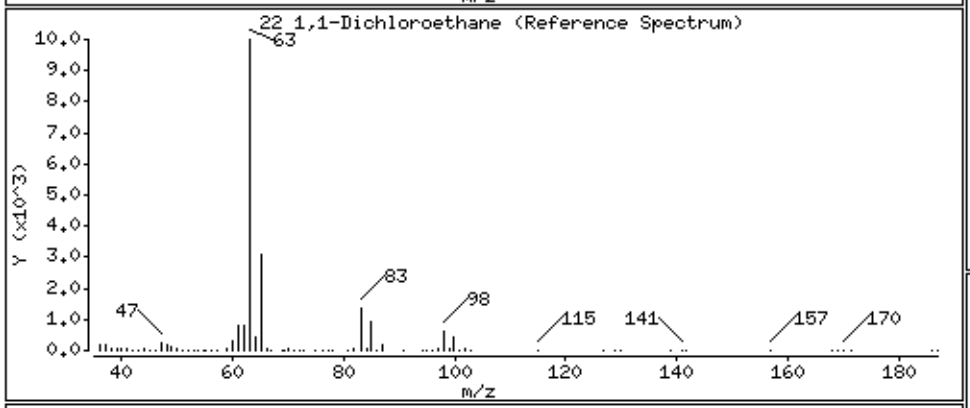
Column diameter: 0.18

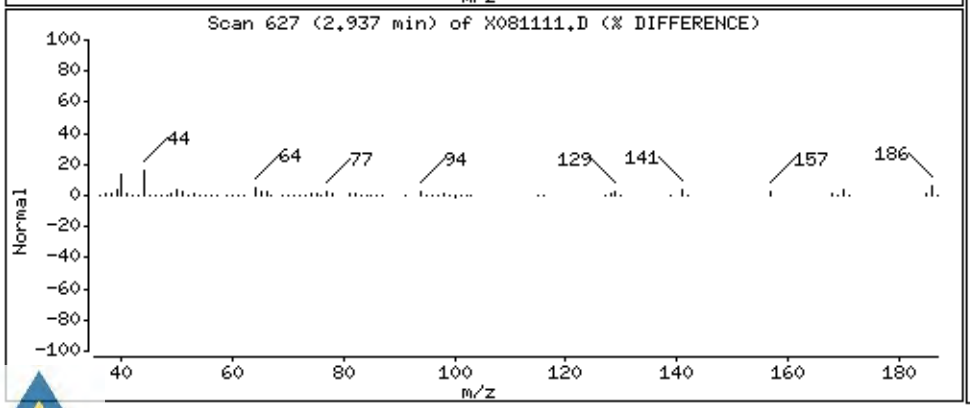
22 1,1-Dichloroethane

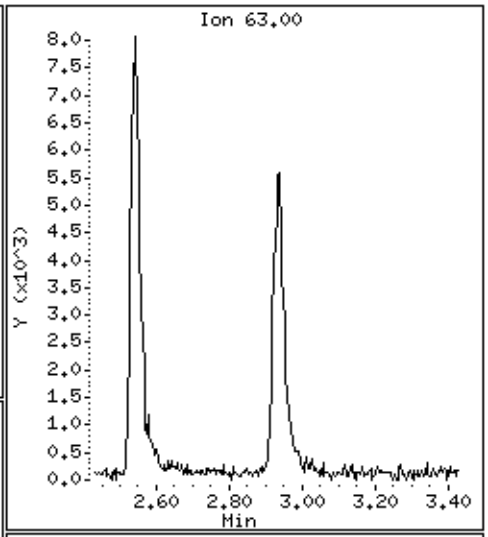
Concentration: 31.09 ug/l

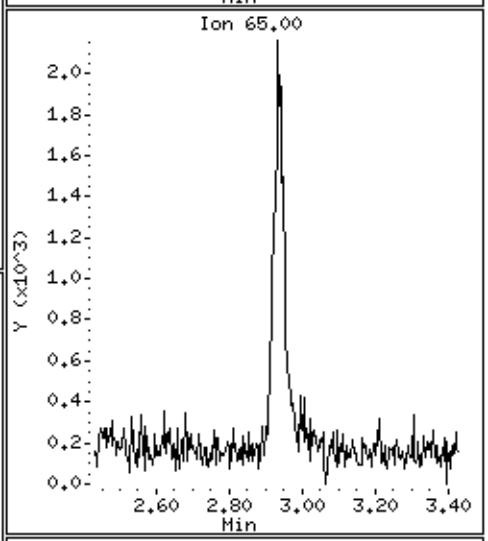


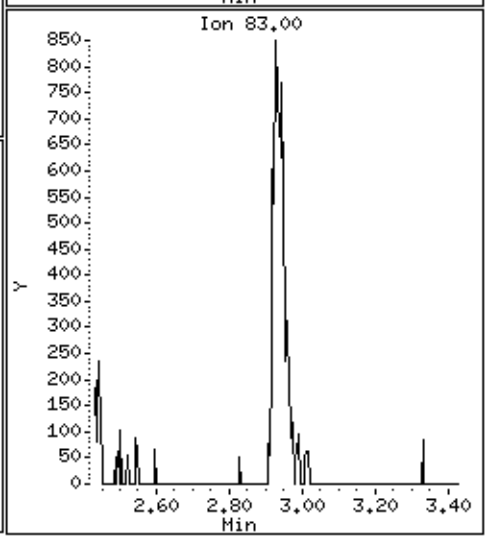












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081111.D

Date : 11-AUG-2022 13:58

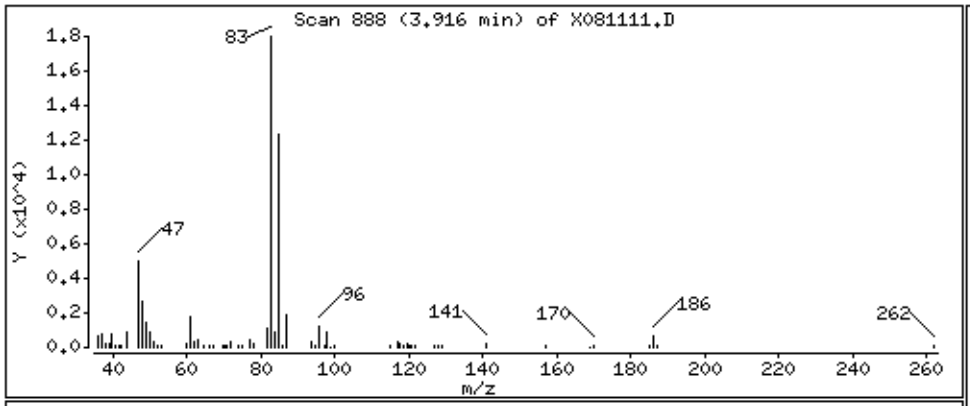
Client ID: HS22080522-01 Instrument: voa6.i

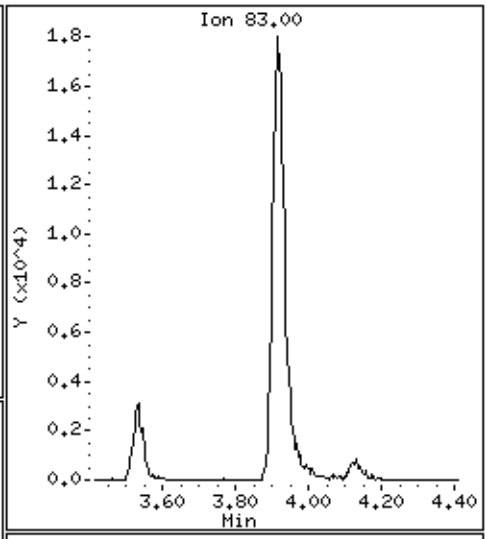
Sample Info: HS22080522-01;HS22080522-01;;;

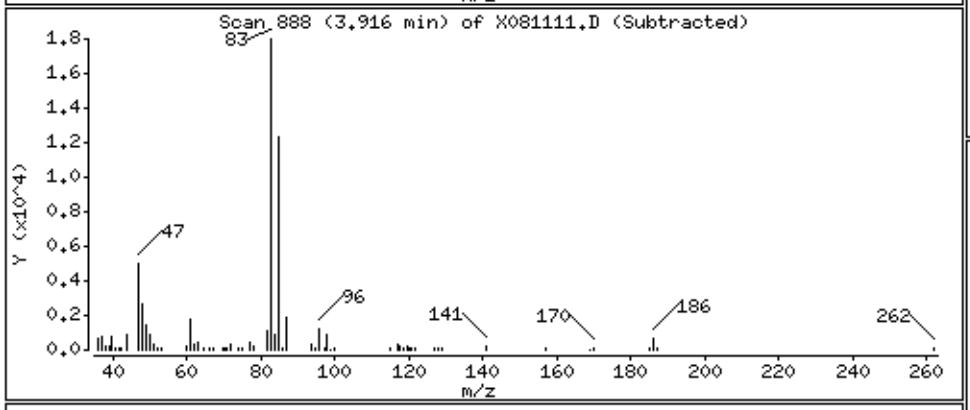
Purge Volume: 5.0 Operator: PC

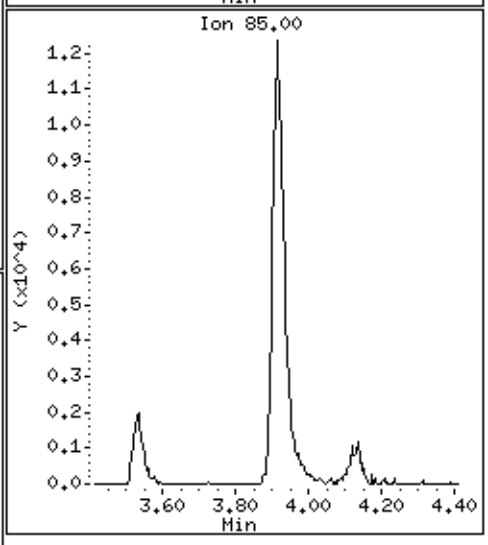
Column phase: DB624 Column diameter: 0.18

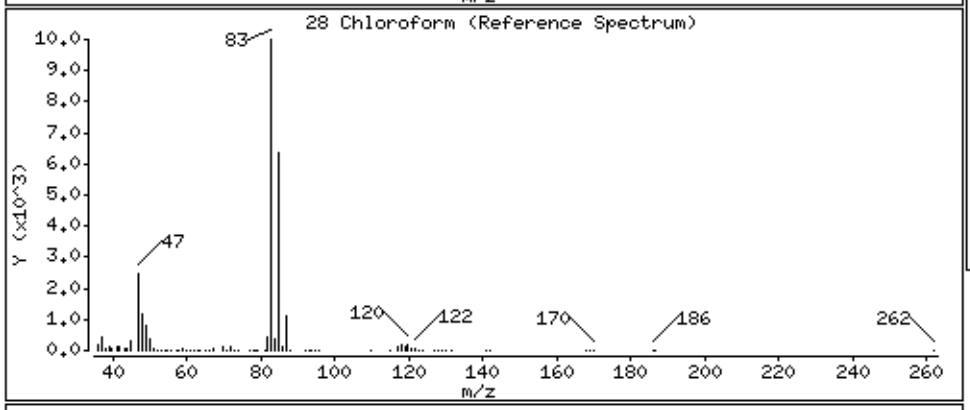
28 Chloroform Concentration: 97.42 ug/l

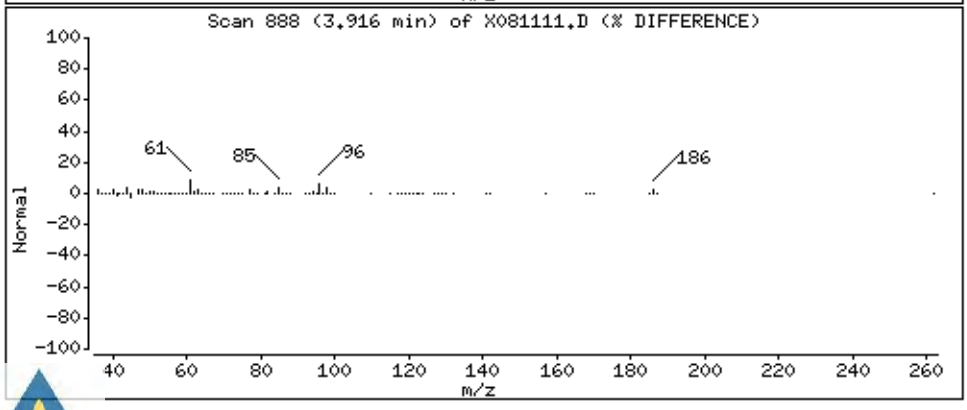












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081111.D

Date : 11-AUG-2022 13:58

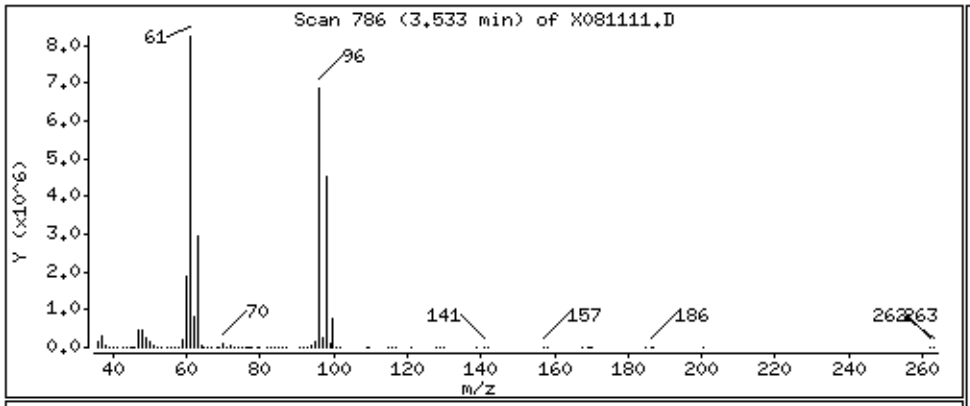
Client ID: HS22080522-01 Instrument: voa6.i

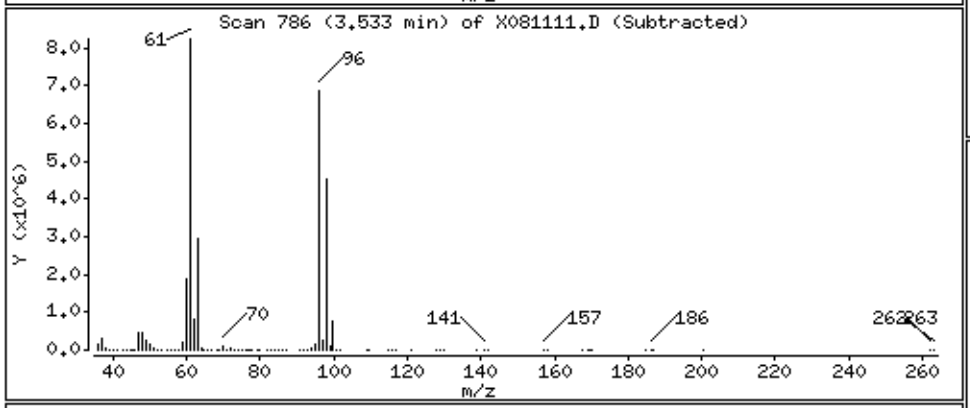
Sample Info: HS22080522-01;HS22080522-01;;;

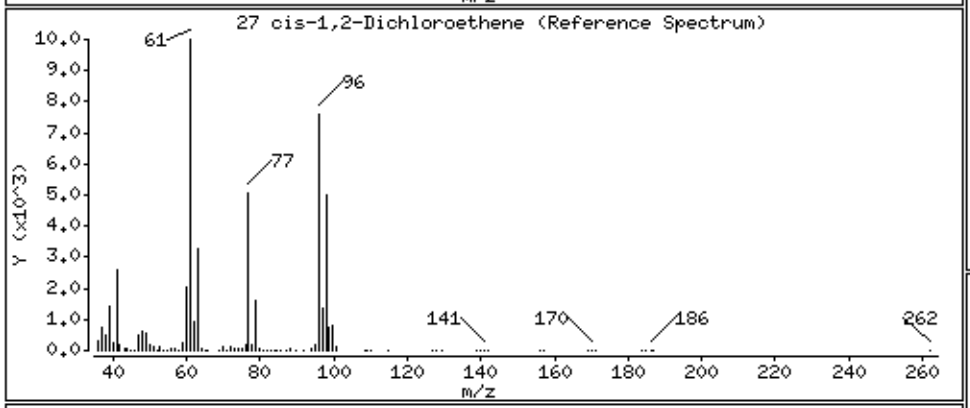
Purge Volume: 5.0 Operator: PC

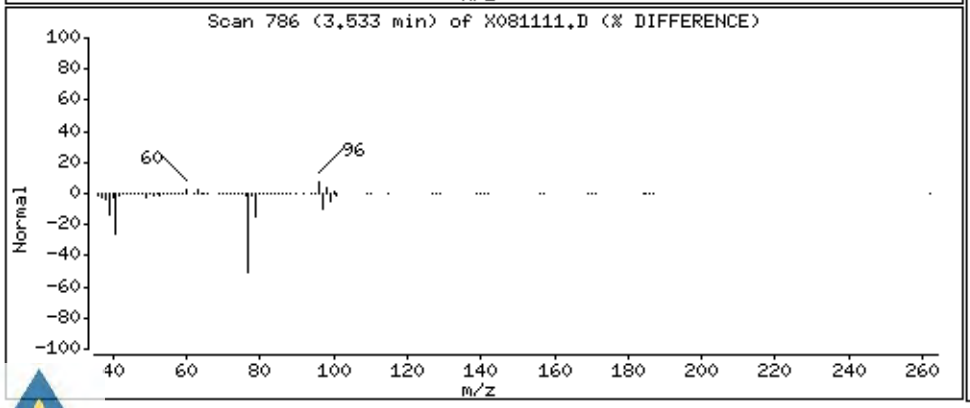
Column phase: DB624 Column diameter: 0.18

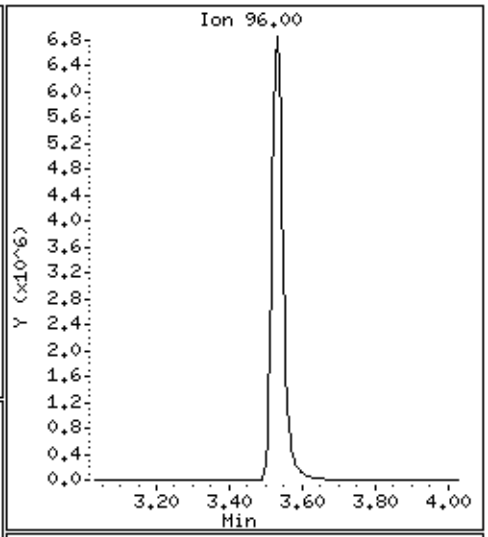
27 cis-1,2-Dichloroethene Concentration: 56872.01 ug/l

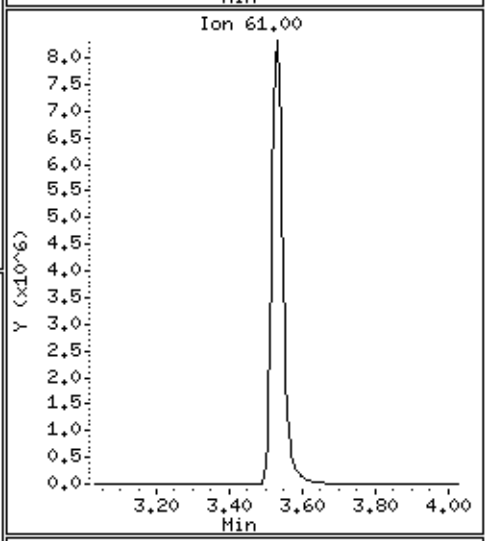


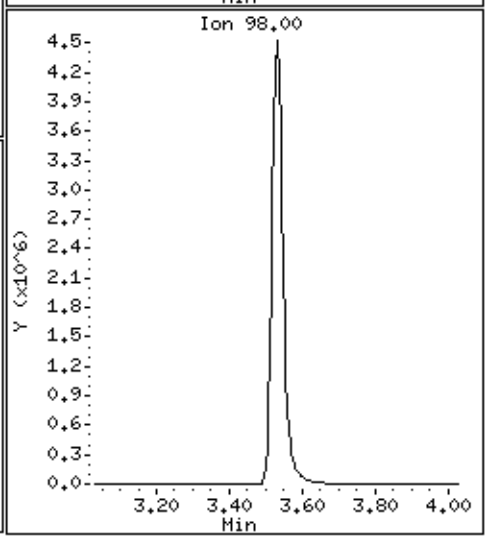












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081111.D

Date : 11-AUG-2022 13:58

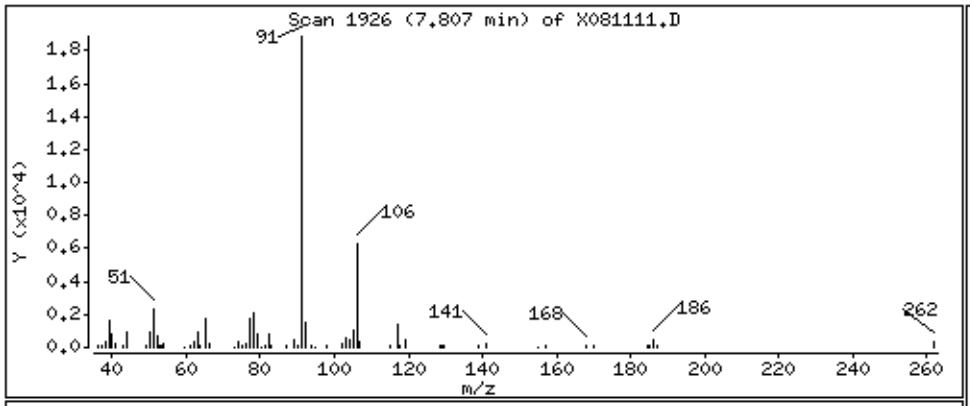
Client ID: HS22080522-01 Instrument: voa6.i

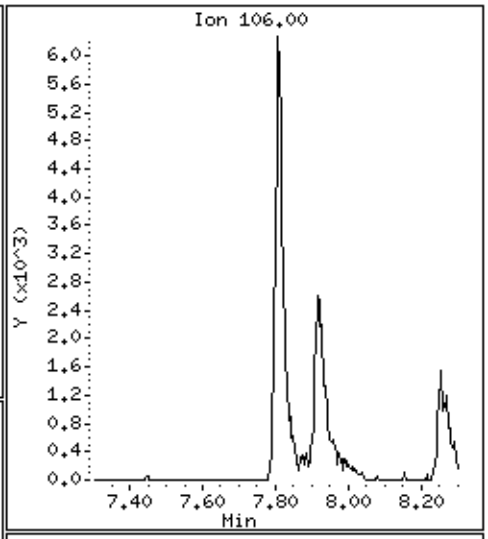
Sample Info: HS22080522-01;HS22080522-01;;;

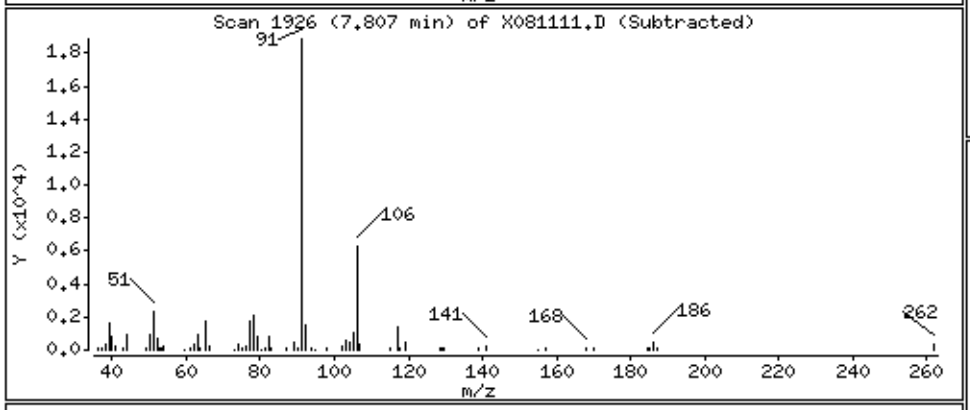
Purge Volume: 5.0 Operator: PC

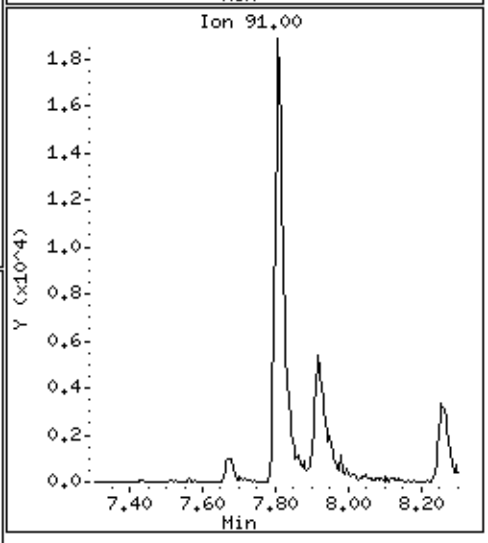
Column phase: DB624 Column diameter: 0.18

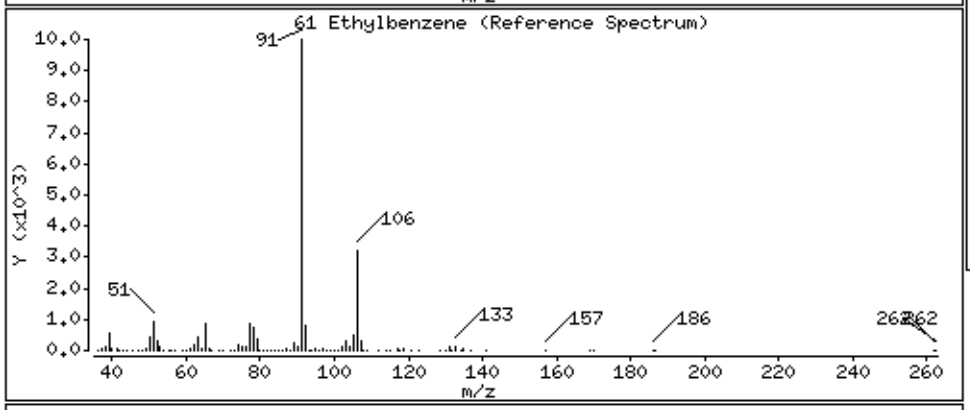
61 Ethylbenzene Concentration: 31.18 ug/l

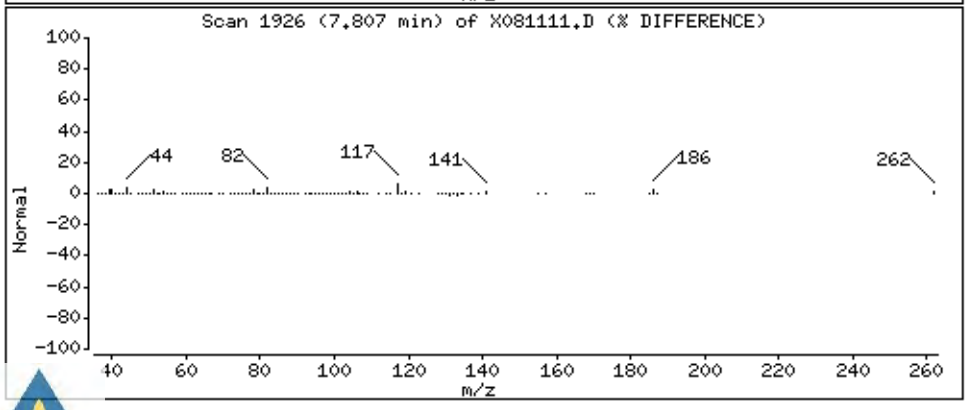












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081111.D Page 6

Date : 11-AUG-2022 13:58

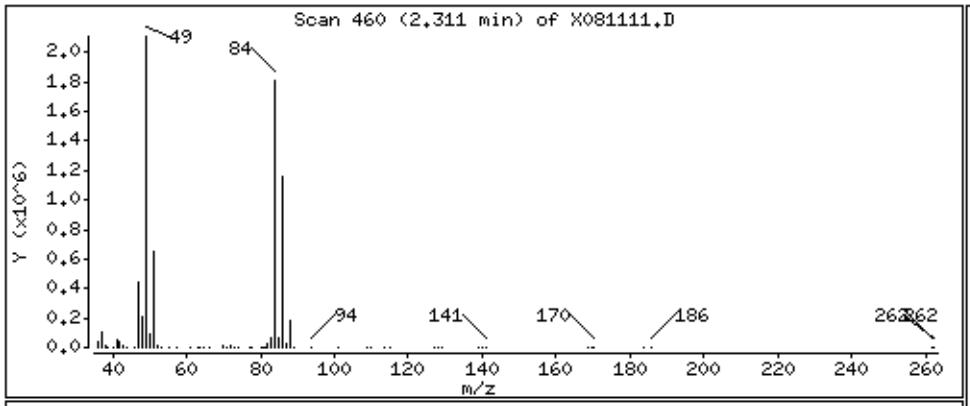
Client ID: HS22080522-01 Instrument: voa6.i

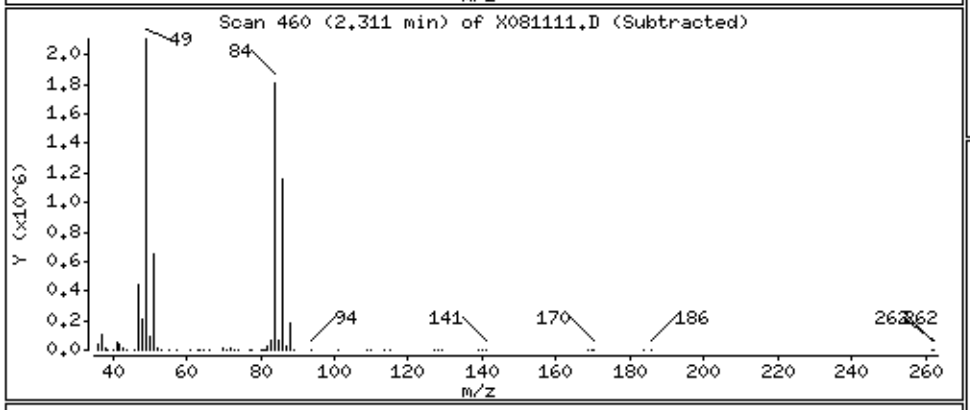
Sample Info: HS22080522-01;HS22080522-01;;;

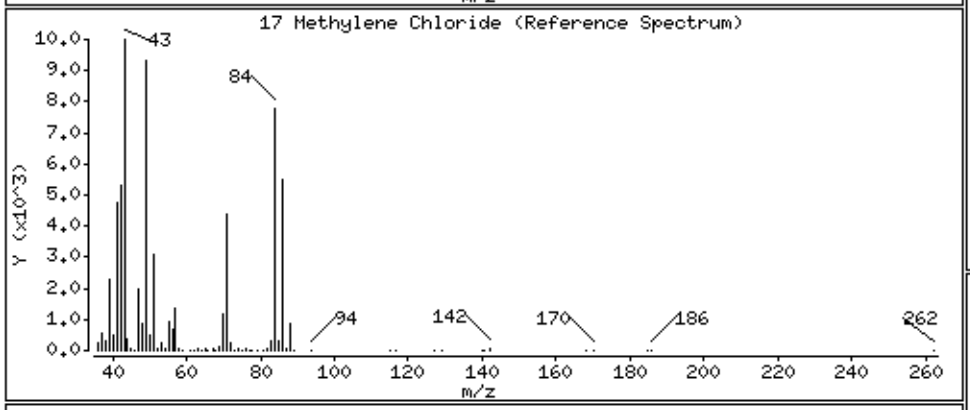
Purge Volume: 5.0 Operator: PC

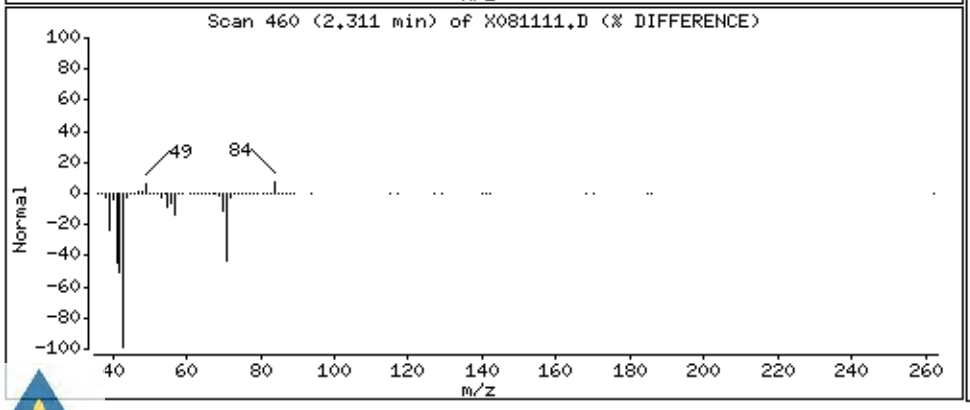
Column phase: DB624 Column diameter: 0.18

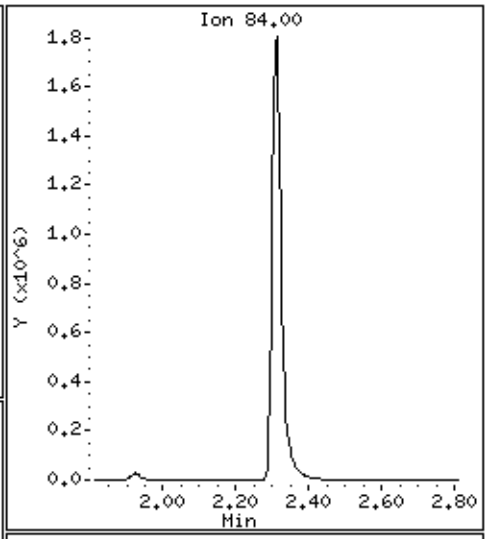
17 Methylene Chloride Concentration: 13573.55 ug/l

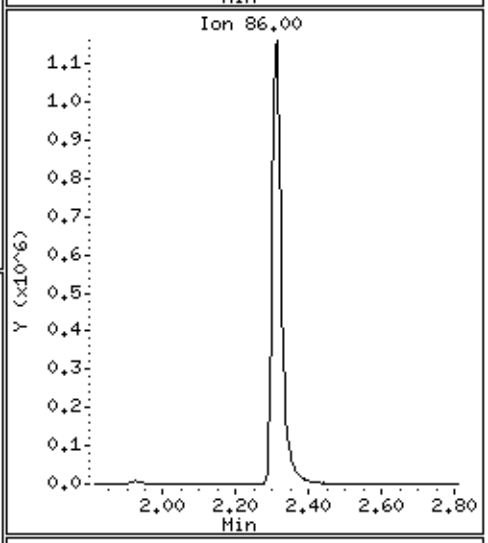


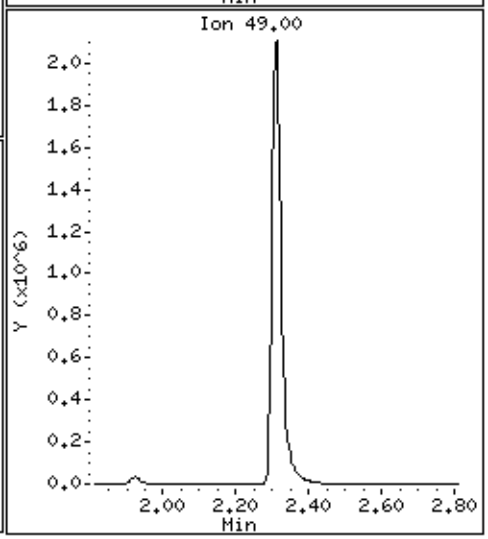












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081111.D Page 7

Date : 11-AUG-2022 13:58

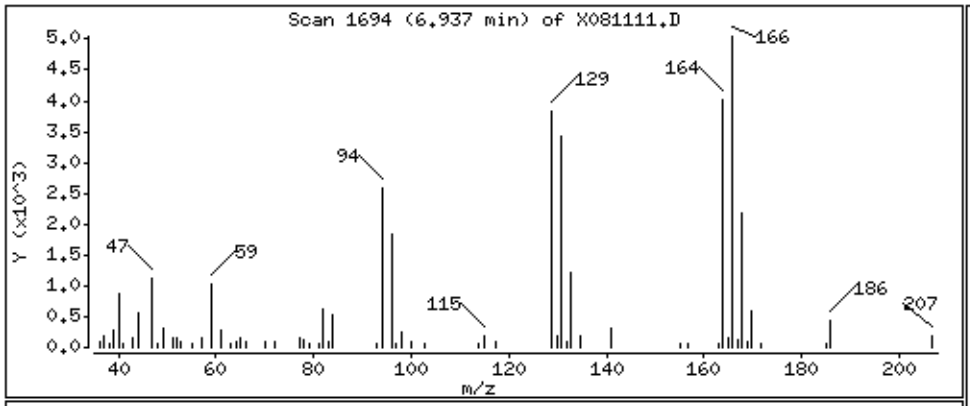
Client ID: HS22080522-01 Instrument: voa6.i

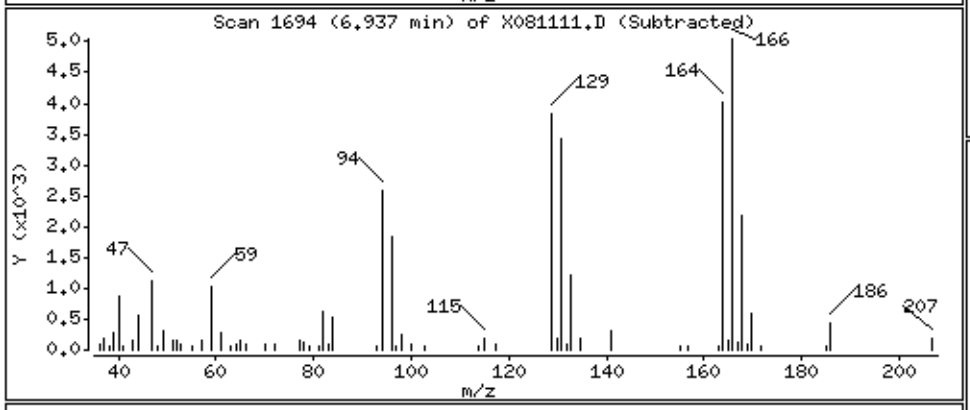
Sample Info: HS22080522-01;HS22080522-01;;;

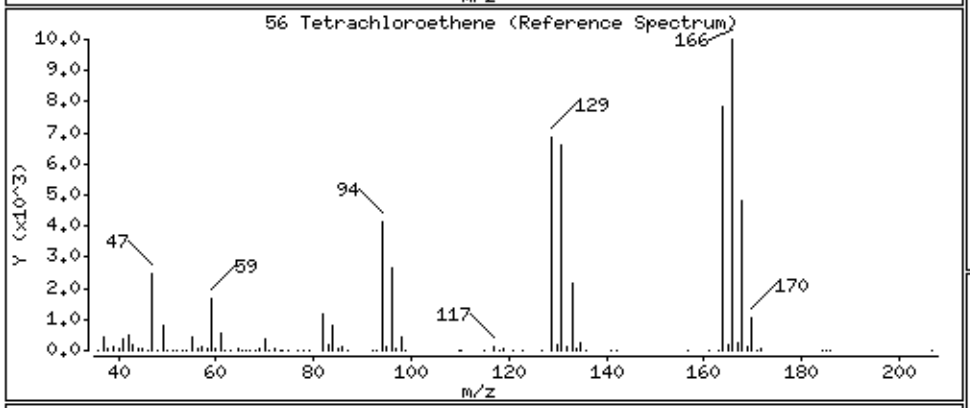
Purge Volume: 5.0 Operator: PC

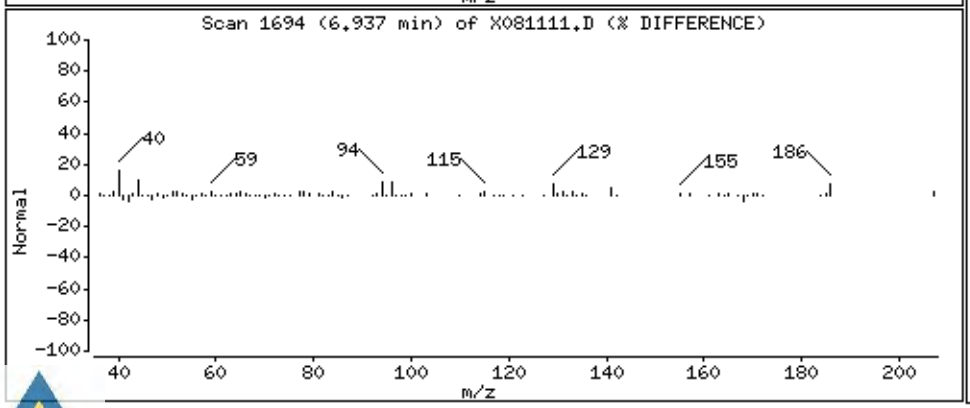
Column phase: DB624 Column diameter: 0.18

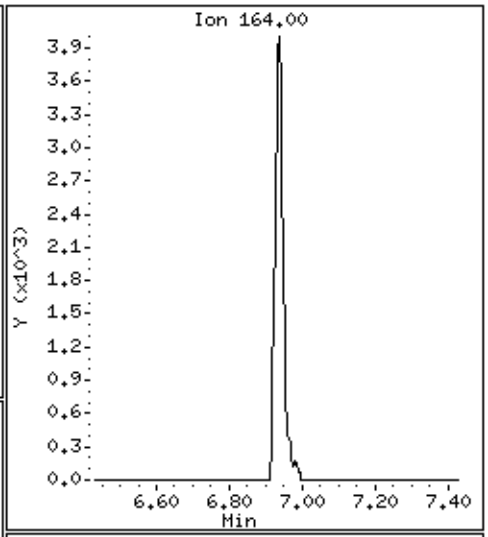
56 Tetrachloroethene Concentration: 30.05 ug/l

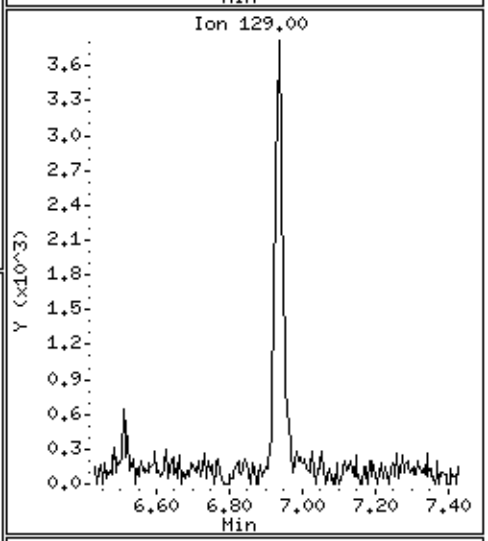


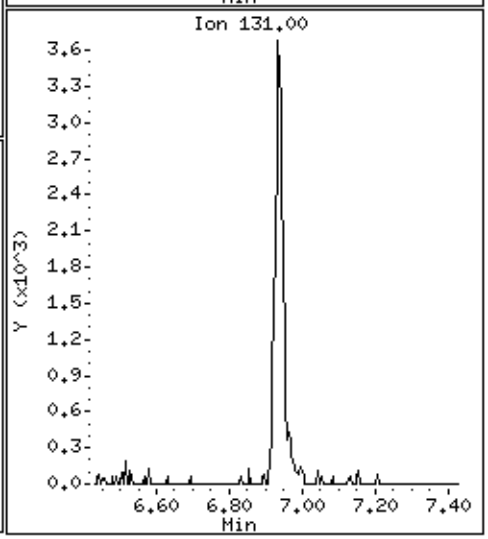












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081111.D

Date : 11-AUG-2022 13:58

Client ID: HS22080522-01

Instrument: voa6.i

Sample Info: HS22080522-01;HS22080522-01;;;

Purge Volume: 5.0

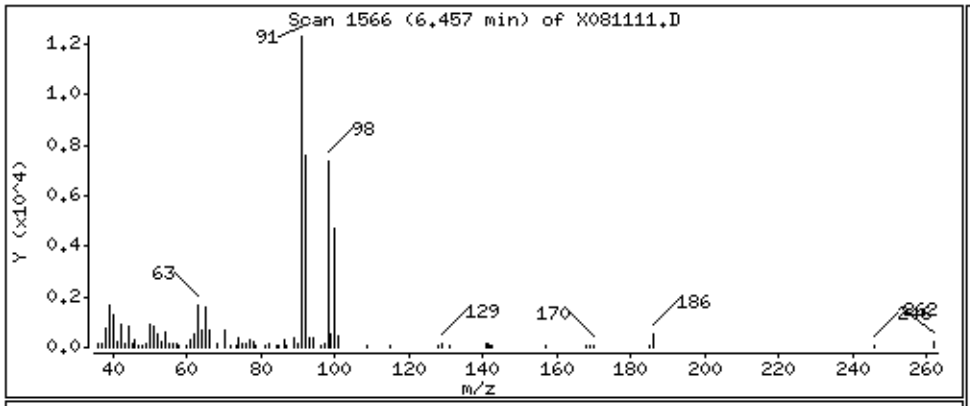
Operator: PC

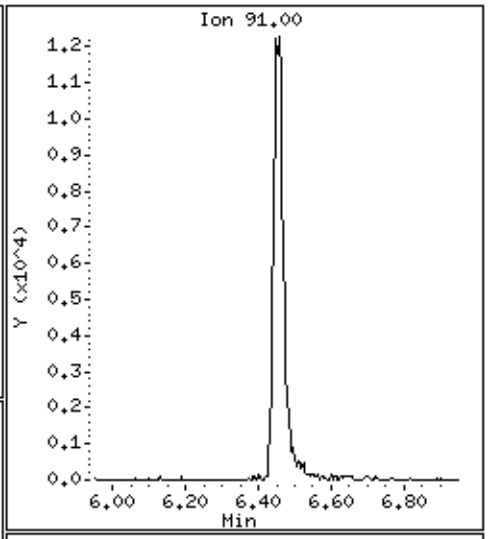
Column phase: DB624

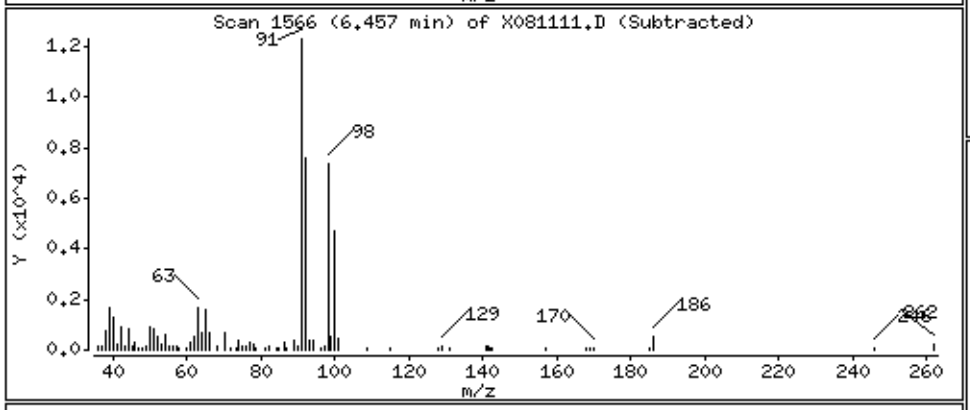
Column diameter: 0.18

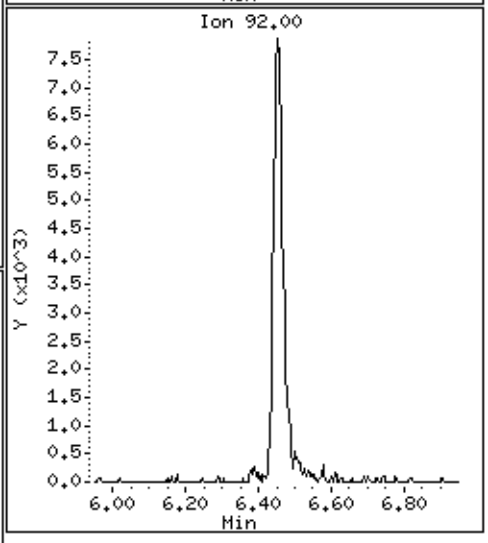
50 Toluene

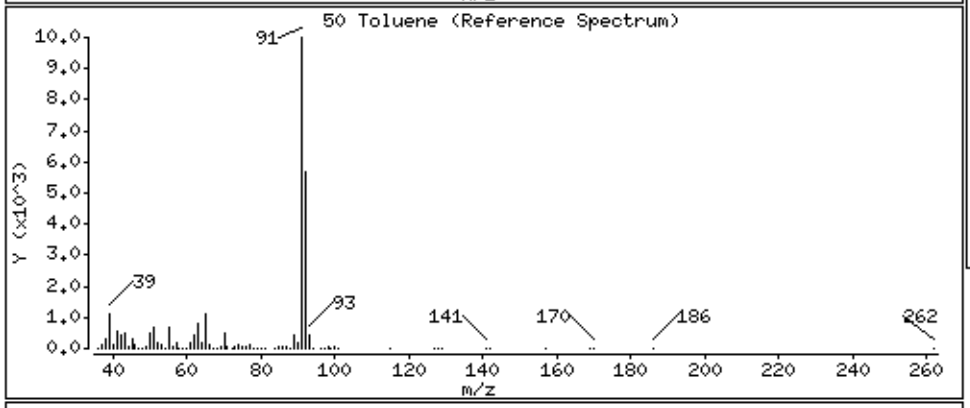
Concentration: 26.06 ug/l

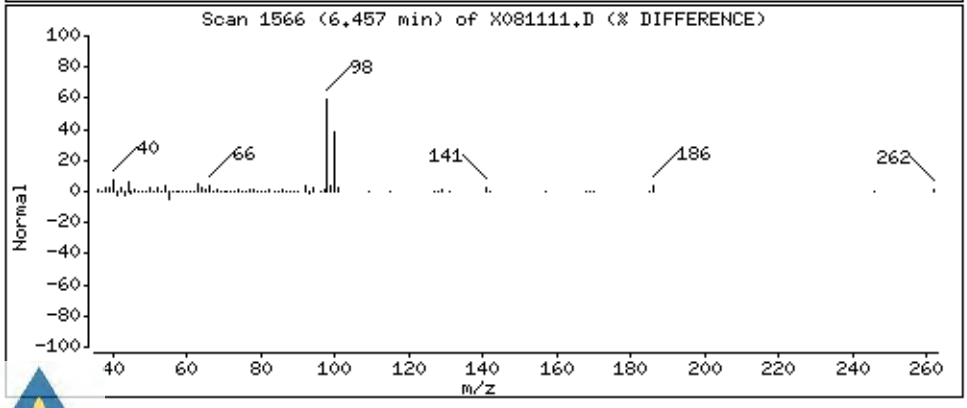












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081111.D Page 9

Date : 11-AUG-2022 13:58

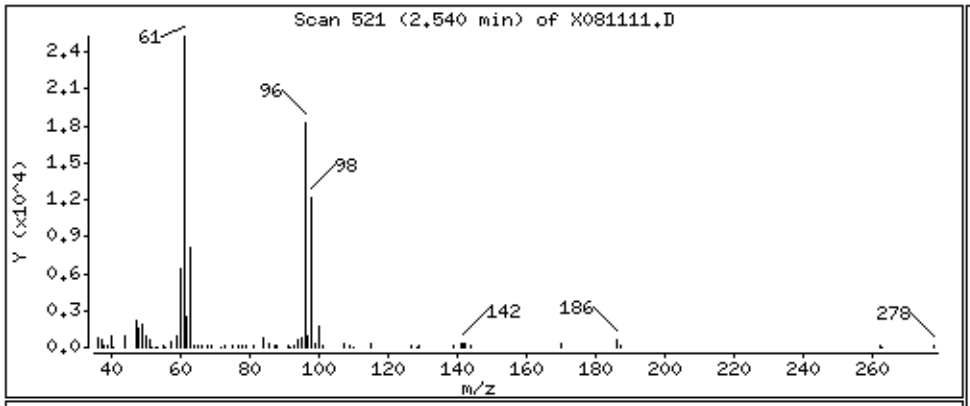
Client ID: HS22080522-01 Instrument: voa6.i

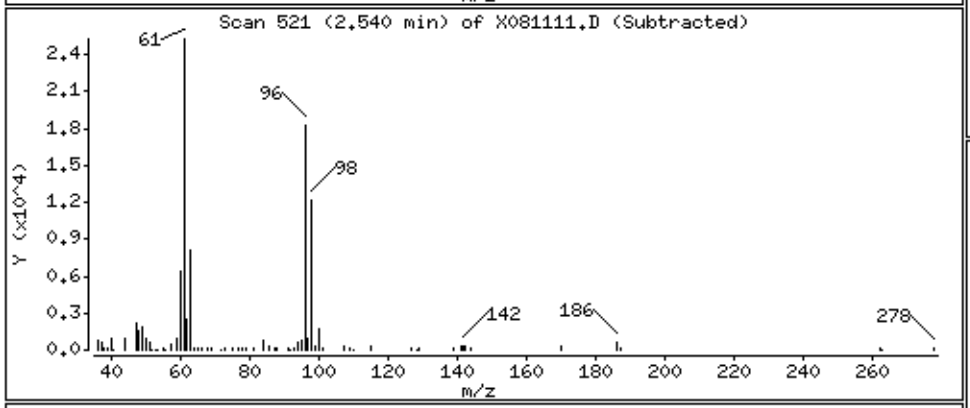
Sample Info: HS22080522-01;HS22080522-01;;;

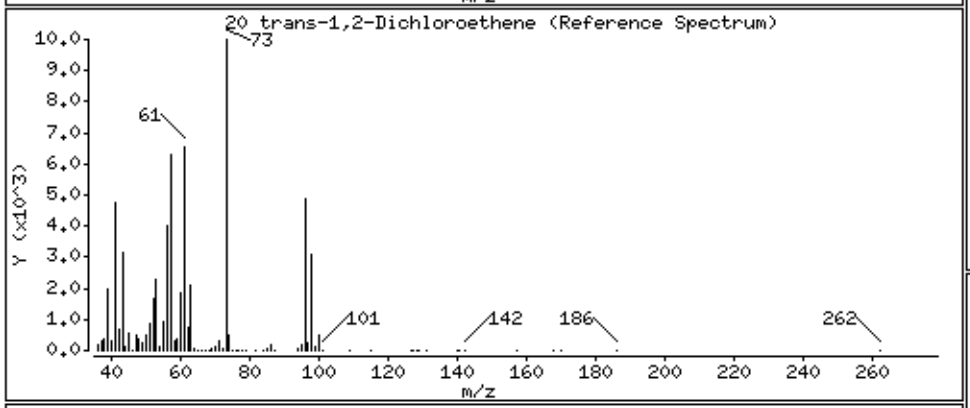
Purge Volume: 5.0 Operator: PC

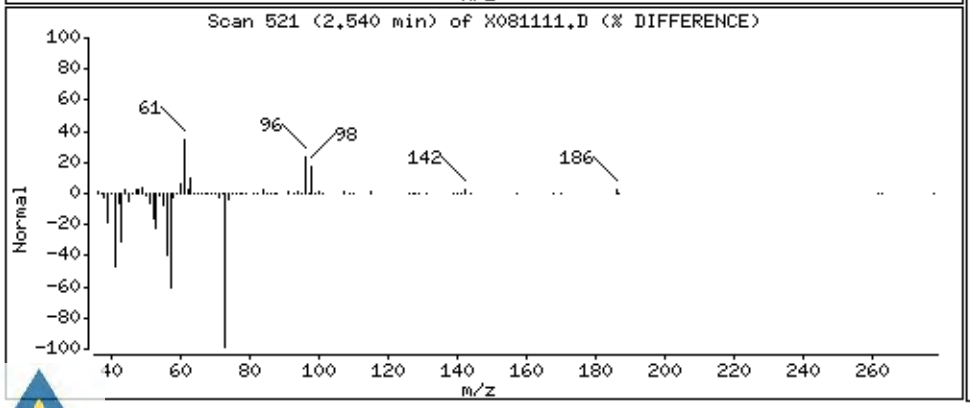
Column phase: DB624 Column diameter: 0.18

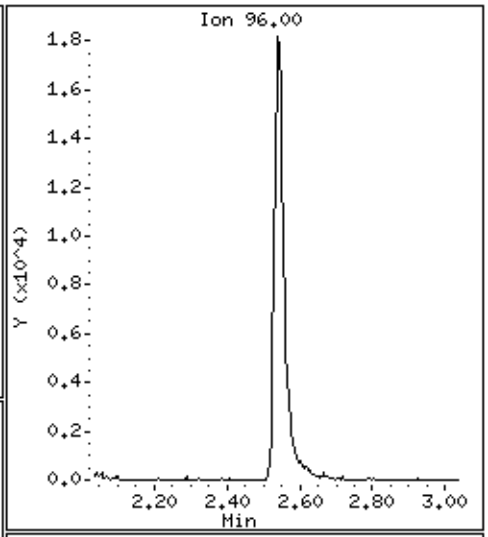
20 trans-1,2-Dichloroethene Concentration: 151.32 ug/l

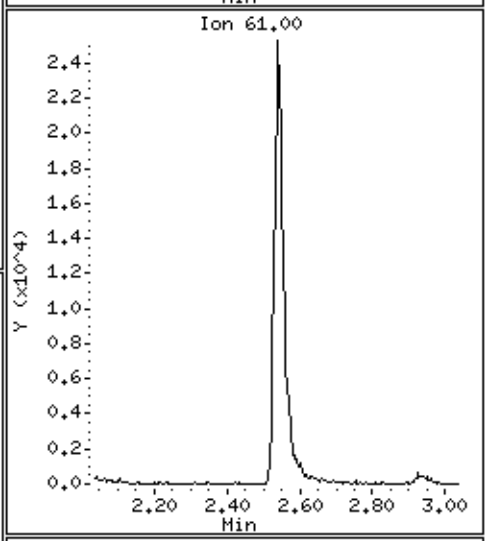


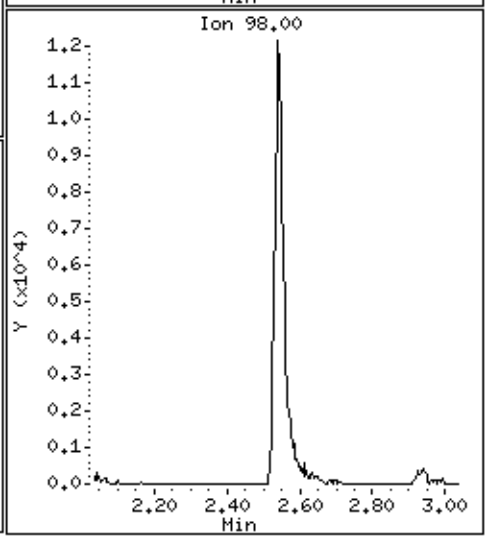












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081111.D Page 10

Date : 11-AUG-2022 13:58

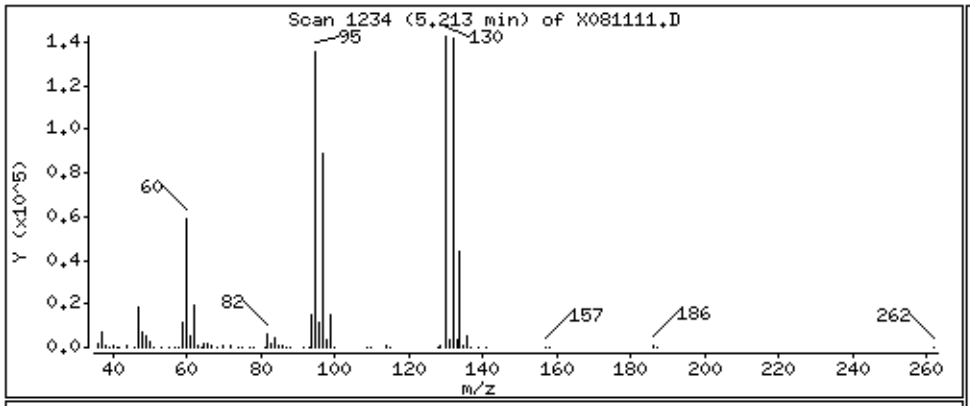
Client ID: HS22080522-01 Instrument: voa6.i

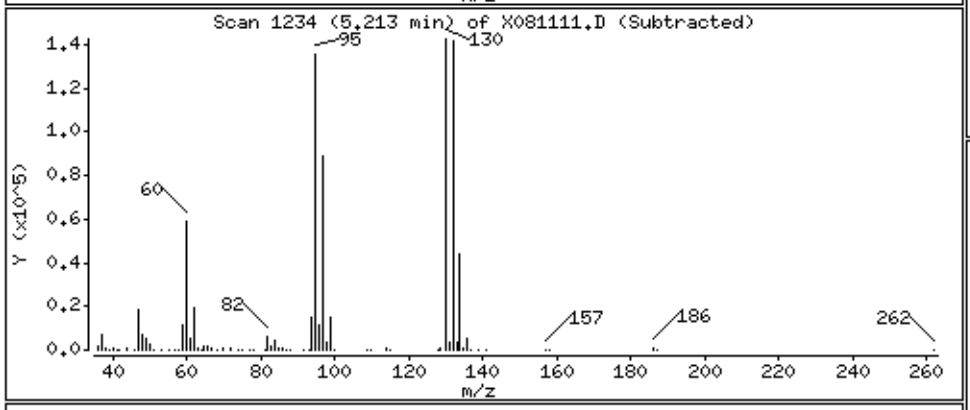
Sample Info: HS22080522-01;HS22080522-01;;;

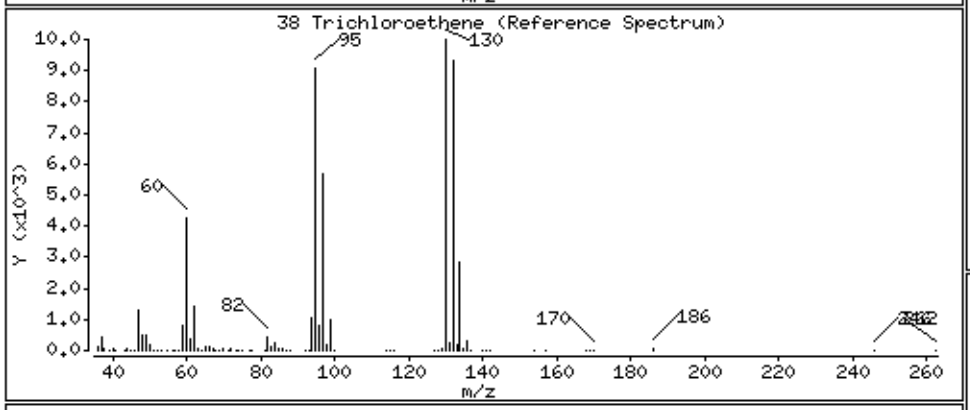
Purge Volume: 5.0 Operator: PC

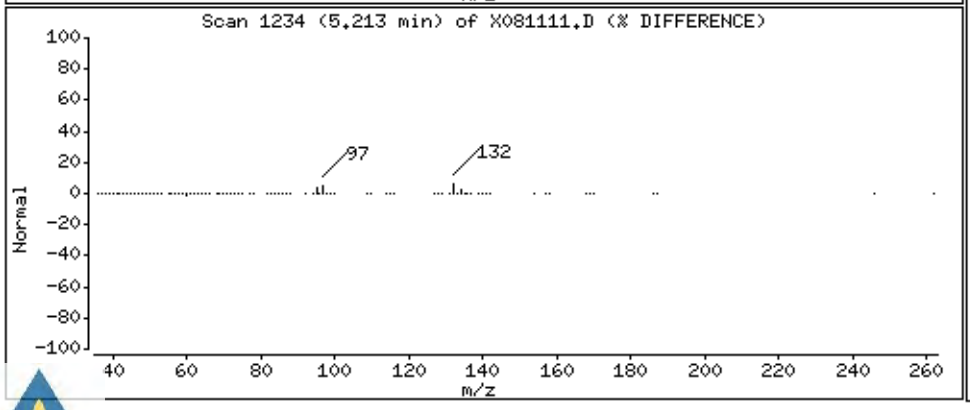
Column phase: DB624 Column diameter: 0.18

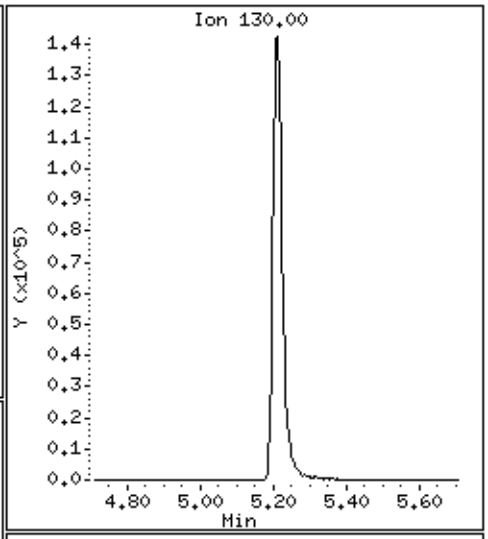
38 Trichloroethene Concentration: 981.32 ug/l

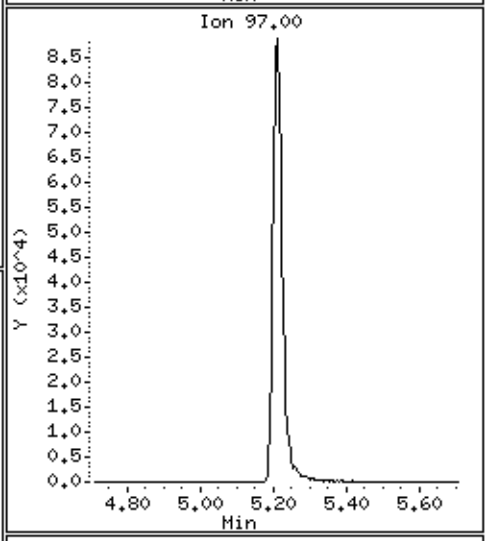


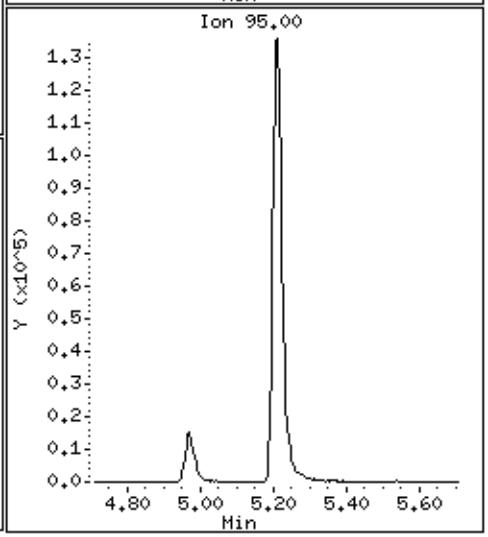












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081111.D Page 11

Date : 11-AUG-2022 13:58

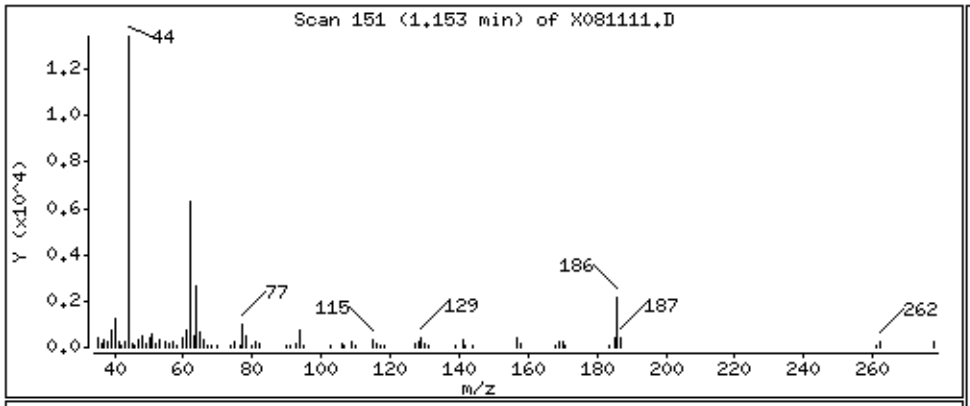
Client ID: HS22080522-01 Instrument: voa6.i

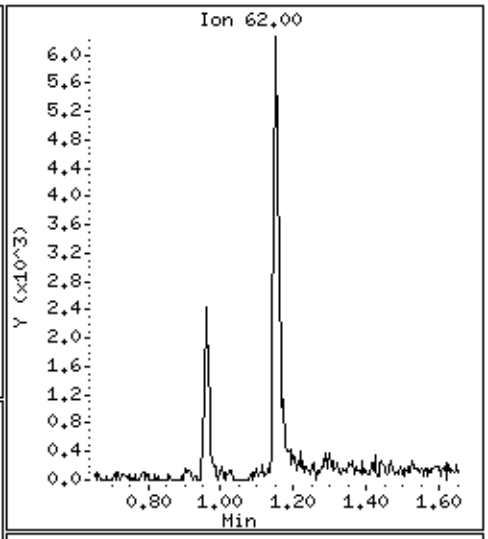
Sample Info: HS22080522-01;HS22080522-01;;;

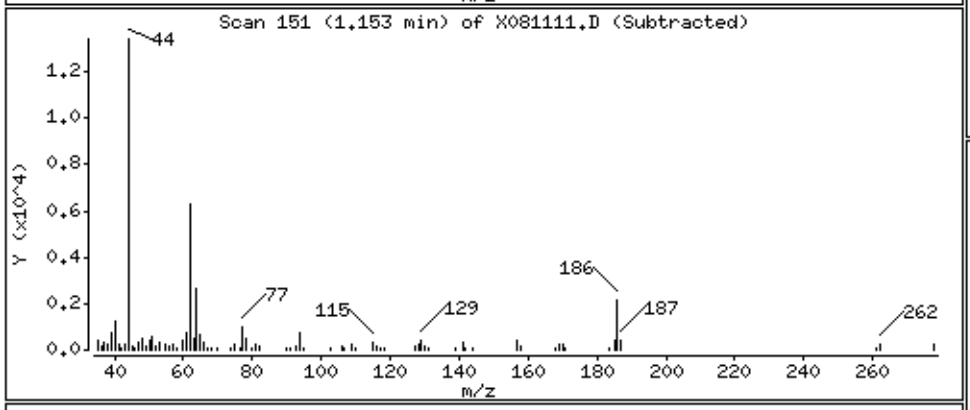
Purge Volume: 5.0 Operator: PC

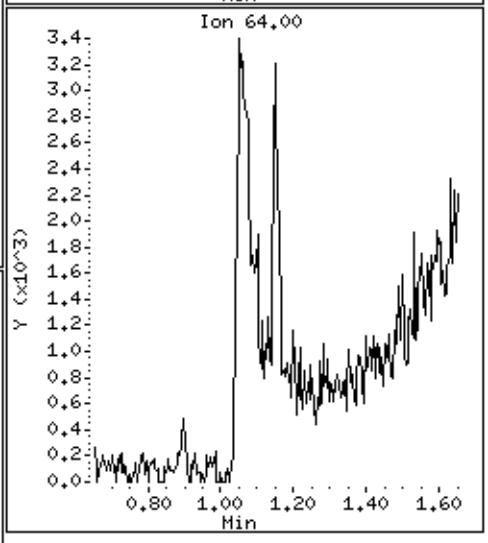
Column phase: DB624 Column diameter: 0.18

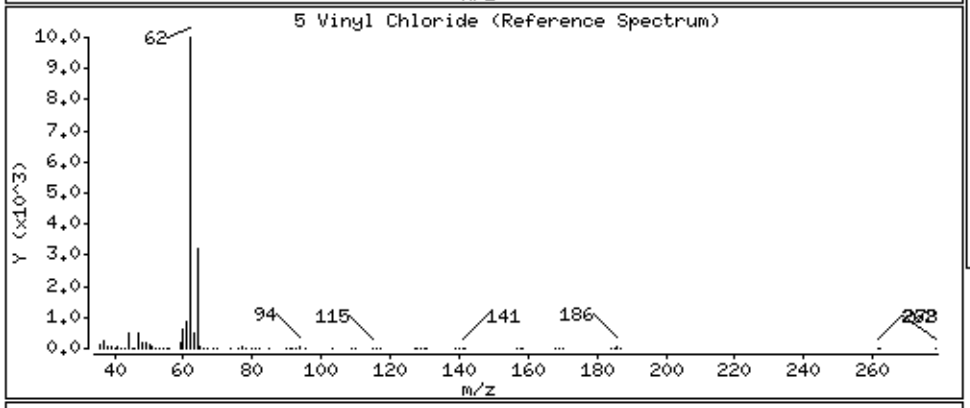
5 Vinyl Chloride Concentration: 24.98 ug/l

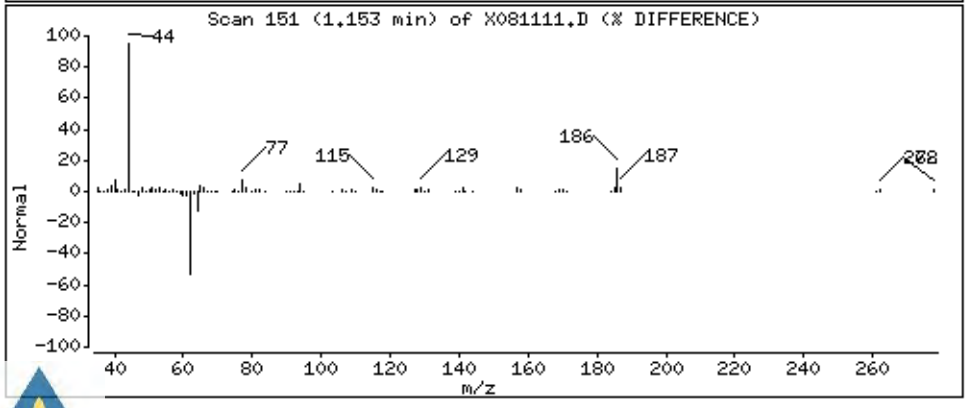












Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081111.D
Inj Date : 11-AUG-2022 13:58
InstruID : voa6.i
LabSampID : HS22080522-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081112.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081112.D
Lab Smp Id: HS22080522-02 Client Smp ID: HS22080522-02
Inj Date : 11-AUG-2022 14:19
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-02;HS22080522-02;;;
Misc Info : HS22052000V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 12
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	673642	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	946960	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	834692	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	363683	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.102	(0.981)	301779	47.4360	47.43
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	327680	47.0469	47.04
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1104491	53.0349	53.03
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	358676	48.1232	48.12
22 1,1-Dichloroethane	63	2.933	2.929	(0.701)	12466	1.20204	30.05(a)
28 Chloroform	83	3.915	3.911	(0.936)	43935	3.86662	96.66(a)
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	14916090	2227.19	55679.86(A)
61 Ethylbenzene	106	7.810	7.802	(1.018)	11098	1.38811	34.70(a)
17 Methylene Chloride	84	2.311	2.311	(0.552)	2977629	488.243	12206.06(A)
56 Tetrachloroethene	164	6.937	6.929	(0.904)	7030	1.29883	32.47(a)
50 Toluene	91	6.453	6.449	(0.841)	25171	1.07277	26.81(a)
20 trans-1,2-Dichloroethene	96	2.543	2.536	(0.608)	34991	5.90454	147.61
38 Trichloroethene	130	5.208	5.208	(1.048)	275781	41.4889	1037.22
5 Vinyl Chloride	62	1.149	1.152	(0.275)	7129	1.00924	25.23(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.

01135092

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081112.D

Date : 11-AUG-2022 14:19

Client ID: HS22080522-02

Instrument: voa6.i

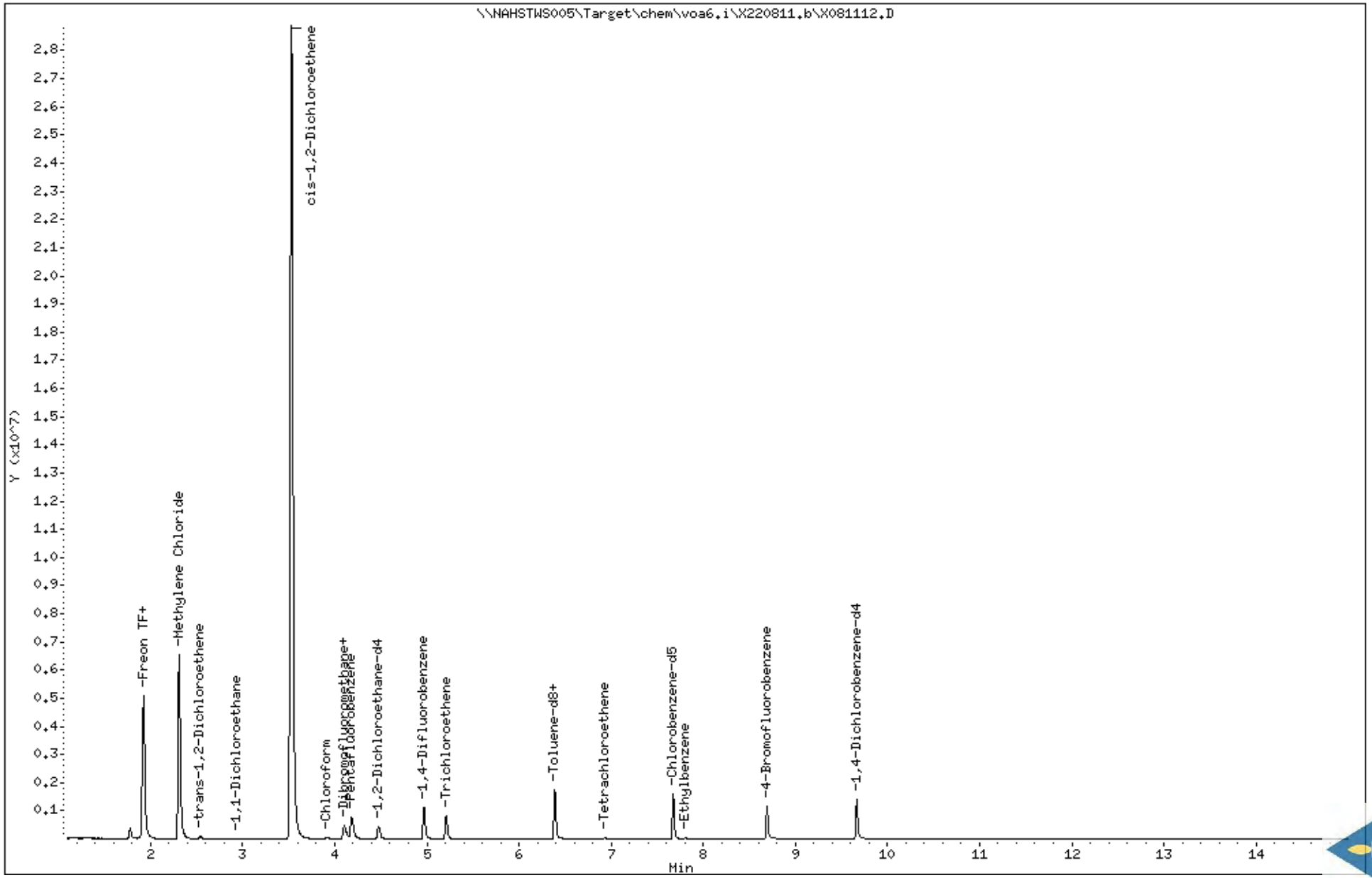
Sample Info: HS22080522-02;HS22080522-02;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081112.D

Date : 11-AUG-2022 14:19

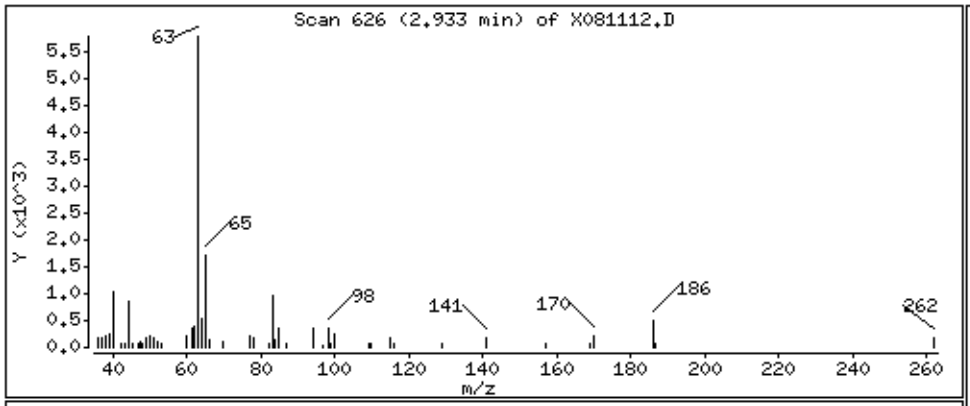
Client ID: HS22080522-02 Instrument: voa6.i

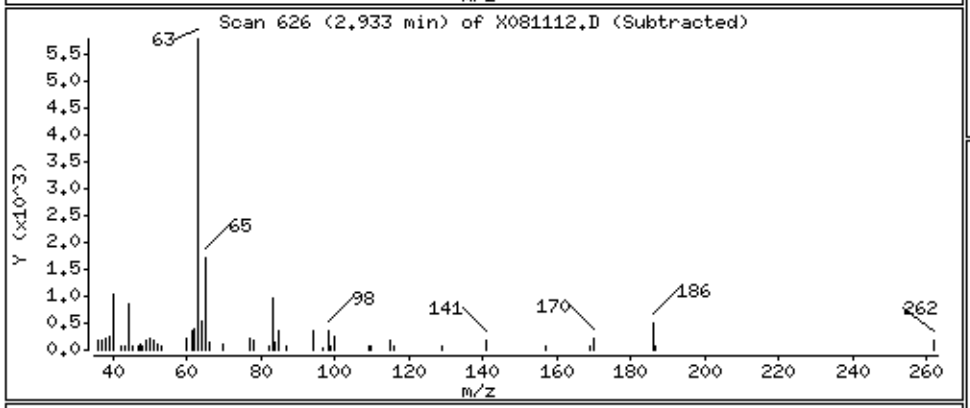
Sample Info: HS22080522-02;HS22080522-02;;;

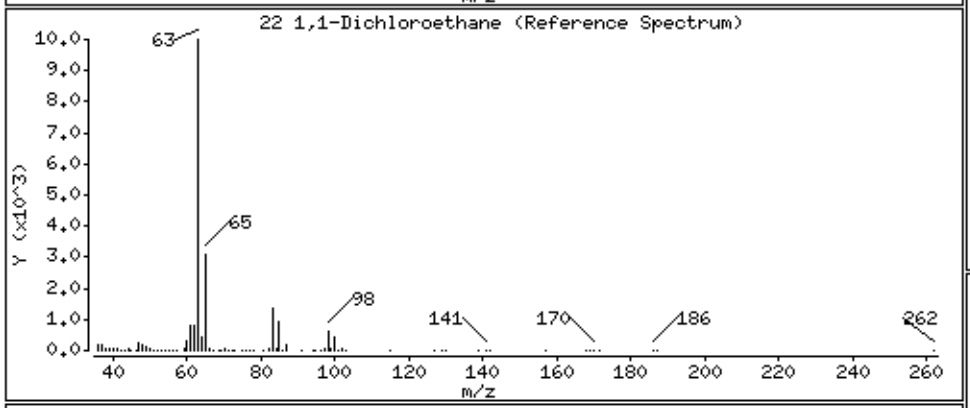
Purge Volume: 5.0 Operator: PC

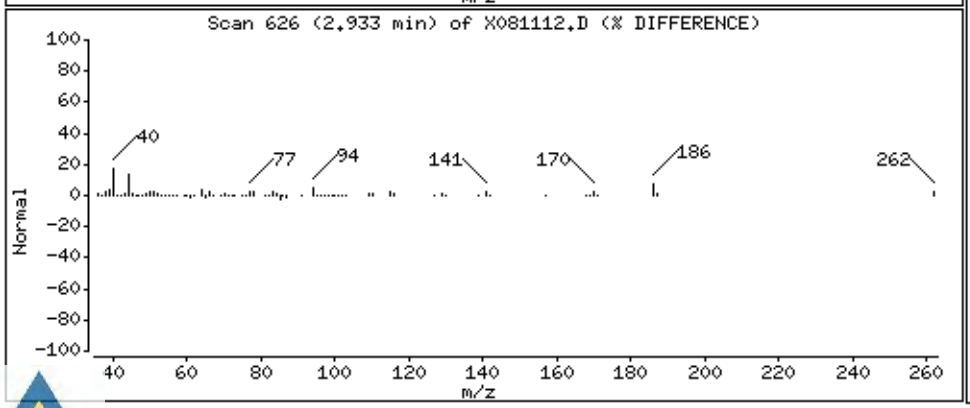
Column phase: DB624 Column diameter: 0.18

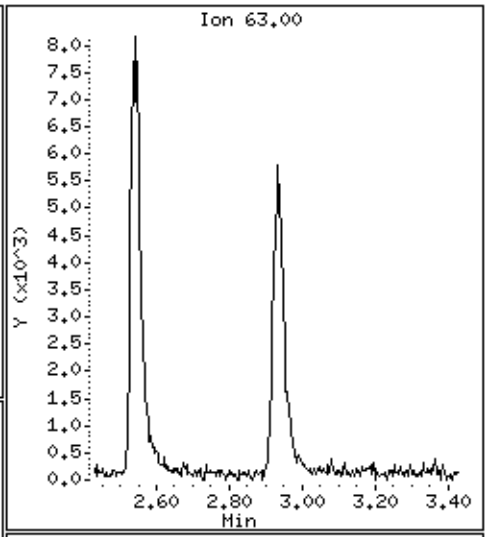
22 1,1-Dichloroethane Concentration: 30.05 ug/l

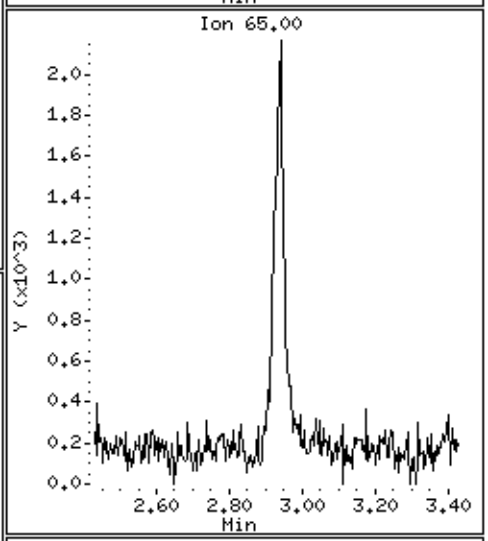


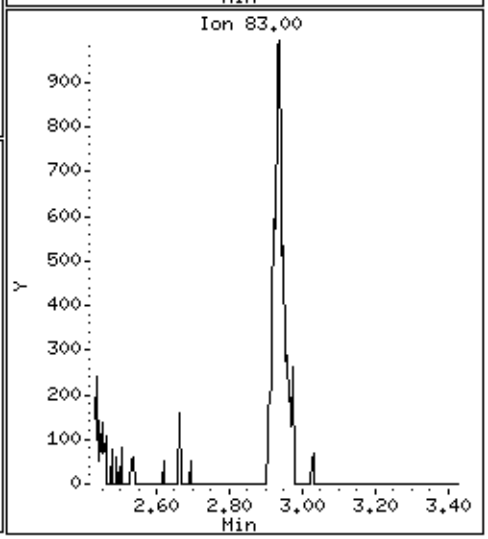












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081112.D

Date : 11-AUG-2022 14:19

Client ID: HS22080522-02

Instrument: voa6.i

Sample Info: HS22080522-02;HS22080522-02;;;

Purge Volume: 5.0

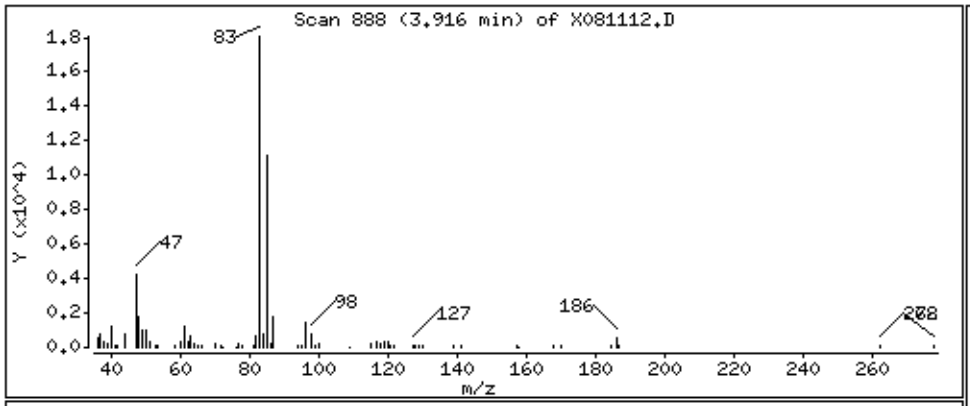
Operator: PC

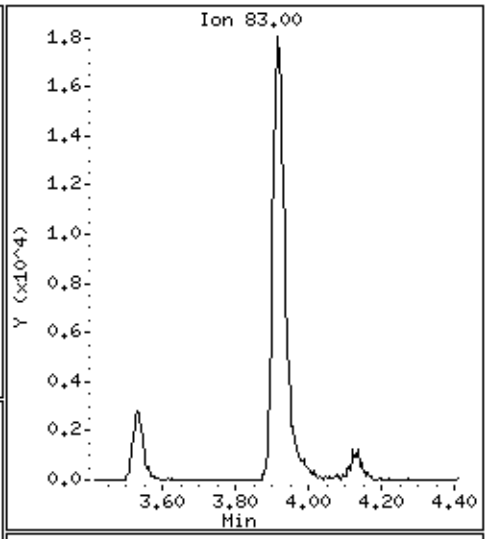
Column phase: DB624

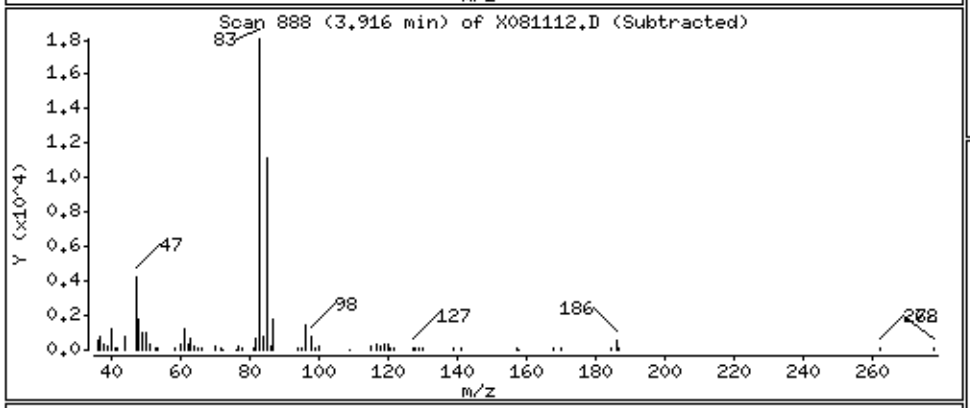
Column diameter: 0.18

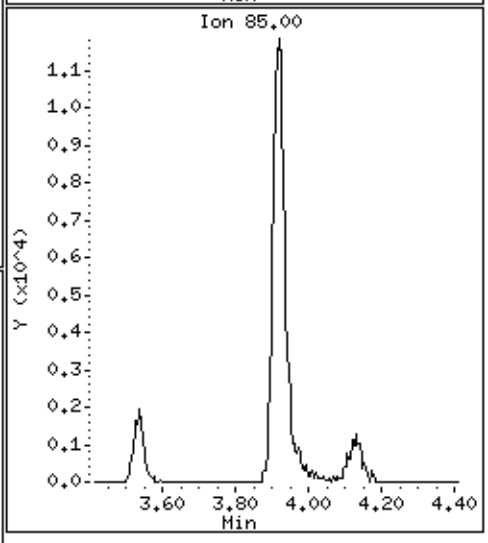
28 Chloroform

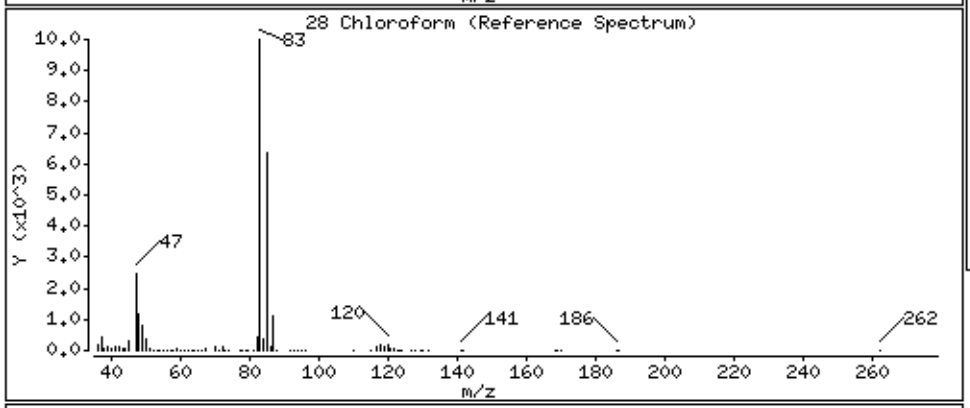
Concentration: 96.66 ug/l

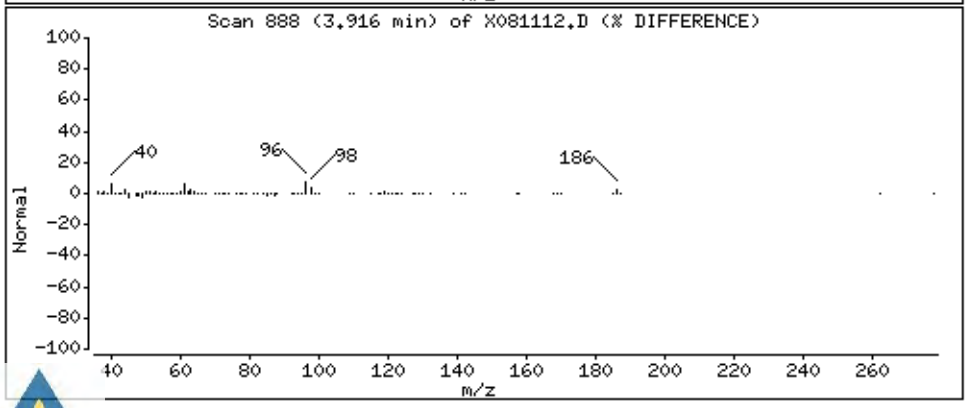












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081112.D Page 4

Date : 11-AUG-2022 14:19

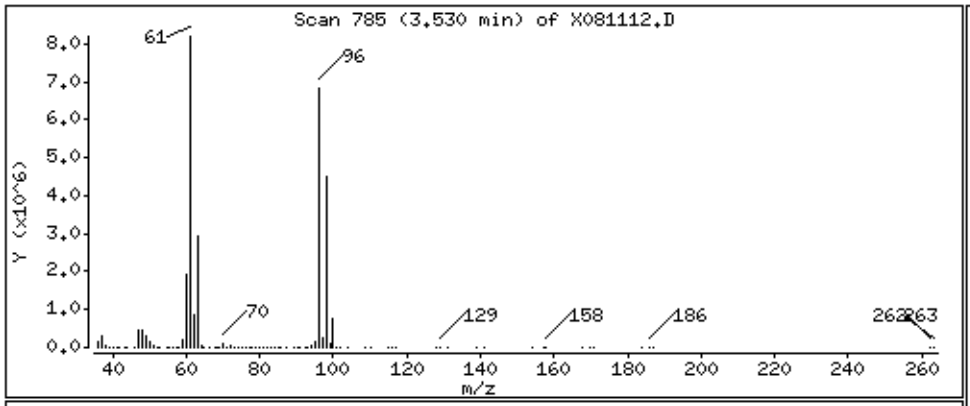
Client ID: HS22080522-02 Instrument: voa6.i

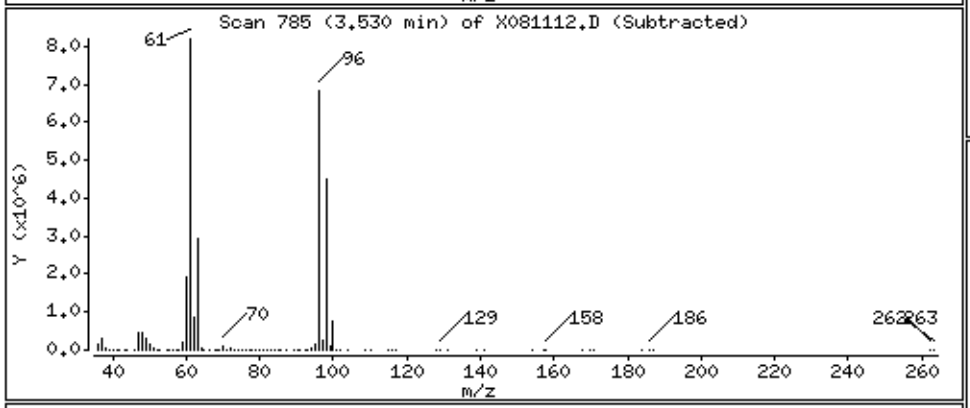
Sample Info: HS22080522-02;HS22080522-02;;;

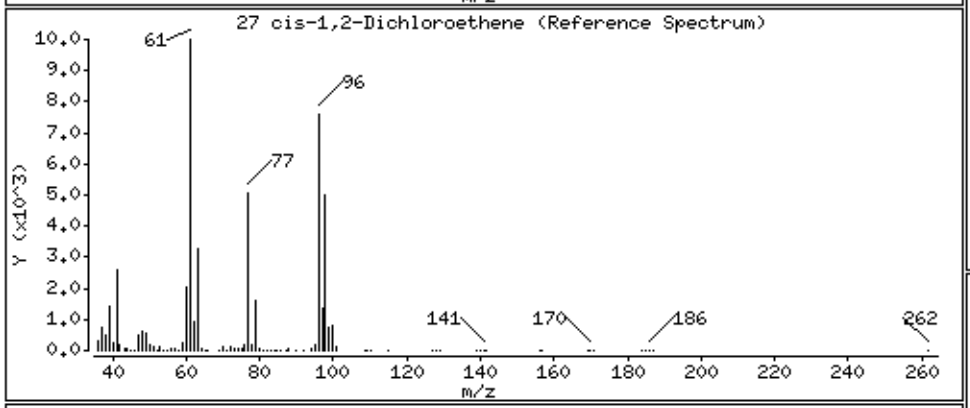
Purge Volume: 5.0 Operator: PC

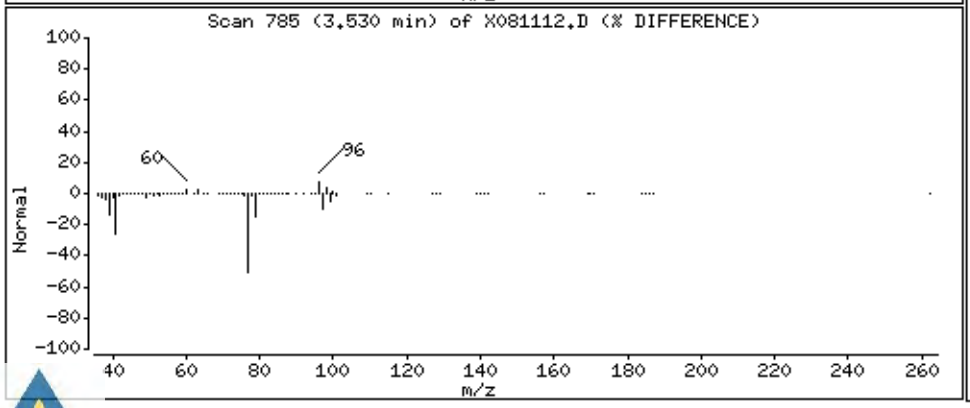
Column phase: DB624 Column diameter: 0.18

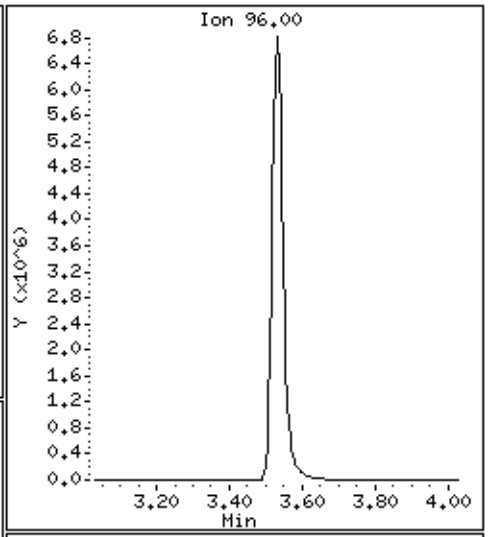
27 cis-1,2-Dichloroethene Concentration: 55679.86 ug/l

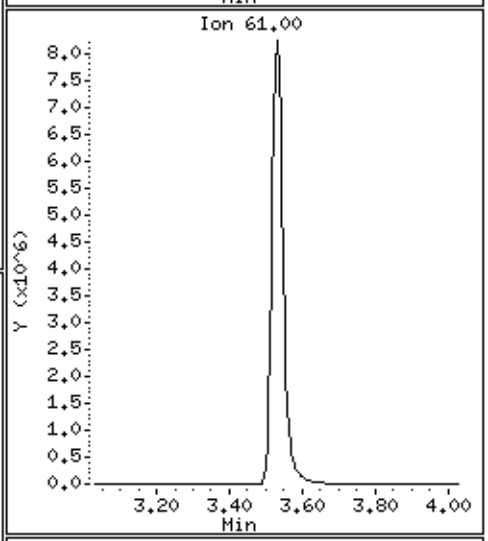


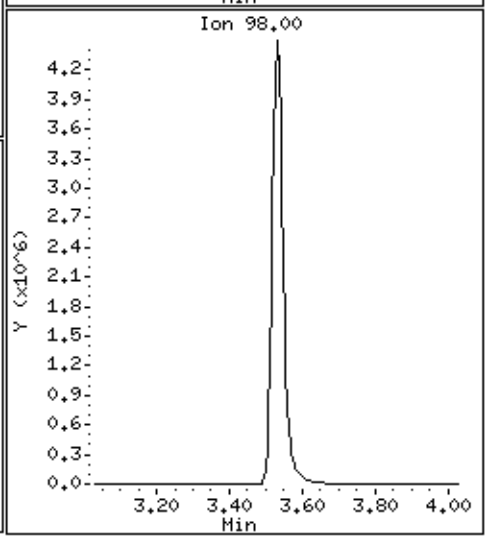












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081112.D Page 5

Date : 11-AUG-2022 14:19

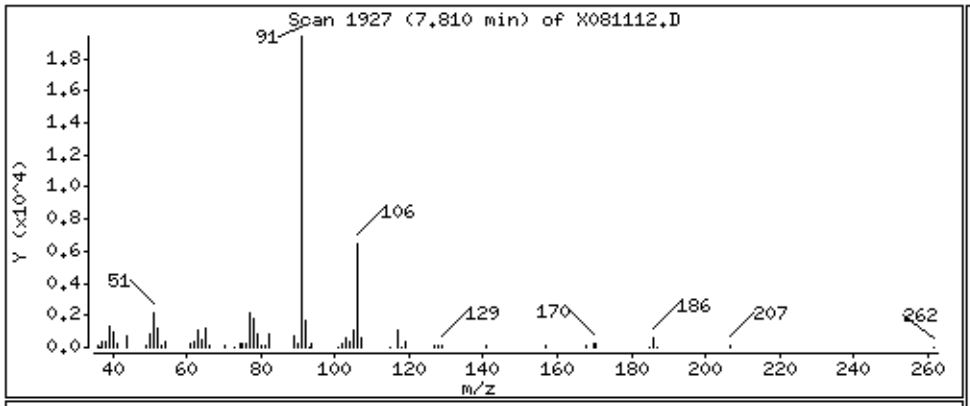
Client ID: HS22080522-02 Instrument: voa6.i

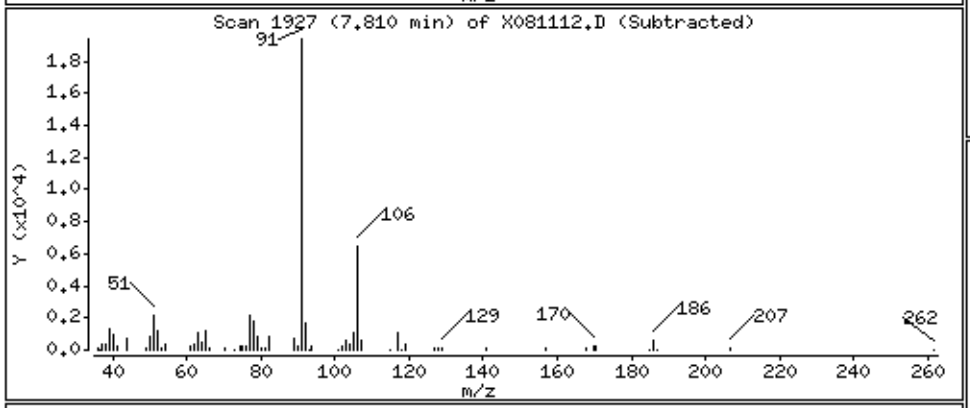
Sample Info: HS22080522-02;HS22080522-02;;;

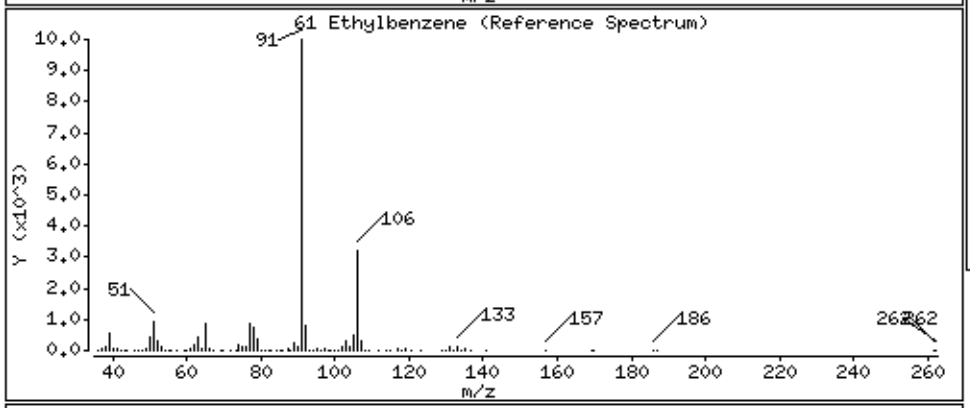
Purge Volume: 5.0 Operator: PC

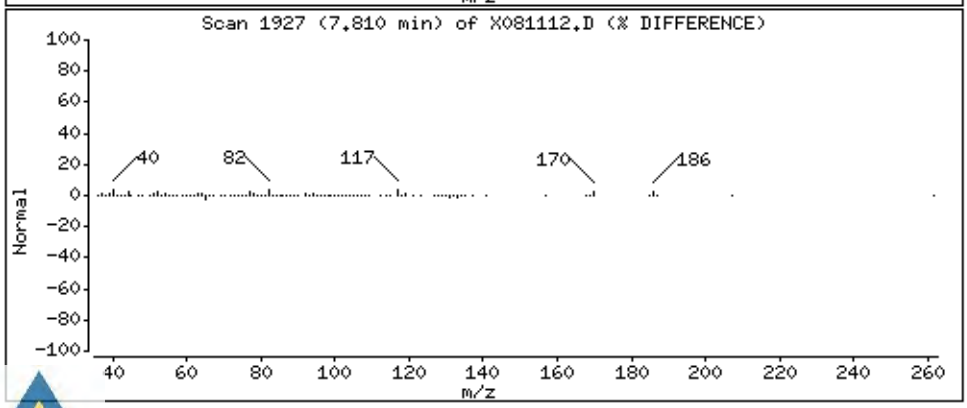
Column phase: DB624 Column diameter: 0.18

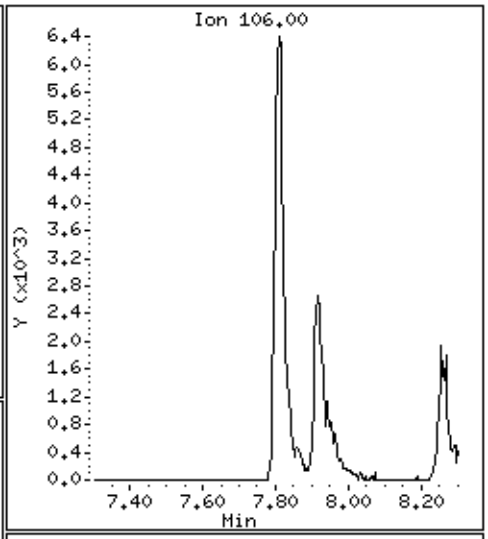
61 Ethylbenzene Concentration: 34.70 ug/l

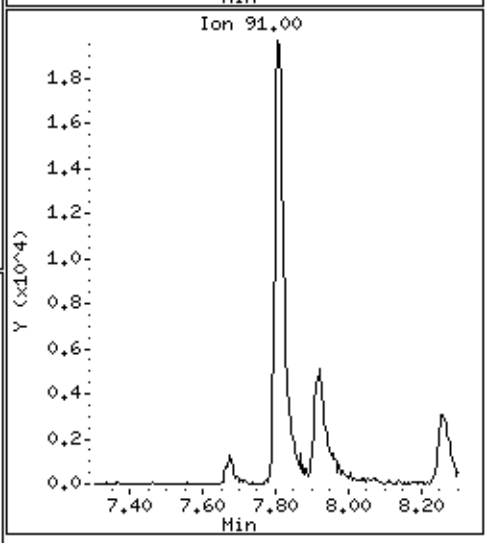












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081112.D Page 6

Date : 11-AUG-2022 14:19

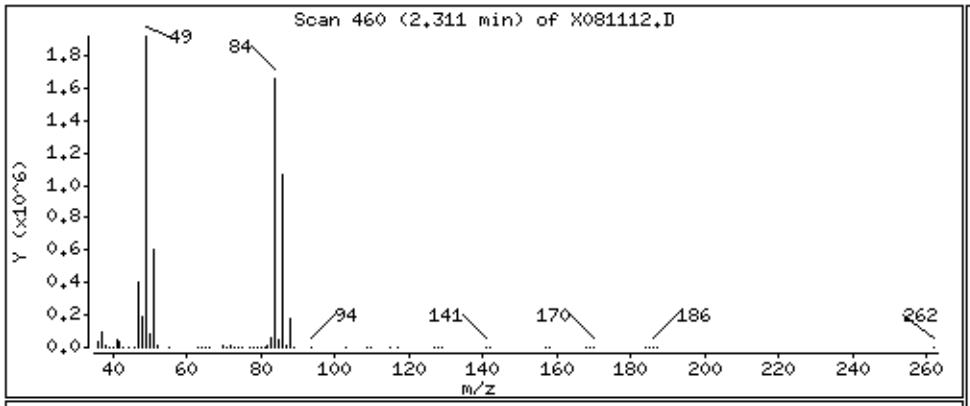
Client ID: HS22080522-02 Instrument: voa6.i

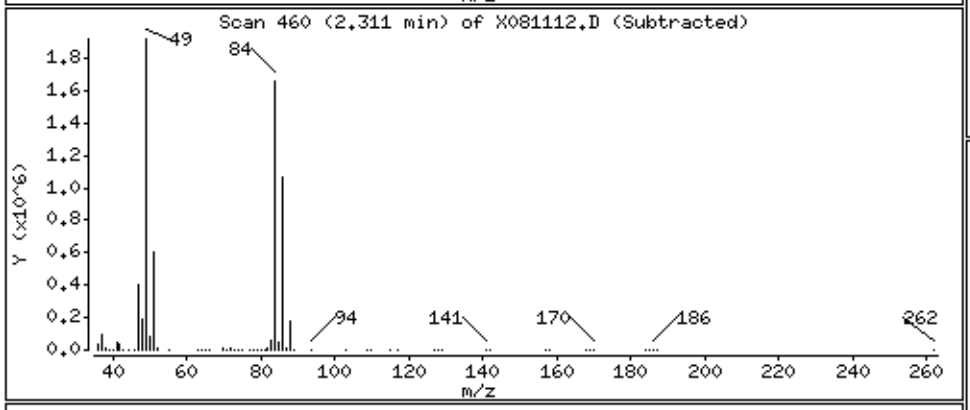
Sample Info: HS22080522-02;HS22080522-02;;;

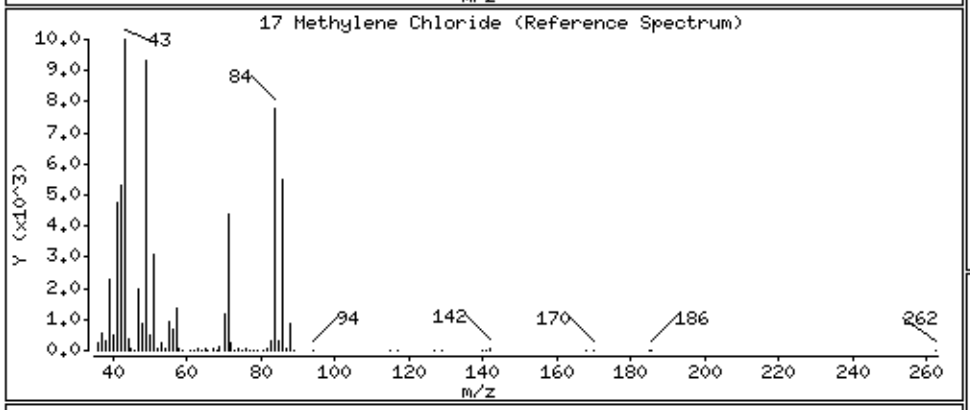
Purge Volume: 5.0 Operator: PC

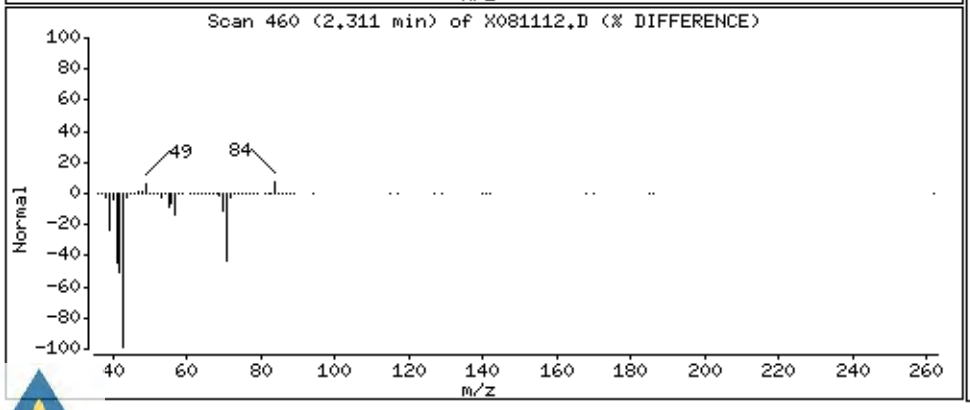
Column phase: DB624 Column diameter: 0.18

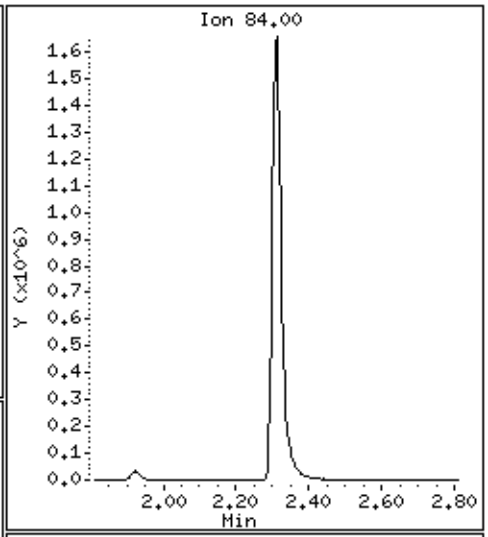
17 Methylene Chloride Concentration: 12206.06 ug/l

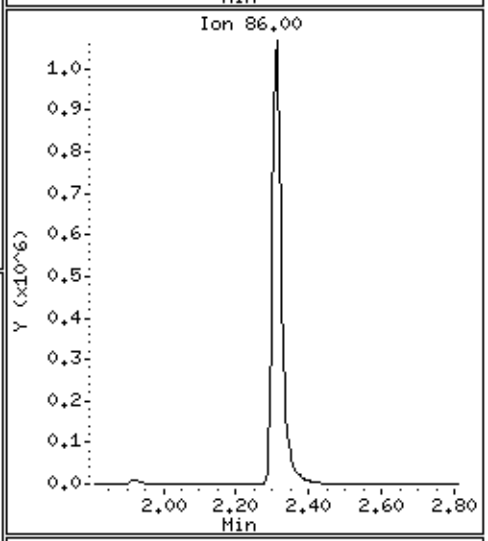


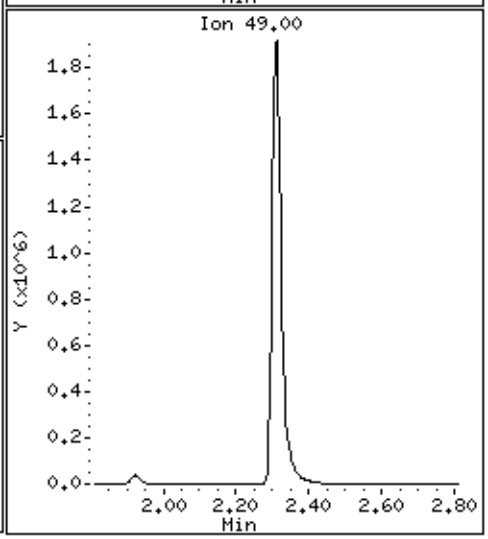












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081112.D Page 7

Date : 11-AUG-2022 14:19

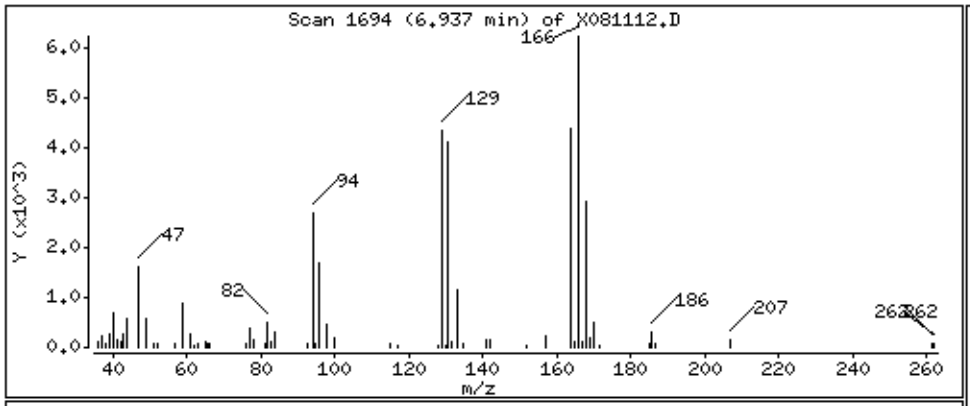
Client ID: HS22080522-02 Instrument: voa6.i

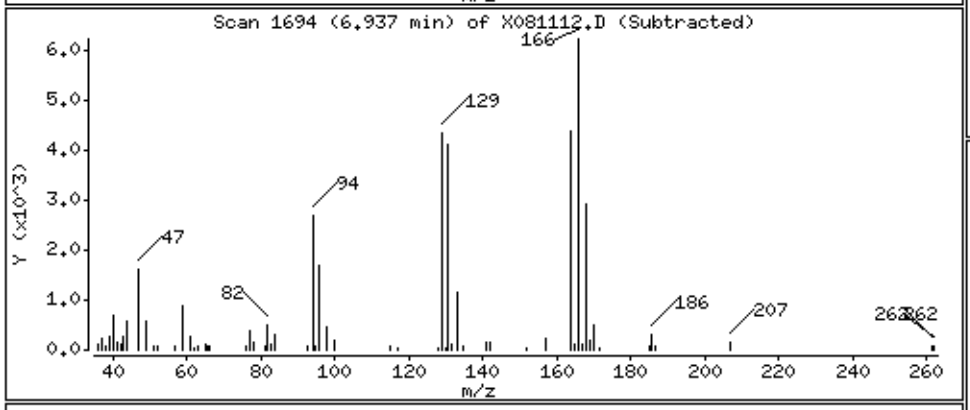
Sample Info: HS22080522-02;HS22080522-02;;;

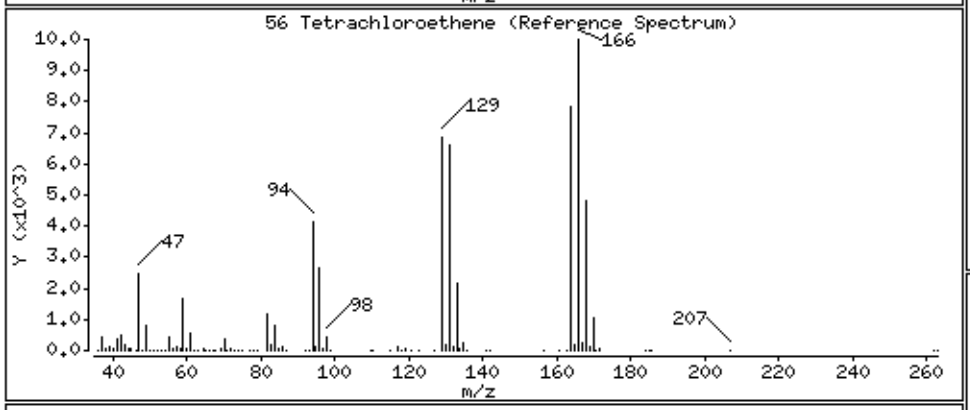
Purge Volume: 5.0 Operator: PC

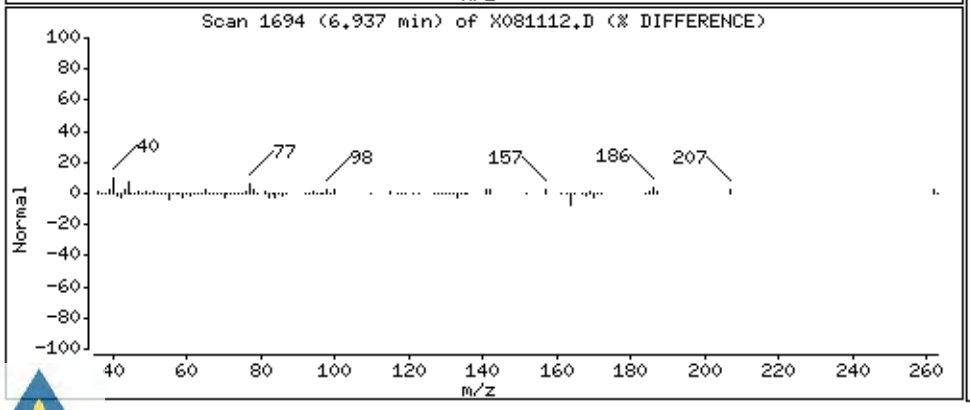
Column phase: DB624 Column diameter: 0.18

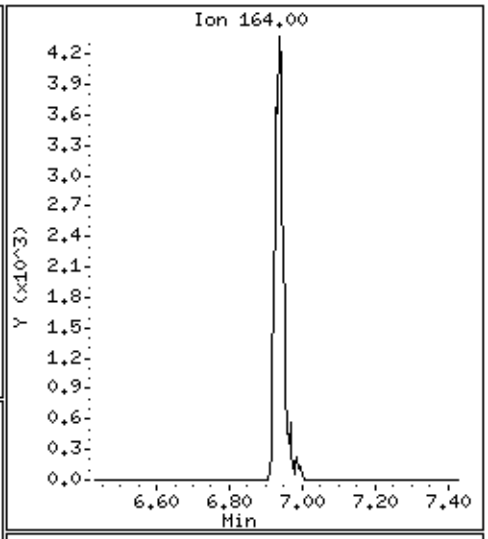
56 Tetrachloroethene Concentration: 32.47 ug/l

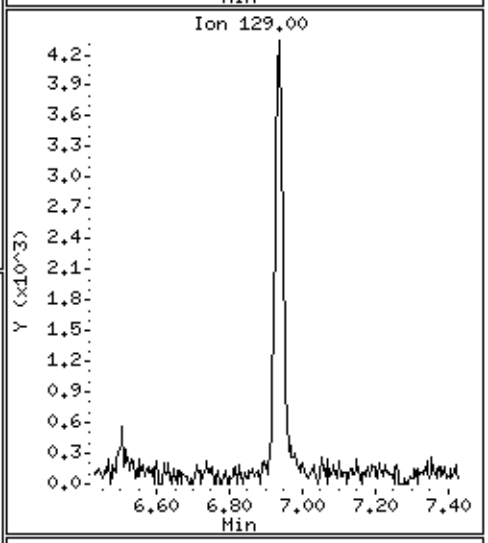


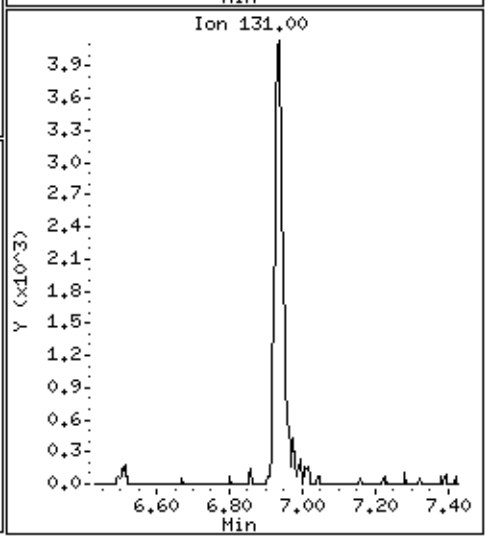












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081112.D Page 8

Date : 11-AUG-2022 14:19

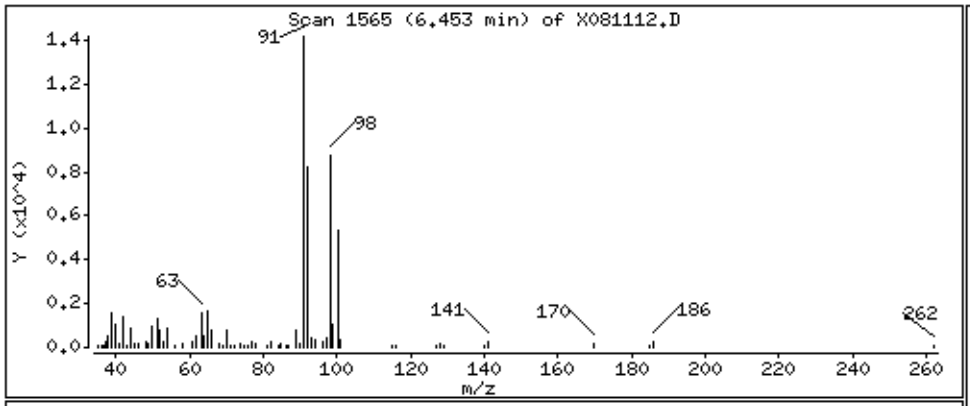
Client ID: HS22080522-02 Instrument: voa6.i

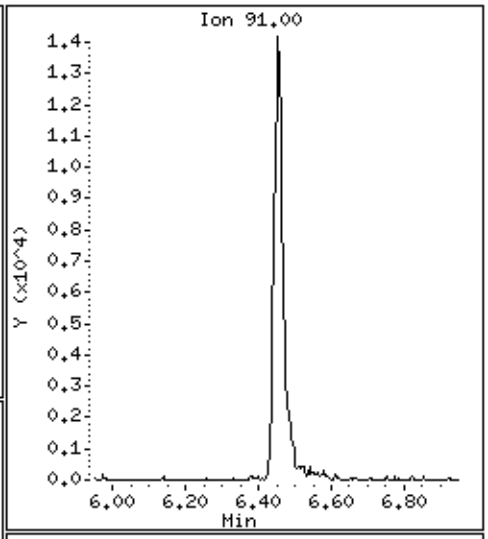
Sample Info: HS22080522-02;HS22080522-02;;;

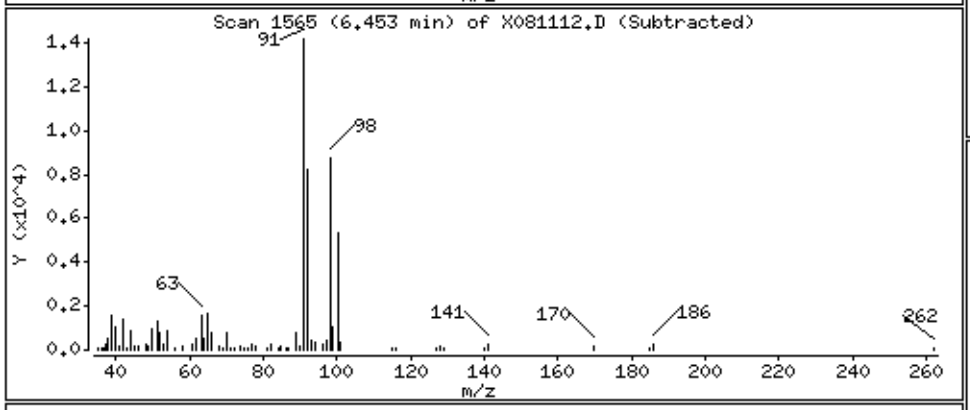
Purge Volume: 5.0 Operator: PC

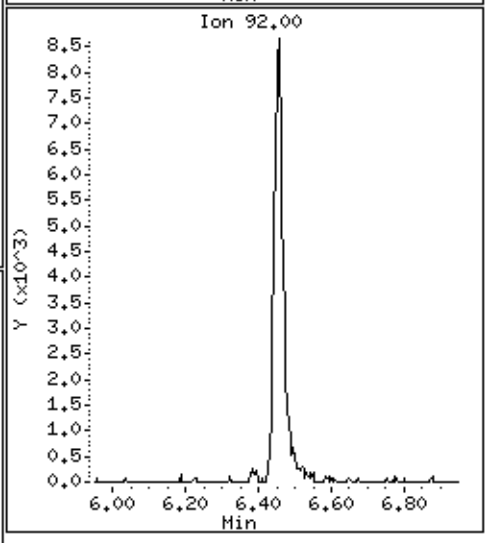
Column phase: DB624 Column diameter: 0.18

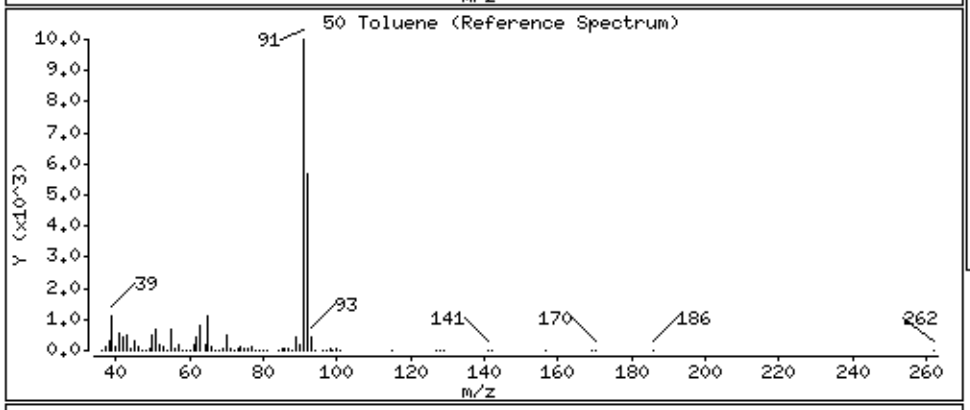
50 Toluene Concentration: 26.81 ug/l

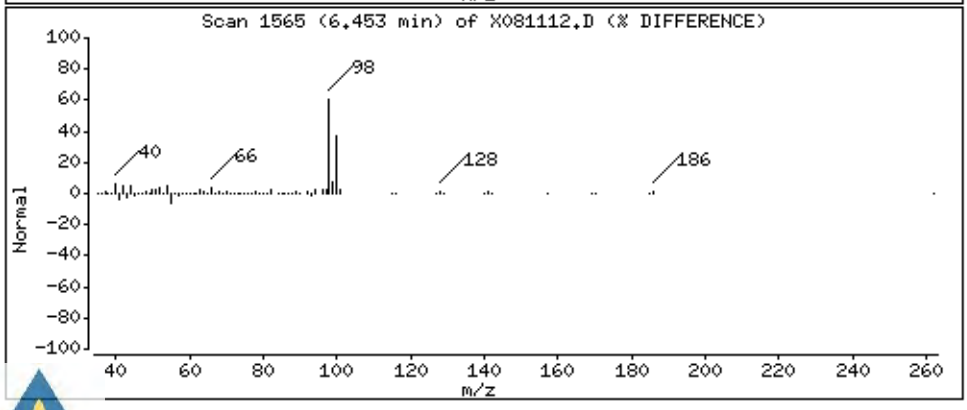












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081112.D Page 9

Date : 11-AUG-2022 14:19

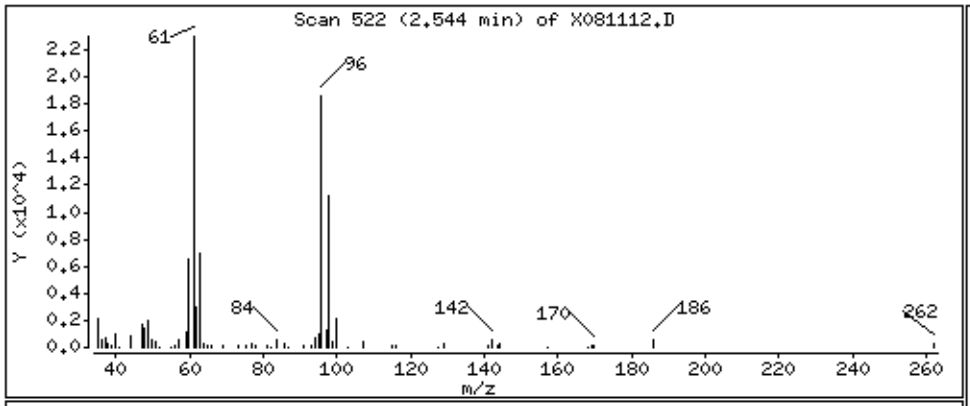
Client ID: HS22080522-02 Instrument: voa6.i

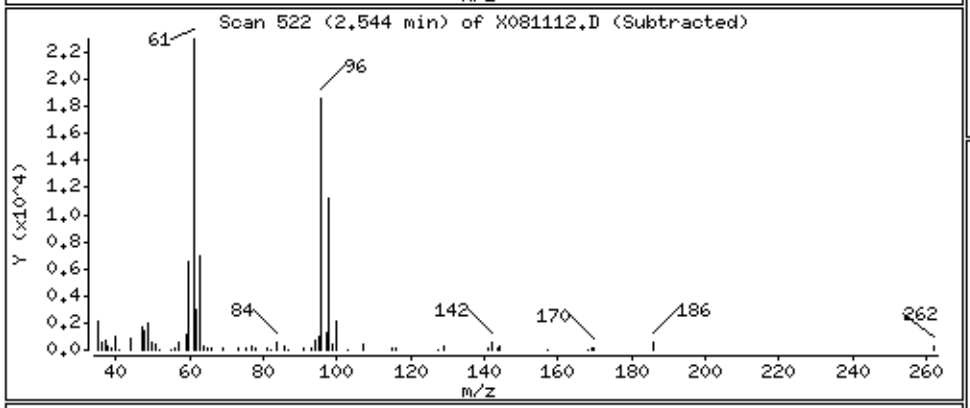
Sample Info: HS22080522-02;HS22080522-02;;;

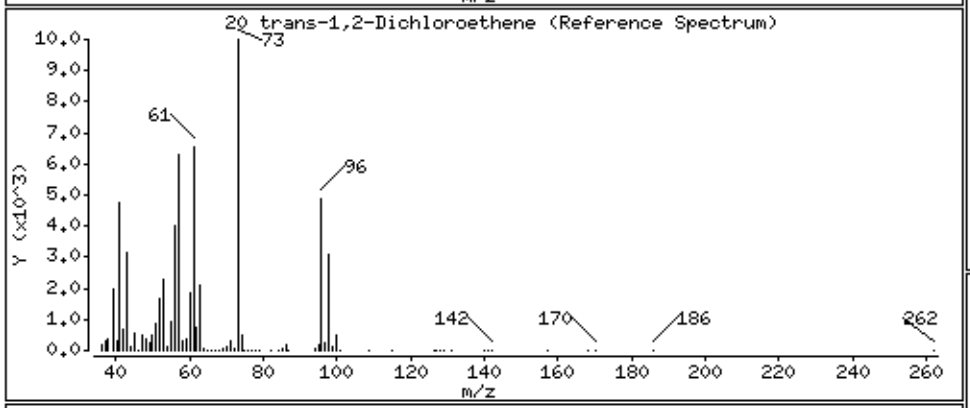
Purge Volume: 5.0 Operator: PC

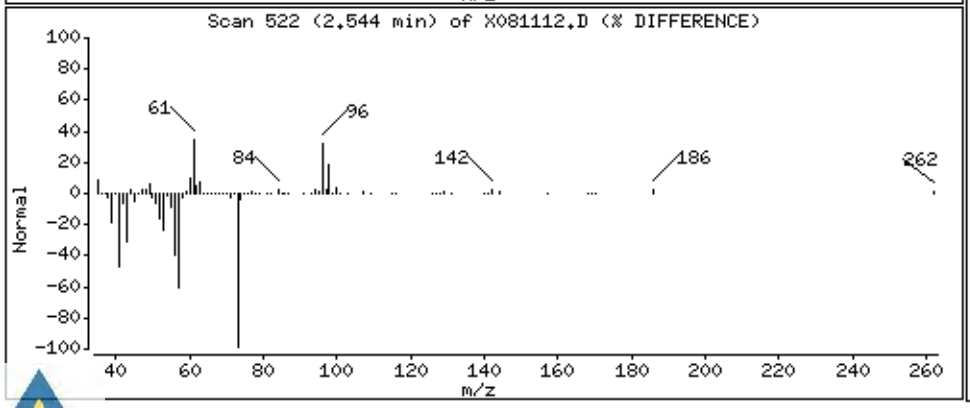
Column phase: DB624 Column diameter: 0.18

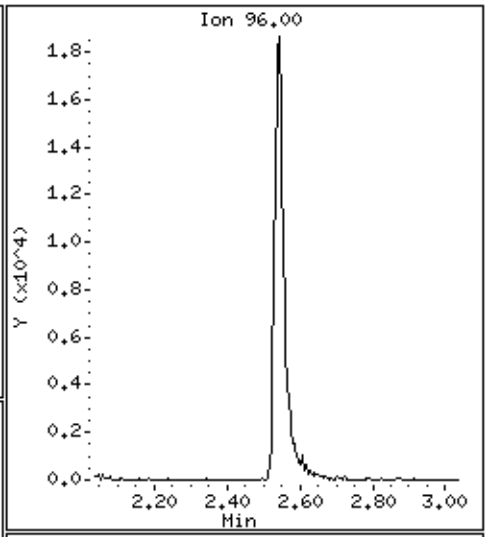
20 trans-1,2-Dichloroethene Concentration: 147.61 ug/l

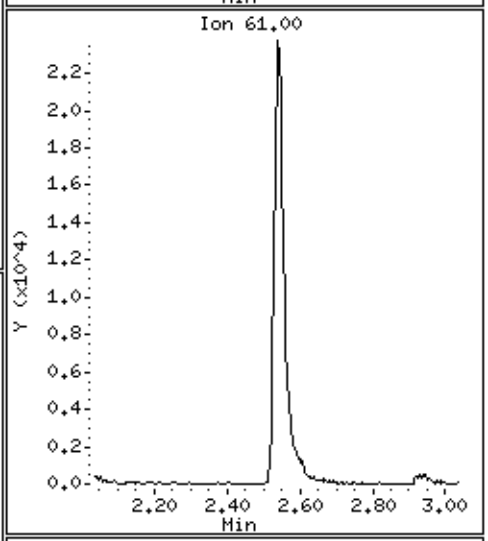


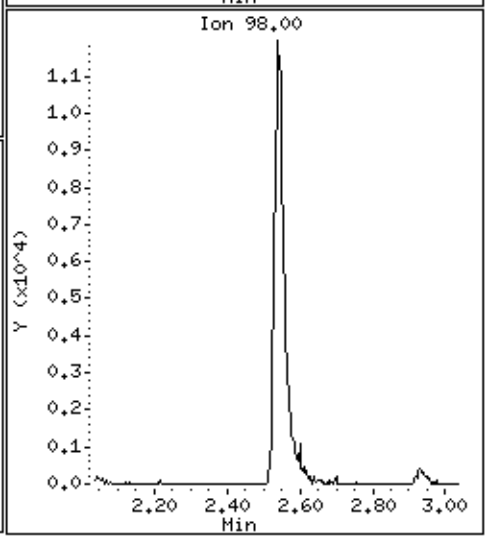












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081112.D Page 10

Date : 11-AUG-2022 14:19

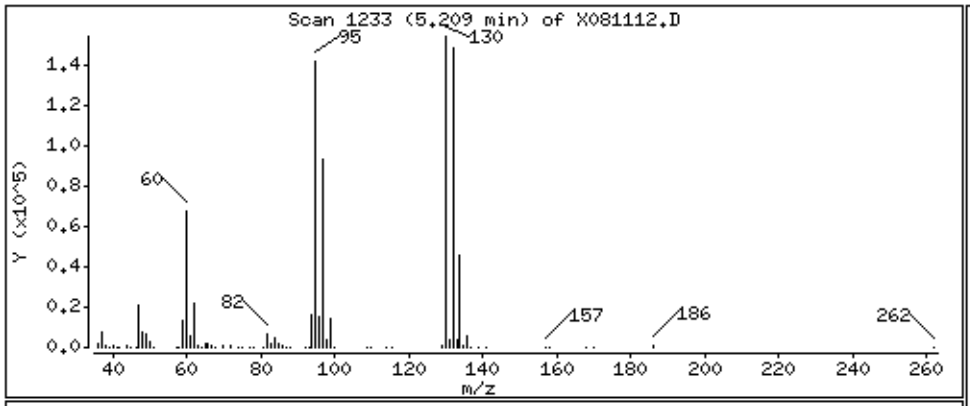
Client ID: HS22080522-02 Instrument: voa6.i

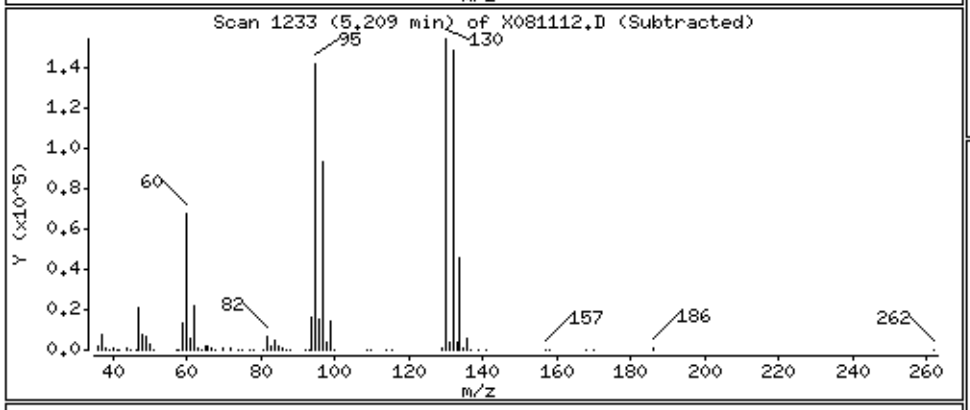
Sample Info: HS22080522-02;HS22080522-02;;;

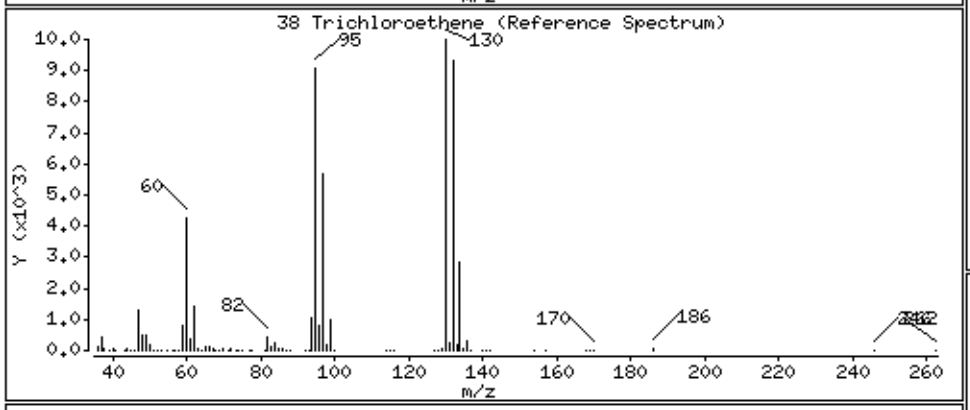
Purge Volume: 5.0 Operator: PC

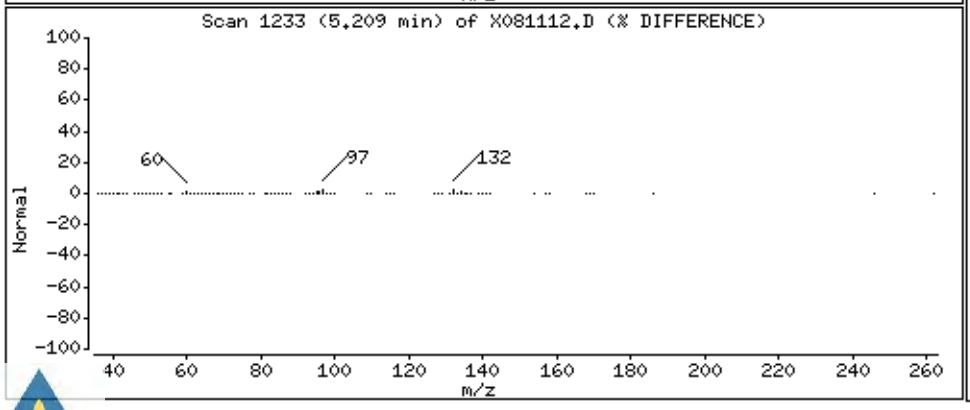
Column phase: DB624 Column diameter: 0.18

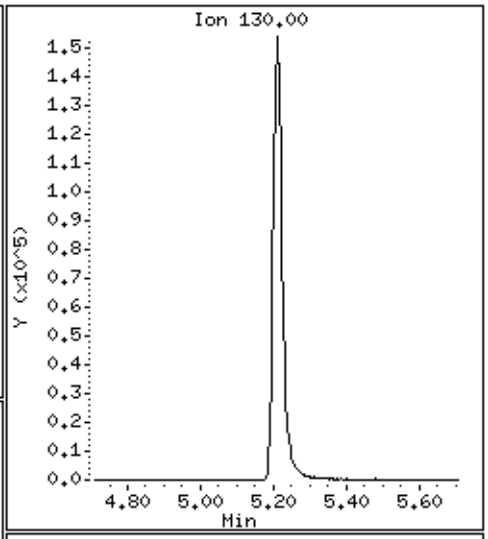
38 Trichloroethene Concentration: 1037.22 ug/l

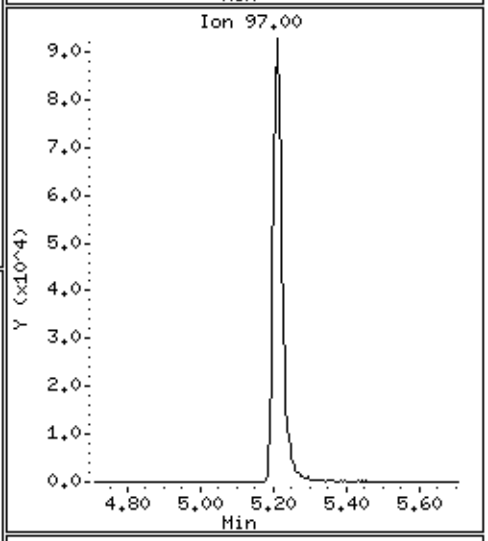


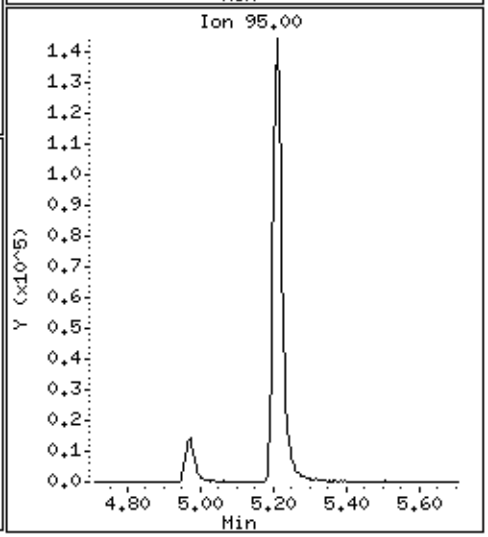












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081112.D Page 11

Date : 11-AUG-2022 14:19

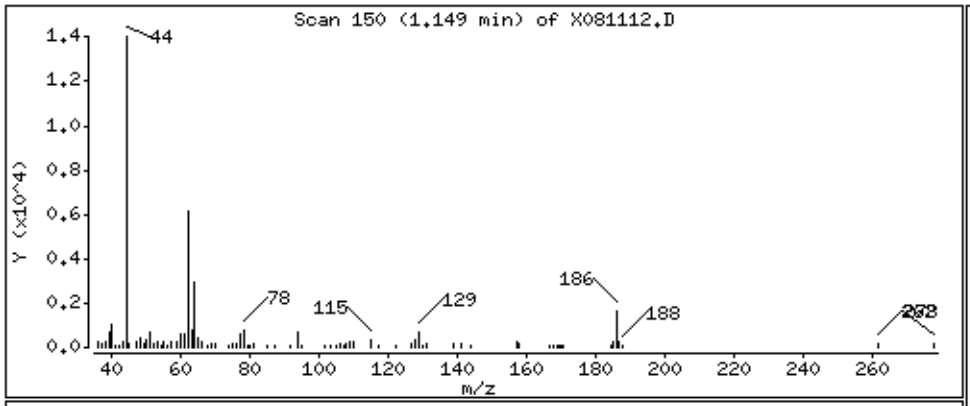
Client ID: HS22080522-02 Instrument: voa6.i

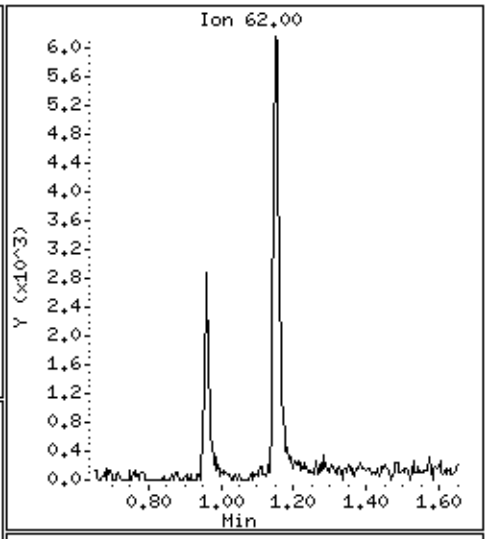
Sample Info: HS22080522-02;HS22080522-02;;;

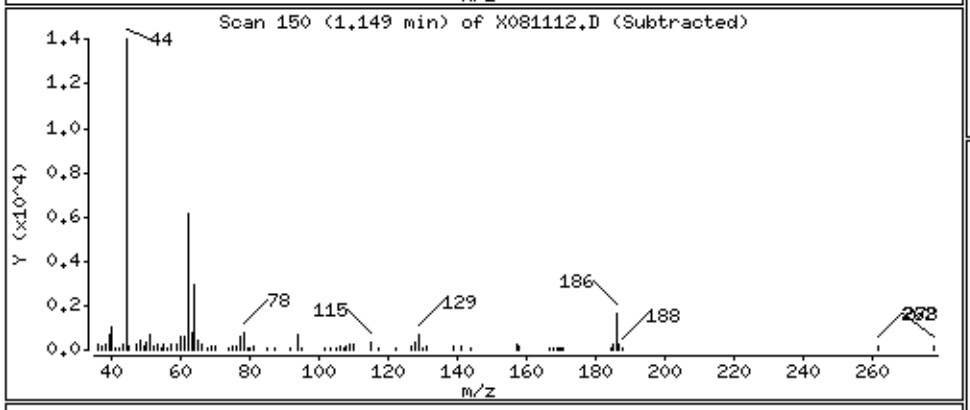
Purge Volume: 5.0 Operator: PC

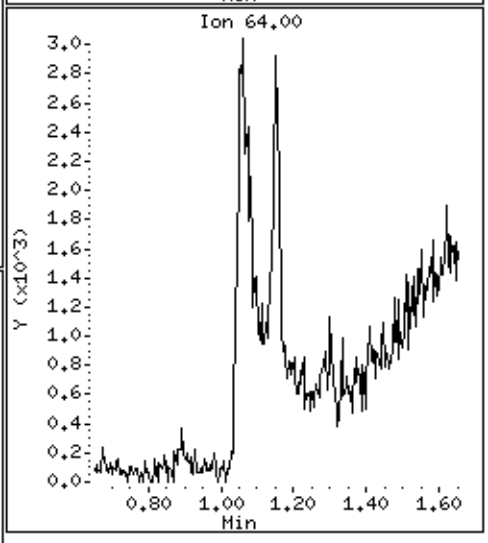
Column phase: DB624 Column diameter: 0.18

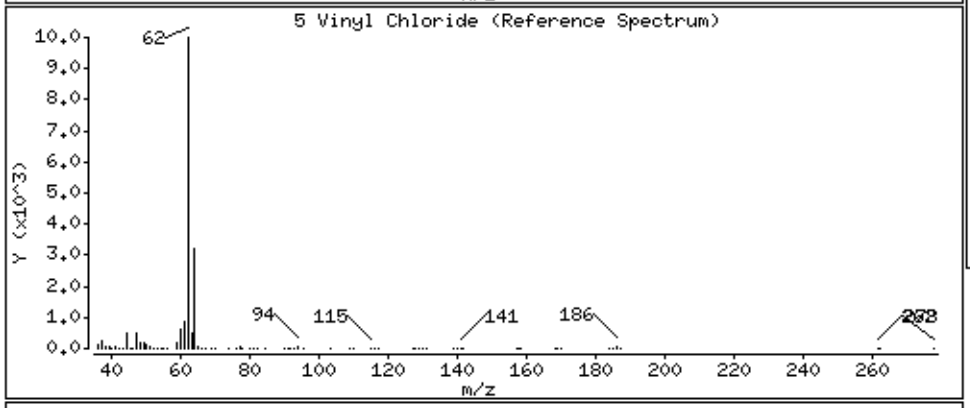
5 Vinyl Chloride Concentration: 25.23 ug/l

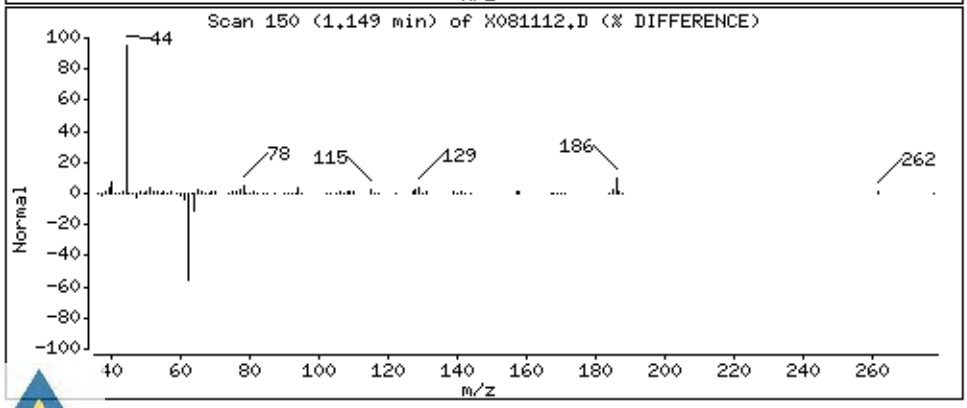












Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081112.D
Inj Date : 11-AUG-2022 14:19
InstruID : voa6.i
LabSampID : HS22080522-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081113.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081113.D
Lab Smp Id: HS22080522-05 Client Smp ID: HS22080522-05
Inj Date : 11-AUG-2022 14:40
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-05;HS22080522-05;;;
Misc Info : HS22052000V6;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 13
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	664201	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	942836	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	830252	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	364768	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	299551	47.7599	47.75
$ 35 1,2-Dichloroethane-d4	65	4.478	4.477	(1.070)	327497	47.6934	47.69
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1095000	52.8603	52.86
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	355695	47.9759	47.97
33 1,2-Dichloroethane	62	4.568	4.560	(0.919)	11352	1.37287	68.64(a)
27 cis-1,2-Dichloroethene	96	3.540	3.529	(0.846)	19899	3.01345	150.67(a)
38 Trichloroethene	130	5.209	5.208	(1.048)	346140	52.3016	2615.07

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

01135105

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081113.D

Date : 11-AUG-2022 14:40

Client ID: HS22080522-05

Instrument: voa6.i

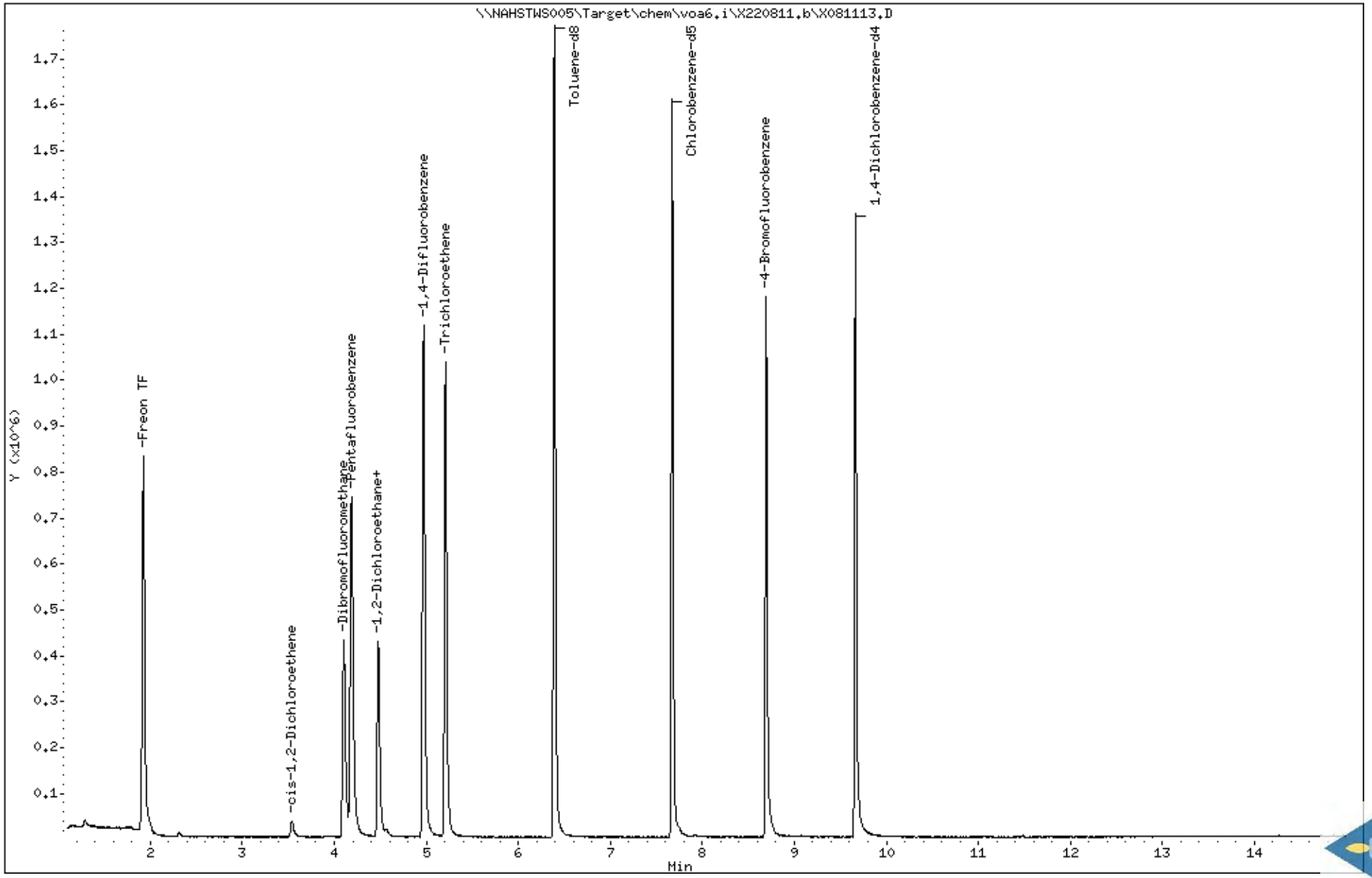
Sample Info: HS22080522-05;HS22080522-05;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081113.D Page 2

Date : 11-AUG-2022 14:40

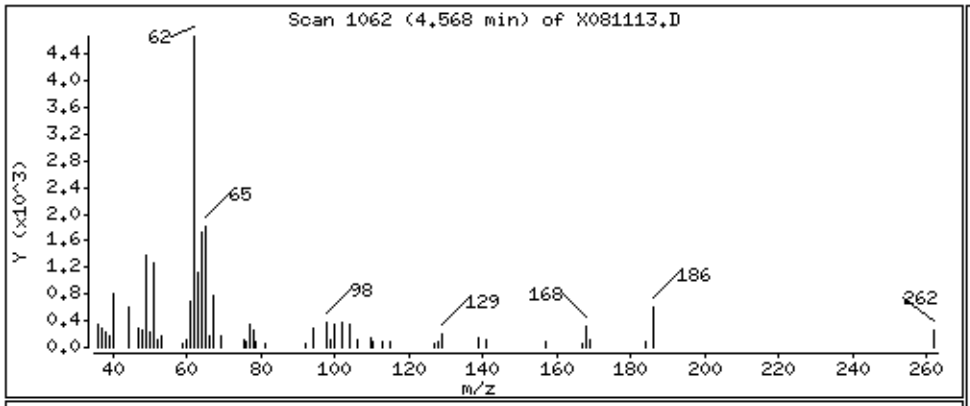
Client ID: HS22080522-05 Instrument: voa6.i

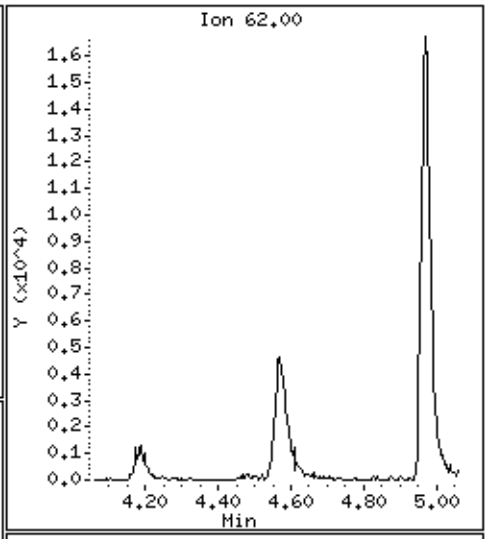
Sample Info: HS22080522-05;HS22080522-05;;;

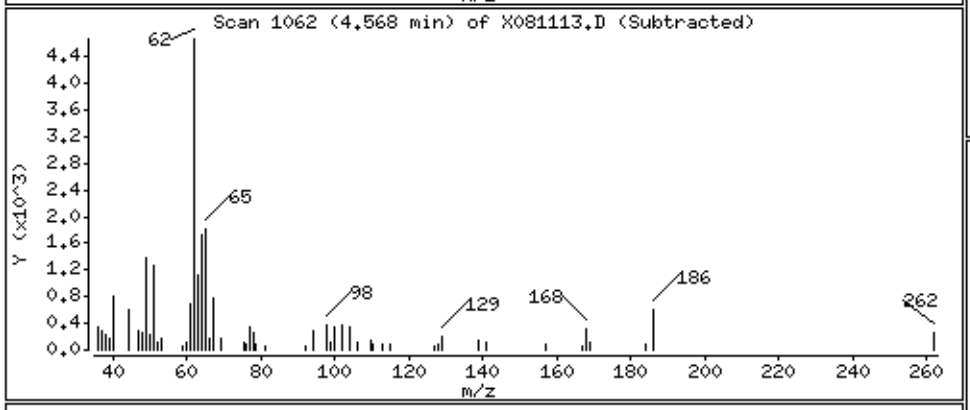
Purge Volume: 5.0 Operator: PC

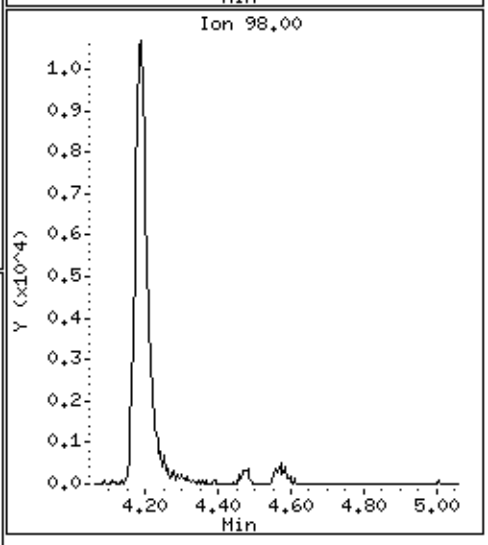
Column phase: DB624 Column diameter: 0.18

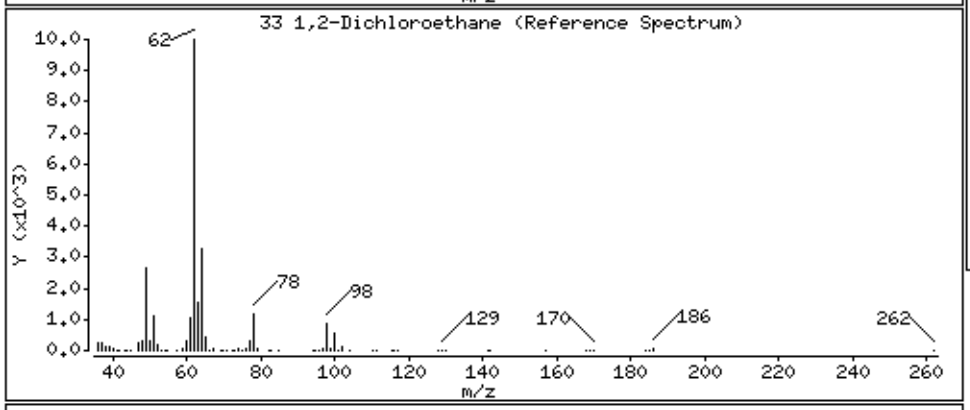
33 1,2-Dichloroethane Concentration: 68.64 ug/l

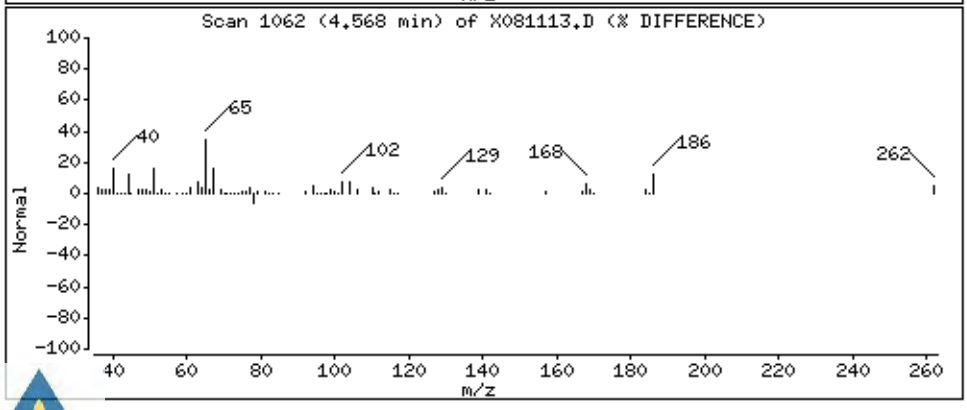












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081113.D

Date : 11-AUG-2022 14:40

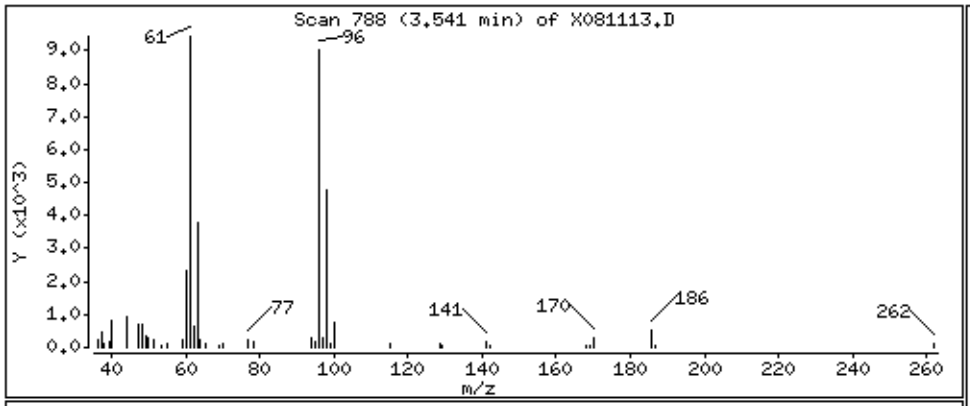
Client ID: HS22080522-05 Instrument: voa6.i

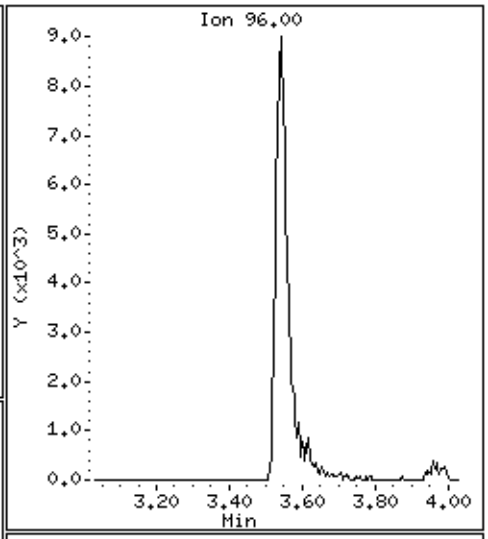
Sample Info: HS22080522-05;HS22080522-05;;;

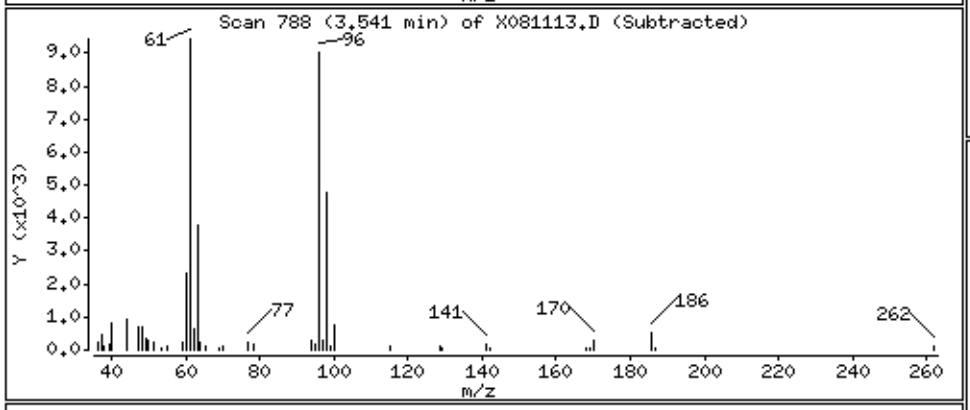
Purge Volume: 5.0 Operator: PC

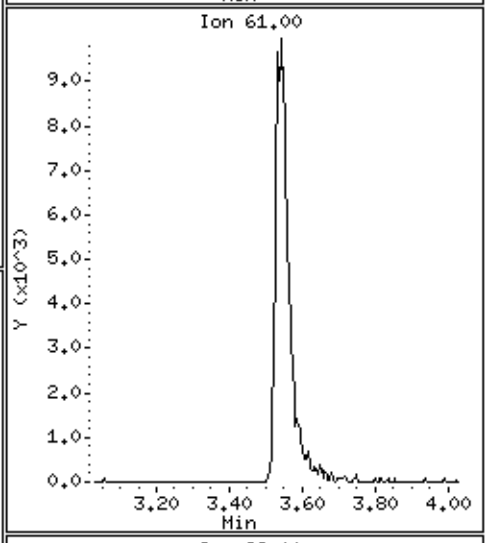
Column phase: DB624 Column diameter: 0.18

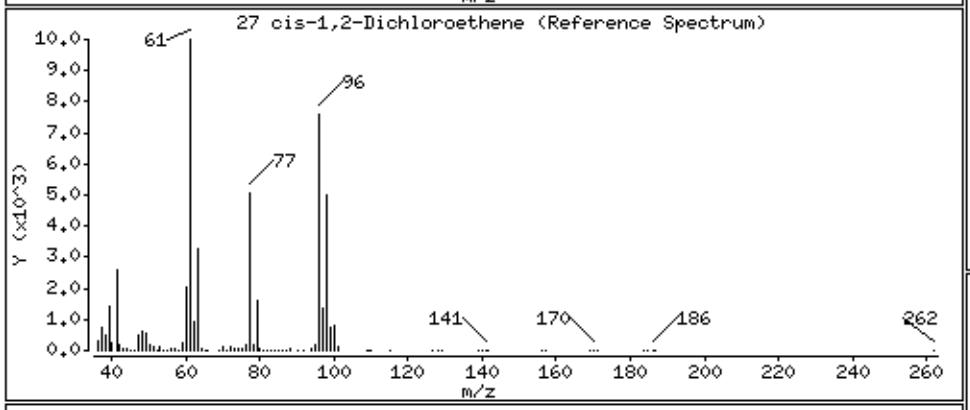
27 cis-1,2-Dichloroethene Concentration: 150.67 ug/l

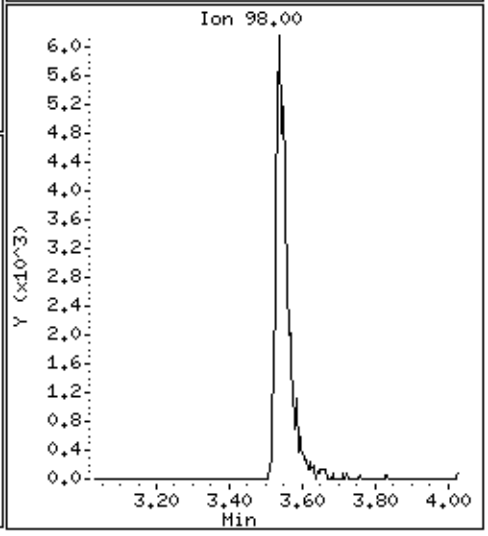


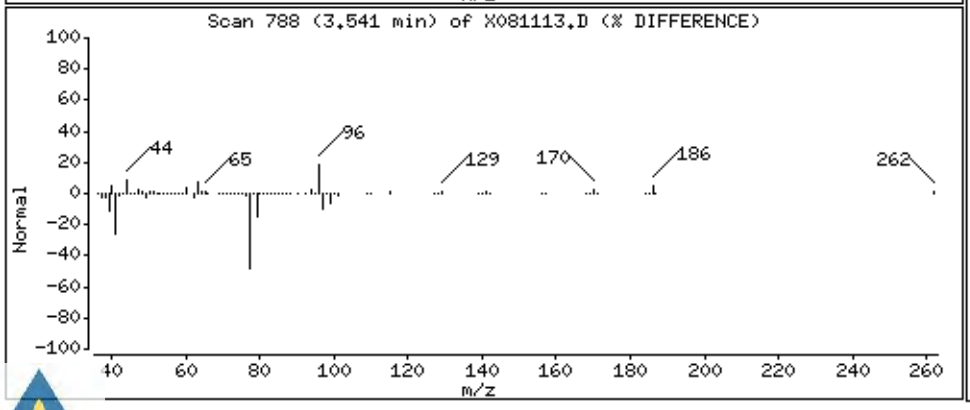












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081113.D Page 4

Date : 11-AUG-2022 14:40

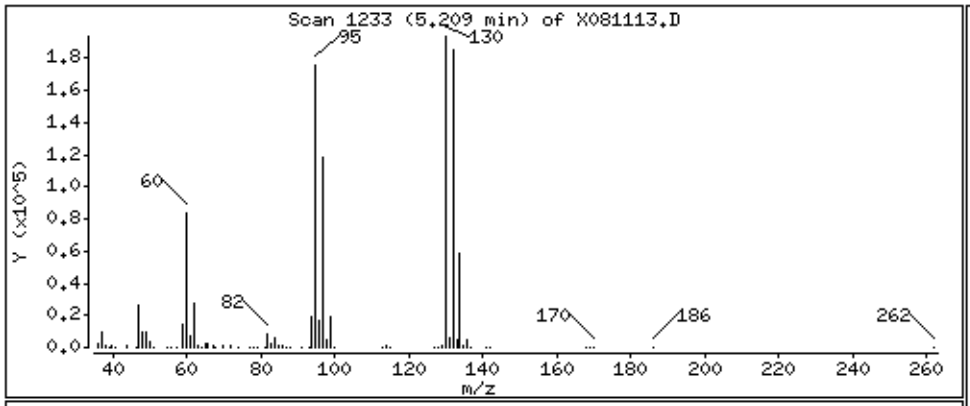
Client ID: HS22080522-05 Instrument: voa6.i

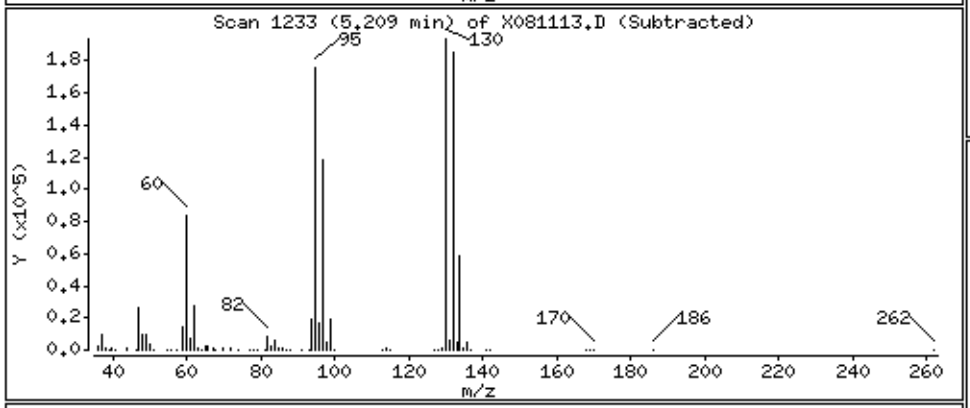
Sample Info: HS22080522-05;HS22080522-05;;;

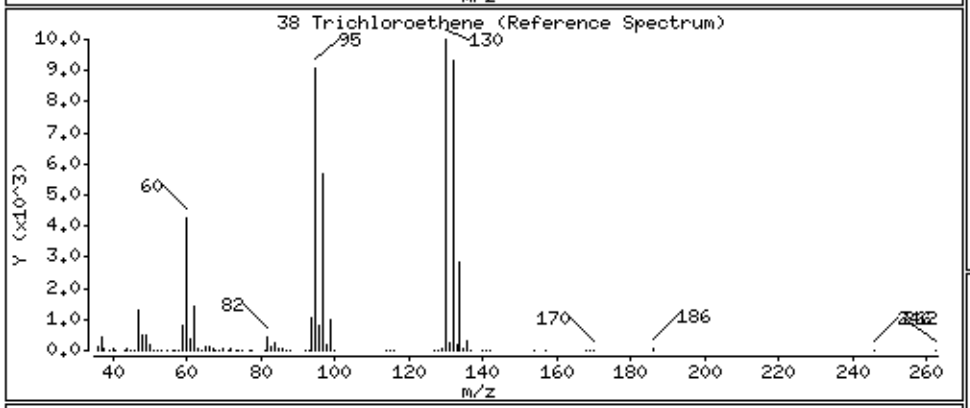
Purge Volume: 5.0 Operator: PC

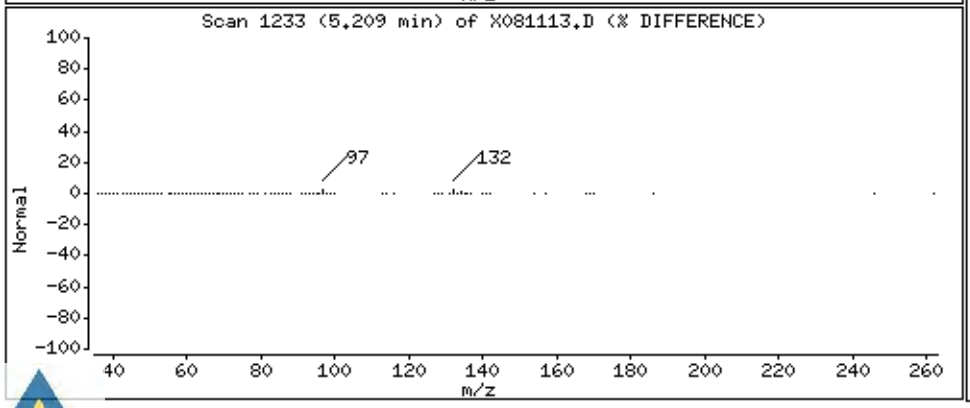
Column phase: DB624 Column diameter: 0.18

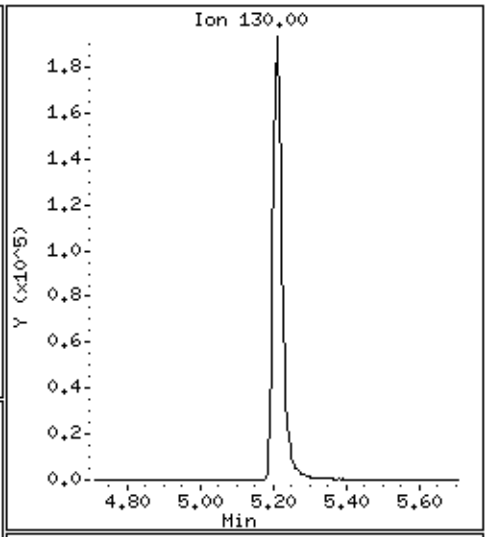
38 Trichloroethene Concentration: 2615.07 ug/l

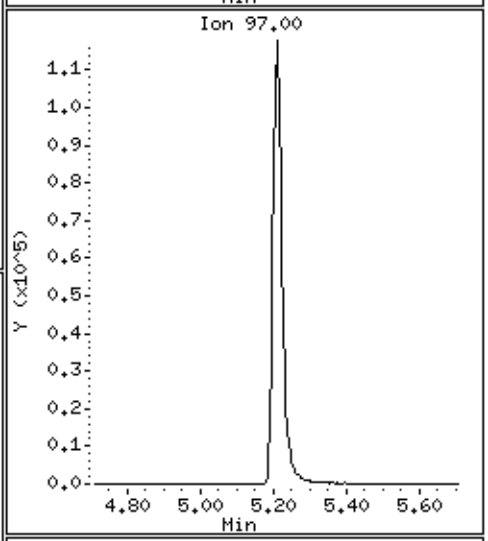


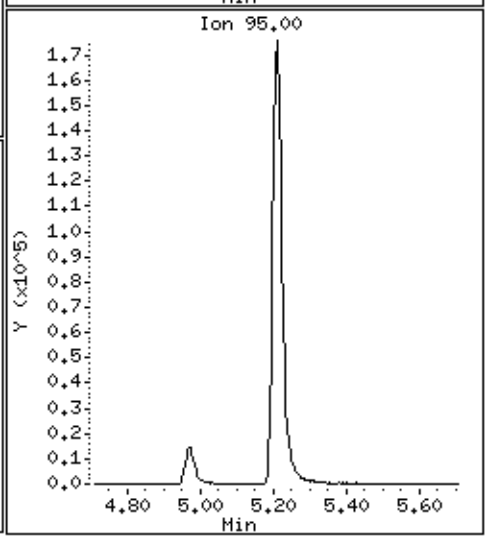












Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081113.D
Inj Date : 11-AUG-2022 14:40
InstruID : voa6.i
LabSampID : HS22080522-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081114.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081114.D
Lab Smp Id: HS22080522-05MS Client Smp ID: HS22080522-05MS
Inj Date : 11-AUG-2022 15:01
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-05MS;HS22080522-05MS;3;;MS
Misc Info : HS22052000V6;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 14 QC Sample: MS
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: bhate.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

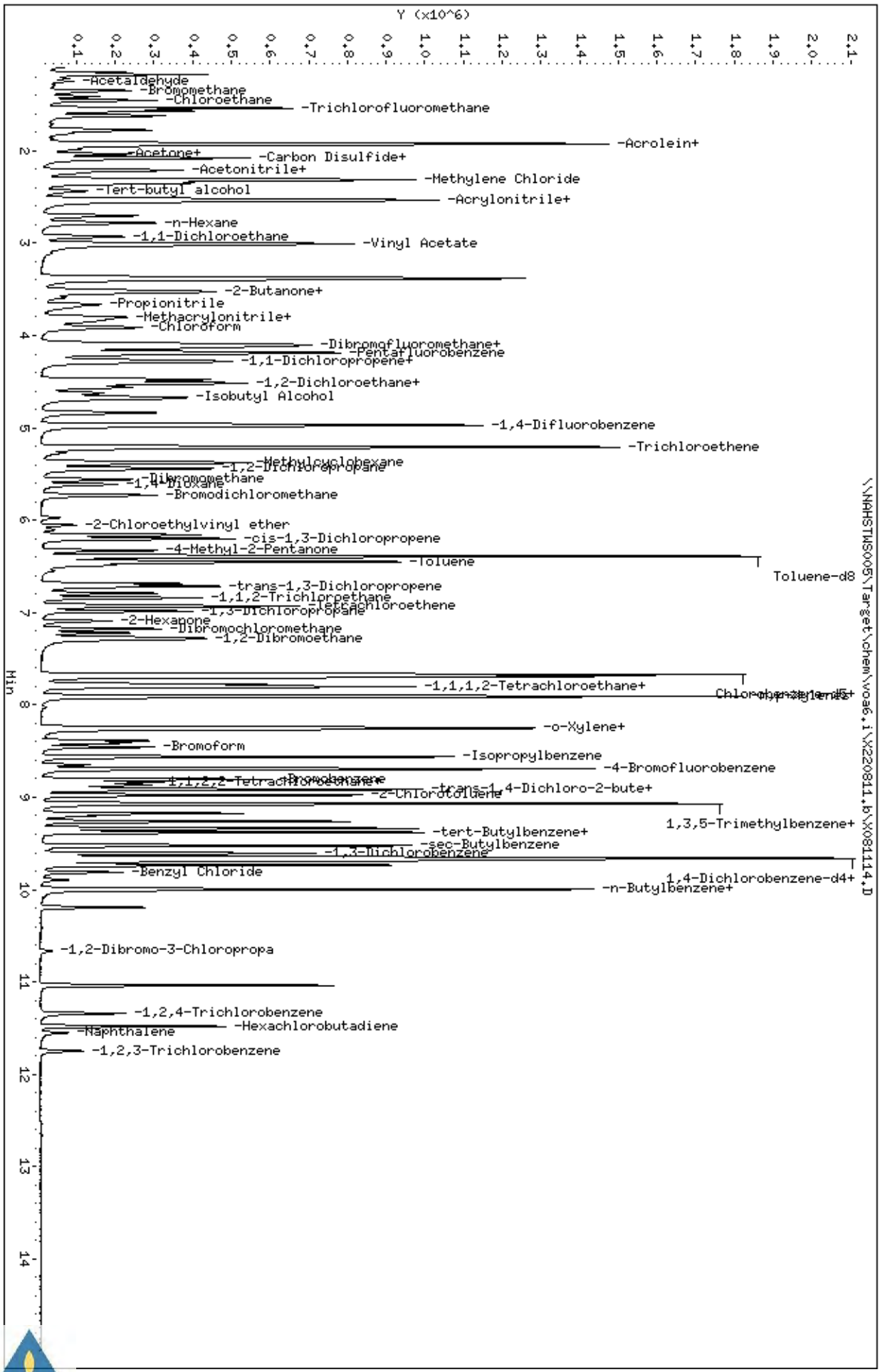
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.189	(1.000)	664479	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	957035	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	840559	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	403245	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	304027	48.4638	48.46
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	337220	49.0984	49.09
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1115288	53.1795	53.17
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	376925	50.2545	50.25
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	130411	22.0833	1104.16
31 1,1,1-Trichloroethane	97	4.088	4.087	(0.977)	208271	22.0945	1104.72
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	116119	20.5032	1025.15
53 1,1,2-Trichloroethane	83	6.839	6.843	(0.892)	90240	20.8804	1044.01
22 1,1-Dichloroethane	63	2.929	2.929	(0.700)	214861	21.0037	1050.18
11 1,1-Dichloroethene	96	1.925	1.921	(0.460)	115804	20.8776	1043.87
32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	176039	22.7913	1139.56
93 1,2,3-Trichlorobenzene	180	11.750	11.742	(1.216)	36569	17.4446	872.22
71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	90607	20.7497	1037.48(M)
90 1,2,4-Trichlorobenzene	180	11.341	11.341	(1.173)	72962	19.8657	993.28
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	449774	23.2531	1162.65
89 1,2-Dibromo-3-Chloropropane	155	10.663	10.659	(1.103)	7643	18.6456	932.28

57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	115947	21.1590	1057.95
88	1,2-Dichlorobenzene	146	9.995	9.992 (1.034)	219942	21.7980	1089.89

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
33	1,2-Dichloroethane	62	4.564	4.560	(0.919)	188136	22.4148	1120.74
42	1,2-Dichloropropane	63	5.441	5.437	(1.095)	122951	20.8721	1043.60
75	1,3,5-Trimethylbenzene	105	9.070	9.066	(0.938)	464027	23.6904	1184.51
83	1,3-Dichlorobenzene	146	9.609	9.605	(0.994)	247125	22.0880	1104.40
54	1,3-Dichloropropane	76	6.985	6.981	(0.911)	187381	21.3152	1065.75
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	260297	21.9147	1095.73
26	2,2-Dichloropropane	77	3.518	3.514	(0.841)	202492	22.1503	1107.51
24	2-Butanone	43	3.593	3.585	(0.858)	55708	33.4190	1670.95
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	389549	22.5374	1126.86
52	2-Hexanone	43	7.090	7.090	(0.924)	104836	39.6643	1983.21
77	4-Chlorotoluene	91	9.073	9.069	(0.939)	444813	23.0561	1152.80
82	p-Isopropyltoluene	119	9.651	9.650	(0.998)	479907	24.3988	1219.94
45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	172139	42.0289	2101.44
10	Acetone	43	1.981	1.981	(0.473)	48869	31.0148	1550.74
37	Benzene	78	4.515	4.515	(0.909)	485038	21.3880	1069.39
74	Bromobenzene	156	8.807	8.807	(0.911)	151768	22.0386	1101.92
29	Bromochloromethane	128	3.799	3.799	(0.908)	72286	19.2942	964.70
39	Bromodichloromethane	83	5.730	5.729	(1.153)	169027	20.9126	1045.63
66	Bromoform	173	8.410	8.410	(1.096)	78534	20.0308	1001.53
6	Bromomethane	94	1.347	1.347	(0.322)	99777	21.2117	1060.58
19	Carbon Disulfide	76	2.078	2.078	(0.497)	644614	43.8971	2194.85
34	Carbon Tetrachloride	117	4.271	4.267	(0.860)	183811	22.2658	1113.29
59	Chlorobenzene	112	7.698	7.694	(1.003)	360412	22.6135	1130.67
7	Chloroethane	64	1.411	1.411	(0.337)	83081	19.4936	974.68
28	Chloroform	83	3.911	3.911	(0.935)	234959	20.9633	1048.16
3	Chloromethane	50	1.085	1.085	(0.259)	137707	22.4125	1120.62
27	cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	147703	22.3584	1117.91
46	cis-1,3-Dichloropropene	75	6.161	6.157	(1.240)	208051	20.9555	1047.77
55	Dibromochloromethane	129	7.176	7.176	(0.935)	131552	21.0862	1054.31
44	Dibromomethane	93	5.557	5.553	(1.118)	80187	20.2886	1014.42
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	128440	20.1865	1009.32
61	Ethylbenzene	106	7.803	7.802	(1.017)	185575	23.0492	1152.46
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	78537	23.1541	1157.70
67	Isopropylbenzene	105	8.563	8.563	(1.116)	577131	23.8372	1191.85
62	m,p-Xylenes	106	7.907	7.907	(1.031)	467990	46.7316	2336.58
17	Methylene Chloride	84	2.311	2.311	(0.552)	127707	20.3927	1019.63
87	n-Butylbenzene	91	9.995	9.995	(1.034)	411622	25.1852	1259.25
73	n-Propylbenzene	91	8.916	8.912	(0.922)	661160	24.8540	1242.69
92	Naphthalene	128	11.551	11.544	(1.195)	66428	16.1676	808.37
63	o-Xylene	106	8.245	8.241	(1.075)	218005	22.3929	1119.64
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	563741	24.7992	1239.96
64	Styrene	104	8.264	8.260	(1.077)	358126	22.3381	1116.90
78	tert-Butylbenzene	119	9.339	9.336	(0.966)	401212	24.1681	1208.40
56	Tetrachloroethene	164	6.929	6.929	(0.903)	127587	23.4078	1170.39
50	Toluene	91	6.449	6.449	(0.841)	535028	22.6434	1132.16
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.606)	125145	21.4087	1070.43
51	trans-1,3-Dichloropropene	75	6.685	6.682	(1.346)	171343	20.8391	1041.95
38	Trichloroethene	130	5.208	5.208	(1.048)	496308	73.8793	3693.96
8	Trichlorofluoromethane	101	1.569	1.568	(0.375)	227147	21.7083	1085.41
5	Vinyl Chloride	62	1.152	1.152	(0.275)	135135	19.3946	969.73

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081114.D
Date : 11-AUG-2022 15:01
Client ID: HS22080522-05MS
Sample Info: HS22080522-05MS;HS22080522-05MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

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

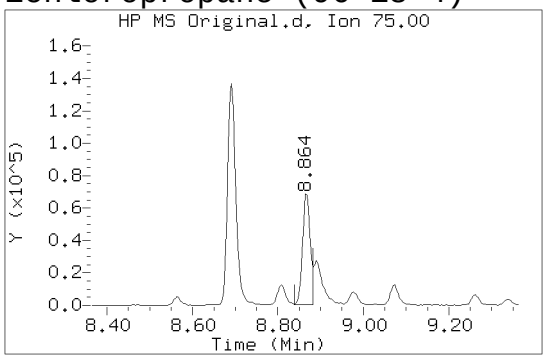
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081114.D
Inj Date : 11-AUG-2022 15:01
InstruID : voa6.i
LabSampID : HS22080522-05MS

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

Reason Code:

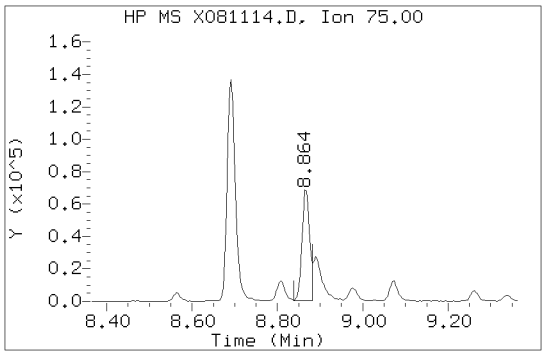
BEFORE

MASS
75
AREA
90607
HEIGHT
68701
19-Aug-2022
11:16
Linh
Pham



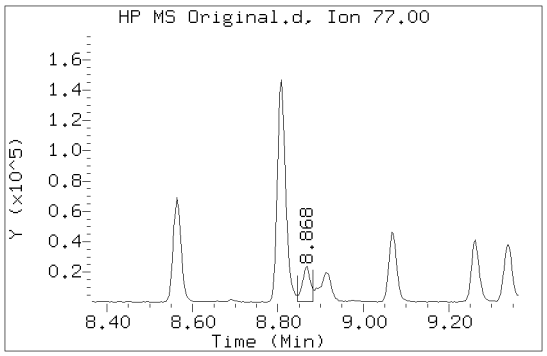
AFTER

MASS
75
AREA
90607
HEIGHT
68701
19-Aug-2022
11:16
Linh
Pham



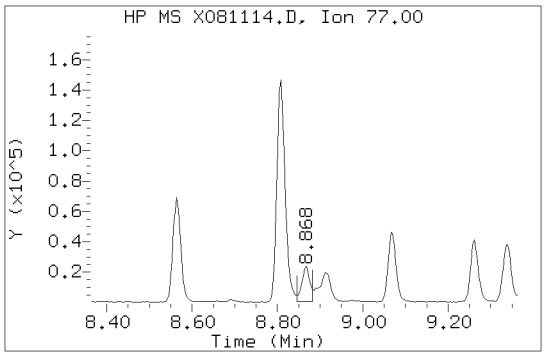
BEFORE

MASS
77
AREA
32600
HEIGHT
23616
19-Aug-2022
11:16
Linh
Pham



AFTER

MASS
77
AREA
32600
HEIGHT
23616
19-Aug-2022
11:16
Linh
Pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081115.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081115.D
Lab Smp Id: HS22080522-05MSD Client Smp ID: HS22080522-05MSD
Inj Date : 11-AUG-2022 15:22
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-05MSD;HS22080522-05MSD;3;;MSD
Misc Info : HS22052000V6;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 14 QC Sample: MSD
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: bhate.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

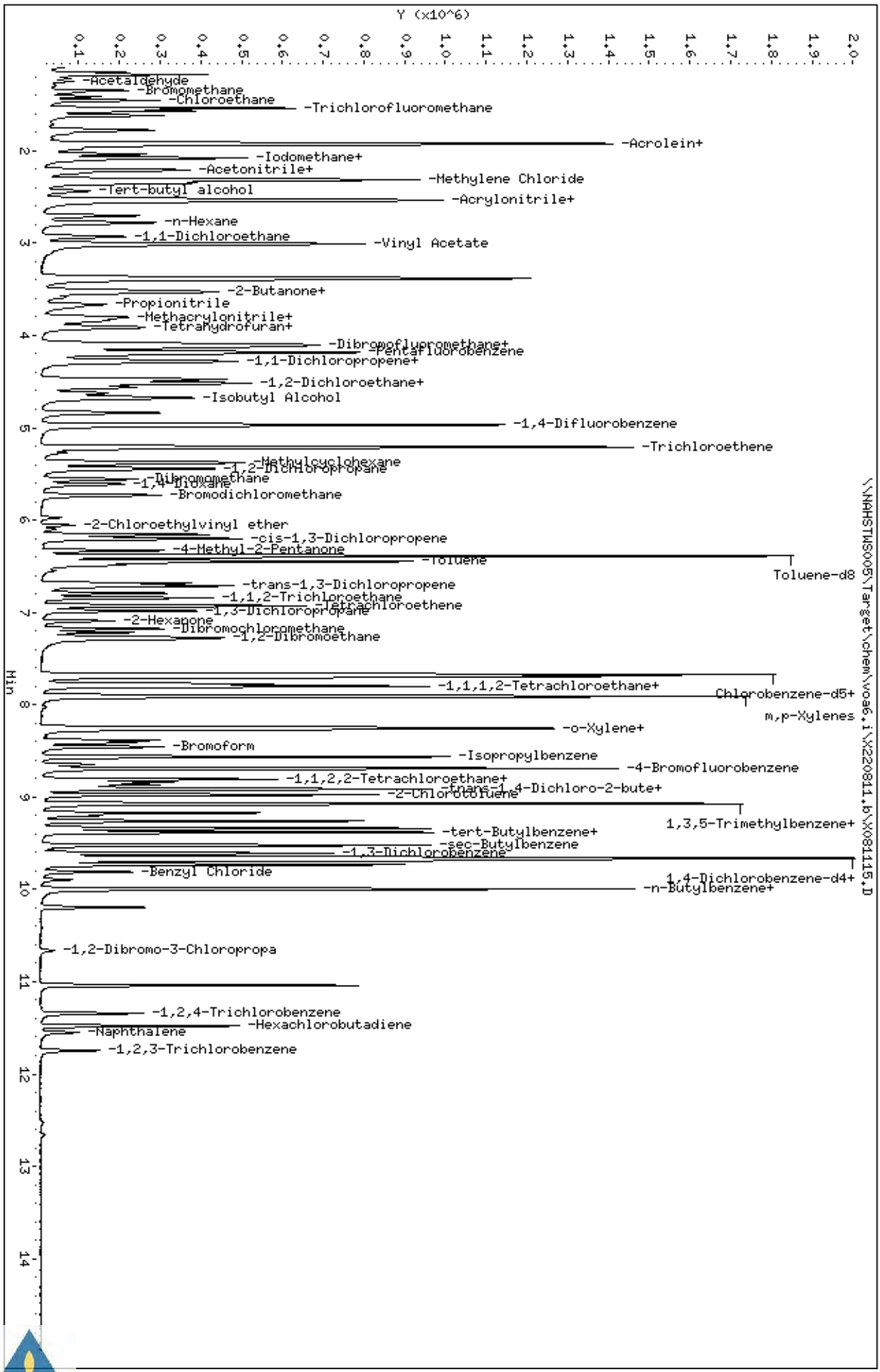
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.189	(1.000)	676677	50.0000	
* 36 1,4-Difluorobenzene	114	4.972	4.968	(1.000)	957979	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	832744	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	382896	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	305093	47.7465	47.74
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	331385	47.3676	47.36
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1119211	53.8674	53.86
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	370713	49.8842	49.88
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	127306	21.7598	1087.98
31 1,1,1-Trichloroethane	97	4.088	4.087	(0.977)	203426	21.1915	1059.57
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	119148	22.1561	1107.80
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	90416	21.1174	1055.87
22 1,1-Dichloroethane	63	2.929	2.929	(0.700)	211865	20.3375	1016.87
11 1,1-Dichloroethene	96	1.925	1.921	(0.460)	108653	19.2353	961.76
32 1,1-Dichloropropene	75	4.286	4.286	(0.862)	169017	21.8607	1093.03
93 1,2,3-Trichlorobenzene	180	11.746	11.742	(1.216)	45009	22.6118	1130.58
71 1,2,3-Trichloropropane	75	8.867	8.863	(0.918)	91942	22.1744	1108.71(M)
90 1,2,4-Trichlorobenzene	180	11.341	11.341	(1.174)	79783	22.8773	1143.86
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	445090	24.2339	1211.69
89 1,2-Dibromo-3-Chloropropane	155	10.663	10.659	(1.104)	8984	22.9052	1145.26

57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	115682	21.3088	1065.43
88	1,2-Dichlorobenzene	146	9.995	9.992 (1.035)	222453	23.2185	1160.92

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
33	1,2-Dichloroethane	62	4.564	4.560	(0.918)	187562	22.3244	1116.22
42	1,2-Dichloropropane	63	5.437	5.437	(1.093)	118371	20.0748	1003.74
75	1,3,5-Trimethylbenzene	105	9.069	9.066	(0.939)	454746	24.4504	1222.52
83	1,3-Dichlorobenzene	146	9.609	9.605	(0.995)	252131	23.7331	1186.65
54	1,3-Dichloropropane	76	6.985	6.981	(0.911)	184324	21.1642	1058.20
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	262669	23.2896	1164.48
26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	192704	20.6833	1034.16
24	2-Butanone	43	3.589	3.585	(0.858)	59185	34.8648	1743.24
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	384196	23.4090	1170.44
52	2-Hexanone	43	7.090	7.090	(0.924)	104321	39.8398	1991.99
77	4-Chlorotoluene	91	9.073	9.069	(0.939)	438192	23.9200	1195.99
82	p-Isopropyltoluene	119	9.650	9.650	(0.999)	478536	25.6221	1281.10
45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	175346	43.2137	2160.68
10	Acetone	43	1.985	1.981	(0.474)	48773	30.2761	1513.80
37	Benzene	78	4.519	4.515	(0.909)	469700	20.6912	1034.56
74	Bromobenzene	156	8.807	8.807	(0.912)	152626	23.3410	1167.05
29	Bromochloromethane	128	3.803	3.799	(0.909)	71646	18.7786	938.93
39	Bromodichloromethane	83	5.729	5.729	(1.152)	168023	20.7679	1038.39
66	Bromoform	173	8.410	8.410	(1.096)	77662	19.9965	999.82
6	Bromomethane	94	1.347	1.347	(0.322)	91635	18.9950	949.75
19	Carbon Disulfide	76	2.078	2.078	(0.497)	612388	40.9509	2047.54
34	Carbon Tetrachloride	117	4.271	4.267	(0.859)	177319	21.4583	1072.91
59	Chlorobenzene	112	7.697	7.694	(1.003)	350906	22.2237	1111.18
7	Chloroethane	64	1.411	1.411	(0.337)	81754	18.8365	941.82
28	Chloroform	83	3.915	3.911	(0.936)	229771	20.1309	1006.54
3	Chloromethane	50	1.085	1.085	(0.259)	127093	20.3170	1015.85
27	cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	142734	21.2167	1060.83
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.238)	205483	20.6764	1033.82
55	Dibromochloromethane	129	7.176	7.176	(0.935)	131899	21.3402	1067.01
44	Dibromomethane	93	5.557	5.553	(1.118)	80181	20.2671	1013.35
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	123744	19.0885	954.42
61	Ethylbenzene	106	7.802	7.802	(1.017)	181590	22.7659	1138.29
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	79611	24.7181	1235.90
67	Isopropylbenzene	105	8.563	8.563	(1.116)	561573	23.4123	1170.61
62	m,p-Xylenes	106	7.907	7.907	(1.031)	454088	45.7689	2288.44
17	Methylene Chloride	84	2.311	2.311	(0.552)	125256	19.6085	980.42
87	n-Butylbenzene	91	9.995	9.995	(1.035)	404444	26.0611	1303.05
73	n-Propylbenzene	91	8.916	8.912	(0.923)	643036	25.4573	1272.86
92	Naphthalene	128	11.551	11.544	(1.196)	81895	20.9913	1049.56
63	o-Xylene	106	8.245	8.241	(1.075)	215012	22.2927	1114.63
81	sec-Butylbenzene	105	9.523	9.523	(0.986)	551167	25.5347	1276.73
64	Styrene	104	8.263	8.260	(1.077)	353070	22.2294	1111.47
78	tert-Butylbenzene	119	9.339	9.336	(0.967)	393710	24.9766	1248.82
56	Tetrachloroethene	164	6.929	6.929	(0.903)	122840	22.7484	1137.42
50	Toluene	91	6.449	6.449	(0.841)	521681	22.2857	1114.28
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.606)	119908	20.1431	1007.15
51	trans-1,3-Dichloropropene	75	6.685	6.682	(1.345)	169066	20.5419	1027.09
38	Trichloroethene	130	5.212	5.208	(1.048)	471943	70.1831	3509.15
8	Trichlorofluoromethane	101	1.568	1.568	(0.375)	216692	20.3359	1016.79
5	Vinyl Chloride	62	1.152	1.152	(0.275)	129882	18.3047	915.23

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081115.D
Date : 11-AUG-2022 15:22
Client ID: HS220805Z2-05MSD
Sample Info: HS220805Z2-05MSD;HS220805Z2-05MSD;3;;MSD
Purge Volume: 5.0
Column phase: DB624

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

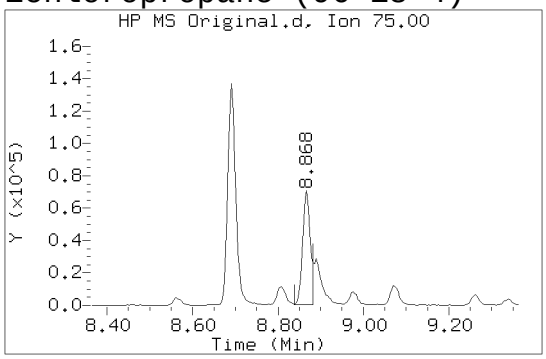
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081115.D
Inj Date : 11-AUG-2022 15:22
InstruID : voa6.i
LabSampID : HS22080522-05MSD

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

Reason Code:

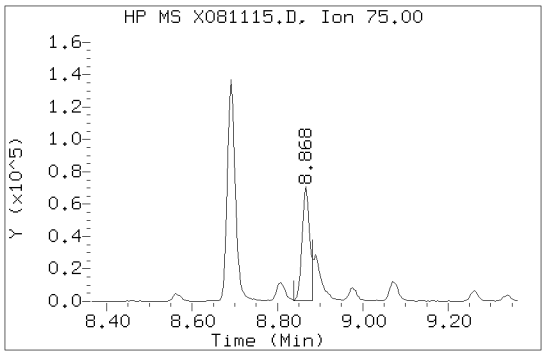
BEFORE

MASS
75
AREA
91942
HEIGHT
70358
19-Aug-2022
11:16
Linh
Pham



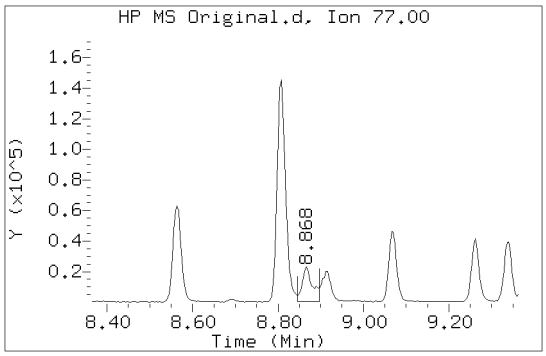
AFTER

MASS
75
AREA
91942
HEIGHT
70358
19-Aug-2022
11:16
Linh
Pham



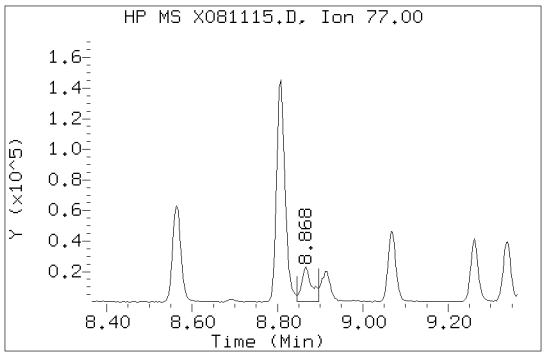
BEFORE

MASS
77
AREA
39902
HEIGHT
22598
19-Aug-2022
11:16
Linh
Pham



AFTER

MASS
77
AREA
39902
HEIGHT
22598
19-Aug-2022
11:16
Linh
Pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081116.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081116.D
Lab Smp Id: HS22080522-01 Client Smp ID: HS22080522-01
Inj Date : 11-AUG-2022 15:43
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-01;HS22080522-01;;;
Misc Info : HS22052000V6;WATER;0;1000;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 15
Dil Factor: 1000.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	1000.000	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	4.189	4.189	(1.000)	663683	50.0000	
* 36 1,4-Difluorobenzene	114	4.972	4.968	(1.000)	945756	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	829456	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	362870	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.979)	297783	47.5114	47.51
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.069)	330305	48.1430	48.14
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1104881	53.3885	53.38
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	355676	48.0202	48.02
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.843)	445815	67.5657	67565.71
17 Methylene Chloride	84	2.314	2.311	(0.553)	95675	15.0775	15077.51
38 Trichloroethene	130	5.216	5.208	(1.049)	9332	1.40571	1405.70(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

01135123

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081116.D

Page 1

Date : 11-AUG-2022 15:43

Client ID: HS22080522-01

Instrument: voa6.i

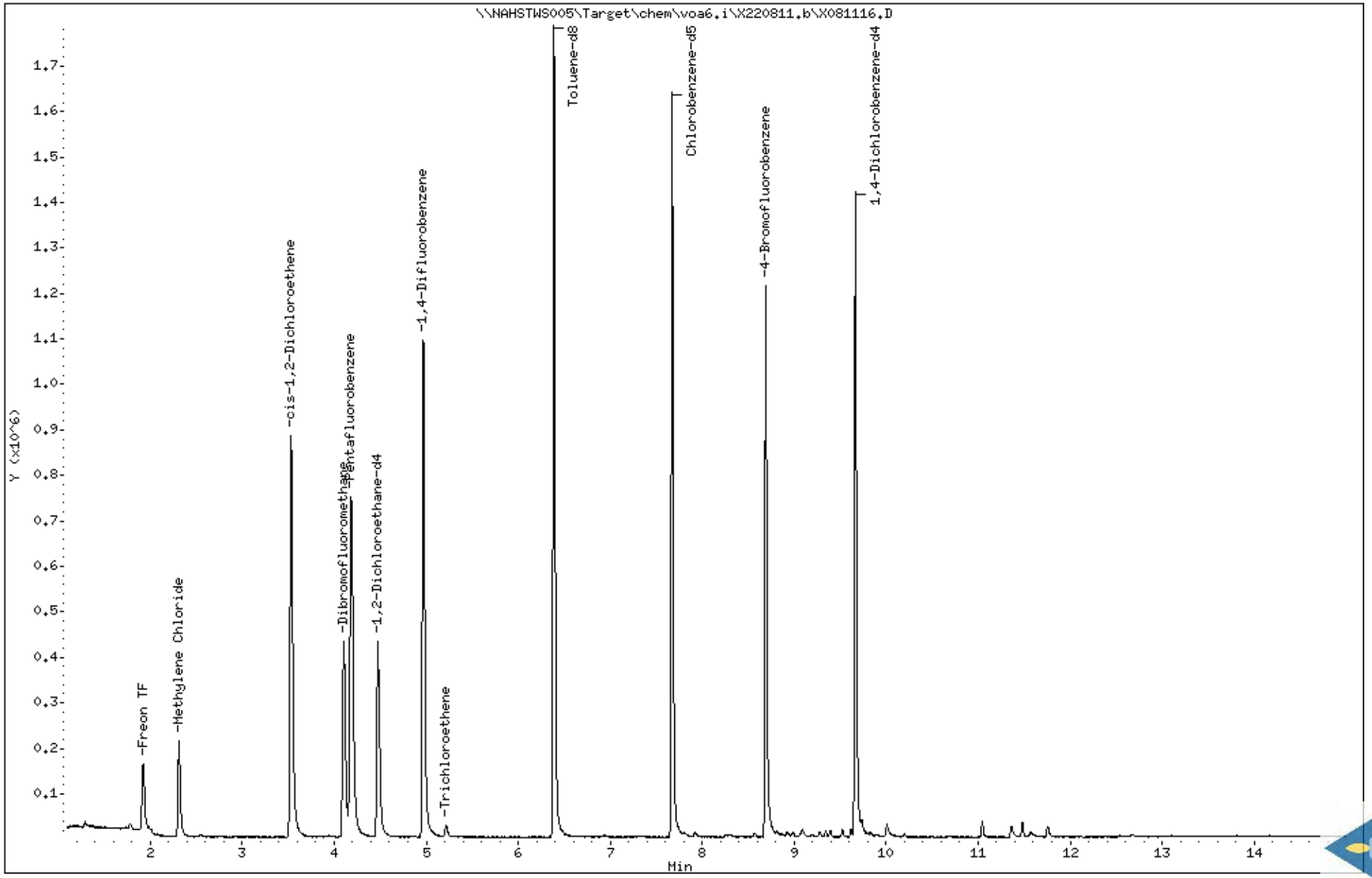
Sample Info: HS22080522-01;HS22080522-01;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081116.D

Date : 11-AUG-2022 15:43

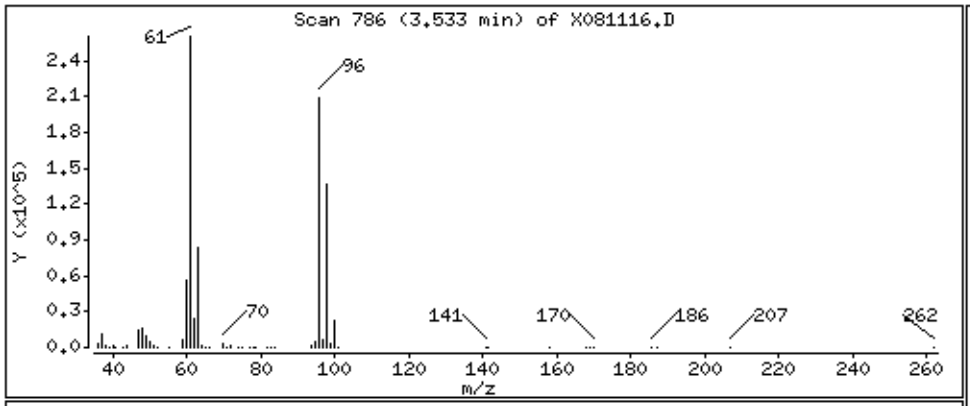
Client ID: HS22080522-01 Instrument: voa6.i

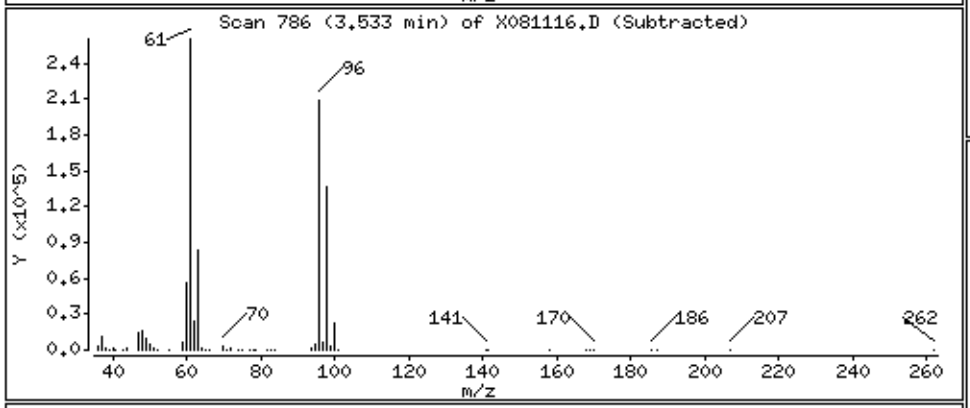
Sample Info: HS22080522-01;HS22080522-01;;;

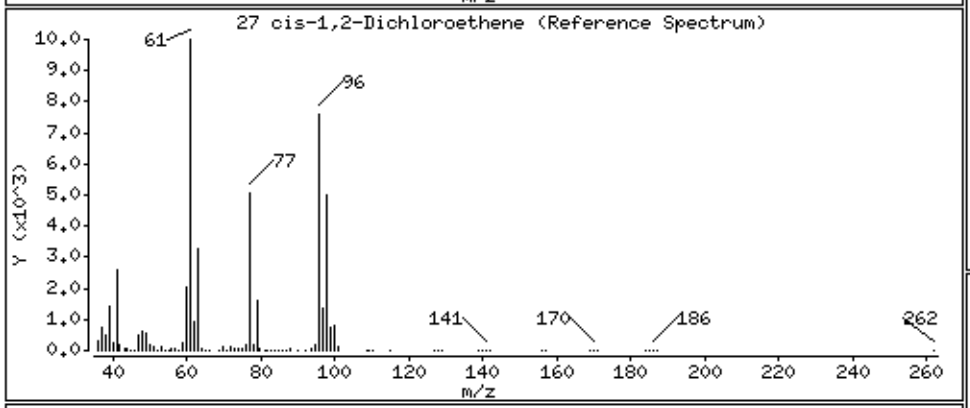
Purge Volume: 5.0 Operator: PC

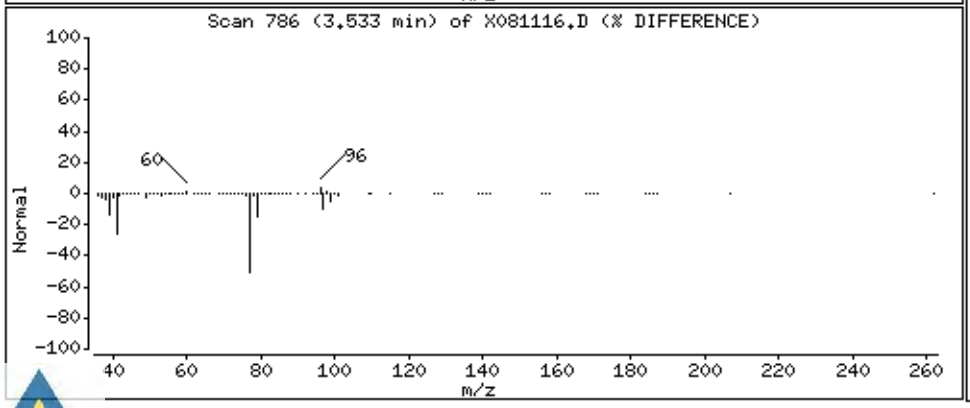
Column phase: DB624 Column diameter: 0.18

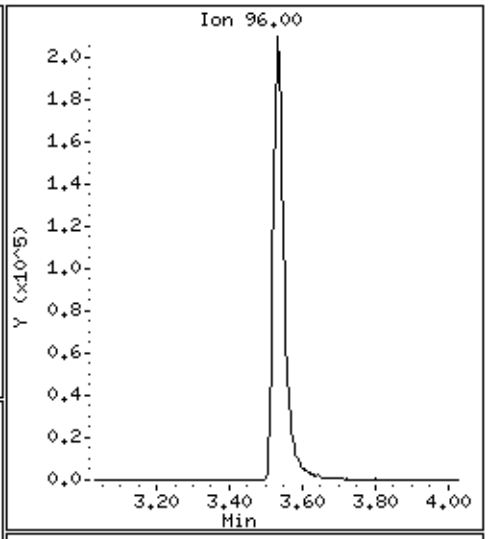
27 cis-1,2-Dichloroethene Concentration: 67565.71 ug/l

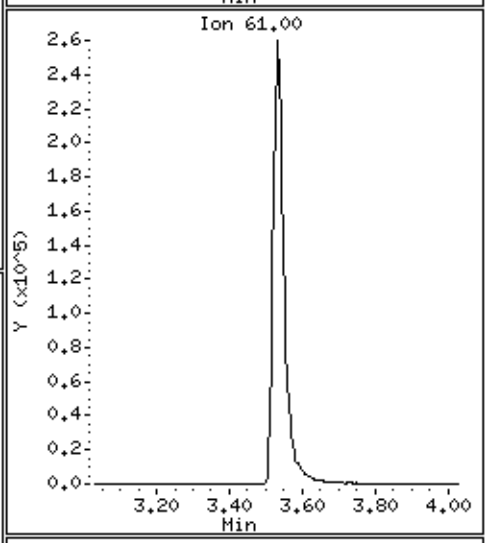


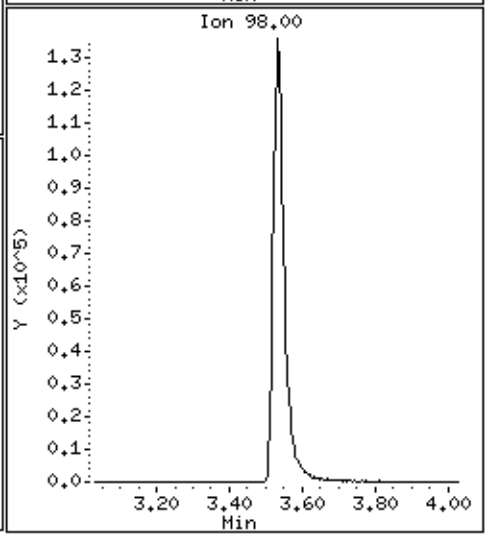












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081116.D Page 3

Date : 11-AUG-2022 15:43

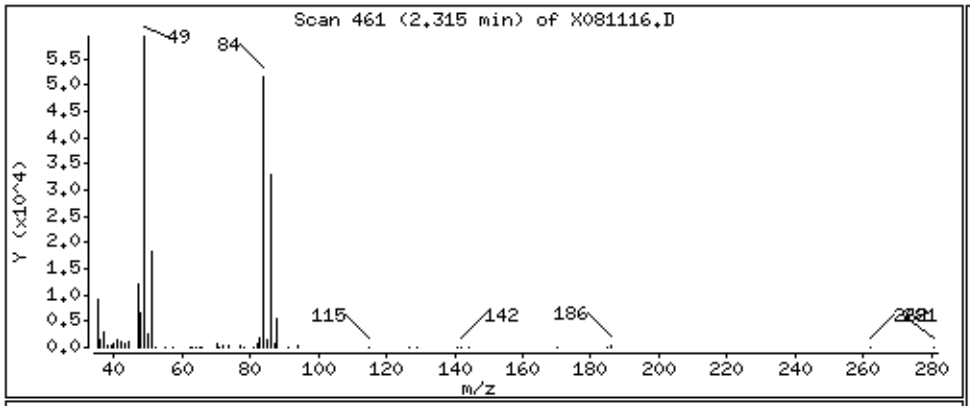
Client ID: HS22080522-01 Instrument: voa6.i

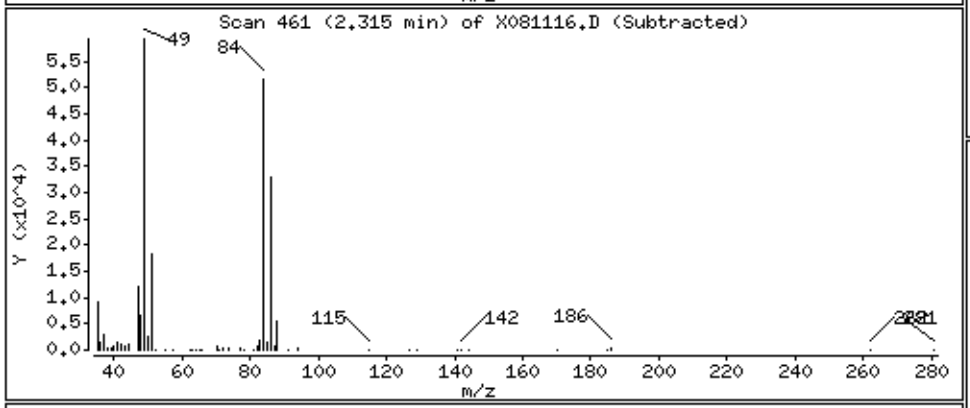
Sample Info: HS22080522-01;HS22080522-01;;;

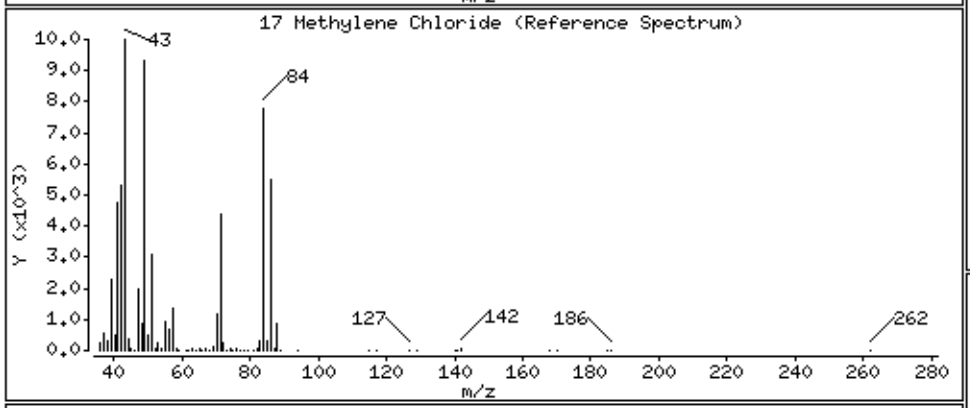
Purge Volume: 5.0 Operator: PC

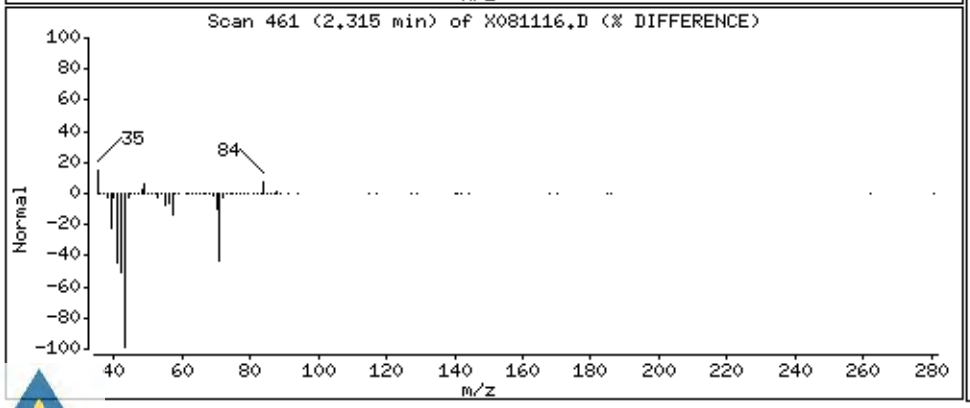
Column phase: DB624 Column diameter: 0.18

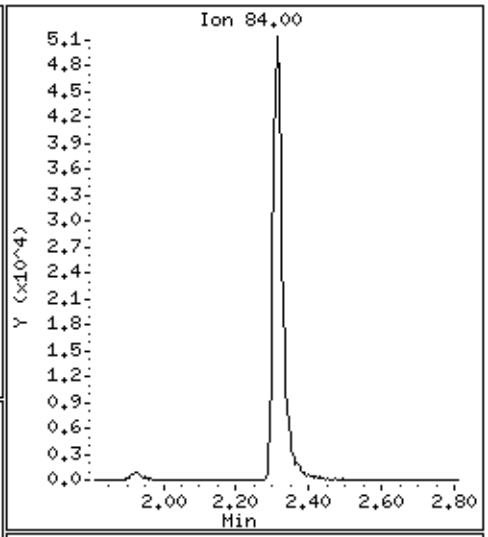
17 Methylene Chloride Concentration: 15077.51 ug/l

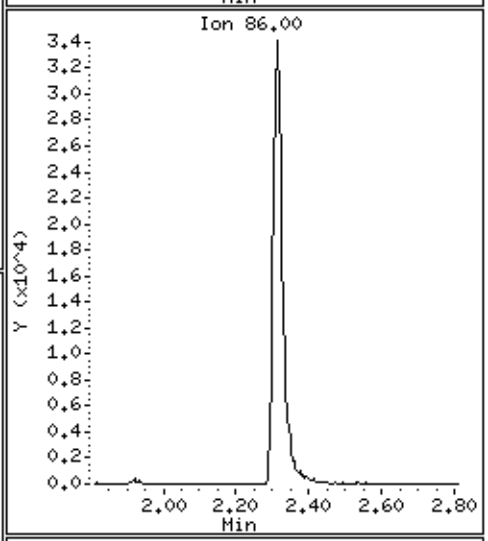


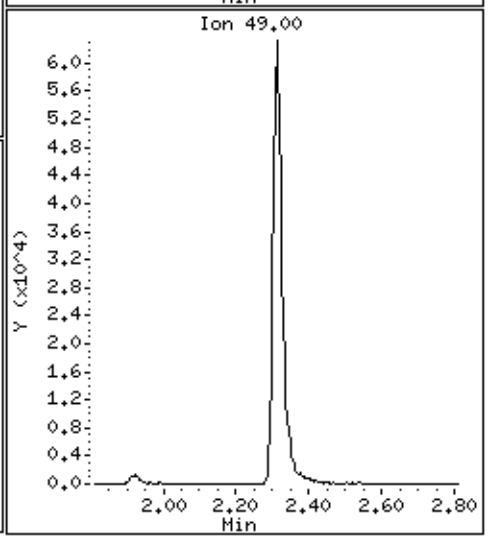












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081116.D Page 4

Date : 11-AUG-2022 15:43

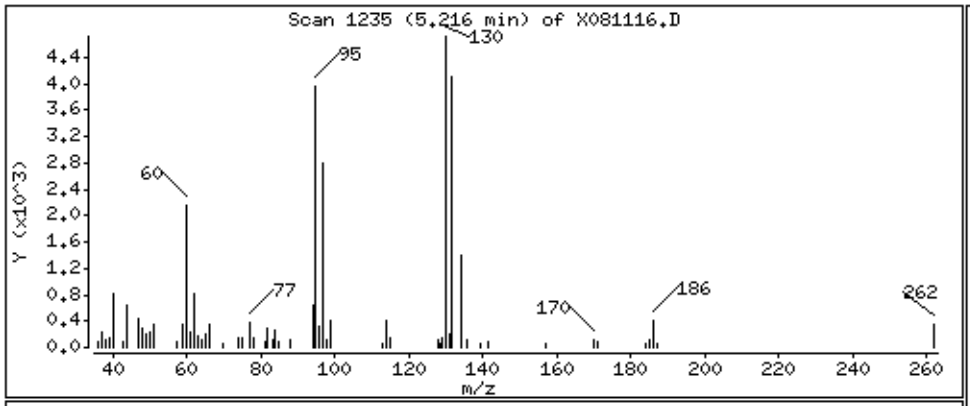
Client ID: HS22080522-01 Instrument: voa6.i

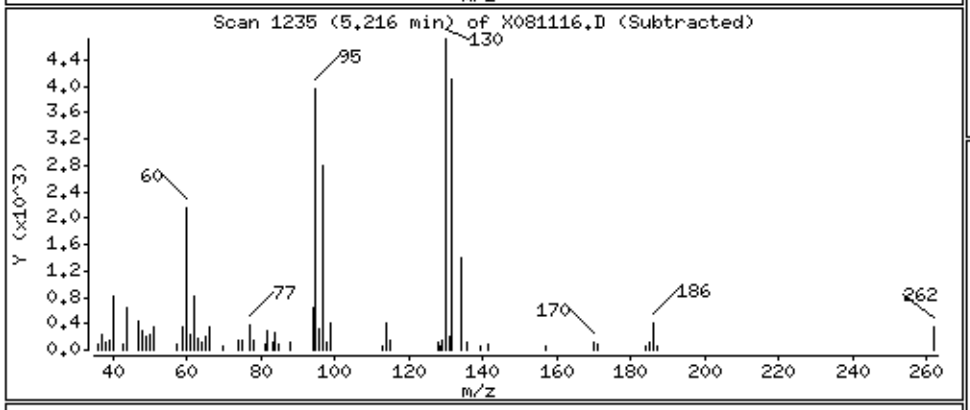
Sample Info: HS22080522-01;HS22080522-01;;;

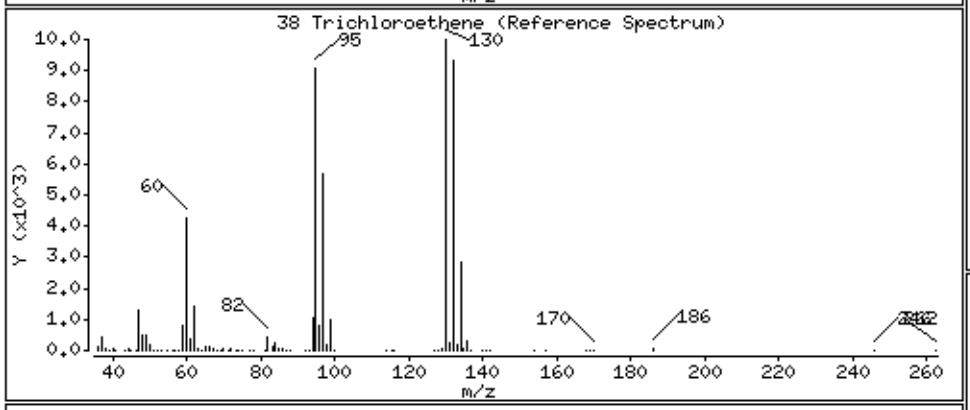
Purge Volume: 5.0 Operator: PC

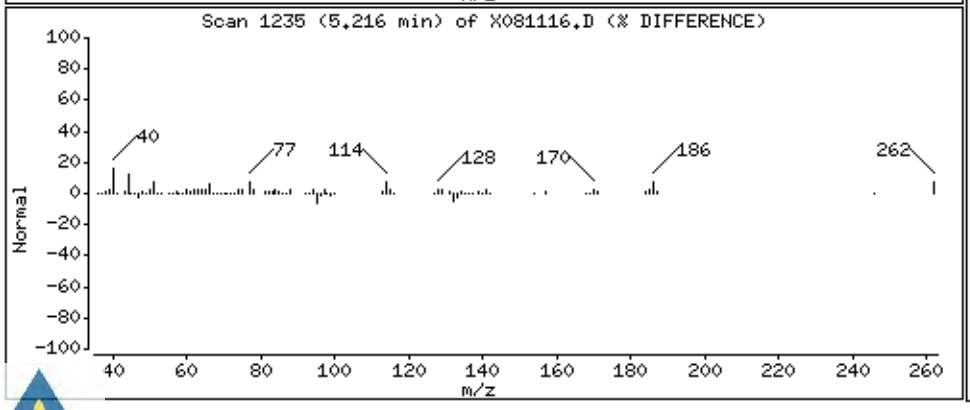
Column phase: DB624 Column diameter: 0.18

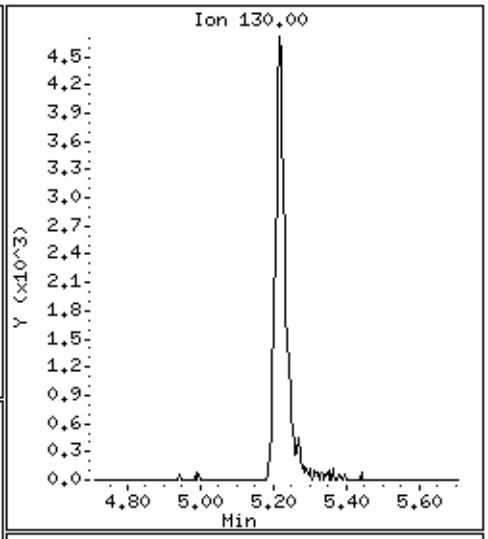
38 Trichloroethene Concentration: 1405.70 ug/l

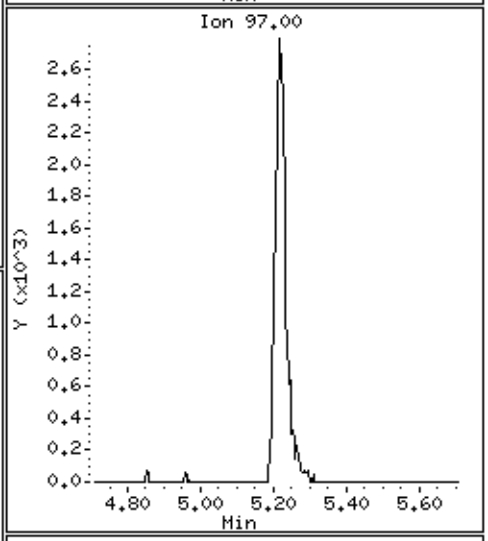


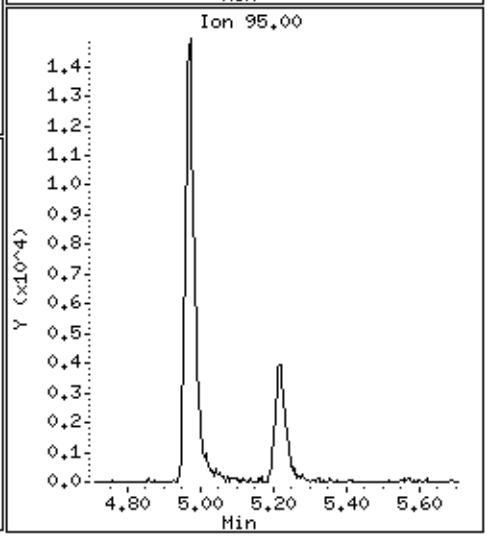












Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081116.D
Inj Date : 11-AUG-2022 15:43
InstruID : voa6.i
LabSampID : HS22080522-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081117.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081117.D
Lab Smp Id: HS22080522-02 Client Smp ID: HS22080522-02
Inj Date : 11-AUG-2022 16:04
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-02;HS22080522-02;;;
Misc Info : HS22052000V6;WATER;0;1000;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 16
Dil Factor: 1000.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	1000.000	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	4.185	4.189	(1.000)	666779	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	953376	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	832023	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	371864	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	300283	47.6905	47.69
$ 35 1,2-Dichloroethane-d4	65	4.478	4.477	(1.070)	329102	47.7422	47.74
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1108611	53.4035	53.40
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	361335	48.6442	48.64
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	440625	66.4691	66469.06
17 Methylene Chloride	84	2.311	2.311	(0.552)	86704	13.5147	13514.66
38 Trichloroethene	130	5.220	5.208	(1.051)	8432	1.25999	1259.98(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

01135129

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081117.D

Date : 11-AUG-2022 16:04

Client ID: HS22080522-02

Instrument: voa6.i

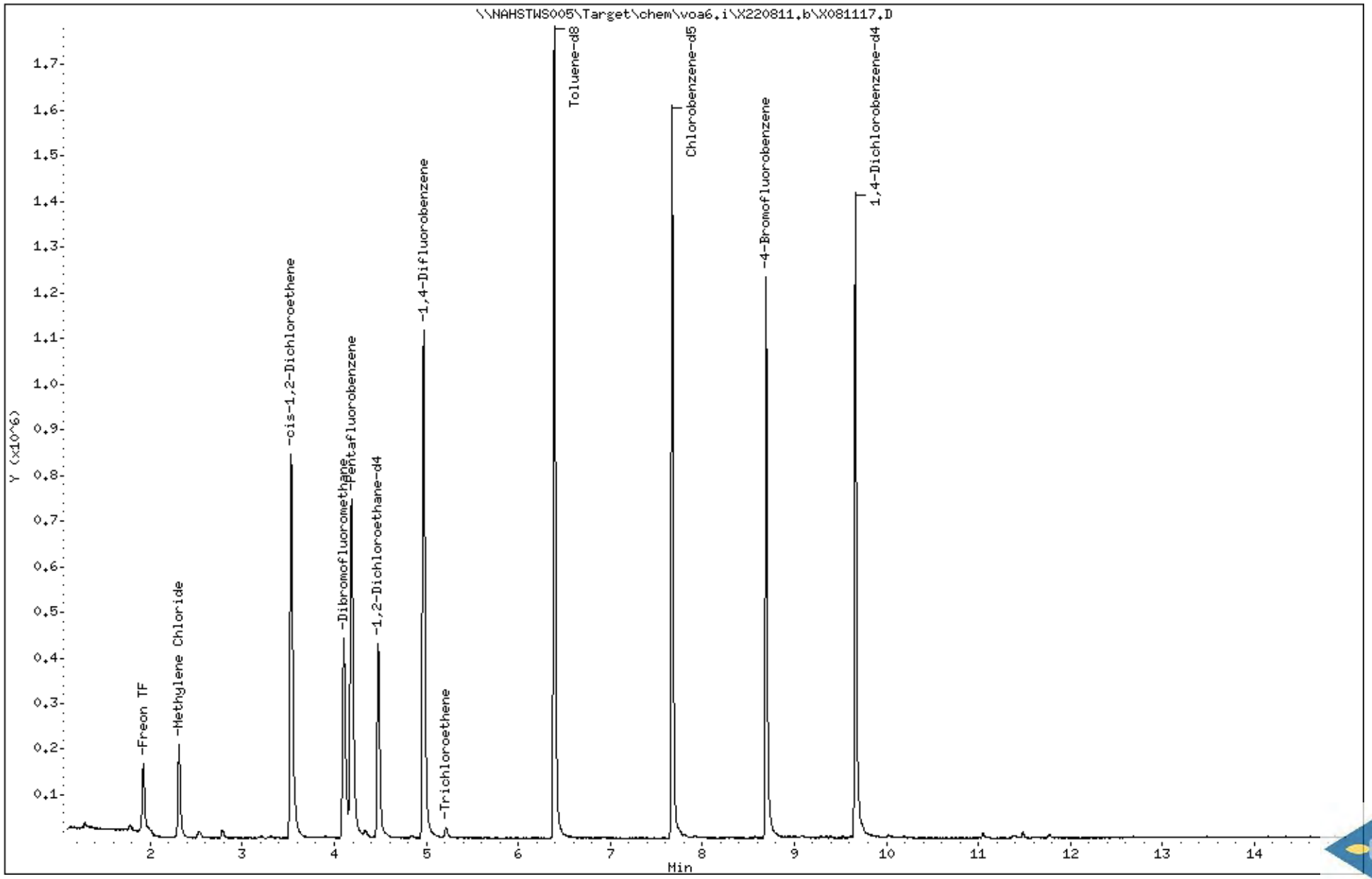
Sample Info: HS22080522-02;HS22080522-02;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081117.D

Date : 11-AUG-2022 16:04

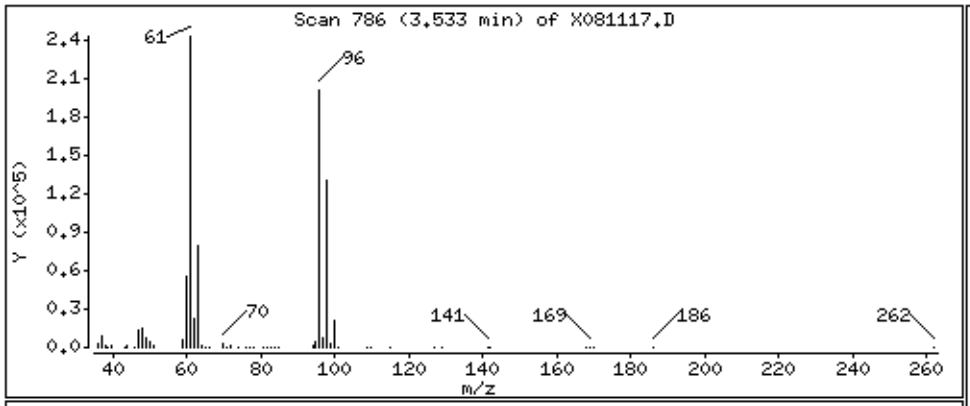
Client ID: HS22080522-02 Instrument: voa6.i

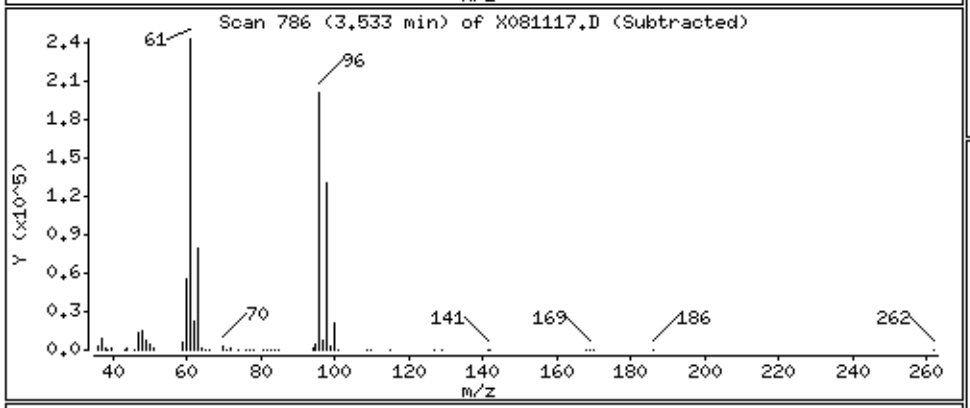
Sample Info: HS22080522-02;HS22080522-02;;;

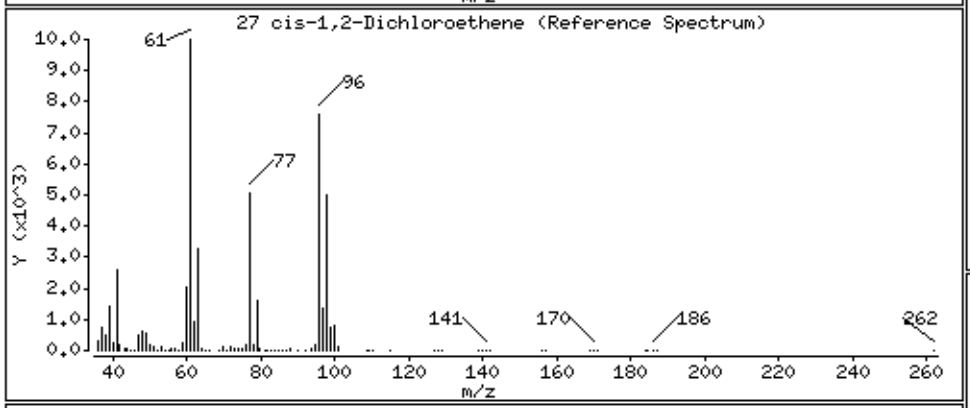
Purge Volume: 5.0 Operator: PC

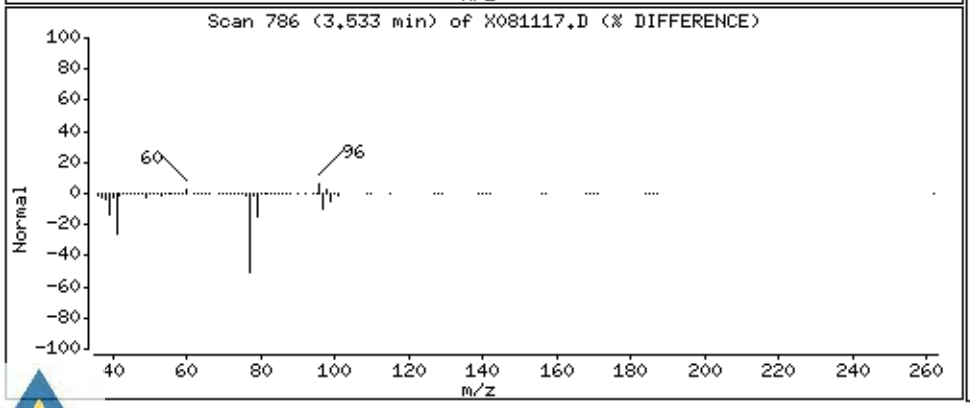
Column phase: DB624 Column diameter: 0.18

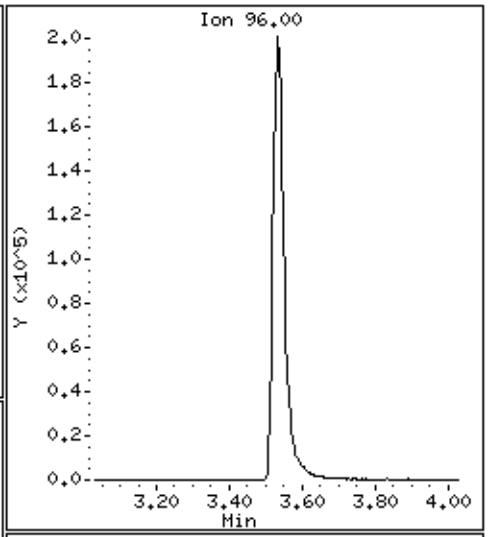
27 cis-1,2-Dichloroethene Concentration: 66469.06 ug/l

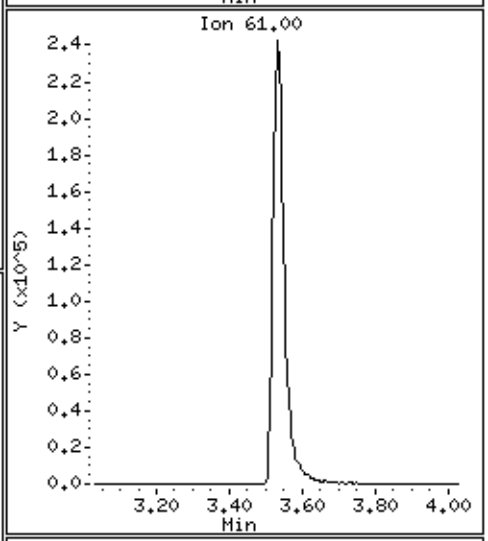


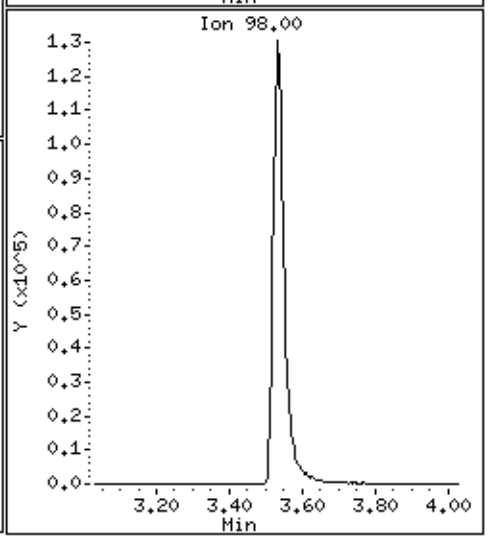












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081117.D Page 3

Date : 11-AUG-2022 16:04

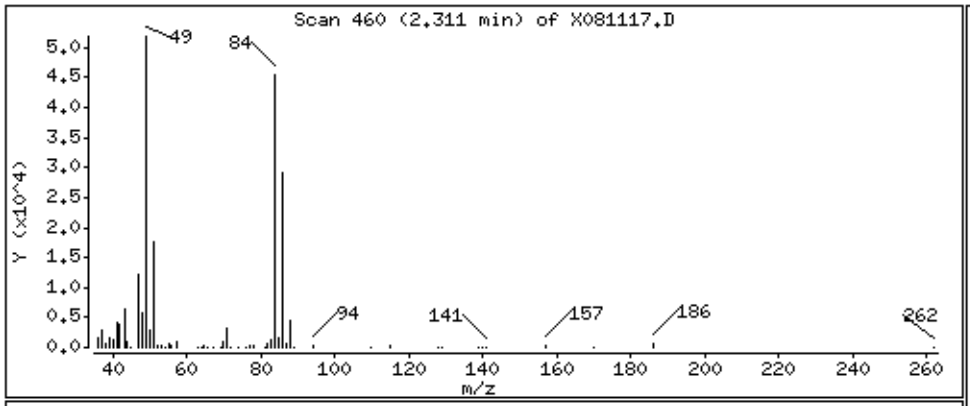
Client ID: HS22080522-02 Instrument: voa6.i

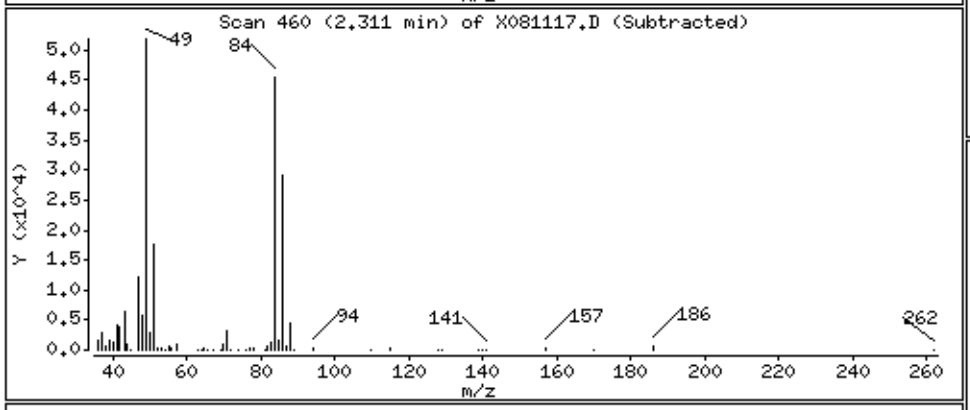
Sample Info: HS22080522-02;HS22080522-02;;;

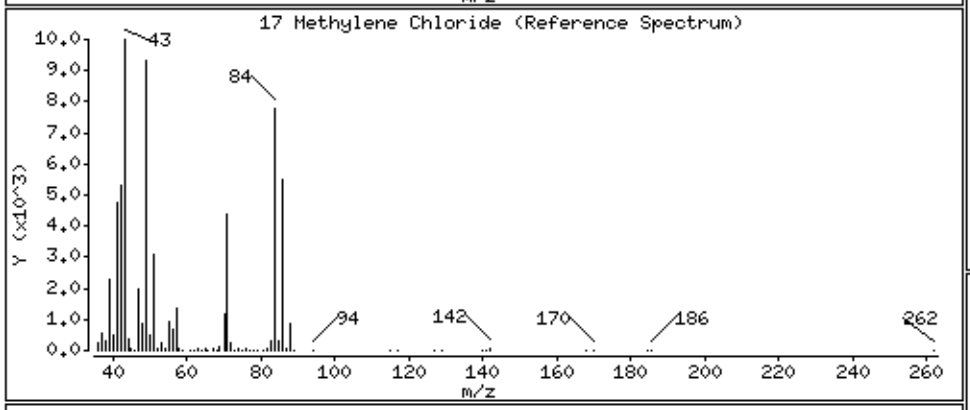
Purge Volume: 5.0 Operator: PC

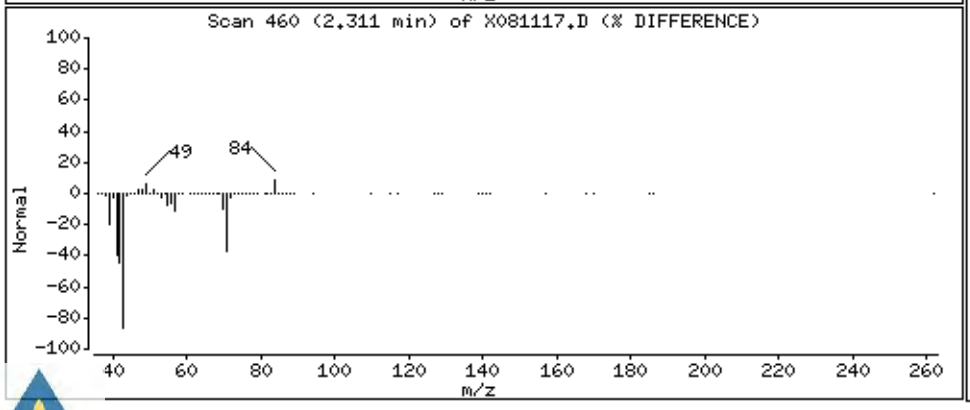
Column phase: DB624 Column diameter: 0.18

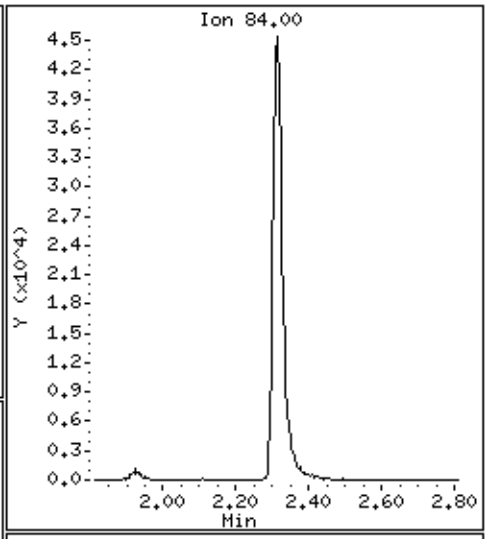
17 Methylene Chloride Concentration: 13514.66 ug/l

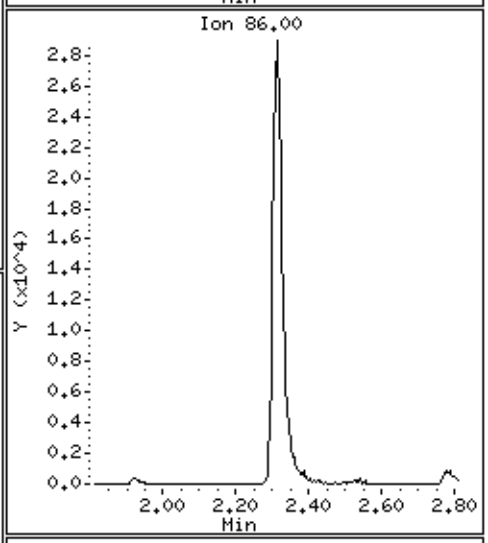


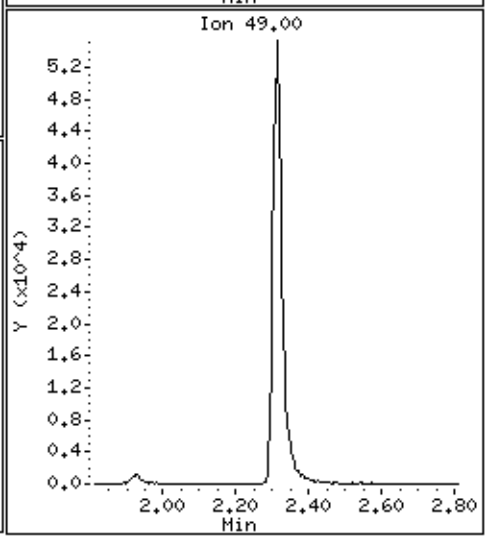












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081117.D Page 4

Date : 11-AUG-2022 16:04

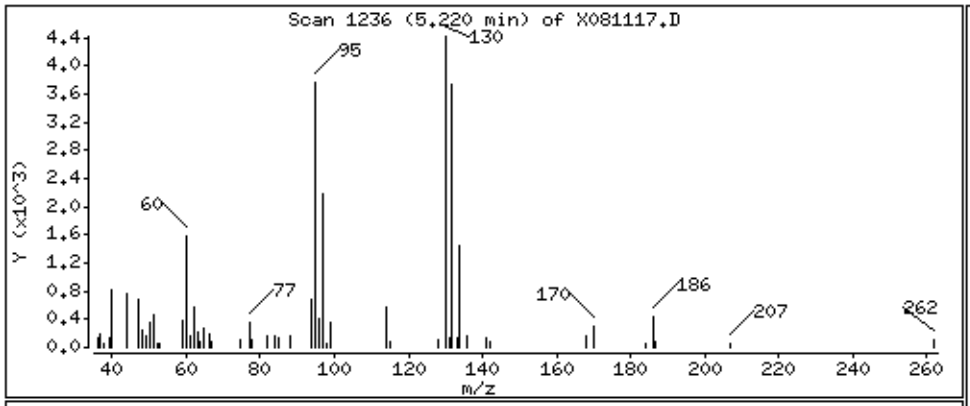
Client ID: HS22080522-02 Instrument: voa6.i

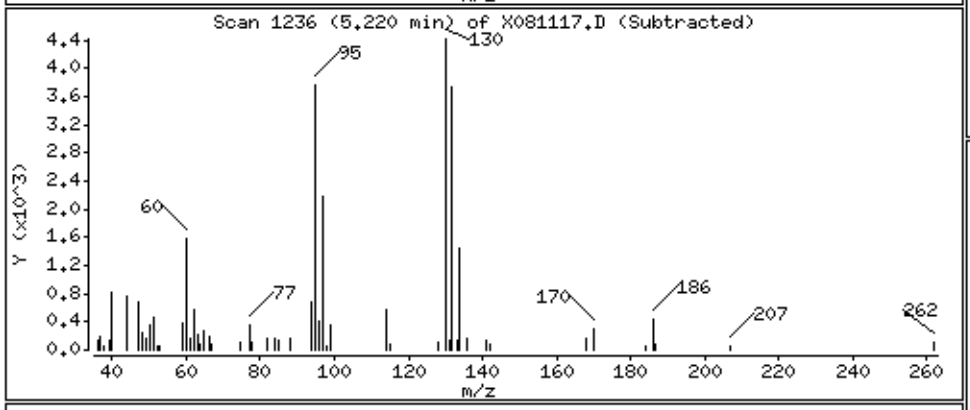
Sample Info: HS22080522-02;HS22080522-02;;;

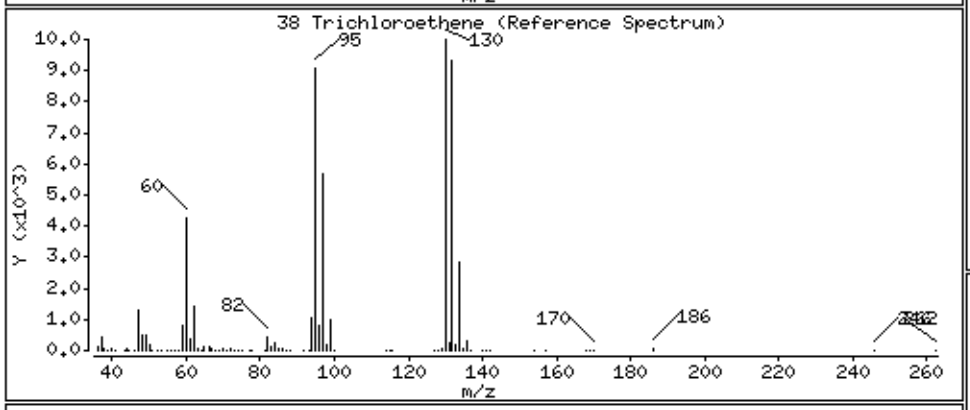
Purge Volume: 5.0 Operator: PC

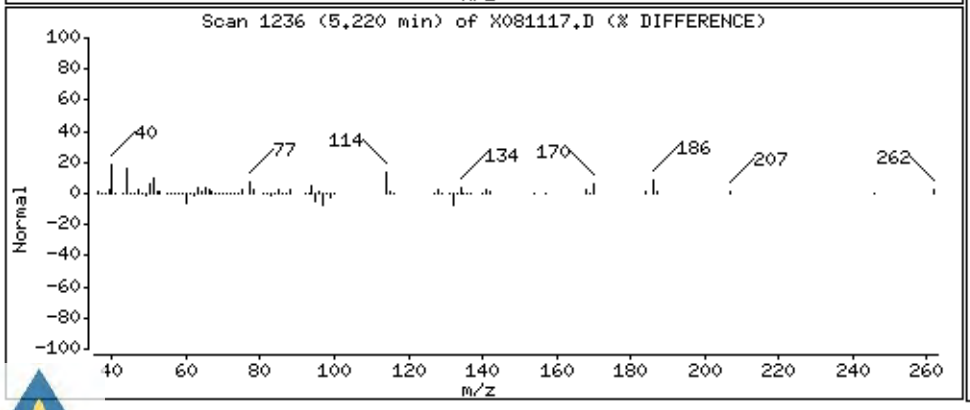
Column phase: DB624 Column diameter: 0.18

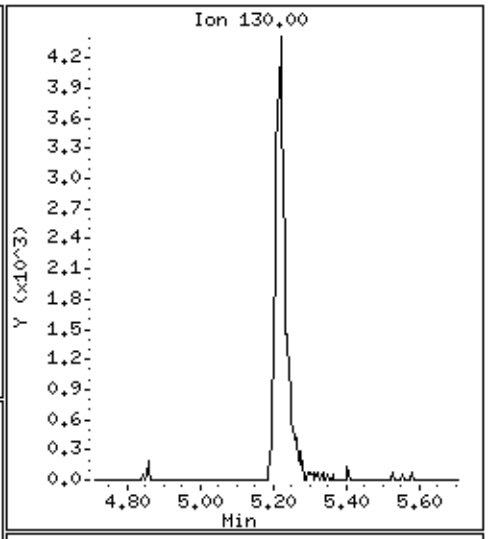
38 Trichloroethene Concentration: 1259.98 ug/l

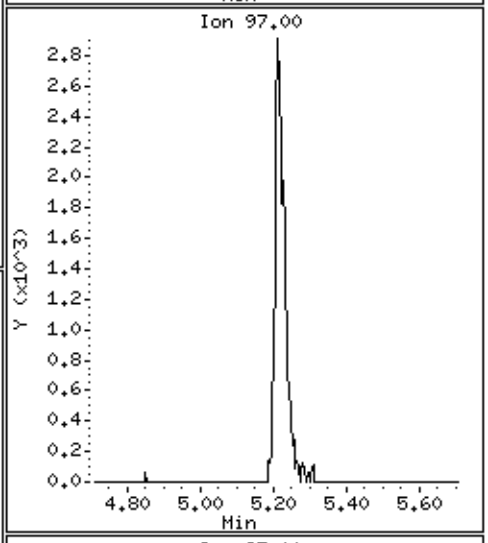


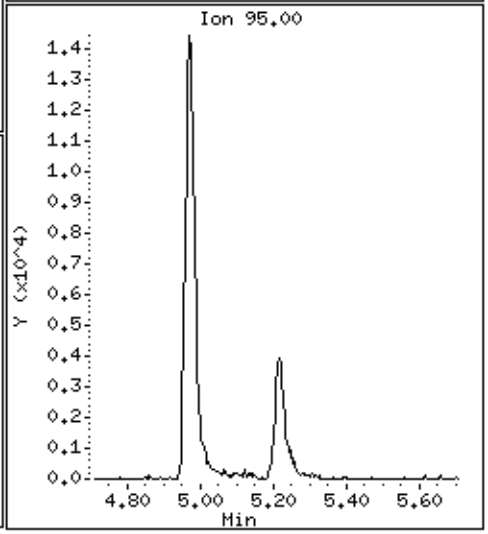












Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081117.D
Inj Date : 11-AUG-2022 16:04
InstruID : voa6.i
LabSampID : HS22080522-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081123.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081123.D
Lab Smp Id: HS22080522-03 Client Smp ID: HS22080522-03
Inj Date : 11-AUG-2022 18:11
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-03;HS22080522-03;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.189	4.189	(1.000)	658792	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	942830	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	822573	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	359396	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.102	(0.980)	299646	48.1735	48.17
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.069)	328078	48.1736	48.17
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1096317	53.4180	53.41
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	355904	48.4604	48.46
27 cis-1,2-Dichloroethene	96	3.544	3.529	(0.846)	14711	2.24609	2.24(a)
38 Trichloroethene	130	5.220	5.208	(1.051)	3647	0.55106	0.55(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

01135135

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081123.D

Date : 11-AUG-2022 18:11

Client ID: HS22080522-03

Instrument: voa6.i

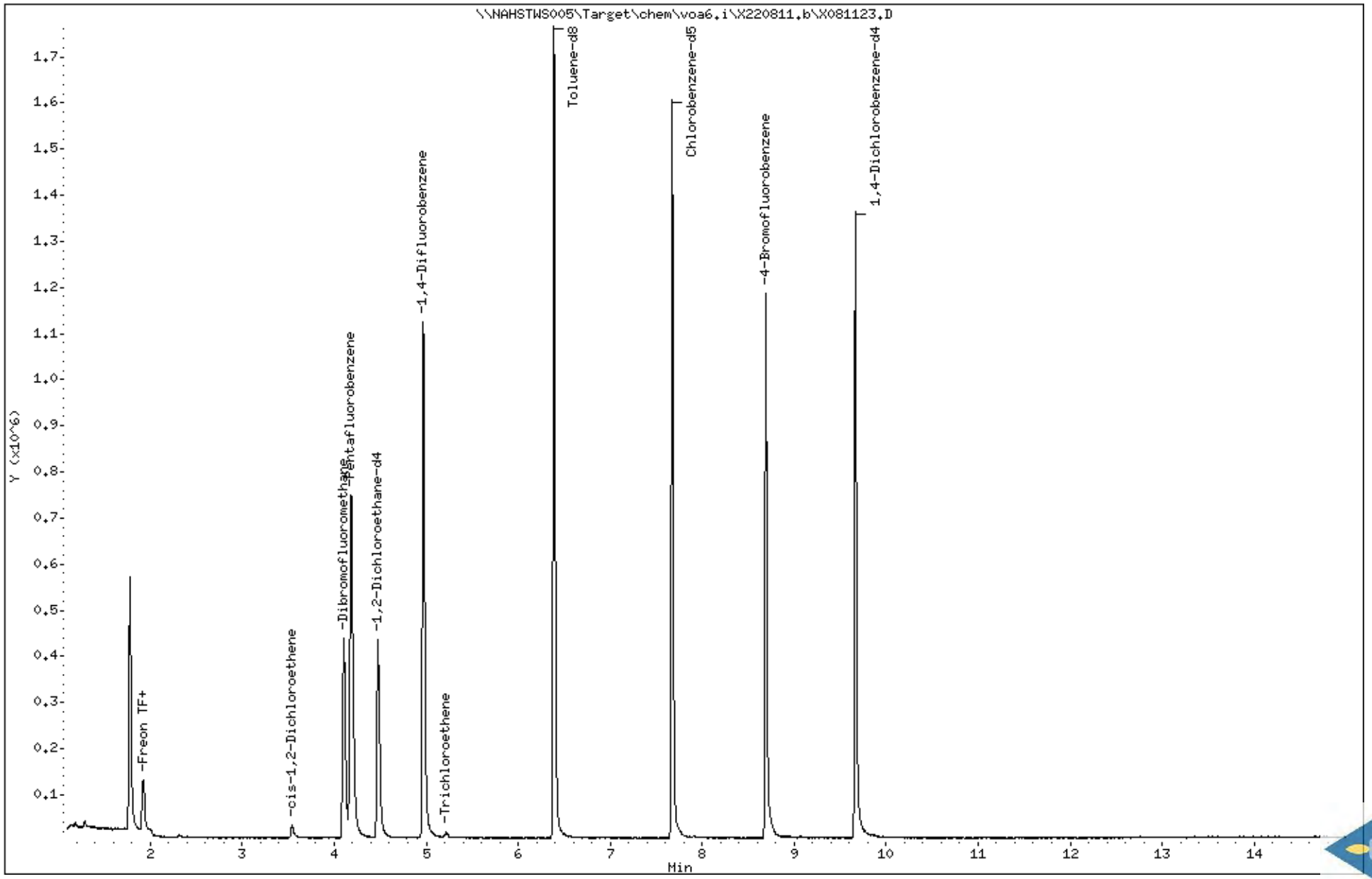
Sample Info: HS22080522-03;HS22080522-03;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081123.D

Date : 11-AUG-2022 18:11

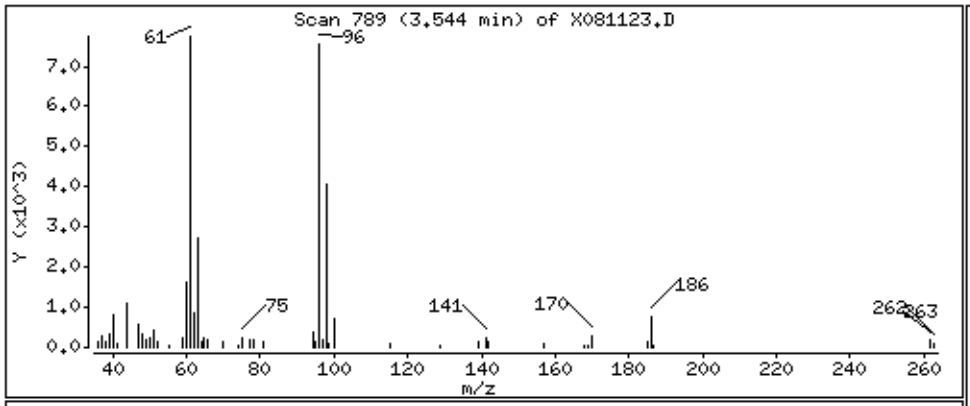
Client ID: HS22080522-03 Instrument: voa6.i

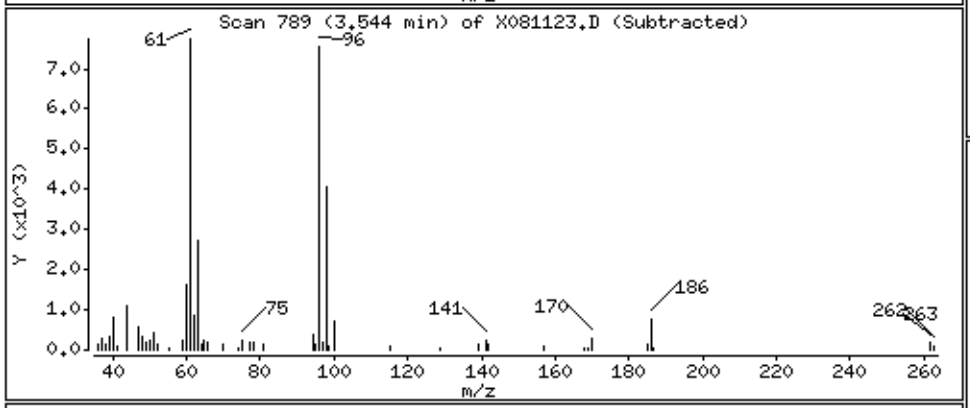
Sample Info: HS22080522-03;HS22080522-03;;;

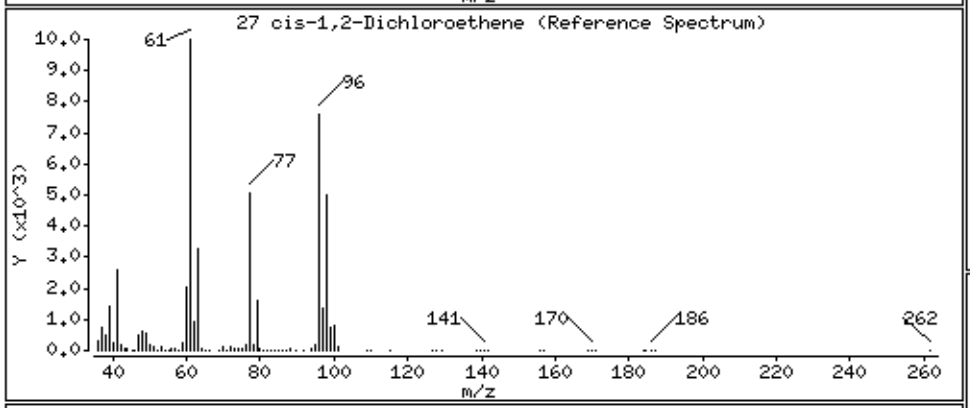
Purge Volume: 5.0 Operator: PC

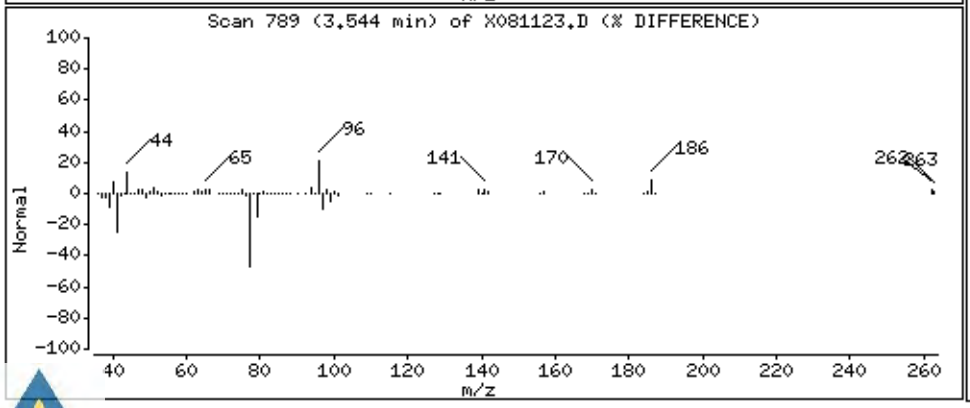
Column phase: DB624 Column diameter: 0.18

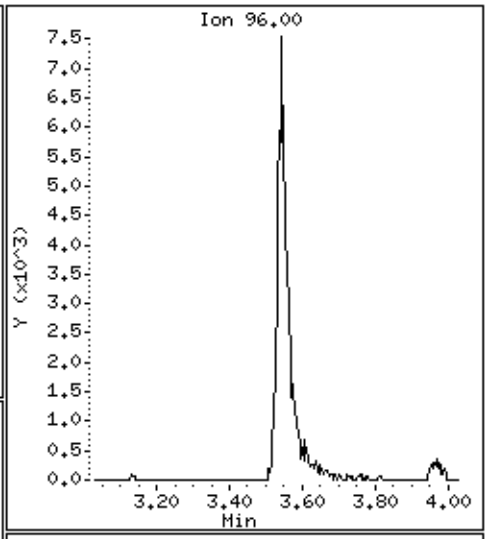
27 cis-1,2-Dichloroethene Concentration: 2.24 ug/l

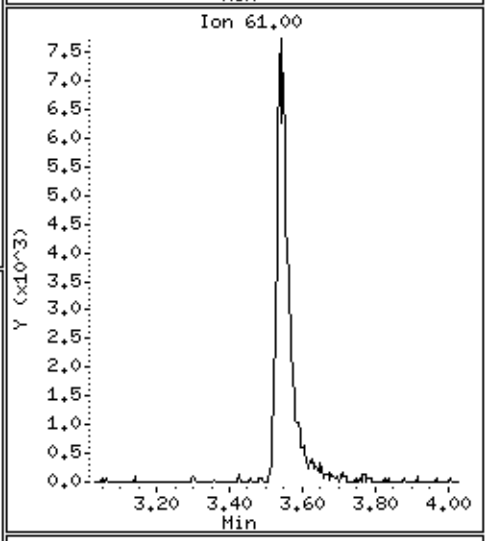


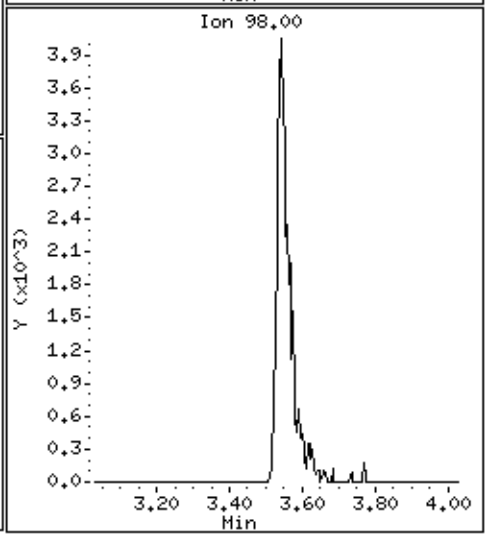












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081123.D Page 3

Date : 11-AUG-2022 18:11

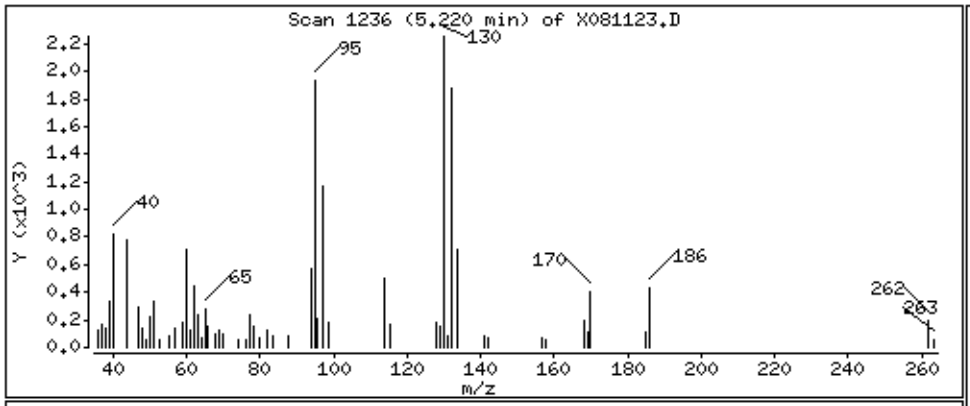
Client ID: HS22080522-03 Instrument: voa6.i

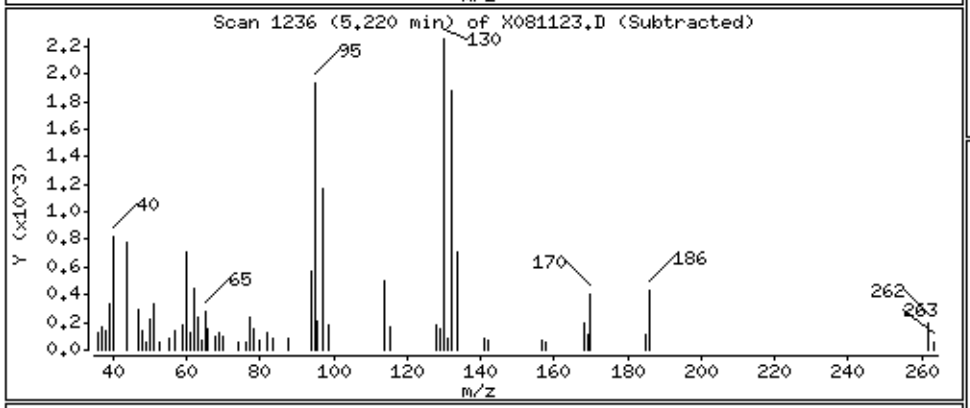
Sample Info: HS22080522-03;HS22080522-03;;;

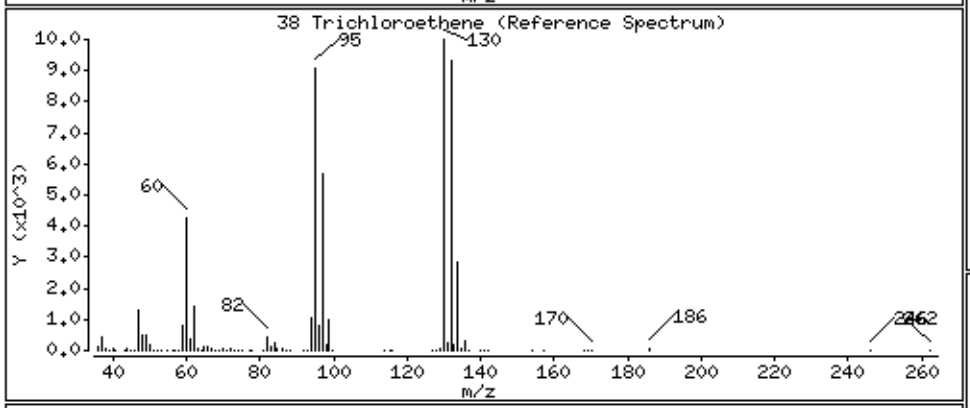
Purge Volume: 5.0 Operator: PC

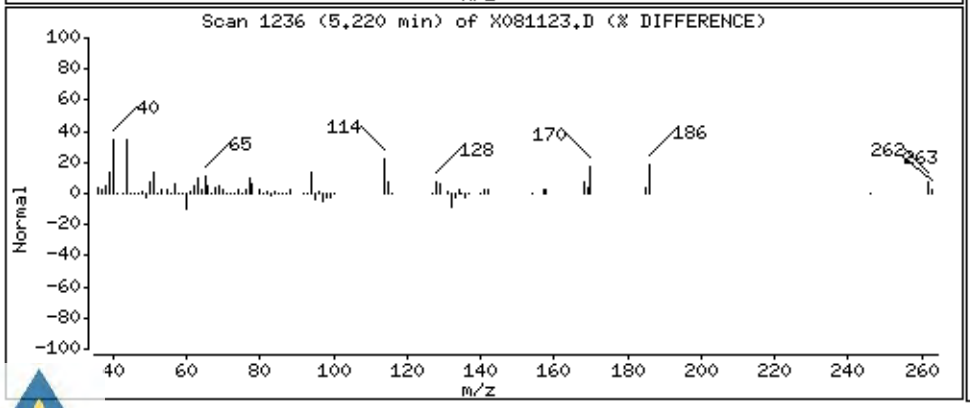
Column phase: DB624 Column diameter: 0.18

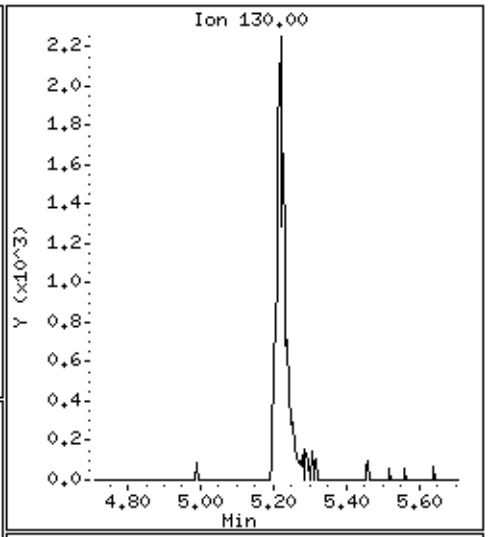
38 Trichloroethene Concentration: 0.55 ug/l

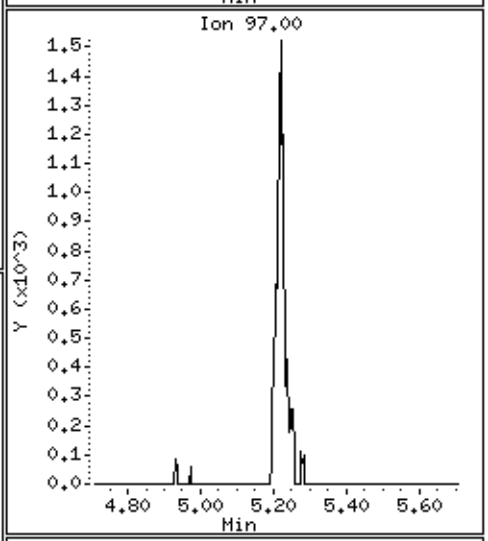


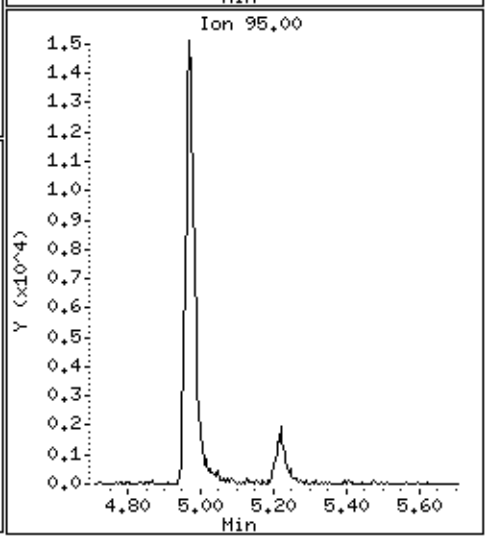












Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081123.D
Inj Date : 11-AUG-2022 18:11
InstruID : voa6.i
LabSampID : HS22080522-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081124.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081124.D
Lab Smp Id: HS22080522-06 Client Smp ID: HS22080522-06
Inj Date : 11-AUG-2022 18:32
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-06;HS22080522-06;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.189	4.189	(1.000)	662939	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	951620	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	816988	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	351342	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.102	(0.980)	299249	47.8032	47.80
$ 35 1,2-Dichloroethane-d4	65	4.474	4.477	(1.068)	327635	47.8051	47.80
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1097343	53.8335	53.83
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	352745	48.3569	48.35

01135140

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081124.D

Date : 11-AUG-2022 18:32

Client ID: HS22080522-06

Instrument: voa6.i

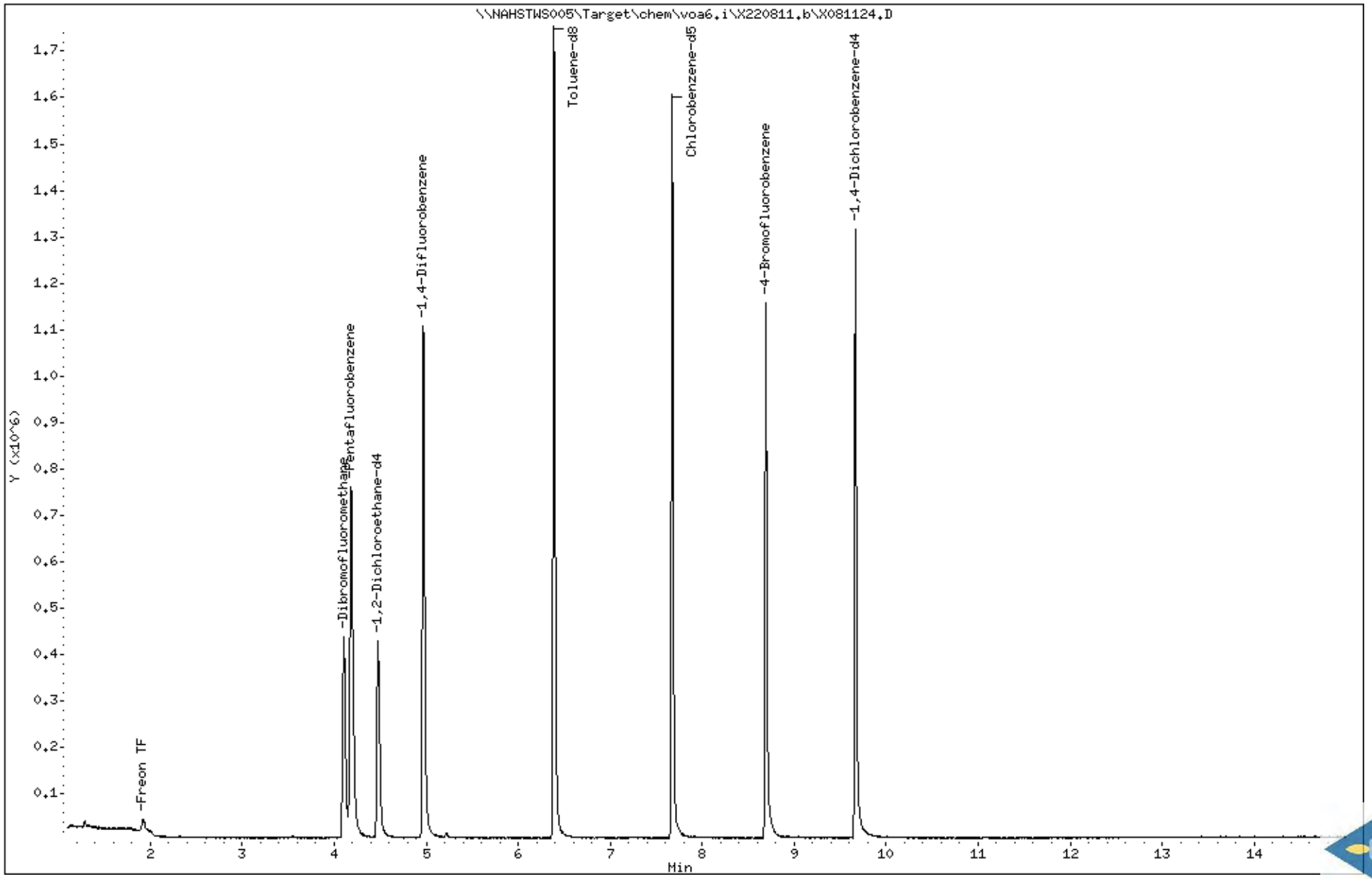
Sample Info: HS22080522-06;HS22080522-06;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081124.D
Inj Date : 11-AUG-2022 18:32
InstruID : voa6.i
LabSampID : HS22080522-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081125.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081125.D
Lab Smp Id: HS22080522-07 Client Smp ID: HS22080522-07
Inj Date : 11-AUG-2022 18:53
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-07;HS22080522-07;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	667710	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	944847	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	829834	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	361349	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.102	(0.981)	296082	46.9465	46.94
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	328457	47.5811	47.58
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1101670	53.2091	53.20
$ 69 4-Bromofluorobenzene	95	8.695	8.691	(1.133)	352309	47.5357	47.53

01135143

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081125.D

Page 1

Date : 11-AUG-2022 18:53

Client ID: HS22080522-07

Instrument: voa6.i

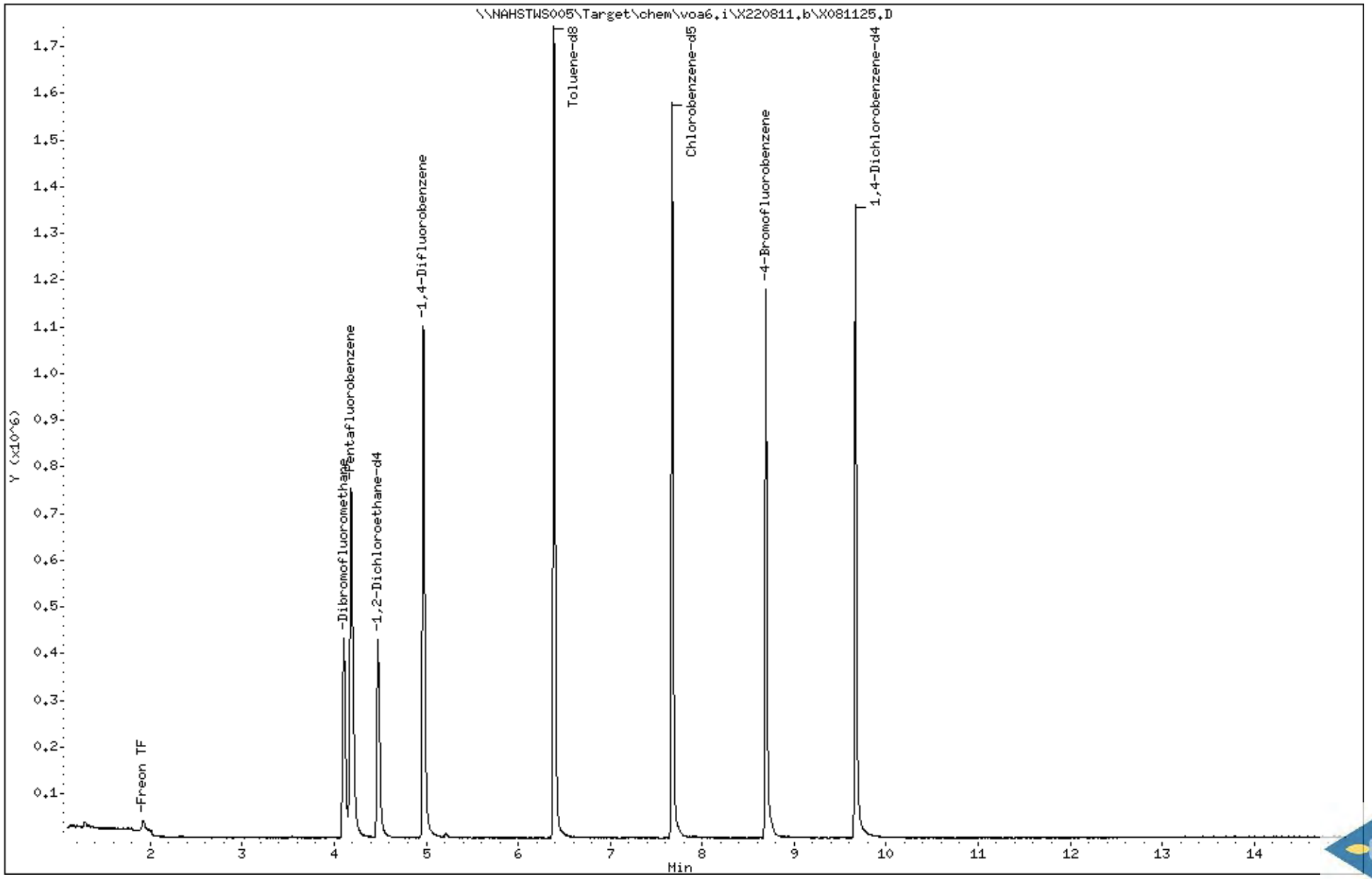
Sample Info: HS22080522-07;HS22080522-07;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081125.D
Inj Date : 11-AUG-2022 18:53
InstruID : voa6.i
LabSampID : HS22080522-07

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081126.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081126.D
Lab Smp Id: HS22080522-09 Client Smp ID: HS22080522-09
Inj Date : 11-AUG-2022 19:14
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-09;HS22080522-09;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	668776	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	952882	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	823892	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	343890	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.102	(0.981)	302321	47.8735	47.87
$ 35 1,2-Dichloroethane-d4	65	4.478	4.477	(1.070)	336746	48.7118	48.71
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1115797	54.2801	54.28
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	350272	47.6029	47.60

01135146

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081126.D

Date : 11-AUG-2022 19:14

Client ID: HS22080522-09

Instrument: voa6.i

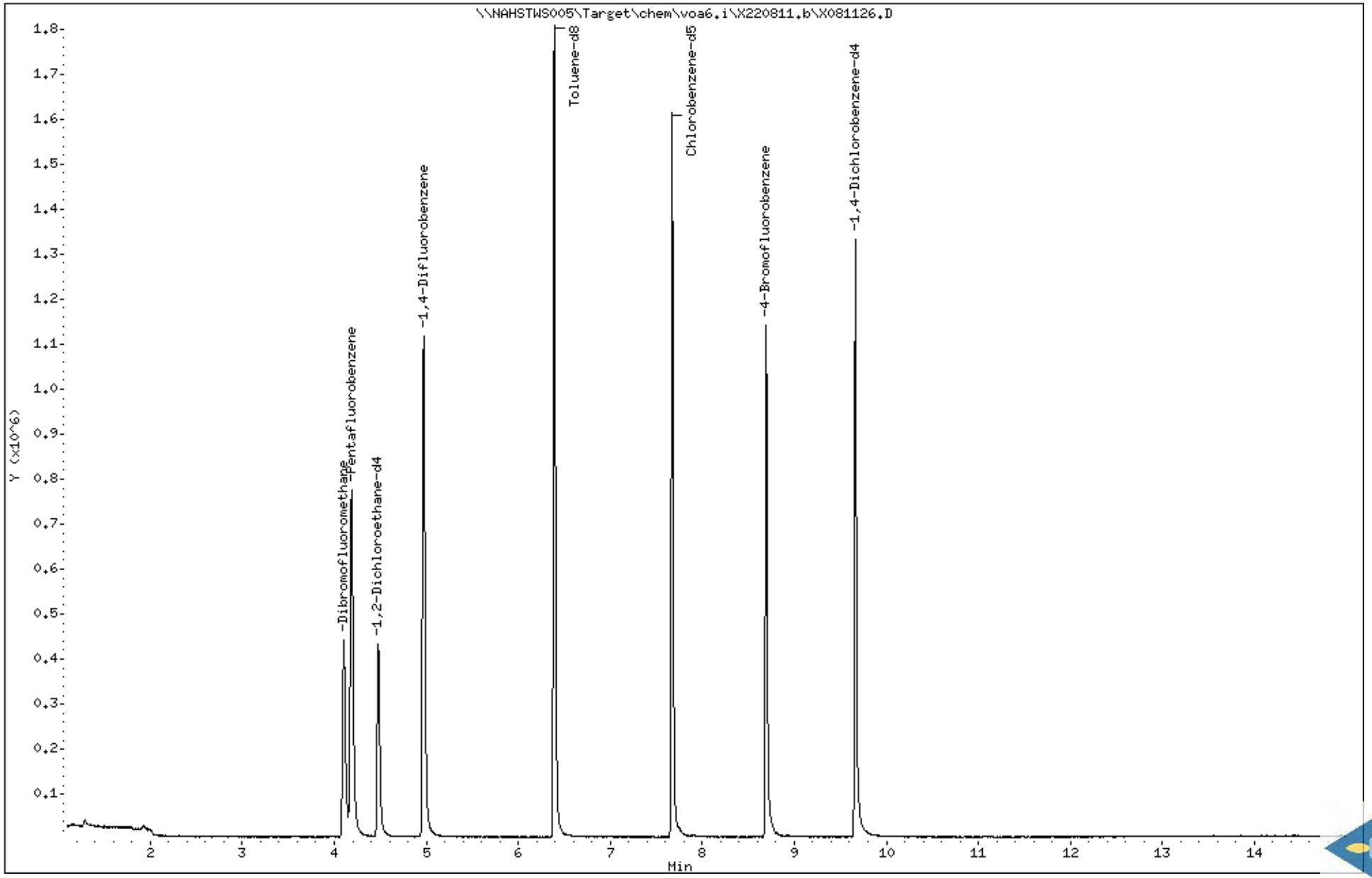
Sample Info: HS22080522-09;HS22080522-09;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081126.D
Inj Date : 11-AUG-2022 19:14
InstruID : voa6.i
LabSampID : HS22080522-09

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081127.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081127.D
Lab Smp Id: HS22080522-11 Client Smp ID: HS22080522-11
Inj Date : 11-AUG-2022 19:35
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-11;HS22080522-11;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	662841	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	947866	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	818737	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	366542	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.102	(0.981)	295368	47.1809	47.18
$ 35 1,2-Dichloroethane-d4	65	4.478	4.477	(1.070)	330760	48.2714	48.27
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1093063	53.5089	53.50
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	355929	48.6948	48.69

01135149

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081127.D

Date : 11-AUG-2022 19:35

Client ID: HS22080522-11

Instrument: voa6.i

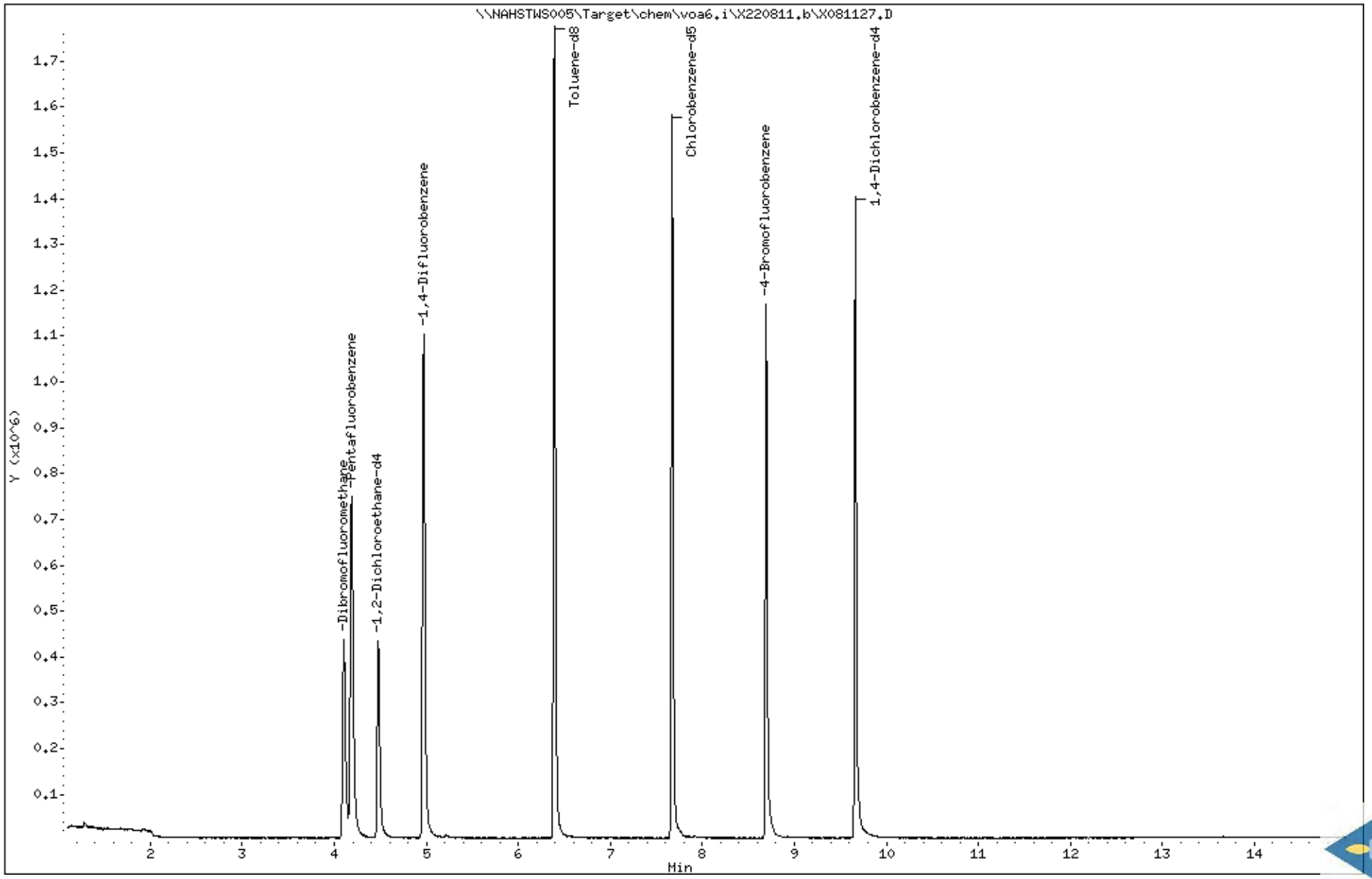
Sample Info: HS22080522-11;HS22080522-11;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081127.D
Inj Date : 11-AUG-2022 19:35
InstruID : voa6.i
LabSampID : HS22080522-11

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081128.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081128.D
Lab Smp Id: HS22080522-08 Client Smp ID: HS22080522-08
Inj Date : 11-AUG-2022 19:56
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-08;HS22080522-08;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	659723	50.0000	
* 36 1,4-Difluorobenzene	114	4.972	4.968	(1.000)	939073	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	811284	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	351914	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	293134	47.0433	47.04
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	331114	48.5533	48.55
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1082322	53.4699	53.46
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	344766	47.5824	47.58
33 1,2-Dichloroethane	62	4.564	4.560	(0.918)	24464	2.97043	2.97(a)
37 Benzene	78	4.522	4.515	(0.910)	14835	0.66667	0.66(a)
27 cis-1,2-Dichloroethene	96	3.536	3.529	(0.845)	128873	19.6486	19.64
38 Trichloroethene	130	5.208	5.208	(1.047)	1490951	226.185	226.18(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.

01135152

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081128.D

Date : 11-AUG-2022 19:56

Client ID: HS22080522-08

Instrument: voa6.i

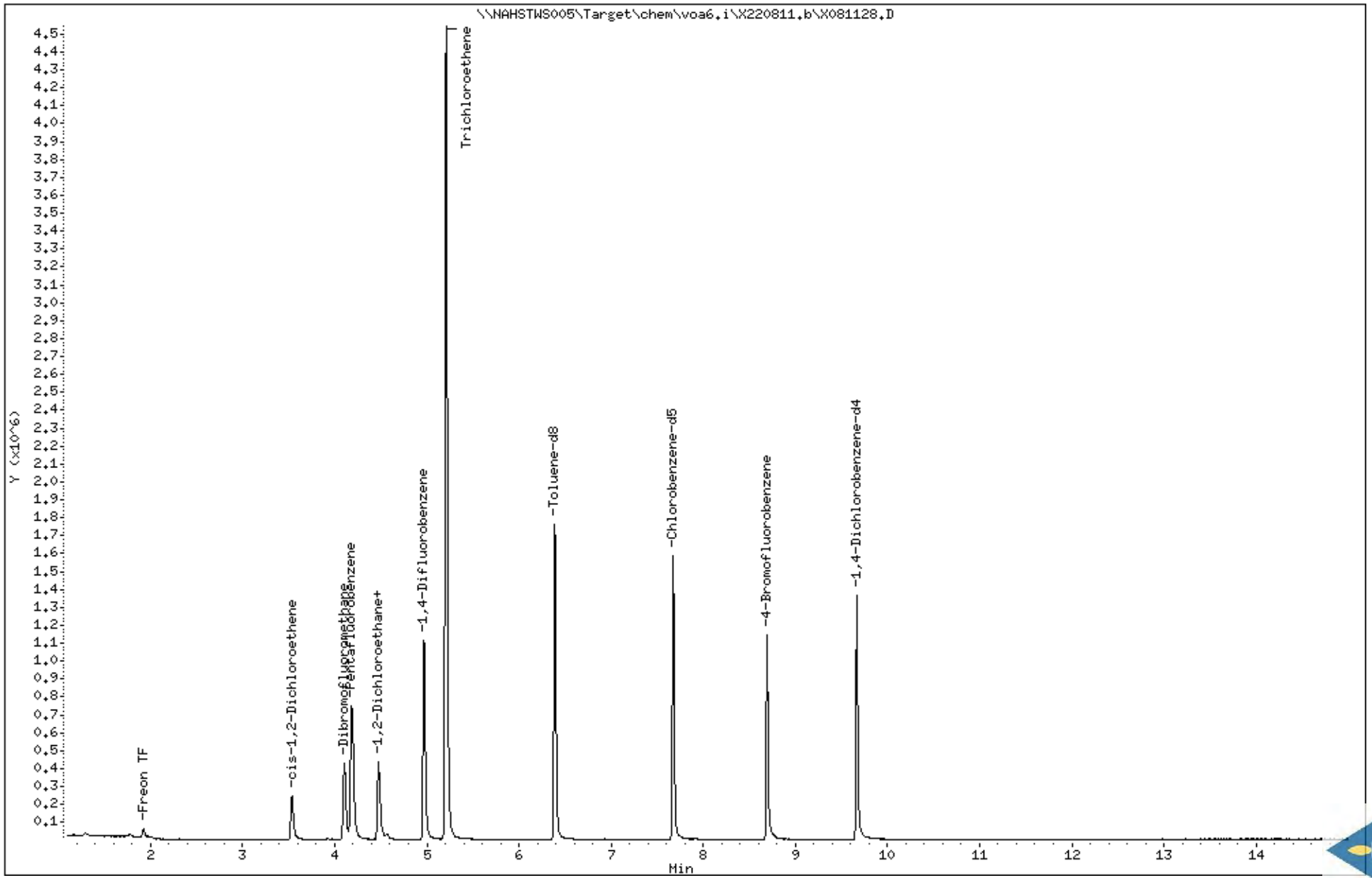
Sample Info: HS22080522-08;HS22080522-08;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081128.D

Date : 11-AUG-2022 19:56

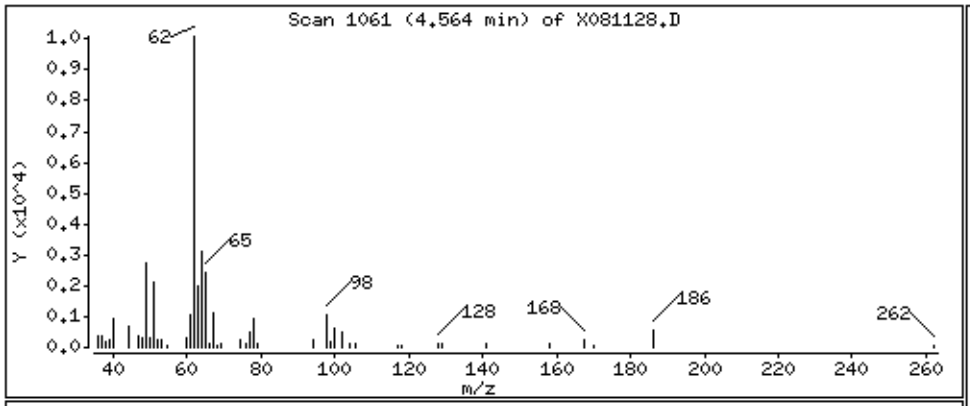
Client ID: HS22080522-08 Instrument: voa6.i

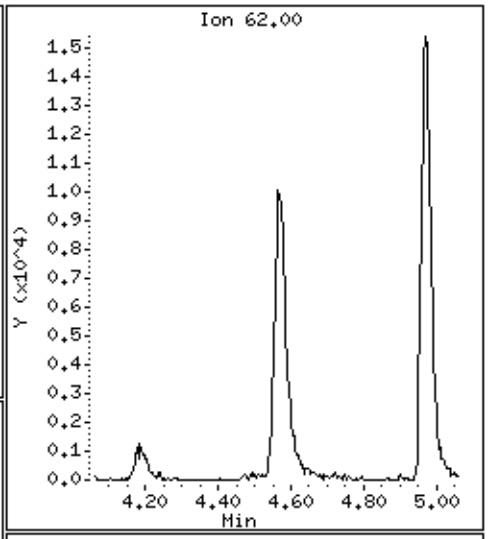
Sample Info: HS22080522-08;HS22080522-08;;;

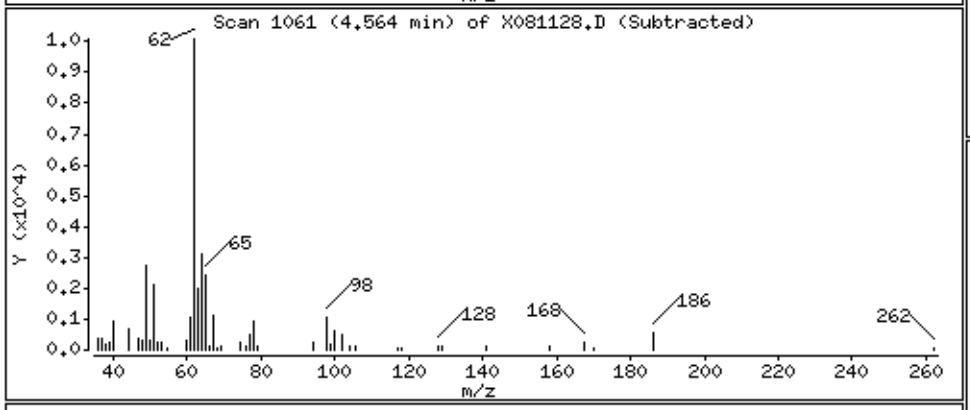
Purge Volume: 5.0 Operator: PC

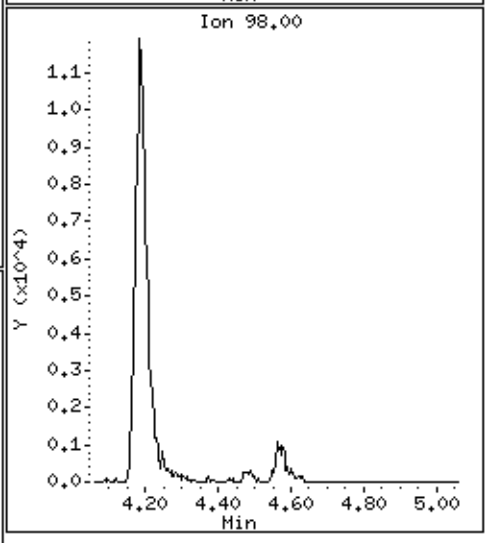
Column phase: DB624 Column diameter: 0.18

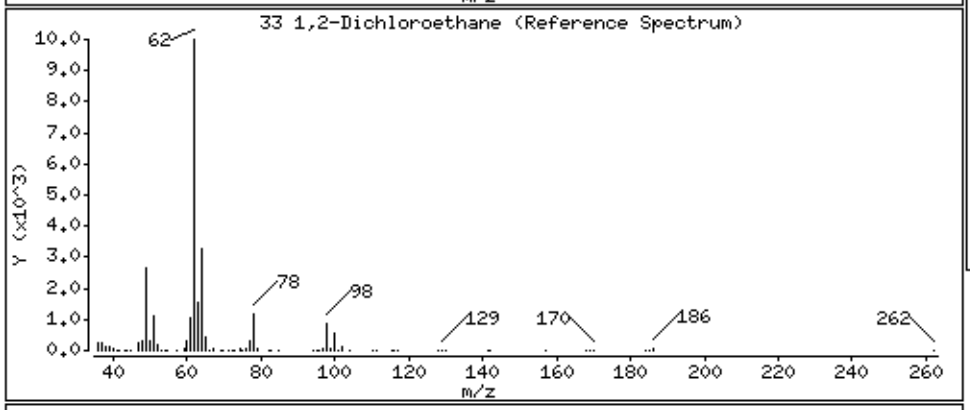
33 1,2-Dichloroethane Concentration: 2.97 ug/l

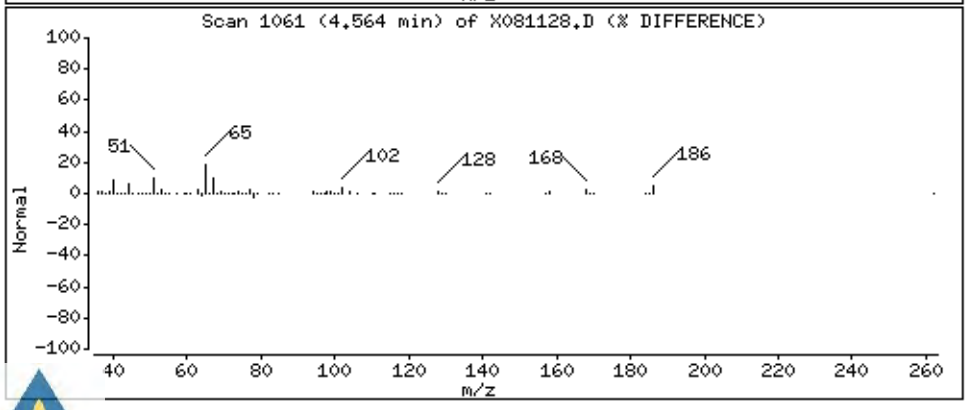












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081128.D Page 3

Date : 11-AUG-2022 19:56

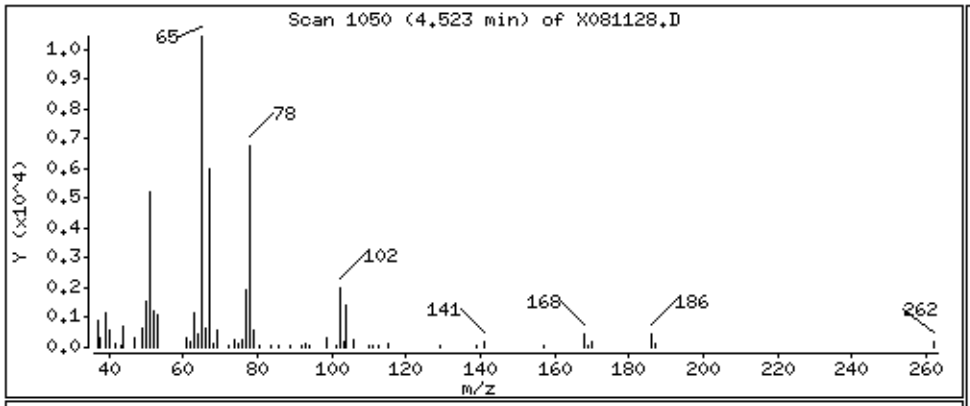
Client ID: HS22080522-08 Instrument: voa6.i

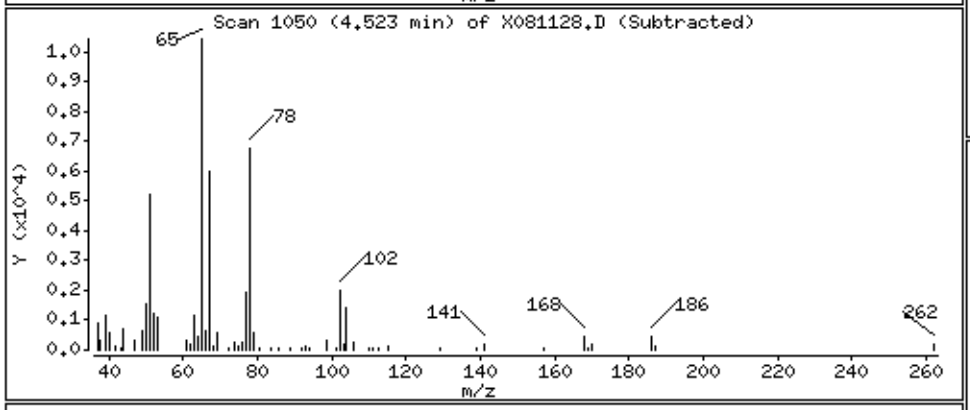
Sample Info: HS22080522-08;HS22080522-08;;;

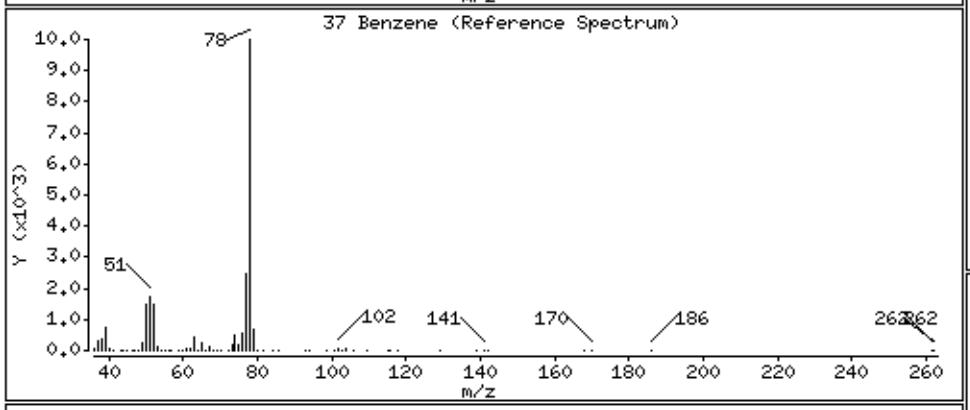
Purge Volume: 5.0 Operator: PC

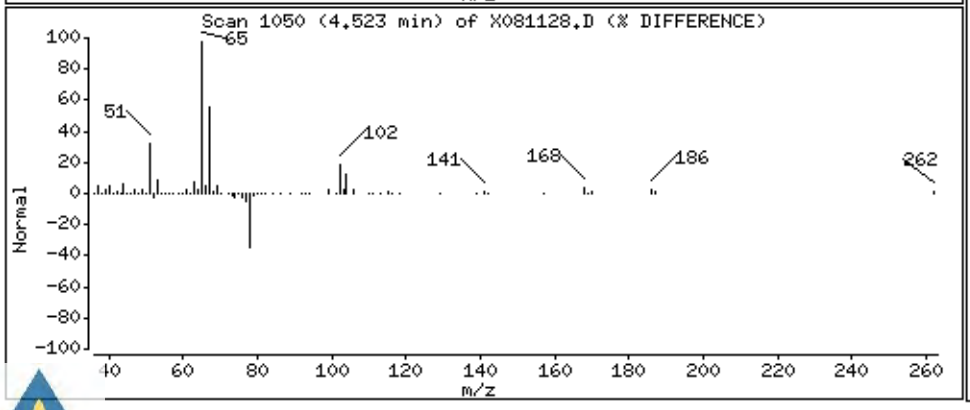
Column phase: DB624 Column diameter: 0.18

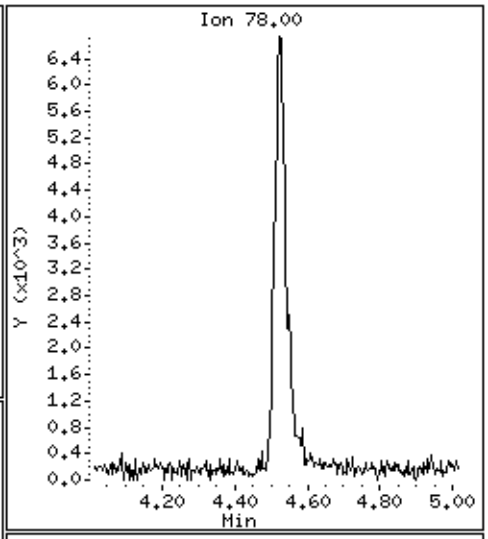
37 Benzene Concentration: 0.66 ug/l

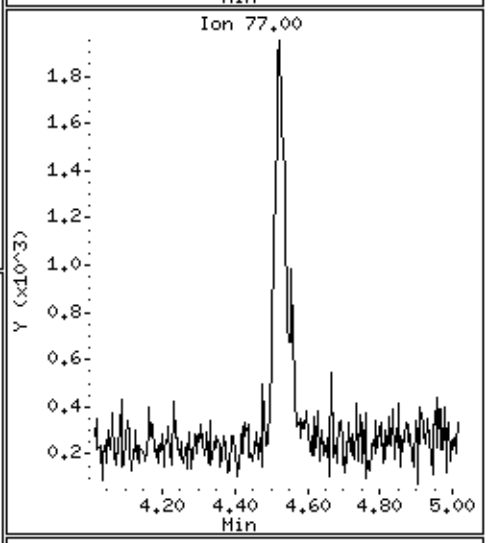


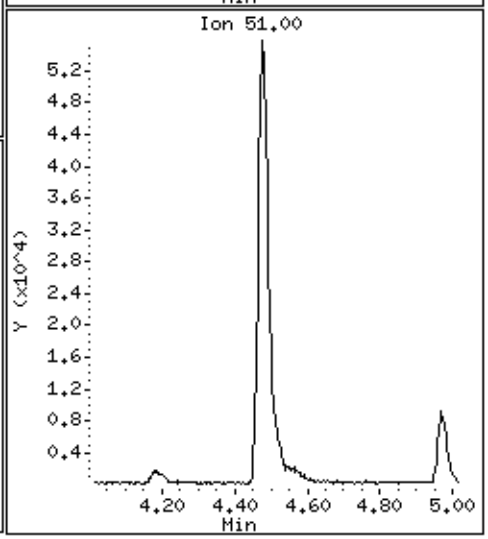












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081128.D Page 4

Date : 11-AUG-2022 19:56

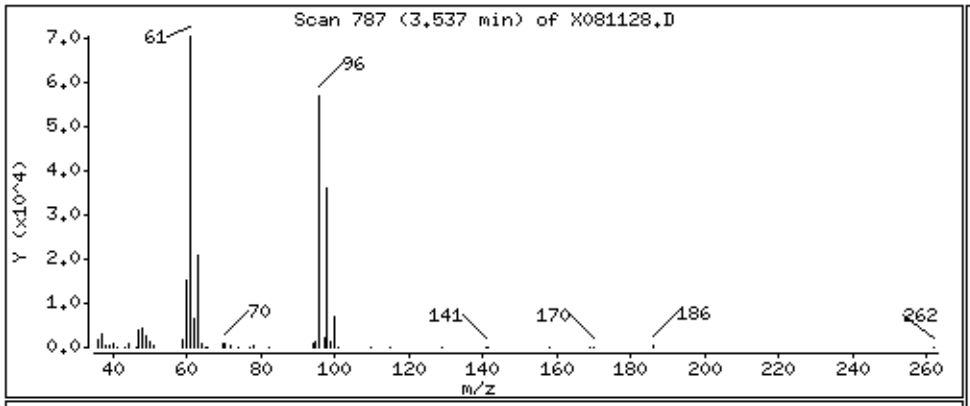
Client ID: HS22080522-08 Instrument: voa6.i

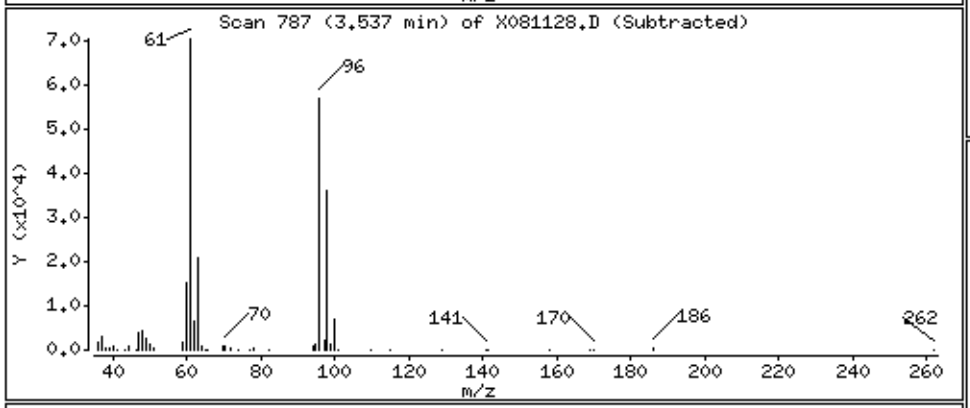
Sample Info: HS22080522-08;HS22080522-08;;;

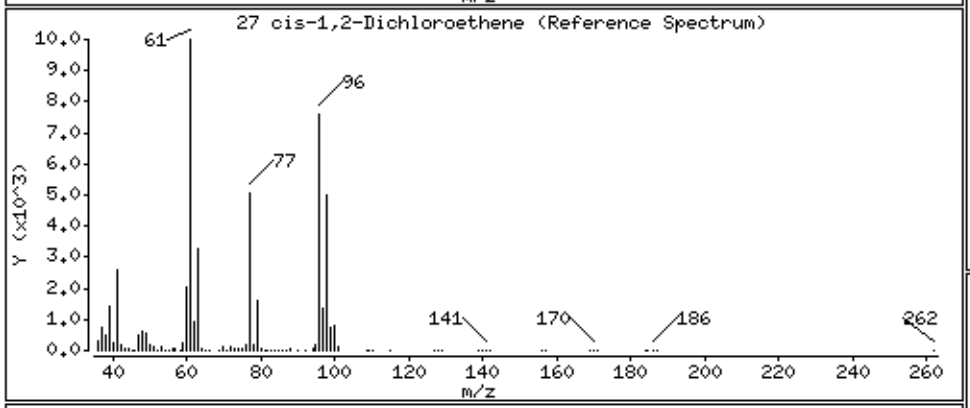
Purge Volume: 5.0 Operator: PC

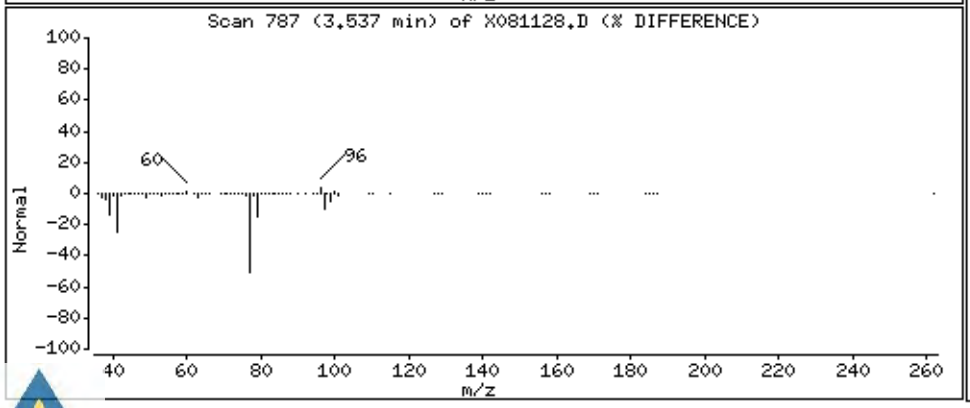
Column phase: DB624 Column diameter: 0.18

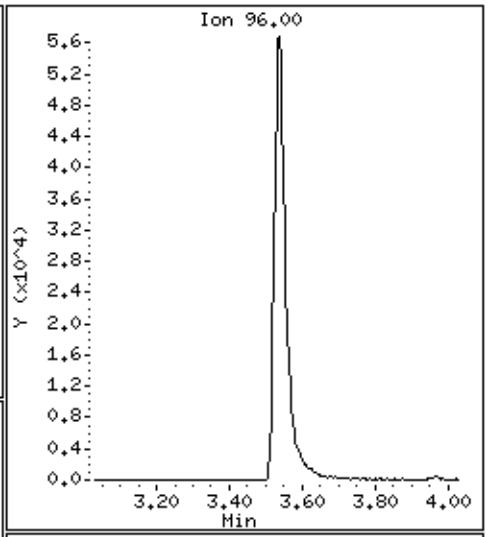
27 cis-1,2-Dichloroethene Concentration: 19.64 ug/l

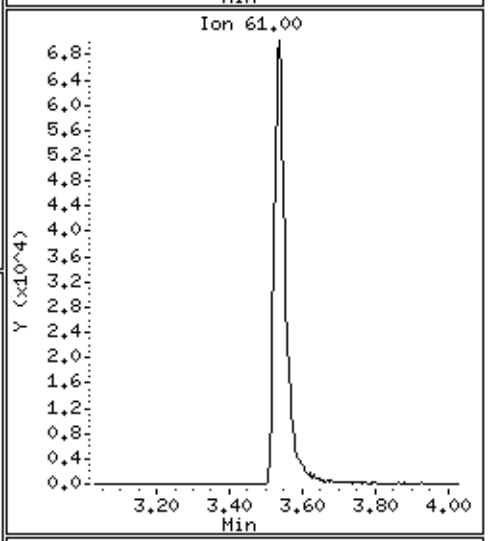


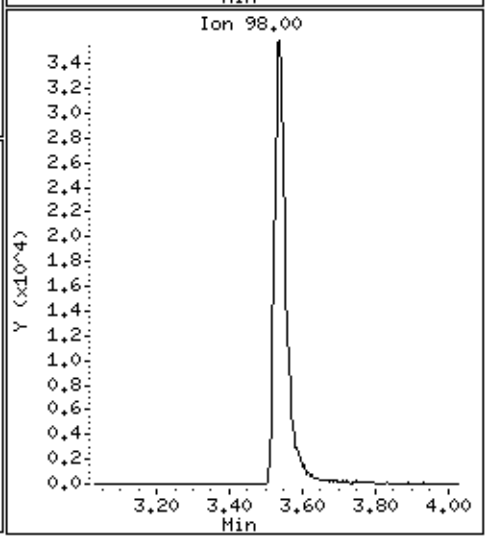












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081128.D Page 5

Date : 11-AUG-2022 19:56

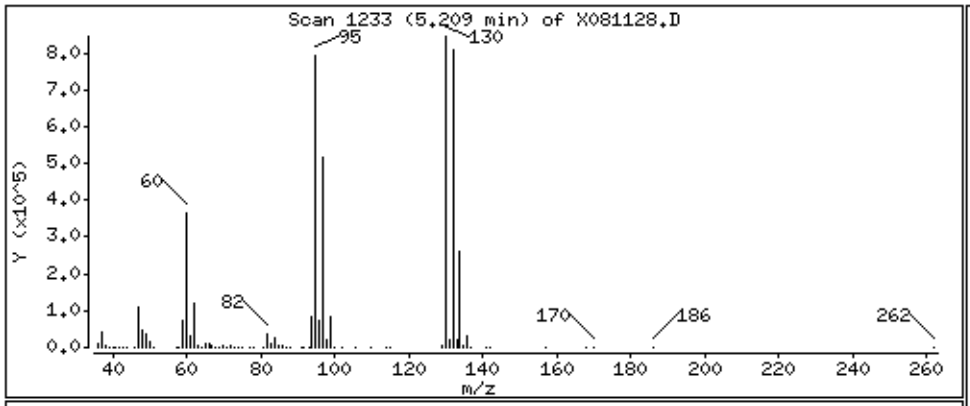
Client ID: HS22080522-08 Instrument: voa6.i

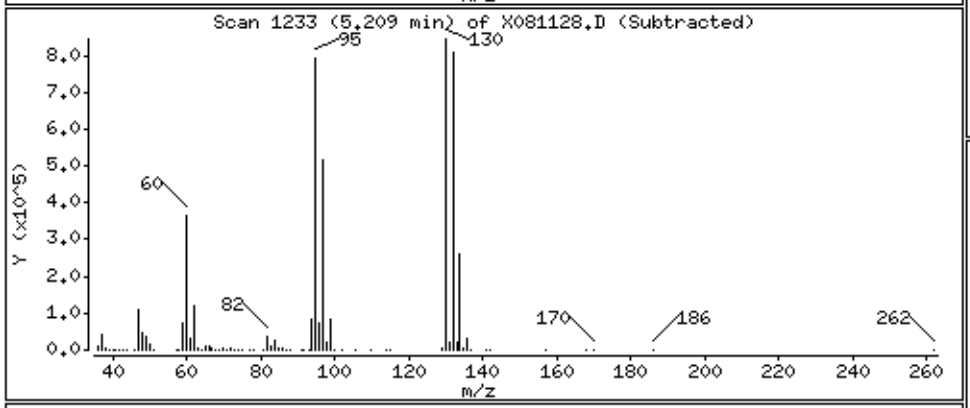
Sample Info: HS22080522-08;HS22080522-08;;;

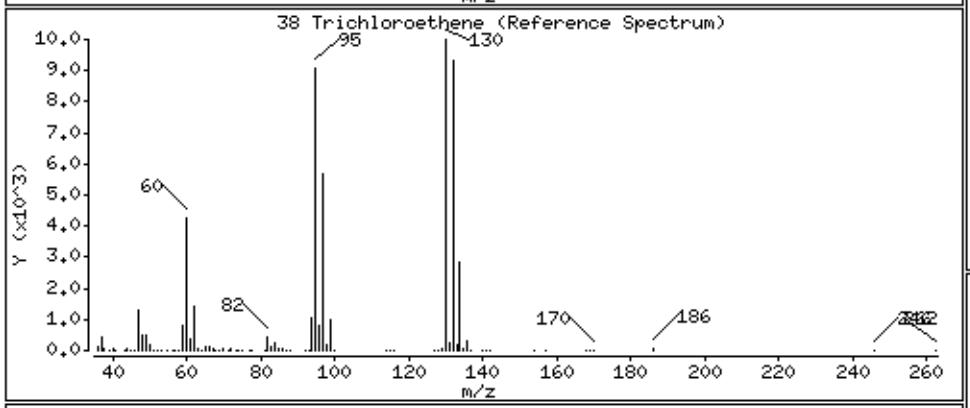
Purge Volume: 5.0 Operator: PC

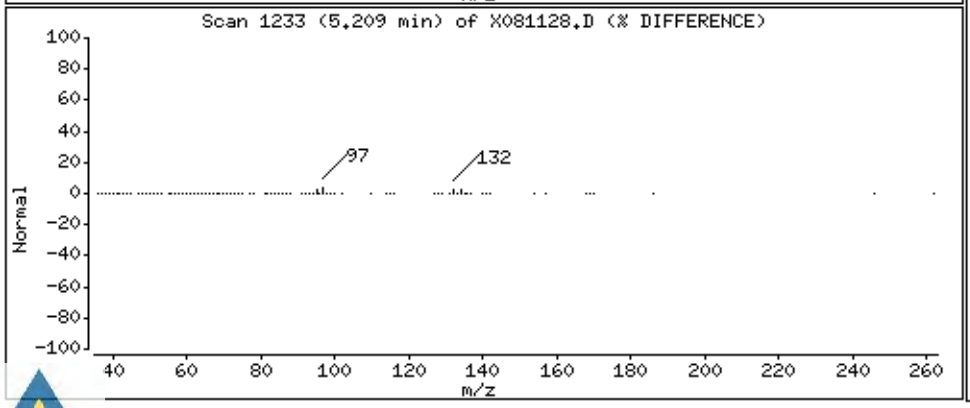
Column phase: DB624 Column diameter: 0.18

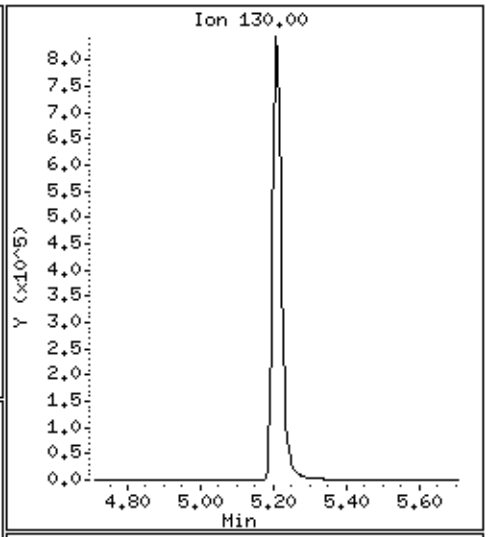
38 Trichloroethene Concentration: 226.18 ug/l

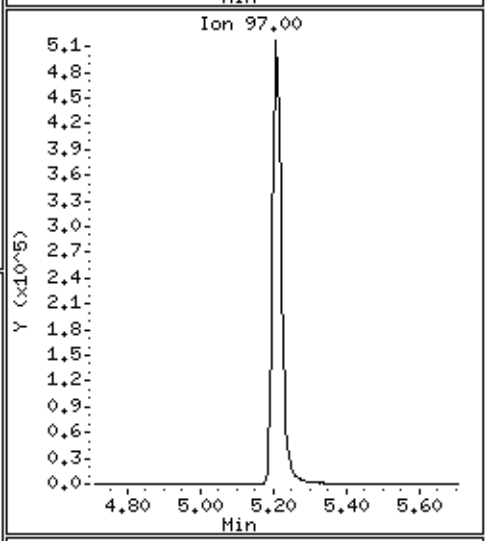


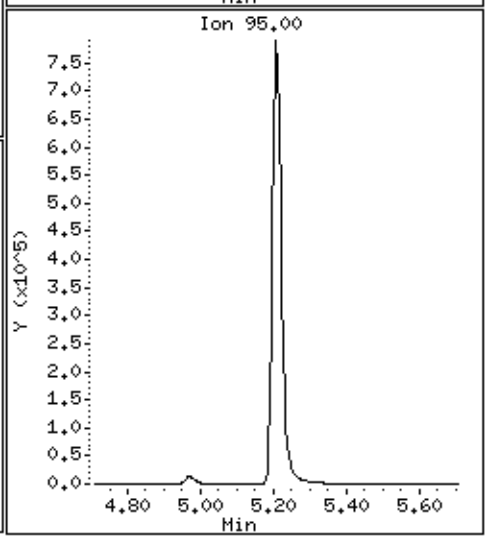












Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081128.D
Inj Date : 11-AUG-2022 19:56
InstruID : voa6.i
LabSampID : HS22080522-08

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081129.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081129.D
Lab Smp Id: HS22080522-10 Client Smp ID: HS22080522-10
Inj Date : 11-AUG-2022 20:17
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-10;HS22080522-10;;;
Misc Info : HS22052000V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:16 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 28
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	656876	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	937712	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	803865	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	358905	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.102	(0.981)	295510	47.6392	47.63
$ 35 1,2-Dichloroethane-d4	65	4.478	4.477	(1.070)	335015	49.3436	49.34
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1081857	53.9402	53.94
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	347375	48.3989	48.39
11 1,1-Dichloroethene	96	1.925	1.921	(0.460)	3533	0.64431	3.22(a)
33 1,2-Dichloroethane	62	4.564	4.560	(0.919)	164489	20.0013	100.00
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	317210	48.5731	242.86
38 Trichloroethene	130	5.209	5.208	(1.048)	2034757	309.131	1545.65(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.

01135159

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081129.D

Date : 11-AUG-2022 20:17

Client ID: HS22080522-10

Instrument: voa6.i

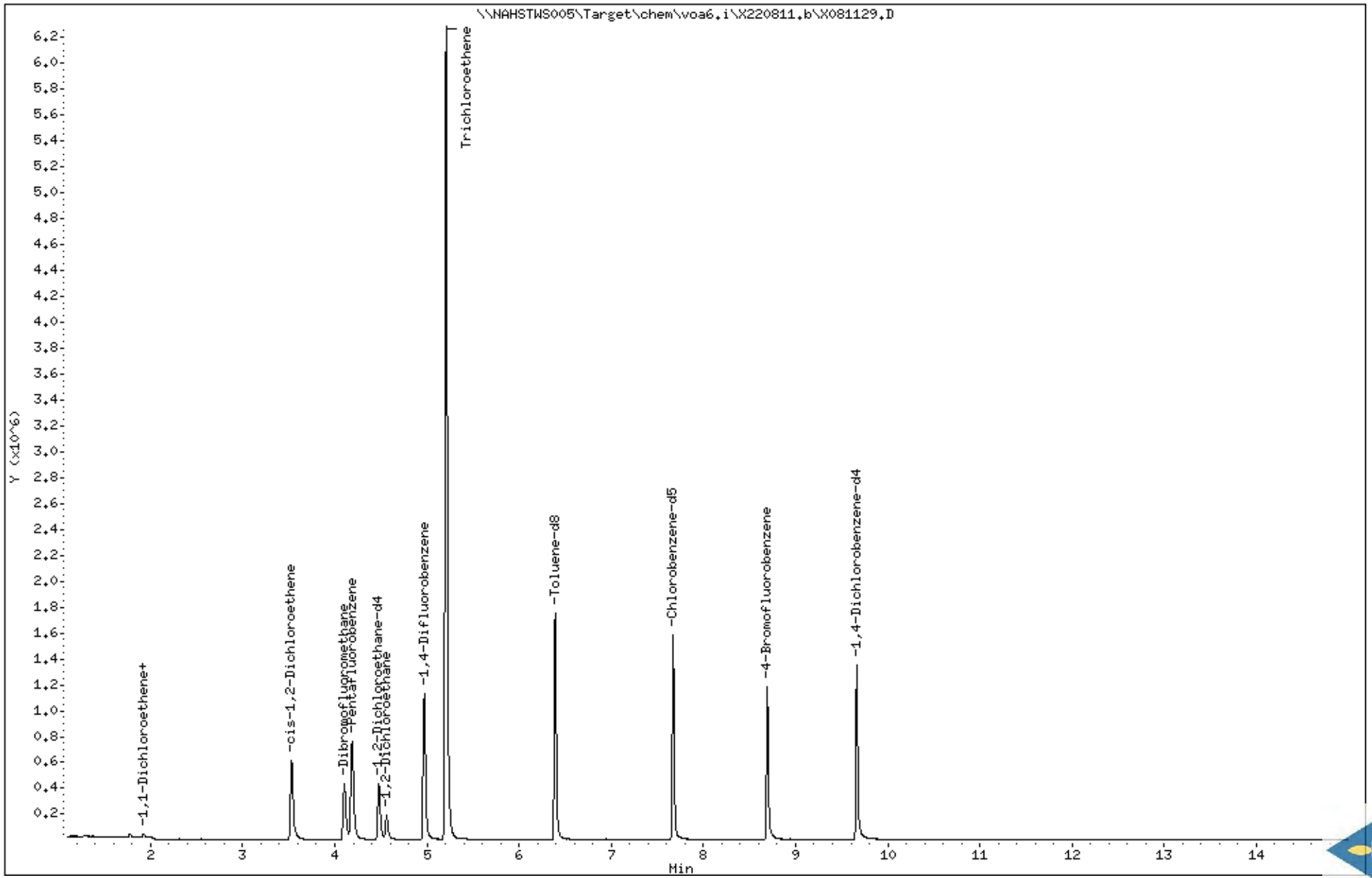
Sample Info: HS22080522-10;HS22080522-10;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081129.D

Date : 11-AUG-2022 20:17

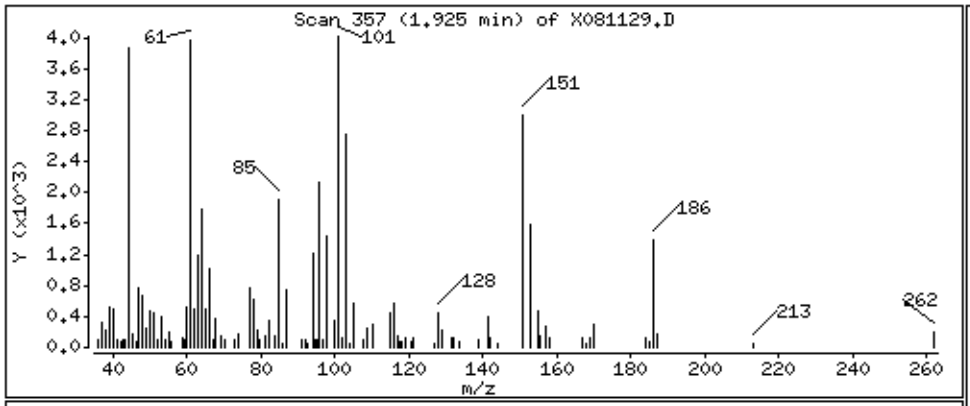
Client ID: HS22080522-10 Instrument: voa6.i

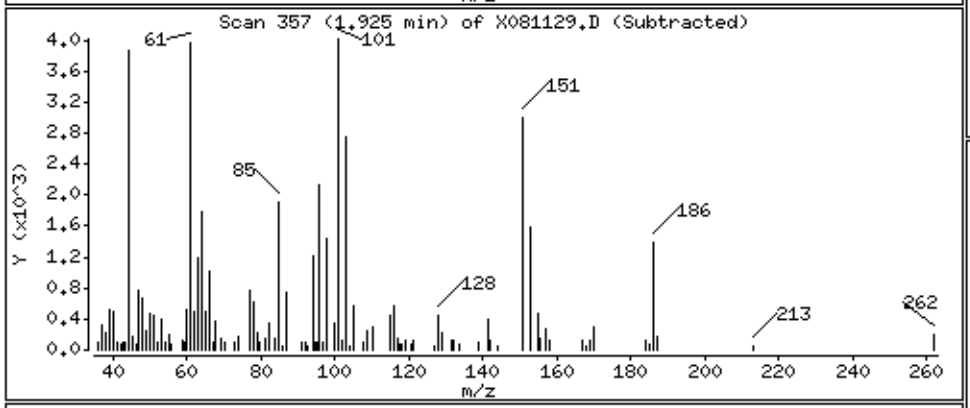
Sample Info: HS22080522-10;HS22080522-10;;;

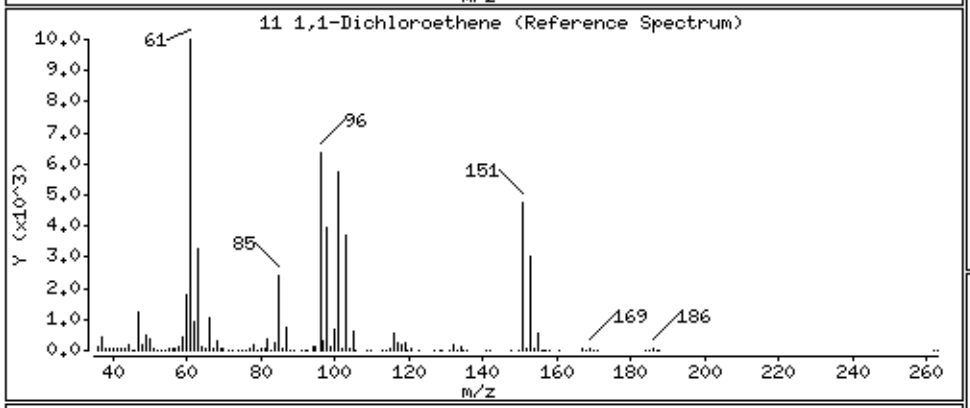
Purge Volume: 5.0 Operator: PC

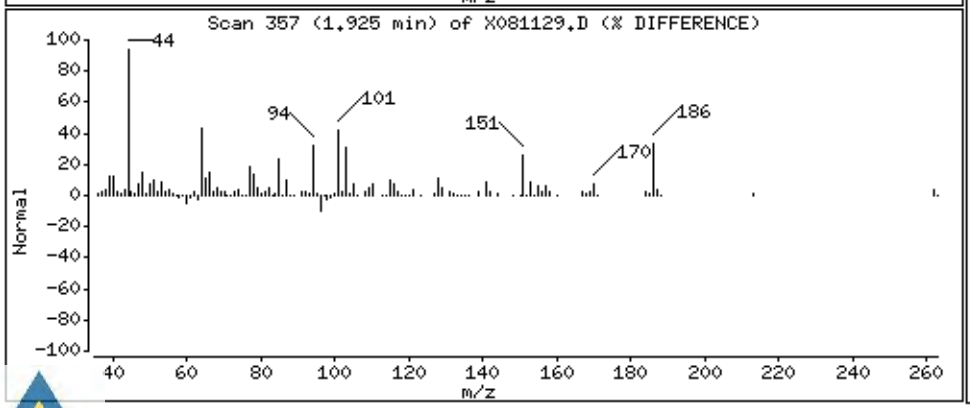
Column phase: DB624 Column diameter: 0.18

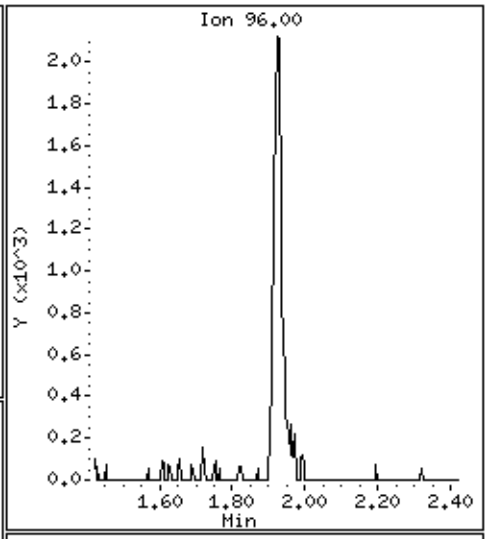
11 1,1-Dichloroethene Concentration: 3.22 ug/l

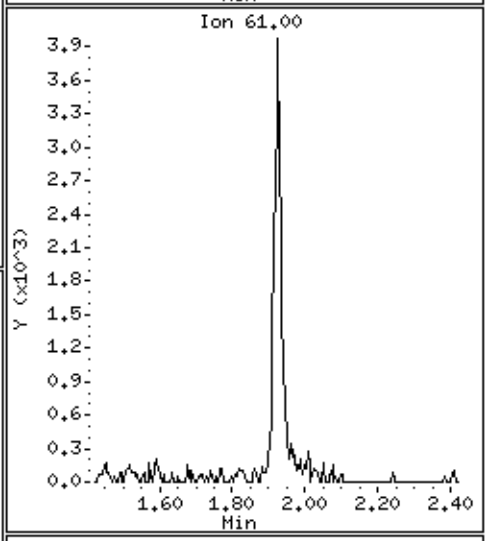


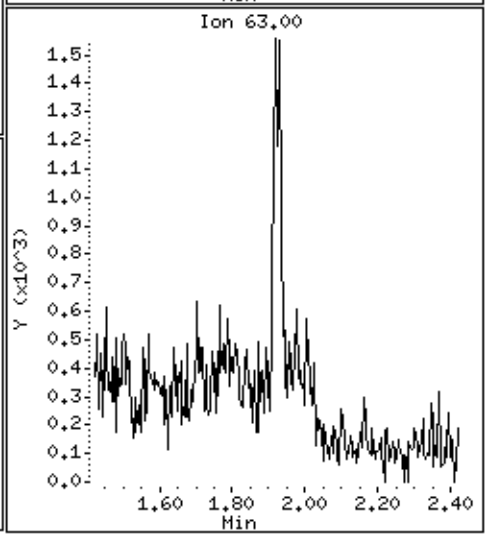












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081129.D Page 3

Date : 11-AUG-2022 20:17

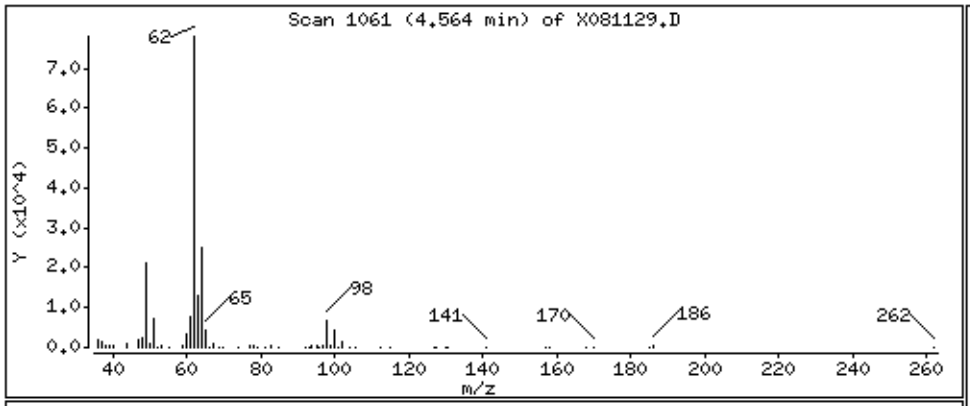
Client ID: HS22080522-10 Instrument: voa6.i

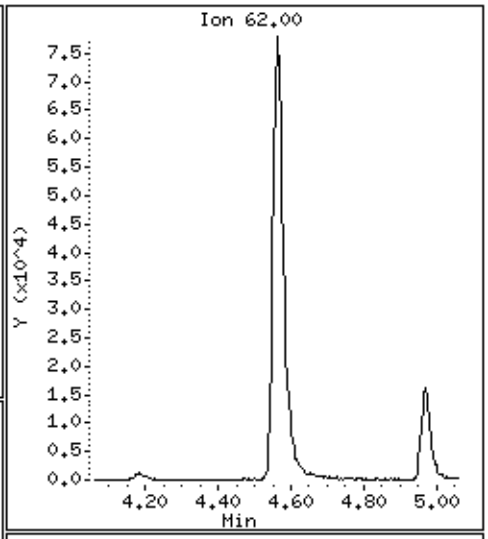
Sample Info: HS22080522-10;HS22080522-10;;;

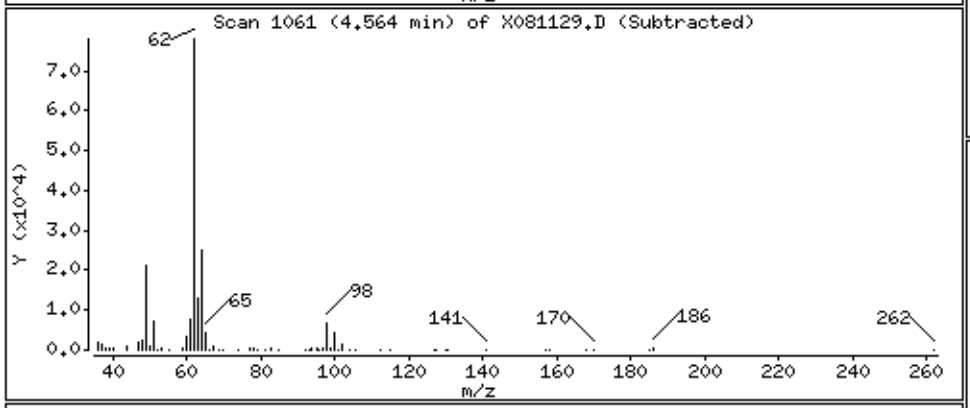
Purge Volume: 5.0 Operator: PC

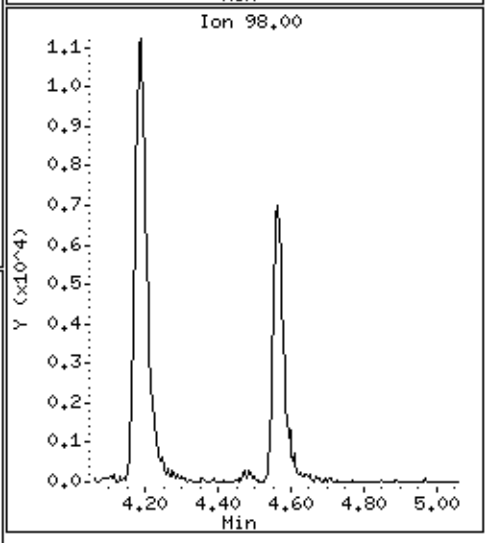
Column phase: DB624 Column diameter: 0.18

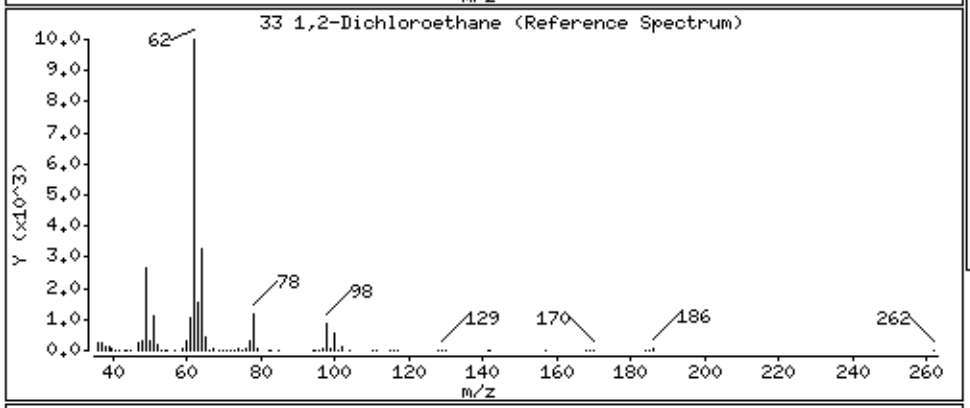
33 1,2-Dichloroethane Concentration: 100.00 ug/l

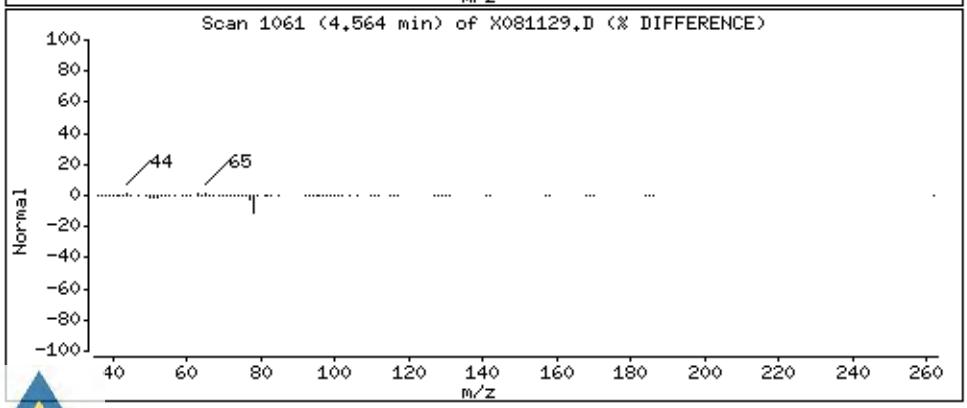












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081129.D

Date : 11-AUG-2022 20:17

Client ID: HS22080522-10

Instrument: voa6.i

Sample Info: HS22080522-10;HS22080522-10;;;

Purge Volume: 5.0

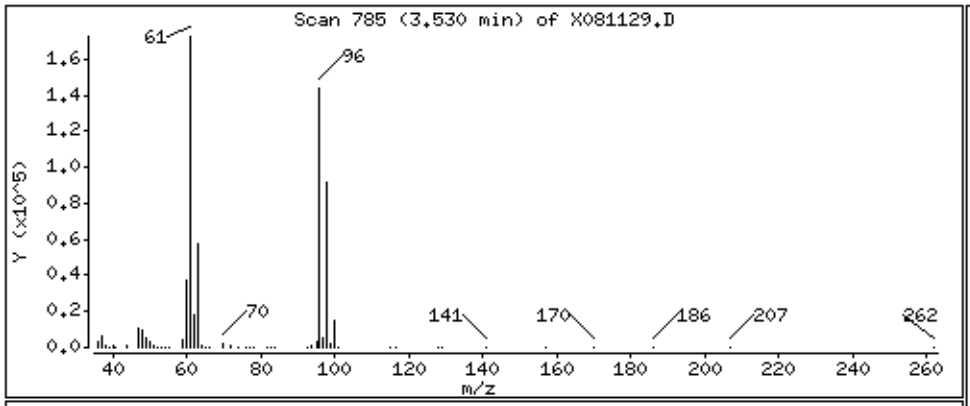
Operator: PC

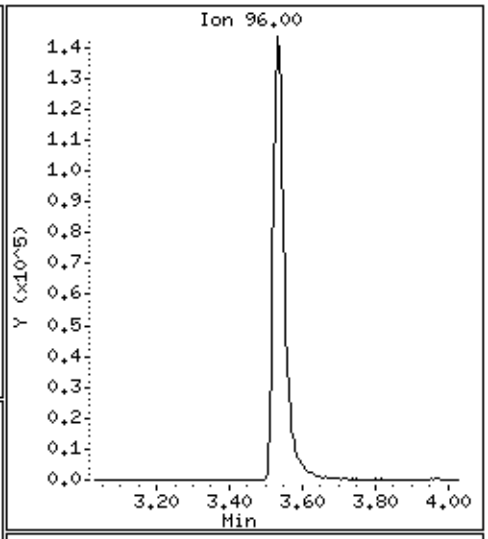
Column phase: DB624

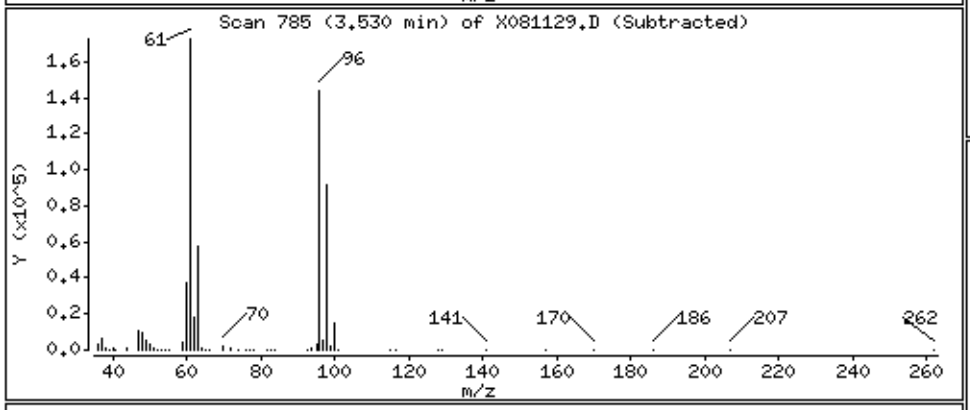
Column diameter: 0.18

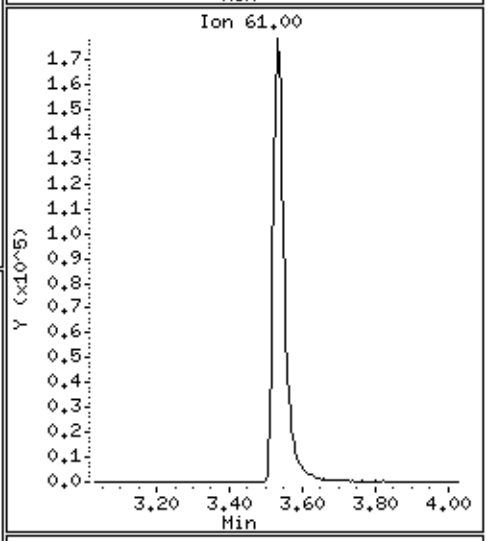
27 cis-1,2-Dichloroethene

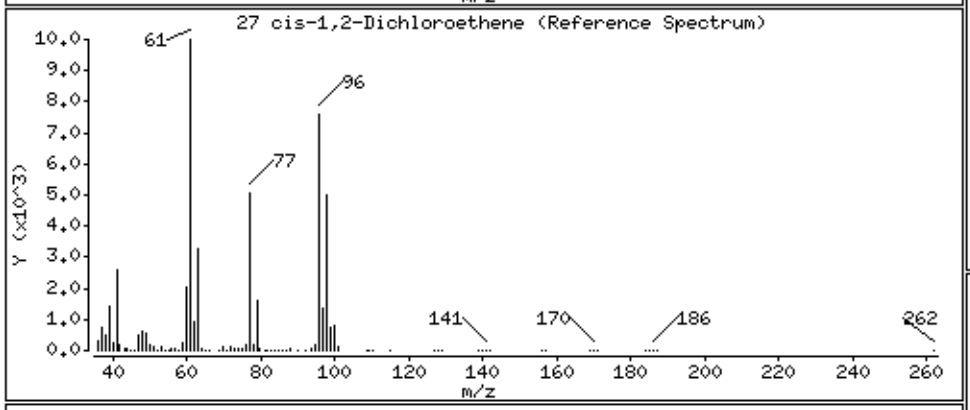
Concentration: 242.86 ug/l

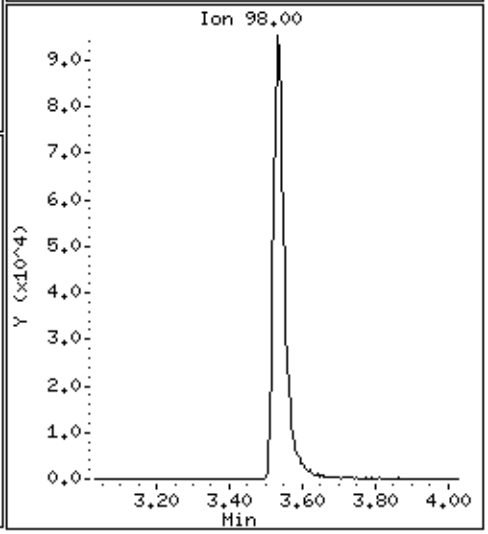


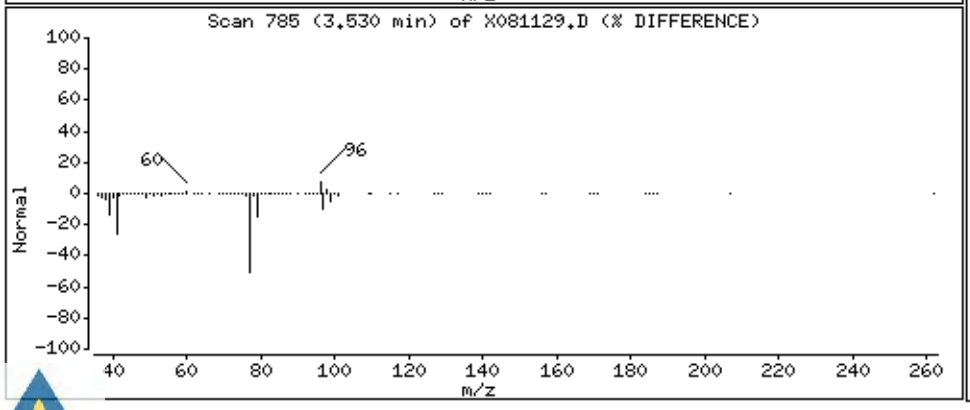












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081129.D Page 5

Date : 11-AUG-2022 20:17

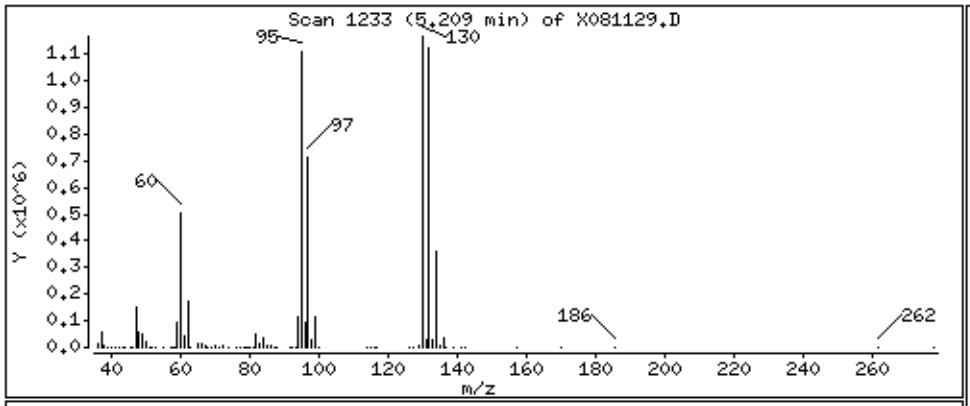
Client ID: HS22080522-10 Instrument: voa6.i

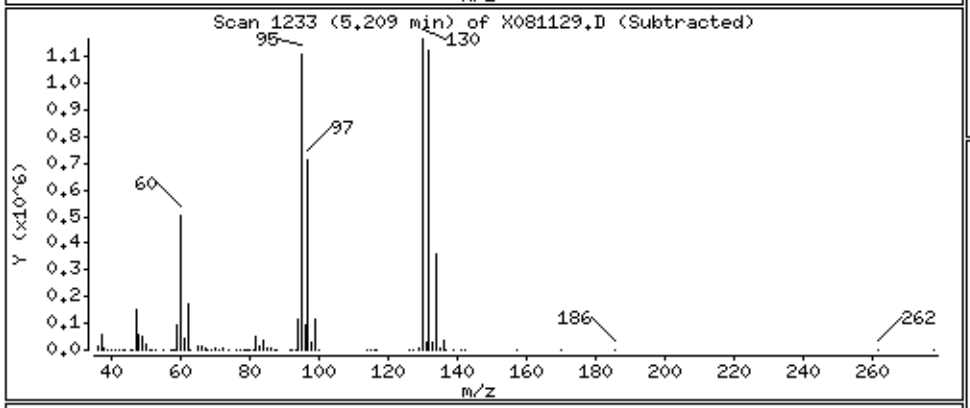
Sample Info: HS22080522-10;HS22080522-10;;;

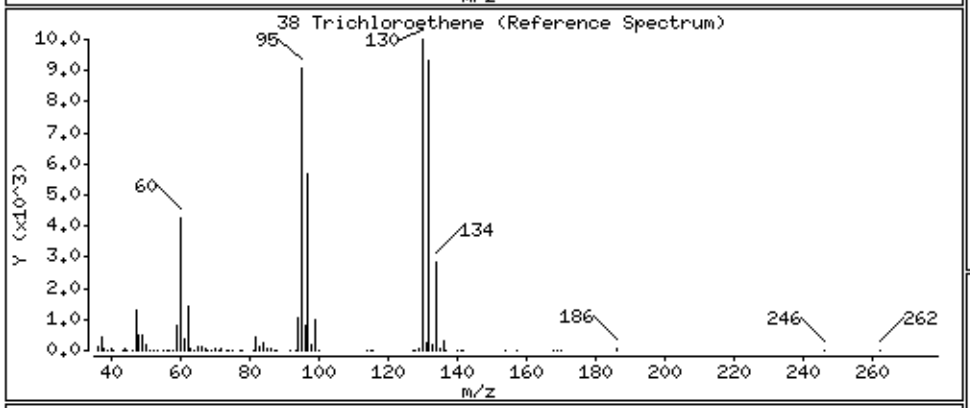
Purge Volume: 5.0 Operator: PC

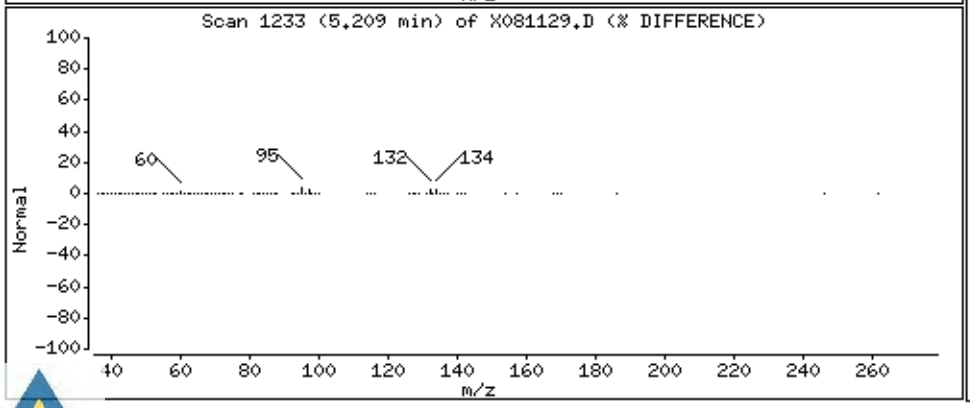
Column phase: DB624 Column diameter: 0.18

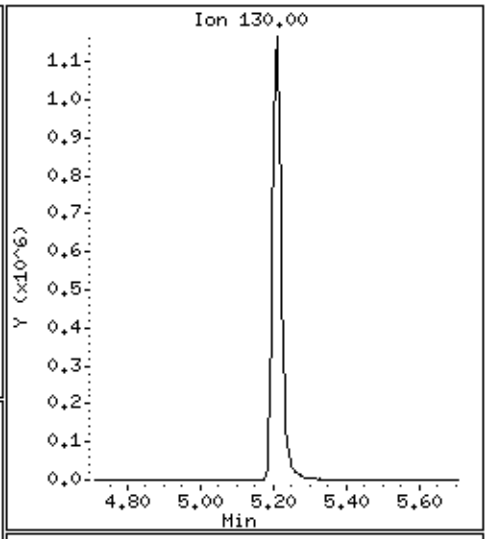
38 Trichloroethene Concentration: 1545.65 ug/l

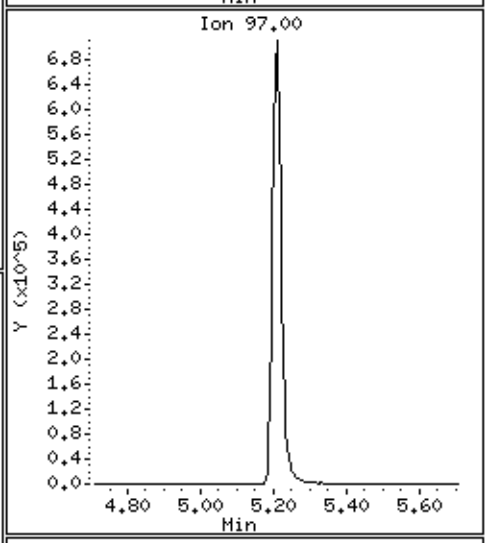


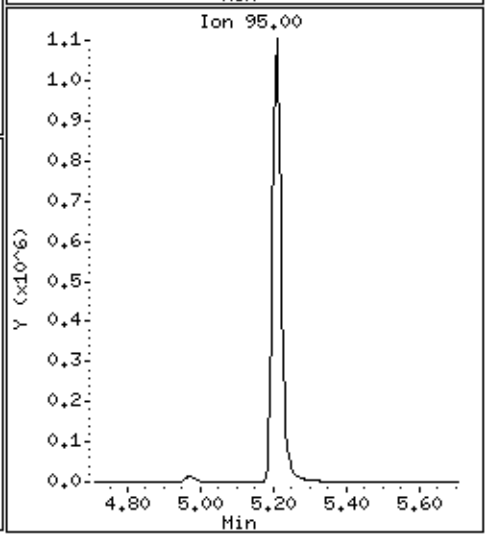












Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081129.D
Inj Date : 11-AUG-2022 20:17
InstruID : voa6.i
LabSampID : HS22080522-10

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081130.D Page 1
Report Date: 19-Aug-2022 11:17

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081130.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 11-AUG-2022 20:38
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\8260W.m
Meth Date : 19-Aug-2022 11:17 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 29 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

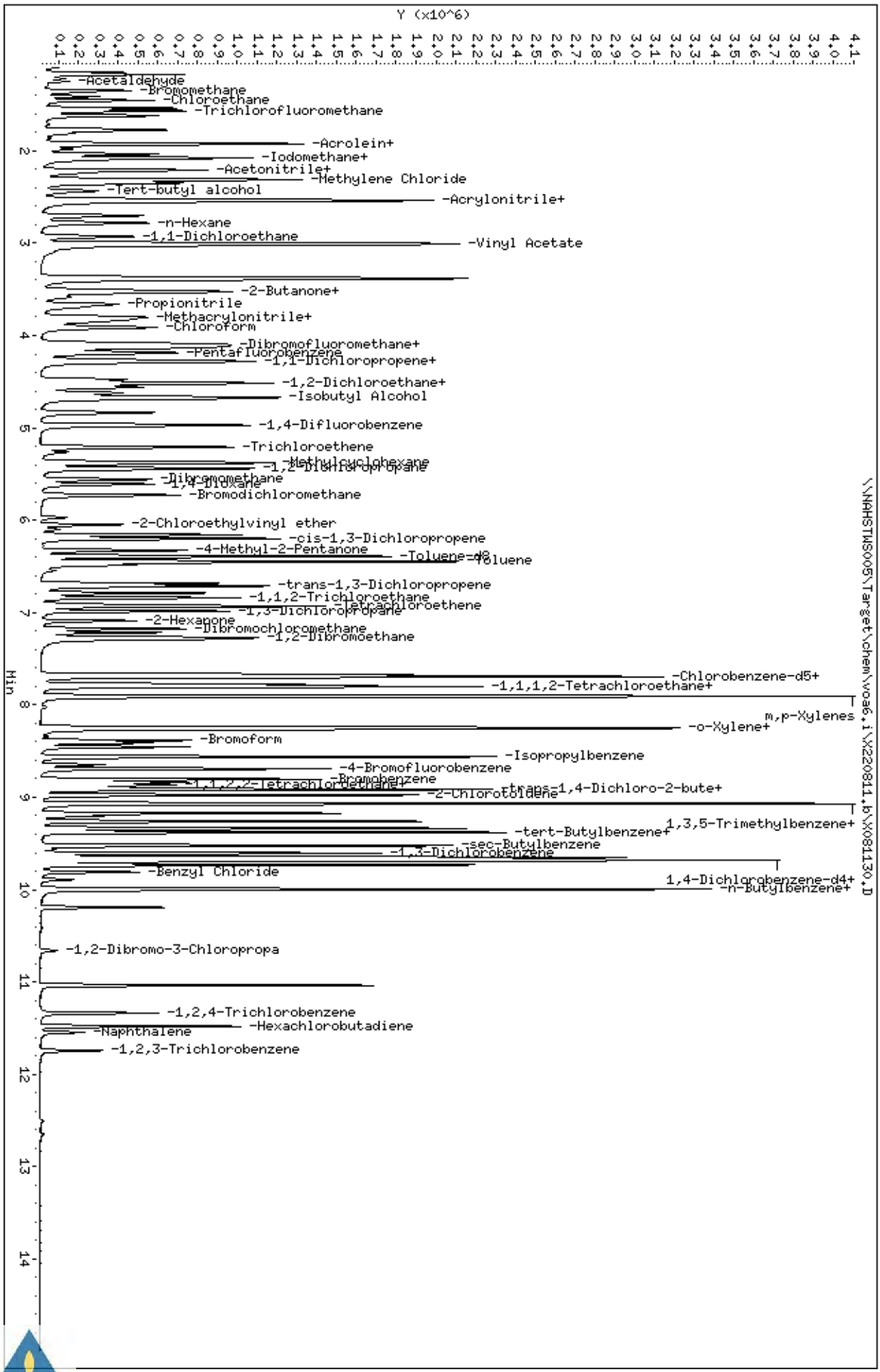
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	569313	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	882986	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	830230	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	408946	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	296601	50.0000	55.28
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	324482	50.0000	55.18
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1041640	50.0000	50.28
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	377422	50.0000	50.95
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	304868	50.0000	52.26
31 1,1,1-Trichloroethane	97	4.091	4.091	(0.978)	446107	50.0000	55.23
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	281414	50.0000	48.99
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	215148	50.0000	50.40
22 1,1-Dichloroethane	63	2.929	2.929	(0.700)	475253	50.0000	54.22
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	233664	50.0000	49.16
32 1,1-Dichloropropene	75	4.283	4.283	(0.862)	379989	50.0000	53.32
93 1,2,3-Trichlorobenzene	180	11.746	11.746	(1.216)	92909	50.0000	43.70
71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	225100	50.0000	50.83(M)
90 1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	177675	50.0000	47.70
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	1034671	50.0000	52.74
89 1,2-Dibromo-3-Chloropropane	155	10.663	10.663	(1.104)	19127	50.0000	44.41

57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	275019	50.0000	50.81
88	1,2-Dichlorobenzene	146	9.995	9.995 (1.035)	516433	50.0000	50.46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	403098	50.0000	52.05
42	1,2-Dichloropropane	63	5.441	5.441	(1.095)	278568	50.0000	51.25
75	1,3,5-Trimethylbenzene	105	9.070	9.070	(0.939)	1051104	50.0000	52.91
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	580428	50.0000	51.15
54	1,3-Dichloropropane	76	6.982	6.982	(0.910)	435599	50.0000	50.16
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	596158	50.0000	49.49
26	2,2-Dichloropropane	77	3.518	3.518	(0.841)	404980	50.0000	52.03
24	2-Butanone	43	3.585	3.585	(0.857)	149185	100.000	104.45
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	874183	50.0000	49.87
52	2-Hexanone	43	7.090	7.090	(0.924)	262688	100.000	100.62
77	4-Chlorotoluene	91	9.070	9.070	(0.939)	1003744	50.0000	51.30
82	p-Isopropyltoluene	119	9.651	9.651	(0.999)	1069138	50.0000	53.59
45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	419758	100.000	103.76
10	Acetone	43	1.981	1.981	(0.473)	117163	100.000	97.58(M)
37	Benzene	78	4.515	4.515	(0.909)	1071321	50.0000	51.20
74	Bromobenzene	156	8.807	8.807	(0.912)	357116	50.0000	51.13
29	Bromochloromethane	128	3.803	3.803	(0.909)	161142	50.0000	50.20
39	Bromodichloromethane	83	5.730	5.730	(1.153)	386016	50.0000	51.76
66	Bromoform	173	8.410	8.410	(1.096)	190542	50.0000	47.40
6	Bromomethane	94	1.347	1.347	(0.322)	198815	50.0000	51.14
19	Carbon Disulfide	76	2.078	2.078	(0.497)	1267411	100.000	100.73
34	Carbon Tetrachloride	117	4.271	4.271	(0.860)	388762	50.0000	51.04
59	Chlorobenzene	112	7.694	7.694	(1.003)	807010	50.0000	51.26
7	Chloroethane	64	1.411	1.411	(0.337)	178984	50.0000	49.01
28	Chloroform	83	3.911	3.911	(0.935)	517576	50.0000	53.89
3	Chloromethane	50	1.085	1.085	(0.259)	254272	50.0000	48.24
27	cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	308777	50.0000	54.55
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	471713	50.0000	51.49
55	Dibromochloromethane	129	7.177	7.177	(0.936)	312711	50.0000	50.74
44	Dibromomethane	93	5.557	5.557	(1.118)	185358	50.0000	50.83
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	219481	50.0000	40.43
61	Ethylbenzene	106	7.799	7.799	(1.017)	419750	50.0000	52.78
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	166698	50.0000	48.46
67	Isopropylbenzene	105	8.564	8.564	(1.116)	1275689	50.0000	53.34
62	m,p-Xylenes	106	7.904	7.904	(1.030)	1053715	100.000	106.52
17	Methylene Chloride	84	2.311	2.311	(0.552)	285046	50.0000	54.52
87	n-Butylbenzene	91	9.995	9.995	(1.035)	895407	50.0000	54.02
73	n-Propylbenzene	91	8.912	8.912	(0.922)	1456316	50.0000	53.98
92	Naphthalene	128	11.547	11.547	(1.195)	174543	50.0000	41.88
63	o-Xylene	106	8.245	8.245	(1.075)	499761	50.0000	51.97
81	sec-Butylbenzene	105	9.523	9.523	(0.986)	1220110	50.0000	52.92
64	Styrene	104	8.260	8.260	(1.077)	829856	50.0000	52.40
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	885102	50.0000	52.57
56	Tetrachloroethene	164	6.929	6.929	(0.903)	272493	50.0000	50.61
50	Toluene	91	6.449	6.449	(0.841)	1190717	50.0000	51.02
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.606)	268950	50.0000	53.70
51	trans-1,3-Dichloropropene	75	6.685	6.685	(1.346)	397844	50.0000	52.44
38	Trichloroethene	130	5.208	5.208	(1.048)	320100	50.0000	51.64
8	Trichlorofluoromethane	101	1.569	1.569	(0.375)	455787	50.0000	50.84
5	Vinyl Chloride	62	1.152	1.152	(0.275)	274836	50.0000	46.03

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081130.D
Date : 11-AUG-2022 20:38
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

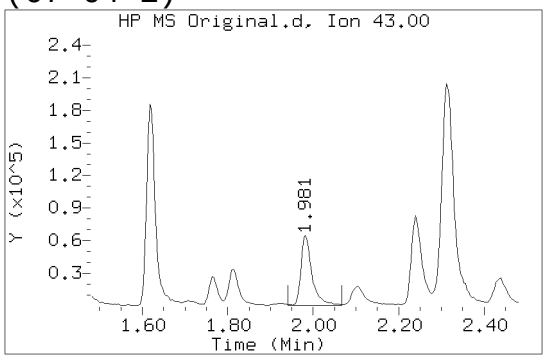
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220811.b\X081130.D
Inj Date : 11-AUG-2022 20:38
InstruID : voa6.i
LabSampID : CCV-END

Acetone (67-64-1)

Reason Code:

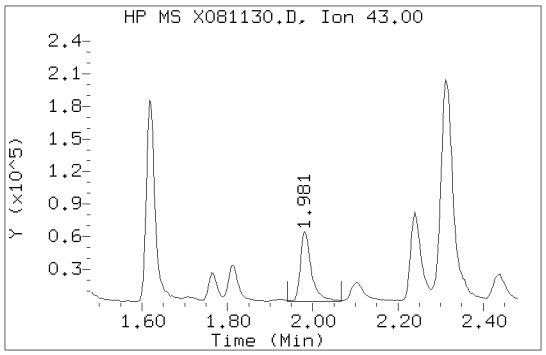
BEFORE

MASS
43
AREA
117163
HEIGHT
64555
19-Aug-2022
11:16
Linh
Pham



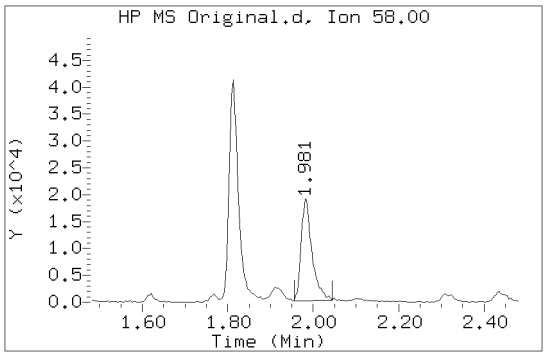
AFTER

MASS
43
AREA
117163
HEIGHT
64555
19-Aug-2022
11:16
Linh
Pham



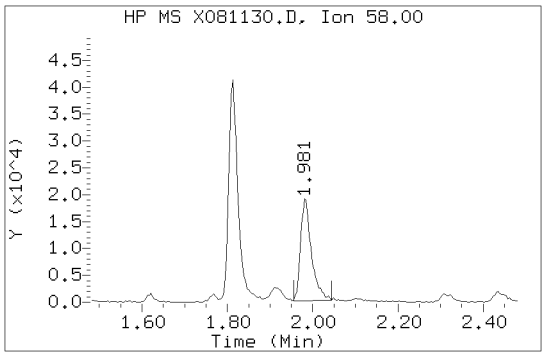
BEFORE

MASS
58
AREA
34280
HEIGHT
18925
19-Aug-2022
11:16
Linh
Pham



AFTER

MASS
58
AREA
34280
HEIGHT
18925
19-Aug-2022
11:16
Linh
Pham

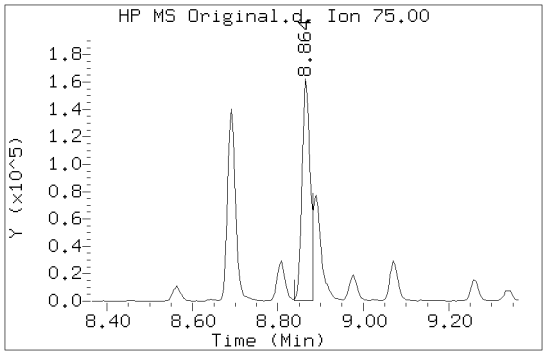


1,2,3-Trichloropropane (96-18-4)

Reason Code:

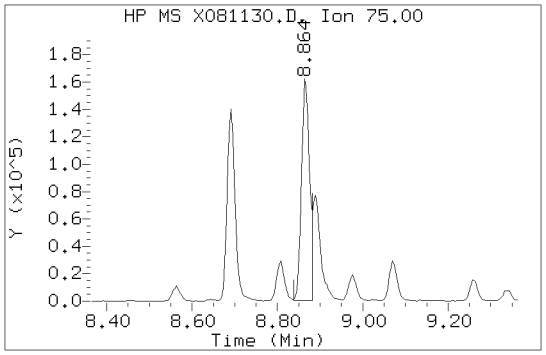
BEFORE

MASS
75
AREA
225100
HEIGHT
161931
19-Aug-2022
11:16
Linh
Pham



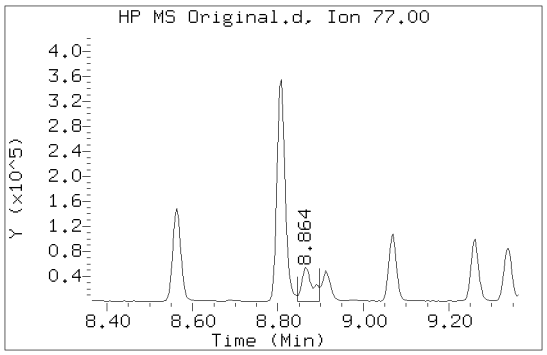
AFTER

MASS
75
AREA
225100
HEIGHT
161931
19-Aug-2022
11:16
Linh
Pham



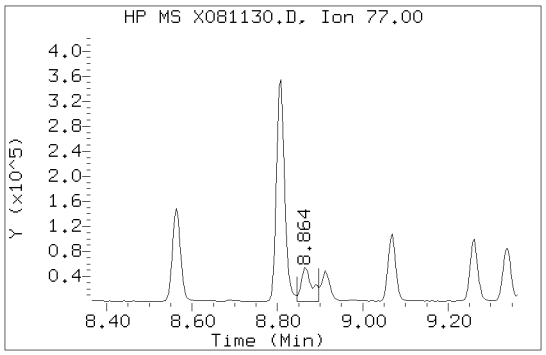
BEFORE

MASS
77
AREA
99979
HEIGHT
53701
19-Aug-2022
11:16
Linh
Pham



AFTER

MASS
77
AREA
99979
HEIGHT
53701
19-Aug-2022
11:16
Linh
Pham



right solutions.
right partner.

Raw Data VOA6 414991

Volatiles Organics by Method 8260C

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/19/2022

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081201.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 12-AUG-2022 10:21
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : HS22052000V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\bfb.m
Meth Date : 26-Jul-2022 15:17 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)	FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.691	8.889	(0.000)	95	98272			0.00- 100.00	100.00
8.691	8.889	(0.000)	50	20392			15.00- 40.00	20.75
8.691	8.889	(0.000)	75	49328			30.00- 60.00	50.20
8.691	8.889	(0.000)	96	7126			5.00- 9.00	7.25
8.691	8.889	(0.000)	173	581			0.00- 2.00	0.70
8.691	8.889	(0.000)	174	83224			50.00- 0.00	84.69
8.691	8.889	(0.000)	175	6360			5.00- 9.00	7.64
8.691	8.889	(0.000)	176	79248			95.00- 101.00	95.22
8.691	8.889	(0.000)	177	6648			5.00- 9.00	8.39

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.75
75	30.00 - 60.00% of mass 95	50.20
96	5.00 - 9.00% of mass 95	7.25
173	Less than 2.00% of mass 174	0.59 (0.70)
174	Greater than 50.00% of mass 95	84.69
175	5.00 - 9.00% of mass 174	6.47 (7.64)
176	95.00 - 101.00% of mass 174	80.64 (95.22)
177	5.00 - 9.00% of mass 176	6.76 (8.39)

Data File: X081201.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 112

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	812	65.90	149	99.00	67	144.80	67
37.10	4546	67.00	465	103.20	109	145.90	182
38.00	4751	68.10	9929	103.80	509	147.70	166
39.10	2787	69.00	10889	105.00	287	148.80	97
39.90	1138	70.00	1257	105.80	603	150.00	103
41.00	817	70.90	62	107.10	81	152.90	91
42.10	1256	71.80	642	108.80	88	153.60	61
43.10	796	73.00	3848	110.90	160	154.80	382
44.10	1415	74.00	16408	111.90	82	156.90	190
44.90	729	75.00	49328	113.80	78	159.00	135
46.00	78	76.00	4806	115.00	541	170.00	249
47.00	786	77.00	1111	115.80	438	172.00	201
47.90	684	78.10	610	117.00	771	172.90	581
49.00	3929	78.90	3080	117.70	359	173.90	83224
50.00	20392	80.00	1284	118.70	350	175.00	6360
51.00	6529	80.90	3160	123.80	76	175.90	79248
52.20	297	81.90	889	127.00	123	176.90	6648
53.10	167	83.00	318	128.00	611	177.90	133
53.90	344	85.00	60	129.10	227	183.80	80
55.00	2035	86.90	3728	129.80	513	186.00	492
56.00	1777	88.00	3598	130.80	73	186.80	101
57.00	2823	90.90	397	131.10	70	187.20	78
58.20	170	92.00	2766	134.00	59	206.70	79
60.00	861	93.00	4128	134.70	231	261.90	215
61.00	4567	94.00	11086	136.80	221	278.00	104
62.00	5244	95.00	98272	139.00	74		
63.00	3173	96.00	7126	141.00	1429		
64.10	339	97.10	364	141.90	156		
65.00	248	98.10	999	143.00	647		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081201.D Page 1

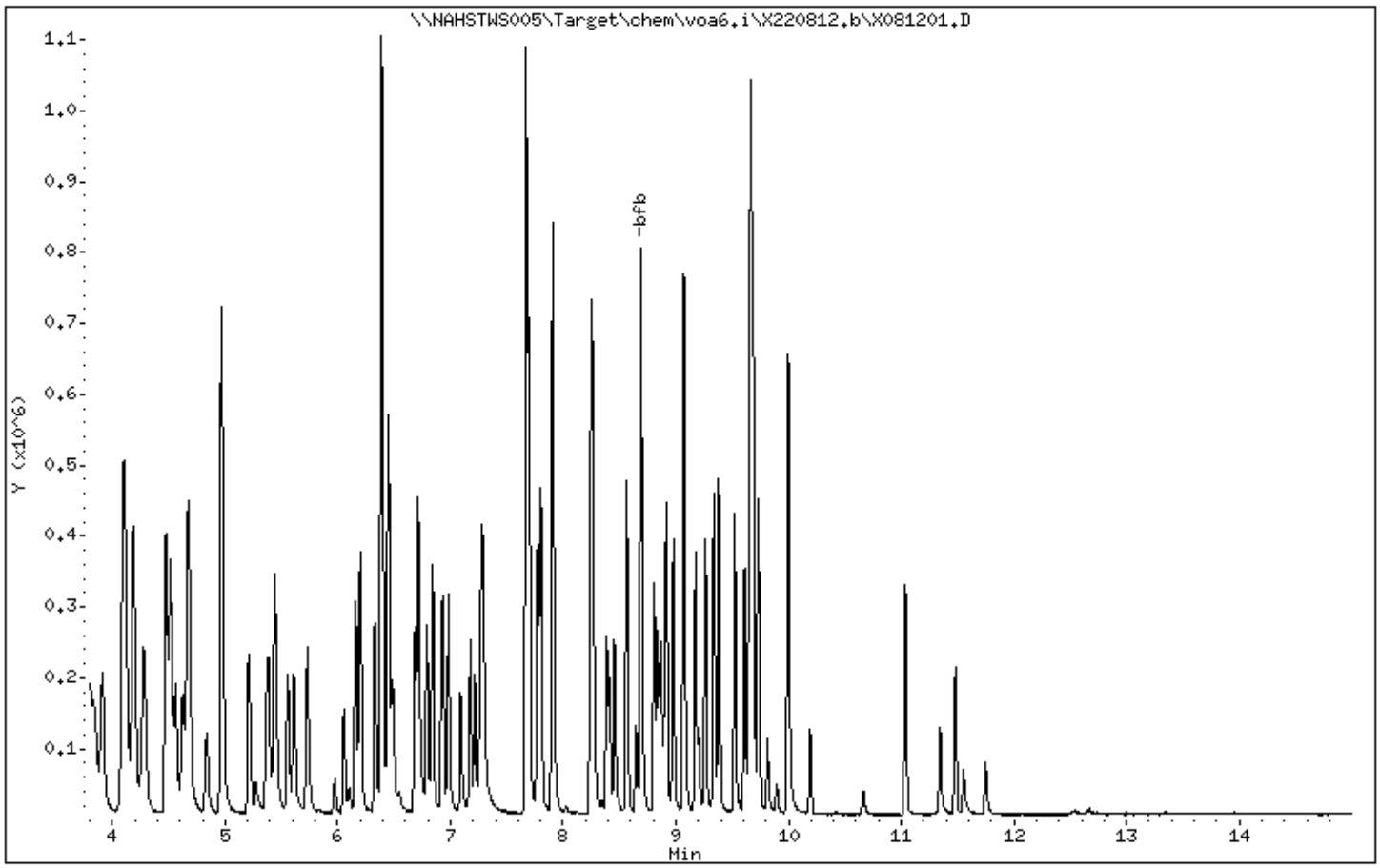
Date : 12-AUG-2022 10:21

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\X220812.b\X081201.D Page 2

Date : 12-AUG-2022 10:21

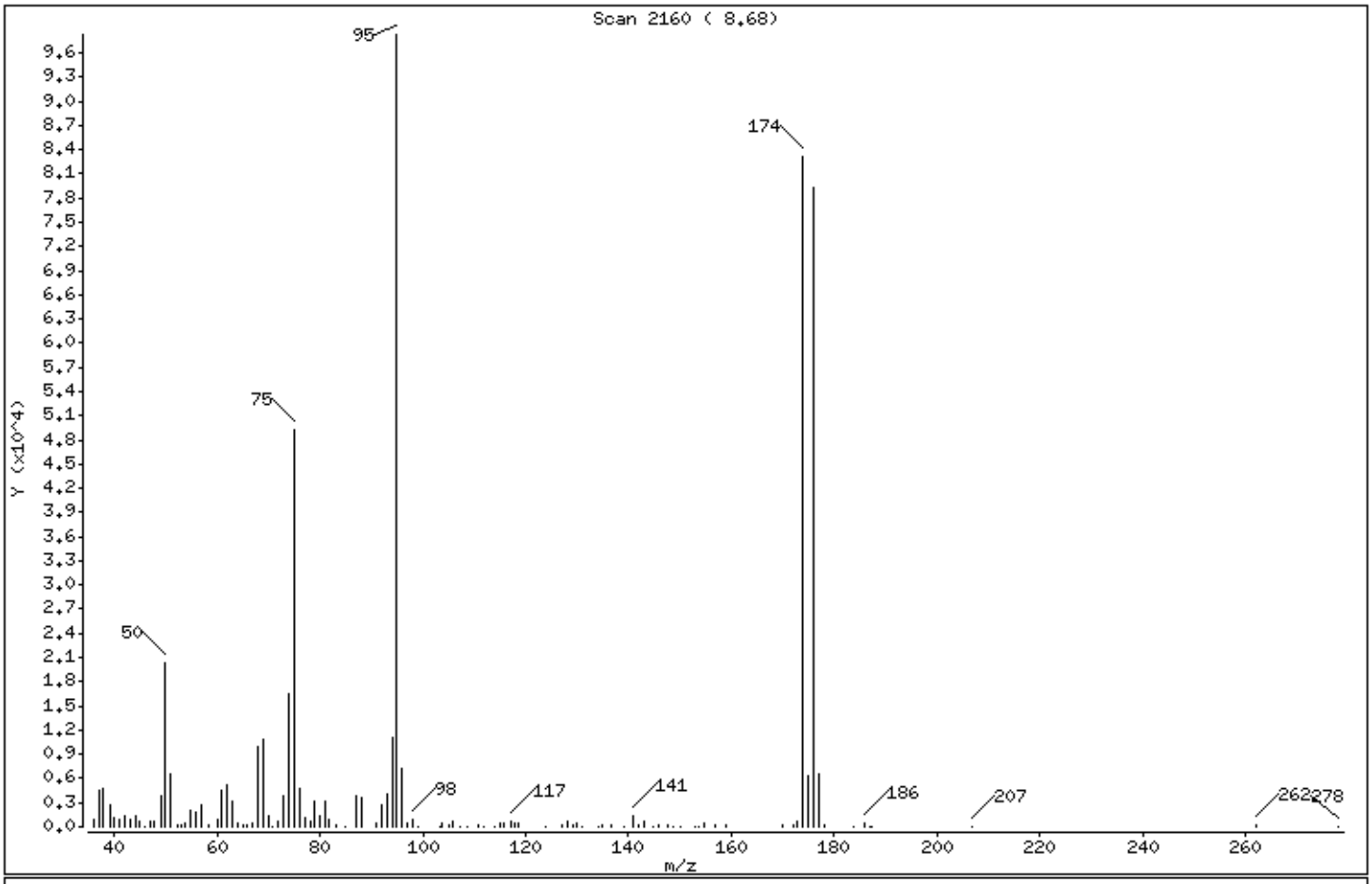
Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.75
75	30.00 - 60.00% of mass 95	50.20
96	5.00 - 9.00% of mass 95	7.25
173	Less than 2.00% of mass 174	0.59 (0.70)
174	Greater than 50.00% of mass 95	84.69
175	5.00 - 9.00% of mass 174	6.47 (7.64)
176	95.00 - 101.00% of mass 174	80.64 (95.22)
177	5.00 - 9.00% of mass 176	6.76 (8.39)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081201.D

Date : 12-AUG-2022 10:21

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: X081201.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 112

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	812	65.90	149	99.00	67	144.80	67
37.10	4546	67.00	465	103.20	109	145.90	182
38.00	4751	68.10	9929	103.80	509	147.70	166
39.10	2787	69.00	10889	105.00	287	148.80	97
39.90	1138	70.00	1257	105.80	603	150.00	103
41.00	817	70.90	62	107.10	81	152.90	91
42.10	1256	71.80	642	108.80	88	153.60	61
43.10	796	73.00	3848	110.90	160	154.80	382
44.10	1415	74.00	16408	111.90	82	156.90	190
44.90	729	75.00	49328	113.80	78	159.00	135
46.00	78	76.00	4806	115.00	541	170.00	249
47.00	786	77.00	1111	115.80	438	172.00	201
47.90	684	78.10	610	117.00	771	172.90	581
49.00	3929	78.90	3080	117.70	359	173.90	83224
50.00	20392	80.00	1284	118.70	350	175.00	6360
51.00	6529	80.90	3160	123.80	76	175.90	79248
52.20	297	81.90	889	127.00	123	176.90	6648
53.10	167	83.00	318	128.00	611	177.90	133
53.90	344	85.00	60	129.10	227	183.80	80
55.00	2035	86.90	3728	129.80	513	186.00	492
56.00	1777	88.00	3598	130.80	73	186.80	101
57.00	2823	90.90	397	131.10	70	187.20	78
58.20	170	92.00	2766	134.00	59	206.70	79
60.00	861	93.00	4128	134.70	231	261.90	215
61.00	4567	94.00	11086	136.80	221	278.00	104
62.00	5244	95.00	98272	139.00	74		
63.00	3173	96.00	7126	141.00	1429		
64.10	339	97.10	364	141.90	156		
65.00	248	98.10	999	143.00	647		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081202.D Page 1
Report Date: 19-Aug-2022 12:23

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081202.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 12-AUG-2022 10:42
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\8260W.m
Meth Date : 19-Aug-2022 12:23 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

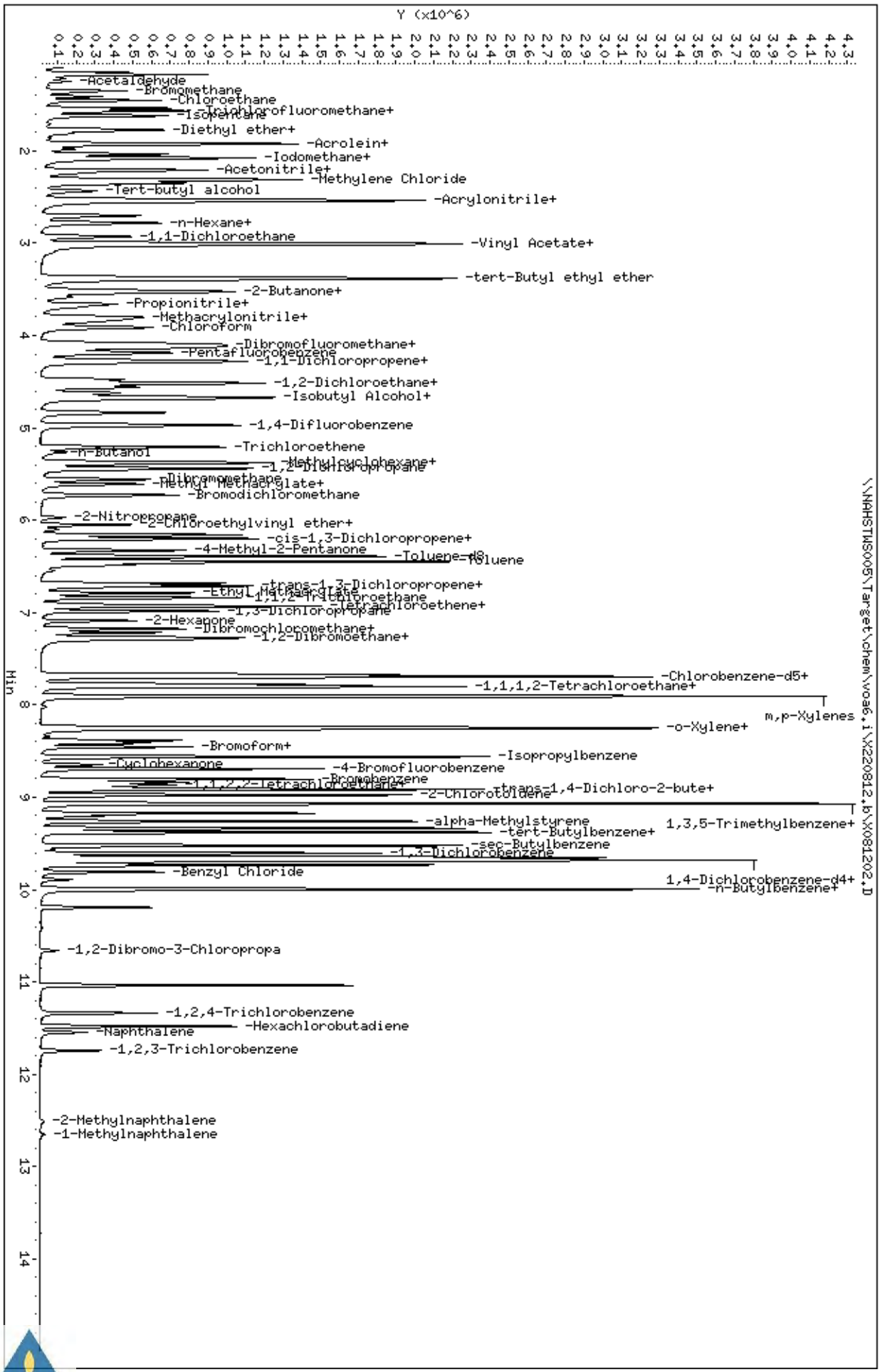
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.189	4.189	(1.000)	593782	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	898849	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	835766	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	398487	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.979)	306163	50.0000	54.70
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.068)	334113	50.0000	54.47
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1066835	50.0000	51.16
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	391450	50.0000	52.52
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	320386	50.0000	54.56
31 1,1,1-Trichloroethane	97	4.084	4.084	(0.975)	459332	50.0000	54.53
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	297772	50.0000	53.20
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	223318	50.0000	51.96
22 1,1-Dichloroethane	63	2.929	2.929	(0.699)	491531	50.0000	53.77
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	239086	50.0000	48.23
32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	391523	50.0000	53.97
93 1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	95869	50.0000	46.27
71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	240620	50.0000	55.76(M)
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	178527	50.0000	49.18
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	1085241	50.0000	56.77
89 1,2-Dibromo-3-Chloropropane	155	10.663	10.663	(1.103)	21532	50.0000	50.94

57 1,2-Dibromoethane	107	7.263	7.263 (0.947)	285299	50.0000	52.36
88 1,2-Dichlorobenzene	146	9.992	9.992 (1.034)	540106	50.0000	54.16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	418481	50.0000	53.08
42	1,2-Dichloropropane	63	5.437	5.437	(1.094)	291978	50.0000	52.77
75	1,3,5-Trimethylbenzene	105	9.070	9.070	(0.938)	1083932	50.0000	55.99
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	615659	50.0000	55.68
54	1,3-Dichloropropane	76	6.982	6.982	(0.910)	458370	50.0000	52.44
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	625216	50.0000	53.26
26	2,2-Dichloropropane	77	3.514	3.514	(0.839)	464322	50.0000	57.22
24	2-Butanone	43	3.585	3.585	(0.856)	161414	100.000	108.36
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	909621	50.0000	53.25
52	2-Hexanone	43	7.090	7.090	(0.924)	282402	100.000	107.45
77	4-Chlorotoluene	91	9.070	9.070	(0.938)	1057446	50.0000	55.46
82	p-Isopropyltoluene	119	9.651	9.651	(0.998)	1124658	50.0000	57.86
45	4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	441326	100.000	108.37
10	Acetone	43	1.981	1.981	(0.473)	129680	100.000	103.92
37	Benzene	78	4.515	4.515	(0.909)	1107444	50.0000	51.99
74	Bromobenzene	156	8.807	8.807	(0.911)	371680	50.0000	54.61
29	Bromochloromethane	128	3.799	3.799	(0.907)	170837	50.0000	51.02
39	Bromodichloromethane	83	5.730	5.730	(1.153)	412879	50.0000	54.38
66	Bromoform	173	8.410	8.410	(1.096)	204296	50.0000	50.41
6	Bromomethane	94	1.347	1.347	(0.322)	209521	50.0000	51.69
19	Carbon Disulfide	76	2.078	2.078	(0.496)	1357135	100.000	103.42
34	Carbon Tetrachloride	117	4.271	4.271	(0.860)	395376	50.0000	50.99
59	Chlorobenzene	112	7.694	7.694	(1.003)	841615	50.0000	53.10
7	Chloroethane	64	1.411	1.411	(0.337)	194157	50.0000	50.97
28	Chloroform	83	3.911	3.911	(0.934)	538541	50.0000	53.77
3	Chloromethane	50	1.085	1.085	(0.259)	310210	50.0000	56.41
27	cis-1,2-Dichloroethene	96	3.533	3.533	(0.843)	321984	50.0000	54.54
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	513013	50.0000	55.01
55	Dibromochloromethane	129	7.177	7.177	(0.936)	332041	50.0000	53.52
44	Dibromomethane	93	5.553	5.553	(1.118)	193078	50.0000	52.01
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	328897	50.0000	58.16
61	Ethylbenzene	106	7.799	7.799	(1.017)	431982	50.0000	53.96
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	172738	50.0000	51.53
67	Isopropylbenzene	105	8.564	8.564	(1.116)	1305414	50.0000	54.22
62	m,p-Xylenes	106	7.904	7.904	(1.030)	1081963	100.000	108.66
17	Methylene Chloride	84	2.311	2.311	(0.552)	299505	50.0000	54.94
87	n-Butylbenzene	91	9.996	9.996	(1.034)	967743	50.0000	59.91
73	n-Propylbenzene	91	8.912	8.912	(0.922)	1529765	50.0000	58.19
92	Naphthalene	128	11.547	11.547	(1.195)	188534	50.0000	46.43
63	o-Xylene	106	8.245	8.245	(1.075)	515990	50.0000	53.30
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	1285633	50.0000	57.23
64	Styrene	104	8.260	8.260	(1.077)	872908	50.0000	54.75
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	926775	50.0000	56.49
56	Tetrachloroethene	164	6.929	6.929	(0.903)	275911	50.0000	50.91
50	Toluene	91	6.449	6.449	(0.841)	1228026	50.0000	52.27
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.605)	282290	50.0000	54.04
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.345)	435532	50.0000	56.39
38	Trichloroethene	130	5.208	5.208	(1.048)	325695	50.0000	51.62
8	Trichlorofluoromethane	101	1.569	1.569	(0.375)	473669	50.0000	50.65
5	Vinyl Chloride	62	1.152	1.152	(0.275)	308119	50.0000	49.48

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081202.D
Date : 12-AUG-2022 10:42
Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

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

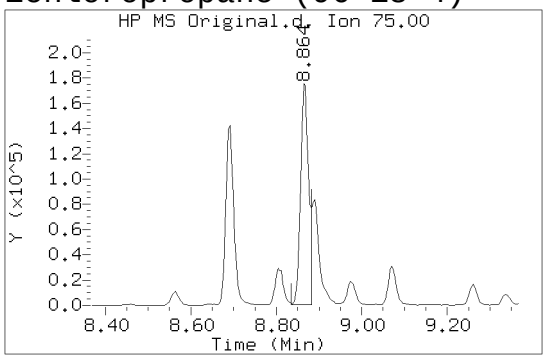
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081202.D
Inj Date : 12-AUG-2022 10:42
InstruID : voa6.i
LabSampID : CCV

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

Reason Code:

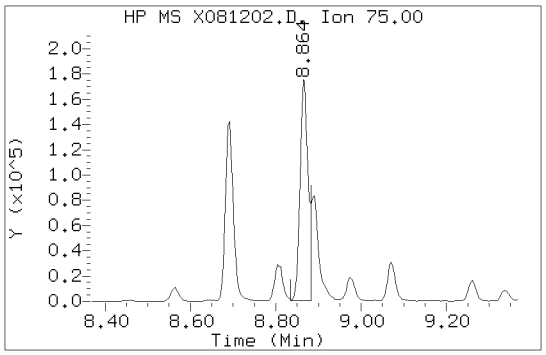
BEFORE

MASS
75
AREA
240620
HEIGHT
175067
19-Aug-2022
12:23
linh
pham



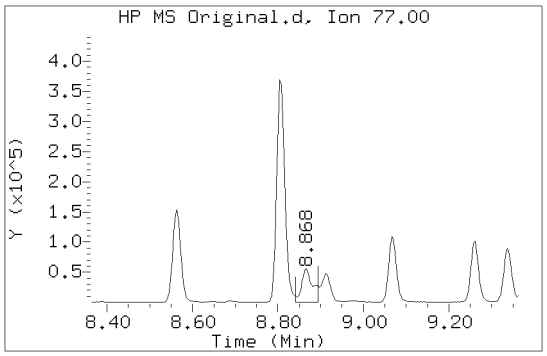
AFTER

MASS
75
AREA
240620
HEIGHT
175067
19-Aug-2022
12:23
linh
pham



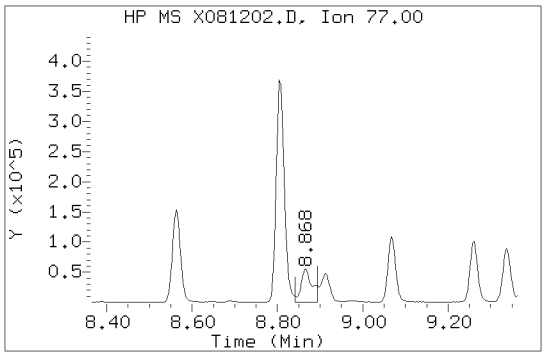
BEFORE

MASS
77
AREA
102419
HEIGHT
55165
19-Aug-2022
12:23
linh
pham



AFTER

MASS
77
AREA
102419
HEIGHT
55165
19-Aug-2022
12:23
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081204.D Page 1
Report Date: 12-Aug-2022 21:00

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081204.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 12-AUG-2022 11:24
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X220812.b\8260W.m
Meth Date : 12-Aug-2022 20:48 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.189	(1.000)	694288	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.103	(0.980)	309027	47.1261	47.12
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	337426	47.0052	47.00
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	982293	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	846853	50.0000	
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1140212	53.9639	53.96
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	367675	48.6307	48.63
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.666	(1.000)	356740	50.0000	

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081205.D Page 1
Report Date: 19-Aug-2022 11:23

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081205.D
Lab Smp Id: VLCSW-220812 Client Smp ID: VLCSW-220812
Inj Date : 12-AUG-2022 11:45
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-220812;VLCSW-220812;3;;LCS
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\8260W.m
Meth Date : 19-Aug-2022 11:23 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

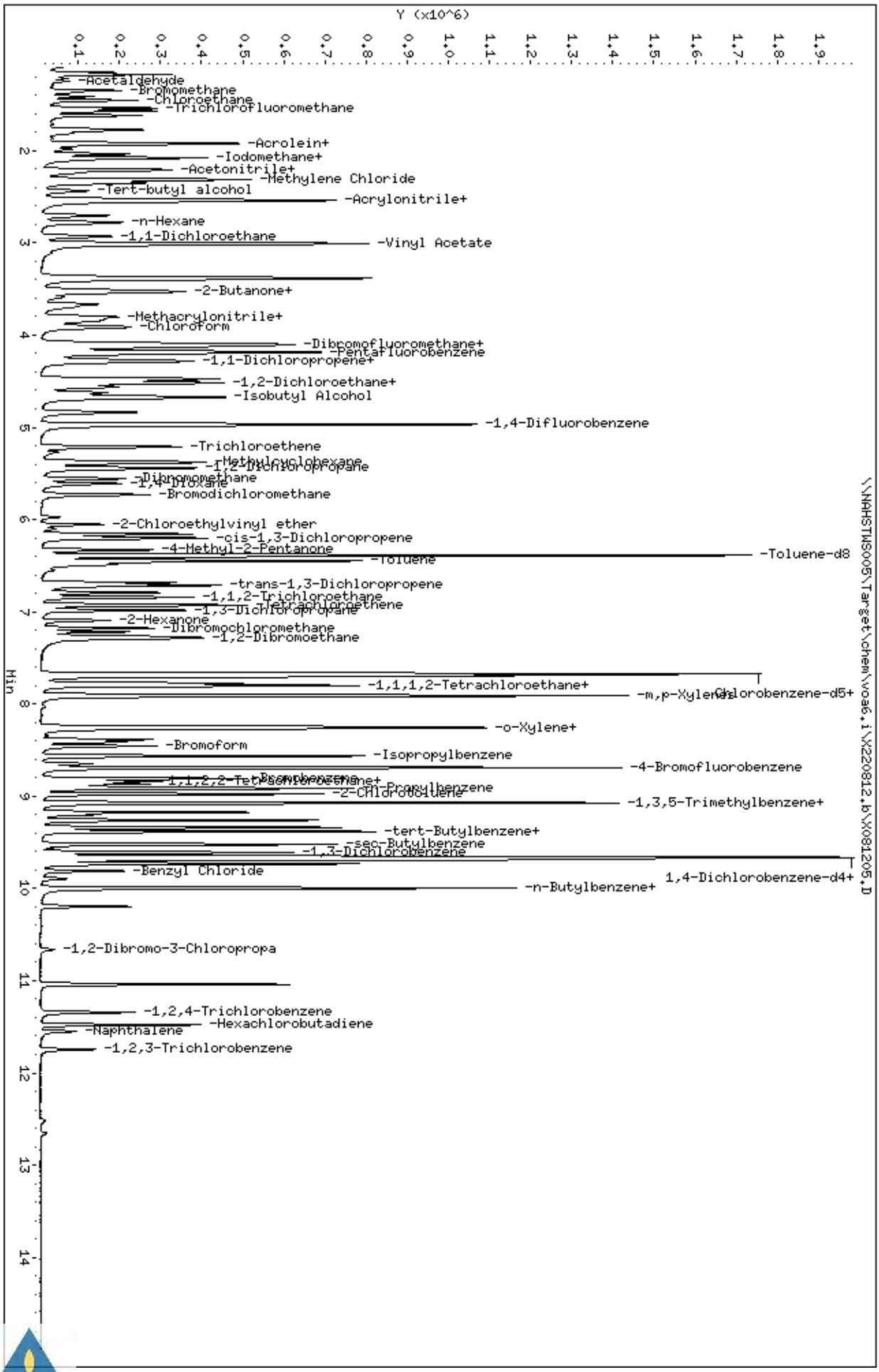
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.189	(1.000)	598260	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	890316	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	821570	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.666	(1.000)	395344	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.103	(0.981)	300277	53.2348	53.23
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	326240	52.7818	52.78
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1047163	51.0852	51.08
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	373915	51.0178	51.01
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	112797	19.5421	19.54
31 1,1,1-Trichloroethane	97	4.087	4.084	(0.977)	160513	18.9129	18.91
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	110718	19.9402	19.94
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	79990	18.9365	18.93
22 1,1-Dichloroethane	63	2.929	2.929	(0.700)	178172	19.3450	19.34
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	84042	16.8285	16.82
32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	135495	18.8568	18.85
93 1,2,3-Trichlorobenzene	180	11.746	11.742	(1.215)	42020	20.4455	20.44
71 1,2,3-Trichloropropane	75	8.867	8.863	(0.917)	81369	19.0065	19.00
90 1,2,4-Trichlorobenzene	180	11.341	11.338	(1.173)	72385	20.1025	20.10
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	369295	19.4740	19.47
89 1,2-Dibromo-3-Chloropropane	155	10.666	10.663	(1.104)	7656	19.0358	19.03

57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	103980	19.4138	19.41
88	1,2-Dichlorobenzene	146	9.995	9.992 (1.034)	191309	19.3392	19.33

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081205.D Page 2
Report Date: 19-Aug-2022 11:23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
33	1,2-Dichloroethane	62	4.564	4.560	(0.919)	150862	19.3209	19.32
42	1,2-Dichloropropane	63	5.441	5.437	(1.095)	102610	18.7244	18.72
75	1,3,5-Trimethylbenzene	105	9.069	9.070	(0.938)	369877	19.2611	19.26
83	1,3-Dichlorobenzene	146	9.605	9.606	(0.994)	212166	19.3424	19.34
54	1,3-Dichloropropane	76	6.985	6.982	(0.911)	165432	19.2533	19.25
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	222142	19.0761	19.07
26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	161134	19.5484	19.54
24	2-Butanone	43	3.589	3.585	(0.858)	52211	34.7880	34.78
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	321674	18.9824	18.98
52	2-Hexanone	43	7.090	7.090	(0.924)	102641	39.7314	39.73
77	4-Chlorotoluene	91	9.073	9.070	(0.939)	369796	19.5508	19.55
82	p-Isopropyltoluene	119	9.650	9.651	(0.998)	371616	19.2708	19.27
45	4-Methyl-2-Pentanone	43	6.329	6.326	(0.825)	161651	40.3804	40.38
10	Acetone	43	1.981	1.981	(0.473)	50957	36.8688	36.86
37	Benzene	78	4.519	4.515	(0.909)	395089	18.7272	18.72
74	Bromobenzene	156	8.807	8.807	(0.911)	133155	19.7222	19.72
29	Bromochloromethane	128	3.799	3.799	(0.908)	62513	18.5325	18.53
39	Bromodichloromethane	83	5.729	5.730	(1.153)	147835	19.6614	19.66
66	Bromoform	173	8.413	8.410	(1.097)	70943	18.6063	18.60
6	Bromomethane	94	1.347	1.347	(0.322)	82653	19.4066	19.40
19	Carbon Disulfide	76	2.078	2.078	(0.497)	475799	35.9875	35.98
34	Carbon Tetrachloride	117	4.267	4.271	(0.859)	133203	17.3446	17.34
59	Chlorobenzene	112	7.694	7.694	(1.003)	299733	19.2410	19.24
7	Chloroethane	64	1.411	1.411	(0.337)	69689	18.1613	18.16
28	Chloroform	83	3.915	3.911	(0.936)	195675	19.3908	19.39
3	Chloromethane	50	1.089	1.085	(0.260)	112770	20.3901	20.39
27	cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	116555	19.5963	19.59
46	cis-1,3-Dichloropropene	75	6.160	6.157	(1.240)	181857	19.6898	19.68
55	Dibromochloromethane	129	7.176	7.177	(0.936)	116793	19.1532	19.15
44	Dibromomethane	93	5.557	5.553	(1.118)	71626	19.4806	19.48
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	108590	18.9452	18.94
61	Ethylbenzene	106	7.802	7.799	(1.017)	150440	19.1172	19.11
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	65446	19.6803	19.68
67	Isopropylbenzene	105	8.563	8.564	(1.116)	443352	18.7350	18.73
62	m,p-Xylenes	106	7.907	7.904	(1.031)	380956	38.9200	38.91
17	Methylene Chloride	84	2.314	2.311	(0.553)	113309	20.0835	20.08
87	n-Butylbenzene	91	9.995	9.996	(1.034)	316125	19.7287	19.72
73	n-Propylbenzene	91	8.916	8.912	(0.922)	506573	19.4234	19.42
92	Naphthalene	128	11.551	11.547	(1.195)	79508	19.7378	19.73
63	o-Xylene	106	8.245	8.245	(1.075)	180566	18.9759	18.97
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	421198	18.8990	18.89
64	Styrene	104	8.263	8.260	(1.077)	305222	19.4782	19.47
78	tert-Butylbenzene	119	9.339	9.336	(0.966)	304609	18.7157	18.71
56	Tetrachloroethene	164	6.929	6.929	(0.903)	96213	18.0598	18.05
50	Toluene	91	6.449	6.449	(0.841)	438831	19.0014	19.00
20	trans-1,2-Dichloroethene	96	2.539	2.536	(0.607)	101413	19.2691	19.26
51	trans-1,3-Dichloropropene	75	6.685	6.682	(1.346)	151753	19.8396	19.83
38	Trichloroethene	130	5.212	5.208	(1.049)	117692	18.8322	18.83
8	Trichlorofluoromethane	101	1.568	1.569	(0.375)	163062	17.3087	17.30
5	Vinyl Chloride	62	1.152	1.152	(0.275)	108109	17.2332	17.23



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081205.D
Date : 12-AUG-2022 11:45
Client ID: VLCSW-220812
Sample Info: VLCSW-220812;VLCSW-220812;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\X220812.b\X081205.D
Inj Date : 12-AUG-2022 11:45
InstruID : voa6.i
LabSampID : VLCSW-220812

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081207.D Page 1
Report Date: 19-Aug-2022 11:23

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081207.D
Lab Smp Id: VBLKW-220812 Client Smp ID: VBLKW-220812
Inj Date : 12-AUG-2022 12:27
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-220812;VBLKW-220812;3;;BLANK
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\8260W.m
Meth Date : 19-Aug-2022 11:23 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	669041	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	947634	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	823289	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	364085	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	302282	47.8480	47.84
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	329894	47.6950	47.69
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1107503	53.9161	53.91
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	357820	48.6827	48.68

01135191

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081207.D

Page 1

Date : 12-AUG-2022 12:27

Client ID: VBLKW-220812

Instrument: voa6.i

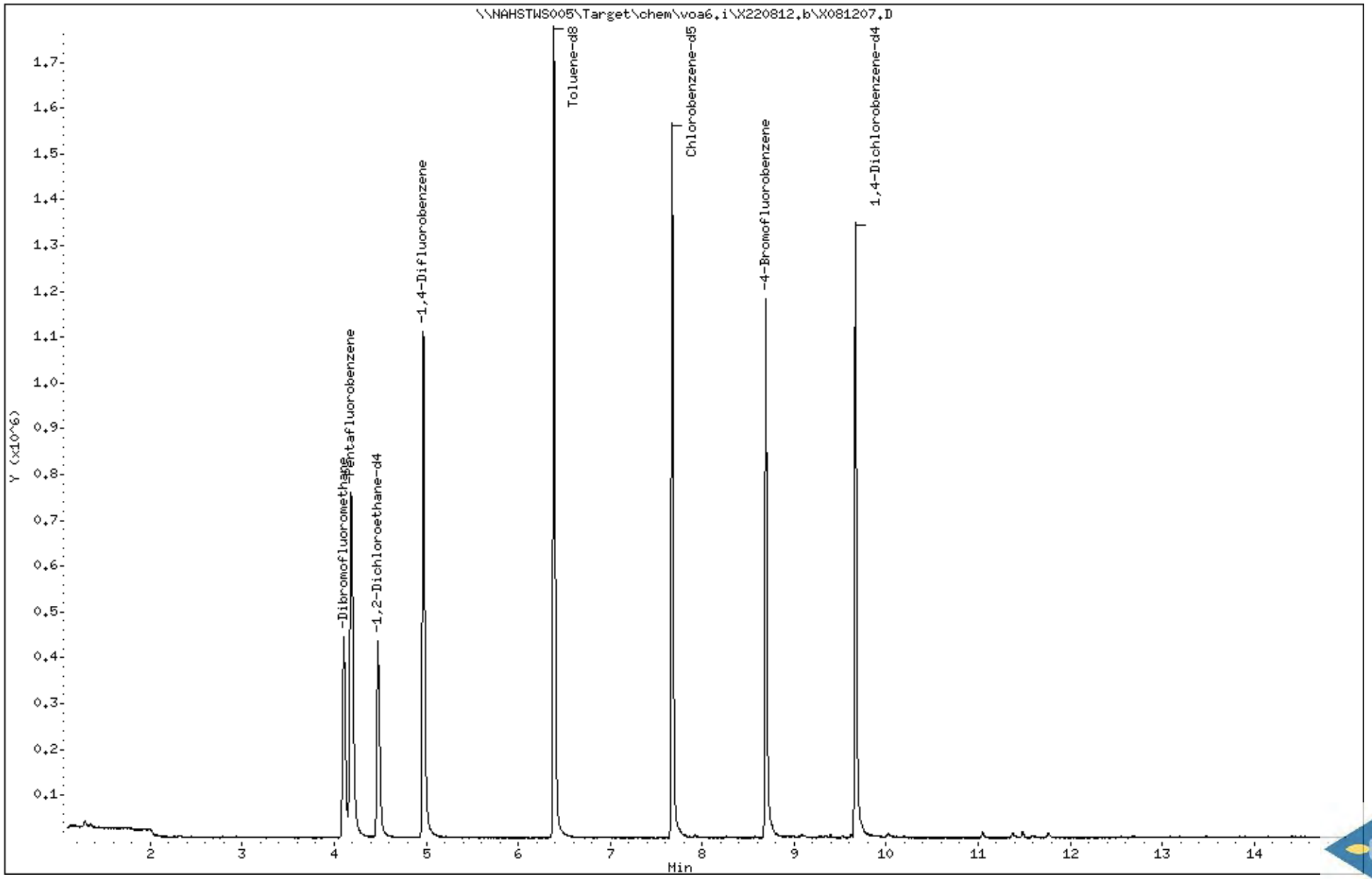
Sample Info: VBLKW-220812;VBLKW-220812;3;;BLANK

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081207.D
Inj Date : 12-AUG-2022 12:27
InstruID : voa6.i
LabSampID : VBLKW-220812

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081210.D Page 1
Report Date: 19-Aug-2022 11:23

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081210.D
Lab Smp Id: HS22080522-04 Client Smp ID: HS22080522-04
Inj Date : 12-AUG-2022 13:31
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-04;HS22080522-04;;;
Misc Info : HS22052000V6;WATER;0;10;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\8260W.m
Meth Date : 19-Aug-2022 11:23 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 10
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	655922	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	943945	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	824208	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	363807	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.103	(0.981)	297881	48.0982	48.09
$ 35 1,2-Dichloroethane-d4	65	4.478	4.474	(1.070)	330564	48.7549	48.75
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1092787	53.1403	53.14
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	353444	48.0227	48.02
29 Bromochloromethane	128	3.829	3.799	(0.915)	7153	1.93414	19.34(a)
27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	1085964	166.531	1665.31
17 Methylene Chloride	84	2.311	2.311	(0.552)	7274178	1226.29	12262.90(A)
38 Trichloroethene	130	5.212	5.208	(1.049)	60068	9.06558	90.65

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.

01135194

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081210.D

Page 1

Date : 12-AUG-2022 13:31

Client ID: HS22080522-04

Instrument: voa6.i

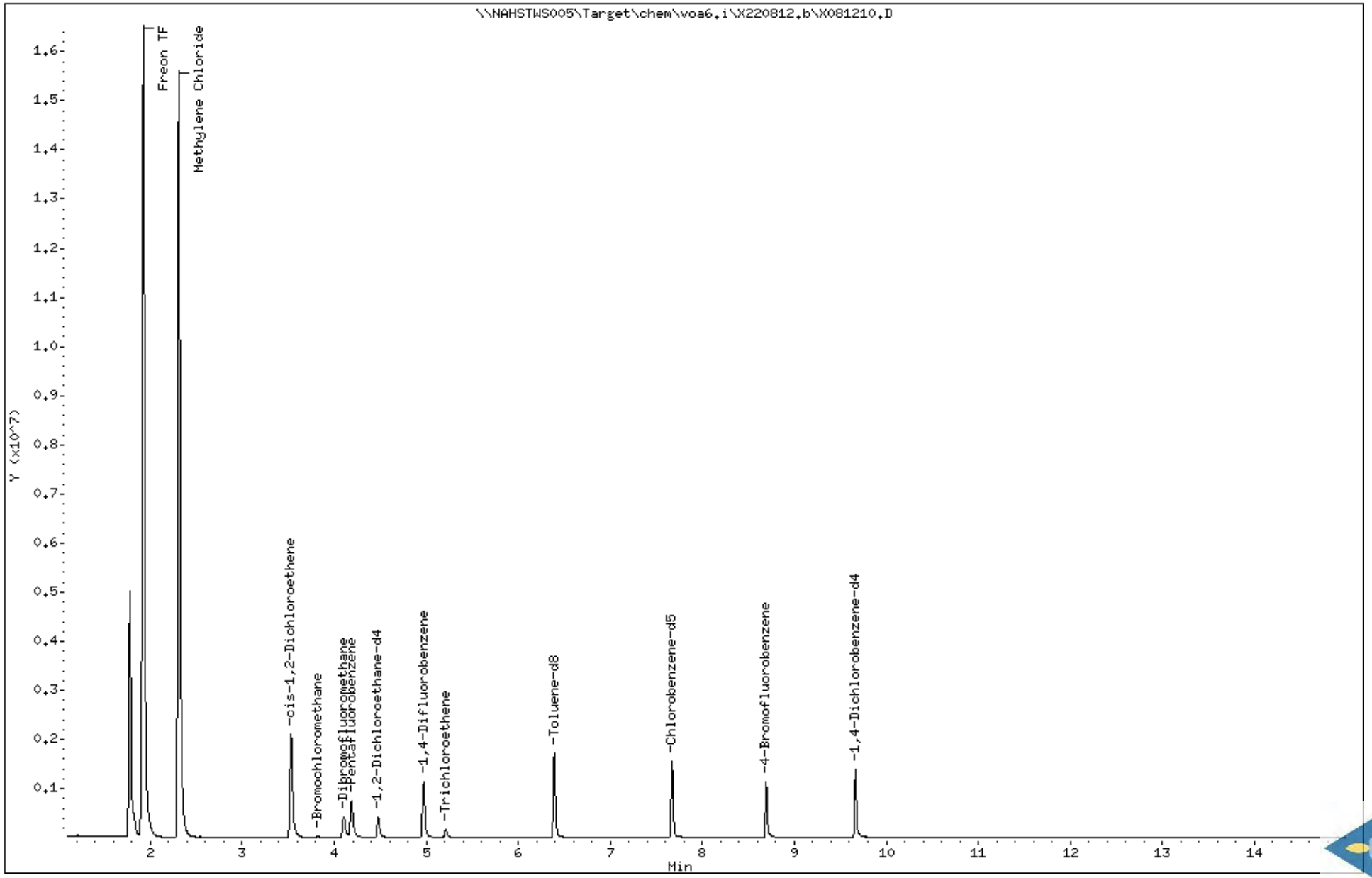
Sample Info: HS22080522-04;HS22080522-04;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081210.D

Date : 12-AUG-2022 13:31

Client ID: HS22080522-04

Instrument: voa6.i

Sample Info: HS22080522-04;HS22080522-04;;;

Purge Volume: 5.0

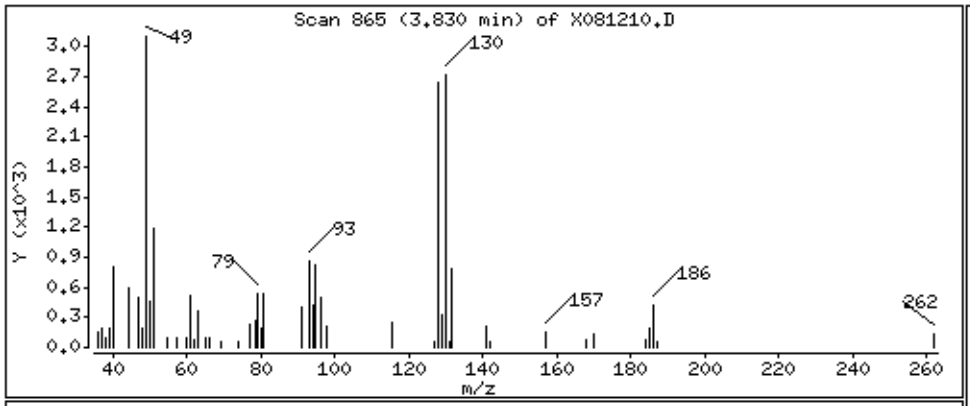
Operator: PC

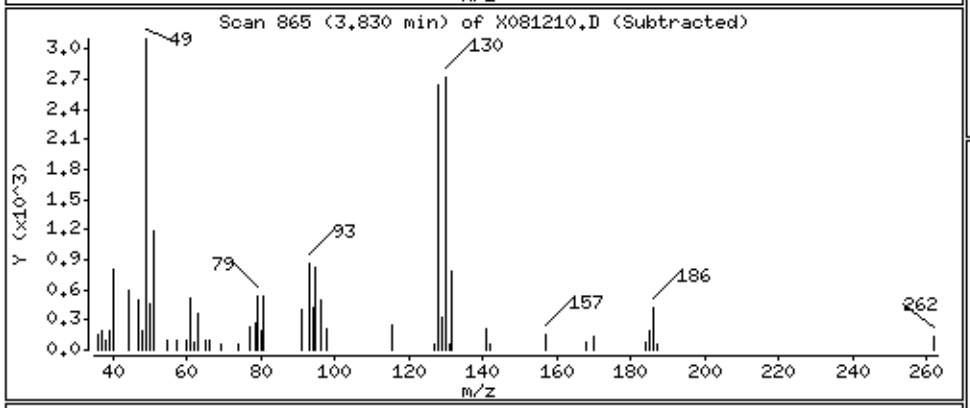
Column phase: DB624

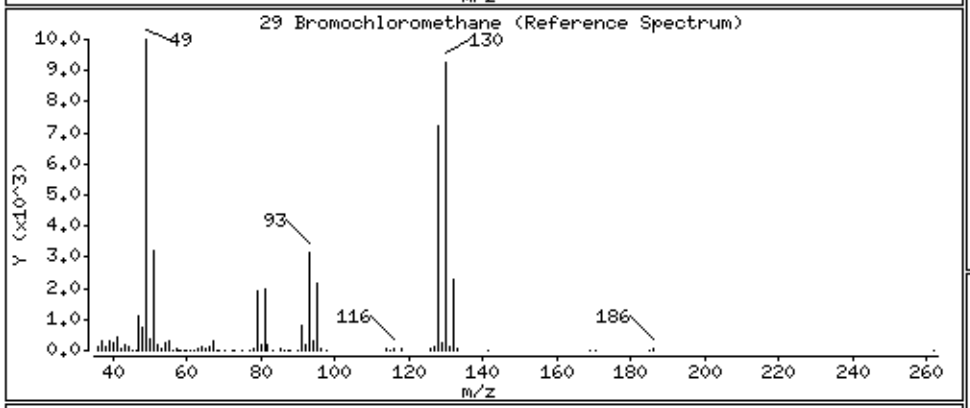
Column diameter: 0.18

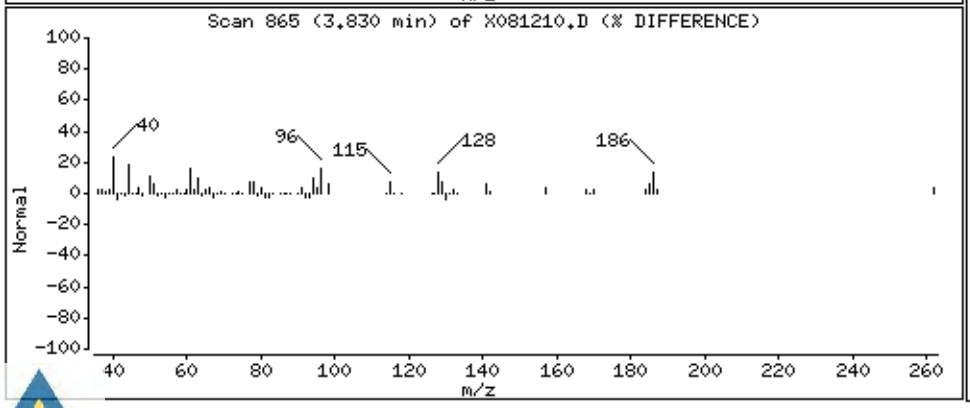
29 Bromochloromethane

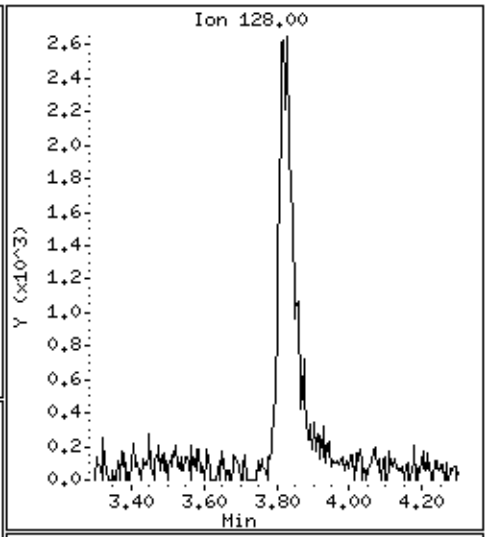
Concentration: 19.34 ug/l

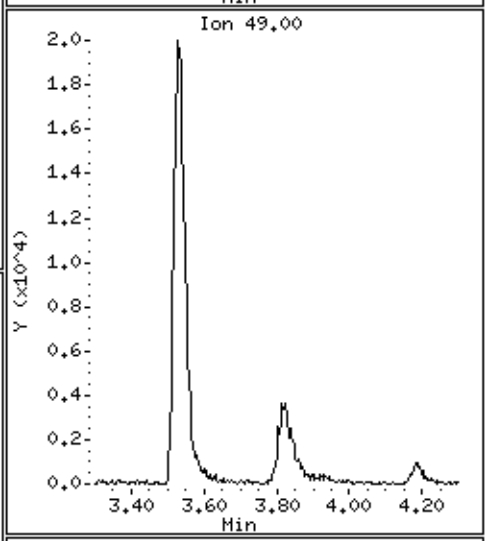


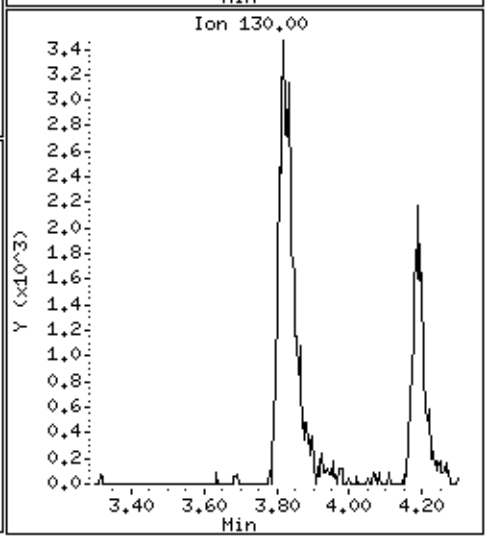












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081210.D Page 3

Date : 12-AUG-2022 13:31

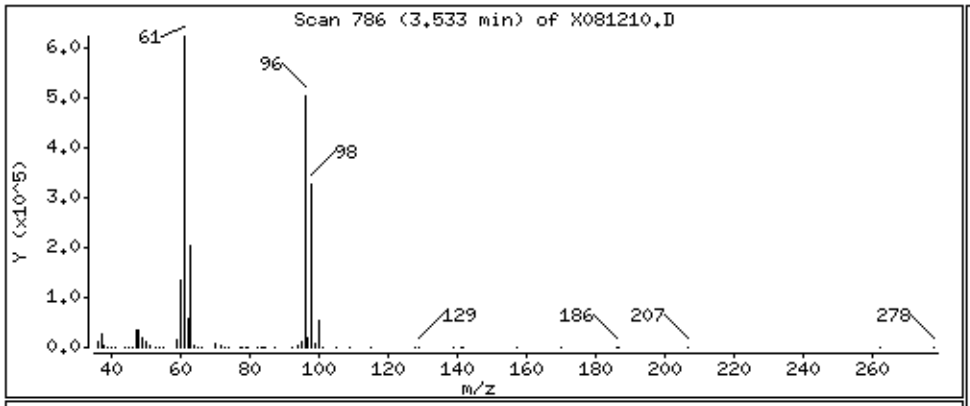
Client ID: HS22080522-04 Instrument: voa6.i

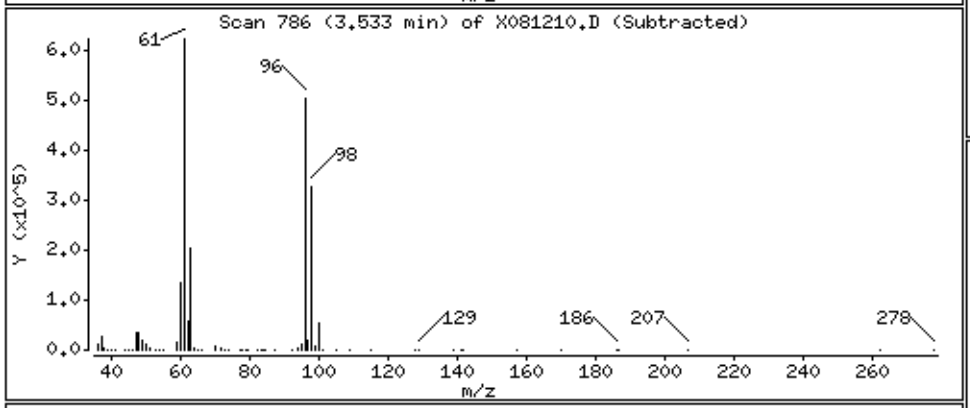
Sample Info: HS22080522-04;HS22080522-04;;;

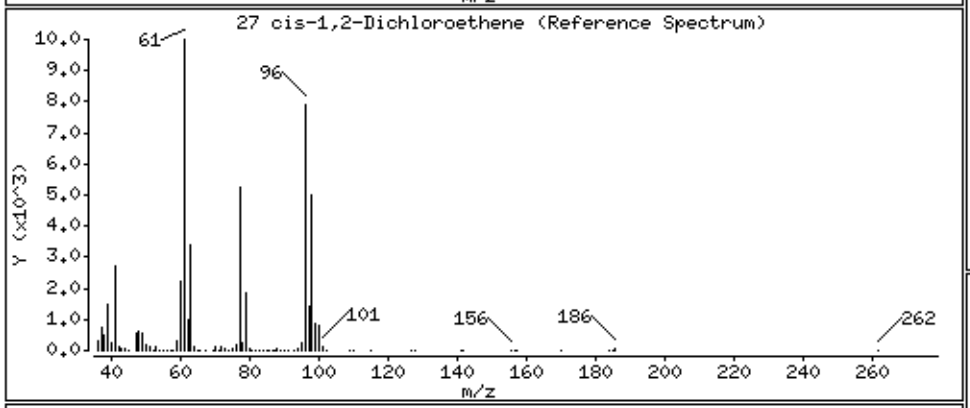
Purge Volume: 5.0 Operator: PC

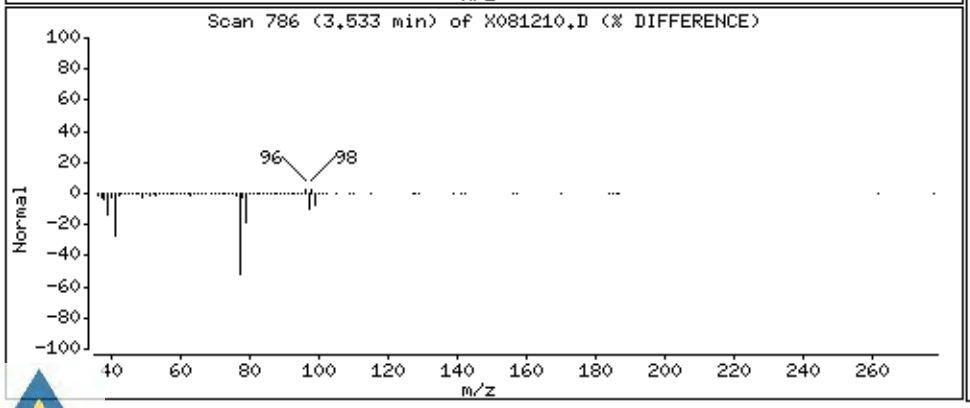
Column phase: DB624 Column diameter: 0.18

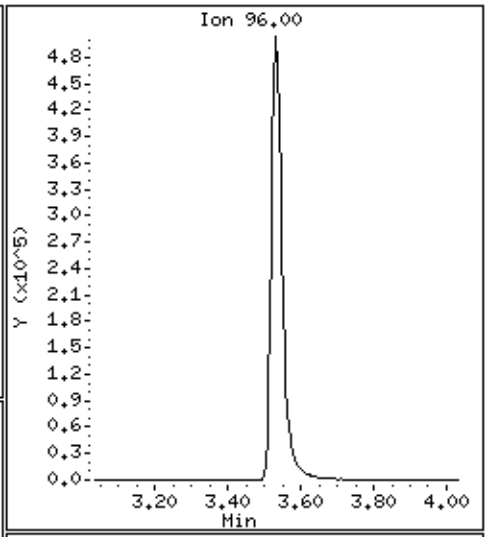
27 cis-1,2-Dichloroethene Concentration: 1665.31 ug/l

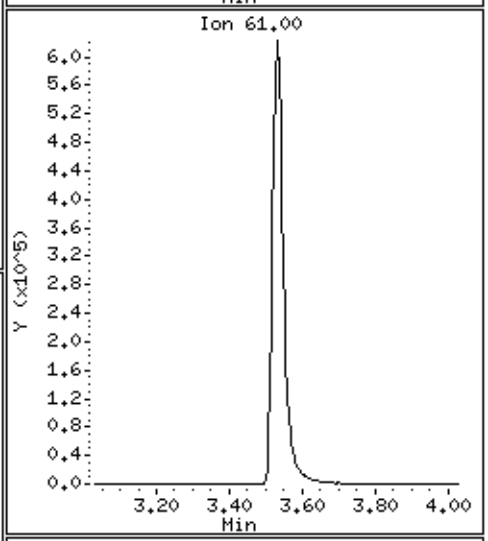


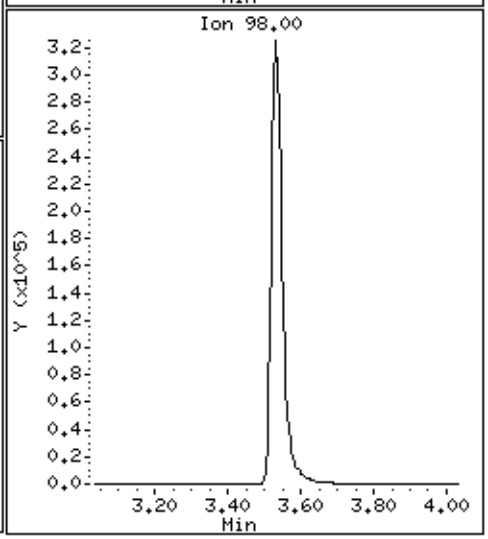












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081210.D Page 4

Date : 12-AUG-2022 13:31

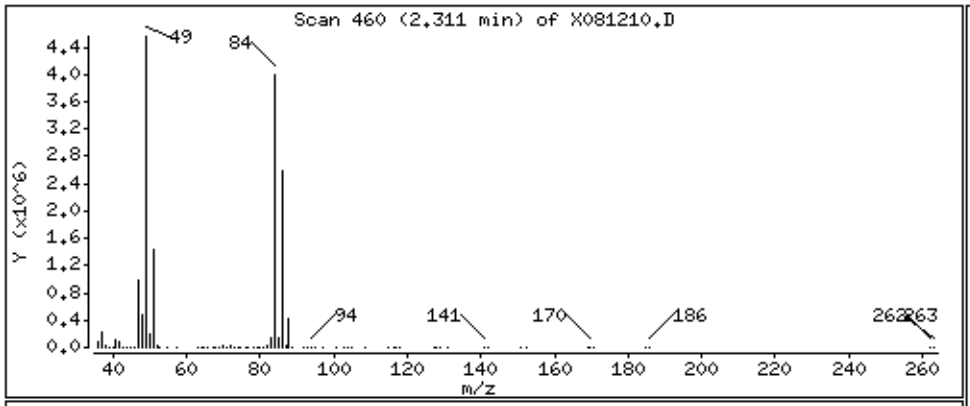
Client ID: HS22080522-04 Instrument: voa6.i

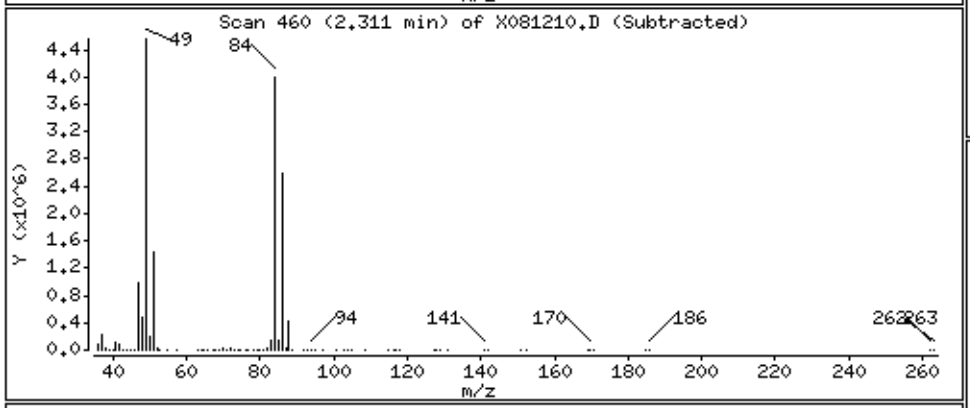
Sample Info: HS22080522-04;HS22080522-04;;;

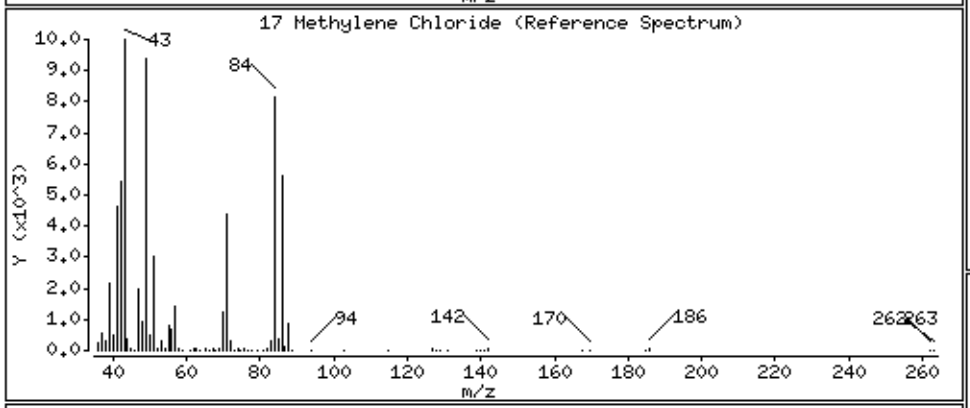
Purge Volume: 5.0 Operator: PC

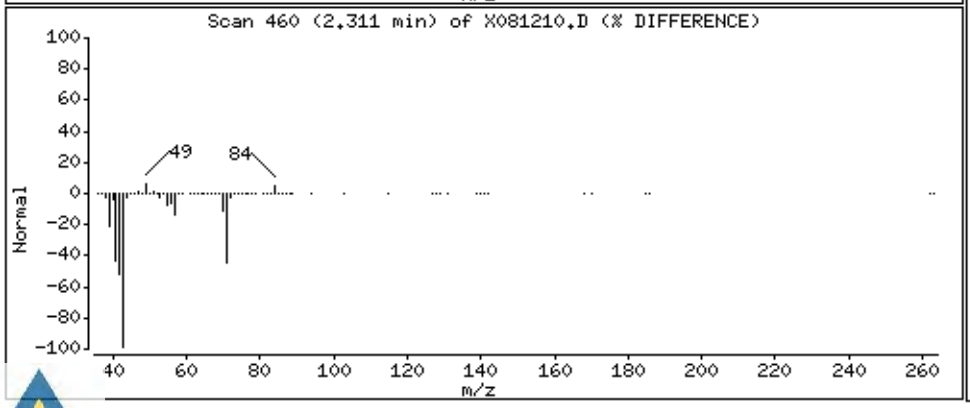
Column phase: DB624 Column diameter: 0.18

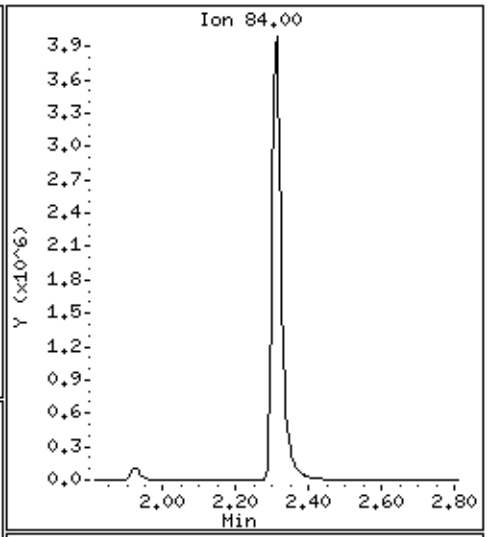
17 Methylene Chloride Concentration: 12262.90 ug/l

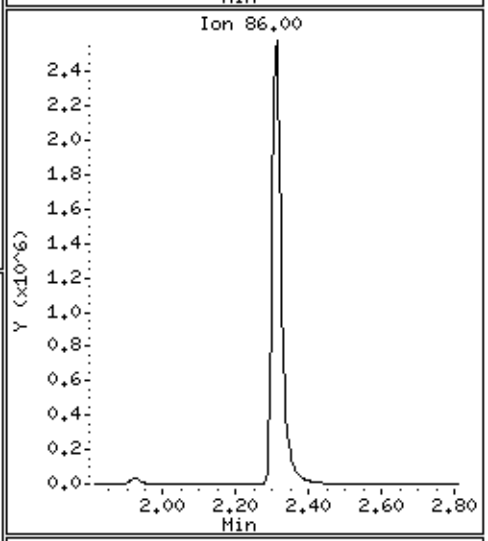


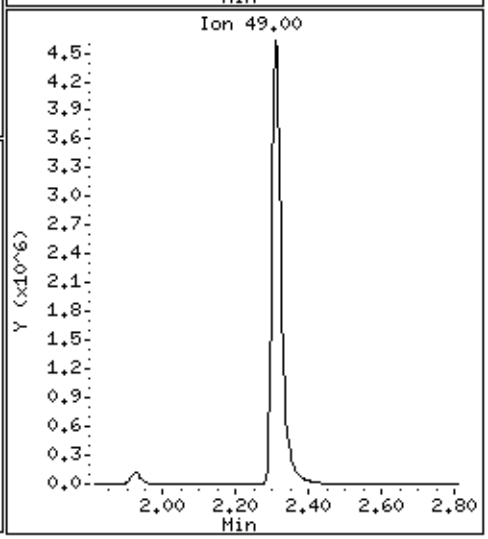












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081210.D Page 5

Date : 12-AUG-2022 13:31

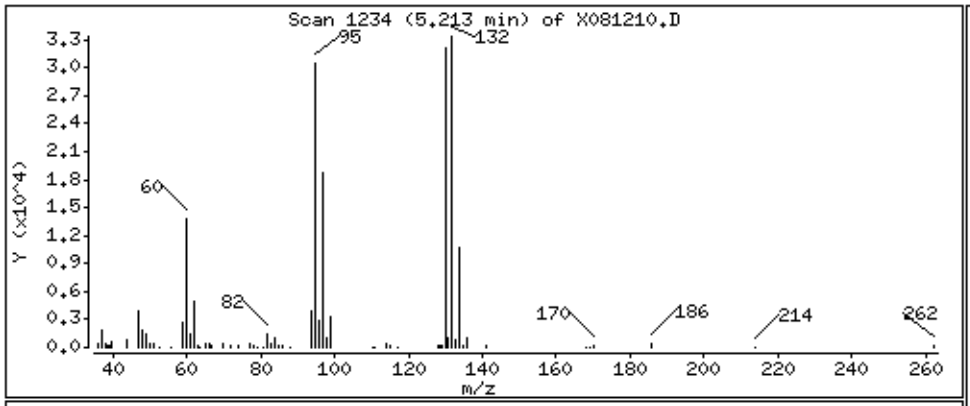
Client ID: HS22080522-04 Instrument: voa6.i

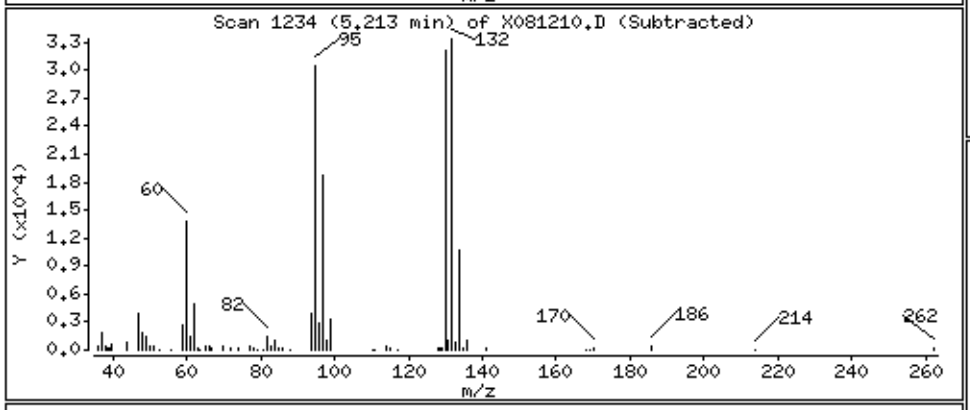
Sample Info: HS22080522-04;HS22080522-04;;;

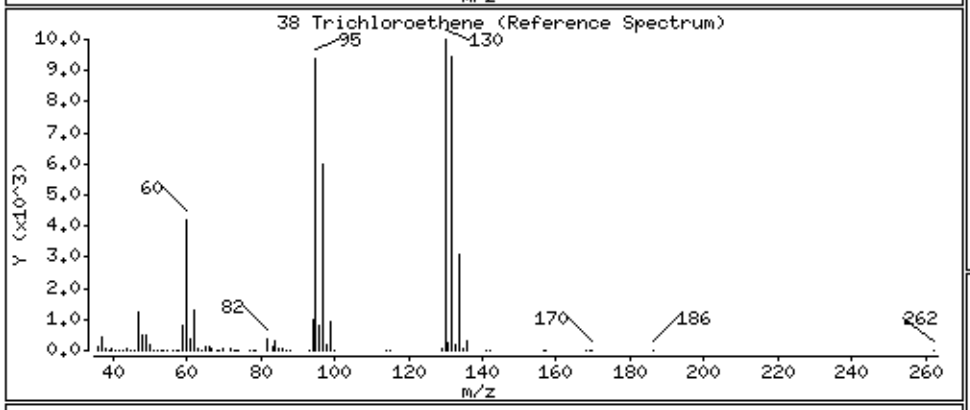
Purge Volume: 5.0 Operator: PC

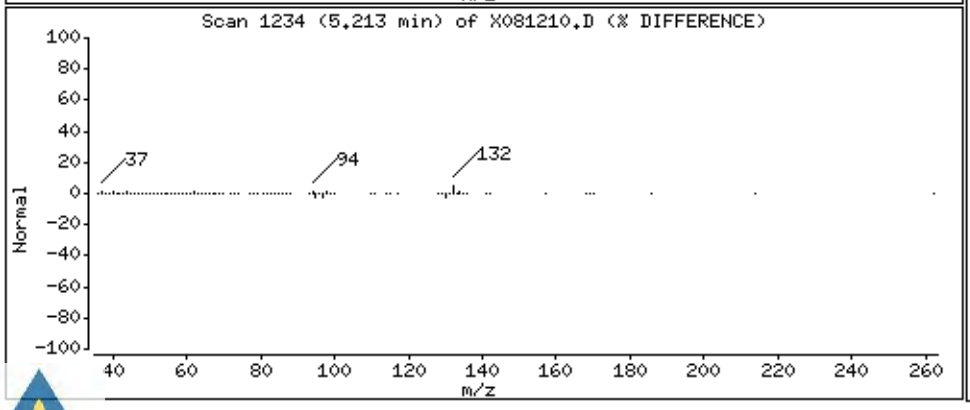
Column phase: DB624 Column diameter: 0.18

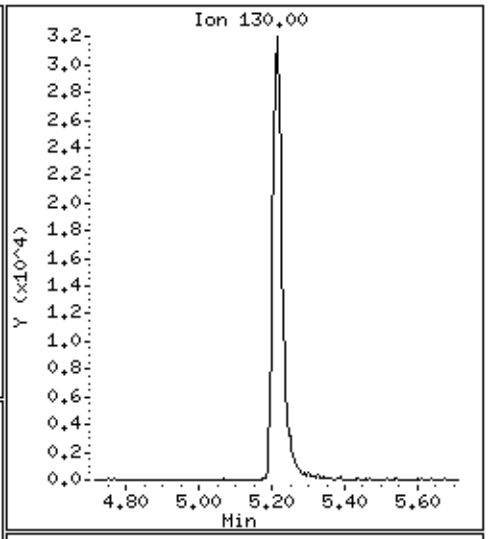
38 Trichloroethene Concentration: 90.65 ug/l

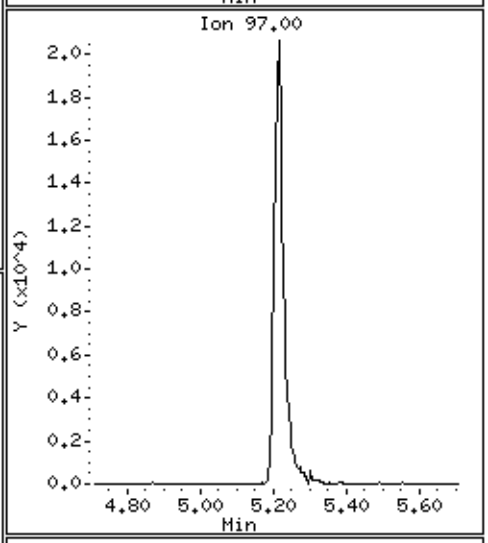


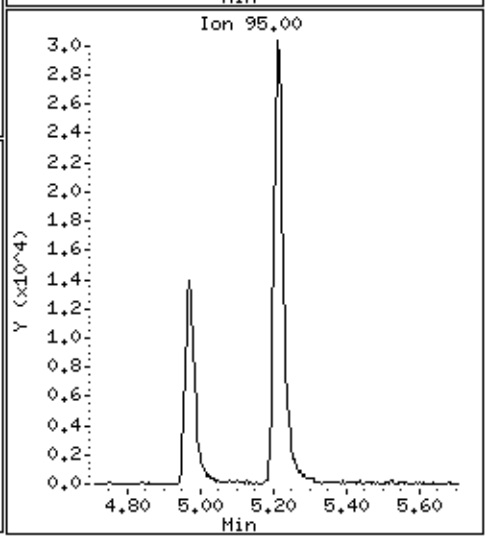












Data File : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081210.D
Inj Date : 12-AUG-2022 13:31
InstruID : voa6.i
LabSampID : HS22080522-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081211.D Page 1
Report Date: 19-Aug-2022 12:23

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081211.D
Lab Smp Id: HS22080490-02MS Client Smp ID: HS22080490-02MS
Inj Date : 12-AUG-2022 13:52
Operator : PC Inst ID: voa6.i
Smp Info : HS22080490-02MS;HS22080490-02MS;3;;MS
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\8260W.m
Meth Date : 19-Aug-2022 12:23 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 11 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	671459	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	953375	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	854231	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.666	(1.000)	405427	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.103	(0.980)	304647	48.0518	48.05
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	331549	47.7621	47.76
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1119513	52.5266	52.52
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	381464	50.0423	50.04
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	124969	20.8231	20.82
31 1,1,1-Trichloroethane	97	4.087	4.084	(0.977)	199884	20.9844	20.98
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	114069	20.0328	20.03
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	88665	20.1876	20.18
22 1,1-Dichloroethane	63	2.929	2.929	(0.700)	204762	19.8084	19.80
11 1,1-Dichloroethene	96	1.925	1.921	(0.460)	106060	18.9221	18.92
32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	170164	22.1153	22.11
93 1,2,3-Trichlorobenzene	180	11.746	11.742	(1.215)	35042	16.6262	16.62
71 1,2,3-Trichloropropane	75	8.867	8.863	(0.917)	85308	19.4310	19.43(M)
90 1,2,4-Trichlorobenzene	180	11.341	11.338	(1.173)	67451	18.2664	18.26
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	417998	21.4940	21.49
89 1,2-Dibromo-3-Chloropropane	155	10.663	10.663	(1.103)	8019	19.4277	19.42

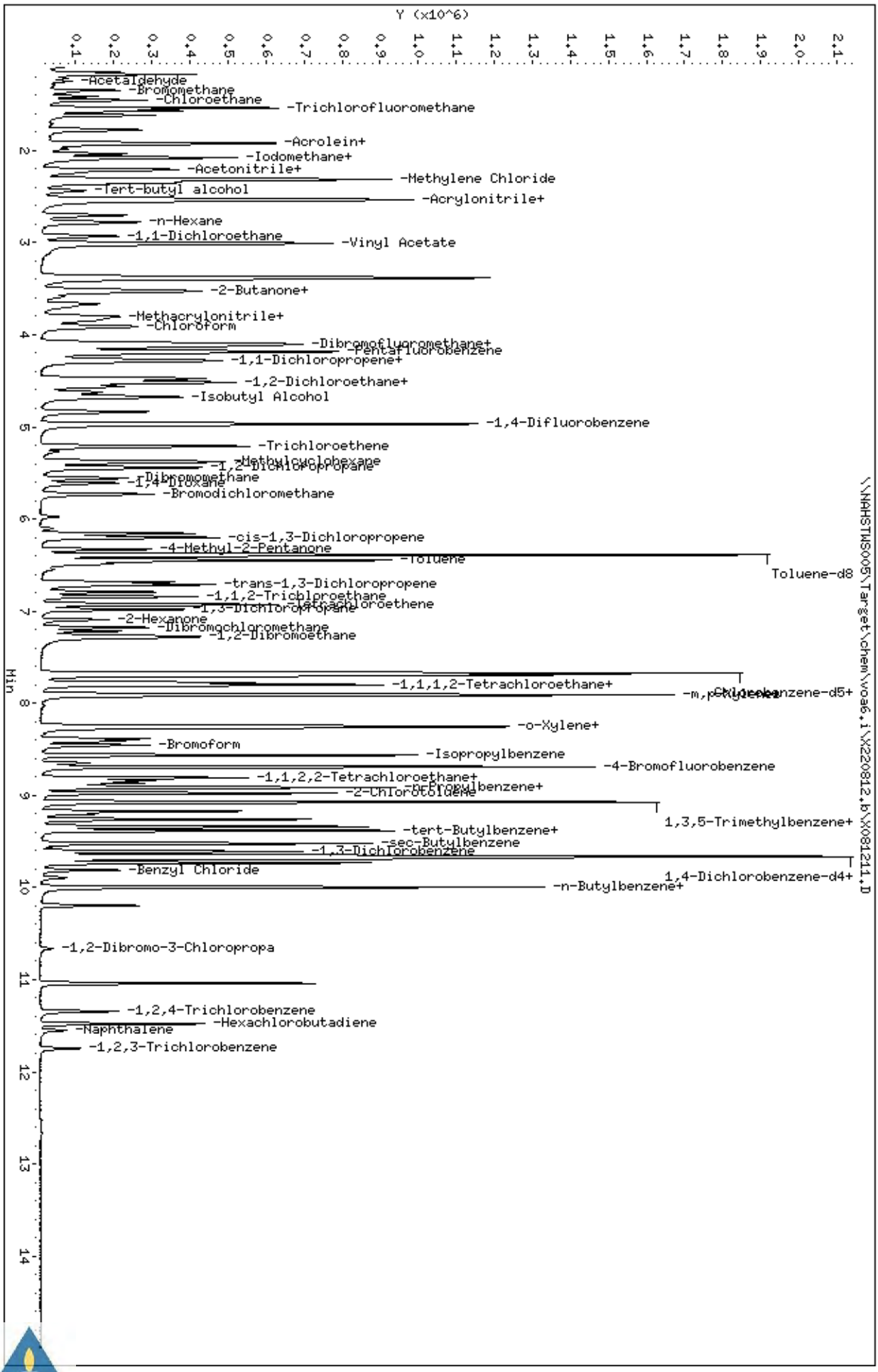
57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	113307	20.3463	20.34
88	1,2-Dichlorobenzene	146	9.995	9.992 (1.034)	207891	20.4928	20.49

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081211.D Page 2
Report Date: 19-Aug-2022 12:23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	168743	20.1815	20.18
42	1,2-Dichloropropane	63	5.437	5.437	(1.094)	118287	20.1575	20.15
75	1,3,5-Trimethylbenzene	105	9.069	9.070	(0.938)	428393	21.7534	21.75
83	1,3-Dichlorobenzene	146	9.605	9.606	(0.994)	238419	21.1952	21.19
54	1,3-Dichloropropane	76	6.985	6.982	(0.911)	179520	20.0941	20.09
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	241829	20.2502	20.25
26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	196142	21.2223	21.22
24	2-Butanone	43	3.593	3.585	(0.858)	54801	32.5332	32.53
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	365799	21.0494	21.04
52	2-Hexanone	43	7.090	7.090	(0.924)	104207	38.7953	38.79
77	4-Chlorotoluene	91	9.073	9.070	(0.939)	412239	21.2527	21.25
82	p-Isopropyltoluene	119	9.650	9.651	(0.998)	433103	21.9007	21.90
45	4-Methyl-2-Pentanone	43	6.329	6.326	(0.825)	171008	41.0845	41.08
10	Acetone	43	1.981	1.981	(0.473)	44888	27.6458	27.64
37	Benzene	78	4.519	4.515	(0.909)	462347	20.4657	20.46
74	Bromobenzene	156	8.807	8.807	(0.911)	147567	21.3132	21.31
29	Bromochloromethane	128	3.803	3.799	(0.909)	70352	18.5827	18.58
39	Bromodichloromethane	83	5.729	5.730	(1.153)	164619	20.4455	20.44
66	Bromoform	173	8.410	8.410	(1.096)	75143	18.9313	18.93
6	Bromomethane	94	1.347	1.347	(0.322)	86836	18.0784	18.07
19	Carbon Disulfide	76	2.078	2.078	(0.497)	612911	41.3043	41.30
34	Carbon Tetrachloride	117	4.271	4.271	(0.860)	176052	21.4078	21.40
59	Chlorobenzene	112	7.697	7.694	(1.003)	344901	21.2940	21.29
7	Chloroethane	64	1.411	1.411	(0.337)	80691	18.7360	18.73
28	Chloroform	83	3.911	3.911	(0.935)	224493	19.8213	19.82
3	Chloromethane	50	1.085	1.085	(0.259)	139162	22.4138	22.41
27	cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	133814	20.0454	20.04
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.239)	199091	20.1300	20.12
55	Dibromochloromethane	129	7.180	7.177	(0.936)	127704	20.1418	20.14
44	Dibromomethane	93	5.557	5.553	(1.118)	78093	19.8346	19.83
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	117113	18.1980	18.19
61	Ethylbenzene	106	7.802	7.799	(1.017)	175610	21.4624	21.46
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	71329	20.9159	20.91
67	Isopropylbenzene	105	8.563	8.564	(1.116)	534566	21.7257	21.72
62	m,p-Xylenes	106	7.907	7.904	(1.031)	447827	44.0025	44.00
17	Methylene Chloride	84	2.311	2.311	(0.552)	126338	19.9460	19.94
87	n-Butylbenzene	91	9.995	9.996	(1.034)	365138	22.2208	22.22
73	n-Propylbenzene	91	8.916	8.912	(0.922)	605409	22.6357	22.63
92	Naphthalene	128	11.551	11.547	(1.195)	63665	15.4117	15.41
63	o-Xylene	106	8.245	8.245	(1.075)	208429	21.0666	21.06
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	502709	21.9954	21.99
64	Styrene	104	8.263	8.260	(1.077)	343024	21.0537	21.05
78	tert-Butylbenzene	119	9.339	9.336	(0.966)	362002	21.6888	21.68
56	Tetrachloroethene	164	6.929	6.929	(0.903)	120457	21.7460	21.74
50	Toluene	91	6.449	6.449	(0.841)	510554	21.2618	21.26
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.606)	118005	19.9774	19.97
51	trans-1,3-Dichloropropene	75	6.685	6.682	(1.346)	165007	20.1455	20.14
38	Trichloroethene	130	5.212	5.208	(1.049)	183191	27.3741	27.37
8	Trichlorofluoromethane	101	1.568	1.569	(0.375)	211317	19.9855	19.98
5	Vinyl Chloride	62	1.152	1.152	(0.275)	131435	18.6675	18.66

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081211.D
Date : 12-AUG-2022 13:52
Client ID: HS22080490-02MS
Sample Info: HS22080490-02MS;HS22080490-02MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

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

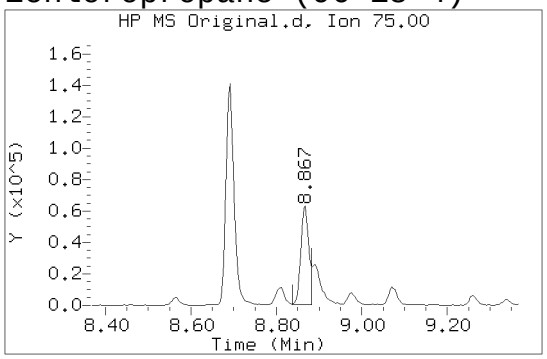
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081211.D
Inj Date : 12-AUG-2022 13:52
InstruID : voa6.i
LabSampID : HS22080490-02MS

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

Reason Code:

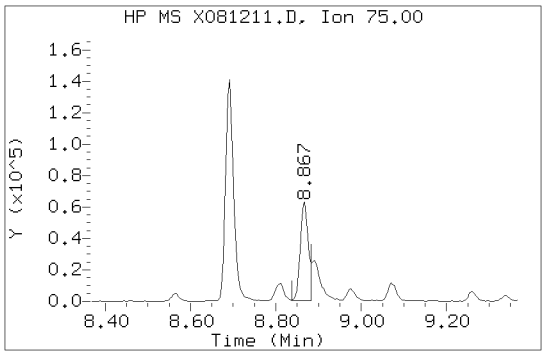
BEFORE

MASS
75
AREA
85308
HEIGHT
62857
19-Aug-2022
12:23
linh
pham



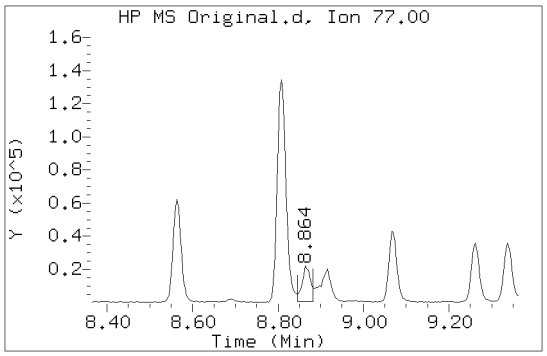
AFTER

MASS
75
AREA
85308
HEIGHT
62857
19-Aug-2022
12:23
linh
pham



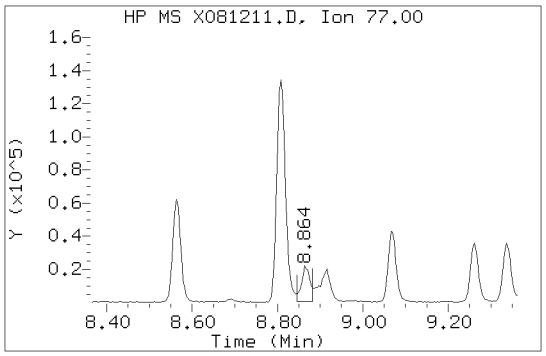
BEFORE

MASS
77
AREA
31350
HEIGHT
21806
19-Aug-2022
12:23
linh
pham



AFTER

MASS
77
AREA
31350
HEIGHT
21806
19-Aug-2022
12:23
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081212.D Page 1
Report Date: 19-Aug-2022 12:23

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081212.D
Lab Smp Id: HS22080490-02MSD Client Smp ID: HS22080490-02MSD
Inj Date : 12-AUG-2022 14:13
Operator : PC Inst ID: voa6.i
Smp Info : HS22080490-02MSD;HS22080490-02MSD;3;;MSD
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\8260W.m
Meth Date : 19-Aug-2022 12:23 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 11 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

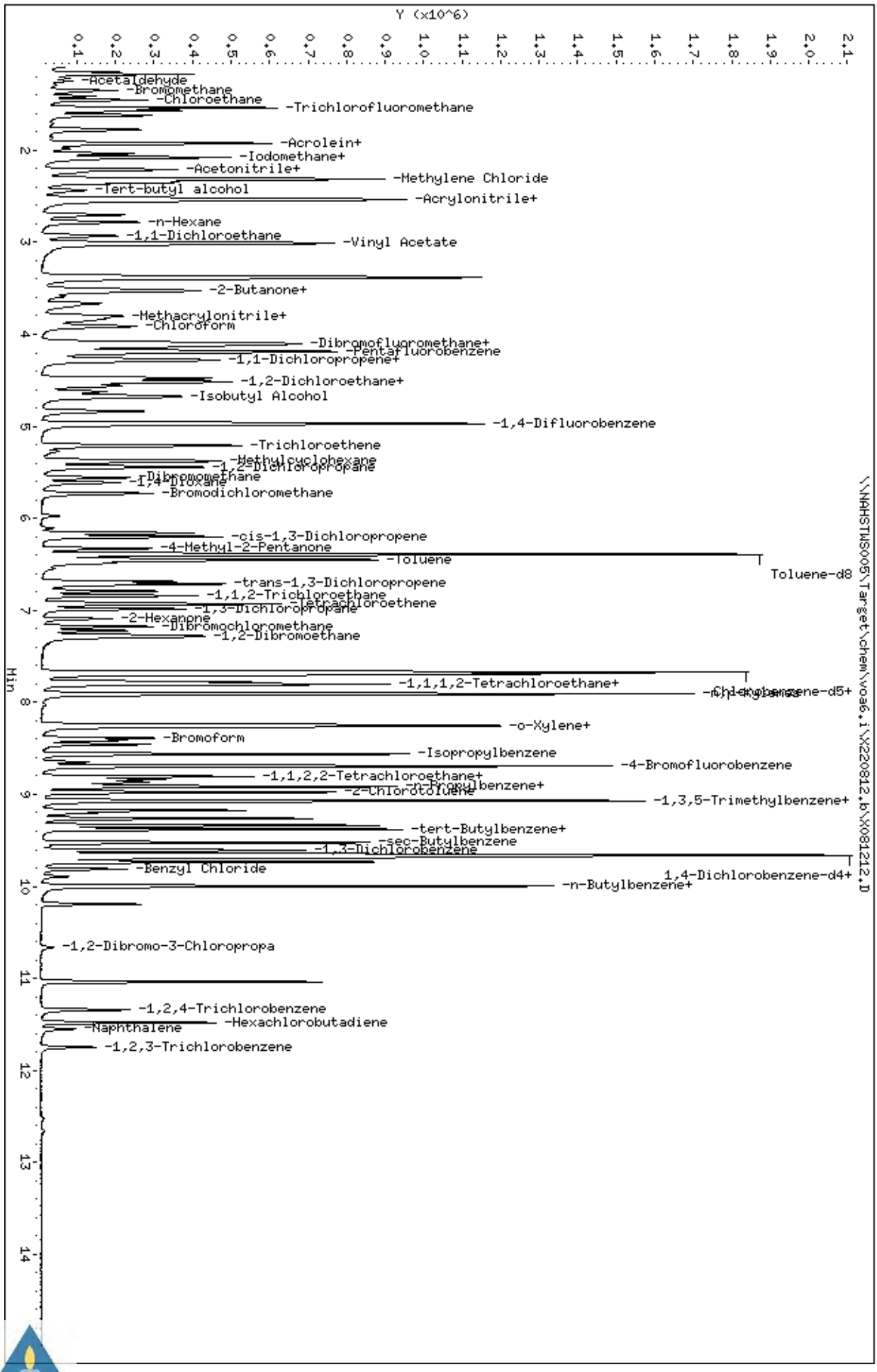
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.189	4.189	(1.000)	669821	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	962498	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	861398	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	408999	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.103	(0.980)	306910	48.5343	48.53
$ 35 1,2-Dichloroethane-d4	65	4.478	4.474	(1.069)	330013	47.6563	47.65
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1134220	52.7739	52.77
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	391386	50.9311	50.93
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	122045	20.1666	20.16
31 1,1,1-Trichloroethane	97	4.088	4.084	(0.976)	190506	20.0488	20.04
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	114357	19.9080	19.90
53 1,1,2-Trichloroethane	83	6.843	6.839	(0.892)	88051	19.8810	19.88
22 1,1-Dichloroethane	63	2.929	2.929	(0.699)	194689	18.8800	18.88
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	101287	18.1148	18.11
32 1,1-Dichloropropene	75	4.283	4.286	(0.862)	161940	20.8470	20.84
93 1,2,3-Trichlorobenzene	180	11.746	11.742	(1.215)	43883	20.6391	20.63
71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	88189	19.9118	19.91(M)
90 1,2,4-Trichlorobenzene	180	11.345	11.338	(1.174)	75526	20.2745	20.27
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	417159	21.2635	21.26
89 1,2-Dibromo-3-Chloropropane	155	10.663	10.663	(1.103)	8097	19.4447	19.44

57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	113214	20.1605	20.16
88	1,2-Dichlorobenzene	146	9.996	9.992 (1.034)	213064	20.8193	20.81

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
33	1,2-Dichloroethane	62	4.564	4.560	(0.919)	167584	19.8529	19.85
42	1,2-Dichloropropane	63	5.441	5.437	(1.095)	116233	19.6197	19.61
75	1,3,5-Trimethylbenzene	105	9.070	9.070	(0.938)	427056	21.4961	21.49
83	1,3-Dichlorobenzene	146	9.609	9.606	(0.994)	235358	20.7403	20.74
54	1,3-Dichloropropane	76	6.982	6.982	(0.910)	181150	20.1079	20.10
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	250367	20.7821	20.78
26	2,2-Dichloropropane	77	3.514	3.514	(0.839)	187441	20.3201	20.32
24	2-Butanone	43	3.593	3.585	(0.858)	54474	32.4181	32.41
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	361297	20.6088	20.60
52	2-Hexanone	43	7.090	7.090	(0.924)	106281	39.2382	39.23
77	4-Chlorotoluene	91	9.073	9.070	(0.939)	412855	21.0986	21.09
82	p-Isopropyltoluene	119	9.651	9.651	(0.998)	434961	21.8026	21.80
45	4-Methyl-2-Pentanone	43	6.329	6.326	(0.825)	162548	38.7271	38.72
10	Acetone	43	1.981	1.981	(0.473)	46318	28.8027	28.80
37	Benzene	78	4.519	4.515	(0.909)	448120	19.6479	19.64
74	Bromobenzene	156	8.807	8.807	(0.911)	146314	20.9477	20.94
29	Bromochloromethane	128	3.803	3.799	(0.908)	68627	18.1714	18.17
39	Bromodichloromethane	83	5.730	5.730	(1.153)	161943	19.9225	19.92
66	Bromoform	173	8.414	8.410	(1.097)	74818	18.7081	18.70
6	Bromomethane	94	1.347	1.347	(0.322)	84316	17.5602	17.56
19	Carbon Disulfide	76	2.078	2.078	(0.496)	592455	40.0234	40.02
34	Carbon Tetrachloride	117	4.271	4.271	(0.860)	167983	20.2330	20.23
59	Chlorobenzene	112	7.698	7.694	(1.003)	332497	20.3574	20.35
7	Chloroethane	64	1.411	1.411	(0.337)	78424	18.2542	18.25
28	Chloroform	83	3.911	3.911	(0.934)	219335	19.4133	19.41
3	Chloromethane	50	1.085	1.085	(0.259)	129812	20.9624	20.96
27	cis-1,2-Dichloroethene	96	3.533	3.533	(0.843)	129425	19.4353	19.43
46	cis-1,3-Dichloropropene	75	6.161	6.157	(1.240)	197100	19.7398	19.73
55	Dibromochloromethane	129	7.177	7.177	(0.936)	127430	19.9314	19.93
44	Dibromomethane	93	5.557	5.553	(1.118)	77666	19.5392	19.53
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	114626	17.8519	17.85
61	Ethylbenzene	106	7.803	7.799	(1.017)	170362	20.6478	20.64
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	73622	21.3998	21.39
67	Isopropylbenzene	105	8.564	8.564	(1.116)	520864	20.9927	20.99
62	m,p-Xylenes	106	7.908	7.904	(1.031)	434506	42.3384	42.33
17	Methylene Chloride	84	2.311	2.311	(0.552)	123105	19.4628	19.46
87	n-Butylbenzene	91	9.996	9.996	(1.034)	369745	22.3047	22.30
73	n-Propylbenzene	91	8.916	8.912	(0.922)	599207	22.2082	22.20
92	Naphthalene	128	11.551	11.547	(1.195)	77615	18.6246	18.62
63	o-Xylene	106	8.245	8.245	(1.075)	201001	20.1468	20.14
81	sec-Butylbenzene	105	9.523	9.523	(0.985)	504240	21.8697	21.86
64	Styrene	104	8.264	8.260	(1.077)	335581	20.4255	20.42
78	tert-Butylbenzene	119	9.339	9.336	(0.966)	363222	21.5719	21.57
56	Tetrachloroethene	164	6.929	6.929	(0.903)	118217	21.1641	21.16
50	Toluene	91	6.449	6.449	(0.841)	497743	20.5558	20.55
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.605)	117073	19.8681	19.86
51	trans-1,3-Dichloropropene	75	6.685	6.682	(1.346)	161833	19.5707	19.57
38	Trichloroethene	130	5.212	5.208	(1.049)	177425	26.2612	26.26
8	Trichlorofluoromethane	101	1.569	1.569	(0.375)	205509	19.4838	19.48
5	Vinyl Chloride	62	1.152	1.152	(0.275)	124882	17.7802	17.78

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081212.D
Date : 12-AUG-2022 14:13
Client ID: HS22080490-02HSD
Sample Info: HS22080490-02MSD;HS22080490-02MSD;3;;MSD
Purge Volume: 5.0
Column phase: DB624

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

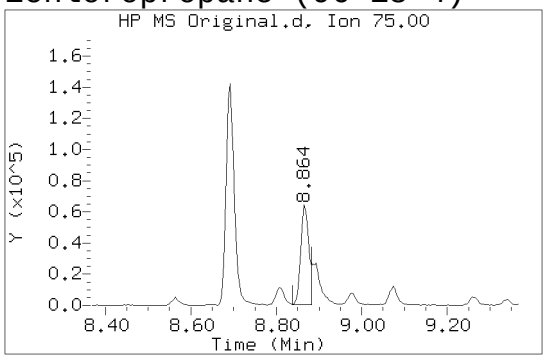
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081212.D
Inj Date : 12-AUG-2022 14:13
InstruID : voa6.i
LabSampID : HS22080490-02MSD

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

Reason Code:

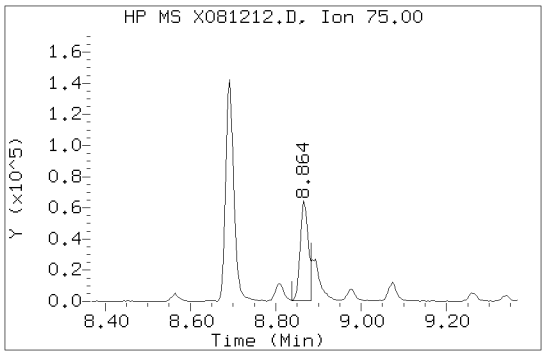
BEFORE

MASS
75
AREA
88189
HEIGHT
64425
19-Aug-2022
12:23
linh
pham



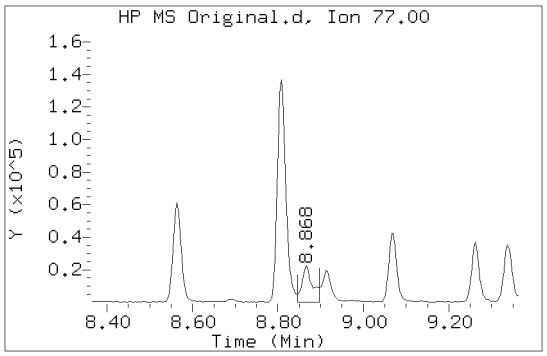
AFTER

MASS
75
AREA
88189
HEIGHT
64425
19-Aug-2022
12:23
linh
pham



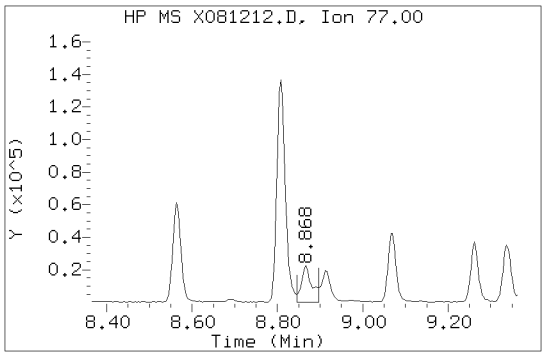
BEFORE

MASS
77
AREA
39841
HEIGHT
22421
19-Aug-2022
12:23
linh
pham



AFTER

MASS
77
AREA
39841
HEIGHT
22421
19-Aug-2022
12:23
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081213.D Page 1
Report Date: 19-Aug-2022 11:23

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081213.D
Lab Smp Id: HS22080522-08 Client Smp ID: HS22080522-08
Inj Date : 12-AUG-2022 14:34
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-08;HS22080522-08;;;
Misc Info : HS22052000V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\8260W.m
Meth Date : 19-Aug-2022 11:23 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 12
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	671818	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	952946	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	828493	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.666	(1.000)	358490	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.103	(0.981)	298638	47.0641	47.06
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	332830	47.9221	47.92
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1104656	53.4397	53.43
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	363471	49.1487	49.14
33 1,2-Dichloroethane	62	4.571	4.560	(0.920)	6003	0.71828	3.59(a)
27 cis-1,2-Dichloroethene	96	3.540	3.533	(0.846)	24284	3.63581	18.17(a)
38 Trichloroethene	130	5.212	5.208	(1.049)	268221	40.0981	200.49

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

01135213

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081213.D

Date : 12-AUG-2022 14:34

Client ID: HS22080522-08

Instrument: voa6.i

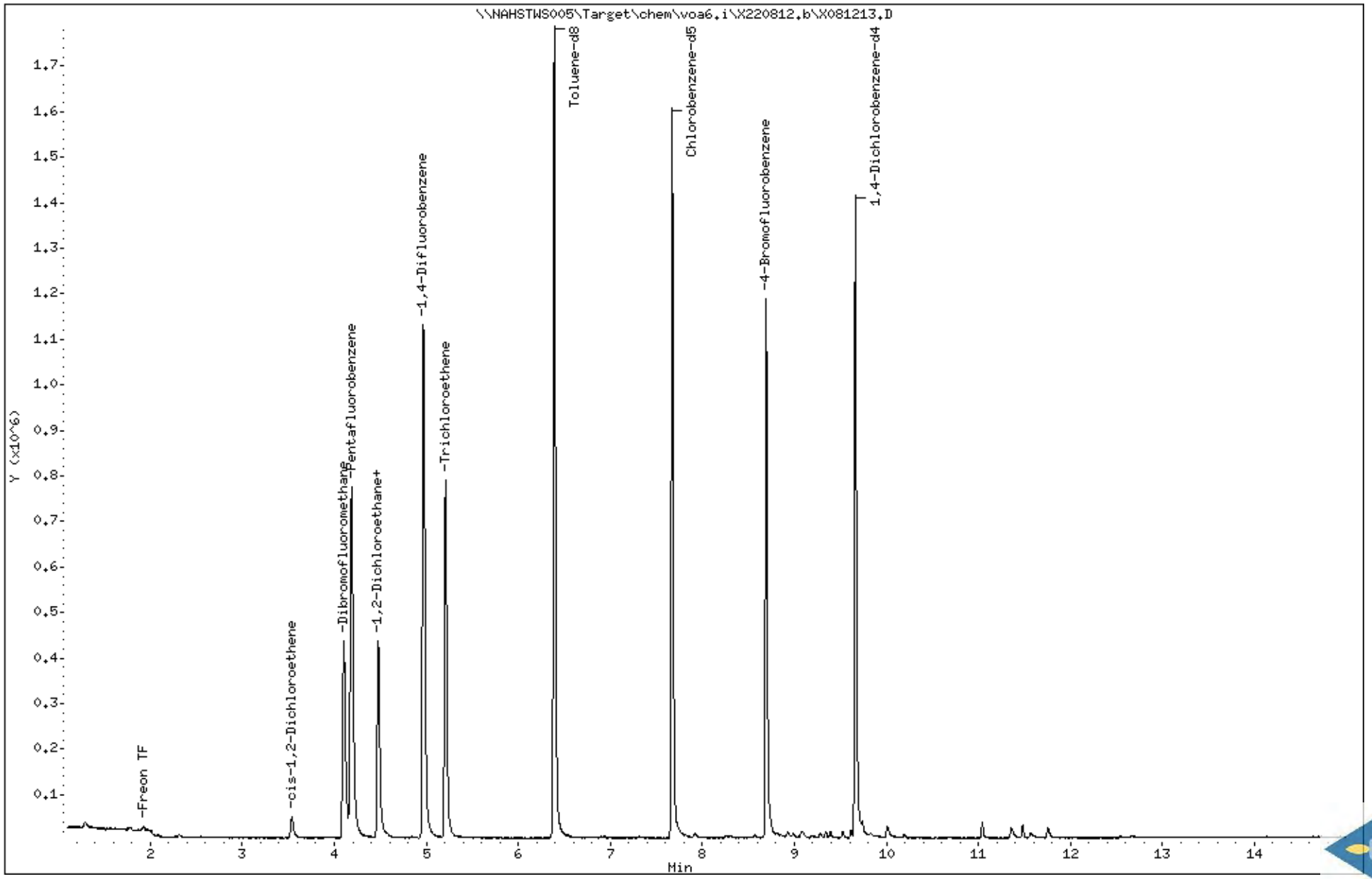
Sample Info: HS22080522-08;HS22080522-08;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081213.D

Date : 12-AUG-2022 14:34

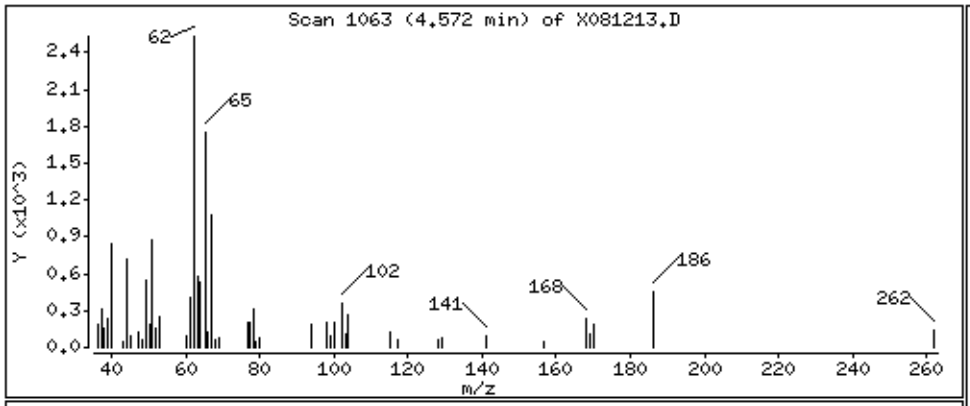
Client ID: HS22080522-08 Instrument: voa6.i

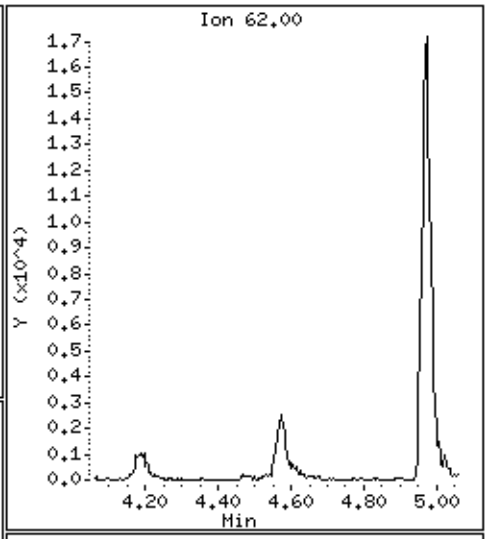
Sample Info: HS22080522-08;HS22080522-08;;;

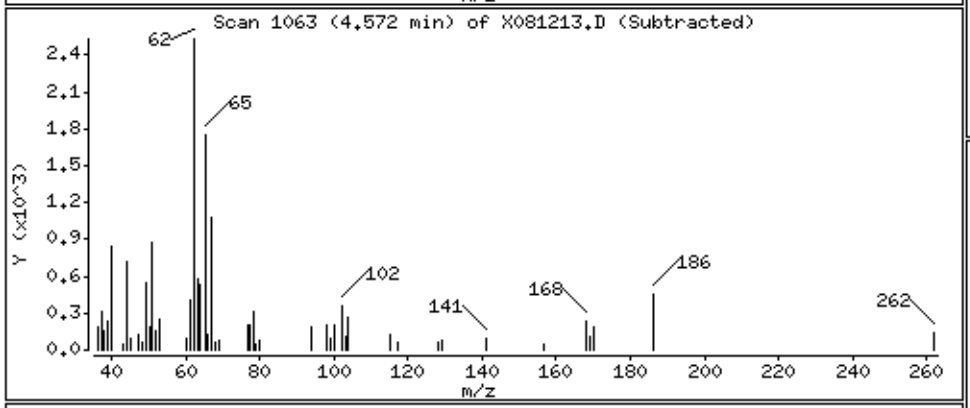
Purge Volume: 5.0 Operator: PC

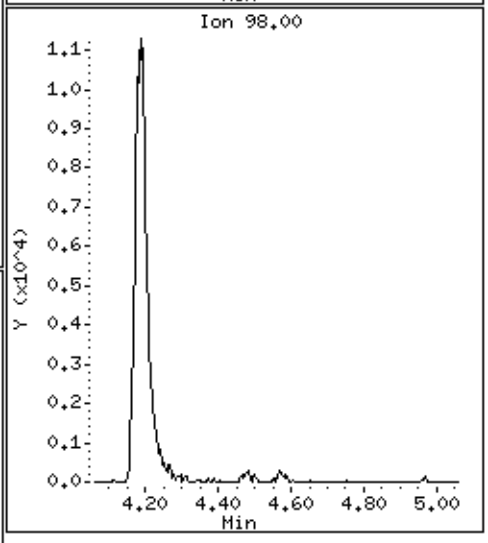
Column phase: DB624 Column diameter: 0.18

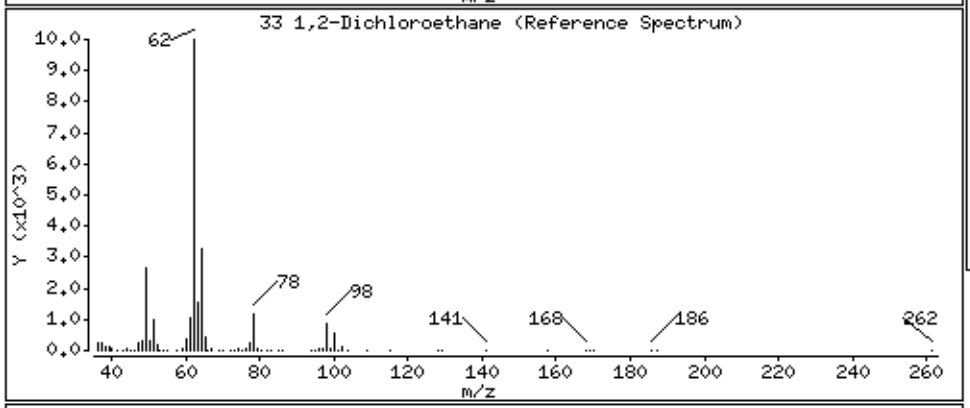
33 1,2-Dichloroethane Concentration: 3.59 ug/l

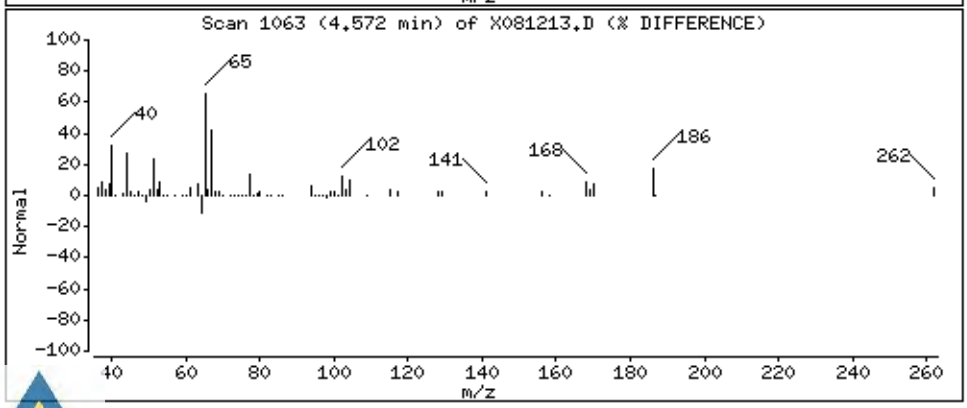












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081213.D Page 3

Date : 12-AUG-2022 14:34

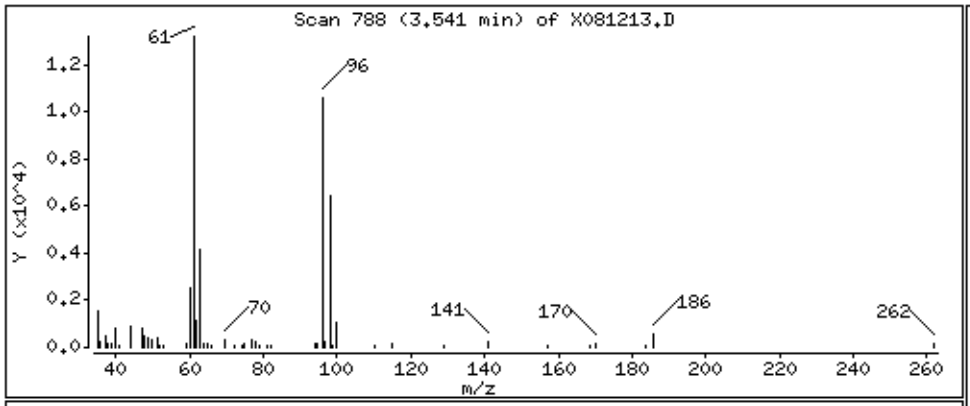
Client ID: HS22080522-08 Instrument: voa6.i

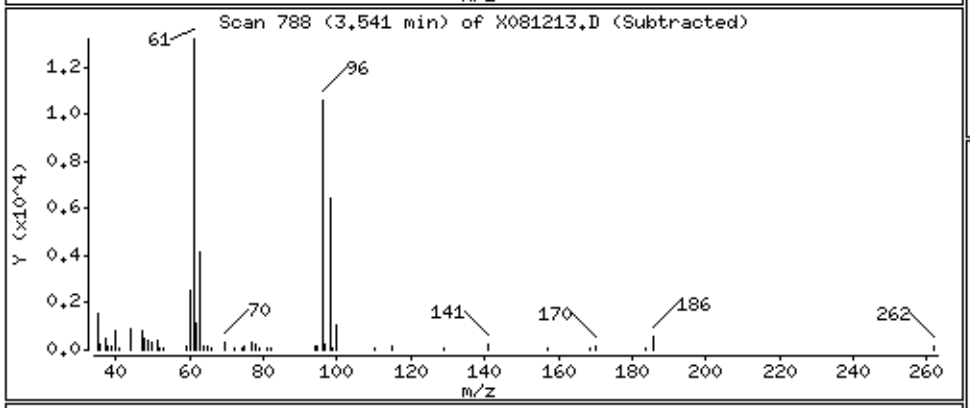
Sample Info: HS22080522-08;HS22080522-08;;;

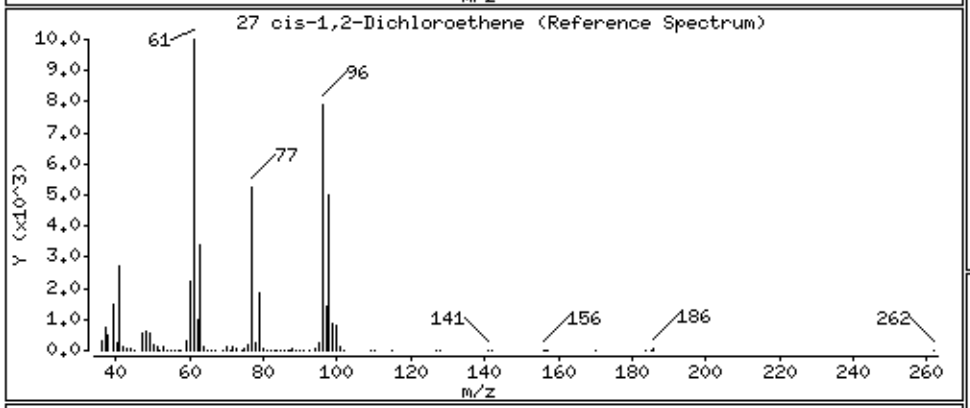
Purge Volume: 5.0 Operator: PC

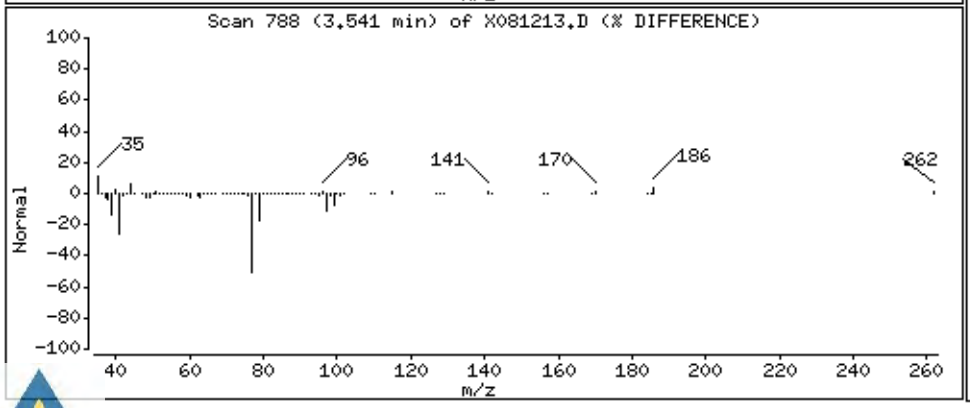
Column phase: DB624 Column diameter: 0.18

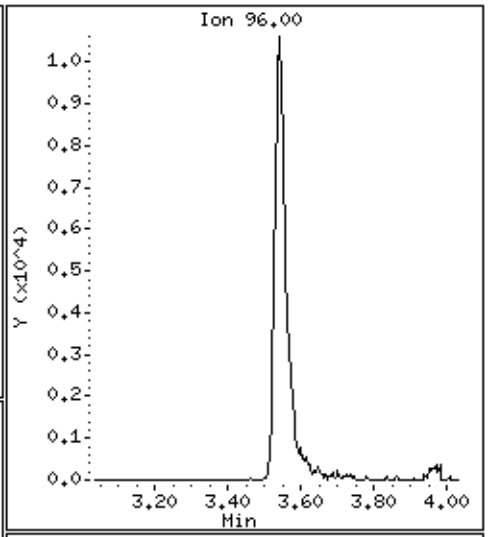
27 cis-1,2-Dichloroethene Concentration: 18.17 ug/l

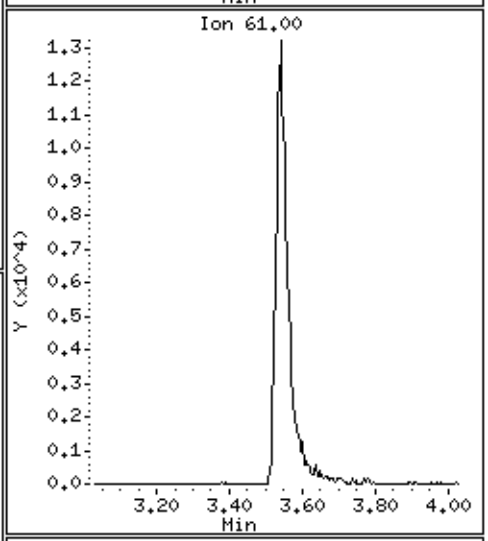


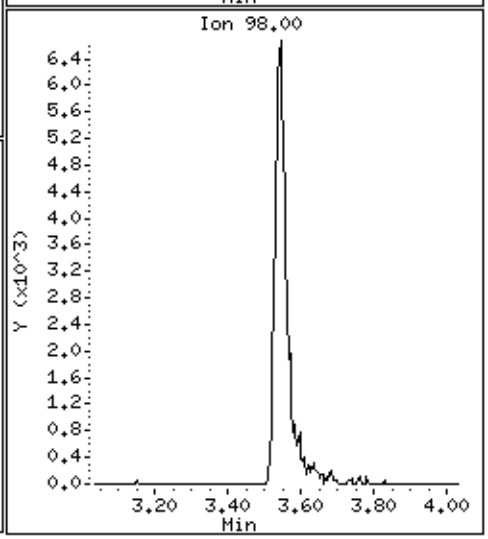












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081213.D Page 4

Date : 12-AUG-2022 14:34

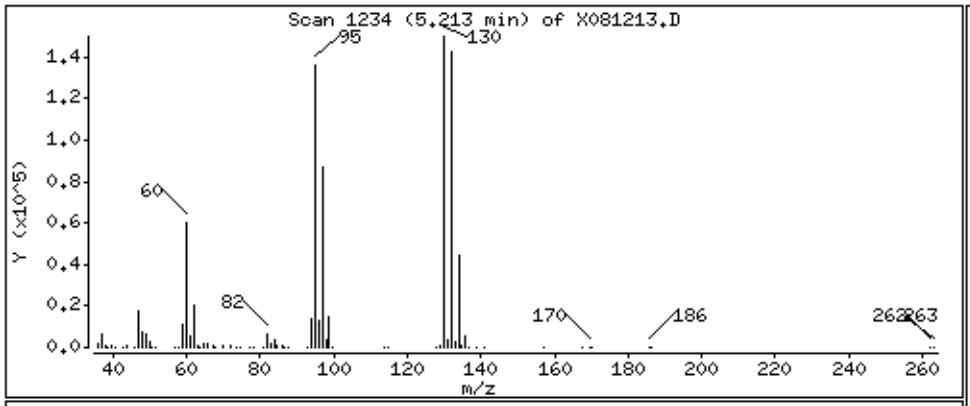
Client ID: HS22080522-08 Instrument: voa6.i

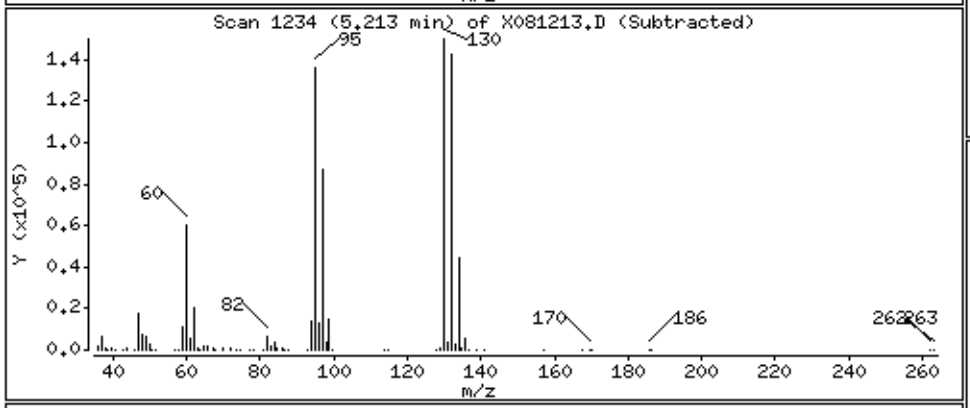
Sample Info: HS22080522-08;HS22080522-08;;;

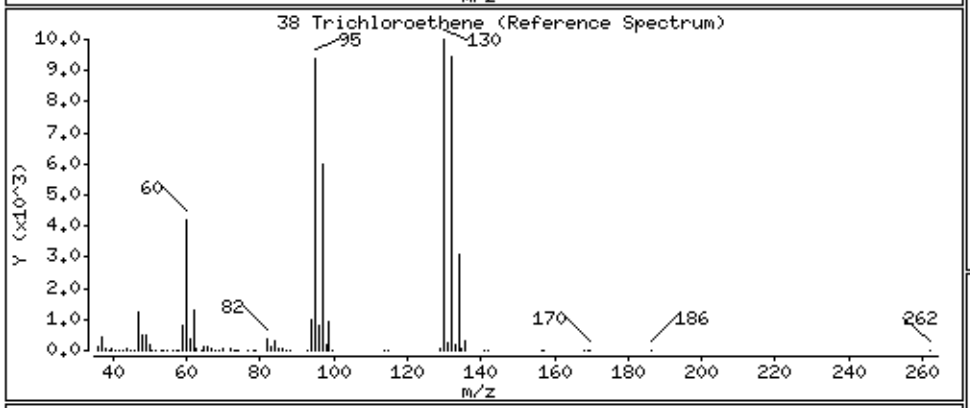
Purge Volume: 5.0 Operator: PC

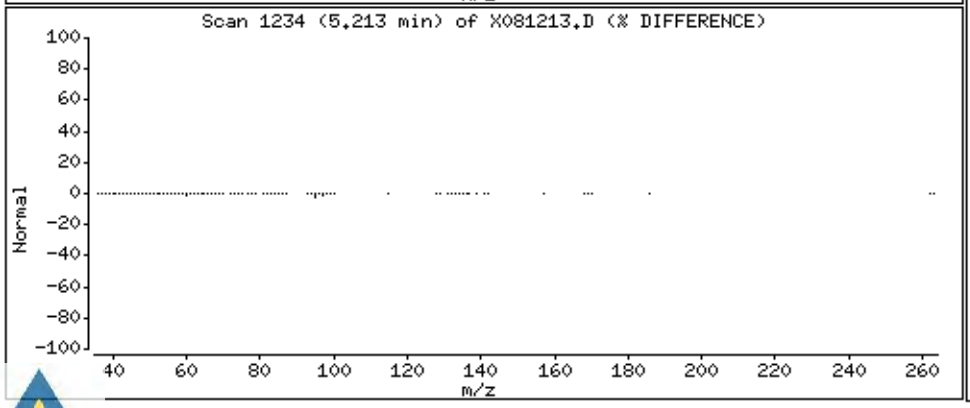
Column phase: DB624 Column diameter: 0.18

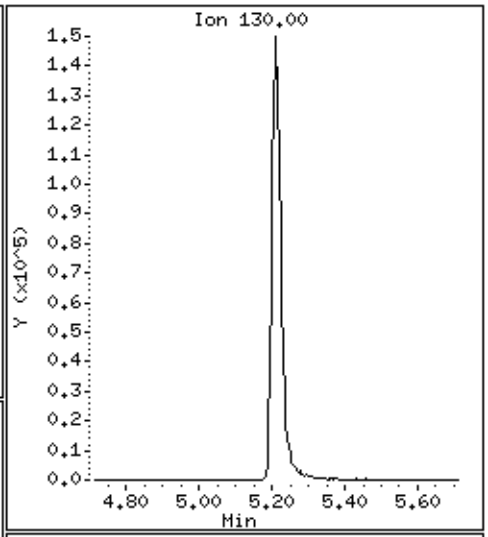
38 Trichloroethene Concentration: 200.49 ug/l

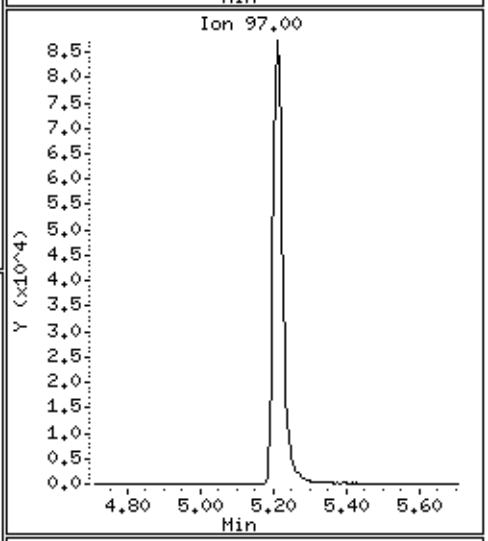


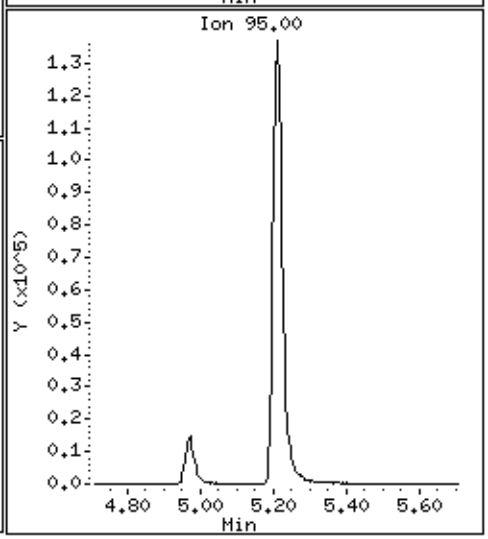












Data File : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081213.D
Inj Date : 12-AUG-2022 14:34
InstruID : voa6.i
LabSampID : HS22080522-08

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081214.D Page 1
Report Date: 19-Aug-2022 11:23

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081214.D
Lab Smp Id: HS22080522-10 Client Smp ID: HS22080522-10
Inj Date : 12-AUG-2022 14:55
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-10;HS22080522-10;;;
Misc Info : HS22052000V6;WATER;0;10;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\8260W.m
Meth Date : 19-Aug-2022 11:23 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 13
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	671542	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	951948	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	838649	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.666	(1.000)	362725	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.103	(0.981)	298065	46.9920	46.99
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	332079	47.8330	47.83
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1108755	52.9884	52.98
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	357714	47.7615	47.76
33 1,2-Dichloroethane	62	4.564	4.560	(0.919)	31767	3.80500	38.05(a)
27 cis-1,2-Dichloroethene	96	3.540	3.533	(0.846)	60694	9.09086	90.90
38 Trichloroethene	130	5.208	5.208	(1.048)	388063	58.0748	580.74

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

01135219

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081214.D

Page 1

Date : 12-AUG-2022 14:55

Client ID: HS22080522-10

Instrument: voa6.i

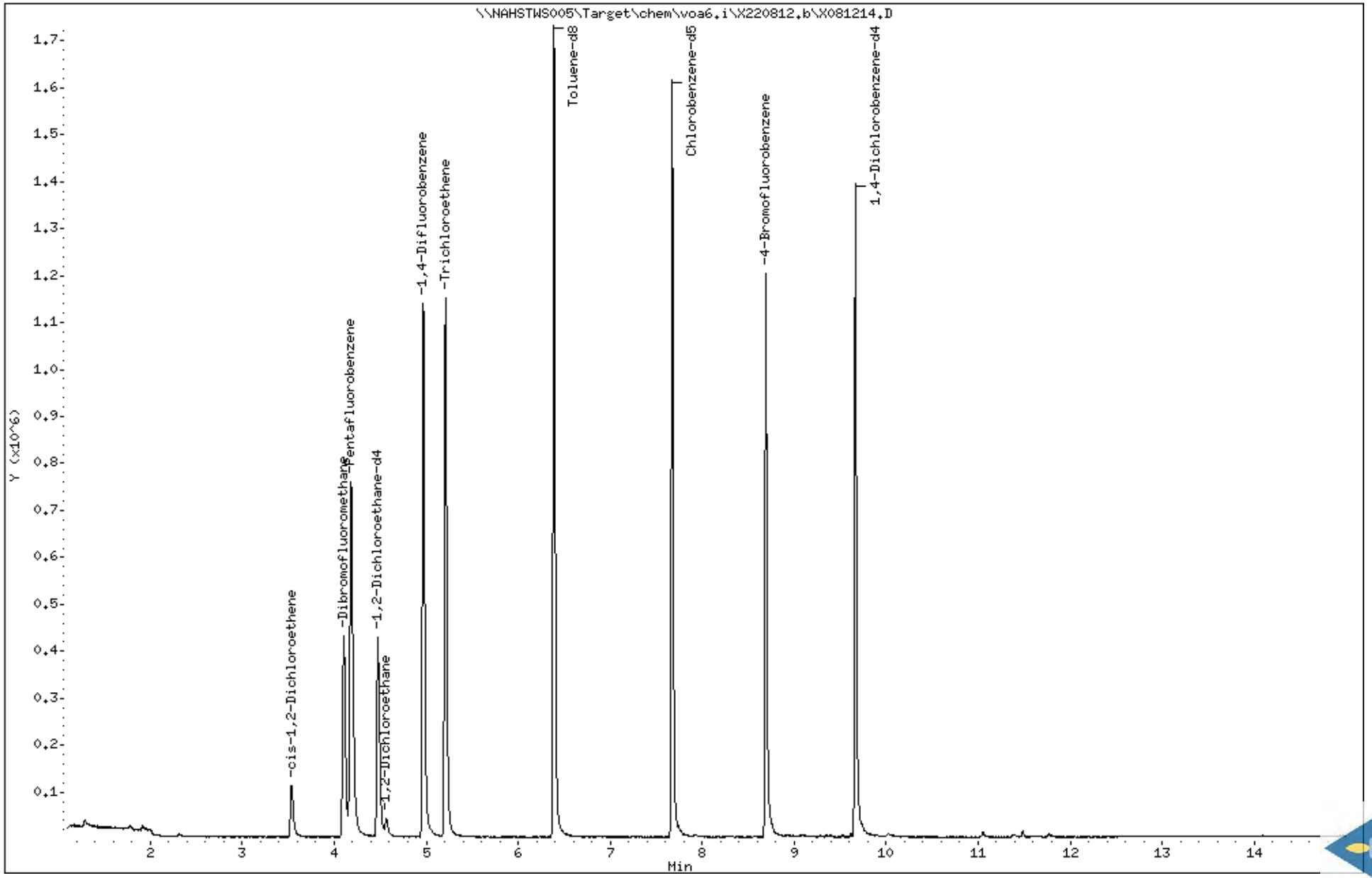
Sample Info: HS22080522-10;HS22080522-10;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081214.D

Date : 12-AUG-2022 14:55

Client ID: HS22080522-10

Instrument: voa6.i

Sample Info: HS22080522-10;HS22080522-10;;;

Purge Volume: 5.0

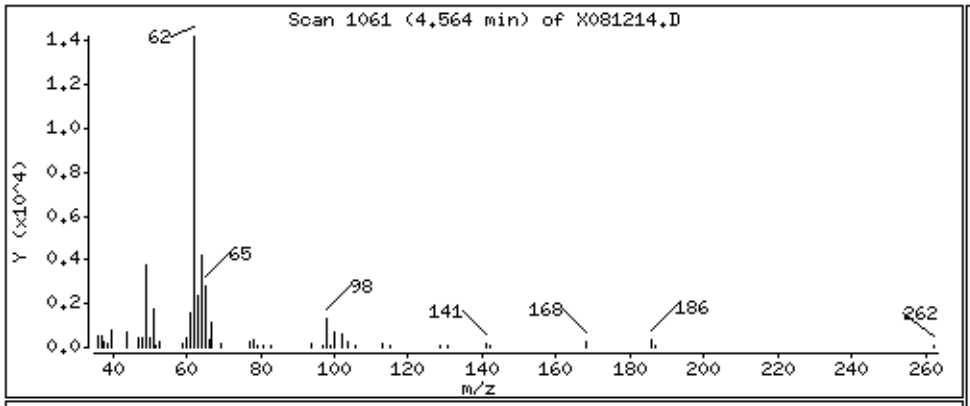
Operator: PC

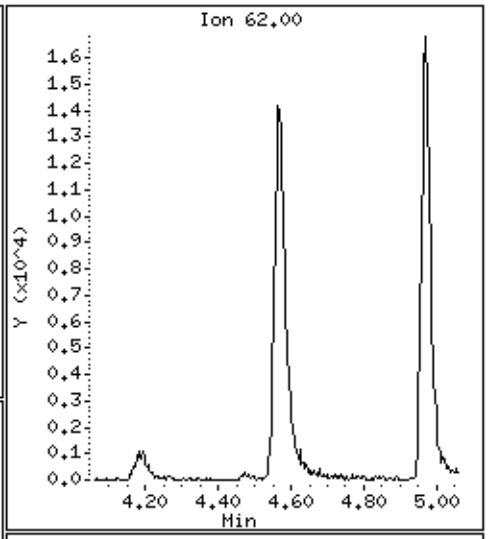
Column phase: DB624

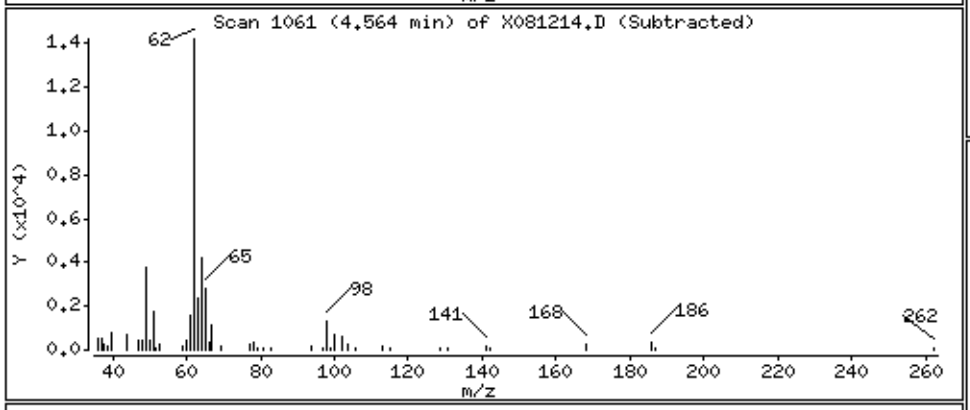
Column diameter: 0.18

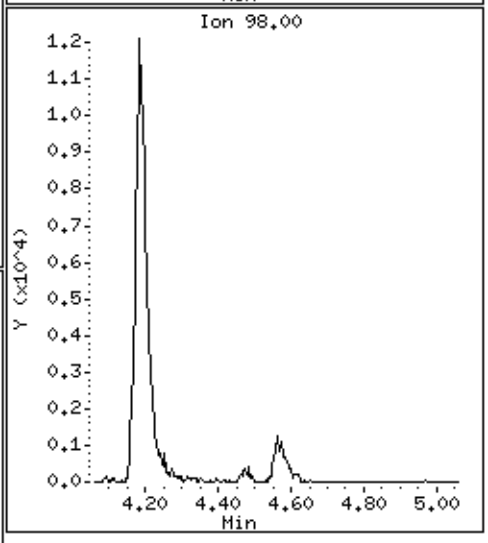
33 1,2-Dichloroethane

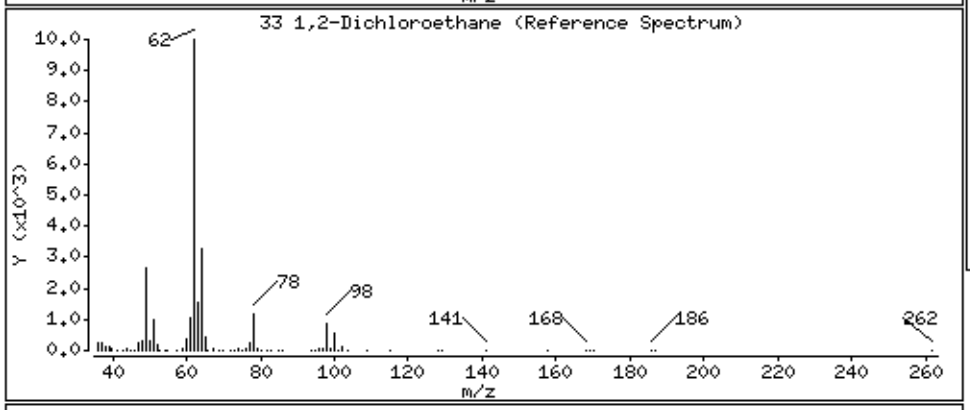
Concentration: 38.05 ug/l

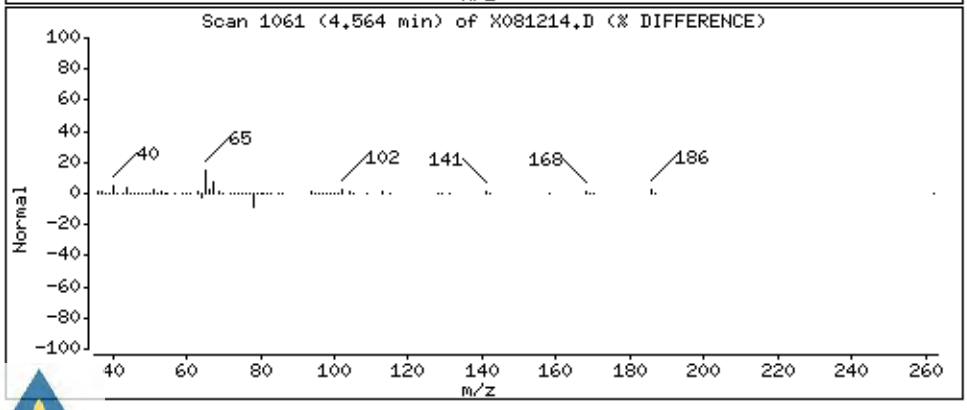












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081214.D

Date : 12-AUG-2022 14:55

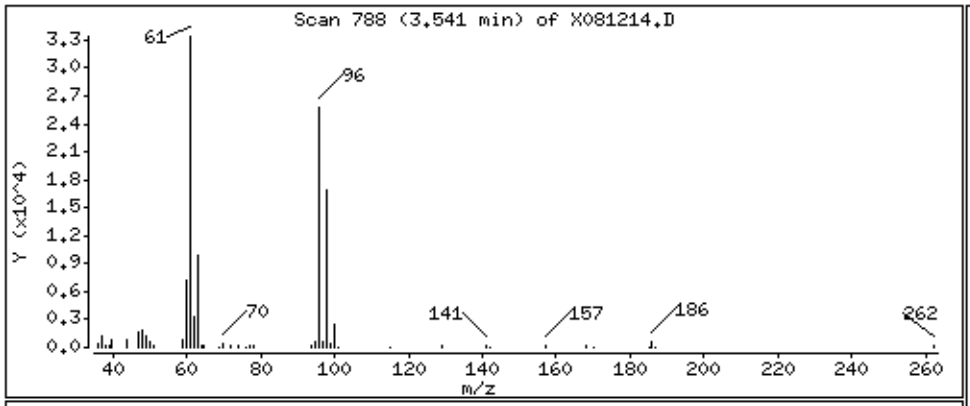
Client ID: HS22080522-10 Instrument: voa6.i

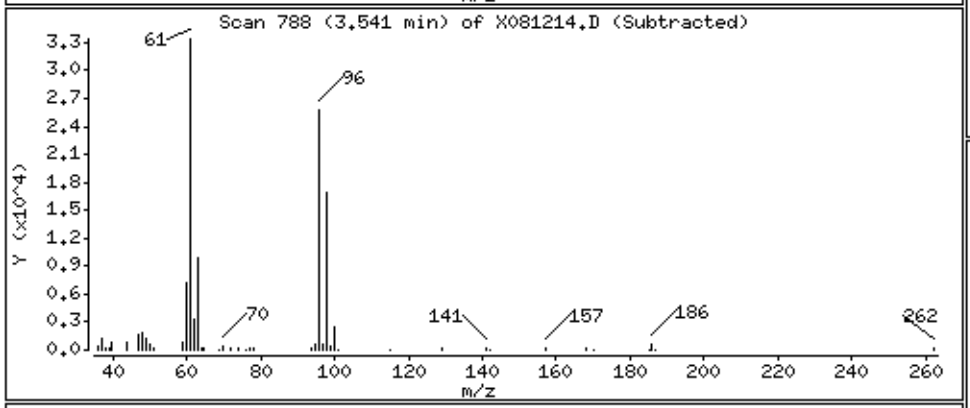
Sample Info: HS22080522-10;HS22080522-10;;;

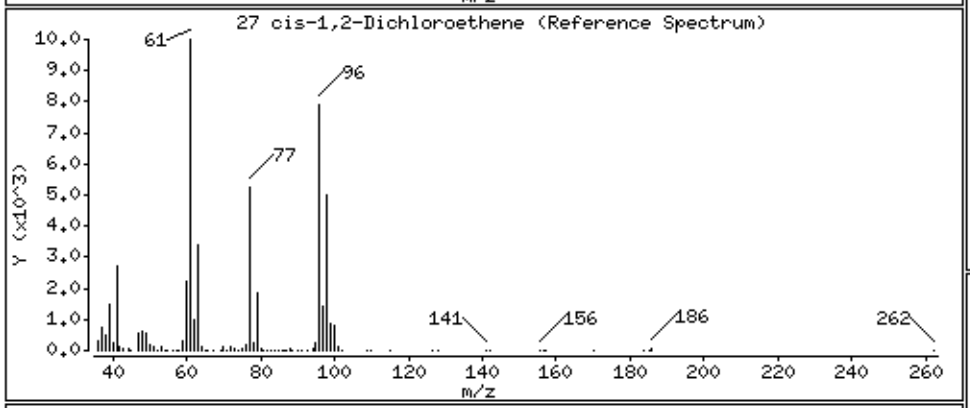
Purge Volume: 5.0 Operator: PC

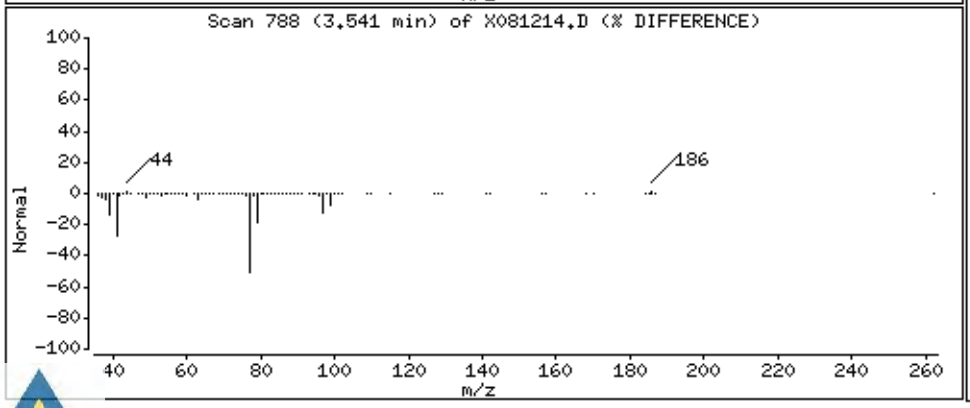
Column phase: DB624 Column diameter: 0.18

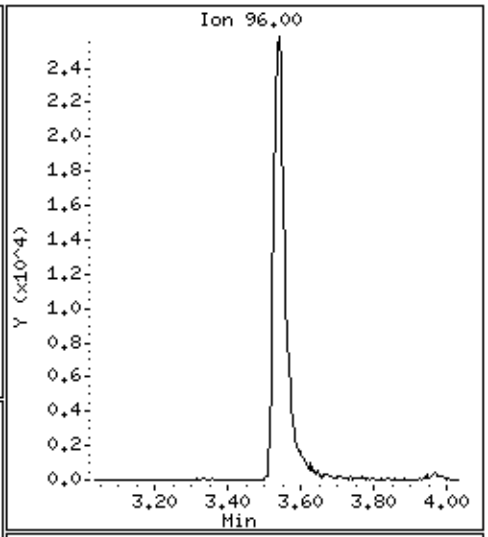
27 cis-1,2-Dichloroethene Concentration: 90.90 ug/l

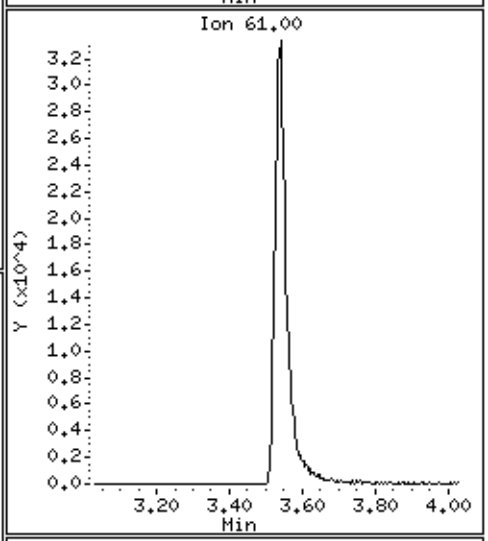


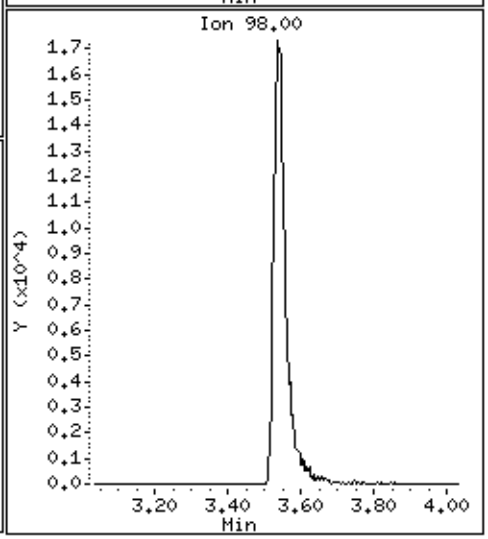












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081214.D Page 4

Date : 12-AUG-2022 14:55

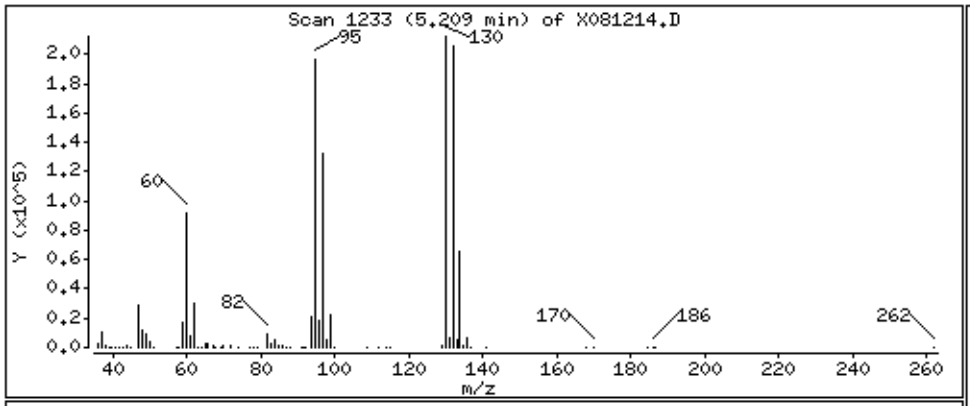
Client ID: HS22080522-10 Instrument: voa6.i

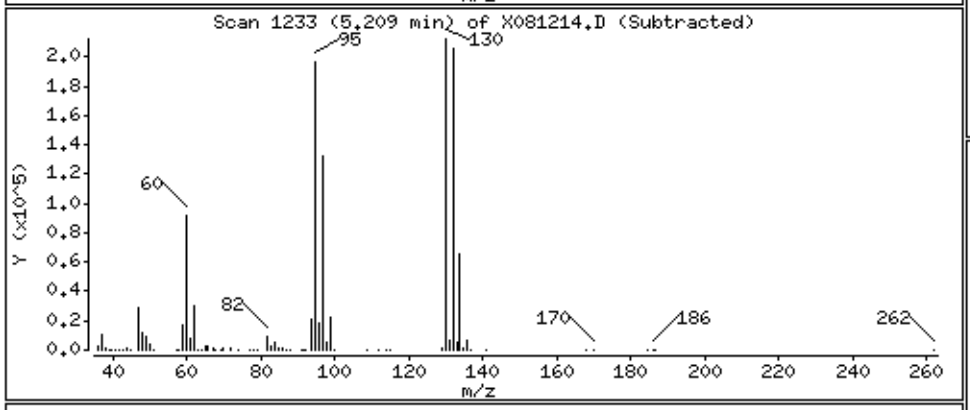
Sample Info: HS22080522-10;HS22080522-10;;;

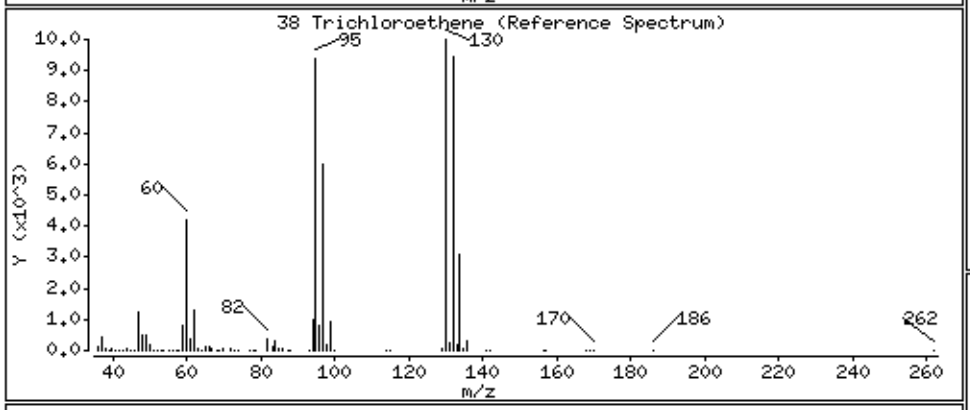
Purge Volume: 5.0 Operator: PC

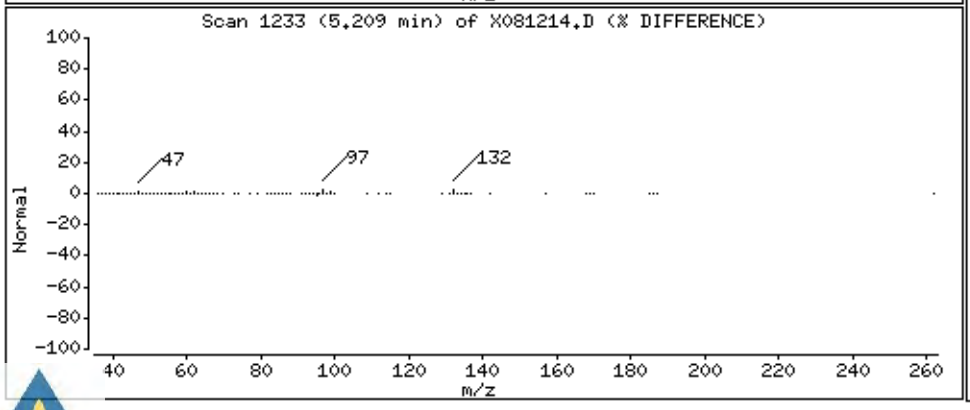
Column phase: DB624 Column diameter: 0.18

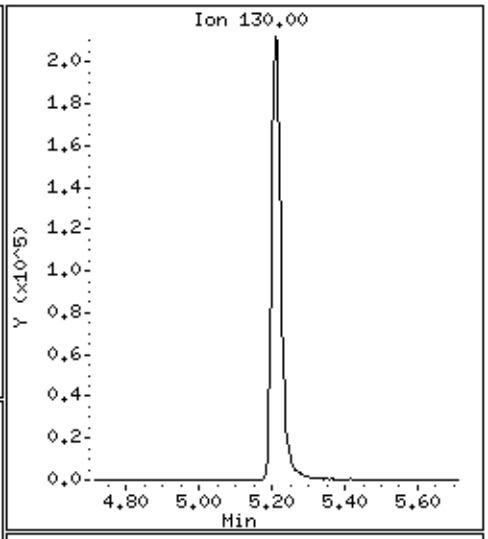
38 Trichloroethene Concentration: 580.74 ug/l

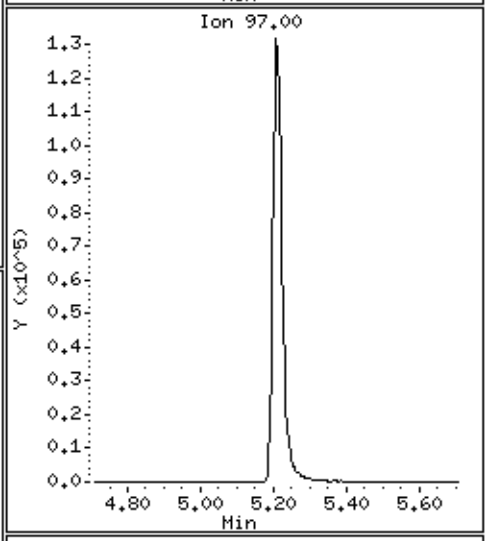


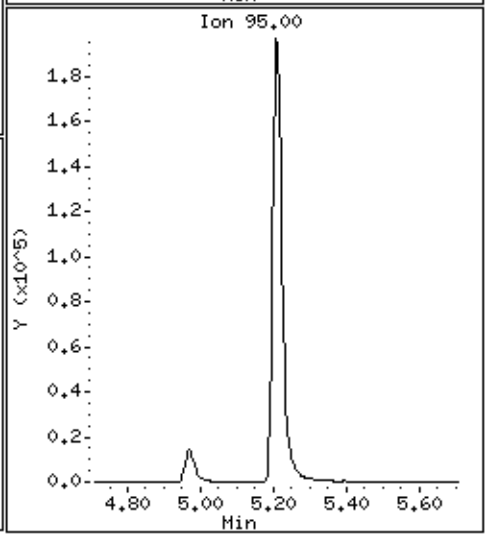












Data File : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081214.D
Inj Date : 12-AUG-2022 14:55
InstruID : voa6.i
LabSampID : HS22080522-10

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081229.D Page 1
Report Date: 19-Aug-2022 11:23

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081229.D
Lab Smp Id: HS22080522-04 Client Smp ID: HS22080522-04
Inj Date : 12-AUG-2022 20:11
Operator : PC Inst ID: voa6.i
Smp Info : HS22080522-04;HS22080522-04;;;
Misc Info : HS22052000V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\8260W.m
Meth Date : 19-Aug-2022 11:23 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 28
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.189	(1.000)	644919	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.969	(1.000)	917187	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	776672	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.666	(1.000)	339370	50.0000	
$ 30 Dibromofluoromethane	113	4.106	4.103	(0.981)	286952	47.1093	47.10
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	324282	48.6437	48.64
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1065565	54.9880	54.98
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	332706	47.9709	47.97
27 cis-1,2-Dichloroethene	96	3.536	3.533	(0.845)	96701	15.0820	1508.19
17 Methylene Chloride	84	2.311	2.311	(0.552)	642352	109.340	10934.03
38 Trichloroethene	130	5.212	5.208	(1.049)	10630	1.65110	165.11(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

01135225

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081229.D

Date : 12-AUG-2022 20:11

Client ID: HS22080522-04

Instrument: voa6.i

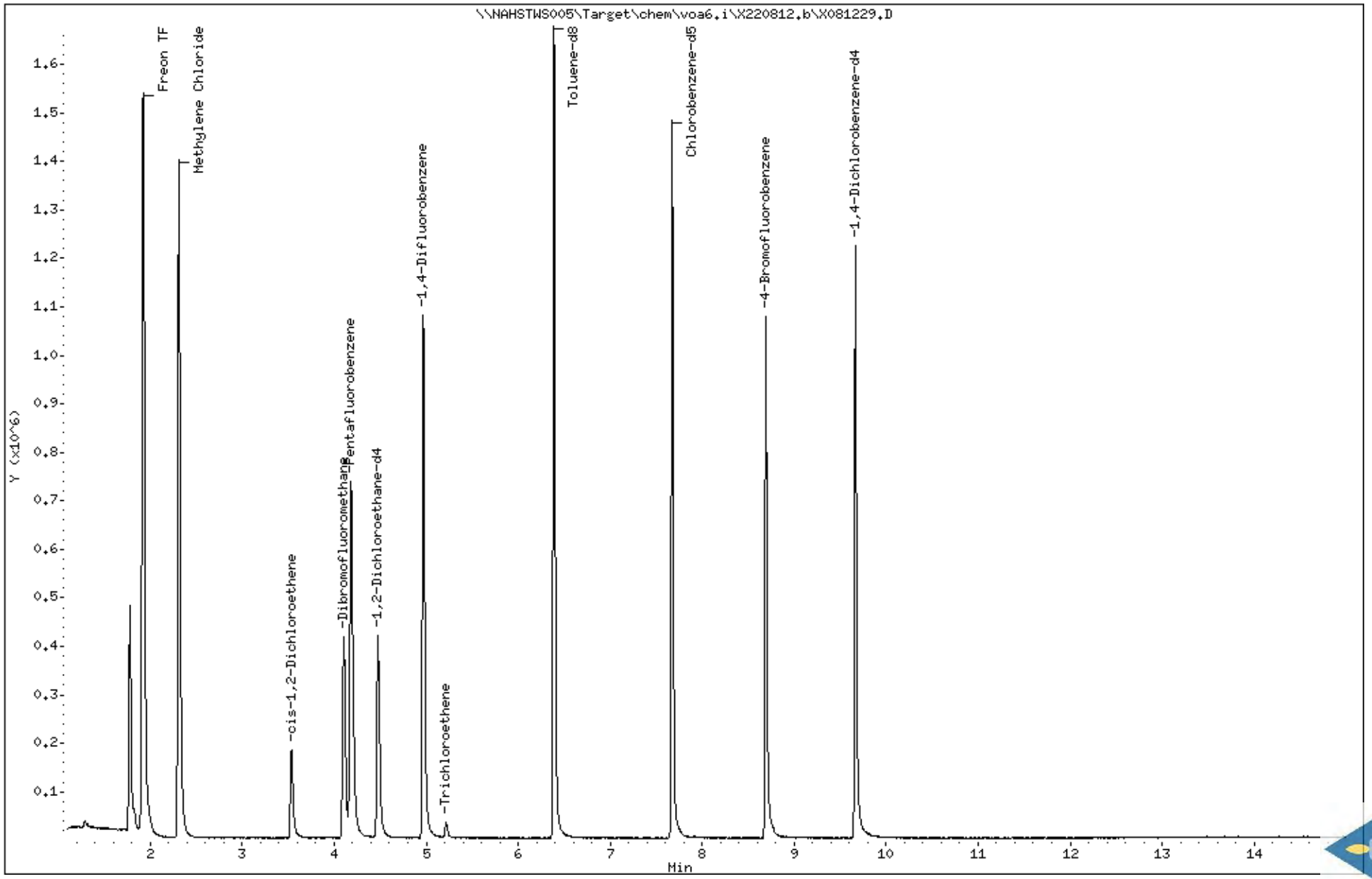
Sample Info: HS22080522-04;HS22080522-04;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081229.D

Date : 12-AUG-2022 20:11

Client ID: HS22080522-04

Instrument: voa6.i

Sample Info: HS22080522-04;HS22080522-04;;;

Purge Volume: 5.0

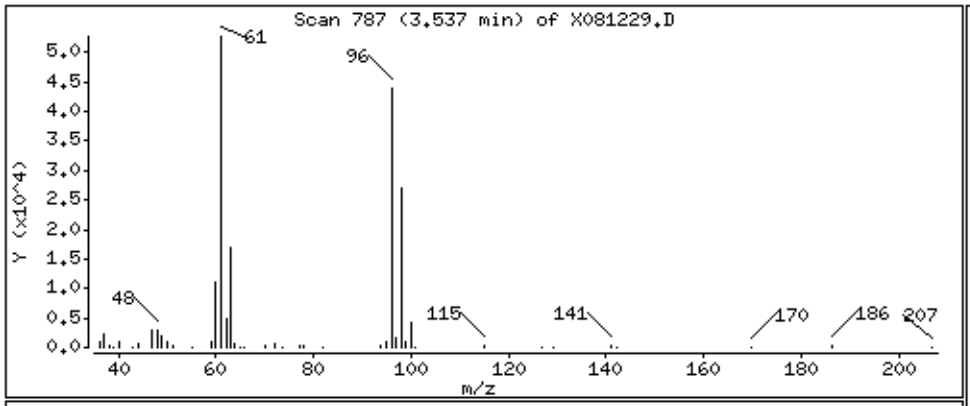
Operator: PC

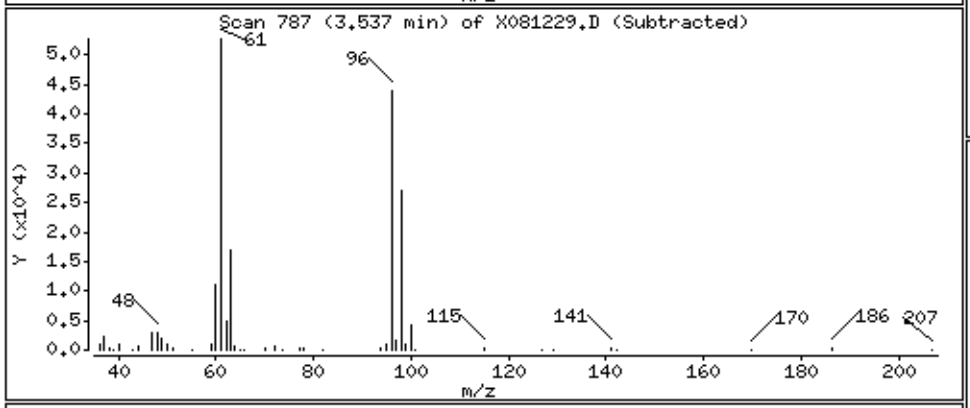
Column phase: DB624

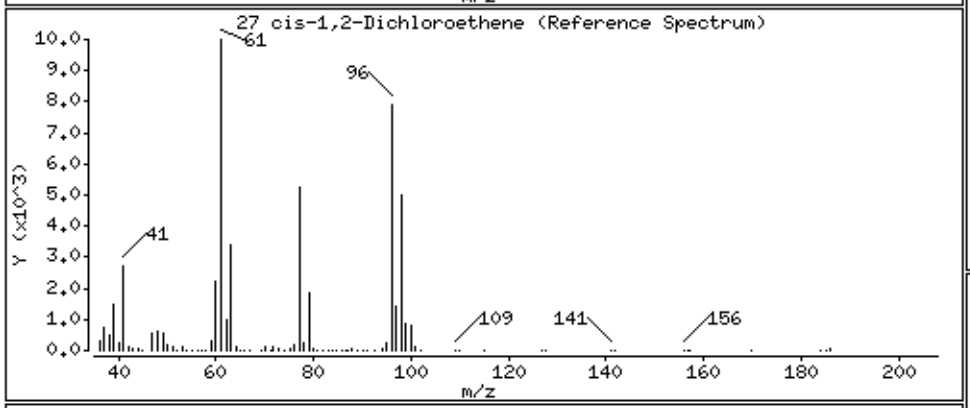
Column diameter: 0.18

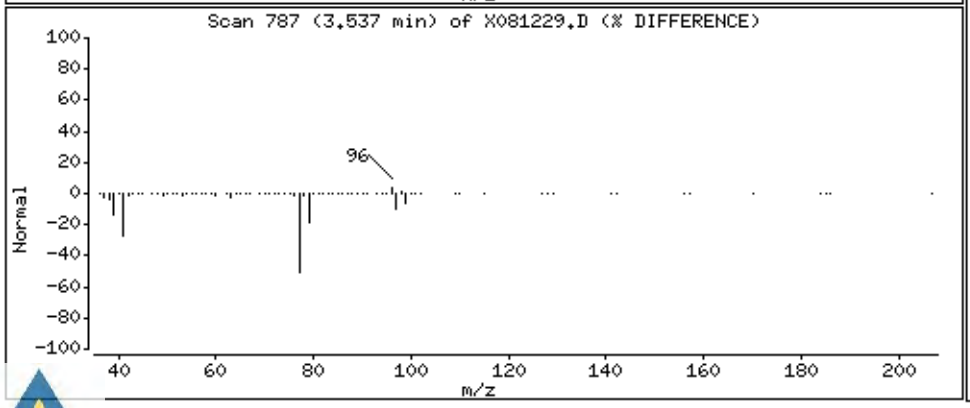
27 cis-1,2-Dichloroethene

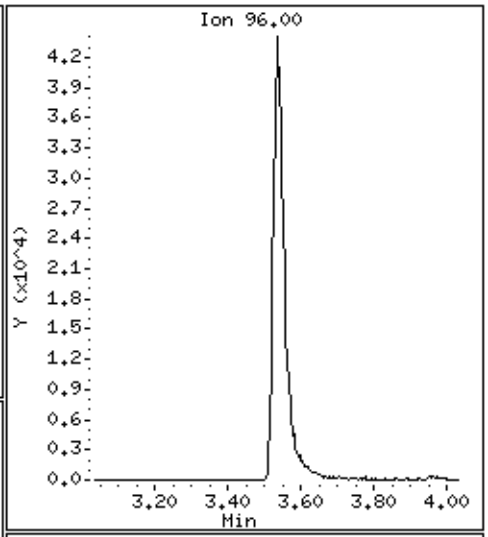
Concentration: 1508.19 ug/l

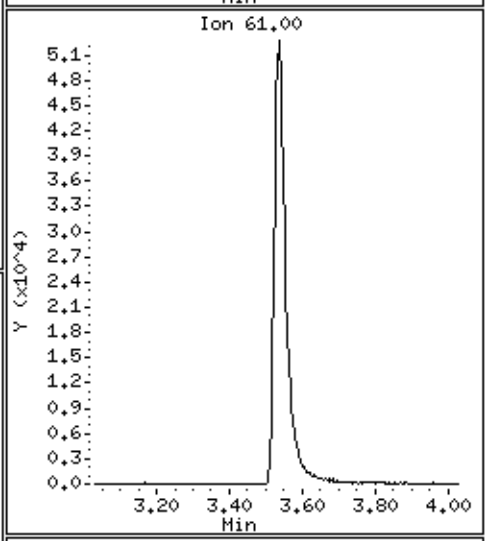


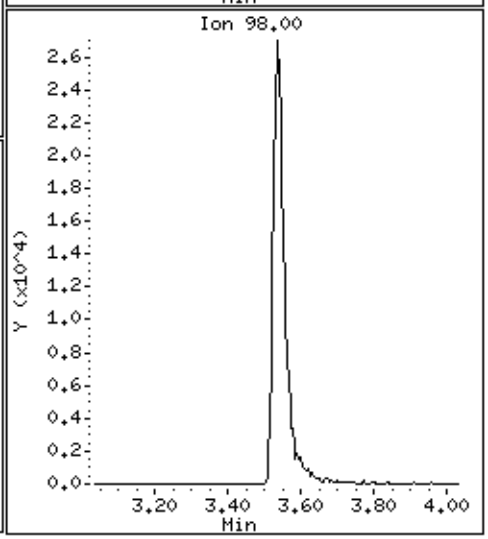












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081229.D

Date : 12-AUG-2022 20:11

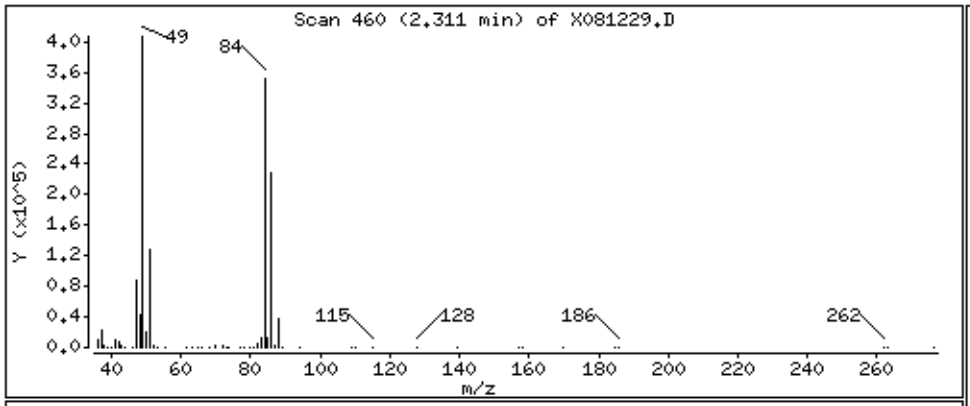
Client ID: HS22080522-04 Instrument: voa6.i

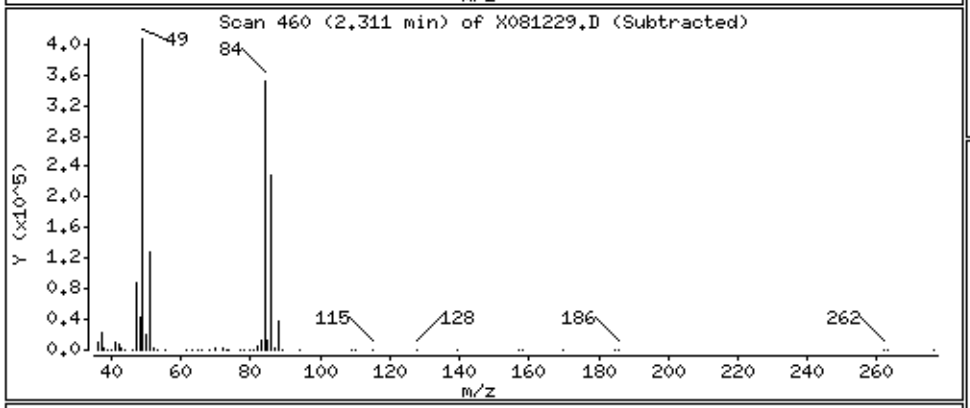
Sample Info: HS22080522-04;HS22080522-04;;;

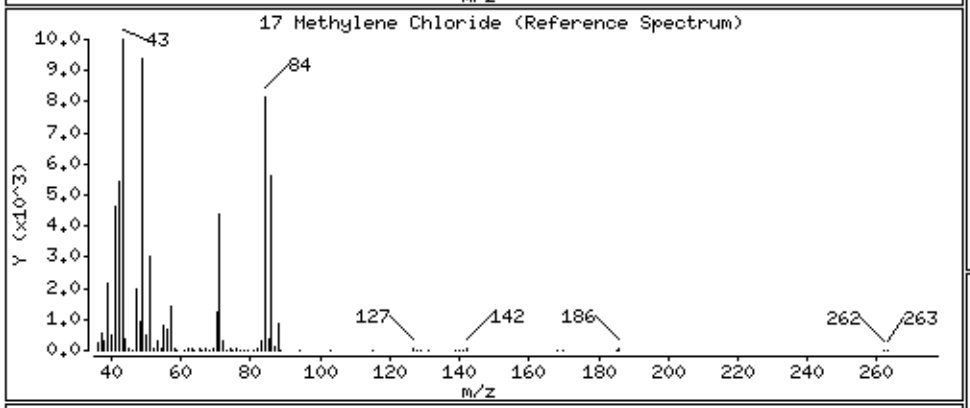
Purge Volume: 5.0 Operator: PC

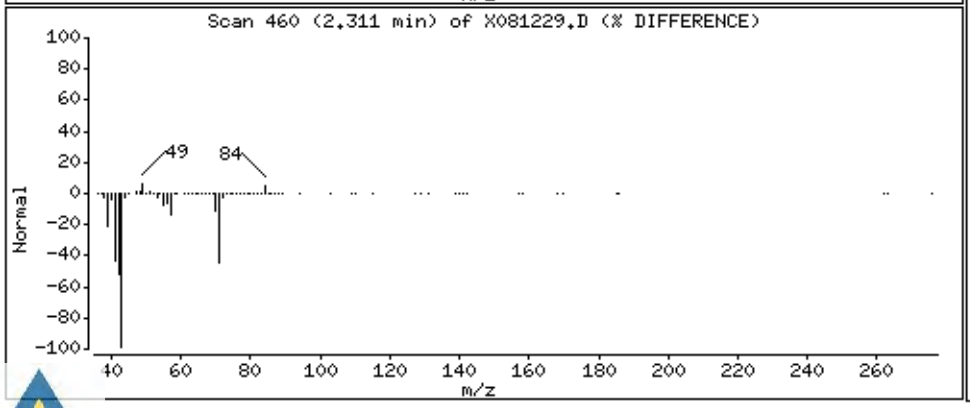
Column phase: DB624 Column diameter: 0.18

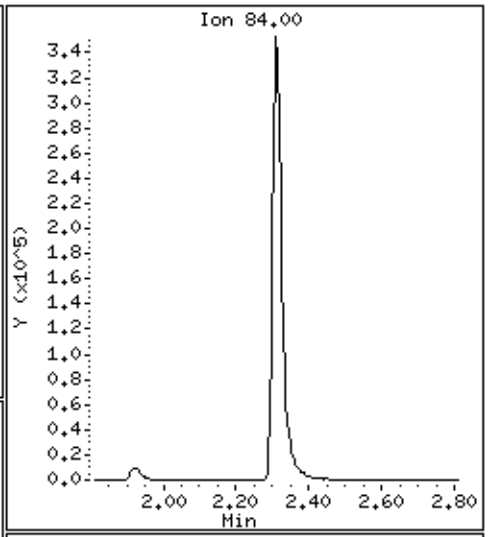
17 Methylene Chloride Concentration: 10934.03 ug/l

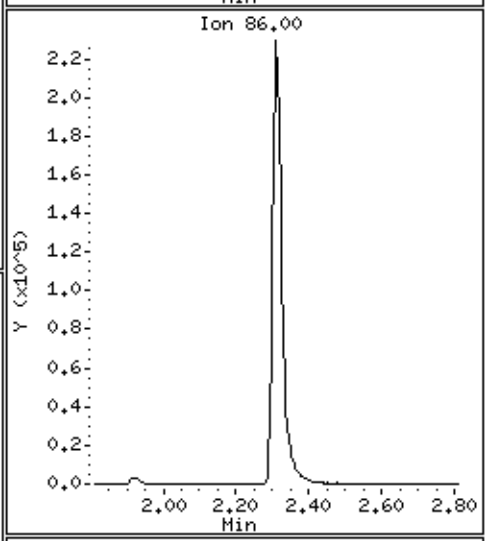


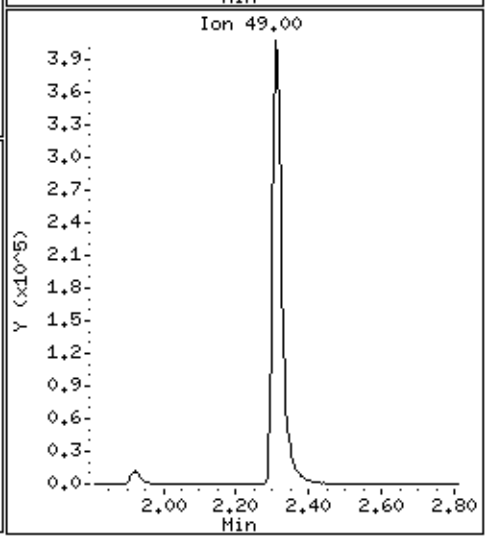












Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081229.D Page 4

Date : 12-AUG-2022 20:11

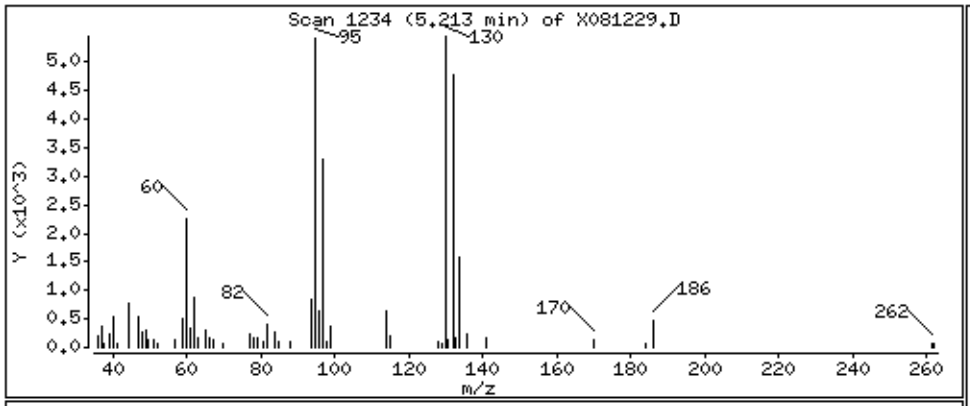
Client ID: HS22080522-04 Instrument: voa6.i

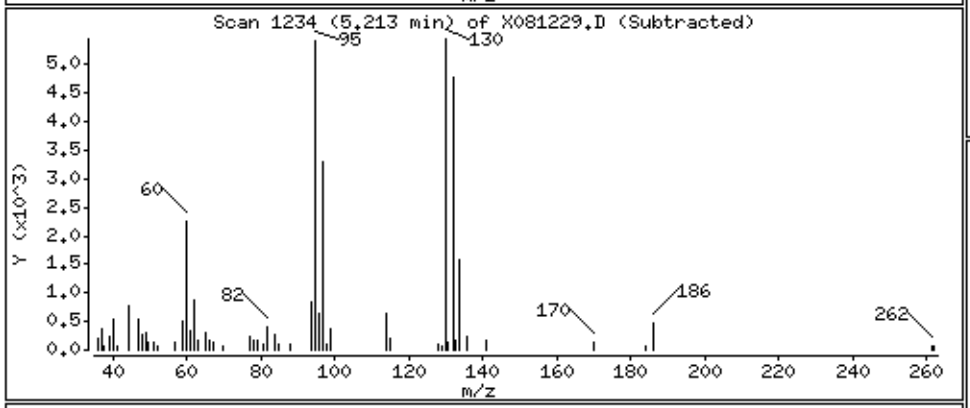
Sample Info: HS22080522-04;HS22080522-04;;;

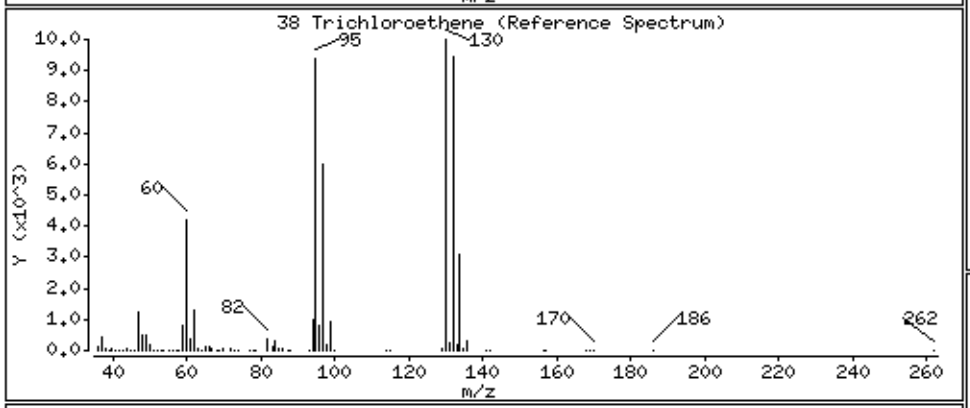
Purge Volume: 5.0 Operator: PC

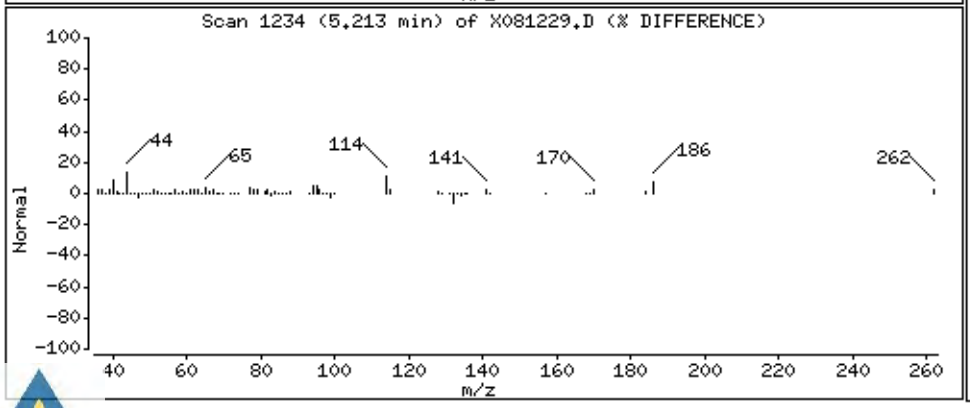
Column phase: DB624 Column diameter: 0.18

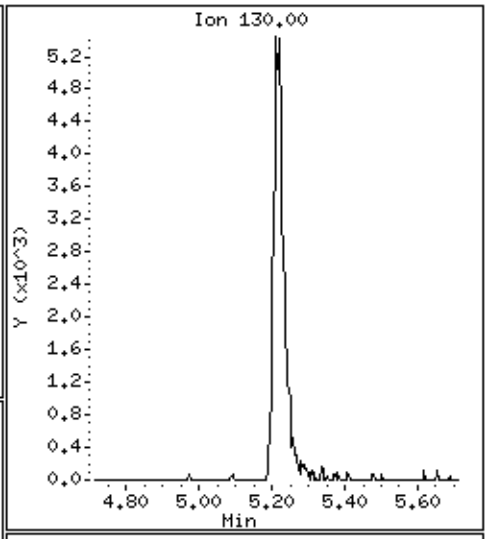
38 Trichloroethene Concentration: 165.11 ug/l

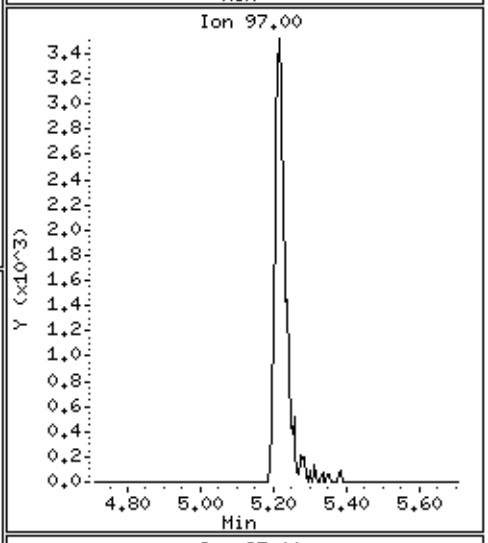


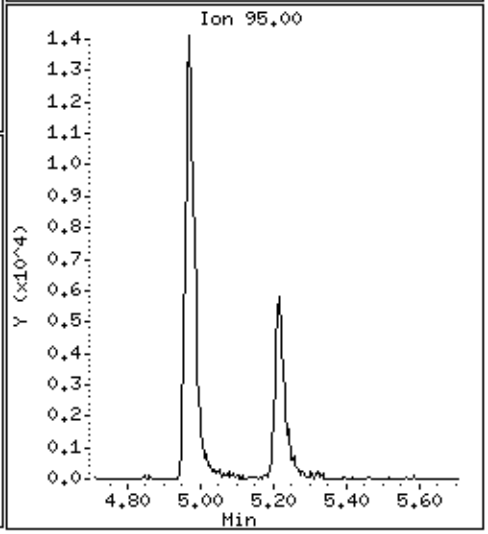












Data File : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081229.D
Inj Date : 12-AUG-2022 20:11
InstruID : voa6.i
LabSampID : HS22080522-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081230.D Page 1
Report Date: 19-Aug-2022 12:23

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081230.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 12-AUG-2022 20:32
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\8260W.m
Meth Date : 19-Aug-2022 12:23 voa6.i Quant Type: ISTD
Cal Date : 19-JUL-2022 13:53 Cal File: X071908.D
Als bottle: 29 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.185	4.185	(1.000)	559668	50.0000	
* 36 1,4-Difluorobenzene	114	4.972	4.972	(1.000)	858284	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	813683	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	401020	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	288553	50.0000	54.70
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	317113	50.0000	54.85
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1023613	50.0000	50.42
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	369576	50.0000	50.91
60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	286558	50.0000	50.12
31 1,1,1-Trichloroethane	97	4.091	4.091	(0.978)	401348	50.0000	50.55
68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	262777	50.0000	46.65
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	200136	50.0000	47.83
22 1,1-Dichloroethane	63	2.929	2.929	(0.700)	425651	50.0000	49.40
11 1,1-Dichloroethene	96	1.925	1.925	(0.460)	208177	50.0000	44.55
32 1,1-Dichloropropene	75	4.286	4.286	(0.862)	336721	50.0000	48.61
93 1,2,3-Trichlorobenzene	180	11.746	11.746	(1.216)	83664	50.0000	40.13
71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	211043	50.0000	48.59(M)
90 1,2,4-Trichlorobenzene	180	11.341	11.341	(1.174)	156233	50.0000	42.77
79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	953203	50.0000	49.55
89 1,2-Dibromo-3-Chloropropane	155	10.659	10.659	(1.103)	19372	50.0000	45.80

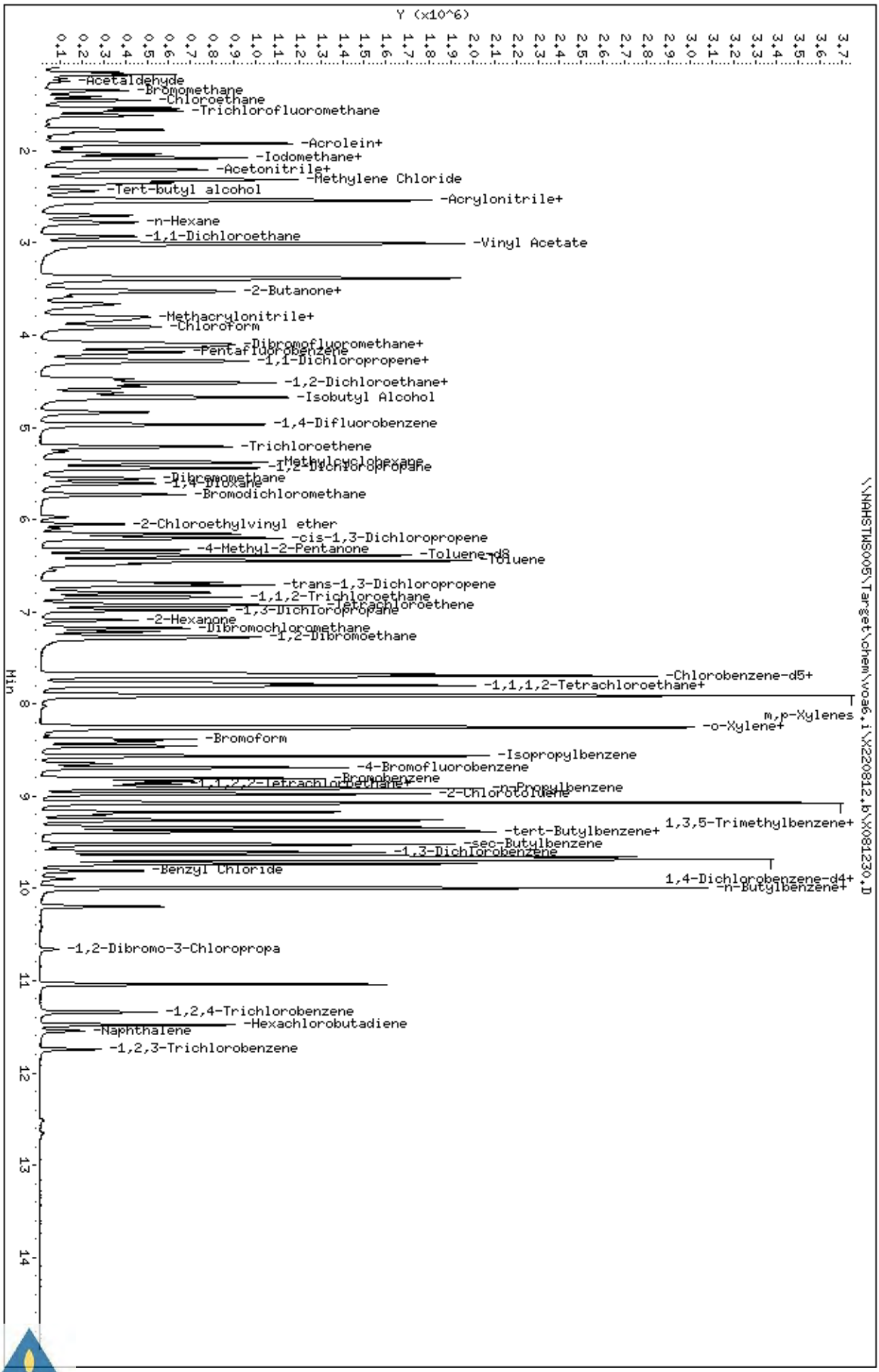
57	1,2-Dibromoethane	107	7.263	7.263 (0.947)	261082	50.0000	49.21
88	1,2-Dichlorobenzene	146	9.992	9.992 (1.034)	485986	50.0000	48.43

Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081230.D Page 2
Report Date: 19-Aug-2022 12:23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.560	4.560	(0.917)	389688	50.0000	51.76
42	1,2-Dichloropropane	63	5.441	5.441	(1.094)	262379	50.0000	49.66
75	1,3,5-Trimethylbenzene	105	9.069	9.069	(0.939)	957569	50.0000	49.15
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	539506	50.0000	48.48
54	1,3-Dichloropropane	76	6.985	6.985	(0.911)	415095	50.0000	48.77
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	557147	50.0000	47.16
26	2,2-Dichloropropane	77	3.518	3.518	(0.841)	370580	50.0000	48.41
24	2-Butanone	43	3.585	3.585	(0.857)	139676	100.000	99.48
76	2-Chlorotoluene	91	8.976	8.976	(0.929)	811797	50.0000	47.22
52	2-Hexanone	43	7.090	7.090	(0.924)	244210	100.000	95.44
77	4-Chlorotoluene	91	9.073	9.073	(0.939)	930900	50.0000	48.51
82	p-Isopropyltoluene	119	9.650	9.650	(0.999)	959939	50.0000	49.07
45	4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	390693	100.000	98.54
10	Acetone	43	1.981	1.981	(0.473)	111987	100.000	94.71(M)
37	Benzene	78	4.519	4.519	(0.909)	992276	50.0000	48.78
74	Bromobenzene	156	8.807	8.807	(0.912)	335740	50.0000	49.02
29	Bromochloromethane	128	3.799	3.799	(0.908)	156972	50.0000	49.74
39	Bromodichloromethane	83	5.729	5.729	(1.152)	367706	50.0000	50.72
66	Bromoform	173	8.410	8.410	(1.096)	178783	50.0000	45.43
6	Bromomethane	94	1.347	1.347	(0.322)	182359	50.0000	47.63
19	Carbon Disulfide	76	2.078	2.078	(0.497)	1132804	100.000	91.58
34	Carbon Tetrachloride	117	4.271	4.271	(0.859)	342893	50.0000	46.31
59	Chlorobenzene	112	7.697	7.697	(1.003)	756655	50.0000	49.04
7	Chloroethane	64	1.411	1.411	(0.337)	162666	50.0000	45.31
28	Chloroform	83	3.911	3.911	(0.935)	487063	50.0000	51.59
3	Chloromethane	50	1.085	1.085	(0.259)	228565	50.0000	44.11
27	cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	291210	50.0000	52.33
46	cis-1,3-Dichloropropene	75	6.157	6.157	(1.238)	442122	50.0000	49.65
55	Dibromochloromethane	129	7.176	7.176	(0.936)	295148	50.0000	48.87
44	Dibromomethane	93	5.557	5.557	(1.118)	177148	50.0000	49.97
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	171264	50.0000	32.05
61	Ethylbenzene	106	7.802	7.802	(1.017)	379334	50.0000	48.67
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	148995	50.0000	44.17
67	Isopropylbenzene	105	8.563	8.563	(1.116)	1148385	50.0000	48.99
62	m,p-Xylenes	106	7.907	7.907	(1.031)	962891	100.000	99.32
17	Methylene Chloride	84	2.311	2.311	(0.552)	269580	50.0000	52.42
87	n-Butylbenzene	91	9.995	9.995	(1.035)	805369	50.0000	49.55
73	n-Propylbenzene	91	8.916	8.916	(0.923)	1305583	50.0000	49.35
92	Naphthalene	128	11.547	11.547	(1.195)	161942	50.0000	39.63
63	o-Xylene	106	8.245	8.245	(1.075)	462249	50.0000	49.04
81	sec-Butylbenzene	105	9.523	9.523	(0.986)	1083500	50.0000	47.92
64	Styrene	104	8.260	8.260	(1.077)	780592	50.0000	50.29
78	tert-Butylbenzene	119	9.339	9.339	(0.967)	794591	50.0000	48.12
56	Tetrachloroethene	164	6.929	6.929	(0.903)	240473	50.0000	45.57
50	Toluene	91	6.449	6.449	(0.841)	1111223	50.0000	48.58
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.606)	249978	50.0000	50.77
51	trans-1,3-Dichloropropene	75	6.685	6.685	(1.345)	375817	50.0000	50.96
38	Trichloroethene	130	5.212	5.212	(1.048)	292177	50.0000	48.49
8	Trichlorofluoromethane	101	1.568	1.568	(0.375)	397159	50.0000	45.06
5	Vinyl Chloride	62	1.152	1.152	(0.275)	241007	50.0000	41.06

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081230.D
Date : 12-AUG-2022 20:32
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

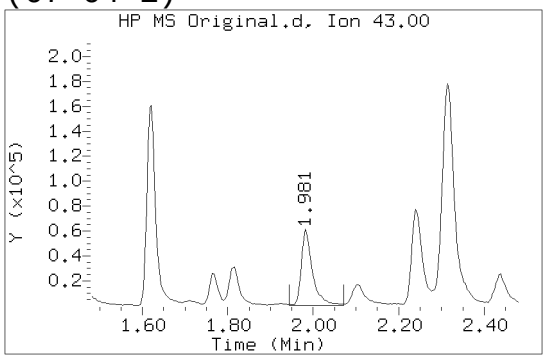
Data File : \\NAHSTWS005\Target\chem\voa6.i\X220812.b\X081230.D
Inj Date : 12-AUG-2022 20:32
InstruID : voa6.i
LabSampID : CCV-END

Acetone (67-64-1)

Reason Code:

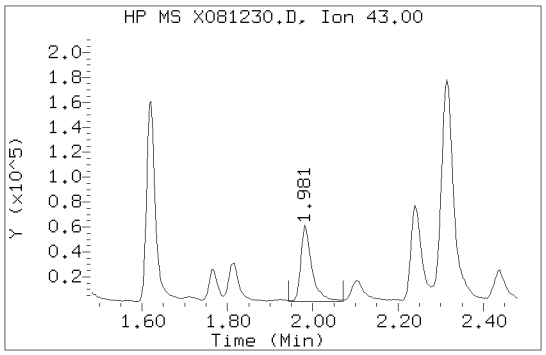
BEFORE

MASS
43
AREA
111987
HEIGHT
61119
19-Aug-2022
12:23
linh
pham



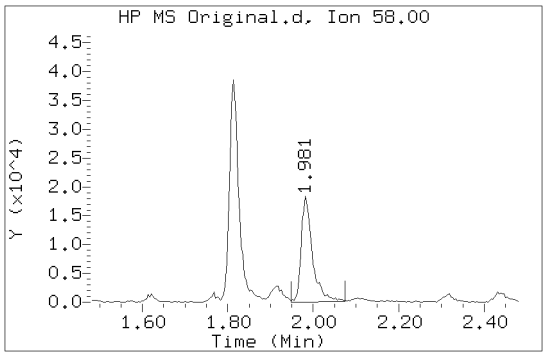
AFTER

MASS
43
AREA
111987
HEIGHT
61119
19-Aug-2022
12:23
linh
pham



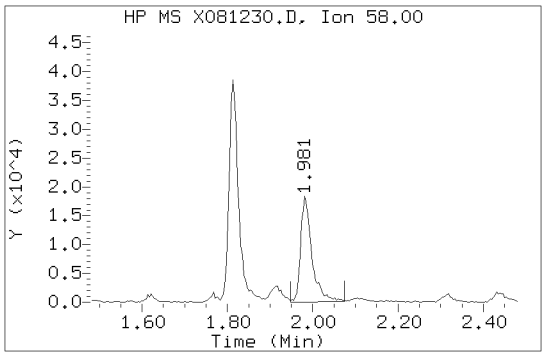
BEFORE

MASS
58
AREA
34387
HEIGHT
18282
19-Aug-2022
12:23
linh
pham



AFTER

MASS
58
AREA
34387
HEIGHT
18282
19-Aug-2022
12:23
linh
pham

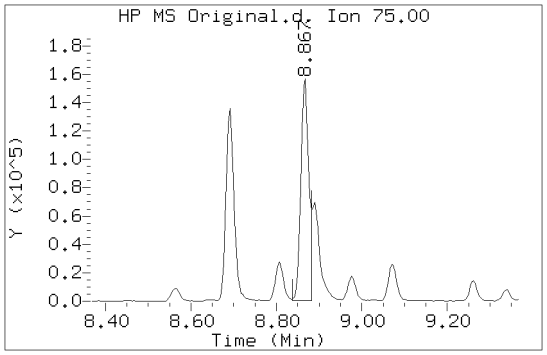


1,2,3-Trichloropropane (96-18-4)

Reason Code:

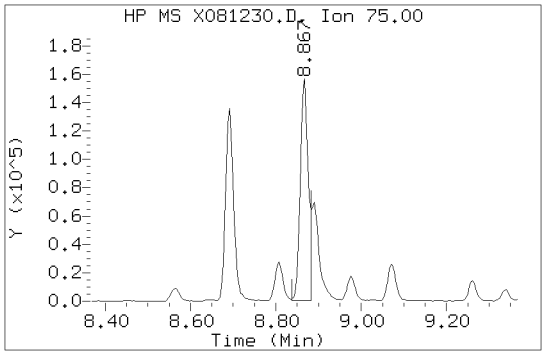
BEFORE

MASS
75
AREA
211043
HEIGHT
156260
19-Aug-2022
12:23
linh
pham



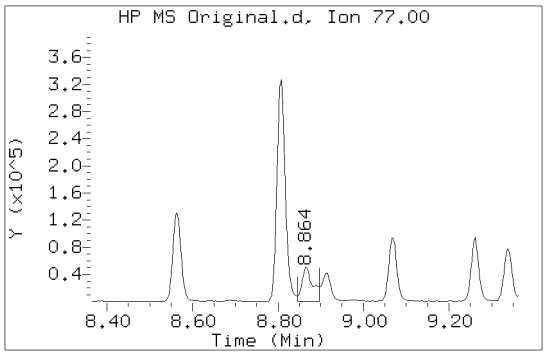
AFTER

MASS
75
AREA
211043
HEIGHT
156260
19-Aug-2022
12:23
linh
pham



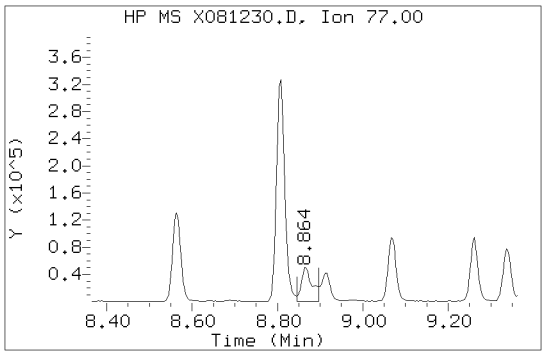
BEFORE

MASS
77
AREA
92837
HEIGHT
50269
19-Aug-2022
12:23
linh
pham



AFTER

MASS
77
AREA
92837
HEIGHT
50269
19-Aug-2022
12:23
linh
pham



HS22080522-MSSEMI-SW8270SIM

ALS WO# HS22080522

right solutions.
right partner.

Form 1

Organic Analysis Data Sheet

EPA 8270SIM

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

EPA 8270SIM

HS22080522-01
MW2_080822

Collected	Received	Matrix	Units	Prep Method	Prep Amount	Basis
08/08/22 07:15	08/10/22 09:45	Water	ug/L	SW3510	Initial 1000mL Final 1mL	Wet

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File	PrepDate
1,4-Dioxane	11		1.0	1.0	1.0	100	08/24/22 14:37	SV-6_415764	11	08/12/22

MC - Method Class CV - Cold Vapor AA P - ICP-AES MS - ICP-MS

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

EPA 8270SIM

HS22080522-02
MW2_080822_a

Collected	Received	Matrix	Units	Prep Method	Prep Amount	Basis
08/08/22 07:15	08/10/22 09:45	Water	ug/L	SW3510	Initial 1000mL Final 1mL	Wet

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File	PrepDate
1,4-Dioxane	17		1.0	1.0	1.0	100	08/24/22 14:55	SV-6_415764	12	08/12/22

MC - Method Class CV - Cold Vapor AA P - ICP-AES MS - ICP-MS

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

EPA 8270SIM

HS22080522-03
18CPTMW01DW_080822

Collected	Received	Matrix	Units	Prep Method	Prep Amount	Basis
08/08/22 08:05	08/10/22 09:45	Water	ug/L	SW3510	Initial 1000mL Final 1mL	Wet

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File	PrepDate
1,4-Dioxane	1.7		1.0	1.0	1.0	100	08/24/22 15:13	SV-6_415764	13	08/12/22

MC - Method Class CV - Cold Vapor AA P - ICP-AES MS - ICP-MS

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

EPA 8270SIM

HS22080522-04
18CPTMW01SW_080822

Collected	Received	Matrix	Units	Prep Method	Prep Amount	Basis
08/08/22 08:50	08/10/22 09:45	Water	ug/L	SW3510	Initial 1000mL Final 1mL	Wet

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File	PrepDate
1,4-Dioxane	0.42		0.010	0.010	0.010	1	08/23/22 17:15	SV-6_415764	25	08/12/22

MC - Method Class CV - Cold Vapor AA P - ICP-AES MS - ICP-MS

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

EPA 8270SIM

HS22080522-08
MW8_080822

Collected	Received	Matrix	Units	Prep Method	Prep Amount	Basis
08/08/22 11:05	08/10/22 09:45	Water	ug/L	SW3510	Initial 1000mL Final 1mL	Wet

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File	PrepDate
1,4-Dioxane	4.7		0.20	0.20	0.20	20	08/24/22 15:31	SV-6_415764	14	08/12/22

MC - Method Class CV - Cold Vapor AA P - ICP-AES MS - ICP-MS

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

EPA 8270SIM

HS22080522-09
18CPTMW23SW_080822

Collected	Received	Matrix	Units	Prep Method	Prep Amount	Basis
08/08/22 11:50	08/10/22 09:45	Water	ug/L	SW3510	Initial 1000mL Final 1mL	Wet

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File	PrepDate
1,4-Dioxane	0.089		0.010	0.010	0.010	1	08/23/22 17:51	SV-6_415764	27	08/12/22

MC - Method Class CV - Cold Vapor AA P - ICP-AES MS - ICP-MS

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

EPA 8270SIM

HS22080522-10
18CPTMW23_080822

Collected	Received	Matrix	Units	Prep Method	Prep Amount	Basis
08/08/22 12:35	08/10/22 09:45	Water	ug/L	SW3510	Initial 1000mL Final 1mL	Wet

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File	PrepDate
1,4-Dioxane	15		1.0	1.0	1.0	100	08/24/22 15:49	SV-6_415764	15	08/12/22

MC - Method Class CV - Cold Vapor AA P - ICP-AES MS - ICP-MS

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

EPA 8270SIM

MBLK-182382
MBLK-182382

Collected	Received	Matrix	Units	Prep Method	Prep Amount	Basis
NA	NA	Aqueous	ug/L	SW3510	Initial 1000mL Final 1mL	Wet

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File	PrepDate
1,4-Dioxane	0.010	U	0.010	0.010	0.010	1	08/23/22 11:16	SV-6_415764	05	08/12/22

MC - Method Class CV - Cold Vapor AA P - ICP-AES MS - ICP-MS

right solutions.
right partner.

Form 2

System Monitoring Compound Recovery

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

RunID
SV-6_415764

~

MBLK-182382 (6817428)	Analyzed 08/23/22 11:16		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
Nitrobenzene-d5	0.07908	0.08000	99	40 - 140	
4-Terphenyl-d14	0.05239	0.08000	66	40 - 140	
2-Fluorobiphenyl	0.03490	0.08000	44	40 - 140	

LCS-182382 (6817429)	Analyzed 08/23/22 11:34		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
4-Terphenyl-d14	0.05302	0.08000	66	40 - 140	
Nitrobenzene-d5	0.07408	0.08000	93	40 - 140	
2-Fluorobiphenyl	0.03441	0.08000	43	40 - 140	

LCSD-182382 (6817430)	Analyzed 08/23/22 11:52		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
2-Fluorobiphenyl	0.03726	0.08000	47	40 - 140	
Nitrobenzene-d5	0.07327	0.08000	92	40 - 140	
4-Terphenyl-d14	0.05532	0.08000	69	40 - 140	

HS22080522-01 (6817439)	Analyzed 08/23/22 16:21		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
4-Terphenyl-d14	0.04238	0.08000	53	40 - 140	
Nitrobenzene-d5	0.08840	0.08000	110	40 - 140	
2-Fluorobiphenyl	0.07960	0.08000	100	40 - 140	

HS22080522-02 (6817440)	Analyzed 08/23/22 16:39		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
2-Fluorobiphenyl	0.06049	0.08000	76	40 - 140	
Nitrobenzene-d5	0.08445	0.08000	106	40 - 140	
4-Terphenyl-d14	0.04027	0.08000	50	40 - 140	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

RunID
SV-6_415764

~

HS22080522-03 (6817441)	Analyzed 08/23/22 16:57		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
4-Terphenyl-d14	0.04412	0.08000	55	40 - 140	
Nitrobenzene-d5	0.08285	0.08000	104	40 - 140	
2-Fluorobiphenyl	0.03639	0.08000	46	40 - 140	

HS22080522-04 (6817442)	Analyzed 08/23/22 17:15		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
2-Fluorobiphenyl	0.05461	0.08000	68	40 - 140	
Nitrobenzene-d5	0.07916	0.08000	99	40 - 140	
4-Terphenyl-d14	0.04809	0.08000	60	40 - 140	

HS22080522-08 (6817443)	Analyzed 08/23/22 17:33		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
4-Terphenyl-d14	0.04772	0.08000	60	40 - 140	
Nitrobenzene-d5	0.07818	0.08000	98	40 - 140	
2-Fluorobiphenyl	0.04119	0.08000	52	40 - 140	

HS22080522-09 (6817444)	Analyzed 08/23/22 17:51		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
2-Fluorobiphenyl	0.03439	0.08000	43	40 - 140	
Nitrobenzene-d5	0.07537	0.08000	94	40 - 140	
4-Terphenyl-d14	0.04404	0.08000	55	40 - 140	

HS22080522-10 (6817445)	Analyzed 08/23/22 18:09		Conc Units ug/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
4-Terphenyl-d14	0.04459	0.08000	56	40 - 140	
Nitrobenzene-d5	0.07260	0.08000	91	40 - 140	
2-Fluorobiphenyl	0.03408	0.08000	43	40 - 140	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder HS22080522

RunID SV-6_415764

~

HS22080522-01 (6817453)	Analyzed 08/24/22 14:37		Conc Units ug/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
4-Terphenyl-d14	0	0.08000	0	40 - 140	*
Nitrobenzene-d5	0	0.08000	0	40 - 140	*
2-Fluorobiphenyl	0	0.08000	0	40 - 140	*

HS22080522-02 (6817454)	Analyzed 08/24/22 14:55		Conc Units ug/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
2-Fluorobiphenyl	0	0.08000	0	40 - 140	*
Nitrobenzene-d5	0	0.08000	0	40 - 140	*
4-Terphenyl-d14	0	0.08000	0	40 - 140	*

HS22080522-03 (6817455)	Analyzed 08/24/22 15:13		Conc Units ug/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
Nitrobenzene-d5	0	0.08000	0	40 - 140	*
4-Terphenyl-d14	0	0.08000	0	40 - 140	*
2-Fluorobiphenyl	0	0.08000	0	40 - 140	*

HS22080522-08 (6817456)	Analyzed 08/24/22 15:31		Conc Units ug/L		DF 20
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
4-Terphenyl-d14	0.05852	0.08000	73	40 - 140	
Nitrobenzene-d5	0.06212	0.08000	78	40 - 140	
2-Fluorobiphenyl	0.05684	0.08000	71	40 - 140	

HS22080522-10 (6817483)	Analyzed 08/24/22 15:49		Conc Units ug/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
4-Terphenyl-d14	0	0.08000	0	40 - 140	*
2-Fluorobiphenyl	0	0.08000	0	40 - 140	*
Nitrobenzene-d5	0	0.08000	0	40 - 140	*

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

right solutions.
right partner.

Form 3B

Laboratory Control Sample Recovery

EPA 8270SIM

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

RunID
SV-6_415764

EPA 8270SIM

SV-6_415764				LCS-182382			LCS-182382					
QC Matrix	Aqueous		Run Date	08/23/22			08/23/22					
Prep Method	SW3510	Units	Run Time	11:34			11:52					
Prep Batch	182382 08/12/22	ug/L	Prep Amt	1000 mL			1000 mL					
Analyte		%R Limits	Spike Added	LCS Result	%R	Q	LCSD Result	%R	Q	RPD Limit	RPD	Q
1,4-Dioxane		40-140	0.08	0.1057	132		0.1071	134.0		20		
2-Fluorobiphenyl		40-140	0.08	0.03441	43		0.03726	47.0		20		
4-Terphenyl-d14		40-140	0.08	0.05302	66		0.05532	69.0		20		
Nitrobenzene-d5		40-140	0.08	0.07408	93		0.07327	92.0		20		

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits

right solutions.
right partner.

Form 4

Method Blank Summary

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

~

BatchID
182382

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK-182382	05.D	08/23/22 11:16	SV-6_415764
LCS-182382	LCS-182382	06.D	08/23/22 11:34	SV-6_415764
LCSD-182382	LCSD-182382	07.D	08/23/22 11:52	SV-6_415764
ZZZZZZ	HS22080472-01	14.D	08/23/22 13:57	SV-6_415764
ZZZZZZ	HS22080499-01	15.D	08/23/22 14:15	SV-6_415764
ZZZZZZ	HS22080499-02	16.D	08/23/22 14:33	SV-6_415764
ZZZZZZ	HS22080499-03	17.D	08/23/22 14:51	SV-6_415764
ZZZZZZ	HS22080499-04	18.D	08/23/22 15:09	SV-6_415764
ZZZZZZ	HS22080499-06	19.D	08/23/22 15:27	SV-6_415764
ZZZZZZ	HS22080499-07	20.D	08/23/22 15:45	SV-6_415764
ZZZZZZ	HS22080499-08	21.D	08/23/22 16:03	SV-6_415764
MW2_080822	HS22080522-01	22.D	08/23/22 16:21	SV-6_415764
MW2_080822_a	HS22080522-02	23.D	08/23/22 16:39	SV-6_415764
18CPTMW01DW_080822	HS22080522-03	24.D	08/23/22 16:57	SV-6_415764
18CPTMW01SW_080822	HS22080522-04	25.D	08/23/22 17:15	SV-6_415764
MW8_080822	HS22080522-08	26.D	08/23/22 17:33	SV-6_415764
18CPTMW23SW_080822	HS22080522-09	27.D	08/23/22 17:51	SV-6_415764
18CPTMW23_080822	HS22080522-10	28.D	08/23/22 18:09	SV-6_415764
ZZZZZZ	HS22080472-01	29.D	08/23/22 18:27	SV-6_415764
ZZZZZZ	HS22080499-01	30.D	08/23/22 18:45	SV-6_415764
ZZZZZZ	HS22080499-03	08.D	08/24/22 13:43	SV-6_415764
ZZZZZZ	HS22080499-04	09.D	08/24/22 14:01	SV-6_415764
ZZZZZZ	HS22080499-08	10.D	08/24/22 14:19	SV-6_415764
MW2_080822	HS22080522-01	11.D	08/24/22 14:37	SV-6_415764
MW2_080822_a	HS22080522-02	12.D	08/24/22 14:55	SV-6_415764
18CPTMW01DW_080822	HS22080522-03	13.D	08/24/22 15:13	SV-6_415764

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080522

Lab File ID: 001 DFTPP Injection Date: 03/10/22

Instrument ID: SV6 DFTPP Injection Time: 1015

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	55.4
68	Less than 2.0% of mass 69	0.8 (1.6)1
69	Mass 69 relative abundance	49.8
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	10.0 - 80.0% of mass 198	59.7
197	Less than 2.0% of mass 198	0.1
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	21.2
365	1.0 - 100.0% of mass 198	2.1
441	Present, but less than mass 443	9.1
442	50.0 - 150.0% of mass 198	62.4
443	15.0 - 24.0% of mass 442	12.2 (19.5)2

1-Value is % mass 69 2-Value is % mass 442

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	1 4 DX-0.08	1 4 DX-0.08	002	03/10/22	1025
02	1 4 DX-0.01	1 4 DX-0.01	003	03/10/22	1047
03	1 4 DX-0.03	1 4 DX-0.03	004	03/10/22	1105
04	1 4 DX-0.05	1 4 DX-0.05	005	03/10/22	1122
05	1 4 DX-0.1	1 4 DX-0.1	006	03/10/22	1140
06	1 4 DX-0.15	1 4 DX-0.15	007	03/10/22	1158
07	1 4 DX-0.2	1 4 DX-0.2	008	03/10/22	1216
08	1 4 DX-0.5	1 4 DX-0.5	009	03/10/22	1256
09	1 4 DX-ICV	1 4 DX-ICV	010	03/10/22	1415
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080522

Lab File ID: 01 DFTPP Injection Date: 08/23/22

Instrument ID: SV6 DFTPP Injection Time: 0933

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	46.3
68	Less than 2.0% of mass 69	0.6 (1.4)1
69	Mass 69 relative abundance	41.7
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	10.0 - 80.0% of mass 198	50.0
197	Less than 2.0% of mass 198	0.6
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	20.4
365	1.0 - 100.0% of mass 198	2.7
441	Present, but less than mass 443	9.9
442	50.0 - 150.0% of mass 198	66.8
443	15.0 - 24.0% of mass 442	12.8 (19.2)2

1-Value is % mass 69 2-Value is % mass 442

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	1 4DIOX-CCV	1 4DIOX-CCV	03	08/23/22	1031
02	MBLK-182382	MBLK-182382	05	08/23/22	1116
03	LCS-182382	LCS-182382	06	08/23/22	1134
04	LCSD-182382	LCSD-182382	07	08/23/22	1152
05	HS22080522-01	HS22080522-01	22	08/23/22	1621
06	HS22080522-02	HS22080522-02	23	08/23/22	1639
07	HS22080522-03	HS22080522-03	24	08/23/22	1657
08	HS22080522-04	HS22080522-04	25	08/23/22	1715
09	HS22080522-08	HS22080522-08	26	08/23/22	1733
10	HS22080522-09	HS22080522-09	27	08/23/22	1751
11	HS22080522-10	HS22080522-10	28	08/23/22	1809
12	1 4DIOX-CCV	1 4DIOX-CCV	31	08/23/22	1903
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080522

Lab File ID: 01 DFTPP Injection Date: 08/24/22

Instrument ID: SV6 DFTPP Injection Time: 1017

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	47.4
68	Less than 2.0% of mass 69	0.6 (1.4)1
69	Mass 69 relative abundance	44.1
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	10.0 - 80.0% of mass 198	52.0
197	Less than 2.0% of mass 198	1.1
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	20.6
365	1.0 - 100.0% of mass 198	2.5
441	Present, but less than mass 443	9.1
442	50.0 - 150.0% of mass 198	61.8
443	15.0 - 24.0% of mass 442	12.0 (19.4)2

1-Value is % mass 69 2-Value is % mass 442

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	1 4-DIOX-CCV	1 4-DIOX-CCV	04	08/24/22	1215
02	HS22080522-01	HS22080522-01	11	08/24/22	1437
03	HS22080522-02	HS22080522-02	12	08/24/22	1455
04	HS22080522-03	HS22080522-03	13	08/24/22	1513
05	HS22080522-08	HS22080522-08	14	08/24/22	1531
06	HS22080522-10	HS22080522-10	15	08/24/22	1549
07	1 4-DIOX-CCV	1 4-DIOX-CCV	33	08/24/22	2112
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

right solutions.
right partner.

Form 6

Initial Calibration Data

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Initial Calibration Data

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID SV-6_410398

Volatiles Organics by Method 8260C

ICAL Start Date 10-MAR-2022 1025
ICAL End Date 10-MAR-2022 1256

Calibration Files

Calibration File Names

Level 1 ..SV6.i\220310.b\003.D
Level 2 ..SV6.i\220310.b\004.D
Level 3 ..SV6.i\220310.b\005.D
Level 4 ..SV6.i\220310.b\002.D
Level 5 ..SV6.i\220310.b\006.D
Level 6 ..SV6.i\220310.b\007.D
Level 7 ..SV6.i\220310.b\008.D
Level 8 ..SV6.i\220310.b\009.D

Compound	Level 1 0.01000	Level 2 0.03000	Level 3 0.05000	Level 4 0.08000	Level 5 0.10000	Level 6 0.15000	Curve	b	m1	m2	%RSD or R^2	Q
	Level 7 0.20000	Level 8 0.50000										
1,4-Dioxane	0.03798	0.03918	0.04058	0.04498	0.04442	0.04181						
	0.04227	0.03722					0.04105	6.932				
----------	0.04227 ---------	0.03722 ---------	----------	----------	----------	----------	0.04105 ---------	6.932 ----------				
2-Fluorophenol	NE	NE	NE	NE	NE	NE						
	NE	NE					NE	NE				
Phenol-d6	NE	NE	NE	NE	NE	NE						
	NE	NE					NE	NE				
Nitrobenzene-d5	0.35847	0.33688	0.34994	0.32911	0.33873	0.30360						
	0.33135	0.31866					0.33334	5.160				
2-Fluorobiphenyl	1.56485	1.50533	1.78010	1.61832	1.49752	1.52796						
	1.51386	1.44464					1.55657	6.656				
105 2,4,6-Tribromophenol	NE	NE	NE	NE	NE	NE						
	NE	NE					NE	NE				
158 4-Terphenyl-d14	1.90541	1.83082	1.91899	1.73323	1.90173	1.90441						
	1.92766	1.91858					1.88010	3.537				

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

right solutions.
right partner.

Form 6I

Initial Calibration Verification (ICV)

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project LHAAP 18 24

Workorder HS22080522

RunID SV-6_410398

Volatiles Organics by Method 8260C

Instrument ID SV6.i ICAL Date 10-MAR-2022
Lab File ID 010.D ICAL Time 1025
?VAL? ?VAL? Conc Units ug/L
Analysis Type SV Level LOW

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
1,4-Dioxane	0.08000	0.08051	100.64	40-140	
Nitrobenzene-d5	0.08000	0.07786	97.33	40-140	
2-Fluorobiphenyl	0.08000	0.08171	102.14	40-140	
158 4-Terphenyl-d14	0.08000	0.06597	82.47	40-140	

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080522

Instrument ID: SV6 Calibration Date: 08/23/22 Time: 1031

Lab File ID: 03 Init. Calib. Date(s): 03/10/22 03/10/22

Init. Calib. Times: 1025 1256

GC Column: RTX-5SIL MS ID: 0.28 (mm)

COMPOUND	RRF OR AMOUNT	RRF8e-002 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
1,4-Dioxane	4.1e-002	4.44e-002	0.01	8.29	20.00	AVRG
Nitrobenzene-d5	0.3330000	0.3125592	0.01	-6.14	20.00	AVRG
4-Terphenyl-d14	1.8800000	1.7815958	0.01	-5.23	20.00	AVRG
2-Fluorobiphenyl	1.5570000	1.5528194	0.01	-0.27	20.00	AVRG

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080522

Instrument ID: SV6 Calibration Date: 08/23/22 Time: 1903

Lab File ID: 31 Init. Calib. Date(s): 03/10/22 03/10/22

Init. Calib. Times: 1025 1256

GC Column: RTX-5SIL MS ID: 0.28 (mm)

COMPOUND	RRF OR AMOUNT	RRF8e-002 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
1,4-Dioxane	4.1e-002	4.25e-002	0.01	3.66	50.00	AVRG
Nitrobenzene-d5	0.3330000	0.3194666	0.01	-4.06	50.00	AVRG
4-Terphenyl-d14	1.8800000	1.3774718	0.01	-26.73	50.00	AVRG
2-Fluorobiphenyl	1.5570000	0.7893068	0.01	-49.30	50.00	AVRG

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080522

Instrument ID: SV6 Calibration Date: 08/24/22 Time: 1215

Lab File ID: 04 Init. Calib. Date(s): 03/10/22 03/10/22

Init. Calib. Times: 1025 1256

GC Column: RTX-5SIL MS ID: 0.28 (mm)

COMPOUND	RRF OR AMOUNT	RRF8e-002 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
1,4-Dioxane	4.1e-002	4.85e-002	0.01	18.29	20.00	AVRG
Nitrobenzene-d5	0.3330000	0.3399589	0.01	2.09	20.00	AVRG
4-Terphenyl-d14	1.8800000	1.6804567	0.01	-10.61	20.00	AVRG
2-Fluorobiphenyl	1.5570000	1.5160387	0.01	-2.63	20.00	AVRG

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080522

Instrument ID: SV6 Calibration Date: 08/24/22 Time: 2112

Lab File ID: 33 Init. Calib. Date(s): 03/10/22 03/10/22

Init. Calib. Times: 1025 1256

GC Column: RTX-5SIL MS ID: 0.28 (mm)

COMPOUND	RRF OR AMOUNT	RRF8e-002 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
1,4-Dioxane	4.1e-002	4.61e-002	0.01	12.44	50.00	AVRG
Nitrobenzene-d5	0.3330000	0.2436831	0.01	-26.82	50.00	AVRG
4-Terphenyl-d14	1.8800000	1.3350552	0.01	-28.99	50.00	AVRG
2-Fluorobiphenyl	1.5570000	1.2233926	0.01	-21.43	50.00	AVRG

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080522

Lab File ID (Standard): 03 Date Analyzed: 08/23/22

Instrument ID: SV6 Time Analyzed: 1031

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	6003	3.59	15829	4.71	7005	6.38
	UPPER LIMIT	12006	4.09	31658	5.21	14010	6.88
	LOWER LIMIT	3002	3.09	7915	4.21	3503	5.88
	CLIENT SAMPLE NO.						
01	MBLK-182382	3706	3.60	13895	4.71	7586	6.38
02	LCS-182382	11986	3.60	17681	4.71	8740	6.38
03	LCSD-182382	10965	3.60	15980	4.71	7794	6.38
04	HS22080522-01	3749	3.60	10602	4.71	5696	6.38
05	HS22080522-02	4256	3.60	17233	4.71	9950	6.38
06	HS22080522-03	4517	3.60	14943	4.71	8435	6.38
07	HS22080522-04	5392	3.60	15029	4.71	7806	6.38
08	HS22080522-08	4124	3.60	13799	4.71	7748	6.38
09	HS22080522-09	4235	3.60	14218	4.71	4228	6.38
10	HS22080522-10	4165	3.60	13984	4.71	4255	6.38
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080522

Lab File ID (Standard): 03 Date Analyzed: 08/23/22

Instrument ID: SV6 Time Analyzed: 1031

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	17339	7.83	7501	10.66	5111	12.72
	UPPER LIMIT	34678	8.33	15002	11.16	10222	13.22
	LOWER LIMIT	8670	7.33	3751	10.16	2556	12.22
	CLIENT SAMPLE NO.						
01	MBLK-182382	13732	7.82	7295	10.66	4549	12.72
02	LCS-182382	15619	7.82	8081	10.66	5095	12.72
03	LCSD-182382	13992	7.82	6397	10.66	4136	12.72
04	HS22080522-01	9968	7.83	7673	10.67	7851	12.74
05	HS22080522-02	17726	7.83	14101	10.67	9136	12.74
06	HS22080522-03	15647	7.83	11675	10.67	10061	12.74
07	HS22080522-04	14205	7.83	9573	10.67	9725	12.74
08	HS22080522-08	14169	7.83	9596	10.67	9423	12.74
09	HS22080522-09	14297	7.83	9702	10.67	9244	12.74
10	HS22080522-10	14191	7.83	10097	10.67	9789	12.74
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080522

Lab File ID (Standard): 04 Date Analyzed: 08/24/22

Instrument ID: SV6 Time Analyzed: 1215

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	5721	3.55	13873	4.66	6874	6.33
	UPPER LIMIT	11442	4.05	27746	5.16	13748	6.83
	LOWER LIMIT	2861	3.05	6937	4.16	3437	5.83
	CLIENT SAMPLE NO.						
01	HS22080522-01	5659	3.55	14819	4.66	8566	6.33
02	HS22080522-02	4060	3.56	15382	4.66	8863	6.33
03	HS22080522-03	3712	3.56	14037	4.66	8085	6.33
04	HS22080522-08	3738	3.56	14197	4.66	8205	6.33
05	HS22080522-10	3492	3.55	13179	4.66	7582	6.33
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22080522

Lab File ID (Standard): 04 Date Analyzed: 08/24/22

Instrument ID: SV6 Time Analyzed: 1215

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	14770	7.78	6043	10.59	4226	12.65
	UPPER LIMIT	29540	8.28	12086	11.09	8452	13.15
	LOWER LIMIT	7385	7.28	3022	10.09	2113	12.15
	CLIENT SAMPLE NO.						
01	HS22080522-01	13196	7.78	6963	10.59	4151	12.64
02	HS22080522-02	13351	7.78	6540	10.59	3880	12.65
03	HS22080522-03	12321	7.78	5703	10.59	3216	12.64
04	HS22080522-08	12563	7.78	5217	10.59	3407	12.64
05	HS22080522-10	11434	7.78	4903	10.59	2726	12.65
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

right solutions.
right partner.

Form 12

Preparation Log

SW3510

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Form 12 - Preparation Log

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

RunID
182382

EPA 8270SIM

Prep Batch 182382 **Prep Method** **Prep Date** 08/12/22

	Matrix	Type	Lab Sample ID	Initial Amt (mL)	Final Amt (mL)	Client Sample ID
1	Aqueous	MBLK	MBLK-182382	1000	1	MBLK-182382
2	Aqueous	LCS	LCS-182382	1000	1	LCS-182382
3	Aqueous	LCSD	LCSD-182382	1000	1	LCSD-182382
4	Water	SAMP	HS22080522-01	1000	1	MW2_080822
5	Water	SAMP	HS22080522-02	1000	1	MW2_080822_a
6	Water	SAMP	HS22080522-03	1000	1	18CPTMW01DW_080822
7	Water	SAMP	HS22080522-04	1000	1	18CPTMW01SW_080822
8	Water	SAMP	HS22080522-08	1000	1	MW8_080822
9	Water	SAMP	HS22080522-09	1000	1	18CPTMW23SW_080822
10	Water	SAMP	HS22080522-10	1000	1	18CPTMW23_080822

right solutions.
right partner.

Analysis Run Log

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project LHAAP 18 24

Workorder
HS22080522

RunID
SV-6_410398

~

Instrument ID SV-6 **Matrix** R410398 **Start Date** 03/10/2022 **EndDate** 03/10/2022

Client Sample ID	Type	Lab Sample ID	DF	Analysis Date	File ID
DFTPP	TUNE	DFTPP	1	03/10/22 10:15	001.D
1 4 DX-0.08	ICAL4	1 4 DX-0.08	1	03/10/22 10:25	002.D
1 4 DX-0.01	ICAL1	1 4 DX-0.01	1	03/10/22 10:47	003.D
1 4 DX-0.03	ICAL2	1 4 DX-0.03	1	03/10/22 11:05	004.D
1 4 DX-0.05	ICAL3	1 4 DX-0.05	1	03/10/22 11:22	005.D
1 4 DX-0.1	ICAL5	1 4 DX-0.1	1	03/10/22 11:40	006.D
1 4 DX-0.15	ICAL6	1 4 DX-0.15	1	03/10/22 11:58	007.D
1 4 DX-0.2	ICAL7	1 4 DX-0.2	1	03/10/22 12:16	008.D
1 4 DX-0.5	ICAL8	1 4 DX-0.5	1	03/10/22 12:56	009.D
1 4 DX-ICV	ICV	1 4 DX-ICV	1	03/10/22 14:15	010.D

SV06 -Logbook

Batch: 50796 **Analyst:** Marco Gutierrez

Date: 08-23-2022 **Reviewer:**

Method: R8270LL SIM **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	DFTPP	TUNE	08-23-2022 09:33 am	1.00	0.00 gm	0.00 mL	01.D		Y	NA
2	SLSTD-2.5	CCV	08-23-2022 09:45 am	1.00	1000.00 mL	1000.00 mL	02.D	Liquid	Y	NA
3	1 4DIOX-CCV	CCV	08-23-2022 10:31 am	1.00	1000.00 mL	1000.00 mL	03.D	Liquid	Y	NA
4	MBLK-182382	MBLK	08-23-2022 11:16 am	1.00	1000.00 mL	1000.00 mL	05.D	Liquid	Y	NA
5	LCS-182382	LCS	08-23-2022 11:34 am	1.00	1000.00 mL	1000.00 mL	06.D	Liquid	Y	NA
6	LCSD-182382	LCSD	08-23-2022 11:52 am	1.00	1000.00 mL	1000.00 mL	07.D	Liquid	Y	NA
7	MBLK-182546	MBLK	08-23-2022 12:10 pm	1.00	1000.00 mL	1000.00 mL	08.D	Liquid	Y	NA
8	LCS-182546	LCS	08-23-2022 12:27 pm	1.00	1000.00 mL	1000.00 mL	09.D	Liquid	Y	NA
9	LCSD-182546	LCSD	08-23-2022 12:45 pm	1.00	1000.00 mL	1000.00 mL	10.D	Liquid	Y	NA
10	MBLK-182674	SAMP	08-23-2022 01:03 pm	1.00	1000.00 mL	1000.00 mL	11.D	Liquid	Y	NA
11	LCS-182674	LCS	08-23-2022 01:21 pm	1.00	1000.00 mL	1000.00 mL	12.D	Liquid	Y	NA
12	LCSD-182674	LCSD	08-23-2022 01:39 pm	1.00	1000.00 mL	1000.00 mL	13.D	Liquid	Y	NA
13	HS22080472-01	SAMP	08-23-2022 01:57 pm	1.00	1000.00 mL	1000.00 mL	14.D	Liquid	Y	NA
14	HS22080499-01	SAMP	08-23-2022 02:15 pm	1.00	1000.00 mL	1000.00 mL	15.D	Liquid	Y	NA
15	HS22080499-02	SAMP	08-23-2022 02:33 pm	1.00	1000.00 mL	1000.00 mL	16.D	Liquid	Y	NA
16	HS22080499-03	SAMP	08-23-2022 02:51 pm	1.00	1000.00 mL	1000.00 mL	17.D	Liquid	Y	NA
17	HS22080499-04	SAMP	08-23-2022 03:09 pm	1.00	1000.00 mL	1000.00 mL	18.D	Liquid	Y	NA
18	HS22080499-06	SAMP	08-23-2022 03:27 pm	1.00	1000.00 mL	1000.00 mL	19.D	Liquid	Y	NA
19	HS22080499-07	SAMP	08-23-2022 03:45 pm	1.00	1000.00 mL	1000.00 mL	20.D	Liquid	Y	NA
20	HS22080499-08	SAMP	08-23-2022 04:03 pm	1.00	1000.00 mL	1000.00 mL	21.D	Liquid	Y	NA
21	HS22080522-01	SAMP	08-23-2022 04:21 pm	1.00	1000.00 mL	1000.00 mL	22.D	Liquid	Y	NA
22	HS22080522-02	SAMP	08-23-2022 04:39 pm	1.00	1000.00 mL	1000.00 mL	23.D	Liquid	Y	NA
23	HS22080522-03	SAMP	08-23-2022 04:57 pm	1.00	1000.00 mL	1000.00 mL	24.D	Liquid	Y	NA
24	HS22080522-04	SAMP	08-23-2022 05:15 pm	1.00	1000.00 mL	1000.00 mL	25.D	Liquid	Y	NA
25	HS22080522-08	SAMP	08-23-2022 05:33 pm	1.00	1000.00 mL	1000.00 mL	26.D	Liquid	Y	NA
26	HS22080522-09	SAMP	08-23-2022 05:51 pm	1.00	1000.00 mL	1000.00 mL	27.D	Liquid	Y	NA
27	HS22080522-10	SAMP	08-23-2022 06:09 pm	1.00	1000.00 mL	1000.00 mL	28.D	Liquid	Y	NA
28	HS22080472-01	SAMP	08-23-2022 06:27 pm	100.0(	1000.00 mL	1000.00 mL	29.D	Liquid	Y	NA
29	HS22080499-01	SAMP	08-23-2022 06:45 pm	10.00	1000.00 mL	1000.00 mL	30.D	Liquid	Y	NA
30	1 4DIOX-CCV	CCV	08-23-2022 07:03 pm	1.00	1000.00 mL	1000.00 mL	31.D	Liquid	Y	NA

SV06 -Logbook

Batch: 50778 **Analyst:** Marco Gutierrez

Date: 08-24-2022 **Reviewer:**

Method: R8270DLVISIM **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	DFTPP	TUNE	08-24-2022 10:17 am	1.00	0.00 gm	0.00 mL	01.D		Y	NA
2	SLSTD-2.5	CCV	08-24-2022 10:29 am	1.00	1000.00 mL	1000.00 mL	02.D	Liquid	Y	NA
3	LVI PAH-0.025	CCV	08-24-2022 11:04 am	1.00	33.00 mL	2000.00 mL	03.D	Liquid	Y	NA
4	1 4-DIOX-0.08	CCV	08-24-2022 12:15 pm	1.00	1000.00 mL	1000.00 mL	04.D	Liquid	Y	NA
5	CCB	SAMP	08-24-2022 12:45 pm	1.00	1000.00 mL	1000.00 mL	05.D	Liquid	Y	NA
6	HS22080879-17	SAMP	08-24-2022 01:03 pm	10.00	33.00 mL	2000.00 mL	06.D	Liquid	Y	NA
7	HS22080879-17	SAMP	08-24-2022 01:23 pm	1000.0	33.00 mL	2000.00 mL	07.D	Liquid	Y	NA
8	HS22080499-03	SAMP	08-24-2022 01:43 pm	10.00	1000.00 mL	1000.00 mL	08.D	Liquid	Y	NA
9	HS22080499-04	SAMP	08-24-2022 02:01 pm	20.00	1000.00 mL	1000.00 mL	09.D	Liquid	Y	NA
10	HS22080499-08	SAMP	08-24-2022 02:19 pm	5.00	1000.00 mL	1000.00 mL	10.D	Liquid	Y	NA
11	HS22080522-01	SAMP	08-24-2022 02:37 pm	100.0(	1000.00 mL	1000.00 mL	11.D	Liquid	Y	NA
12	HS22080522-02	SAMP	08-24-2022 02:55 pm	100.0(	1000.00 mL	1000.00 mL	12.D	Liquid	Y	NA
13	HS22080522-03	SAMP	08-24-2022 03:13 pm	100.0(	1000.00 mL	1000.00 mL	13.D	Liquid	Y	NA
14	HS22080522-08	SAMP	08-24-2022 03:31 pm	20.00	1000.00 mL	1000.00 mL	14.D	Liquid	Y	NA
15	HS22080522-10	SAMP	08-24-2022 03:49 pm	100.0(	1000.00 mL	1000.00 mL	15.D	Liquid	Y	NA
16	HS22080611-01	SAMP	08-24-2022 04:07 pm	1.00	1000.00 mL	1000.00 mL	16.D	Liquid	Y	NA
17	HS22080611-02	SAMP	08-24-2022 04:25 pm	1.00	1000.00 mL	1000.00 mL	17.D	Liquid	Y	NA
18	HS22080611-03	SAMP	08-24-2022 04:43 pm	1.00	1000.00 mL	1000.00 mL	18.D	Liquid	Y	NA
19	HS22080611-04	SAMP	08-24-2022 05:01 pm	1.00	1000.00 mL	1000.00 mL	19.D	Liquid	Y	NA
20	HS22080611-05	SAMP	08-24-2022 05:19 pm	1.00	1000.00 mL	1000.00 mL	20.D	Liquid	Y	NA
21	HS22080611-06	SAMP	08-24-2022 05:37 pm	1.00	1000.00 mL	1000.00 mL	21.D	Liquid	Y	NA
22	HS22080695-01	SAMP	08-24-2022 05:55 pm	1.00	1000.00 mL	1000.00 mL	22.D	Liquid	Y	NA
23	HS22080695-04	SAMP	08-24-2022 06:13 pm	1.00	1000.00 mL	1000.00 mL	23.D	Liquid	Y	NA
24	HS22080695-05	SAMP	08-24-2022 06:31 pm	1.00	1000.00 mL	1000.00 mL	24.D	Liquid	Y	NA
25	HS22080695-06	SAMP	08-24-2022 06:49 pm	1.00	1000.00 mL	1000.00 mL	25.D	Liquid	Y	NA
26	HS22080695-07	SAMP	08-24-2022 07:07 pm	1.00	1000.00 mL	1000.00 mL	26.D	Liquid	Y	NA
27	HS22080695-08	SAMP	08-24-2022 07:25 pm	1.00	1000.00 mL	1000.00 mL	27.D	Liquid	Y	NA
28	HS22080752-01	SAMP	08-24-2022 07:43 pm	1.00	1000.00 mL	1000.00 mL	28.D	Liquid	Y	NA
29	HS22080752-02	SAMP	08-24-2022 08:01 pm	1.00	1000.00 mL	1000.00 mL	29.D	Liquid	Y	NA
30	HS22080752-03	SAMP	08-24-2022 08:19 pm	1.00	1000.00 mL	1000.00 mL	30.D	Liquid	Y	NA
31	HS22080752-04	SAMP	08-24-2022 08:37 pm	1.00	1000.00 mL	1000.00 mL	31.D	Liquid	Y	NA
32	HS22080752-05	SAMP	08-24-2022 08:55 pm	1.00	1000.00 mL	1000.00 mL	32.D	Liquid	Y	NA
33	1 4-DIOX-0.08	CCV	08-24-2022 09:12 pm	1.00	1000.00 mL	1000.00 mL	33.D	Liquid	Y	NA
34	CCB	SAMP	08-24-2022 09:30 pm	1.00	1000.00 mL	1000.00 mL	34.D	Liquid	Y	NA

right solutions.
right partner.

Raw Data SV-6 410398

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\001.D Page 1
Report Date: 10-Mar-2022 10:29

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\001.D
Lab Smp Id: DFTPP Client Smp ID: DFTPP
Inj Date : 10-MAR-2022 10:15 MS Autotune Date: 09-MAR-2022 11:12
Operator : smith Inst ID: SV6.i
Smp Info : DFTPP;DFTPP;3;;DFTPP
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DFTPP.m
Meth Date : 09-Dec-2021 09:52 jjuarez Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vf * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Cpnd Variable		Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
5.667	6.357	-0.690	198	97000			0.00- 100.00	100.00
5.667	6.357	-0.690	51	53776			10.00- 80.00	55.44
5.667	6.357	-0.690	68	766			0.00- 2.00	1.59
5.667	6.357	-0.690	69	48284			0.00- 0.00	49.78
5.667	6.357	-0.690	70	222			0.00- 2.00	0.46
5.667	6.357	-0.690	127	57876			10.00- 80.00	59.67
5.667	6.357	-0.690	197	89			0.00- 2.00	0.09
5.667	6.357	-0.690	199	6703			5.00- 9.00	6.91
5.667	6.357	-0.690	275	20548			10.00- 60.00	21.18
5.667	6.357	-0.690	365	2011			1.00- 100.00	2.07
5.667	6.357	-0.690	441	8864			0.01- 99.99	74.94
5.667	6.357	-0.690	442	60568			50.00- 150.00	62.44
5.667	6.357	-0.690	443	11828			15.00- 24.00	19.53

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	55.44
68	Less than 2.00% of mass 69	0.79 (1.59)
69	Mass 69 relative abundance	49.78
70	Less than 2.00% of mass 69	0.23 (0.46)
127	10.00 - 80.00% of mass 198	59.67
197	Less than 2.00% of mass 198	0.09
199	5.00 - 9.00% of mass 198	6.91
275	10.00 - 60.00% of mass 198	21.18
365	1.00 - 100.00% of mass 198	2.07
441	Present, but less than mass 443	9.14
442	50.00 - 150.00% of mass 198	62.44
443	15.00 - 24.00% of mass 442	12.19 (19.53)

Data File: 001.D
Spectrum: Average Spectrum: 5.657 to 5.662 min. (SUB)
Location of Maximum: 198.00
Number of points: 255

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	59	111.00	4304	180.00	2452	257.00	491
37.00	224	112.00	539	181.00	1144	258.00	2733
38.00	615	113.00	143	182.00	177	259.00	454
39.00	3676	116.00	789	184.00	192	261.00	82
40.00	317	117.00	14919	185.00	1728	264.00	185
41.00	107	118.00	1145	186.00	13758	265.00	973
44.00	143	119.00	105	187.00	3715	266.00	174
45.00	94	120.00	150	188.00	457	268.00	88
47.00	15	122.00	973	189.00	685	270.00	75
48.00	89	123.00	1516	190.00	117	272.00	103
49.00	508	124.00	642	191.00	390	273.00	1456
50.00	14754	125.00	696	192.00	1177	274.00	3568
51.00	53776	126.00	256	193.00	1358	275.00	20544
52.00	2771	127.00	57872	194.00	259	276.00	2620
53.00	81	128.00	4240	195.00	139	277.00	1638
55.00	257	129.00	21648	196.00	2928	278.00	262
56.00	1346	130.00	1884	197.00	89	283.00	139
57.00	3111	131.00	409	198.00	97000	284.00	97
58.00	105	132.00	154	199.00	6703	285.00	237
61.00	558	134.00	606	200.00	528	293.00	305
62.00	699	135.00	1740	201.00	612	294.00	85
63.00	1803	136.00	678	203.00	645	295.00	95
64.00	268	137.00	930	204.00	3334	296.00	5500
65.00	1049	138.00	177	205.00	5688	297.00	828
68.00	766	140.00	157	206.00	23784	303.00	625
69.00	48280	141.00	2481	207.00	3124	304.00	170
70.00	222	142.00	824	208.00	849	308.00	75
73.00	474	143.00	679	209.00	168	314.00	238
74.00	5459	144.00	97	210.00	354	315.00	643
75.00	8373	145.00	111	211.00	911	316.00	288
76.00	3216	146.00	464	215.00	167	321.00	145
77.00	63088	147.00	1285	216.00	492	323.00	1574
78.00	4098	148.00	3525	217.00	6177	324.00	249
79.00	3357	149.00	673	218.00	732	327.00	240
80.00	2361	150.00	140	221.00	5622	328.00	123
81.00	3824	151.00	388	222.00	202	332.00	116
82.00	1046	152.00	197	223.00	1480	333.00	145
83.00	984	153.00	769	224.00	12590	334.00	1088
84.00	280	154.00	654	225.00	3091	335.00	208
85.00	674	155.00	1544	226.00	254	341.00	172
86.00	1189	156.00	1996	227.00	4932	346.00	310
87.00	592	157.00	598	228.00	818	352.00	508
88.00	224	158.00	423	229.00	1162	353.00	276
89.00	90	159.00	429	230.00	119	354.00	517
91.00	780	160.00	694	231.00	476	355.00	80

92.00	934	161.00	1193	233.00	83	365.00	2011
93.00	5961	162.00	336	234.00	295	366.00	237
94.00	433	163.00	100	235.00	300	371.00	101
95.00	133	164.00	97	236.00	162	372.00	897
96.00	339	165.00	922	237.00	449	373.00	165
97.00	116	166.00	761	239.00	168	383.00	177
98.00	4829	167.00	6070	240.00	144	390.00	86
99.00	3781	168.00	3181	241.00	236	402.00	245
100.00	330	169.00	504	242.00	771	403.00	502
101.00	2289	170.00	104	243.00	851	404.00	138
102.00	119	171.00	173	244.00	9664	421.00	356
103.00	671	172.00	468	245.00	1352	422.00	273
104.00	1246	173.00	626	246.00	1814	423.00	3205
105.00	1212	174.00	1018	247.00	300	424.00	810
106.00	442	175.00	1981	249.00	349	441.00	8864
107.00	16936	176.00	577	253.00	177	442.00	60568
108.00	2535	177.00	828	254.00	257	443.00	11828
109.00	409	178.00	262	255.00	47016	444.00	1210
110.00	29360	179.00	3529	256.00	7188		

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\001.D

Date : 10-MAR-2022 10:15

Client ID: DFTPP

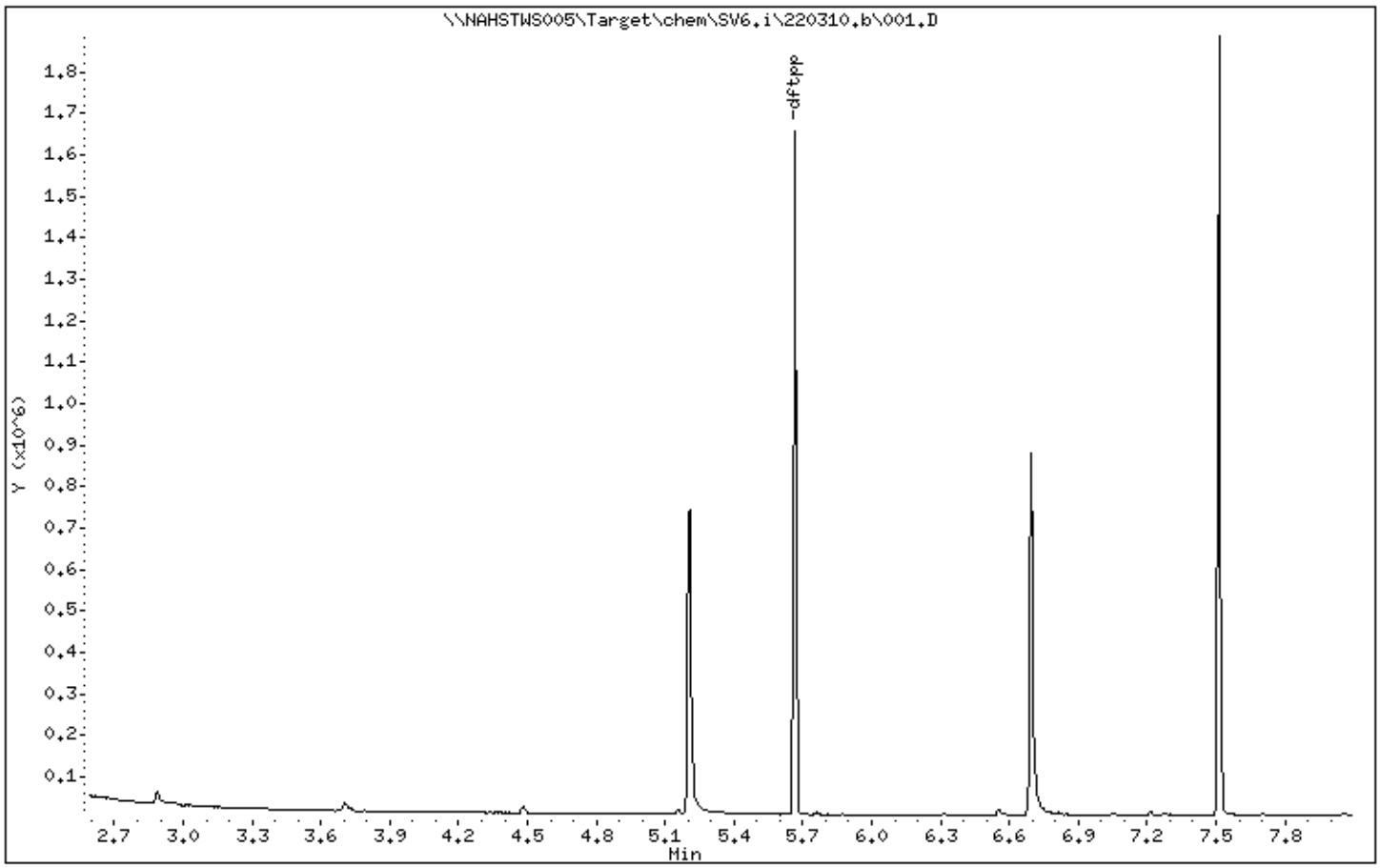
Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\001.D

Date : 10-MAR-2022 10:15

Client ID: DFTPP

Instrument: SV6.i

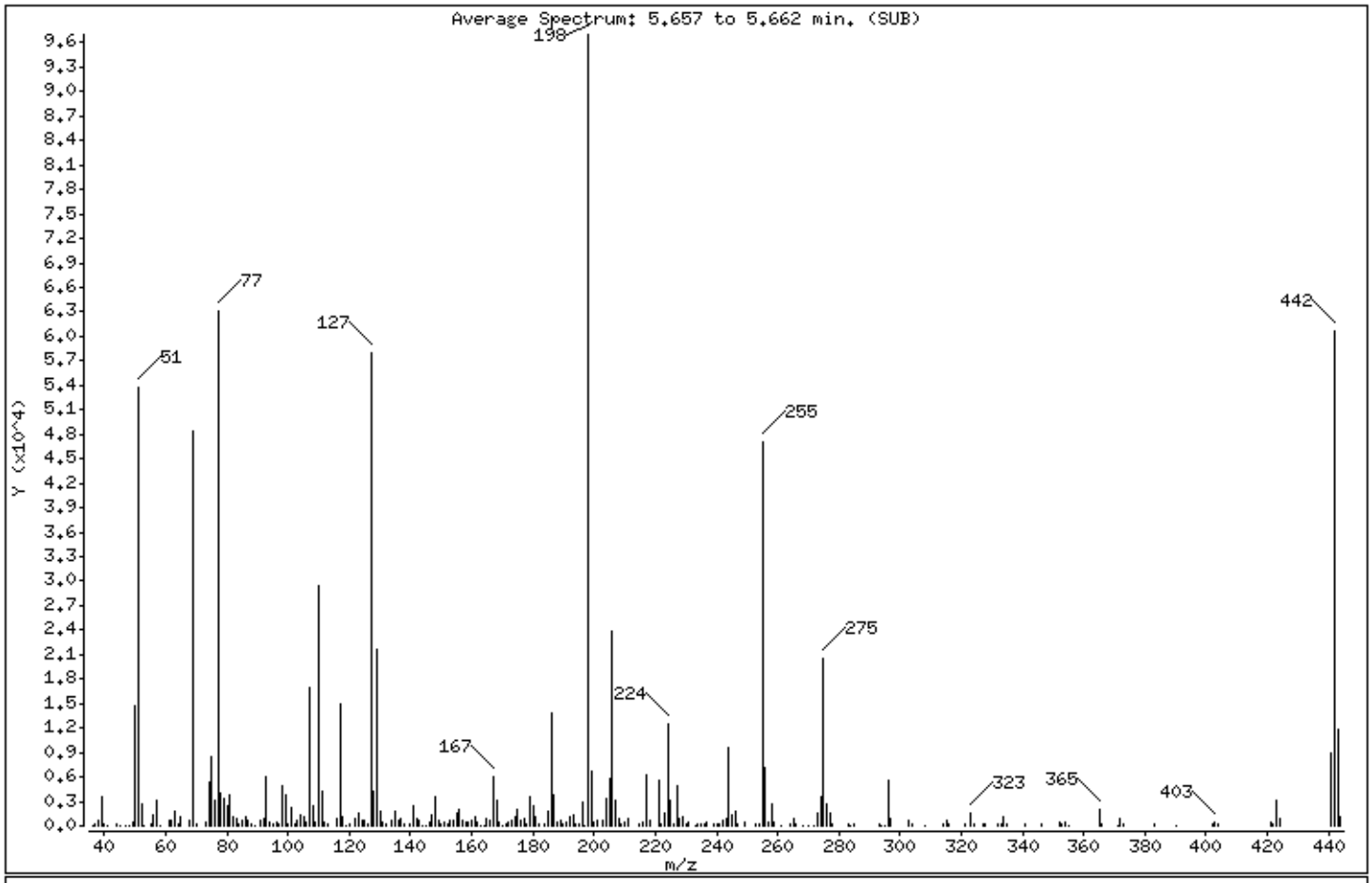
Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	55.44
68	Less than 2.00% of mass 69	0.79 (1.59)
69	Mass 69 relative abundance	49.78
70	Less than 2.00% of mass 69	0.23 (0.46)
127	10.00 - 80.00% of mass 198	59.67
197	Less than 2.00% of mass 198	0.09
199	5.00 - 9.00% of mass 198	6.91
275	10.00 - 60.00% of mass 198	21.18
365	1.00 - 100.00% of mass 198	2.07
441	Present, but less than mass 443	9.14
442	50.00 - 150.00% of mass 198	62.44
443	15.00 - 24.00% of mass 442	12.19 (19.53)

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\001.D

Date : 10-MAR-2022 10:15

Client ID: DFTPP Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS Column diameter: 0.25

Data File: 001.D
Spectrum: Average Spectrum: 5.657 to 5.662 min. (SUB)
Location of Maximum: 198.00
Number of points: 255

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	59	111.00	4304	180.00	2452	257.00	491
37.00	224	112.00	539	181.00	1144	258.00	2733
38.00	615	113.00	143	182.00	177	259.00	454
39.00	3676	116.00	789	184.00	192	261.00	82
40.00	317	117.00	14919	185.00	1728	264.00	185
41.00	107	118.00	1145	186.00	13758	265.00	973
44.00	143	119.00	105	187.00	3715	266.00	174
45.00	94	120.00	150	188.00	457	268.00	88
47.00	15	122.00	973	189.00	685	270.00	75
48.00	89	123.00	1516	190.00	117	272.00	103
49.00	508	124.00	642	191.00	390	273.00	1456
50.00	14754	125.00	696	192.00	1177	274.00	3568
51.00	53776	126.00	256	193.00	1358	275.00	20544
52.00	2771	127.00	57872	194.00	259	276.00	2620
53.00	81	128.00	4240	195.00	139	277.00	1638
55.00	257	129.00	21648	196.00	2928	278.00	262
56.00	1346	130.00	1884	197.00	89	283.00	139
57.00	3111	131.00	409	198.00	97000	284.00	97
58.00	105	132.00	154	199.00	6703	285.00	237
61.00	558	134.00	606	200.00	528	293.00	305
62.00	699	135.00	1740	201.00	612	294.00	85
63.00	1803	136.00	678	203.00	645	295.00	95
64.00	268	137.00	930	204.00	3334	296.00	5500
65.00	1049	138.00	177	205.00	5688	297.00	828
68.00	766	140.00	157	206.00	23784	303.00	625
69.00	48280	141.00	2481	207.00	3124	304.00	170
70.00	222	142.00	824	208.00	849	308.00	75
73.00	474	143.00	679	209.00	168	314.00	238
74.00	5459	144.00	97	210.00	354	315.00	643
75.00	8373	145.00	111	211.00	911	316.00	288
76.00	3216	146.00	464	215.00	167	321.00	145
77.00	63088	147.00	1285	216.00	492	323.00	1574
78.00	4098	148.00	3525	217.00	6177	324.00	249
79.00	3357	149.00	673	218.00	732	327.00	240
80.00	2361	150.00	140	221.00	5622	328.00	123

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\001.D

Date : 10-MAR-2022 10:15

Client ID: DFTPP Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS Column diameter: 0.25

Data File: 001.D
Spectrum: Average Spectrum: 5.657 to 5.662 min. (SUB)
Location of Maximum: 198.00
Number of points: 255

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	3824	151.00	388	222.00	202	332.00	116
82.00	1046	152.00	197	223.00	1480	333.00	145
83.00	984	153.00	769	224.00	12590	334.00	1088
84.00	280	154.00	654	225.00	3091	335.00	208
85.00	674	155.00	1544	226.00	254	341.00	172
86.00	1189	156.00	1996	227.00	4932	346.00	310
87.00	592	157.00	598	228.00	818	352.00	508
88.00	224	158.00	423	229.00	1162	353.00	276
89.00	90	159.00	429	230.00	119	354.00	517
91.00	780	160.00	694	231.00	476	355.00	80
92.00	934	161.00	1193	233.00	83	365.00	2011
93.00	5961	162.00	336	234.00	295	366.00	237
94.00	433	163.00	100	235.00	300	371.00	101
95.00	133	164.00	97	236.00	162	372.00	897
96.00	339	165.00	922	237.00	449	373.00	165
97.00	116	166.00	761	239.00	168	383.00	177
98.00	4829	167.00	6070	240.00	144	390.00	86
99.00	3781	168.00	3181	241.00	236	402.00	245
100.00	330	169.00	504	242.00	771	403.00	502
101.00	2289	170.00	104	243.00	851	404.00	138
102.00	119	171.00	173	244.00	9664	421.00	356
103.00	671	172.00	468	245.00	1352	422.00	273
104.00	1246	173.00	626	246.00	1814	423.00	3205
105.00	1212	174.00	1018	247.00	300	424.00	810
106.00	442	175.00	1981	249.00	349	441.00	8864
107.00	16936	176.00	577	253.00	177	442.00	60568
108.00	2535	177.00	828	254.00	257	443.00	11828
109.00	409	178.00	262	255.00	47016	444.00	1210
110.00	29360	179.00	3529	256.00	7188		

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\002.D
Lab Smp Id: 1 4 DX-0.08 Client Smp ID: 1 4 DX-0.08
Inj Date : 10-MAR-2022 10:25 MS Autotune Date: 09-MAR-2022 11:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4 DX-0.08;1 4 DX-0.08
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DXSIM.m
Meth Date : 25-Aug-2022 16:08 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 10:25 Cal File: 002.D
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.790	3.790	(1.000)	6809	0.10000	(aM)
* 45 Naphthalene-d8	136	4.918	4.918	(1.000)	24566	0.10000	
$ 33 Nitrobenzene-d5	82	4.262	4.262	(0.867)	6468	0.08000	0.07898(M)
* 86 Acenaphthene-d10	164	6.603	6.603	(1.000)	12954	0.10000	
$ 69 2-Fluorobiphenyl	172	5.943	5.943	(0.900)	16771	0.08000	0.08317
* 126 Phenanthrene-d10	188	8.053	8.053	(1.000)	26502	0.10000	
* 182 Chrysene-d12	240	10.958	10.958	(1.000)	11837	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.656	9.656	(0.881)	16413	0.08000	0.07375(M)
* 198 Perylene-d12	264	13.085	13.085	(1.000)	8294	0.10000	
1 1,4-Dioxane	58	2.005	2.005	(0.529)	245	0.08000	0.08765(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

01135285

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\002.D

Page 1

Date : 10-MAR-2022 10:25

Client ID: 1 4 DX-0.08

Instrument: SV6.i

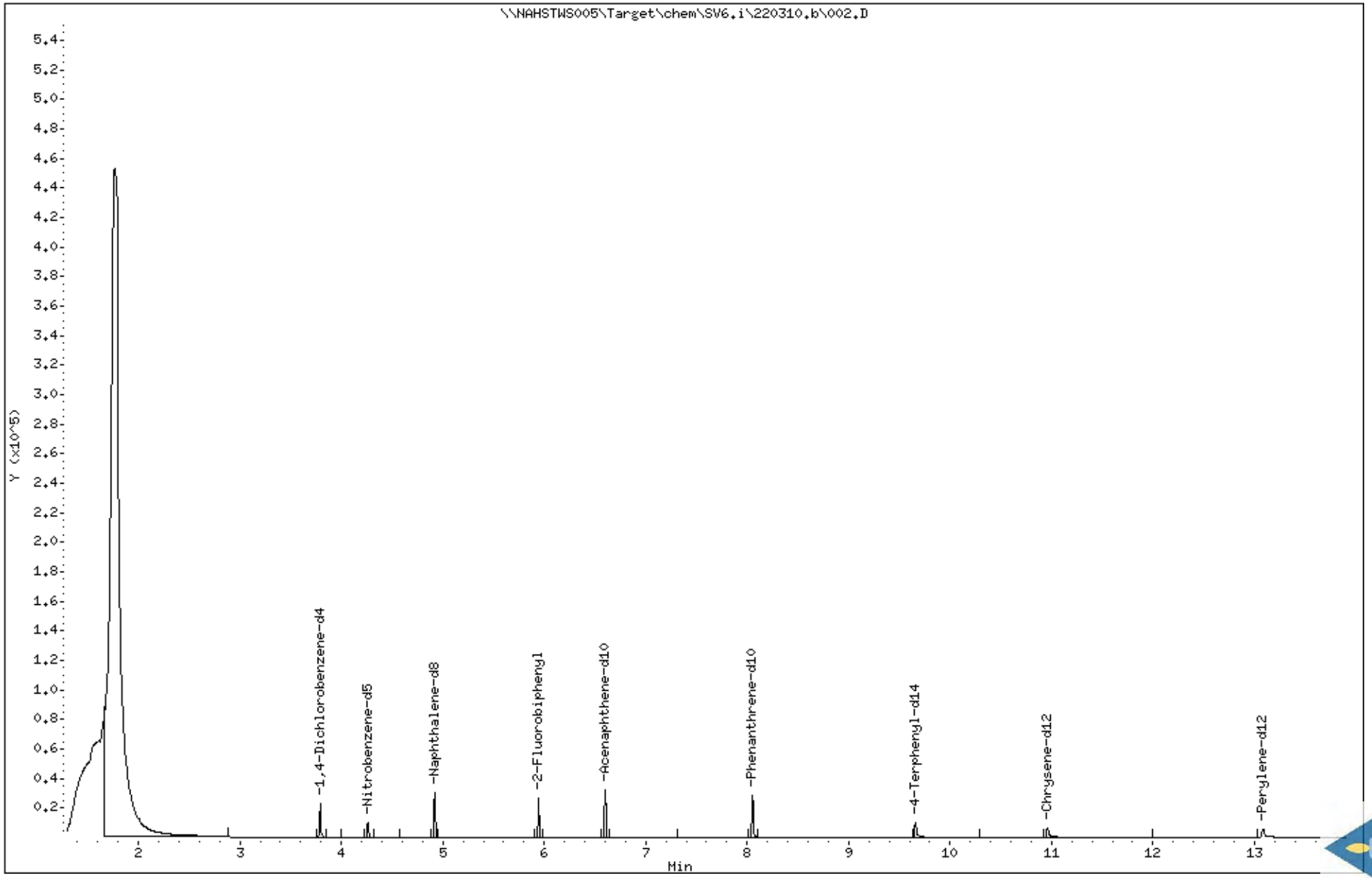
Sample Info: 1 4 DX-0.08;1 4 DX-0.08

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28

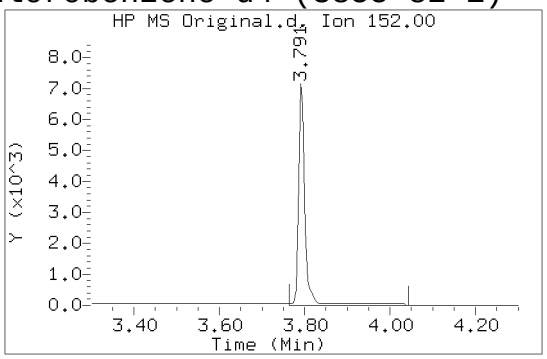


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\002.D
Inj Date : 10-MAR-2022 10:25
InstruID : SV6.i
LabSampID : 1 4 DX-0.08

1,4-Dichlorobenzene-d4 (3855-82-1)

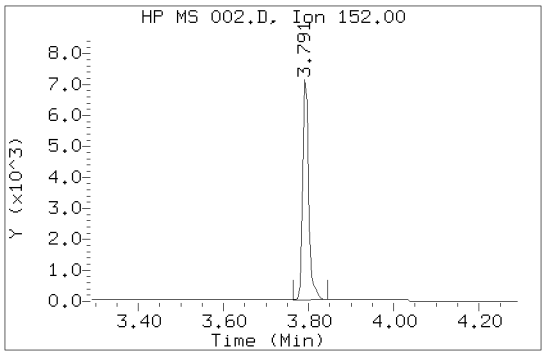
BEFORE

MASS
152
AREA
7703
HEIGHT
7154
25-Aug-2022
16:02
linh
pham



AFTER

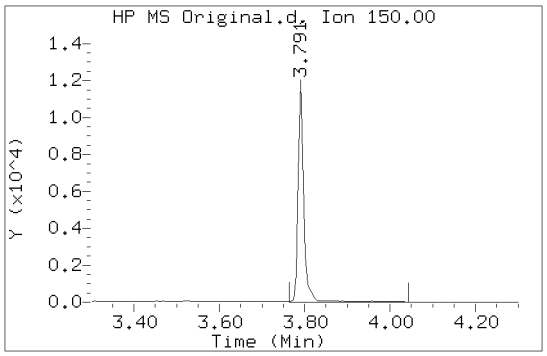
MASS
152
AREA
6809
HEIGHT
7102
25-Aug-2022
16:08
linh
pham



Reason Code:

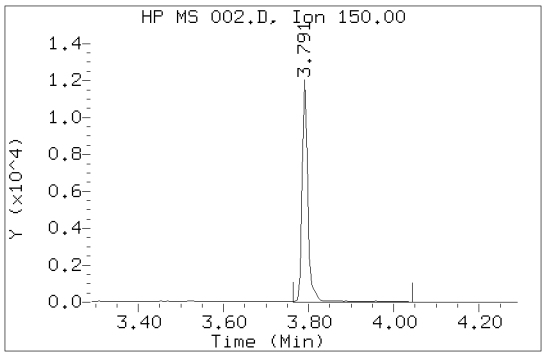
BEFORE

MASS
150
AREA
11466
HEIGHT
12036
25-Aug-2022
16:02
linh
pham



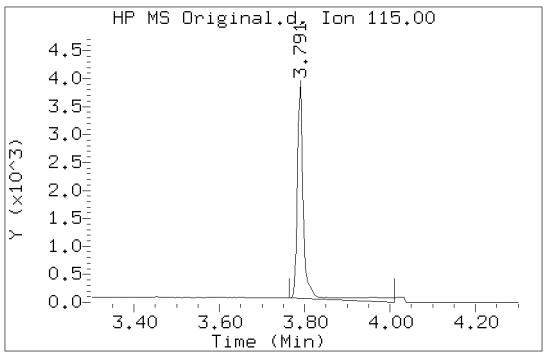
AFTER

MASS
150
AREA
11466
HEIGHT
12036
25-Aug-2022
16:08
linh
pham



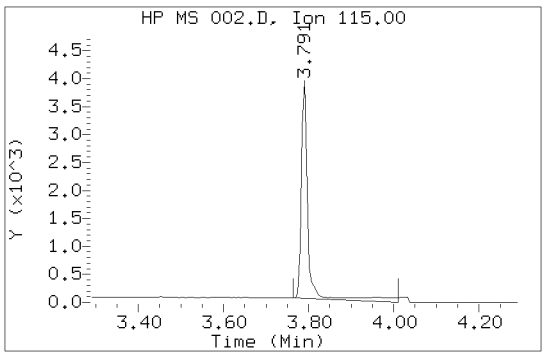
BEFORE

MASS
115
AREA
4211
HEIGHT
3890
25-Aug-2022
16:02
linh
pham



AFTER

MASS
115
AREA
4211
HEIGHT
3890
25-Aug-2022
16:08
linh
pham

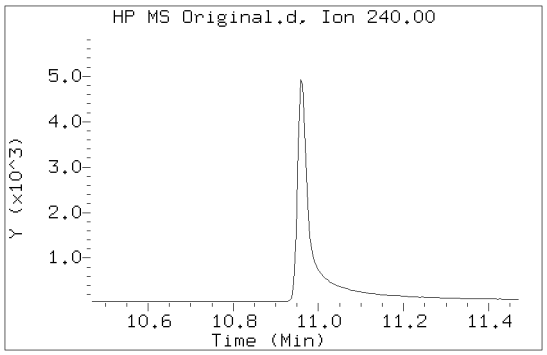


Chrysene-d12 (1719-03-5)

Reason Code:

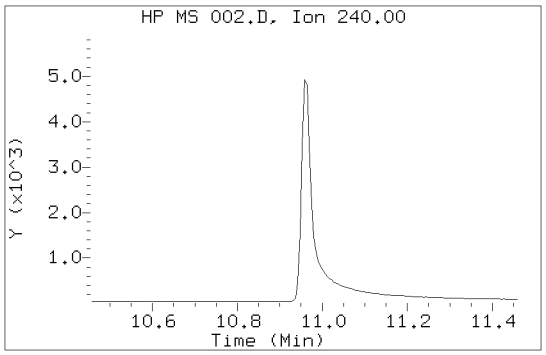
BEFORE

MASS
240
AREA
0
HEIGHT
0
25-Aug-2022
16:02
linh
pham



AFTER

MASS
240
AREA
11837
HEIGHT
4871
25-Aug-2022
16:08
linh
pham



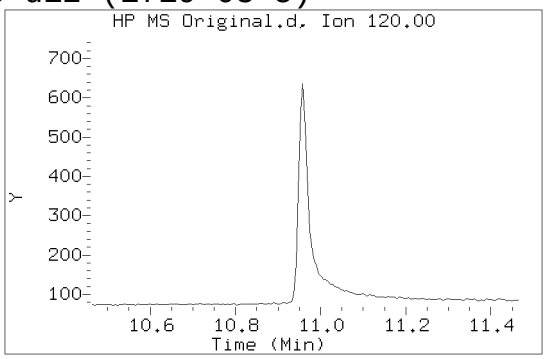
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\002.D
Inj Date : 10-MAR-2022 10:25
InstruID : SV6.i
LabSampID : 1 4 DX-0.08

Chrysene-d12 (1719-03-5)

Reason Code:

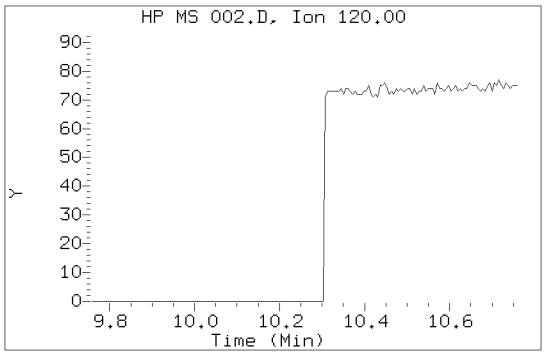
BEFORE

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:02
linh
pham



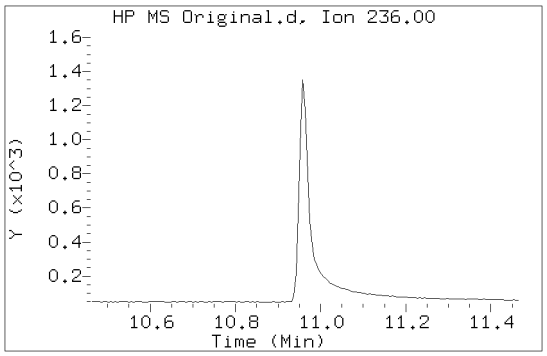
AFTER

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



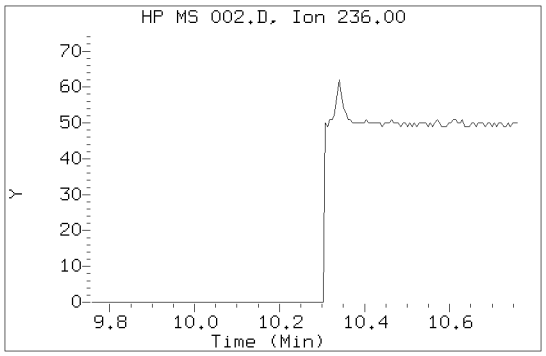
BEFORE

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:02
linh
pham



AFTER

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

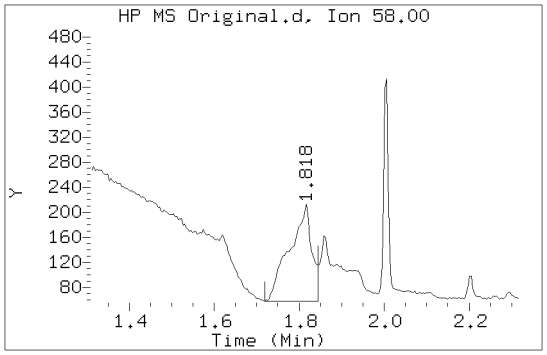


1,4-Dioxane ()

Reason Code:

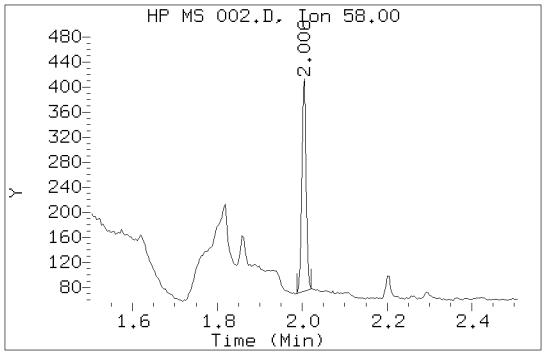
BEFORE

MASS
58
AREA
561
HEIGHT
155
25-Aug-2022
16:02
linh
pham



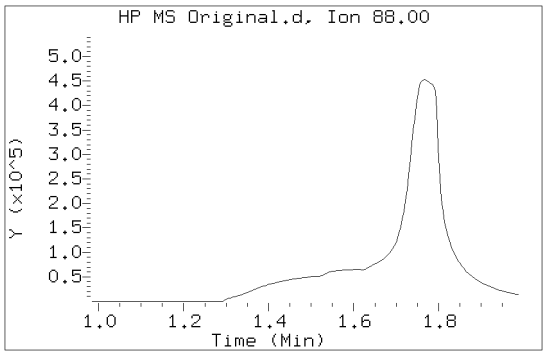
AFTER

MASS
58
AREA
245
HEIGHT
338
25-Aug-2022
16:08
linh
pham



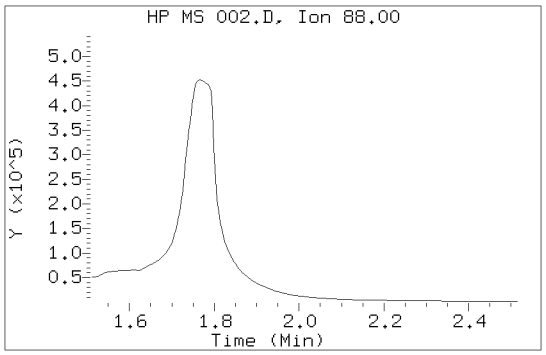
BEFORE

MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:02
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



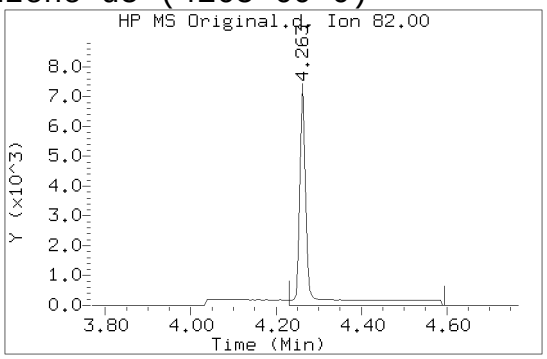
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\002.D
Inj Date : 10-MAR-2022 10:25
InstruID : SV6.i
LabSampID : 1 4 DX-0.08

Nitrobenzene-d5 (4165-60-0)

Reason Code:

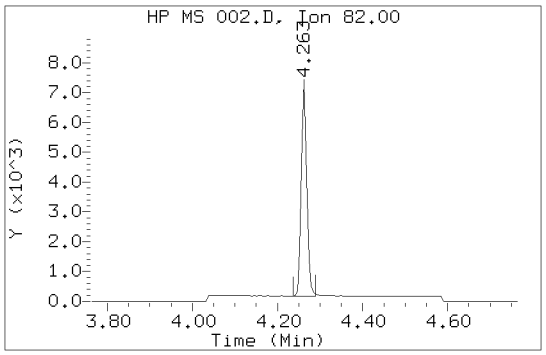
BEFORE

MASS
82
AREA
10168
HEIGHT
7437
25-Aug-2022
16:02
linh
pham



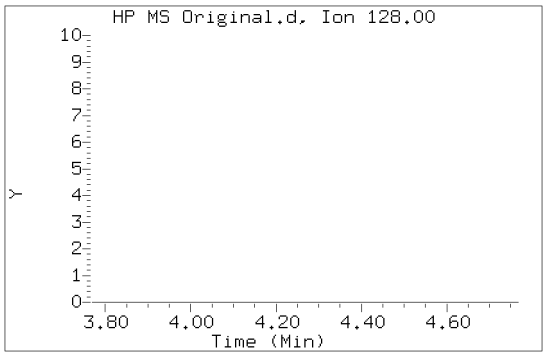
AFTER

MASS
82
AREA
6468
HEIGHT
7271
25-Aug-2022
16:08
linh
pham



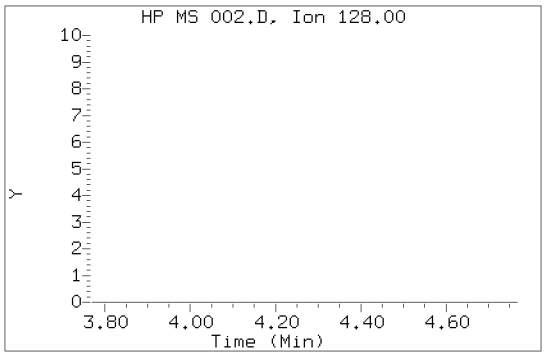
BEFORE

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:02
linh
pham



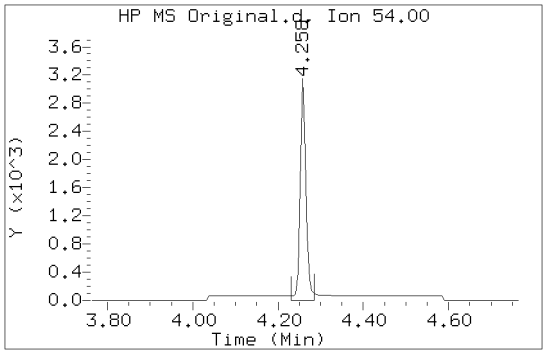
AFTER

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



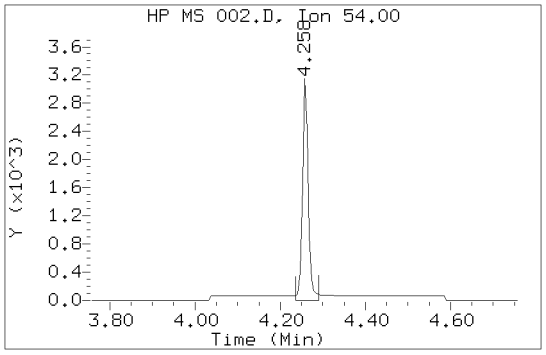
BEFORE

MASS
54
AREA
2990
HEIGHT
3148
25-Aug-2022
16:02
linh
pham



AFTER

MASS
54
AREA
2995
HEIGHT
3148
25-Aug-2022
16:08
linh
pham

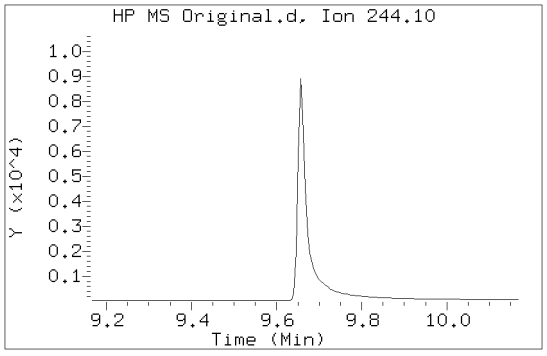


4-Terphenyl-d14 (1718-51-0)

Reason Code:

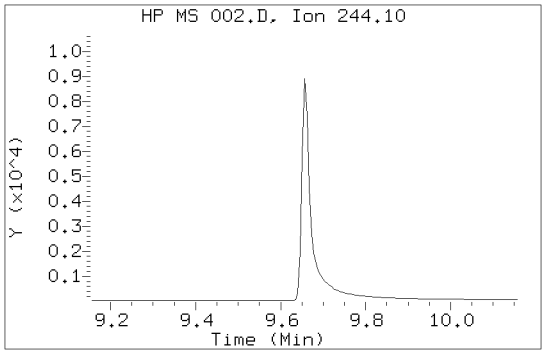
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
25-Aug-2022
16:02
linh
pham



AFTER

MASS
244.1
AREA
16413
HEIGHT
8885
25-Aug-2022
16:08
linh
pham



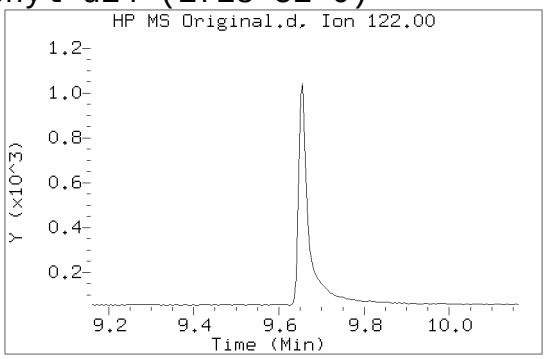
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\002.D
Inj Date : 10-MAR-2022 10:25
InstruID : SV6.i
LabSampID : 1 4 DX-0.08

4-Terphenyl-d14 (1718-51-0)

Reason Code:

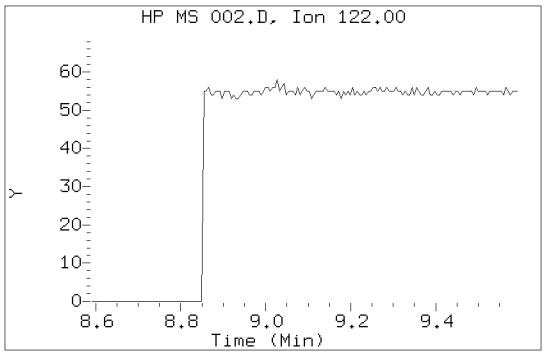
BEFORE

MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:02
linh
pham



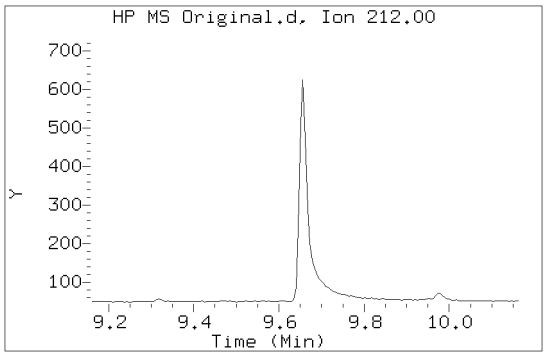
AFTER

MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



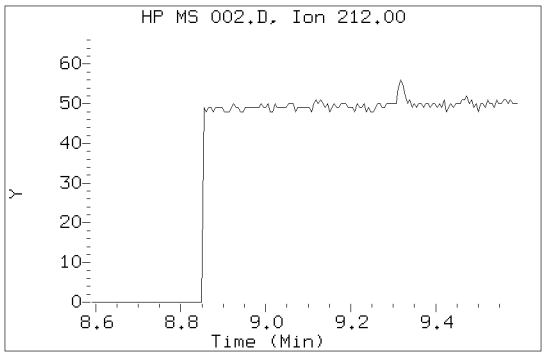
BEFORE

MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:02
linh
pham



AFTER

MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\003.D Page 1
Report Date: 25-Aug-2022 16:08

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\003.D
Lab Smp Id: 1 4 DX-0.01 Client Smp ID: 1 4 DX-0.01
Inj Date : 10-MAR-2022 10:47 MS Autotune Date: 09-MAR-2022 11:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4 DX-0.01;1 4 DX-0.01
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DXSIM.m
Meth Date : 25-Aug-2022 16:08 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 10:25 Cal File: 002.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.795	3.795	(1.000)	5529	0.10000	(a)
* 45 Naphthalene-d8	136	4.922	4.922	(1.000)	16961	0.10000	(M)
$ 33 Nitrobenzene-d5	82	4.262	4.262	(0.866)	608	0.01000	0.01075(QM)
* 86 Acenaphthene-d10	164	6.603	6.603	(1.000)	9707	0.10000	
$ 69 2-Fluorobiphenyl	172	5.943	5.943	(0.900)	1519	0.01000	0.01005(QM)
* 126 Phenanthrene-d10	188	8.058	8.058	(1.000)	16382	0.10000	
* 182 Chrysene-d12	240	10.963	10.963	(1.000)	6576	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.661	9.661	(0.881)	1253	0.01000	0.01013(M)
* 198 Perylene-d12	264	13.090	13.090	(1.000)	3752	0.10000	
1 1,4-Dioxane	58	1.994	1.994	(0.525)	21	0.01000	0.009252(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01135291

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\003.D

Page 1

Date : 10-MAR-2022 10:47

Client ID: 1 4 DX-0.01

Instrument: SV6.i

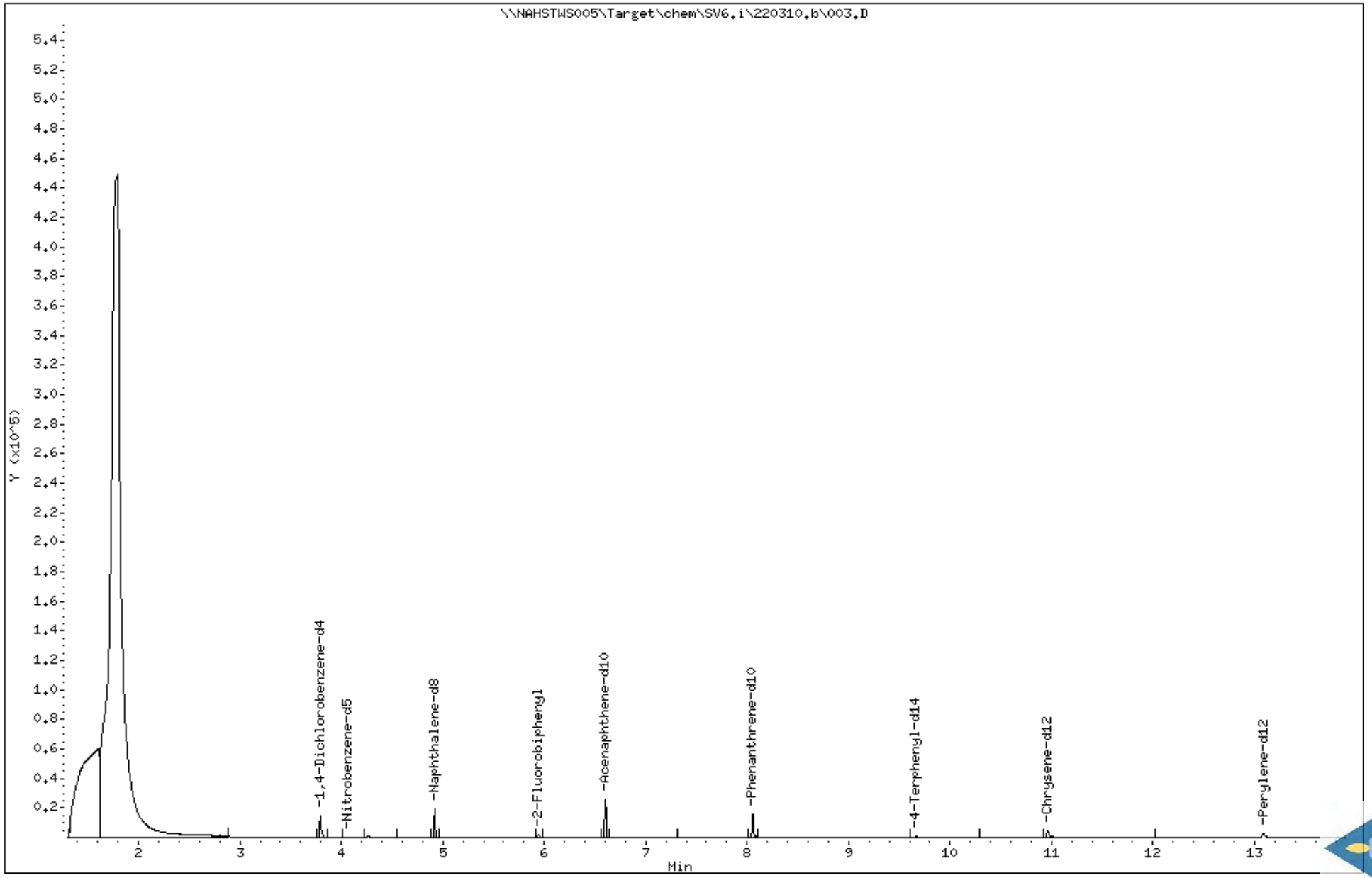
Sample Info: 1 4 DX-0.01;1 4 DX-0.01

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



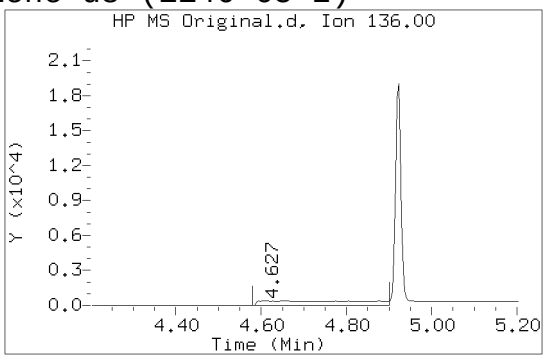
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\003.D
Inj Date : 10-MAR-2022 10:47
InstruID : SV6.i
LabSampID : 1 4 DX-0.01

Naphthalene-d8 (1146-65-2)

Reason Code:

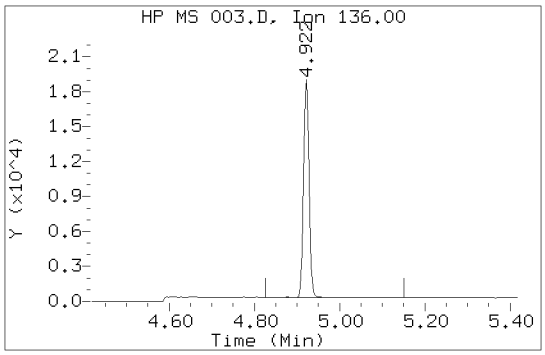
BEFORE

MASS
136
AREA
6591
HEIGHT
377
25-Aug-2022
16:04
linh
pham



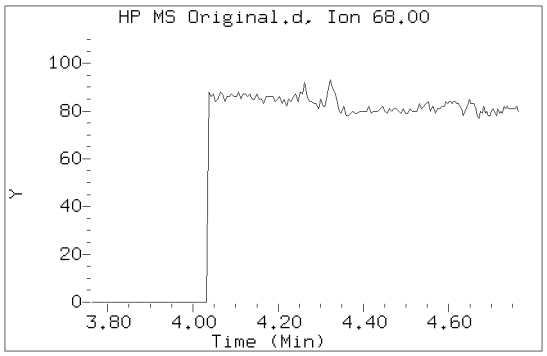
AFTER

MASS
136
AREA
16961
HEIGHT
18707
25-Aug-2022
16:08
linh
pham



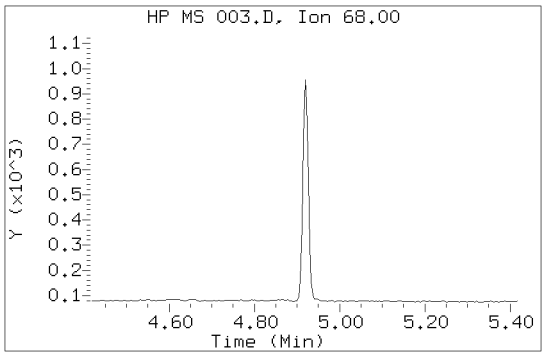
BEFORE

MASS
68
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
68
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

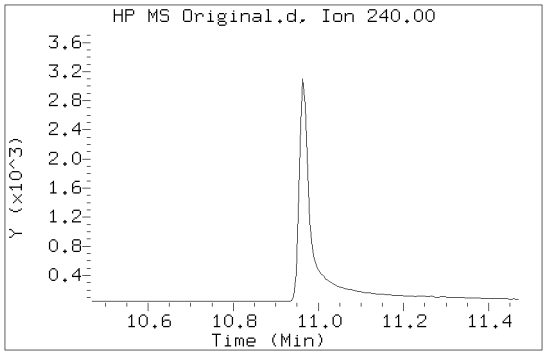


Chrysene-d12 (1719-03-5)

Reason Code:

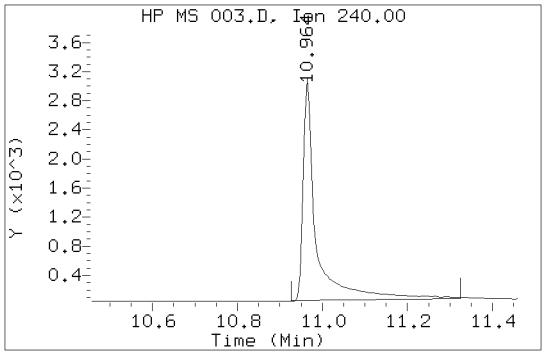
BEFORE

MASS
240
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



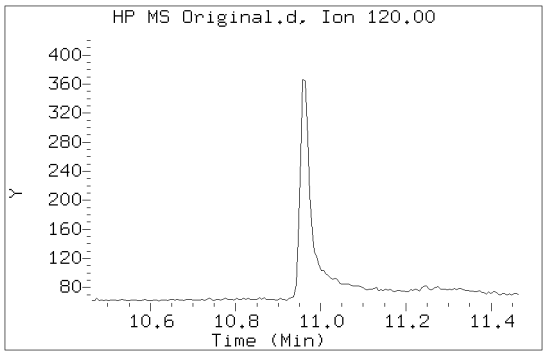
AFTER

MASS
240
AREA
6576
HEIGHT
3041
25-Aug-2022
16:08
linh
pham



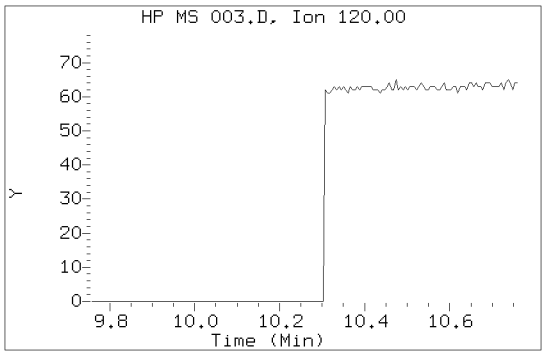
BEFORE

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



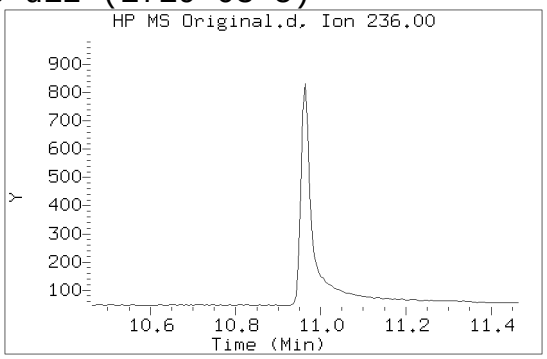
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\003.D
Inj Date : 10-MAR-2022 10:47
InstruID : SV6.i
LabSampID : 1 4 DX-0.01

Chrysene-d12 (1719-03-5)

Reason Code:

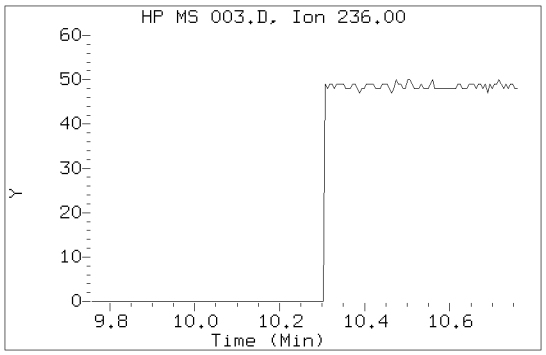
BEFORE

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

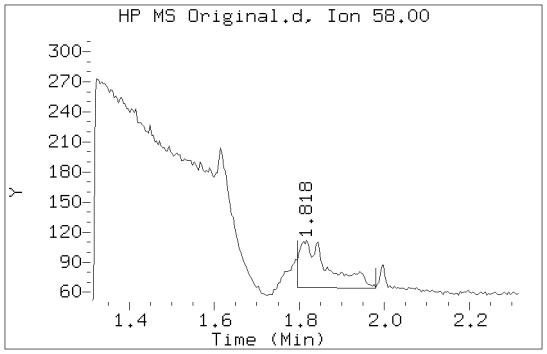


1,4-Dioxane ()

Reason Code:

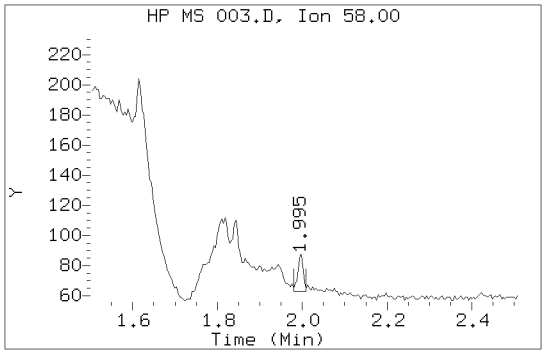
BEFORE

MASS
58
AREA
231
HEIGHT
47
25-Aug-2022
16:04
linh
pham



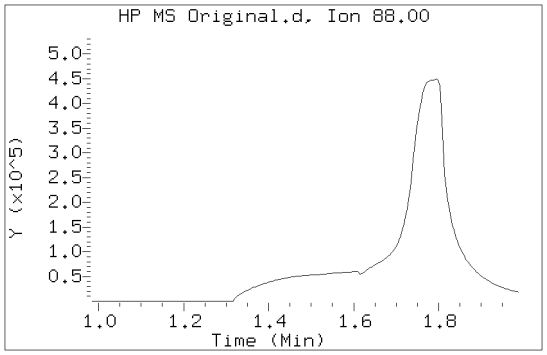
AFTER

MASS
58
AREA
21
HEIGHT
24
25-Aug-2022
16:08
linh
pham



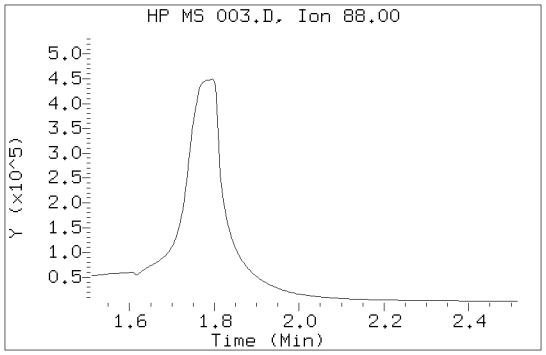
BEFORE

MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

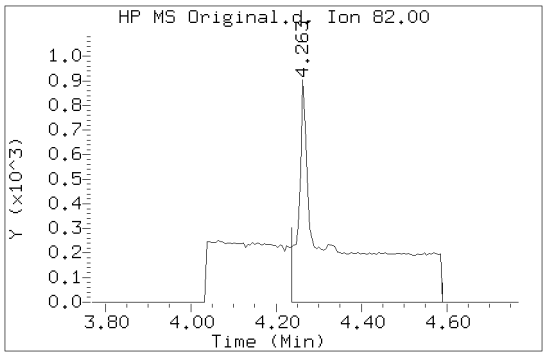


Nitrobenzene-d5 (4165-60-0)

Reason Code:

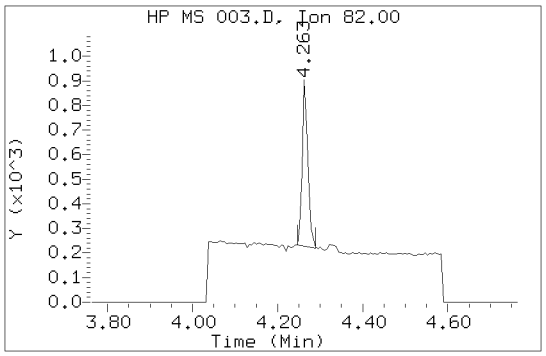
BEFORE

MASS
82
AREA
4980
HEIGHT
904
25-Aug-2022
16:04
linh
pham



AFTER

MASS
82
AREA
608
HEIGHT
676
25-Aug-2022
16:08
linh
pham



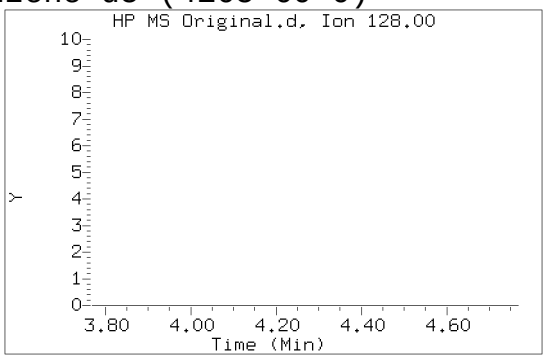
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\003.D
Inj Date : 10-MAR-2022 10:47
InstruID : SV6.i
LabSampID : 1 4 DX-0.01

Nitrobenzene-d5 (4165-60-0)

Reason Code:

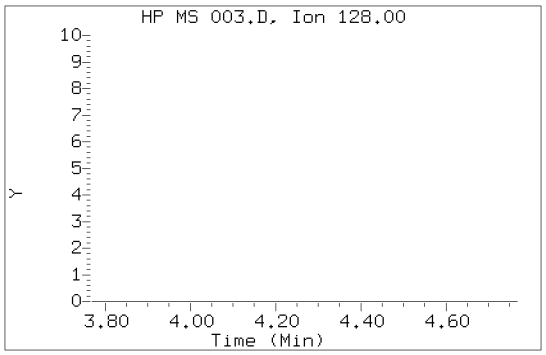
BEFORE

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



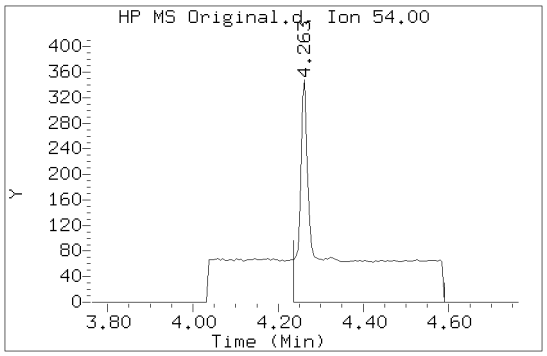
AFTER

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



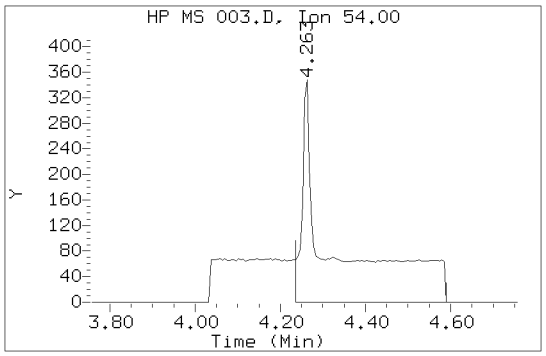
BEFORE

MASS
54
AREA
1660
HEIGHT
348
25-Aug-2022
16:04
linh
pham



AFTER

MASS
54
AREA
1660
HEIGHT
348
25-Aug-2022
16:08
linh
pham

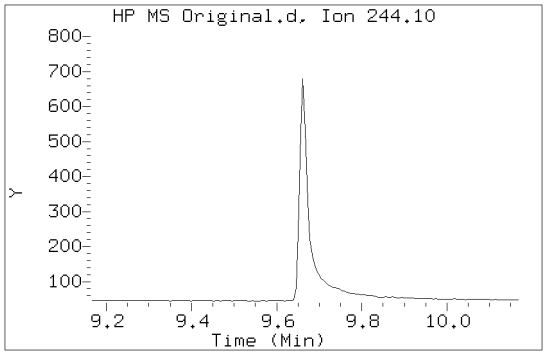


4-Terphenyl-d14 (1718-51-0)

Reason Code:

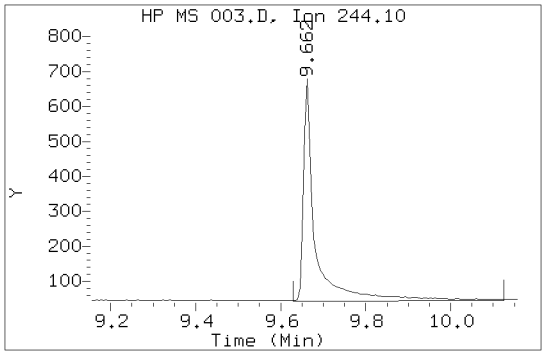
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



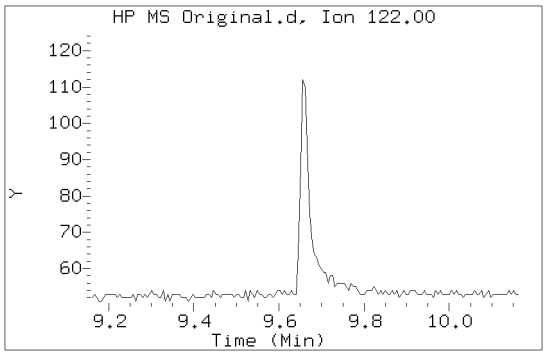
AFTER

MASS
244.1
AREA
1253
HEIGHT
635
25-Aug-2022
16:08
linh
pham



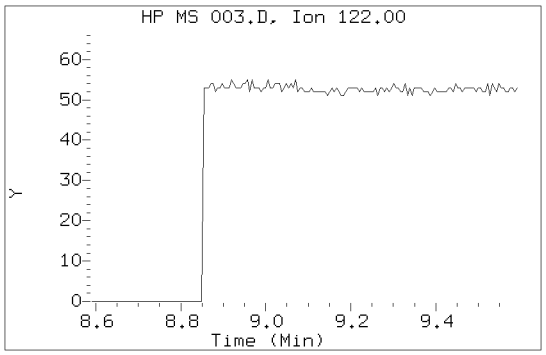
BEFORE

MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

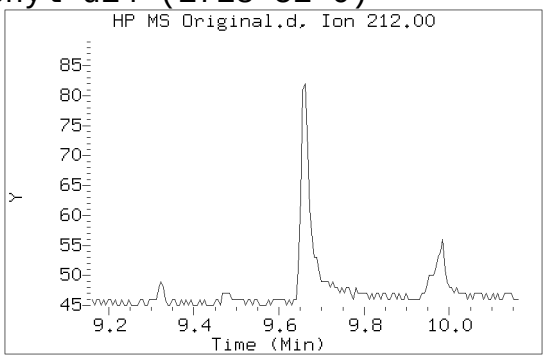
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\003.D
Inj Date : 10-MAR-2022 10:47
InstruID : SV6.i
LabSampID : 1 4 DX-0.01

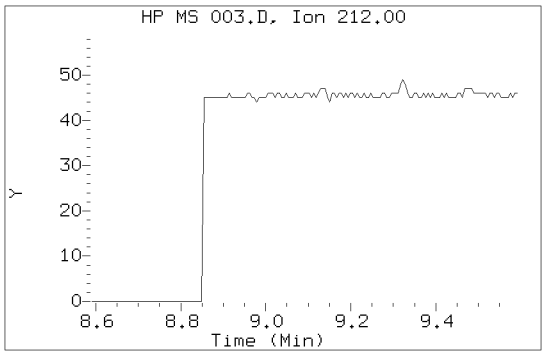
4-Terphenyl-d14 (1718-51-0)

BEFORE
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



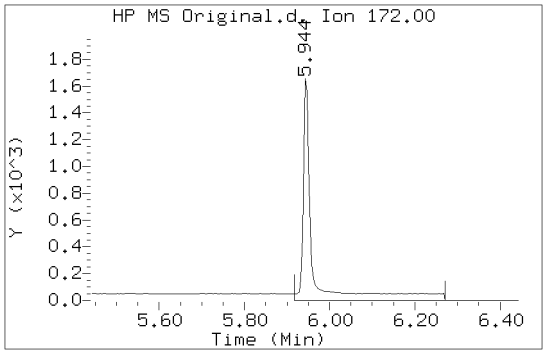
Reason Code:

AFTER
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



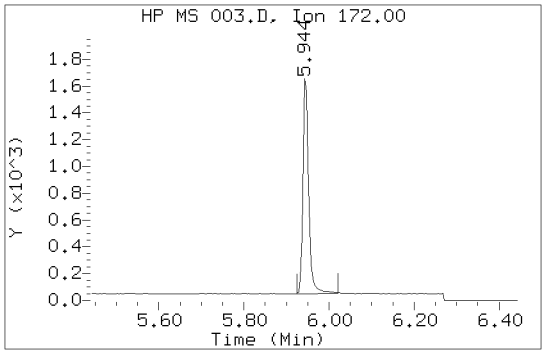
2-Fluorobiphenyl (321-60-8)

BEFORE
MASS
172
AREA
2590
HEIGHT
1655
25-Aug-2022
16:04
linh
pham

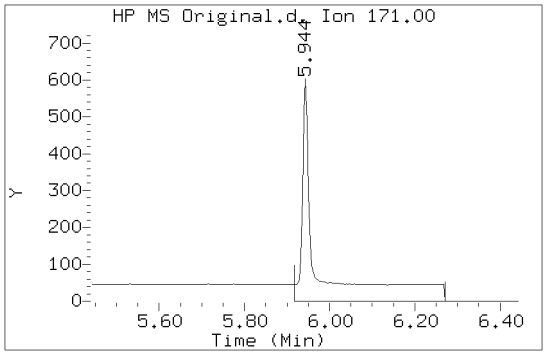


Reason Code:

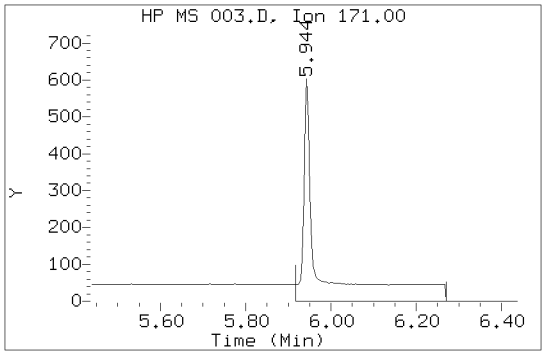
AFTER
MASS
172
AREA
1519
HEIGHT
1606
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
171
AREA
1483
HEIGHT
603
25-Aug-2022
16:04
linh
pham



AFTER
MASS
171
AREA
1483
HEIGHT
603
25-Aug-2022
16:08
linh
pham



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\004.D
Lab Smp Id: 1 4 DX-0.03 Client Smp ID: 1 4 DX-0.03
Inj Date : 10-MAR-2022 11:05 MS Autotune Date: 09-MAR-2022 11:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4 DX-0.03;1 4 DX-0.03
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DXSIM.m
Meth Date : 25-Aug-2022 16:08 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 10:47 Cal File: 003.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.790	3.790	(1.000)	4850	0.10000	(aM)
* 45 Naphthalene-d8	136	4.918	4.918	(1.000)	18345	0.10000	(M)
$ 33 Nitrobenzene-d5	82	4.262	4.262	(0.867)	1854	0.03000	0.03032(QM)
* 86 Acenaphthene-d10	164	6.603	6.603	(1.000)	9938	0.10000	
$ 69 2-Fluorobiphenyl	172	5.943	5.943	(0.900)	4488	0.03000	0.02901(Q)
* 126 Phenanthrene-d10	188	8.053	8.053	(1.000)	16949	0.10000	
* 182 Chrysene-d12	240	10.963	10.963	(1.000)	7290	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.656	9.656	(0.881)	4004	0.03000	0.02921(M)
* 198 Perylene-d12	264	13.090	13.090	(1.000)	4319	0.10000	
1 1,4-Dioxane	58	1.990	1.990	(0.525)	57	0.03000	0.02863(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01135297

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\004.D

Page 1

Date : 10-MAR-2022 11:05

Client ID: 1 4 DX-0.03

Instrument: SV6.i

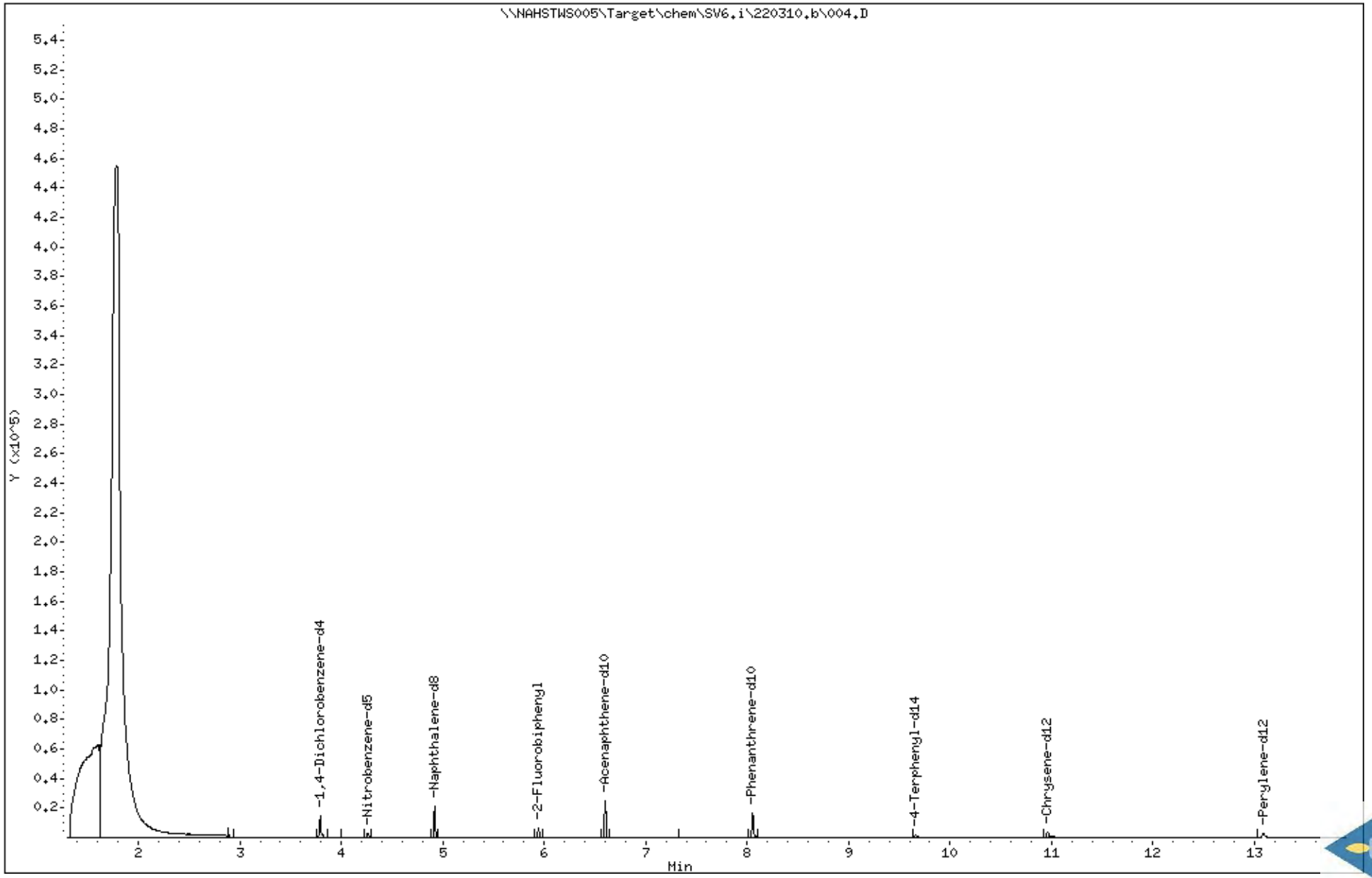
Sample Info: 1 4 DX-0.03;1 4 DX-0.03

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28

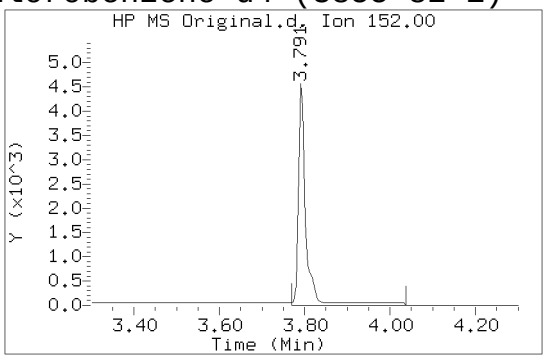


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\004.D
Inj Date : 10-MAR-2022 11:05
InstruID : SV6.i
LabSampID : 1 4 DX-0.03

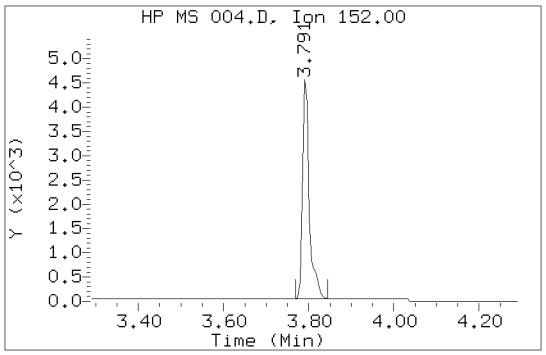
1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

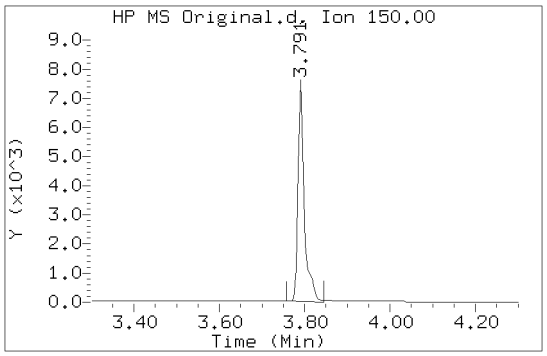
BEFORE
MASS
152
AREA
5742
HEIGHT
4567
25-Aug-2022
16:04
linh
pham



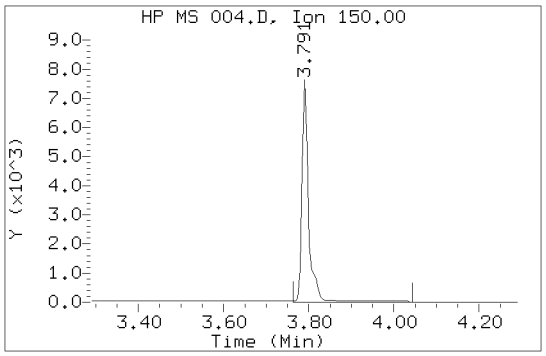
AFTER
MASS
152
AREA
4850
HEIGHT
4511
25-Aug-2022
16:08
linh
pham



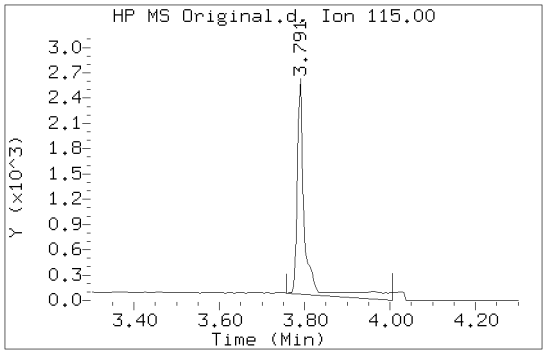
BEFORE
MASS
150
AREA
7811
HEIGHT
7601
25-Aug-2022
16:04
linh
pham



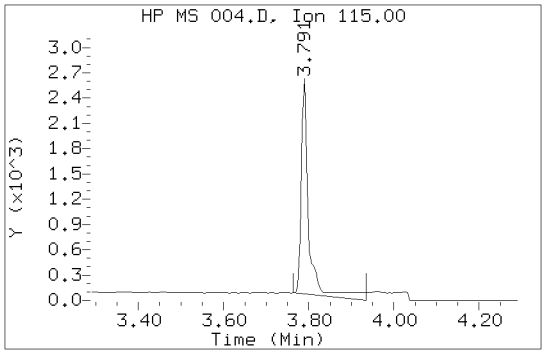
AFTER
MASS
150
AREA
8525
HEIGHT
7633
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
115
AREA
3339
HEIGHT
2555
25-Aug-2022
16:04
linh
pham



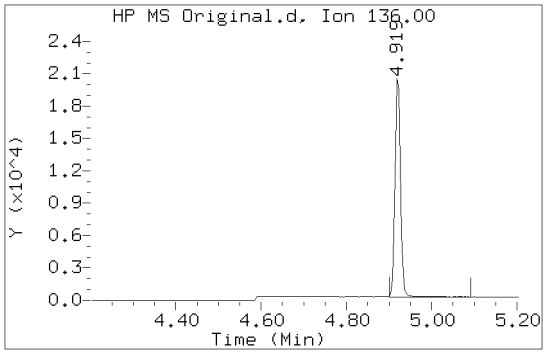
AFTER
MASS
115
AREA
3101
HEIGHT
2555
25-Aug-2022
16:08
linh
pham



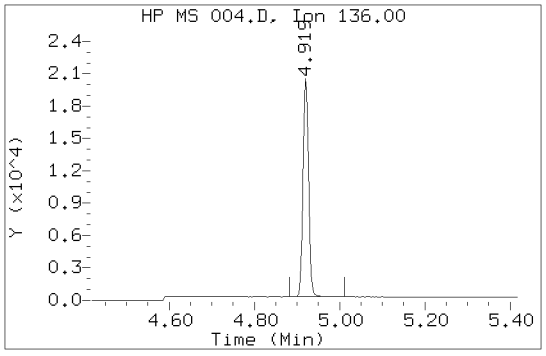
Naphthalene-d8 (1146-65-2)

Reason Code:

BEFORE
MASS
136
AREA
18381
HEIGHT
20218
25-Aug-2022
16:04
linh
pham



AFTER
MASS
136
AREA
18345
HEIGHT
20214
25-Aug-2022
16:08
linh
pham



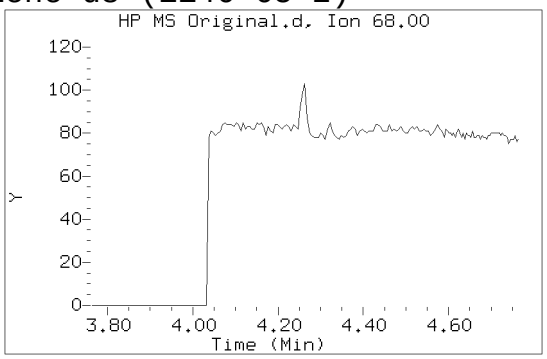
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\004.D
Inj Date : 10-MAR-2022 11:05
InstruID : SV6.i
LabSampID : 1 4 DX-0.03

Naphthalene-d8 (1146-65-2)

Reason Code:

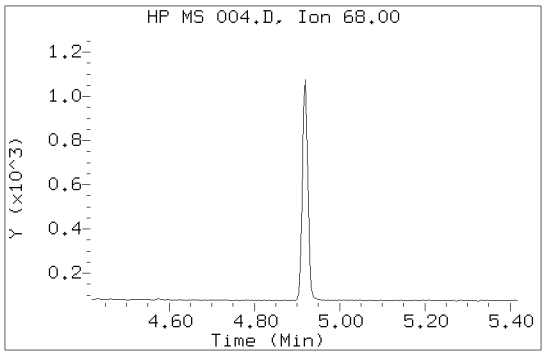
BEFORE

MASS
68
AREA
905
HEIGHT
999
25-Aug-2022
16:04
linh
pham



AFTER

MASS
68
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

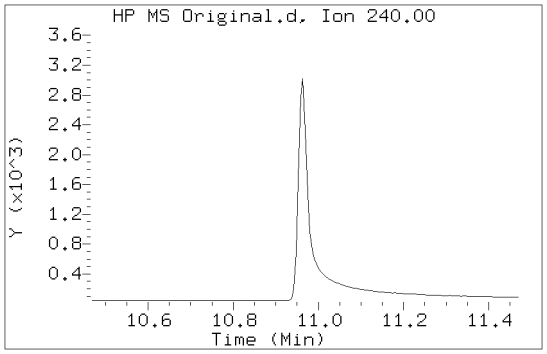


Chrysene-d12 (1719-03-5)

Reason Code:

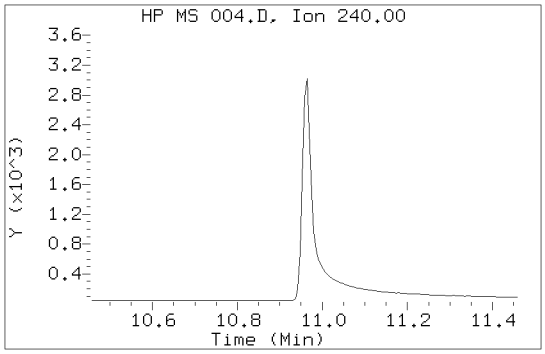
BEFORE

MASS
240
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



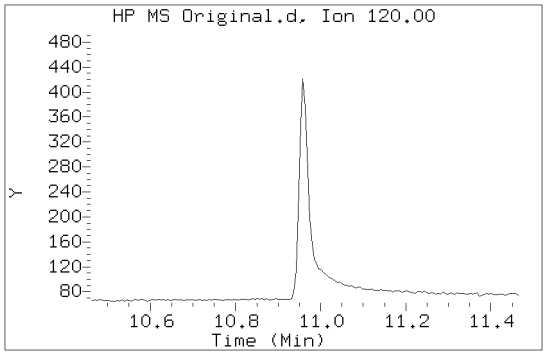
AFTER

MASS
240
AREA
7290
HEIGHT
2973
25-Aug-2022
16:08
linh
pham



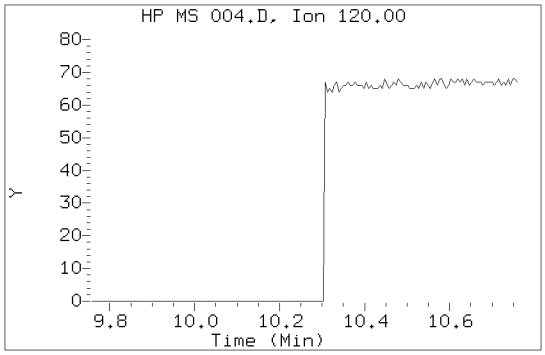
BEFORE

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



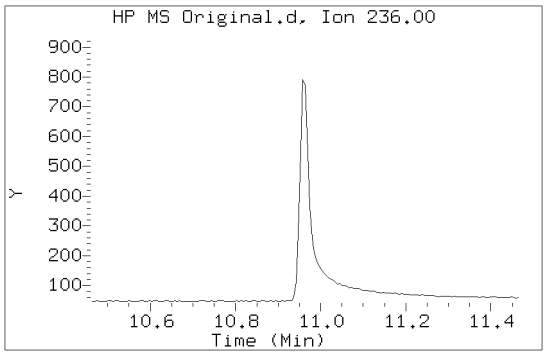
AFTER

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



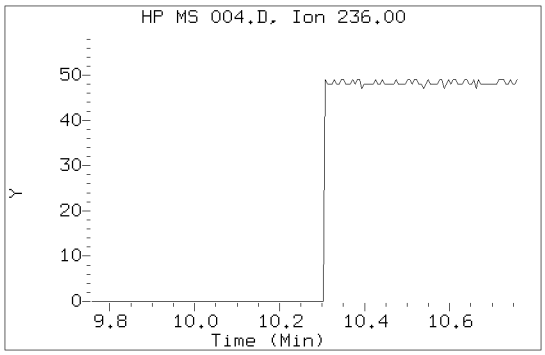
BEFORE

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



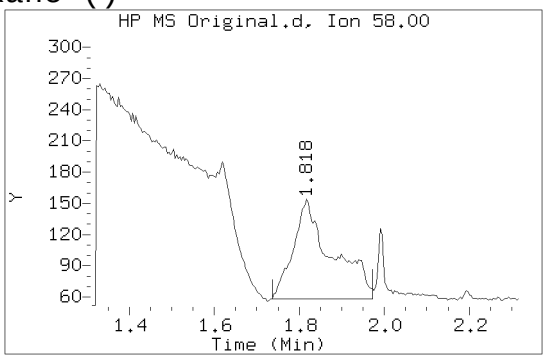
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\004.D
Inj Date : 10-MAR-2022 11:05
InstruID : SV6.i
LabSampID : 1 4 DX-0.03

1,4-Dioxane ()

Reason Code:

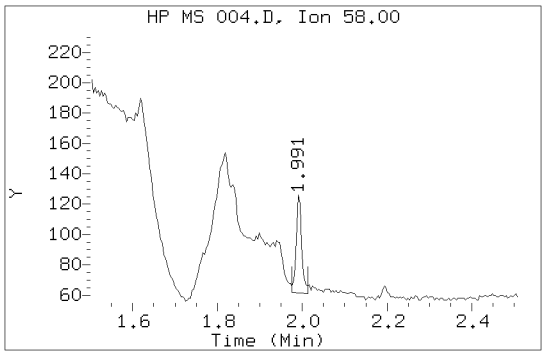
BEFORE

MASS
58
AREA
606
HEIGHT
96
25-Aug-2022
16:04
linh
pham



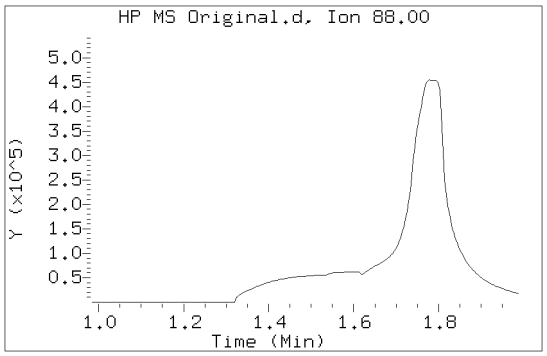
AFTER

MASS
58
AREA
57
HEIGHT
64
25-Aug-2022
16:08
linh
pham



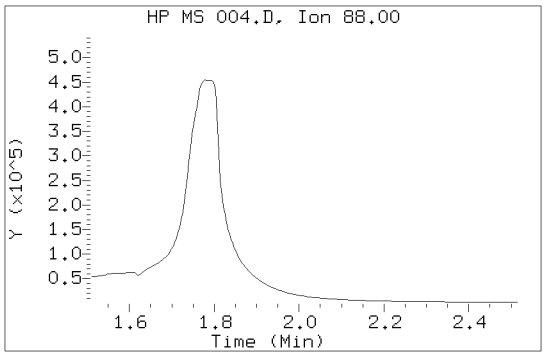
BEFORE

MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

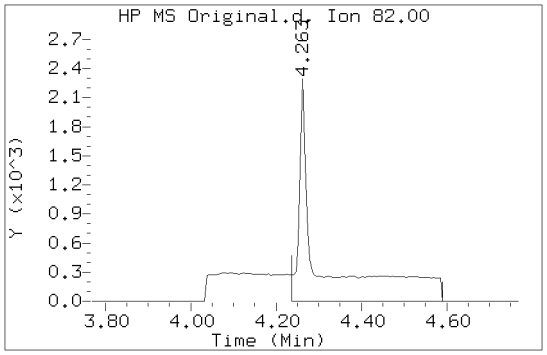


Nitrobenzene-d5 (4165-60-0)

Reason Code:

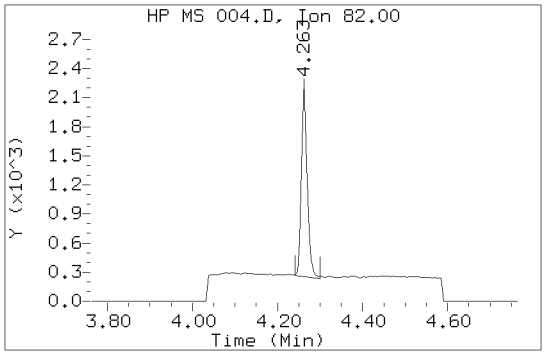
BEFORE

MASS
82
AREA
7178
HEIGHT
2293
25-Aug-2022
16:04
linh
pham



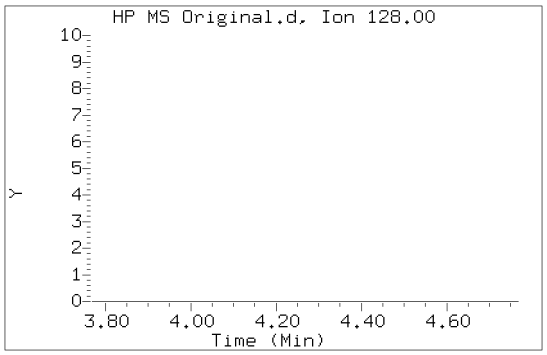
AFTER

MASS
82
AREA
1854
HEIGHT
2038
25-Aug-2022
16:08
linh
pham



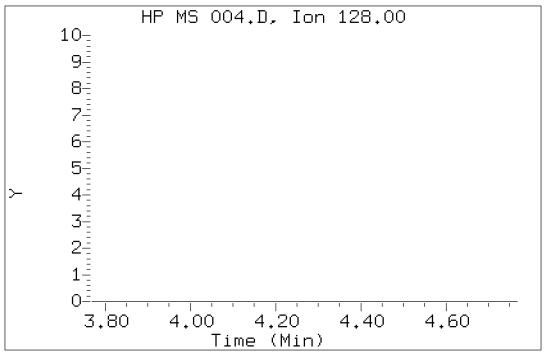
BEFORE

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

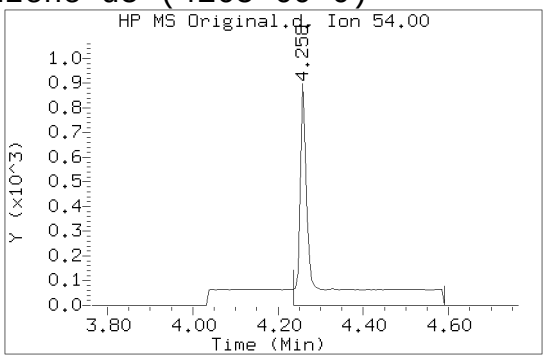


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\004.D
Inj Date : 10-MAR-2022 11:05
InstruID : SV6.i
LabSampID : 1 4 DX-0.03

Nitrobenzene-d5 (4165-60-0)

BEFORE

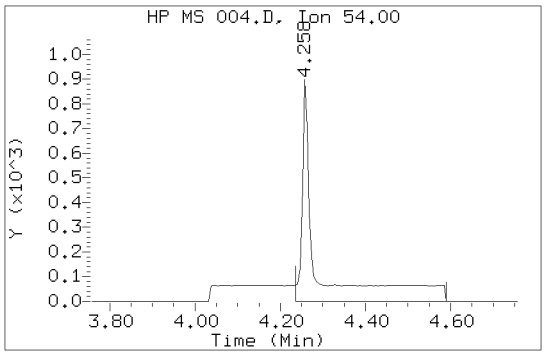
MASS
54
AREA
2147
HEIGHT
898
25-Aug-2022
16:04
linh
pham



AFTER

MASS
54
AREA
2147
HEIGHT
898
25-Aug-2022
16:08
linh
pham

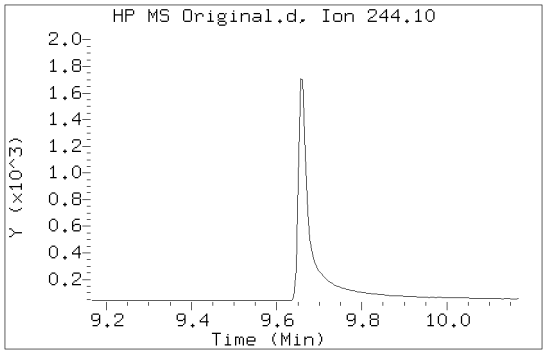
Reason Code:



4-Terphenyl-d14 (1718-51-0)

BEFORE

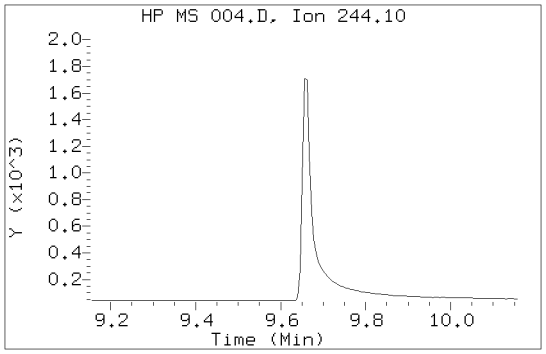
MASS
244.1
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

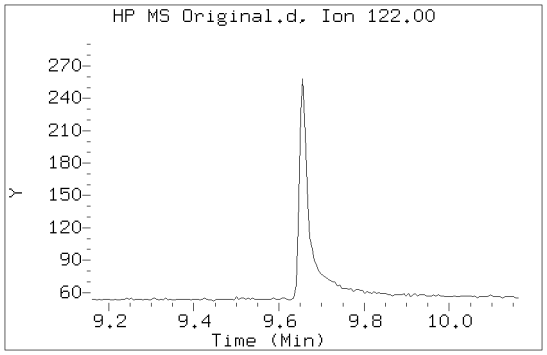
MASS
244.1
AREA
4004
HEIGHT
1671
25-Aug-2022
16:08
linh
pham

Reason Code:



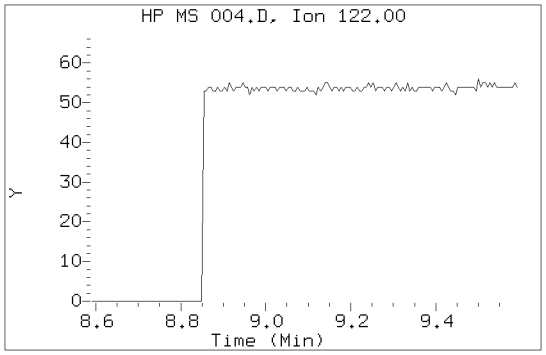
BEFORE

MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



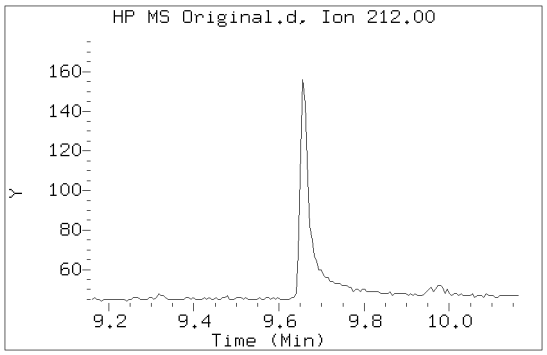
AFTER

MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



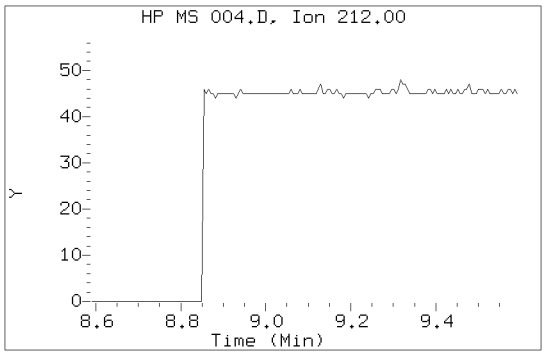
BEFORE

MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\005.D Page 1
Report Date: 25-Aug-2022 16:08

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\005.D
Lab Smp Id: 1 4 DX-0.05 Client Smp ID: 1 4 DX-0.05
Inj Date : 10-MAR-2022 11:22 MS Autotune Date: 09-MAR-2022 11:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4 DX-0.05;1 4 DX-0.05
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DXSIM.m
Meth Date : 25-Aug-2022 16:08 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 11:05 Cal File: 004.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.790	3.790	(1.000)	5274	0.10000	(aM)
* 45 Naphthalene-d8	136	4.918	4.918	(1.000)	20409	0.10000	
$ 33 Nitrobenzene-d5	82	4.262	4.262	(0.867)	3571	0.05000	0.05249(QM)
* 86 Acenaphthene-d10	164	6.603	6.603	(1.000)	9759	0.10000	
$ 69 2-Fluorobiphenyl	172	5.943	5.943	(0.900)	8686	0.05000	0.05718
* 126 Phenanthrene-d10	188	8.053	8.053	(1.000)	16554	0.10000	
* 182 Chrysene-d12	240	10.958	10.958	(1.000)	6789	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.656	9.656	(0.881)	6514	0.05000	0.05103(M)
* 198 Perylene-d12	264	13.085	13.085	(1.000)	4224	0.10000	
1 1,4-Dioxane	58	1.994	1.994	(0.526)	107	0.05000	0.04942(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01135303

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\005.D

Date : 10-MAR-2022 11:22

Client ID: 1 4 DX-0.05

Instrument: SV6.i

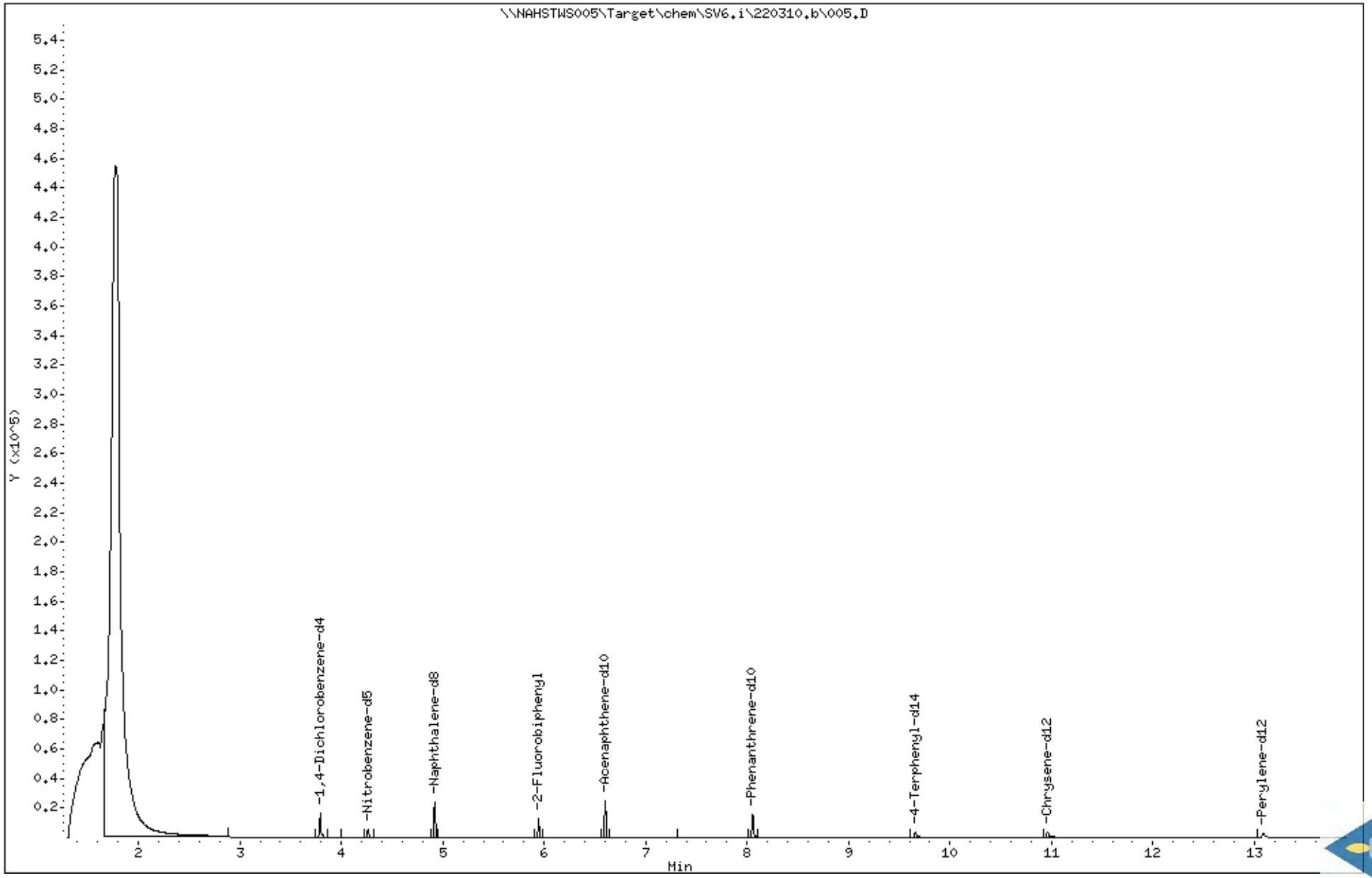
Sample Info: 1 4 DX-0.05;1 4 DX-0.05

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



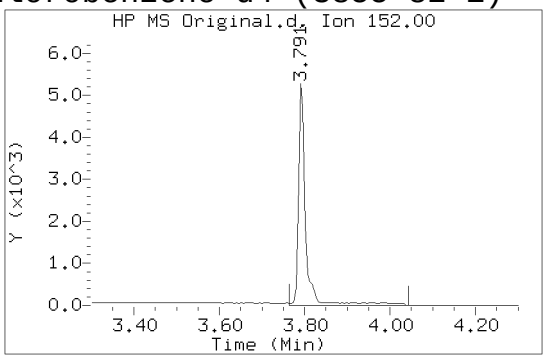
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\005.D
Inj Date : 10-MAR-2022 11:22
InstruID : SV6.i
LabSampID : 1 4 DX-0.05

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

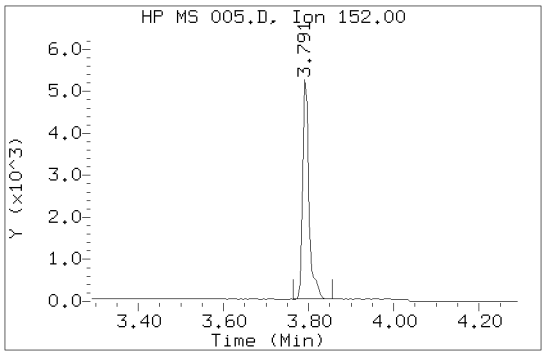
BEFORE

MASS
152
AREA
6163
HEIGHT
5277
25-Aug-2022
16:04
linh
pham



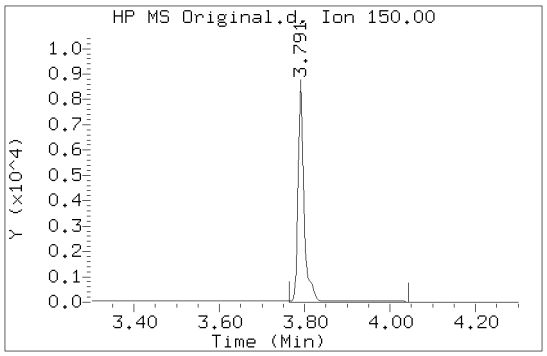
AFTER

MASS
152
AREA
5274
HEIGHT
5222
25-Aug-2022
16:08
linh
pham



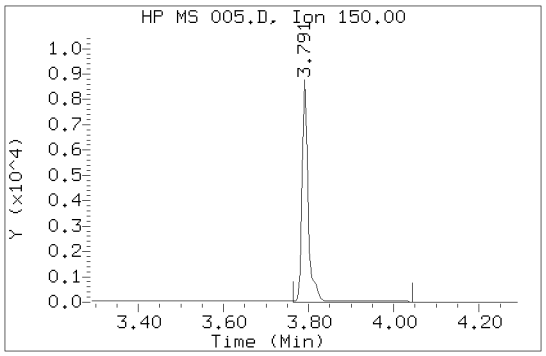
BEFORE

MASS
150
AREA
9110
HEIGHT
8769
25-Aug-2022
16:04
linh
pham



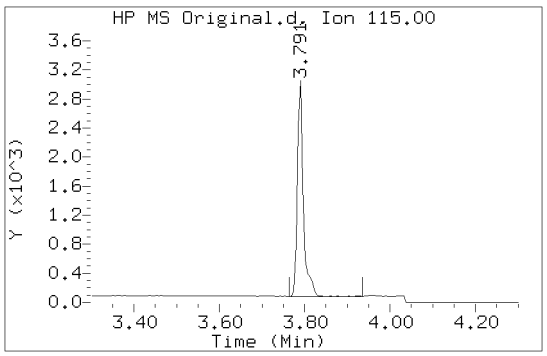
AFTER

MASS
150
AREA
9110
HEIGHT
8769
25-Aug-2022
16:08
linh
pham



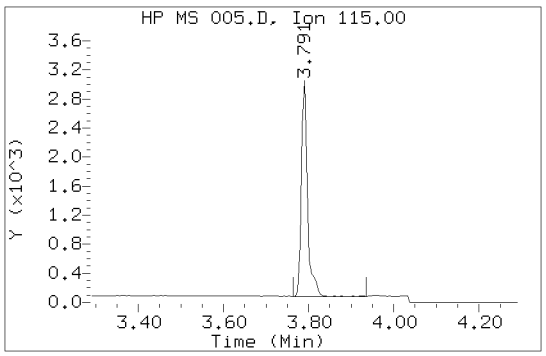
BEFORE

MASS
115
AREA
2922
HEIGHT
2969
25-Aug-2022
16:04
linh
pham



AFTER

MASS
115
AREA
2922
HEIGHT
2969
25-Aug-2022
16:08
linh
pham

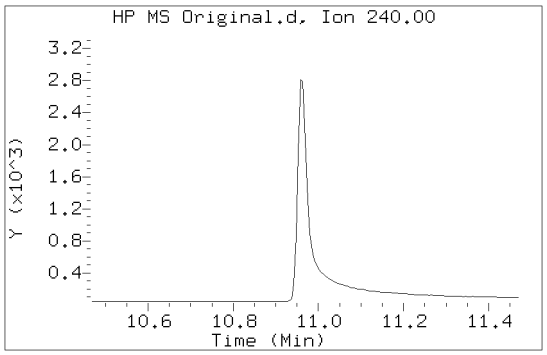


Chrysene-d12 (1719-03-5)

Reason Code:

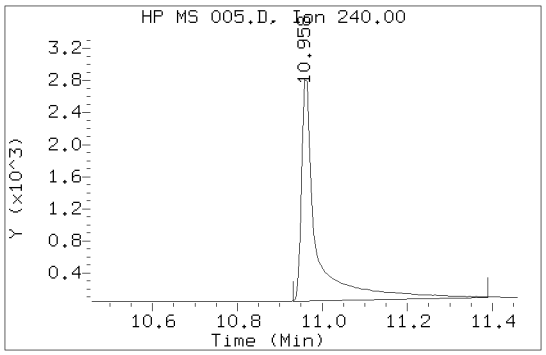
BEFORE

MASS
240
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
240
AREA
6789
HEIGHT
2758
25-Aug-2022
16:08
linh
pham

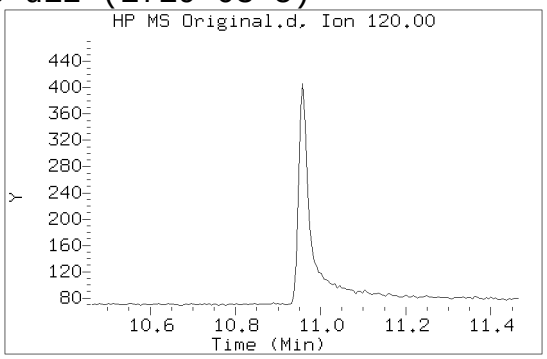


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\005.D
Inj Date : 10-MAR-2022 11:22
InstruID : SV6.i
LabSampID : 1 4 DX-0.05

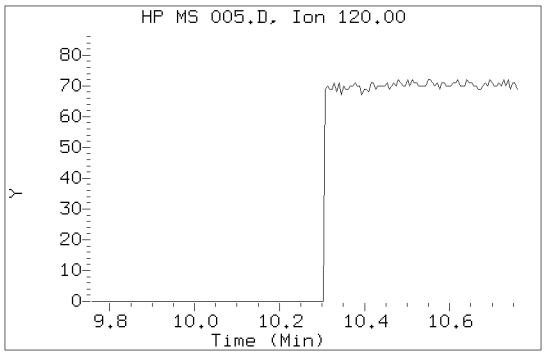
Chrysene-d12 (1719-03-5)

Reason Code:

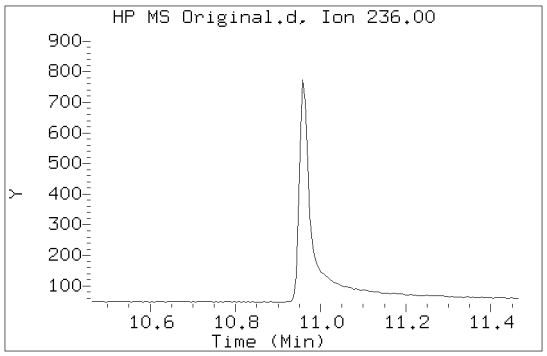
BEFORE
MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



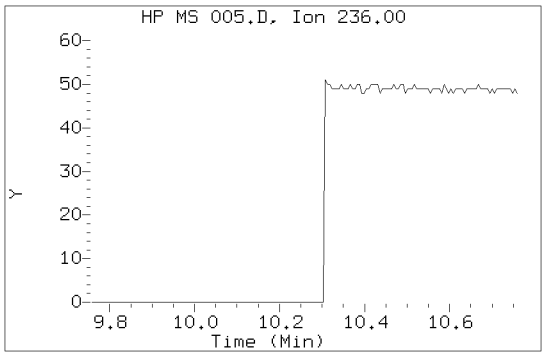
AFTER
MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



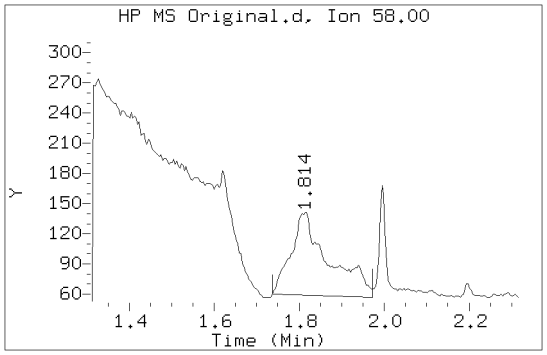
AFTER
MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



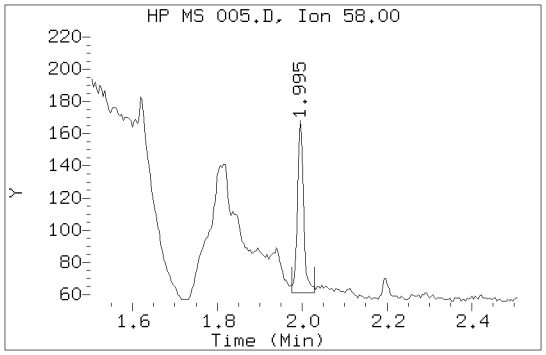
1,4-Dioxane ()

Reason Code:

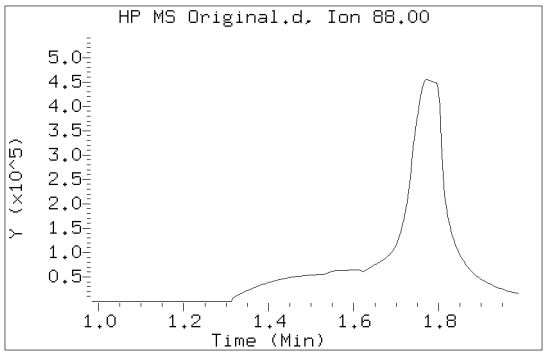
BEFORE
MASS
58
AREA
509
HEIGHT
81
25-Aug-2022
16:04
linh
pham



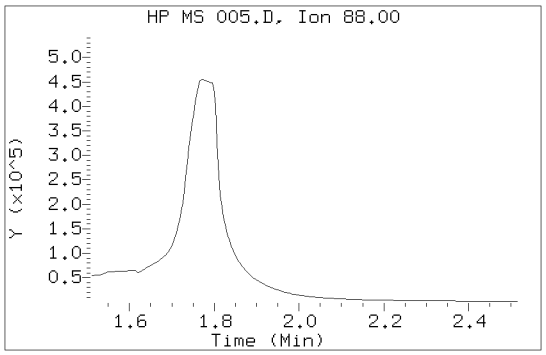
AFTER
MASS
58
AREA
107
HEIGHT
107
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

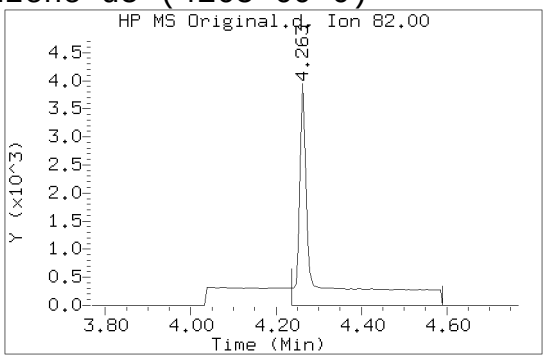


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\005.D
Inj Date : 10-MAR-2022 11:22
InstruID : SV6.i
LabSampID : 1 4 DX-0.05

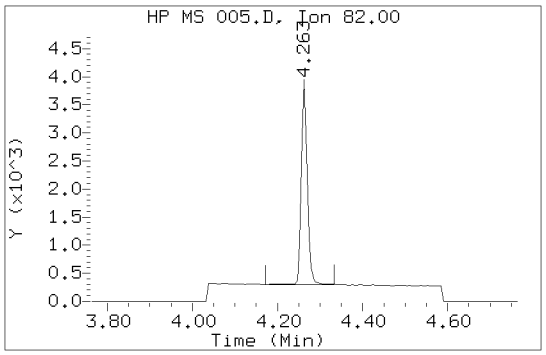
Nitrobenzene-d5 (4165-60-0)

Reason Code:

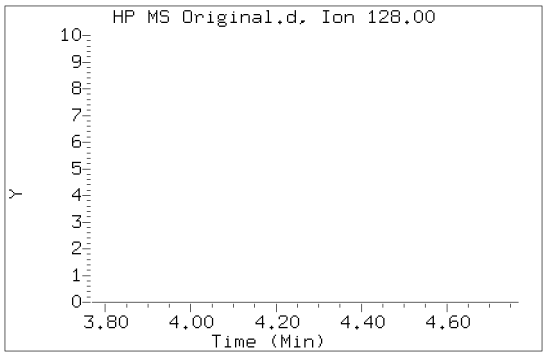
BEFORE
MASS
82
AREA
9627
HEIGHT
3947
25-Aug-2022
16:04
linh
pham



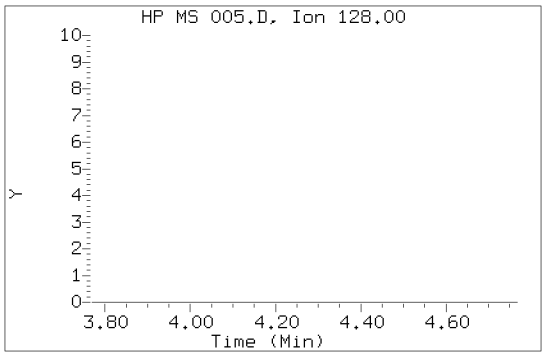
AFTER
MASS
82
AREA
3571
HEIGHT
3653
25-Aug-2022
16:08
linh
pham



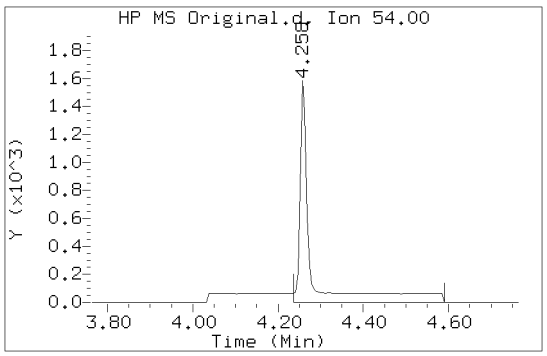
BEFORE
MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



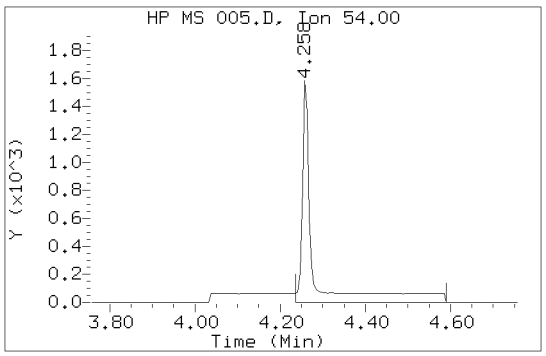
AFTER
MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
54
AREA
2838
HEIGHT
1584
25-Aug-2022
16:04
linh
pham



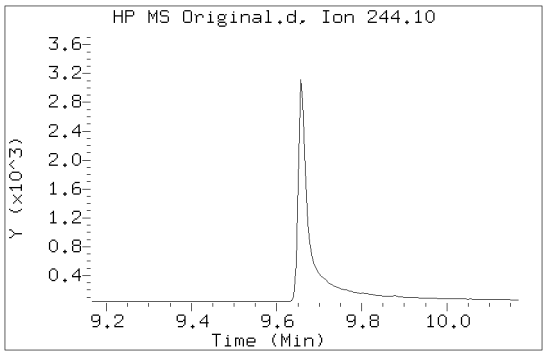
AFTER
MASS
54
AREA
2838
HEIGHT
1584
25-Aug-2022
16:08
linh
pham



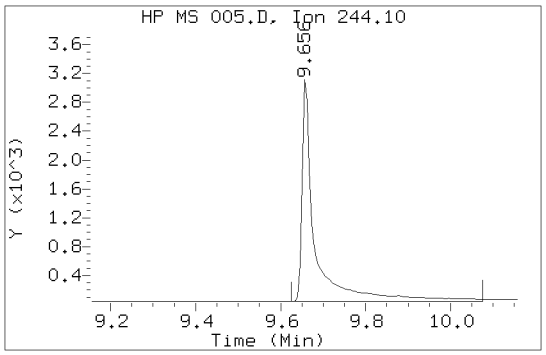
4-Terphenyl-d14 (1718-51-0)

Reason Code:

BEFORE
MASS
244.1
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
244.1
AREA
6514
HEIGHT
3070
25-Aug-2022
16:08
linh
pham

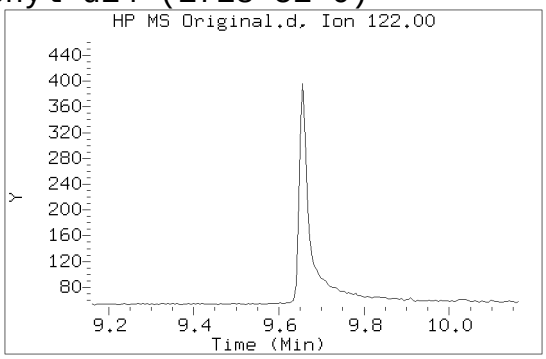


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\005.D
Inj Date : 10-MAR-2022 11:22
InstruID : SV6.i
LabSampID : 1 4 DX-0.05

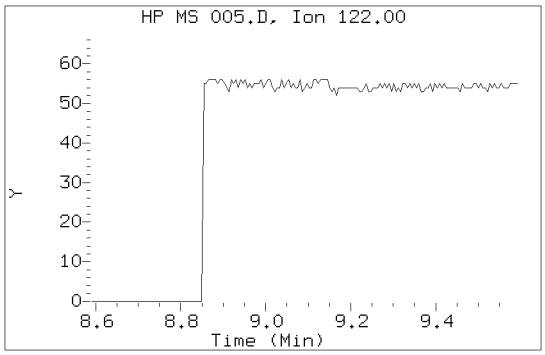
4-Terphenyl-d14 (1718-51-0)

Reason Code:

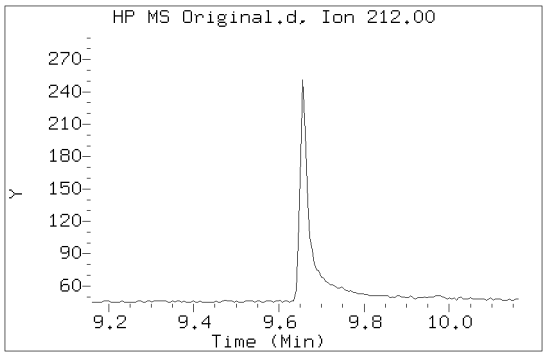
BEFORE
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



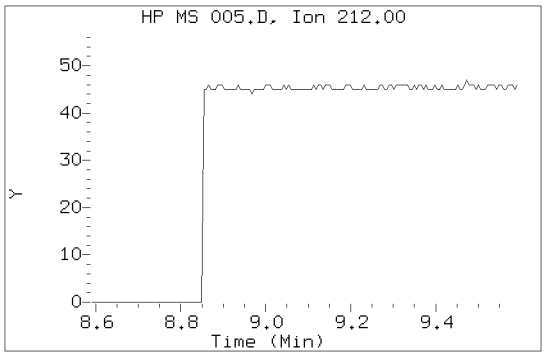
AFTER
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\006.D
Lab Smp Id: 1 4 DX-0.1 Client Smp ID: 1 4 DX-0.1
Inj Date : 10-MAR-2022 11:40 MS Autotune Date: 09-MAR-2022 11:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4 DX-0.1;1 4 DX-0.1
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DXSIM.m
Meth Date : 25-Aug-2022 16:08 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 11:22 Cal File: 005.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.790	3.790	(1.000)	6146	0.10000	(aM)
* 45 Naphthalene-d8	136	4.918	4.918	(1.000)	20583	0.10000	
$ 33 Nitrobenzene-d5	82	4.262	4.262	(0.867)	6972	0.10000	0.1016(M)
* 86 Acenaphthene-d10	164	6.603	6.603	(1.000)	11296	0.10000	
$ 69 2-Fluorobiphenyl	172	5.943	5.943	(0.900)	16916	0.10000	0.09621
* 126 Phenanthrene-d10	188	8.058	8.058	(1.000)	19503	0.10000	
* 182 Chrysene-d12	240	10.963	10.963	(1.000)	7205	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.661	9.661	(0.881)	13702	0.10000	0.1012(M)
* 198 Perylene-d12	264	13.090	13.090	(1.000)	4516	0.10000	
1 1,4-Dioxane	58	1.994	1.994	(0.526)	273	0.10000	0.1082(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

01135309

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\006.D

Date : 10-MAR-2022 11:40

Client ID: 1 4 DX-0.1

Instrument: SV6.i

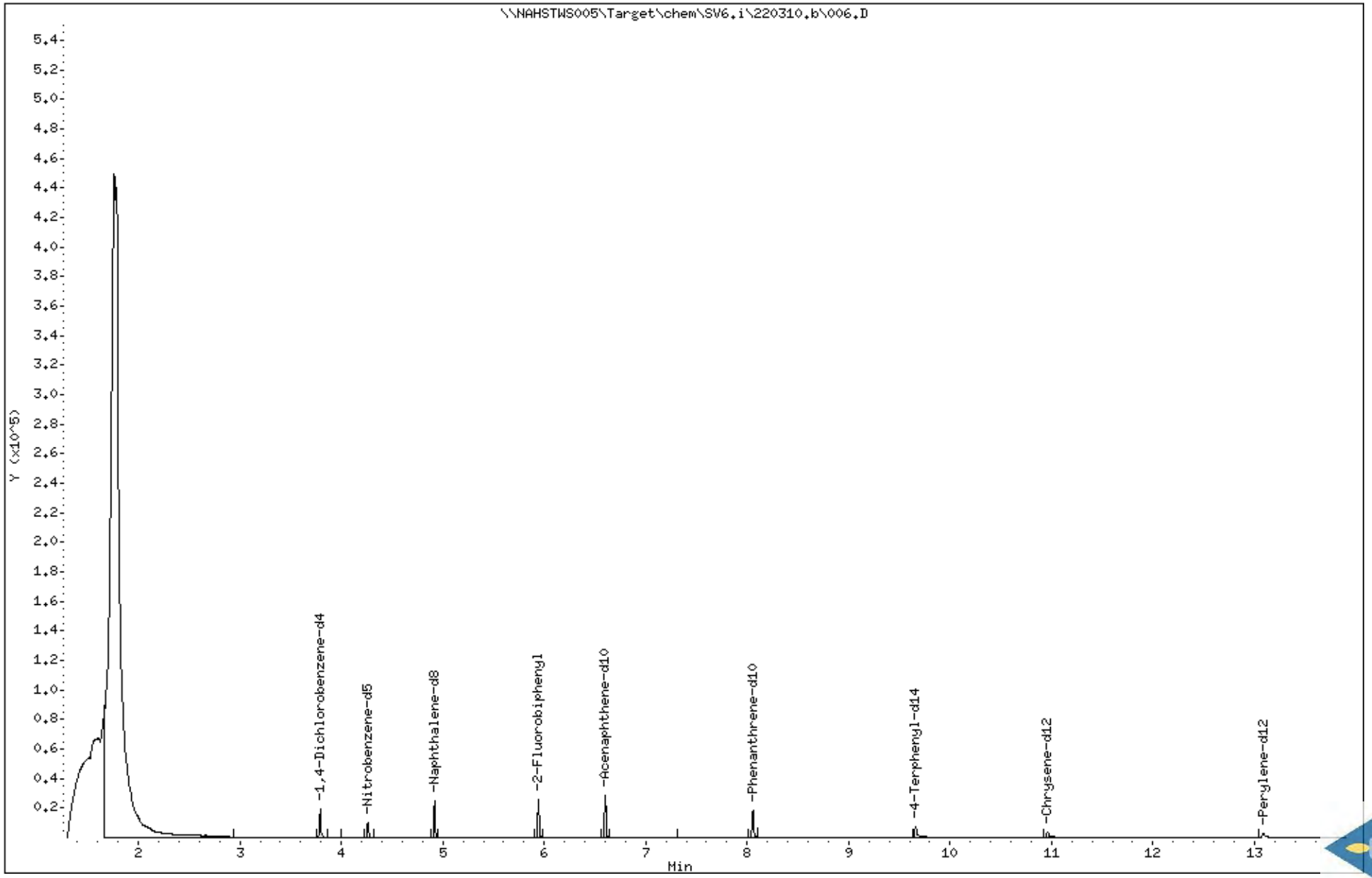
Sample Info: 1 4 DX-0.1;1 4 DX-0.1

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28

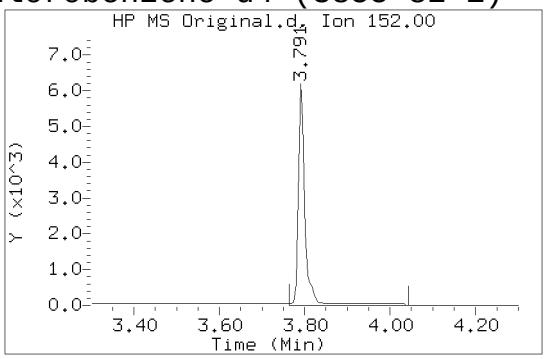


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\006.D
Inj Date : 10-MAR-2022 11:40
InstruID : SV6.i
LabSampID : 1 4 DX-0.1

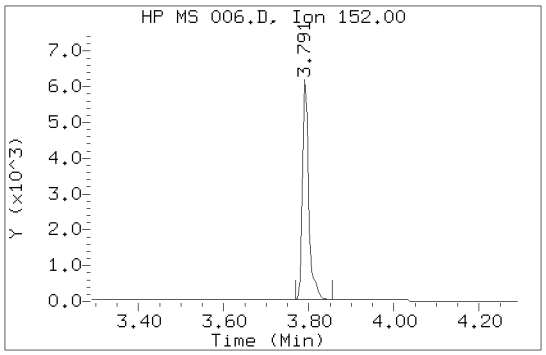
1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

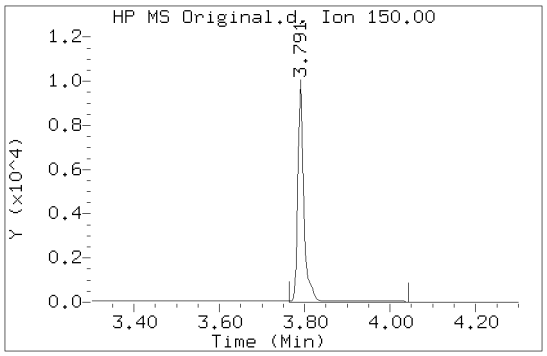
BEFORE
MASS
152
AREA
7014
HEIGHT
6198
25-Aug-2022
16:04
linh
pham



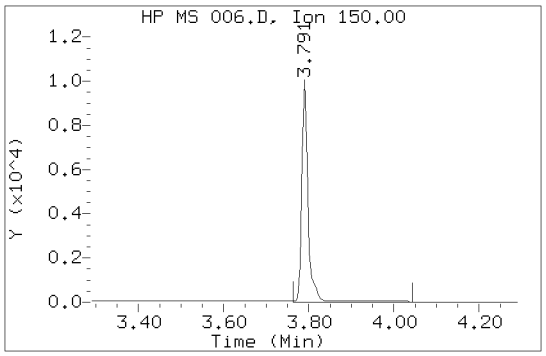
AFTER
MASS
152
AREA
6146
HEIGHT
6147
25-Aug-2022
16:08
linh
pham



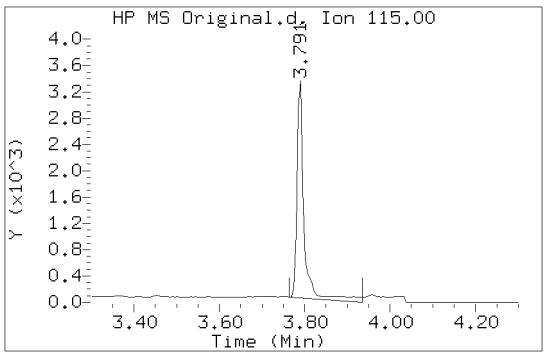
BEFORE
MASS
150
AREA
10435
HEIGHT
10058
25-Aug-2022
16:04
linh
pham



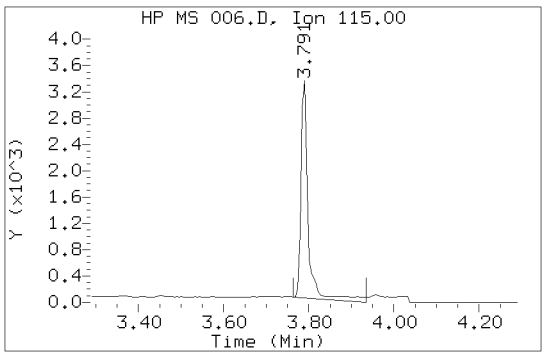
AFTER
MASS
150
AREA
10435
HEIGHT
10058
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
115
AREA
3810
HEIGHT
3300
25-Aug-2022
16:04
linh
pham



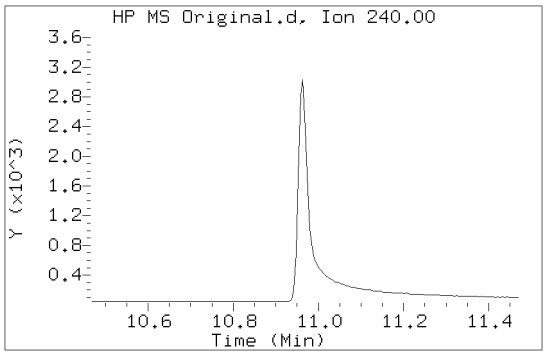
AFTER
MASS
115
AREA
3810
HEIGHT
3300
25-Aug-2022
16:08
linh
pham



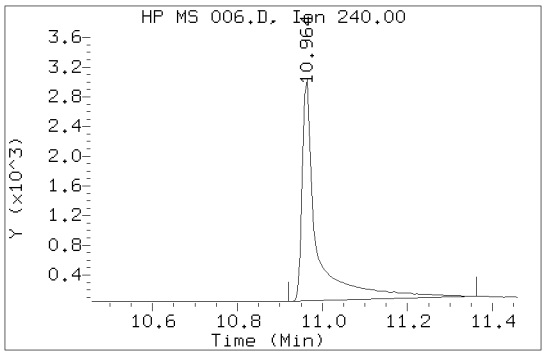
Chrysene-d12 (1719-03-5)

Reason Code:

BEFORE
MASS
240
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
240
AREA
7205
HEIGHT
2978
25-Aug-2022
16:08
linh
pham

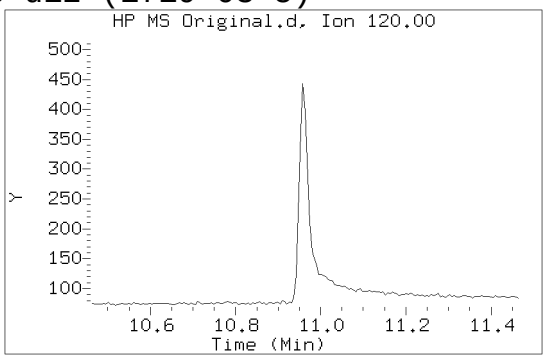


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\006.D
Inj Date : 10-MAR-2022 11:40
InstruID : SV6.i
LabSampID : 1 4 DX-0.1

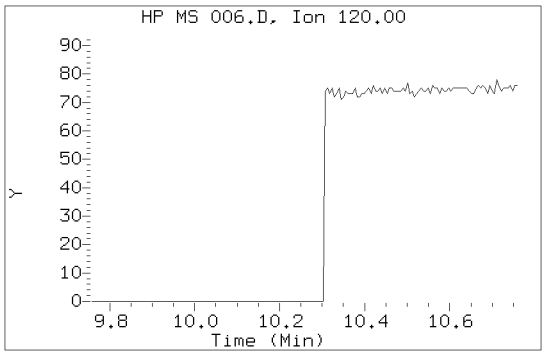
Chrysene-d12 (1719-03-5)

Reason Code:

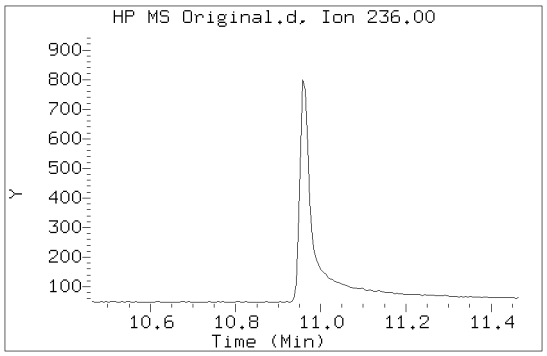
BEFORE
MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



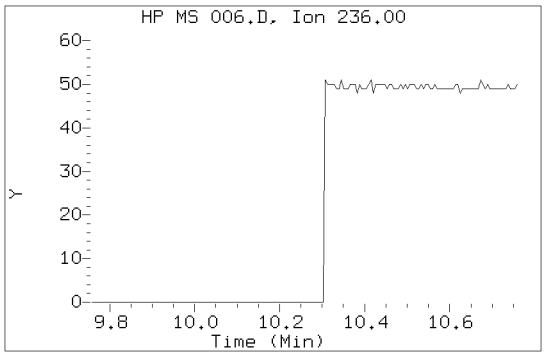
AFTER
MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



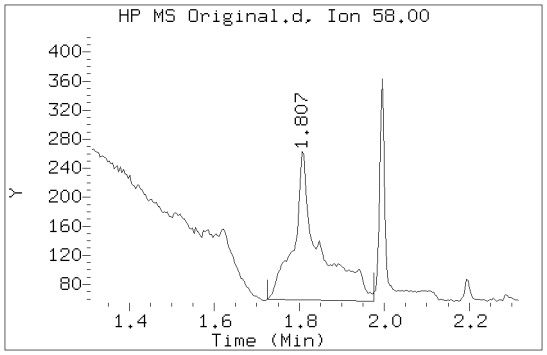
AFTER
MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



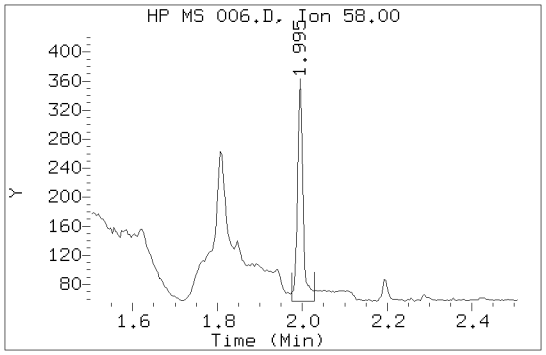
1,4-Dioxane ()

Reason Code:

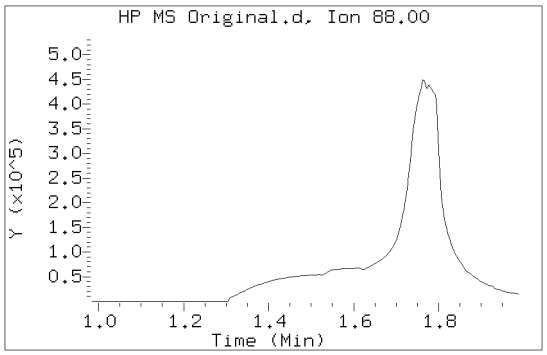
BEFORE
MASS
58
AREA
864
HEIGHT
203
25-Aug-2022
16:04
linh
pham



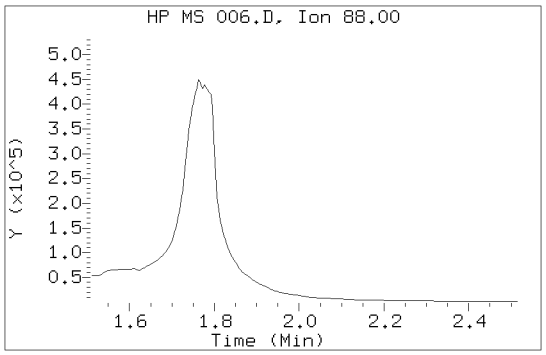
AFTER
MASS
58
AREA
273
HEIGHT
306
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



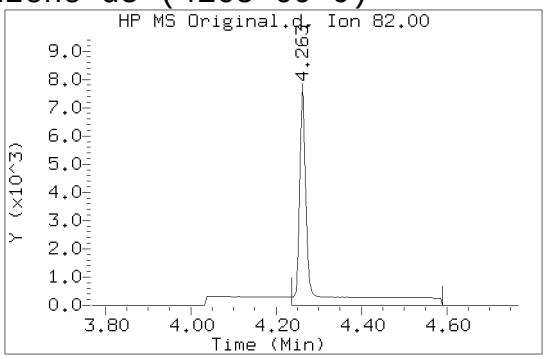
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\006.D
Inj Date : 10-MAR-2022 11:40
InstruID : SV6.i
LabSampID : 1 4 DX-0.1

Nitrobenzene-d5 (4165-60-0)

Reason Code:

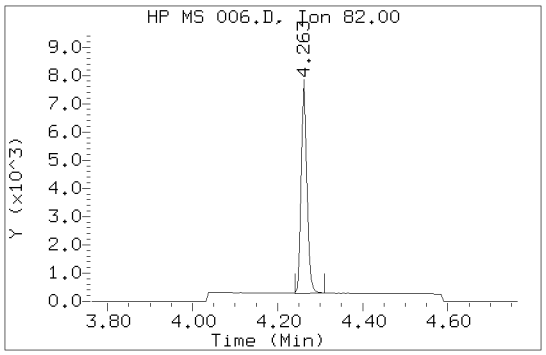
BEFORE

MASS
82
AREA
12838
HEIGHT
7851
25-Aug-2022
16:04
linh
pham



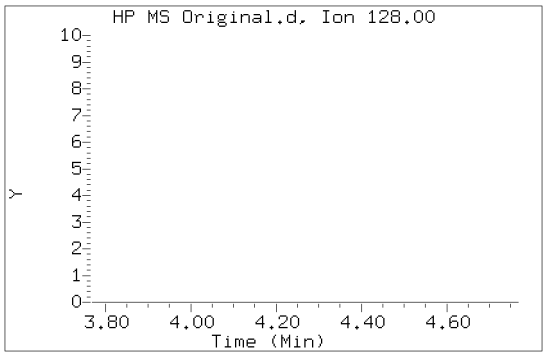
AFTER

MASS
82
AREA
6972
HEIGHT
7565
25-Aug-2022
16:08
linh
pham



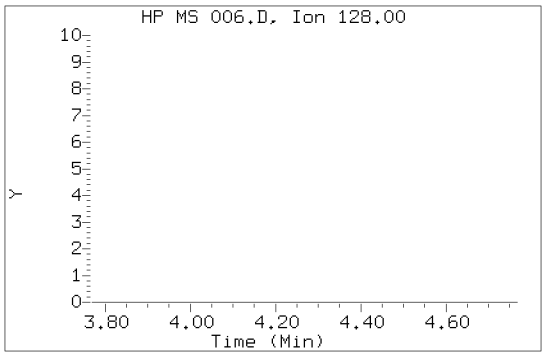
BEFORE

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



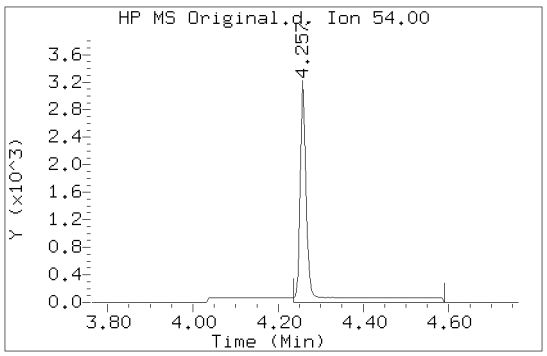
AFTER

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



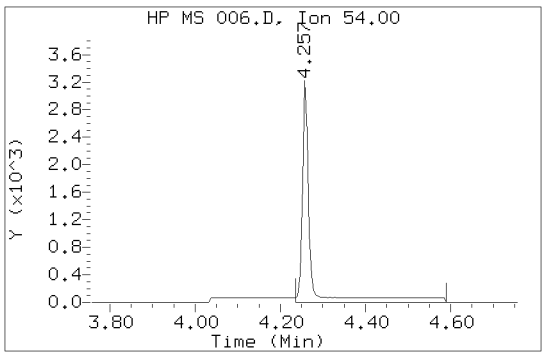
BEFORE

MASS
54
AREA
4279
HEIGHT
3222
25-Aug-2022
16:04
linh
pham



AFTER

MASS
54
AREA
4279
HEIGHT
3222
25-Aug-2022
16:08
linh
pham

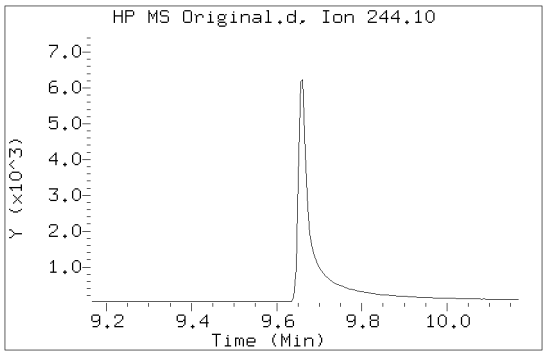


4-Terphenyl-d14 (1718-51-0)

Reason Code:

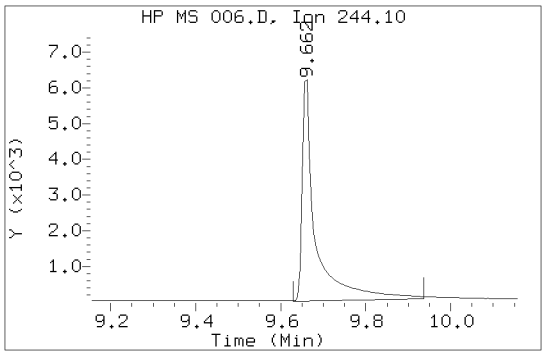
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
244.1
AREA
13702
HEIGHT
6196
25-Aug-2022
16:08
linh
pham

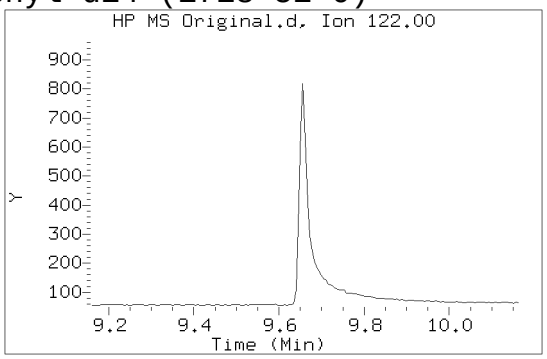


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\006.D
Inj Date : 10-MAR-2022 11:40
InstruID : SV6.i
LabSampID : 1 4 DX-0.1

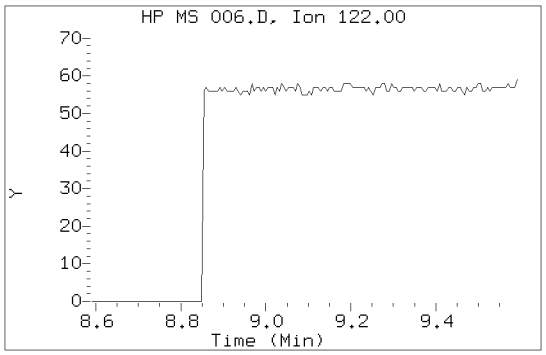
4-Terphenyl-d14 (1718-51-0)

Reason Code:

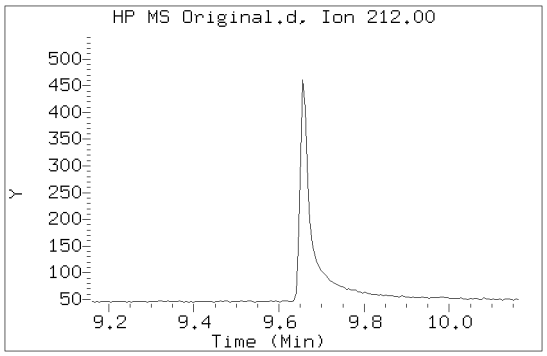
BEFORE
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



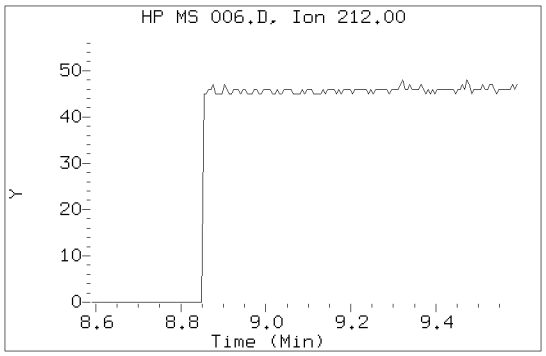
AFTER
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\007.D
Lab Smp Id: 1 4 DX-0.15 Client Smp ID: 1 4 DX-0.15
Inj Date : 10-MAR-2022 11:58 MS Autotune Date: 09-MAR-2022 11:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4 DX-0.15;1 4 DX-0.15
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DXSIM.m
Meth Date : 25-Aug-2022 16:08 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 11:40 Cal File: 006.D
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.790	3.790	(1.000)	3795	0.10000	(aM)
* 45 Naphthalene-d8	136	4.918	4.918	(1.000)	14247	0.10000	(M)
$ 33 Nitrobenzene-d5	82	4.262	4.262	(0.867)	6488	0.15000	0.1366(M)
* 86 Acenaphthene-d10	164	6.603	6.603	(1.000)	7392	0.10000	
$ 69 2-Fluorobiphenyl	172	5.943	5.943	(0.900)	16942	0.15000	0.1472
* 126 Phenanthrene-d10	188	8.058	8.058	(1.000)	12440	0.10000	
* 182 Chrysene-d12	240	10.963	10.963	(1.000)	4575	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.661	9.661	(0.881)	13069	0.15000	0.1519(AM)
* 198 Perylene-d12	264	13.090	13.090	(1.000)	2595	0.10000	
1 1,4-Dioxane	58	1.979	1.979	(0.522)	238	0.15000	0.1528(M)

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.

01135315

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\007.D

Date : 10-MAR-2022 11:58

Client ID: 1 4 DX-0.15

Instrument: SV6.i

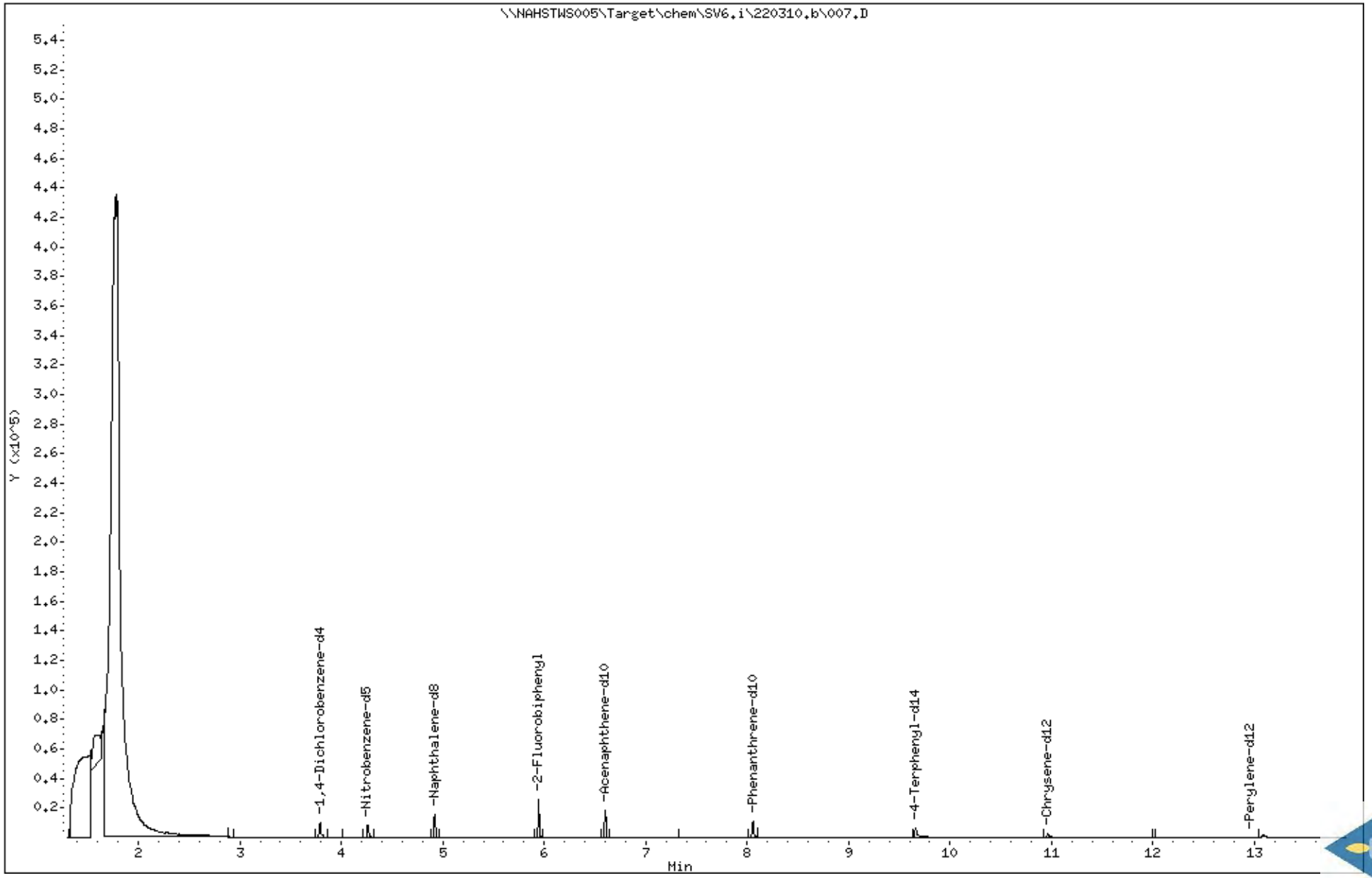
Sample Info: 1 4 DX-0.15;1 4 DX-0.15

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



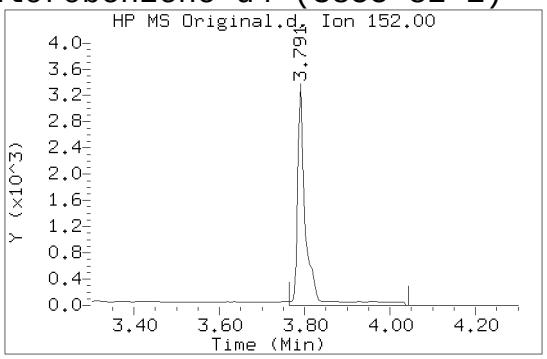
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\007.D
Inj Date : 10-MAR-2022 11:58
InstruID : SV6.i
LabSampID : 1 4 DX-0.15

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

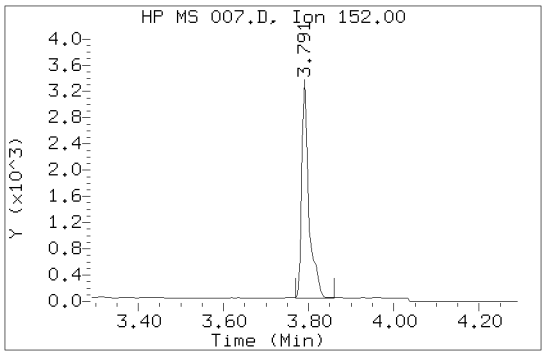
BEFORE

MASS
152
AREA
4665
HEIGHT
3379
25-Aug-2022
16:04
linh
pham



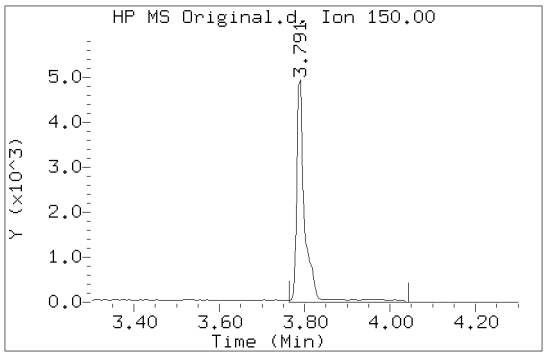
AFTER

MASS
152
AREA
3795
HEIGHT
3326
25-Aug-2022
16:08
linh
pham



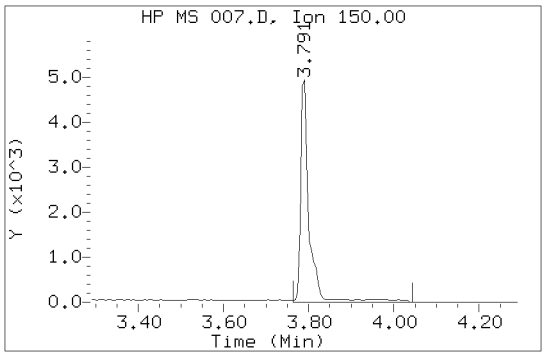
BEFORE

MASS
150
AREA
6833
HEIGHT
4945
25-Aug-2022
16:04
linh
pham



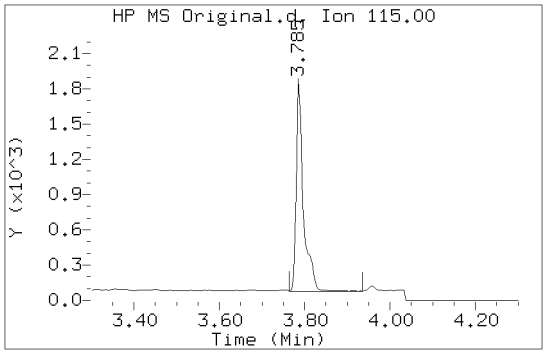
AFTER

MASS
150
AREA
6833
HEIGHT
4945
25-Aug-2022
16:08
linh
pham



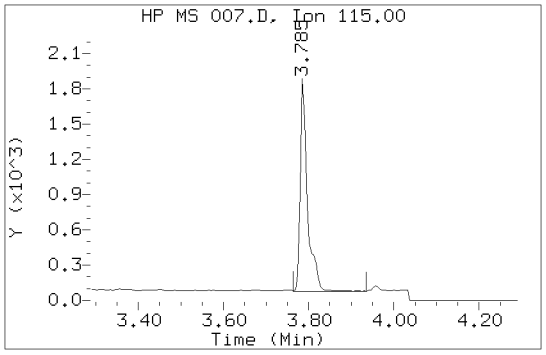
BEFORE

MASS
115
AREA
2089
HEIGHT
1807
25-Aug-2022
16:04
linh
pham



AFTER

MASS
115
AREA
2089
HEIGHT
1807
25-Aug-2022
16:08
linh
pham

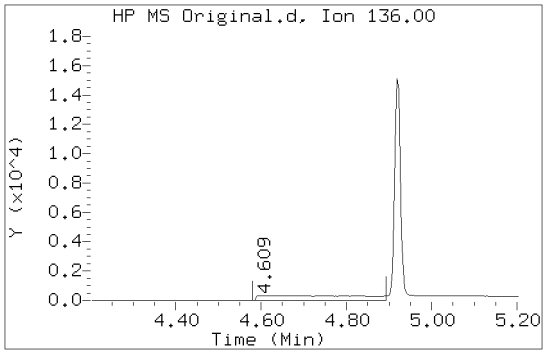


Naphthalene-d8 (1146-65-2)

Reason Code:

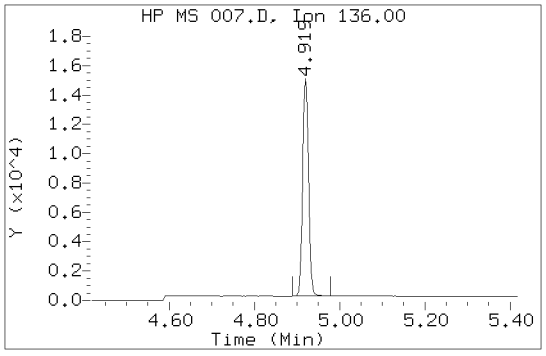
BEFORE

MASS
136
AREA
5460
HEIGHT
316
25-Aug-2022
16:04
linh
pham



AFTER

MASS
136
AREA
14247
HEIGHT
14814
25-Aug-2022
16:08
linh
pham



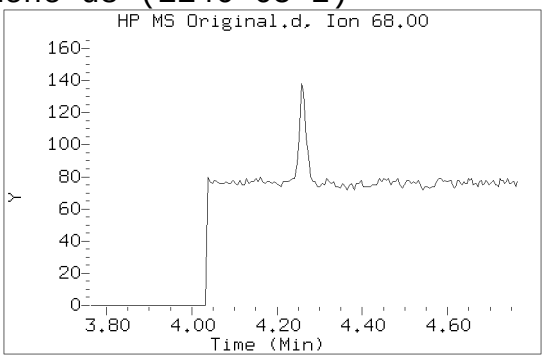
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\007.D
Inj Date : 10-MAR-2022 11:58
InstruID : SV6.i
LabSampID : 1 4 DX-0.15

Naphthalene-d8 (1146-65-2)

Reason Code:

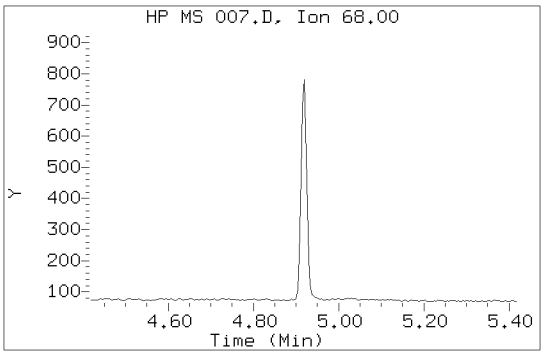
BEFORE

MASS
68
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
68
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

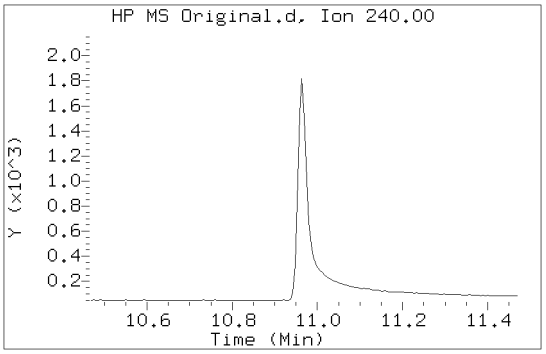


Chrysene-d12 (1719-03-5)

Reason Code:

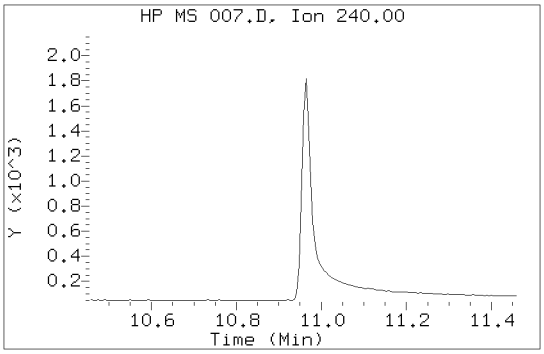
BEFORE

MASS
240
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



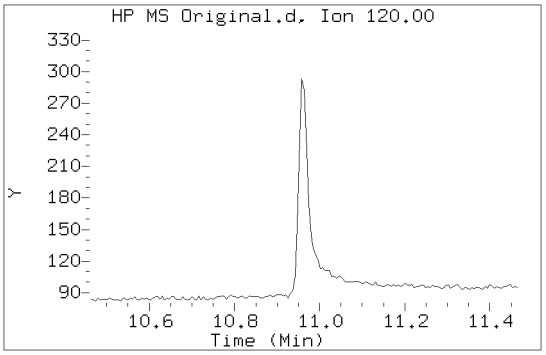
AFTER

MASS
240
AREA
4575
HEIGHT
1766
25-Aug-2022
16:08
linh
pham



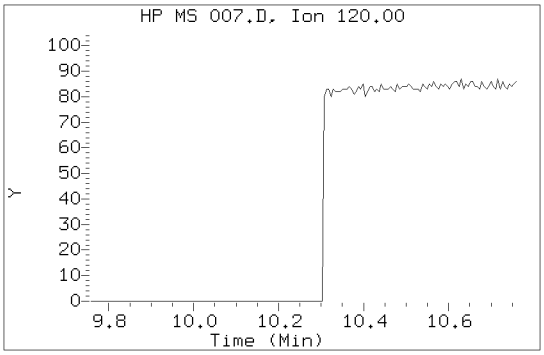
BEFORE

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



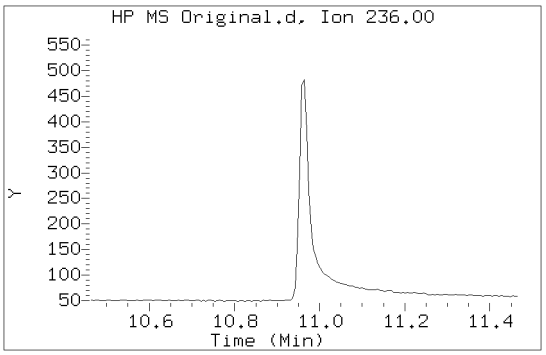
AFTER

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



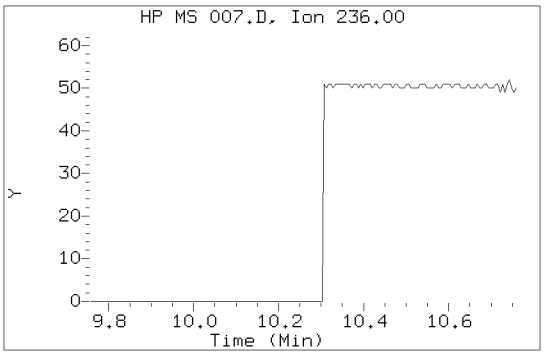
BEFORE

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

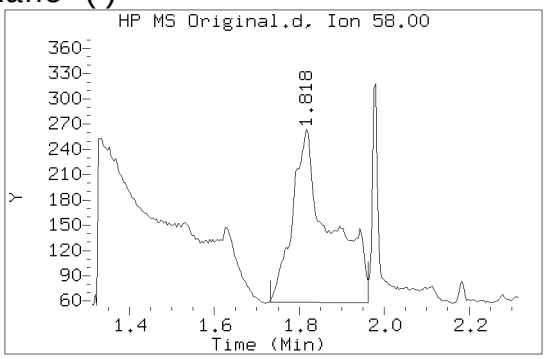


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\007.D
Inj Date : 10-MAR-2022 11:58
InstruID : SV6.i
LabSampID : 1 4 DX-0.15

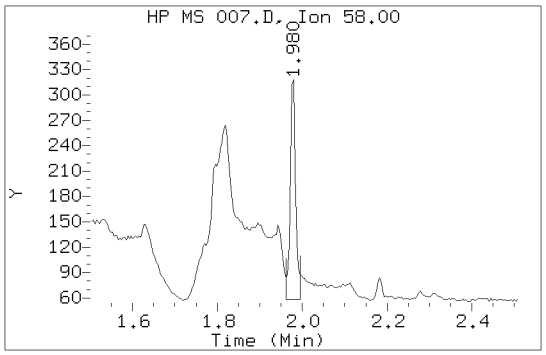
1,4-Dioxane ()

Reason Code:

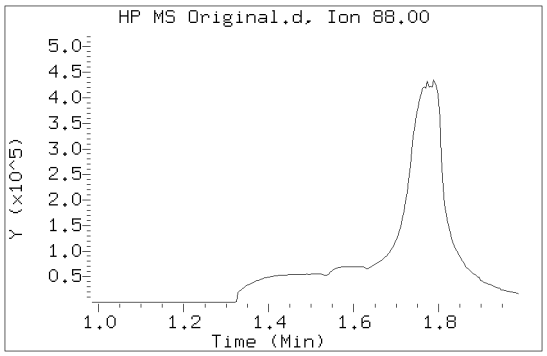
BEFORE
MASS
58
AREA
1252
HEIGHT
205
25-Aug-2022
16:04
linh
pham



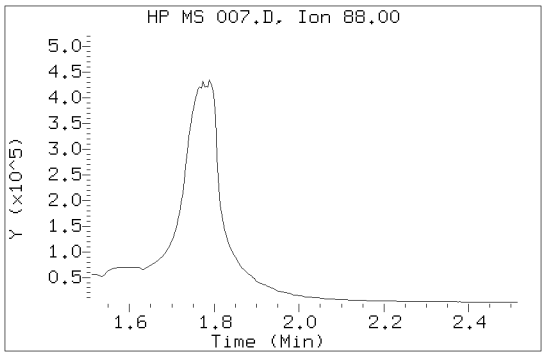
AFTER
MASS
58
AREA
238
HEIGHT
260
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



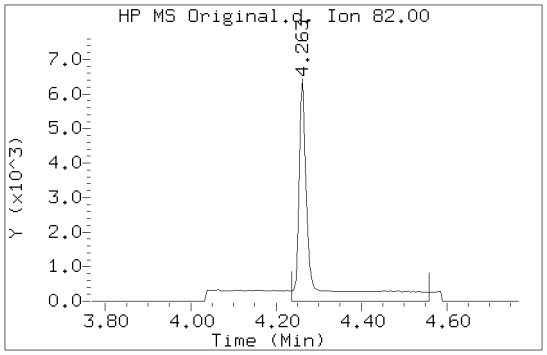
AFTER
MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



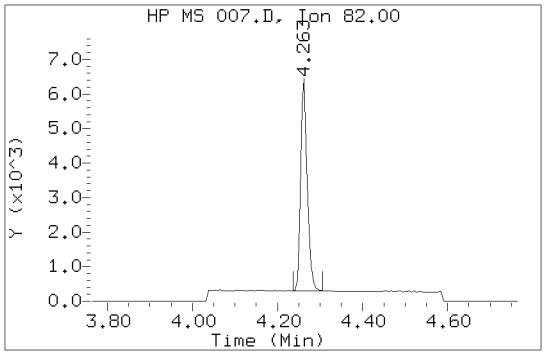
Nitrobenzene-d5 (4165-60-0)

Reason Code:

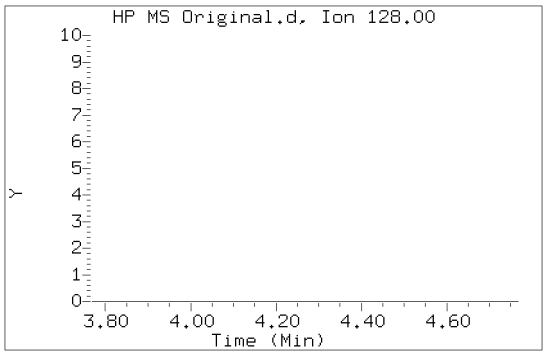
BEFORE
MASS
82
AREA
12102
HEIGHT
6437
25-Aug-2022
16:04
linh
pham



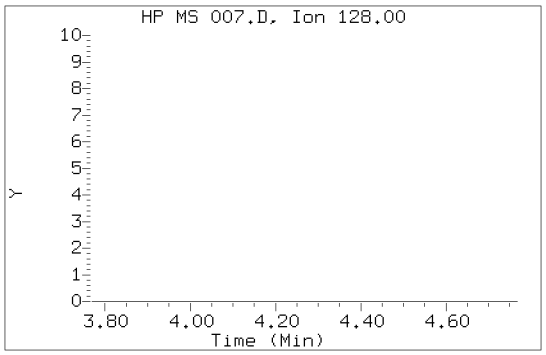
AFTER
MASS
82
AREA
6488
HEIGHT
6131
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



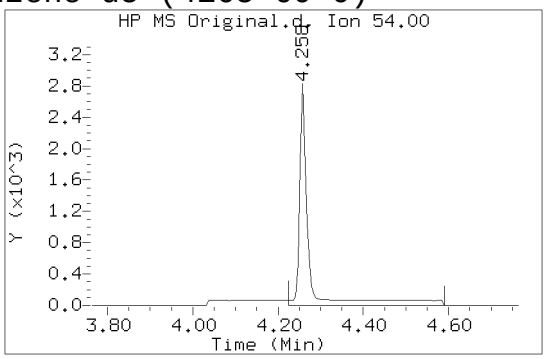
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\007.D
Inj Date : 10-MAR-2022 11:58
InstruID : SV6.i
LabSampID : 1 4 DX-0.15

Nitrobenzene-d5 (4165-60-0)

Reason Code:

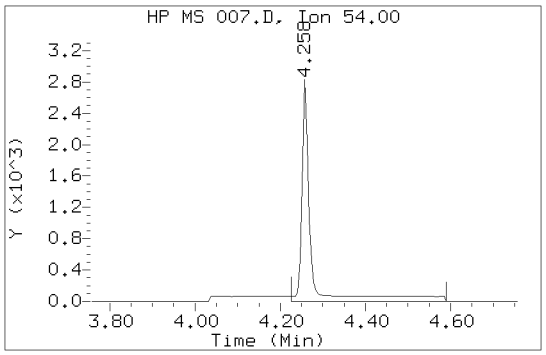
BEFORE

MASS
54
AREA
4221
HEIGHT
2829
25-Aug-2022
16:04
linh
pham



AFTER

MASS
54
AREA
4221
HEIGHT
2829
25-Aug-2022
16:08
linh
pham

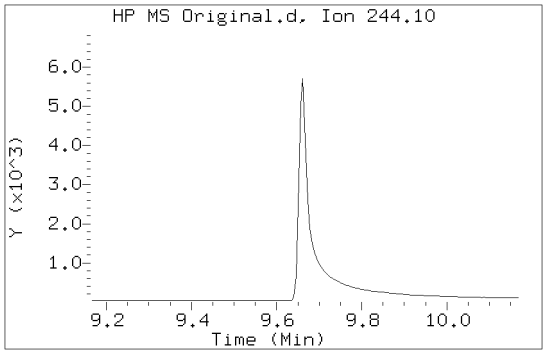


4-Terphenyl-d14 (1718-51-0)

Reason Code:

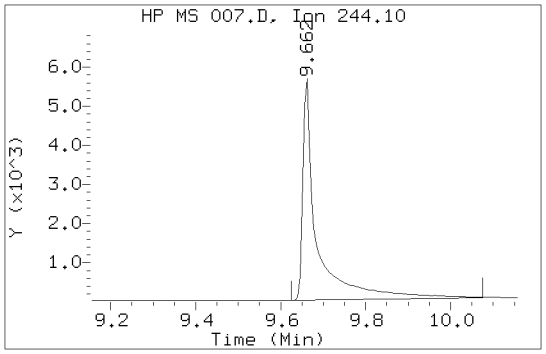
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



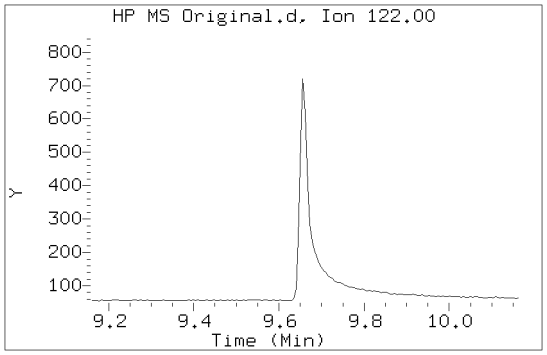
AFTER

MASS
244.1
AREA
13069
HEIGHT
5661
25-Aug-2022
16:08
linh
pham



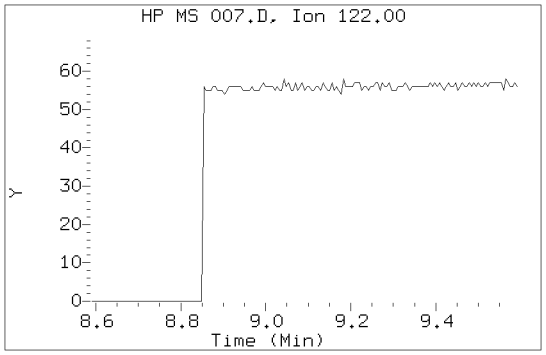
BEFORE

MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



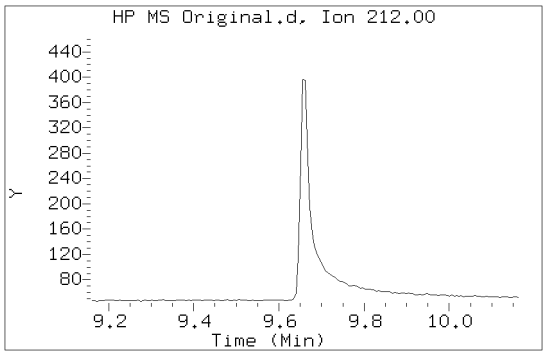
AFTER

MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



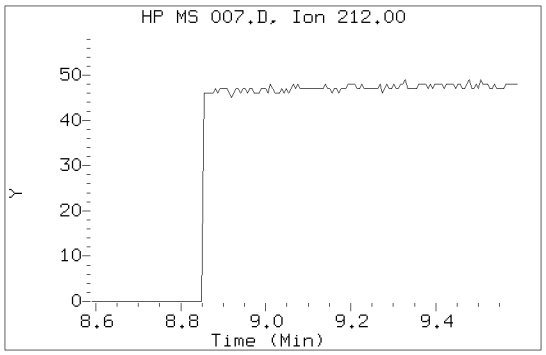
BEFORE

MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\008.D Page 1
Report Date: 25-Aug-2022 16:08

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\008.D
Lab Smp Id: 1 4 DX-0.2 Client Smp ID: 1 4 DX-0.2
Inj Date : 10-MAR-2022 12:16 MS Autotune Date: 09-MAR-2022 11:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4 DX-0.2;1 4 DX-0.2
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DXSIM.m
Meth Date : 25-Aug-2022 16:08 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 11:58 Cal File: 007.D
Als bottle: 8 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.796	3.796	(1.000)	7263	0.10000	(aM)
* 45 Naphthalene-d8	136	4.918	4.918	(1.000)	25657	0.10000	
$ 33 Nitrobenzene-d5	82	4.262	4.262	(0.867)	17003	0.20000	0.1988(AM)
* 86 Acenaphthene-d10	164	6.603	6.603	(1.000)	14251	0.10000	
$ 69 2-Fluorobiphenyl	172	5.943	5.943	(0.900)	43148	0.20000	0.1945(A)
* 126 Phenanthrene-d10	188	8.059	8.059	(1.000)	24746	0.10000	
* 182 Chrysene-d12	240	10.963	10.963	(1.000)	9545	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.661	9.661	(0.881)	36799	0.20000	0.2050(AM)
* 198 Perylene-d12	264	13.090	13.090	(1.000)	5135	0.10000	
1 1,4-Dioxane	58	2.013	2.013	(0.530)	614	0.20000	0.2059(M)

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.

01135321

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\008.D

Page 1

Date : 10-MAR-2022 12:16

Client ID: 1 4 DX-0.2

Instrument: SV6.i

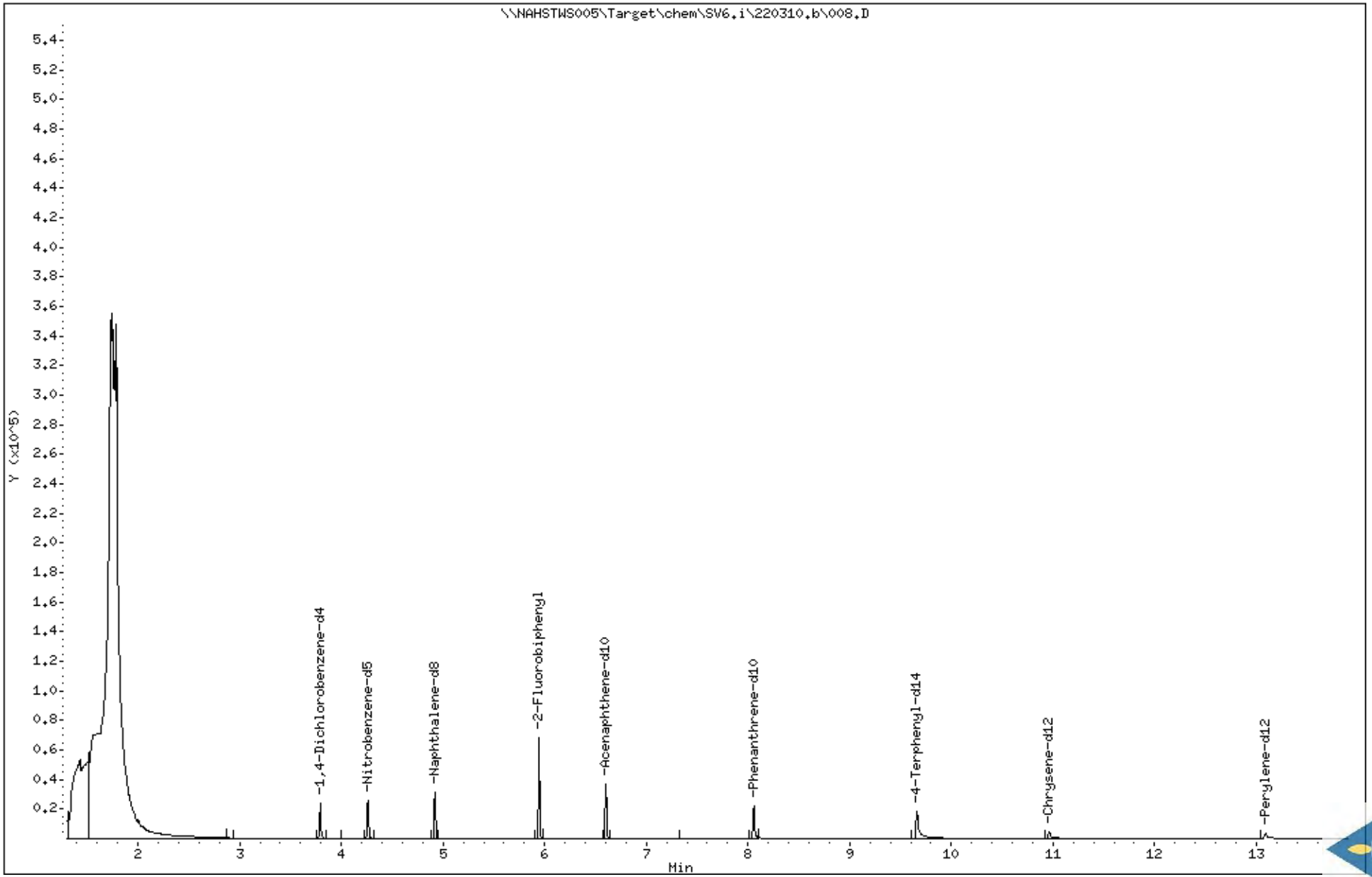
Sample Info: 1 4 DX-0.2;1 4 DX-0.2

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



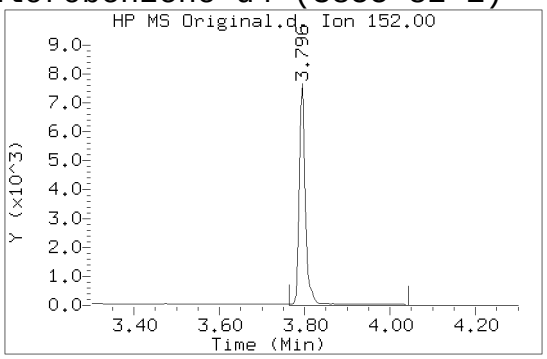
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\008.D
Inj Date : 10-MAR-2022 12:16
InstruID : SV6.i
LabSampID : 1 4 DX-0.2

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

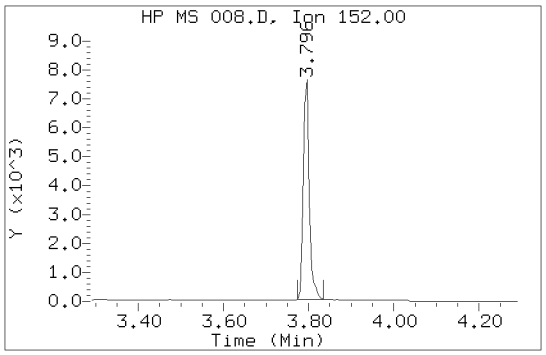
BEFORE

MASS
152
AREA
8188
HEIGHT
7663
25-Aug-2022
16:04
linh
pham



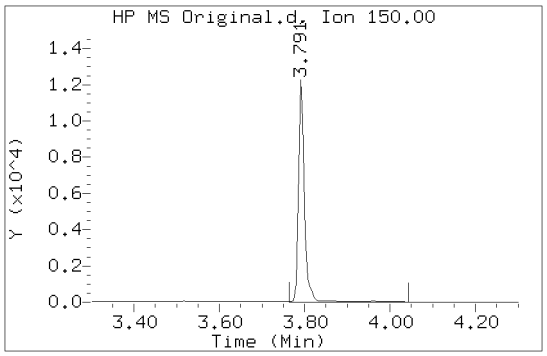
AFTER

MASS
152
AREA
7263
HEIGHT
7596
25-Aug-2022
16:08
linh
pham



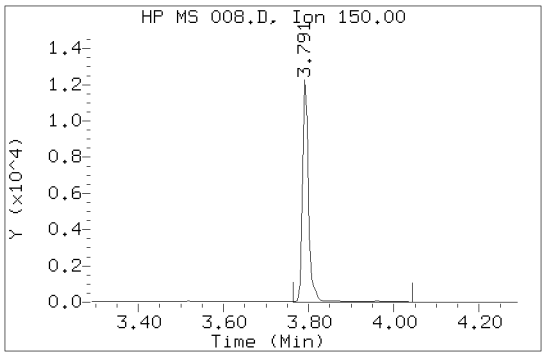
BEFORE

MASS
150
AREA
12278
HEIGHT
12265
25-Aug-2022
16:04
linh
pham



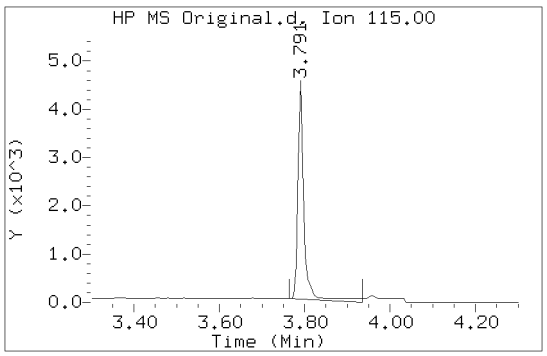
AFTER

MASS
150
AREA
12278
HEIGHT
12265
25-Aug-2022
16:08
linh
pham



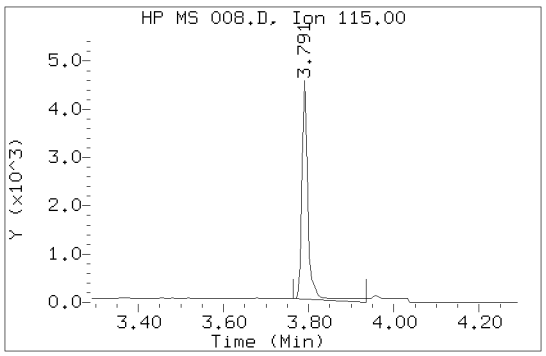
BEFORE

MASS
115
AREA
4513
HEIGHT
4526
25-Aug-2022
16:04
linh
pham



AFTER

MASS
115
AREA
4513
HEIGHT
4526
25-Aug-2022
16:08
linh
pham

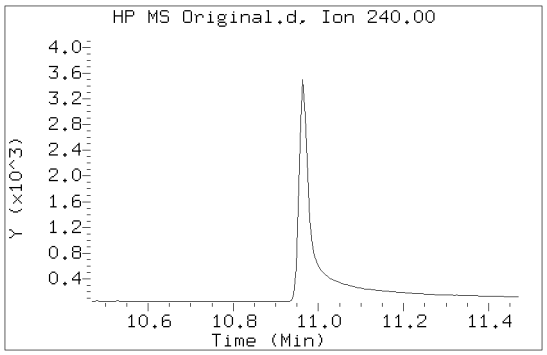


Chrysene-d12 (1719-03-5)

Reason Code:

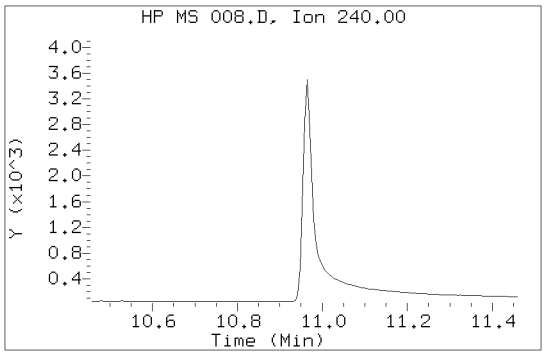
BEFORE

MASS
240
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
240
AREA
9545
HEIGHT
3446
25-Aug-2022
16:08
linh
pham

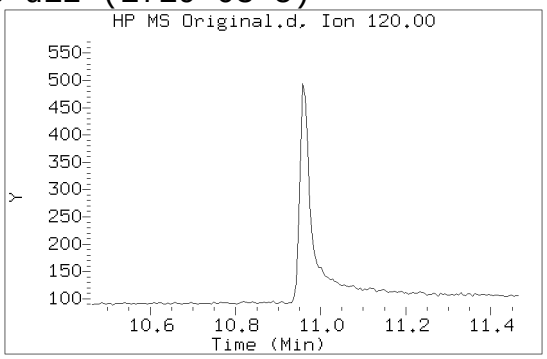


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\008.D
Inj Date : 10-MAR-2022 12:16
InstruID : SV6.i
LabSampID : 1 4 DX-0.2

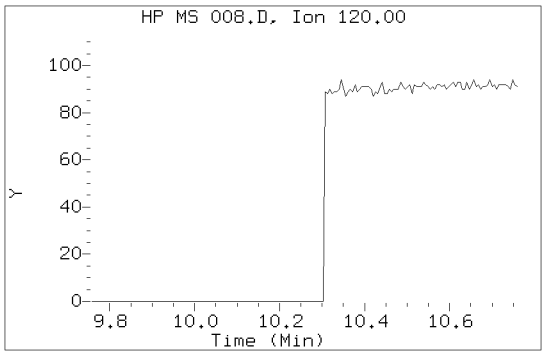
Chrysene-d12 (1719-03-5)

Reason Code:

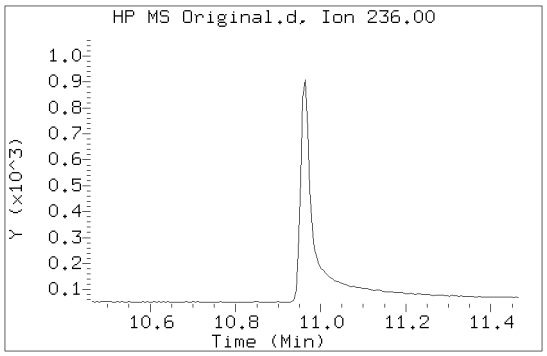
BEFORE
MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



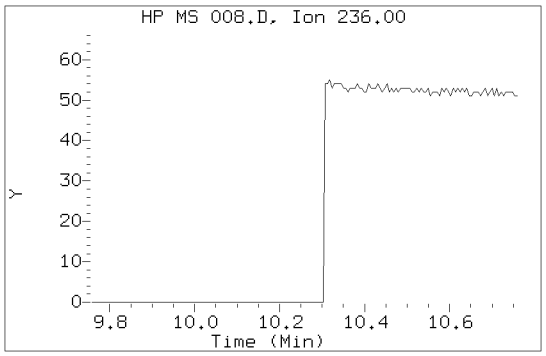
AFTER
MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



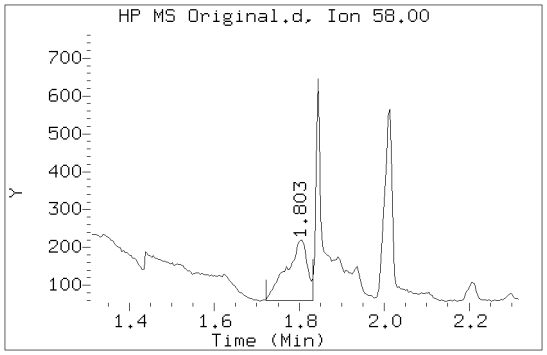
AFTER
MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



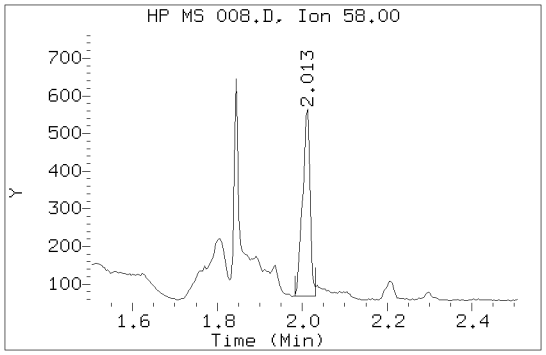
1,4-Dioxane ()

Reason Code:

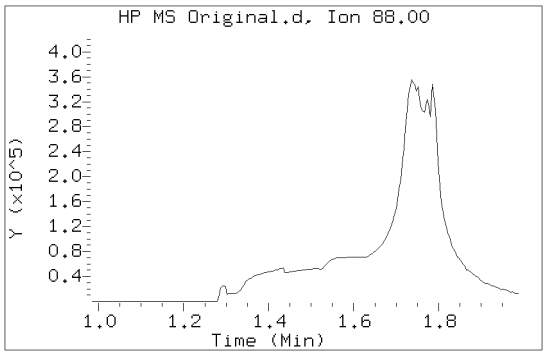
BEFORE
MASS
58
AREA
554
HEIGHT
160
25-Aug-2022
16:04
linh
pham



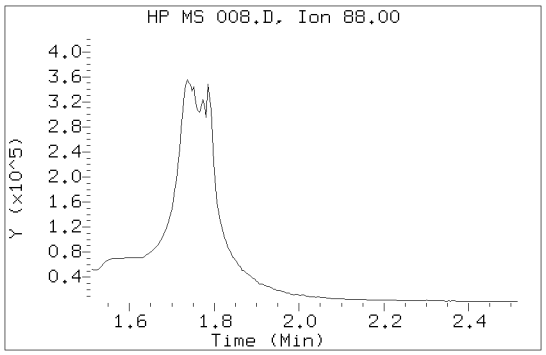
AFTER
MASS
58
AREA
614
HEIGHT
496
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



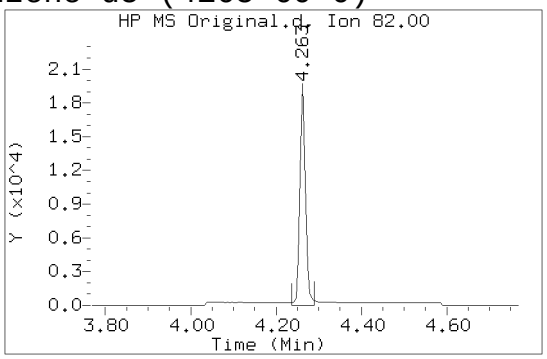
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\008.D
Inj Date : 10-MAR-2022 12:16
InstruID : SV6.i
LabSampID : 1 4 DX-0.2

Nitrobenzene-d5 (4165-60-0)

Reason Code:

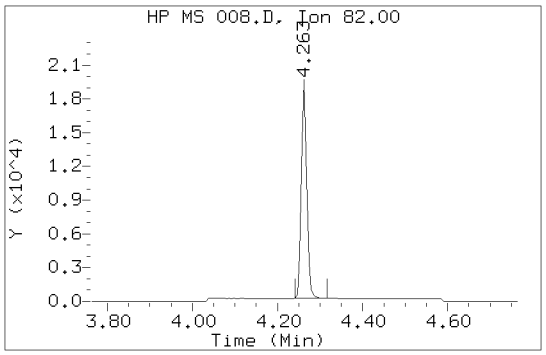
BEFORE

MASS
82
AREA
17887
HEIGHT
19712
25-Aug-2022
16:04
linh
pham



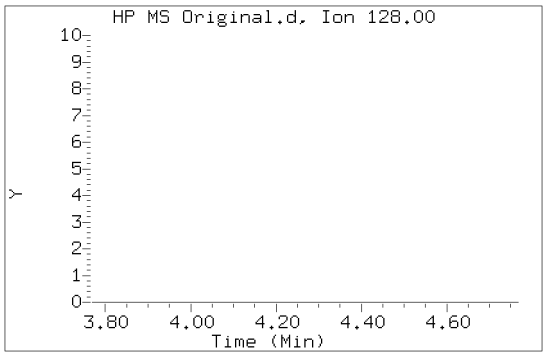
AFTER

MASS
82
AREA
17003
HEIGHT
19451
25-Aug-2022
16:08
linh
pham



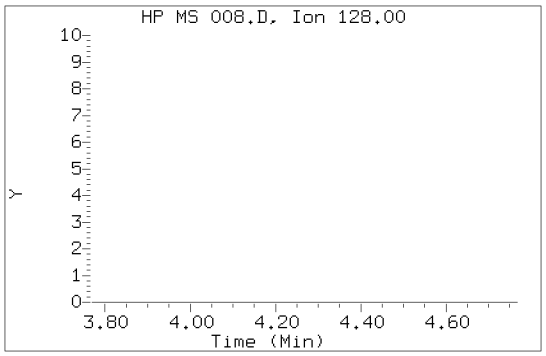
BEFORE

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



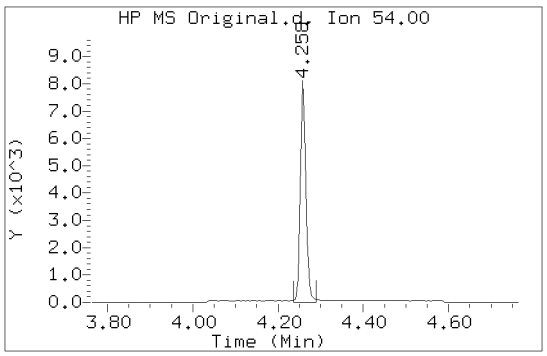
AFTER

MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



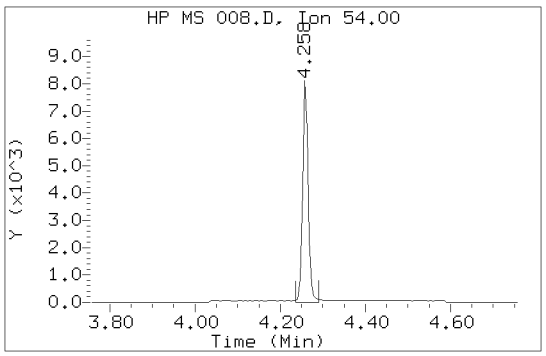
BEFORE

MASS
54
AREA
7400
HEIGHT
8110
25-Aug-2022
16:04
linh
pham



AFTER

MASS
54
AREA
7400
HEIGHT
8110
25-Aug-2022
16:08
linh
pham

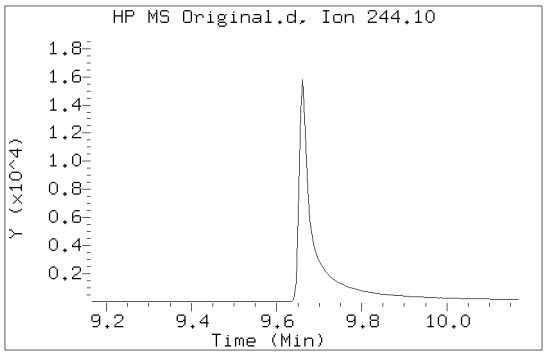


4-Terphenyl-d14 (1718-51-0)

Reason Code:

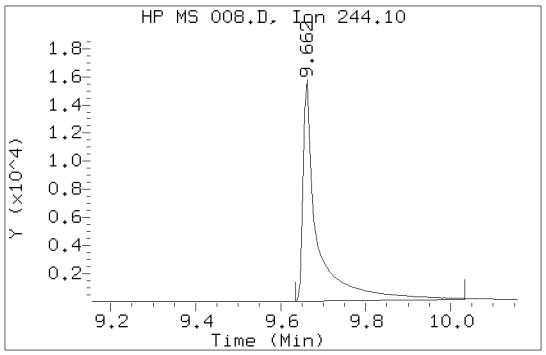
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
244.1
AREA
36799
HEIGHT
15739
25-Aug-2022
16:08
linh
pham

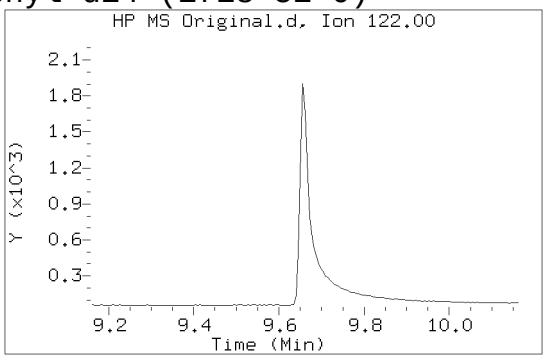


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\008.D
Inj Date : 10-MAR-2022 12:16
InstruID : SV6.i
LabSampID : 1 4 DX-0.2

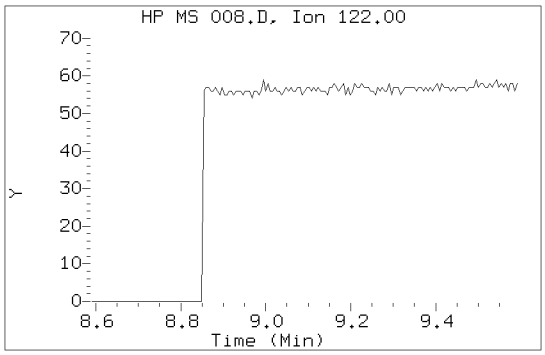
4-Terphenyl-d14 (1718-51-0)

Reason Code:

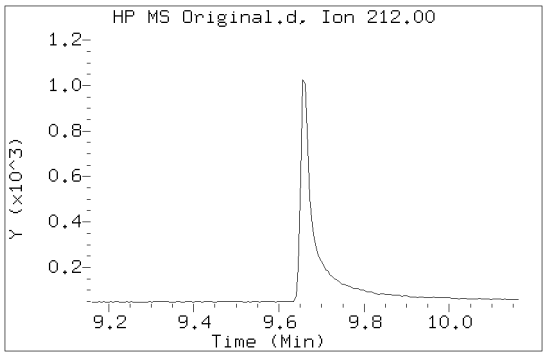
BEFORE
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



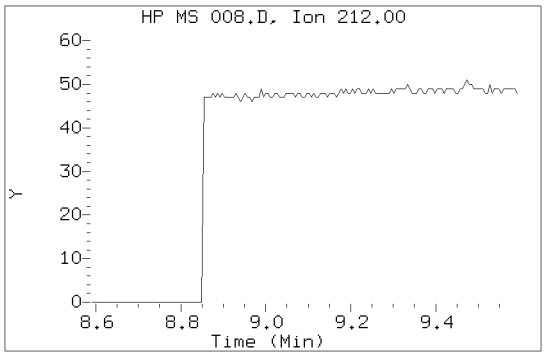
AFTER
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\009.D Page 1
Report Date: 25-Aug-2022 16:08

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\009.D
Lab Smp Id: 1 4 DX-0.5 Client Smp ID: 1 4 DX-0.5
Inj Date : 10-MAR-2022 12:56 MS Autotune Date: 09-MAR-2022 11:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4 DX-0.5;1 4 DX-0.5
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DXSIM.m
Meth Date : 25-Aug-2022 16:08 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:16 Cal File: 008.D
Als bottle: 9 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.801	3.801	(1.000)	6911	0.10000	(aQM)
* 45 Naphthalene-d8	136	4.922	4.922	(1.000)	13189	0.10000	(M)
$ 33 Nitrobenzene-d5	82	4.268	4.268	(0.907)	21014	0.50000	0.4780(A)
* 86 Acenaphthene-d10	164	6.603	6.603	(1.000)	7222	0.10000	(QM)
$ 69 2-Fluorobiphenyl	172	5.943	5.943	(1.000)	52166	0.50000	0.4640(A)
* 126 Phenanthrene-d10	188	8.064	8.064	(1.000)	12388	0.10000	
* 182 Chrysene-d12	240	10.969	10.969	(1.000)	3790	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.667	9.667	(0.881)	36357	0.50000	0.5102(AM)
* 198 Perylene-d12	264	13.101	13.101	(1.000)	1809	0.10000	
1 1,4-Dioxane	58	2.049	2.049	(0.539)	1286	0.50000	0.4533(H)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

01135328

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\009.D

Page 1

Date : 10-MAR-2022 12:56

Client ID: 1 4 DX-0.5

Instrument: SV6.i

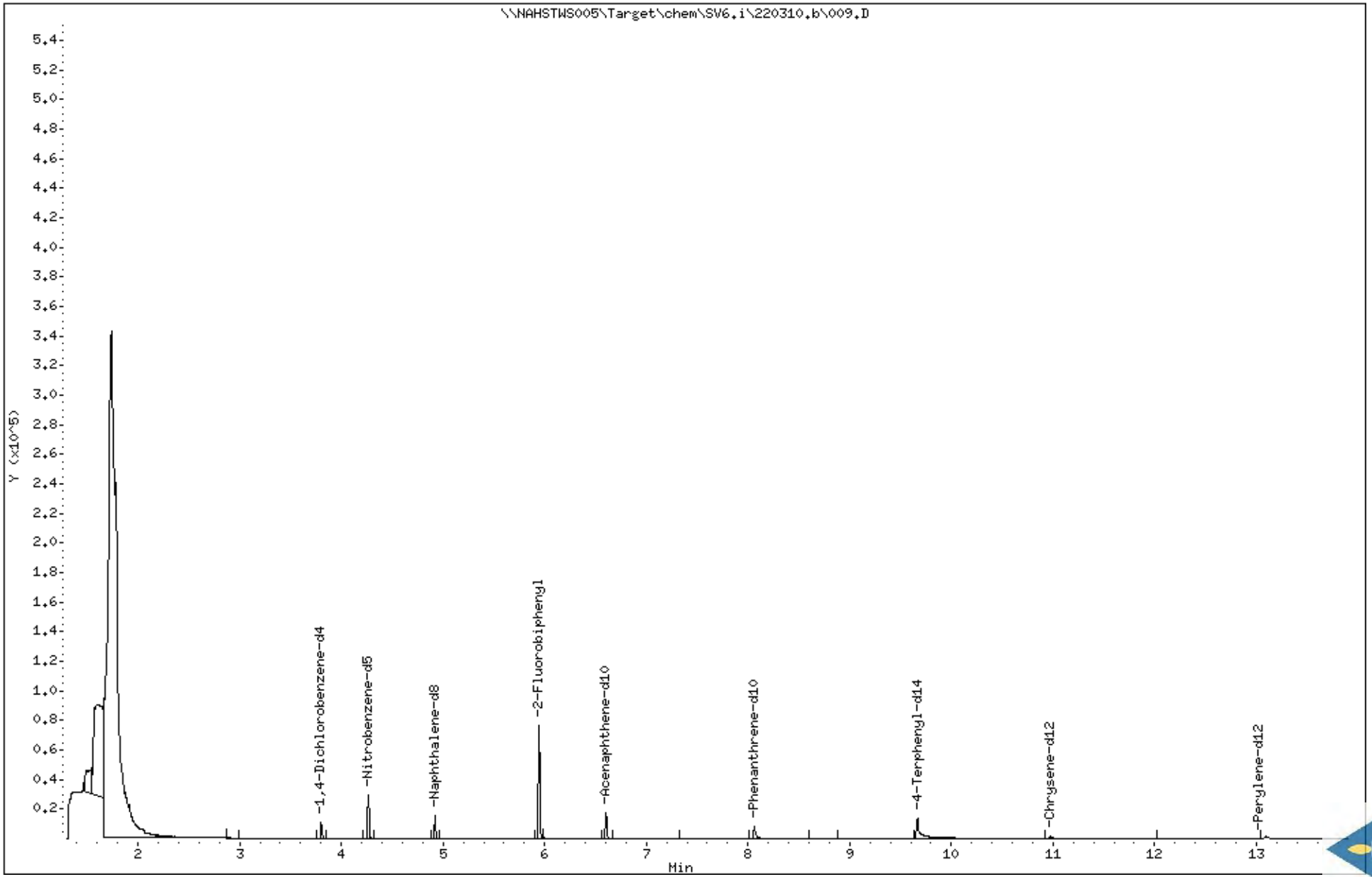
Sample Info: 1 4 DX-0.5;1 4 DX-0.5

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



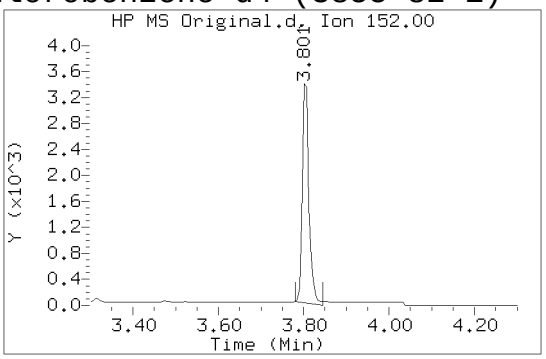
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\009.D
Inj Date : 10-MAR-2022 12:56
InstruID : SV6.i
LabSampID : 1 4 DX-0.5

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

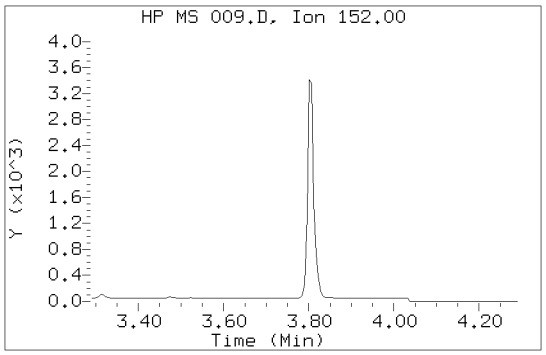
BEFORE

MASS
152
AREA
3578
HEIGHT
3374
25-Aug-2022
16:04
linh
pham



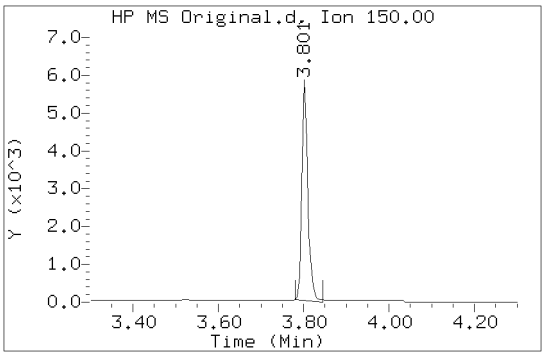
AFTER

MASS
152
AREA
6911
HEIGHT
3414
25-Aug-2022
16:08
linh
pham



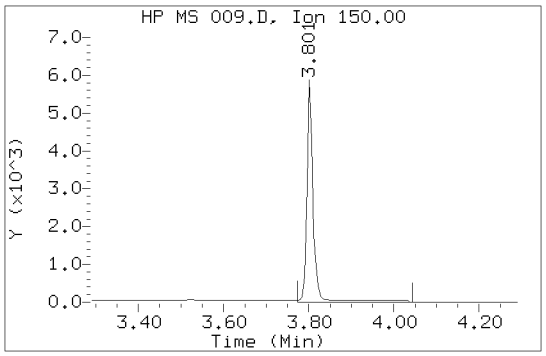
BEFORE

MASS
150
AREA
5548
HEIGHT
5835
25-Aug-2022
16:04
linh
pham



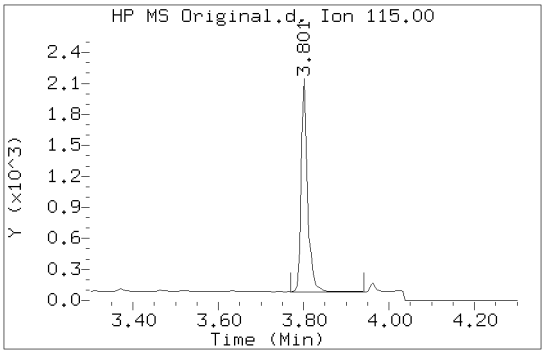
AFTER

MASS
150
AREA
6275
HEIGHT
5877
25-Aug-2022
16:08
linh
pham



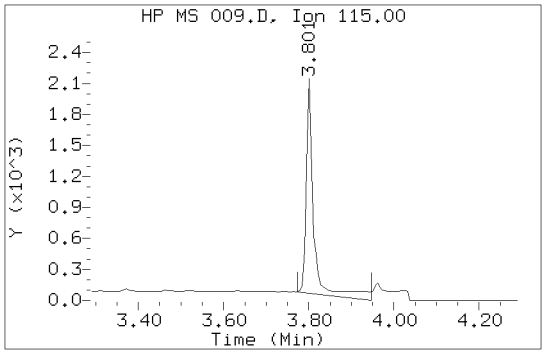
BEFORE

MASS
115
AREA
2092
HEIGHT
2063
25-Aug-2022
16:04
linh
pham



AFTER

MASS
115
AREA
2533
HEIGHT
2075
25-Aug-2022
16:08
linh
pham

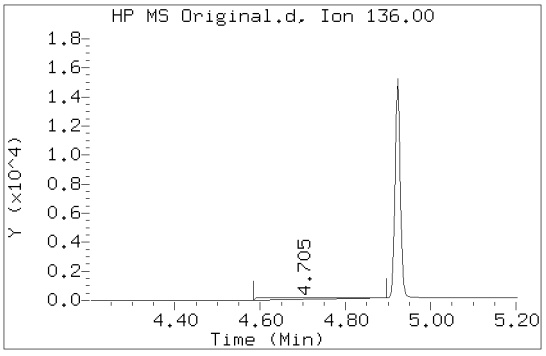


Naphthalene-d8 (1146-65-2)

Reason Code:

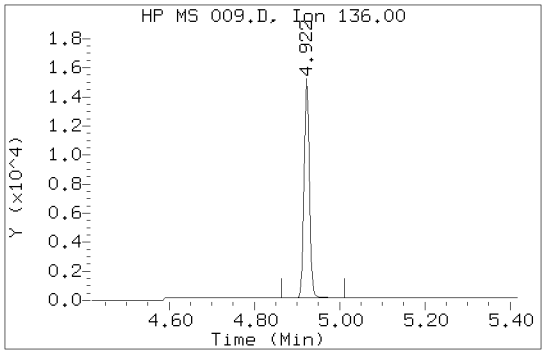
BEFORE

MASS
136
AREA
1531
HEIGHT
108
25-Aug-2022
16:04
linh
pham



AFTER

MASS
136
AREA
13189
HEIGHT
15077
25-Aug-2022
16:08
linh
pham



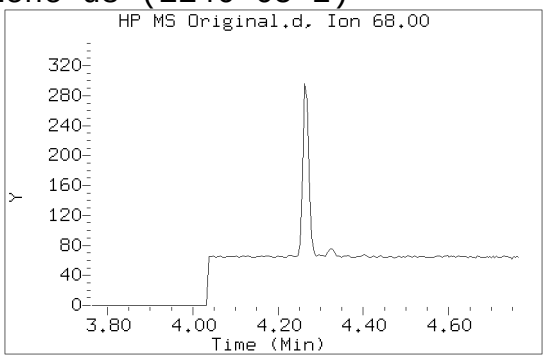
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\009.D
Inj Date : 10-MAR-2022 12:56
InstruID : SV6.i
LabSampID : 1 4 DX-0.5

Naphthalene-d8 (1146-65-2)

Reason Code:

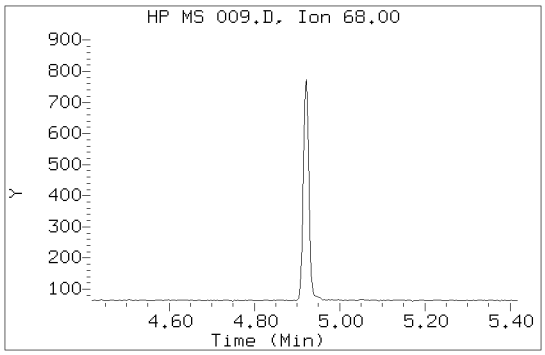
BEFORE

MASS
68
AREA
262
HEIGHT
233
25-Aug-2022
16:04
linh
pham



AFTER

MASS
68
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

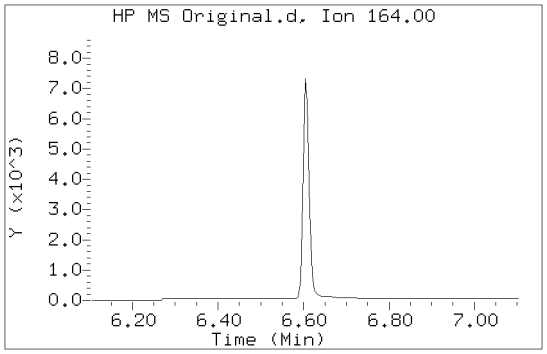


Acenaphthene-d10 (15067-26-2)

Reason Code:

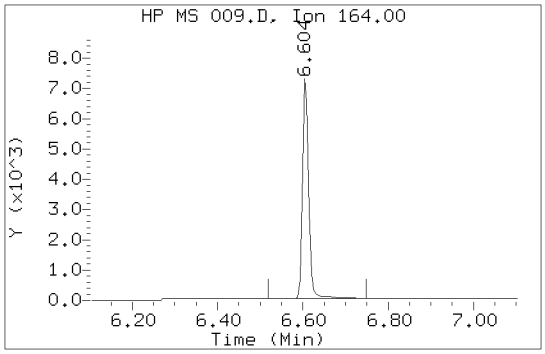
BEFORE

MASS
164
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



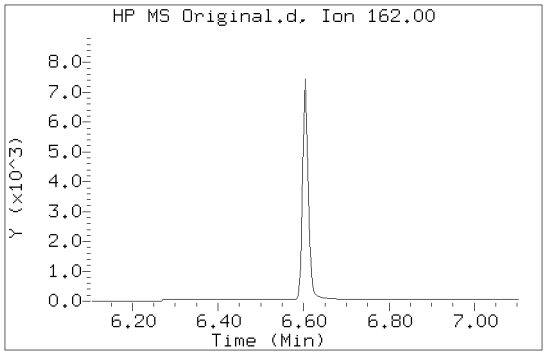
AFTER

MASS
164
AREA
7222
HEIGHT
7257
25-Aug-2022
16:08
linh
pham



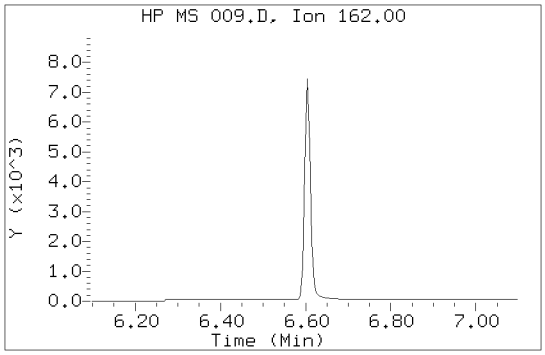
BEFORE

MASS
162
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



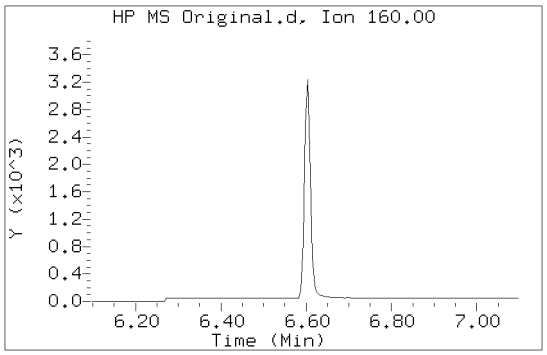
AFTER

MASS
162
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



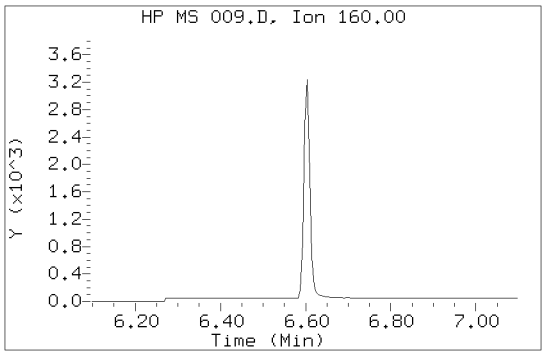
BEFORE

MASS
160
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
160
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



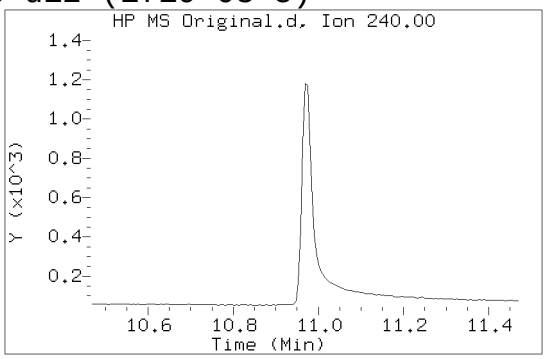
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\009.D
Inj Date : 10-MAR-2022 12:56
InstruID : SV6.i
LabSampID : 1 4 DX-0.5

Chrysene-d12 (1719-03-5)

Reason Code:

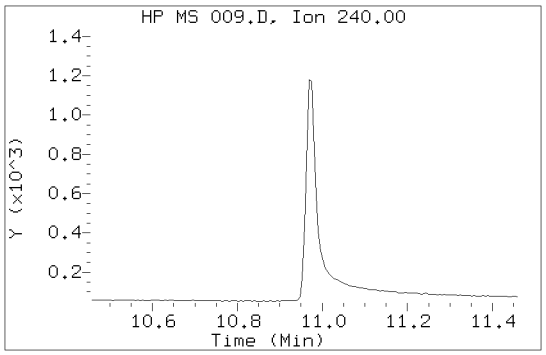
BEFORE

MASS
240
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



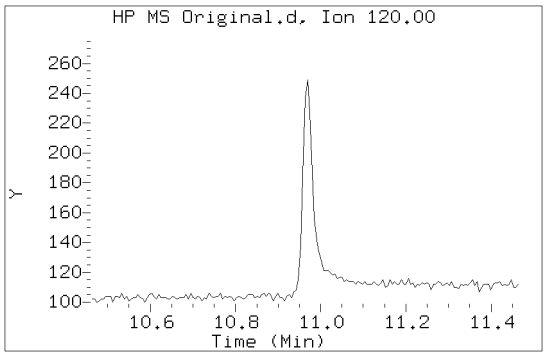
AFTER

MASS
240
AREA
3790
HEIGHT
1133
25-Aug-2022
16:08
linh
pham



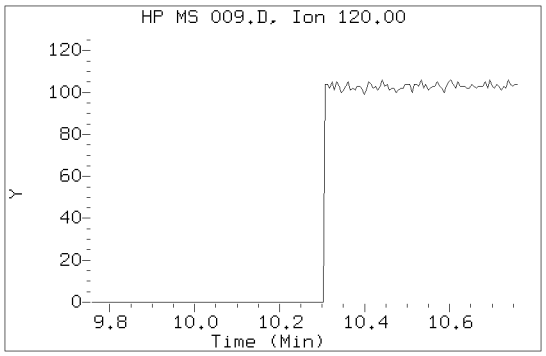
BEFORE

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



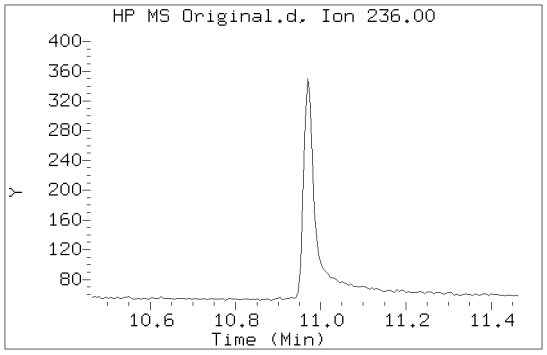
AFTER

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



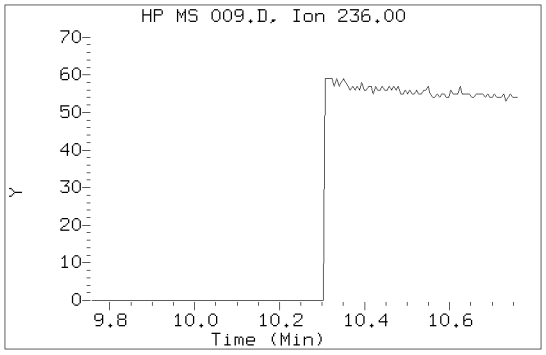
BEFORE

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

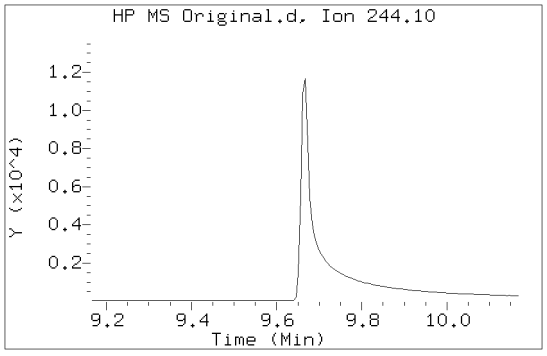


4-Terphenyl-d14 (1718-51-0)

Reason Code:

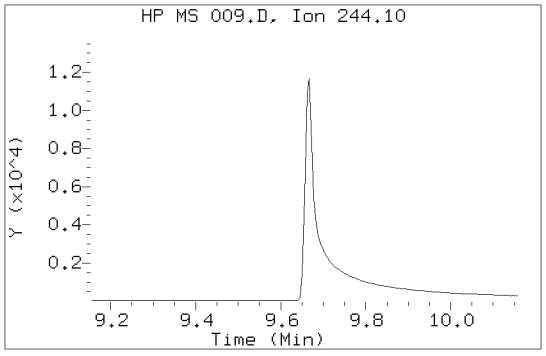
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
244.1
AREA
36357
HEIGHT
11597
25-Aug-2022
16:08
linh
pham

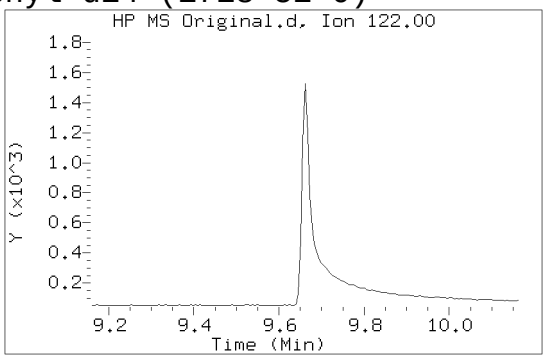


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\009.D
Inj Date : 10-MAR-2022 12:56
InstruID : SV6.i
LabSampID : 1 4 DX-0.5

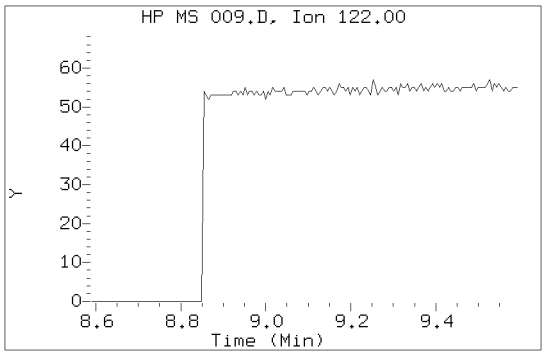
4-Terphenyl-d14 (1718-51-0)

Reason Code:

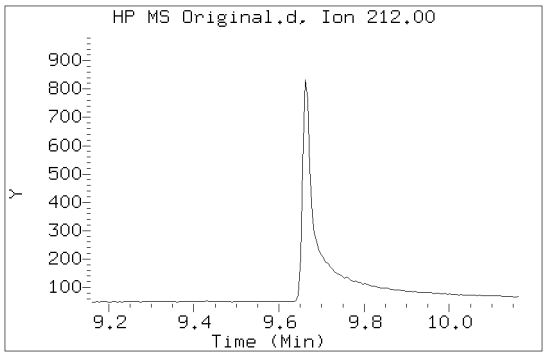
BEFORE
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



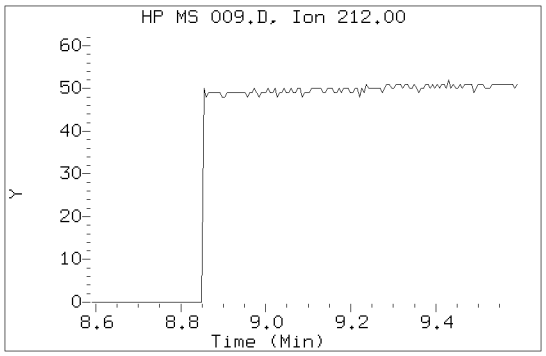
AFTER
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\010.D Page 1
Report Date: 25-Aug-2022 16:08

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220310.b\010.D
Lab Smp Id: 1 4 DX-ICV Client Smp ID: 1 4 DX-ICV
Inj Date : 10-MAR-2022 14:15 MS Autotune Date: 09-MAR-2022 11:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4 DX-ICV;1 4 DX-ICV
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220310.b\DXSIM.m
Meth Date : 25-Aug-2022 16:08 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 10 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.795	3.801	(1.000)	6142	0.10000	(aM)
* 45 Naphthalene-d8	136	4.922	4.922	(1.000)	16012	0.10000	(M)
$ 33 Nitrobenzene-d5	82	4.262	4.268	(0.866)	4156	0.07786	0.07786(M)
* 86 Acenaphthene-d10	164	6.609	6.603	(1.000)	8780	0.10000	(M)
$ 69 2-Fluorobiphenyl	172	5.947	5.943	(0.900)	11167	0.08171	0.08171(M)
* 126 Phenanthrene-d10	188	8.064	8.064	(1.000)	15732	0.10000	
* 182 Chrysene-d12	240	10.974	10.969	(1.000)	6319	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.667	9.667	(0.881)	7838	0.06597	0.06597(M)
* 198 Perylene-d12	264	13.101	13.101	(1.000)	4163	0.10000	(M)
1 1,4-Dioxane	58	2.002	2.049	(0.527)	203	0.08051	0.08051(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

01135334

Data File: \\NAHSTWS005\Target\chem\SV6.i\220310.b\010.D

Page 1

Date : 10-MAR-2022 14:15

Client ID: 1 4 DX-ICV

Instrument: SV6.i

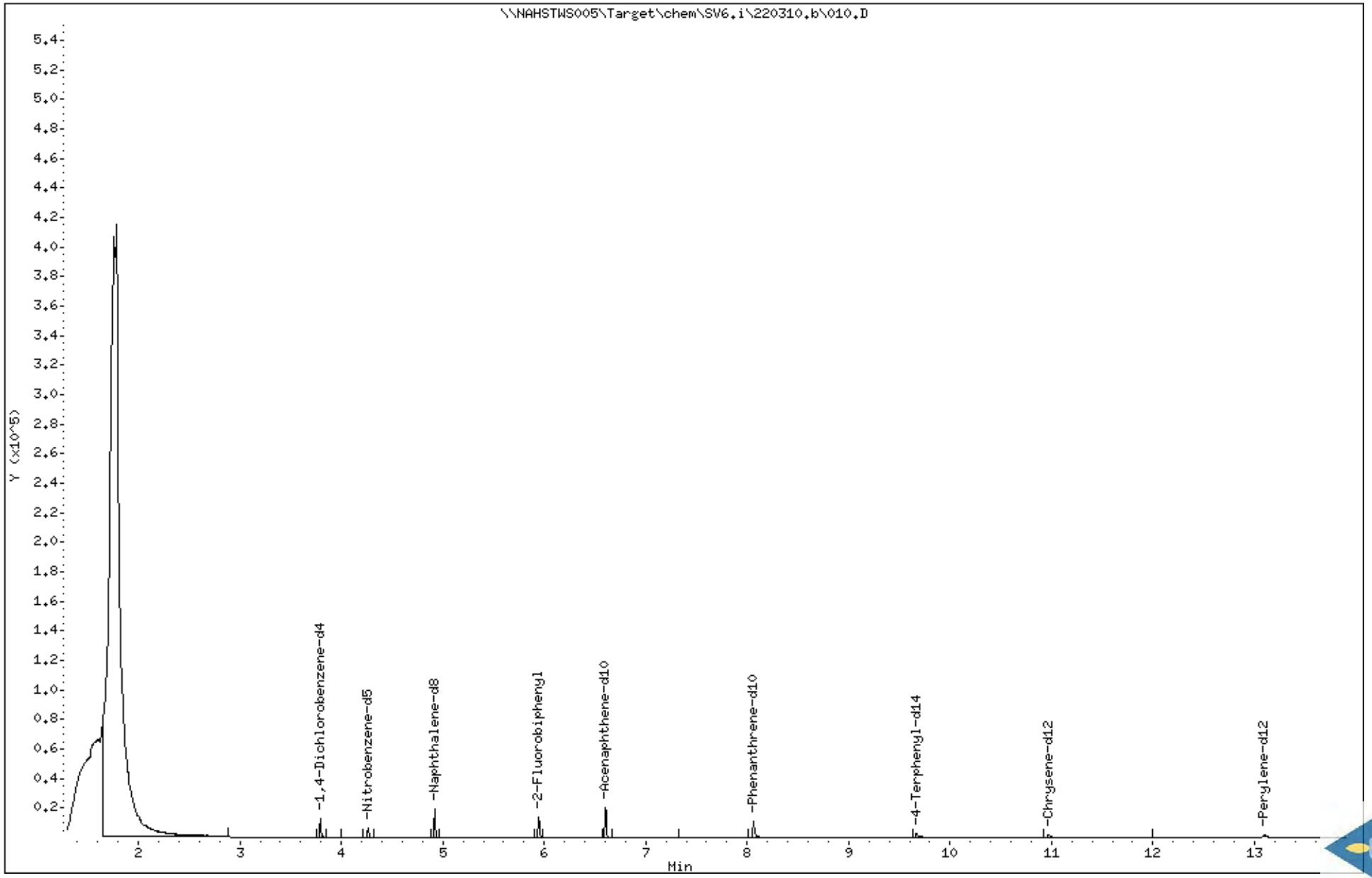
Sample Info: 1 4 DX-ICV;1 4 DX-ICV

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



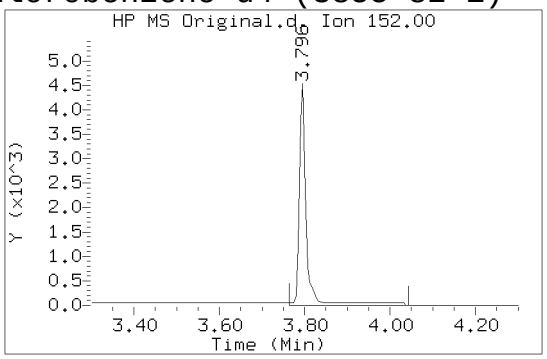
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\010.D
Inj Date : 10-MAR-2022 14:15
InstruID : SV6.i
LabSampID : 1 4 DX-ICV

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

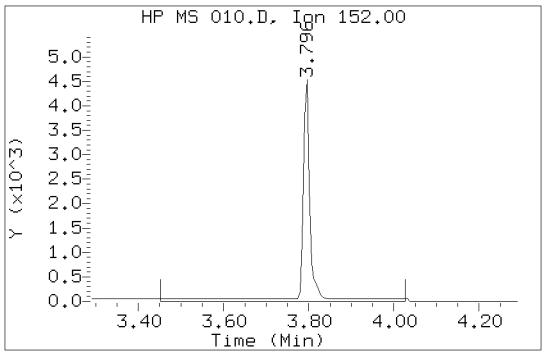
BEFORE

MASS
152
AREA
5222
HEIGHT
4535
25-Aug-2022
16:04
linh
pham



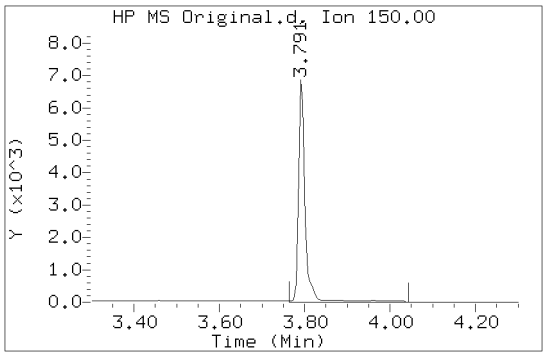
AFTER

MASS
152
AREA
6142
HEIGHT
4535
25-Aug-2022
16:08
linh
pham



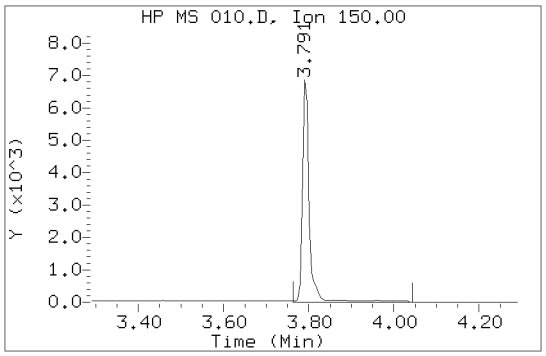
BEFORE

MASS
150
AREA
7641
HEIGHT
6864
25-Aug-2022
16:04
linh
pham



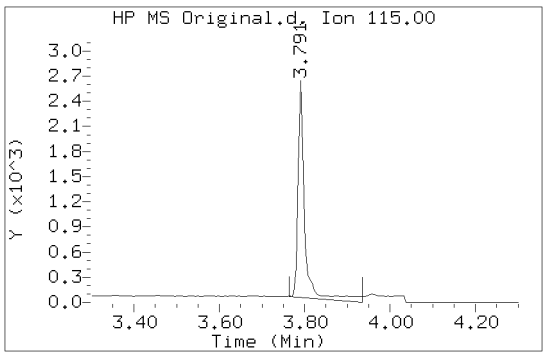
AFTER

MASS
150
AREA
7641
HEIGHT
6864
25-Aug-2022
16:08
linh
pham



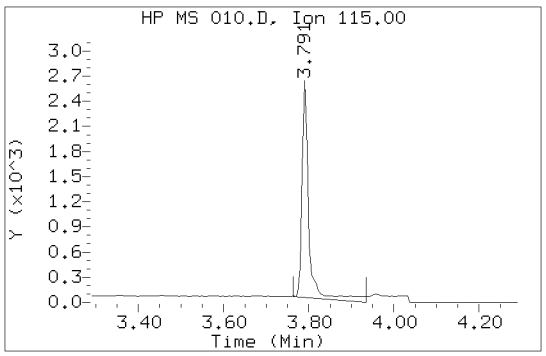
BEFORE

MASS
115
AREA
2822
HEIGHT
2584
25-Aug-2022
16:04
linh
pham



AFTER

MASS
115
AREA
2822
HEIGHT
2584
25-Aug-2022
16:08
linh
pham

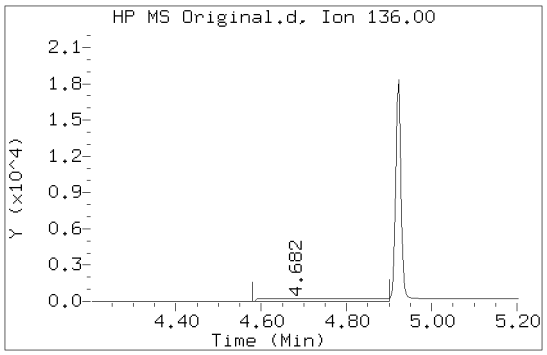


Naphthalene-d8 (1146-65-2)

Reason Code:

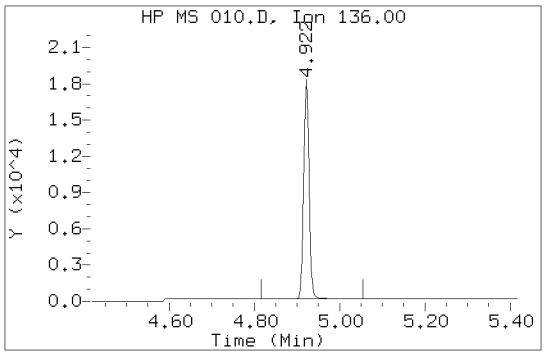
BEFORE

MASS
136
AREA
3810
HEIGHT
208
25-Aug-2022
16:04
linh
pham



AFTER

MASS
136
AREA
16012
HEIGHT
18137
25-Aug-2022
16:08
linh
pham



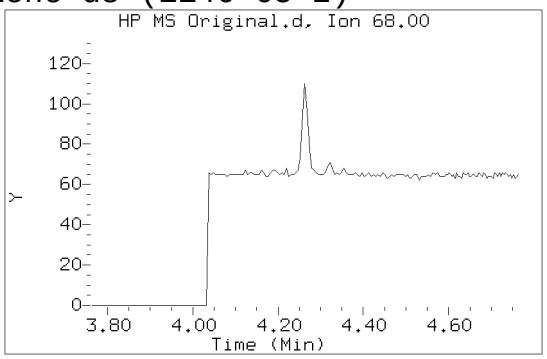
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\010.D
Inj Date : 10-MAR-2022 14:15
InstruID : SV6.i
LabSampID : 1 4 DX-ICV

Naphthalene-d8 (1146-65-2)

Reason Code:

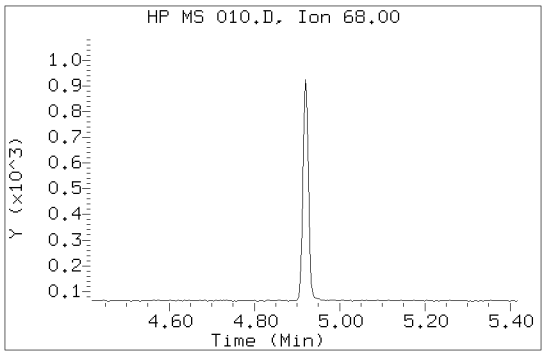
BEFORE

MASS
68
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
68
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

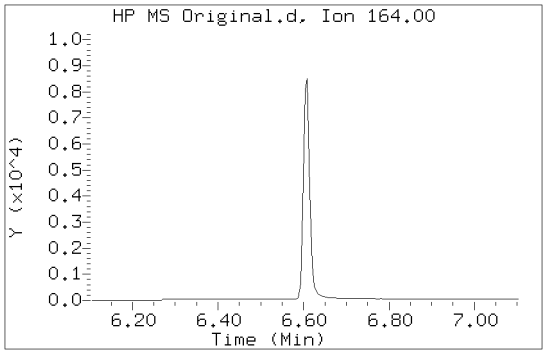


Acenaphthene-d10 (15067-26-2)

Reason Code:

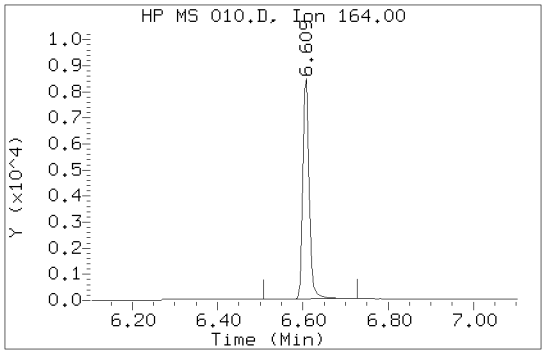
BEFORE

MASS
164
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



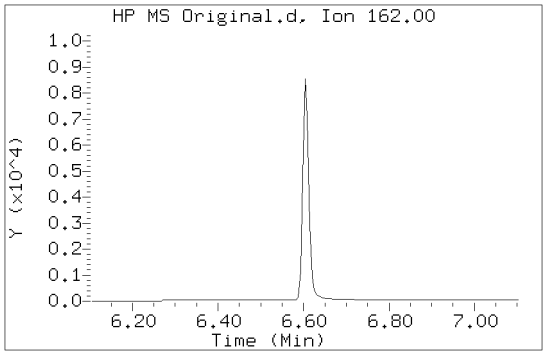
AFTER

MASS
164
AREA
8780
HEIGHT
8443
25-Aug-2022
16:08
linh
pham



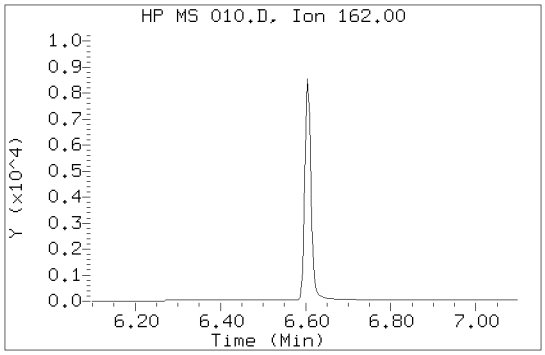
BEFORE

MASS
162
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



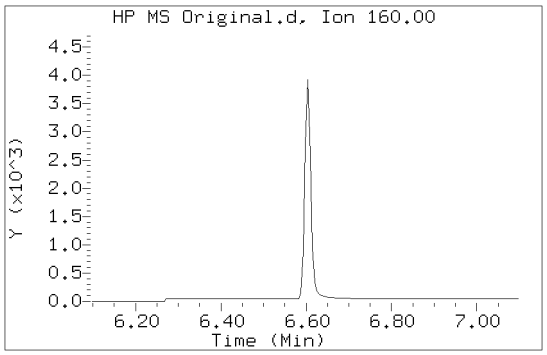
AFTER

MASS
162
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



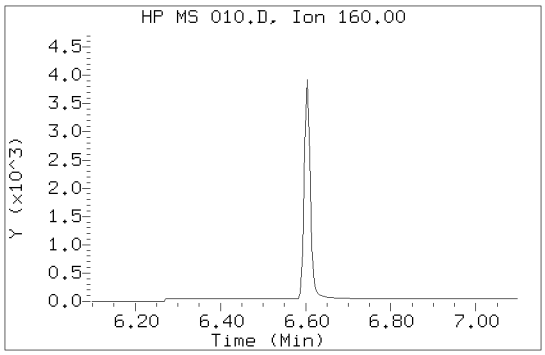
BEFORE

MASS
160
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
160
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



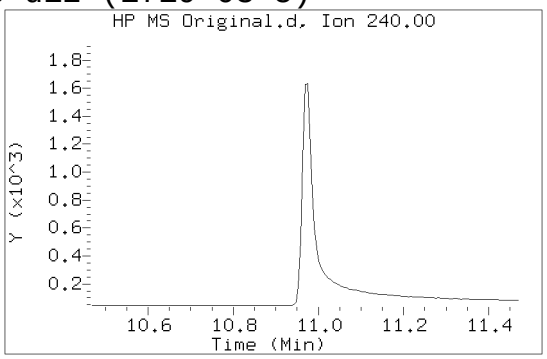
Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\010.D
Inj Date : 10-MAR-2022 14:15
InstruID : SV6.i
LabSampID : 1 4 DX-ICV

Chrysene-d12 (1719-03-5)

Reason Code:

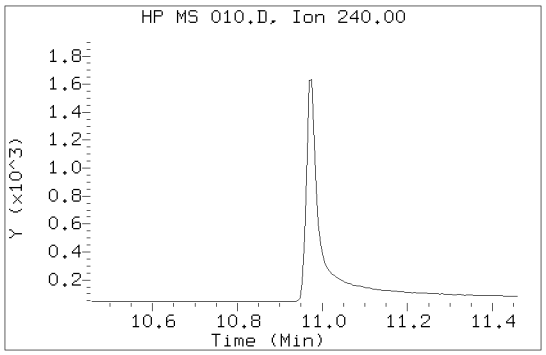
BEFORE

MASS
240
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



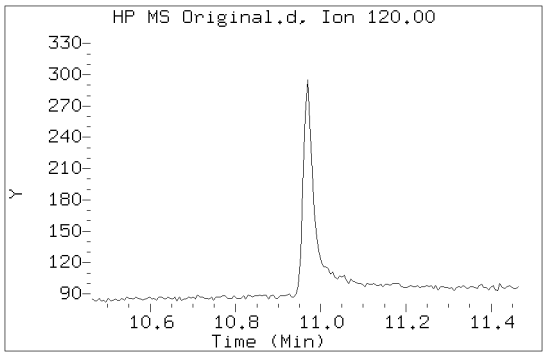
AFTER

MASS
240
AREA
6319
HEIGHT
1596
25-Aug-2022
16:08
linh
pham



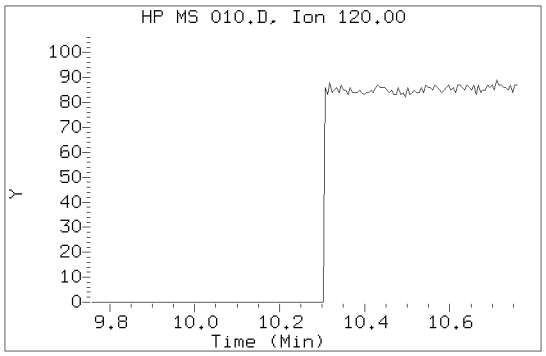
BEFORE

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



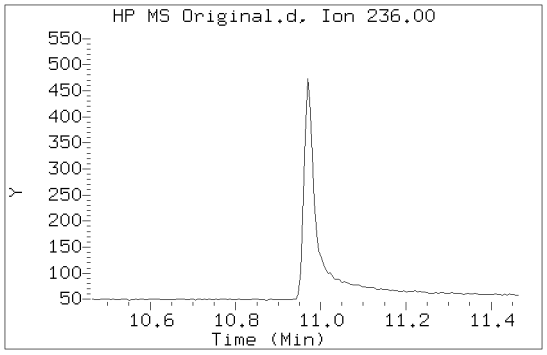
AFTER

MASS
120
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



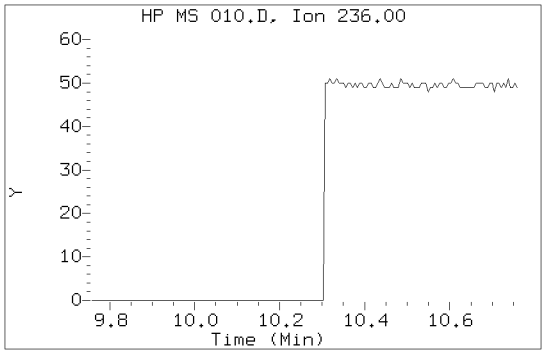
BEFORE

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER

MASS
236
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

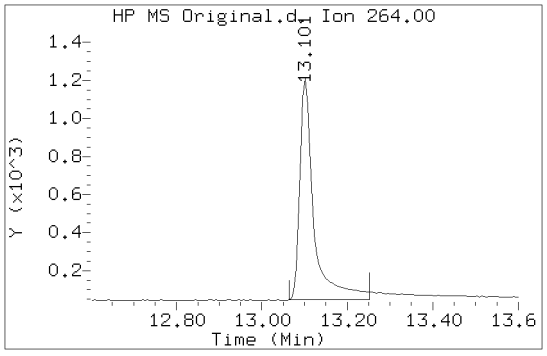


Perylene-d12 (1520-96-3)

Reason Code:

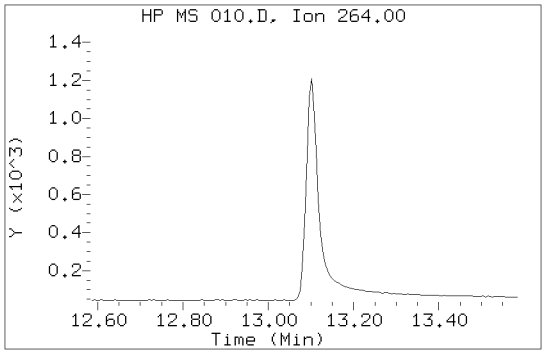
BEFORE

MASS
264
AREA
2659
HEIGHT
1162
25-Aug-2022
16:04
linh
pham



AFTER

MASS
264
AREA
4163
HEIGHT
1174
25-Aug-2022
16:08
linh
pham

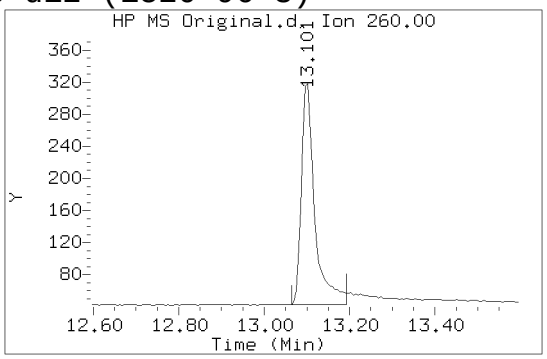


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\010.D
Inj Date : 10-MAR-2022 14:15
InstruID : SV6.i
LabSampID : 1 4 DX-ICV

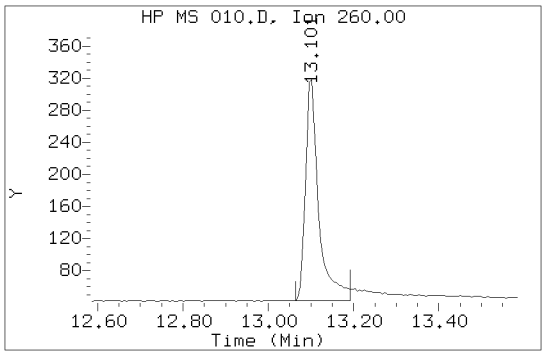
Perylene-d12 (1520-96-3)

Reason Code:

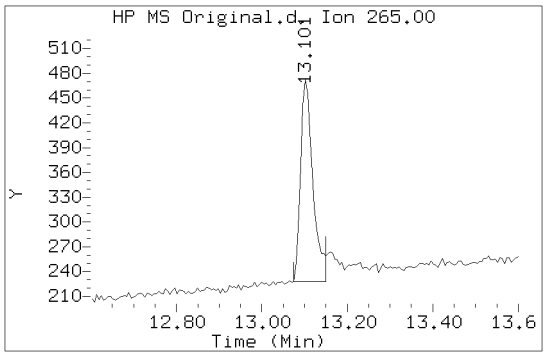
BEFORE
MASS
260
AREA
598
HEIGHT
275
25-Aug-2022
16:04
linh
pham



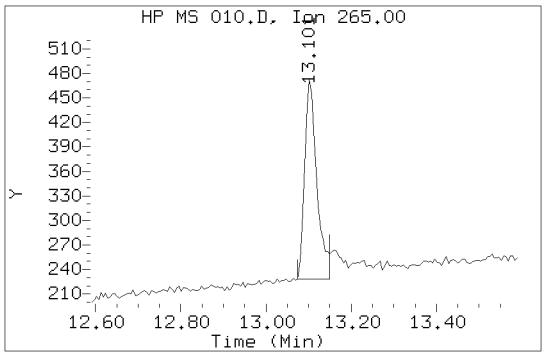
AFTER
MASS
260
AREA
598
HEIGHT
275
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
265
AREA
490
HEIGHT
244
25-Aug-2022
16:04
linh
pham



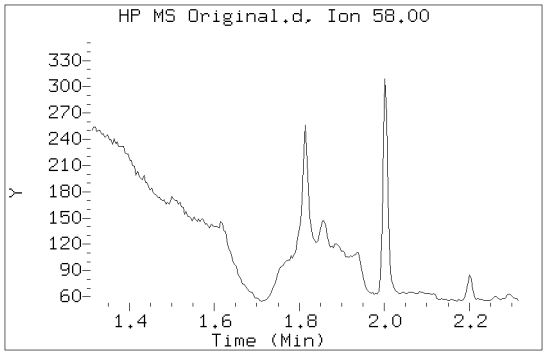
AFTER
MASS
265
AREA
490
HEIGHT
244
25-Aug-2022
16:08
linh
pham



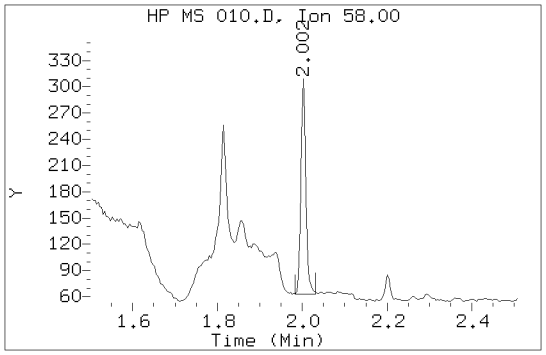
1,4-Dioxane ()

Reason Code:

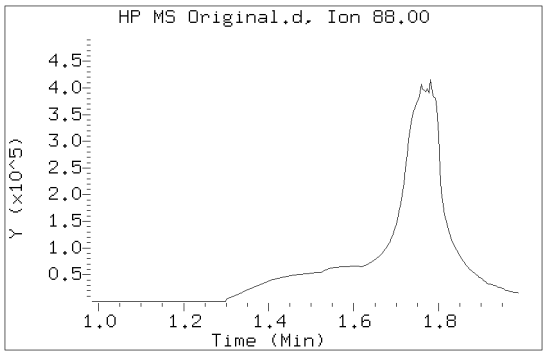
BEFORE
MASS
58
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



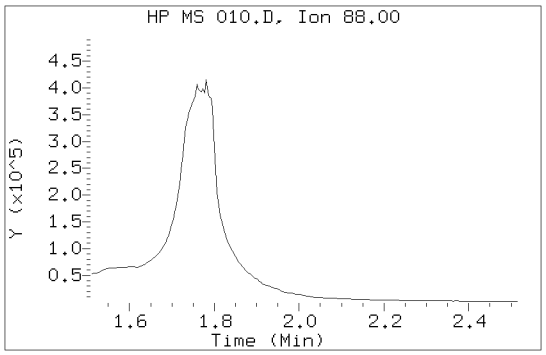
AFTER
MASS
58
AREA
203
HEIGHT
246
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
88
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham

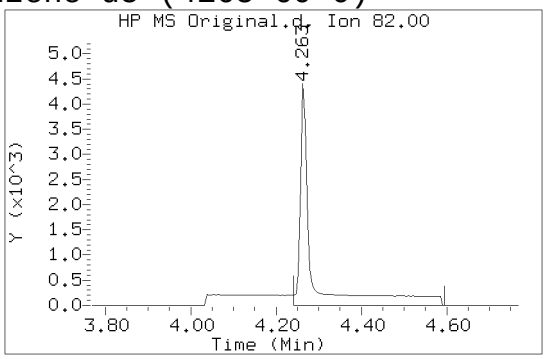


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\010.D
Inj Date : 10-MAR-2022 14:15
InstruID : SV6.i
LabSampID : 1 4 DX-ICV

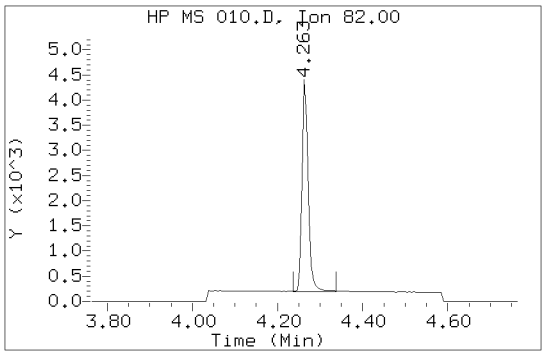
Nitrobenzene-d5 (4165-60-0)

Reason Code:

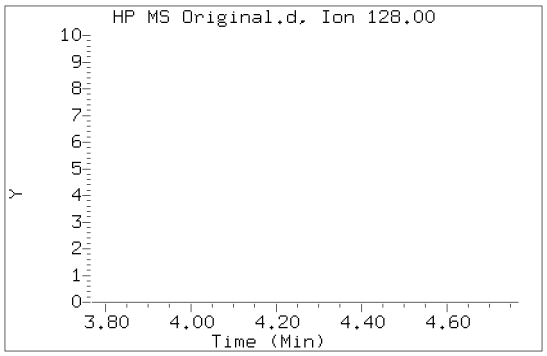
BEFORE
MASS
82
AREA
8115
HEIGHT
4405
25-Aug-2022
16:04
linh
pham



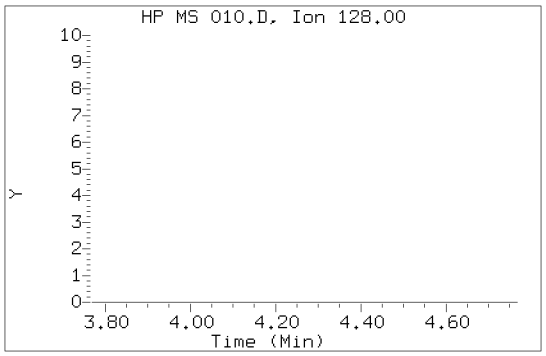
AFTER
MASS
82
AREA
4156
HEIGHT
4208
25-Aug-2022
16:08
linh
pham



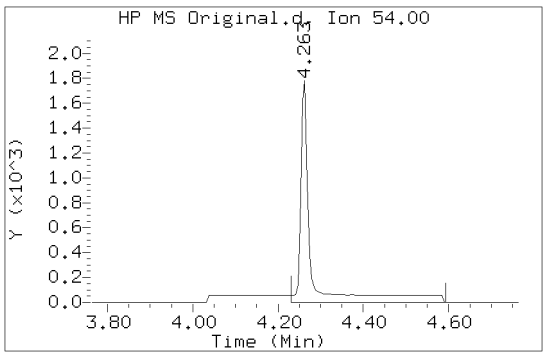
BEFORE
MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



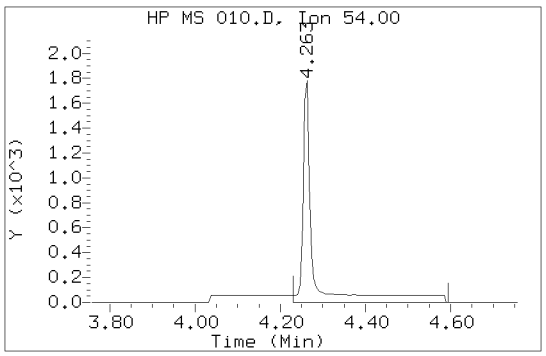
AFTER
MASS
128
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
54
AREA
2997
HEIGHT
1781
25-Aug-2022
16:04
linh
pham



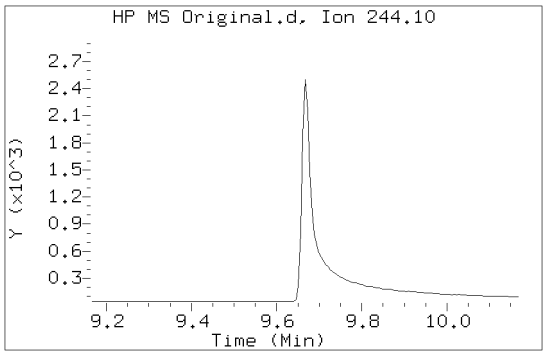
AFTER
MASS
54
AREA
2997
HEIGHT
1781
25-Aug-2022
16:08
linh
pham



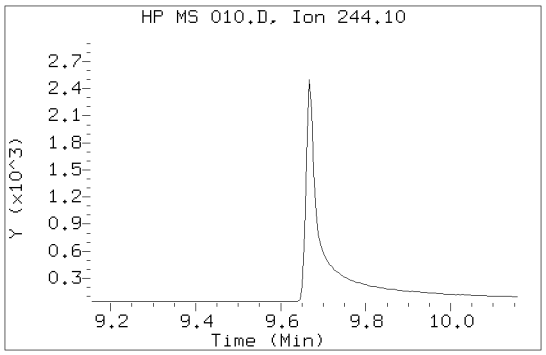
4-Terphenyl-d14 (1718-51-0)

Reason Code:

BEFORE
MASS
244.1
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



AFTER
MASS
244.1
AREA
7838
HEIGHT
2457
25-Aug-2022
16:08
linh
pham

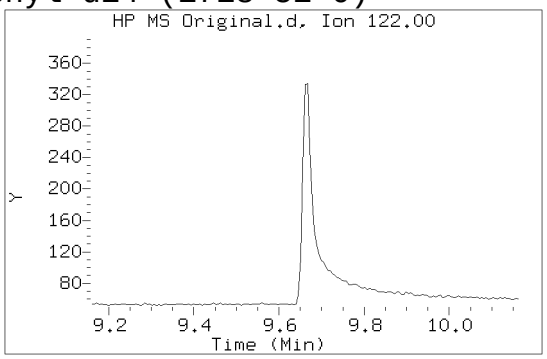


Data File : \\NAHSTWS005\Target\chem\SV6.i\220310.b\010.D
Inj Date : 10-MAR-2022 14:15
InstruID : SV6.i
LabSampID : 1 4 DX-ICV

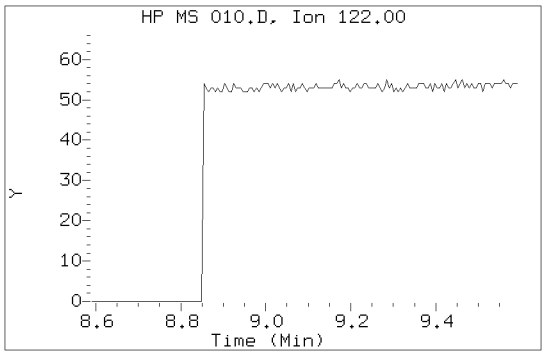
4-Terphenyl-d14 (1718-51-0)

Reason Code:

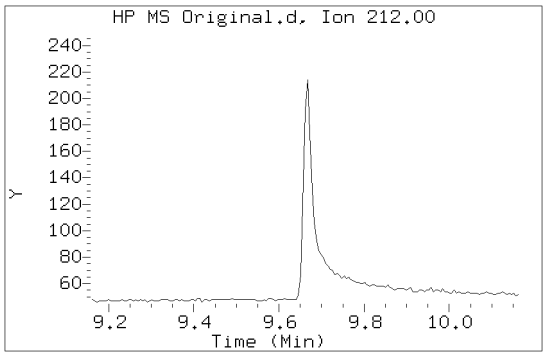
BEFORE
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



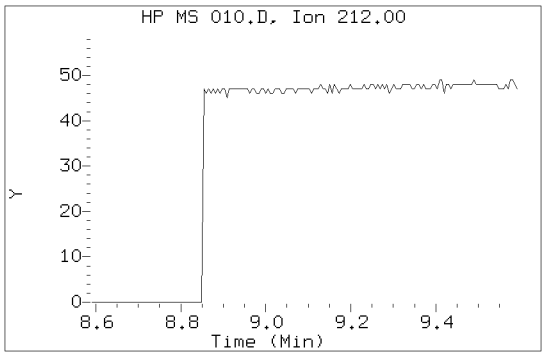
AFTER
MASS
122
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:04
linh
pham



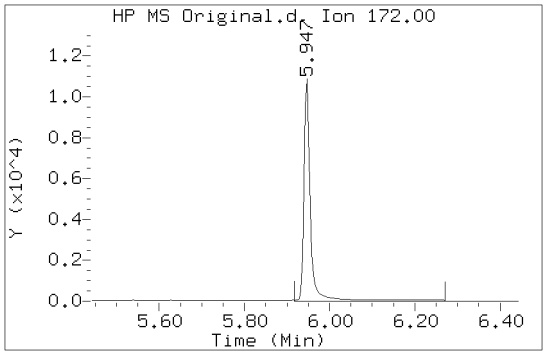
AFTER
MASS
212
AREA
0
HEIGHT
0
25-Aug-2022
16:08
linh
pham



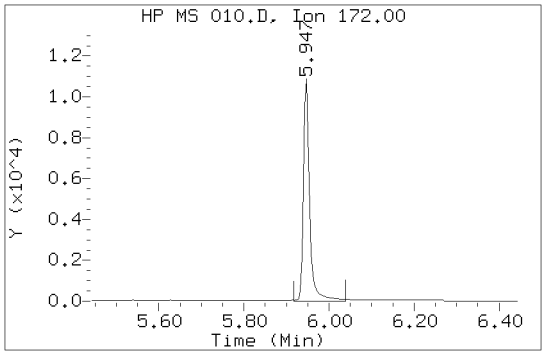
2-Fluorobiphenyl (321-60-8)

Reason Code:

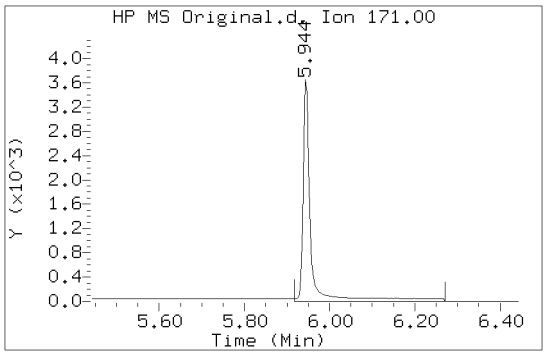
BEFORE
MASS
172
AREA
11965
HEIGHT
10878
25-Aug-2022
16:04
linh
pham



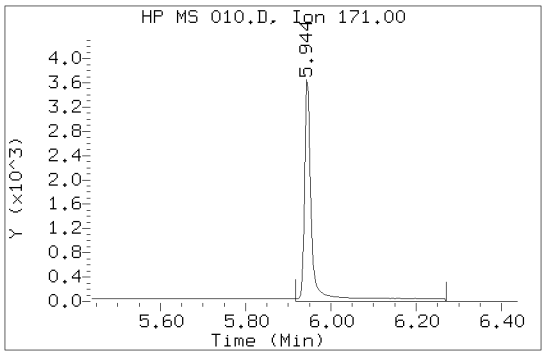
AFTER
MASS
172
AREA
11167
HEIGHT
10878
25-Aug-2022
16:08
linh
pham



BEFORE
MASS
171
AREA
4702
HEIGHT
3651
25-Aug-2022
16:04
linh
pham



AFTER
MASS
171
AREA
4702
HEIGHT
3651
25-Aug-2022
16:08
linh
pham



right solutions.
right partner.

Raw Data SV-6 415764

Workorder

HS22080522

Client

Bhate Environmental Associates, Inc.

Project

LHAAP 18 24

08/30/2022

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\01.D

Date : 23-AUG-2022 09:33

Client ID: DFTPP

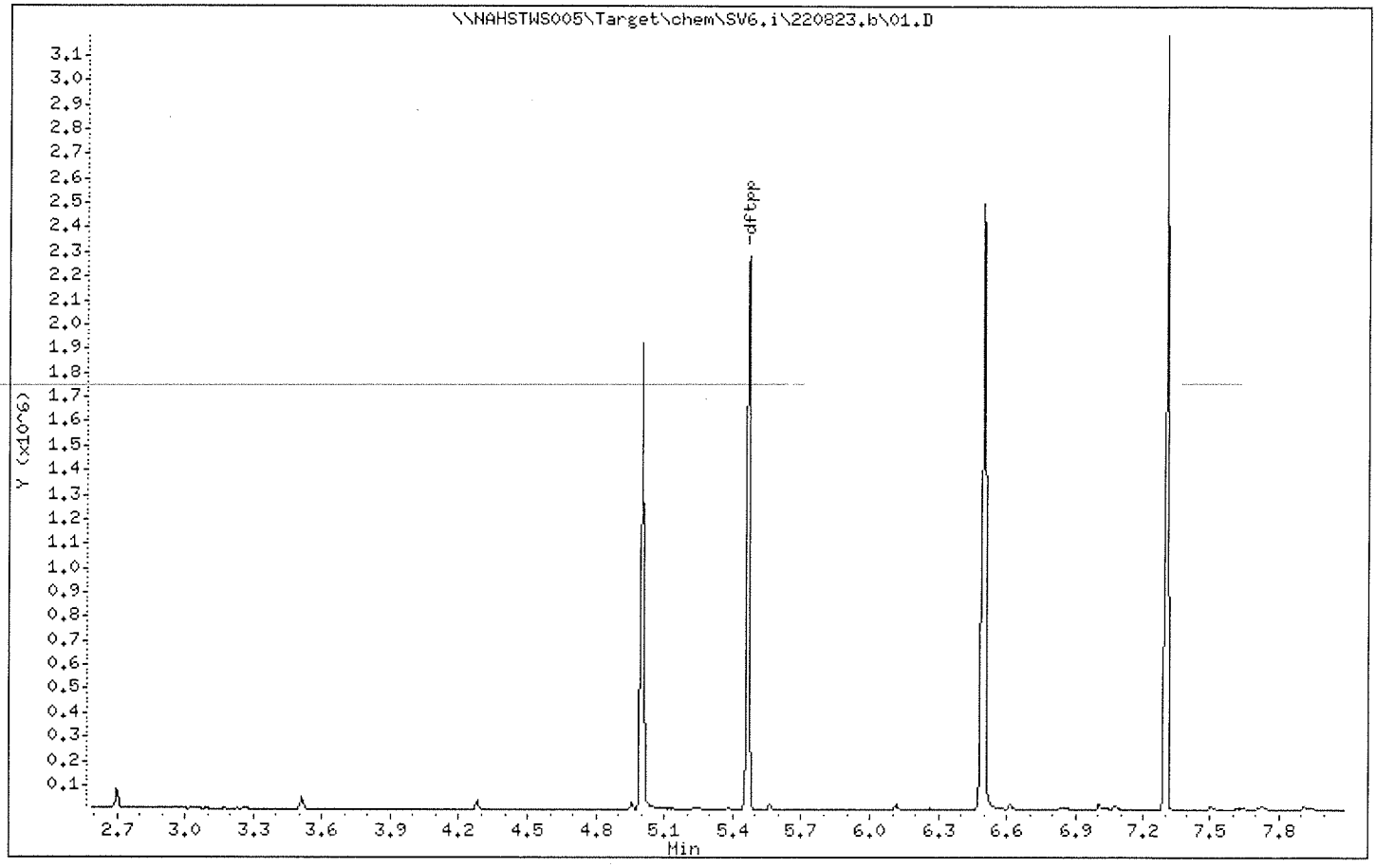
Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\01.D

Date : 23-AUG-2022 09:33

Client ID: DFTPP

Instrument: SV6.i

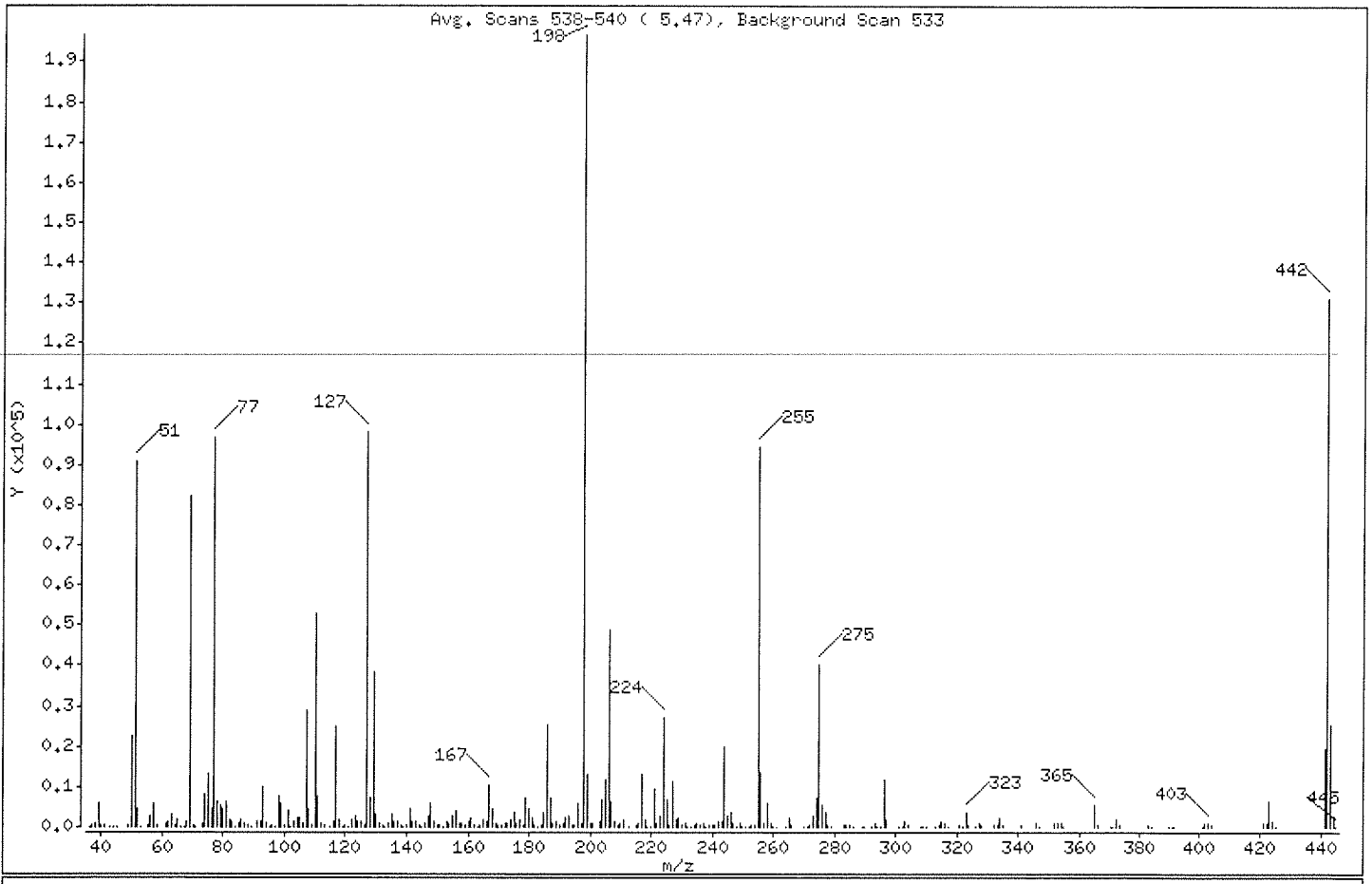
Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	46.31
68	Less than 2.00% of mass 69	0.59 (1.41)
69	Mass 69 relative abundance	41.75
70	Less than 2.00% of mass 69	0.21 (0.50)
127	10.00 - 80.00% of mass 198	49.98
197	Less than 2.00% of mass 198	0.57
199	5.00 - 9.00% of mass 198	6.67
275	10.00 - 60.00% of mass 198	20.40
365	1.00 - 100.00% of mass 198	2.67
441	Present, but less than mass 443	9.93
442	50.00 - 150.00% of mass 198	66.75
443	15.00 - 24.00% of mass 442	12.79 (19.16)

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\01.D

Date : 23-AUG-2022 09:33

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 01.D

Spectrum: Avg. Scans 538-540 (5.47), Background Scan 533

Location of Maximum: 198.00

Number of points: 293

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	71	120.00	367	194.00	571	276.00	5207
37.00	372	121.00	130	195.00	382	277.00	3419
38.00	960	122.00	1761	196.00	5711	278.00	533
39.00	5917	123.00	2799	197.00	1124	279.00	73
40.00	255	124.00	1289	198.00	196544	283.00	423
41.00	231	125.00	1232	199.00	13108	284.00	269
43.00	108	126.00	419	200.00	947	285.00	618
44.00	39	127.00	98240	201.00	865	286.00	53
45.00	175	128.00	7138	203.00	1351	289.00	74
49.00	514	129.00	38368	204.00	6834	290.00	62
50.00	22528	130.00	3289	205.00	11717	292.00	181
51.00	91024	131.00	722	206.00	48912	293.00	793
52.00	4378	132.00	304	207.00	6122	294.00	163
53.00	165	133.00	186	208.00	1503	295.00	184
55.00	409	134.00	1076	209.00	502	296.00	11552
56.00	2576	135.00	3063	210.00	743	297.00	1717
57.00	5964	136.00	1261	211.00	1795	301.00	61
58.00	283	137.00	1357	213.00	117	302.00	165
61.00	1004	138.00	288	215.00	525	303.00	1347
62.00	1170	139.00	171	216.00	1006	304.00	311
63.00	3200	140.00	476	217.00	12913	308.00	144
64.00	399	141.00	4712	218.00	1603	309.00	50
65.00	1631	142.00	1517	219.00	205	310.00	143
66.00	50	143.00	1136	220.00	85	313.00	50
67.00	59	144.00	231	221.00	9563	314.00	539
68.00	1160	145.00	224	222.00	968	315.00	1290
69.00	82048	146.00	753	223.00	2928	316.00	717
70.00	407	147.00	2514	224.00	27192	317.00	70
71.00	53	148.00	5897	225.00	6745	321.00	371
73.00	698	149.00	1148	226.00	662	322.00	175
74.00	8269	150.00	271	227.00	11386	323.00	3679
75.00	12928	151.00	654	228.00	1586	324.00	641
76.00	4546	152.00	184	229.00	2265	326.00	52
77.00	96640	153.00	1528	230.00	291	327.00	713
78.00	6146	154.00	1124	231.00	914	328.00	375

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\01.D

Date : 23-AUG-2022 09:33

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 01.D
Spectrum: Avg. Scans 538-540 (5.47), Background Scan 533
Location of Maximum: 198.00
Number of points: 293

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	5514	155.00	2645	232.00	154	332.00	231
80.00	4336	156.00	3901	233.00	189	333.00	376
81.00	6503	157.00	781	234.00	656	334.00	2328
82.00	1587	158.00	741	235.00	826	335.00	529
83.00	1517	159.00	561	236.00	538	341.00	419
84.00	96	160.00	1544	237.00	818	346.00	805
85.00	1077	161.00	2254	238.00	50	347.00	60
86.00	1653	162.00	567	239.00	405	352.00	1074
87.00	800	163.00	170	240.00	272	353.00	737
88.00	342	164.00	237	241.00	537	354.00	1105
89.00	139	165.00	1758	242.00	1366	355.00	152
91.00	1388	166.00	1375	243.00	1287	365.00	5245
92.00	1550	167.00	10546	244.00	19952	366.00	653
93.00	10129	168.00	4441	245.00	2596	370.00	70
94.00	705	169.00	739	246.00	3797	371.00	202
95.00	189	170.00	245	247.00	784	372.00	1775
96.00	478	171.00	397	248.00	153	373.00	451
97.00	185	172.00	871	249.00	696	383.00	558
98.00	7864	173.00	1122	250.00	147	384.00	62
99.00	5741	174.00	1950	251.00	183	390.00	200
100.00	511	175.00	3761	252.00	220	391.00	83
101.00	3864	176.00	1080	253.00	448	392.00	62
102.00	186	177.00	1712	254.00	672	401.00	56
103.00	1159	178.00	554	255.00	94248	402.00	786
104.00	2188	179.00	7321	256.00	13638	403.00	1053
105.00	2068	180.00	4741	257.00	971	404.00	346
106.00	727	181.00	2356	258.00	5933	421.00	862
107.00	28824	182.00	322	259.00	870	422.00	835
108.00	4345	183.00	172	260.00	137	423.00	6425
109.00	644	184.00	516	261.00	153	424.00	1207
110.00	52784	185.00	3436	264.00	214	425.00	51
111.00	7830	186.00	25456	265.00	2398	441.00	19512
112.00	966	187.00	7025	266.00	469	442.00	131200
113.00	302	188.00	711	270.00	72	443.00	25136
115.00	50	189.00	1539	271.00	199	444.00	2181

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\01.D

Date : 23-AUG-2022 09:33

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 01.D

Spectrum: Avg. Scans 538-540 (5.47), Background Scan 533

Location of Maximum: 198.00

Number of points: 293

m/z	Y	m/z	Y	m/z	Y	m/z	Y
116.00	1474	190.00	266	272.00	257	445.00	58
117.00	24712	191.00	688	273.00	2833		
118.00	1761	192.00	2347	274.00	7258		
119.00	199	193.00	2642	275.00	40104		

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D Page 1
Report Date: 25-Aug-2022 16:19

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Lab Smp Id: 1 4DIOX-CCV Client Smp ID: 1 4DIOX-CCV
Inj Date : 23-AUG-2022 10:31
Operator : LG Inst ID: SV6.i
Smp Info : 1 4DIOX-0.08
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 25-Aug-2022 16:19 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	
* 20 1,4-Dichlorobenzene-d4	152	3.592	3.592	(1.000)	6003	0.10000		(aM)
* 45 Naphthalene-d8	136	4.705	4.705	(1.000)	15829	0.10000		(M)
$ 33 Nitrobenzene-d5	82	4.059	4.059	(0.863)	3958	0.08000	0.07501	(QM)
* 86 Acenaphthene-d10	164	6.376	6.376	(1.000)	7005	0.10000		(QM)
$ 69 2-Fluorobiphenyl	172	5.718	5.718	(0.897)	8702	0.08000	0.07981	(M)
* 126 Phenanthrene-d10	188	7.827	7.827	(1.000)	17339	0.10000		(M)
* 182 Chrysene-d12	240	10.657	10.657	(1.000)	7501	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.408	9.408	(0.883)	10691	0.08000	0.07581	(M)
* 198 Perylene-d12	264	12.724	12.724	(1.000)	5111	0.10000		
1 1,4-Dioxane	58	1.887	1.887	(0.525)	213	0.08000	0.08643	(aQM)

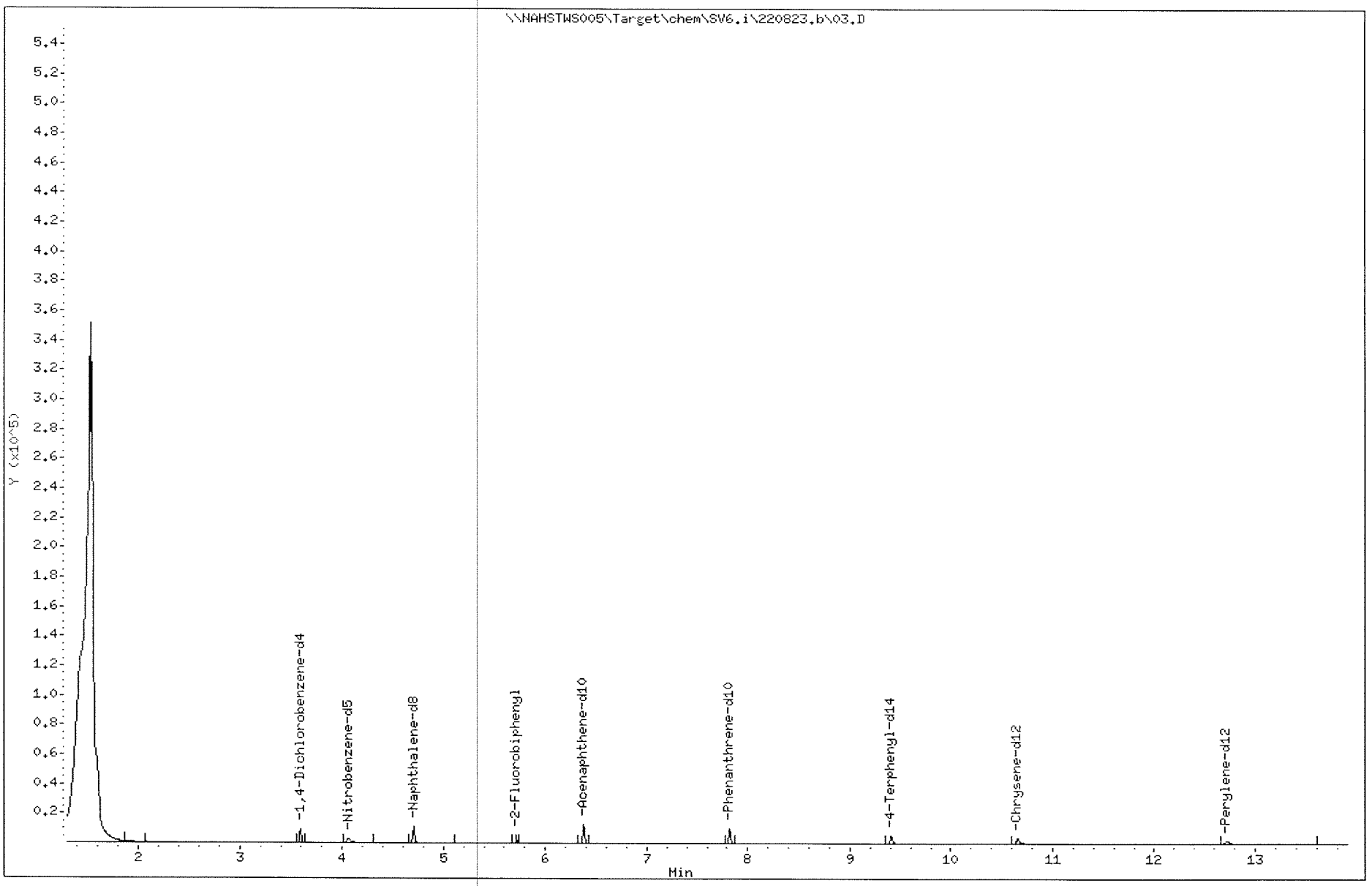
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01135348

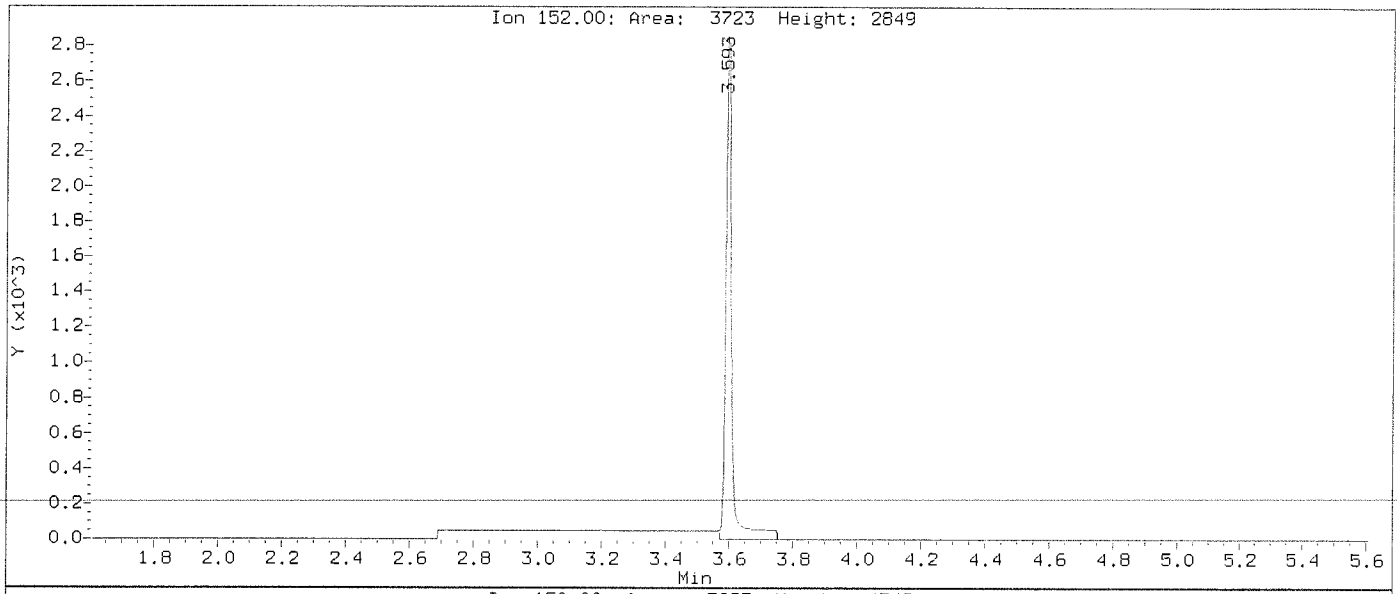
Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Date : 23-AUG-2022 10:31
Client ID: 1 4DIOX-CCV
Sample Info: 1 4DIOX-0.08
Purge Volume: 1000.0
Column phase: RTX-5SIL MS

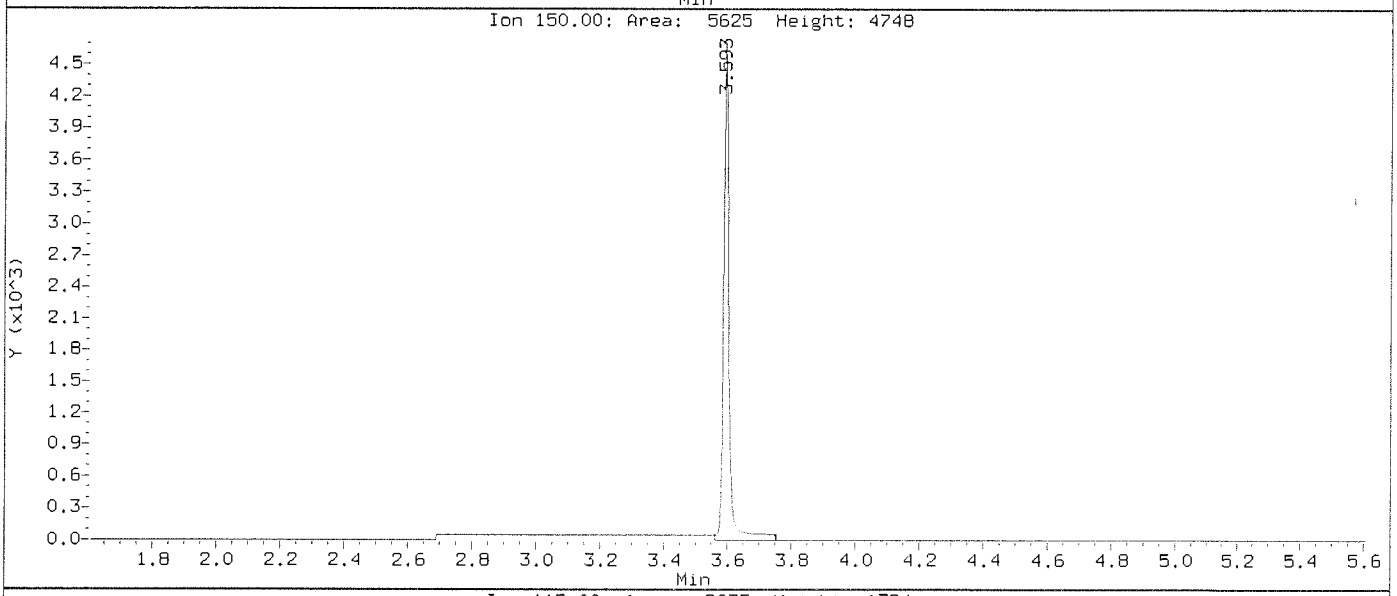
Instrument: SV6.i
Operator: LG
Column diameter: 0.28

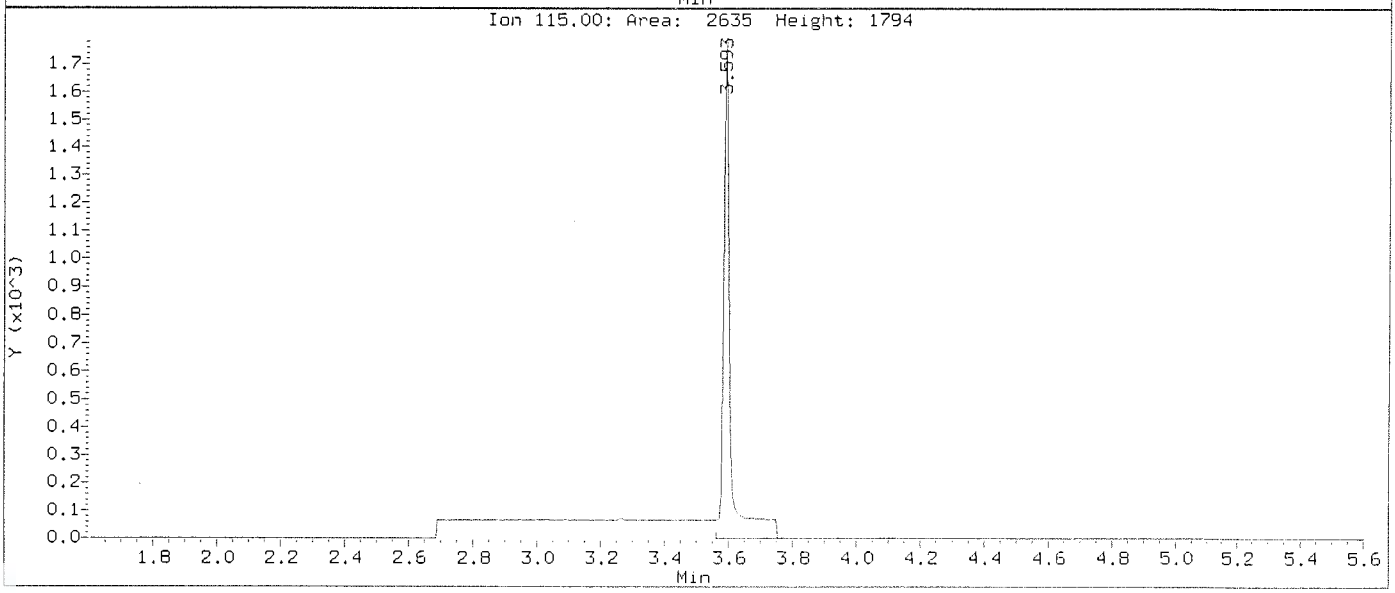


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\Before\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: 1,4-Dichlorobenzene-d4
CAS Number: 3855-82-1

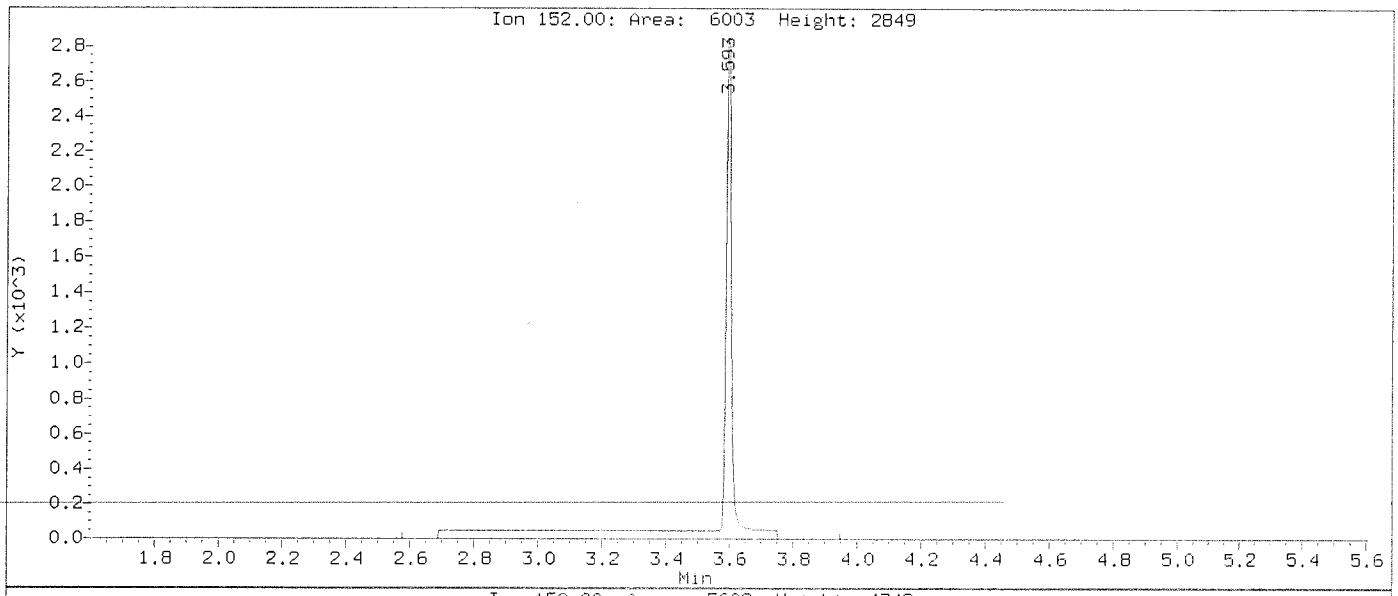


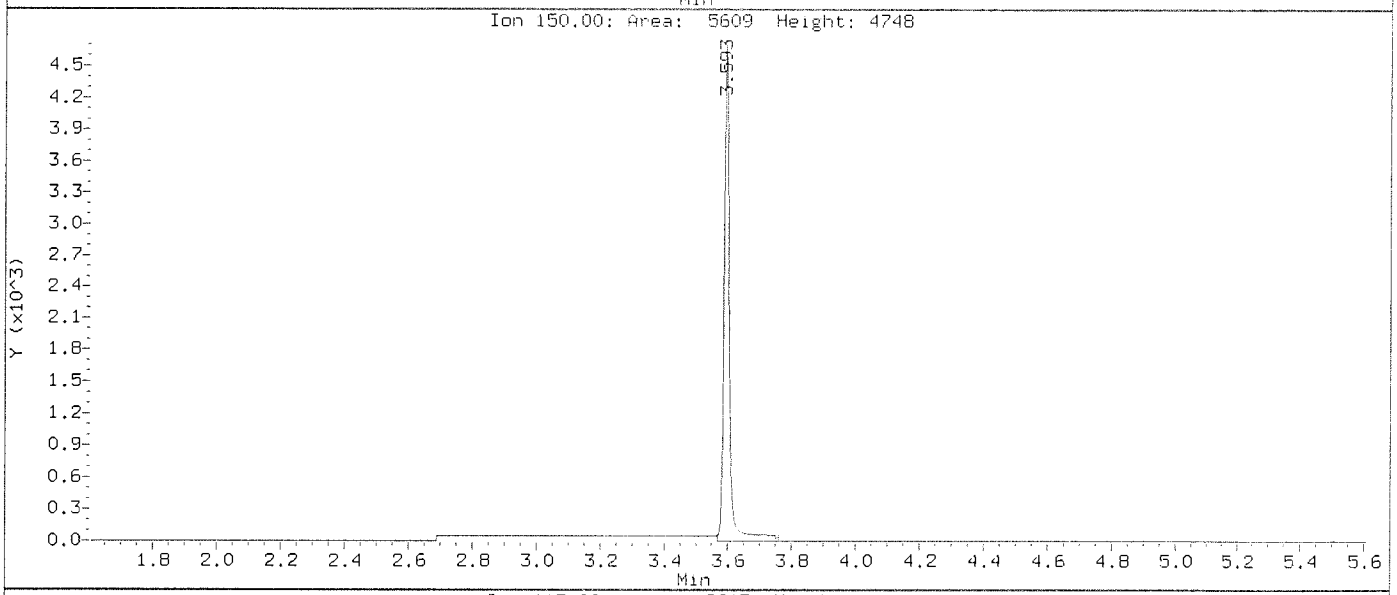


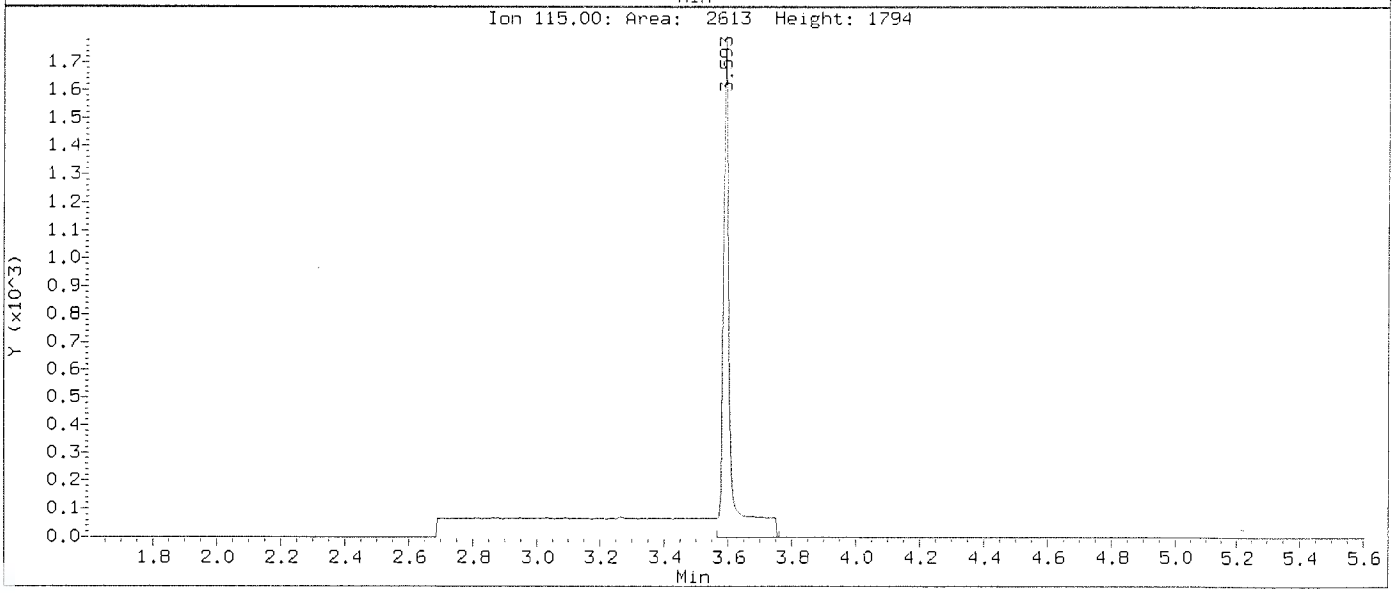


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: 1,4-Dichlorobenzene-d4
CAS Number: 3855-82-1

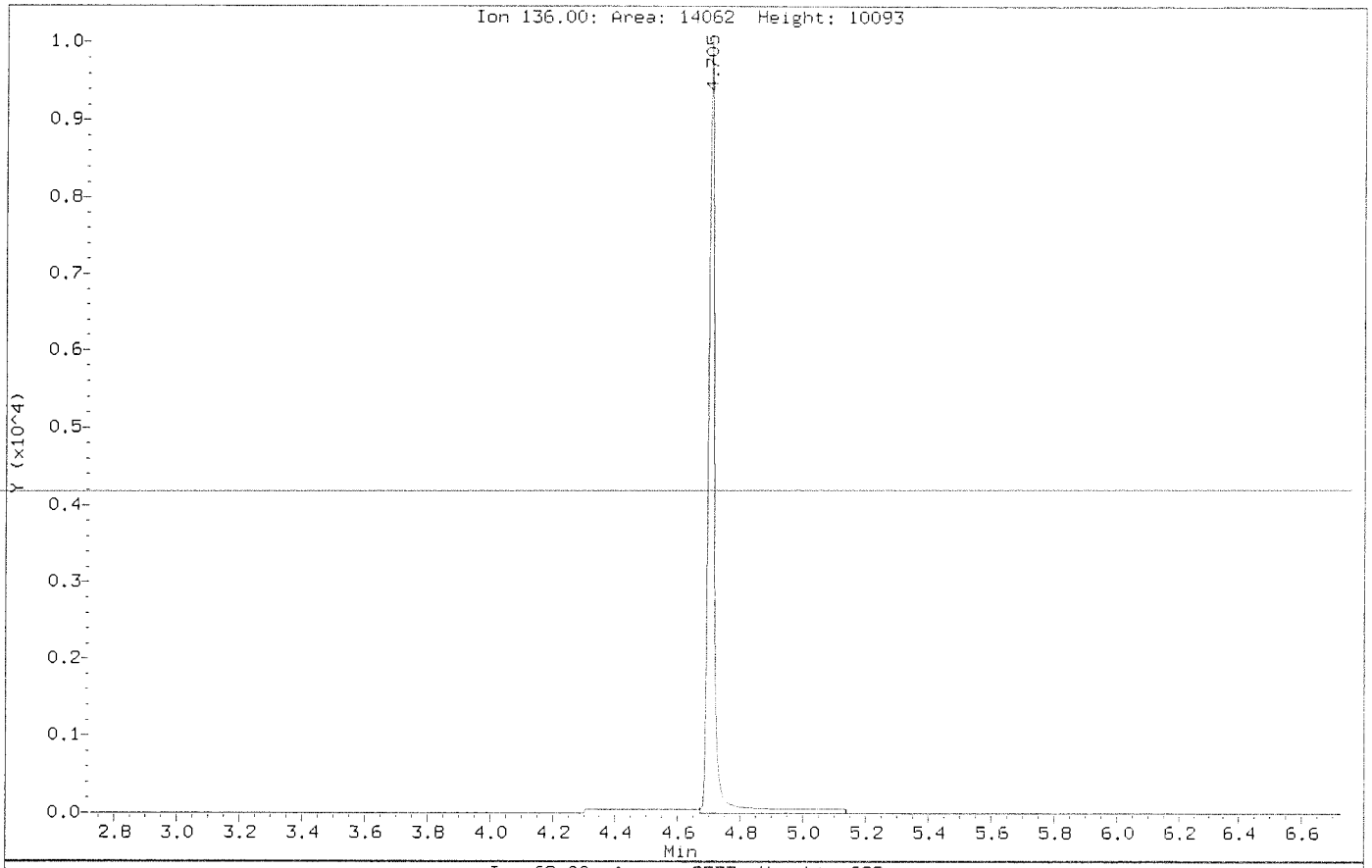


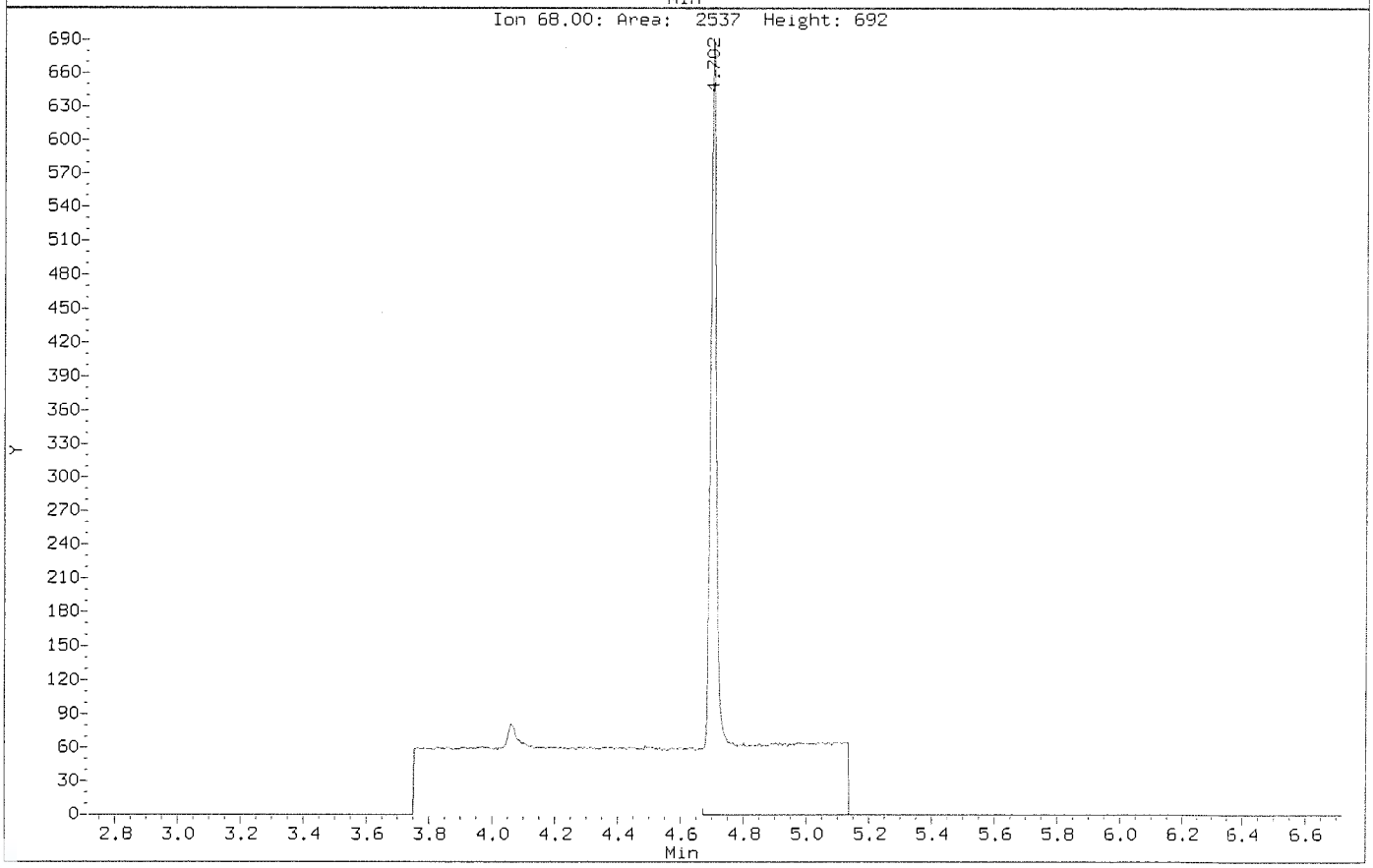




Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\Before\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

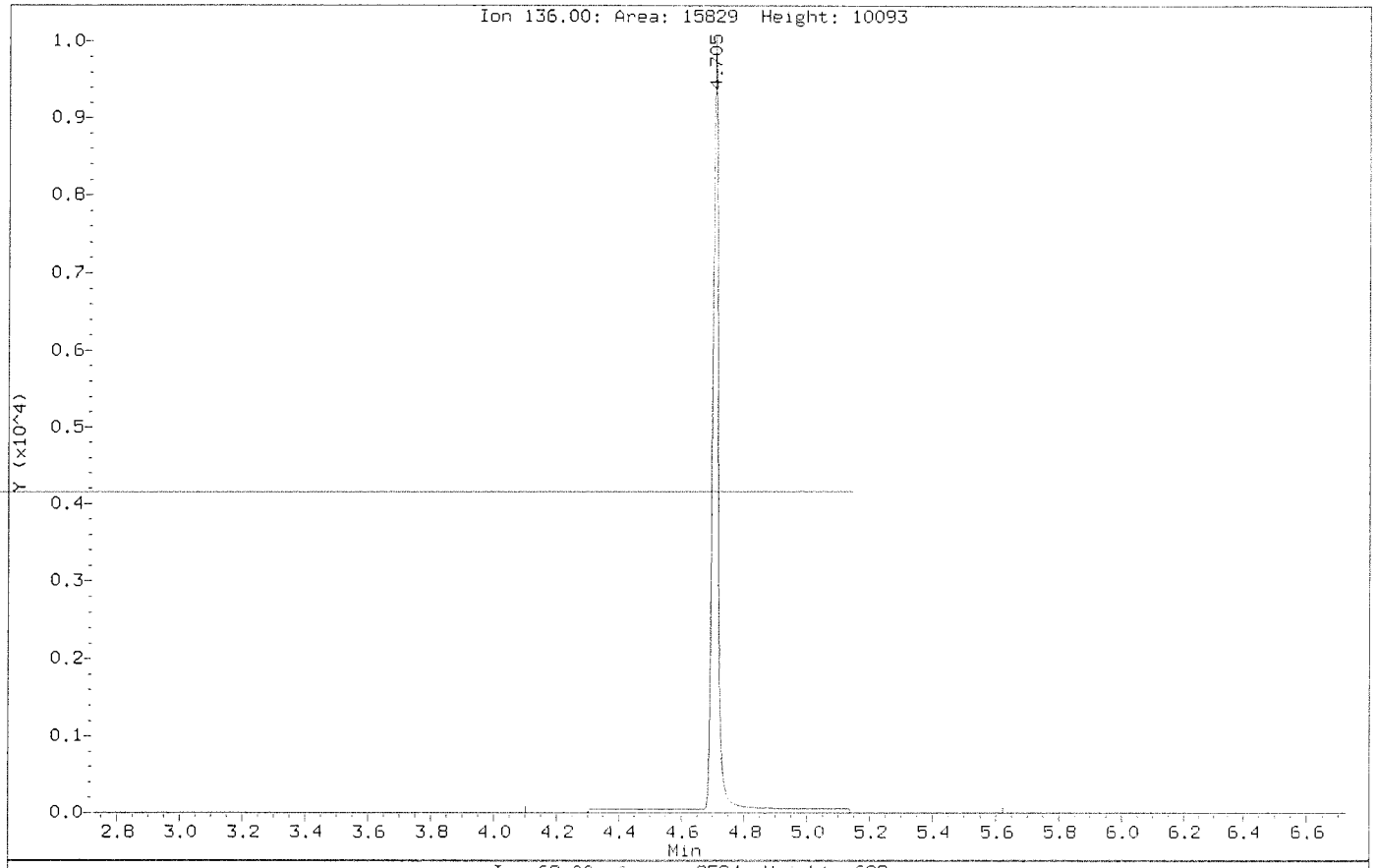
Compound: Naphthalene-d8
CAS Number: 1146-65-2

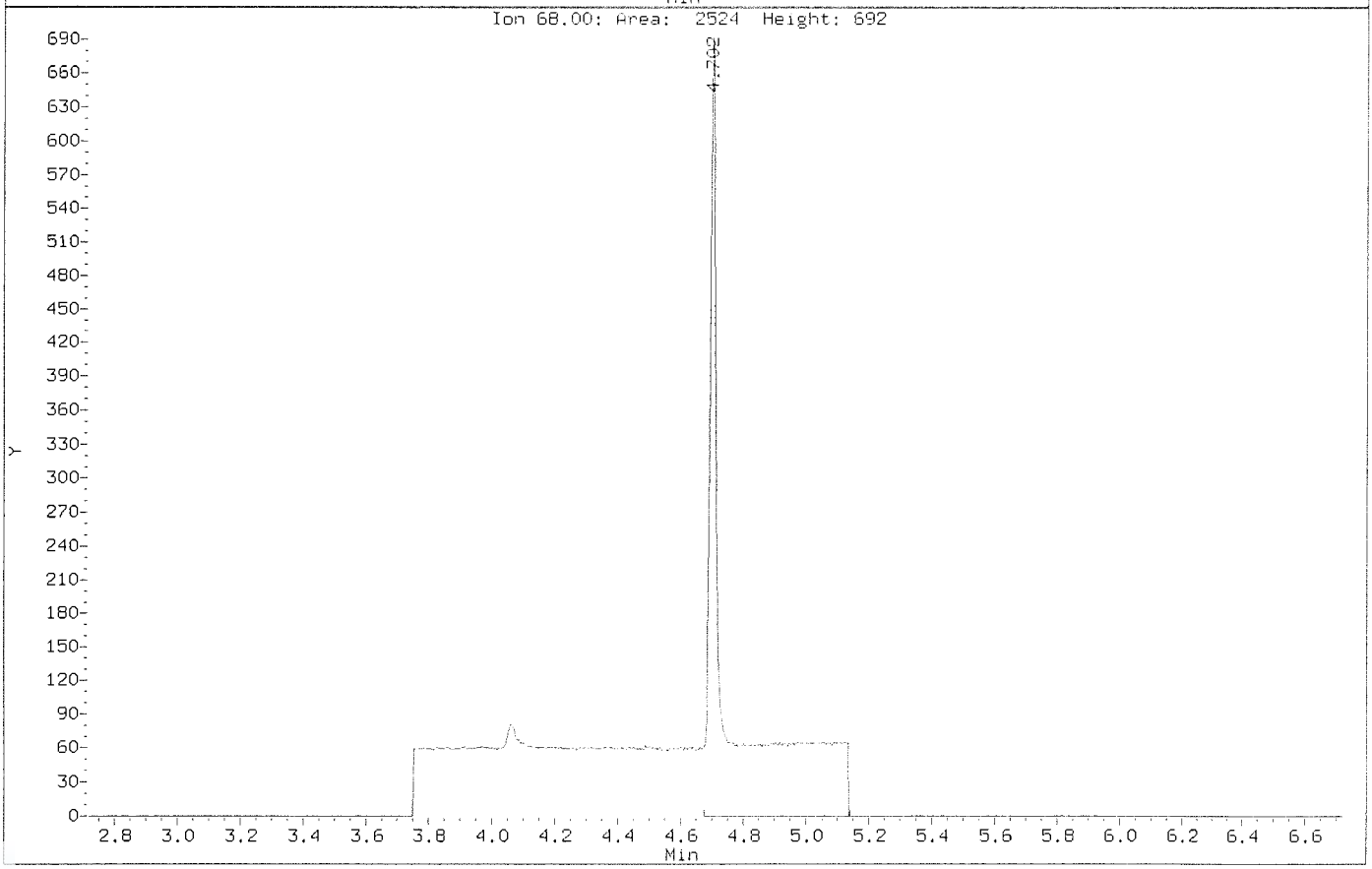




Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

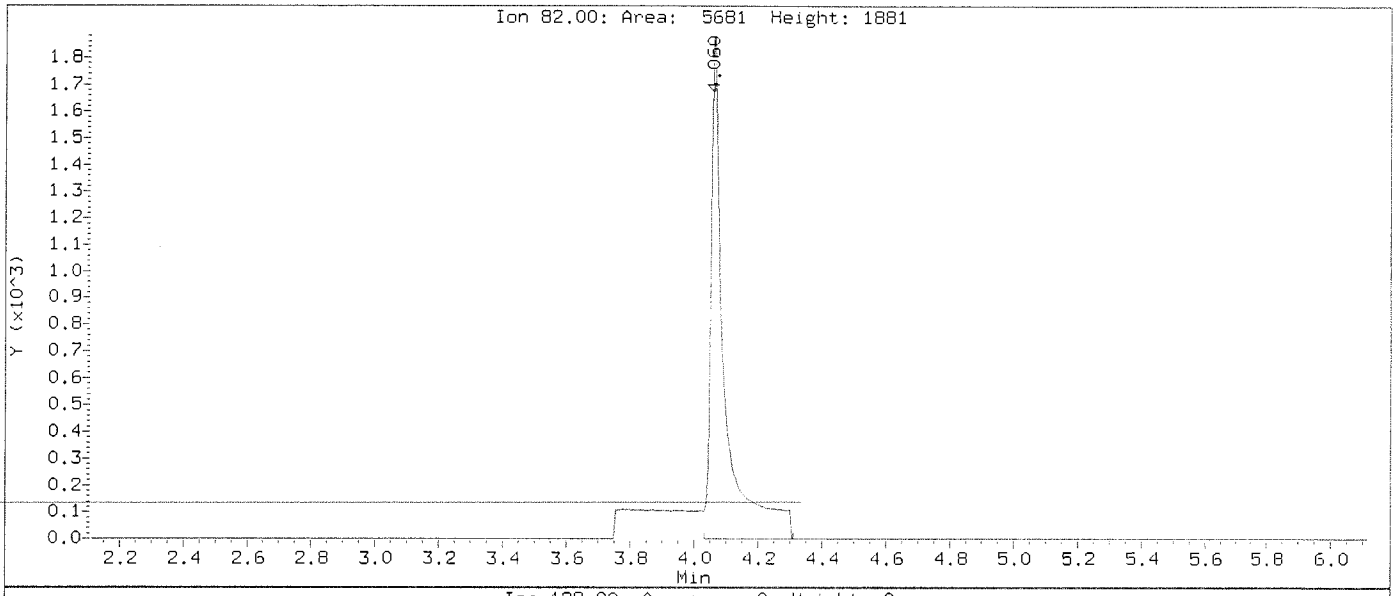
Compound: Naphthalene-d8
CAS Number: 1146-65-2

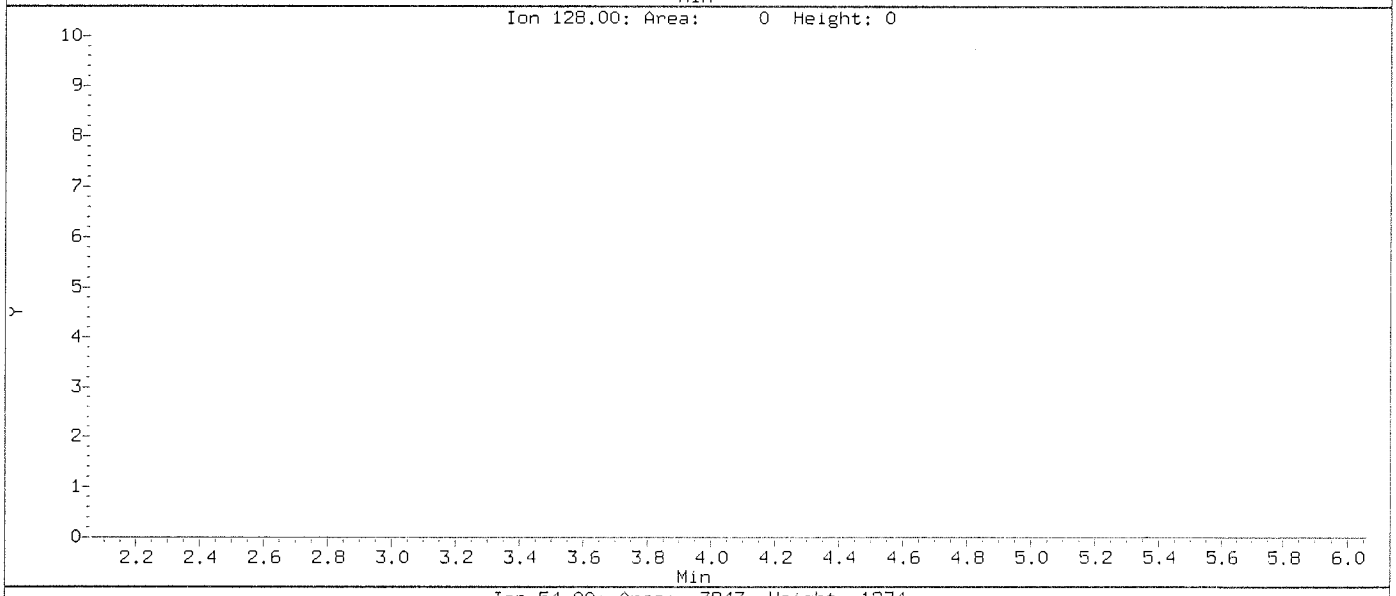


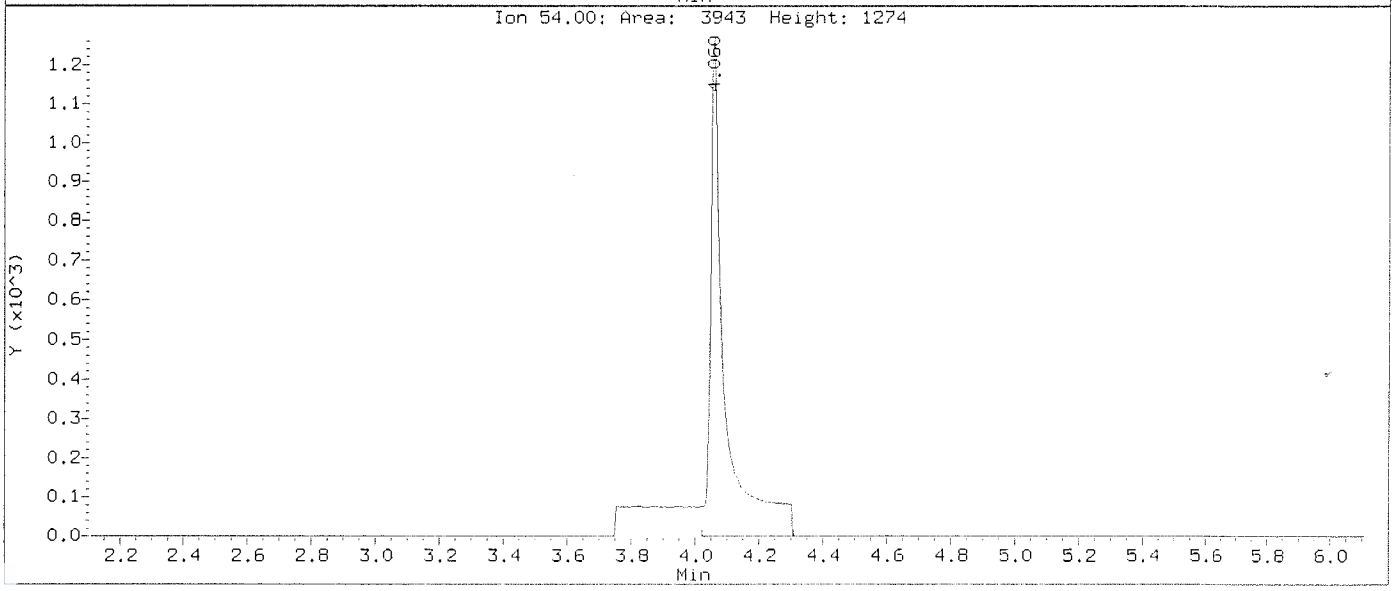


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\Before\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: Nitrobenzene-d5
CAS Number: 4165-60-0

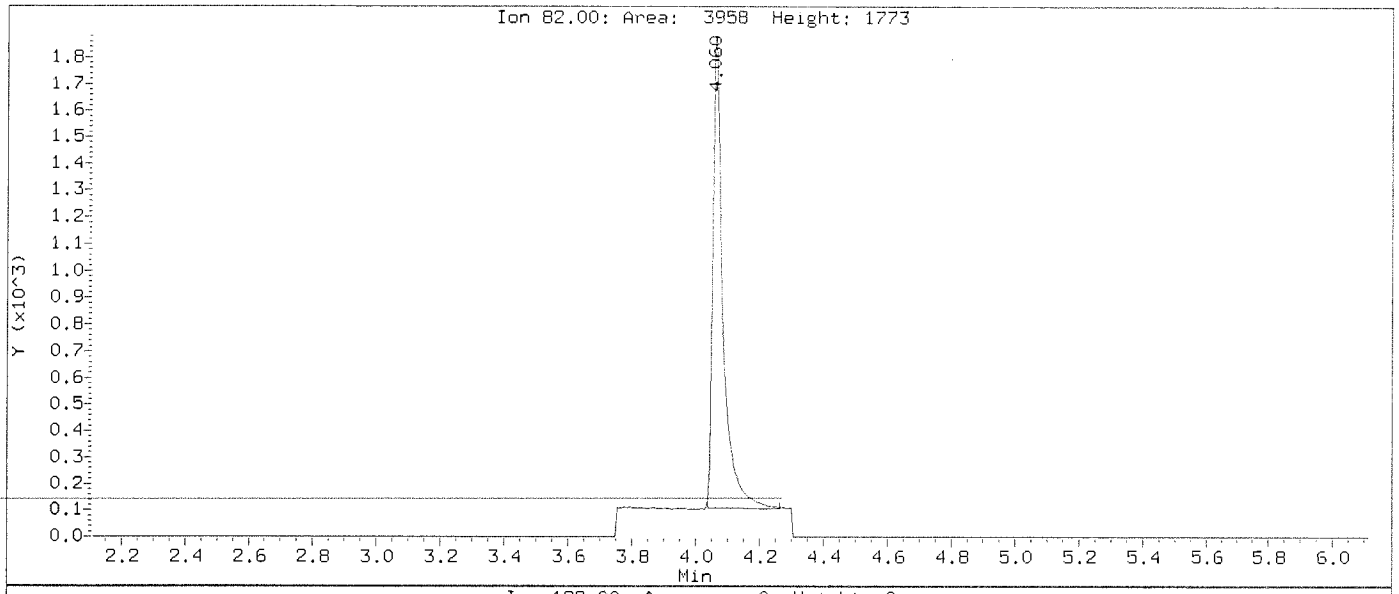


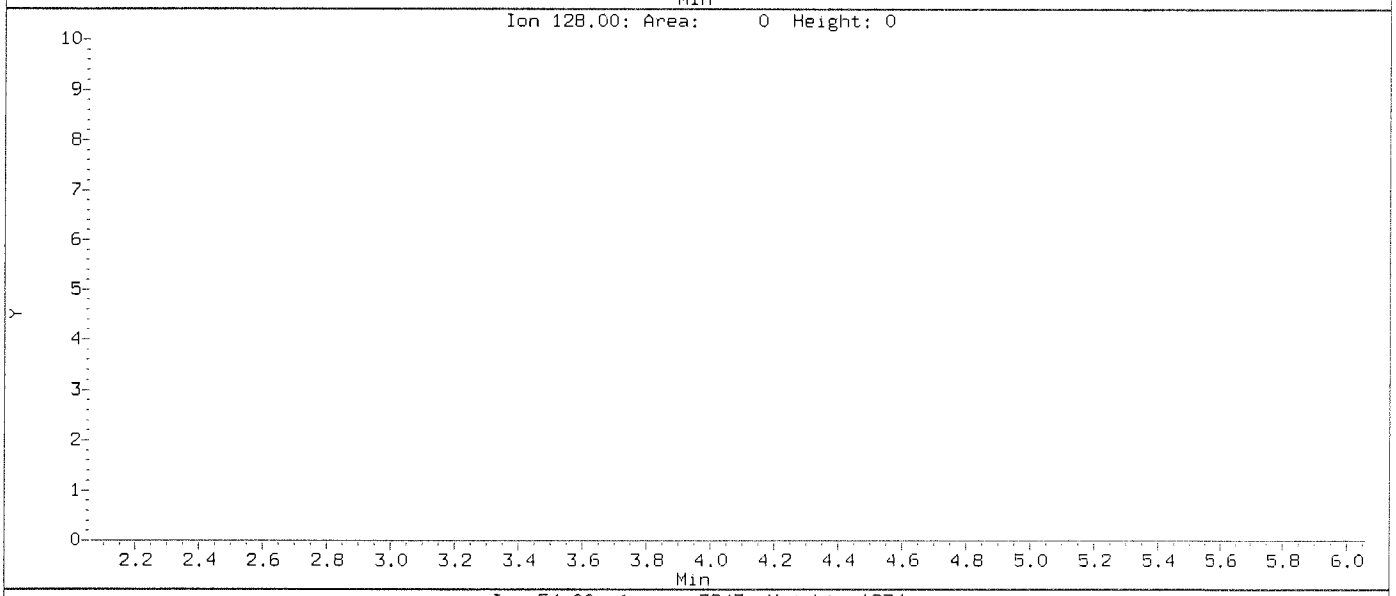


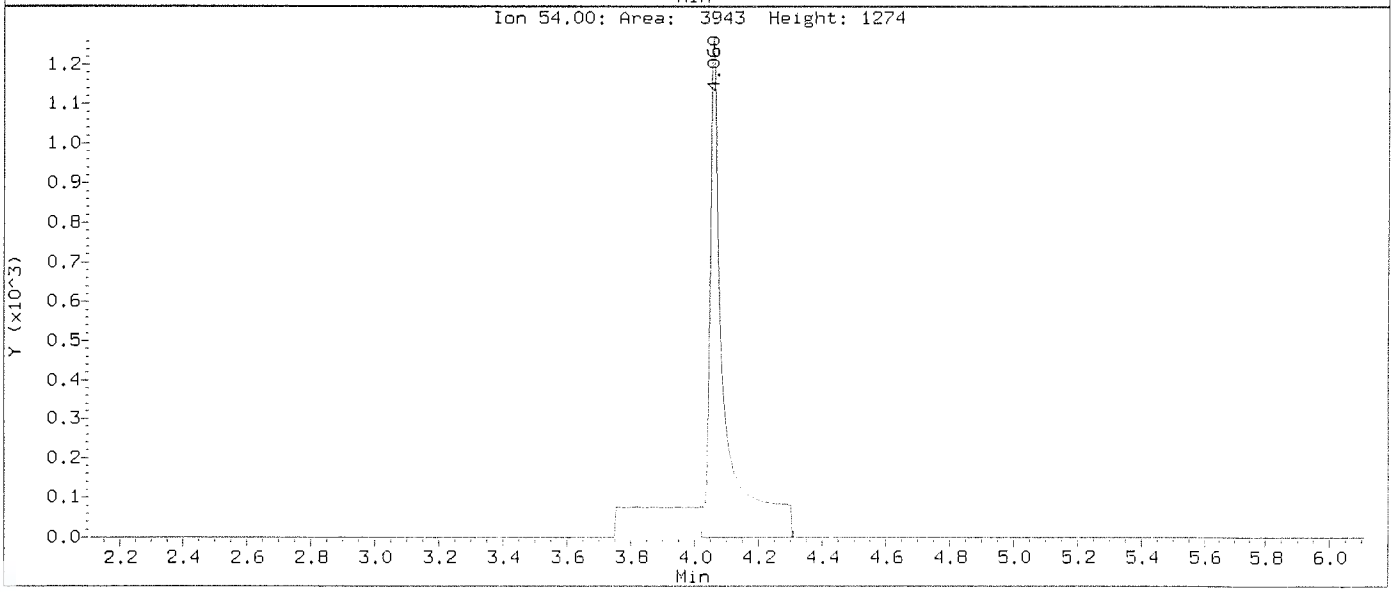


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: Nitrobenzene-d5
CAS Number: 4165-60-0

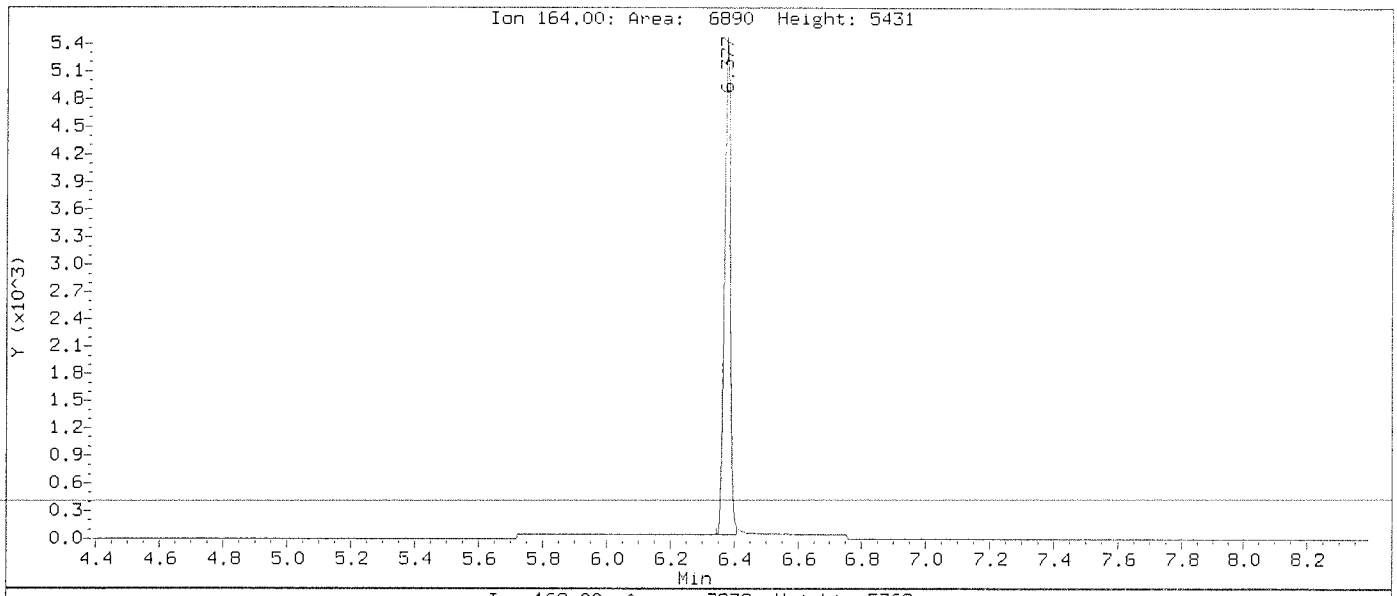


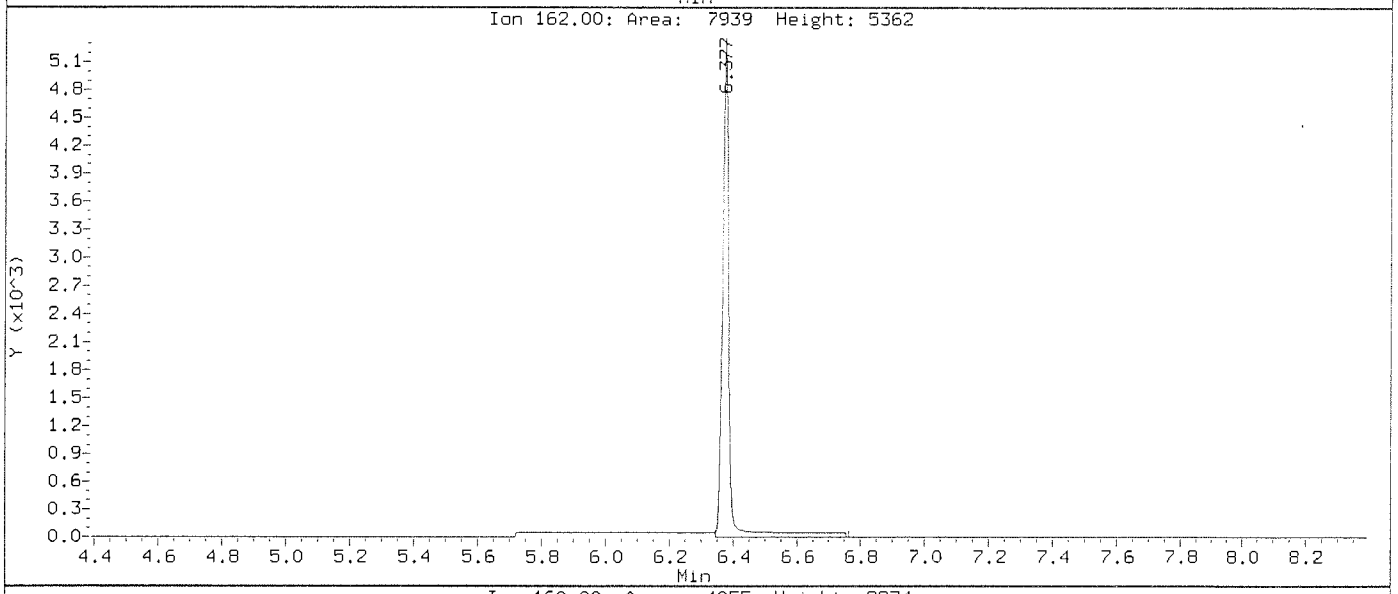


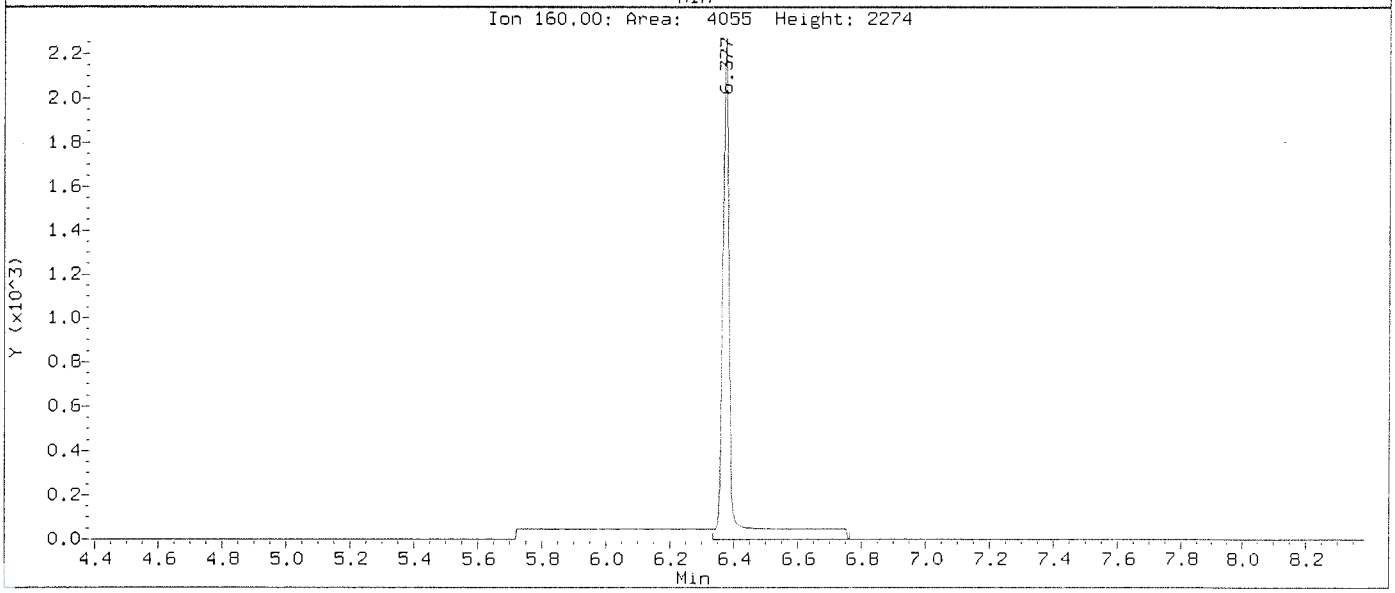


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\Before\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: Acenaphthene-d10
CAS Number: 15067-26-2

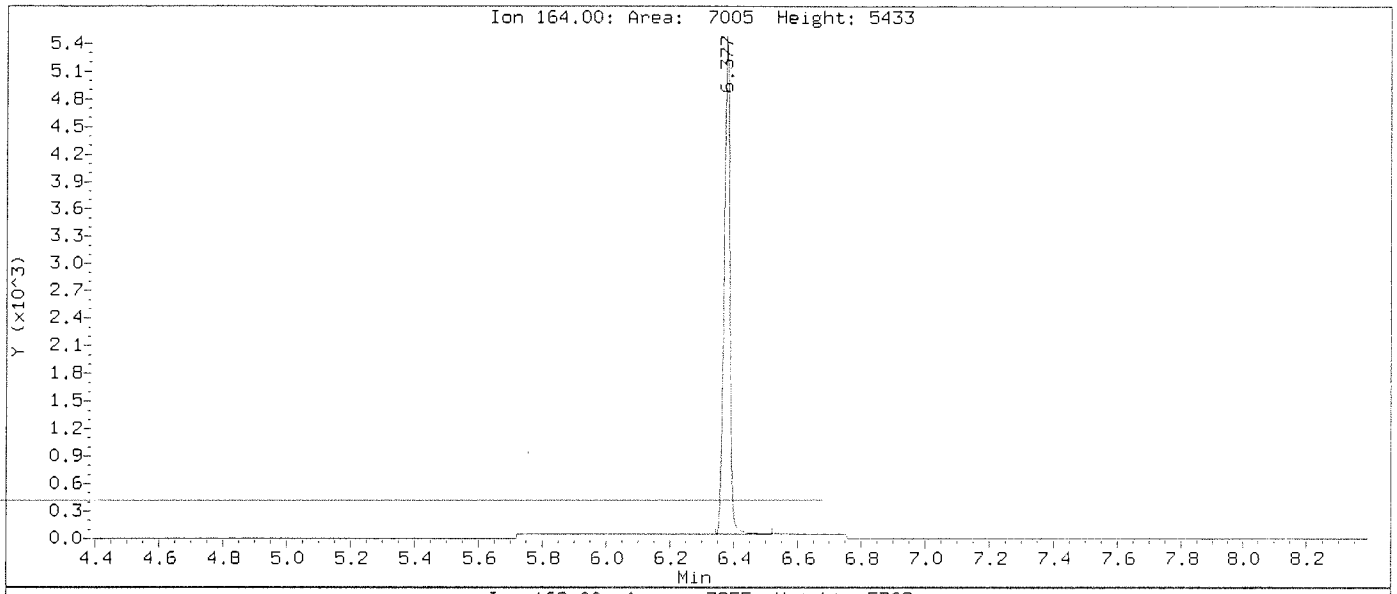


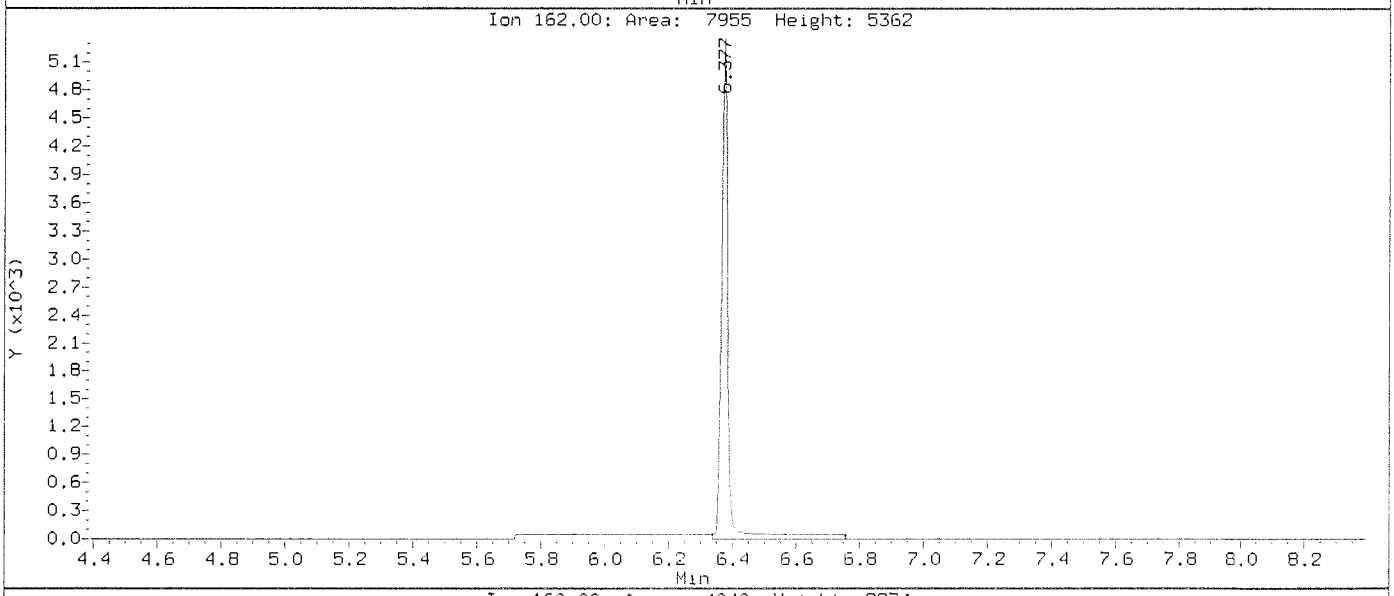


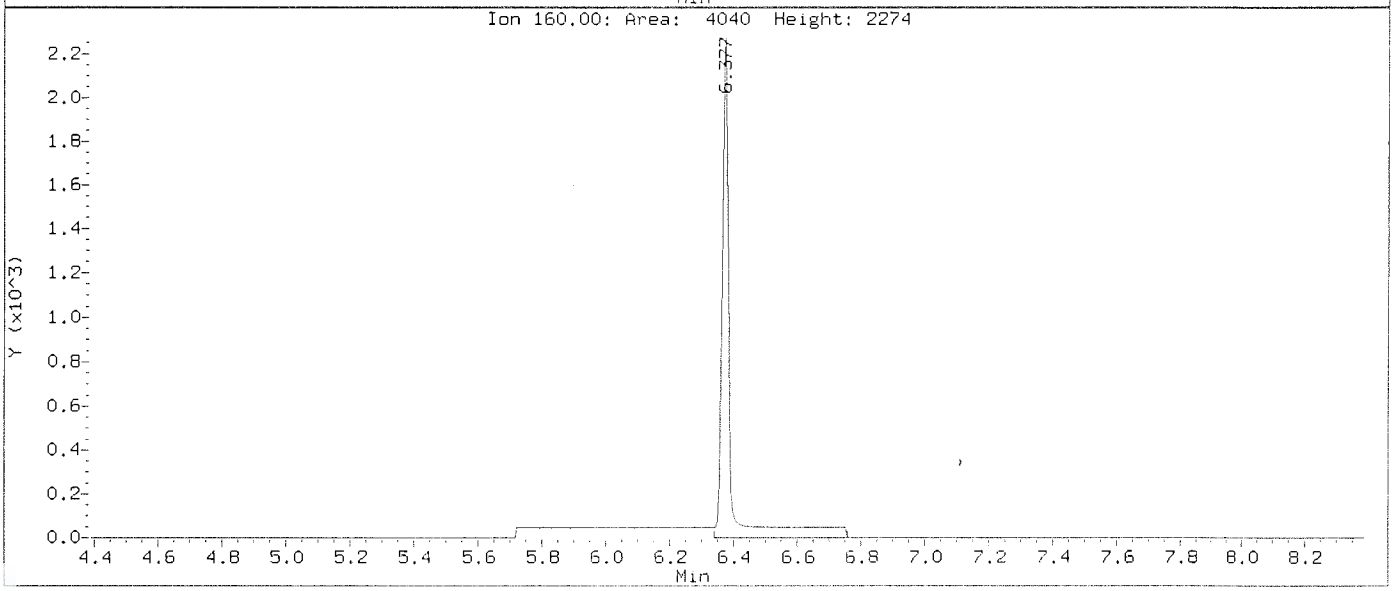


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: Acenaphthene-d10
CAS Number: 15067-26-2

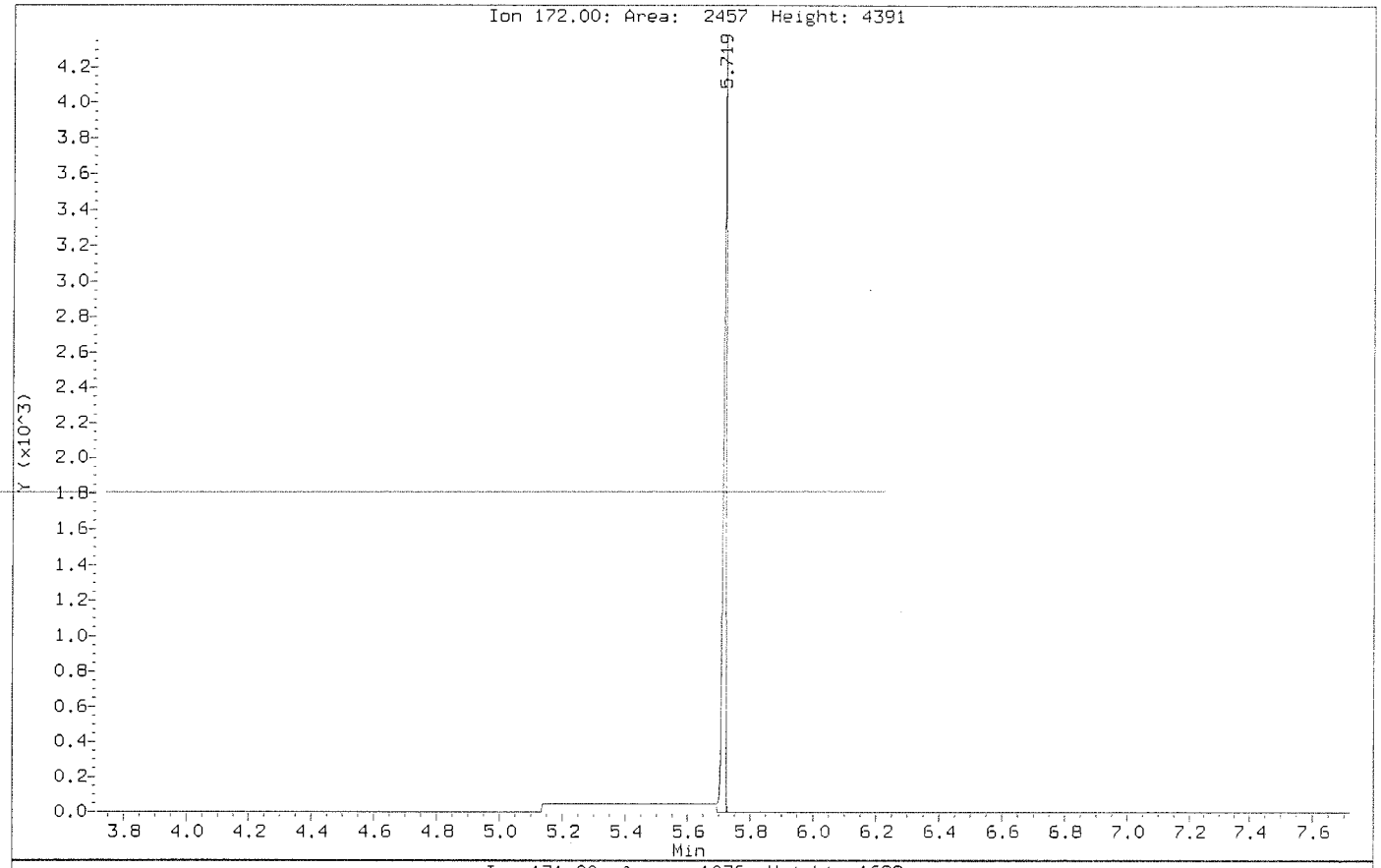


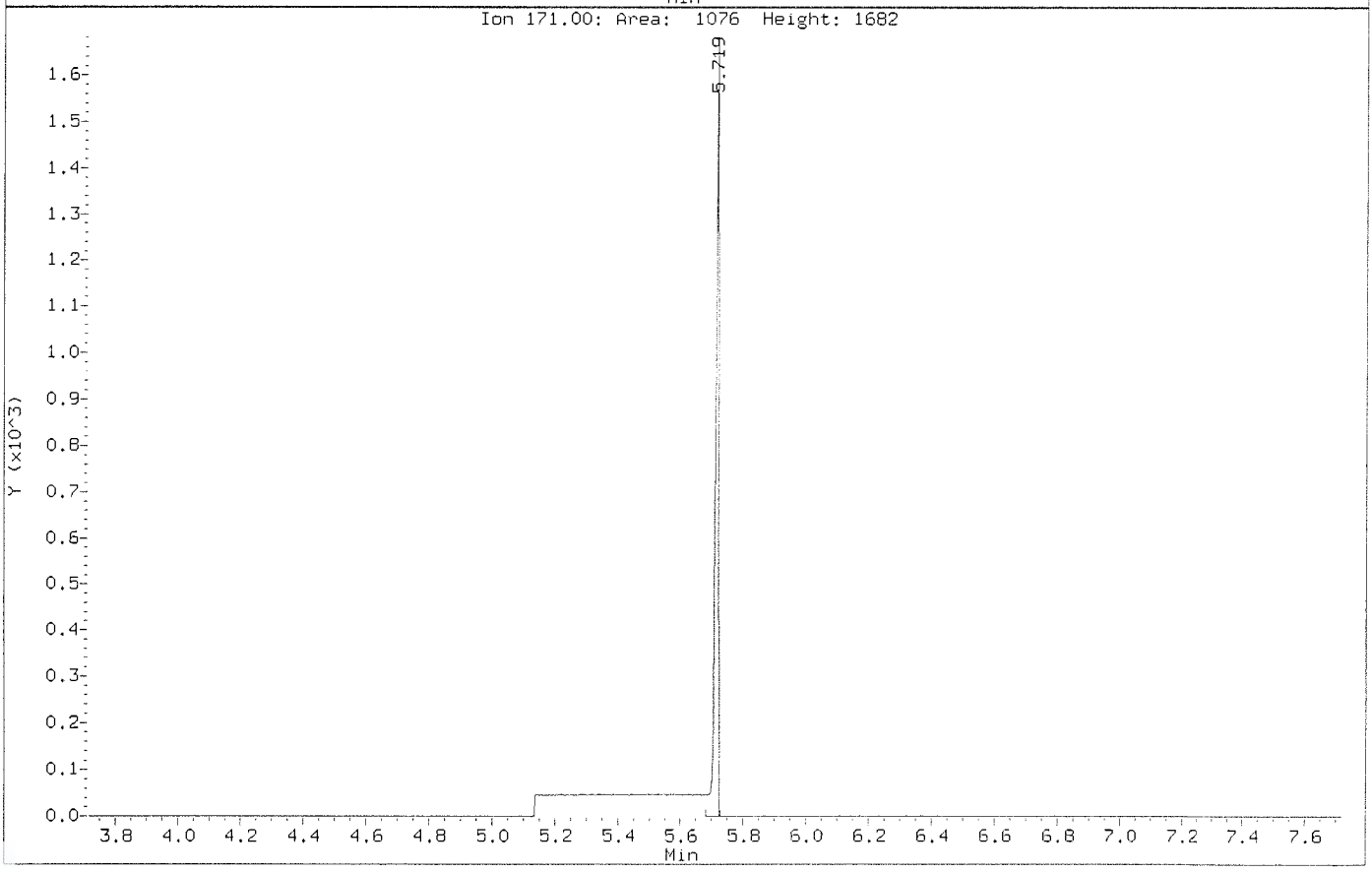




Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\Before\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

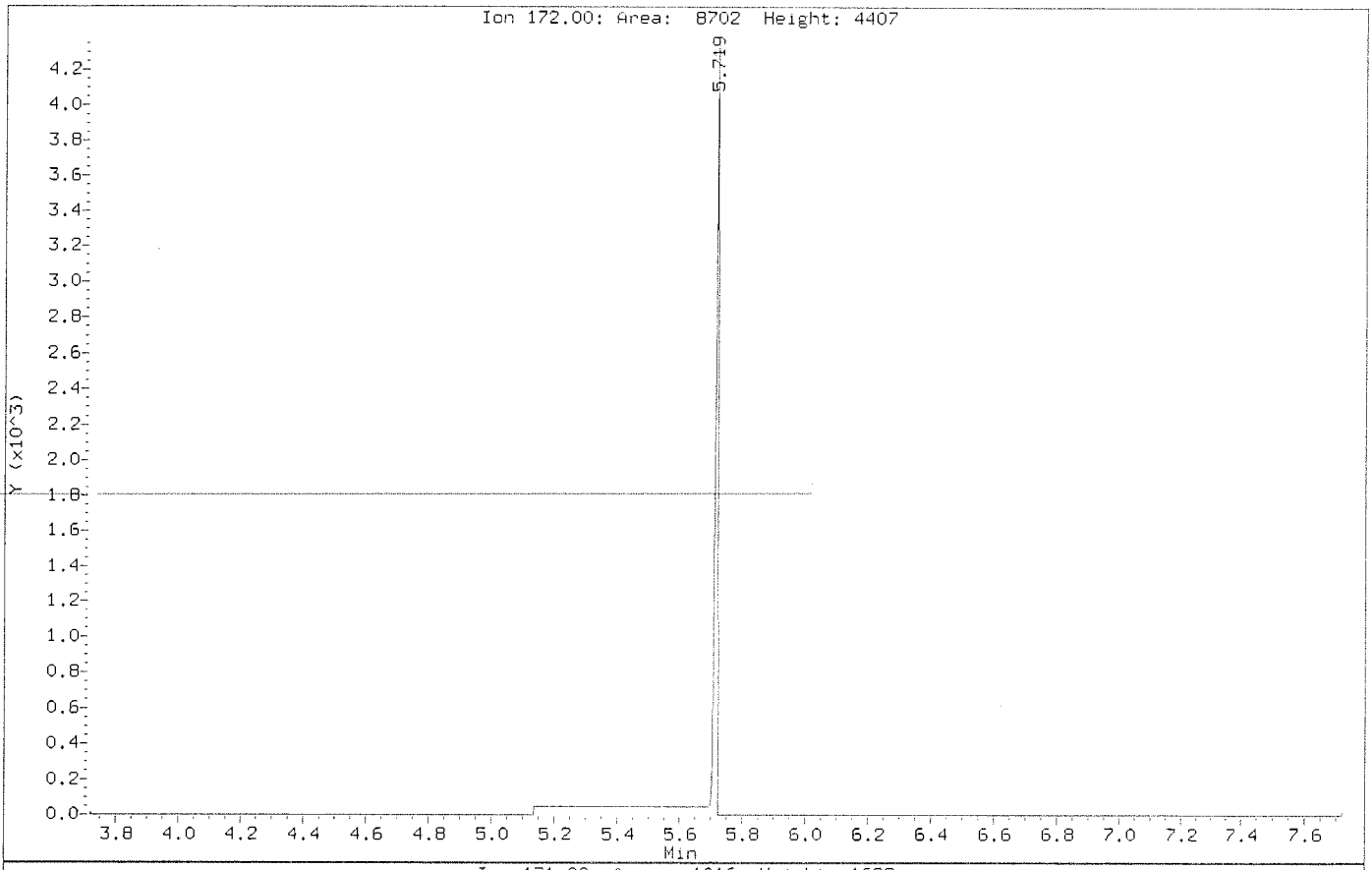
Compound: 2-Fluorobiphenyl
CAS Number: 321-60-8

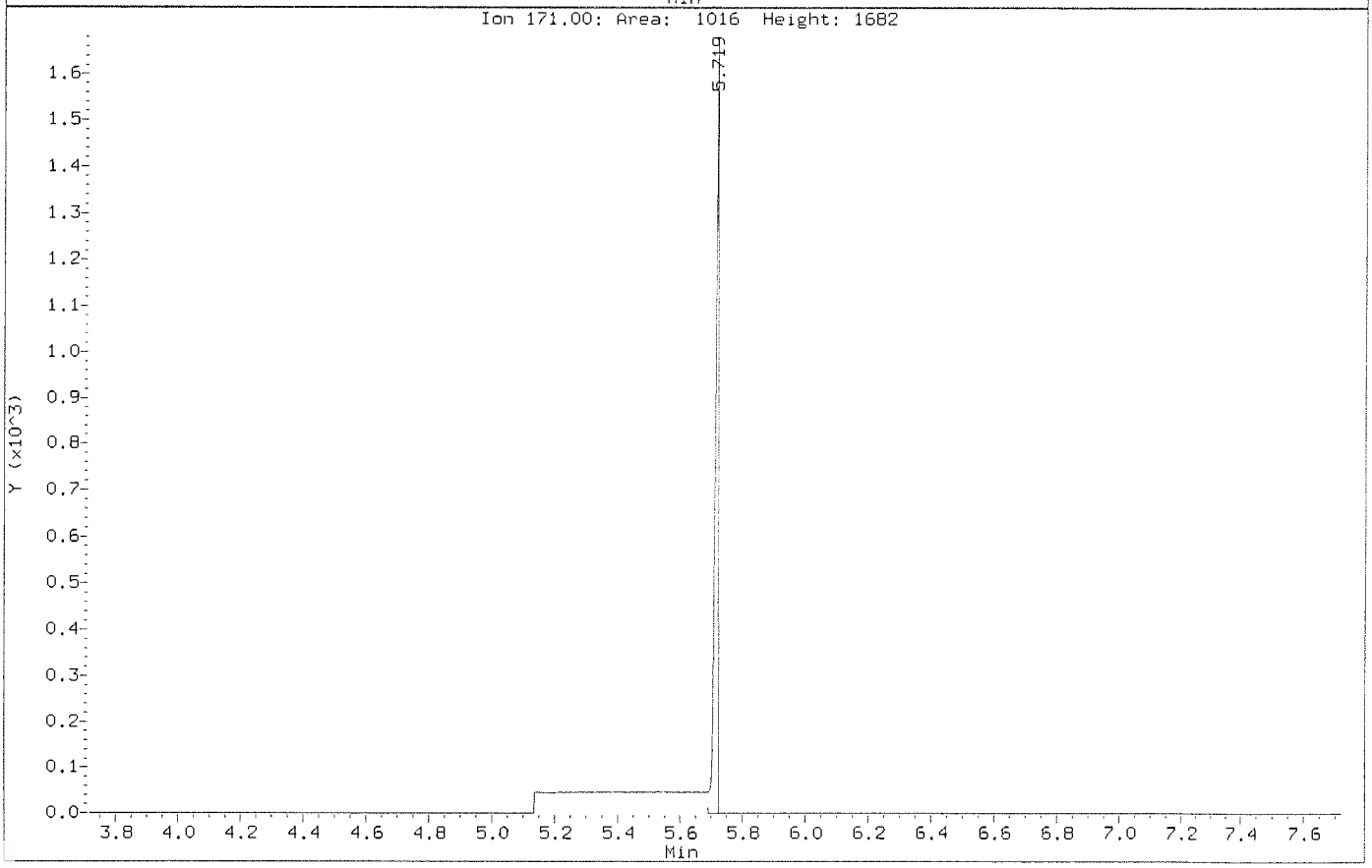




Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

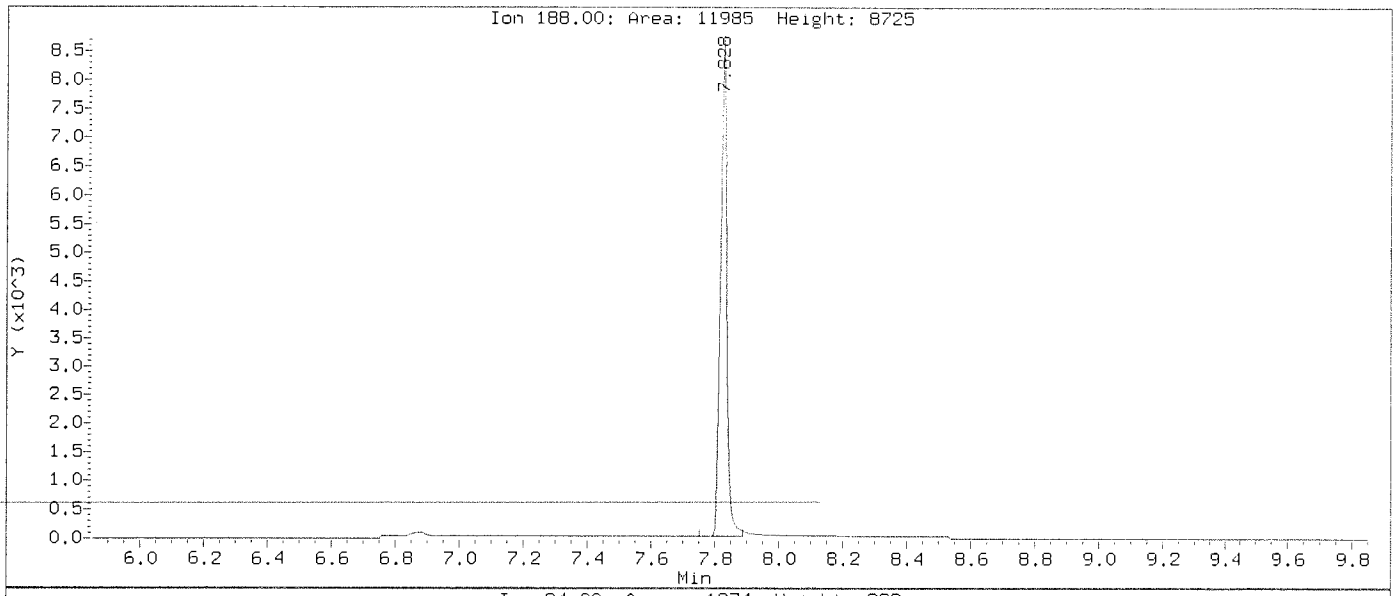
Compound: 2-Fluorobiphenyl
CAS Number: 321-60-8

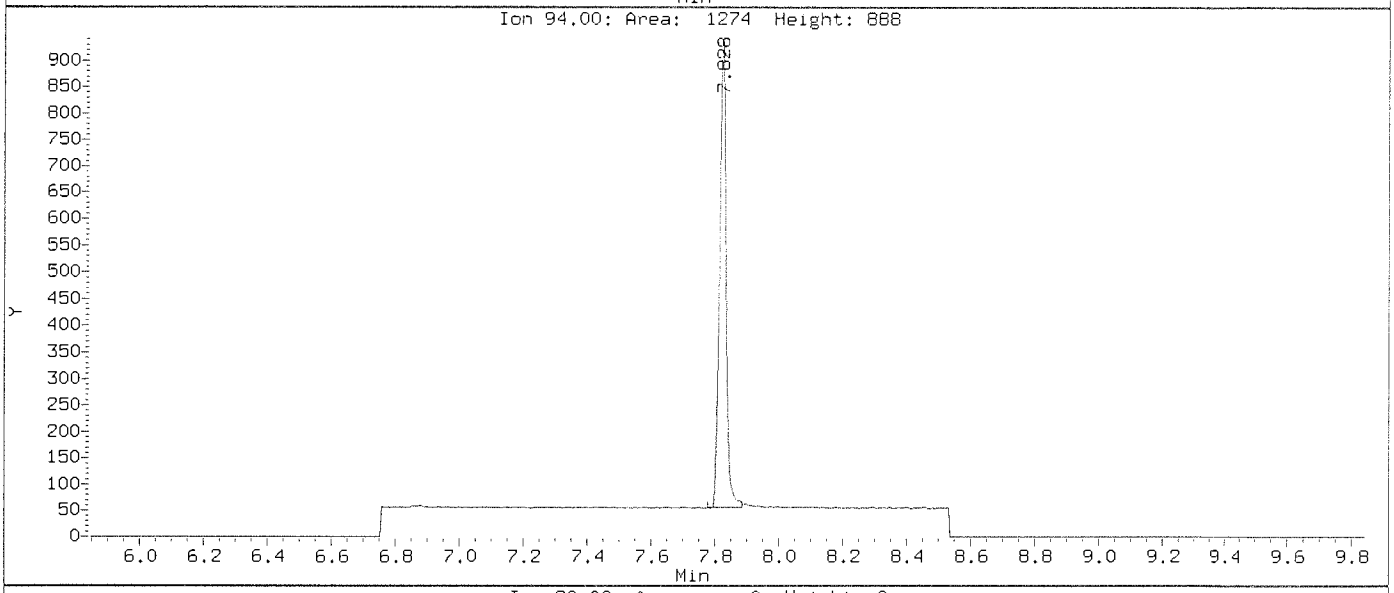


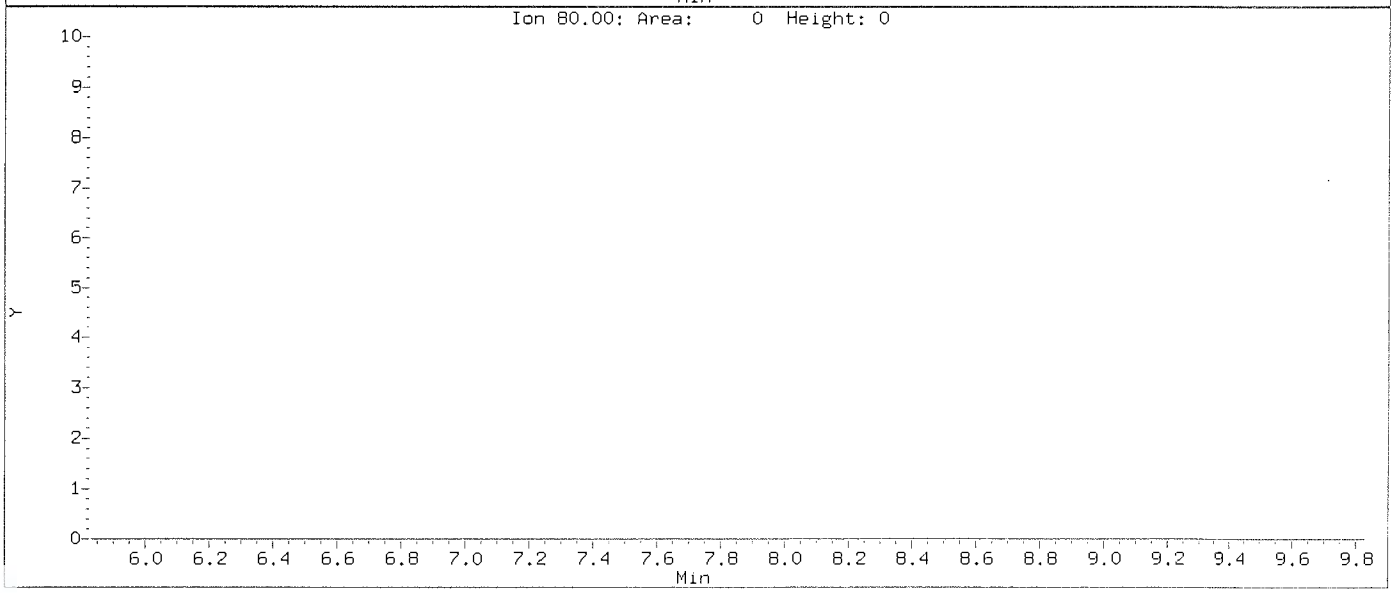


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\Before\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: Phenanthrene-d10
CAS Number: 1517-22-2

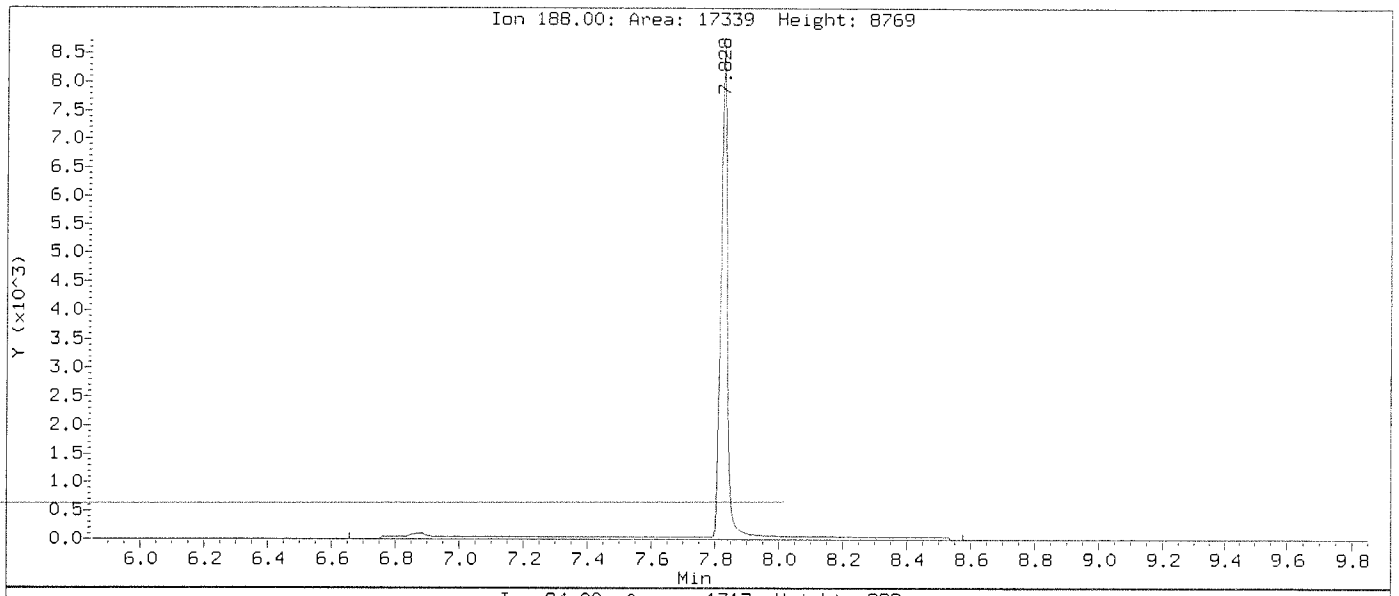


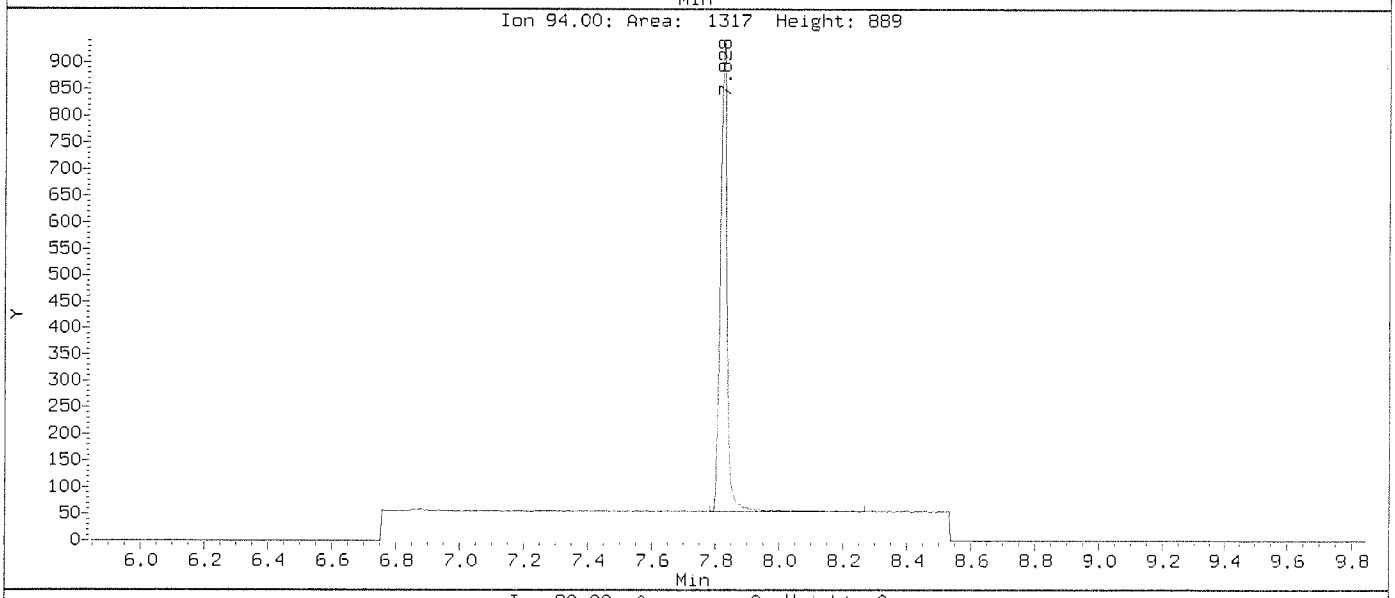


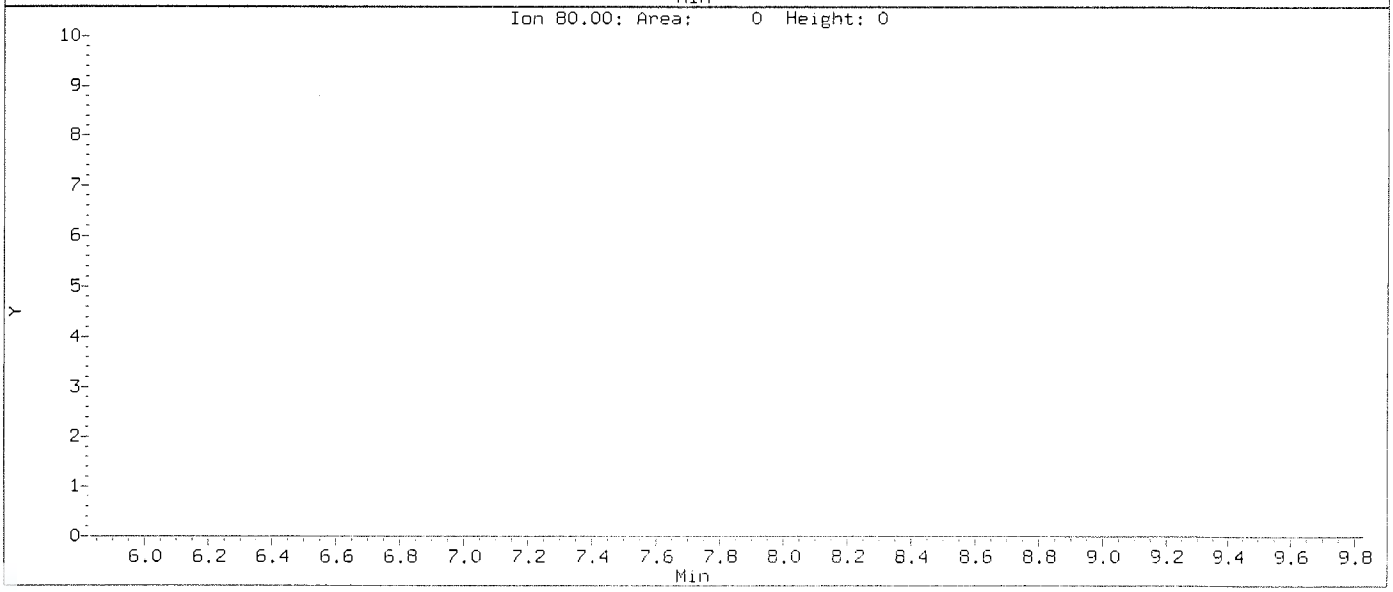


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: Phenanthrene-d10
CAS Number: 1517-22-2

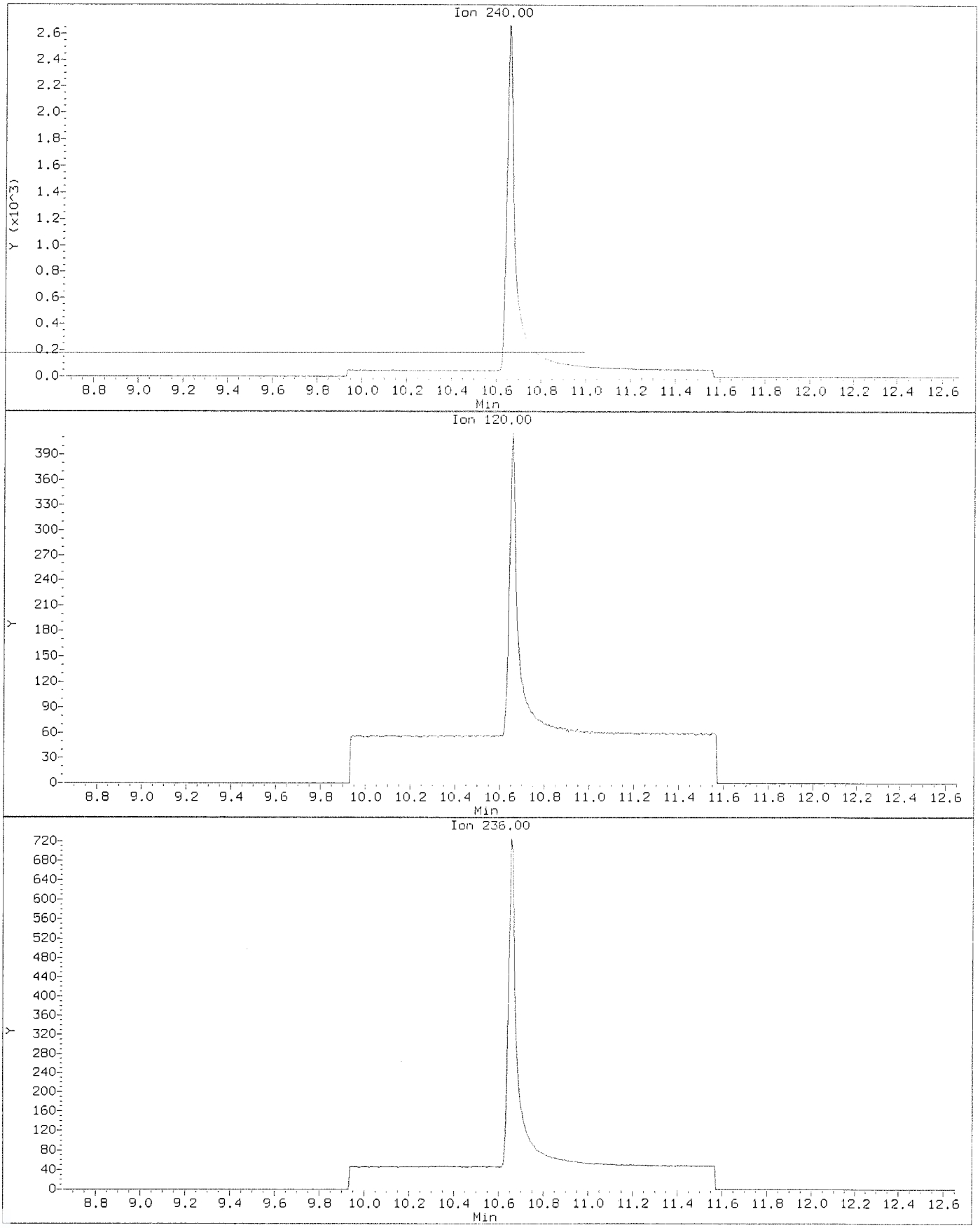






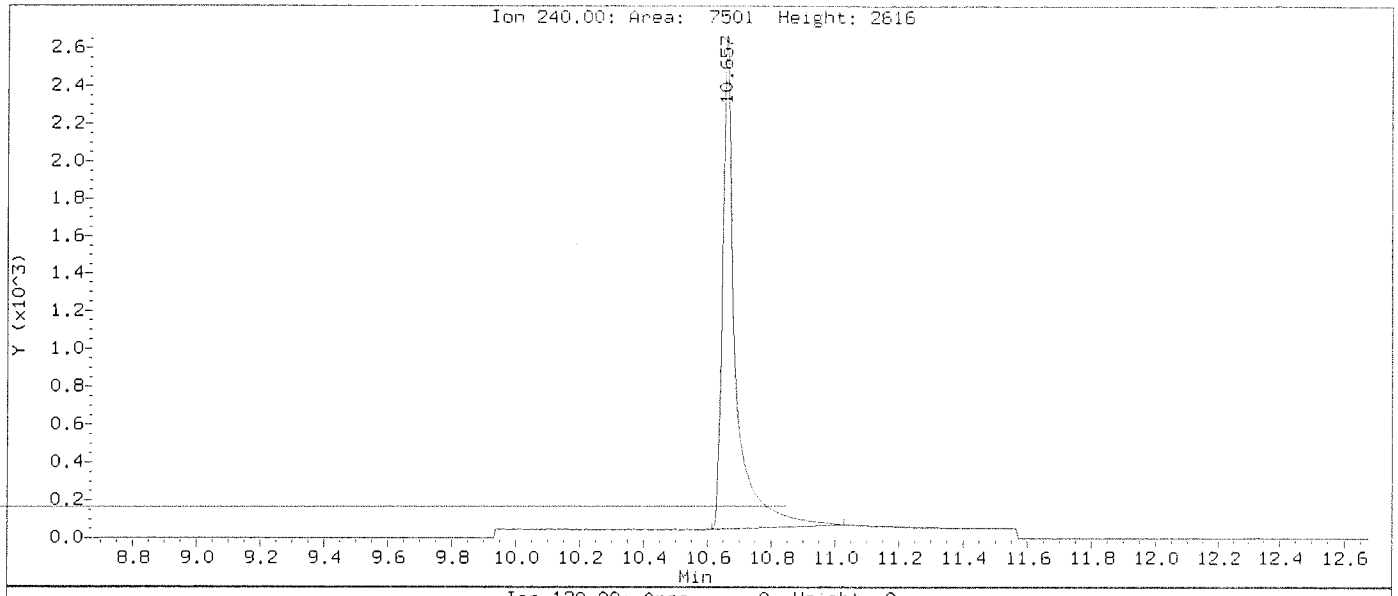
Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\Before\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

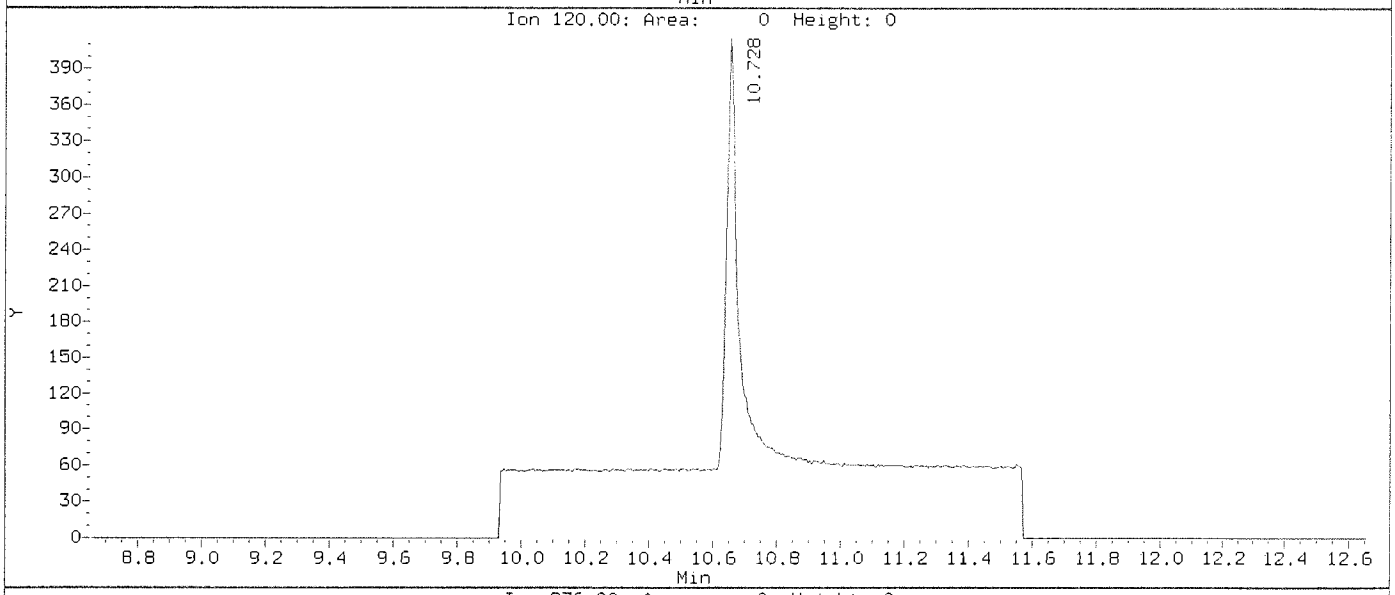
Compound: Chrysene-d12
CAS Number: 1719-03-5

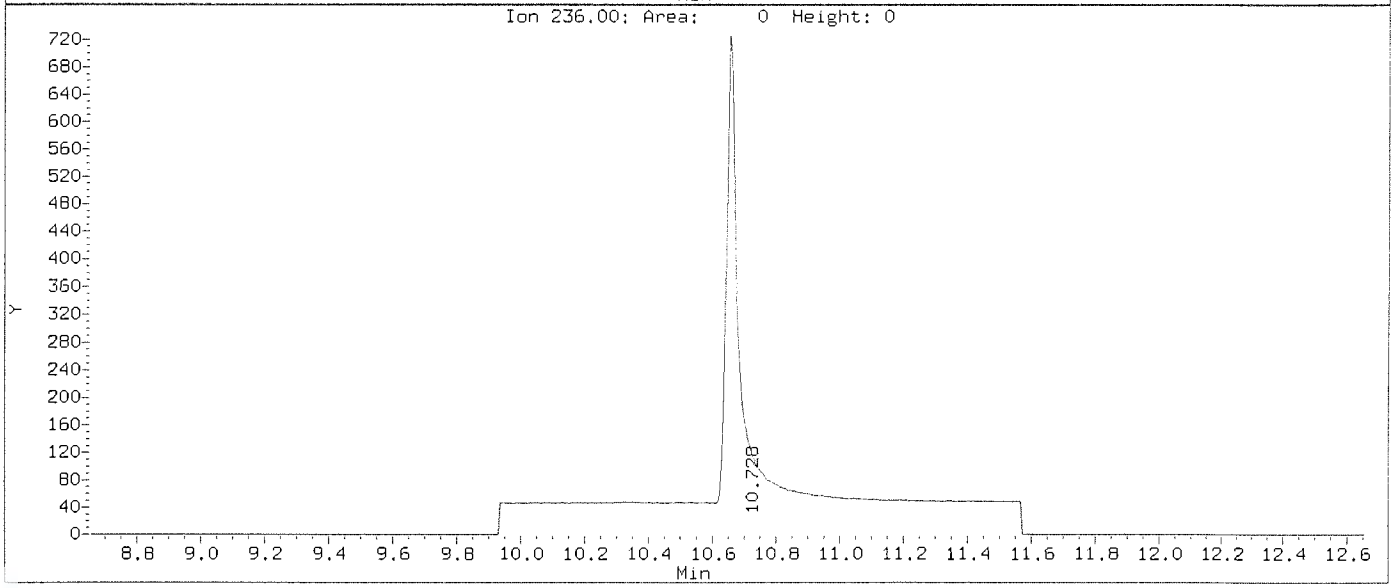


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: Chrysene-d12
CAS Number: 1719-03-5

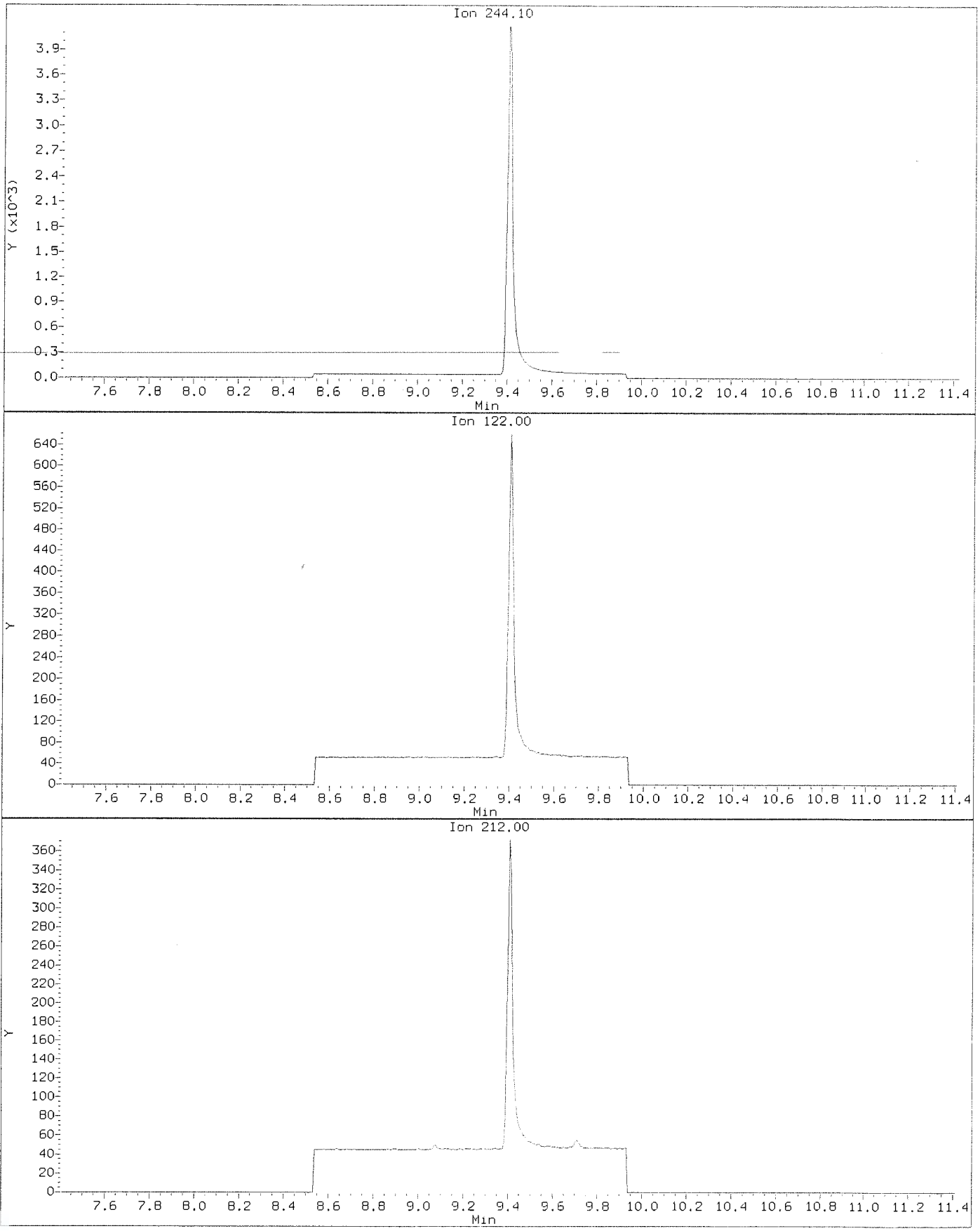






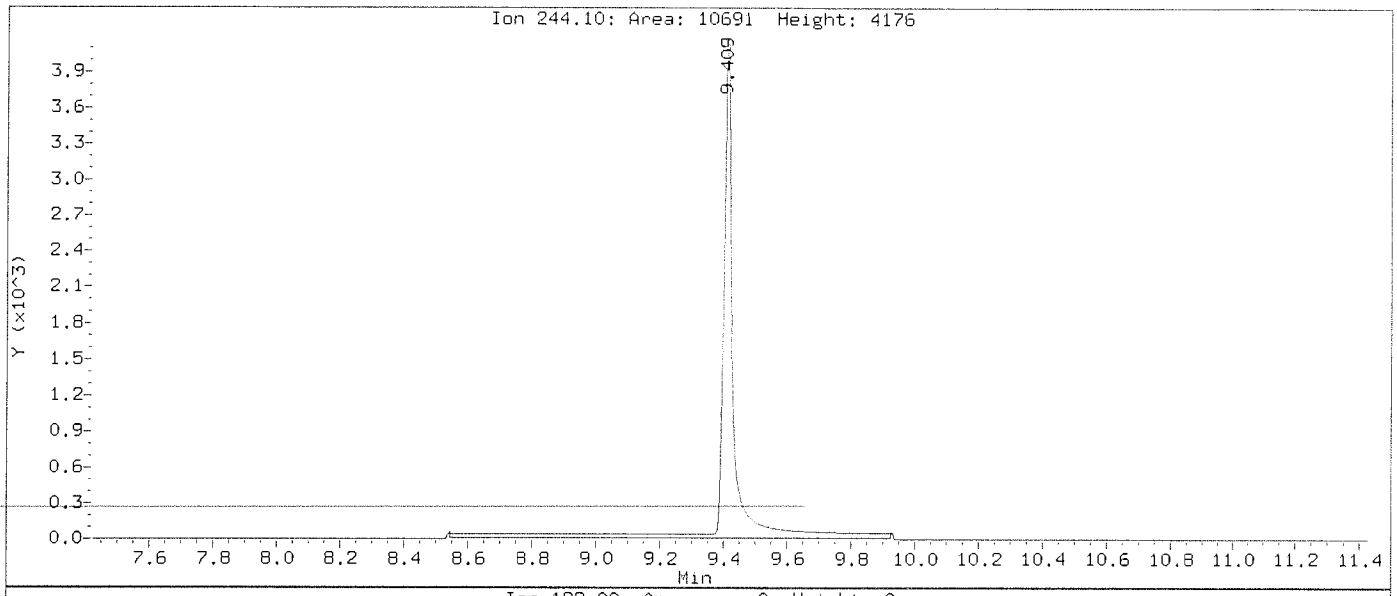
Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\Before\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

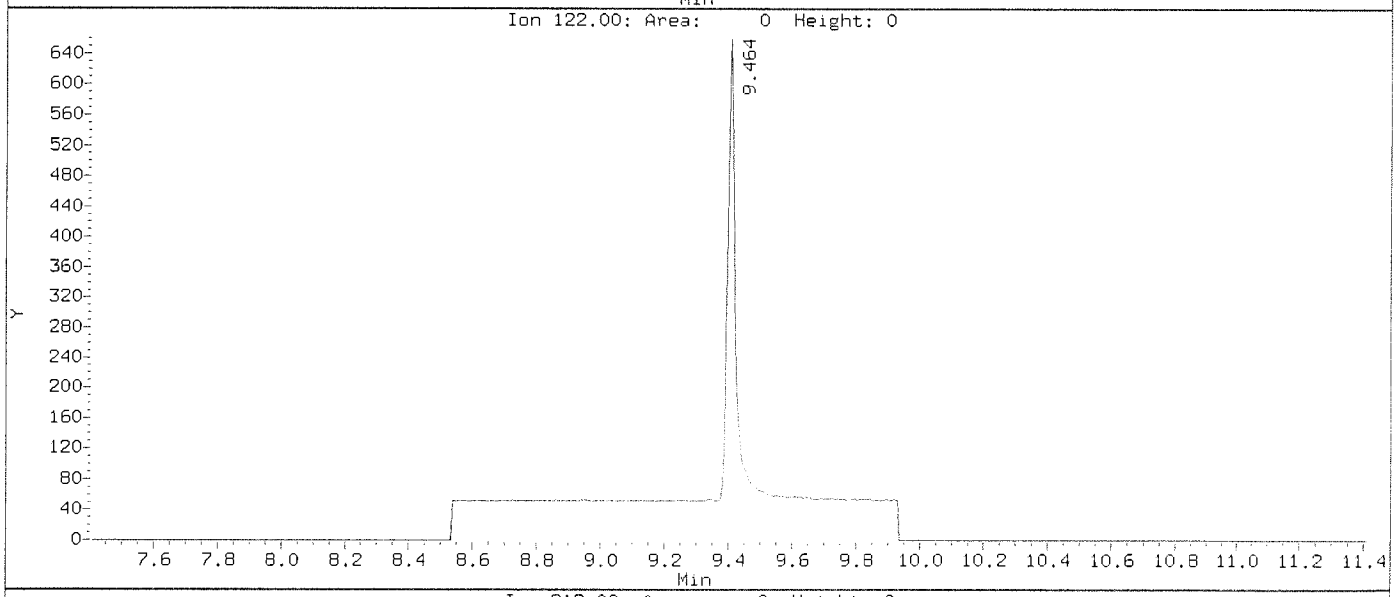
Compound: 4-Terphenyl-d14
CAS Number: 1718-51-0

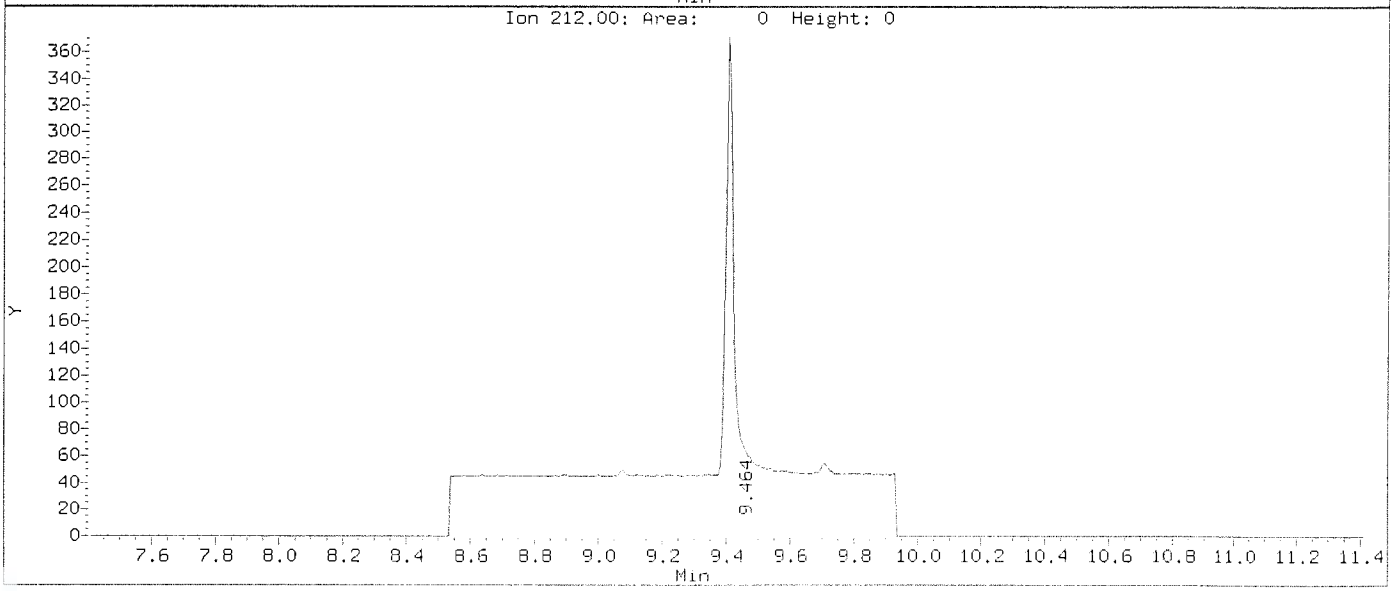


Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: 4-Terphenyl-d14
CAS Number: 1718-51-0

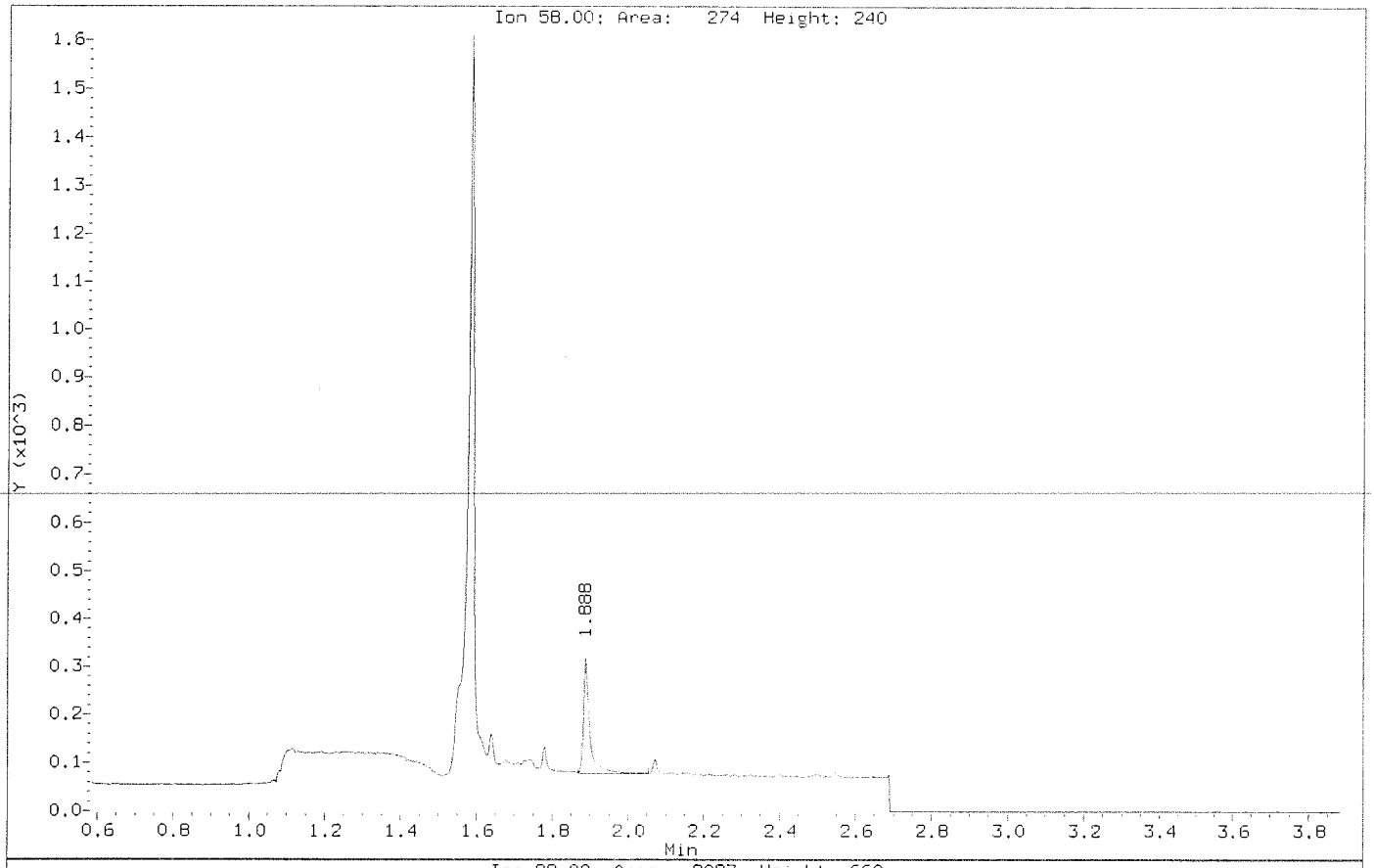


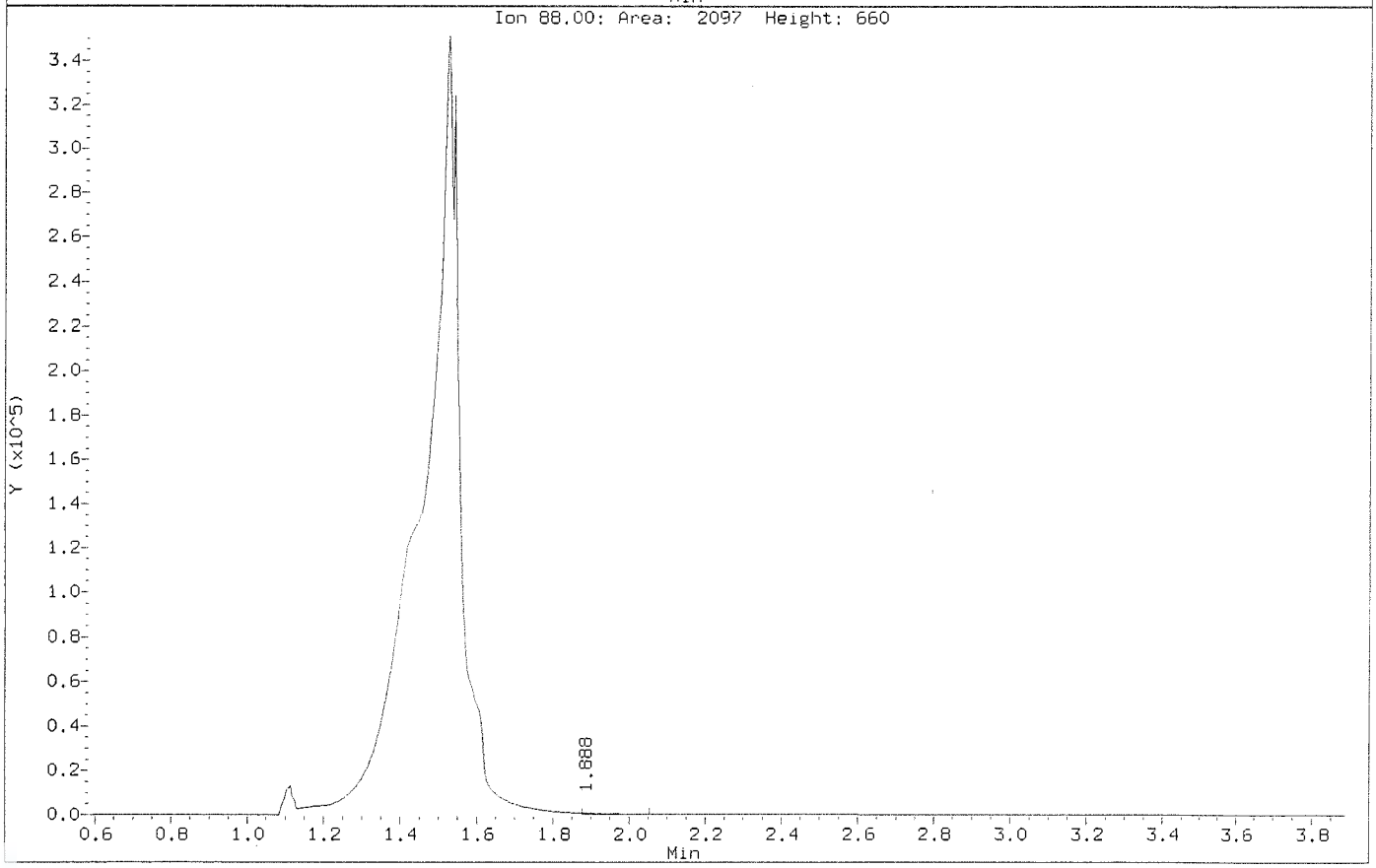




Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\Before\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

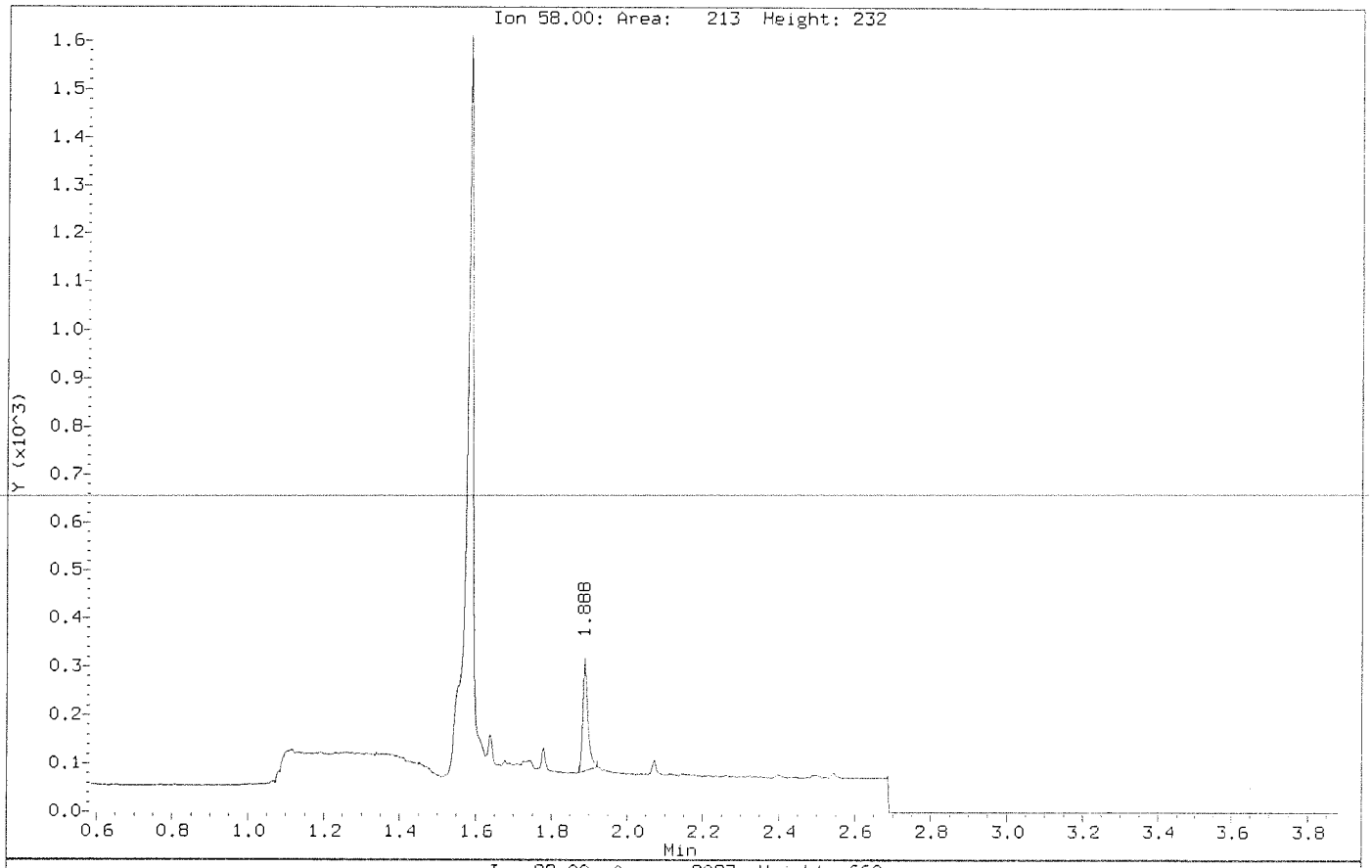
Compound: 1,4-Dioxane
CAS Number:

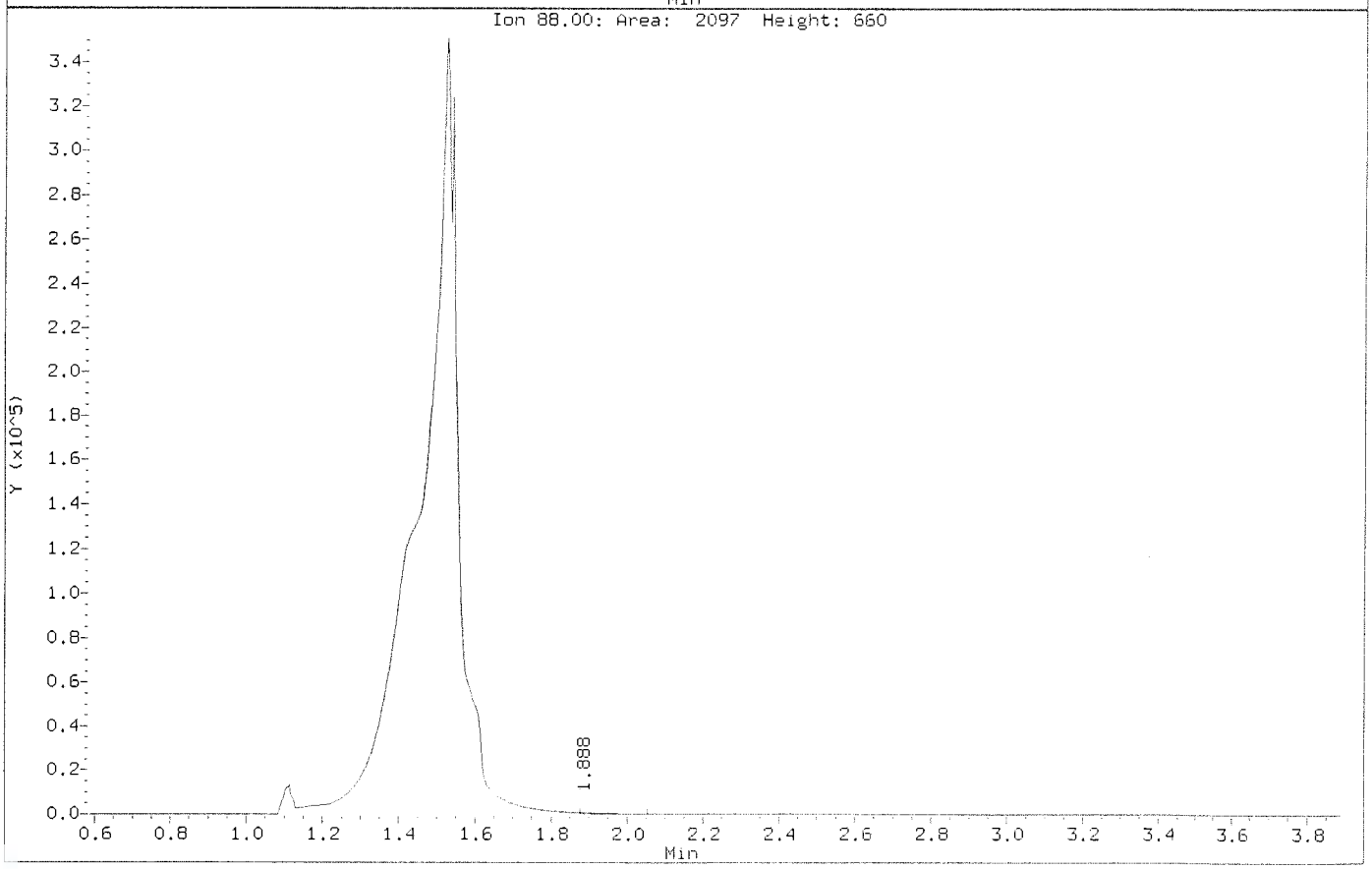




Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\03.D
Injection Date: 23-AUG-2022 10:31
Instrument: SV6.i
Client Sample ID: 1 4DIOX-CCV

Compound: 1,4-Dioxane
CAS Number:





ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\05.D
Lab Smp Id: MBLK-182382
Inj Date : 23-AUG-2022 11:16
Operator : LG Inst ID: SV6.i
Smp Info : MBLK-182382
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.598	3.592	(1.000)	3706	0.10000	(aQ)
* 45 Naphthalene-d8	136	4.705	4.705	(1.000)	13895	0.10000	
$ 33 Nitrobenzene-d5	82	4.054	4.059	(0.862)	3663	0.07908	0.07908(M)
* 86 Acenaphthene-d10	164	6.376	6.376	(1.000)	7586	0.10000	(Q)
$ 69 2-Fluorobiphenyl	172	5.719	5.718	(0.897)	4121	0.03490	0.03490(M)
* 126 Phenanthrene-d10	188	7.822	7.827	(1.000)	13732	0.10000	
* 182 Chrysene-d12	240	10.657	10.657	(1.000)	7295	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.408	9.408	(0.000)	7185	0.05239	0.05239(M)
* 198 Perylene-d12	264	12.724	12.724	(1.000)	4549	0.10000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01135368

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\05.D

Date : 23-AUG-2022 11:16

Client ID:

Instrument: SV6.i

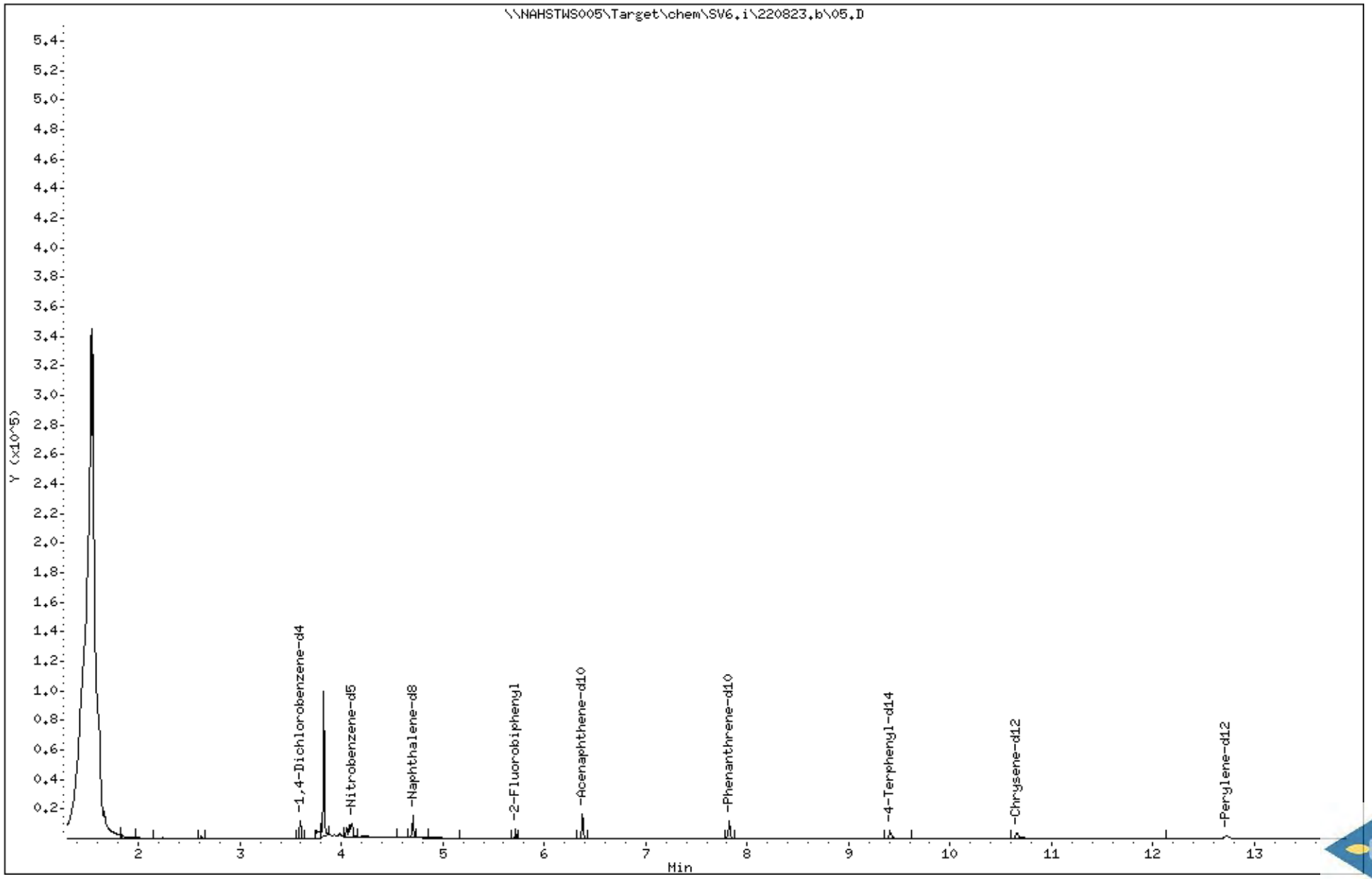
Sample Info: MBLK-182382

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



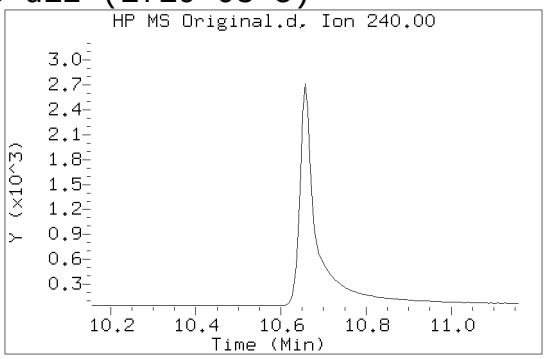
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\05.D
Inj Date : 23-AUG-2022 11:16
InstruID : SV6.i
LabSampID : MBLK-182382

Chrysene-d12 (1719-03-5)

Reason Code:

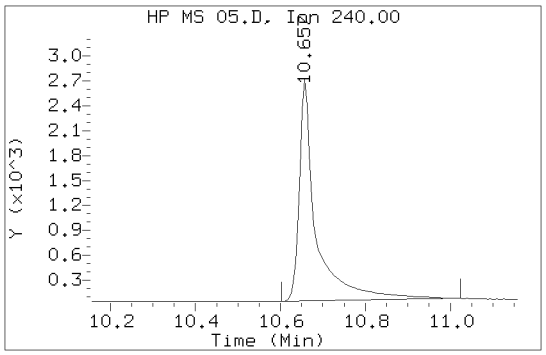
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
11:30
ALSHS
Server



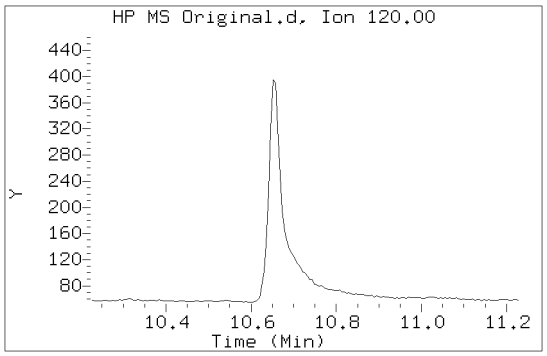
AFTER

MASS
240
AREA
7295
HEIGHT
2666
24-Aug-2022
10:25
ALSHS
S



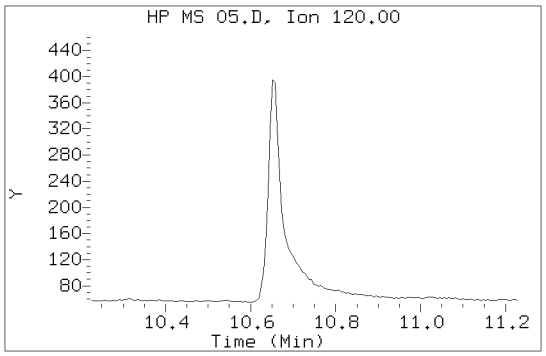
BEFORE

MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
11:30
ALSHS
Server



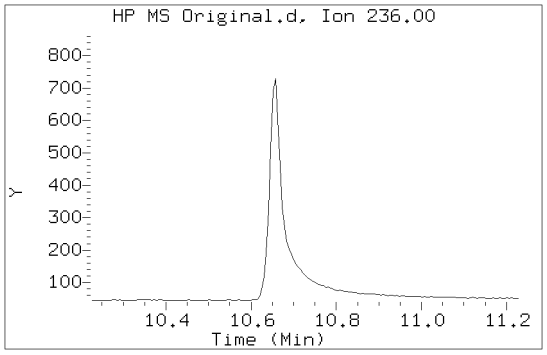
AFTER

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



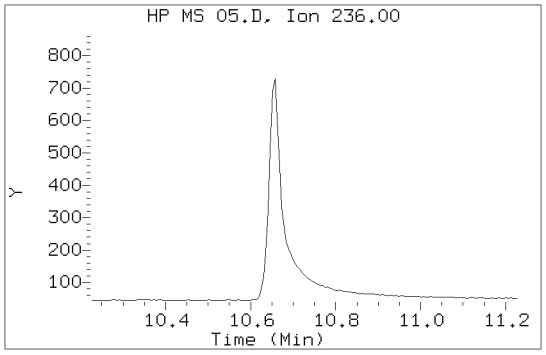
BEFORE

MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
11:30
ALSHS
Server



AFTER

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

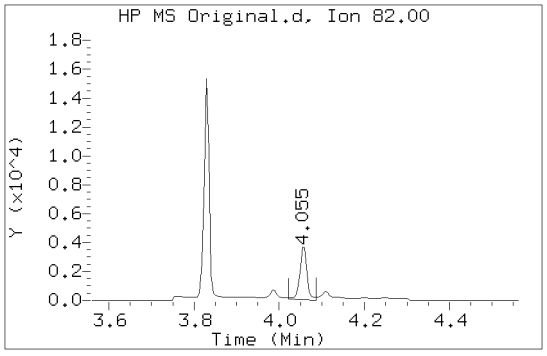


Nitrobenzene-d5 (4165-60-0)

Reason Code:

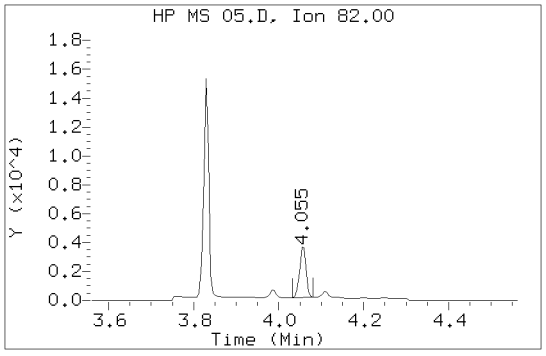
BEFORE

MASS
82
AREA
4302
HEIGHT
3638
23-Aug-2022
11:30
ALSHS
Server



AFTER

MASS
82
AREA
3663
HEIGHT
3483
24-Aug-2022
10:25
ALSHS
S

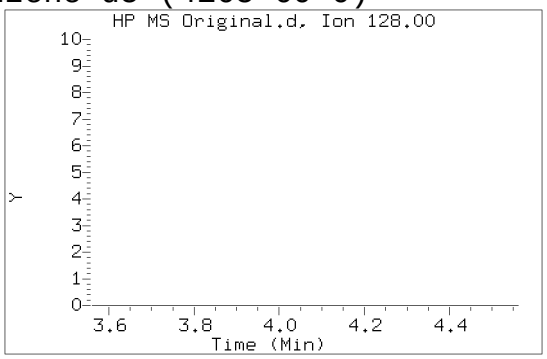


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\05.D
Inj Date : 23-AUG-2022 11:16
InstruID : SV6.i
LabSampID : MBLK-182382

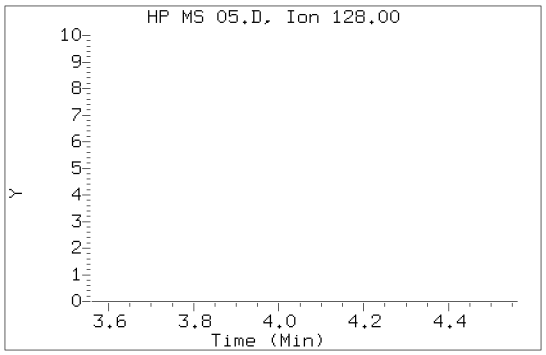
Nitrobenzene-d5 (4165-60-0)

Reason Code:

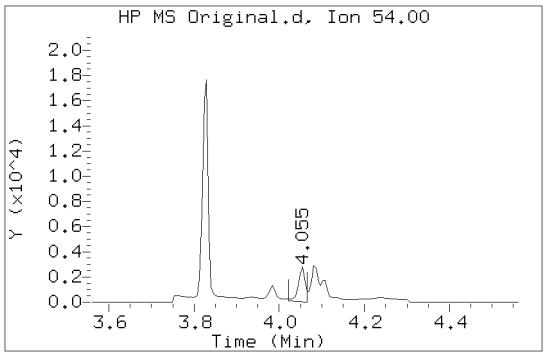
BEFORE
MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
11:30
ALSHS
Server



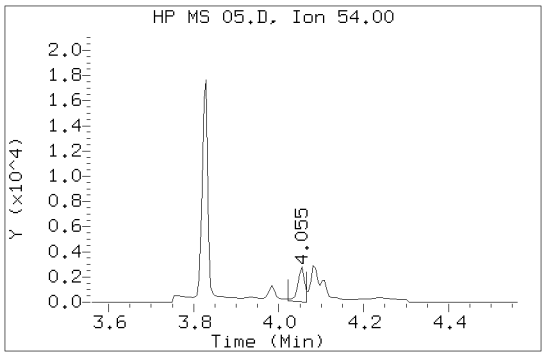
AFTER
MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
54
AREA
3083
HEIGHT
2754
23-Aug-2022
11:30
ALSHS
Server



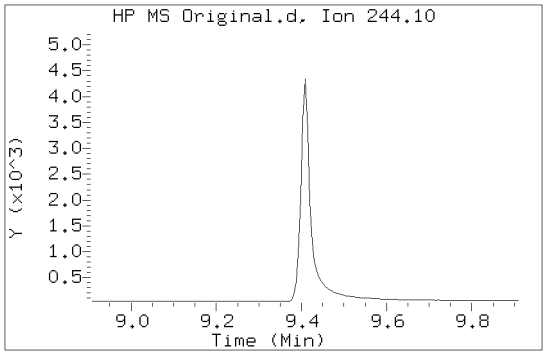
AFTER
MASS
54
AREA
3083
HEIGHT
2754
24-Aug-2022
10:25
ALSHS
S



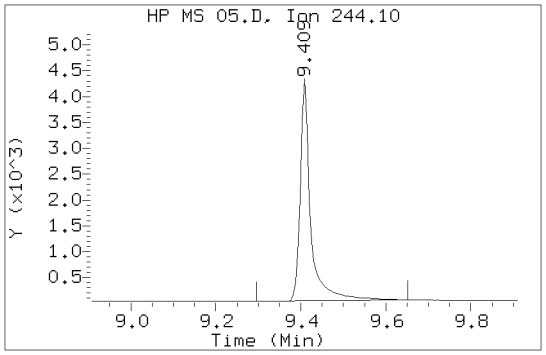
4-Terphenyl-d14 (1718-51-0)

Reason Code:

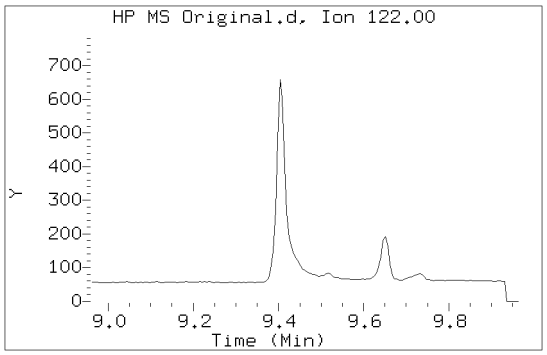
BEFORE
MASS
244.1
AREA
0
HEIGHT
0
23-Aug-2022
11:30
ALSHS
Server



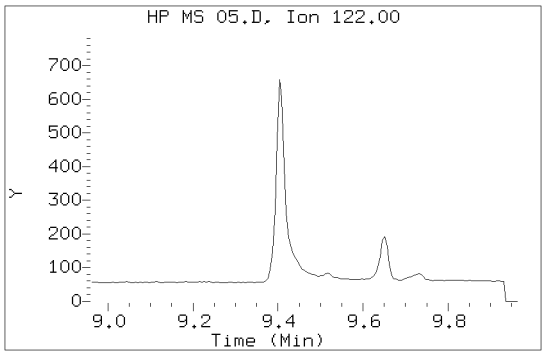
AFTER
MASS
244.1
AREA
7185
HEIGHT
4289
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
122
AREA
0
HEIGHT
0
23-Aug-2022
11:30
ALSHS
Server



AFTER
MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

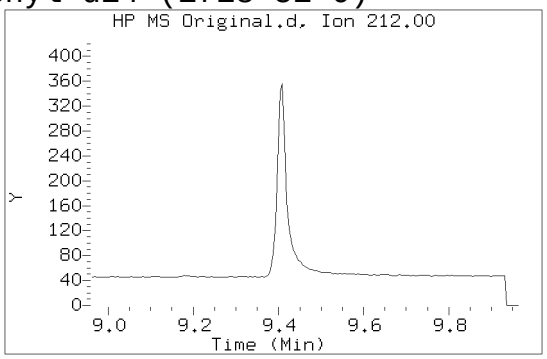


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\05.D
Inj Date : 23-AUG-2022 11:16
InstruID : SV6.i
LabSampID : MBLK-182382

4-Terphenyl-d14 (1718-51-0)

BEFORE

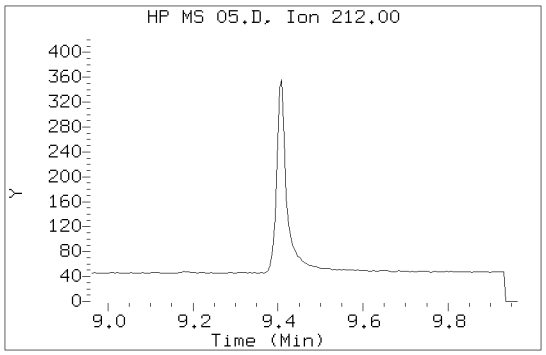
MASS
212
AREA
0
HEIGHT
0
23-Aug-2022
11:30
ALSHS
Server



AFTER

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

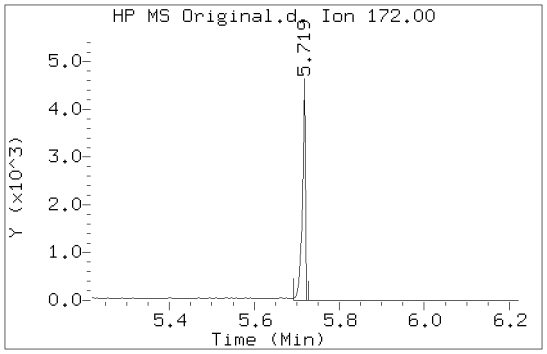
Reason Code:



2-Fluorobiphenyl (321-60-8)

BEFORE

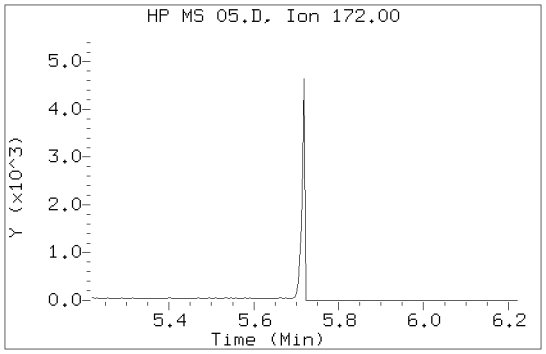
MASS
172
AREA
2447
HEIGHT
4641
23-Aug-2022
11:30
ALSHS
Server



AFTER

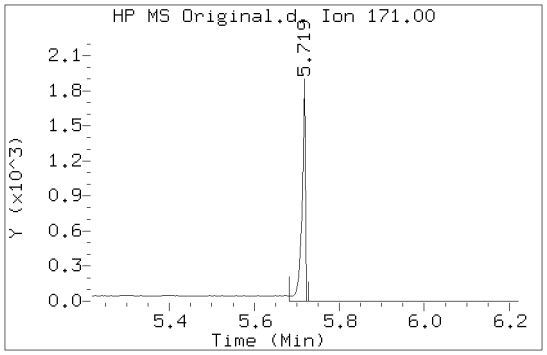
MASS
172
AREA
4121
HEIGHT
4641
24-Aug-2022
10:25
ALSHS
S

Reason Code:



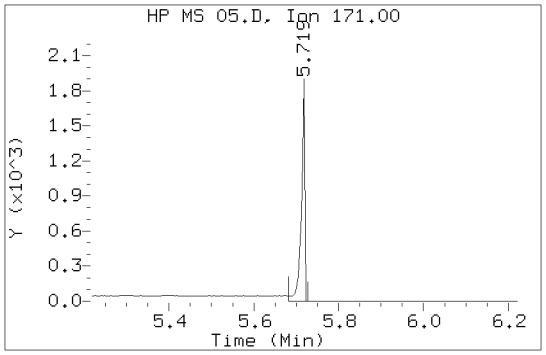
BEFORE

MASS
171
AREA
1113
HEIGHT
1901
23-Aug-2022
11:30
ALSHS
Server



AFTER

MASS
171
AREA
1113
HEIGHT
1901
24-Aug-2022
10:25
ALSHS
S



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\06.D
Lab Smp Id: LCS-182382
Inj Date : 23-AUG-2022 11:34
Operator : LG Inst ID: SV6.i
Smp Info : LCS-182382
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.598	3.592	(1.000)	11986	0.10000	(aM)
* 45 Naphthalene-d8	136	4.705	4.705	(1.000)	17681	0.10000	
$ 33 Nitrobenzene-d5	82	4.059	4.059	(0.863)	4366	0.07408	0.07408(M)
* 86 Acenaphthene-d10	164	6.376	6.376	(1.000)	8740	0.10000	(M)
$ 69 2-Fluorobiphenyl	172	5.718	5.718	(0.897)	4681	0.03441	0.03441(M)
* 126 Phenanthrene-d10	188	7.822	7.827	(1.000)	15619	0.10000	
* 182 Chrysene-d12	240	10.657	10.657	(1.000)	8081	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.408	9.408	(0.883)	8055	0.05302	0.05302(M)
* 198 Perylene-d12	264	12.719	12.724	(1.000)	5095	0.10000	
1 1,4-Dioxane	58	1.920	1.887	(0.534)	520	0.10568	0.1057(aM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

01135373

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\06.D

Date : 23-AUG-2022 11:34

Client ID:

Instrument: SV6.i

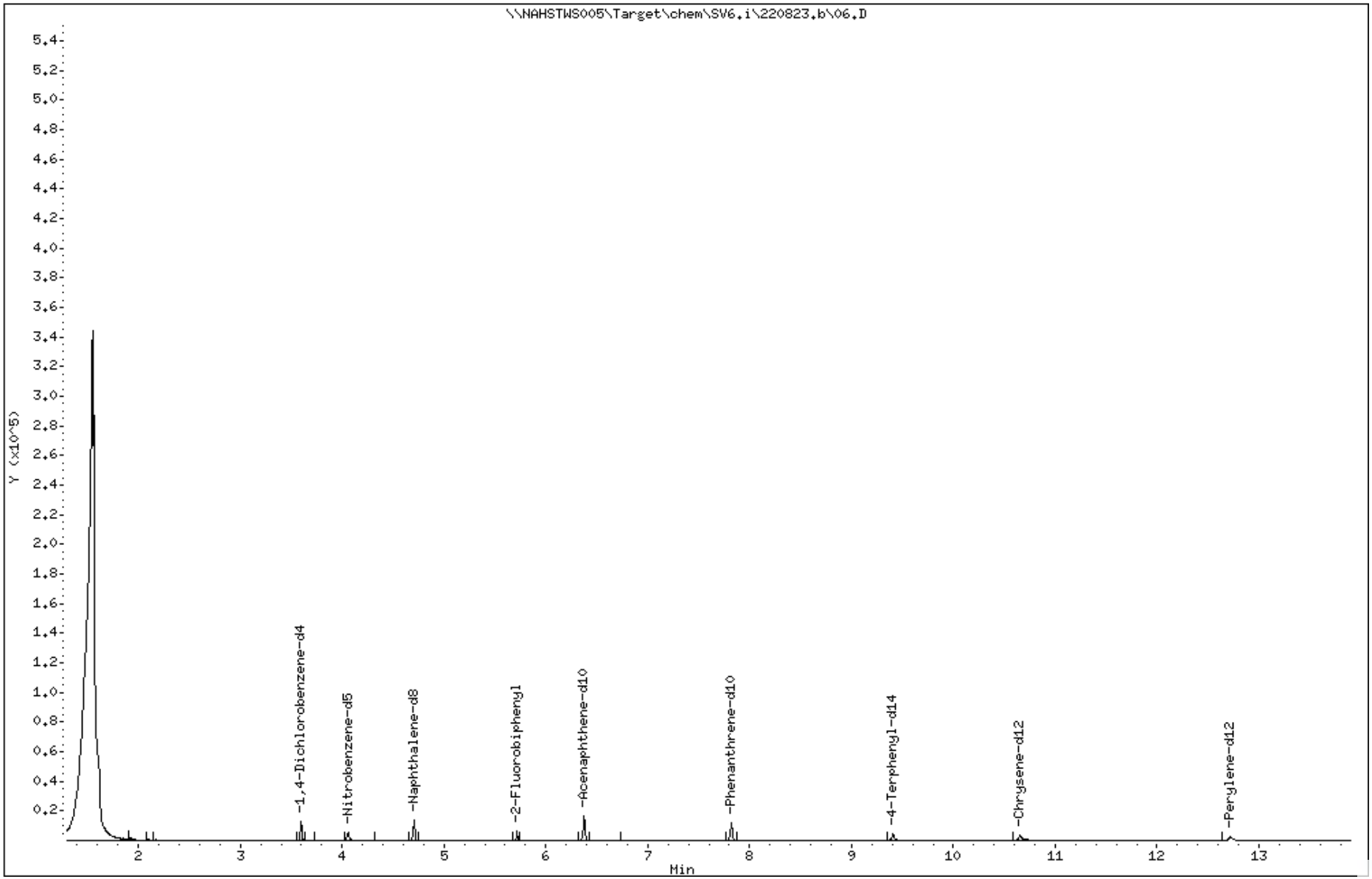
Sample Info: LCS-182382

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



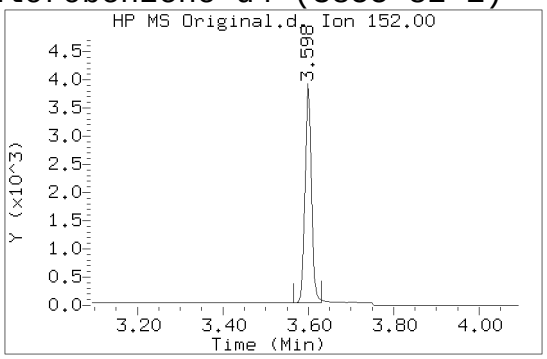
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\06.D
Inj Date : 23-AUG-2022 11:34
InstruID : SV6.i
LabSampID : LCS-182382

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

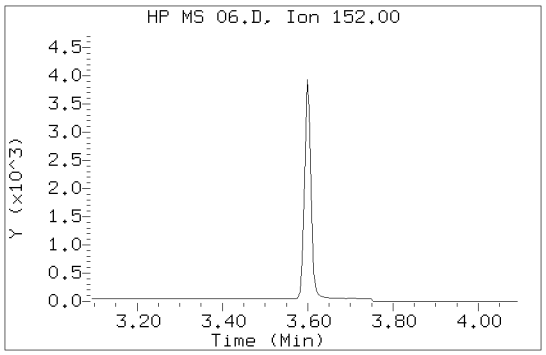
BEFORE

MASS
152
AREA
4013
HEIGHT
3885
23-Aug-2022
11:48
ALSHS
Server



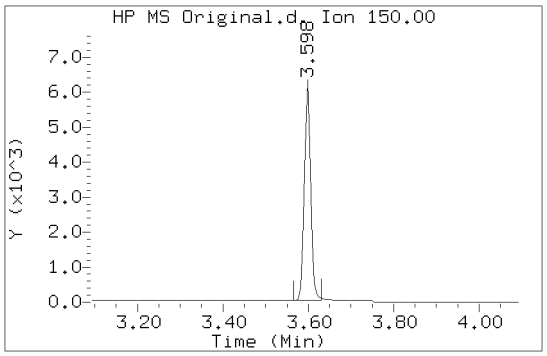
AFTER

MASS
152
AREA
11986
HEIGHT
4007
24-Aug-2022
10:25
ALSHS
S



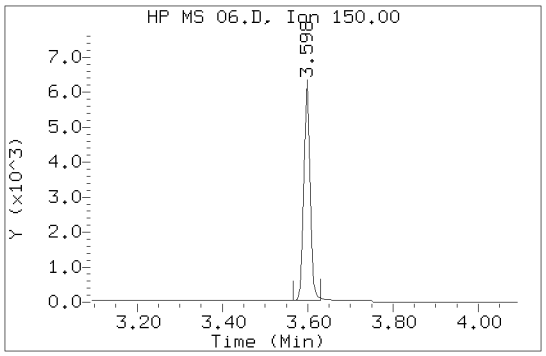
BEFORE

MASS
150
AREA
6334
HEIGHT
6303
23-Aug-2022
11:48
ALSHS
Server



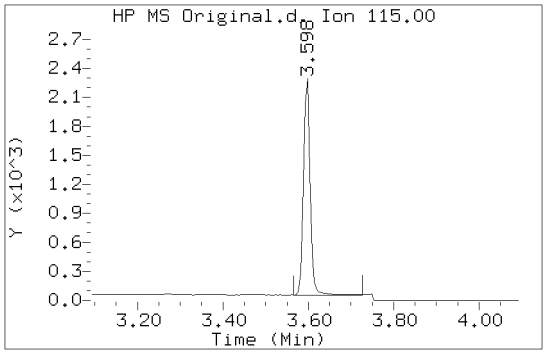
AFTER

MASS
150
AREA
6334
HEIGHT
6303
24-Aug-2022
10:25
ALSHS
S



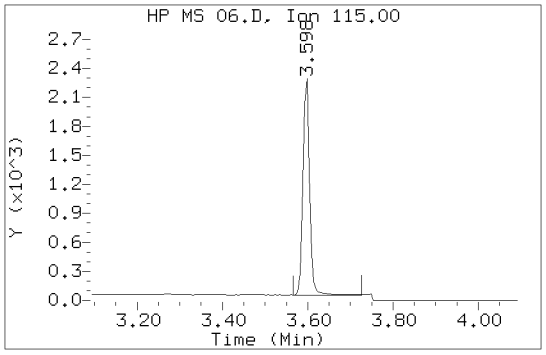
BEFORE

MASS
115
AREA
2380
HEIGHT
2238
23-Aug-2022
11:48
ALSHS
Server



AFTER

MASS
115
AREA
2380
HEIGHT
2238
24-Aug-2022
10:25
ALSHS
S

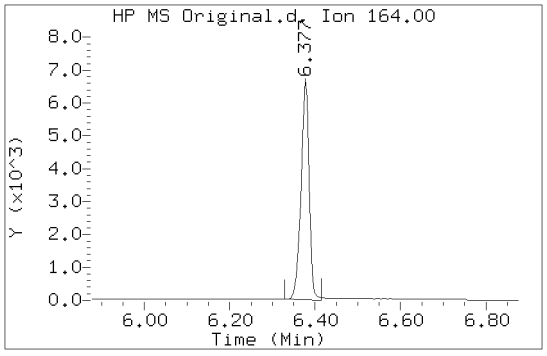


Acenaphthene-d10 (15067-26-2)

Reason Code:

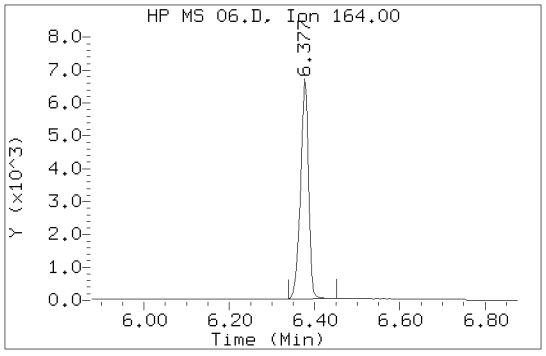
BEFORE

MASS
164
AREA
8871
HEIGHT
6718
23-Aug-2022
11:48
ALSHS
Server



AFTER

MASS
164
AREA
8740
HEIGHT
6688
24-Aug-2022
10:25
ALSHS
S



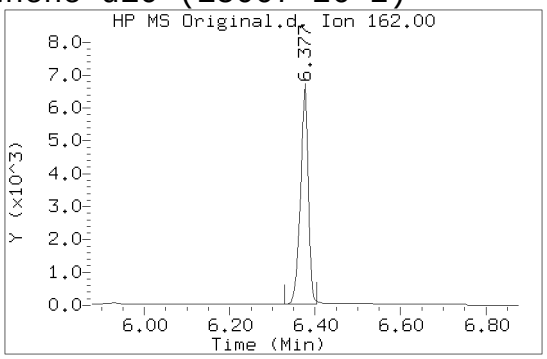
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\06.D
Inj Date : 23-AUG-2022 11:34
InstruID : SV6.i
LabSampID : LCS-182382

Acenaphthene-d10 (15067-26-2)

Reason Code:

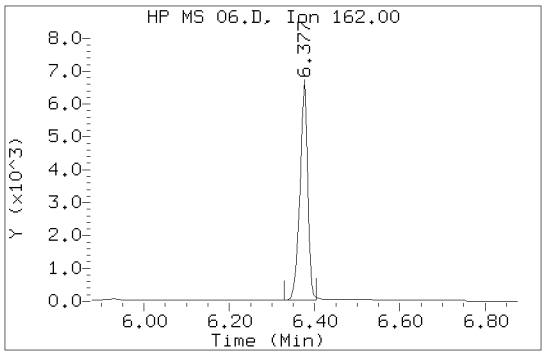
BEFORE

MASS
162
AREA
8458
HEIGHT
6694
23-Aug-2022
11:48
ALSHS
Server



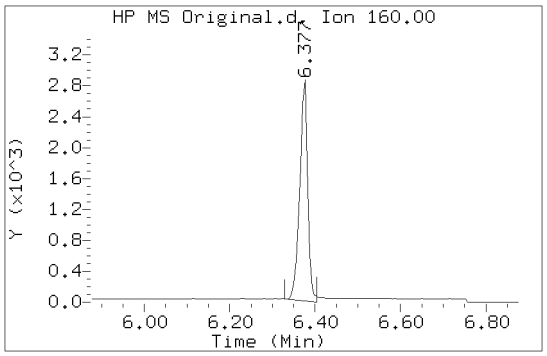
AFTER

MASS
162
AREA
8458
HEIGHT
6694
24-Aug-2022
10:25
ALSHS
S



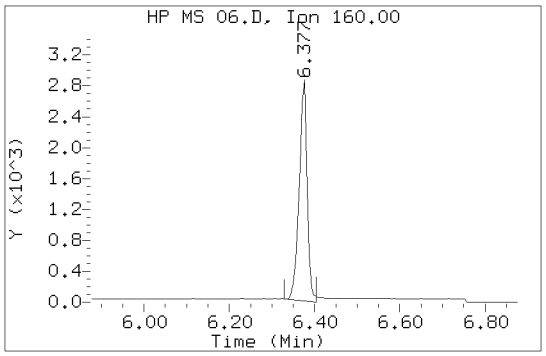
BEFORE

MASS
160
AREA
3745
HEIGHT
2860
23-Aug-2022
11:48
ALSHS
Server



AFTER

MASS
160
AREA
3745
HEIGHT
2860
24-Aug-2022
10:25
ALSHS
S

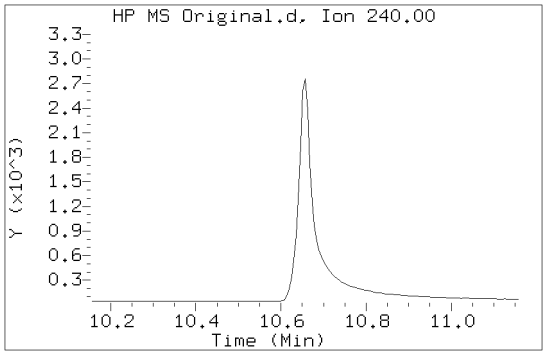


Chrysene-d12 (1719-03-5)

Reason Code:

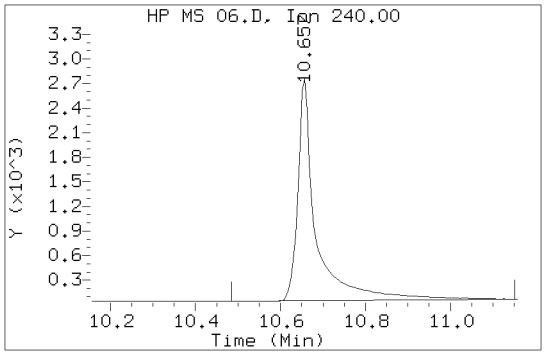
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
11:48
ALSHS
Server



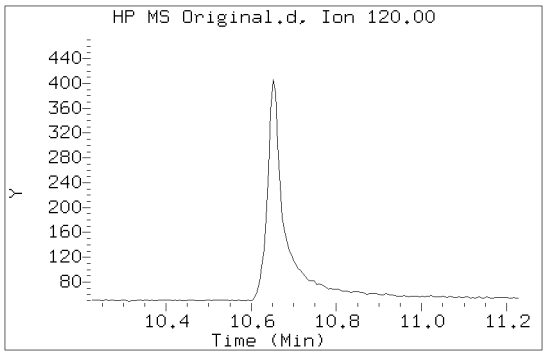
AFTER

MASS
240
AREA
8081
HEIGHT
2705
24-Aug-2022
10:25
ALSHS
S



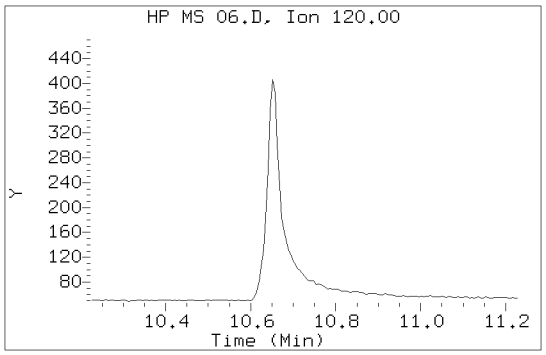
BEFORE

MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
11:48
ALSHS
Server



AFTER

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



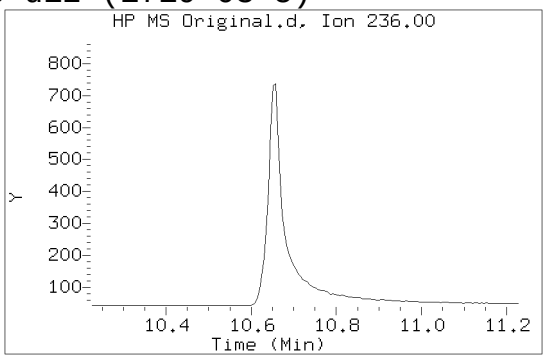
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\06.D
Inj Date : 23-AUG-2022 11:34
InstruID : SV6.i
LabSampID : LCS-182382

Chrysene-d12 (1719-03-5)

Reason Code:

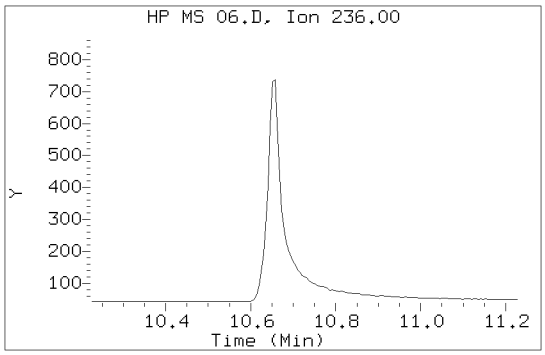
BEFORE

MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
11:48
ALSHS
Server



AFTER

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

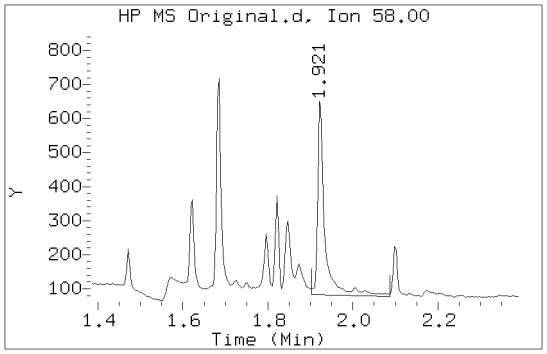


1,4-Dioxane ()

Reason Code:

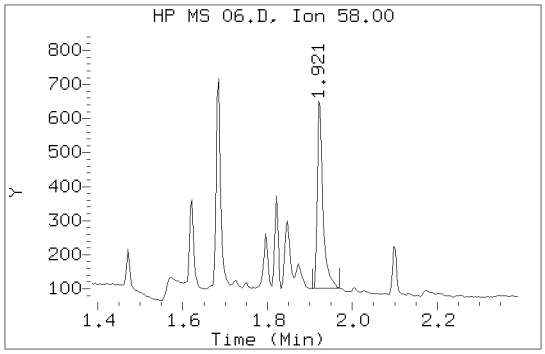
BEFORE

MASS
58
AREA
683
HEIGHT
568
23-Aug-2022
11:48
ALSHS
Server



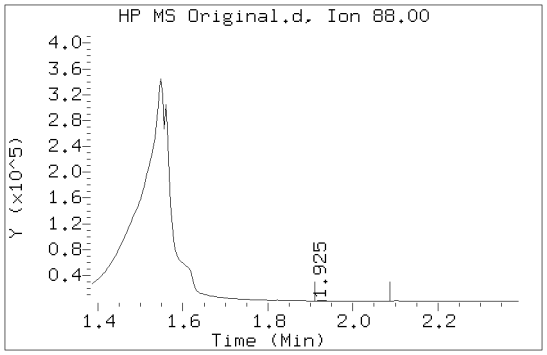
AFTER

MASS
58
AREA
520
HEIGHT
550
24-Aug-2022
10:25
ALSHS
S



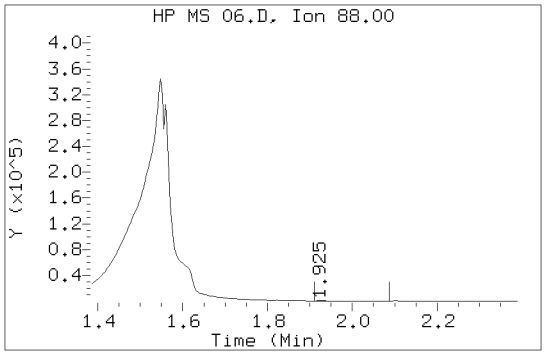
BEFORE

MASS
88
AREA
2170
HEIGHT
956
23-Aug-2022
11:48
ALSHS
Server



AFTER

MASS
88
AREA
2170
HEIGHT
956
24-Aug-2022
10:25
ALSHS
S

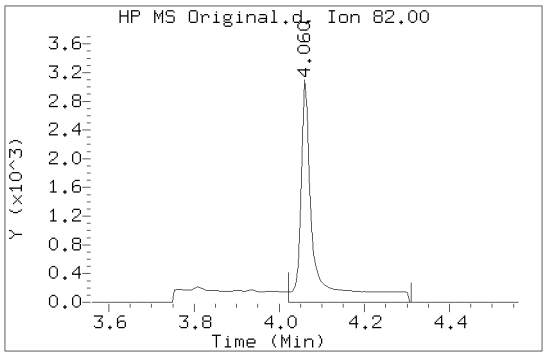


Nitrobenzene-d5 (4165-60-0)

Reason Code:

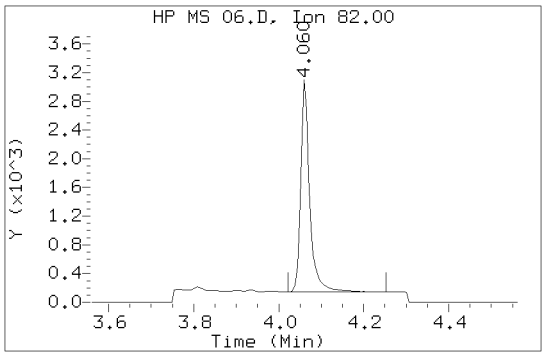
BEFORE

MASS
82
AREA
6752
HEIGHT
3099
23-Aug-2022
11:48
ALSHS
Server



AFTER

MASS
82
AREA
4366
HEIGHT
2956
24-Aug-2022
10:25
ALSHS
S

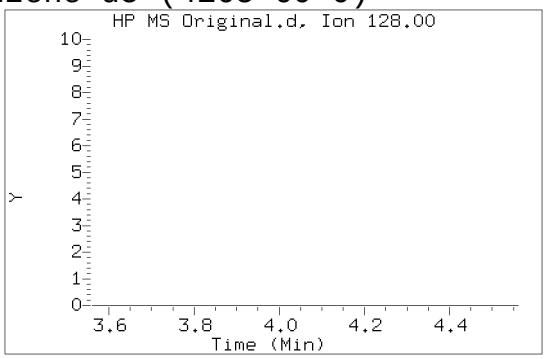


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\06.D
Inj Date : 23-AUG-2022 11:34
InstruID : SV6.i
LabSampID : LCS-182382

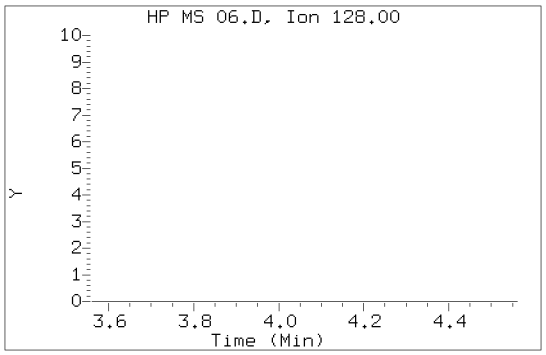
Nitrobenzene-d5 (4165-60-0)

Reason Code:

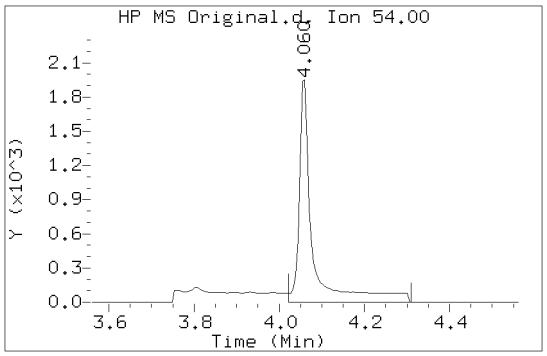
BEFORE
MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
11:48
ALSHS
Server



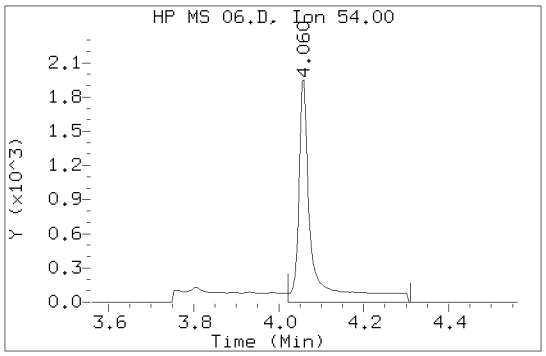
AFTER
MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
54
AREA
4233
HEIGHT
1950
23-Aug-2022
11:48
ALSHS
Server



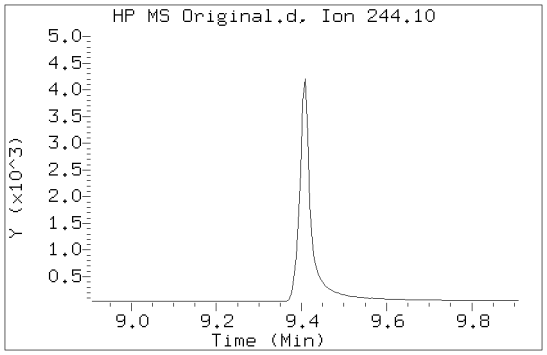
AFTER
MASS
54
AREA
4233
HEIGHT
1950
24-Aug-2022
10:25
ALSHS
S



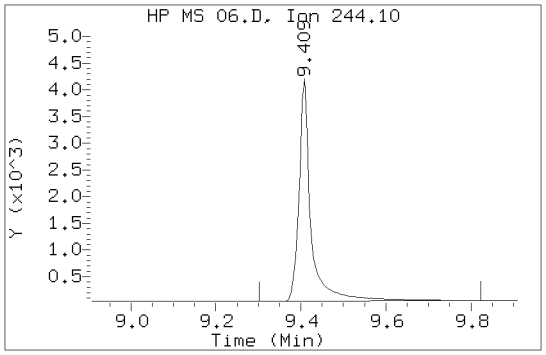
4-Terphenyl-d14 (1718-51-0)

Reason Code:

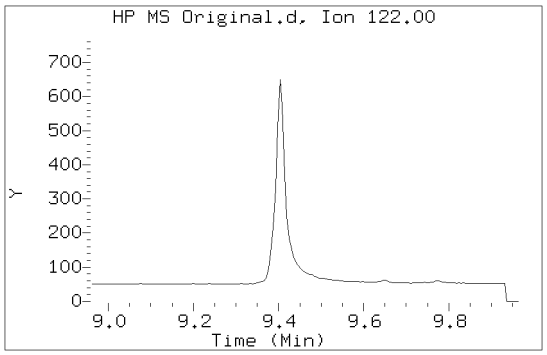
BEFORE
MASS
244.1
AREA
0
HEIGHT
0
23-Aug-2022
11:48
ALSHS
Server



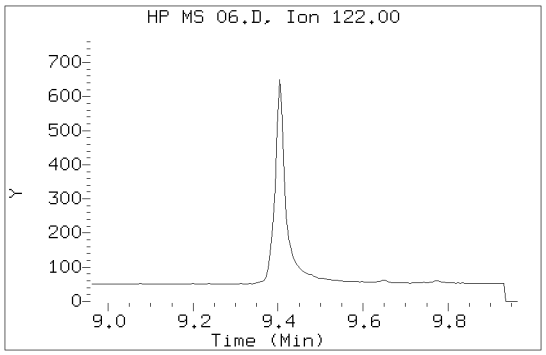
AFTER
MASS
244.1
AREA
8055
HEIGHT
4158
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
122
AREA
0
HEIGHT
0
23-Aug-2022
11:48
ALSHS
Server



AFTER
MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



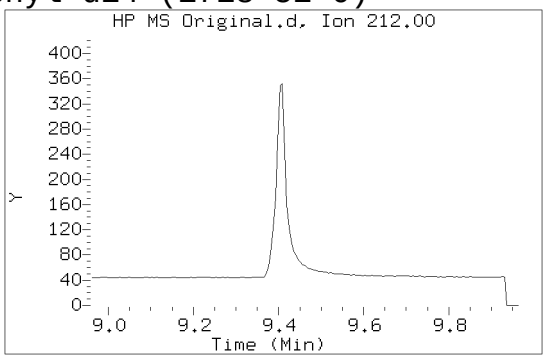
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\06.D
Inj Date : 23-AUG-2022 11:34
InstruID : SV6.i
LabSampID : LCS-182382

4-Terphenyl-d14 (1718-51-0)

Reason Code:

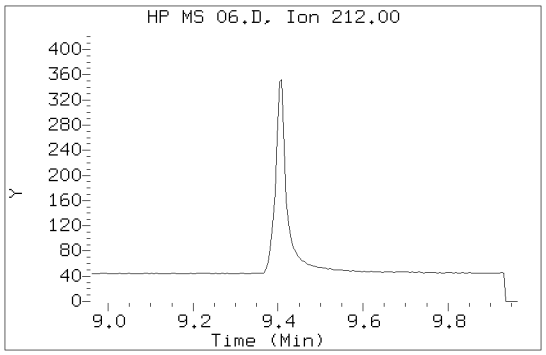
BEFORE

MASS
212
AREA
0
HEIGHT
0
23-Aug-2022
11:48
ALSHS
Server



AFTER

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

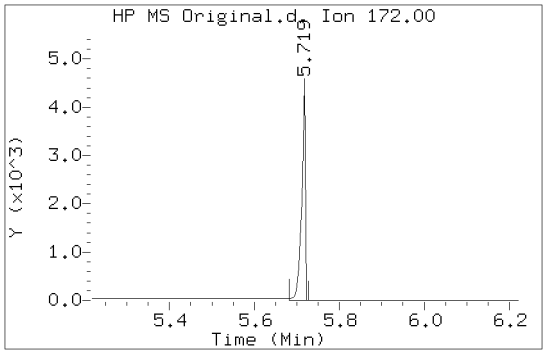


2-Fluorobiphenyl (321-60-8)

Reason Code:

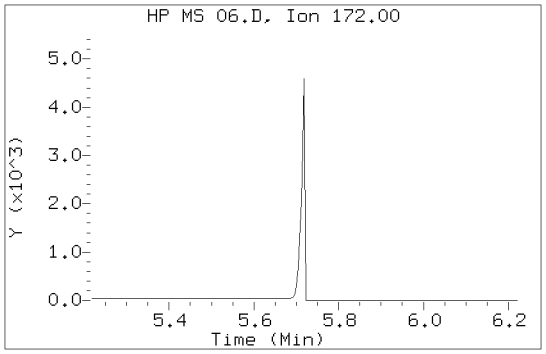
BEFORE

MASS
172
AREA
2838
HEIGHT
4591
23-Aug-2022
11:48
ALSHS
Server



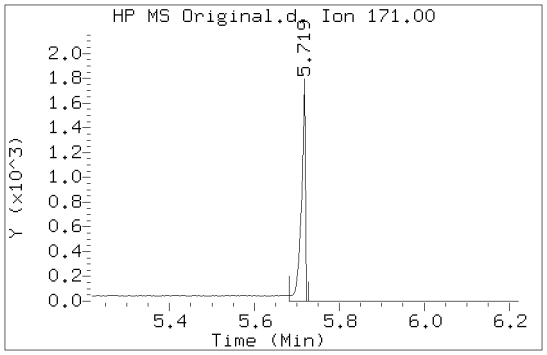
AFTER

MASS
172
AREA
4681
HEIGHT
4603
24-Aug-2022
10:25
ALSHS
S



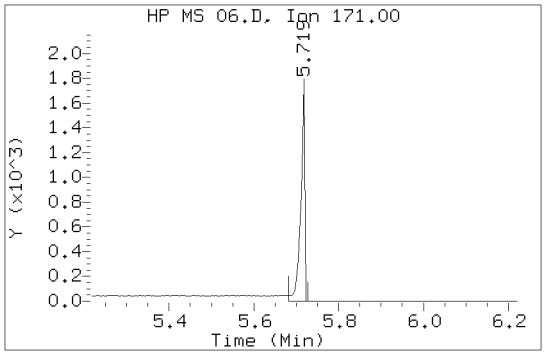
BEFORE

MASS
171
AREA
1215
HEIGHT
1795
23-Aug-2022
11:48
ALSHS
Server



AFTER

MASS
171
AREA
1215
HEIGHT
1795
24-Aug-2022
10:25
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\07.D Page 1
Report Date: 24-Aug-2022 10:25

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\07.D
Lab Smp Id: LCSD-182382
Inj Date : 23-AUG-2022 11:52
Operator : LG Inst ID: SV6.i
Smp Info : LCSD-182382
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 6 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.598	3.592	(1.000)	10965	0.10000	(aM)
* 45 Naphthalene-d8	136	4.705	4.705	(1.000)	15980	0.10000	
$ 33 Nitrobenzene-d5	82	4.059	4.059	(0.863)	3903	0.07327	0.07327(M)
* 86 Acenaphthene-d10	164	6.377	6.376	(1.000)	7794	0.10000	(Q)
$ 69 2-Fluorobiphenyl	172	5.719	5.718	(0.897)	4521	0.03727	0.03726(M)
* 126 Phenanthrene-d10	188	7.822	7.827	(1.000)	13992	0.10000	
* 182 Chrysene-d12	240	10.657	10.657	(1.000)	6397	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.409	9.408	(0.883)	6654	0.05533	0.05532(M)
* 198 Perylene-d12	264	12.719	12.724	(1.000)	4136	0.10000	
1 1,4-Dioxane	58	1.906	1.887	(0.530)	482	0.10708	0.1071(aM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01135380

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\07.D

Page 1

Date : 23-AUG-2022 11:52

Client ID:

Instrument: SV6.i

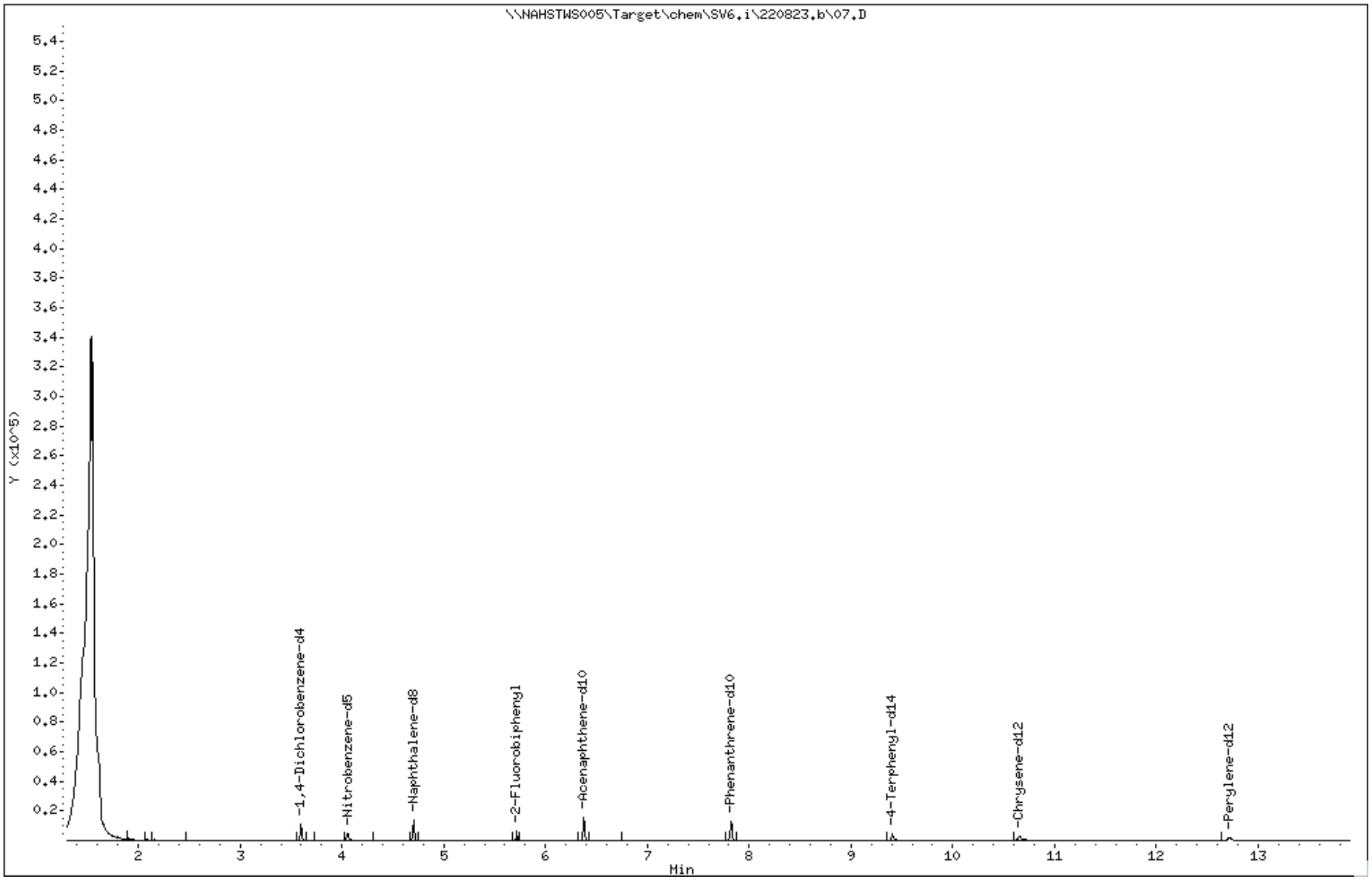
Sample Info: LCSD-182382

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



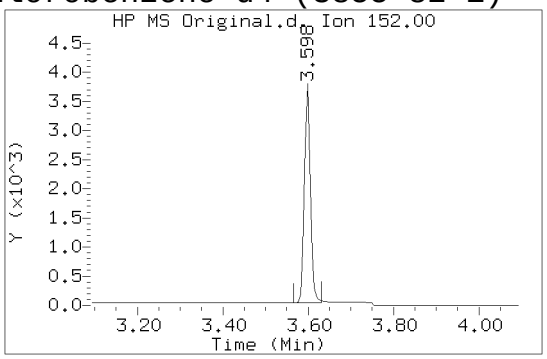
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\07.D
Inj Date : 23-AUG-2022 11:52
InstruID : SV6.i
LabSampID : LCSD-182382

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

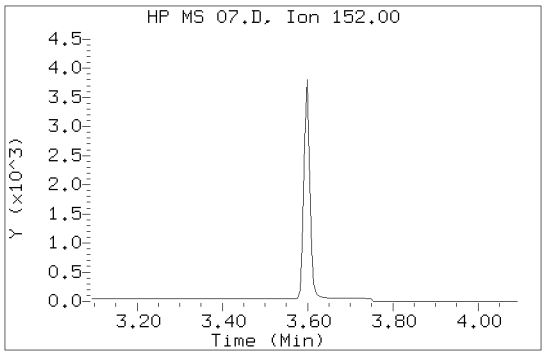
BEFORE

MASS
152
AREA
3602
HEIGHT
3756
23-Aug-2022
12:07
ALSHS
Server



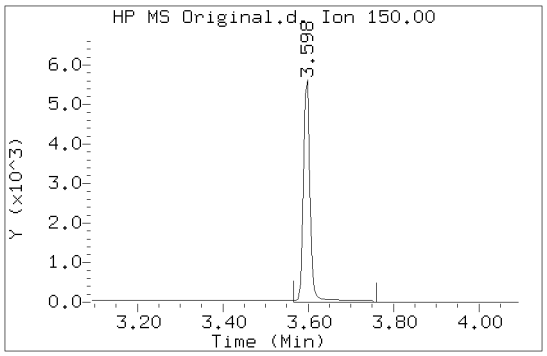
AFTER

MASS
152
AREA
10965
HEIGHT
3869
24-Aug-2022
10:25
ALSHS
S



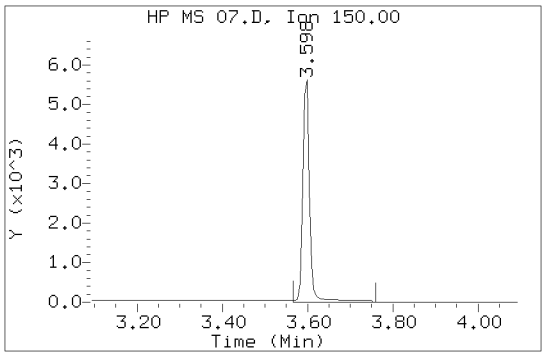
BEFORE

MASS
150
AREA
6299
HEIGHT
5623
23-Aug-2022
12:07
ALSHS
Server



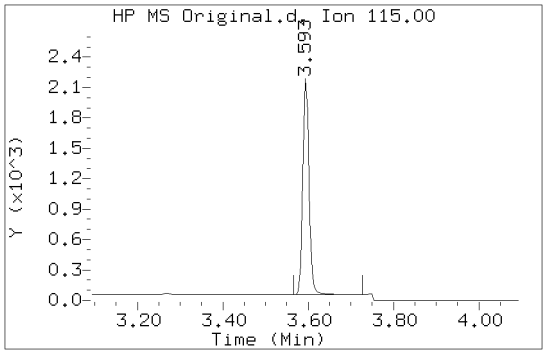
AFTER

MASS
150
AREA
6299
HEIGHT
5623
24-Aug-2022
10:25
ALSHS
S



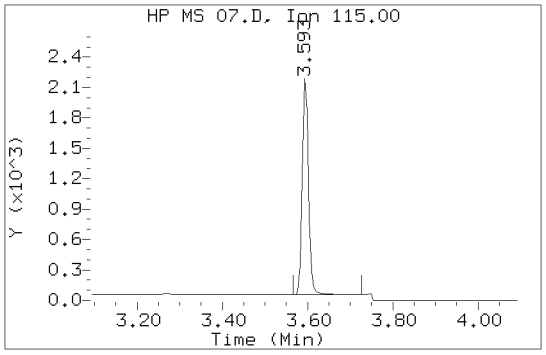
BEFORE

MASS
115
AREA
2133
HEIGHT
2131
23-Aug-2022
12:07
ALSHS
Server



AFTER

MASS
115
AREA
2133
HEIGHT
2131
24-Aug-2022
10:25
ALSHS
S

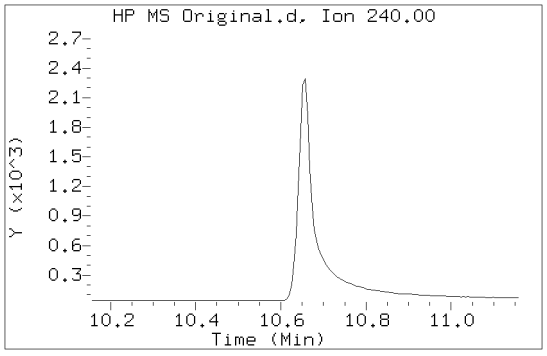


Chrysene-d12 (1719-03-5)

Reason Code:

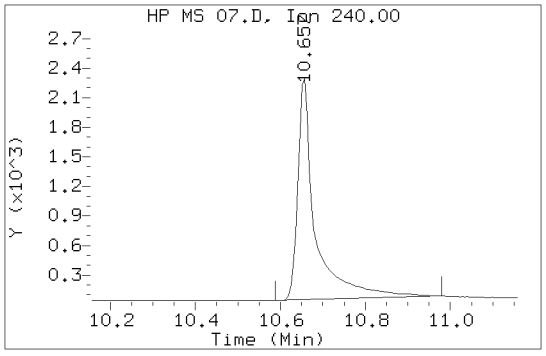
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
12:07
ALSHS
Server



AFTER

MASS
240
AREA
6397
HEIGHT
2240
24-Aug-2022
10:25
ALSHS
S

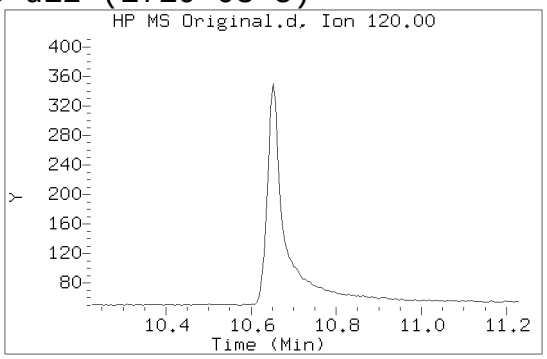


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\07.D
Inj Date : 23-AUG-2022 11:52
InstruID : SV6.i
LabSampID : LCSD-182382

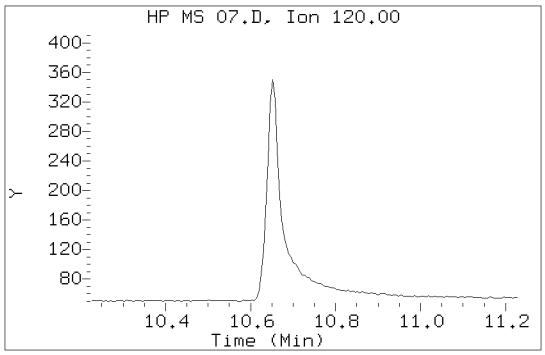
Chrysene-d12 (1719-03-5)

Reason Code:

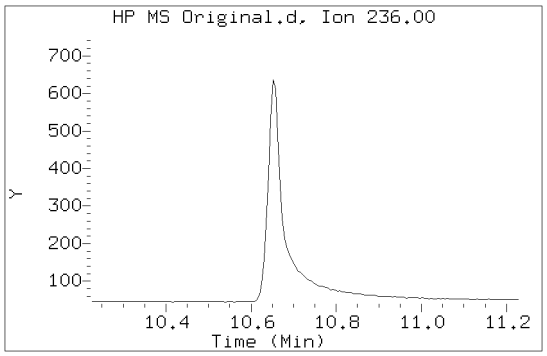
BEFORE
MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
12:07
ALSHS
Server



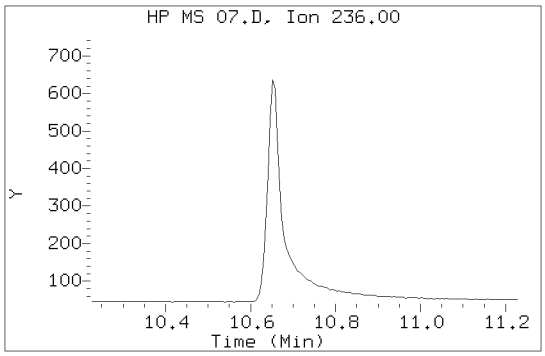
AFTER
MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
12:07
ALSHS
Server



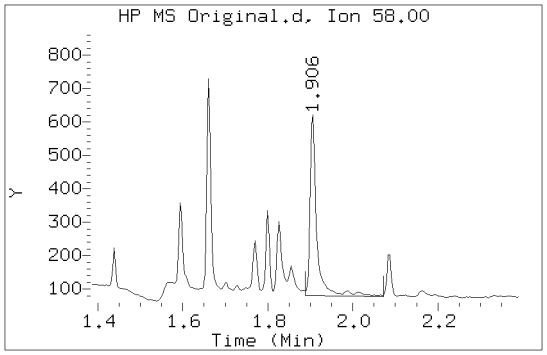
AFTER
MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



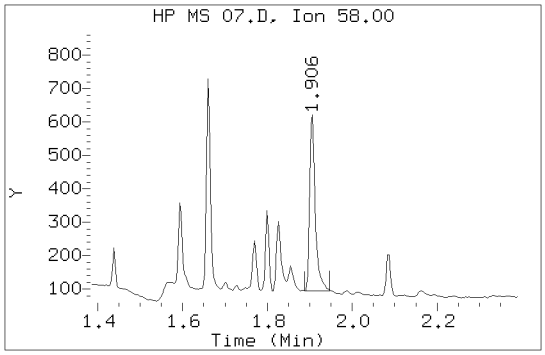
1,4-Dioxane ()

Reason Code:

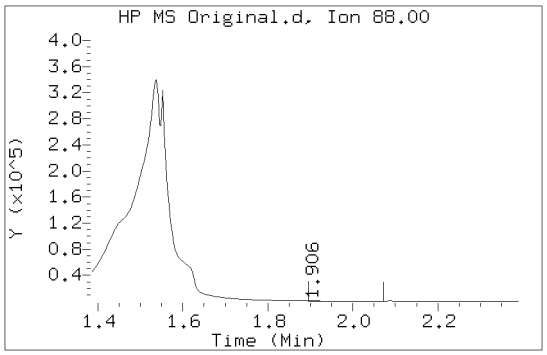
BEFORE
MASS
58
AREA
591
HEIGHT
539
23-Aug-2022
12:07
ALSHS
Server



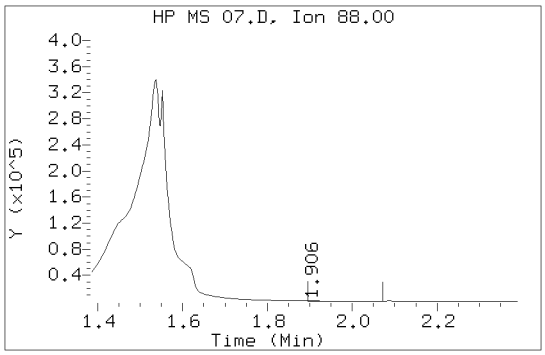
AFTER
MASS
58
AREA
482
HEIGHT
527
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
88
AREA
2399
HEIGHT
981
23-Aug-2022
12:07
ALSHS
Server



AFTER
MASS
88
AREA
2399
HEIGHT
981
24-Aug-2022
10:25
ALSHS
S



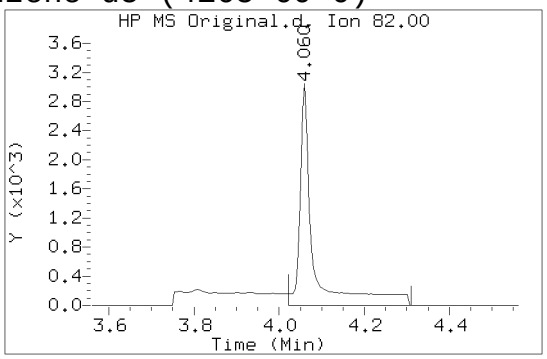
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\07.D
Inj Date : 23-AUG-2022 11:52
InstruID : SV6.i
LabSampID : LCSD-182382

Nitrobenzene-d5 (4165-60-0)

Reason Code:

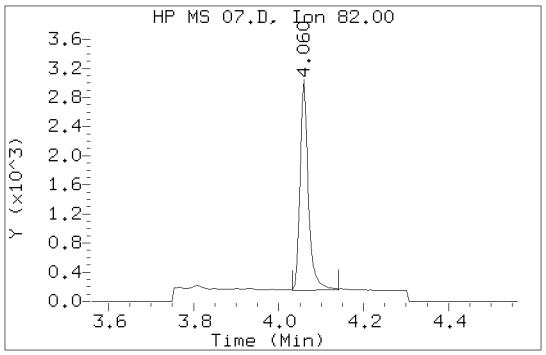
BEFORE

MASS
82
AREA
6515
HEIGHT
3045
23-Aug-2022
12:07
ALSHS
Server



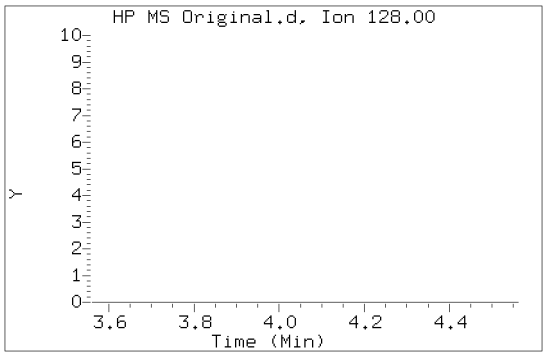
AFTER

MASS
82
AREA
3903
HEIGHT
2890
24-Aug-2022
10:25
ALSHS
S



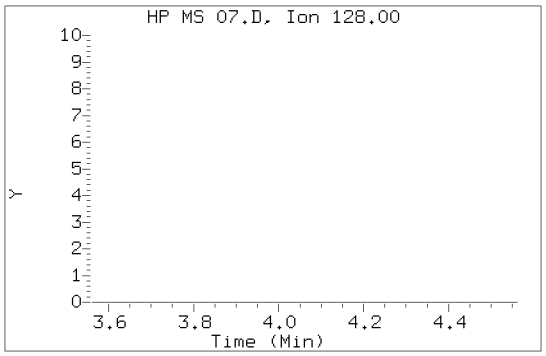
BEFORE

MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
12:07
ALSHS
Server



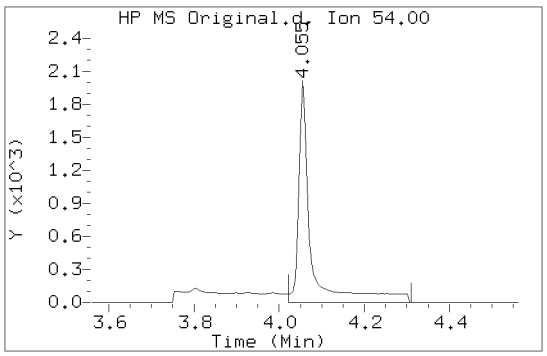
AFTER

MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



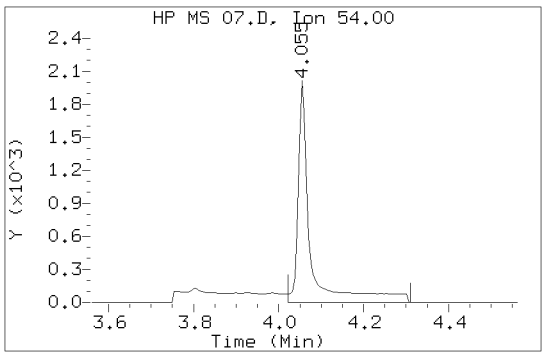
BEFORE

MASS
54
AREA
3948
HEIGHT
2015
23-Aug-2022
12:07
ALSHS
Server



AFTER

MASS
54
AREA
3948
HEIGHT
2015
24-Aug-2022
10:25
ALSHS
S

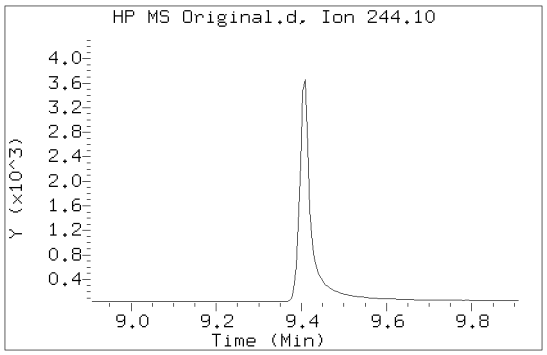


4-Terphenyl-d14 (1718-51-0)

Reason Code:

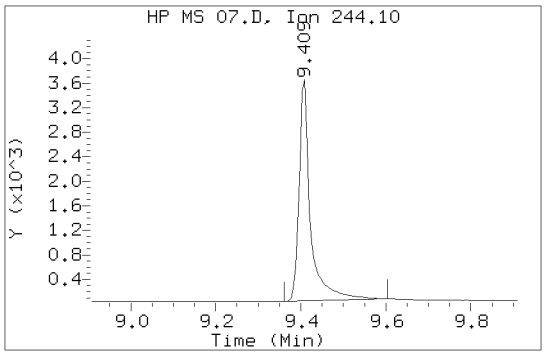
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
23-Aug-2022
12:07
ALSHS
Server



AFTER

MASS
244.1
AREA
6654
HEIGHT
3604
24-Aug-2022
10:25
ALSHS
S

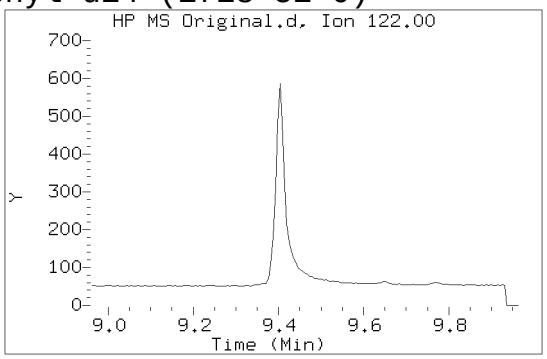


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\07.D
Inj Date : 23-AUG-2022 11:52
InstruID : SV6.i
LabSampID : LCSD-182382

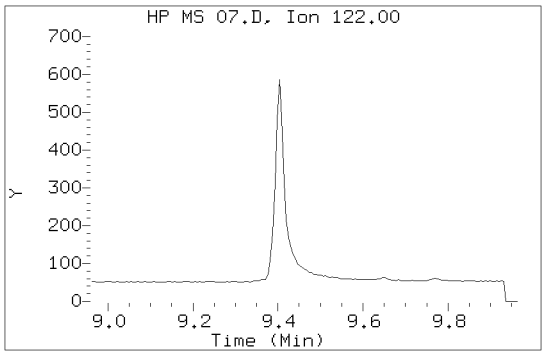
4-Terphenyl-d14 (1718-51-0)

Reason Code:

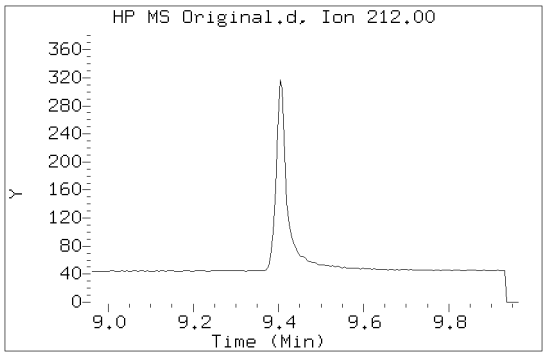
BEFORE
MASS
122
AREA
0
HEIGHT
0
23-Aug-2022
12:07
ALSHS
Server



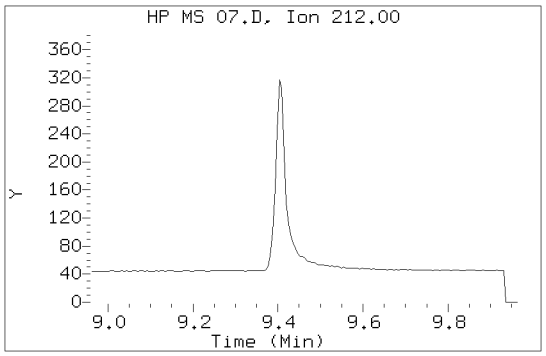
AFTER
MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
212
AREA
0
HEIGHT
0
23-Aug-2022
12:07
ALSHS
Server



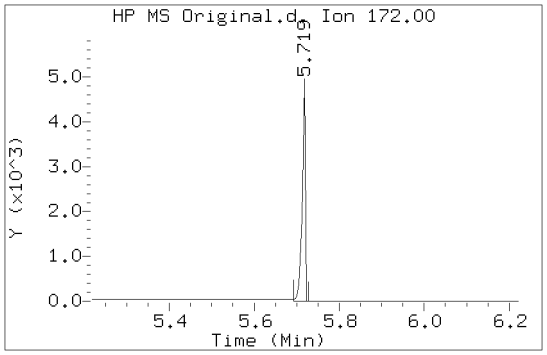
AFTER
MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



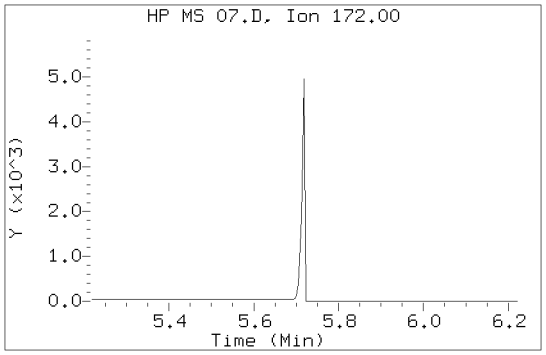
2-Fluorobiphenyl (321-60-8)

Reason Code:

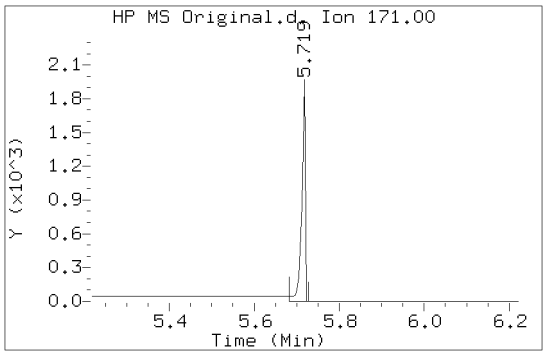
BEFORE
MASS
172
AREA
2701
HEIGHT
4957
23-Aug-2022
12:07
ALSHS
Server



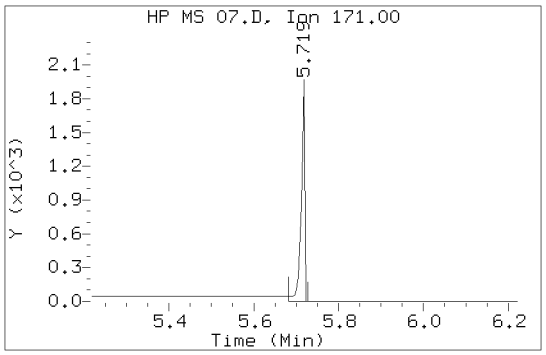
AFTER
MASS
172
AREA
4521
HEIGHT
4957
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
171
AREA
1194
HEIGHT
1969
23-Aug-2022
12:07
ALSHS
Server



AFTER
MASS
171
AREA
1194
HEIGHT
1969
24-Aug-2022
10:25
ALSHS
S



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\22.D
Lab Smp Id: HS22080522-01
Inj Date : 23-AUG-2022 16:21
Operator : LG Inst ID: SV6.i
Smp Info : HS22080522-01
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.598	3.592	(1.000)	3749	0.10000	(aM)
* 45 Naphthalene-d8	136	4.709	4.705	(1.000)	10602	0.10000	
$ 33 Nitrobenzene-d5	82	4.060	4.059	(0.862)	3124	0.08840	0.08840(M)
* 86 Acenaphthene-d10	164	6.382	6.376	(1.000)	5696	0.10000	(QM)
$ 69 2-Fluorobiphenyl	172	5.358	5.718	(0.840)	7058	0.07961	0.07960(M)
* 126 Phenanthrene-d10	188	7.833	7.827	(1.000)	9968	0.10000	(Q)
* 182 Chrysene-d12	240	10.668	10.657	(1.000)	7673	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.414	9.408	(0.882)	6114	0.04238	0.04238(M)
* 198 Perylene-d12	264	12.740	12.724	(1.000)	7851	0.10000	
1 1,4-Dioxane	58	1.858	1.887	(0.516)	15323	9.95597	9.956(AQH)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

01135387

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\22.D

Date : 23-AUG-2022 16:21

Client ID:

Instrument: SV6.i

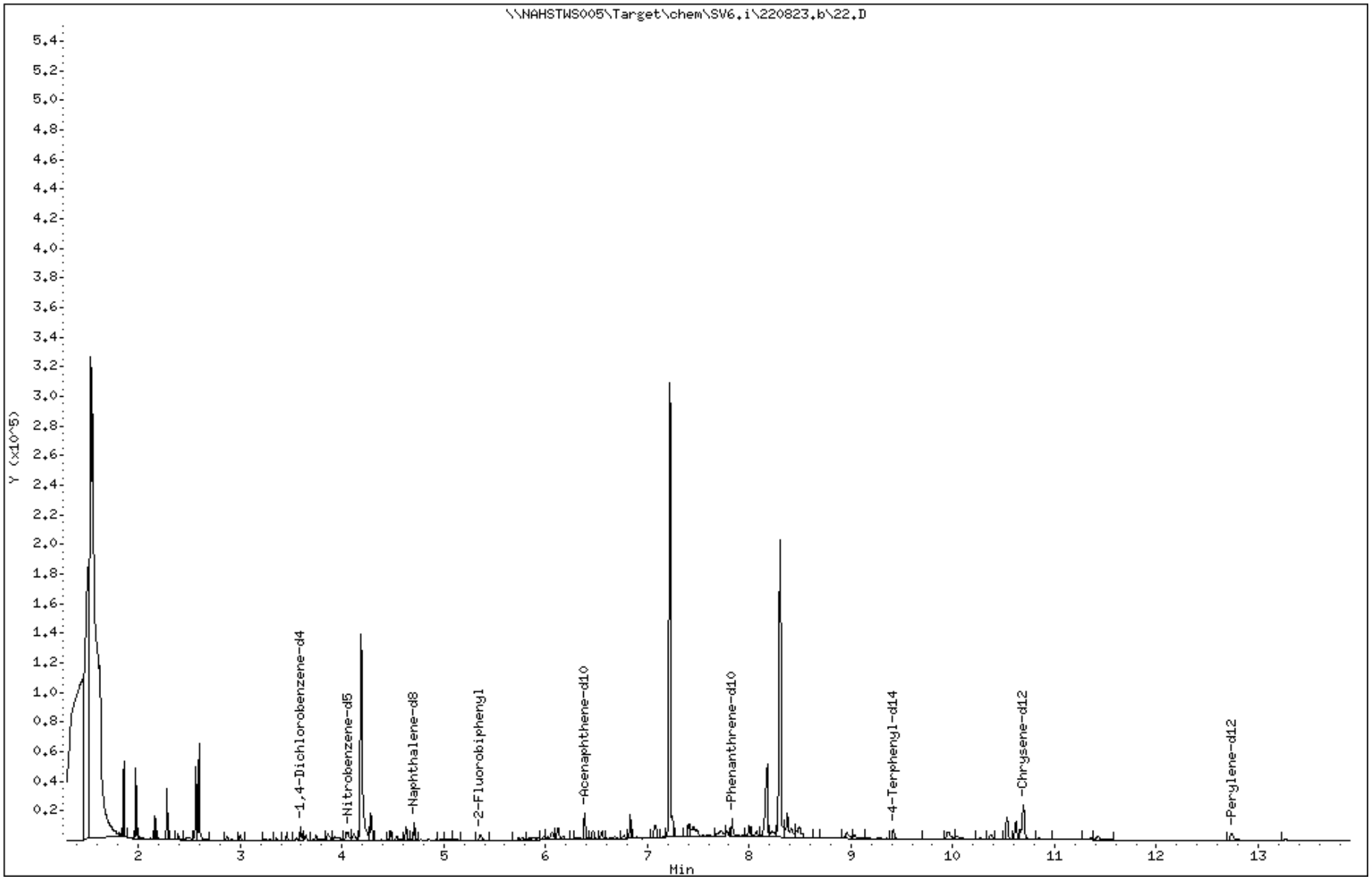
Sample Info: HS22080522-01

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\22.D

Date : 23-AUG-2022 16:21

Client ID:

Instrument: SV6.i

Sample Info: HS22080522-01

Purge Volume: 1000.0

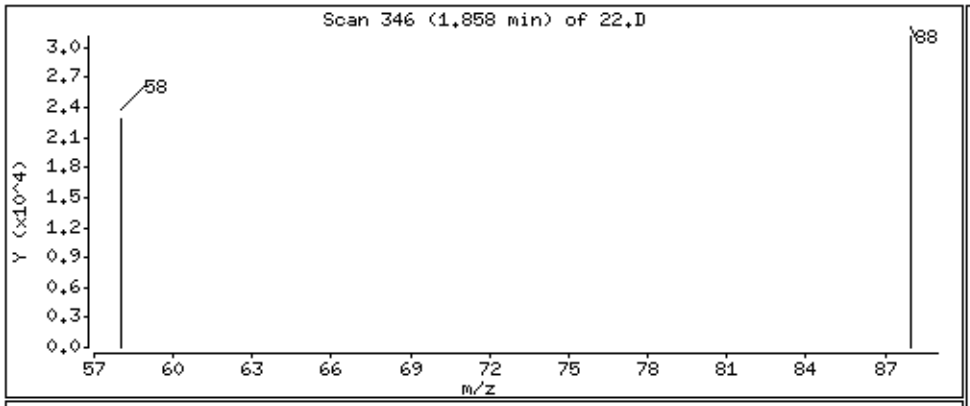
Operator: LG

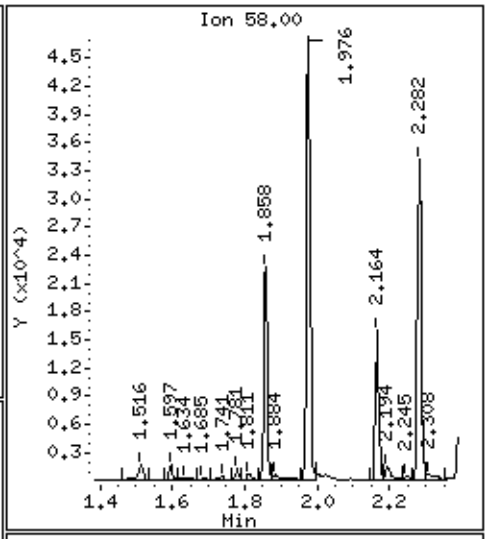
Column phase: RTX-5SIL MS

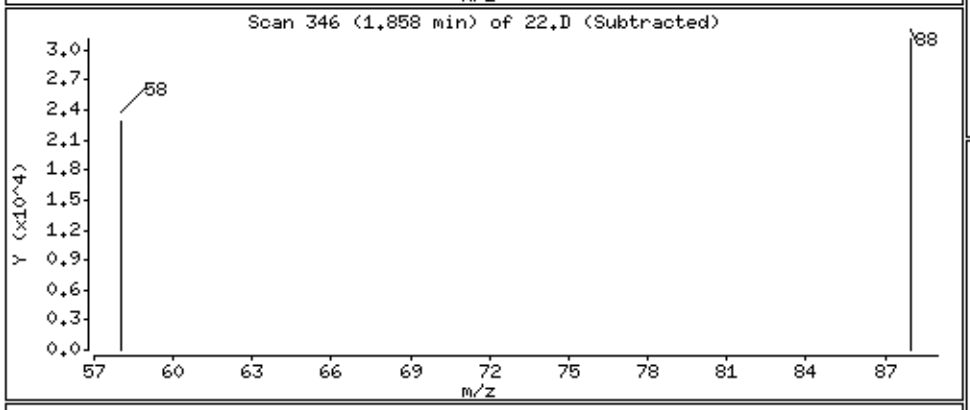
Column diameter: 0.28

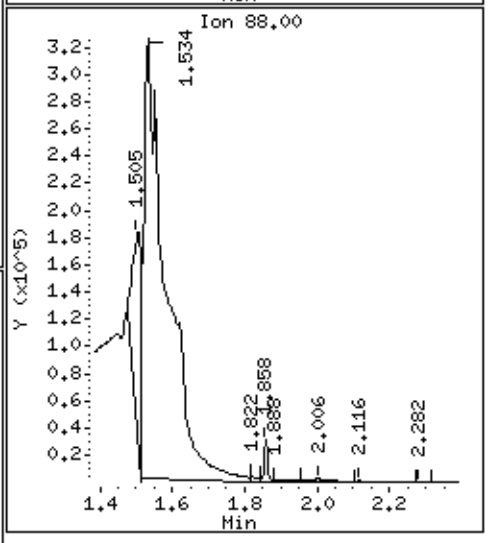
1 1,4-Dioxane

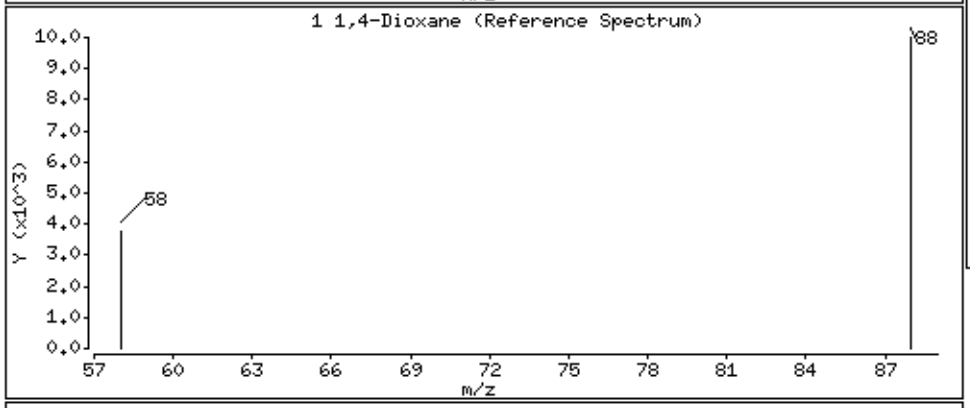
Concentration: 9.956 ug/L

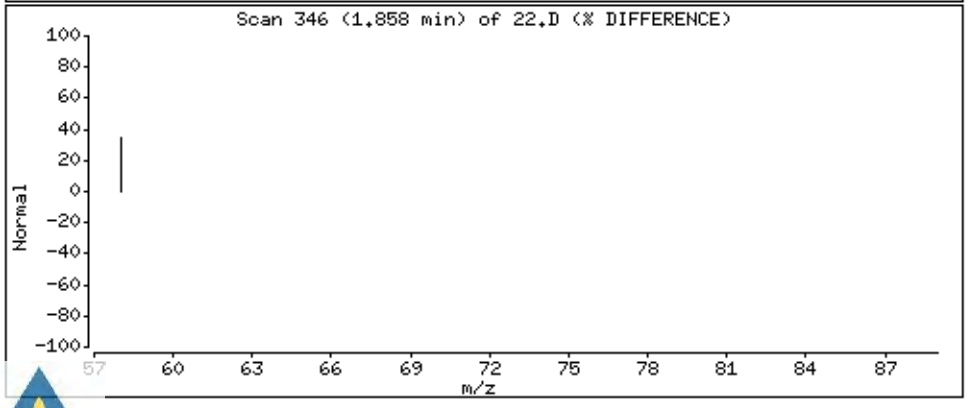












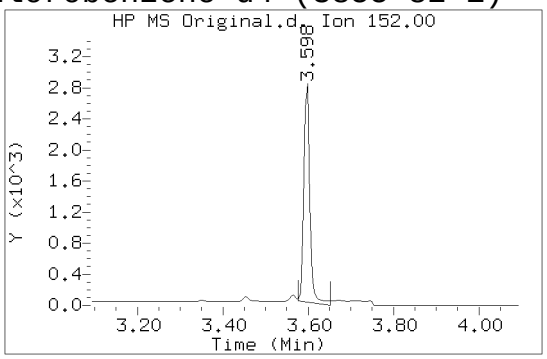
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\22.D
Inj Date : 23-AUG-2022 16:21
InstruID : SV6.i
LabSampID : HS22080522-01

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

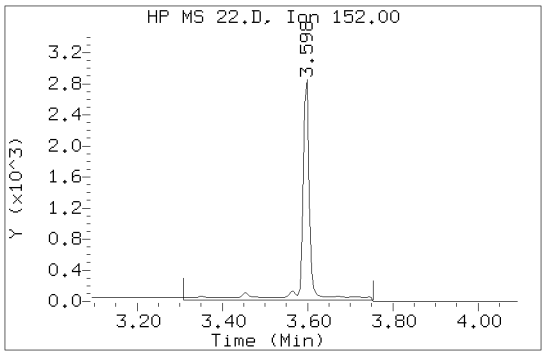
BEFORE

MASS
152
AREA
2714
HEIGHT
2813
23-Aug-2022
16:37
ALSHS
Server



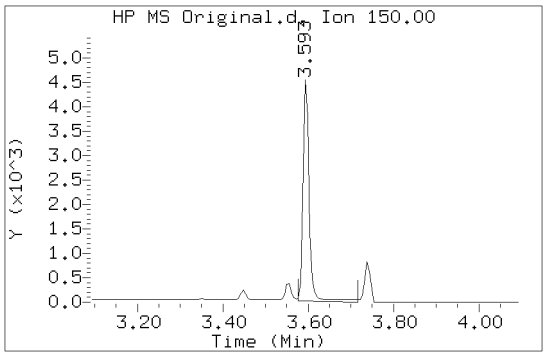
AFTER

MASS
152
AREA
3749
HEIGHT
2839
24-Aug-2022
10:25
ALSHS
S



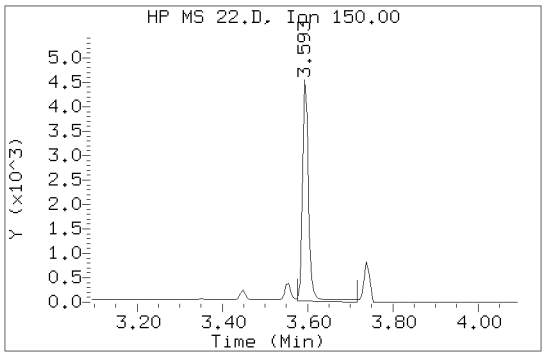
BEFORE

MASS
150
AREA
4477
HEIGHT
4528
23-Aug-2022
16:37
ALSHS
Server



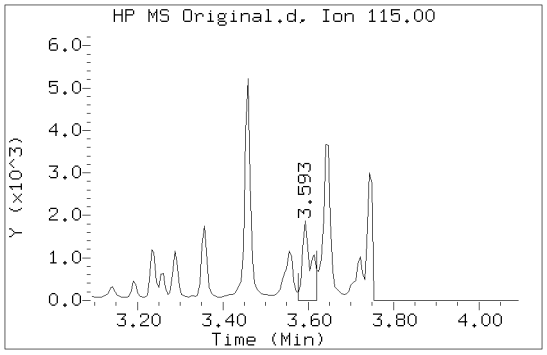
AFTER

MASS
150
AREA
4477
HEIGHT
4528
24-Aug-2022
10:25
ALSHS
S



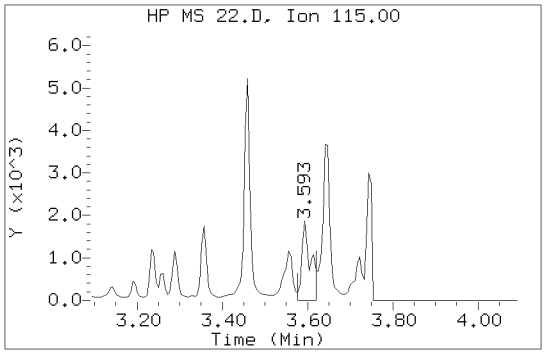
BEFORE

MASS
115
AREA
2673
HEIGHT
1860
23-Aug-2022
16:37
ALSHS
Server



AFTER

MASS
115
AREA
2673
HEIGHT
1860
24-Aug-2022
10:25
ALSHS
S

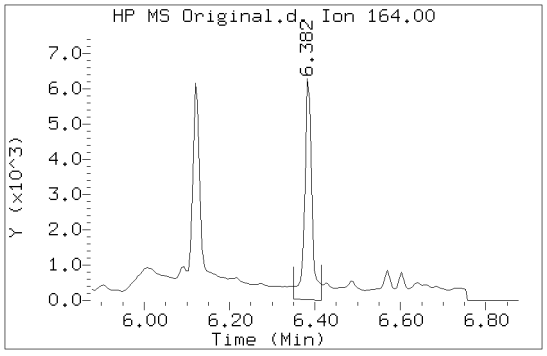


Acenaphthene-d10 (15067-26-2)

Reason Code:

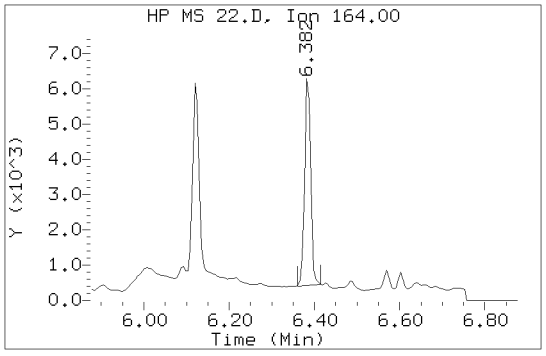
BEFORE

MASS
164
AREA
7405
HEIGHT
6269
23-Aug-2022
16:37
ALSHS
Server



AFTER

MASS
164
AREA
5696
HEIGHT
5859
24-Aug-2022
10:25
ALSHS
S



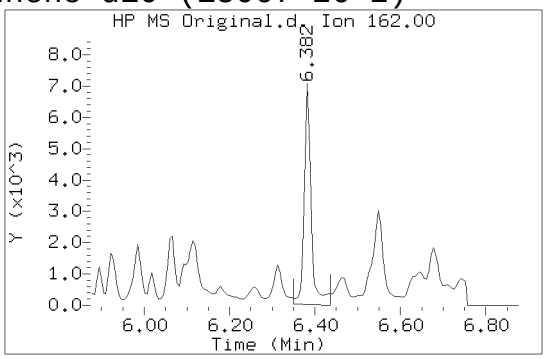
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\22.D
Inj Date : 23-AUG-2022 16:21
InstruID : SV6.i
LabSampID : HS22080522-01

Acenaphthene-d10 (15067-26-2)

Reason Code:

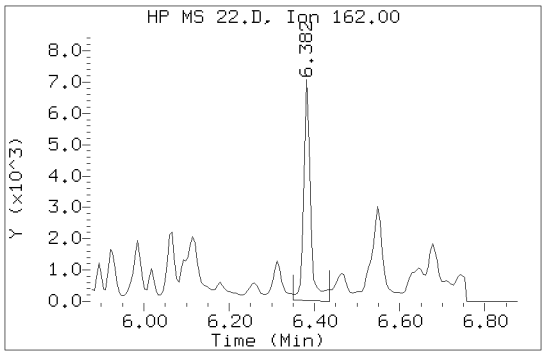
BEFORE

MASS
162
AREA
7964
HEIGHT
7056
23-Aug-2022
16:37
ALSHS
Server



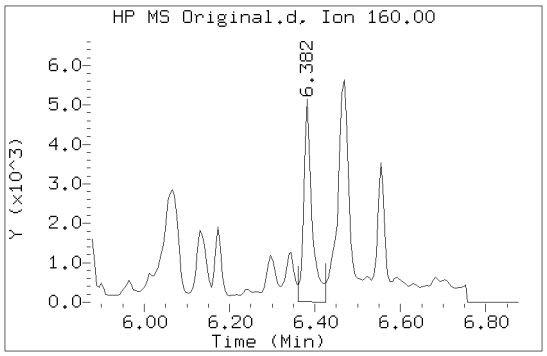
AFTER

MASS
162
AREA
7964
HEIGHT
7056
24-Aug-2022
10:25
ALSHS
S



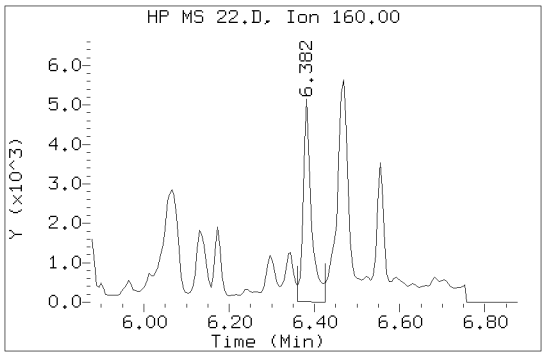
BEFORE

MASS
160
AREA
6899
HEIGHT
5129
23-Aug-2022
16:37
ALSHS
Server



AFTER

MASS
160
AREA
6899
HEIGHT
5129
24-Aug-2022
10:25
ALSHS
S

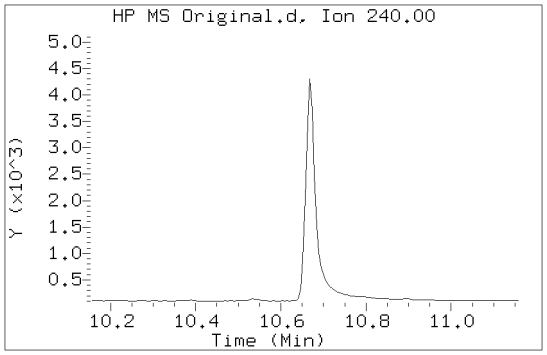


Chrysene-d12 (1719-03-5)

Reason Code:

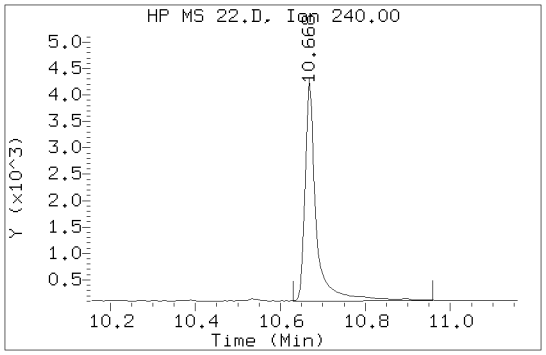
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
16:37
ALSHS
Server



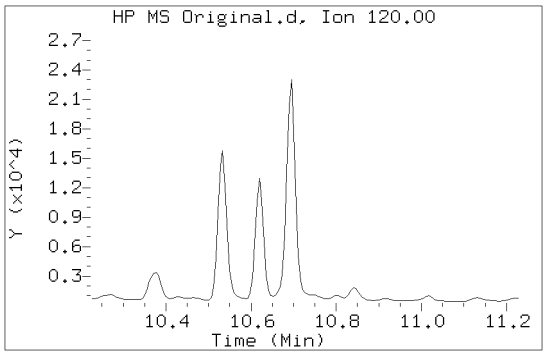
AFTER

MASS
240
AREA
7673
HEIGHT
4199
24-Aug-2022
10:25
ALSHS
S



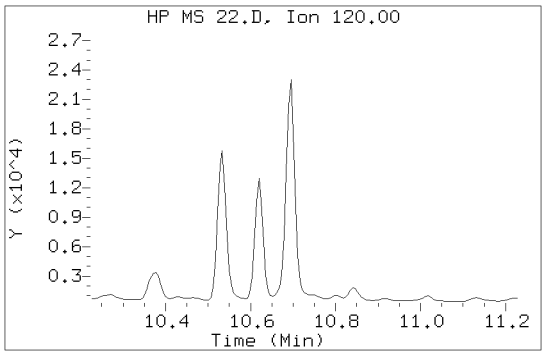
BEFORE

MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
16:37
ALSHS
Server



AFTER

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



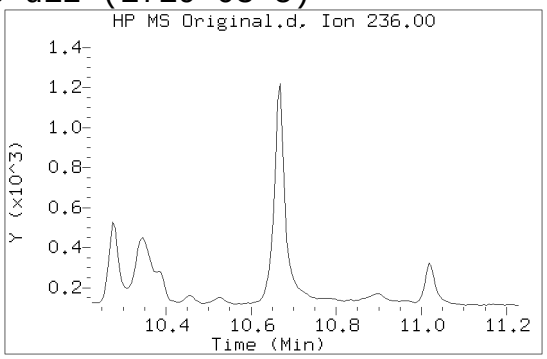
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\22.D
Inj Date : 23-AUG-2022 16:21
InstruID : SV6.i
LabSampID : HS22080522-01

Chrysene-d12 (1719-03-5)

Reason Code:

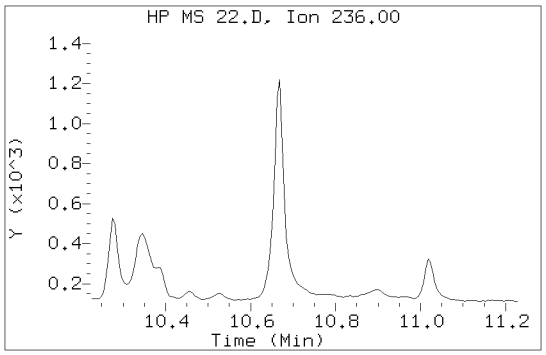
BEFORE

MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
16:37
ALSHS
Server



AFTER

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

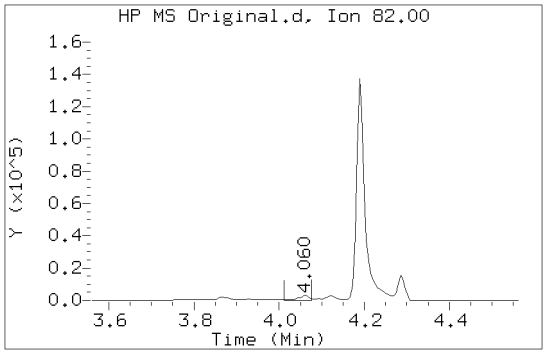


Nitrobenzene-d5 (4165-60-0)

Reason Code:

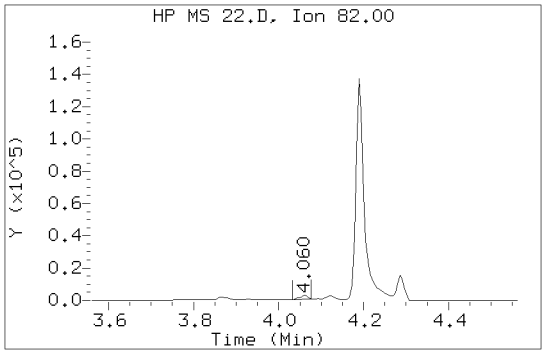
BEFORE

MASS
82
AREA
5247
HEIGHT
3063
23-Aug-2022
16:37
ALSHS
Server



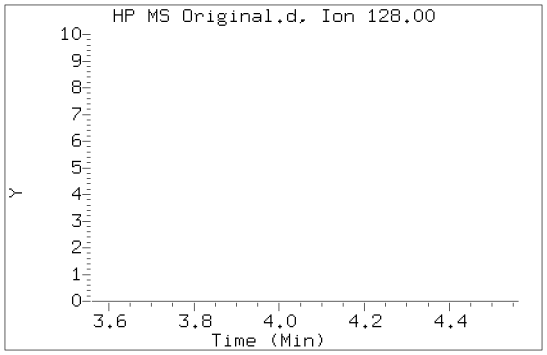
AFTER

MASS
82
AREA
3124
HEIGHT
2461
24-Aug-2022
10:25
ALSHS
S



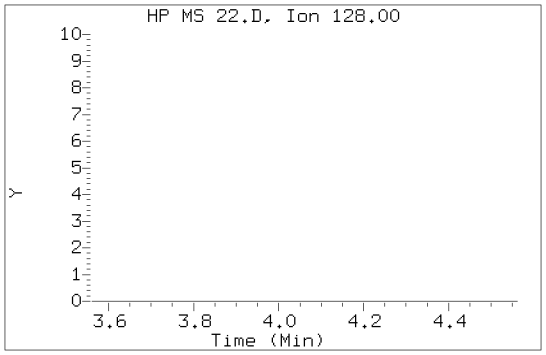
BEFORE

MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
16:37
ALSHS
Server



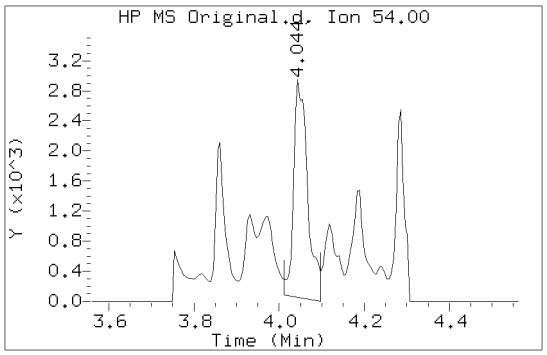
AFTER

MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



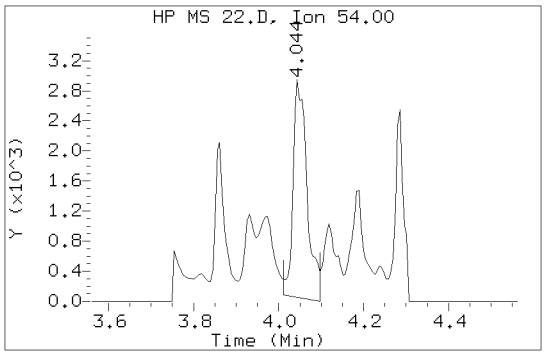
BEFORE

MASS
54
AREA
6644
HEIGHT
2893
23-Aug-2022
16:37
ALSHS
Server



AFTER

MASS
54
AREA
6644
HEIGHT
2893
24-Aug-2022
10:25
ALSHS
S



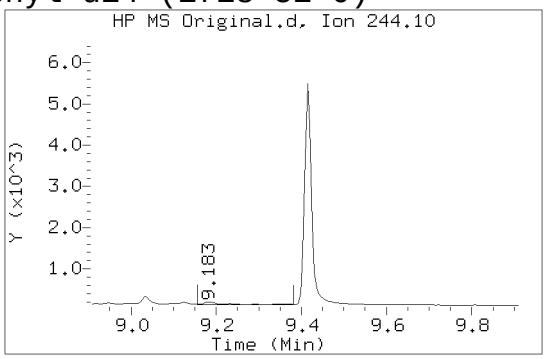
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\22.D
Inj Date : 23-AUG-2022 16:21
InstruID : SV6.i
LabSampID : HS22080522-01

4-Terphenyl-d14 (1718-51-0)

Reason Code:

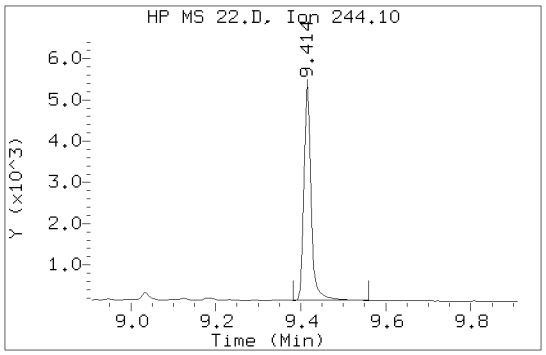
BEFORE

MASS
244.1
AREA
137
HEIGHT
58
23-Aug-2022
16:37
ALSHS
Server



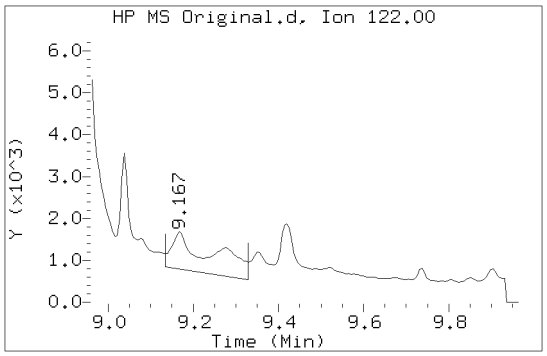
AFTER

MASS
244.1
AREA
6114
HEIGHT
5348
24-Aug-2022
10:25
ALSHS
S



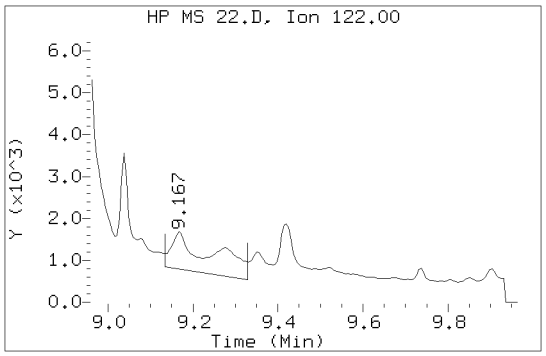
BEFORE

MASS
122
AREA
6192
HEIGHT
895
23-Aug-2022
16:37
ALSHS
Server



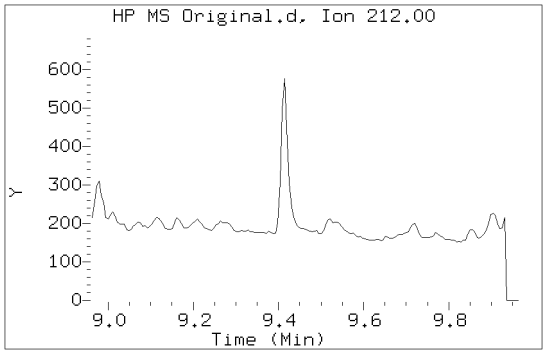
AFTER

MASS
122
AREA
6192
HEIGHT
895
24-Aug-2022
10:25
ALSHS
S



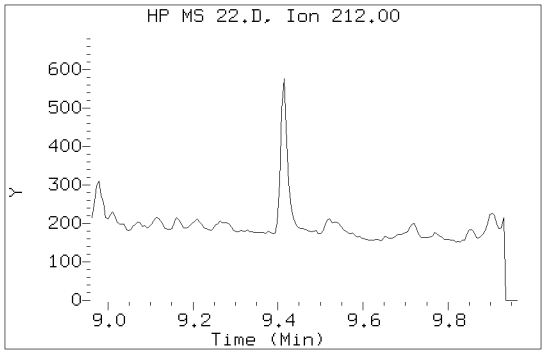
BEFORE

MASS
212
AREA
651
HEIGHT
135
23-Aug-2022
16:37
ALSHS
Server



AFTER

MASS
212
AREA
651
HEIGHT
135
24-Aug-2022
10:25
ALSHS
S

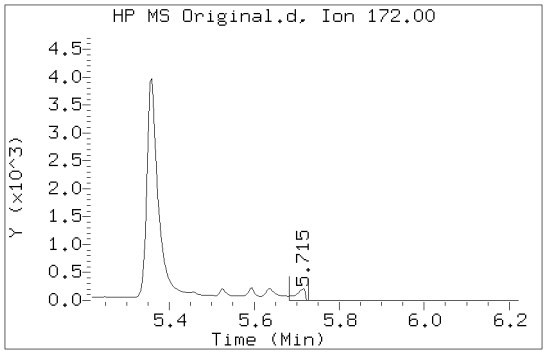


2-Fluorobiphenyl (321-60-8)

Reason Code:

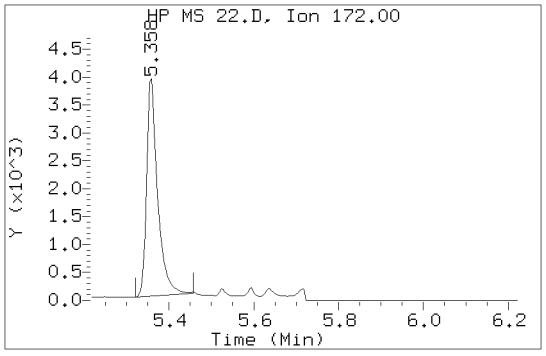
BEFORE

MASS
172
AREA
331
HEIGHT
205
23-Aug-2022
16:37
ALSHS
Server



AFTER

MASS
172
AREA
7058
HEIGHT
3901
24-Aug-2022
10:25
ALSHS
S



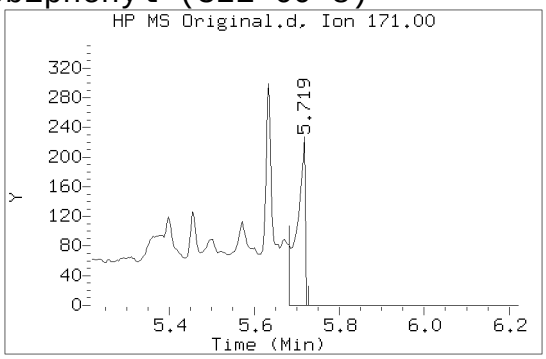
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\22.D
Inj Date : 23-AUG-2022 16:21
InstruID : SV6.i
LabSampID : HS22080522-01

2-Fluorobiphenyl (321-60-8)

Reason Code:

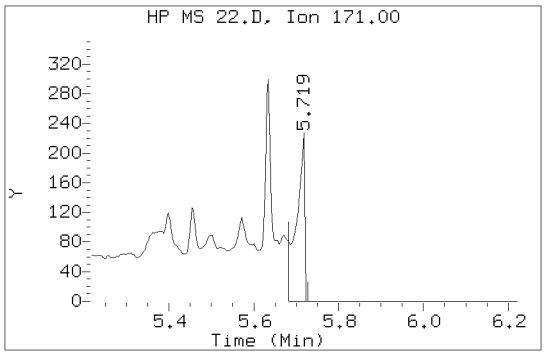
BEFORE

MASS
171
AREA
317
HEIGHT
227
23-Aug-2022
16:37
ALSHS
Server



AFTER

MASS
171
AREA
317
HEIGHT
227
24-Aug-2022
10:25
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\23.D Page 1
Report Date: 24-Aug-2022 10:26

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\23.D
Lab Smp Id: HS22080522-02
Inj Date : 23-AUG-2022 16:39
Operator : LG Inst ID: SV6.i
Smp Info : HS22080522-02
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.603	3.592	(1.000)	4256	0.10000	(aQ)
* 45 Naphthalene-d8	136	4.712	4.705	(1.000)	17233	0.10000	
$ 33 Nitrobenzene-d5	82	4.065	4.059	(0.863)	4851	0.08445	0.08445(M)
* 86 Acenaphthene-d10	164	6.382	6.376	(1.000)	9950	0.10000	(Q)
$ 69 2-Fluorobiphenyl	172	5.365	5.718	(0.841)	9369	0.06049	0.06049(M)
* 126 Phenanthrene-d10	188	7.832	7.827	(1.000)	17726	0.10000	(Q)
* 182 Chrysene-d12	240	10.667	10.657	(1.000)	14101	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.414	9.408	(0.882)	10675	0.04027	0.04026(M)
* 198 Perylene-d12	264	12.740	12.724	(1.000)	9136	0.10000	(M)
1 1,4-Dioxane	58	1.906	1.887	(0.529)	25028	14.3245	14.32(AQH)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

01135396

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\23.D

Date : 23-AUG-2022 16:39

Client ID:

Instrument: SV6.i

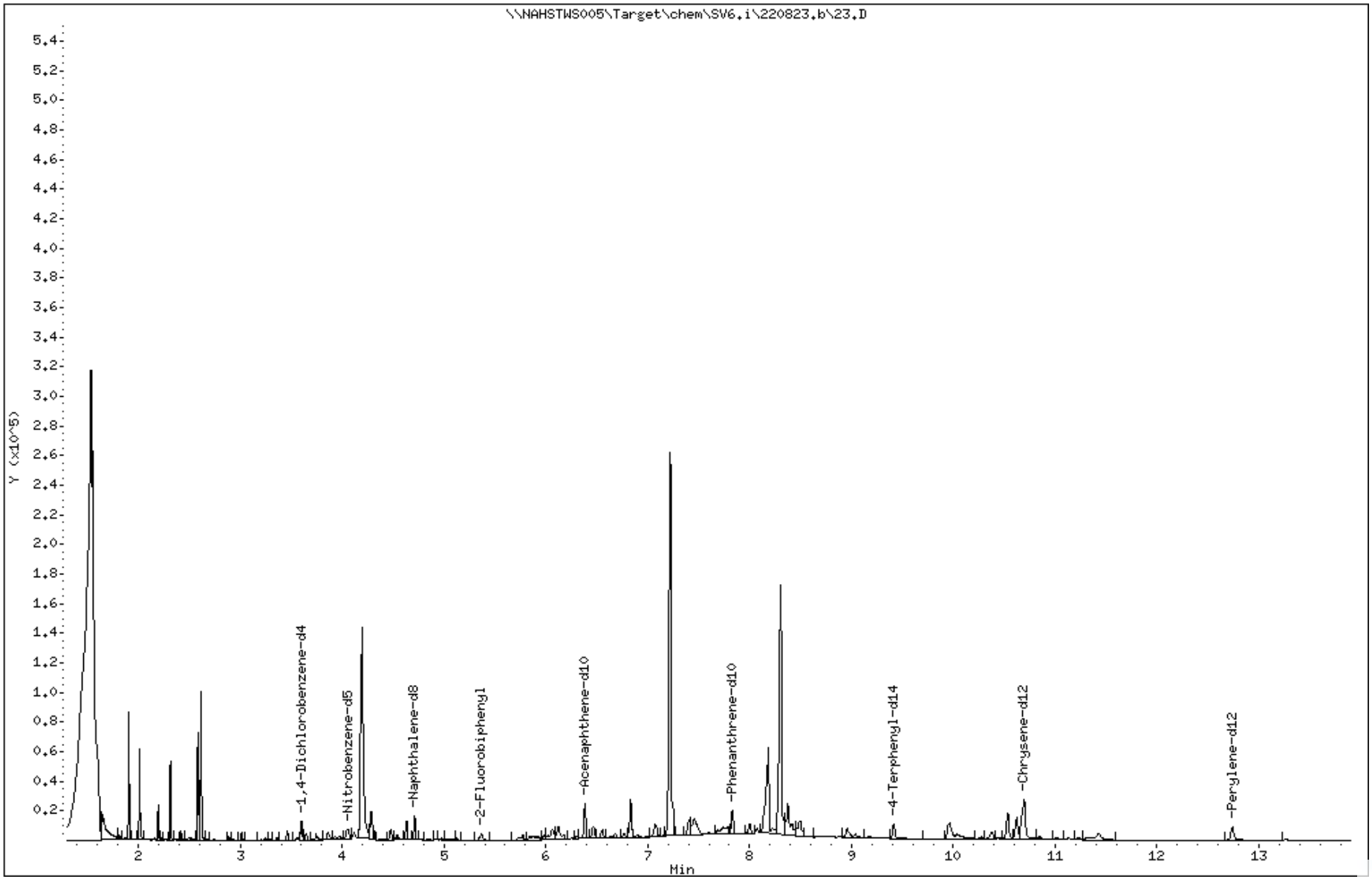
Sample Info: HS22080522-02

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\23.D

Date : 23-AUG-2022 16:39

Client ID:

Instrument: SV6.i

Sample Info: HS22080522-02

Purge Volume: 1000.0

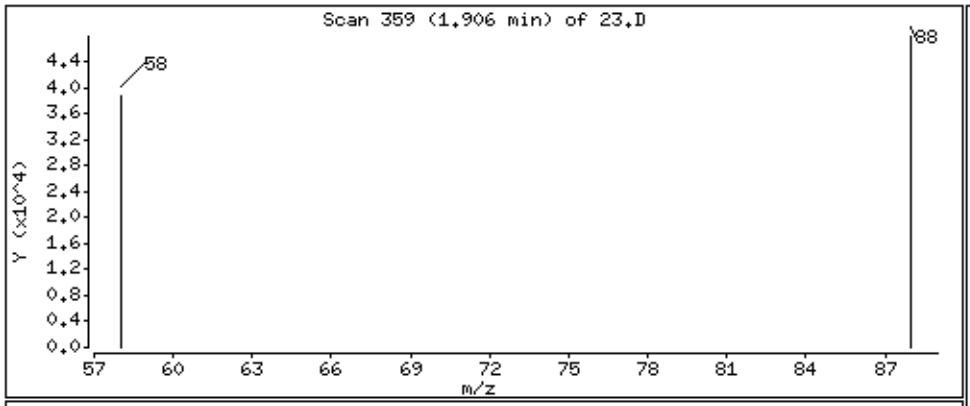
Operator: LG

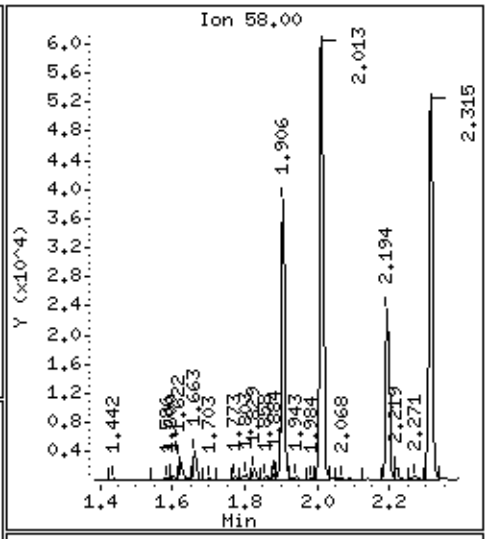
Column phase: RTX-5SIL MS

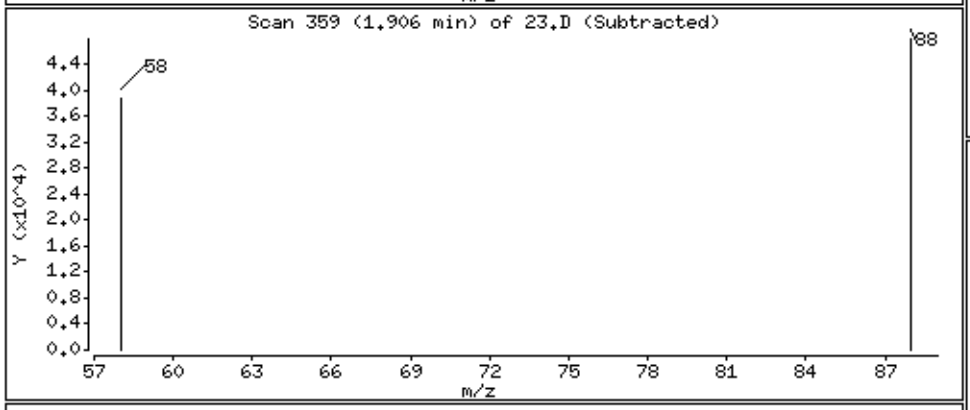
Column diameter: 0.28

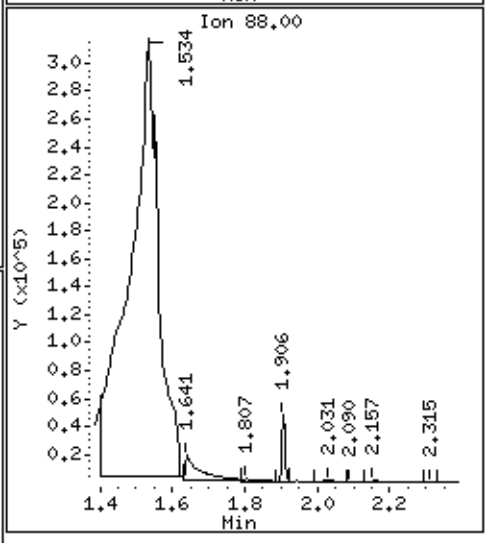
1 1,4-Dioxane

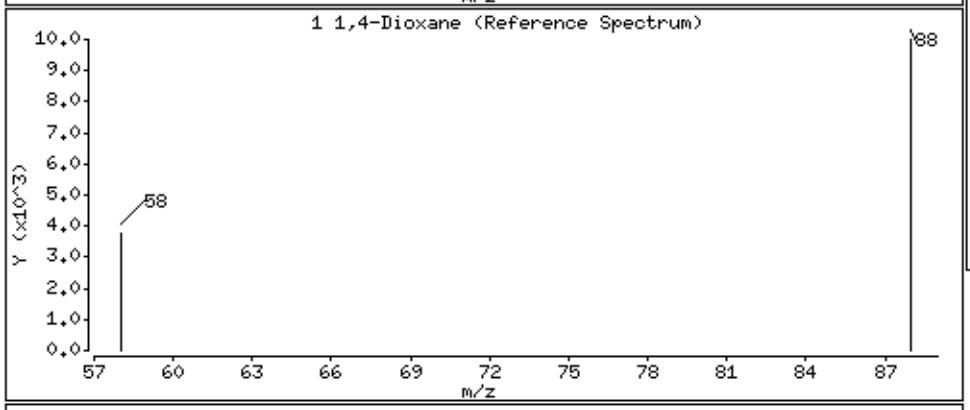
Concentration: 14.32 ug/L

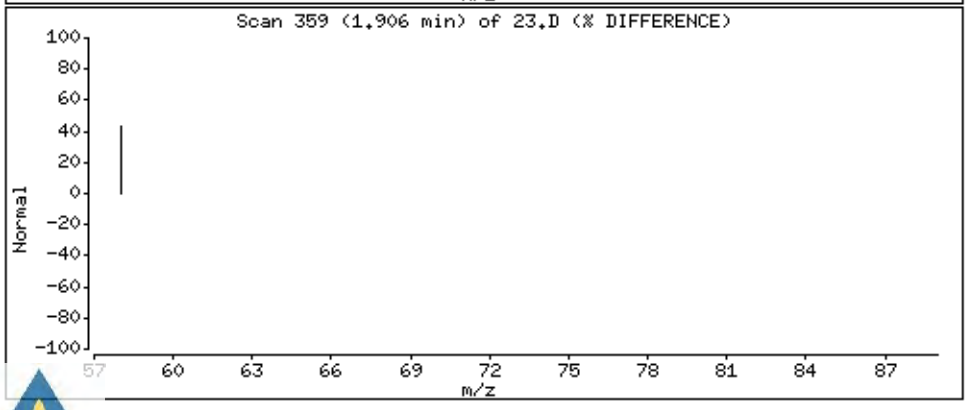












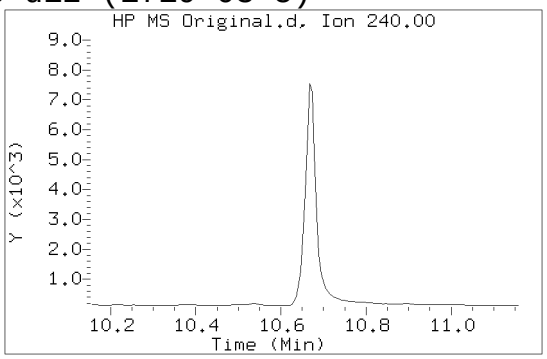
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\23.D
Inj Date : 23-AUG-2022 16:39
InstruID : SV6.i
LabSampID : HS22080522-02

Chrysene-d12 (1719-03-5)

Reason Code:

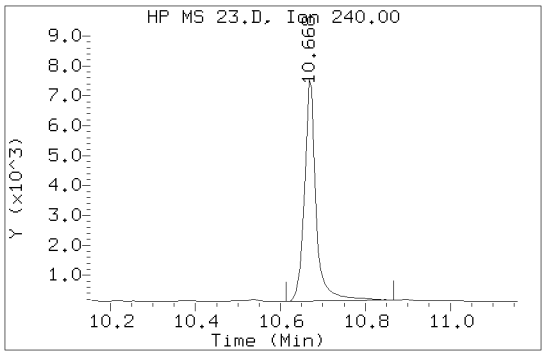
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
16:55
ALSHS
Server



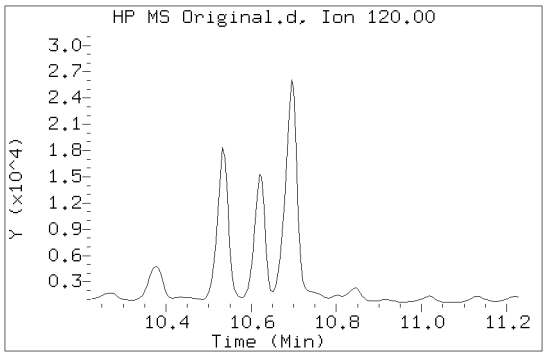
AFTER

MASS
240
AREA
14101
HEIGHT
7398
24-Aug-2022
10:25
ALSHS
S



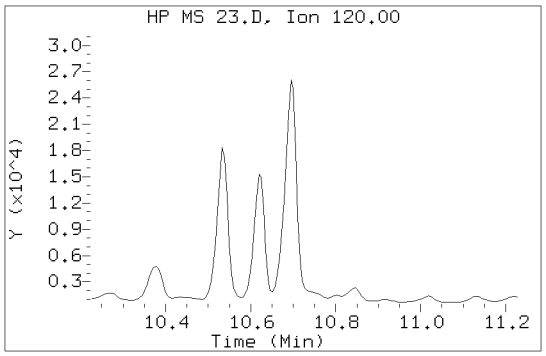
BEFORE

MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
16:55
ALSHS
Server



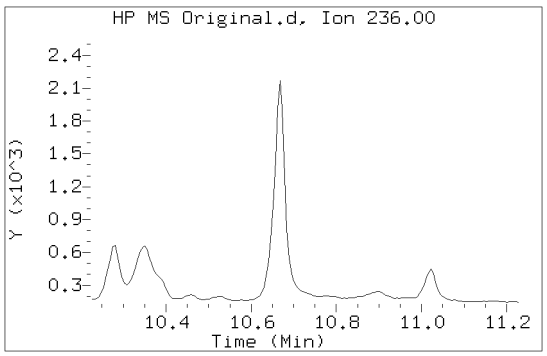
AFTER

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



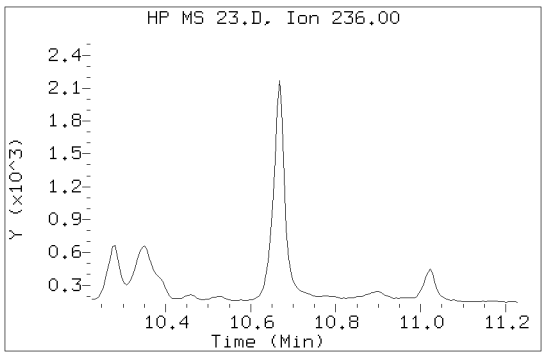
BEFORE

MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
16:55
ALSHS
Server



AFTER

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

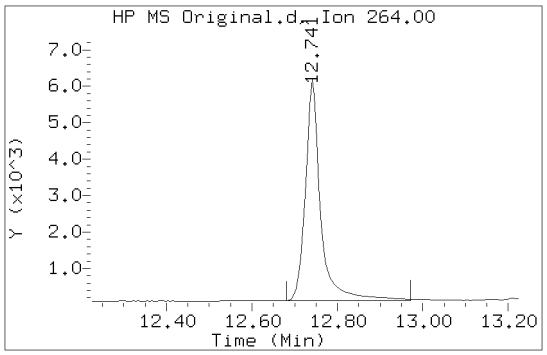


Perylene-d12 (1520-96-3)

Reason Code:

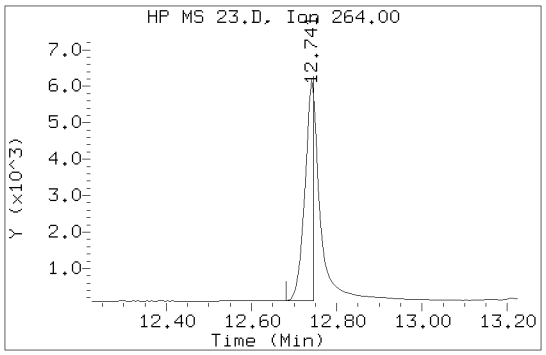
BEFORE

MASS
264
AREA
15079
HEIGHT
6060
23-Aug-2022
16:55
ALSHS
Server



AFTER

MASS
264
AREA
9136
HEIGHT
6060
24-Aug-2022
10:25
ALSHS
S

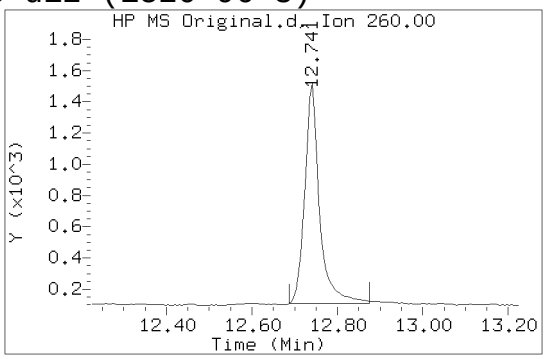


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\23.D
Inj Date : 23-AUG-2022 16:39
InstruID : SV6.i
LabSampID : HS22080522-02

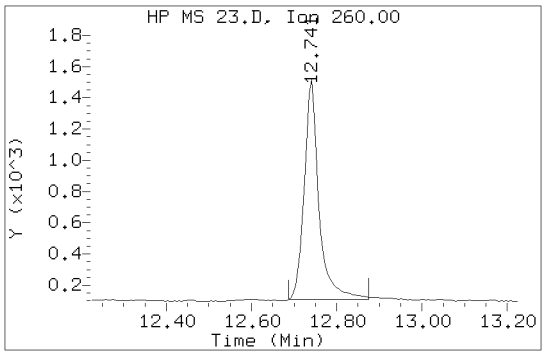
Perylene-d12 (1520-96-3)

Reason Code:

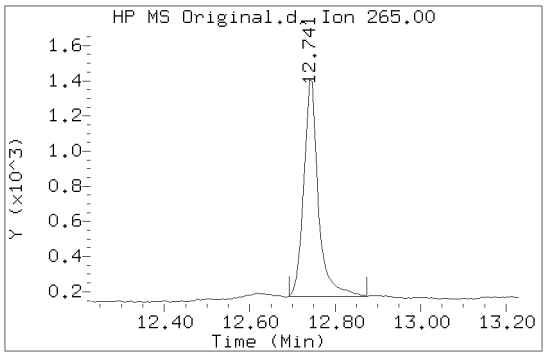
BEFORE
MASS
260
AREA
3389
HEIGHT
1408
23-Aug-2022
16:55
ALSHS
Server



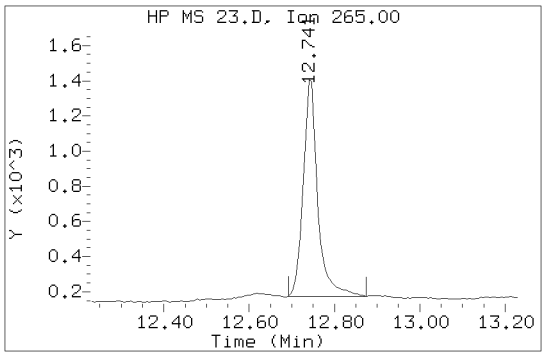
AFTER
MASS
260
AREA
3389
HEIGHT
1408
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
265
AREA
2915
HEIGHT
1231
23-Aug-2022
16:55
ALSHS
Server



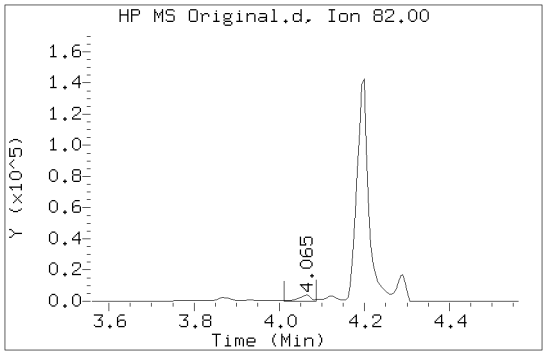
AFTER
MASS
265
AREA
2915
HEIGHT
1231
24-Aug-2022
10:25
ALSHS
S



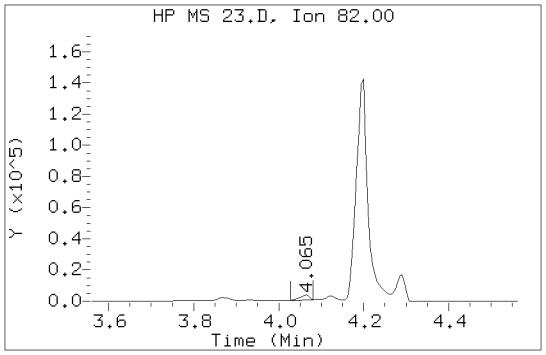
Nitrobenzene-d5 (4165-60-0)

Reason Code:

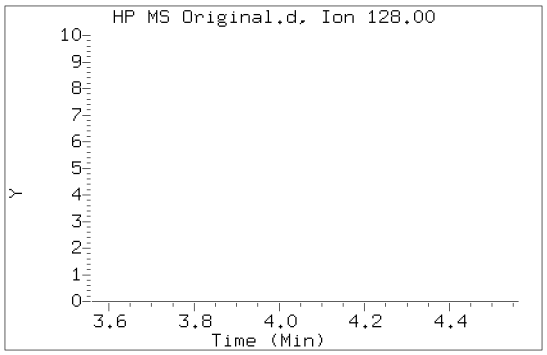
BEFORE
MASS
82
AREA
8306
HEIGHT
4059
23-Aug-2022
16:55
ALSHS
Server



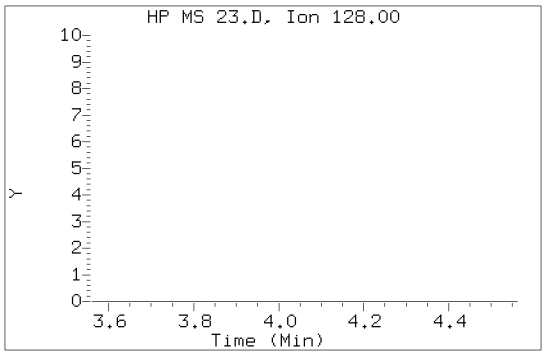
AFTER
MASS
82
AREA
4851
HEIGHT
3201
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
16:55
ALSHS
Server



AFTER
MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



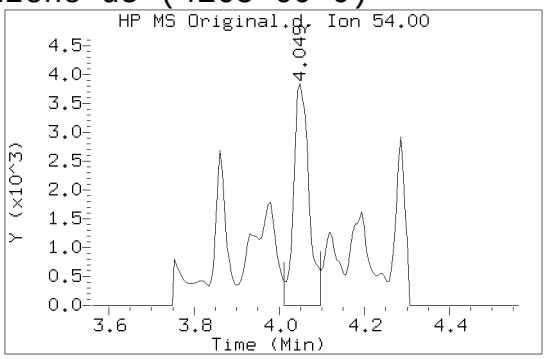
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\23.D
Inj Date : 23-AUG-2022 16:39
InstruID : SV6.i
LabSampID : HS22080522-02

Nitrobenzene-d5 (4165-60-0)

Reason Code:

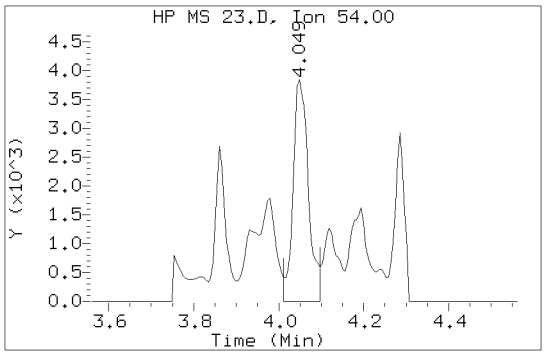
BEFORE

MASS
54
AREA
9650
HEIGHT
3846
23-Aug-2022
16:55
ALSHS
Server



AFTER

MASS
54
AREA
9650
HEIGHT
3846
24-Aug-2022
10:25
ALSHS
S

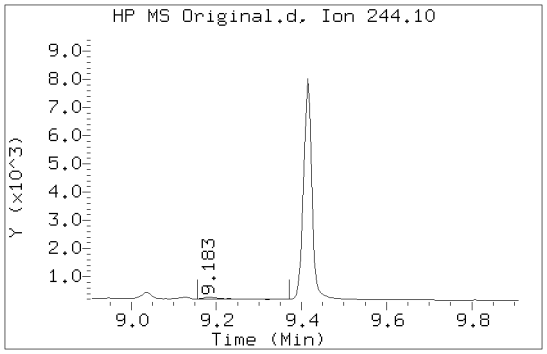


4-Terphenyl-d14 (1718-51-0)

Reason Code:

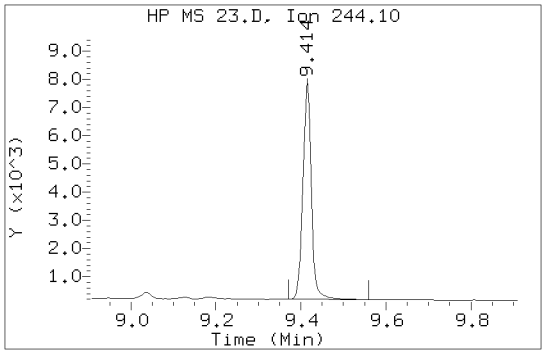
BEFORE

MASS
244.1
AREA
161
HEIGHT
75
23-Aug-2022
16:55
ALSHS
Server



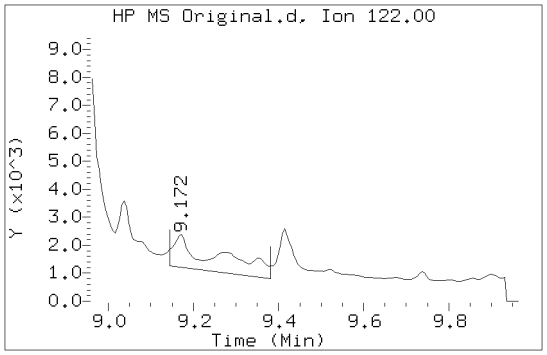
AFTER

MASS
244.1
AREA
10675
HEIGHT
7826
24-Aug-2022
10:25
ALSHS
S



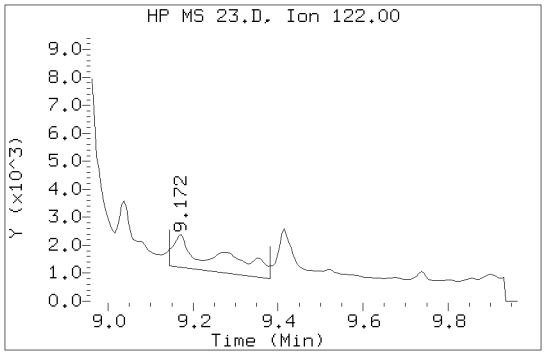
BEFORE

MASS
122
AREA
8652
HEIGHT
1184
23-Aug-2022
16:55
ALSHS
Server



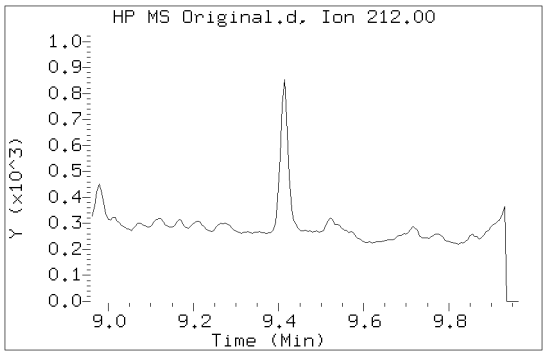
AFTER

MASS
122
AREA
8652
HEIGHT
1184
24-Aug-2022
10:25
ALSHS
S



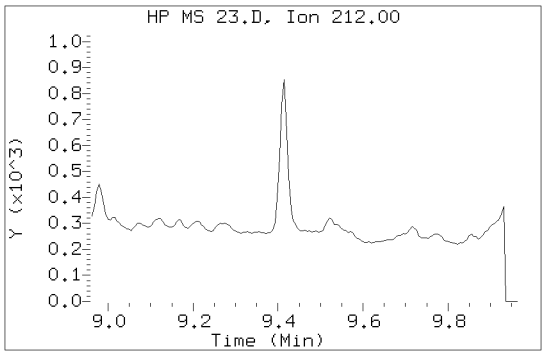
BEFORE

MASS
212
AREA
888
HEIGHT
189
23-Aug-2022
16:55
ALSHS
Server



AFTER

MASS
212
AREA
888
HEIGHT
189
24-Aug-2022
10:25
ALSHS
S



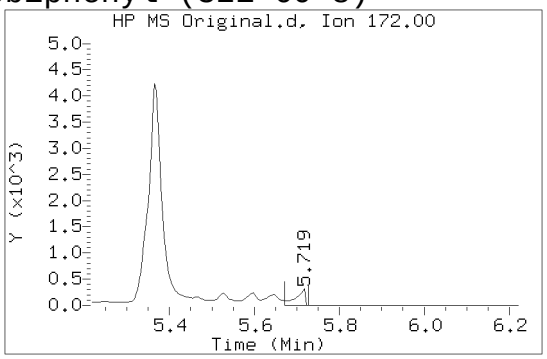
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\23.D
Inj Date : 23-AUG-2022 16:39
InstruID : SV6.i
LabSampID : HS22080522-02

2-Fluorobiphenyl (321-60-8)

Reason Code:

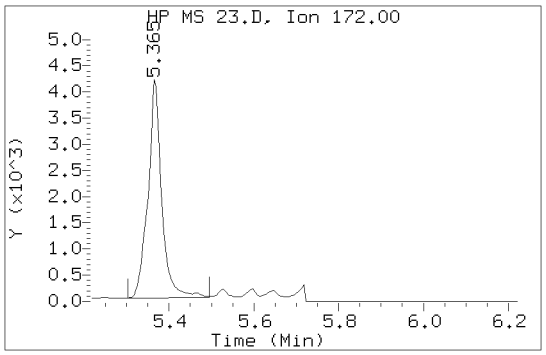
BEFORE

MASS
172
AREA
495
HEIGHT
317
23-Aug-2022
16:55
ALSHS
Server



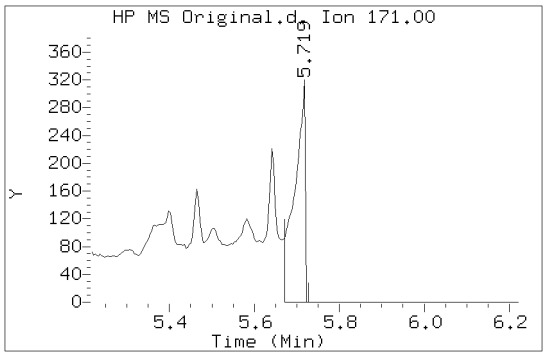
AFTER

MASS
172
AREA
9369
HEIGHT
4164
24-Aug-2022
10:25
ALSHS
S



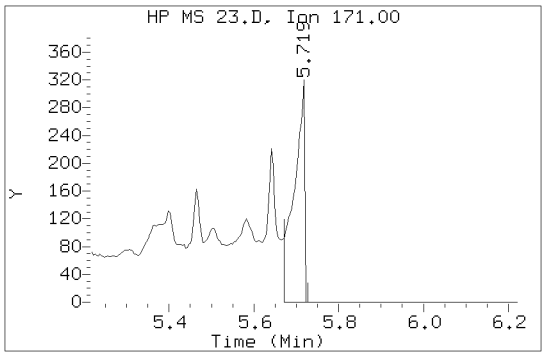
BEFORE

MASS
171
AREA
570
HEIGHT
320
23-Aug-2022
16:55
ALSHS
Server



AFTER

MASS
171
AREA
570
HEIGHT
320
24-Aug-2022
10:25
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\24.D Page 1
Report Date: 24-Aug-2022 10:26

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\24.D
Lab Smp Id: HS22080522-03
Inj Date : 23-AUG-2022 16:57
Operator : LG Inst ID: SV6.i
Smp Info : HS22080522-03
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.603	3.592	(1.000)	4517	0.10000	(aQ)
* 45 Naphthalene-d8	136	4.712	4.705	(1.000)	14943	0.10000	(M)
$ 33 Nitrobenzene-d5	82	4.065	4.059	(0.863)	4127	0.08285	0.08285(M)
* 86 Acenaphthene-d10	164	6.382	6.376	(1.000)	8435	0.10000	(M)
$ 69 2-Fluorobiphenyl	172	5.718	5.718	(0.896)	4778	0.03639	0.03639(M)
* 126 Phenanthrene-d10	188	7.827	7.827	(1.000)	15647	0.10000	
* 182 Chrysene-d12	240	10.667	10.657	(1.000)	11675	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.414	9.408	(0.882)	9684	0.04412	0.04412(M)
* 198 Perylene-d12	264	12.740	12.724	(1.000)	10061	0.10000	(M)
1 1,4-Dioxane	58	1.902	1.887	(0.528)	2603	1.40372	1.404(AQ)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.

01135404

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\24.D

Date : 23-AUG-2022 16:57

Client ID:

Instrument: SV6.i

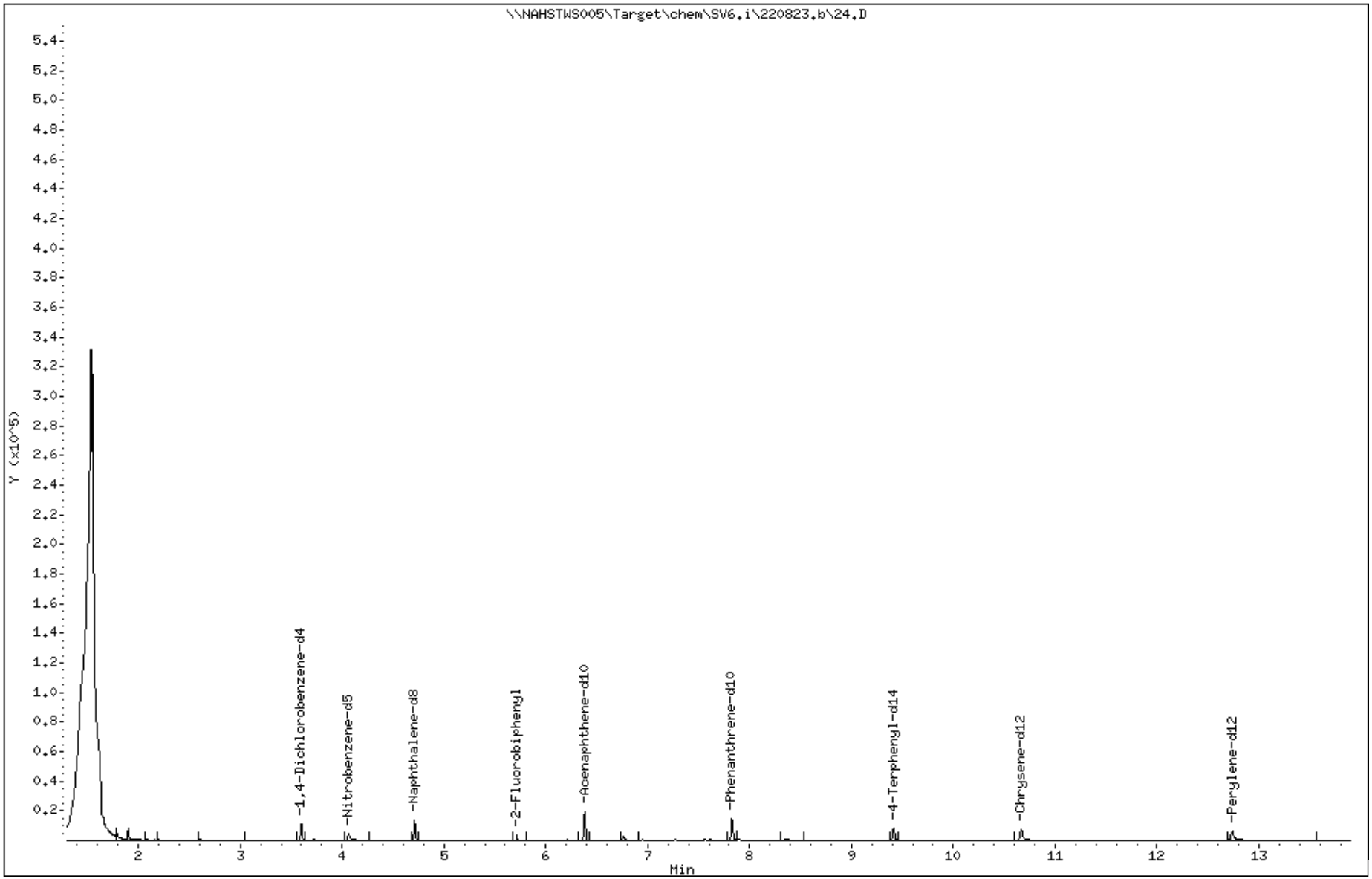
Sample Info: HS22080522-03

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\24.D

Date : 23-AUG-2022 16:57

Client ID:

Instrument: SV6.i

Sample Info: HS22080522-03

Purge Volume: 1000.0

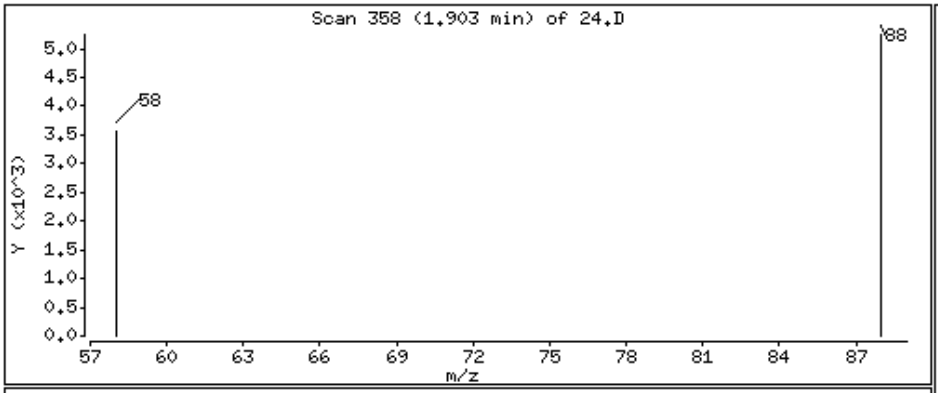
Operator: LG

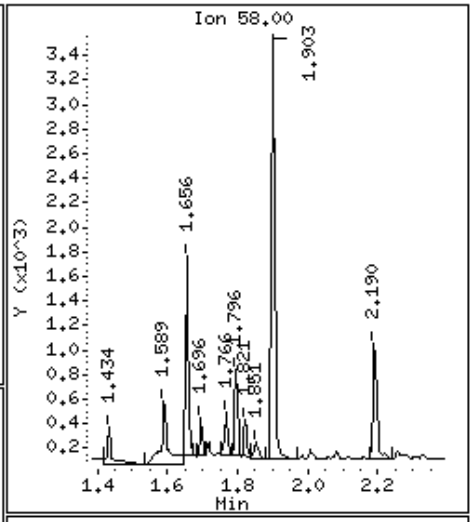
Column phase: RTX-5SIL MS

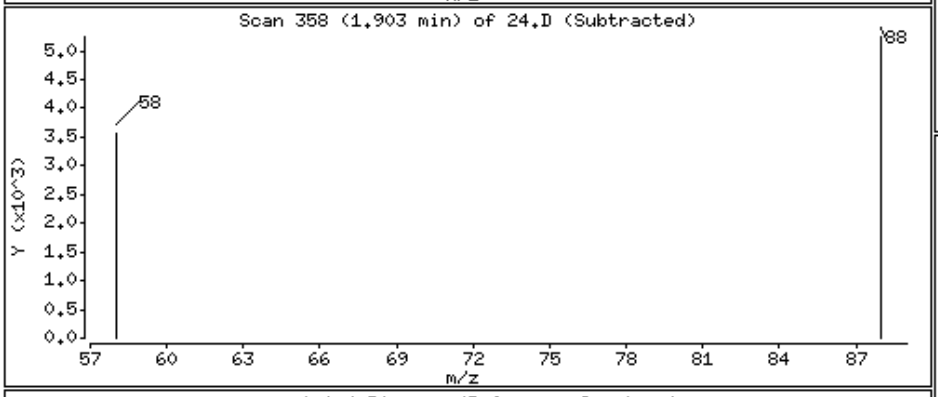
Column diameter: 0.28

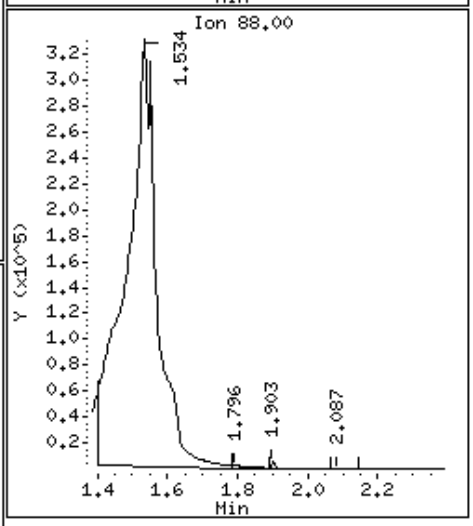
1 1,4-Dioxane

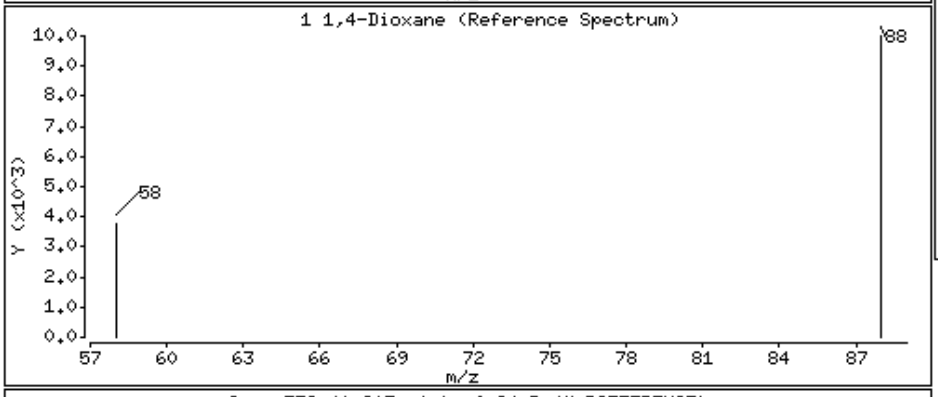
Concentration: 1.404 ug/L

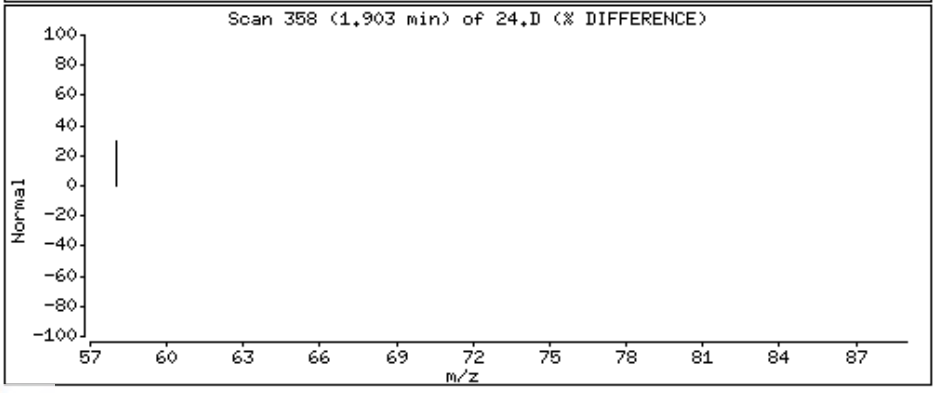












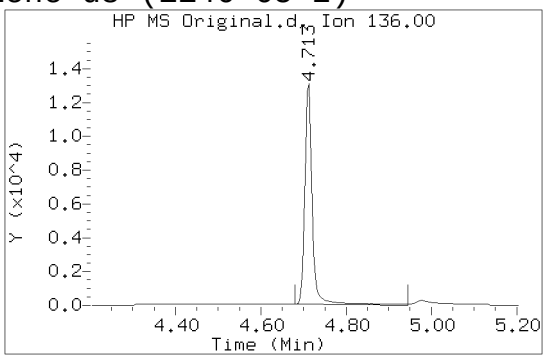
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\24.D
Inj Date : 23-AUG-2022 16:57
InstruID : SV6.i
LabSampID : HS22080522-03

Naphthalene-d8 (1146-65-2)

Reason Code:

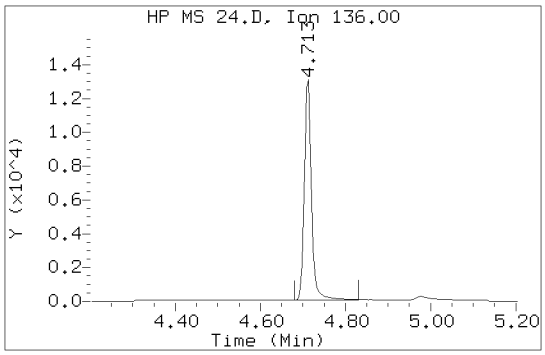
BEFORE

MASS
136
AREA
15801
HEIGHT
13055
23-Aug-2022
17:12
ALSHS
Server



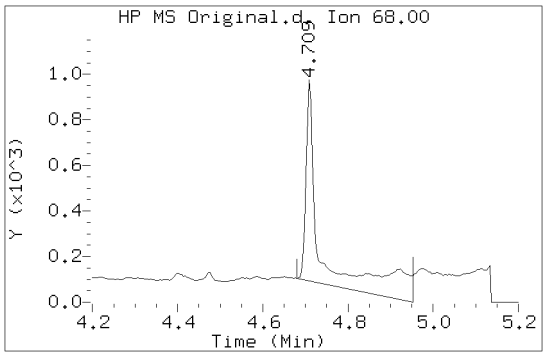
AFTER

MASS
136
AREA
14943
HEIGHT
13036
24-Aug-2022
10:25
ALSHS
S



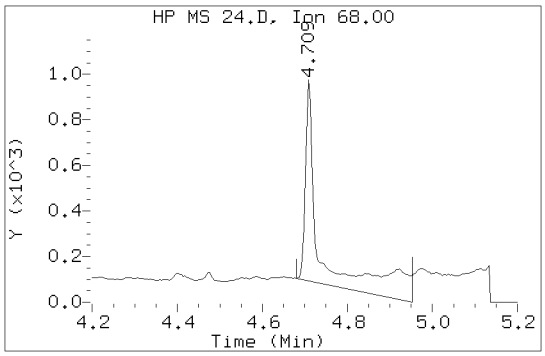
BEFORE

MASS
68
AREA
2119
HEIGHT
881
23-Aug-2022
17:12
ALSHS
Server



AFTER

MASS
68
AREA
2119
HEIGHT
881
24-Aug-2022
10:25
ALSHS
S

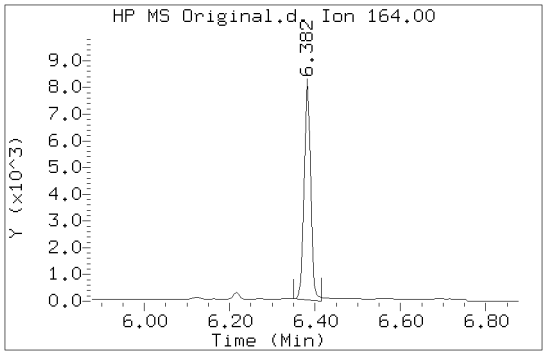


Acenaphthene-d10 (15067-26-2)

Reason Code:

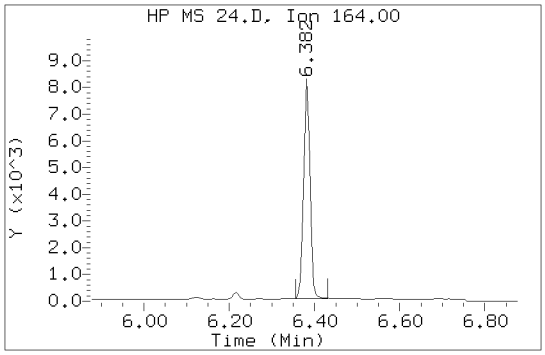
BEFORE

MASS
164
AREA
8647
HEIGHT
8273
23-Aug-2022
17:12
ALSHS
Server



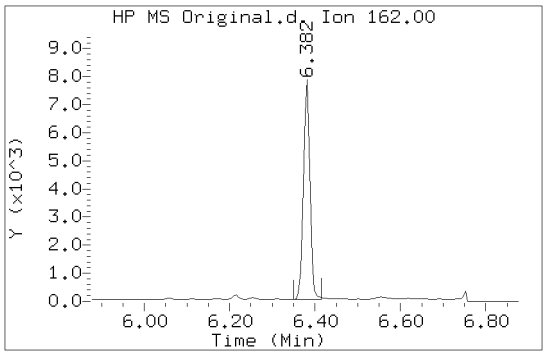
AFTER

MASS
164
AREA
8435
HEIGHT
8216
24-Aug-2022
10:25
ALSHS
S



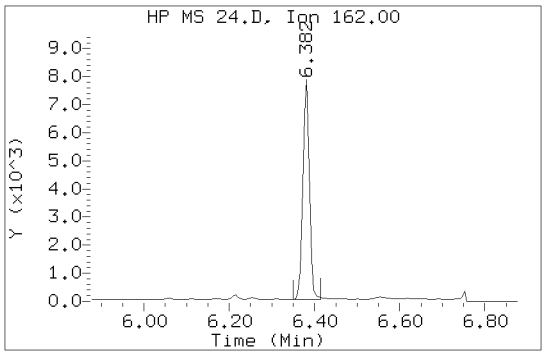
BEFORE

MASS
162
AREA
8197
HEIGHT
7815
23-Aug-2022
17:12
ALSHS
Server



AFTER

MASS
162
AREA
8197
HEIGHT
7815
24-Aug-2022
10:25
ALSHS
S



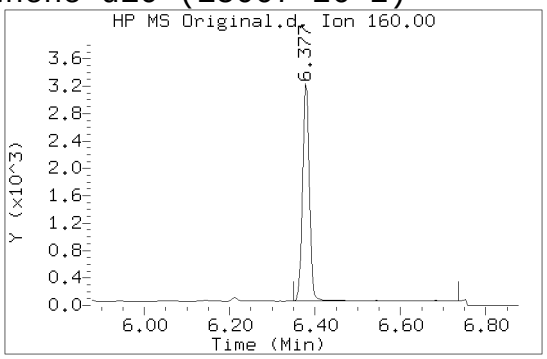
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\24.D
Inj Date : 23-AUG-2022 16:57
InstruID : SV6.i
LabSampID : HS22080522-03

Acenaphthene-d10 (15067-26-2)

Reason Code:

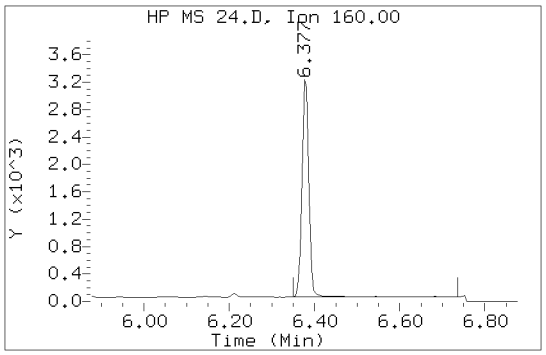
BEFORE

MASS
160
AREA
3610
HEIGHT
3174
23-Aug-2022
17:12
ALSHS
Server



AFTER

MASS
160
AREA
3610
HEIGHT
3174
24-Aug-2022
10:25
ALSHS
S

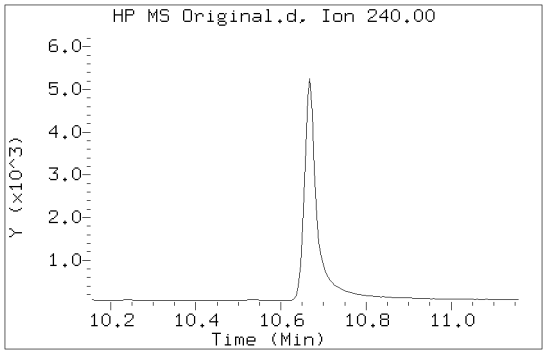


Chrysene-d12 (1719-03-5)

Reason Code:

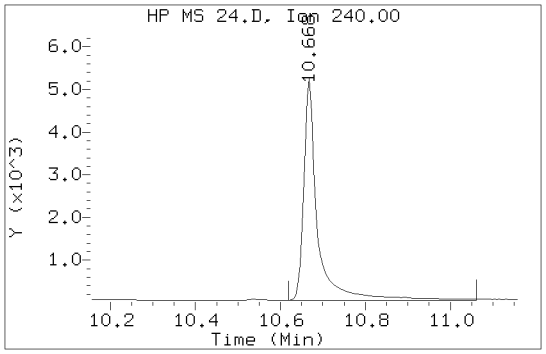
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
17:12
ALSHS
Server



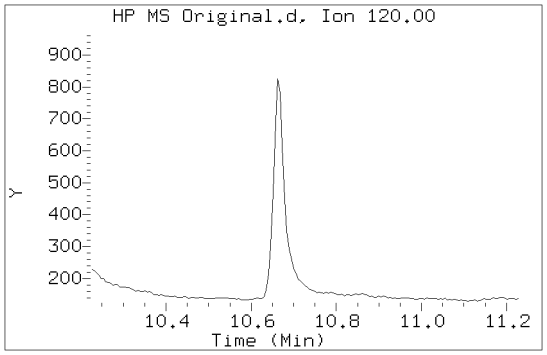
AFTER

MASS
240
AREA
11675
HEIGHT
5189
24-Aug-2022
10:25
ALSHS
S



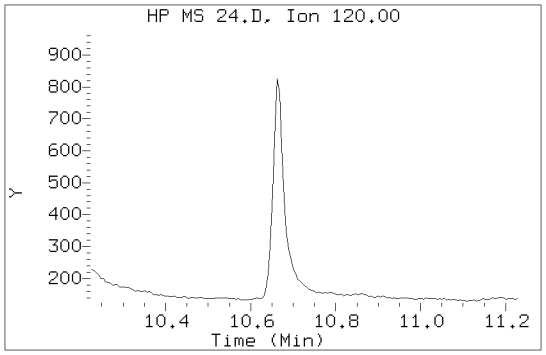
BEFORE

MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
17:12
ALSHS
Server



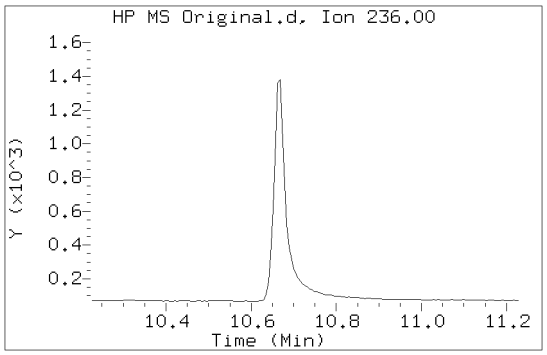
AFTER

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



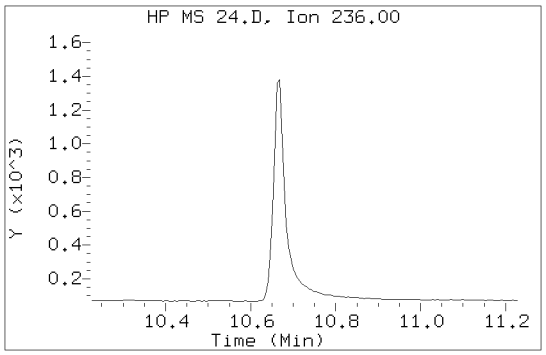
BEFORE

MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
17:12
ALSHS
Server



AFTER

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



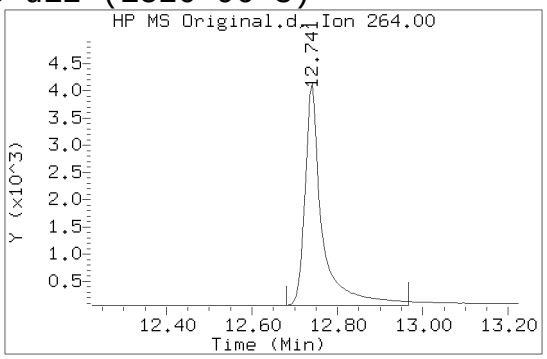
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\24.D
Inj Date : 23-AUG-2022 16:57
InstruID : SV6.i
LabSampID : HS22080522-03

Perylene-d12 (1520-96-3)

Reason Code:

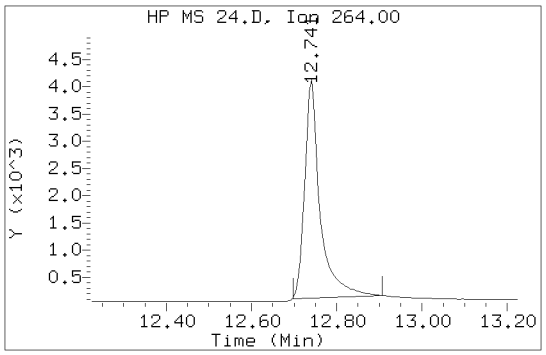
BEFORE

MASS
264
AREA
11257
HEIGHT
4066
23-Aug-2022
17:12
ALSHS
Server



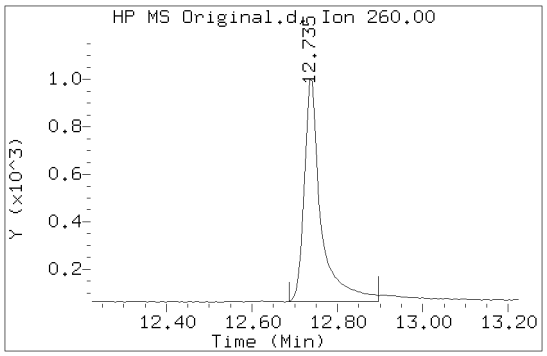
AFTER

MASS
264
AREA
10061
HEIGHT
4011
24-Aug-2022
10:25
ALSHS
S



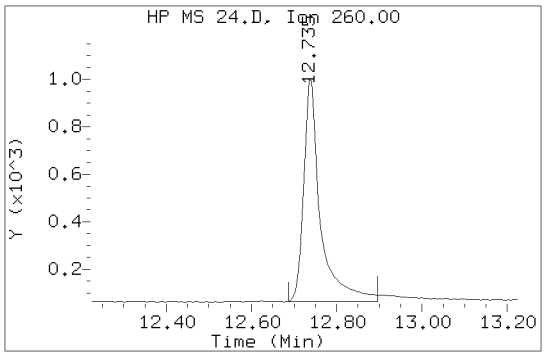
BEFORE

MASS
260
AREA
2543
HEIGHT
931
23-Aug-2022
17:12
ALSHS
Server



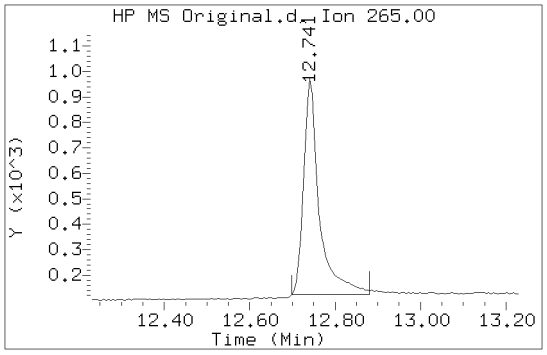
AFTER

MASS
260
AREA
2543
HEIGHT
931
24-Aug-2022
10:25
ALSHS
S



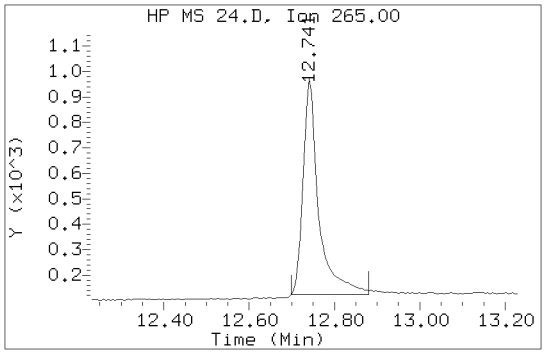
BEFORE

MASS
265
AREA
2152
HEIGHT
848
23-Aug-2022
17:12
ALSHS
Server



AFTER

MASS
265
AREA
2152
HEIGHT
848
24-Aug-2022
10:25
ALSHS
S

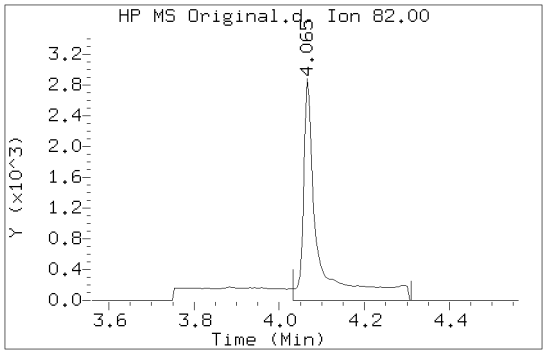


Nitrobenzene-d5 (4165-60-0)

Reason Code:

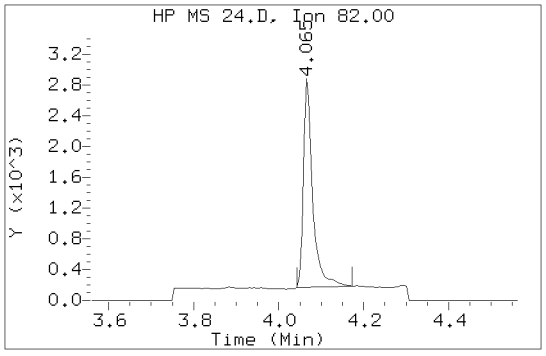
BEFORE

MASS
82
AREA
6957
HEIGHT
2879
23-Aug-2022
17:12
ALSHS
Server



AFTER

MASS
82
AREA
4127
HEIGHT
2709
24-Aug-2022
10:25
ALSHS
S

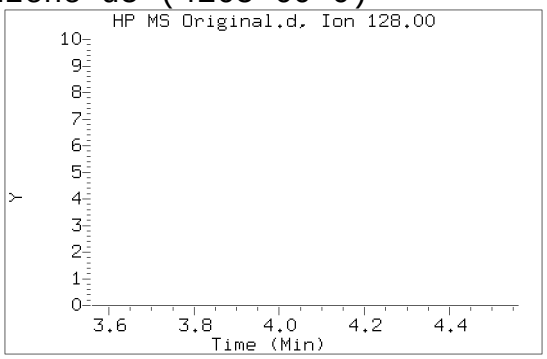


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\24.D
Inj Date : 23-AUG-2022 16:57
InstruID : SV6.i
LabSampID : HS22080522-03

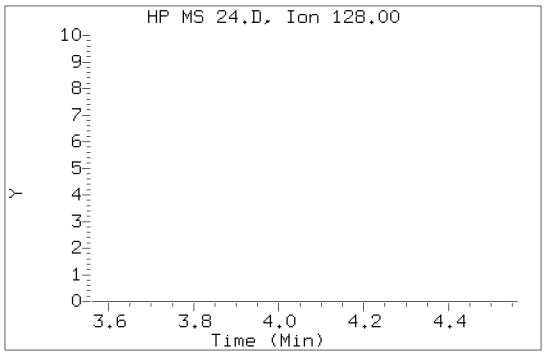
Nitrobenzene-d5 (4165-60-0)

Reason Code:

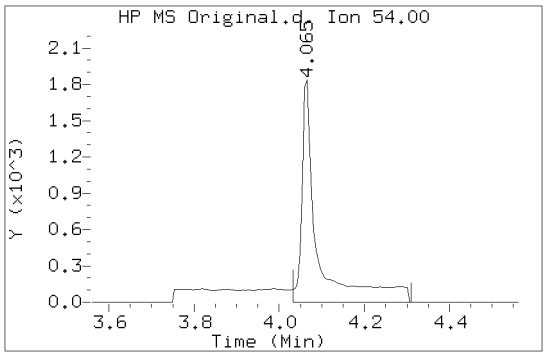
BEFORE
MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
17:12
ALSHS
Server



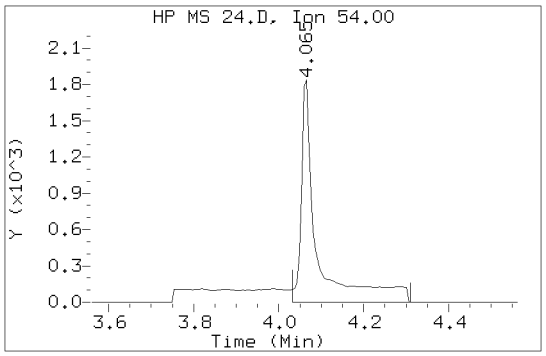
AFTER
MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
54
AREA
4690
HEIGHT
1837
23-Aug-2022
17:12
ALSHS
Server



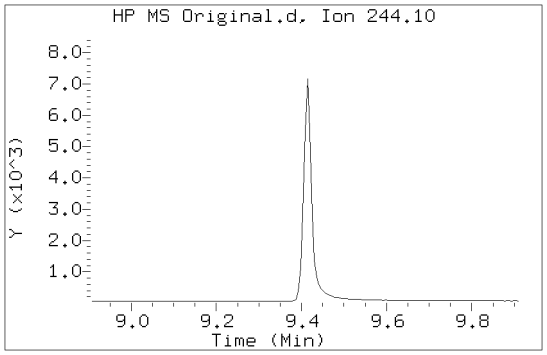
AFTER
MASS
54
AREA
4690
HEIGHT
1837
24-Aug-2022
10:25
ALSHS
S



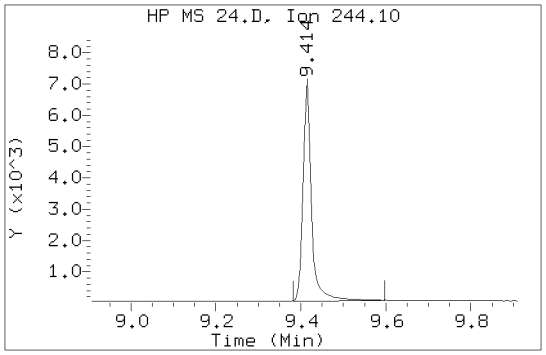
4-Terphenyl-d14 (1718-51-0)

Reason Code:

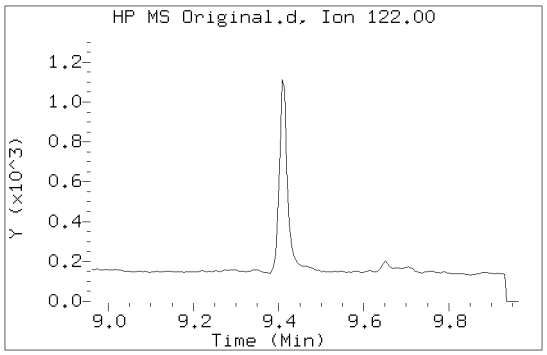
BEFORE
MASS
244.1
AREA
0
HEIGHT
0
23-Aug-2022
17:12
ALSHS
Server



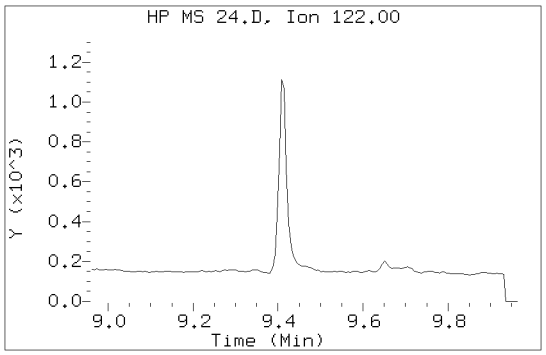
AFTER
MASS
244.1
AREA
9684
HEIGHT
7094
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
122
AREA
0
HEIGHT
0
23-Aug-2022
17:12
ALSHS
Server



AFTER
MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

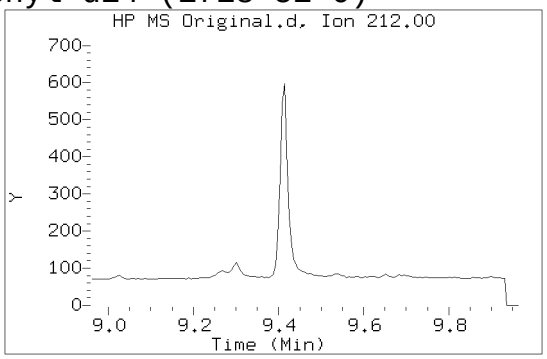


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\24.D
Inj Date : 23-AUG-2022 16:57
InstruID : SV6.i
LabSampID : HS22080522-03

4-Terphenyl-d14 (1718-51-0)

BEFORE

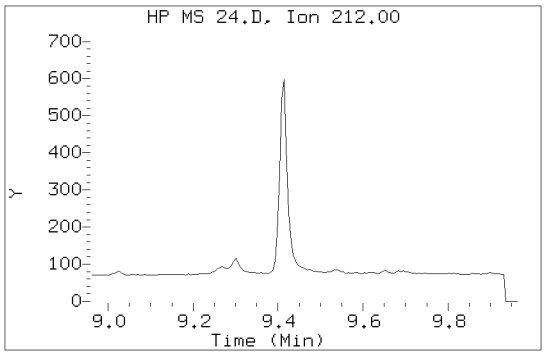
MASS
212
AREA
0
HEIGHT
0
23-Aug-2022
17:12
ALSHS
Server



Reason Code:

AFTER

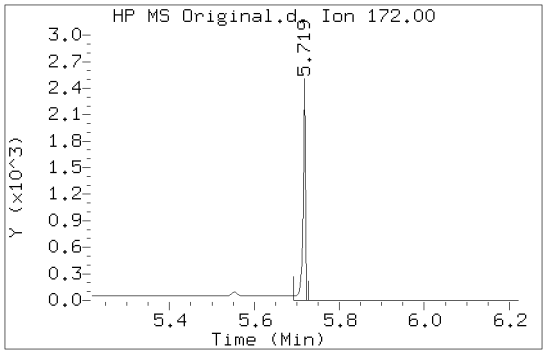
MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



2-Fluorobiphenyl (321-60-8)

BEFORE

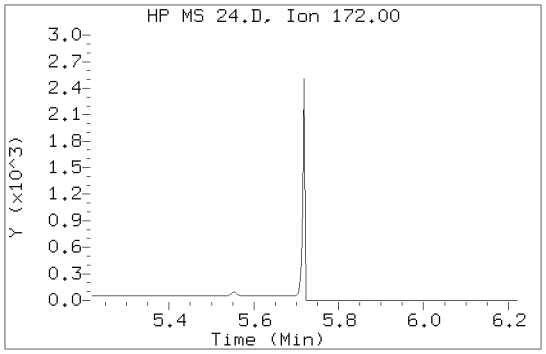
MASS
172
AREA
1024
HEIGHT
2507
23-Aug-2022
17:12
ALSHS
Server



Reason Code:

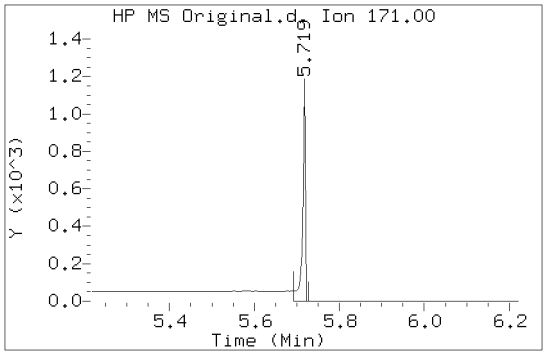
AFTER

MASS
172
AREA
4778
HEIGHT
2565
24-Aug-2022
10:25
ALSHS
S



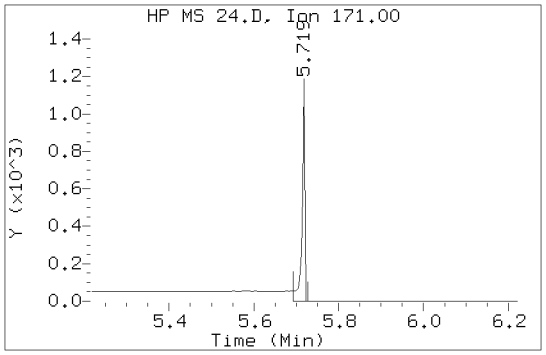
BEFORE

MASS
171
AREA
553
HEIGHT
1187
23-Aug-2022
17:12
ALSHS
Server



AFTER

MASS
171
AREA
553
HEIGHT
1187
24-Aug-2022
10:25
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\25.D Page 1
Report Date: 24-Aug-2022 10:26

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\25.D
Lab Smp Id: HS22080522-04
Inj Date : 23-AUG-2022 17:15
Operator : LG Inst ID: SV6.i
Smp Info : HS22080522-04
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.603	3.592	(1.000)	5392	0.10000	(aM)
* 45 Naphthalene-d8	136	4.709	4.705	(1.000)	15029	0.10000	
$ 33 Nitrobenzene-d5	82	4.065	4.059	(0.863)	3966	0.07916	0.07916(M)
* 86 Acenaphthene-d10	164	6.382	6.376	(1.000)	7806	0.10000	(Q)
$ 69 2-Fluorobiphenyl	172	5.719	5.718	(0.896)	6636	0.05461	0.05461(M)
* 126 Phenanthrene-d10	188	7.833	7.827	(1.000)	14205	0.10000	
* 182 Chrysene-d12	240	10.667	10.657	(1.000)	9573	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.414	9.408	(0.882)	8656	0.04809	0.04809(M)
* 198 Perylene-d12	264	12.740	12.724	(1.000)	9725	0.10000	(M)
1 1,4-Dioxane	58	1.898	1.887	(0.527)	926	0.41833	0.4183(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01135412

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\25.D

Date : 23-AUG-2022 17:15

Client ID:

Instrument: SV6.i

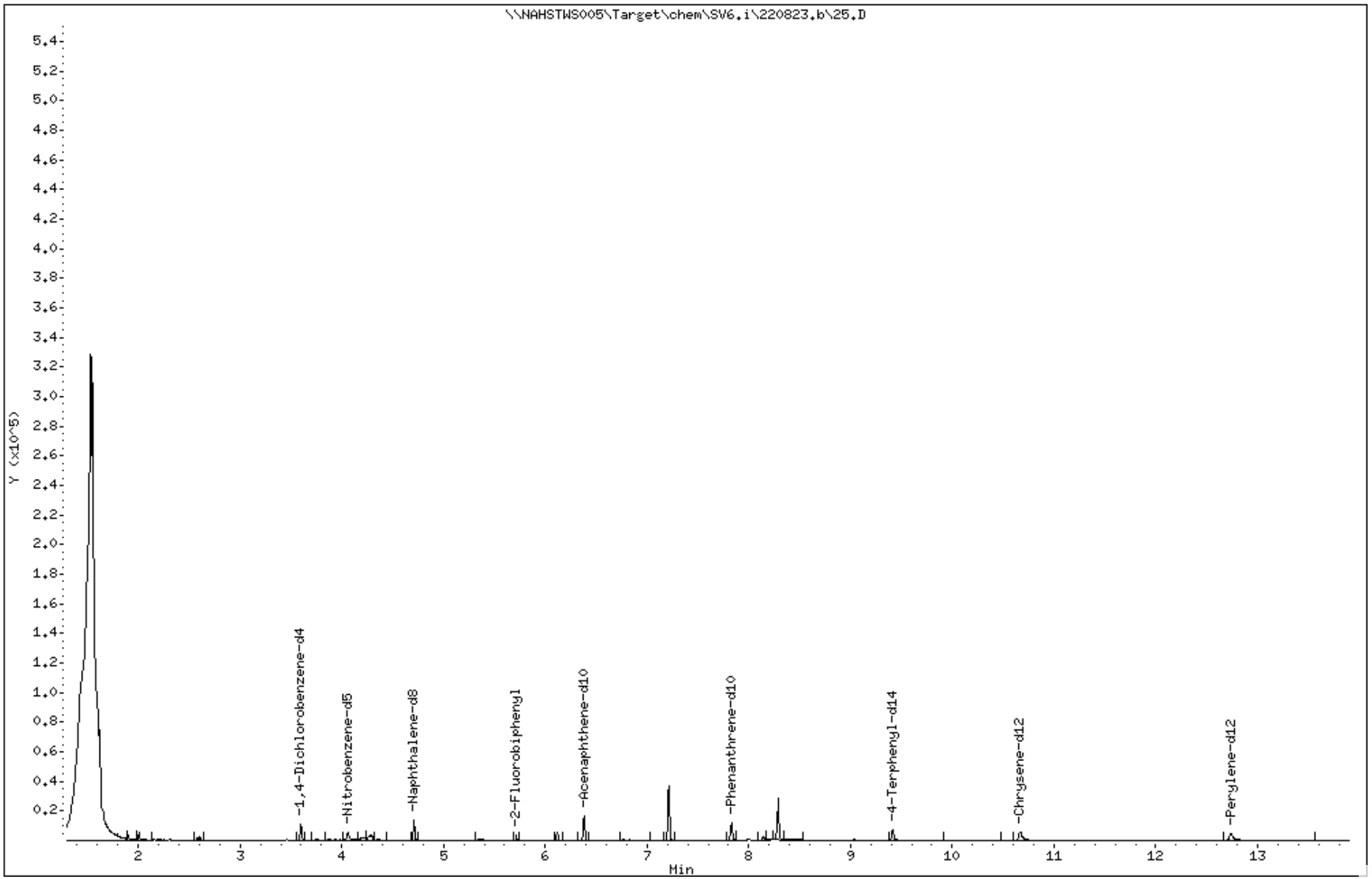
Sample Info: HS22080522-04

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\25.D

Date : 23-AUG-2022 17:15

Client ID:

Instrument: SV6.i

Sample Info: HS22080522-04

Purge Volume: 1000.0

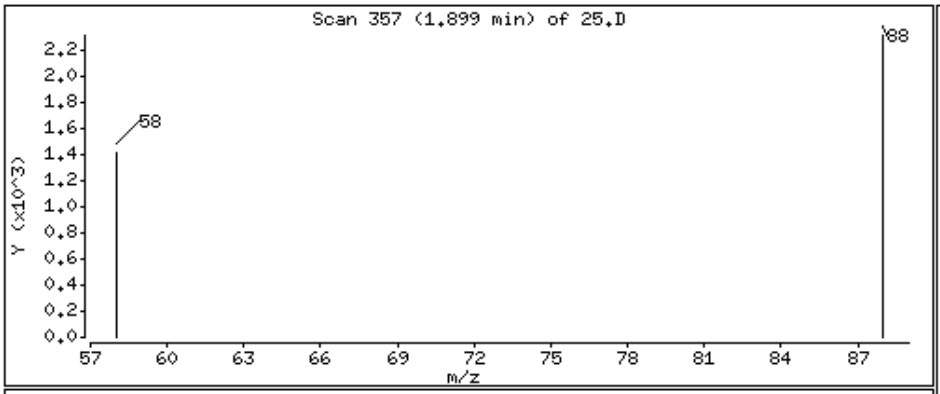
Operator: LG

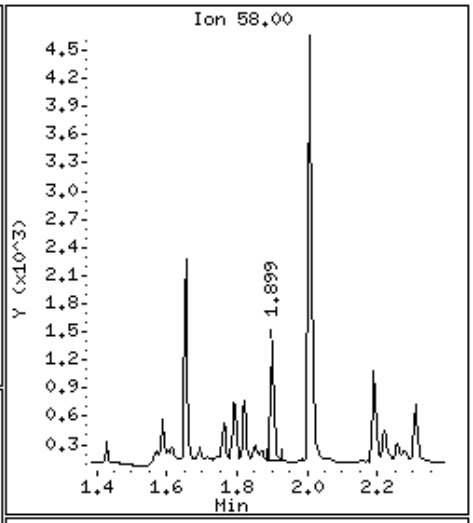
Column phase: RTX-5SIL MS

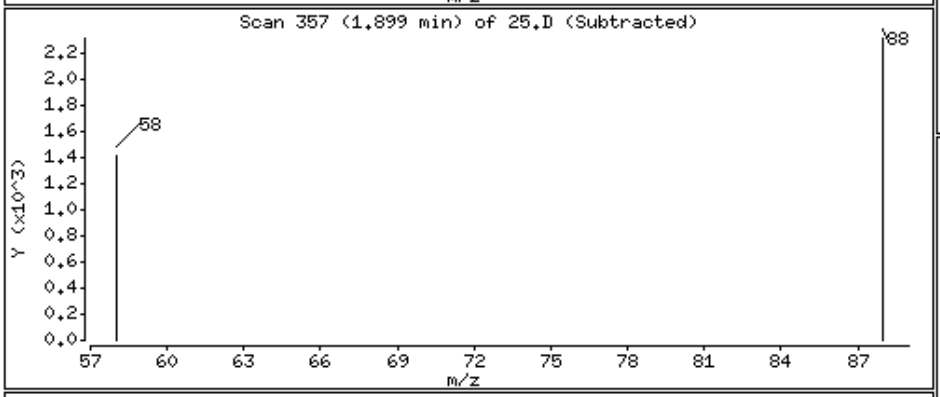
Column diameter: 0.28

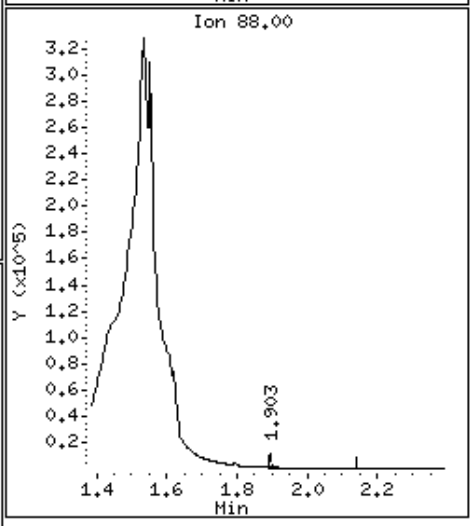
1 1,4-Dioxane

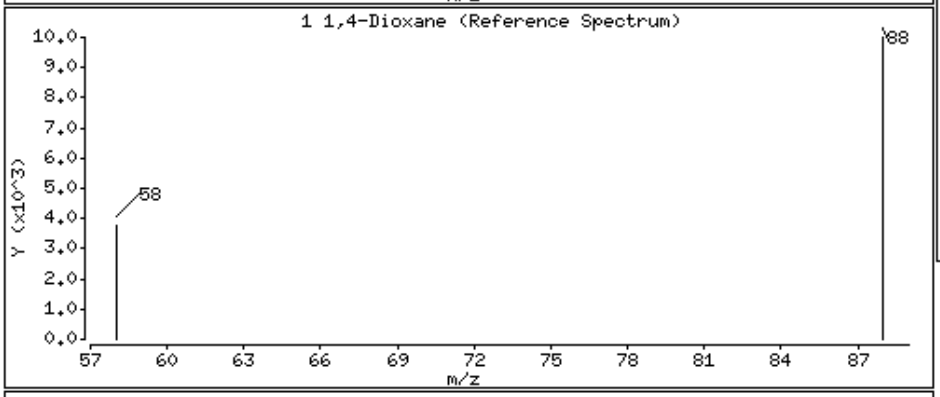
Concentration: 0.4183 ug/L

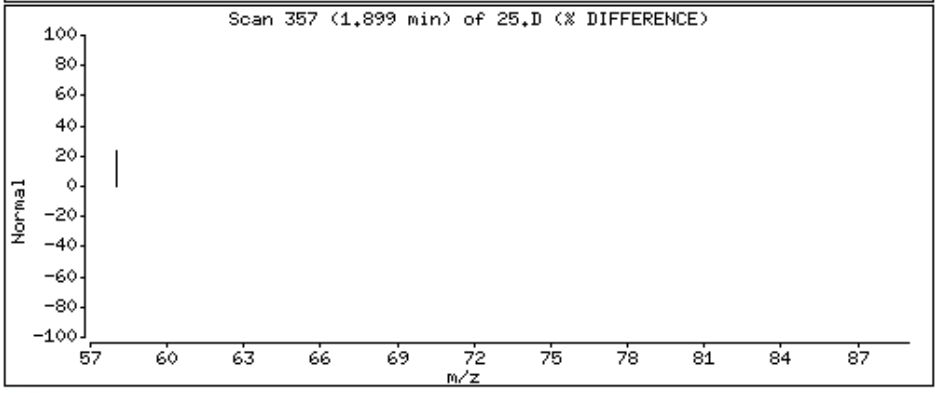












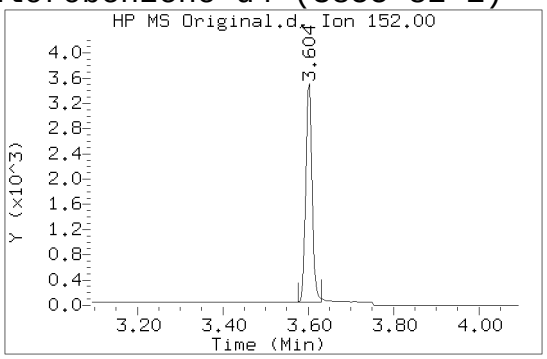
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\25.D
Inj Date : 23-AUG-2022 17:15
InstruID : SV6.i
LabSampID : HS22080522-04

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

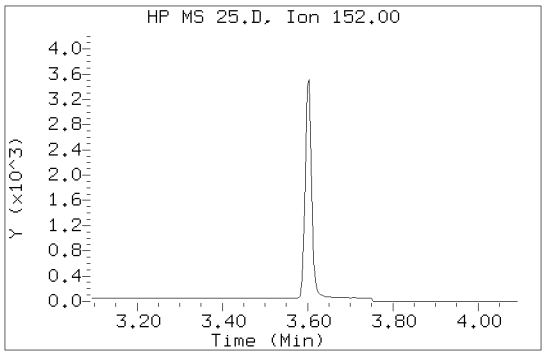
BEFORE

MASS
152
AREA
3597
HEIGHT
3459
23-Aug-2022
17:29
ALSHS
Server



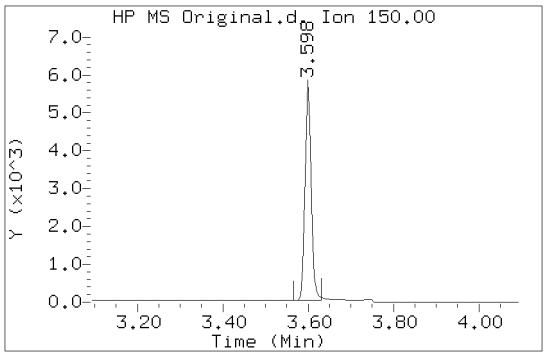
AFTER

MASS
152
AREA
5392
HEIGHT
3489
24-Aug-2022
10:25
ALSHS
S



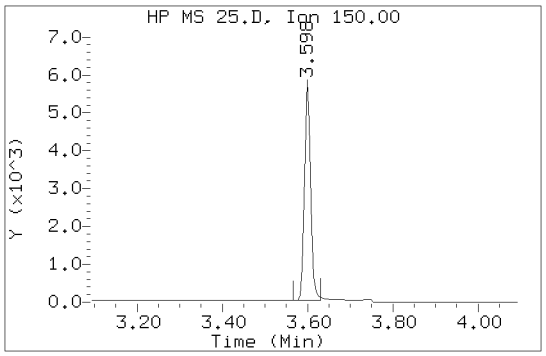
BEFORE

MASS
150
AREA
5704
HEIGHT
5816
23-Aug-2022
17:29
ALSHS
Server



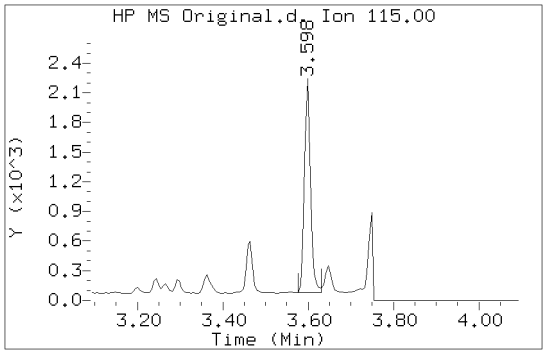
AFTER

MASS
150
AREA
5704
HEIGHT
5816
24-Aug-2022
10:25
ALSHS
S



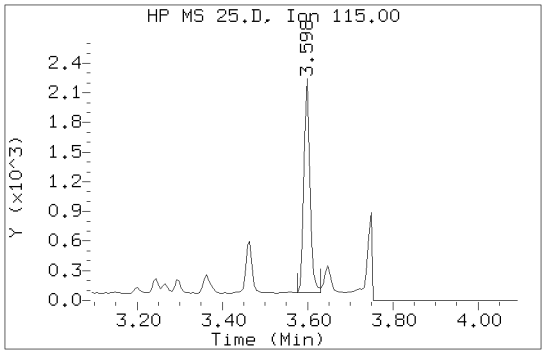
BEFORE

MASS
115
AREA
2117
HEIGHT
2163
23-Aug-2022
17:29
ALSHS
Server



AFTER

MASS
115
AREA
2117
HEIGHT
2163
24-Aug-2022
10:25
ALSHS
S

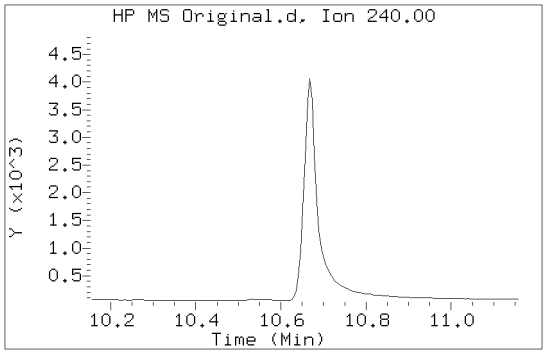


Chrysene-d12 (1719-03-5)

Reason Code:

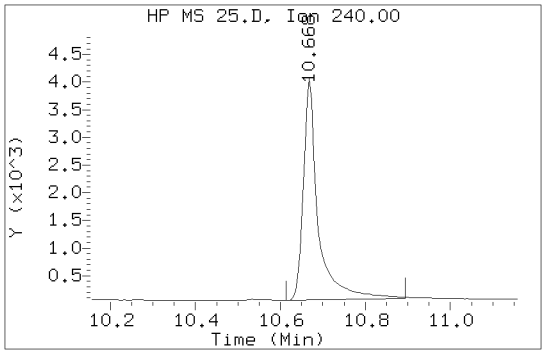
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
17:29
ALSHS
Server



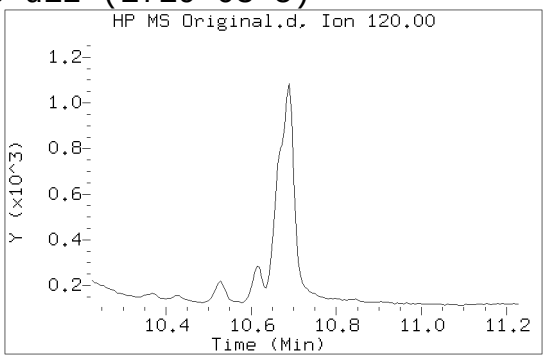
AFTER

MASS
240
AREA
9573
HEIGHT
3992
24-Aug-2022
10:25
ALSHS
S

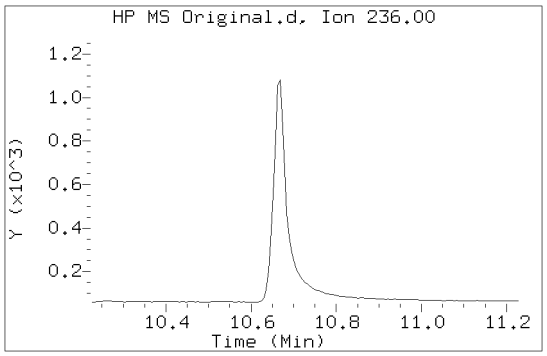


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\25.D
Inj Date : 23-AUG-2022 17:15
InstruID : SV6.i
LabSampID : HS22080522-04

Chrysene-d12 (1719-03-5)

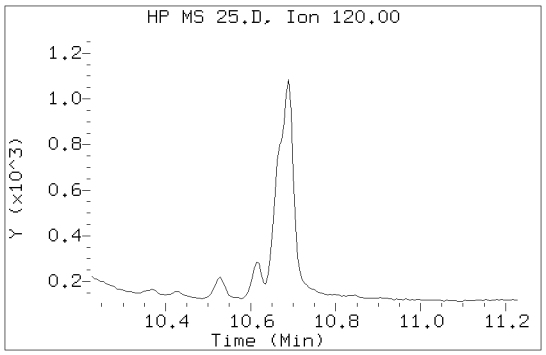


BEFORE
MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
17:29
ALSHS
Server

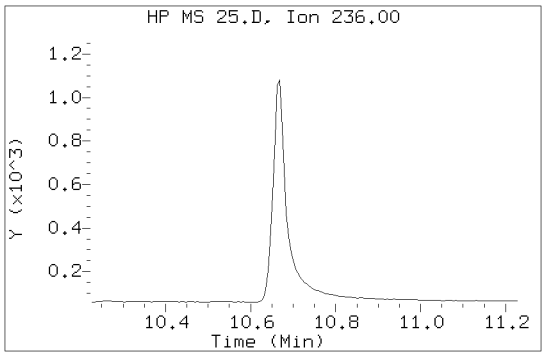


BEFORE
MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
17:29
ALSHS
Server

Reason Code:

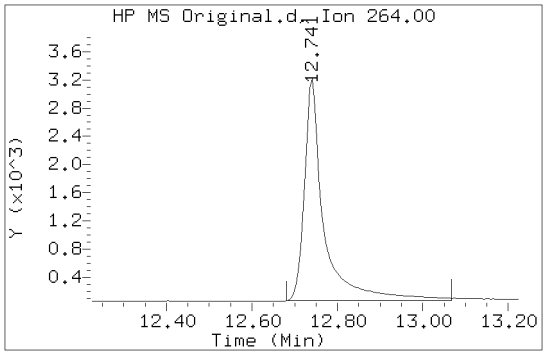


AFTER
MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

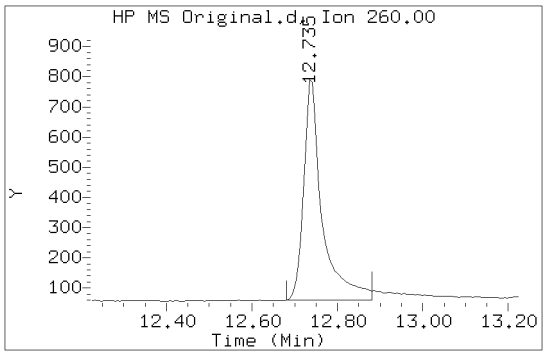


AFTER
MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

Perylene-d12 (1520-96-3)

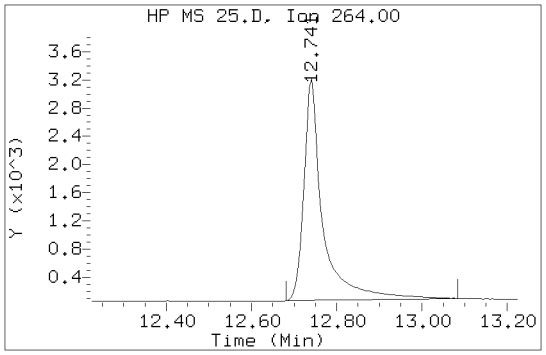


BEFORE
MASS
264
AREA
10106
HEIGHT
3150
23-Aug-2022
17:29
ALSHS
Server

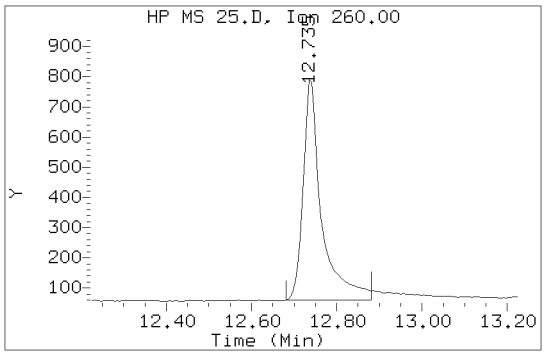


BEFORE
MASS
260
AREA
2195
HEIGHT
730
23-Aug-2022
17:29
ALSHS
Server

Reason Code:



AFTER
MASS
264
AREA
9725
HEIGHT
3142
24-Aug-2022
10:25
ALSHS
S



AFTER
MASS
260
AREA
2195
HEIGHT
730
24-Aug-2022
10:25
ALSHS
S

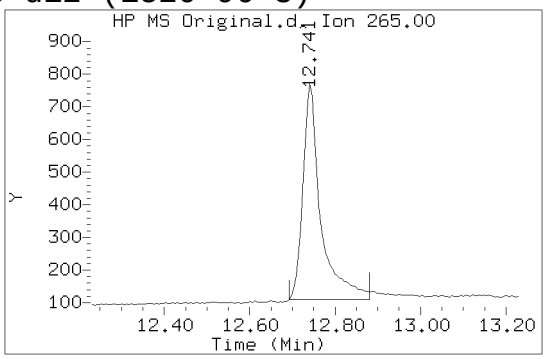
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\25.D
Inj Date : 23-AUG-2022 17:15
InstruID : SV6.i
LabSampID : HS22080522-04

Perylene-d12 (1520-96-3)

Reason Code:

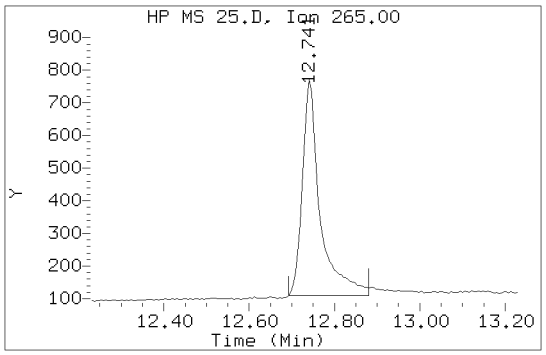
BEFORE

MASS
265
AREA
1924
HEIGHT
662
23-Aug-2022
17:29
ALSHS
Server



AFTER

MASS
265
AREA
1924
HEIGHT
662
24-Aug-2022
10:25
ALSHS
S

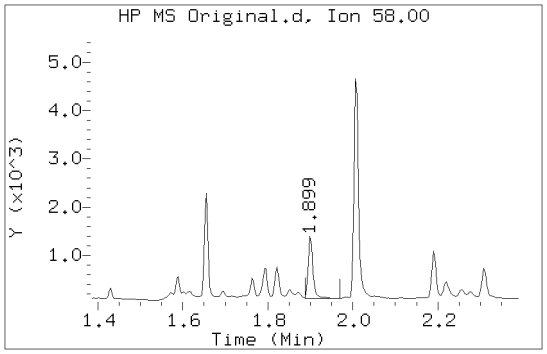


1,4-Dioxane ()

Reason Code:

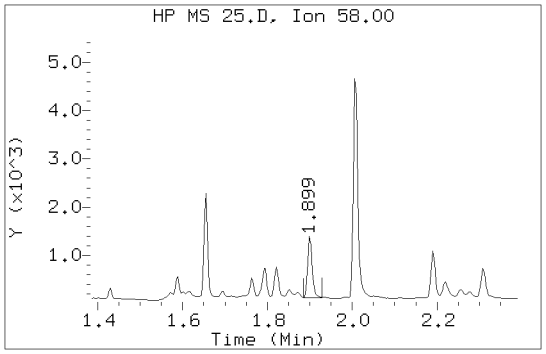
BEFORE

MASS
58
AREA
990
HEIGHT
1293
23-Aug-2022
17:29
ALSHS
Server



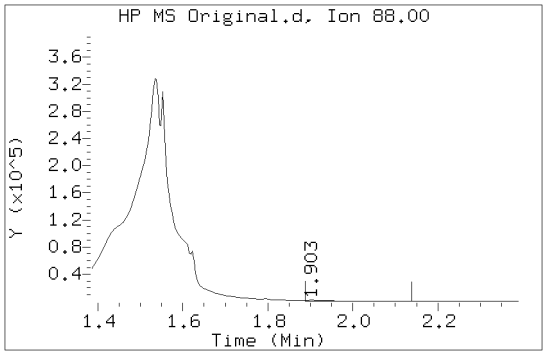
AFTER

MASS
58
AREA
926
HEIGHT
1278
24-Aug-2022
10:25
ALSHS
S



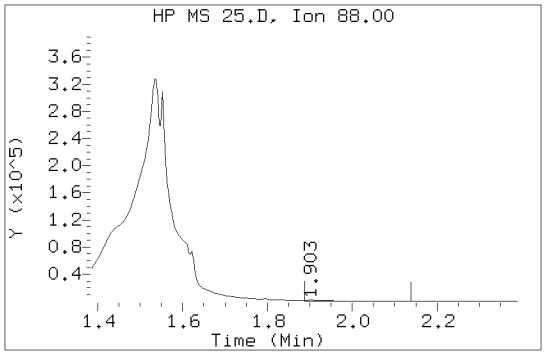
BEFORE

MASS
88
AREA
4835
HEIGHT
2099
23-Aug-2022
17:29
ALSHS
Server



AFTER

MASS
88
AREA
4835
HEIGHT
2099
24-Aug-2022
10:25
ALSHS
S

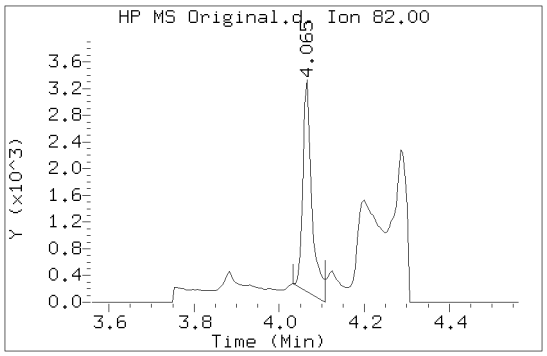


Nitrobenzene-d5 (4165-60-0)

Reason Code:

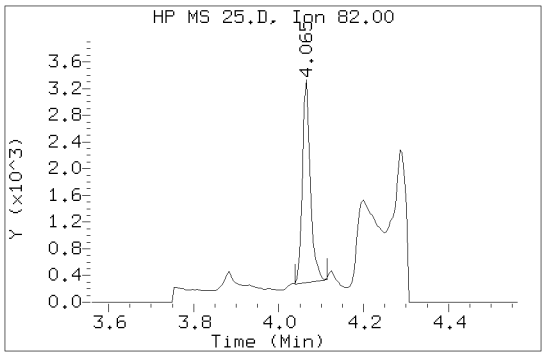
BEFORE

MASS
82
AREA
4732
HEIGHT
3170
23-Aug-2022
17:29
ALSHS
Server



AFTER

MASS
82
AREA
3966
HEIGHT
3034
24-Aug-2022
10:25
ALSHS
S



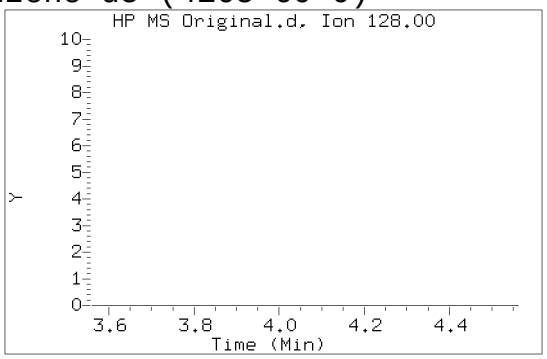
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\25.D
Inj Date : 23-AUG-2022 17:15
InstruID : SV6.i
LabSampID : HS22080522-04

Nitrobenzene-d5 (4165-60-0)

Reason Code:

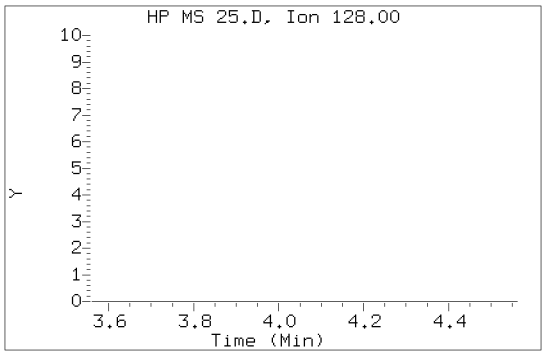
BEFORE

MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
17:29
ALSHS
Server



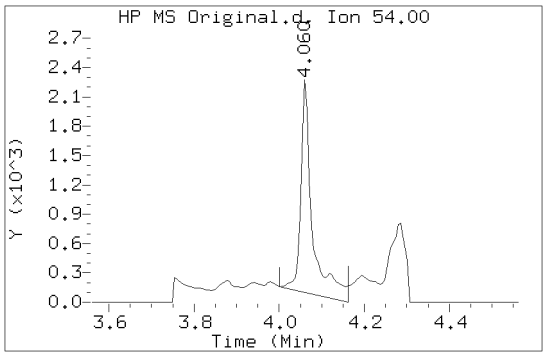
AFTER

MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



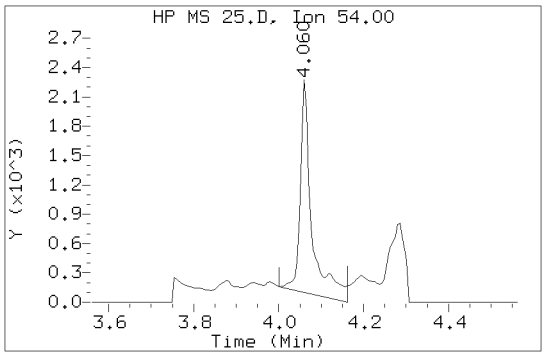
BEFORE

MASS
54
AREA
4094
HEIGHT
2172
23-Aug-2022
17:29
ALSHS
Server



AFTER

MASS
54
AREA
4094
HEIGHT
2172
24-Aug-2022
10:25
ALSHS
S

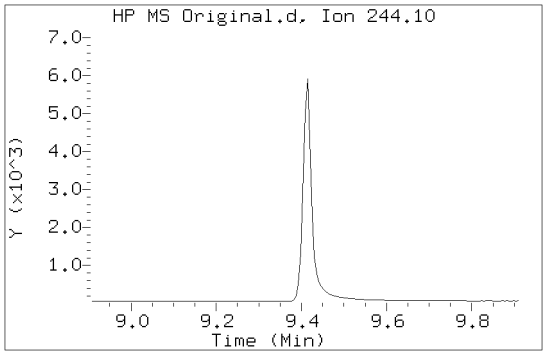


4-Terphenyl-d14 (1718-51-0)

Reason Code:

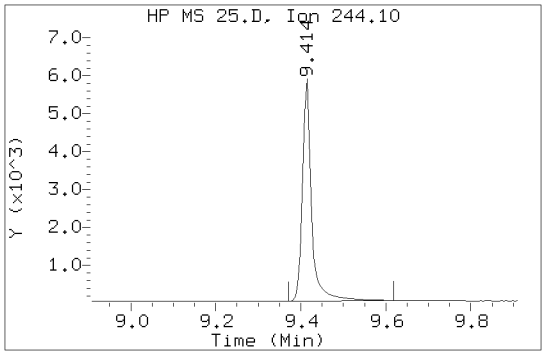
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
23-Aug-2022
17:29
ALSHS
Server



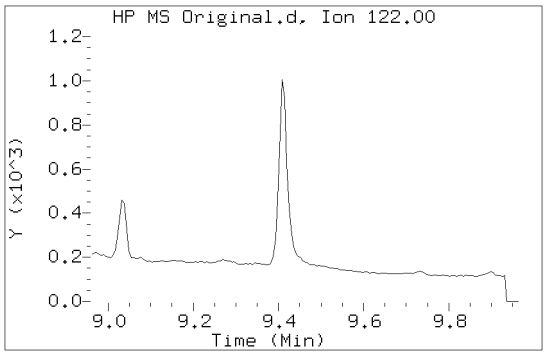
AFTER

MASS
244.1
AREA
8656
HEIGHT
5853
24-Aug-2022
10:25
ALSHS
S



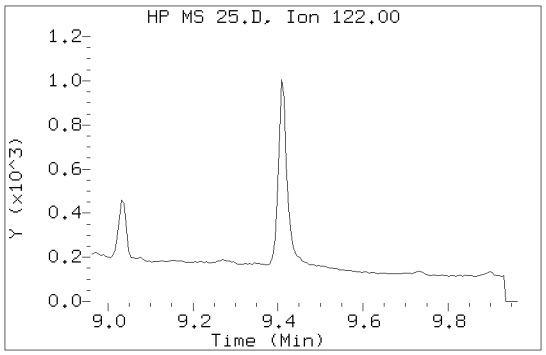
BEFORE

MASS
122
AREA
0
HEIGHT
0
23-Aug-2022
17:29
ALSHS
Server



AFTER

MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

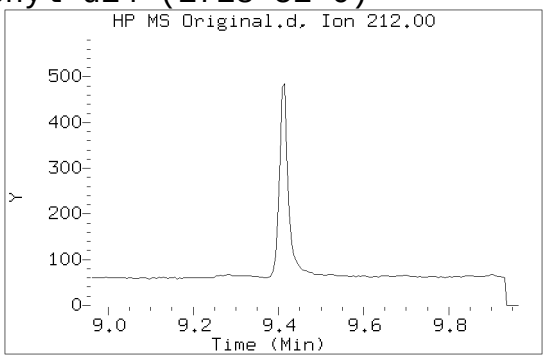


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\25.D
Inj Date : 23-AUG-2022 17:15
InstruID : SV6.i
LabSampID : HS22080522-04

4-Terphenyl-d14 (1718-51-0)

BEFORE

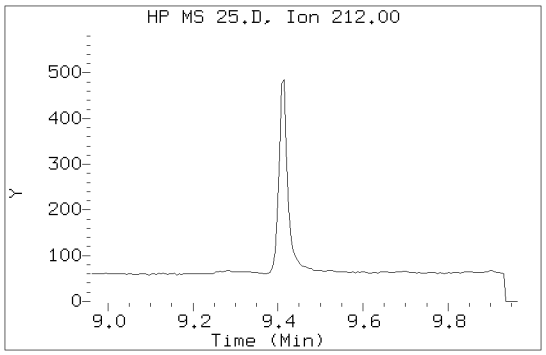
MASS
212
AREA
0
HEIGHT
0
23-Aug-2022
17:29
ALSHS
Server



Reason Code:

AFTER

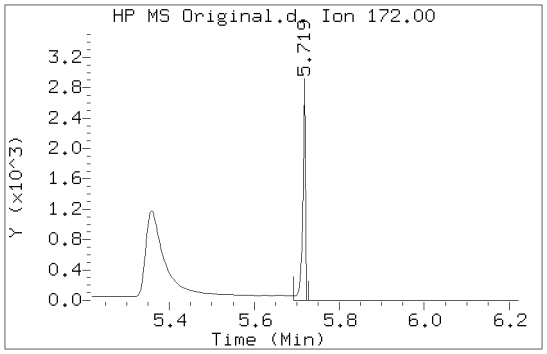
MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



2-Fluorobiphenyl (321-60-8)

BEFORE

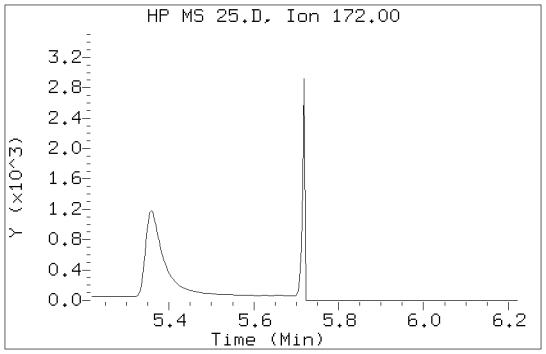
MASS
172
AREA
1325
HEIGHT
2919
23-Aug-2022
17:29
ALSHS
Server



Reason Code:

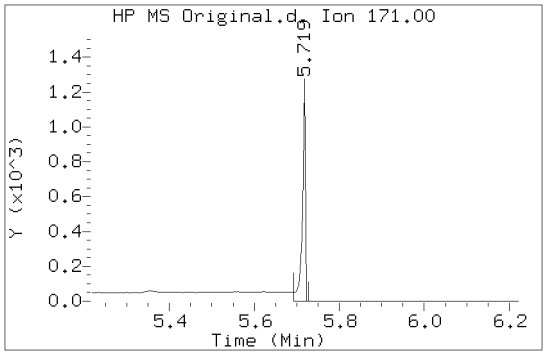
AFTER

MASS
172
AREA
6636
HEIGHT
2919
24-Aug-2022
10:25
ALSHS
S



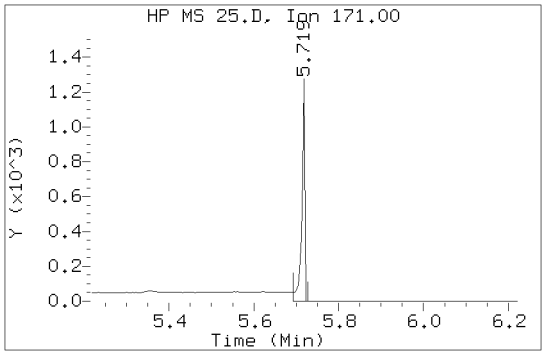
BEFORE

MASS
171
AREA
651
HEIGHT
1275
23-Aug-2022
17:29
ALSHS
Server



AFTER

MASS
171
AREA
651
HEIGHT
1275
24-Aug-2022
10:25
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\26.D Page 1
Report Date: 24-Aug-2022 10:26

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\26.D
Lab Smp Id: HS22080522-08
Inj Date : 23-AUG-2022 17:33
Operator : LG Inst ID: SV6.i
Smp Info : HS22080522-08
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.603	3.592	(1.000)	4124	0.10000	(aQ)
* 45 Naphthalene-d8	136	4.712	4.705	(1.000)	13799	0.10000	(M)
$ 33 Nitrobenzene-d5	82	4.065	4.059	(0.863)	3596	0.07818	0.07818(M)
* 86 Acenaphthene-d10	164	6.382	6.376	(1.000)	7748	0.10000	(Q)
$ 69 2-Fluorobiphenyl	172	5.719	5.718	(0.896)	4968	0.04119	0.04119(M)
* 126 Phenanthrene-d10	188	7.833	7.827	(1.000)	14169	0.10000	
* 182 Chrysene-d12	240	10.667	10.657	(1.000)	9596	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.414	9.408	(0.882)	8609	0.04772	0.04772(M)
* 198 Perylene-d12	264	12.740	12.724	(1.000)	9423	0.10000	
1 1,4-Dioxane	58	1.906	1.887	(0.529)	8164	4.82213	4.822(AQ)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.

01135421

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\26.D

Page 1

Date : 23-AUG-2022 17:33

Client ID:

Instrument: SV6.i

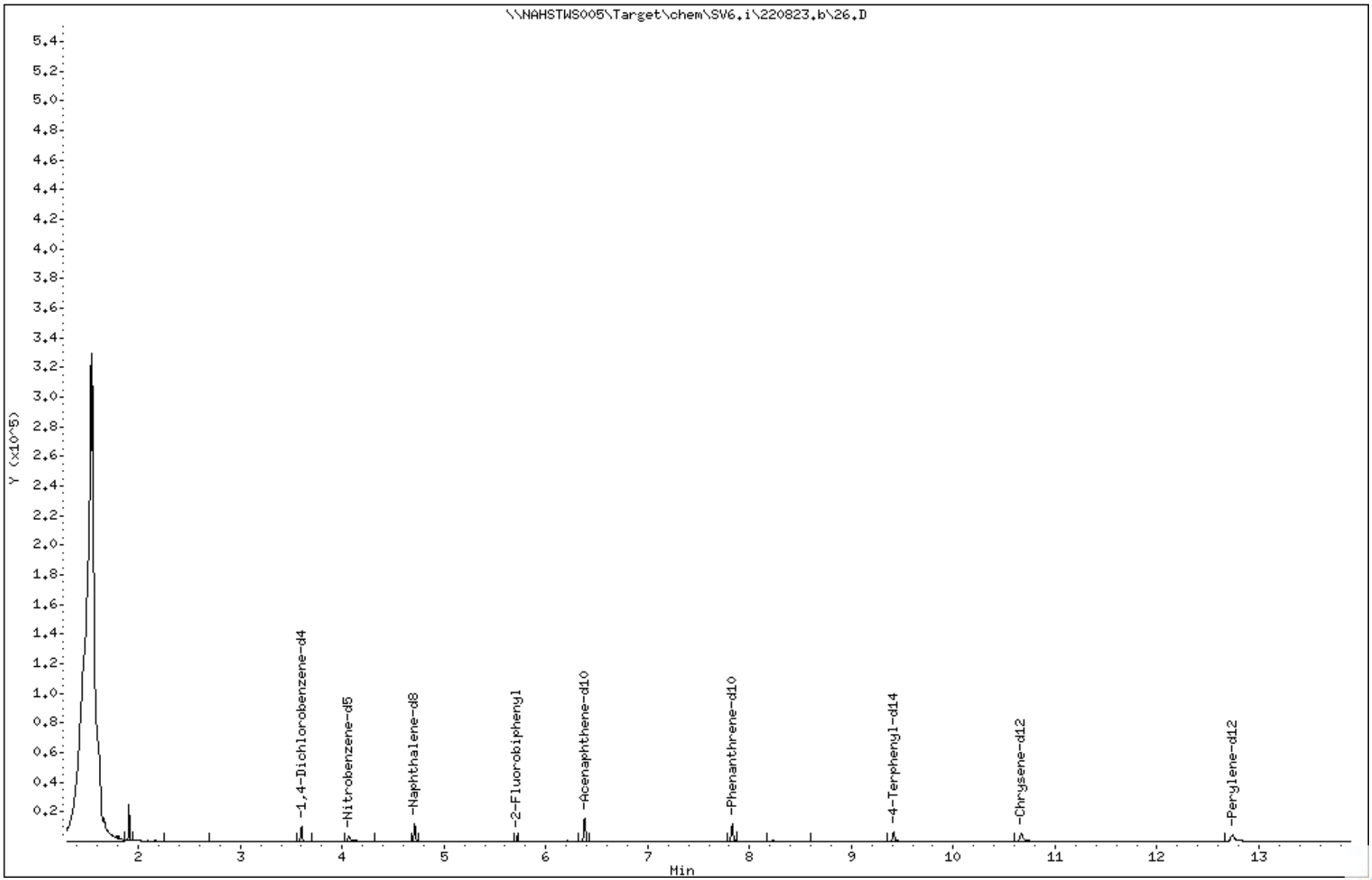
Sample Info: HS22080522-08

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\26.D

Date : 23-AUG-2022 17:33

Client ID:

Instrument: SV6.i

Sample Info: HS22080522-08

Purge Volume: 1000.0

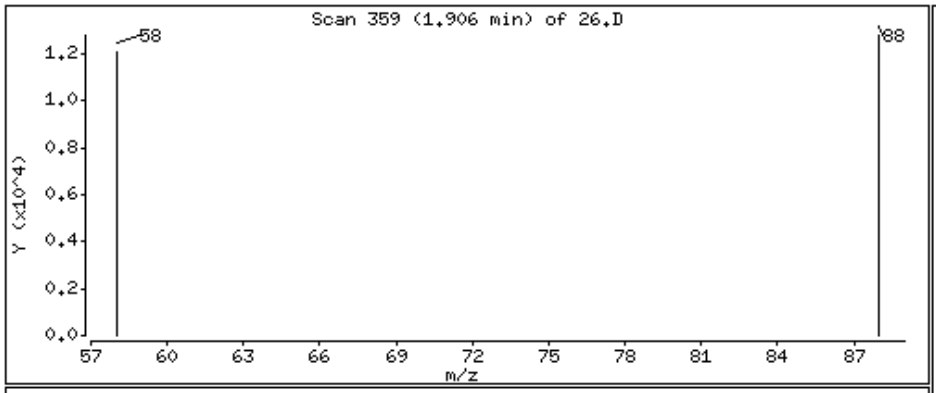
Operator: LG

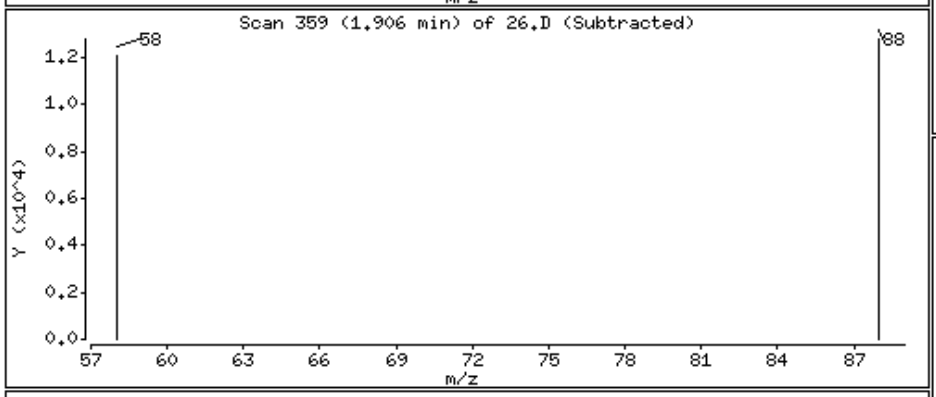
Column phase: RTX-5SIL MS

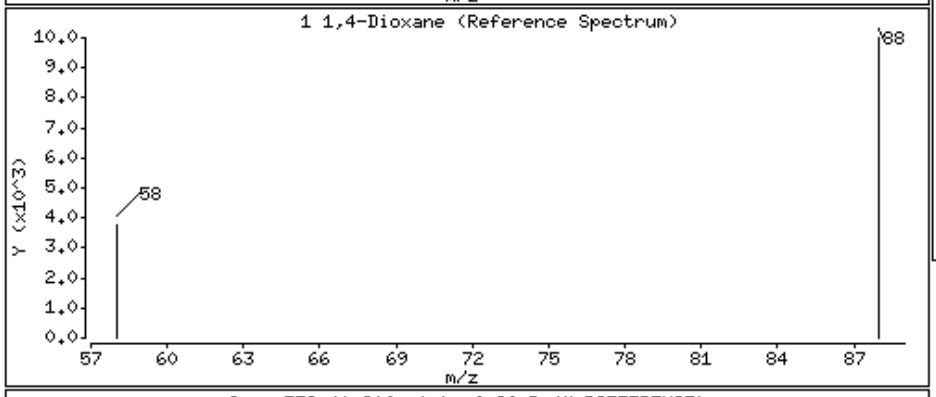
Column diameter: 0.28

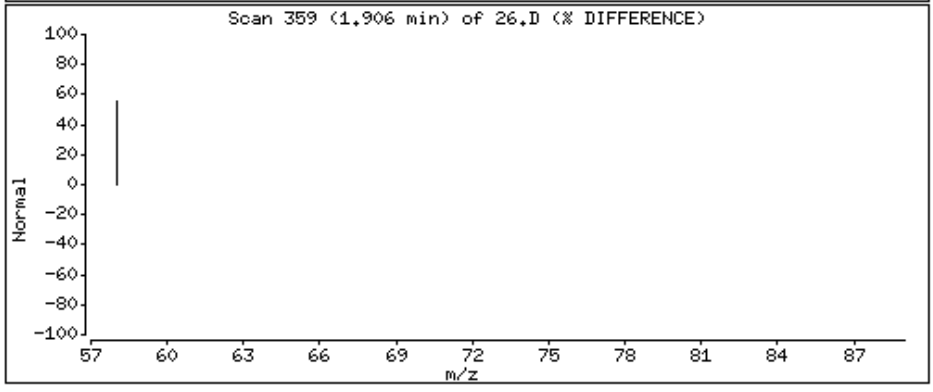
1 1,4-Dioxane

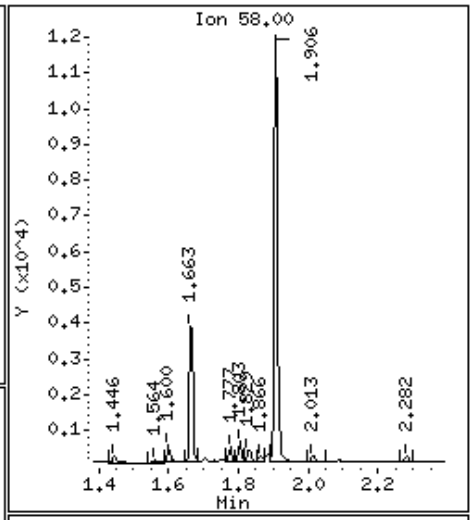
Concentration: 4.822 ug/L

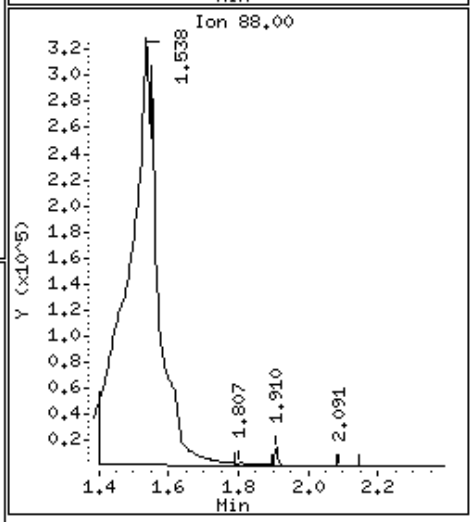












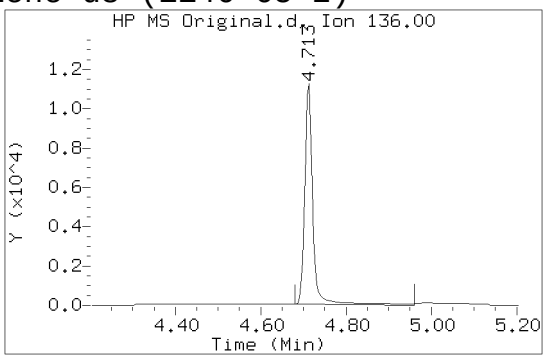
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\26.D
Inj Date : 23-AUG-2022 17:33
InstruID : SV6.i
LabSampID : HS22080522-08

Naphthalene-d8 (1146-65-2)

Reason Code:

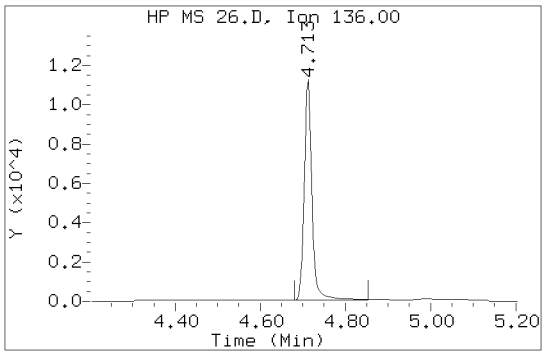
BEFORE

MASS
136
AREA
14614
HEIGHT
11220
23-Aug-2022
17:48
ALSHS
Server



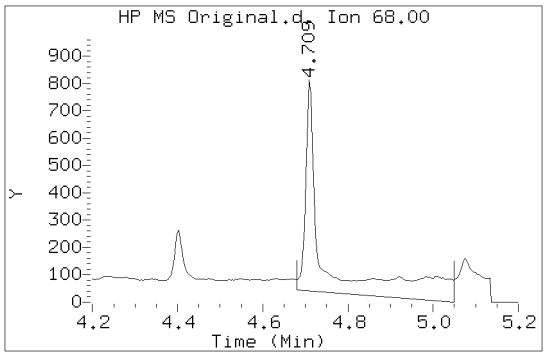
AFTER

MASS
136
AREA
13799
HEIGHT
11201
24-Aug-2022
10:25
ALSHS
S



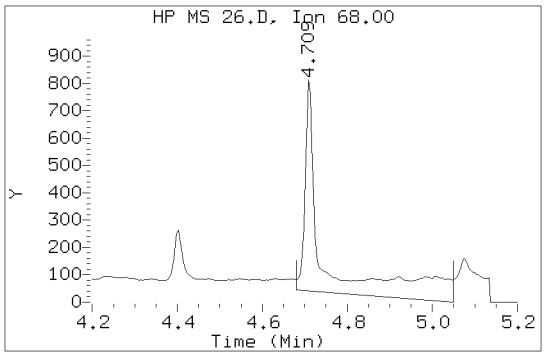
BEFORE

MASS
68
AREA
2259
HEIGHT
771
23-Aug-2022
17:48
ALSHS
Server



AFTER

MASS
68
AREA
2259
HEIGHT
771
24-Aug-2022
10:25
ALSHS
S

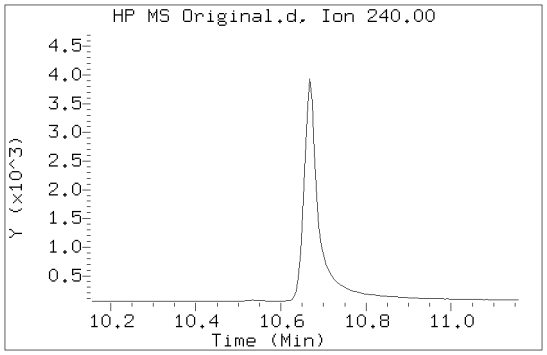


Chrysene-d12 (1719-03-5)

Reason Code:

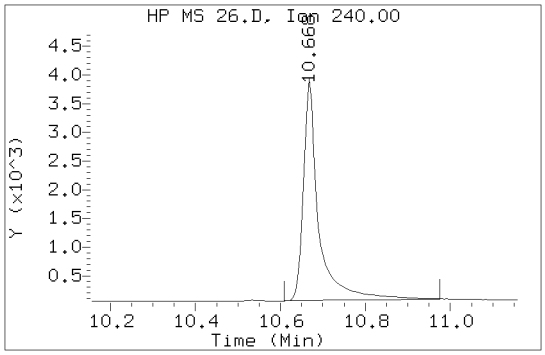
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
17:48
ALSHS
Server



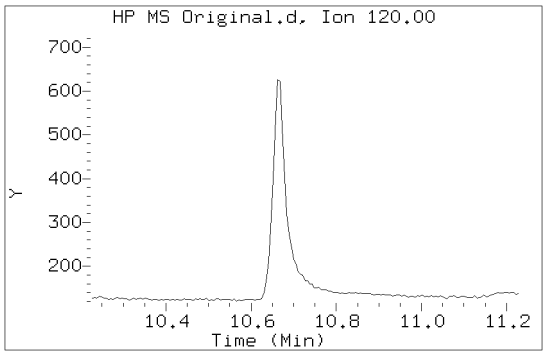
AFTER

MASS
240
AREA
9596
HEIGHT
3860
24-Aug-2022
10:25
ALSHS
S



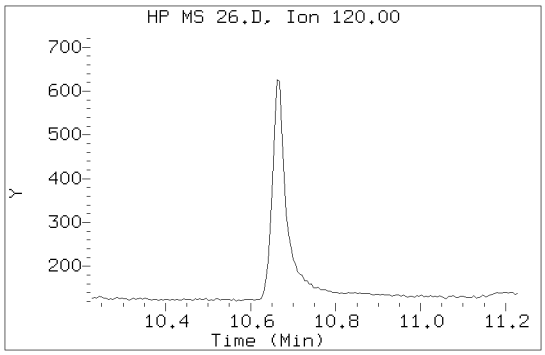
BEFORE

MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
17:48
ALSHS
Server



AFTER

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



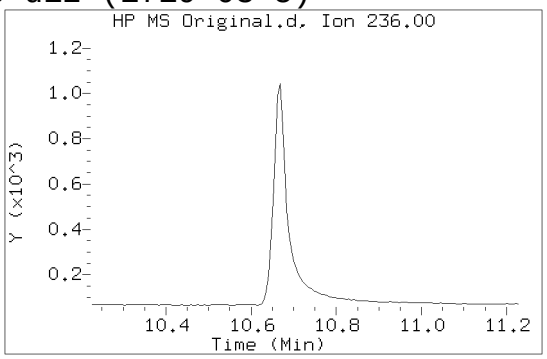
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\26.D
Inj Date : 23-AUG-2022 17:33
InstruID : SV6.i
LabSampID : HS22080522-08

Chrysene-d12 (1719-03-5)

Reason Code:

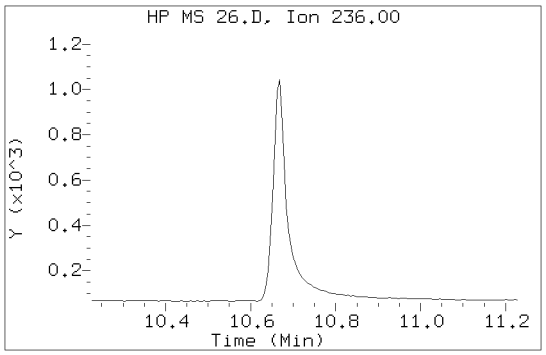
BEFORE

MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
17:48
ALSHS
Server



AFTER

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

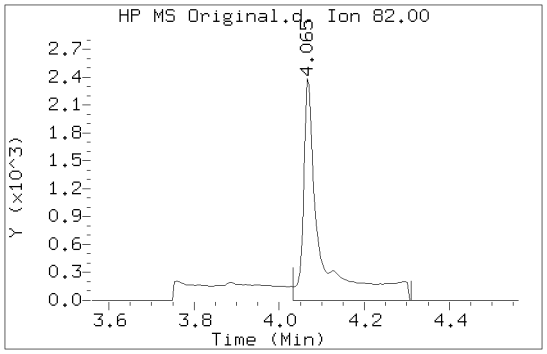


Nitrobenzene-d5 (4165-60-0)

Reason Code:

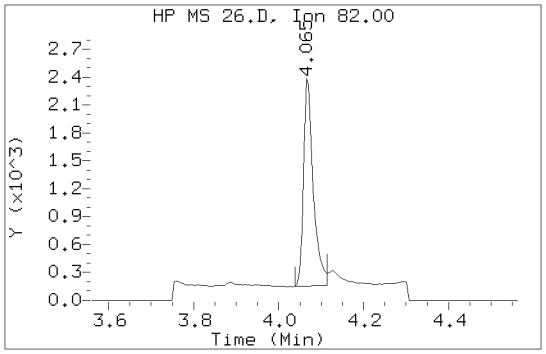
BEFORE

MASS
82
AREA
6658
HEIGHT
2385
23-Aug-2022
17:48
ALSHS
Server



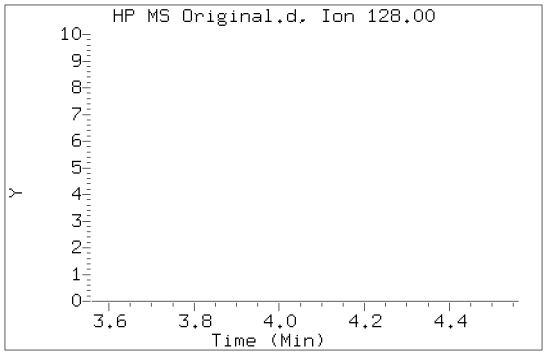
AFTER

MASS
82
AREA
3596
HEIGHT
2230
24-Aug-2022
10:25
ALSHS
S



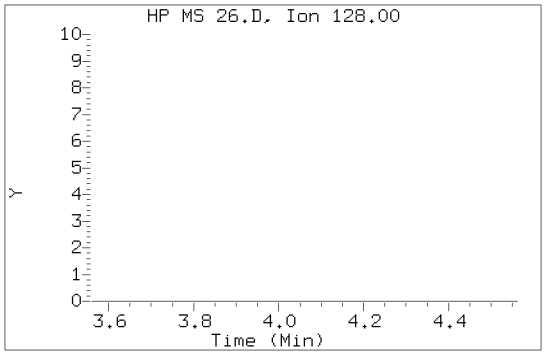
BEFORE

MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
17:48
ALSHS
Server



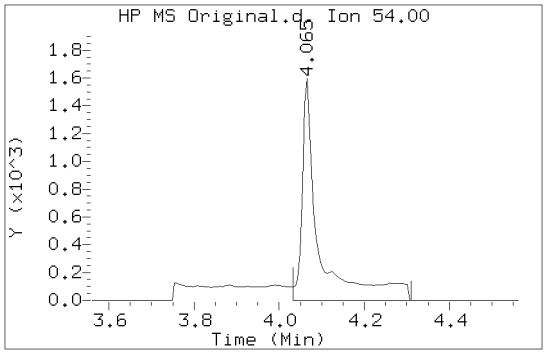
AFTER

MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



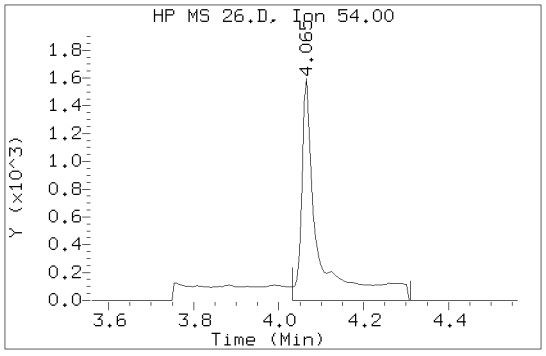
BEFORE

MASS
54
AREA
4348
HEIGHT
1595
23-Aug-2022
17:48
ALSHS
Server



AFTER

MASS
54
AREA
4348
HEIGHT
1595
24-Aug-2022
10:25
ALSHS
S



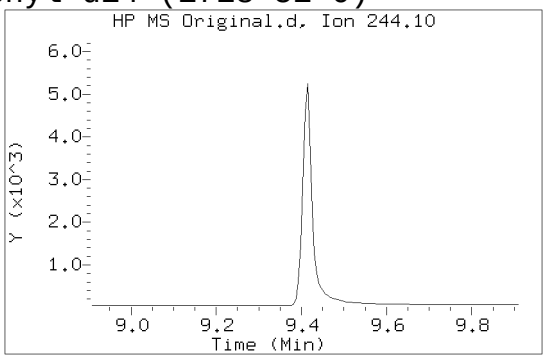
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\26.D
Inj Date : 23-AUG-2022 17:33
InstruID : SV6.i
LabSampID : HS22080522-08

4-Terphenyl-d14 (1718-51-0)

Reason Code:

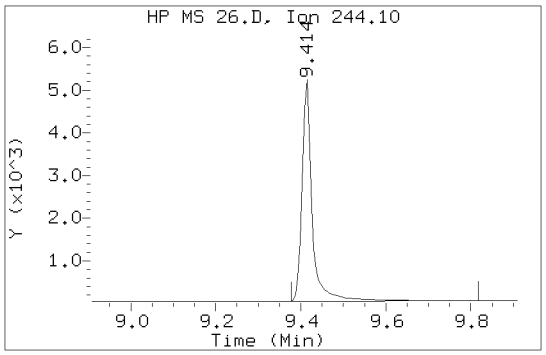
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
23-Aug-2022
17:48
ALSHS
Server



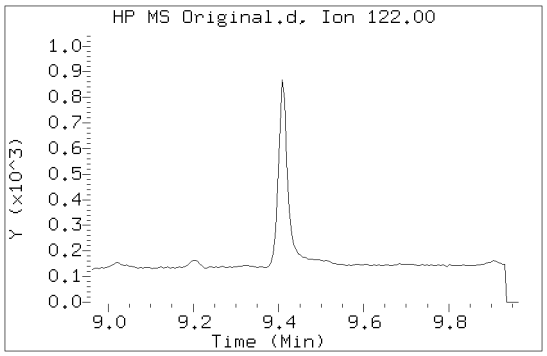
AFTER

MASS
244.1
AREA
8609
HEIGHT
5188
24-Aug-2022
10:25
ALSHS
S



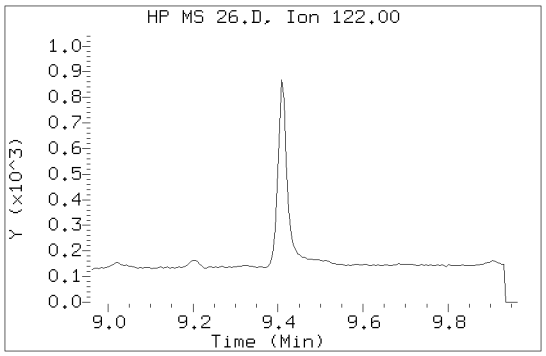
BEFORE

MASS
122
AREA
0
HEIGHT
0
23-Aug-2022
17:48
ALSHS
Server



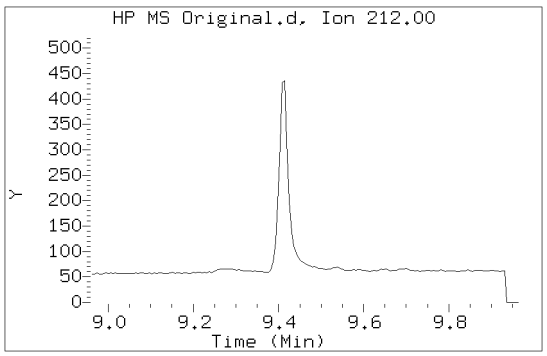
AFTER

MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



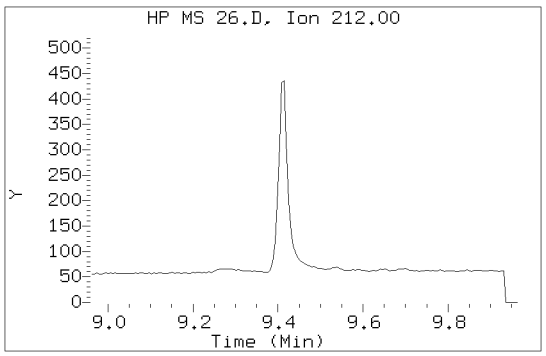
BEFORE

MASS
212
AREA
0
HEIGHT
0
23-Aug-2022
17:48
ALSHS
Server



AFTER

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S

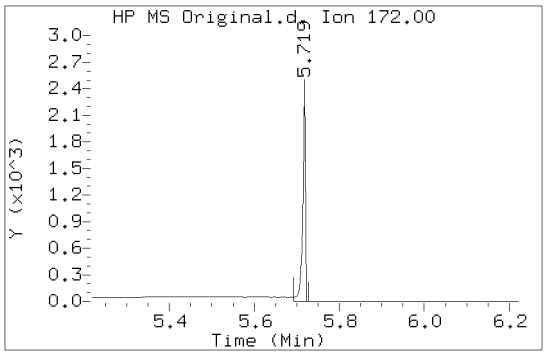


2-Fluorobiphenyl (321-60-8)

Reason Code:

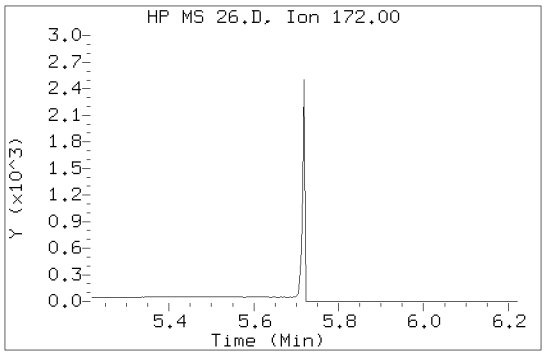
BEFORE

MASS
172
AREA
1120
HEIGHT
2503
23-Aug-2022
17:48
ALSHS
Server



AFTER

MASS
172
AREA
4968
HEIGHT
2564
24-Aug-2022
10:25
ALSHS
S



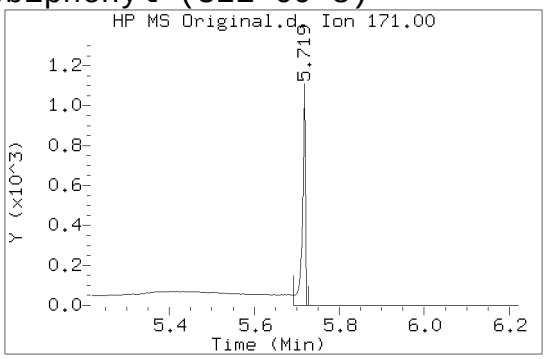
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\26.D
Inj Date : 23-AUG-2022 17:33
InstruID : SV6.i
LabSampID : HS22080522-08

2-Fluorobiphenyl (321-60-8)

Reason Code:

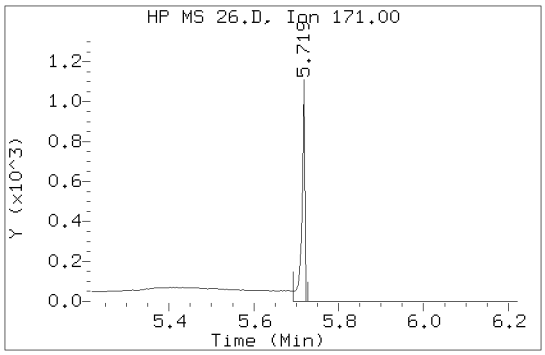
BEFORE

MASS
171
AREA
566
HEIGHT
1110
23-Aug-2022
17:48
ALSHS
Server



AFTER

MASS
171
AREA
566
HEIGHT
1110
24-Aug-2022
10:25
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\27.D Page 1
Report Date: 24-Aug-2022 10:26

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\27.D
Lab Smp Id: HS22080522-09
Inj Date : 23-AUG-2022 17:51
Operator : LG Inst ID: SV6.i
Smp Info : HS22080522-09
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.603	3.592	(1.000)	4235	0.10000	(aQ)
* 45 Naphthalene-d8	136	4.712	4.705	(1.000)	14218	0.10000	(M)
$ 33 Nitrobenzene-d5	82	4.070	4.059	(0.864)	3572	0.07537	0.07537(M)
* 86 Acenaphthene-d10	164	6.382	6.376	(1.000)	4228	0.10000	(QM)
$ 69 2-Fluorobiphenyl	172	5.718	5.718	(0.896)	2263	0.03439	0.03438(M)
* 126 Phenanthrene-d10	188	7.832	7.827	(1.000)	14297	0.10000	
* 182 Chrysene-d12	240	10.667	10.657	(1.000)	9702	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.414	9.408	(0.882)	8033	0.04404	0.04404(M)
* 198 Perylene-d12	264	12.740	12.724	(1.000)	9244	0.10000	
1 1,4-Dioxane	58	1.843	1.887	(0.512)	155	0.08915	0.08915(aM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01135428

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\27.D

Date : 23-AUG-2022 17:51

Client ID:

Instrument: SV6.i

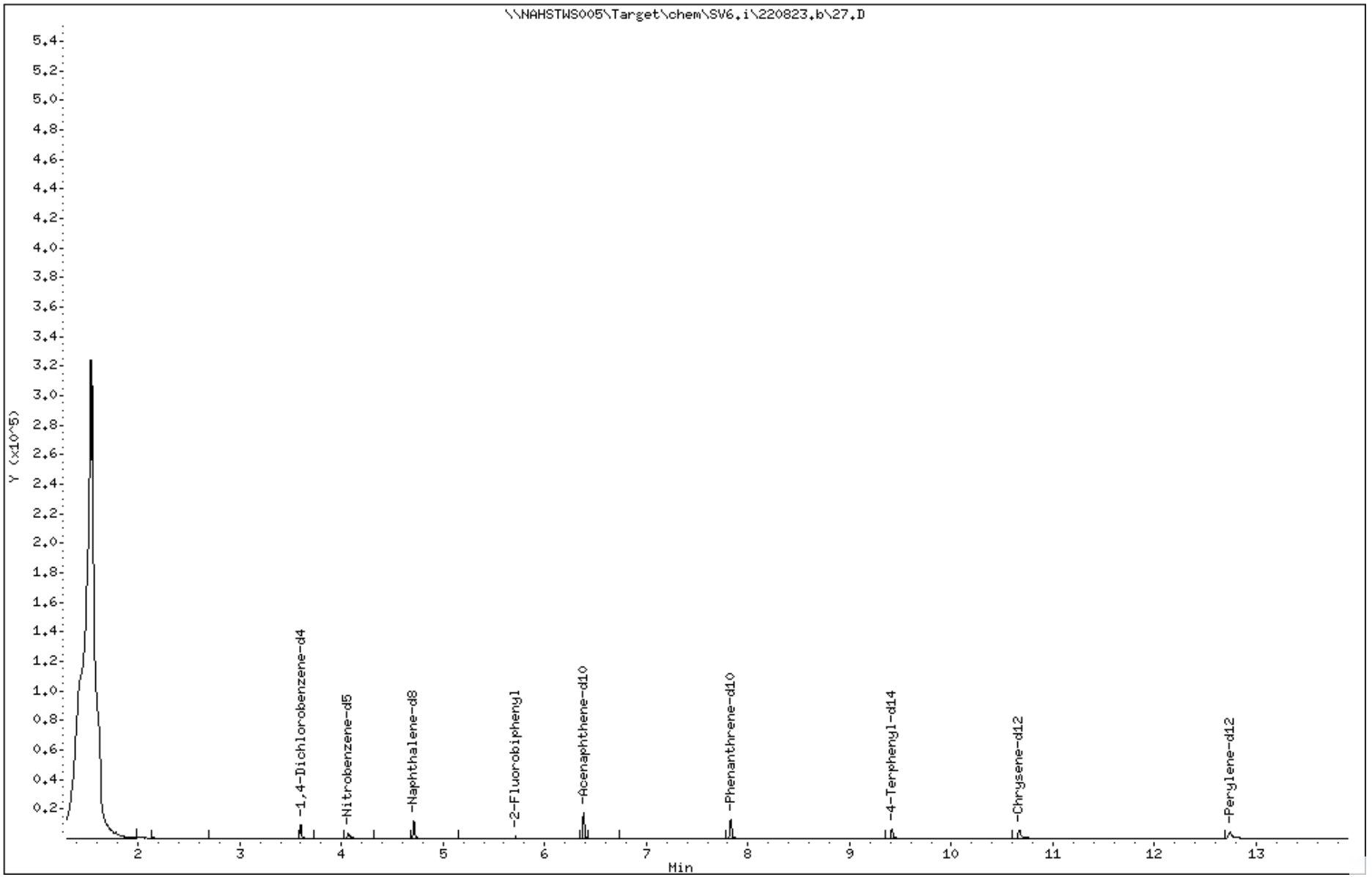
Sample Info: HS22080522-09

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\27.D

Date : 23-AUG-2022 17:51

Client ID:

Instrument: SV6.i

Sample Info: HS22080522-09

Purge Volume: 1000.0

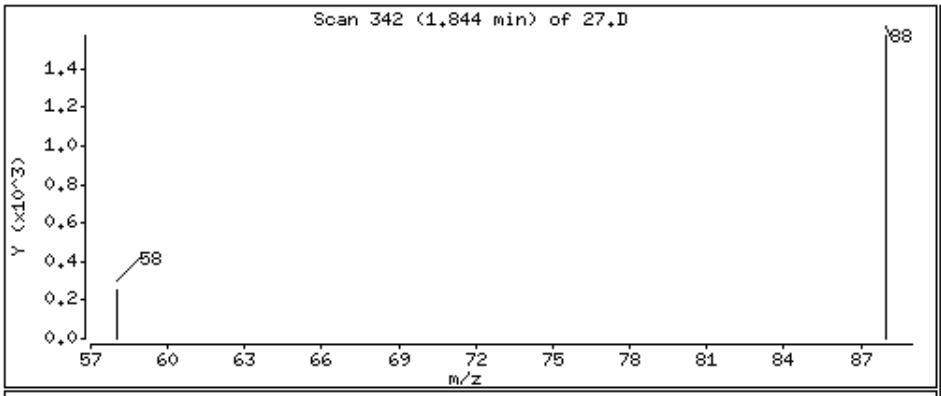
Operator: LG

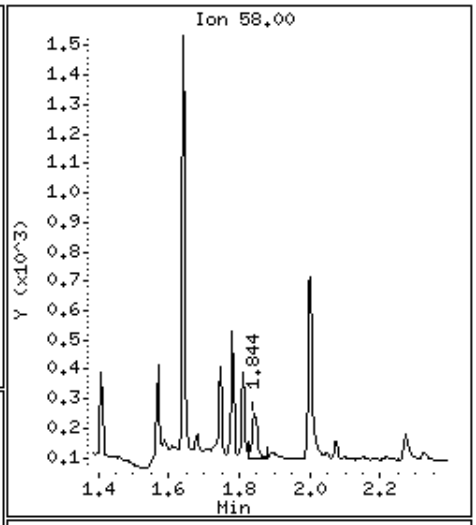
Column phase: RTX-5SIL MS

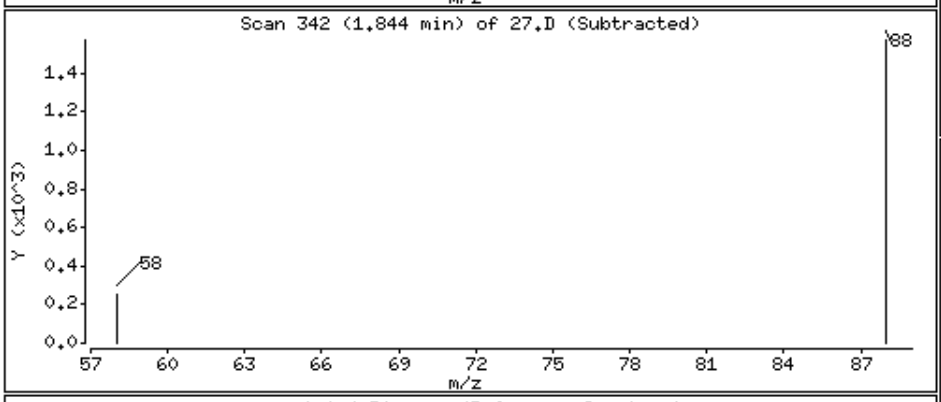
Column diameter: 0.28

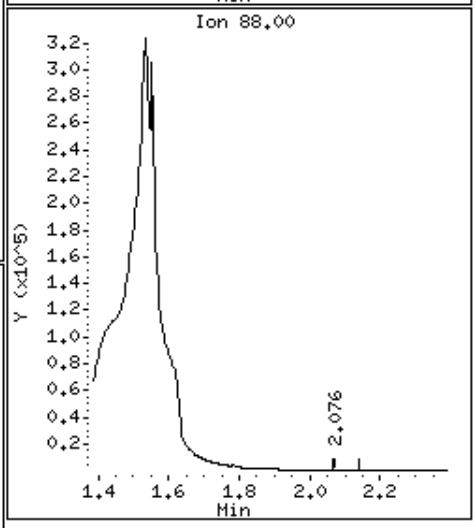
1 1,4-Dioxane

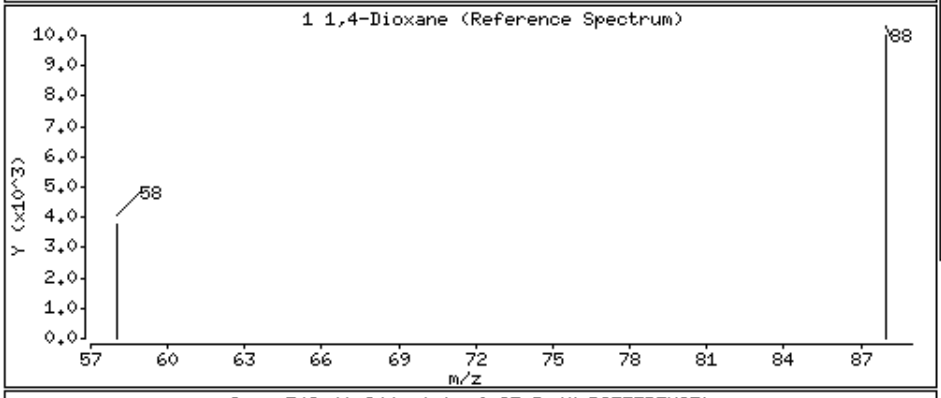
Concentration: 0.08915 ug/L

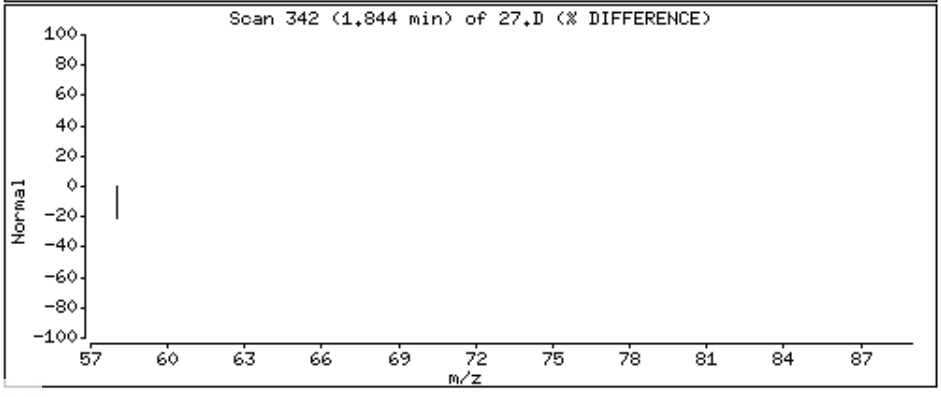












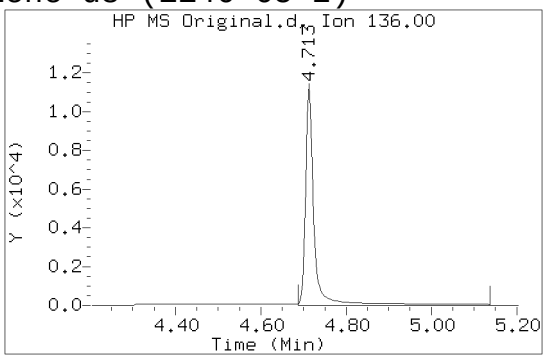
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\27.D
Inj Date : 23-AUG-2022 17:51
InstruID : SV6.i
LabSampID : HS22080522-09

Naphthalene-d8 (1146-65-2)

Reason Code:

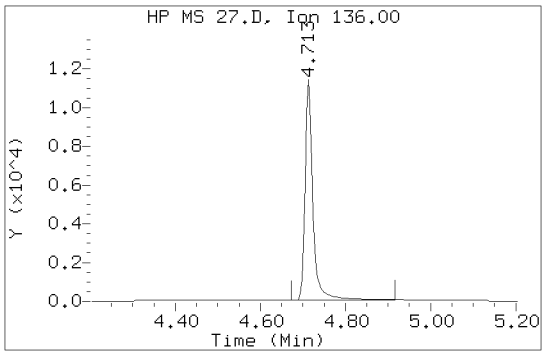
BEFORE

MASS
136
AREA
16204
HEIGHT
11443
23-Aug-2022
18:06
ALSHS
Server



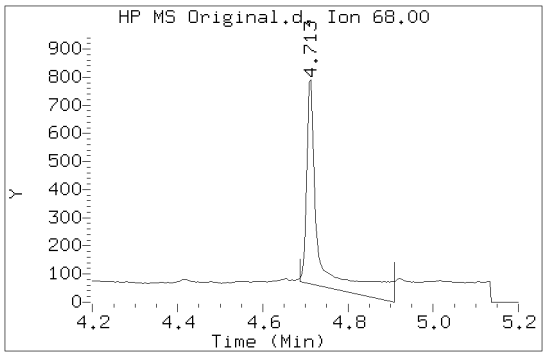
AFTER

MASS
136
AREA
14218
HEIGHT
11379
24-Aug-2022
10:25
ALSHS
S



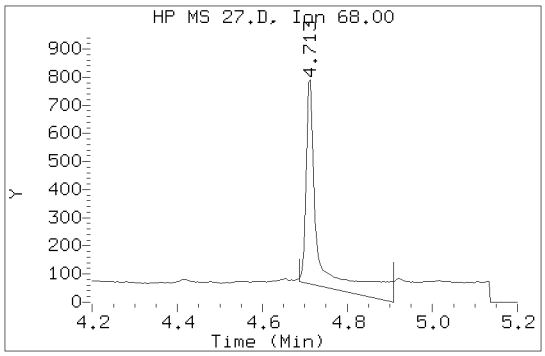
BEFORE

MASS
68
AREA
1439
HEIGHT
726
23-Aug-2022
18:06
ALSHS
Server



AFTER

MASS
68
AREA
1439
HEIGHT
726
24-Aug-2022
10:25
ALSHS
S

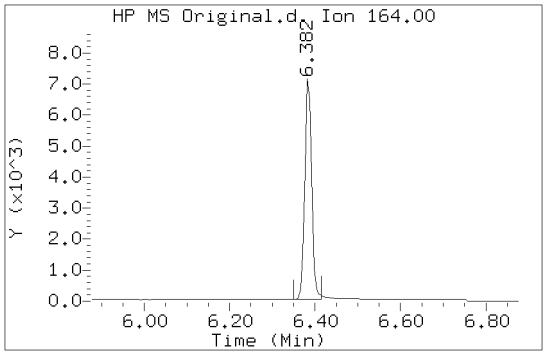


Acenaphthene-d10 (15067-26-2)

Reason Code:

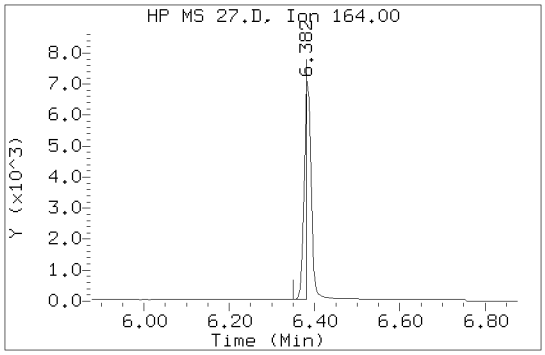
BEFORE

MASS
164
AREA
7885
HEIGHT
7112
23-Aug-2022
18:06
ALSHS
Server



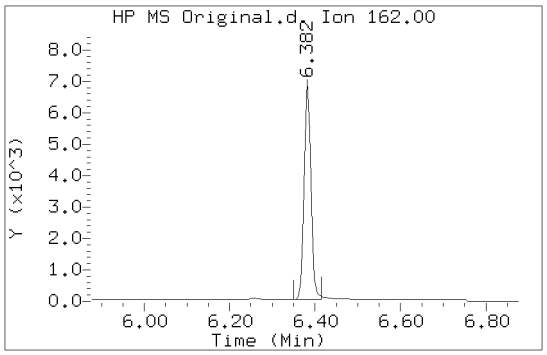
AFTER

MASS
164
AREA
4228
HEIGHT
7112
24-Aug-2022
10:25
ALSHS
S



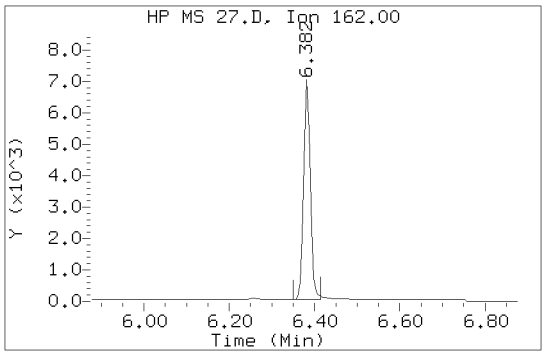
BEFORE

MASS
162
AREA
7573
HEIGHT
6999
23-Aug-2022
18:06
ALSHS
Server



AFTER

MASS
162
AREA
7573
HEIGHT
6999
24-Aug-2022
10:25
ALSHS
S



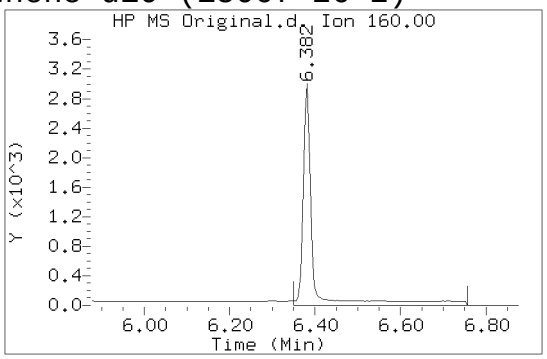
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\27.D
Inj Date : 23-AUG-2022 17:51
InstruID : SV6.i
LabSampID : HS22080522-09

Acenaphthene-d10 (15067-26-2)

Reason Code:

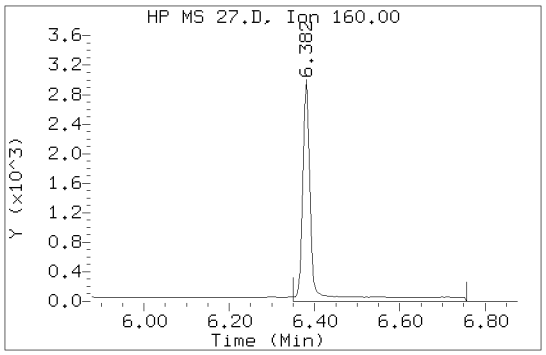
BEFORE

MASS
160
AREA
4661
HEIGHT
3003
23-Aug-2022
18:06
ALSHS
Server



AFTER

MASS
160
AREA
4661
HEIGHT
3003
24-Aug-2022
10:25
ALSHS
S

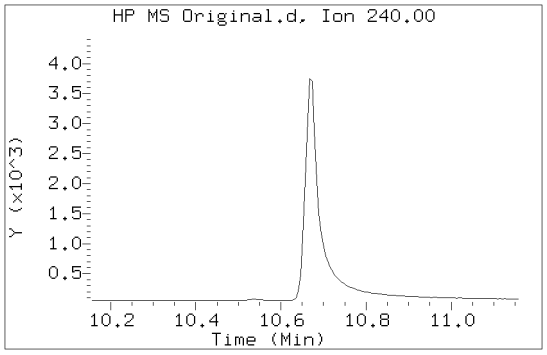


Chrysene-d12 (1719-03-5)

Reason Code:

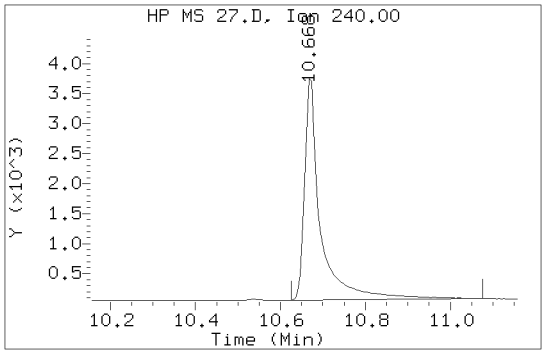
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
18:06
ALSHS
Server



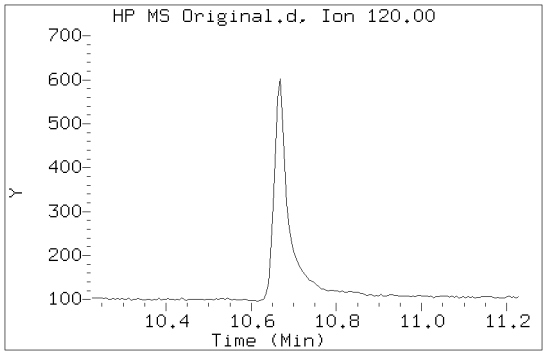
AFTER

MASS
240
AREA
9702
HEIGHT
3687
24-Aug-2022
10:25
ALSHS
S



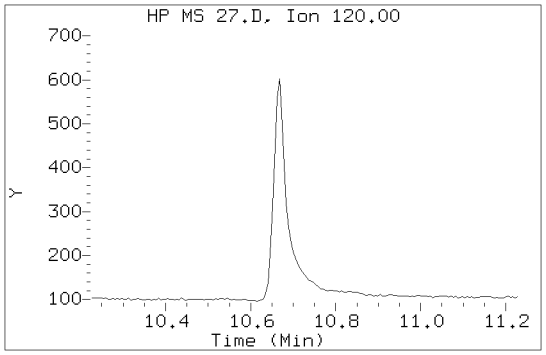
BEFORE

MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
18:06
ALSHS
Server



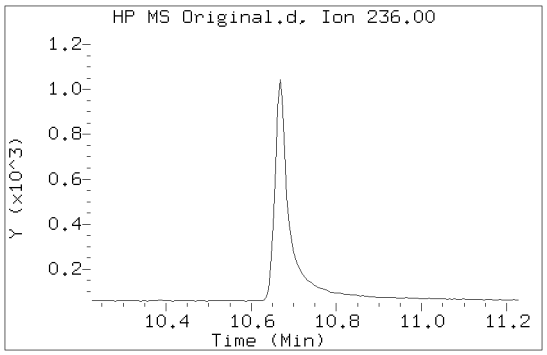
AFTER

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



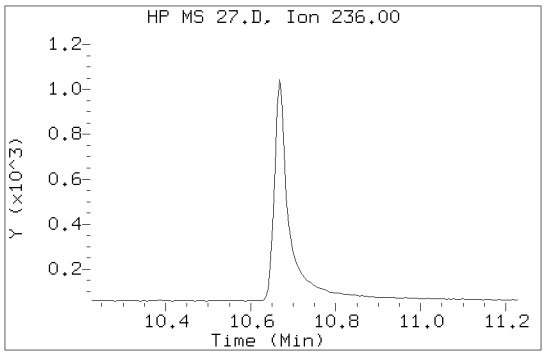
BEFORE

MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
18:06
ALSHS
Server



AFTER

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



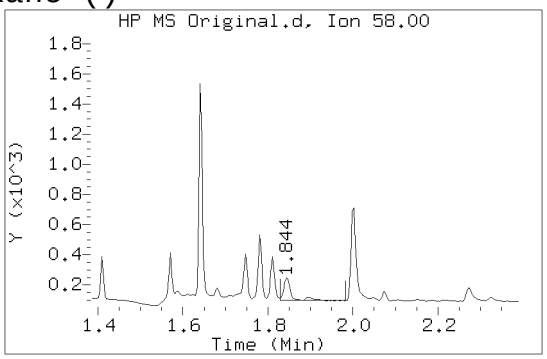
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\27.D
Inj Date : 23-AUG-2022 17:51
InstruID : SV6.i
LabSampID : HS22080522-09

1,4-Dioxane ()

Reason Code:

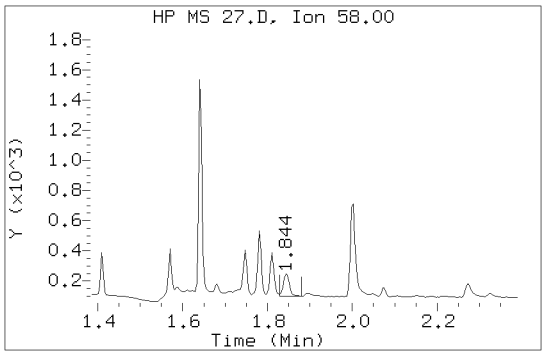
BEFORE

MASS
58
AREA
180
HEIGHT
152
23-Aug-2022
18:06
ALSHS
Server



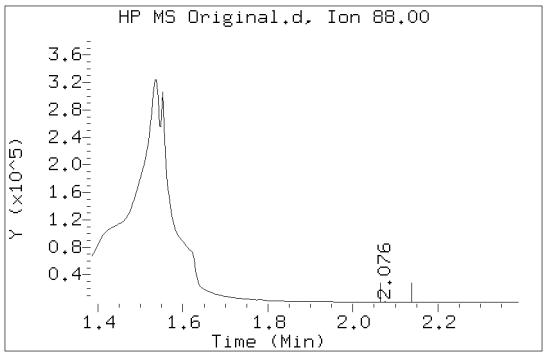
AFTER

MASS
58
AREA
155
HEIGHT
152
24-Aug-2022
10:25
ALSHS
S



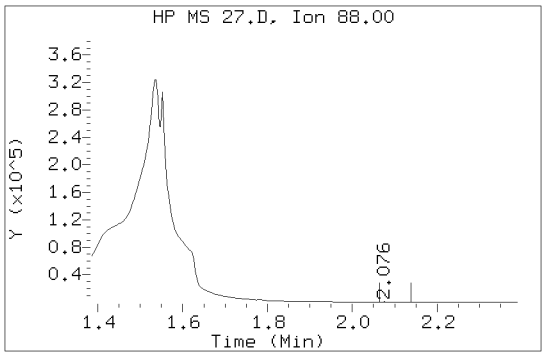
BEFORE

MASS
88
AREA
413
HEIGHT
384
23-Aug-2022
18:06
ALSHS
Server



AFTER

MASS
88
AREA
413
HEIGHT
384
24-Aug-2022
10:25
ALSHS
S

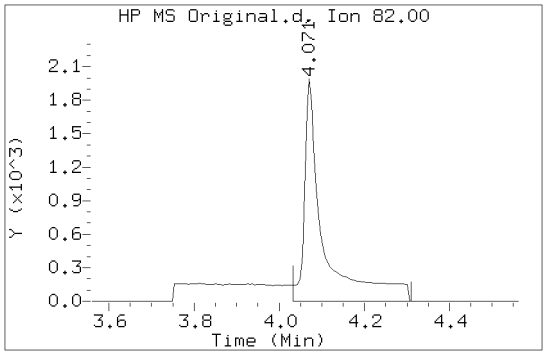


Nitrobenzene-d5 (4165-60-0)

Reason Code:

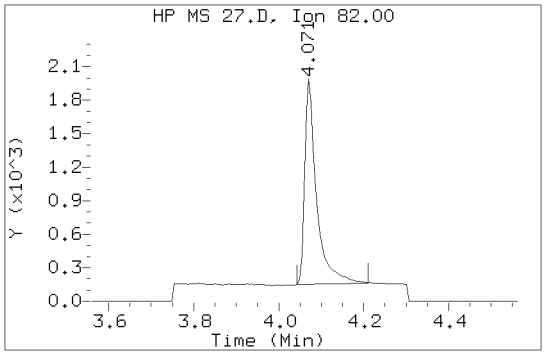
BEFORE

MASS
82
AREA
6075
HEIGHT
1991
23-Aug-2022
18:06
ALSHS
Server



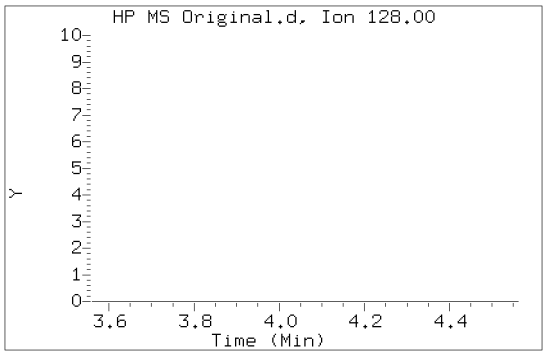
AFTER

MASS
82
AREA
3572
HEIGHT
1840
24-Aug-2022
10:25
ALSHS
S



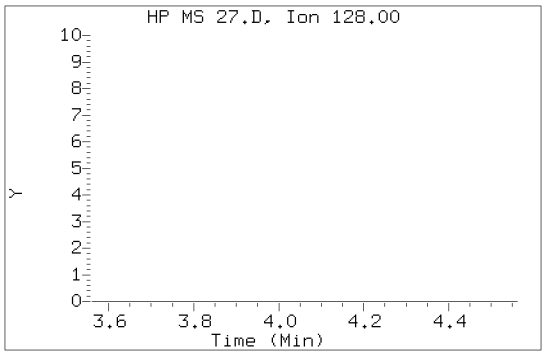
BEFORE

MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
18:06
ALSHS
Server



AFTER

MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



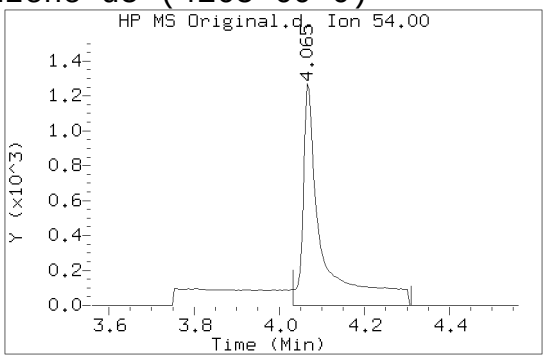
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\27.D
Inj Date : 23-AUG-2022 17:51
InstruID : SV6.i
LabSampID : HS22080522-09

Nitrobenzene-d5 (4165-60-0)

Reason Code:

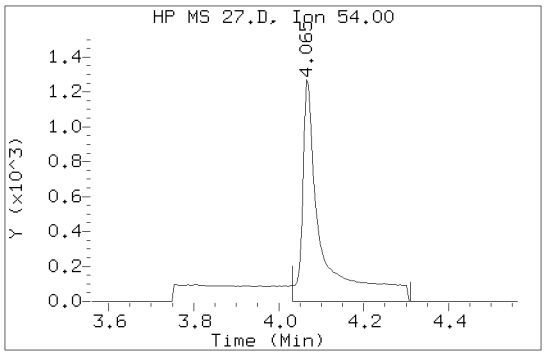
BEFORE

MASS
54
AREA
3892
HEIGHT
1270
23-Aug-2022
18:06
ALSHS
Server



AFTER

MASS
54
AREA
3892
HEIGHT
1270
24-Aug-2022
10:25
ALSHS
S

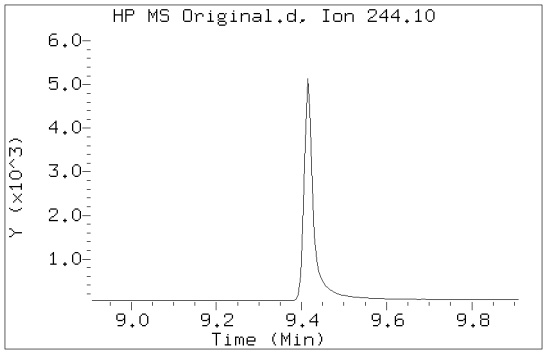


4-Terphenyl-d14 (1718-51-0)

Reason Code:

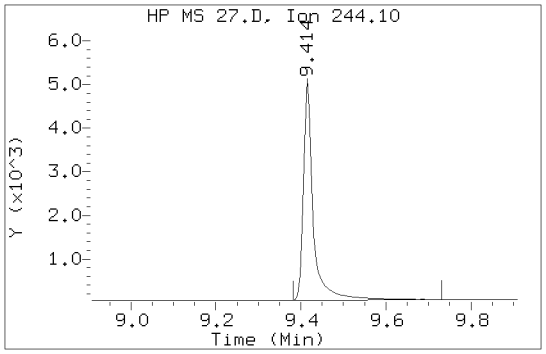
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
23-Aug-2022
18:06
ALSHS
Server



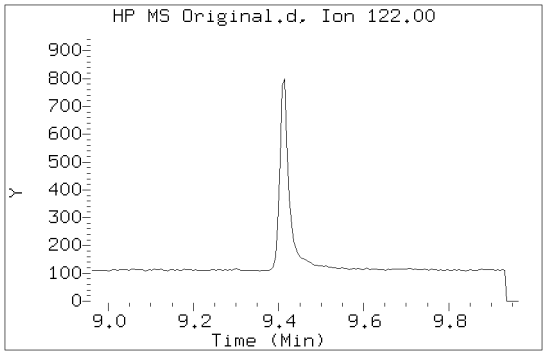
AFTER

MASS
244.1
AREA
8033
HEIGHT
5074
24-Aug-2022
10:25
ALSHS
S



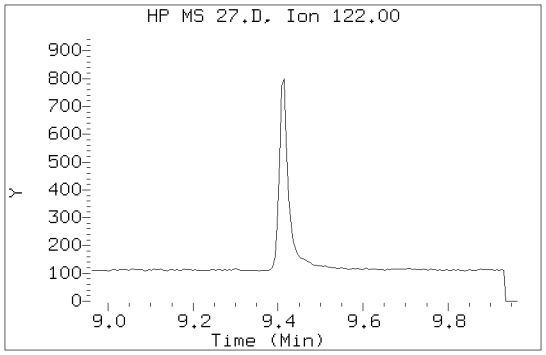
BEFORE

MASS
122
AREA
0
HEIGHT
0
23-Aug-2022
18:06
ALSHS
Server



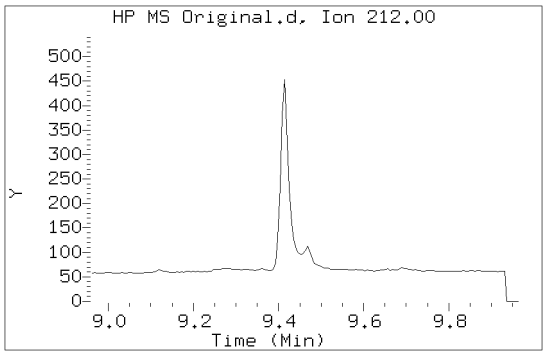
AFTER

MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



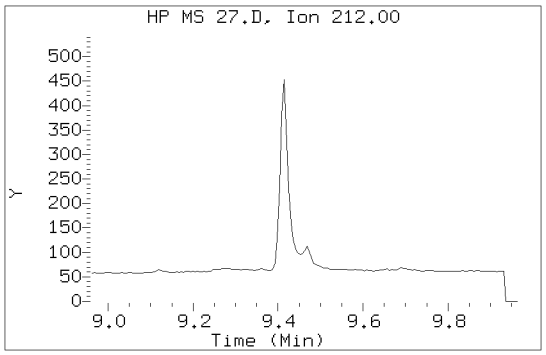
BEFORE

MASS
212
AREA
0
HEIGHT
0
23-Aug-2022
18:06
ALSHS
Server



AFTER

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



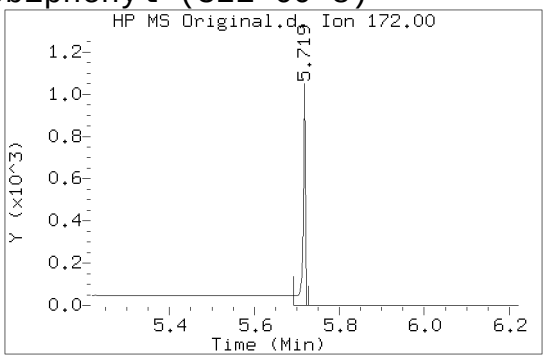
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\27.D
Inj Date : 23-AUG-2022 17:51
InstruID : SV6.i
LabSampID : HS22080522-09

2-Fluorobiphenyl (321-60-8)

Reason Code:

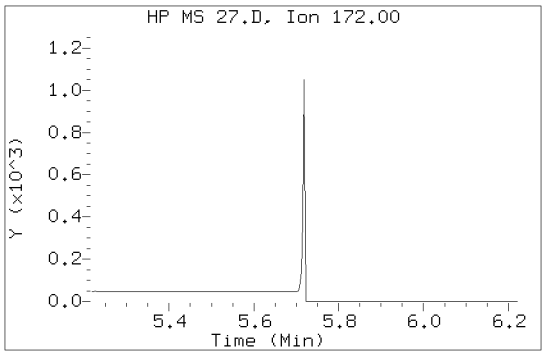
BEFORE

MASS
172
AREA
426
HEIGHT
1050
23-Aug-2022
18:06
ALSHS
Server



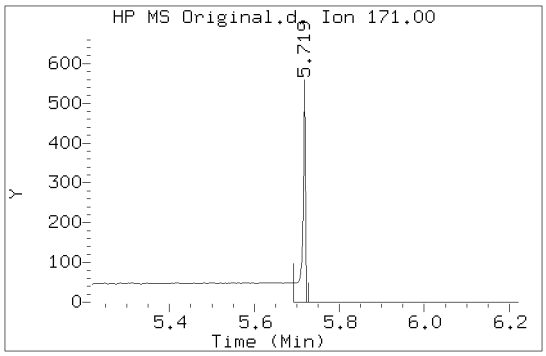
AFTER

MASS
172
AREA
2263
HEIGHT
1058
24-Aug-2022
10:25
ALSHS
S



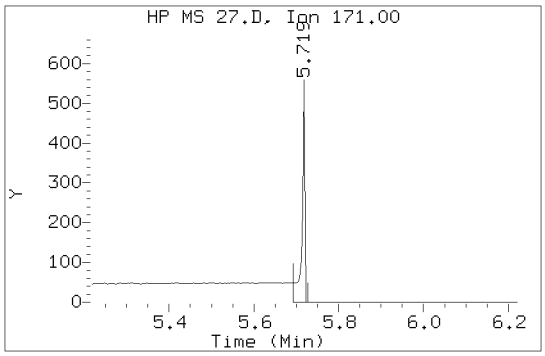
BEFORE

MASS
171
AREA
269
HEIGHT
559
23-Aug-2022
18:06
ALSHS
Server



AFTER

MASS
171
AREA
269
HEIGHT
559
24-Aug-2022
10:25
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\28.D Page 1
Report Date: 24-Aug-2022 10:26

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220823.b\28.D
Lab Smp Id: HS22080522-10
Inj Date : 23-AUG-2022 18:09
Operator : LG Inst ID: SV6.i
Smp Info : HS22080522-10
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220823.b\DXSIM.m
Meth Date : 24-Aug-2022 10:25 SV6.i Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.603	3.592	(1.000)	4165	0.10000	(aQ)
* 45 Naphthalene-d8	136	4.712	4.705	(1.000)	13984	0.10000	
$ 33 Nitrobenzene-d5	82	4.065	4.059	(0.863)	3384	0.07260	0.07260(M)
* 86 Acenaphthene-d10	164	6.382	6.376	(1.000)	4255	0.10000	(QM)
$ 69 2-Fluorobiphenyl	172	5.719	5.718	(0.896)	2257	0.03408	0.03408(M)
* 126 Phenanthrene-d10	188	7.833	7.827	(1.000)	14191	0.10000	
* 182 Chrysene-d12	240	10.667	10.657	(1.000)	10097	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.414	9.408	(0.882)	8465	0.04459	0.04459(M)
* 198 Perylene-d12	264	12.740	12.724	(1.000)	9789	0.10000	
1 1,4-Dioxane	58	1.902	1.887	(0.528)	22004	12.8689	12.87(AQ)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.

01135437

Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\28.D

Date : 23-AUG-2022 18:09

Client ID:

Instrument: SV6.i

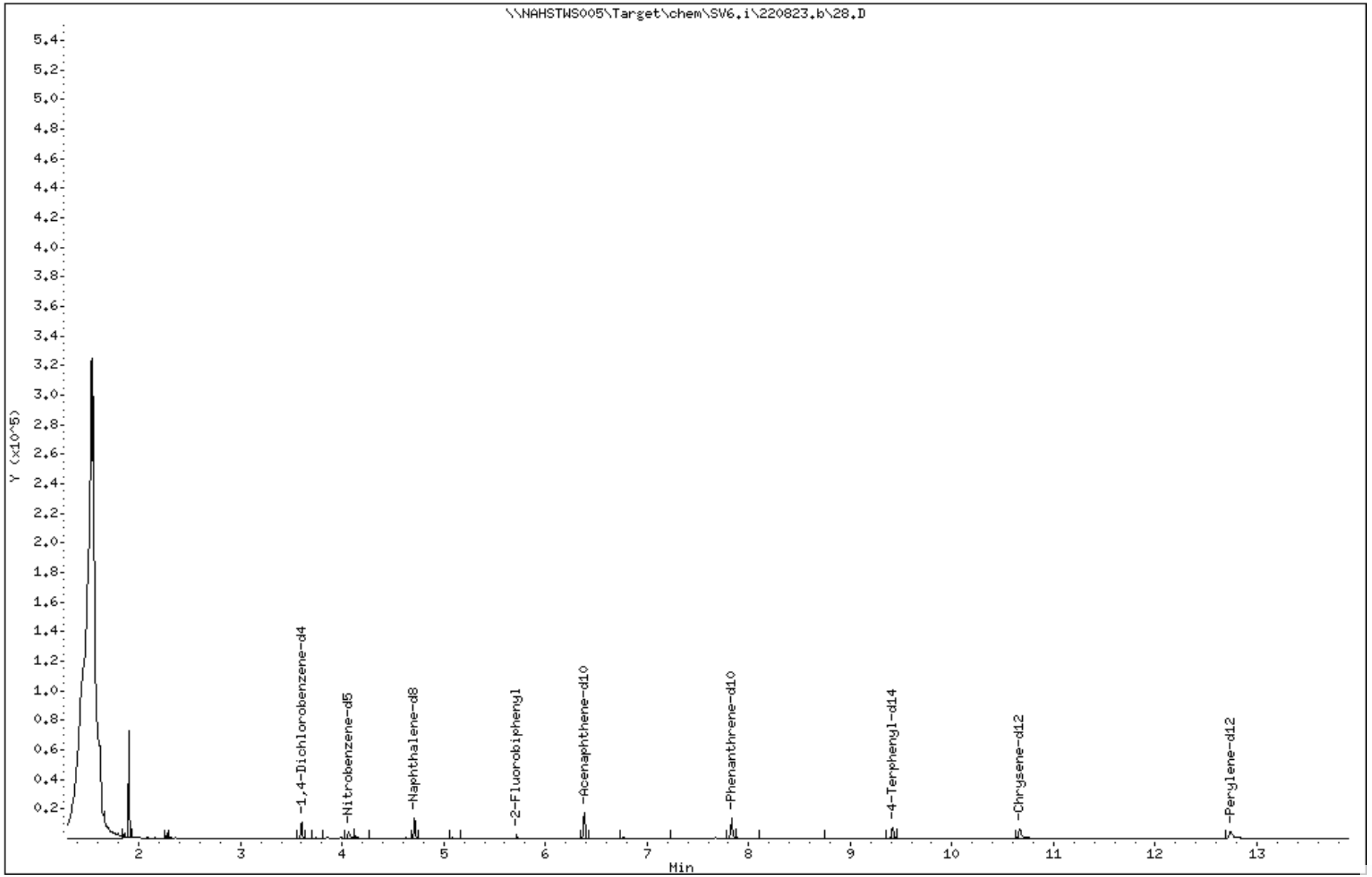
Sample Info: HS22080522-10

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220823.b\28.D

Date : 23-AUG-2022 18:09

Client ID:

Instrument: SV6.i

Sample Info: HS22080522-10

Purge Volume: 1000.0

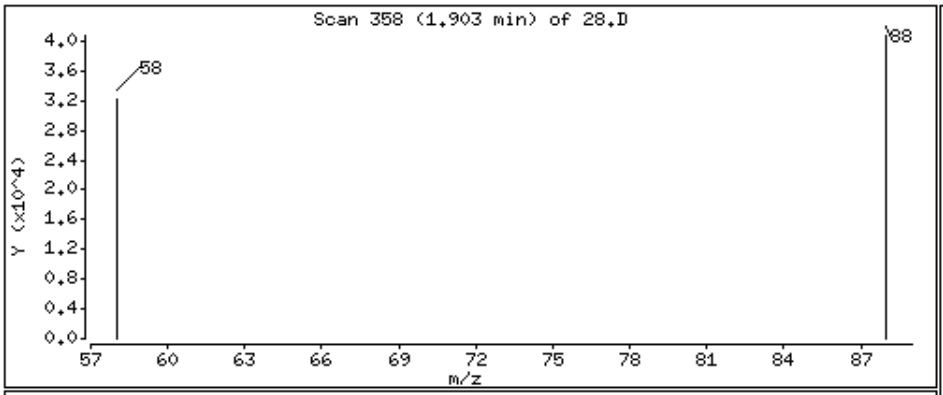
Operator: LG

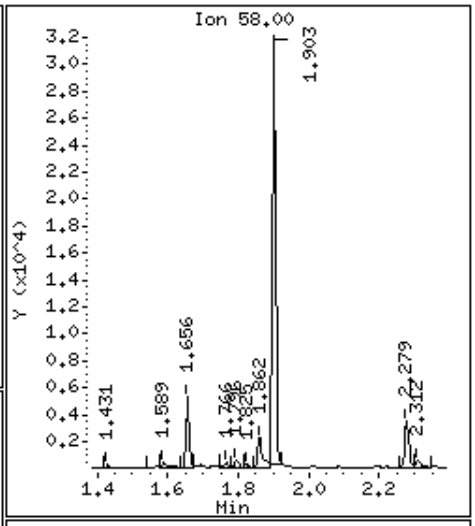
Column phase: RTX-5SIL MS

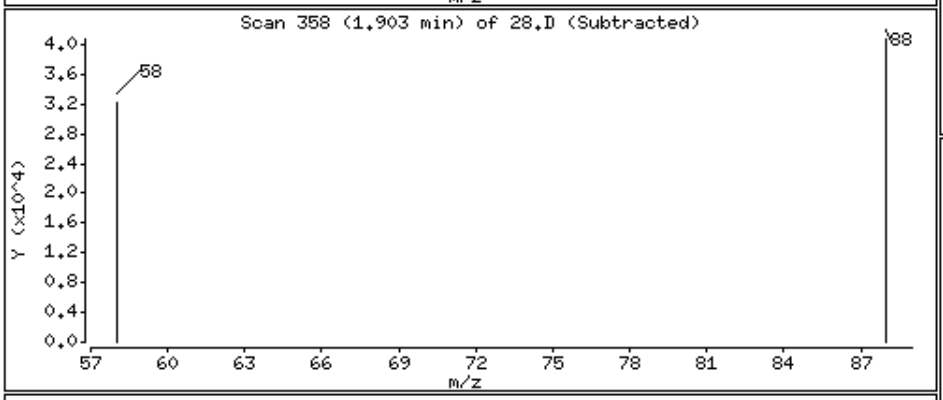
Column diameter: 0.28

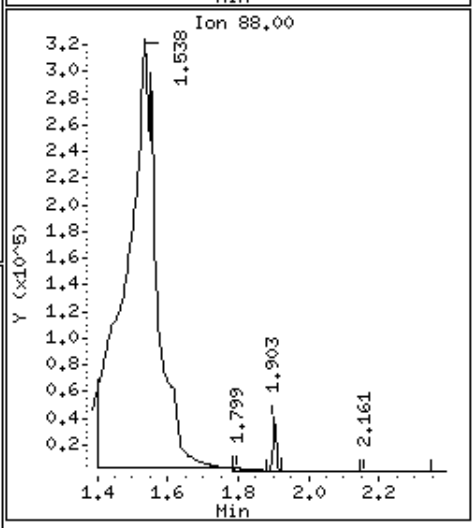
1 1,4-Dioxane

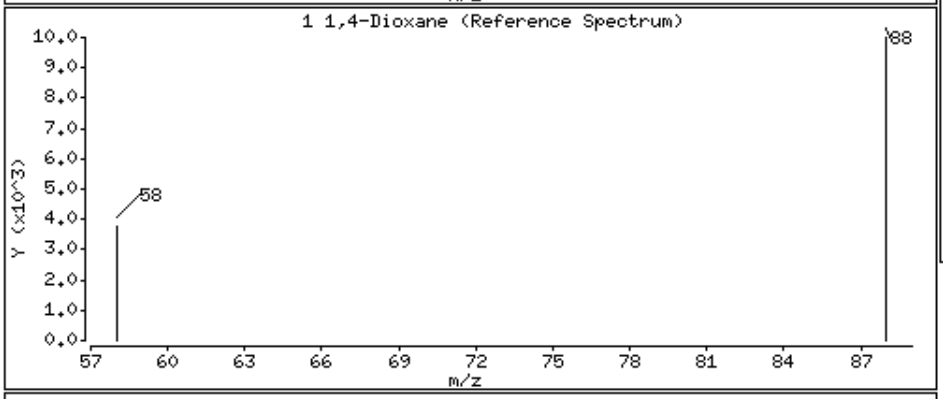
Concentration: 12.87 ug/L

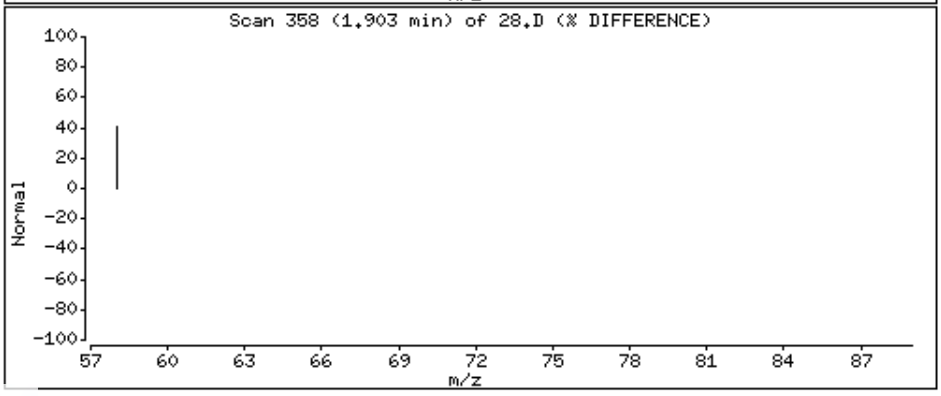












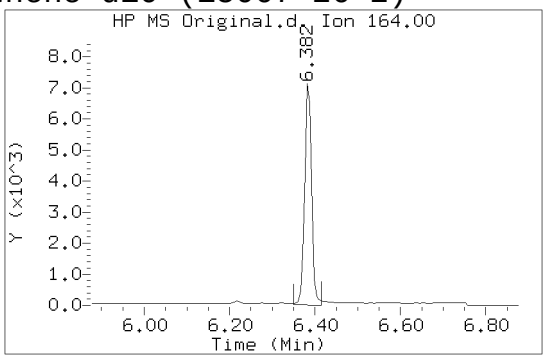
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\28.D
Inj Date : 23-AUG-2022 18:09
InstruID : SV6.i
LabSampID : HS22080522-10

Acenaphthene-d10 (15067-26-2)

Reason Code:

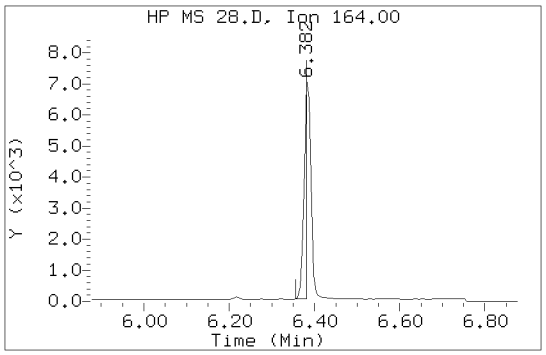
BEFORE

MASS
164
AREA
7959
HEIGHT
7127
23-Aug-2022
18:23
ALSHS
Server



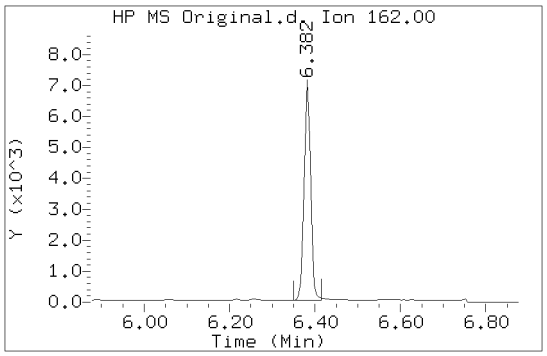
AFTER

MASS
164
AREA
4255
HEIGHT
7046
24-Aug-2022
10:25
ALSHS
S



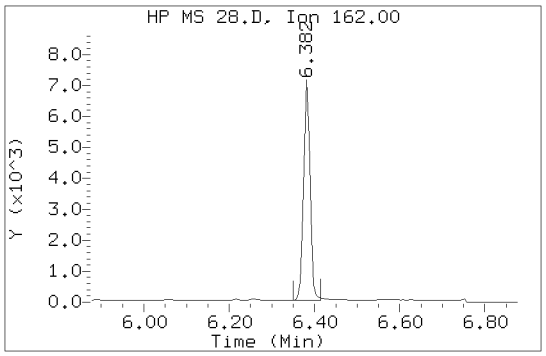
BEFORE

MASS
162
AREA
7454
HEIGHT
7121
23-Aug-2022
18:23
ALSHS
Server



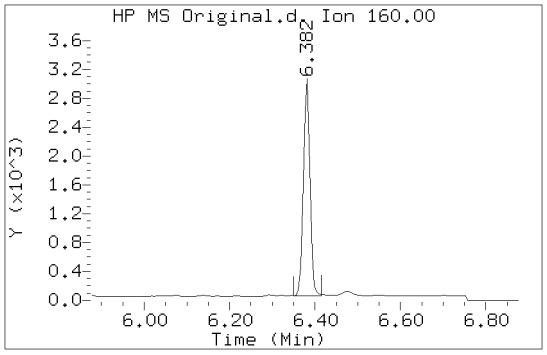
AFTER

MASS
162
AREA
7454
HEIGHT
7121
24-Aug-2022
10:25
ALSHS
S



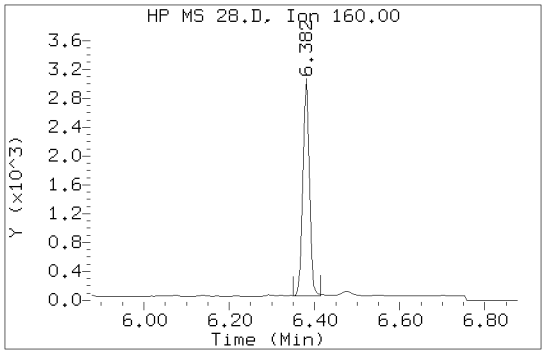
BEFORE

MASS
160
AREA
3183
HEIGHT
3008
23-Aug-2022
18:23
ALSHS
Server



AFTER

MASS
160
AREA
3183
HEIGHT
3008
24-Aug-2022
10:25
ALSHS
S

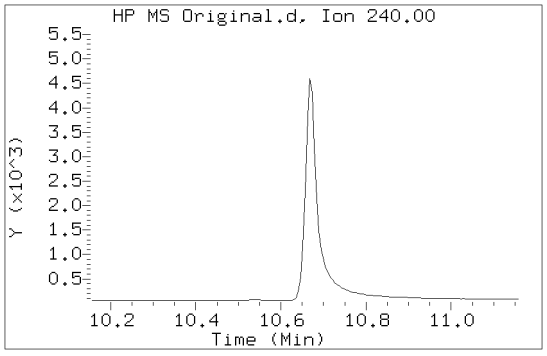


Chrysene-d12 (1719-03-5)

Reason Code:

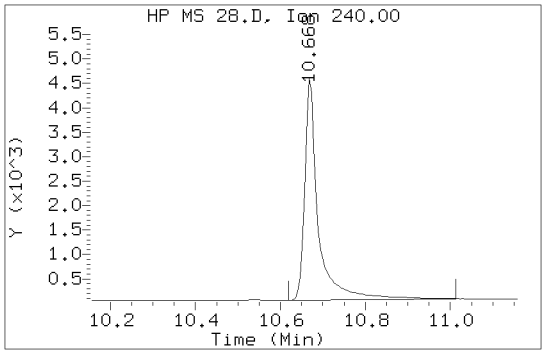
BEFORE

MASS
240
AREA
0
HEIGHT
0
23-Aug-2022
18:23
ALSHS
Server



AFTER

MASS
240
AREA
10097
HEIGHT
4529
24-Aug-2022
10:25
ALSHS
S

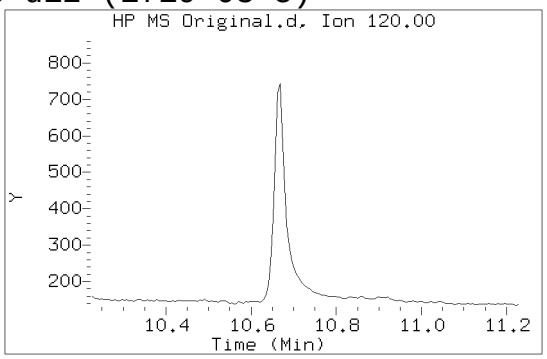


Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\28.D
Inj Date : 23-AUG-2022 18:09
InstruID : SV6.i
LabSampID : HS22080522-10

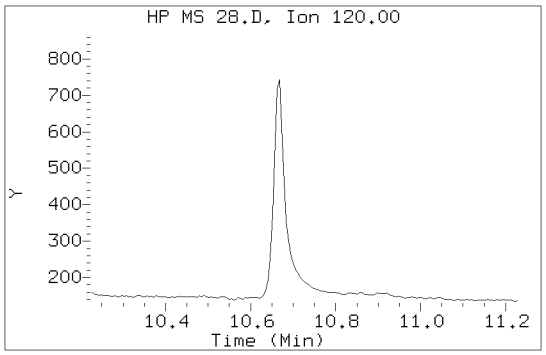
Chrysene-d12 (1719-03-5)

Reason Code:

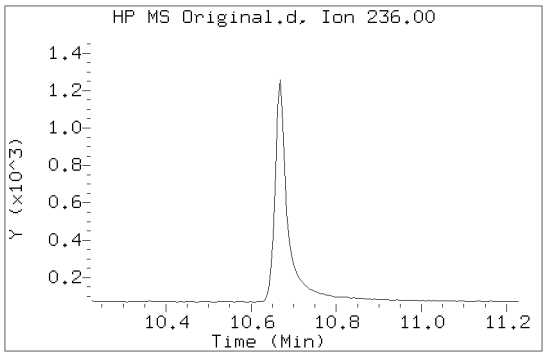
BEFORE
MASS
120
AREA
0
HEIGHT
0
23-Aug-2022
18:23
ALSHS
Server



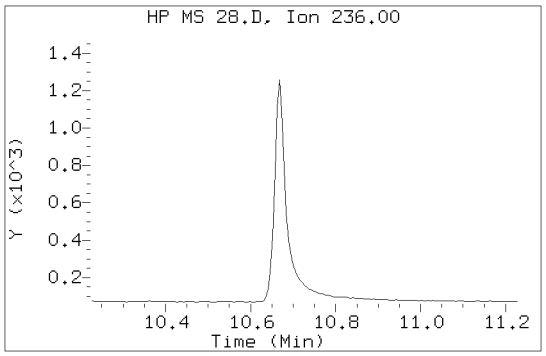
AFTER
MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
236
AREA
0
HEIGHT
0
23-Aug-2022
18:23
ALSHS
Server



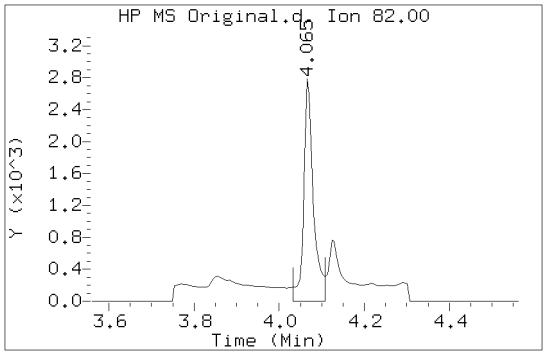
AFTER
MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



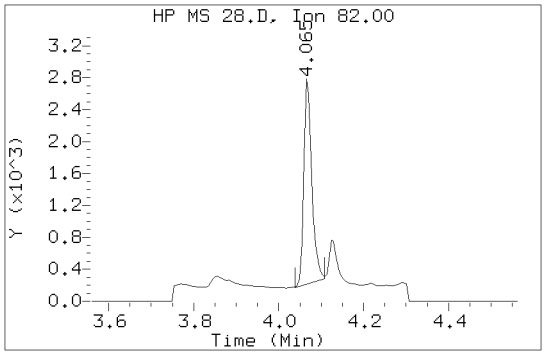
Nitrobenzene-d5 (4165-60-0)

Reason Code:

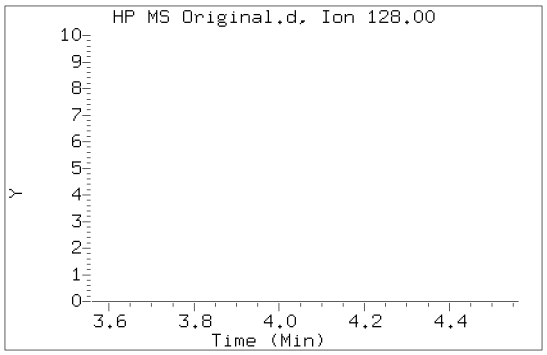
BEFORE
MASS
82
AREA
4462
HEIGHT
2785
23-Aug-2022
18:23
ALSHS
Server



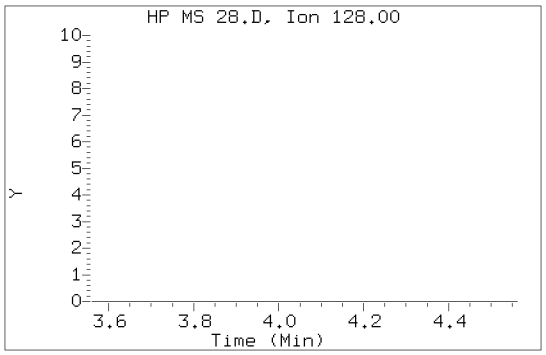
AFTER
MASS
82
AREA
3384
HEIGHT
2571
24-Aug-2022
10:25
ALSHS
S



BEFORE
MASS
128
AREA
0
HEIGHT
0
23-Aug-2022
18:23
ALSHS
Server



AFTER
MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



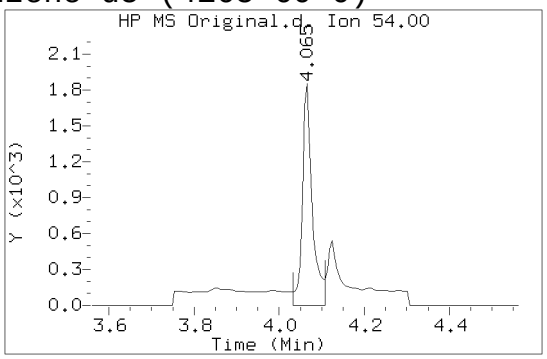
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\28.D
Inj Date : 23-AUG-2022 18:09
InstruID : SV6.i
LabSampID : HS22080522-10

Nitrobenzene-d5 (4165-60-0)

Reason Code:

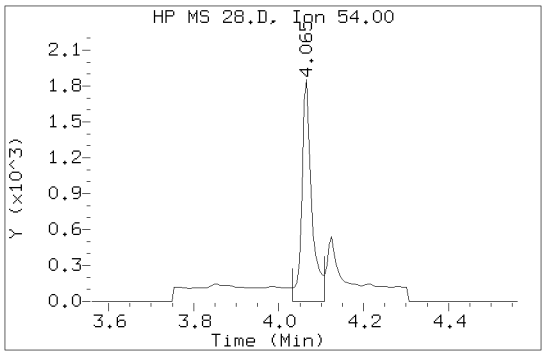
BEFORE

MASS
54
AREA
3037
HEIGHT
1853
23-Aug-2022
18:23
ALSHS
Server



AFTER

MASS
54
AREA
3037
HEIGHT
1853
24-Aug-2022
10:25
ALSHS
S

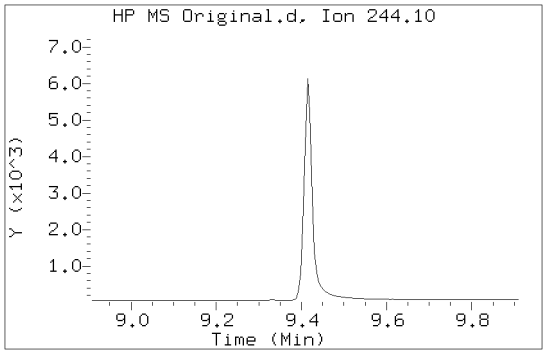


4-Terphenyl-d14 (1718-51-0)

Reason Code:

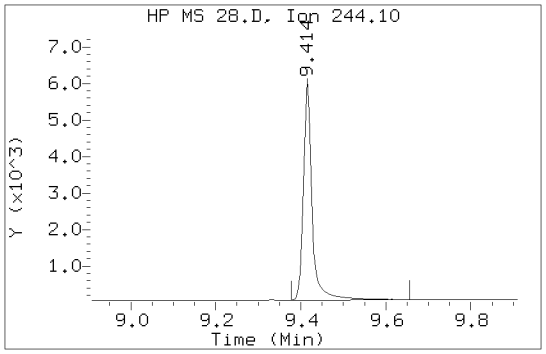
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
23-Aug-2022
18:23
ALSHS
Server



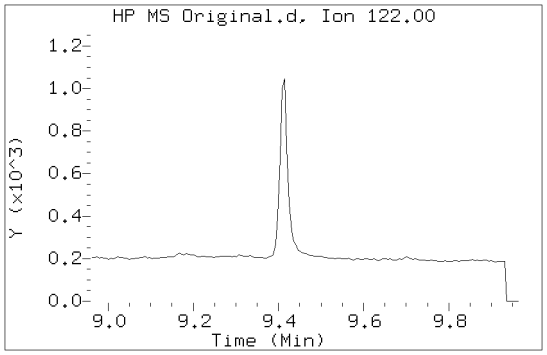
AFTER

MASS
244.1
AREA
8465
HEIGHT
6059
24-Aug-2022
10:25
ALSHS
S



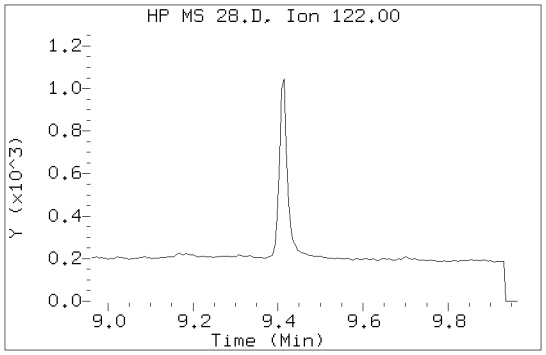
BEFORE

MASS
122
AREA
0
HEIGHT
0
23-Aug-2022
18:23
ALSHS
Server



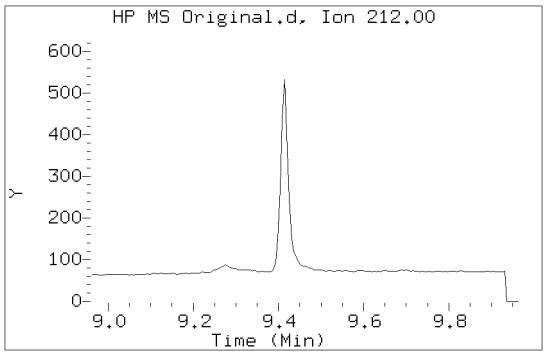
AFTER

MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



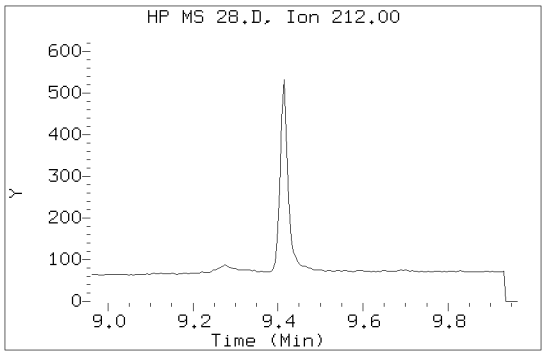
BEFORE

MASS
212
AREA
0
HEIGHT
0
23-Aug-2022
18:23
ALSHS
Server



AFTER

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
10:25
ALSHS
S



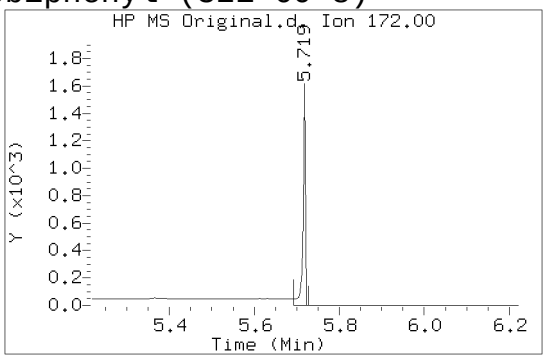
Data File : \\NAHSTWS005\Target\chem\SV6.i\220823.b\28.D
Inj Date : 23-AUG-2022 18:09
InstruID : SV6.i
LabSampID : HS22080522-10

2-Fluorobiphenyl (321-60-8)

Reason Code:

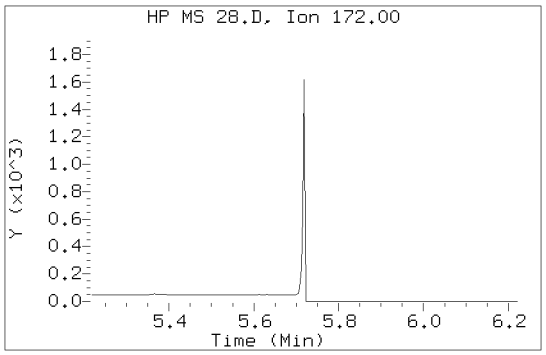
BEFORE

MASS
172
AREA
648
HEIGHT
1617
23-Aug-2022
18:23
ALSHS
Server



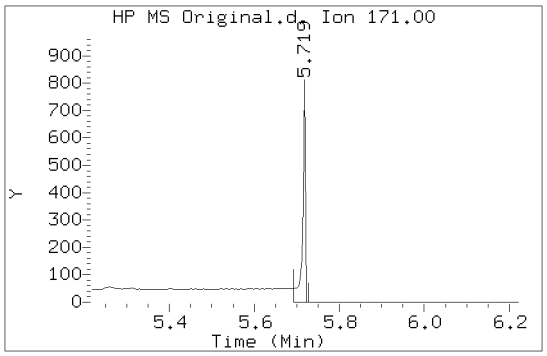
AFTER

MASS
172
AREA
2257
HEIGHT
1617
24-Aug-2022
10:25
ALSHS
S



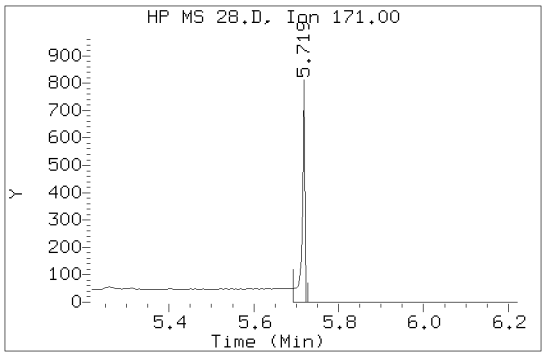
BEFORE

MASS
171
AREA
377
HEIGHT
812
23-Aug-2022
18:23
ALSHS
Server



AFTER

MASS
171
AREA
377
HEIGHT
812
24-Aug-2022
10:25
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\01.D

Date : 24-AUG-2022 10:17

Client ID: DFTPP

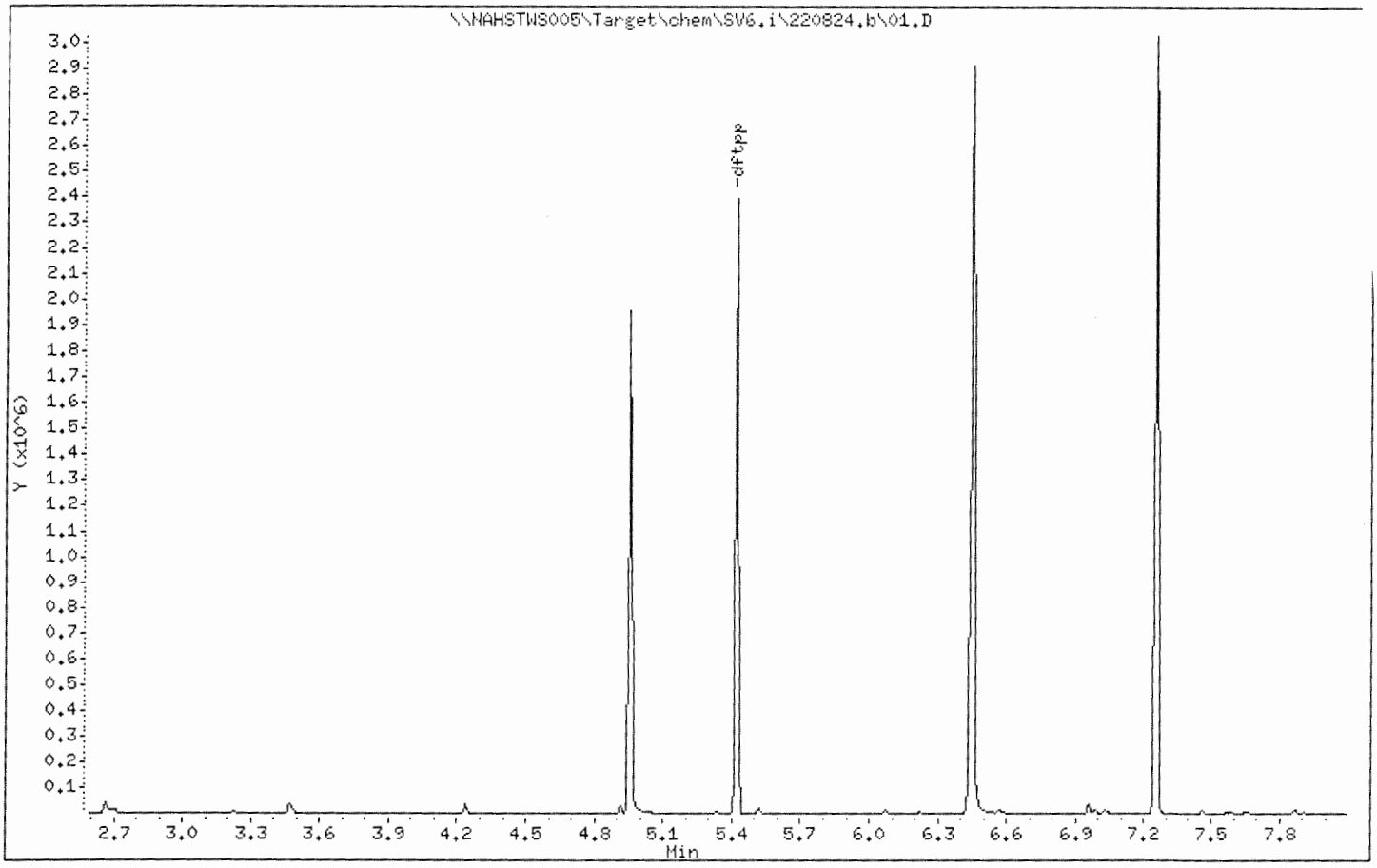
Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\01.D

Date : 24-AUG-2022 10:17

Client ID: DFTPP

Instrument: SV6.i

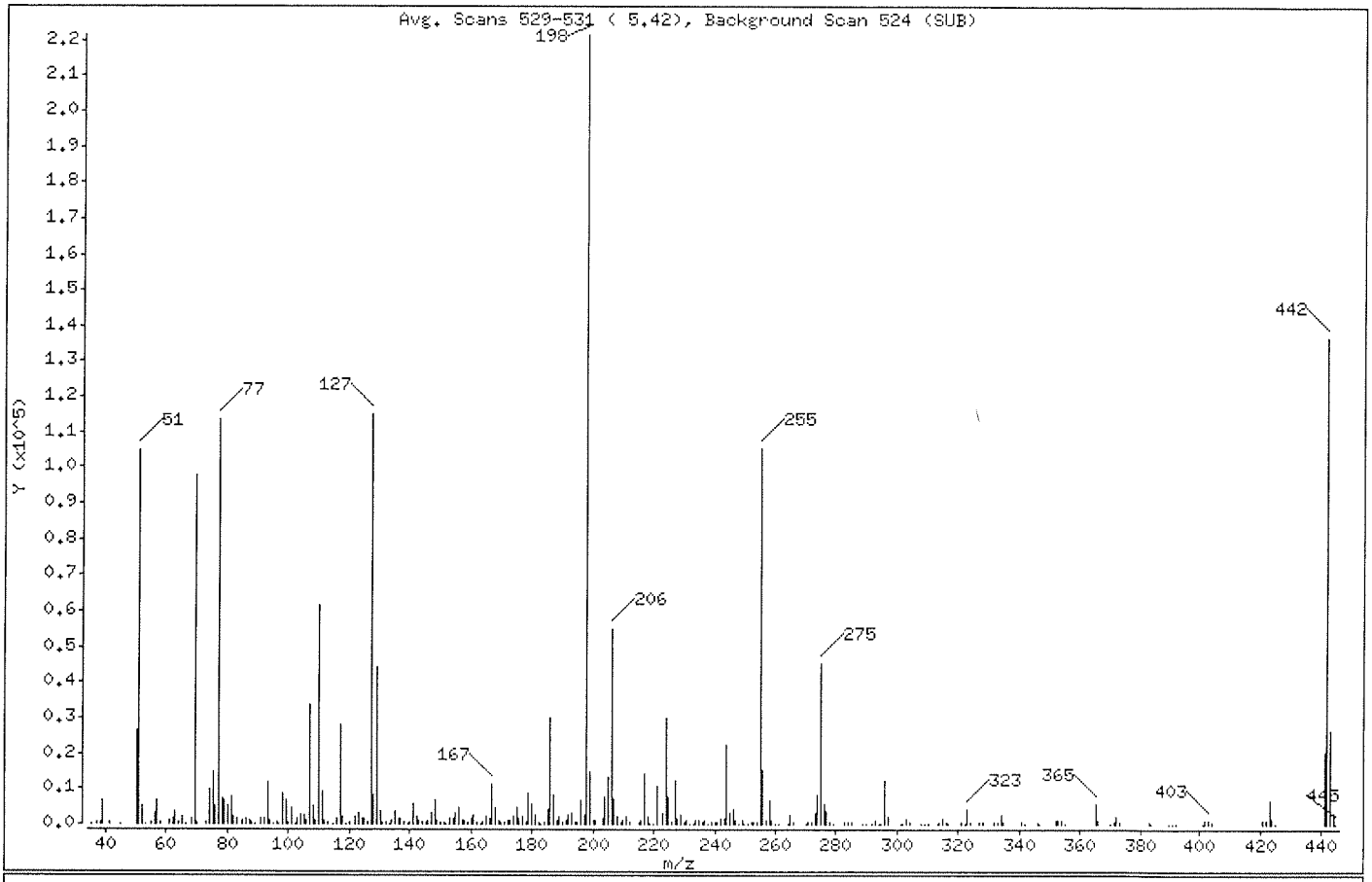
Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	47.43
68	Less than 2.00% of mass 69	0.60 (1.35)
69	Mass 69 relative abundance	44.12
70	Less than 2.00% of mass 69	0.24 (0.54)
127	10.00 - 80.00% of mass 198	51.96
197	Less than 2.00% of mass 198	1.14
199	5.00 - 9.00% of mass 198	6.75
275	10.00 - 60.00% of mass 198	20.57
365	1.00 - 100.00% of mass 198	2.52
441	Present, but less than mass 443	9.11
442	50.00 - 150.00% of mass 198	61.83
443	15.00 - 24.00% of mass 442	11.97 (19.36)

Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\01.D

Date : 24-AUG-2022 10:17

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 01.D

Spectrum: Avg. Scans 529-531 (5.42), Background Scan 524 (SUB)

Location of Maximum: 198.00

Number of points: 283

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	84	125.00	1419	196.00	6611	276.00	5836
37.00	341	126.00	520	197.00	2512	277.00	3752
38.00	718	127.00	114984	198.00	221312	278.00	555
39.00	6749	128.00	8325	199.00	14929	279.00	113
41.00	291	129.00	44416	200.00	1128	283.00	430
45.00	156	130.00	3684	201.00	948	284.00	302
50.00	26280	131.00	757	203.00	1436	285.00	705
51.00	104968	132.00	428	204.00	7783	289.00	105
52.00	5315	133.00	76	205.00	13349	290.00	105
53.00	254	134.00	1271	206.00	54824	292.00	130
55.00	451	135.00	3561	207.00	6928	293.00	791
56.00	2946	136.00	1399	208.00	1816	294.00	227
57.00	6781	137.00	1600	209.00	565	295.00	245
58.00	325	138.00	358	210.00	830	296.00	12411
61.00	1177	139.00	173	211.00	2049	297.00	1814
62.00	1408	140.00	500	212.00	278	301.00	148
63.00	3815	141.00	5372	215.00	555	302.00	183
64.00	600	142.00	1857	216.00	1191	303.00	1549
65.00	1868	143.00	1258	217.00	14343	304.00	362
66.00	67	144.00	313	218.00	1919	308.00	130
68.00	1321	145.00	298	219.00	181	309.00	52
69.00	97640	146.00	985	220.00	120	310.00	156
70.00	523	147.00	2809	221.00	10788	313.00	71
73.00	722	148.00	6658	223.00	3276	314.00	558
74.00	9612	149.00	1266	224.00	29952	315.00	1519
75.00	14978	150.00	334	225.00	7679	316.00	741
76.00	5256	151.00	734	226.00	757	317.00	113
77.00	113224	152.00	221	227.00	12192	321.00	411
78.00	7361	153.00	1734	228.00	1722	322.00	150
79.00	6487	154.00	1309	229.00	2534	323.00	4067
80.00	5065	155.00	3107	230.00	379	324.00	734
81.00	7467	156.00	4351	231.00	1001	327.00	751
82.00	1820	157.00	838	232.00	175	328.00	373
83.00	1736	158.00	933	233.00	208	332.00	280
85.00	1210	159.00	709	234.00	790	333.00	409

Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\01.D

Date : 24-AUG-2022 10:17

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 01.D
Spectrum: Avg. Scans 529-531 (5.42), Background Scan 524 (SUB)
Location of Maximum: 198.00
Number of points: 283

m/z	Y	m/z	Y	m/z	Y	m/z	Y
86.00	1597	160.00	1717	235.00	872	334.00	2506
87.00	1042	161.00	2600	236.00	594	335.00	591
88.00	404	162.00	725	237.00	845	341.00	495
89.00	127	163.00	150	238.00	64	342.00	70
91.00	1586	164.00	292	239.00	410	346.00	763
92.00	1709	165.00	2143	240.00	365	347.00	141
93.00	11664	166.00	1526	241.00	688	352.00	1195
94.00	831	167.00	11431	242.00	1514	353.00	802
95.00	245	168.00	4739	243.00	1505	354.00	1151
96.00	557	169.00	836	244.00	22360	355.00	191
97.00	220	170.00	268	245.00	2814	365.00	5578
98.00	8809	171.00	464	246.00	4137	366.00	773
99.00	6664	172.00	987	247.00	800	370.00	110
100.00	704	173.00	1212	248.00	219	371.00	274
101.00	4359	174.00	2280	249.00	797	372.00	1952
102.00	238	175.00	4478	250.00	54	373.00	492
103.00	1312	176.00	1294	251.00	232	383.00	531
104.00	2753	177.00	1899	252.00	266	384.00	115
105.00	2442	178.00	677	253.00	535	390.00	217
106.00	770	179.00	8454	254.00	684	391.00	139
107.00	33480	180.00	5517	255.00	105240	392.00	53
108.00	4992	181.00	2595	256.00	15052	401.00	58
109.00	861	182.00	402	257.00	1168	402.00	795
110.00	61464	183.00	228	258.00	6519	403.00	1101
111.00	9163	184.00	641	259.00	1028	404.00	413
112.00	1110	185.00	3876	260.00	127	421.00	967
113.00	358	186.00	29968	261.00	160	422.00	860
115.00	61	187.00	8224	264.00	195	423.00	6721
116.00	1714	188.00	785	265.00	2574	424.00	1314
117.00	27984	189.00	1845	266.00	427	425.00	109
118.00	1835	190.00	308	270.00	137	441.00	20152
119.00	223	191.00	905	271.00	257	442.00	136832
120.00	404	192.00	2597	272.00	311	443.00	26488
122.00	2041	193.00	2813	273.00	3243	444.00	2455
123.00	3111	194.00	581	274.00	8100	445.00	122

Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\01.D

Date : 24-AUG-2022 10:17

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 01.D
Spectrum: Avg. Scans 529-531 (5.42), Background Scan 524 (SUB)
Location of Maximum: 198.00
Number of points: 283

m/z	Y	m/z	Y	m/z	Y	m/z	Y
124.00	1482	195.00	386	275.00	45528		

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D
Lab Smp Id: 1 4-DIOX-CCV Client Smp ID: 1 4-DIOX-CCV
Inj Date : 24-AUG-2022 12:15
Operator : LG Inst ID: SV6.i
Smp Info : 1 4-DIOX-0.08;1 4-DIOX-0.08;2
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220824.b\DXSIM.m
Meth Date : 30-Aug-2022 12:43 Linh.Pham Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	
* 20 1,4-Dichlorobenzene-d4	152	3.552	3.557	(1.000)	5721	0.10000		(aM)
* 45 Naphthalene-d8	136	4.660	4.682	(1.000)	13873	0.10000		
$ 33 Nitrobenzene-d5	82	4.019	4.072	(0.862)	3773	0.08000	0.08159	(QM)
* 86 Acenaphthene-d10	164	6.330	6.351	(1.000)	6874	0.10000		(QM)
$ 69 2-Fluorobiphenyl	172	5.681	5.714	(0.898)	8337	0.08000	0.07792	(QM)
* 126 Phenanthrene-d10	188	7.780	7.802	(1.000)	14770	0.10000		(M)
* 182 Chrysene-d12	240	10.594	10.615	(1.000)	6043	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.356	9.378	(0.883)	8124	0.08000	0.07150	(M)
* 198 Perylene-d12	264	12.645	12.672	(1.000)	4226	0.10000		
1 1,4-Dioxane	58	1.847	1.828	(0.520)	222	0.08000	0.09452	(aQM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01135449

Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D

Date : 24-AUG-2022 12:15

Client ID: 1 4-DIOX-CCV

Sample Info: 1 4-DIOX-0.08;1 4-DIOX-0.08;2

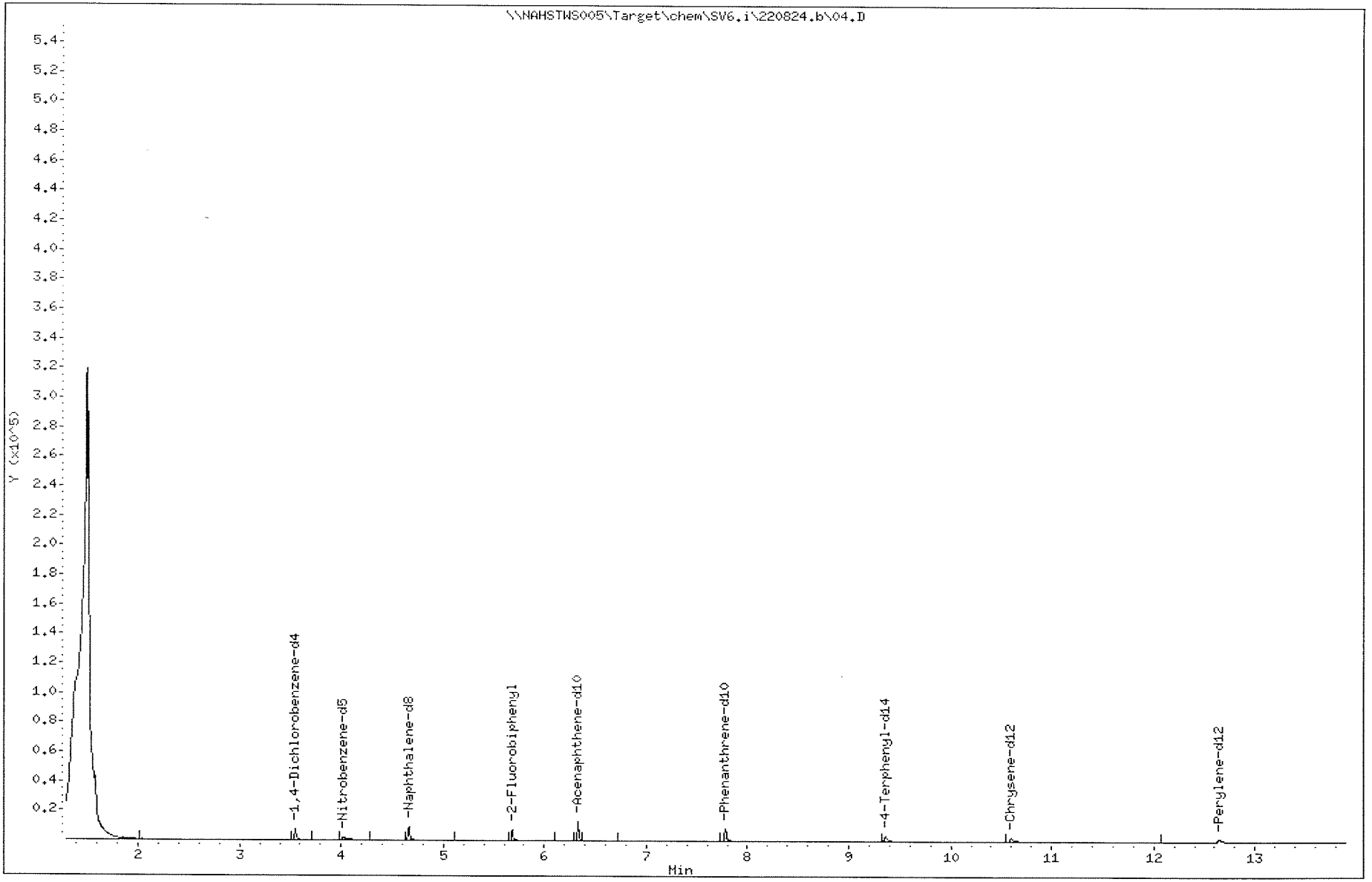
Purge Volume: 1000.0

Column phase: RTX-5SIL MS

Instrument: SV6.i

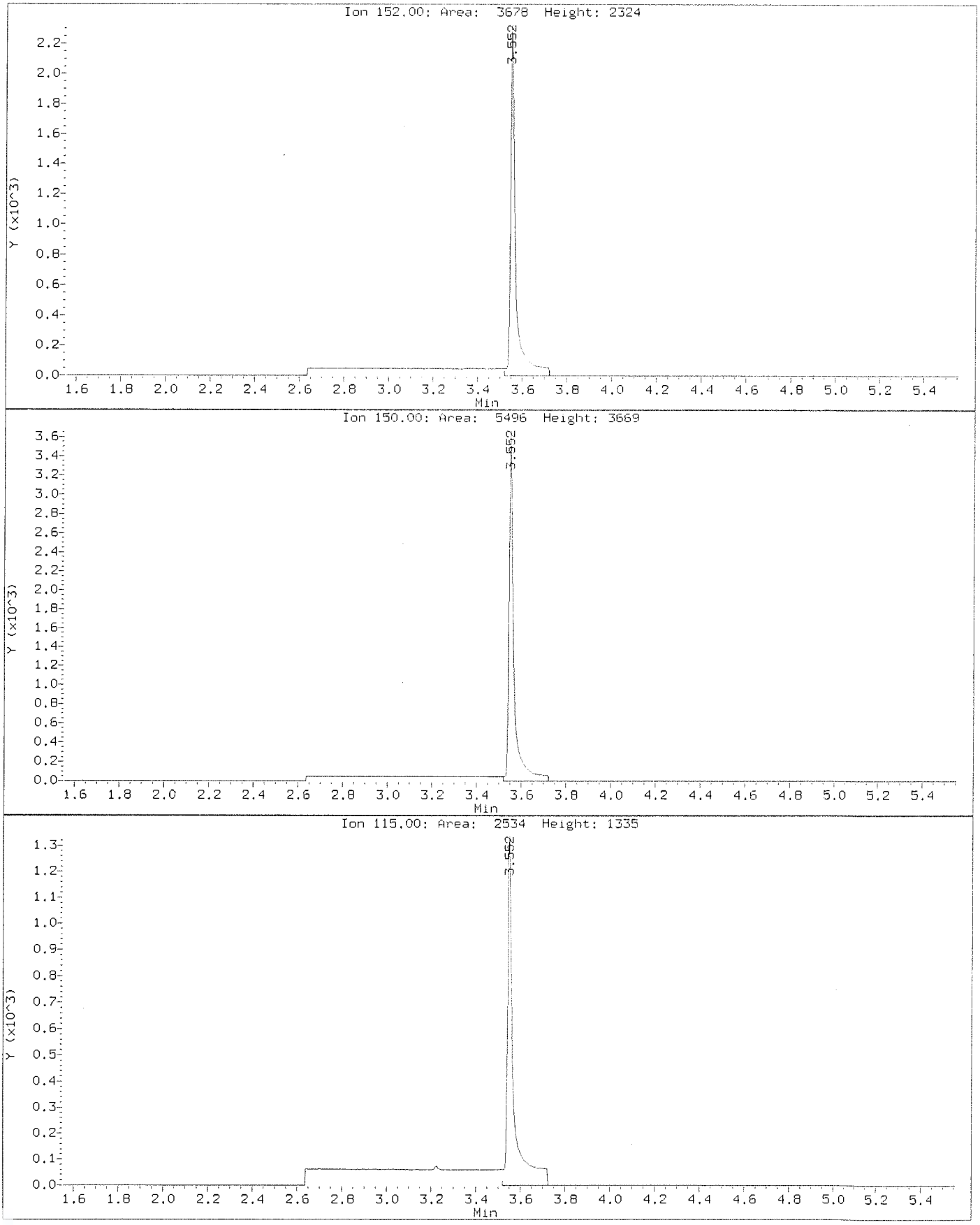
Operator: LG

Column diameter: 0.28



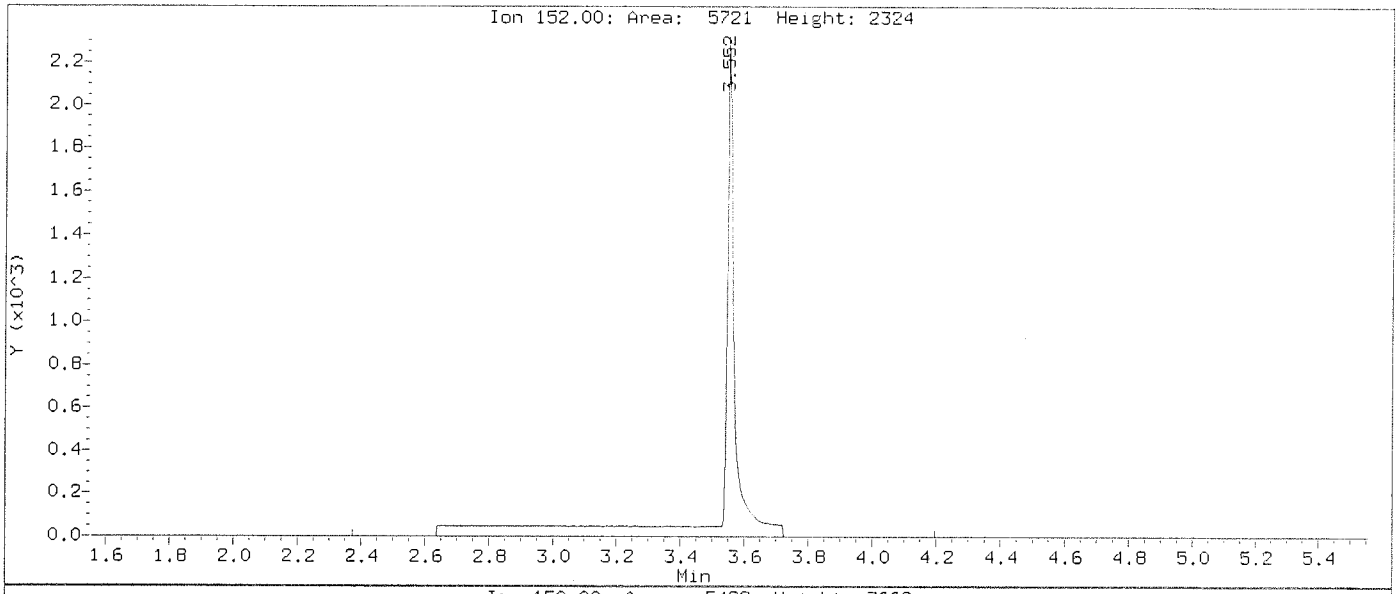
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

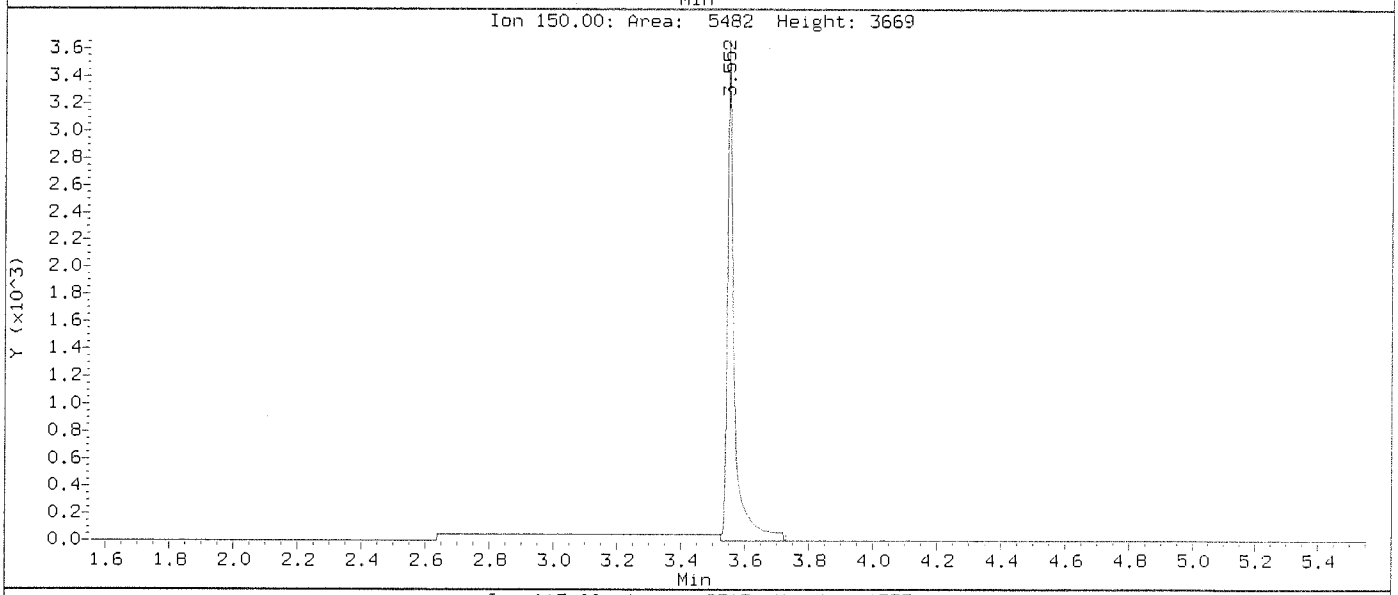
Compound: 1,4-Dichlorobenzene-d4
CAS Number: 3855-82-1

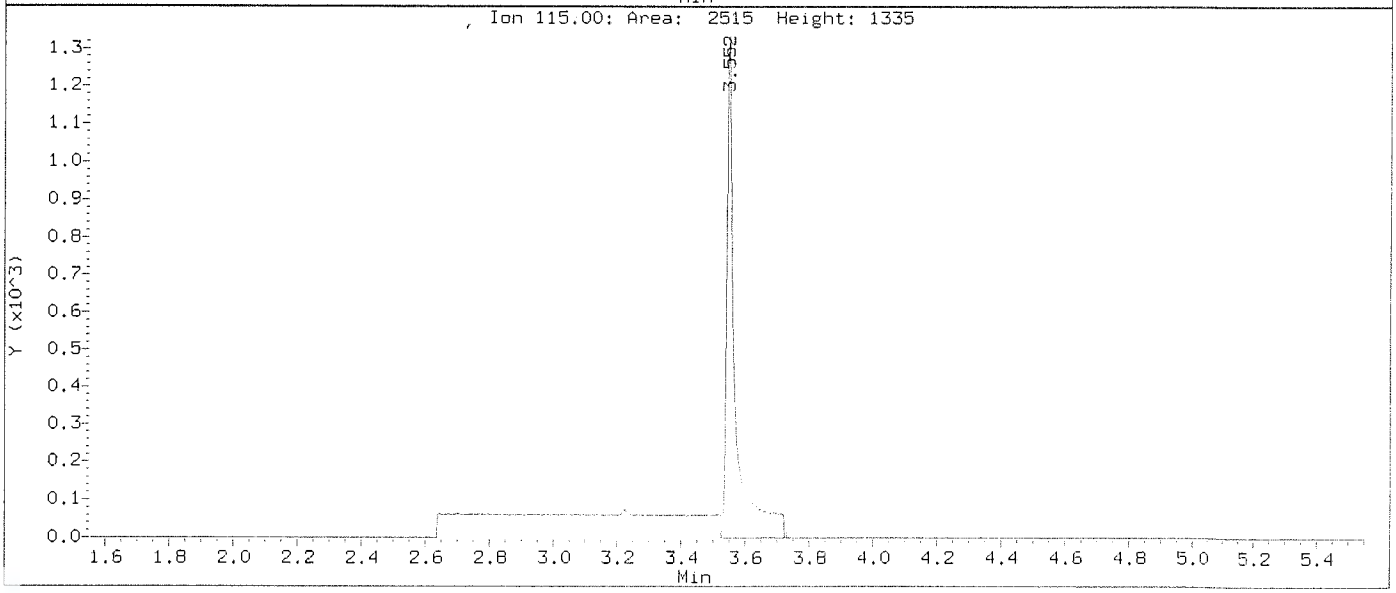


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: 1,4-Dichlorobenzene-d4
CAS Number: 3855-82-1

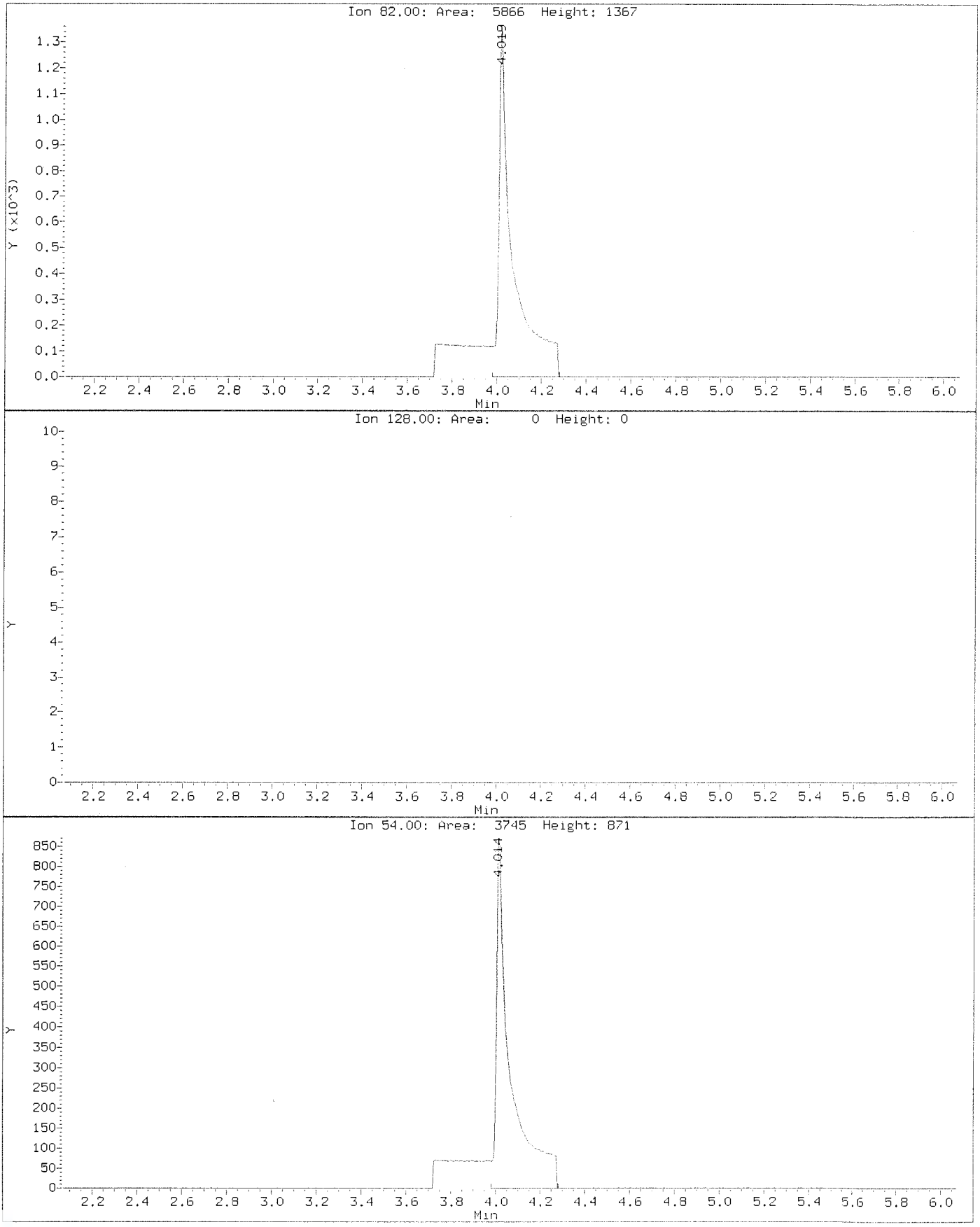






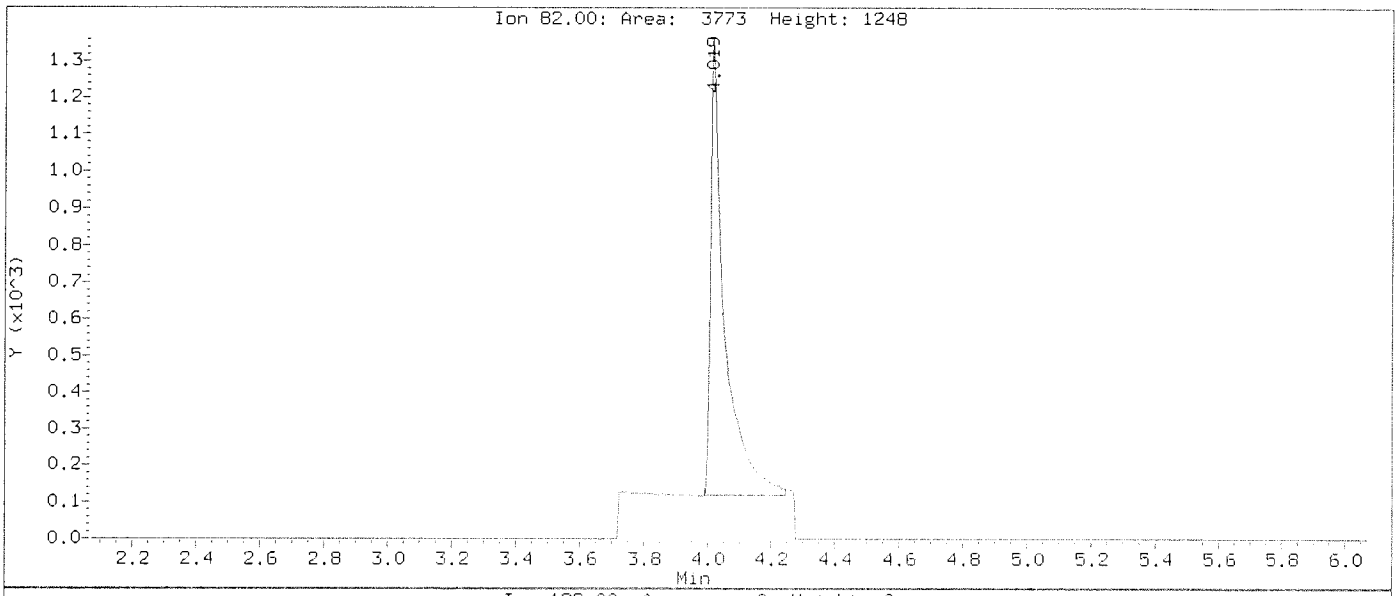
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

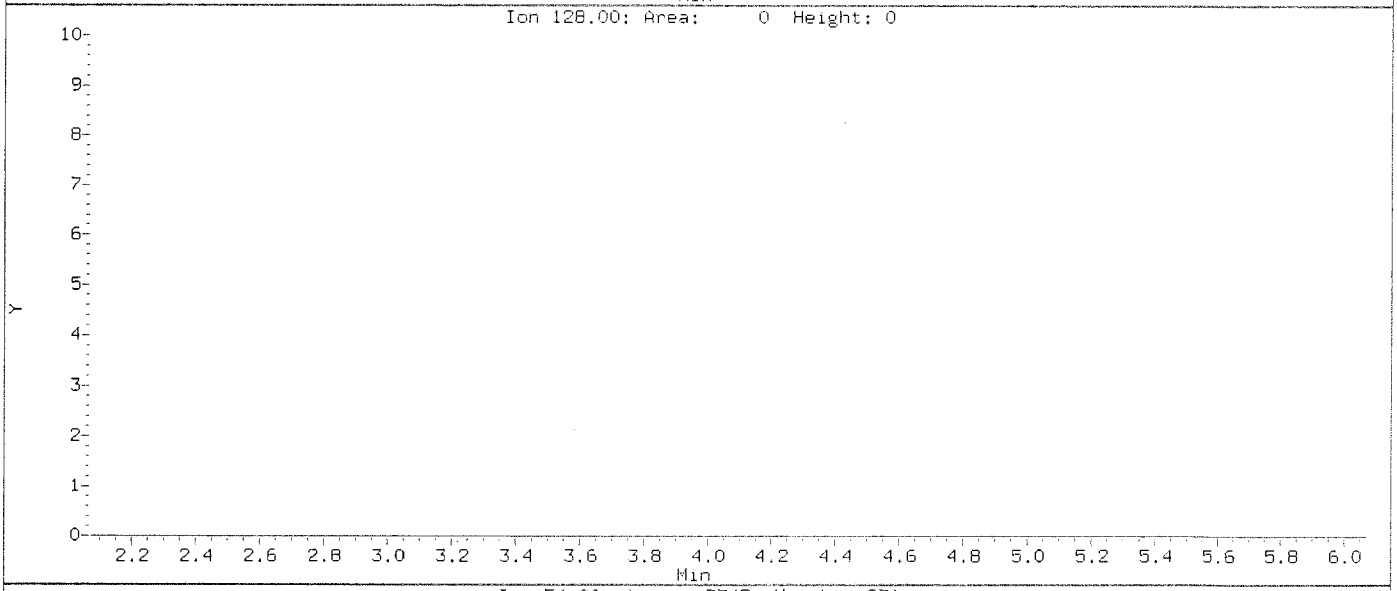
Compound: Nitrobenzene-d5
CAS Number: 4165-60-0

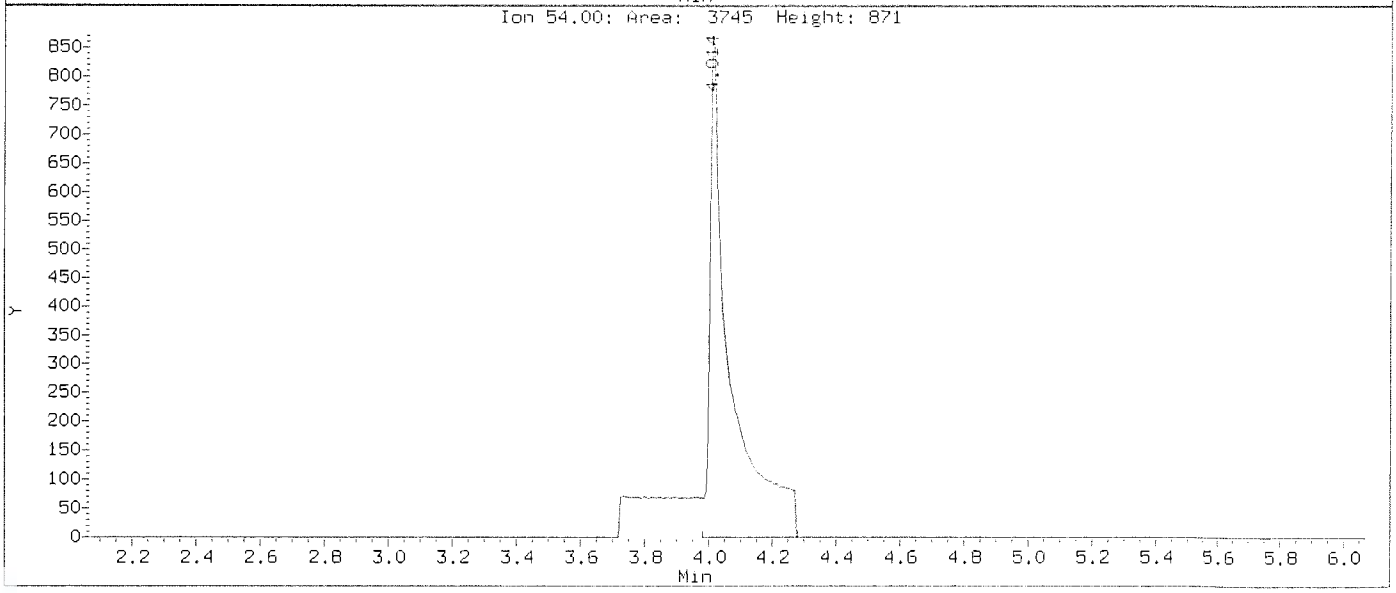


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: Nitrobenzene-d5
CAS Number: 4165-60-0

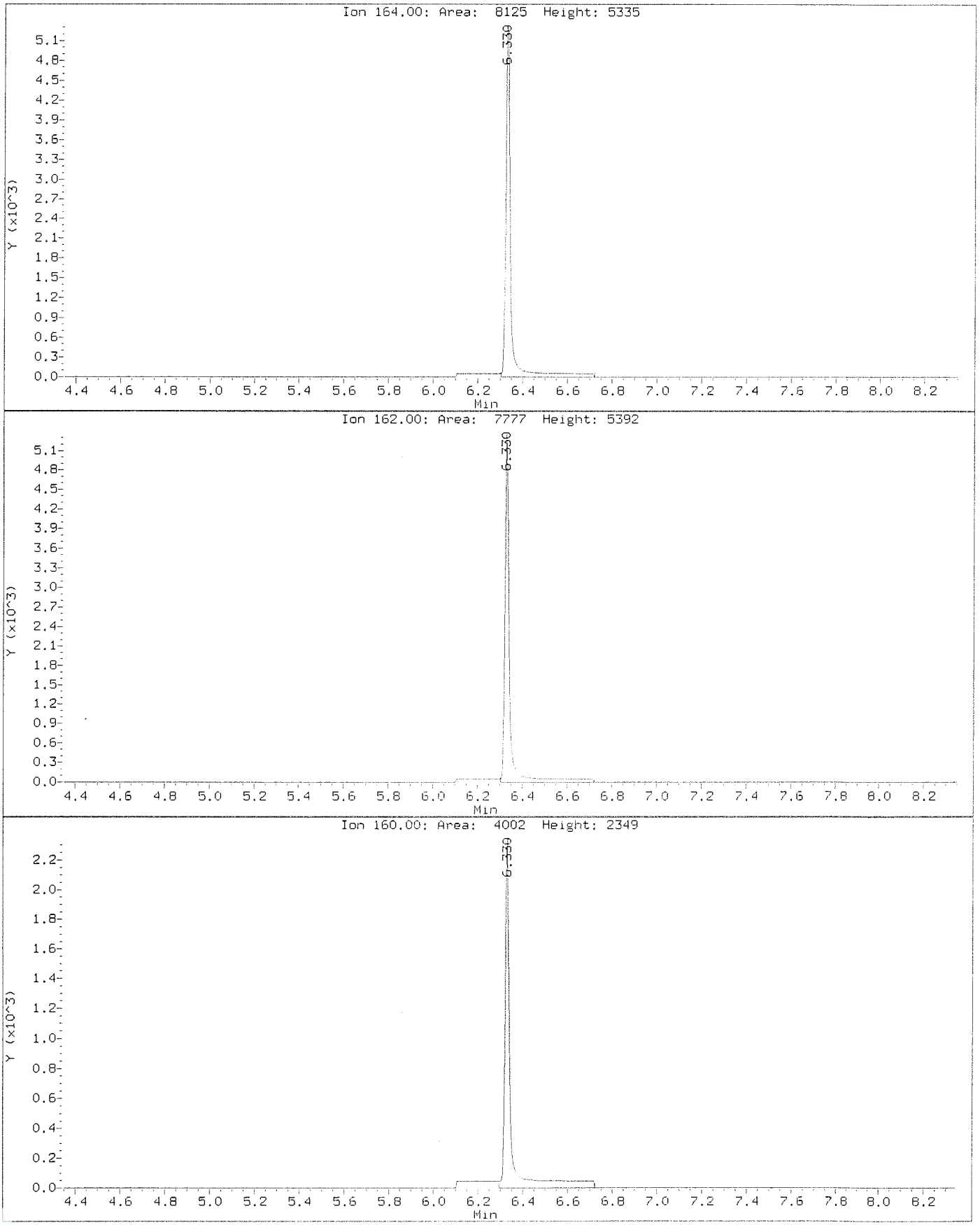






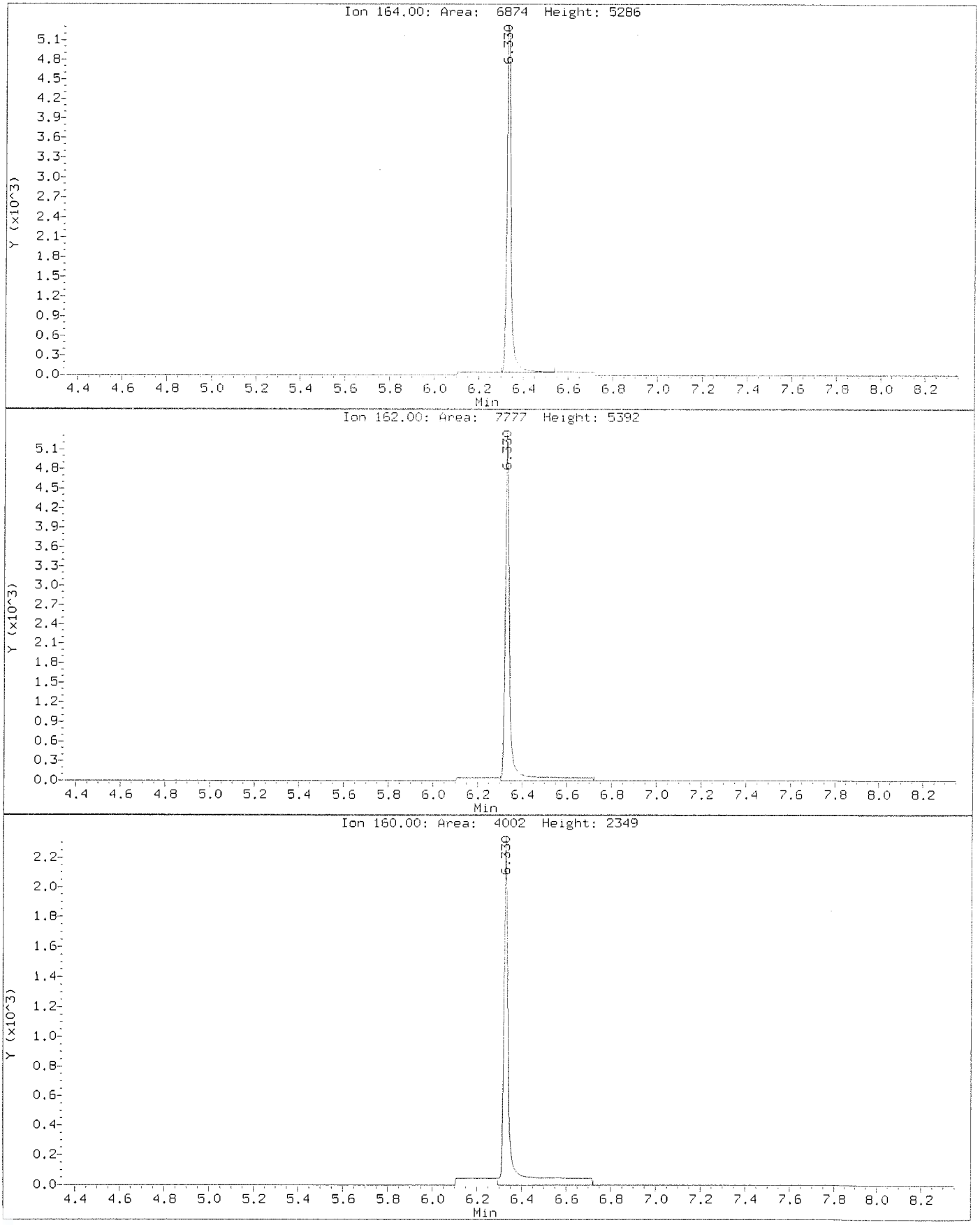
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: Acenaphthene-d10
CAS Number: 15067-26-2



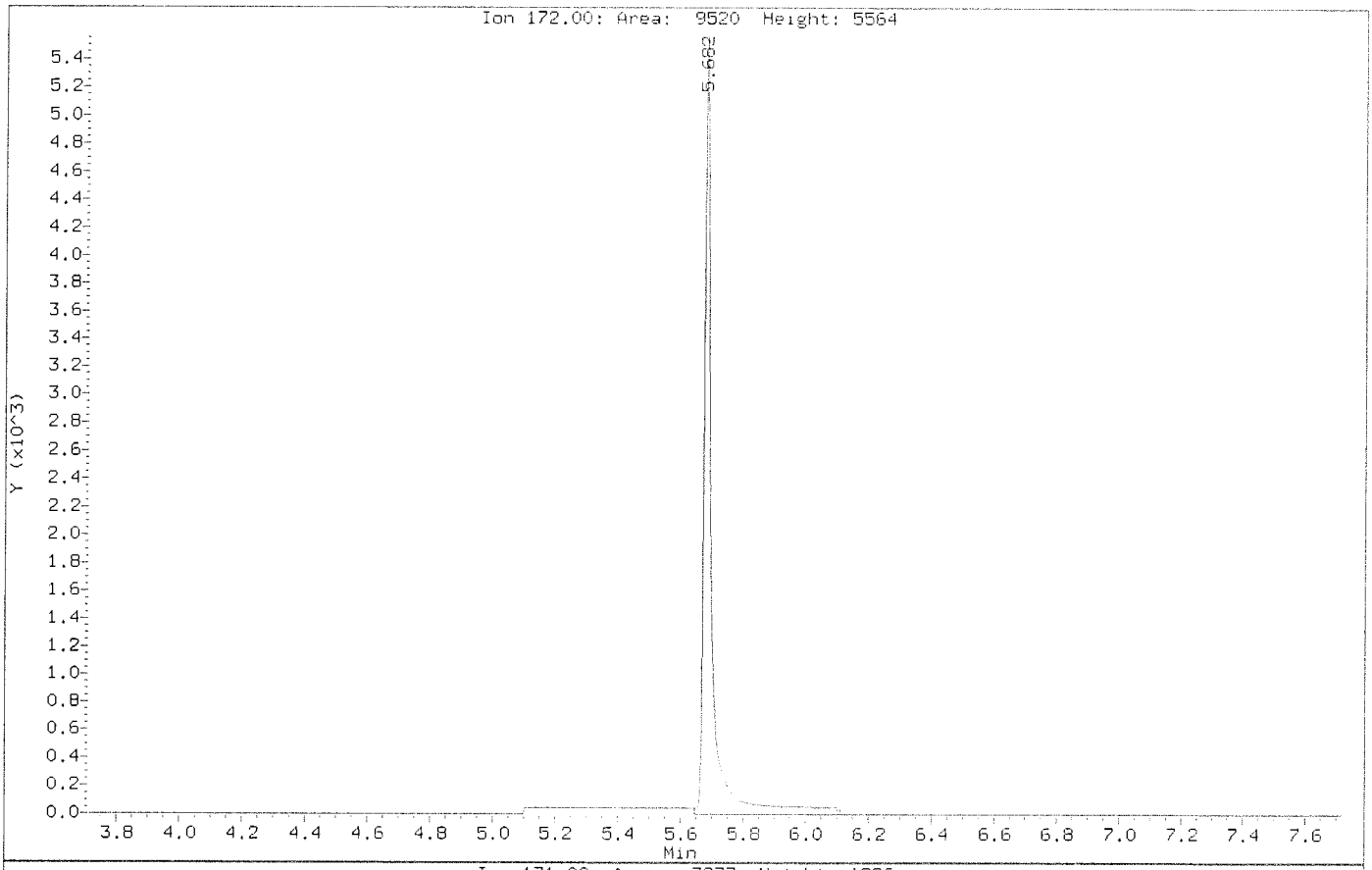
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

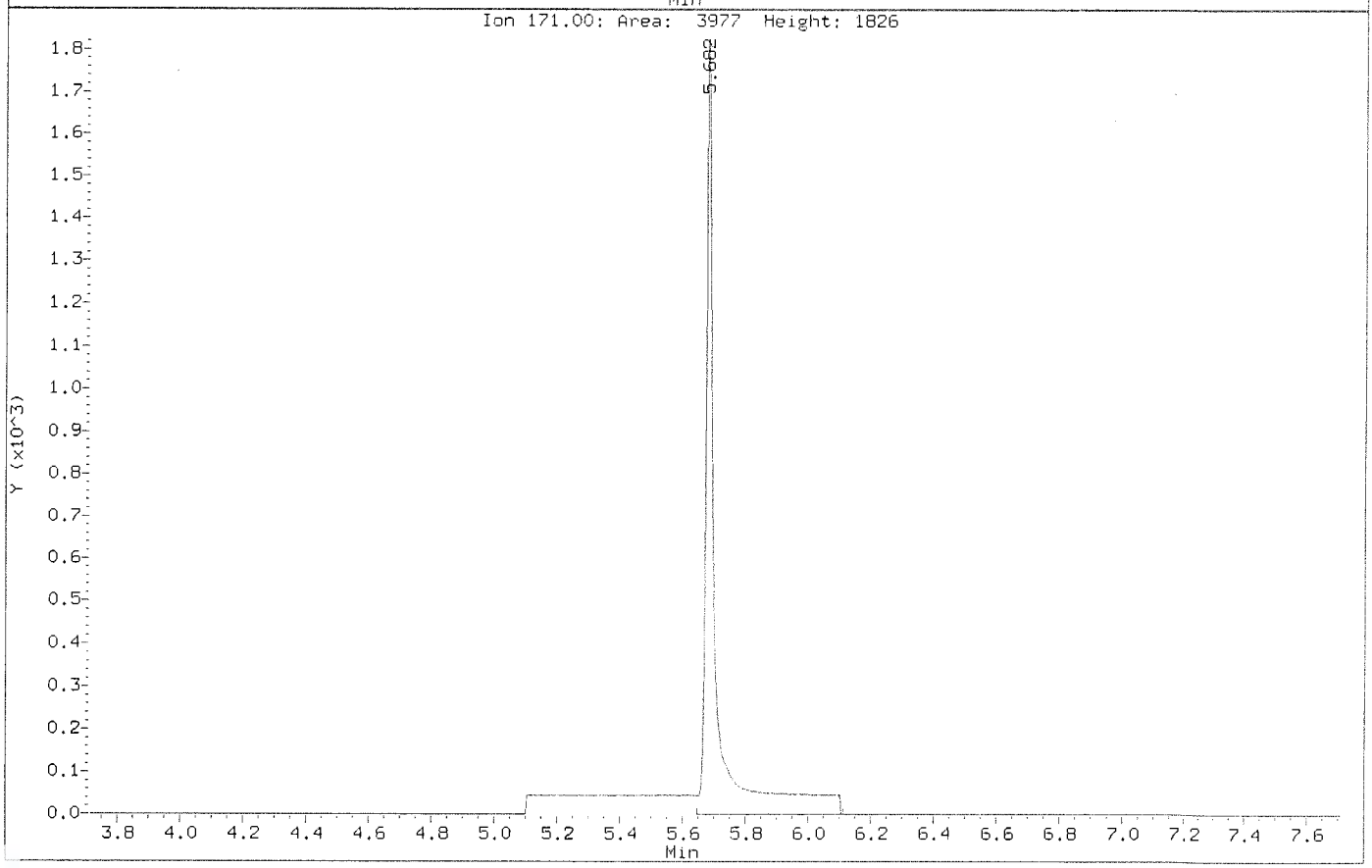
Compound: Acenaphthene-d10
CAS Number: 15067-26-2



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

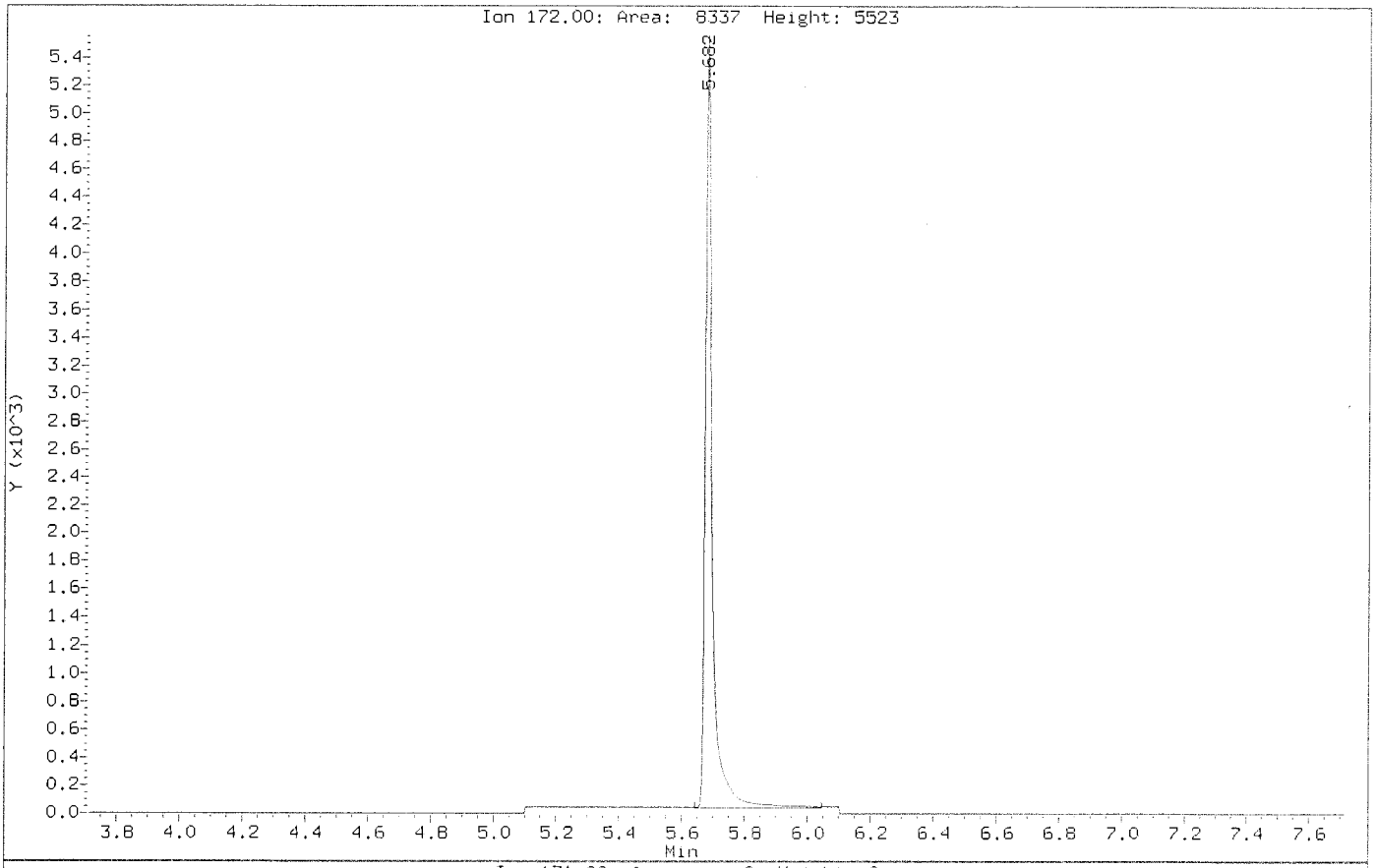
Compound: 2-Fluorobiphenyl
CAS Number: 321-60-8

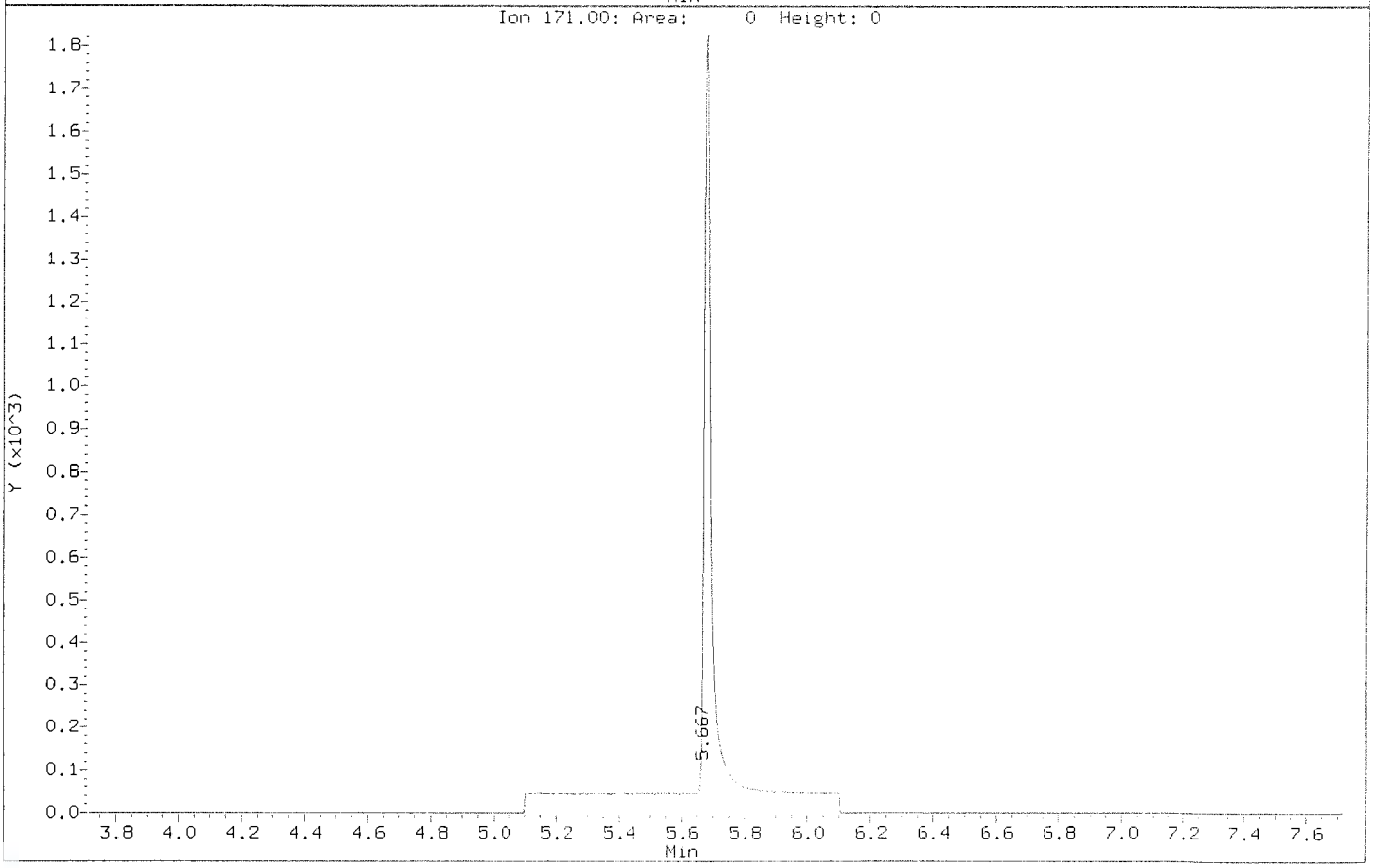




Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

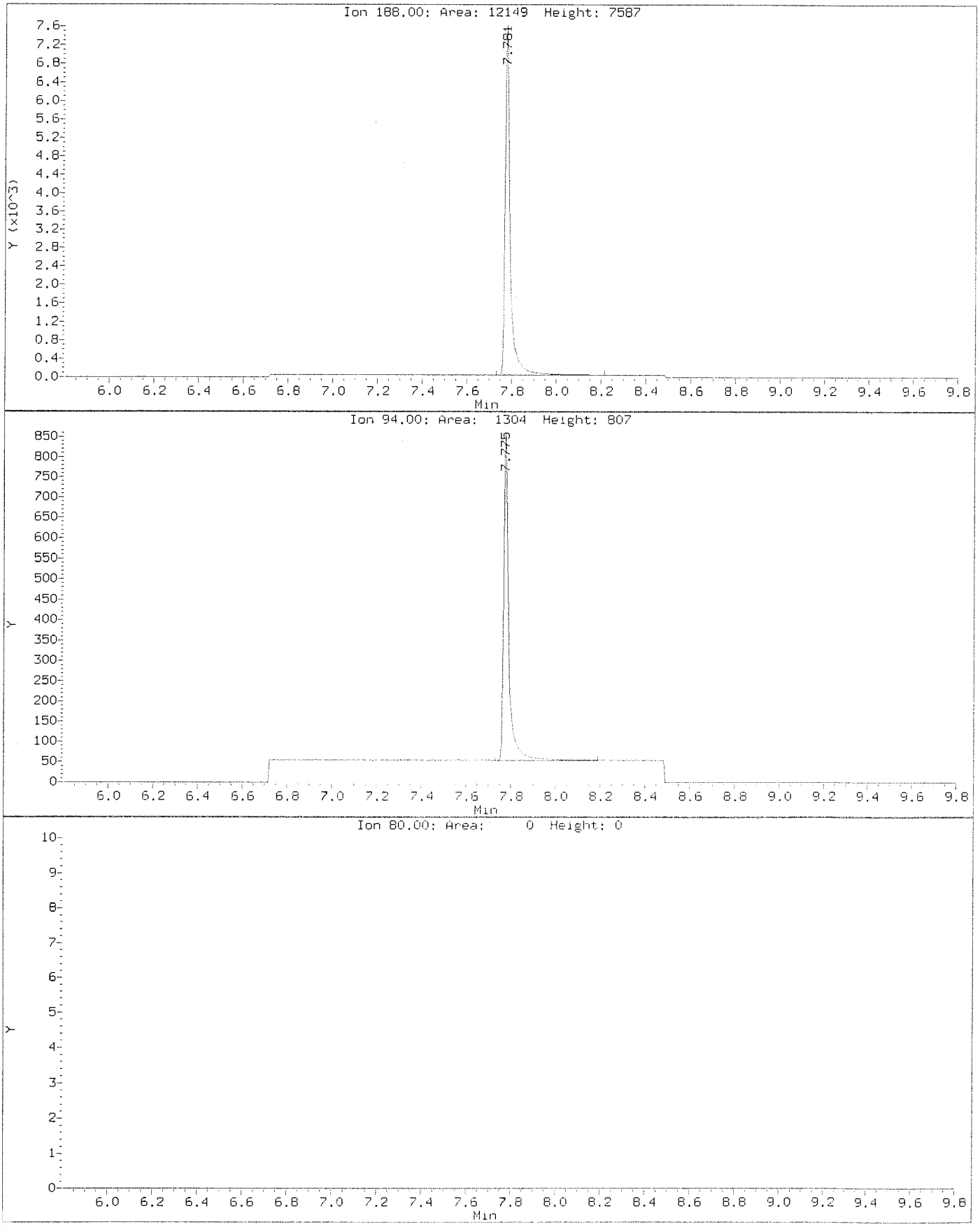
Compound: 2-Fluorobiphenyl
CAS Number: 321-60-8





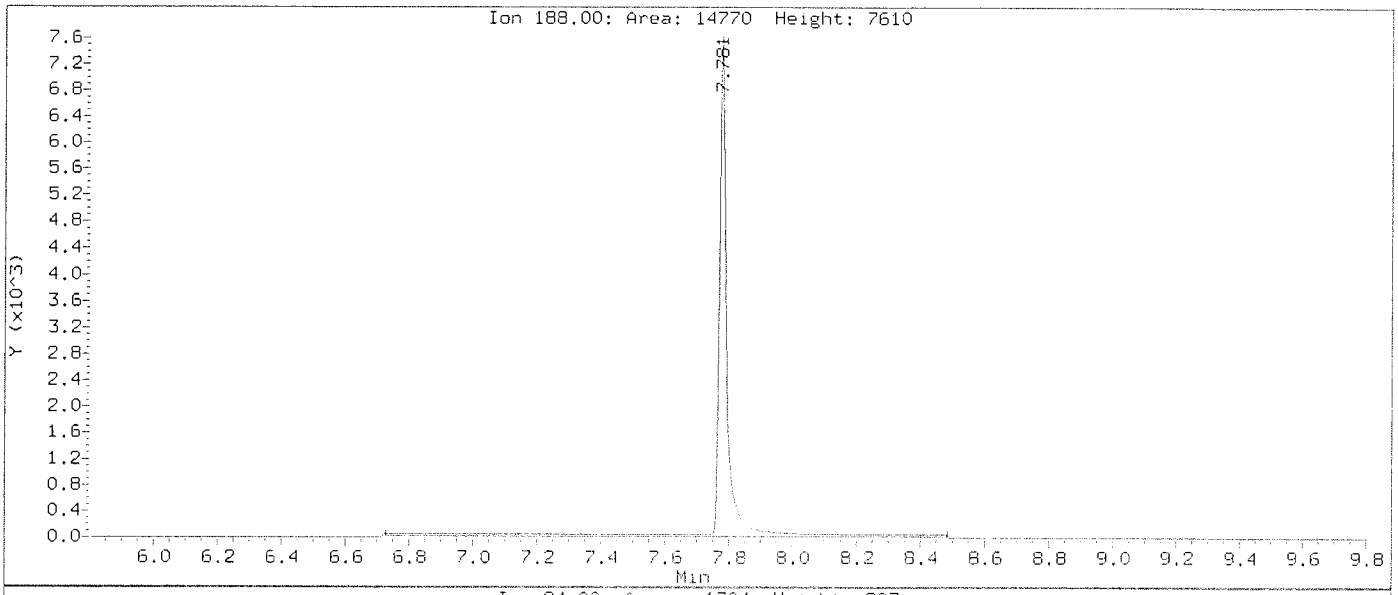
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

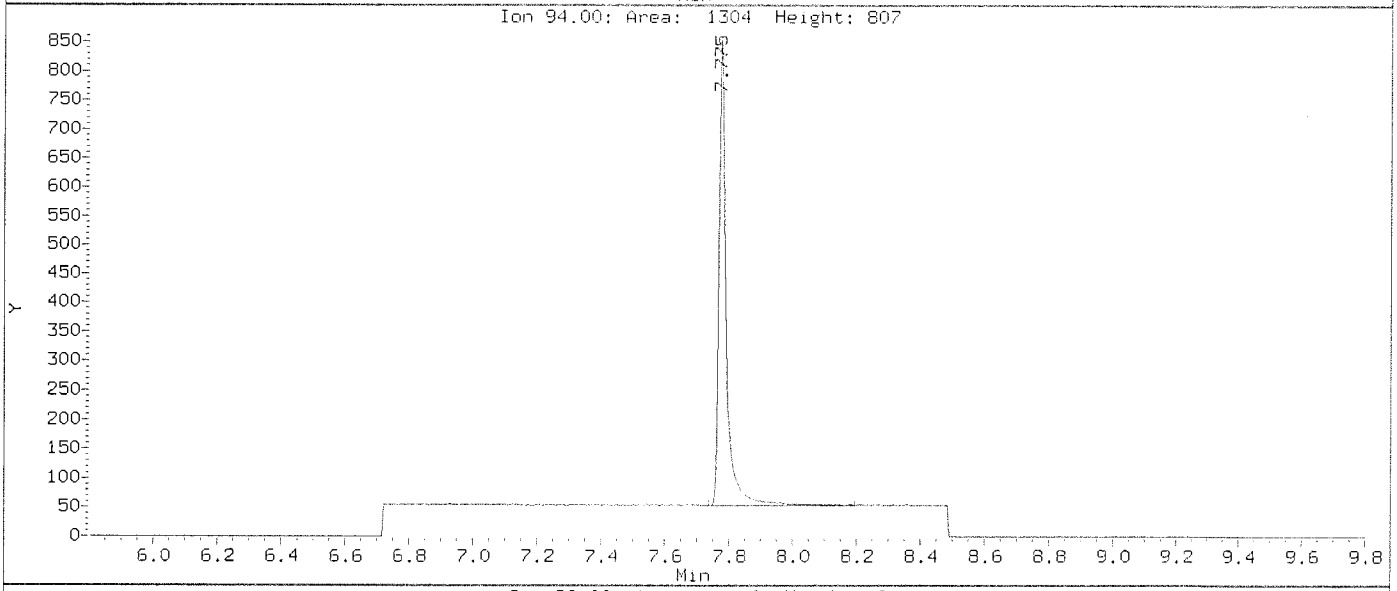
Compound: Phenanthrene-d10
CAS Number: 1517-22-2

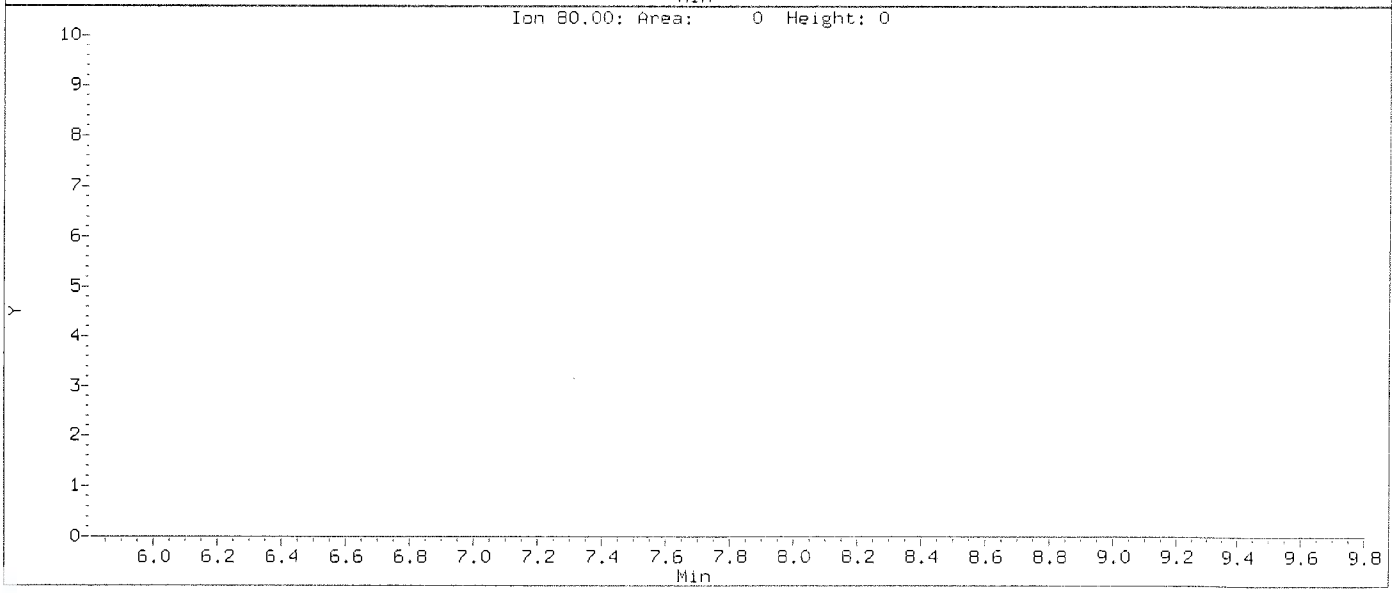


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: Phenanthrene-d10
CAS Number: 1517-22-2

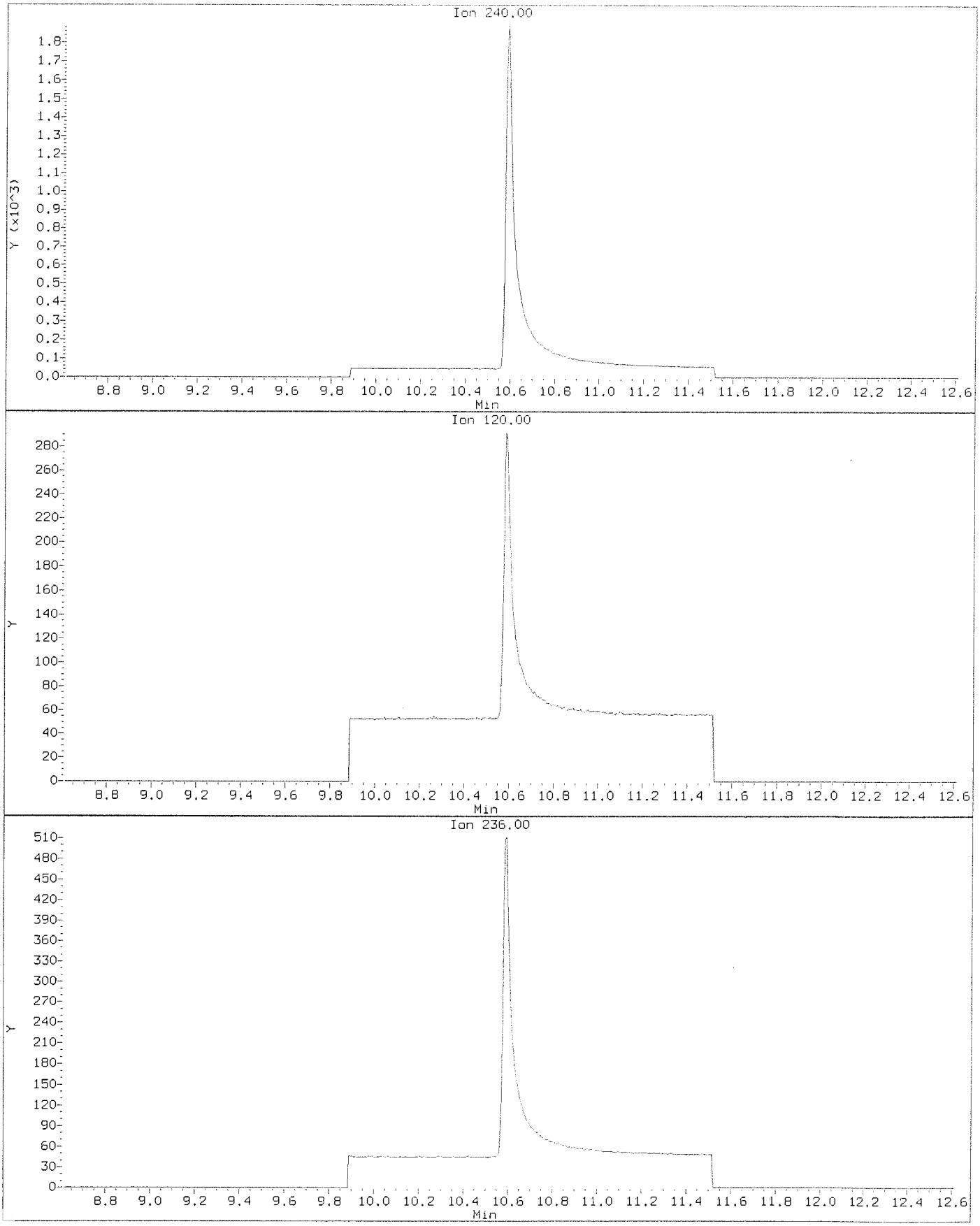






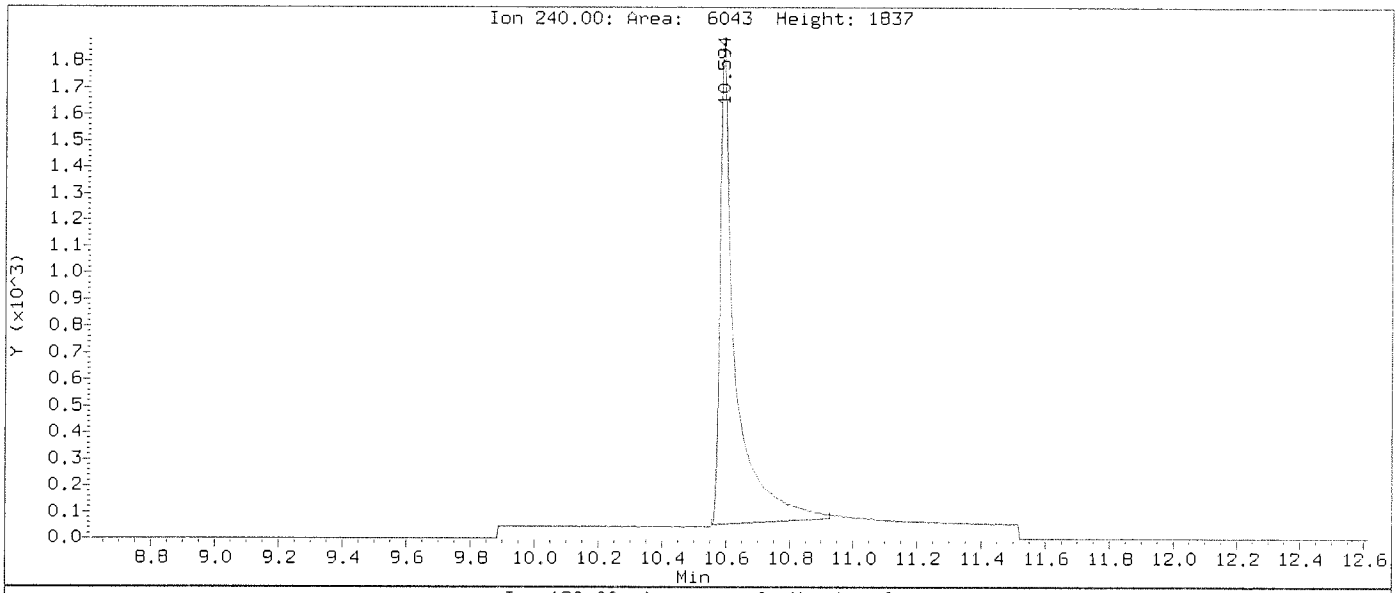
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

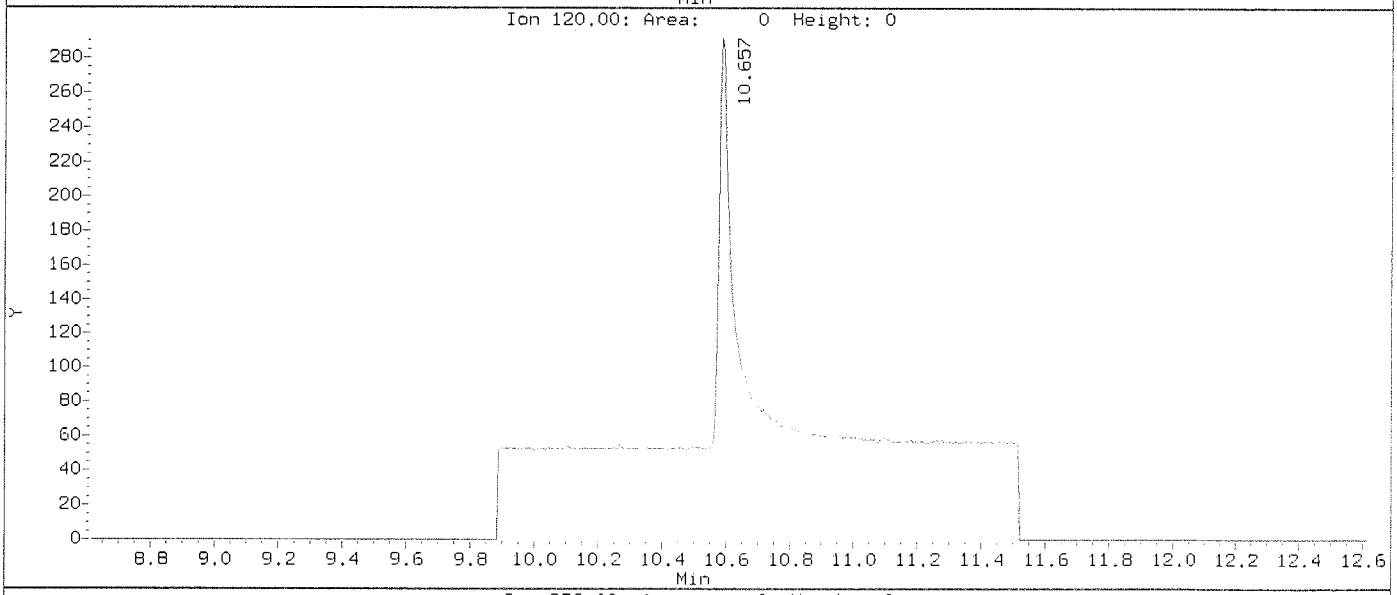
Compound: Chrysene-d12
CAS Number: 1719-03-5

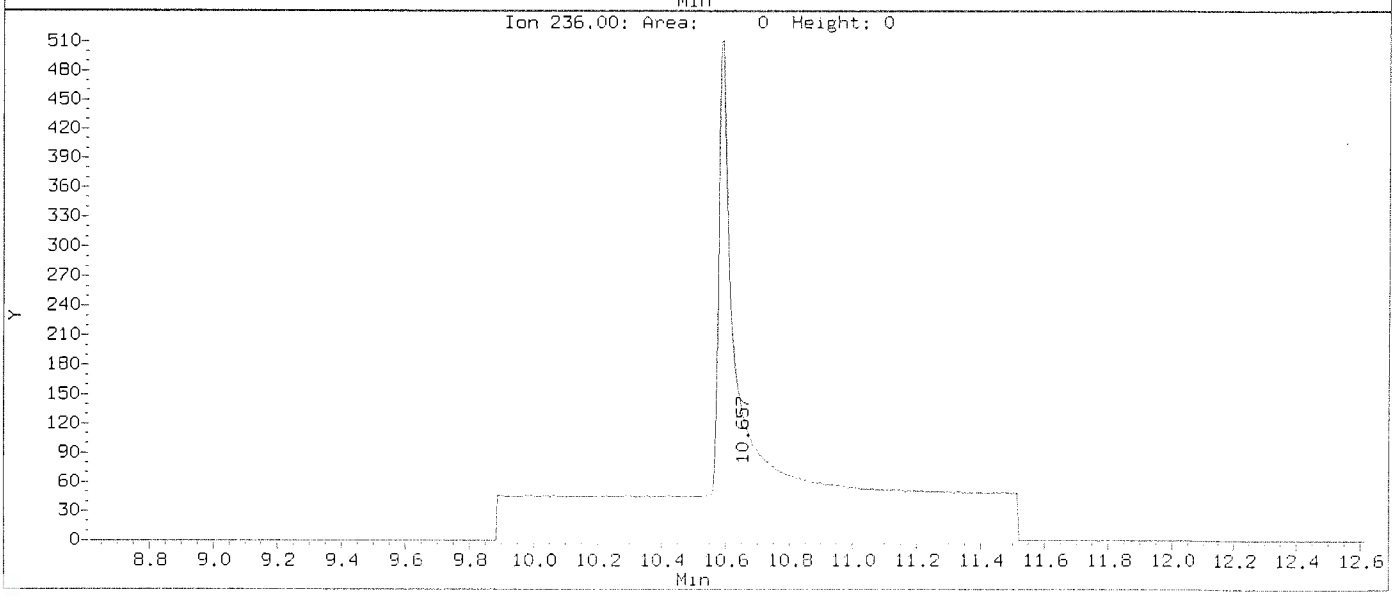


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: Chrysene-d12
CAS Number: 1719-03-5

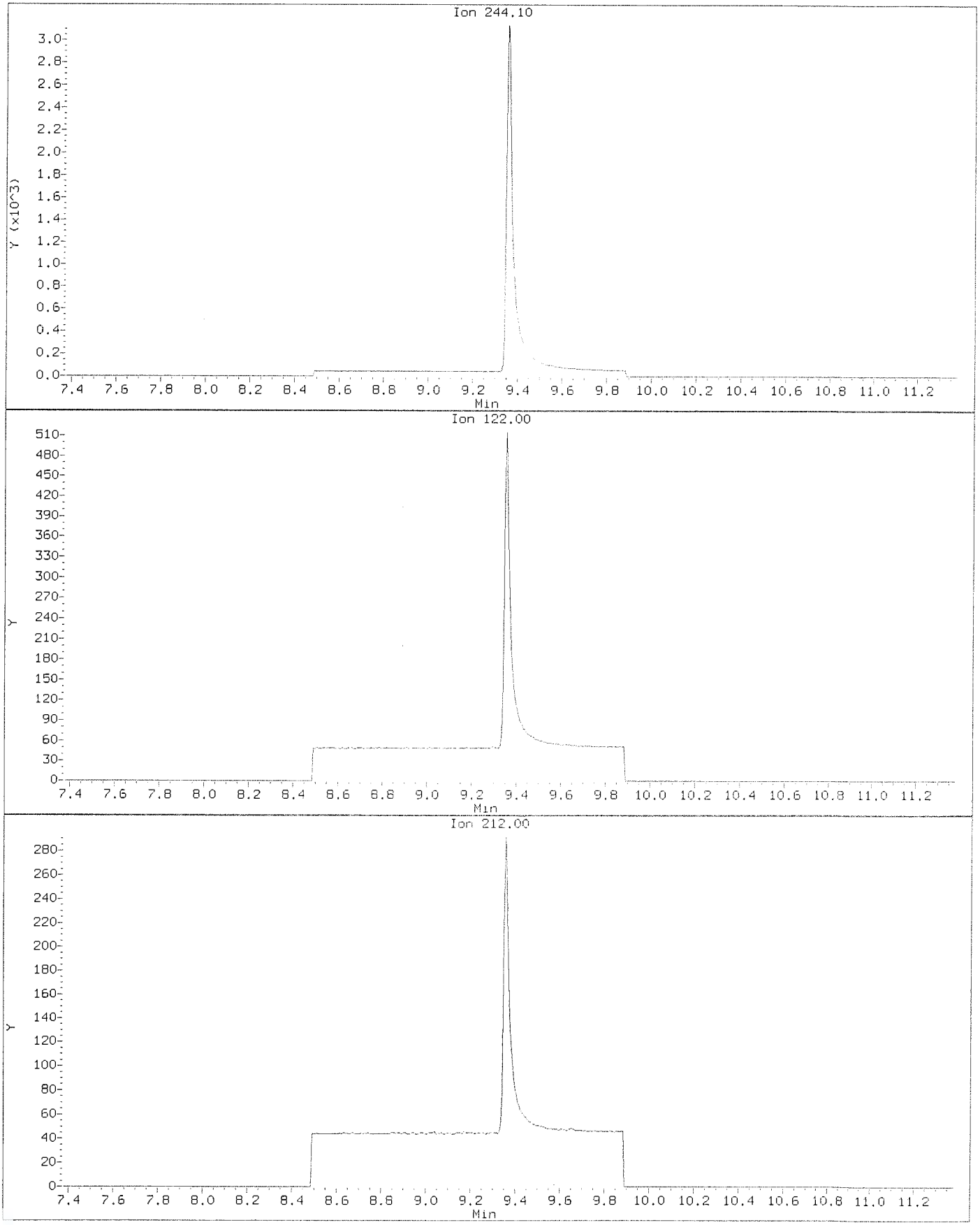






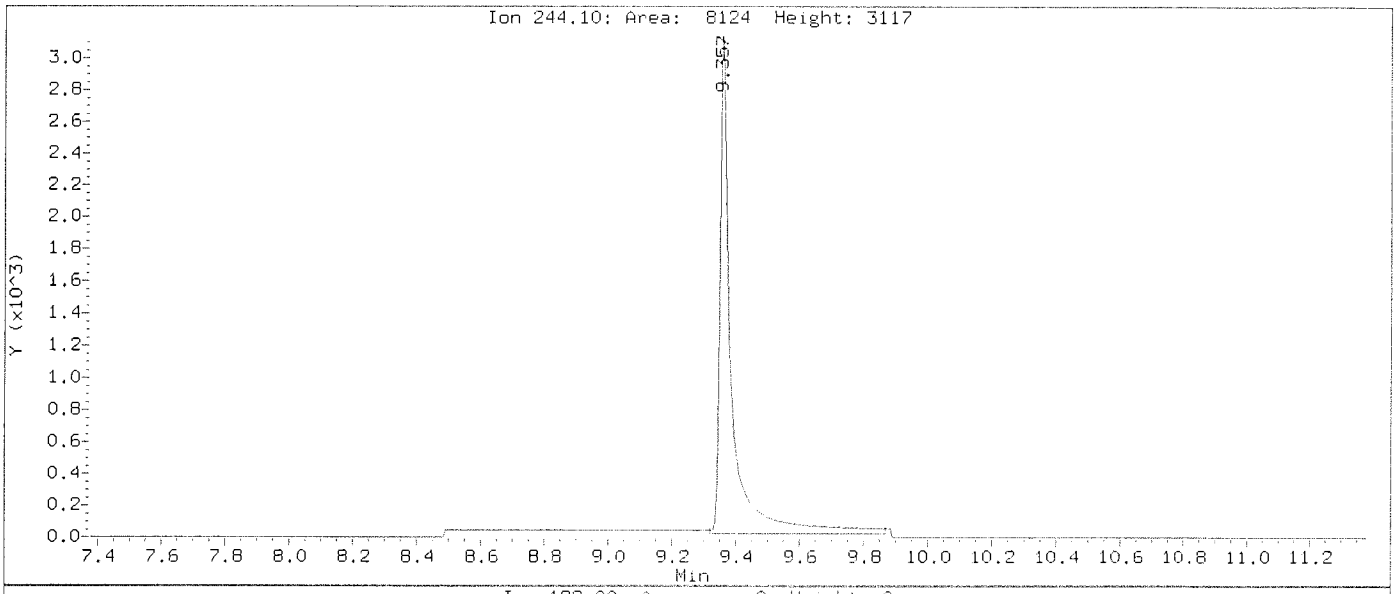
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

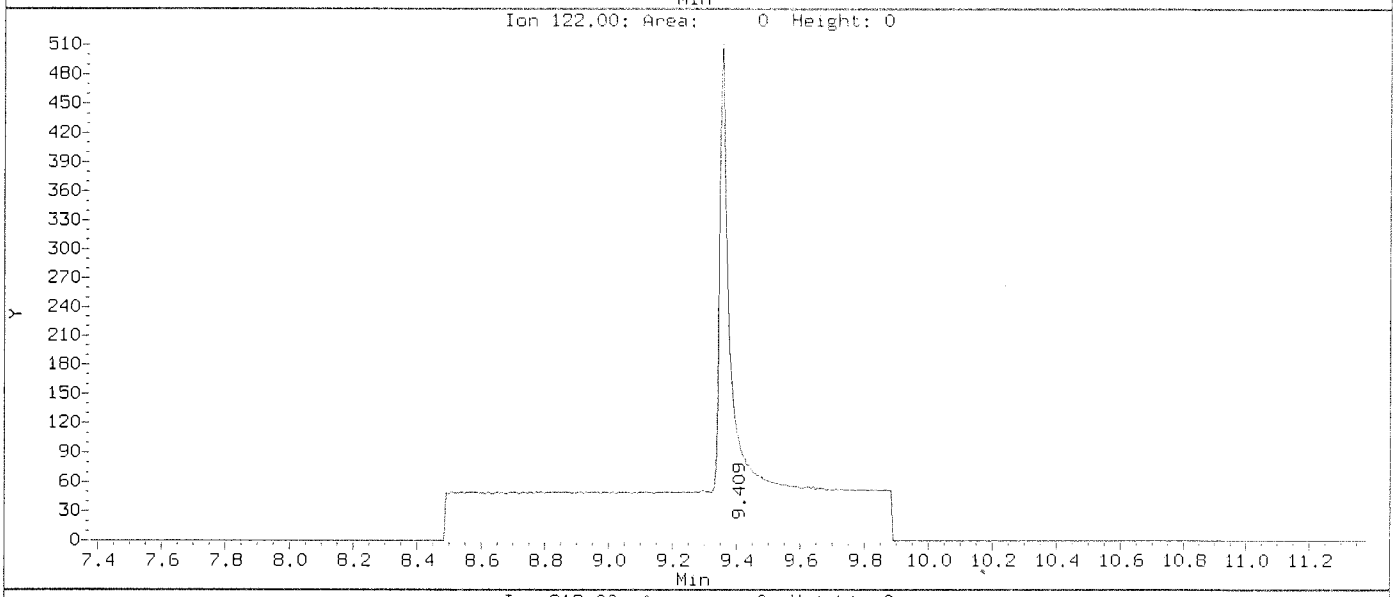
Compound: 4-Terphenyl-d14
CAS Number: 1718-51-0

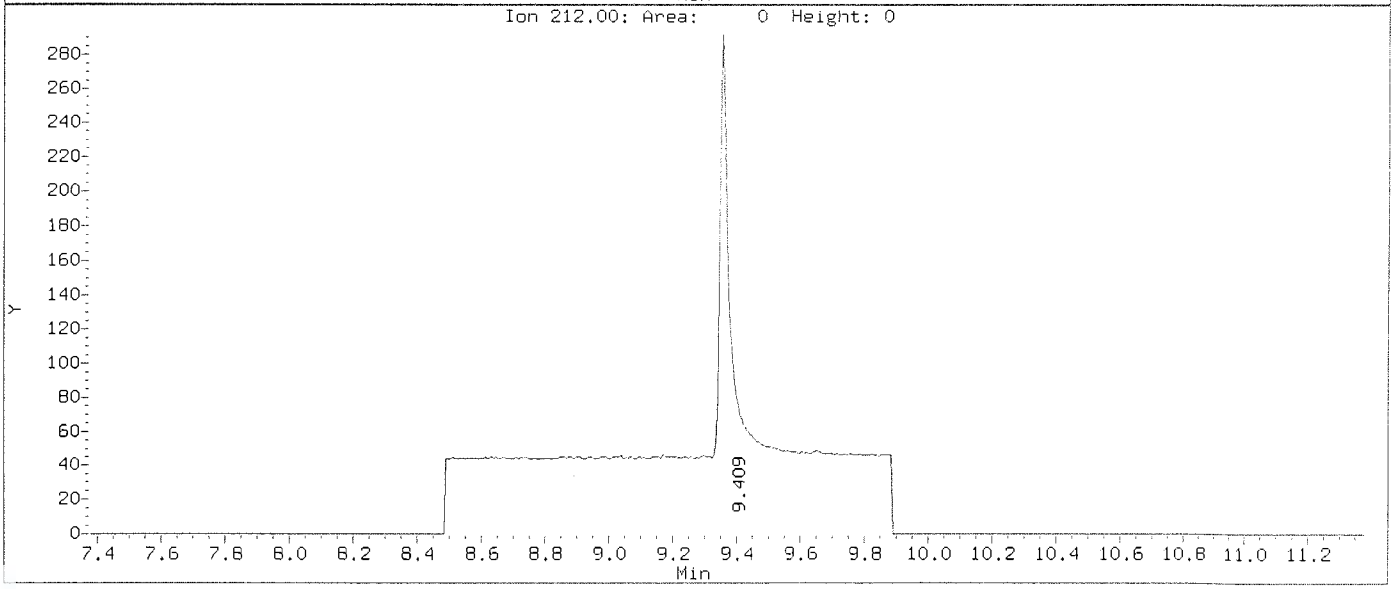


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: 4-Terphenyl-d14
CAS Number: 1718-51-0

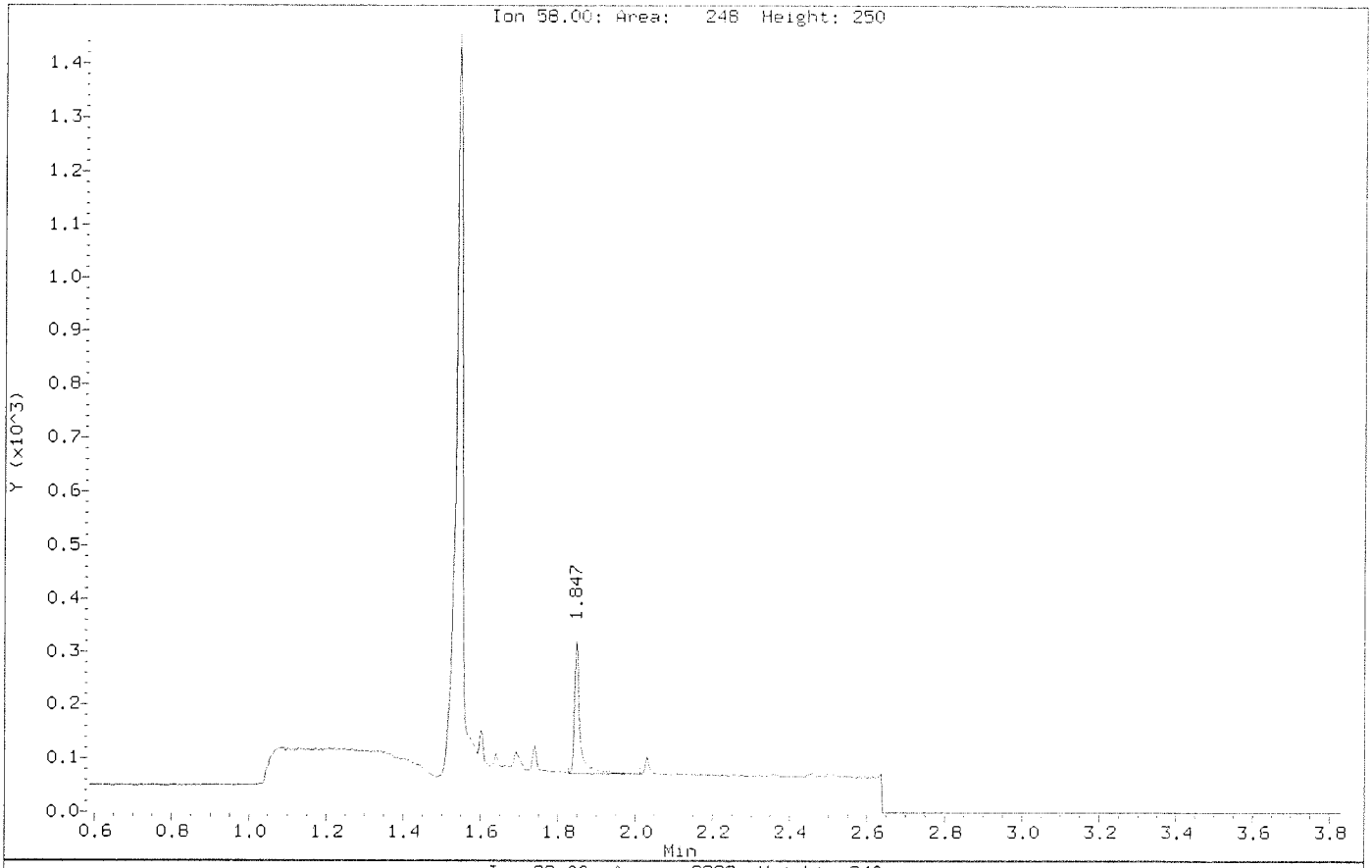


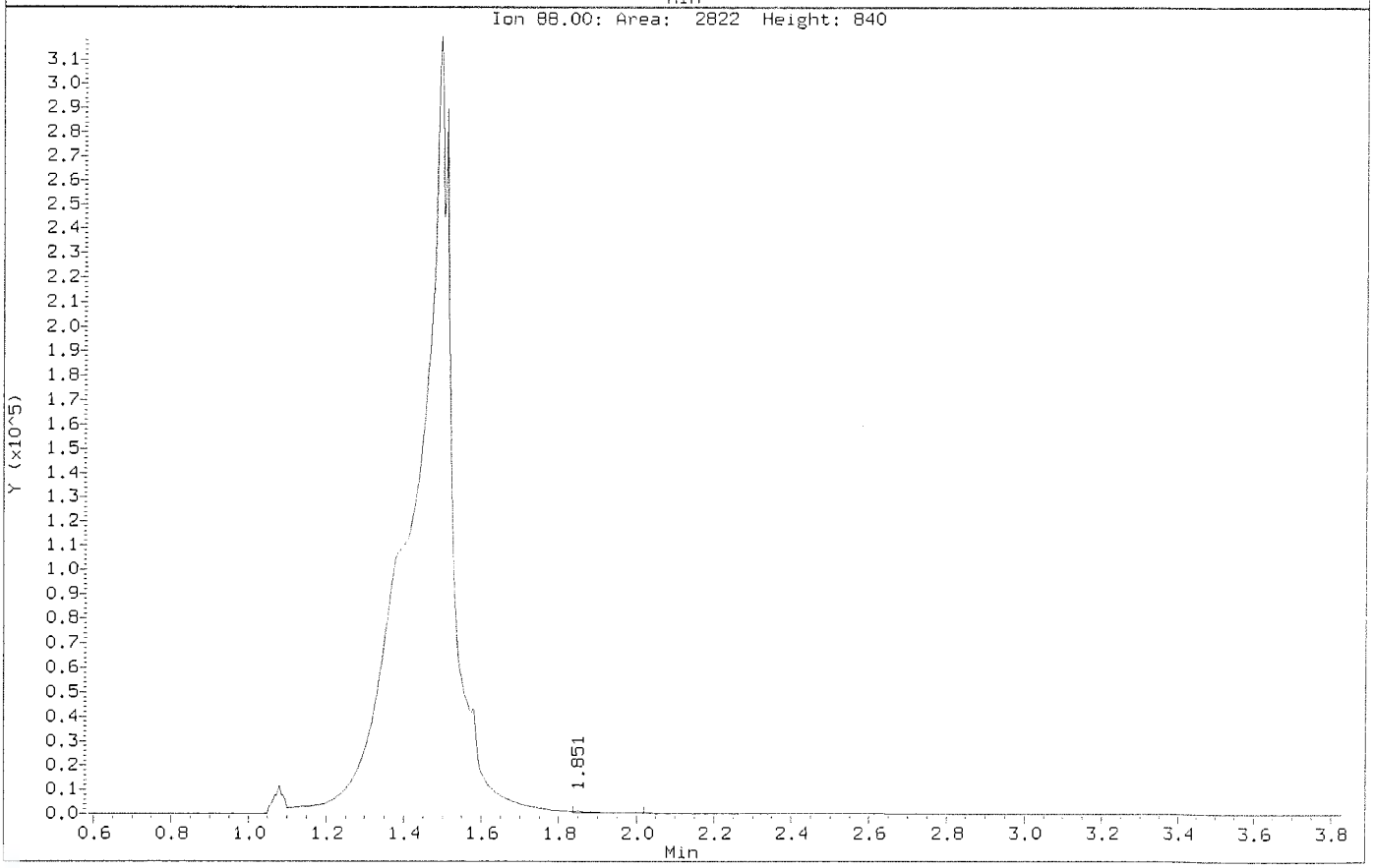




Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

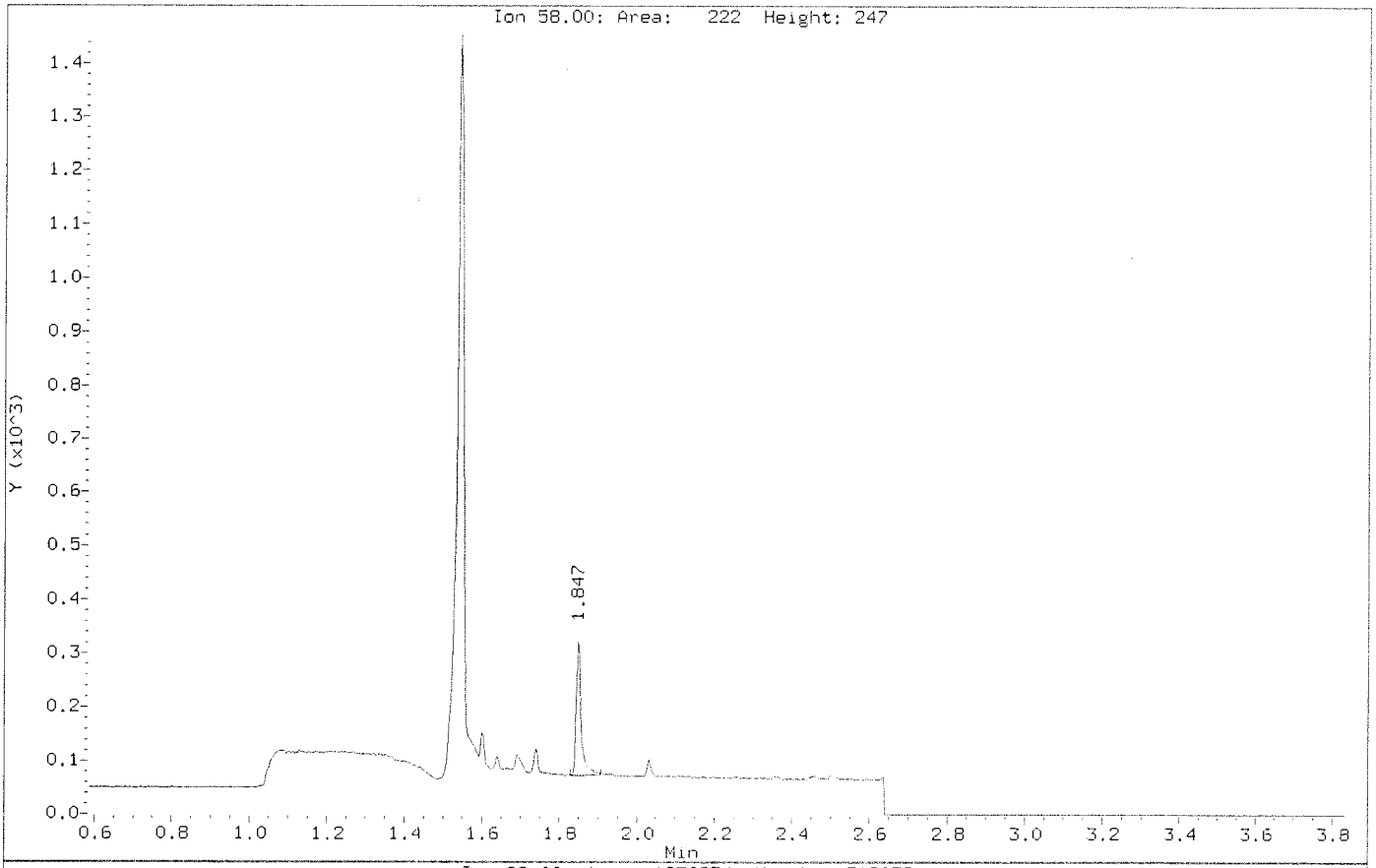
Compound: 1,4-Dioxane
CAS Number:

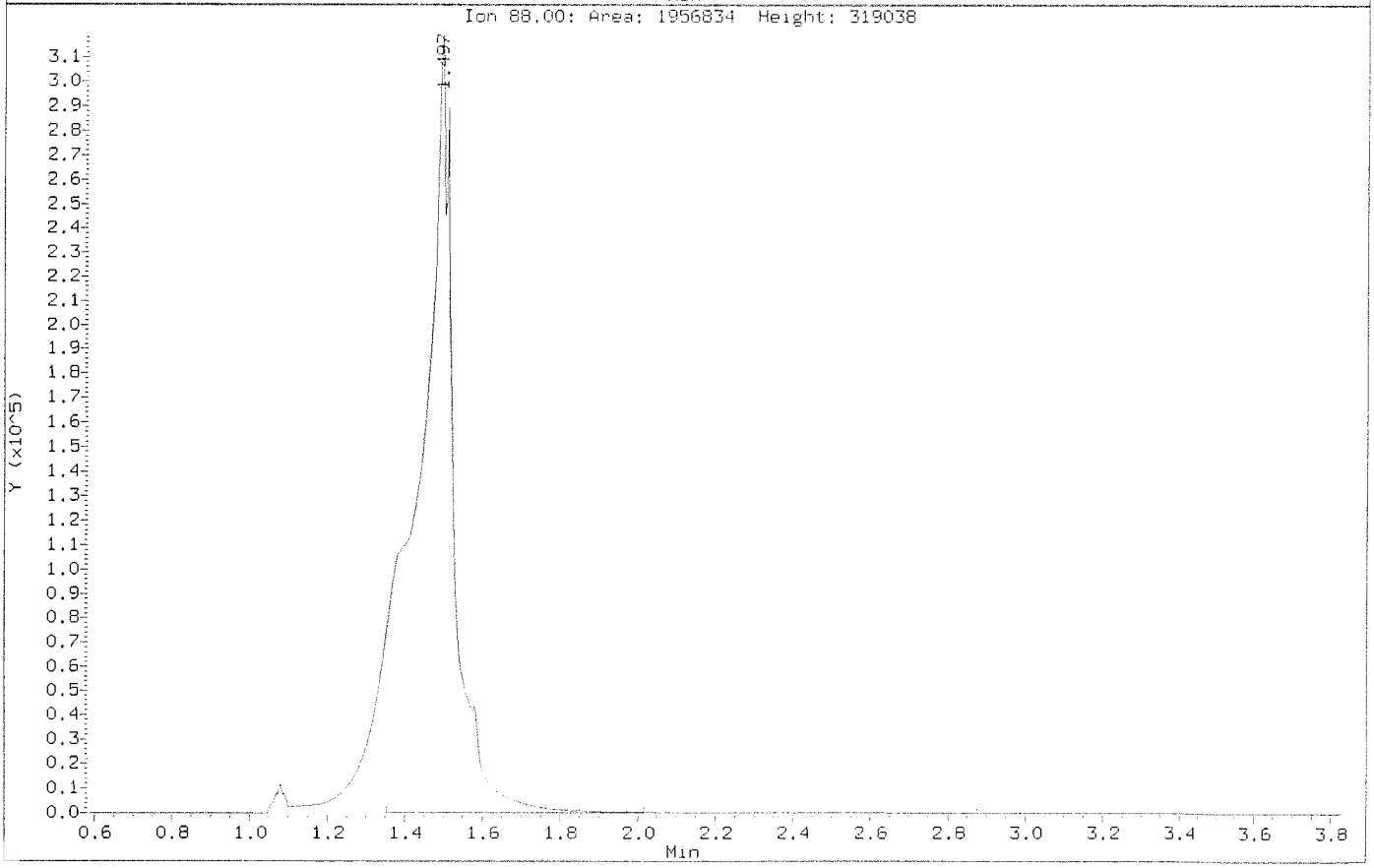




Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\04.D
Injection Date: 24-AUG-2022 12:15
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: 1,4-Dioxane
CAS Number:





ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220824.b\11.D
Lab Smp Id: HS22080522-01
Inj Date : 24-AUG-2022 14:37
Operator : LG Inst ID: SV6.i
Smp Info : HS22080522-01X1H
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220824.b\DXSIM.m
Meth Date : 24-Aug-2022 15:42 jjuarez Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 11
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	100.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	
* 20 1,4-Dichlorobenzene-d4	152	3.552	3.552	(1.000)	5659	0.10000		(aM)
* 45 Naphthalene-d8	136	4.660	4.660	(1.000)	14819	0.10000		
* 86 Acenaphthene-d10	164	6.330	6.330	(1.000)	8566	0.10000		(Q)
* 126 Phenanthrene-d10	188	7.775	7.780	(1.000)	13196	0.10000		
* 182 Chrysene-d12	240	10.588	10.594	(1.000)	6963	0.10000		(M)
* 198 Perylene-d12	264	12.640	12.645	(1.000)	4151	0.10000		
1 1,4-Dioxane	58	1.862	1.847	(0.524)	263	0.11321	11.32	(Q)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01135467

Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\11.D

Date : 24-AUG-2022 14:37

Client ID:

Instrument: SV6.i

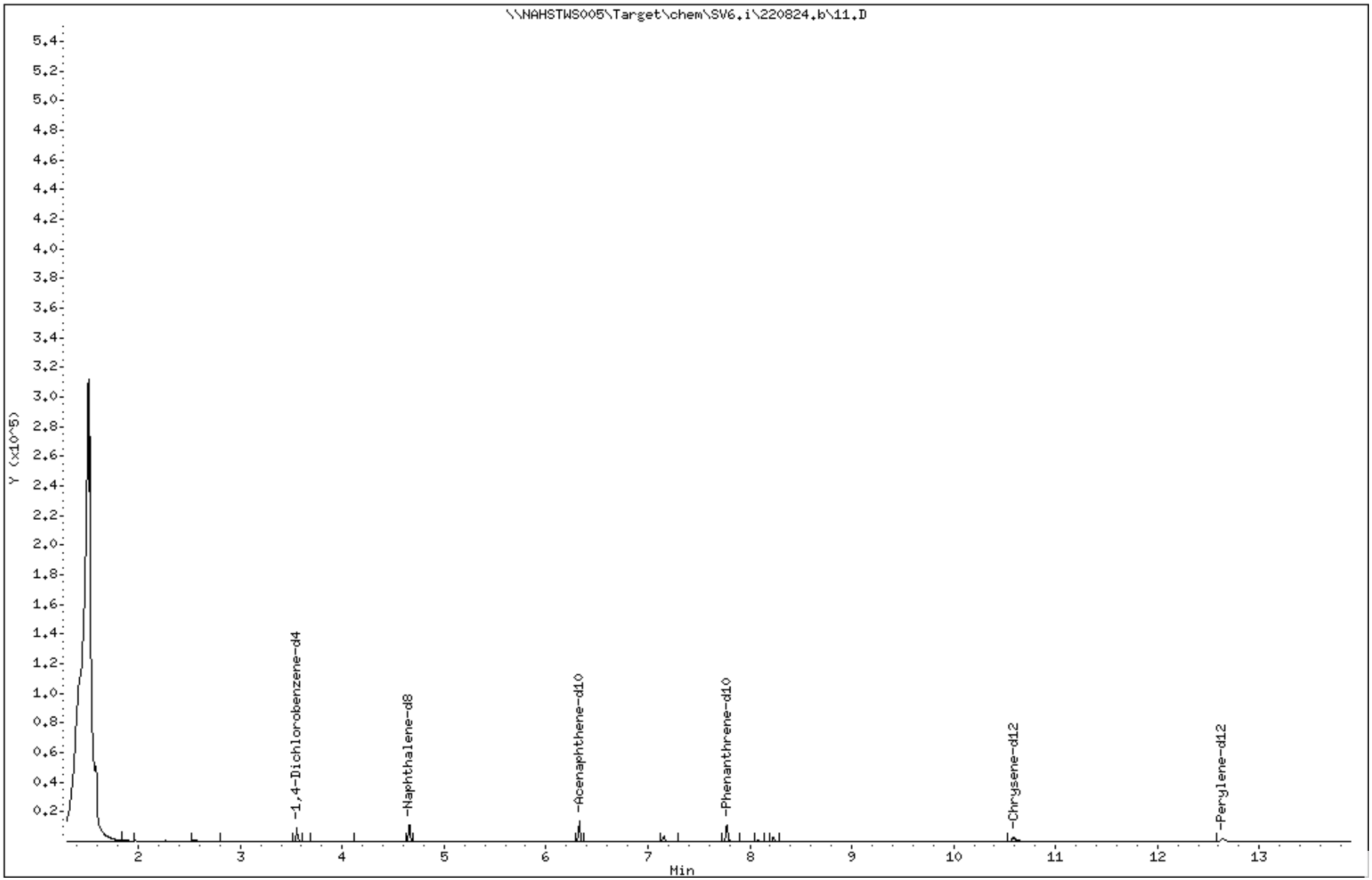
Sample Info: HS22080522-01X1H

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\11.D

Date : 24-AUG-2022 14:37

Client ID:

Instrument: SV6.i

Sample Info: HS22080522-01X1H

Purge Volume: 1000.0

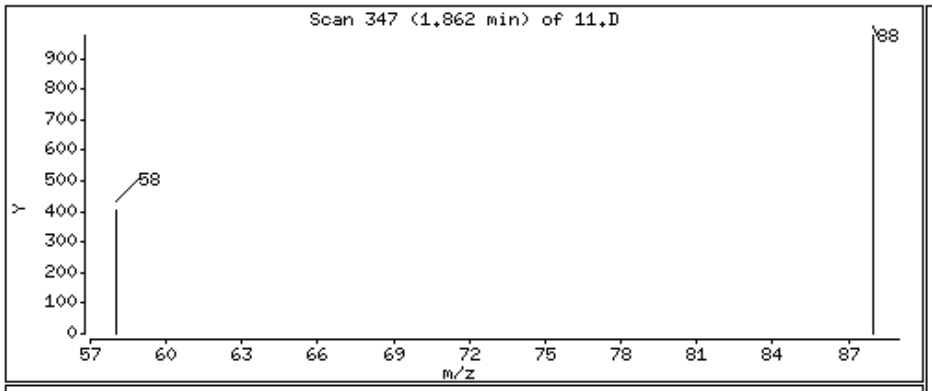
Operator: LG

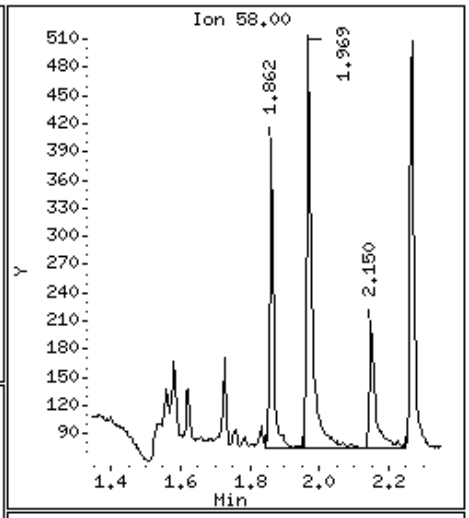
Column phase: RTX-5SIL MS

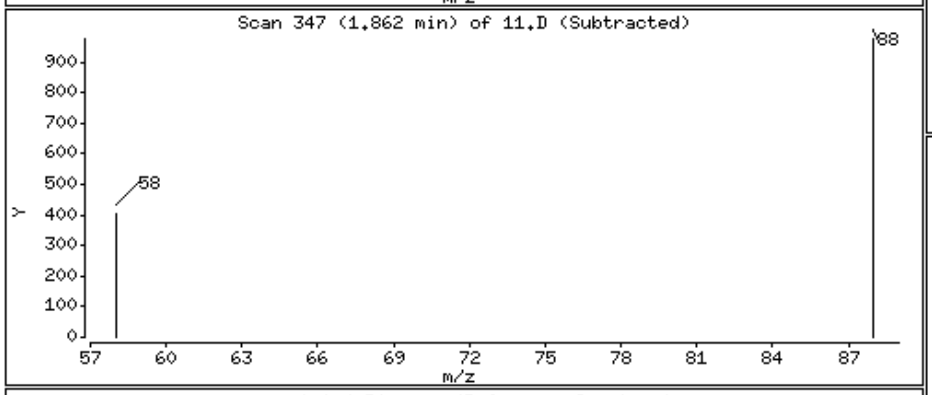
Column diameter: 0.28

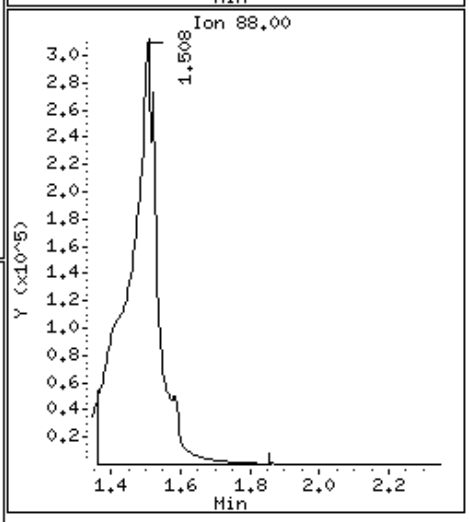
1 1,4-Dioxane

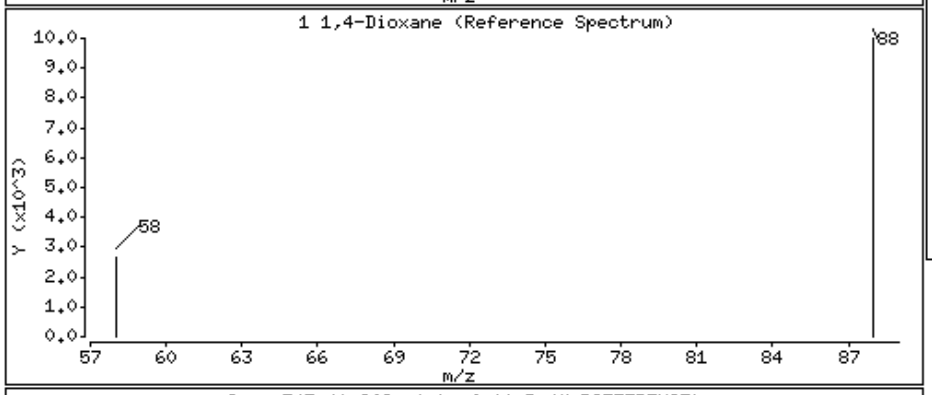
Concentration: 11.32 ug/L

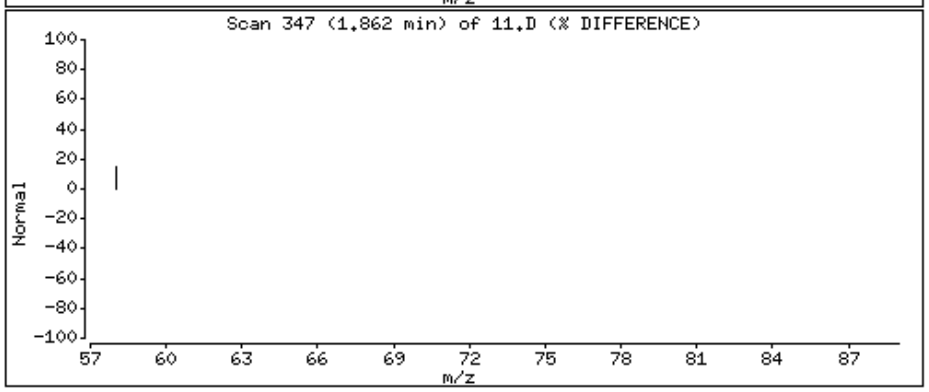












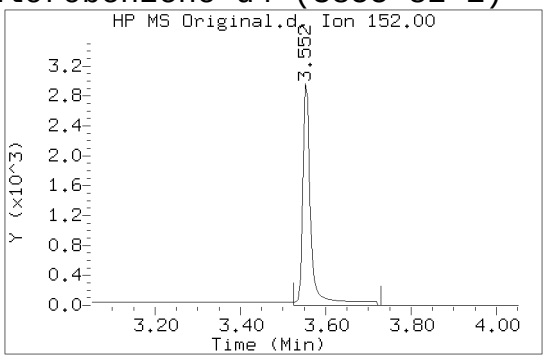
Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\11.D
Inj Date : 24-AUG-2022 14:37
InstruID : SV6.i
LabSampID : HS22080522-01

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

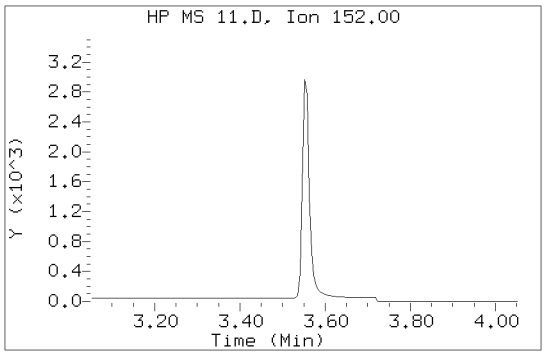
BEFORE

MASS
152
AREA
3922
HEIGHT
2964
24-Aug-2022
14:51
ALSHS
Server



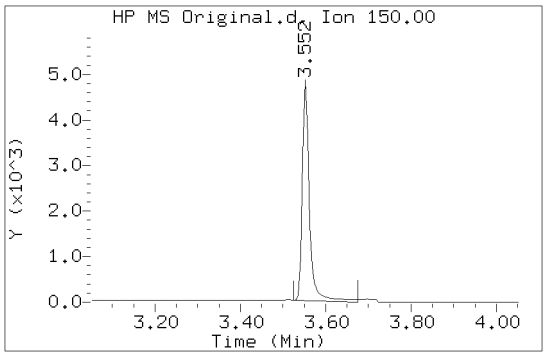
AFTER

MASS
152
AREA
5659
HEIGHT
2964
24-Aug-2022
15:50
ALSHS
S



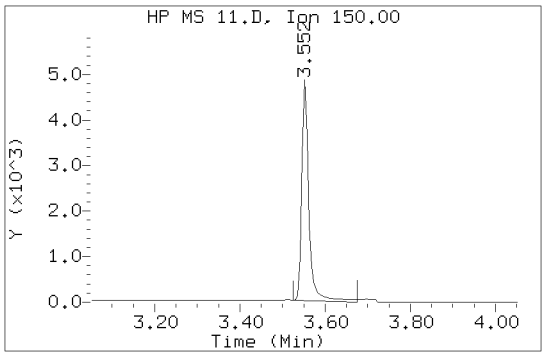
BEFORE

MASS
150
AREA
5497
HEIGHT
4842
24-Aug-2022
14:51
ALSHS
Server



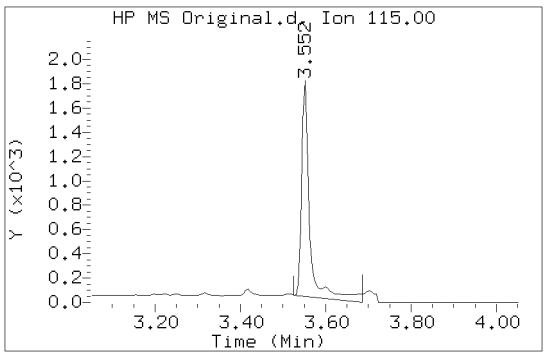
AFTER

MASS
150
AREA
5497
HEIGHT
4842
24-Aug-2022
15:50
ALSHS
S



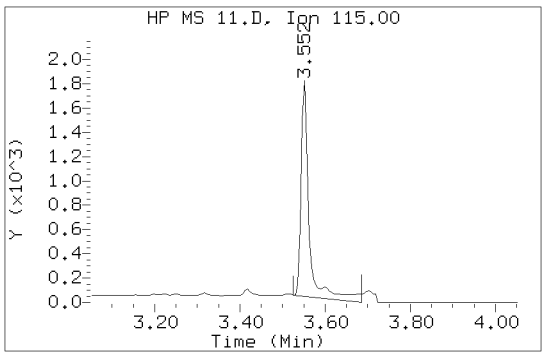
BEFORE

MASS
115
AREA
2311
HEIGHT
1775
24-Aug-2022
14:51
ALSHS
Server



AFTER

MASS
115
AREA
2311
HEIGHT
1775
24-Aug-2022
15:50
ALSHS
S

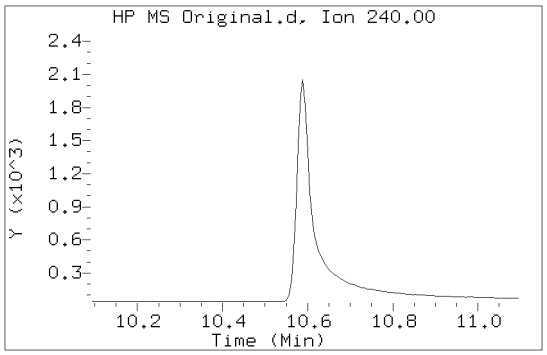


Chrysene-d12 (1719-03-5)

Reason Code:

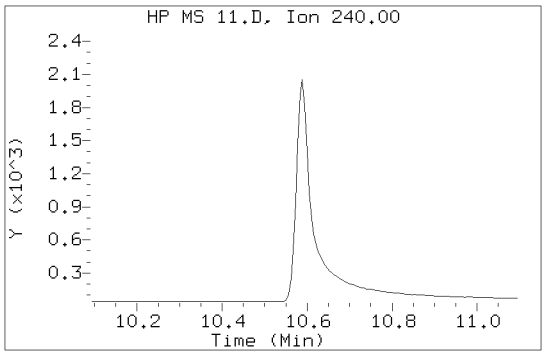
BEFORE

MASS
240
AREA
0
HEIGHT
0
24-Aug-2022
14:51
ALSHS
Server



AFTER

MASS
240
AREA
6963
HEIGHT
2008
24-Aug-2022
15:50
ALSHS
S



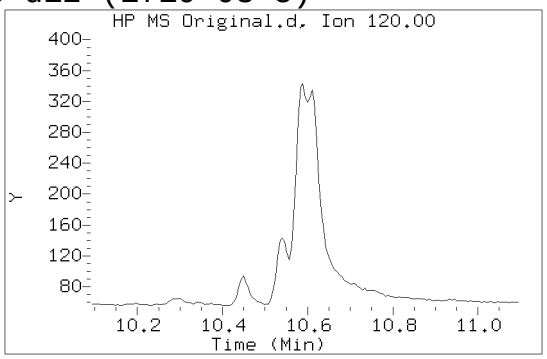
Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\11.D
Inj Date : 24-AUG-2022 14:37
InstruID : SV6.i
LabSampID : HS22080522-01

Chrysene-d12 (1719-03-5)

Reason Code:

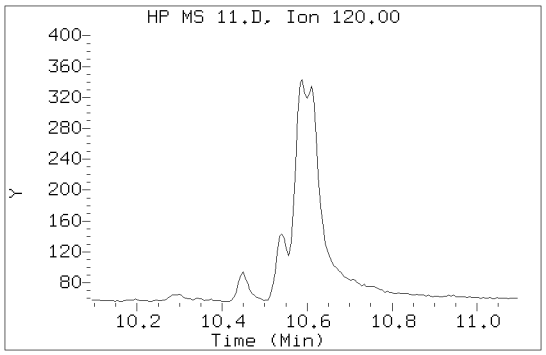
BEFORE

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
14:51
ALSHS
Server



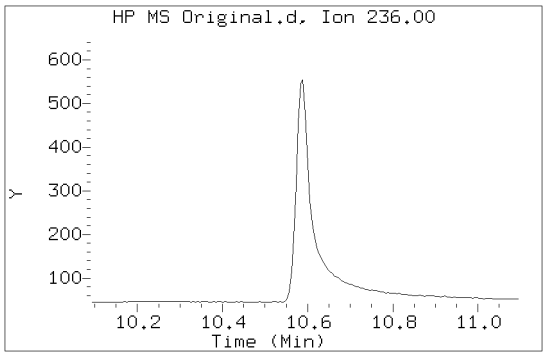
AFTER

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



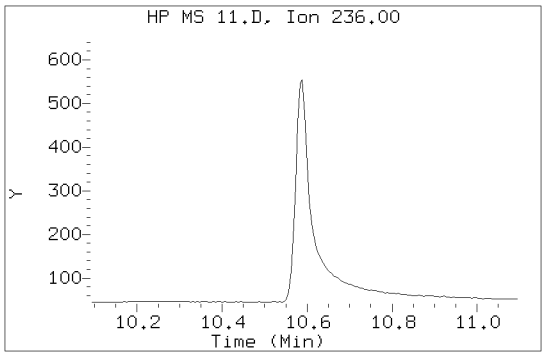
BEFORE

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
14:51
ALSHS
Server



AFTER

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\12.D Page 1
Report Date: 24-Aug-2022 15:50

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220824.b\12.D
Lab Smp Id: HS22080522-02
Inj Date : 24-AUG-2022 14:55
Operator : LG Inst ID: SV6.i
Smp Info : HS22080522-02X1H
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220824.b\DXSIM.m
Meth Date : 24-Aug-2022 15:42 jjuarez Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 12
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	100.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.557	3.552	(1.000)	4060	0.10000	(aQ)
* 45 Naphthalene-d8	136	4.660	4.660	(1.000)	15382	0.10000	
* 86 Acenaphthene-d10	164	6.330	6.330	(1.000)	8863	0.10000	(Q)
* 126 Phenanthrene-d10	188	7.775	7.780	(1.000)	13351	0.10000	
* 182 Chrysene-d12	240	10.588	10.594	(1.000)	6540	0.10000	(M)
* 198 Perylene-d12	264	12.645	12.645	(1.000)	3880	0.10000	
1 1,4-Dioxane	58	1.865	1.847	(0.524)	285	0.17099	17.10(Q)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01135472

Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\12.D

Date : 24-AUG-2022 14:55

Client ID:

Instrument: SV6.i

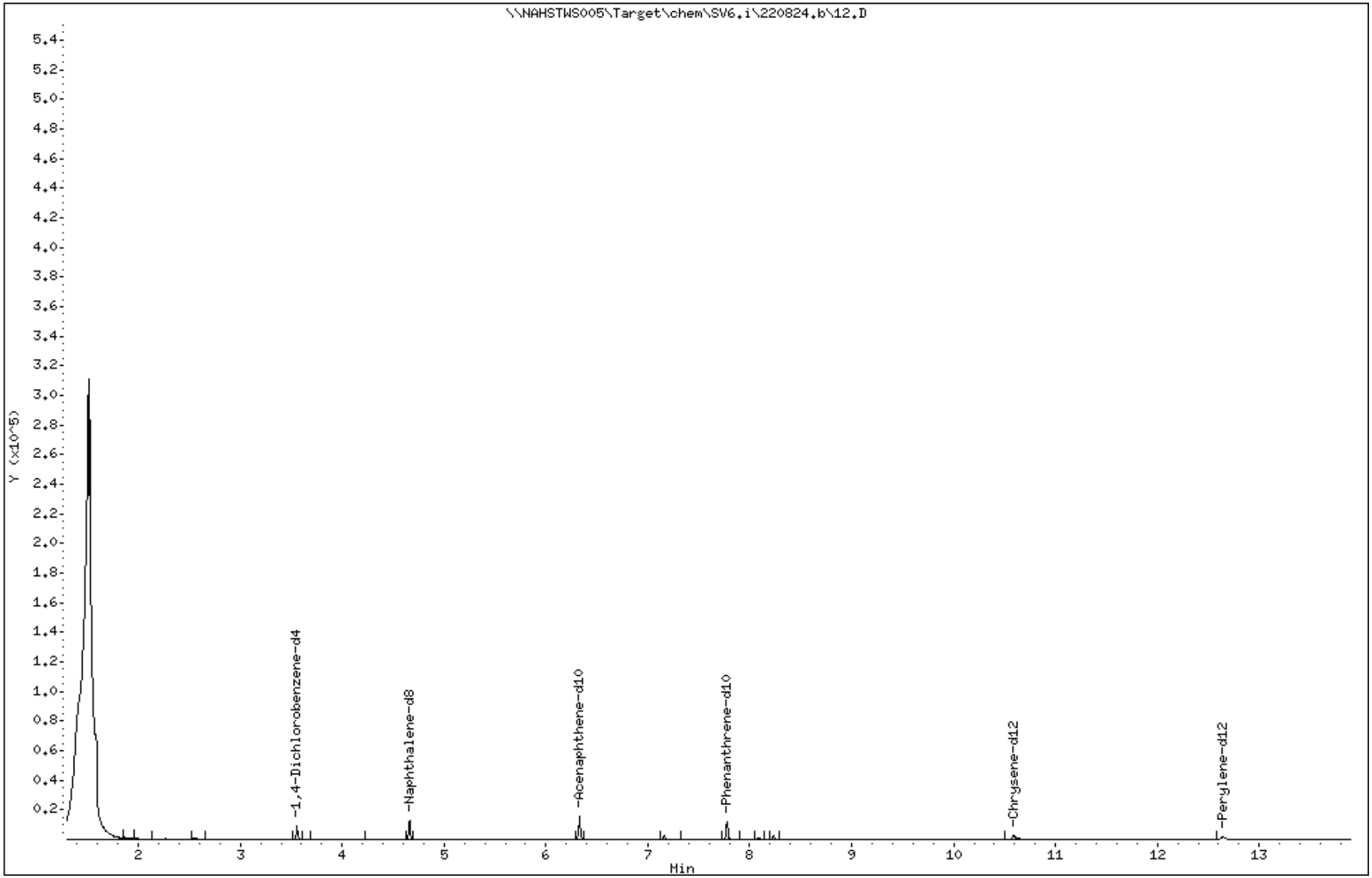
Sample Info: HS22080522-02X1H

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\12.D

Date : 24-AUG-2022 14:55

Client ID:

Instrument: SV6.i

Sample Info: HS22080522-02X1H

Purge Volume: 1000.0

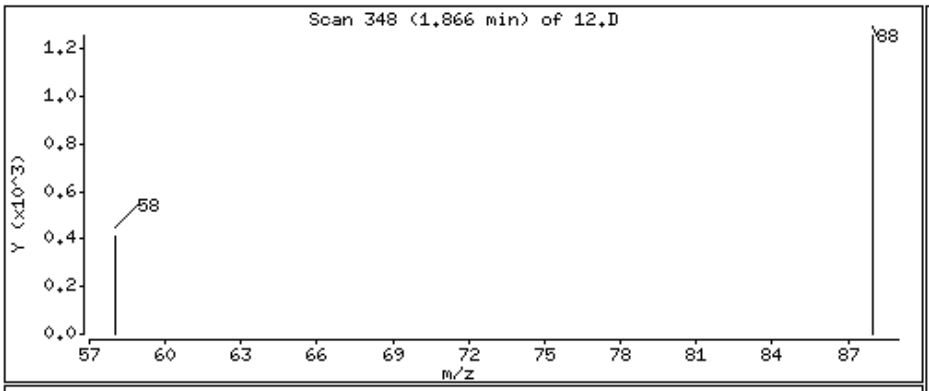
Operator: LG

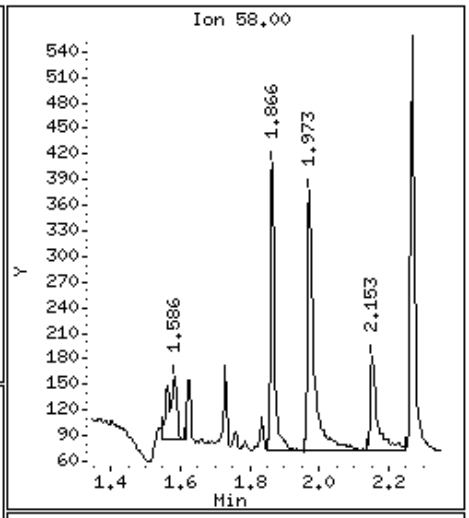
Column phase: RTX-5SIL MS

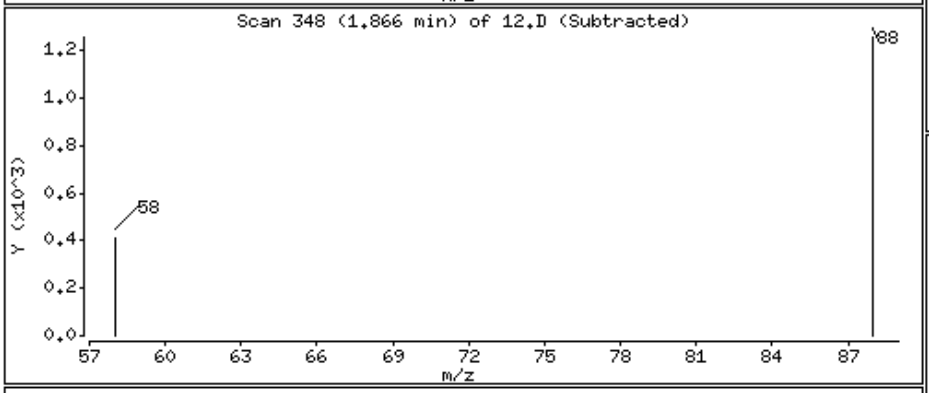
Column diameter: 0.28

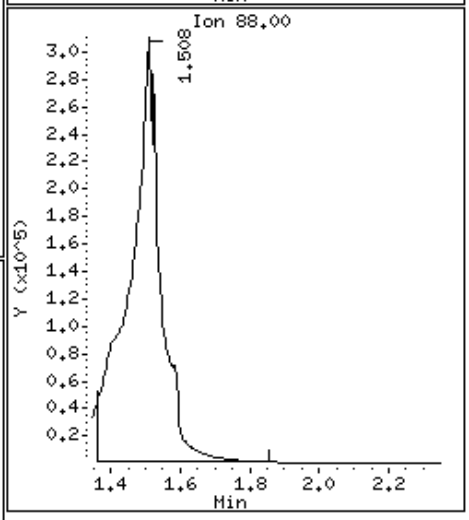
1 1,4-Dioxane

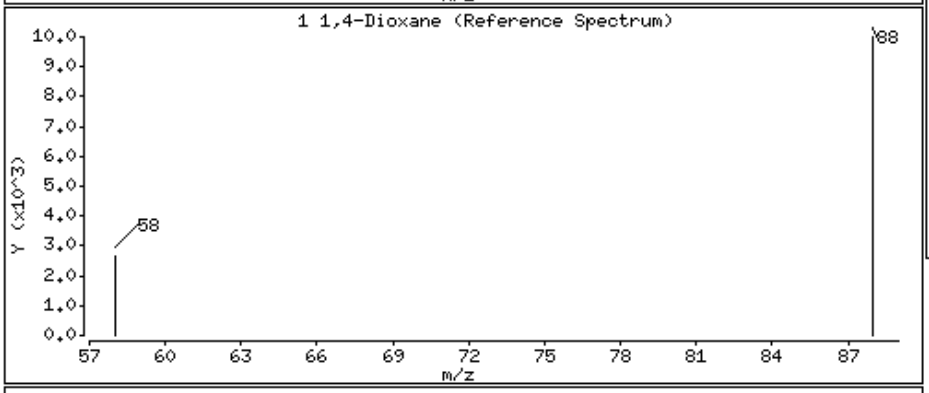
Concentration: 17.10 ug/L

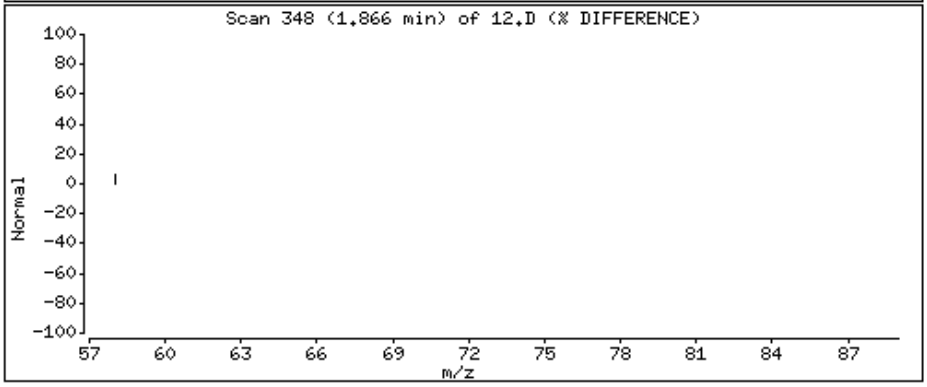










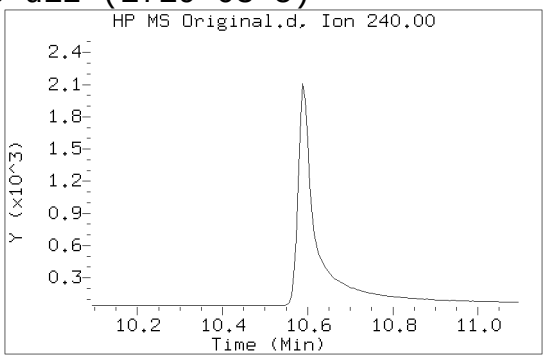


Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\12.D
Inj Date : 24-AUG-2022 14:55
InstruID : SV6.i
LabSampID : HS22080522-02

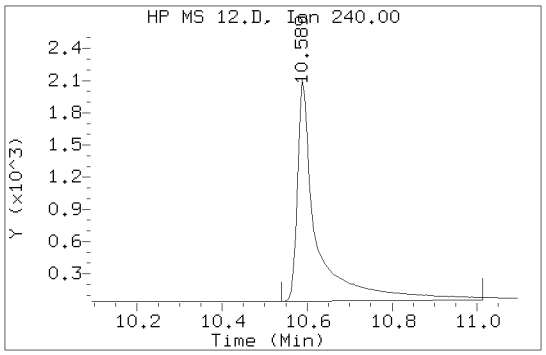
Chrysene-d12 (1719-03-5)

Reason Code:

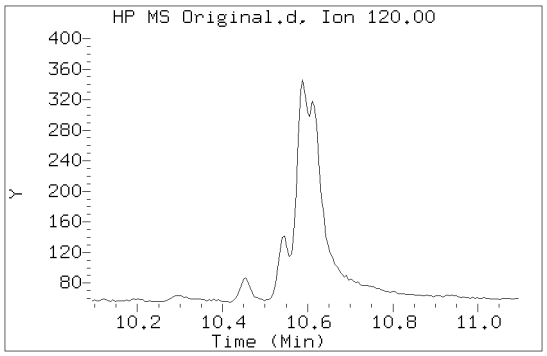
BEFORE
MASS
240
AREA
0
HEIGHT
0
24-Aug-2022
15:11
ALSHS
Server



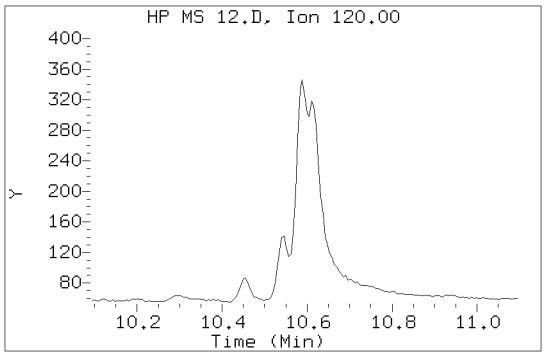
AFTER
MASS
240
AREA
6540
HEIGHT
2062
24-Aug-2022
15:50
ALSHS
S



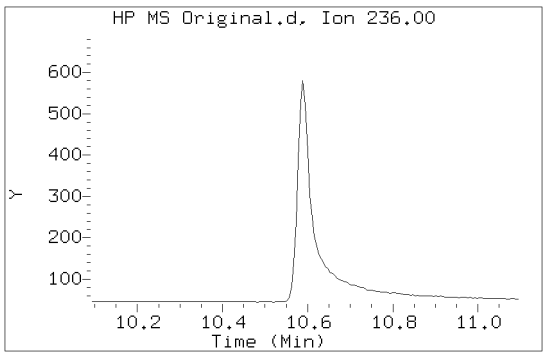
BEFORE
MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
15:11
ALSHS
Server



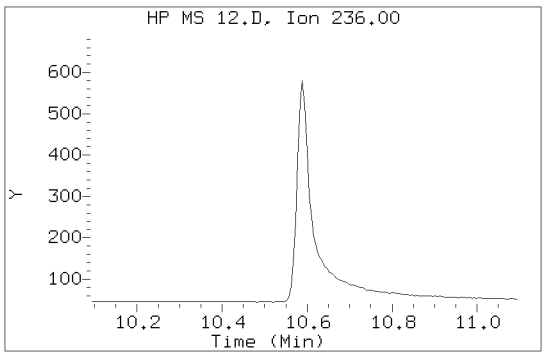
AFTER
MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



BEFORE
MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
15:11
ALSHS
Server



AFTER
MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\13.D Page 1
Report Date: 24-Aug-2022 15:50

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220824.b\13.D
Lab Smp Id: HS22080522-03
Inj Date : 24-AUG-2022 15:13
Operator : LG Inst ID: SV6.i
Smp Info : HS22080522-03X1H
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220824.b\DXSIM.m
Meth Date : 24-Aug-2022 15:42 jjuarez Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 13
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	100.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.557	3.552	(1.000)	3712	0.10000	(aQ)
* 45 Naphthalene-d8	136	4.660	4.660	(1.000)	14037	0.10000	
* 86 Acenaphthene-d10	164	6.330	6.330	(1.000)	8085	0.10000	(Q)
* 126 Phenanthrene-d10	188	7.775	7.780	(1.000)	12321	0.10000	
* 182 Chrysene-d12	240	10.588	10.594	(1.000)	5703	0.10000	(M)
* 198 Perylene-d12	264	12.640	12.645	(1.000)	3216	0.10000	
1 1,4-Dioxane	58	1.858	1.847	(0.522)	26	0.01706	1.706(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01135476

Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\13.D

Date : 24-AUG-2022 15:13

Client ID:

Instrument: SV6.i

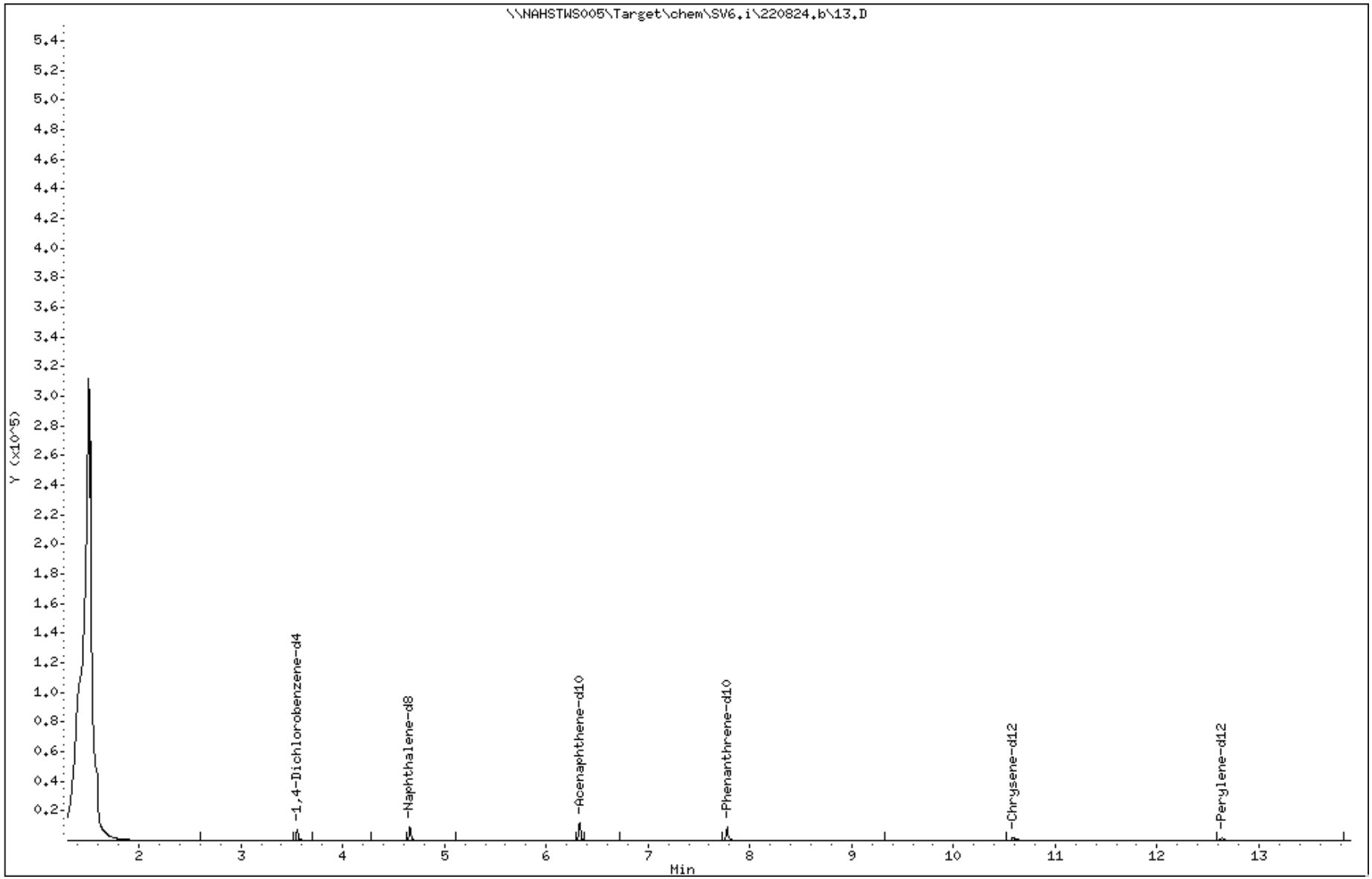
Sample Info: HS22080522-03X1H

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\13.D

Date : 24-AUG-2022 15:13

Client ID:

Instrument: SV6.i

Sample Info: HS22080522-03X1H

Purge Volume: 1000.0

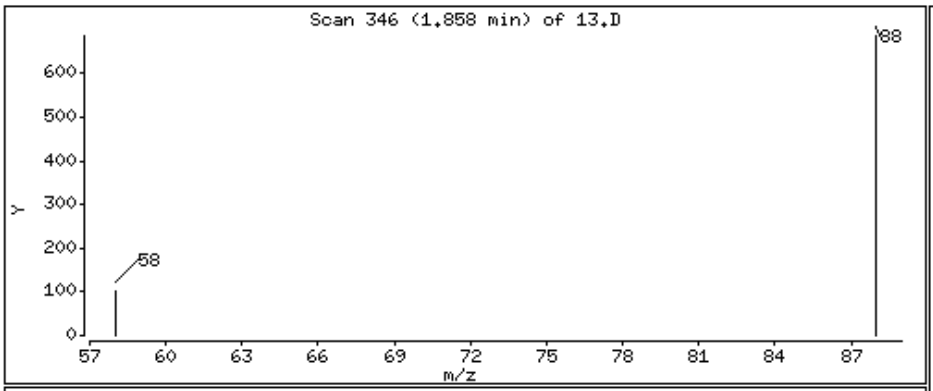
Operator: LG

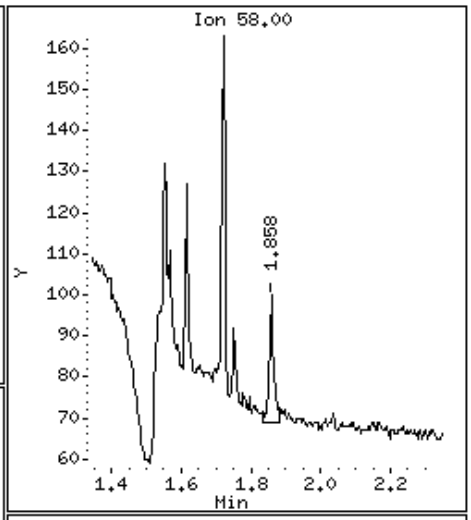
Column phase: RTX-5SIL MS

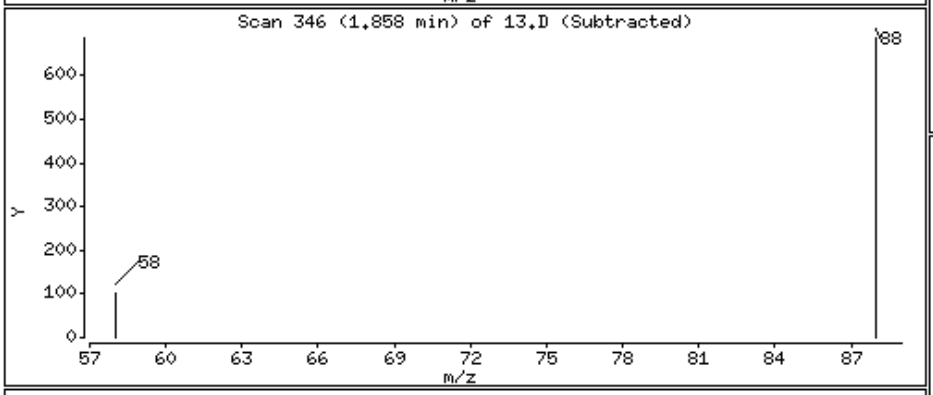
Column diameter: 0.28

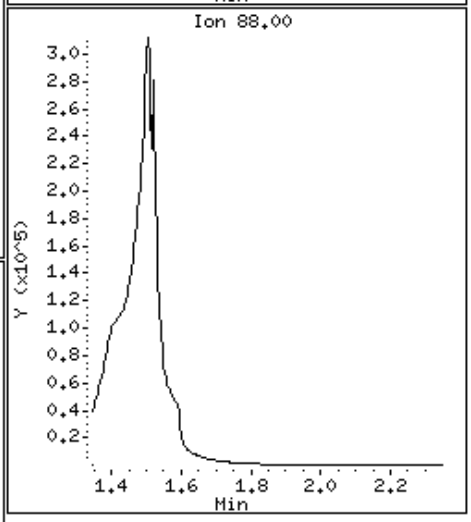
1 1,4-Dioxane

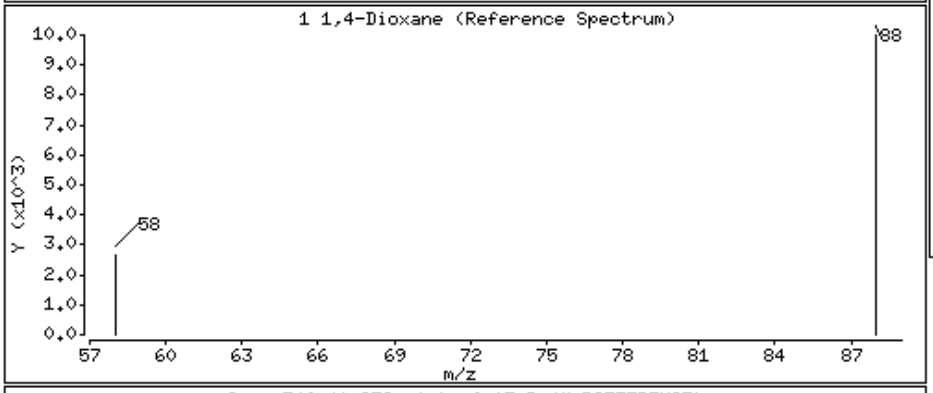
Concentration: 1.706 ug/L

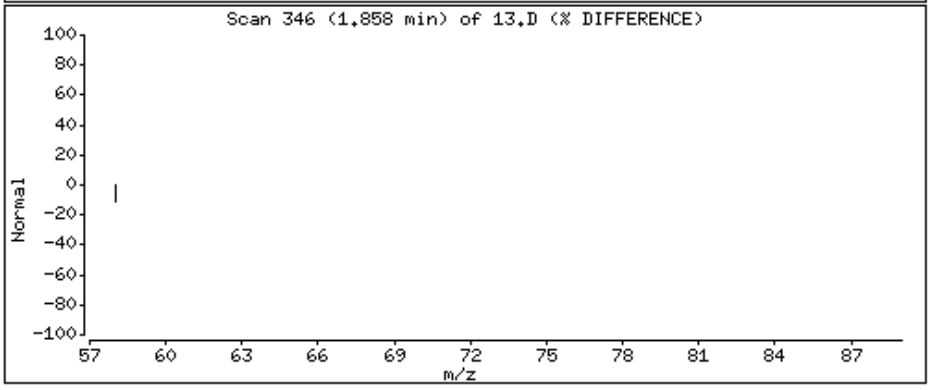










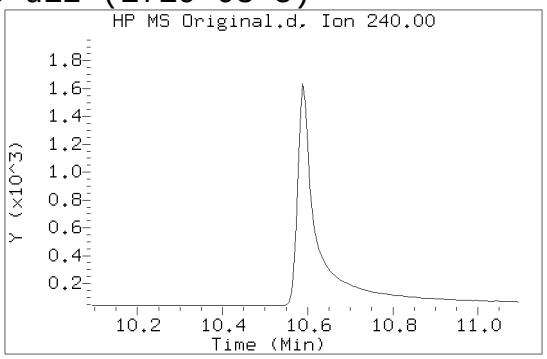


Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\13.D
Inj Date : 24-AUG-2022 15:13
InstruID : SV6.i
LabSampID : HS22080522-03

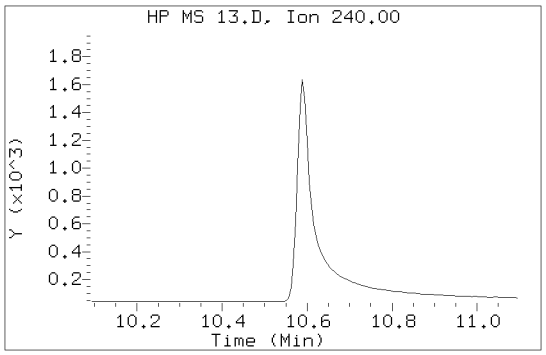
Chrysene-d12 (1719-03-5)

Reason Code:

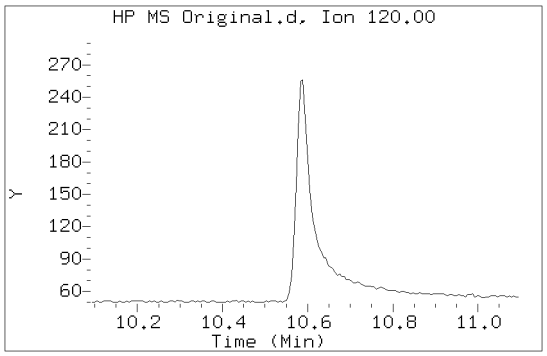
BEFORE
MASS
240
AREA
0
HEIGHT
0
24-Aug-2022
15:29
ALSHS
Server



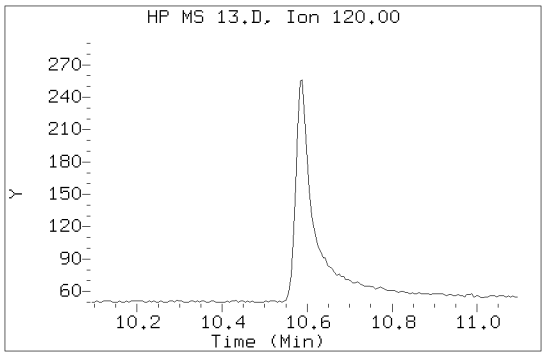
AFTER
MASS
240
AREA
5703
HEIGHT
1590
24-Aug-2022
15:50
ALSHS
S



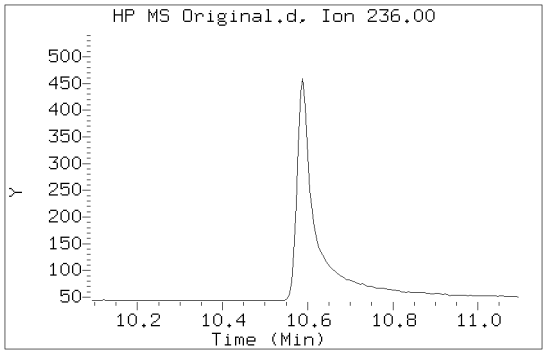
BEFORE
MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
15:29
ALSHS
Server



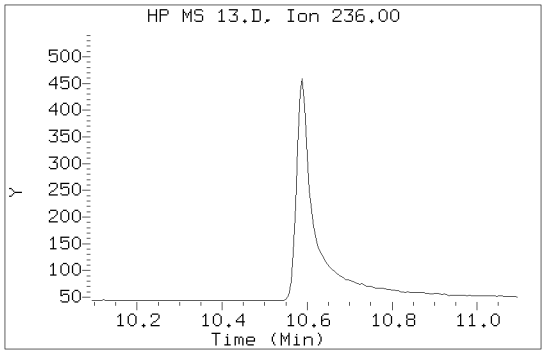
AFTER
MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



BEFORE
MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
15:29
ALSHS
Server



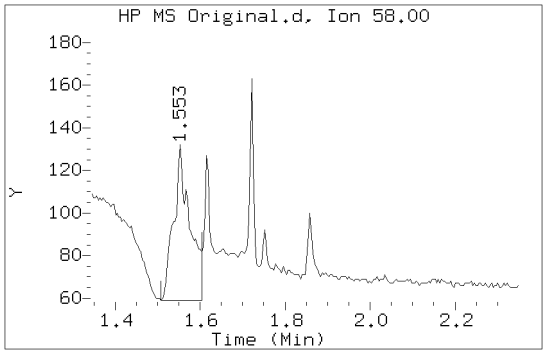
AFTER
MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



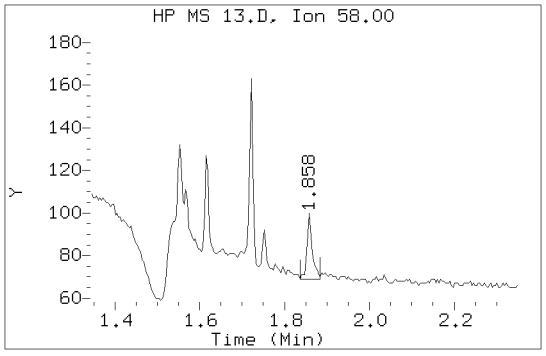
1,4-Dioxane ()

Reason Code:

BEFORE
MASS
58
AREA
193
HEIGHT
73
24-Aug-2022
15:29
ALSHS
Server



AFTER
MASS
58
AREA
26
HEIGHT
31
24-Aug-2022
15:50
ALSHS
S



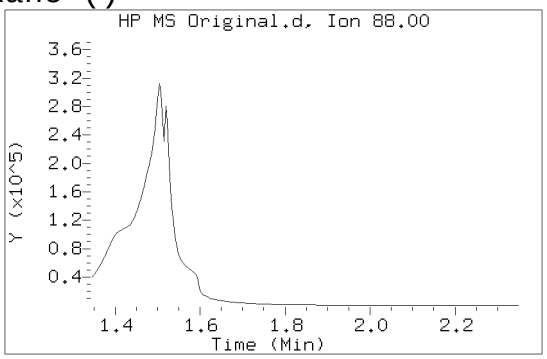
Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\13.D
Inj Date : 24-AUG-2022 15:13
InstruID : SV6.i
LabSampID : HS22080522-03

1,4-Dioxane ()

Reason Code:

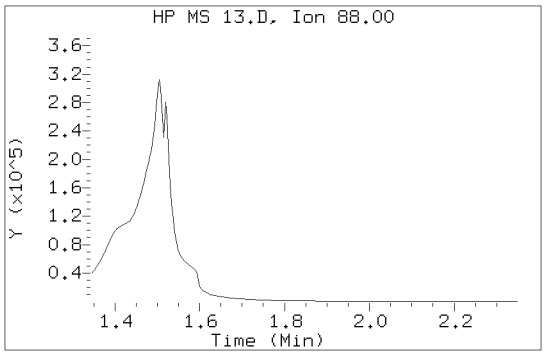
BEFORE

MASS
88
AREA
0
HEIGHT
0
24-Aug-2022
15:29
ALSHS
Server



AFTER

MASS
88
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\14.D Page 1
Report Date: 24-Aug-2022 15:50

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220824.b\14.D
Lab Smp Id: HS22080522-08
Inj Date : 24-AUG-2022 15:31
Operator : LG Inst ID: SV6.i
Smp Info : HS22080522-08X20
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220824.b\DXSIM.m
Meth Date : 24-Aug-2022 15:42 jjuarez Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 14
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	20.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.557	3.552	(1.000)	3738	0.10000	(aQ)
* 45 Naphthalene-d8	136	4.660	4.660	(1.000)	14197	0.10000	
$ 33 Nitrobenzene-d5	82	4.029	4.019	(0.865)	147	0.00311	0.06212(M)
* 86 Acenaphthene-d10	164	6.330	6.330	(1.000)	8205	0.10000	(Q)
$ 69 2-Fluorobiphenyl	172	5.685	5.681	(0.898)	363	0.00284	0.05684(M)
* 126 Phenanthrene-d10	188	7.775	7.780	(1.000)	12563	0.10000	
* 182 Chrysene-d12	240	10.588	10.594	(1.000)	5217	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.356	9.356	(0.884)	287	0.00293	0.05852(M)
* 198 Perylene-d12	264	12.640	12.645	(1.000)	3407	0.10000	
1 1,4-Dioxane	58	1.858	1.847	(0.522)	360	0.23459	4.692(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01135481

Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\14.D

Date : 24-AUG-2022 15:31

Client ID: HS22080522-08

Instrument: SV6.i

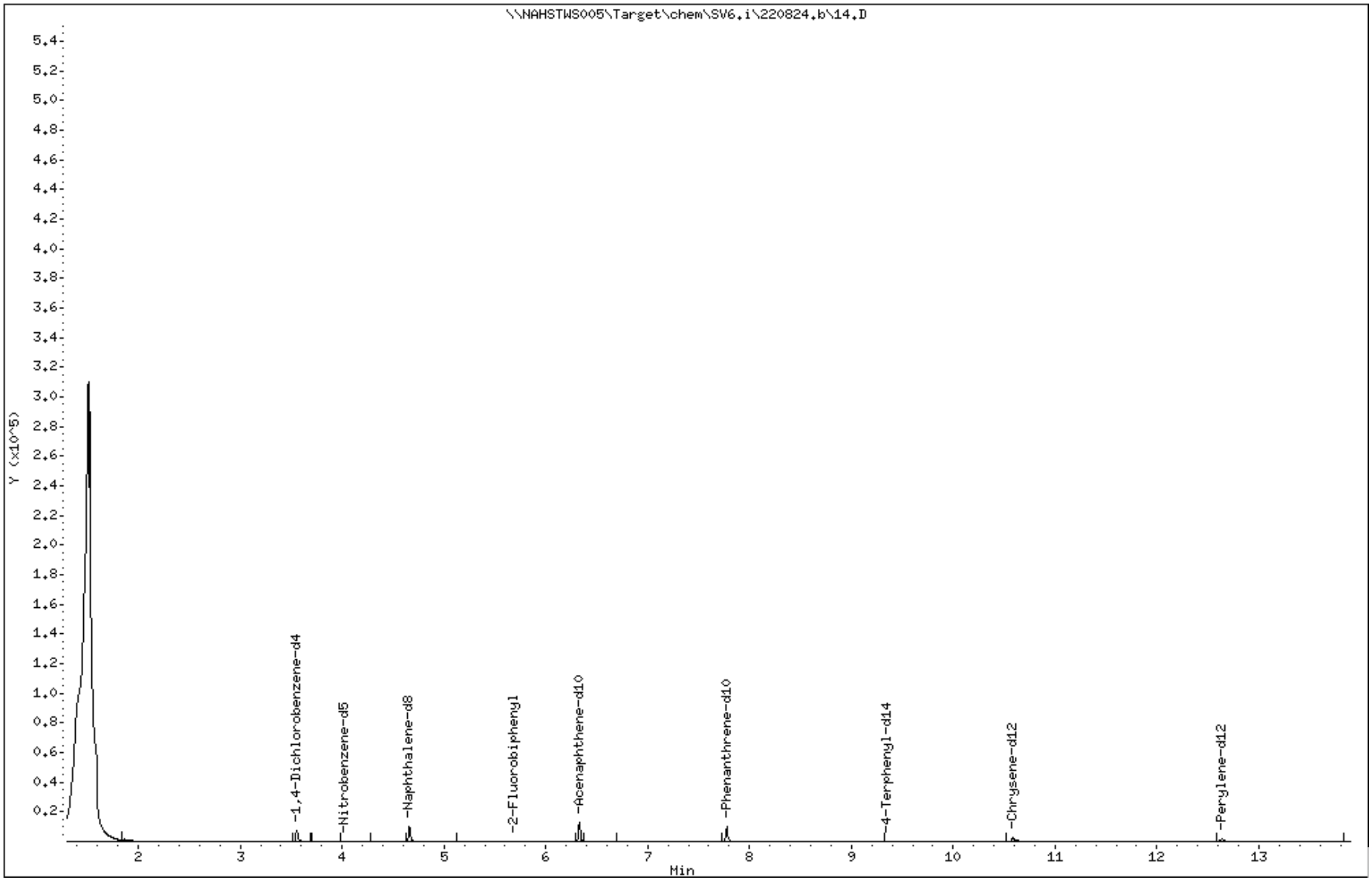
Sample Info: HS22080522-08X20

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\14.D

Date : 24-AUG-2022 15:31

Client ID: HS22080522-08

Instrument: SV6.i

Sample Info: HS22080522-08X20

Purge Volume: 1000.0

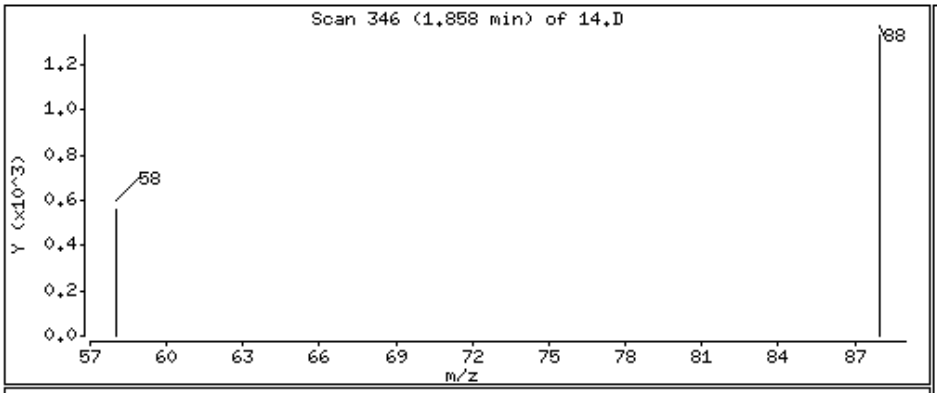
Operator: LG

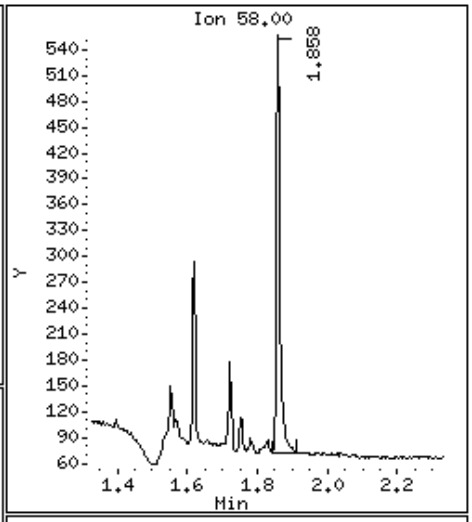
Column phase: RTX-5SIL MS

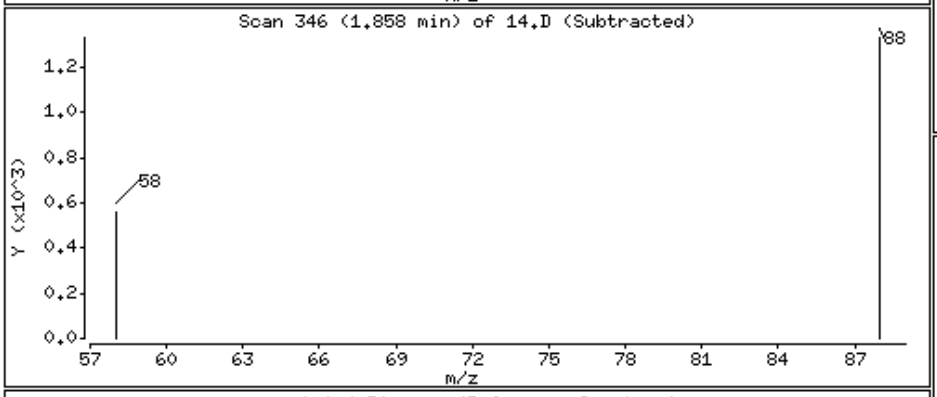
Column diameter: 0.28

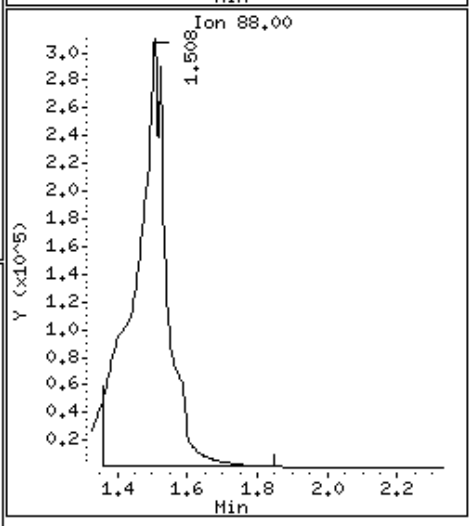
1 1,4-Dioxane

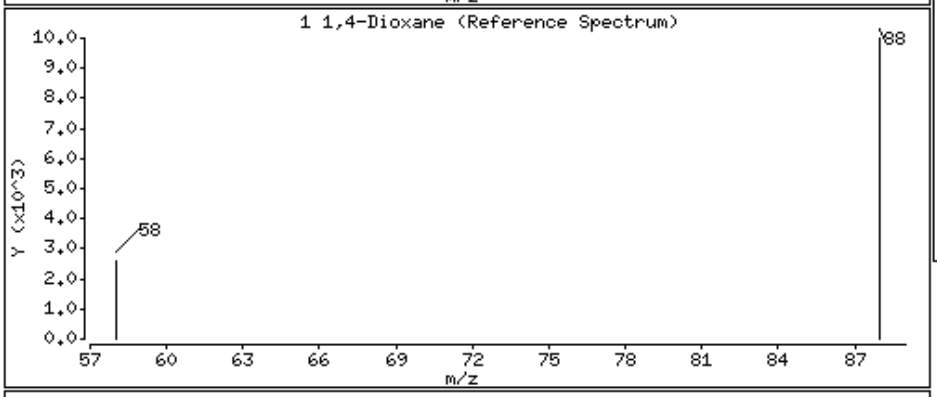
Concentration: 4.692 ug/L

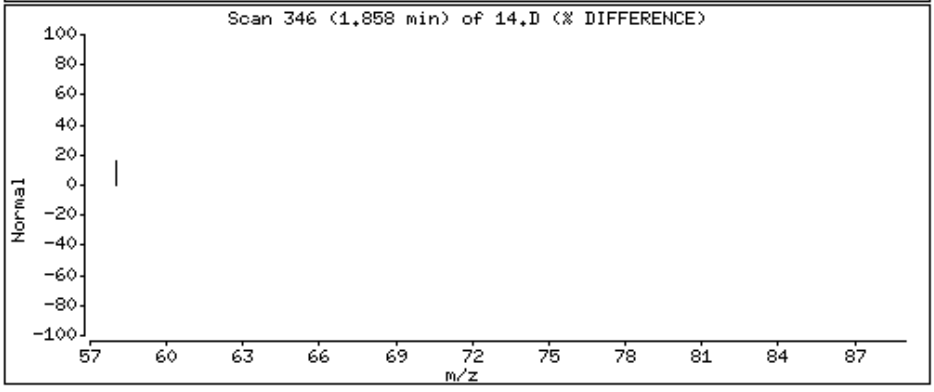












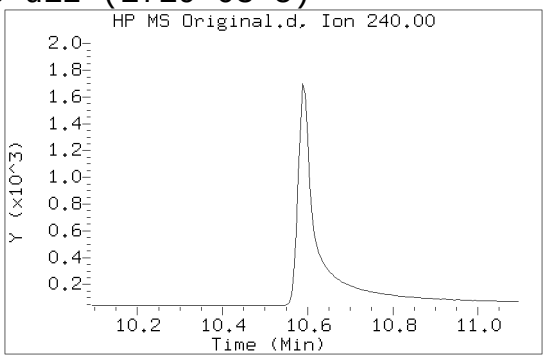
Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\14.D
Inj Date : 24-AUG-2022 15:31
InstruID : SV6.i
LabSampID : HS22080522-08

Chrysene-d12 (1719-03-5)

Reason Code:

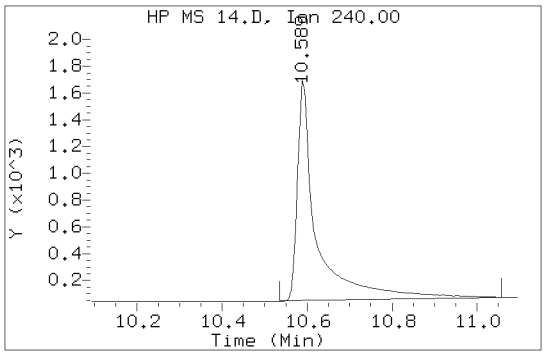
BEFORE

MASS
240
AREA
0
HEIGHT
0
24-Aug-2022
15:47
ALSHS
Server



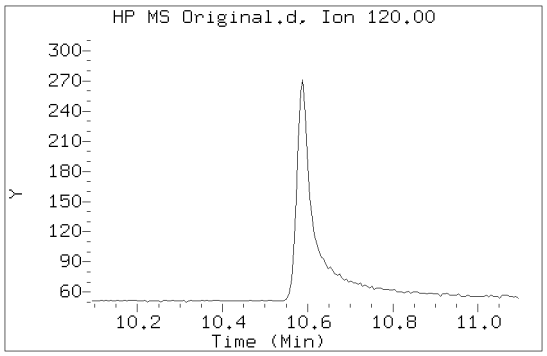
AFTER

MASS
240
AREA
5217
HEIGHT
1648
24-Aug-2022
15:50
ALSHS
S



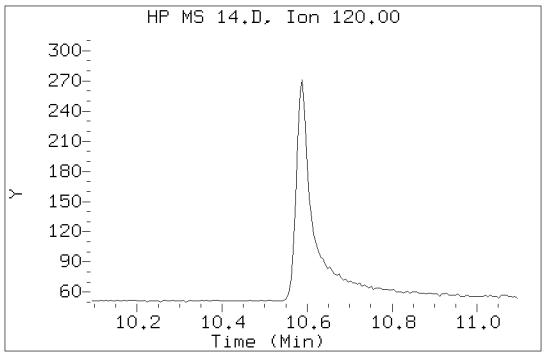
BEFORE

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
15:47
ALSHS
Server



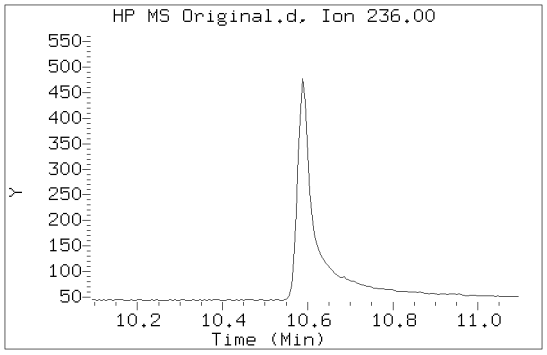
AFTER

MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



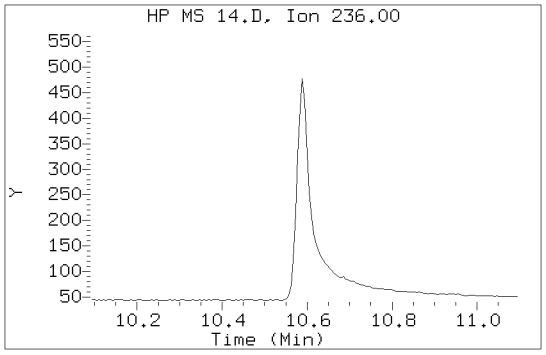
BEFORE

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
15:47
ALSHS
Server



AFTER

MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S

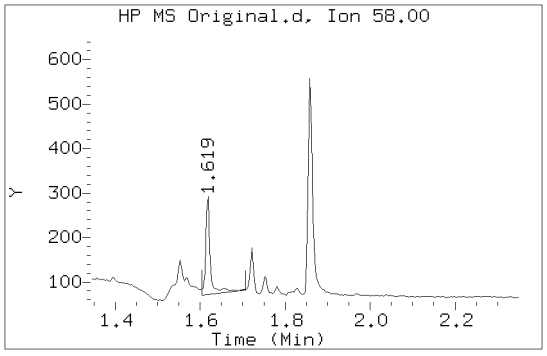


1,4-Dioxane ()

Reason Code:

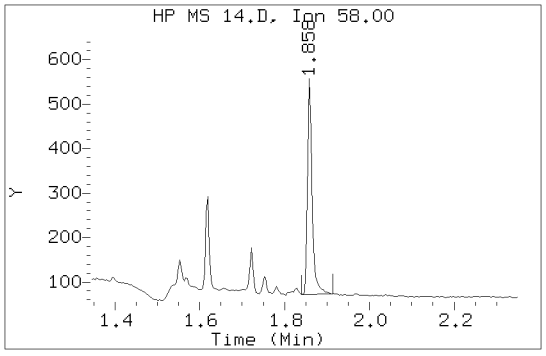
BEFORE

MASS
58
AREA
163
HEIGHT
221
24-Aug-2022
15:47
ALSHS
Server



AFTER

MASS
58
AREA
360
HEIGHT
484
24-Aug-2022
15:50
ALSHS
S



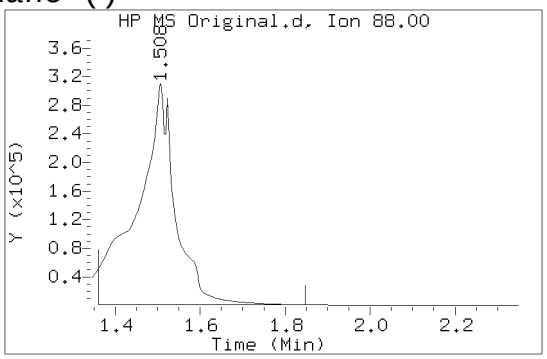
Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\14.D
Inj Date : 24-AUG-2022 15:31
InstruID : SV6.i
LabSampID : HS22080522-08

1,4-Dioxane ()

Reason Code:

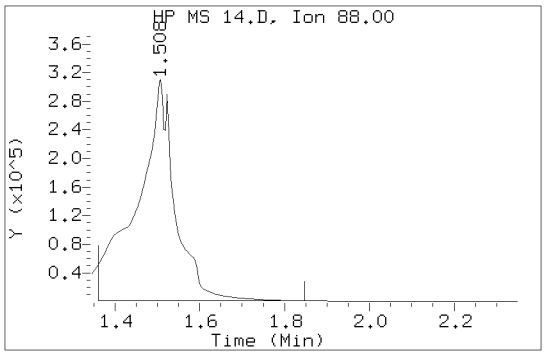
BEFORE

MASS
88
AREA
1941552
HEIGHT
309235
24-Aug-2022
15:47
ALSHS
Server



AFTER

MASS
88
AREA
1941552
HEIGHT
309235
24-Aug-2022
15:50
ALSHS
S

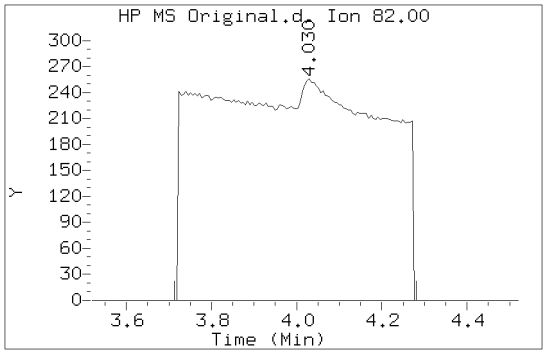


Nitrobenzene-d5 (4165-60-0)

Reason Code:

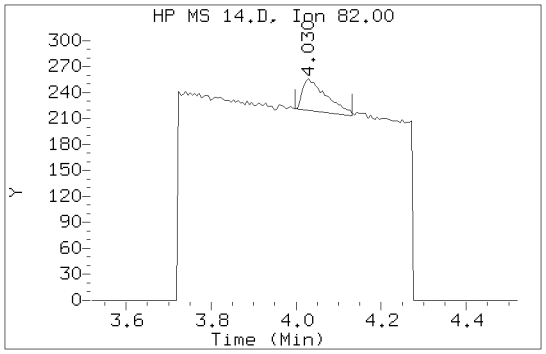
BEFORE

MASS
82
AREA
7482
HEIGHT
256
24-Aug-2022
15:47
ALSHS
Server



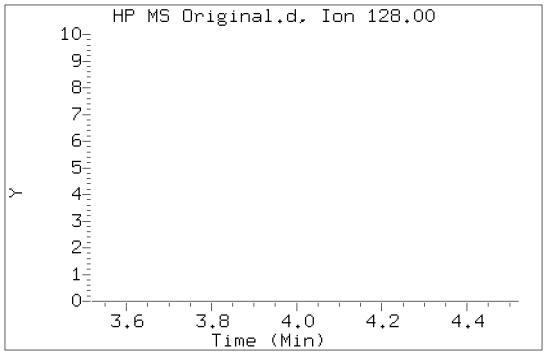
AFTER

MASS
82
AREA
147
HEIGHT
36
24-Aug-2022
15:50
ALSHS
S



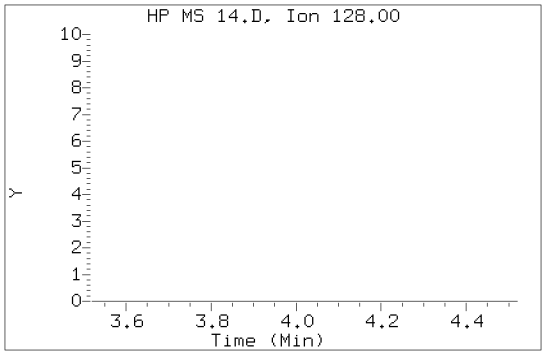
BEFORE

MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
15:47
ALSHS
Server



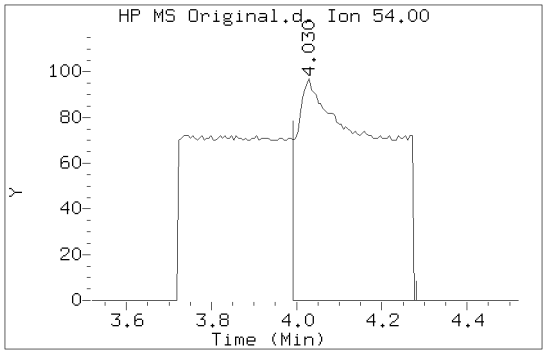
AFTER

MASS
128
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



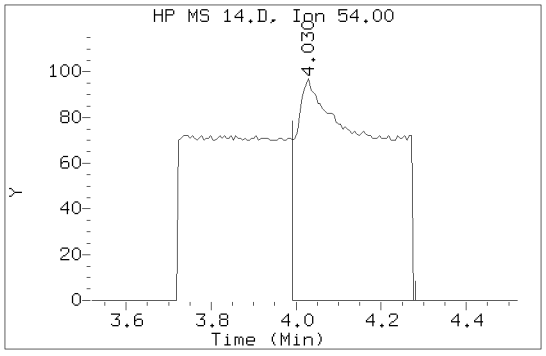
BEFORE

MASS
54
AREA
1304
HEIGHT
97
24-Aug-2022
15:47
ALSHS
Server



AFTER

MASS
54
AREA
1304
HEIGHT
97
24-Aug-2022
15:50
ALSHS
S



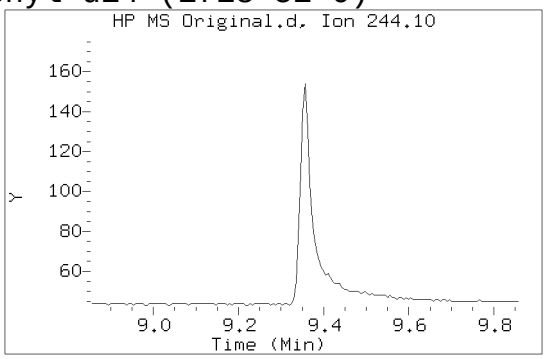
Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\14.D
Inj Date : 24-AUG-2022 15:31
InstruID : SV6.i
LabSampID : HS22080522-08

4-Terphenyl-d14 (1718-51-0)

Reason Code:

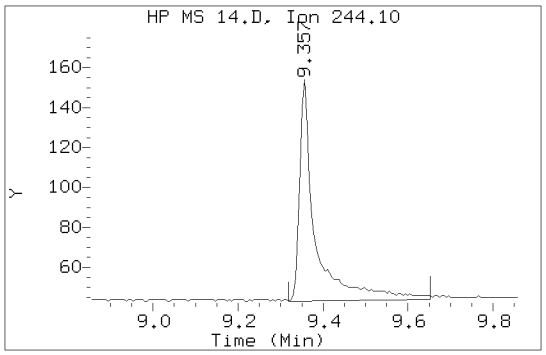
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
24-Aug-2022
15:47
ALSHS
Server



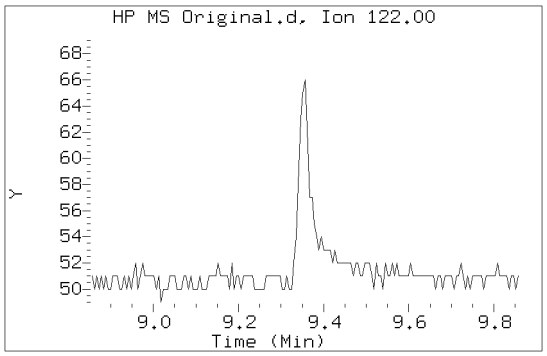
AFTER

MASS
244.1
AREA
287
HEIGHT
110
24-Aug-2022
15:50
ALSHS
S



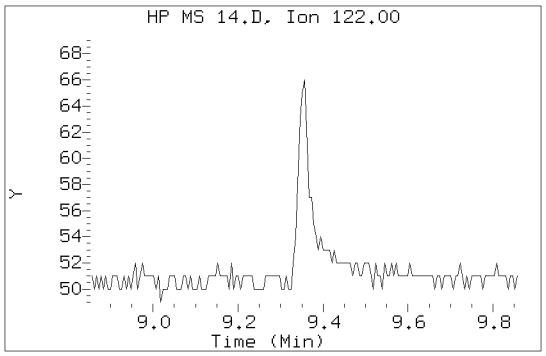
BEFORE

MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
15:47
ALSHS
Server



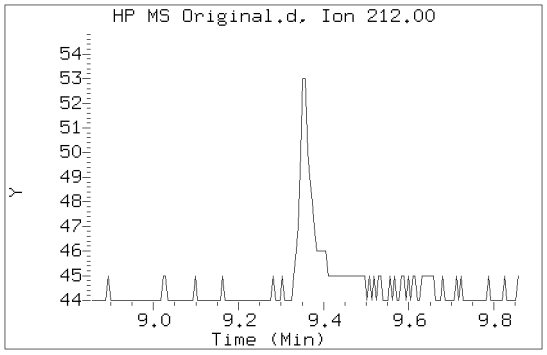
AFTER

MASS
122
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S



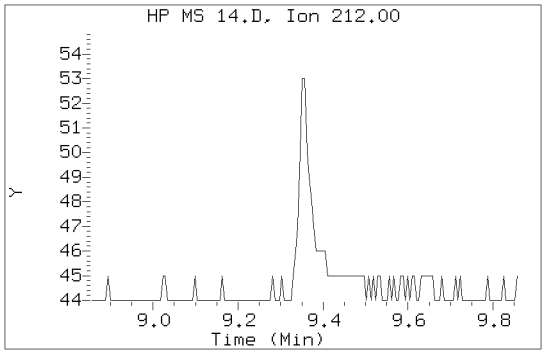
BEFORE

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
15:47
ALSHS
Server



AFTER

MASS
212
AREA
0
HEIGHT
0
24-Aug-2022
15:50
ALSHS
S

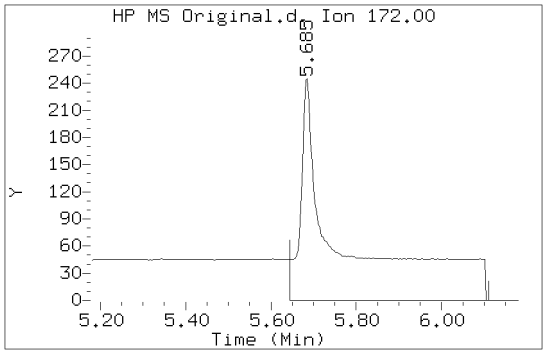


2-Fluorobiphenyl (321-60-8)

Reason Code:

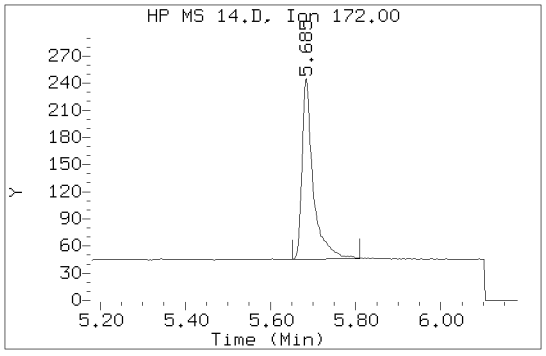
BEFORE

MASS
172
AREA
1625
HEIGHT
245
24-Aug-2022
15:47
ALSHS
Server



AFTER

MASS
172
AREA
363
HEIGHT
199
24-Aug-2022
15:50
ALSHS
S



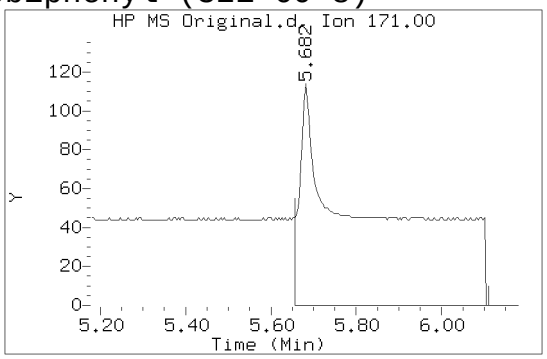
Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\14.D
Inj Date : 24-AUG-2022 15:31
InstruID : SV6.i
LabSampID : HS22080522-08

2-Fluorobiphenyl (321-60-8)

Reason Code:

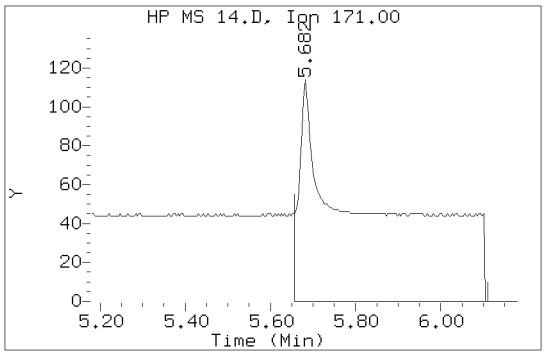
BEFORE

MASS
171
AREA
1327
HEIGHT
114
24-Aug-2022
15:47
ALSHS
Server



AFTER

MASS
171
AREA
1327
HEIGHT
114
24-Aug-2022
15:50
ALSHS
S



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\15.D Page 1
Report Date: 24-Aug-2022 16:09

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220824.b\15.D
Lab Smp Id: HS22080522-10
Inj Date : 24-AUG-2022 15:49
Operator : LG Inst ID: SV6.i
Smp Info : HS22080522-10X1H
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\220824.b\DXSIM.m
Meth Date : 24-Aug-2022 15:42 jjuarez Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 15
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7122

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	100.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	
* 20 1,4-Dichlorobenzene-d4	152	3.552	3.552	(1.000)	3492	0.10000		(aQ)
* 45 Naphthalene-d8	136	4.660	4.660	(1.000)	13179	0.10000		
* 86 Acenaphthene-d10	164	6.330	6.330	(1.000)	7582	0.10000		(Q)
* 126 Phenanthrene-d10	188	7.780	7.780	(1.000)	11434	0.10000		
* 182 Chrysene-d12	240	10.594	10.594	(1.000)	4903	0.10000		(M)
* 198 Perylene-d12	264	12.645	12.645	(1.000)	2726	0.10000		
1 1,4-Dioxane	58	1.843	1.847	(0.519)	221	0.15416	15.42	(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01135488

Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\15.D

Page 1

Date : 24-AUG-2022 15:49

Client ID:

Instrument: SV6.i

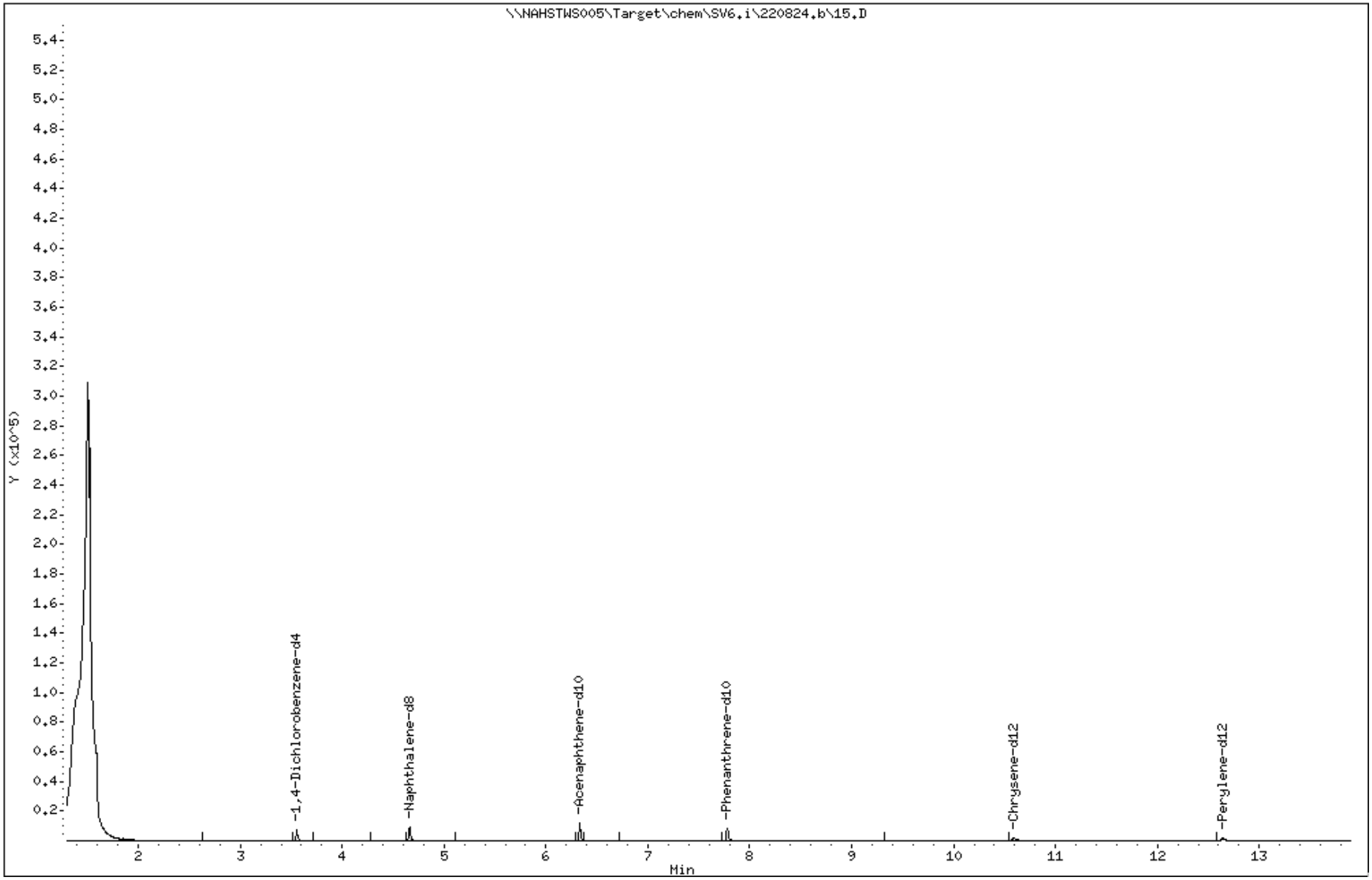
Sample Info: HS22080522-10X1H

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\15.D

Date : 24-AUG-2022 15:49

Client ID:

Instrument: SV6.i

Sample Info: HS22080522-10X1H

Purge Volume: 1000.0

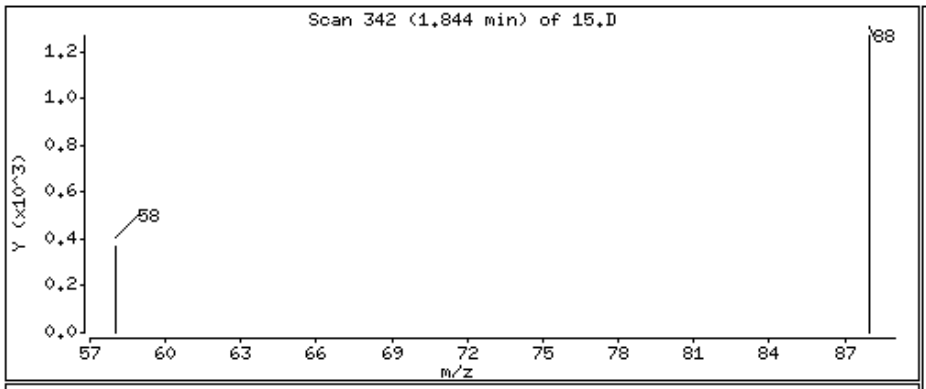
Operator: LG

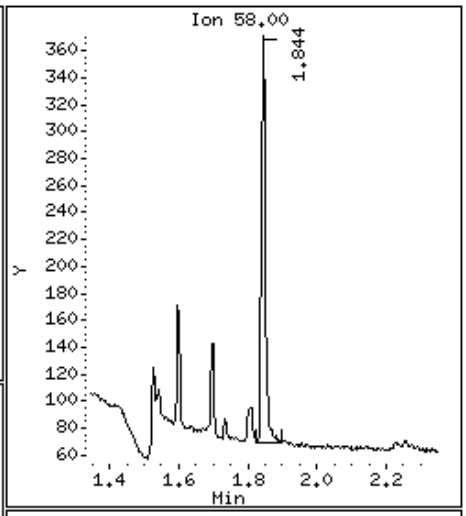
Column phase: RTX-5SIL MS

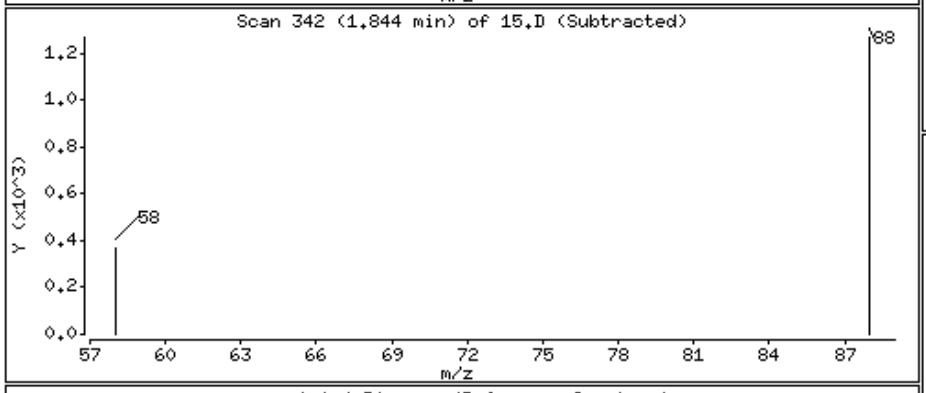
Column diameter: 0.28

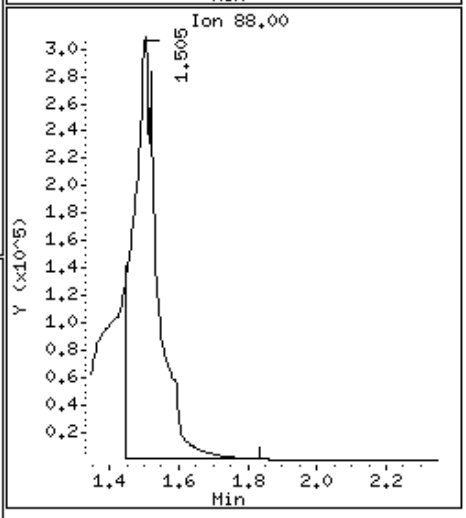
1 1,4-Dioxane

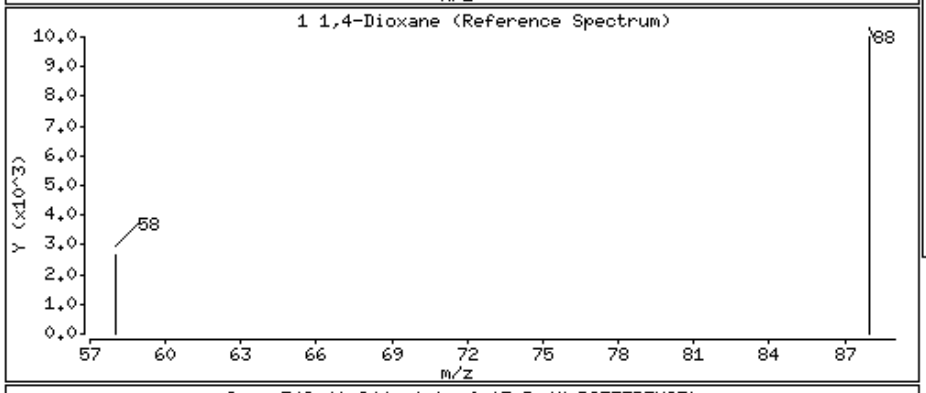
Concentration: 15.42 ug/L

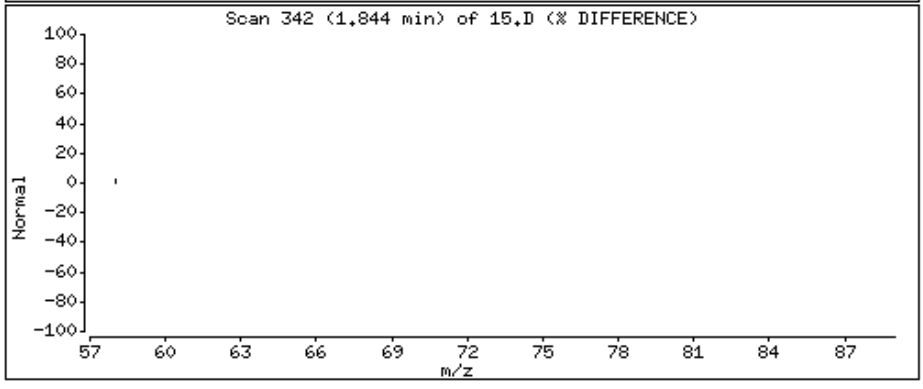










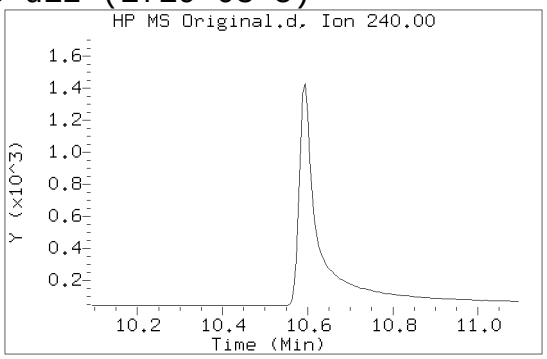


Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\15.D
Inj Date : 24-AUG-2022 15:49
InstruID : SV6.i
LabSampID : HS22080522-10

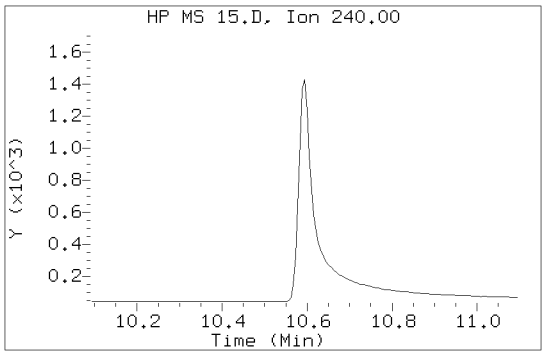
Chrysene-d12 (1719-03-5)

Reason Code:

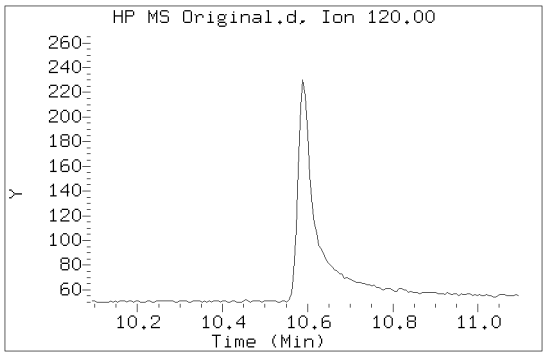
BEFORE
MASS
240
AREA
0
HEIGHT
0
24-Aug-2022
16:04
ALSHS
Server



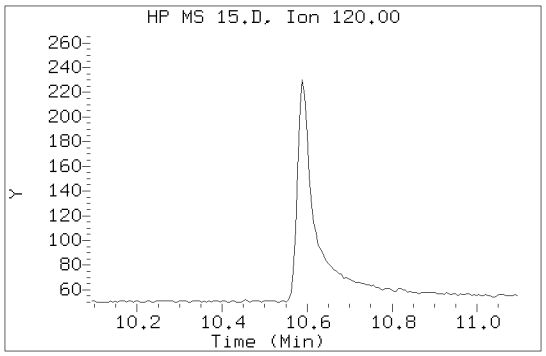
AFTER
MASS
240
AREA
4903
HEIGHT
1383
24-Aug-2022
16:09
ALSHS
S



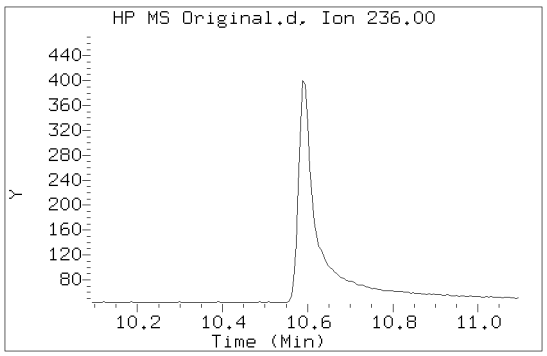
BEFORE
MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
16:04
ALSHS
Server



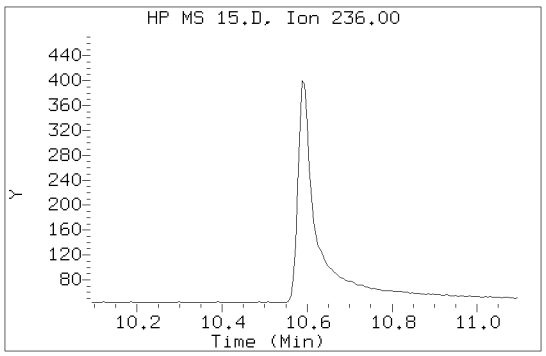
AFTER
MASS
120
AREA
0
HEIGHT
0
24-Aug-2022
16:09
ALSHS
S



BEFORE
MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
16:04
ALSHS
Server



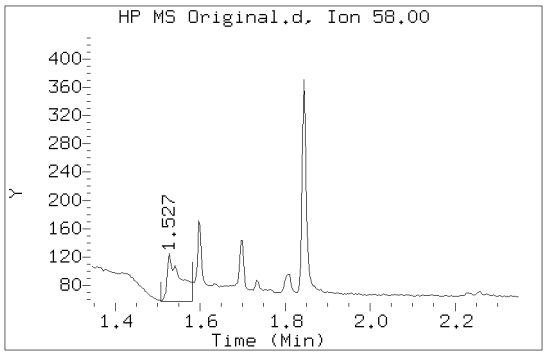
AFTER
MASS
236
AREA
0
HEIGHT
0
24-Aug-2022
16:09
ALSHS
S



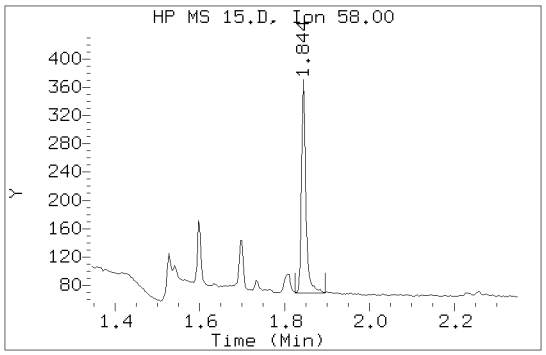
1,4-Dioxane ()

Reason Code:

BEFORE
MASS
58
AREA
148
HEIGHT
68
24-Aug-2022
16:04
ALSHS
Server



AFTER
MASS
58
AREA
221
HEIGHT
302
24-Aug-2022
16:09
ALSHS
S



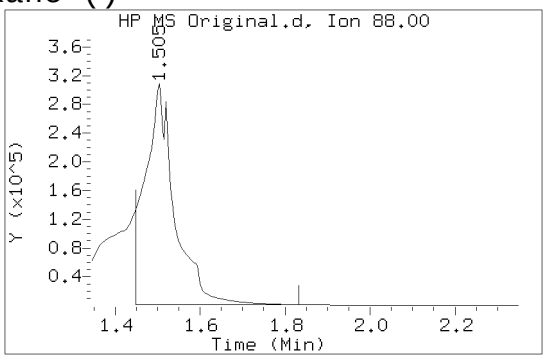
Data File : \\NAHSTWS005\Target\chem\SV6.i\220824.b\15.D
Inj Date : 24-AUG-2022 15:49
InstruID : SV6.i
LabSampID : HS22080522-10

1,4-Dioxane ()

Reason Code:

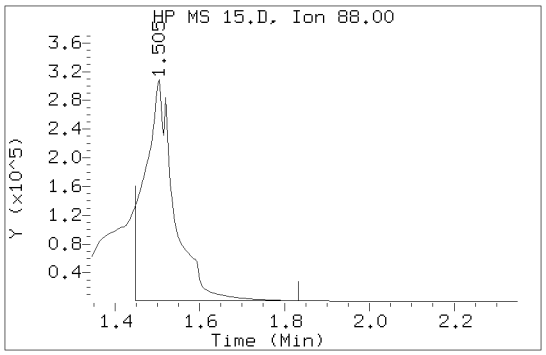
BEFORE

MASS
88
AREA
1474561
HEIGHT
307770
24-Aug-2022
16:04
ALSHS
Server



AFTER

MASS
88
AREA
1474561
HEIGHT
307770
24-Aug-2022
16:09
ALSHS
S



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\220824.b\33.D
Lab Smp Id: 1 4-DIOX-CCV Client Smp ID: 1 4-DIOX-CCV
Inj Date : 24-AUG-2022 21:12
Operator : LG Inst ID: SV6.i
Smp Info : 1 4-DIOX-0.08;1 4-DIOX-0.08;2
Misc Info :
Comment :
Method : \\nahstws005\Target\chem\SV6.i\220824.b\DXSIM.m
Meth Date : 30-Aug-2022 12:43 Linh.Pham Quant Type: ISTD
Cal Date : 10-MAR-2022 12:56 Cal File: 009.D
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTWS005

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	
* 20 1,4-Dichlorobenzene-d4	152	3.557	3.557	(1.000)	3119	0.10000		(aQ)
* 45 Naphthalene-d8	136	4.682	4.682	(1.000)	11675	0.10000		
$ 33 Nitrobenzene-d5	82	4.072	4.072	(0.870)	2276	0.08000	0.05848	(QM)
* 86 Acenaphthene-d10	164	6.351	6.351	(1.000)	6859	0.10000		(Q)
$ 69 2-Fluorobiphenyl	172	5.714	5.714	(0.900)	6713	0.08000	0.06288	(M)
* 126 Phenanthrene-d10	188	7.802	7.802	(1.000)	9884	0.10000		
* 182 Chrysene-d12	240	10.615	10.615	(1.000)	5614	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.378	9.378	(0.883)	5996	0.08000	0.05681	(M)
* 198 Perylene-d12	264	12.672	12.672	(1.000)	4222	0.10000		(M)
1 1,4-Dioxane	58	1.828	1.828	(0.514)	176	0.08000	0.1374	(QM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01135493

Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\33.D

Date : 24-AUG-2022 21:12

Client ID: 1 4-DIOX-CCV

Instrument: SV6.i

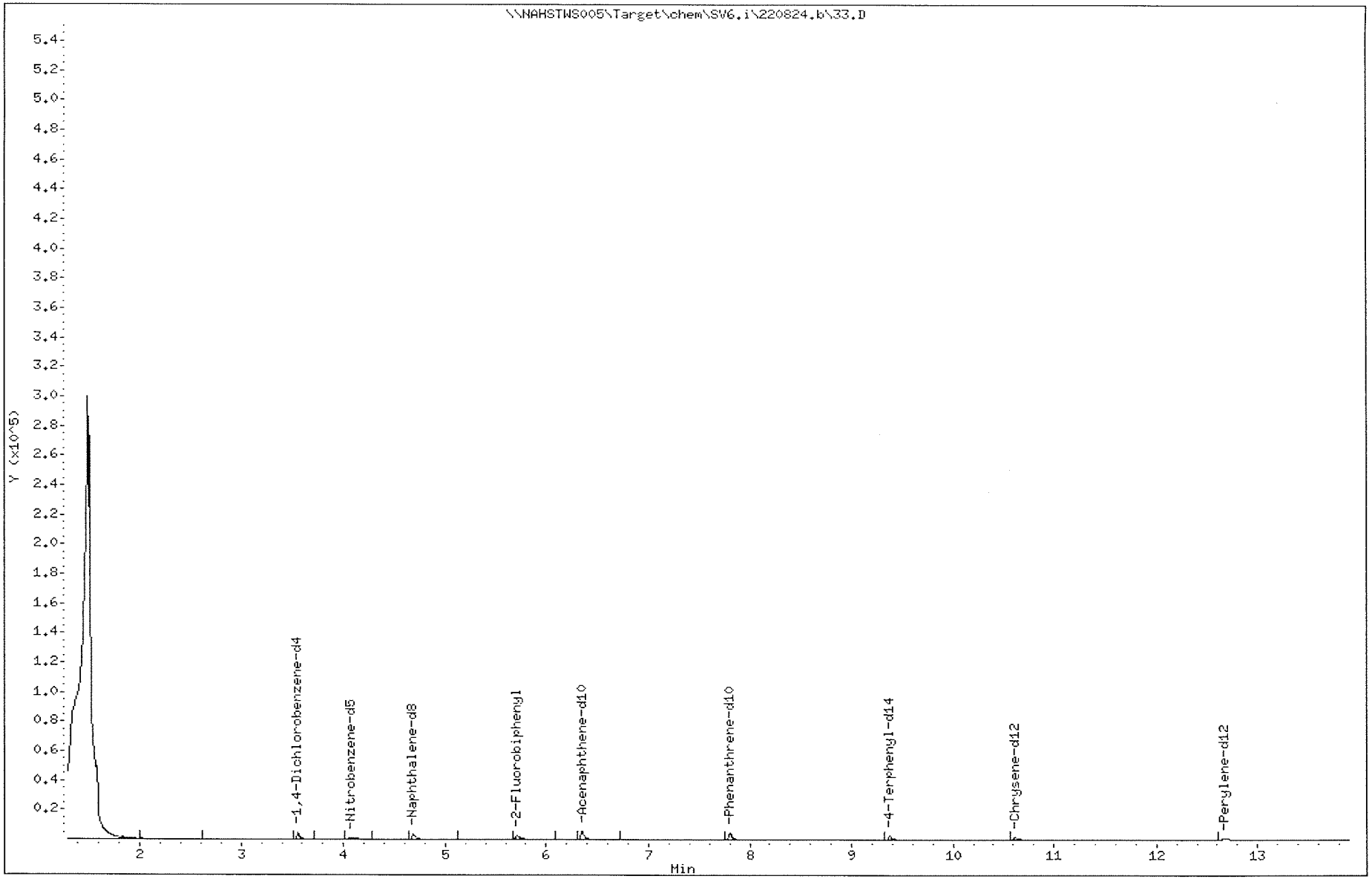
Sample Info: 1 4-DIOX-0.08;1 4-DIOX-0.08;2

Purge Volume: 1000.0

Operator: LC

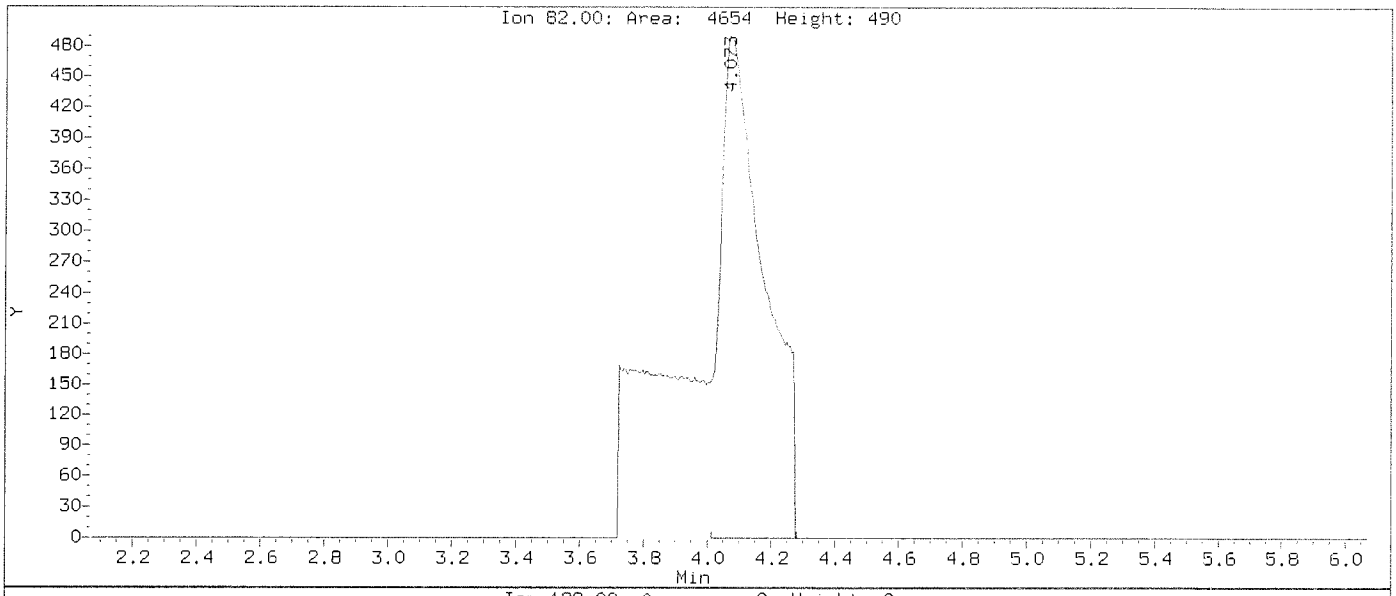
Column phase: RTX-5SIL MS

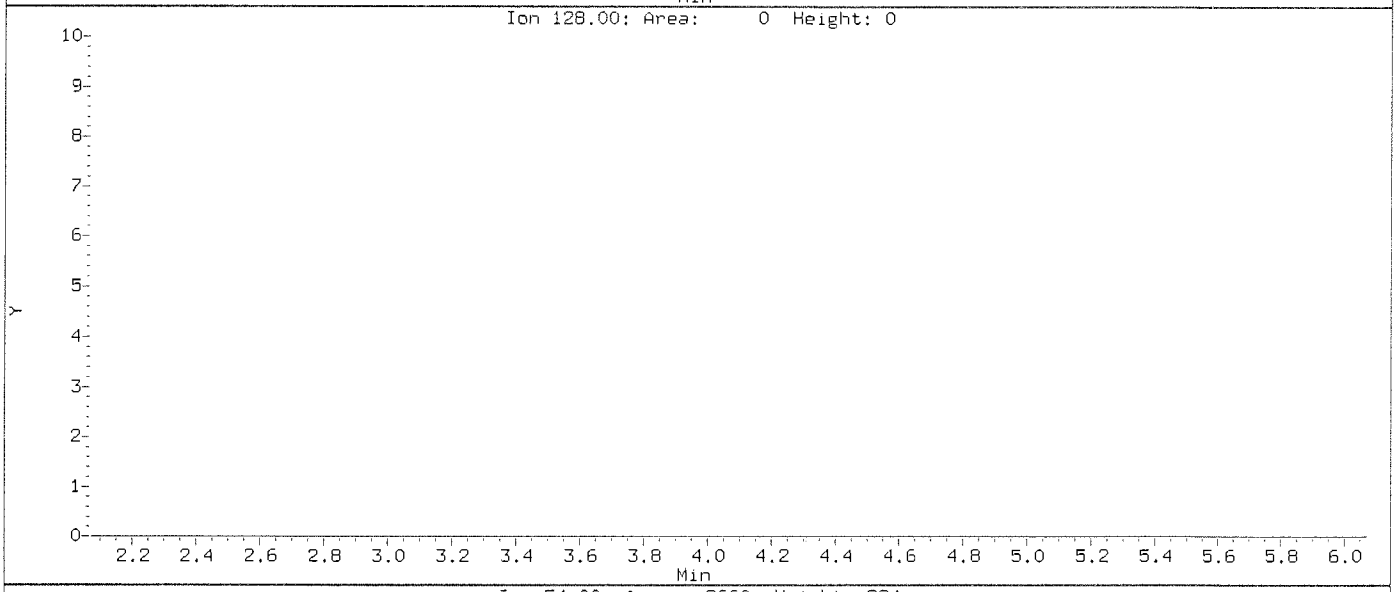
Column diameter: 0.28

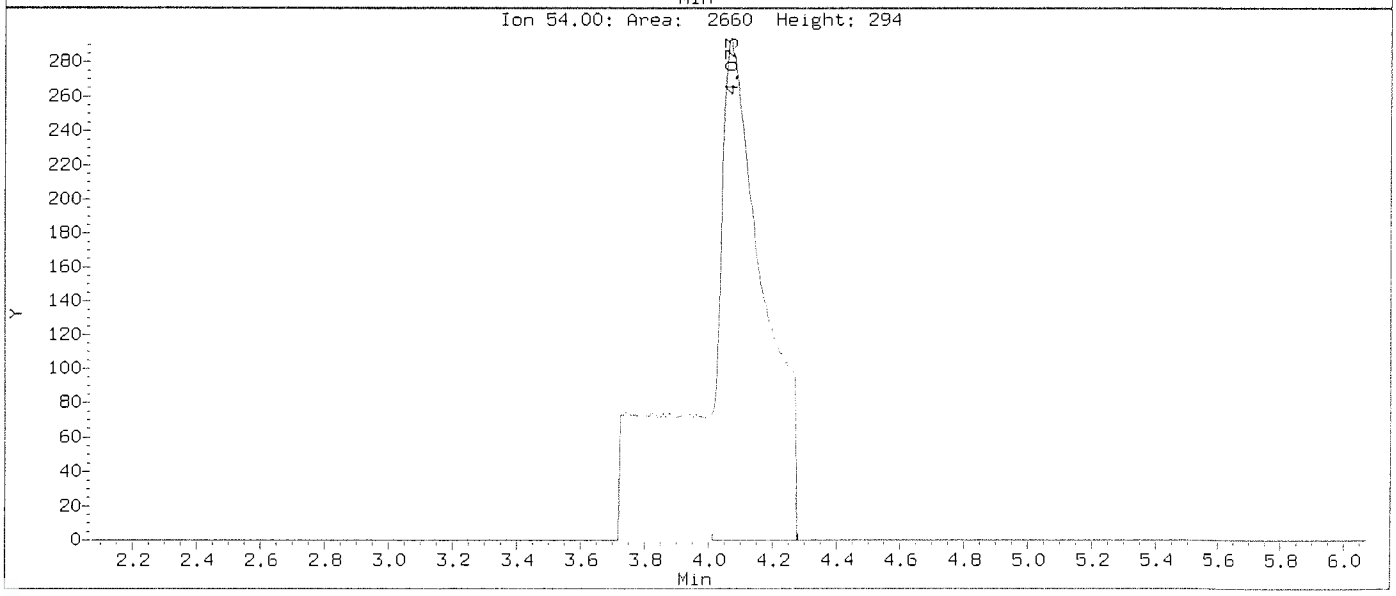


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: Nitrobenzene-d5
CAS Number: 4165-60-0

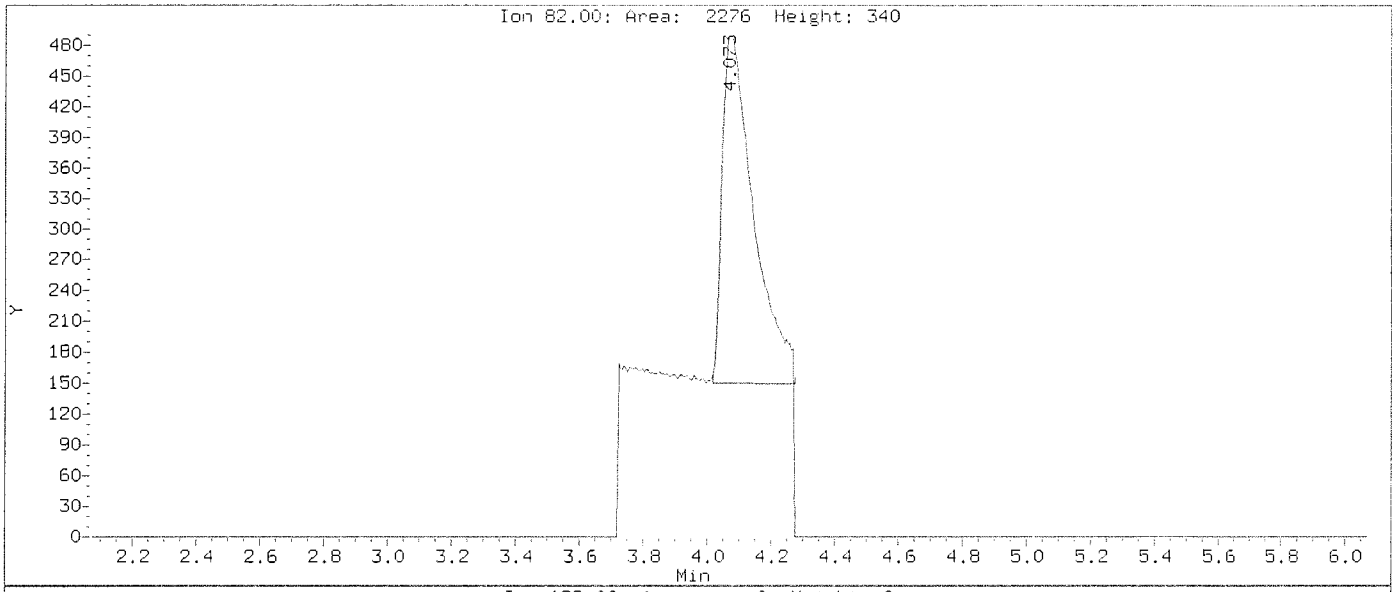


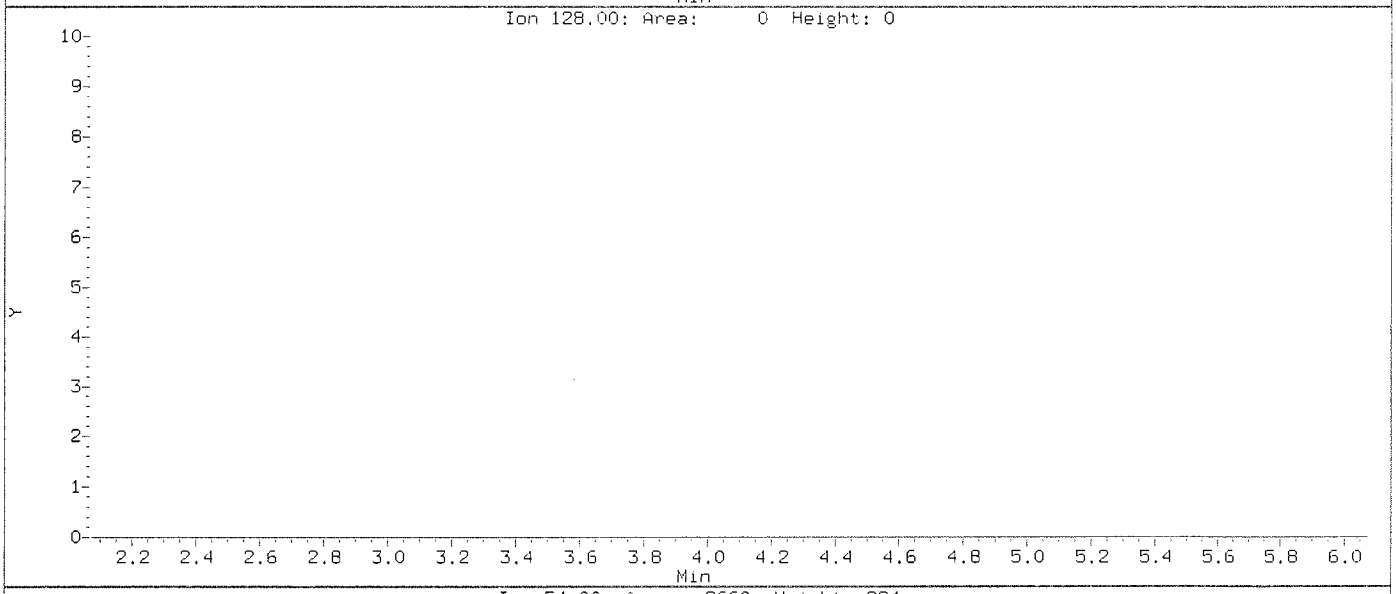


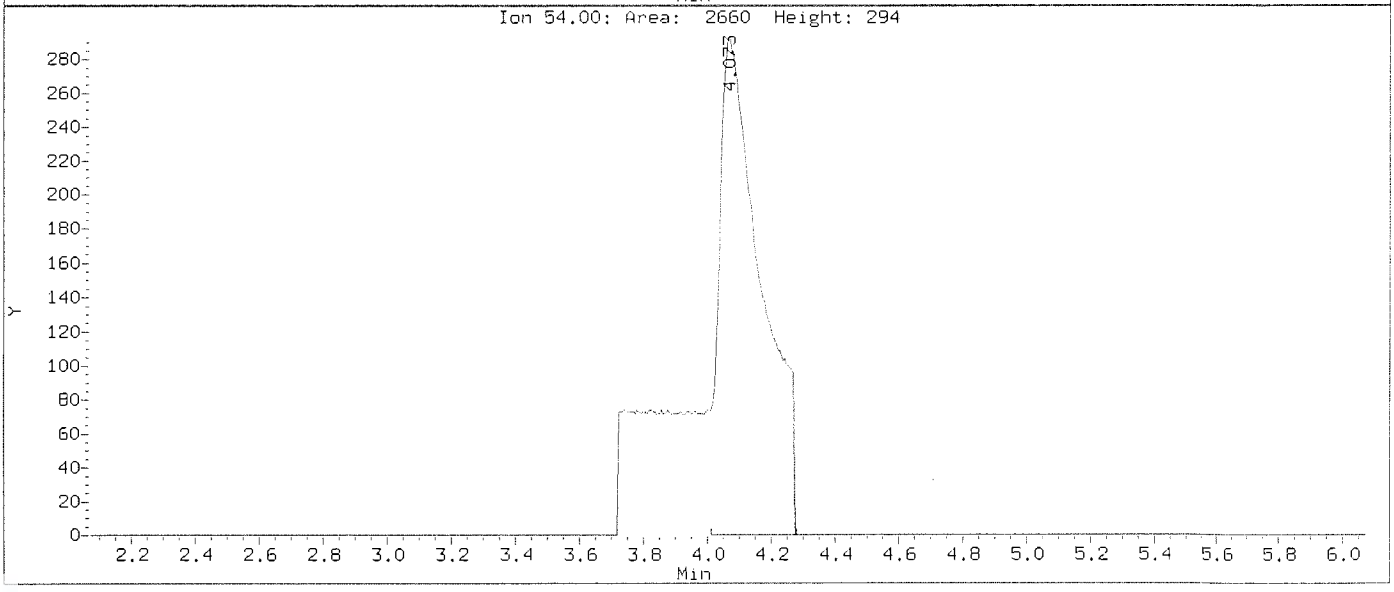


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: Nitrobenzene-d5
CAS Number: 4165-60-0

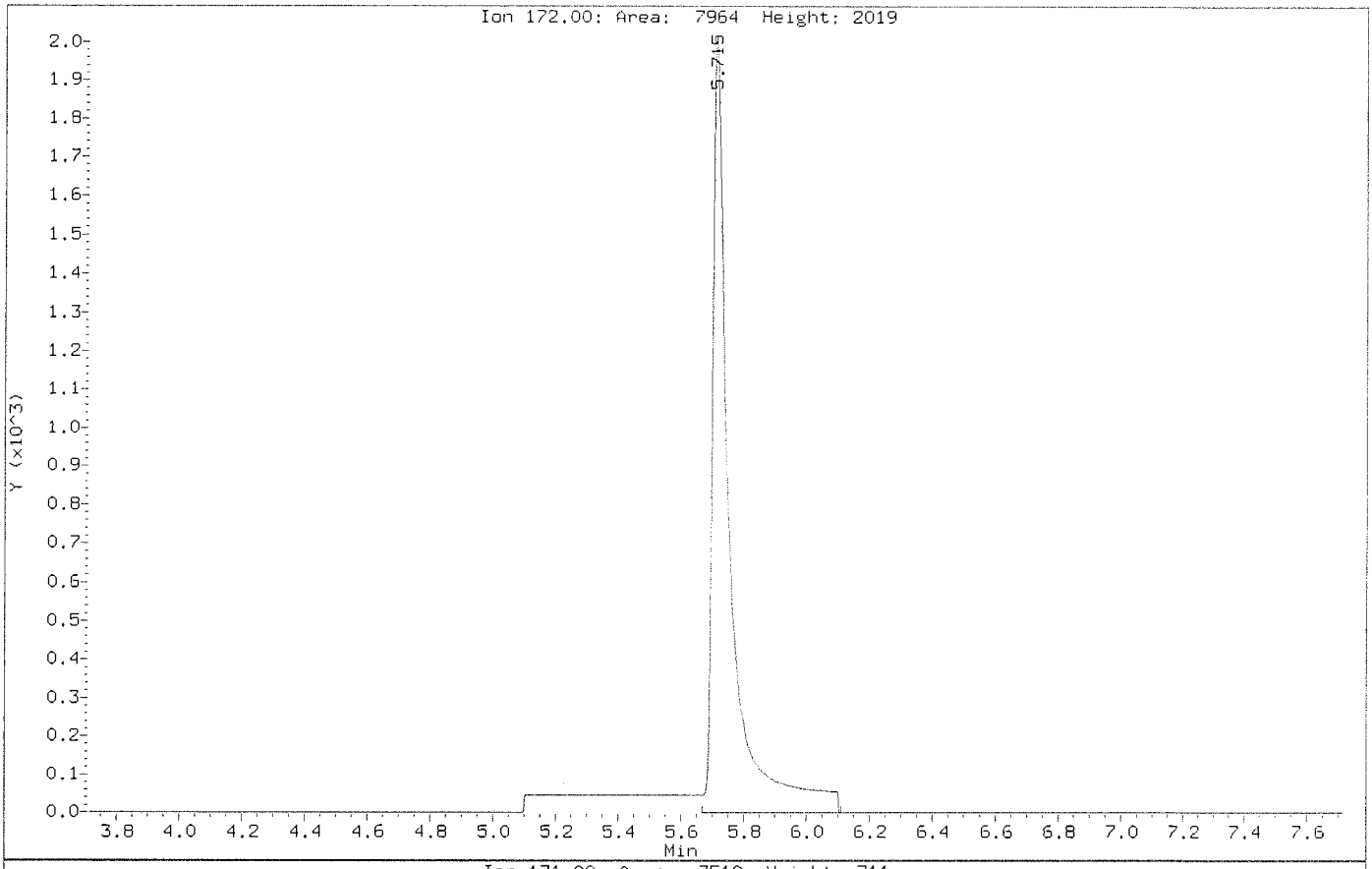


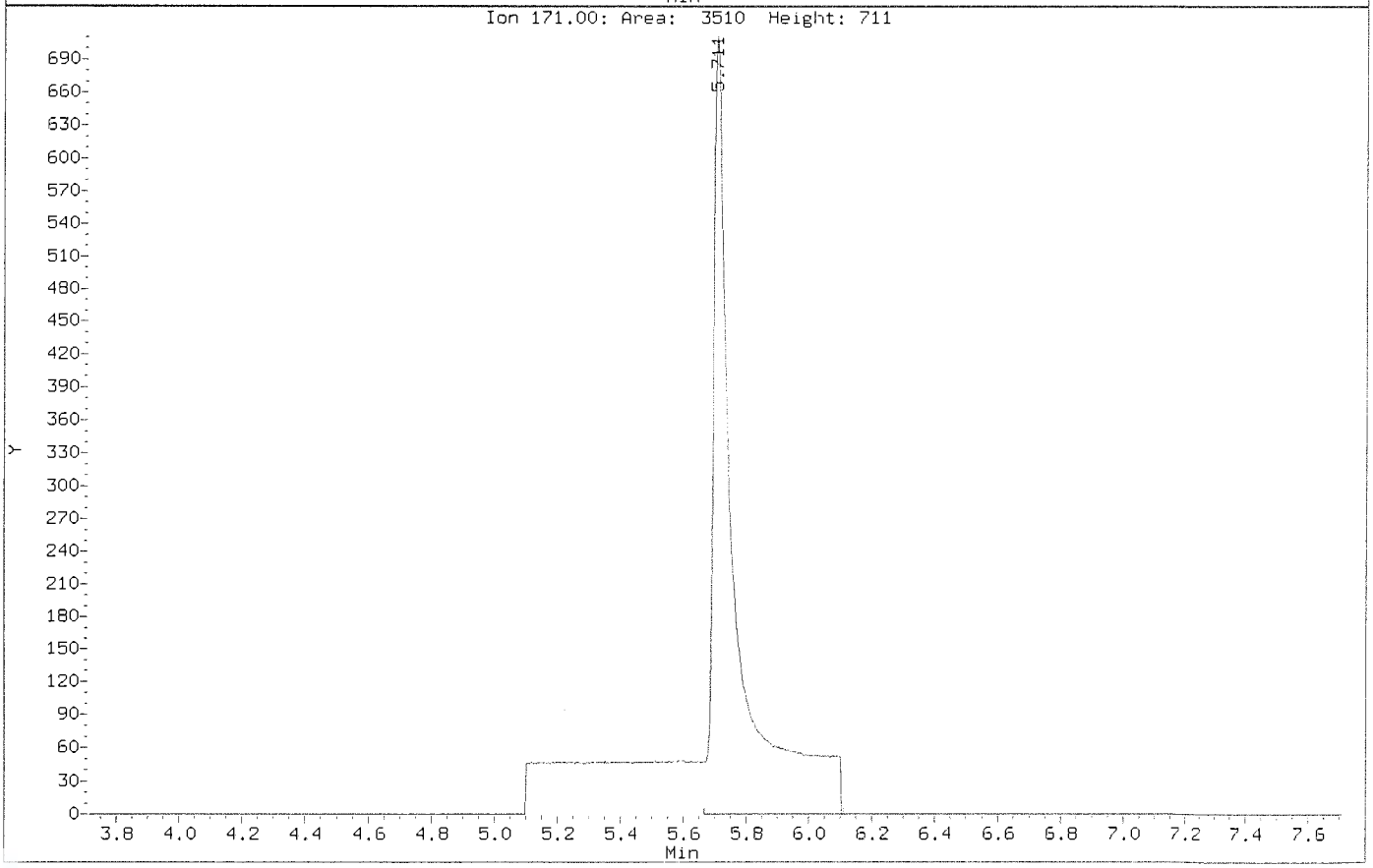




Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

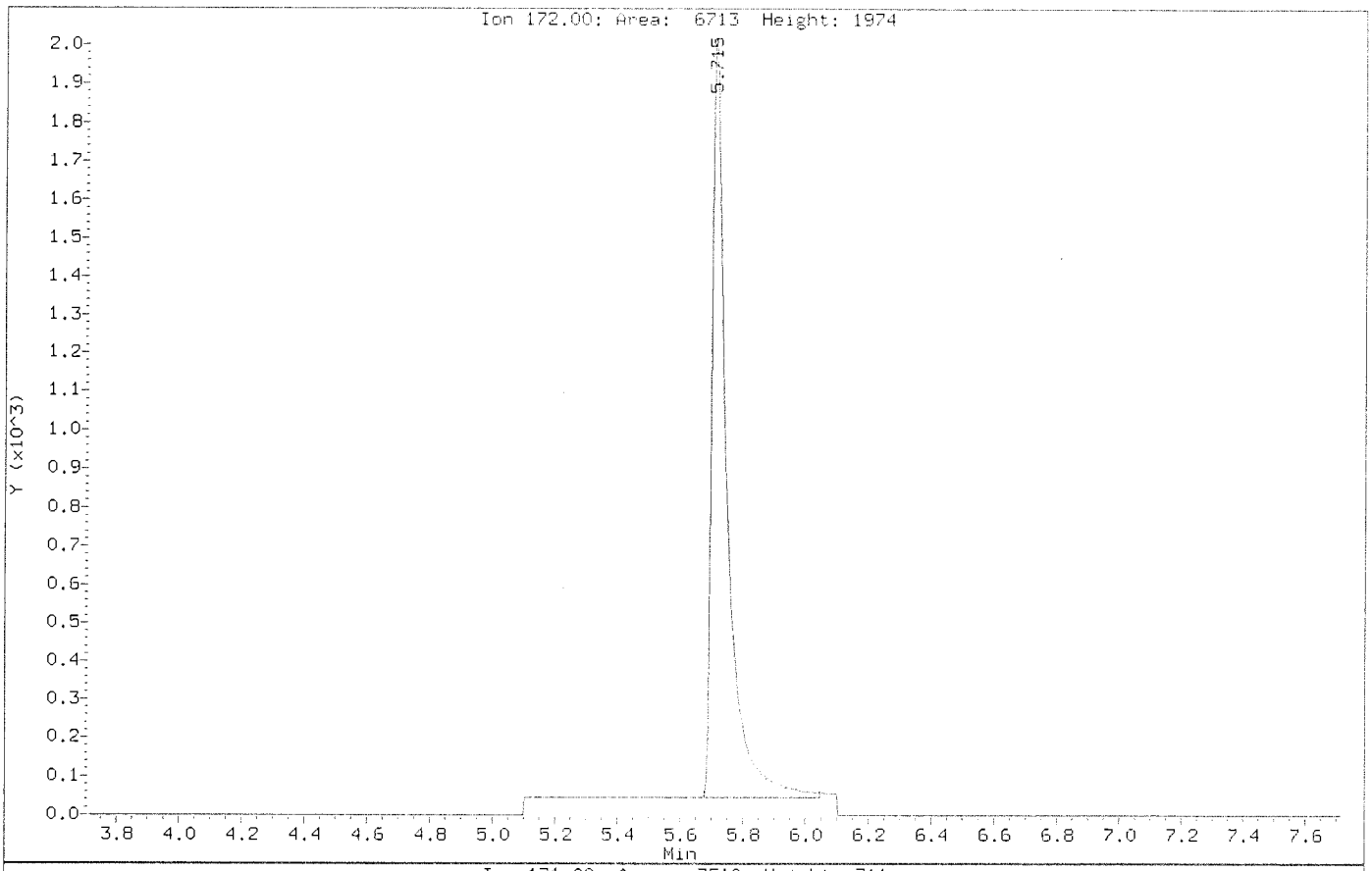
Compound: 2-Fluorobiphenyl
CAS Number: 321-60-8

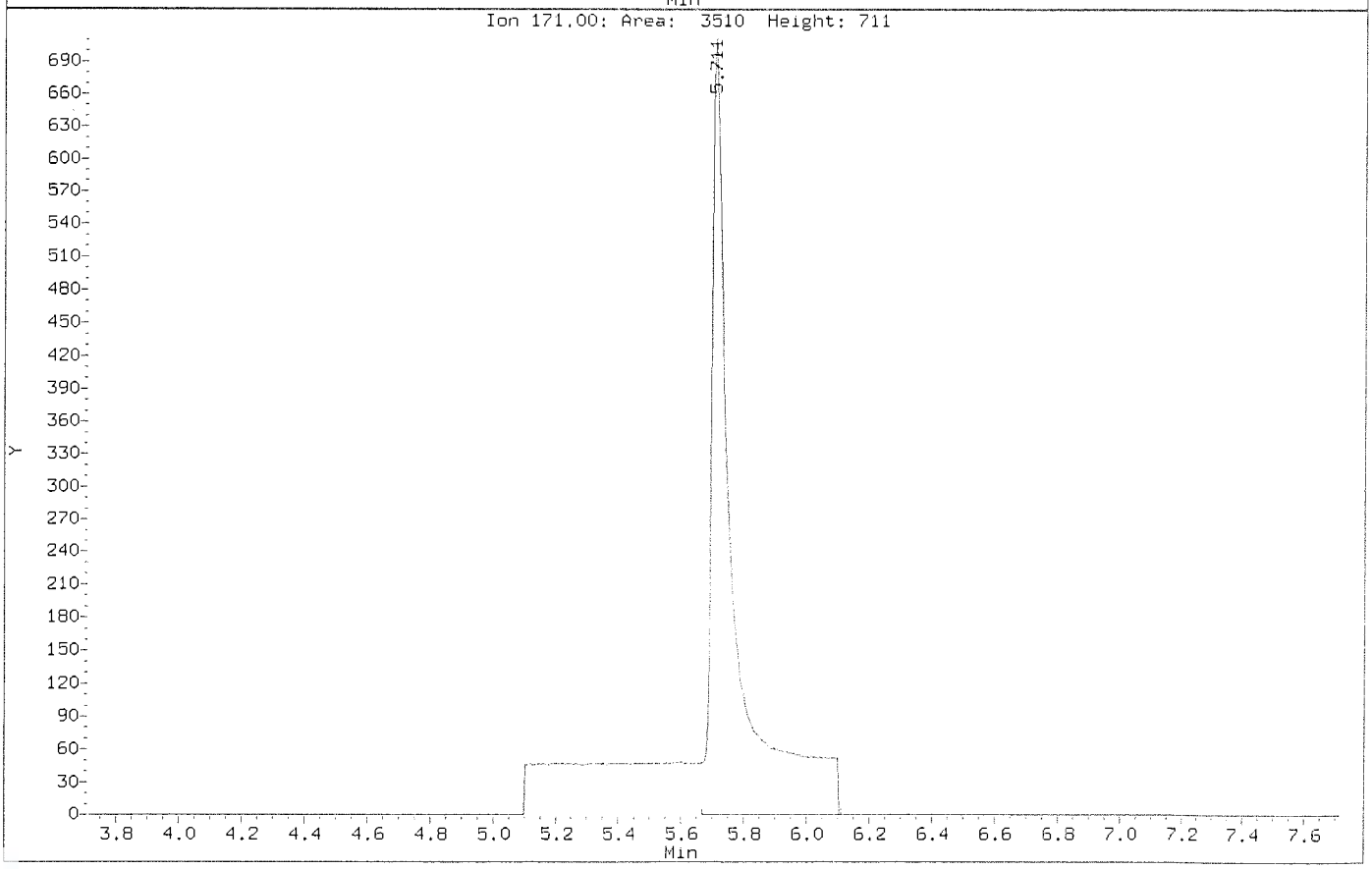




Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

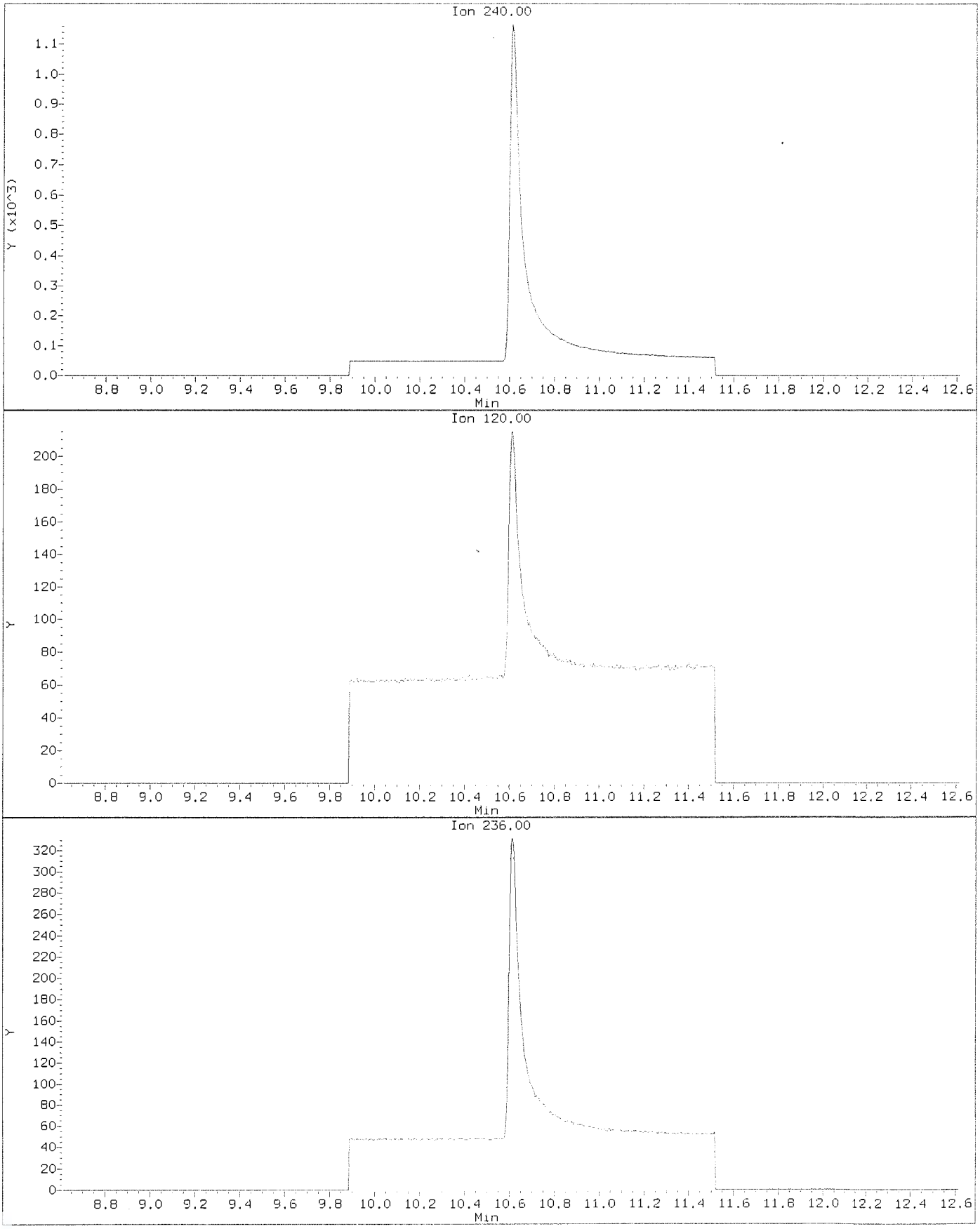
Compound: 2-Fluorobiphenyl
CAS Number: 321-60-8





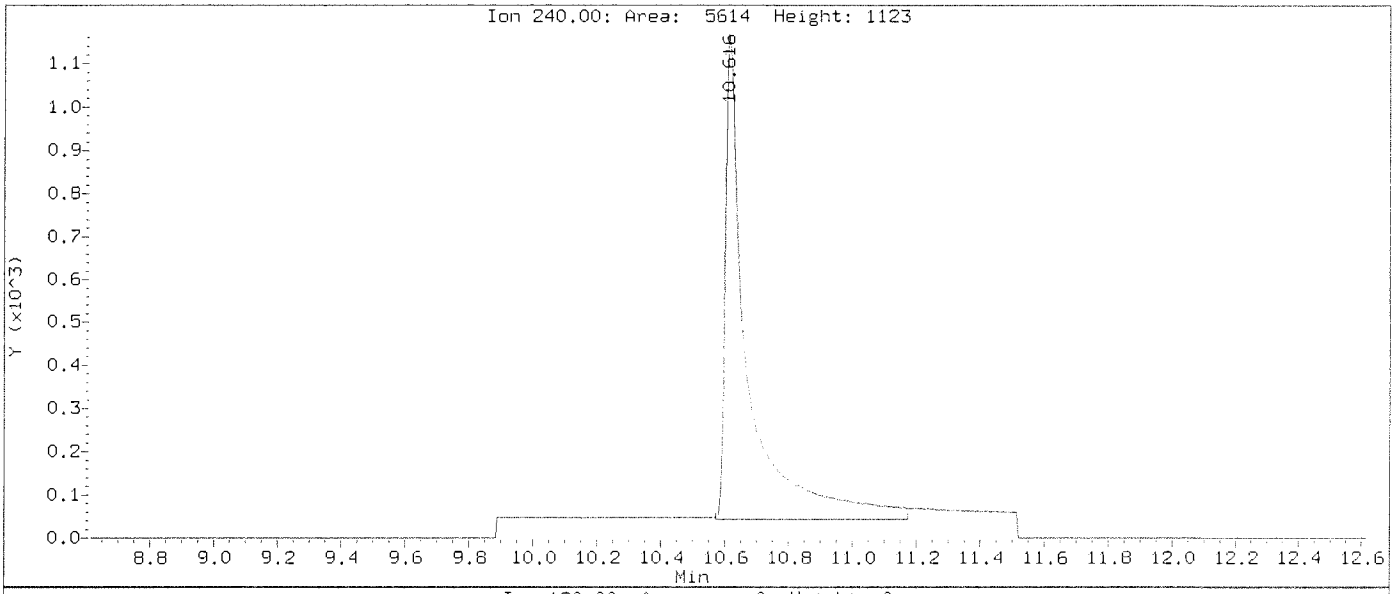
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

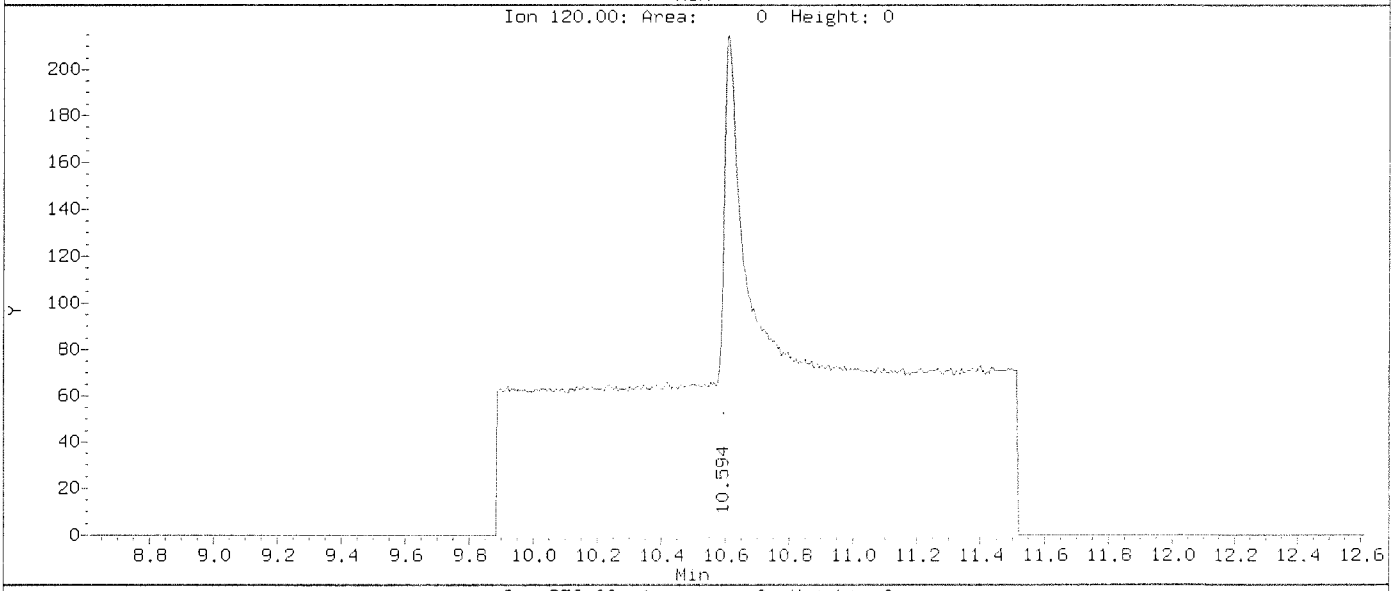
Compound: Chrysene-d12
CAS Number: 1719-03-5

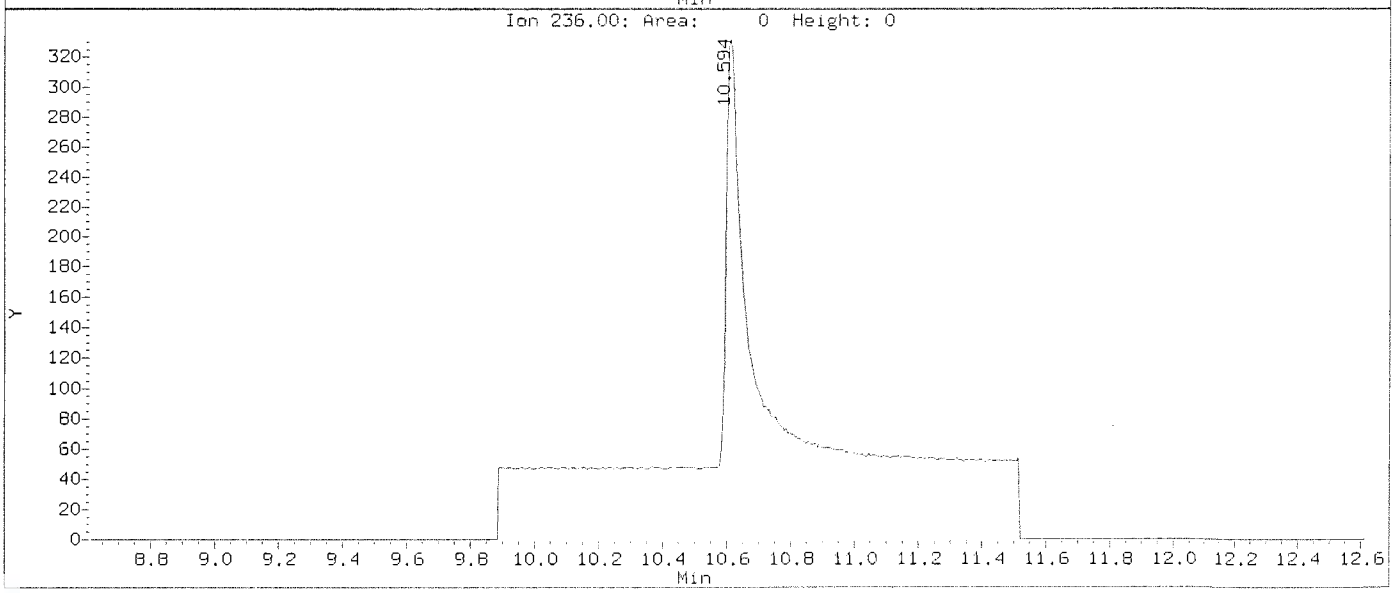


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: Chrysene-d12
CAS Number: 1719-03-5

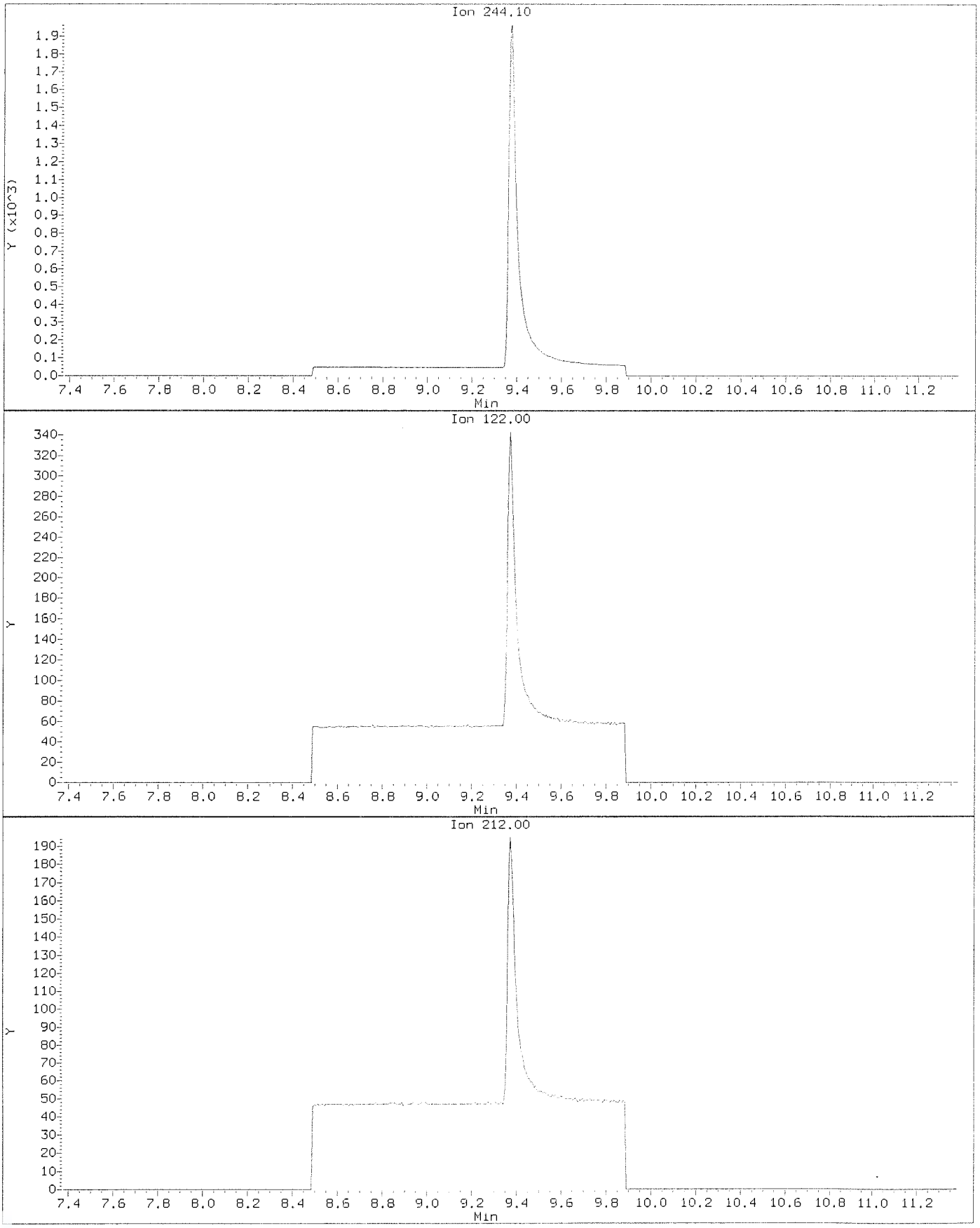






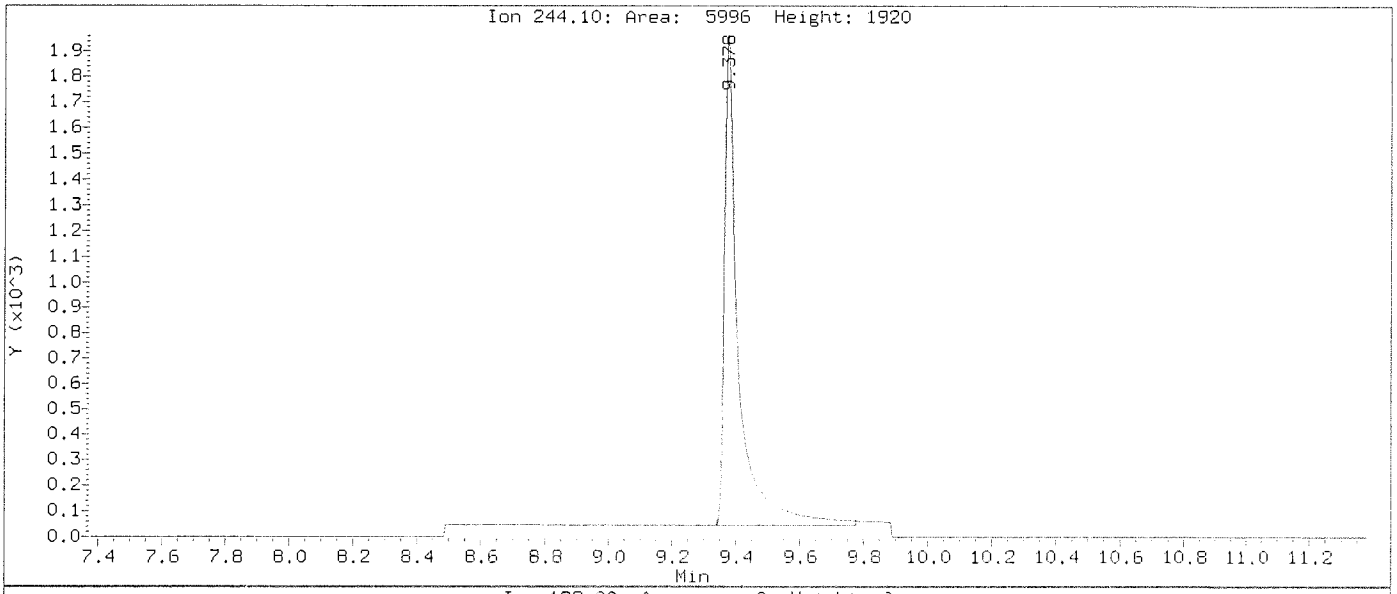
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

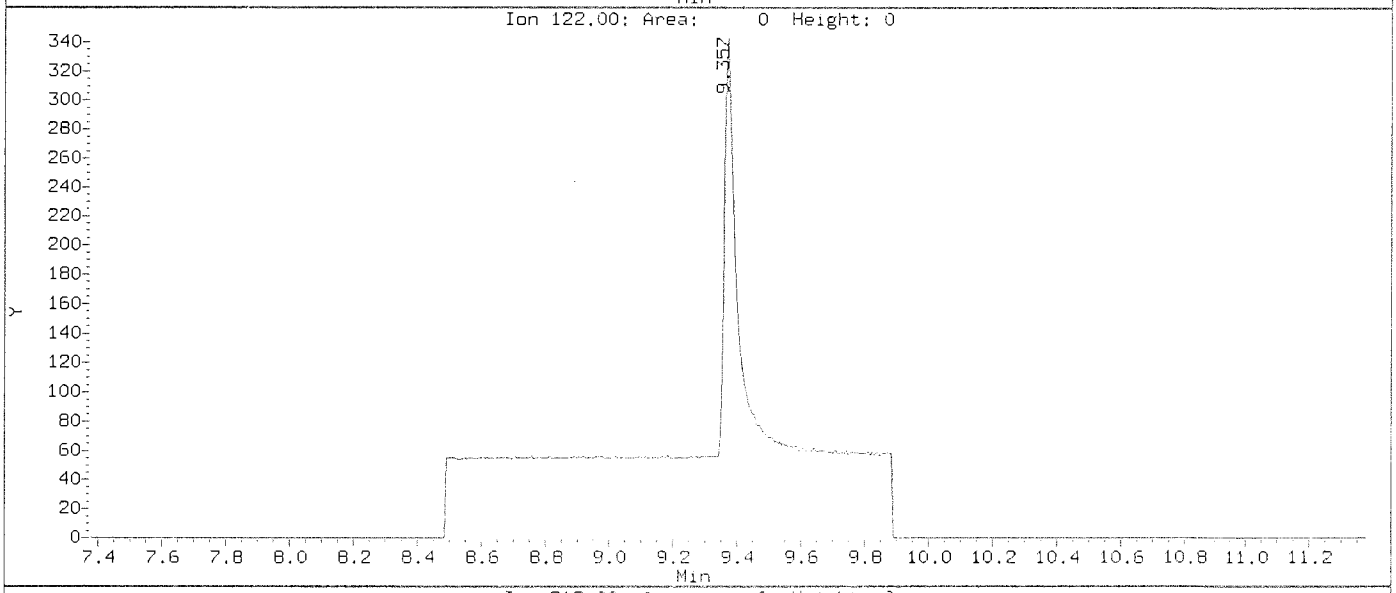
Compound: 4-Terphenyl-d14
CAS Number: 1718-51-0

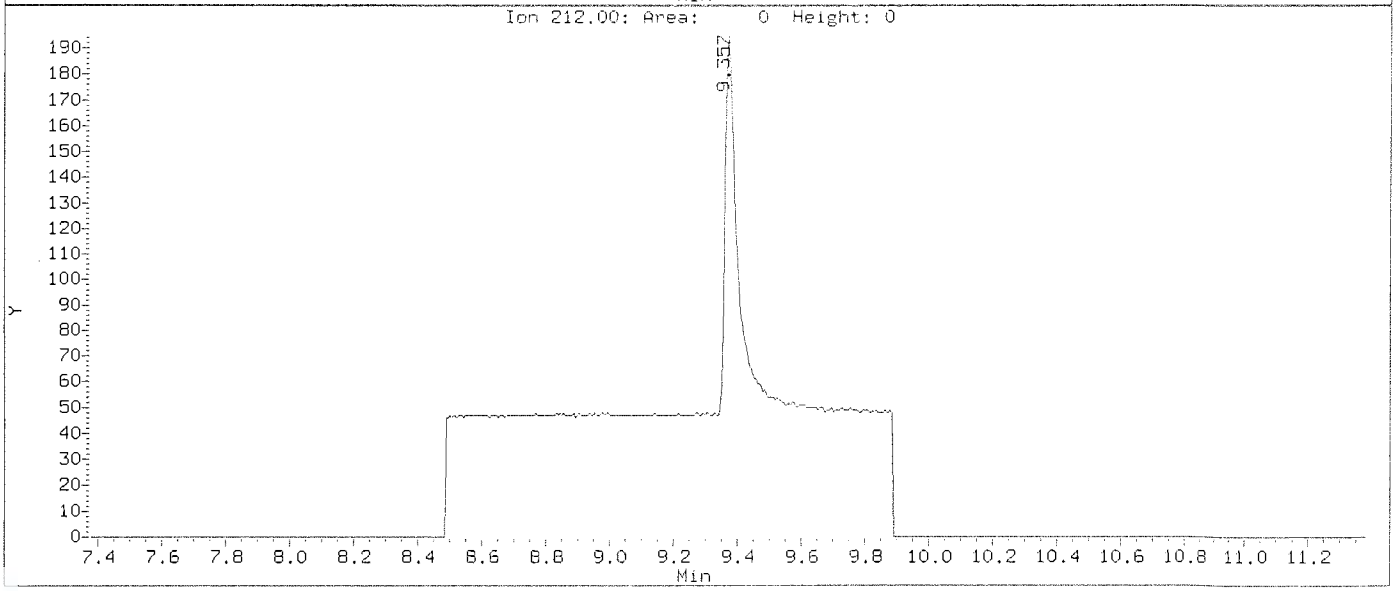


Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: 4-Terphenyl-d14
CAS Number: 1718-51-0

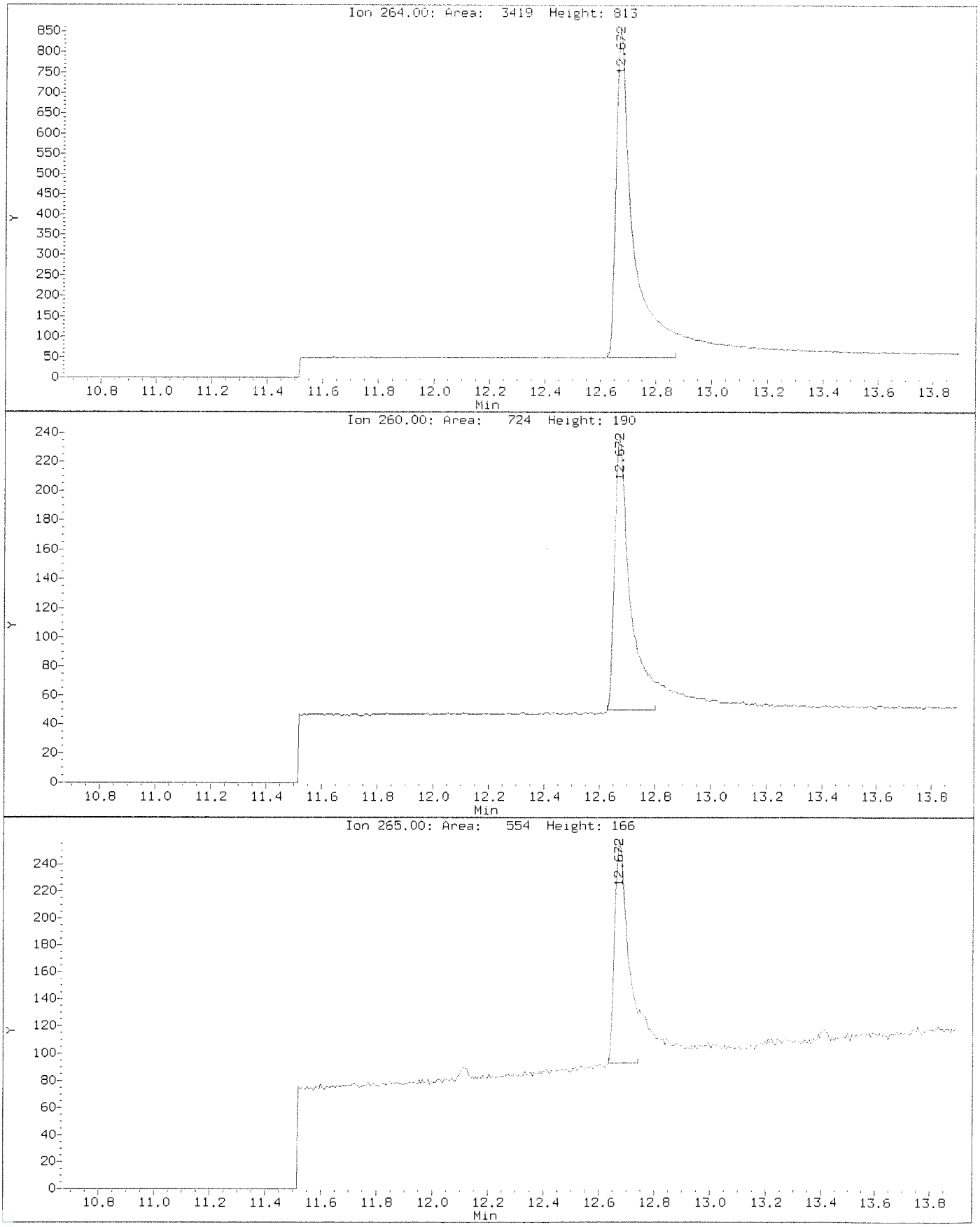






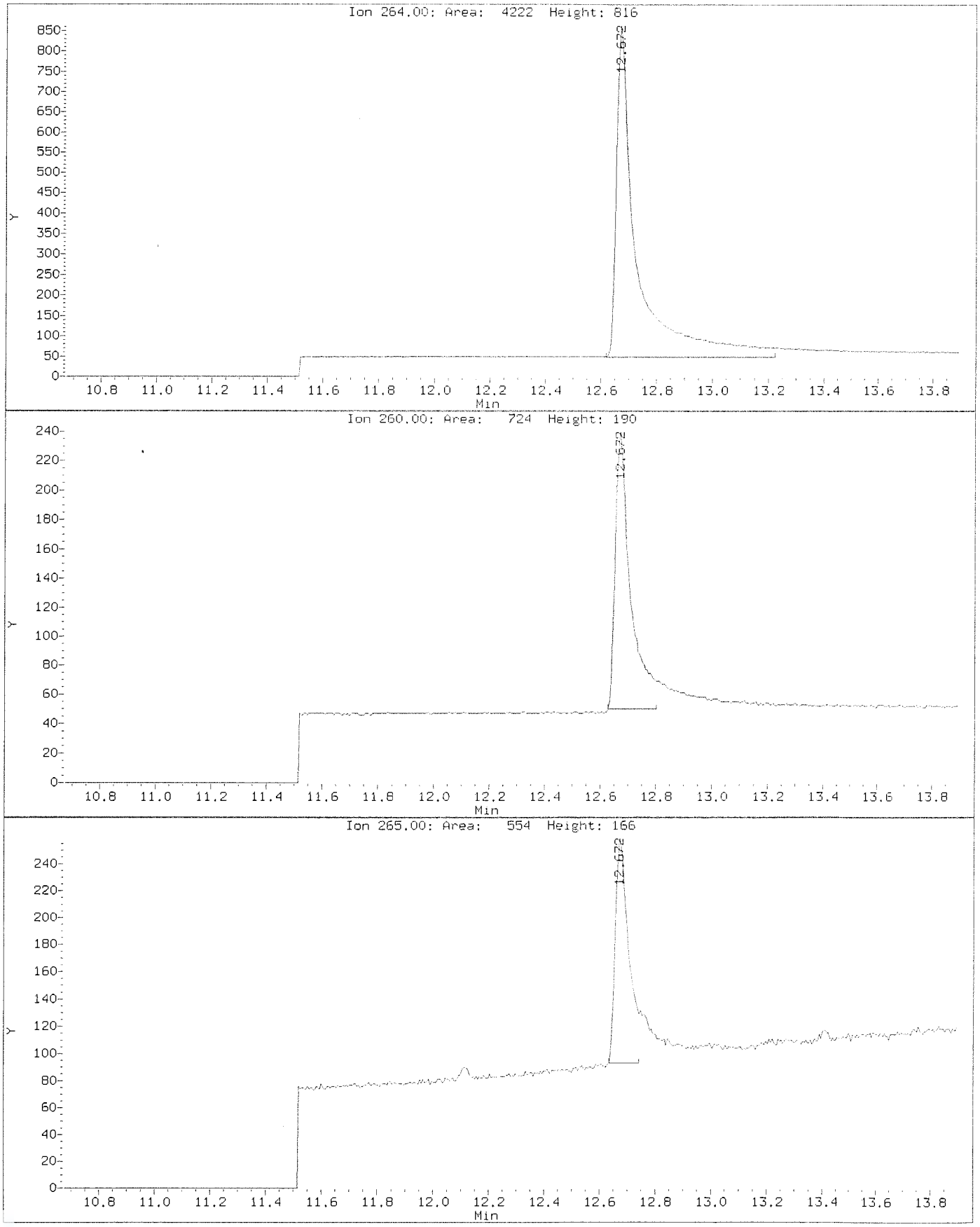
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: Perylene-d12
CAS Number: 1520-96-3



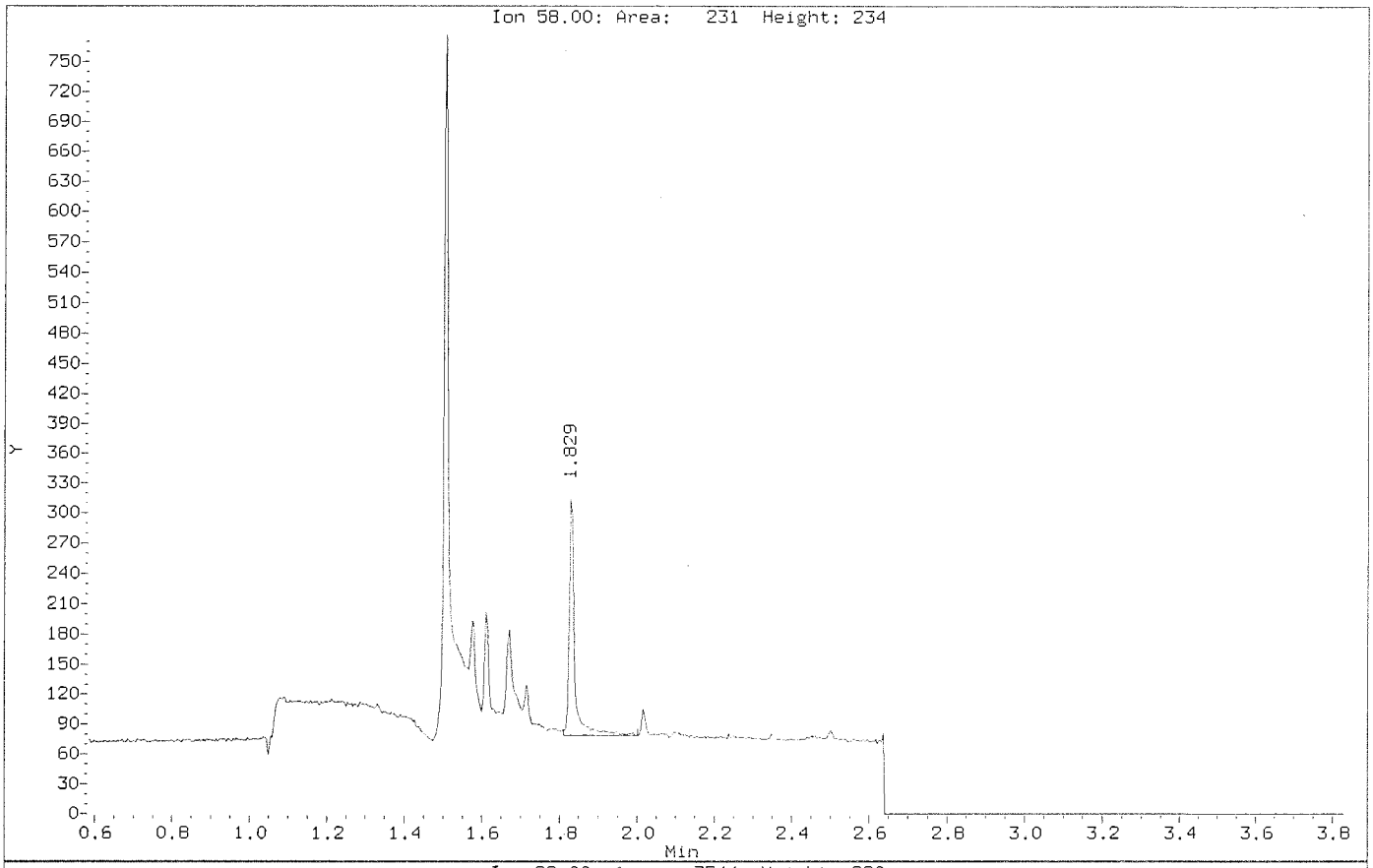
Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

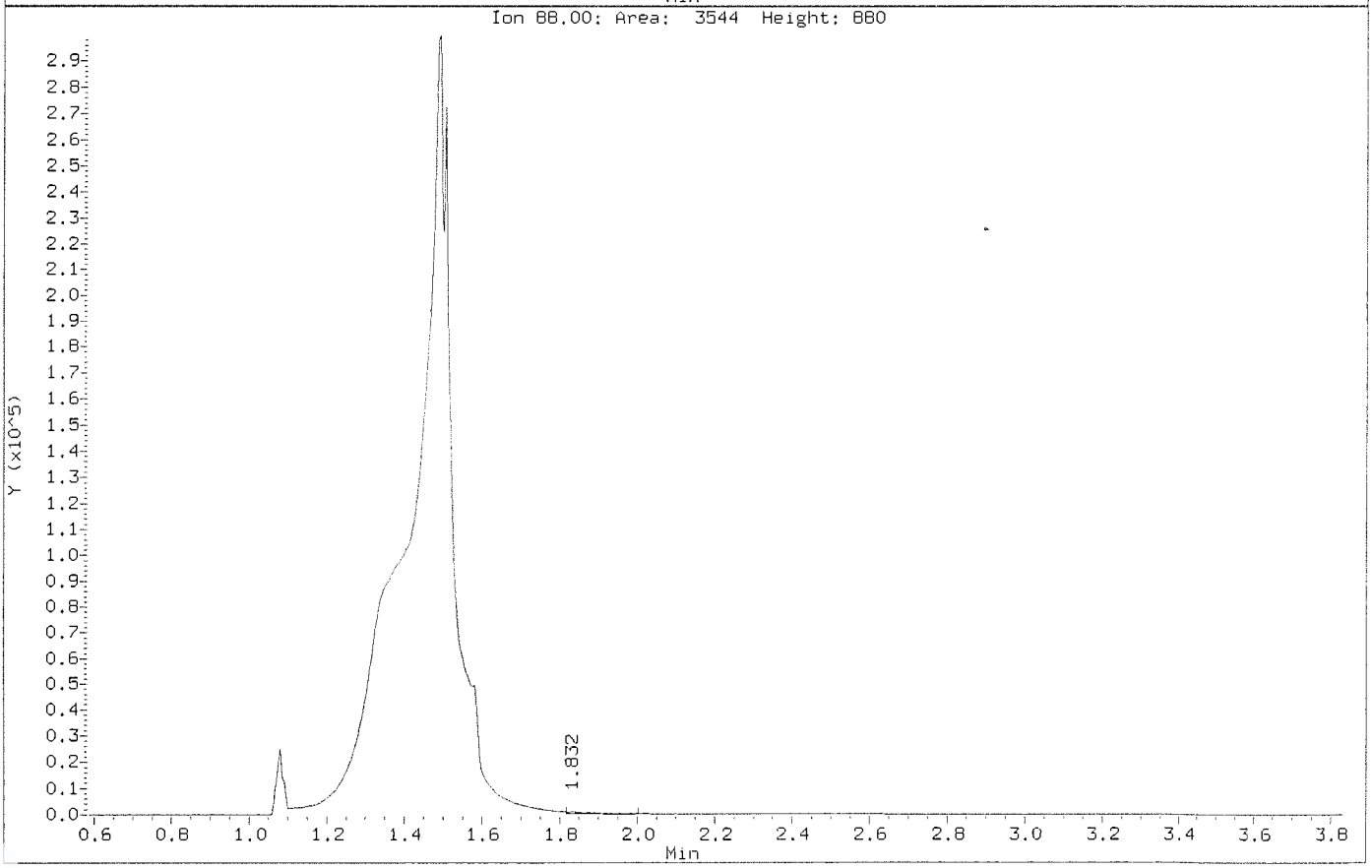
Compound: Perylene-d12
CAS Number: 1520-96-3



Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\Before\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

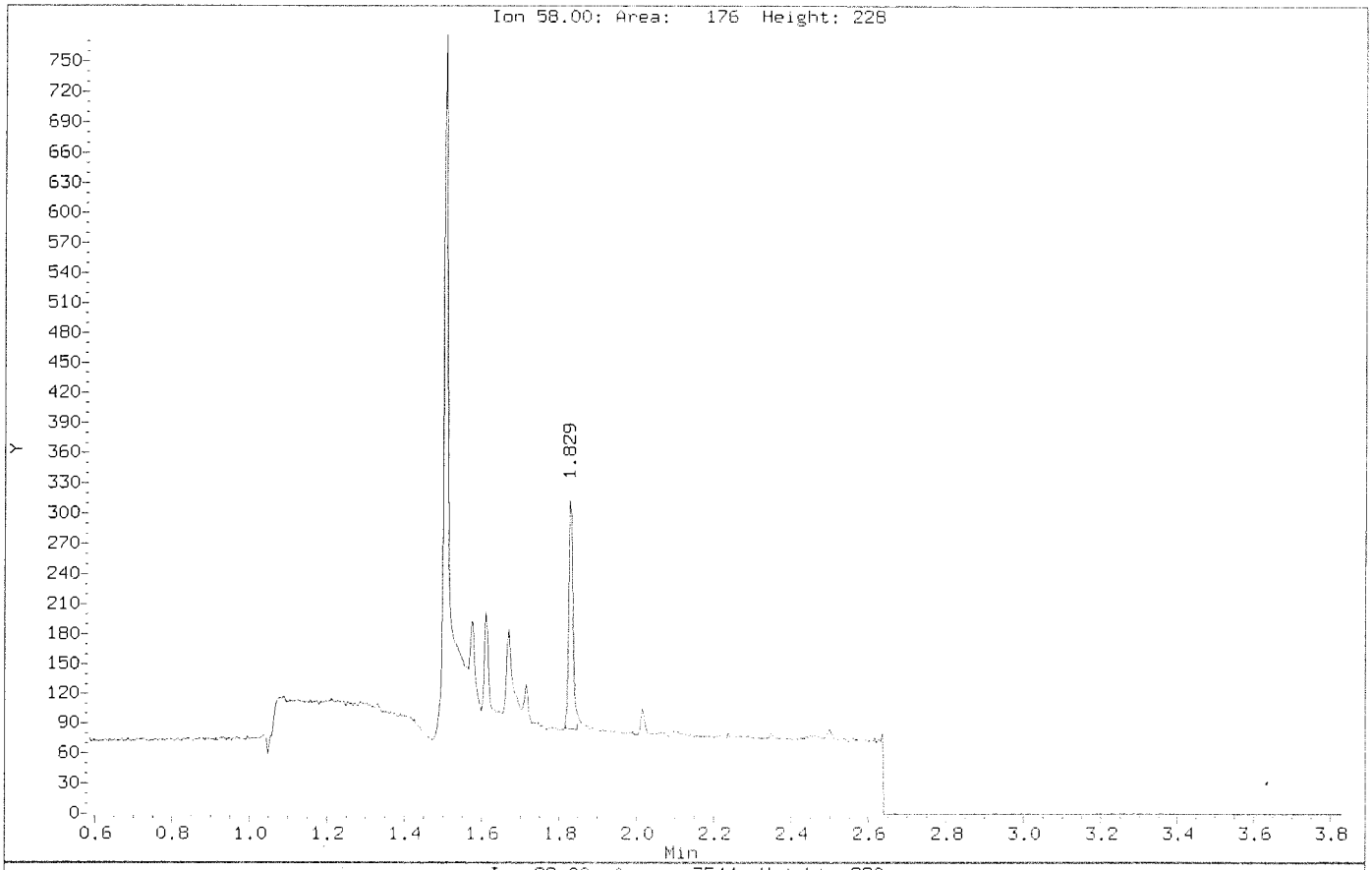
Compound: 1,4-Dioxane
CAS Number:

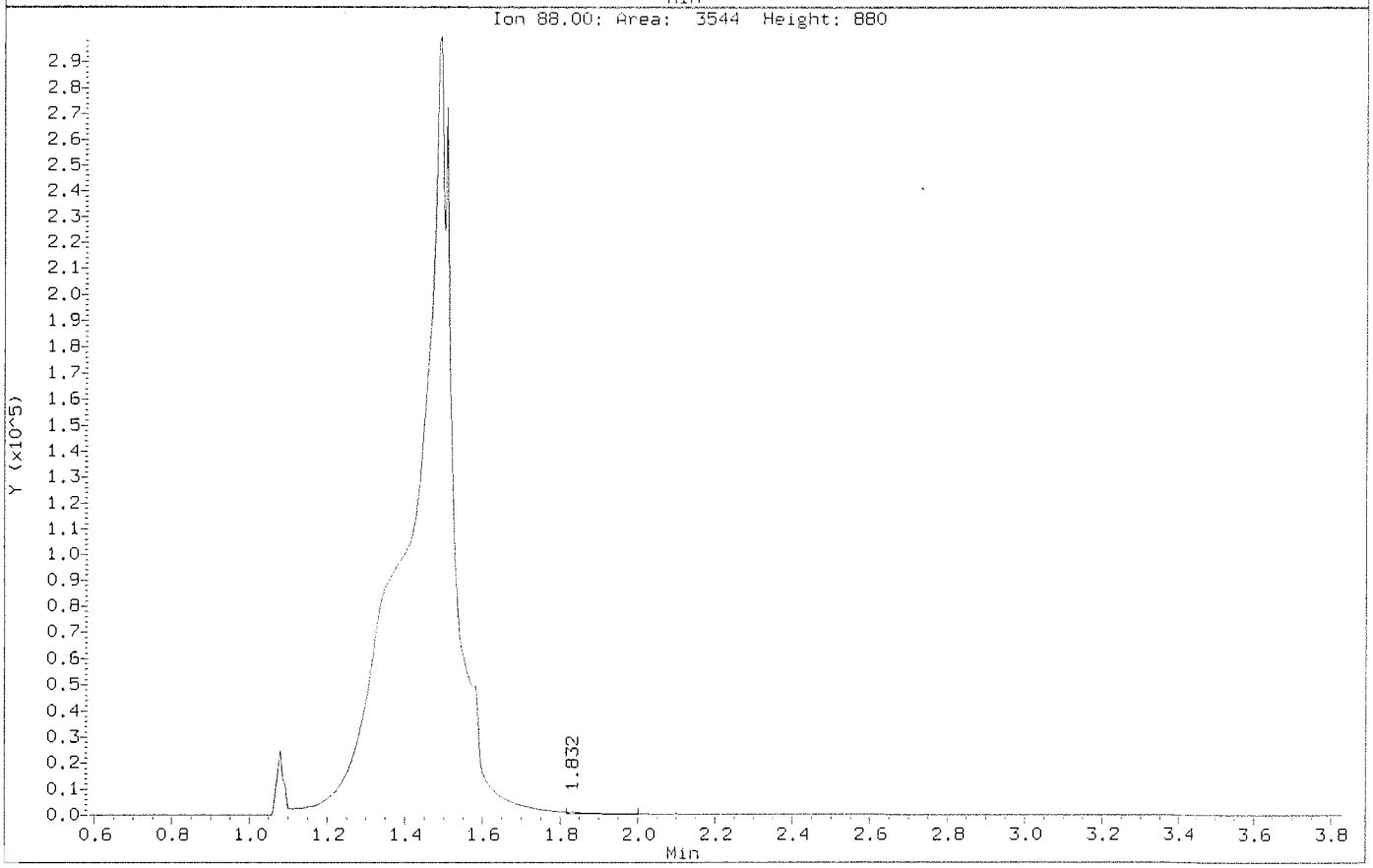




Data File: \\NAHSTWS005\Target\chem\SV6.i\220824.b\33.D
Injection Date: 24-AUG-2022 21:12
Instrument: SV6.i
Client Sample ID: 1 4-DIOX-CCV

Compound: 1,4-Dioxane
CAS Number:





HS22080522 - ME - ICP_W_DOD

ALS WO# HS22080522

ALS Houston, US

Date: 02-Sep-22

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522
Start Date: 22-Aug-2022 End Date: 22-Aug-2022

Run ID:ICPMS07_415559
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS07_415559_Tune	1	22-Aug-2022 00:00	ICPMS07_415559_Tune_1	
CAL BLK	1	22-Aug-2022 12:37	018CALB.d_6812314	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
2/10/200	1	22-Aug-2022 12:40	019CALS.d_6812315	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
5/25/500	1	22-Aug-2022 12:42	020CALS.d_6812316	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
10/50/100	1	22-Aug-2022 12:44	021CALS.d_6812317	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
100/500/10K	1	22-Aug-2022 12:46	022CALS.d_6812318	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
200/1000/20K	1	22-Aug-2022 12:49	023CALS.d_6812319	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICV	1	22-Aug-2022 12:57	025_ICV.d_6812321	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLICV2	1	22-Aug-2022 12:59	026LCV2.d_6812322	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLICV5	1	22-Aug-2022 13:01	027LCV5.d_6812323	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICB	1	22-Aug-2022 13:03	028_ICB.d_6812324	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICSA	1	22-Aug-2022 13:09	029ICSA.d_6812325	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICSAB	1	22-Aug-2022 13:11	030ICSB.d_6812326	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CAL BLK	1	22-Aug-2022 20:07	136CALB.d_6813220	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
2/10/200	1	22-Aug-2022 20:09	137CALS.d_6813221	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
5/25/500	1	22-Aug-2022 20:11	138CALS.d_6813222	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
10/50/100	1	22-Aug-2022 20:13	139CALS.d_6813223	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
100/500/10K	1	22-Aug-2022 20:15	140CALS.d_6813224	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
200/1000/20K	1	22-Aug-2022 20:17	141CALS.d_6813225	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICCV 1	1	22-Aug-2022 20:21	143_ICV.d_6813227	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLCCV2	1	22-Aug-2022 20:23	144LCV2.d_6813228	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLCCV5	1	22-Aug-2022 20:25	145LCV5.d_6813229	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICCB 1	1	22-Aug-2022 20:27	146_ICB.d_6813230	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 2	1	22-Aug-2022 20:32	148_CCV.d_6813232	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 2	1	22-Aug-2022 20:34	149_CCB.d_6813233	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
MBLK-182618	1	22-Aug-2022 20:36	150SMPL.d_6813234	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LCS-182618	1	22-Aug-2022 20:38	151SMPL.d_6813235	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ZZZZZZSD	25	22-Aug-2022 20:42	153SMPL.d_6813237	BA NA
ZZZZZZPDS	5	22-Aug-2022 20:48	156SMPL.d_6813240	BA NA
CCV 3	1	22-Aug-2022 20:50	157_CCV.d_6813241	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 3	1	22-Aug-2022 20:52	158_CCB.d_6813242	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
18CPTMW01DW_080822	5	22-Aug-2022 20:58	161SMPL.d_6813245	NA
17WW08_080822	5	22-Aug-2022 21:02	163SMPL.d_6813247	NA

ALS Houston, US

Date: 02-Sep-22

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522
Start Date: 22-Aug-2022 End Date: 22-Aug-2022

Run ID:ICPMS07_415559
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
17WW08_080822_a	5	22-Aug-2022 21:04	164SMPL.d_6813248	NA
CCV 4	1	22-Aug-2022 21:15	169_CCV.d_6813253	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 4	1	22-Aug-2022 21:16	170_CCB.d_6813254	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 5	1	22-Aug-2022 21:33	178_CCV.d_6813323	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 5	1	22-Aug-2022 21:35	179_CCB.d_6813324	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN

ALS Houston, US Date: 02-Sep-22

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522
Start Date: 23-Aug-2022 End Date: 23-Aug-2022

Run ID:ICPMS07_415638
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS07_415638_Tune	1	23-Aug-2022 00:00	ICPMS07_415638_Tune_1	
CAL BLK	1	23-Aug-2022 11:56	018CALB.d_6815391	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
2/10/200	1	23-Aug-2022 11:58	019CALS.d_6815392	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
5/25/500	1	23-Aug-2022 12:01	020CALS.d_6815393	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
10/50/100	1	23-Aug-2022 12:03	021CALS.d_6815394	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
100/500/10K	1	23-Aug-2022 12:05	022CALS.d_6815395	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
200/1000/20K	1	23-Aug-2022 12:08	023CALS.d_6815396	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
2/10/200	1	23-Aug-2022 12:18	025CALS.d_6815398	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICV	1	23-Aug-2022 12:24	027_ICV.d_6815400	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLICV2	1	23-Aug-2022 12:26	028LCV2.d_6815401	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLICV5	1	23-Aug-2022 12:28	029LCV5.d_6815402	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICB	1	23-Aug-2022 12:30	030_ICB.d_6815403	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICSA	1	23-Aug-2022 12:34	031ICSA.d_6815404	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICSAB	1	23-Aug-2022 12:36	032ICSB.d_6815405	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 1	1	23-Aug-2022 12:43	034_CCV.d_6815407	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 1	1	23-Aug-2022 12:45	035_CCB.d_6815408	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ZZZZZZSD	5	23-Aug-2022 13:06	039SMPL.d_6815410	AG AL AS BE CA CD CO CR CU FE K MG MN NI PB SB SE TL V ZN
ZZZZZZMS	1	23-Aug-2022 13:08	040SMPL.d_6815411	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ZZZZZZPDS	1	23-Aug-2022 13:12	042SMPL.d_6815413	AG AL AS BE CA CD CO CR CU FE K MG MN NI PB SB SE TL V ZN
CCV 2	1	23-Aug-2022 13:20	046_CCV.d_6815417	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 2	1	23-Aug-2022 13:22	047_CCB.d_6815418	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
18CPTMW01DW_080822	1	23-Aug-2022 13:27	049SMPL.d_6815420	AG AL AS BA BE CA CD CO CR CU FE K MG MN NI PB SB SE TL V ZN
18CPTMW01SW_080822	1	23-Aug-2022 13:29	050SMPL.d_6815421	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
17WW08_080822	1	23-Aug-2022 13:31	051SMPL.d_6815422	AG AL AS BA BE CA CD CO CR CU FE K MG MN NI PB SB SE TL V ZN
17WW08_080822_a	1	23-Aug-2022 13:33	052SMPL.d_6815423	AG AL AS BA BE CA CD CO CR CU FE K MG MN NI PB SB SE TL V ZN
18WW24_080822	1	23-Aug-2022 13:35	053SMPL.d_6815424	AG AL AS BA BE CA CD CO CR CU FE K MG NI PB SB SE TL V ZN
18WW24_080822	50	23-Aug-2022 13:37	054SMPL.d_6815425	MN NA
CCV 3	1	23-Aug-2022 13:45	058_CCV.d_6815429	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 3	1	23-Aug-2022 13:47	059_CCB.d_6815430	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 4	1	23-Aug-2022 14:33	070_CCV.d_6815440	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 4	1	23-Aug-2022 14:35	071_CCB.d_6815441	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 5	1	23-Aug-2022 15:01	082_CCV.d_6815477	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN

ALS Houston, US

Date: 02-Sep-22

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522
Start Date: 23-Aug-2022 End Date: 23-Aug-2022

Run ID:ICPMS07_415638
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
CCB 5	1	23-Aug-2022 15:03	083_CCB.d_6815478	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ZZZZZZMSD	1	23-Aug-2022 15:05	084SMPL.d_6815479	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 6	1	23-Aug-2022 15:29	094_CCV.d_6815482	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 6	1	23-Aug-2022 15:31	095_CCB.d_6815483	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 7	1	23-Aug-2022 16:17	104_CCV.d_6815486	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 7	1	23-Aug-2022 16:19	105_CCB.d_6815487	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN

ALS Houston, US

Date: 02-Sep-22

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Run ID: ICPMS07_415559
Instrument: ICPMS07
Method: SW6020A

ICV | Date: 22-Aug-2022 12:57 | Seq: 6812321 | ICV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	103.531	104	90-110	
Antimony	100	103.275	103	90-110	
Arsenic	100	107.128	107	90-110	
Barium	100	103.108	103	90-110	
Beryllium	100	105.618	106	90-110	
Cadmium	100	103.469	103	90-110	
Calcium	10000	9954.04	100	90-110	
Chromium	100	99.982	100	90-110	
Cobalt	100	95.464	96	90-110	
Copper	100	102.943	103	90-110	
Iron	10000	10022.703	100	90-110	
Lead	100	99.696	100	90-110	
Magnesium	10000	10068.132	101	90-110	
Manganese	100	103.713	104	90-110	
Nickel	100	102.37	102	90-110	
Potassium	10000	10115.34	101	90-110	
Selenium	100	106.372	106	90-110	
Silver	100	104.352	104	90-110	
Sodium	10000	10052.131	101	90-110	
Thallium	100	106.137	106	90-110	
Vanadium	100	102.061	102	90-110	
Zinc	100	103.495	103	90-110	

ICCV1 | Date: 22-Aug-2022 20:21 | Seq: 6813227 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	106.681	107	90-110	
Antimony	100	103.393	103	90-110	
Arsenic	100	109.205	109	90-110	
Barium	100	105.954	106	90-110	
Beryllium	100	105.022	105	90-110	
Cadmium	100	106.35	106	90-110	
Calcium	10000	10058.083	101	90-110	
Chromium	100	104.29	104	90-110	
Cobalt	100	105.999	106	90-110	
Copper	100	104.339	104	90-110	
Iron	10000	10136.572	101	90-110	
Lead	100	98.51	99	90-110	
Magnesium	10000	10100.637	101	90-110	
Manganese	100	105.436	105	90-110	
Nickel	100	104.952	105	90-110	
Potassium	10000	10090.62	101	90-110	
Selenium	100	106.822	107	90-110	
Silver	100	105.081	105	90-110	
Sodium	10000	9987.386	100	90-110	
Thallium	100	106.748	107	90-110	
Vanadium	100	103.563	104	90-110	
Zinc	100	106.666	107	90-110	

CCV2 | Date: 22-Aug-2022 20:32 | Seq: 6813232 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	104.547	105	90-110	
Antimony	100	99.515	100	90-110	
Arsenic	100	101.078	101	90-110	
Barium	100	100.512	101	90-110	
Beryllium	100	105.197	105	90-110	

ALS Houston, US

Date: 02-Sep-22

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Run ID: ICPMS07_415559
Instrument: ICPMS07
Method: SW6020A

CCV2 Date: 22-Aug-2022 20:32 Seq: 6813232 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Cadmium	100	102.499	102	90-110	
Calcium	10000	9969.889	100	90-110	
Chromium	100	100.691	101	90-110	
Cobalt	100	102.03	102	90-110	
Copper	100	100.446	100	90-110	
Iron	10000	10012.533	100	90-110	
Lead	100	94.521	95	90-110	
Magnesium	10000	9960.924	100	90-110	
Manganese	100	100.542	101	90-110	
Nickel	100	100.694	101	90-110	
Potassium	10000	10014.514	100	90-110	
Selenium	100	102.088	102	90-110	
Silver	100	102.193	102	90-110	
Sodium	10000	9804.36	98	90-110	
Thallium	100	100.296	100	90-110	
Vanadium	100	100.024	100	90-110	
Zinc	100	100.424	100	90-110	

CCV3 Date: 22-Aug-2022 20:50 Seq: 6813241 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	106.255	106	90-110	
Antimony	100	99.948	100	90-110	
Arsenic	100	101.93	102	90-110	
Barium	100	101.274	101	90-110	
Beryllium	100	97.919	98	90-110	
Cadmium	100	101.48	101	90-110	
Calcium	10000	10032.644	100	90-110	
Chromium	100	99.953	100	90-110	
Cobalt	100	101.588	102	90-110	
Copper	100	100.468	100	90-110	
Iron	10000	9943.807	99	90-110	
Lead	100	95.416	95	90-110	
Magnesium	10000	9932.814	99	90-110	
Manganese	100	100.889	101	90-110	
Nickel	100	100.647	101	90-110	
Potassium	10000	10085.775	101	90-110	
Selenium	100	103.482	103	90-110	
Silver	100	102.49	102	90-110	
Sodium	10000	9936.291	99	90-110	
Thallium	100	100.81	101	90-110	
Vanadium	100	99.892	100	90-110	
Zinc	100	101.277	101	90-110	

CCV4 Date: 22-Aug-2022 21:15 Seq: 6813253 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	101.944	102	90-110	
Antimony	100	97.702	98	90-110	
Arsenic	100	101.121	101	90-110	
Barium	100	99.879	100	90-110	
Beryllium	100	99.739	100	90-110	
Cadmium	100	101.754	102	90-110	
Calcium	10000	9920.306	99	90-110	
Chromium	100	99.476	100	90-110	
Cobalt	100	101.981	102	90-110	
Copper	100	100.307	100	90-110	

ALS Houston, US

Date: 02-Sep-22

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Run ID: ICPMS07_415559
Instrument: ICPMS07
Method: SW6020A

CCV4 Date: 22-Aug-2022 21:15 Seq: 6813253 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Iron	10000	9938.872	99	90-110	
Lead	100	94.57	95	90-110	
Magnesium	10000	9952.135	100	90-110	
Manganese	100	100.906	101	90-110	
Nickel	100	100.634	101	90-110	
Potassium	10000	10026.132	100	90-110	
Selenium	100	101.078	101	90-110	
Silver	100	101.428	101	90-110	
Sodium	10000	9834.997	98	90-110	
Thallium	100	99.524	100	90-110	
Vanadium	100	99.783	100	90-110	
Zinc	100	100.114	100	90-110	

CCV5 Date: 22-Aug-2022 21:33 Seq: 6813323 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	105.141	105	90-110	
Antimony	100	98.32	98	90-110	
Arsenic	100	102.558	103	90-110	
Barium	100	101.139	101	90-110	
Beryllium	100	98.78	99	90-110	
Cadmium	100	102.345	102	90-110	
Calcium	10000	10070.43	101	90-110	
Chromium	100	100.767	101	90-110	
Cobalt	100	101.612	102	90-110	
Copper	100	100.571	101	90-110	
Iron	10000	9980.842	100	90-110	
Lead	100	94.064	94	90-110	
Magnesium	10000	9972.648	100	90-110	
Manganese	100	99.876	100	90-110	
Nickel	100	101.111	101	90-110	
Potassium	10000	10102.375	101	90-110	
Selenium	100	103.922	104	90-110	
Silver	100	102.742	103	90-110	
Sodium	10000	9876.176	99	90-110	
Thallium	100	99.177	99	90-110	
Vanadium	100	100.795	101	90-110	
Zinc	100	99.704	100	90-110	

ALS Houston, US

Date: 02-Sep-22

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Run ID: ICPMS07_415638
Instrument: ICPMS07
Method: SW6020A

ICV | Date: 23-Aug-2022 12:24 | Seq: 6815400 | ICV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	101.607	102	90-110	
Antimony	100	101.235	101	90-110	
Arsenic	100	107.118	107	90-110	
Barium	100	103.392	103	90-110	
Beryllium	100	103.916	104	90-110	
Cadmium	100	103.301	103	90-110	
Calcium	10000	9959.956	100	90-110	
Chromium	100	99.233	99	90-110	
Cobalt	100	103.31	103	90-110	
Copper	100	97.193	97	90-110	
Iron	10000	9980.514	100	90-110	
Lead	100	100.253	100	90-110	
Magnesium	10000	9990.013	100	90-110	
Manganese	100	103.28	103	90-110	
Nickel	100	100.94	101	90-110	
Potassium	10000	9987.076	100	90-110	
Selenium	100	105.312	105	90-110	
Silver	100	100.645	101	90-110	
Sodium	10000	9967.288	100	90-110	
Thallium	100	107.205	107	90-110	
Vanadium	100	102.05	102	90-110	
Zinc	100	104.597	105	90-110	

CCV1 | Date: 23-Aug-2022 12:43 | Seq: 6815407 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	99.674	100	90-110	
Antimony	100	97.647	98	90-110	
Arsenic	100	99.182	99	90-110	
Barium	100	98.764	99	90-110	
Beryllium	100	102.895	103	90-110	
Cadmium	100	99.4	99	90-110	
Calcium	10000	9839.277	98	90-110	
Chromium	100	94.381	94	90-110	
Cobalt	100	98.916	99	90-110	
Copper	100	92.963	93	90-110	
Iron	10000	9856.296	99	90-110	
Lead	100	95.951	96	90-110	
Magnesium	10000	9873.967	99	90-110	
Manganese	100	98.65	99	90-110	
Nickel	100	97.374	97	90-110	
Potassium	10000	9852.884	99	90-110	
Selenium	100	99.123	99	90-110	
Silver	100	98.945	99	90-110	
Sodium	10000	9849.553	99	90-110	
Thallium	100	100.785	101	90-110	
Vanadium	100	97.647	98	90-110	
Zinc	100	101.26	101	90-110	

CCV2 | Date: 23-Aug-2022 13:20 | Seq: 6815417 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	105.094	105	90-110	
Antimony	100	98.134	98	90-110	
Arsenic	100	102.65	103	90-110	
Barium	100	100.759	101	90-110	
Beryllium	100	102.885	103	90-110	

ALS Houston, US

Date: 02-Sep-22

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Run ID: ICPMS07_415638
Instrument: ICPMS07
Method: SW6020A

CCV2 Date: 23-Aug-2022 13:20 Seq: 6815417 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Cadmium	100	101.782	102	90-110	
Calcium	10000	10154.228	102	90-110	
Chromium	100	95.573	96	90-110	
Cobalt	100	100.729	101	90-110	
Copper	100	93.663	94	90-110	
Iron	10000	10023.98	100	90-110	
Lead	100	99.672	100	90-110	
Magnesium	10000	10077.358	101	90-110	
Manganese	100	102.738	103	90-110	
Nickel	100	99.3	99	90-110	
Potassium	10000	10271.614	103	90-110	
Selenium	100	102.653	103	90-110	
Silver	100	102.841	103	90-110	
Sodium	10000	10239.995	102	90-110	
Thallium	100	106.858	107	90-110	
Vanadium	100	100.269	100	90-110	
Zinc	100	101.152	101	90-110	

CCV3 Date: 23-Aug-2022 13:45 Seq: 6815429 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	101.342	101	90-110	
Antimony	100	98.217	98	90-110	
Arsenic	100	102.511	103	90-110	
Barium	100	99.523	100	90-110	
Beryllium	100	101.777	102	90-110	
Cadmium	100	100.284	100	90-110	
Calcium	10000	10082.981	101	90-110	
Chromium	100	96.667	97	90-110	
Cobalt	100	100.75	101	90-110	
Copper	100	94.473	95	90-110	
Iron	10000	10027.166	100	90-110	
Lead	100	99.466	100	90-110	
Magnesium	10000	10158.34	102	90-110	
Manganese	100	101.968	102	90-110	
Nickel	100	99.72	100	90-110	
Potassium	10000	10192.502	102	90-110	
Selenium	100	102.331	102	90-110	
Silver	100	101.546	102	90-110	
Sodium	10000	10466.792	105	90-110	
Thallium	100	104.547	105	90-110	
Vanadium	100	101.516	102	90-110	
Zinc	100	103.379	103	90-110	

CCV4 Date: 23-Aug-2022 14:33 Seq: 6815440 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	103.066	103	90-110	
Antimony	100	98.435	98	90-110	
Arsenic	100	101.473	101	90-110	
Barium	100	100.305	100	90-110	
Beryllium	100	100.848	101	90-110	
Cadmium	100	101.819	102	90-110	
Calcium	10000	9972.599	100	90-110	
Chromium	100	96.474	97	90-110	
Cobalt	100	101.463	101	90-110	
Copper	100	94.89	95	90-110	

ALS Houston, US

Date: 02-Sep-22

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Run ID: ICPMS07_415638
Instrument: ICPMS07
Method: SW6020A

CCV4 Date: 23-Aug-2022 14:33 Seq: 6815440 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Iron	10000	10044.644	100	90-110	
Lead	100	98.736	99	90-110	
Magnesium	10000	10246.304	102	90-110	
Manganese	100	100.807	101	90-110	
Nickel	100	101.233	101	90-110	
Potassium	10000	10031.171	100	90-110	
Selenium	100	101.566	102	90-110	
Silver	100	101.343	101	90-110	
Sodium	10000	10473.781	105	90-110	
Thallium	100	103.6	104	90-110	
Vanadium	100	100.982	101	90-110	
Zinc	100	103.677	104	90-110	

CCV5 Date: 23-Aug-2022 15:01 Seq: 6815477 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	101.812	102	90-110	
Antimony	100	100.131	100	90-110	
Arsenic	100	101.855	102	90-110	
Barium	100	101.132	101	90-110	
Beryllium	100	107.495	107	90-110	
Cadmium	100	101.837	102	90-110	
Calcium	10000	9797.234	98	90-110	
Chromium	100	97.415	97	90-110	
Cobalt	100	102.328	102	90-110	
Copper	100	96.148	96	90-110	
Iron	10000	10045.331	100	90-110	
Lead	100	99.251	99	90-110	
Magnesium	10000	10135.693	101	90-110	
Manganese	100	100.788	101	90-110	
Nickel	100	101.016	101	90-110	
Potassium	10000	9947.124	100	90-110	
Selenium	100	99.324	99	90-110	
Silver	100	100.609	101	90-110	
Sodium	10000	10300.859	103	90-110	
Thallium	100	104.509	105	90-110	
Vanadium	100	101.218	101	90-110	
Zinc	100	104.027	104	90-110	

CCV6 Date: 23-Aug-2022 15:29 Seq: 6815482 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	103.247	103	90-110	
Antimony	100	99.497	100	90-110	
Arsenic	100	102.283	102	90-110	
Barium	100	99.007	99	90-110	
Beryllium	100	108.809	109	90-110	
Cadmium	100	100.404	100	90-110	
Calcium	10000	10018.26	100	90-110	
Chromium	100	97.878	98	90-110	
Cobalt	100	102.945	103	90-110	
Copper	100	96.487	97	90-110	
Iron	10000	10199.329	102	90-110	
Lead	100	101.151	101	90-110	
Magnesium	10000	10389.657	104	90-110	
Manganese	100	101.739	102	90-110	
Nickel	100	102.089	102	90-110	

ALS Houston, US

Date: 02-Sep-22

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Run ID: ICPMS07_415638
Instrument: ICPMS07
Method: SW6020A

CCV6 Date: 23-Aug-2022 15:29 Seq: 6815482 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Potassium	10000	10183.845	102	90-110	
Selenium	100	101.045	101	90-110	
Silver	100	102.685	103	90-110	
Sodium	10000	10740.563	107	90-110	
Thallium	100	104.276	104	90-110	
Vanadium	100	102.94	103	90-110	
Zinc	100	104.88	105	90-110	

CCV7 Date: 23-Aug-2022 16:17 Seq: 6815486 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	103.704	104	90-110	
Antimony	100	100.097	100	90-110	
Arsenic	100	100.372	100	90-110	
Barium	100	99.967	100	90-110	
Beryllium	100	102.296	102	90-110	
Cadmium	100	100.784	101	90-110	
Calcium	10000	9968.101	100	90-110	
Chromium	100	97.682	98	90-110	
Cobalt	100	103.149	103	90-110	
Copper	100	96.151	96	90-110	
Iron	10000	10267.988	103	90-110	
Lead	100	98.661	99	90-110	
Magnesium	10000	10475.288	105	90-110	
Manganese	100	101.485	101	90-110	
Nickel	100	101.579	102	90-110	
Potassium	10000	10153.494	102	90-110	
Selenium	100	99.411	99	90-110	
Silver	100	100.147	100	90-110	
Sodium	10000	10644.223	106	90-110	
Thallium	100	103.714	104	90-110	
Vanadium	100	102.187	102	90-110	
Zinc	100	103.366	103	90-110	

ALS Houston, US

Date: 02-Sep-22

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Run ID: ICPMS07_415559
Instrument: ICPMS07
Method: SW6020A

ICB	Date: 22-Aug-2022 13:03		Seq: 6812324	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	5	0.4	5	U	
Arsenic	5	0.4	5	U	
Barium	5	1.9	5	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	5	0.4	5	U	
Cobalt	5	0.1	5	U	
Copper	5	1	5	U	
Iron	200	12	200	U	
Lead	5	0.6	5	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	5	0.6	5	U	
Potassium	200	18	200	U	
Selenium	5	1.1	5	U	
Silver	5	0.2	5	U	
Sodium	200	14	200	U	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	5	2	5	U	

ICCB1	Date: 22-Aug-2022 20:27		Seq: 6813230	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	-31.56	14	200	J	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB2	Date: 22-Aug-2022 20:34		Seq: 6813233	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	

ALS Houston, US Date: 02-Sep-22

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Run ID: ICPMS07_415559
Instrument: ICPMS07
Method: SW6020A

CCB2	Date: 22-Aug-2022 20:34		Seq: 6813233	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	-19.18	14	200	J	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

MBLK-182618	Date: 22-Aug-2022 20:36		Seq: 6813234	MBLK	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	7.024	1.8	10	J	
Antimony	5	0.4	5	U	
Arsenic	5	0.4	5	U	
Barium	5	1.9	5	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	5	0.4	5	U	
Cobalt	5	0.1	5	U	
Copper	5	1	5	U	
Iron	200	12	200	U	
Lead	5	0.6	5	U	
Magnesium	14.08	10	200	J	
Manganese	5	0.7	5	U	
Nickel	5	0.6	5	U	
Potassium	200	18	200	U	
Selenium	5	1.1	5	U	
Silver	5	0.2	5	U	
Sodium	200	14	200	U	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	5	2	5	U	

CCB3	Date: 22-Aug-2022 20:52		Seq: 6813242	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	

ALS Houston, US Date: 02-Sep-22

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Run ID: ICPMS07_415559
Instrument: ICPMS07
Method: SW6020A

CCB3	Date: 22-Aug-2022 20:52		Seq: 6813242	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	200	14	200	U	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB4	Date: 22-Aug-2022 21:16		Seq: 6813254	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	200	14	200	U	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB5	Date: 22-Aug-2022 21:35		Seq: 6813324	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	

ALS Houston, US

Date: 02-Sep-22

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Run ID: ICPMS07_415559
Instrument: ICPMS07
Method: SW6020A

CCB5 | Date: 22-Aug-2022 21:35 | Seq: 6813324 | CCB | Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Potassium	200	18	200	U
Selenium	2	1.1	2	U
Silver	2	0.2	2	U
Sodium	-15.55	14	200	J
Thallium	2	0.2	2	U
Vanadium	5	0.6	5	U
Zinc	4	2	4	U

ALS Houston, US

Date: 02-Sep-22

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Run ID: ICPMS07_415638
Instrument: ICPMS07
Method: SW6020A

ICB	Date: 23-Aug-2022 12:30		Seq: 6815403	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	200	14	200	U	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB1	Date: 23-Aug-2022 12:45		Seq: 6815408	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	200	14	200	U	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB2	Date: 23-Aug-2022 13:22		Seq: 6815418	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	

ALS Houston, US

Date: 02-Sep-22

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Run ID: ICPMS07_415638
Instrument: ICPMS07
Method: SW6020A

CCB2	Date: 23-Aug-2022 13:22		Seq: 6815418	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	168.8	14	200	J	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB3	Date: 23-Aug-2022 13:47		Seq: 6815430	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	22.97	18	200	J	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	257.9	14	200		
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB4	Date: 23-Aug-2022 14:35		Seq: 6815441	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	

ALS Houston, US

Date: 02-Sep-22

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Run ID: ICPMS07_415638
Instrument: ICPMS07
Method: SW6020A

CCB4 Date: 23-Aug-2022 14:35 Seq: 6815441 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Iron	200	12	200	U
Lead	2	0.6	2	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	2	0.6	2	U
Potassium	200	18	200	U
Selenium	2	1.1	2	U
Silver	2	0.2	2	U
Sodium	134.6	14	200	J
Thallium	2	0.2	2	U
Vanadium	5	0.6	5	U
Zinc	4	2	4	U

CCB5 Date: 23-Aug-2022 15:03 Seq: 6815478 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	10	1.8	10	U
Antimony	2	0.4	2	U
Arsenic	2	0.4	2	U
Barium	4	1.9	4	U
Beryllium	2	0.2	2	U
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	4	0.4	4	U
Cobalt	5	0.2	5	U
Copper	2	1	2	U
Iron	200	12	200	U
Lead	2	0.6	2	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	2	0.6	2	U
Potassium	200	18	200	U
Selenium	2	1.1	2	U
Silver	2	0.2	2	U
Sodium	90.16	14	200	J
Thallium	2	0.2	2	U
Vanadium	5	0.6	5	U
Zinc	4	2	4	U

CCB6 Date: 23-Aug-2022 15:31 Seq: 6815483 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	10	1.8	10	U
Antimony	2	0.4	2	U
Arsenic	2	0.4	2	U
Barium	4	1.9	4	U
Beryllium	2	0.2	2	U
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	4	0.4	4	U
Cobalt	5	0.2	5	U
Copper	2	1	2	U
Iron	200	12	200	U
Lead	2	0.6	2	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	2	0.6	2	U

ALS Houston, US

Date: 02-Sep-22

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Run ID: ICPMS07_415638
Instrument: ICPMS07
Method: SW6020A

CCB6	Date: 23-Aug-2022 15:31		Seq: 6815483	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Potassium	21.64	18	200	J	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	194	14	200	J	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB7	Date: 23-Aug-2022 16:19		Seq: 6815487	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	98.81	14	200	J	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

ALS Houston, US

Date: 02-Sep-22

Form 4 - ICP Interference Check Sample

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Run ID:ICPMS07_415559
Instrument:ICPMS07
Method:SW6020A

ICSA	Date: 22-Aug-2022 13:09	Seq: 6812325	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100000	100900	101	
Antimony		0.188	0	
Arsenic		0.12	0	
Barium		1.374	0	
Beryllium		0.006	0	
Cadmium		0.802	0	
Calcium	100000	103300	103	
Chromium		2.022	0	
Cobalt		0.129	0	
Copper		0.172	0	
Iron	100000	98800	98.8	
Lead		0.055	0	
Magnesium	100000	100100	100	
Manganese		0.47	0	
Nickel		0.446	0	
Potassium	100000	100800	101	
Selenium		0.362	0	
Silver		0.017	0	
Sodium	100000	100100	100	
Thallium		0.005	0	
Vanadium		0.043	0	
Zinc		1.219	0	

ICSAB	Date: 22-Aug-2022 13:11	Seq: 6812326	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100500	99410	98.9	
Antimony	100	98.1	98.1	
Arsenic	100	98.33	98.3	
Barium	100	101.4	101	
Beryllium	100	101.2	101	
Cadmium	100	98.93	98.9	
Calcium	110000	110700	101	
Chromium	100	96.67	96.7	
Cobalt	100	89.74	89.7	
Copper	100	94.9	94.9	
Iron	110000	107400	97.6	
Lead	100	97.34	97.3	
Magnesium	110000	108500	98.6	
Manganese	100	98.34	98.3	
Nickel	100	95.33	95.3	
Potassium	110000	109600	99.6	
Selenium	100	96.2	96.2	
Silver	100	94.19	94.2	
Sodium	110000	109400	99.5	
Thallium	100	99.75	99.8	
Vanadium	100	98.94	98.9	
Zinc	100	97.47	97.5	

ALS Houston, US

Date: 02-Sep-22

Form 4 - ICP Interference Check Sample

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Run ID:ICPMS07_415638
Instrument:ICPMS07
Method:SW6020A

ICSA	Date: 23-Aug-2022 12:34	Seq: 6815404	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100000	100600	101	
Antimony		0.115	0	
Arsenic		0.094	0	
Barium		1.358	0	
Beryllium		0.004	0	
Cadmium		0.778	0	
Calcium	100000	102400	102	
Chromium		2.061	0	
Cobalt		0.128	0	
Copper		0.122	0	
Iron	100000	99440	99.4	
Lead		0.062	0	
Magnesium	100000	100100	100	
Manganese		0.433	0	
Nickel		0.401	0	
Potassium	100000	100100	100	
Selenium		-0.31	0	
Silver		0.018	0	
Sodium	100000	101000	101	
Thallium		0.009	0	
Vanadium		0.039	0	
Zinc		1.228	0	

ICSAB	Date: 23-Aug-2022 12:36	Seq: 6815405	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100500	99520	99.0	
Antimony	100	97.97	98.0	
Arsenic	100	99.87	99.9	
Barium	100	101.2	101	
Beryllium	100	99.72	99.7	
Cadmium	100	98.21	98.2	
Calcium	110000	111800	102	
Chromium	100	96.19	96.2	
Cobalt	100	98.24	98.2	
Copper	100	90.52	90.5	
Iron	110000	107700	97.9	
Lead	100	98.72	98.7	
Magnesium	110000	108200	98.3	
Manganese	100	98.78	98.8	
Nickel	100	96.08	96.1	
Potassium	110000	108900	99.0	
Selenium	100	100.5	100	
Silver	100	87.83	87.8	
Sodium	110000	108900	99.0	
Thallium	100	102.9	103	
Vanadium	100	99.23	99.2	
Zinc	100	98.47	98.5	

ALS Houston, US Date: 02-Sep-22

Form 5A - Matrix Spike/Matrix Spike Duplicate Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Date Analyzed: 23-Aug-2022 15:05
Date Extracted: 19-Aug-2022 09:00
Units: ug/L

Matrix Spike: HS22080472-01MS
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	MS Result	Spike Amount	% Rec	MSD Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Aluminum	14.10	118.8	100.0	105	117.8	100.0	104	84-117	0.847	20
Antimony	5.000	51.96	50.00	104	52.85	50.00	106	85-117	1.71	20
Arsenic	5.000	56.55	50.00	112	56.58	50.00	113	84-116	0.0636	20
Barium	398.7	452.0	50.00	107	446.7	50.00	96.0	86-114	1.19	20
Beryllium	2.000	55.33	50.00	111	58.90	50.00	118	83-121	6.25	20
Cadmium	2.000	53.96	50.00	108	54.29	50.00	109	87-115	0.595	20
Calcium	18190	22560	5000	87.3	22090	5000	78.0	87-118	2.10	20
Chromium	0.4180	50.63	50.00	100	52.01	50.00	103	85-116	2.68	20
Cobalt	0.1760	52.15	50.00	104	53.89	50.00	107	86-115	3.28	20
Copper	5.000	49.01	50.00	96.5	50.65	50.00	101	85-118	3.29	20
Iron	90.66	5222	5000	103	5322	5000	105	87-118	1.91	20
Lead	5.000	51.45	50.00	102	52.34	50.00	105	88-115	1.71	20
Magnesium	18090	22070	5000	79.6	22590	5000	90.0	83-118	2.33	20
Manganese	74.29	124.5	50.00	100	124.9	50.00	101	87-115	0.328	20
Nickel	5.000	50.98	50.00	101	52.70	50.00	105	85-117	3.30	20
Potassium	2681	7896	5000	104	7743	5000	101	87-115	1.95	20
Selenium	5.000	49.53	50.00	98.6	46.88	50.00	93.8	80-120	5.50	20
Silver	5.000	41.19	50.00	82.4	40.77	50.00	81.5	85-116	1.02	20
Sodium	768400	726200	5000	-845	751600	5000	-337	85-117	3.44	20
Thallium	2.000	51.06	50.00	102	51.80	50.00	104	82-116	1.43	20
Vanadium	5.000	54.72	50.00	109	55.50	50.00	111	86-115	1.42	20
Zinc	4.970	57.99	50.00	106	59.37	50.00	109	83-119	2.35	20

ALS Houston, US

Date: 02-Sep-22

Form 5B - Post Digest Sample Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Date Analyzed: 22-Aug-2022 20:48
Date Extracted: 19-Aug-2022 09:00
Units: ug/L

Lab Sample ID: HS22080472-01PDS
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Barium	354.8	899	500	109	80-120
Sodium	765600	811500	50000	92	80-120

ALS Houston, US

Date: 02-Sep-22

Form 5B - Post Digest Sample Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Date Analyzed: 23-Aug-2022 13:12
Date Extracted: 19-Aug-2022 09:00
Units: ug/L

Lab Sample ID: HS22080472-01PDS
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Aluminum	14.1	116.2	100	102	80-120
Antimony	0	98.26	100	98	80-120
Arsenic	0	110.4	100	110	80-120
Beryllium	0	108.8	100	109	80-120
Cadmium	0	106	100	106	80-120
Calcium	18190	27520	10000	93	80-120
Chromium	0.418	99.39	100	99	80-120
Cobalt	0.176	102.5	100	102	80-120
Copper	0	94.34	100	94	80-120
Iron	90.66	10100	10000	100	80-120
Lead	0	108.4	100	108	80-120
Magnesium	18090	26680	10000	86	80-120
Manganese	74.29	174.4	100	100	80-120
Nickel	0	98.86	100	99	80-120
Potassium	2681	13020	10000	103	80-120
Selenium	0	108.5	100	108	80-120
Silver	0	103.5	100	103	80-120
Thallium	0	109.9	100	110	80-120
Vanadium	0	107	100	107	80-120
Zinc	4.97	108.3	100	103	80-120

ALS Houston, US

Date: 02-Sep-22

Form 7 - Laboratory Control Sample

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Date Analyzed: 22-Aug-2022 20:38
Date Extracted: 19-Aug-2022 09:00
Units: ug/L

Lab Sample ID: LCS-182618
Analysis Method: SW6020A

Analyte	Spike Amount	LCS Result	% Rec	% Rec Limits
Aluminum	100	109.6	110	84-117
Antimony	50	53.24	106	85-117
Arsenic	50	55.76	112	84-116
Barium	50	54.04	108	86-114
Beryllium	50	58.58	117	83-121
Cadmium	50	55.91	112	87-115
Calcium	5000	5107	102	87-118
Chromium	50	53.84	108	85-116
Cobalt	50	55.53	111	86-115
Copper	50	55.2	110	85-118
Iron	5000	5326	107	87-118
Lead	50	48.92	98	88-115
Magnesium	5000	5437	109	83-118
Manganese	50	54.8	110	87-115
Nickel	50	54.38	109	85-117
Potassium	5000	5402	108	87-115
Selenium	50	57.53	115	80-120
Silver	50	44.47	89	85-116
Sodium	5000	5232	105	85-117
Thallium	50	51.71	103	82-116
Vanadium	50	54.02	108	86-115
Zinc	50	56.68	113	83-119

ALS Houston, US Date: 02-Sep-22

Form 8 - ICP Serial Dilutions

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Date Analyzed: 22-Aug-2022 20:42
Date Extracted: 19-Aug-2022 09:00
Units: ug/L

Lab Sample ID: HS22080472-01SD
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	C	SD Result	C	RPD	Q
Barium	354.8		343.2		3	
Sodium	765600		762800		0	

ALS Houston, US Date: 02-Sep-22

Form 8 - ICP Serial Dilutions

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS22080522

Date Analyzed: 23-Aug-2022 13:06
Date Extracted: 19-Aug-2022 09:00
Units: ug/L

Lab Sample ID: HS22080472-01SD
Client Sample ID:

Analysis Method: SW6020A

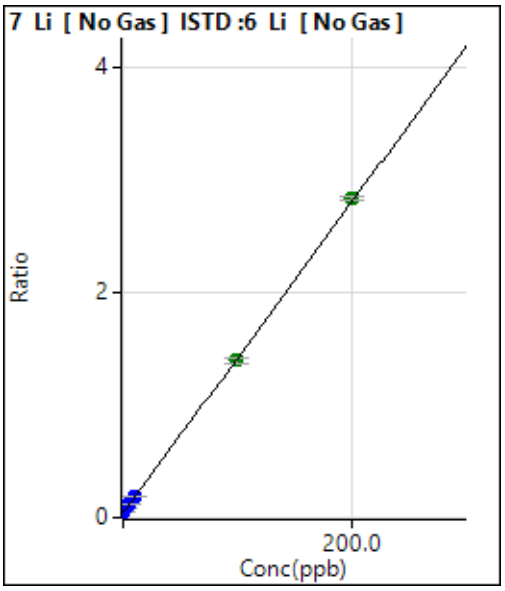
Analyte	Sample Result	C	SD Result	C	RPD	Q
Aluminum	14.1		26.55	J	88	
Antimony	0	U	0	U	0	
Arsenic	0	U	0	U	0	
Beryllium	0	U	0	U	0	
Cadmium	0	U	0	U	0	
Calcium	18190		18120		0	
Chromium	0.418	J	0	U	0	
Cobalt	0.176	J	0	U	0	
Copper	0	U	0	U	0	
Iron	90.66	J	91.1	J	0	
Lead	0	U	0	U	0	
Magnesium	18090		18110		0	
Manganese	74.29		75.2		1	
Nickel	0	U	0	U	0	
Potassium	2681		2409		10	E
Selenium	0	U	0	U	0	
Silver	0	U	0	U	0	
Thallium	0	U	0	U	0	
Vanadium	0	U	0	U	0	
Zinc	4.97	J	0	U	0	

Calibration for 143_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\082222A.b\
Analysis File: 082222A.batch.bin
DA Date-Time: 08/22/2022 20:22:31
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	136CALB.d	CAL BLK	08/22/2022 20:07:01
2	137CALS.d	2/10/200	08/22/2022 20:09:11
3	138CALS.d	5/25/500	08/22/2022 20:11:20
4	139CALS.d	10/50/100	08/22/2022 20:13:30
5	140CALS.d	100/500/10K	08/22/2022 20:15:39
6	141CALS.d	200/1000/20K	08/22/2022 20:17:44

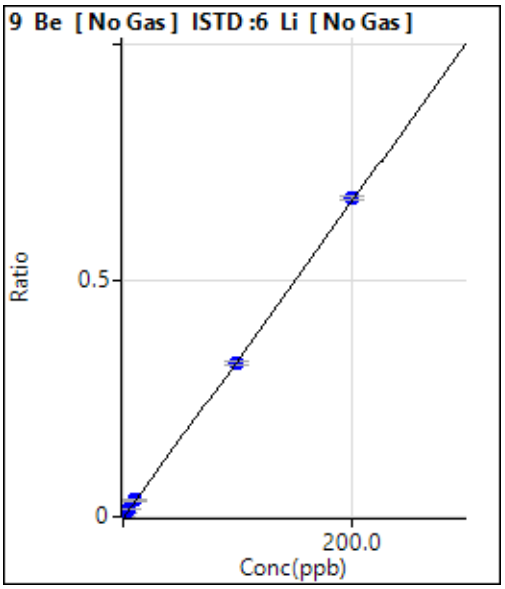
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35828.95	0.0549	P	5.5	
2	☐	2.000	2.481	57297.79	0.0891	P	0.3	24.0
3	☐	5.000	4.904	79275.14	0.1226	P	0.8	-1.9
4	☐	10.000	9.813	122261.24	0.1904	P	1.3	-1.9
5	☐	100.000	96.948	957901.00	1.3943	A	3.8	-3.1
6	☐	200.000	201.533	1857600.75	2.8393	A	1.6	0.8

y = 0.0138 * x + 0.0549
R = 0.9998
DL = 0.657 ppb
BEC = 3.971 ppb

Weight: <None>
Min Conc: <None>

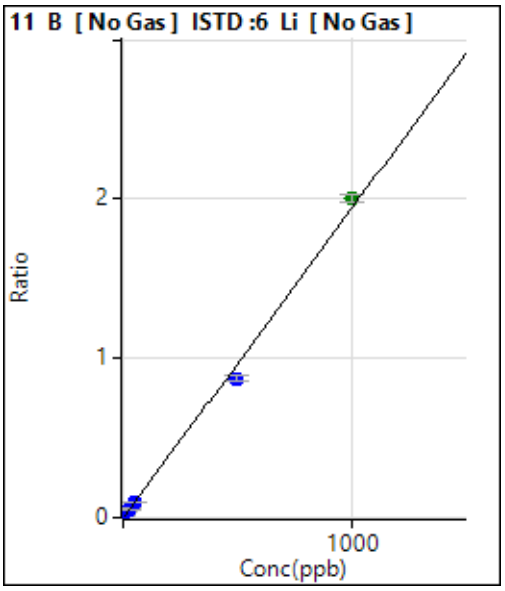


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0000	P	29.0	
2	☐	2.000	2.570	5566.15	0.0087	P	3.2	28.5
3	☐	5.000	5.127	11137.84	0.0172	P	3.1	2.5
4	☐	10.000	10.314	22224.32	0.0346	P	0.8	3.1
5	☐	100.000	97.127	223720.64	0.3256	P	2.4	-2.9
6	☐	200.000	201.412	441697.75	0.6751	P	0.7	0.7

y = 0.0034 * x + 4.5882E-005
R = 0.9998
DL = 0.0119 ppb
BEC = 0.01369 ppb

Weight: <None>
Min Conc: <None>

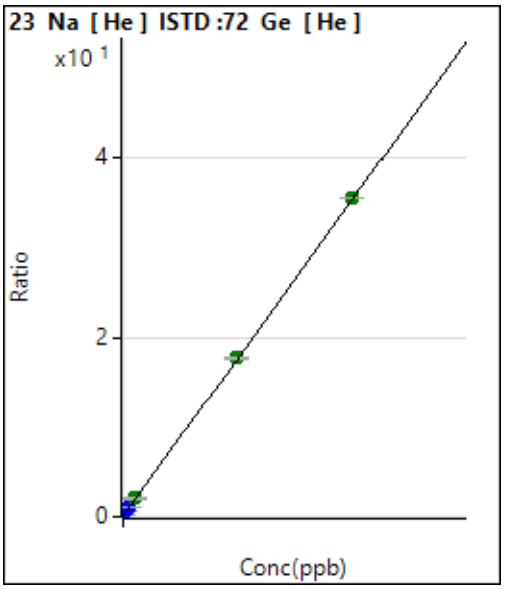
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5057.63	0.0077	P	6.0	
2	☐	10.000	11.723	19623.77	0.0305	P	1.8	17.2
3	☐	25.000	23.639	34707.87	0.0537	P	2.6	-5.4
4	☐	50.000	47.458	64192.46	0.1000	P	1.9	-5.1
5	☐	500.000	444.497	598843.28	0.8717	P	3.9	-11.1
6	☐	1000.000	1027.895	1312189.90	2.0056	A	2.6	2.8

y = 0.0019 * x + 0.0077
R = 0.9979
DL = 0.7188 ppb
BEC = 3.985 ppb

Weight: <None>
Min Conc: <None>

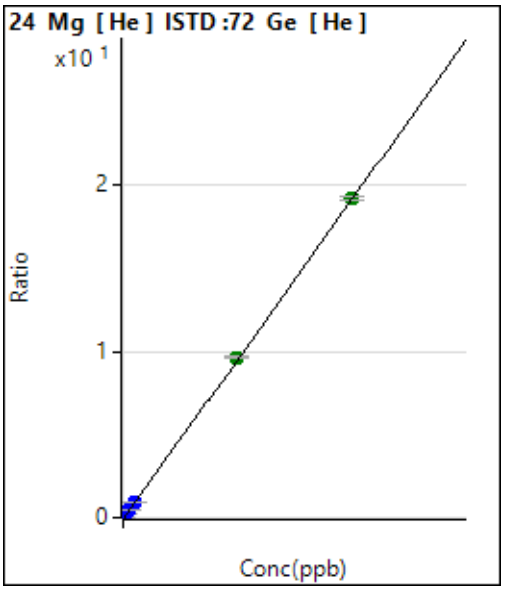


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	113031.74	0.2637	P	1.4	
2	☐	200.000	234.634	290704.16	0.6766	P	8.4	17.3
3	☐	500.000	448.263	453677.61	1.0525	P	0.6	-10.3
4	☐	1000.000	1011.984	878190.43	2.0444	A	1.0	1.2
5	☐	10000.00	9893.410	7589096.35	17.6719	A	1.4	-1.1
6	☐	20000.00	20053.64	14970410.1	35.5497	A	0.4	0.3

y = 0.0018 * x + 0.2637
R = 1.0000
DL = 6.104 ppb
BEC = 149.9 ppb

Weight: <None>
Min Conc: <None>

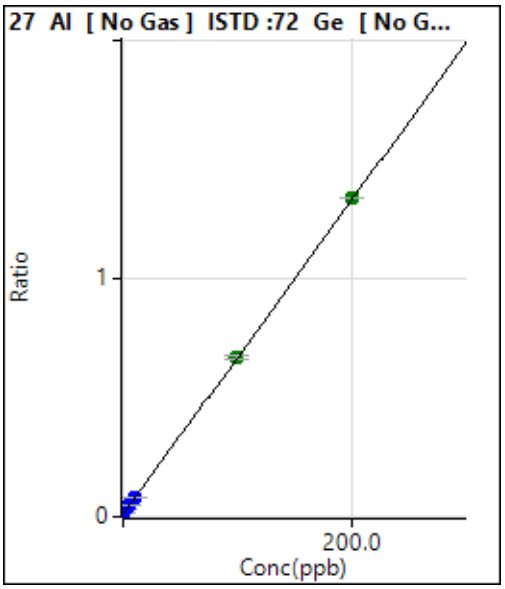
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1483.44	0.0035	P	14.1	
2	☐	200.000	241.967	101418.78	0.2360	P	1.3	21.0
3	☐	500.000	488.515	203846.72	0.4729	P	0.2	-2.3
4	☐	1000.000	973.493	403327.18	0.9389	P	0.3	-2.7
5	☐	10000.00	10013.87	4133960.04	9.6260	A	0.9	0.1
6	☐	20000.00	19994.25	8092443.42	19.2164	A	0.8	0.0

y = 9.6092E-004 * x + 0.0035
R = 1.0000
DL = 1.527 ppb
BEC = 3.601 ppb

Weight: <None>
Min Conc: <None>

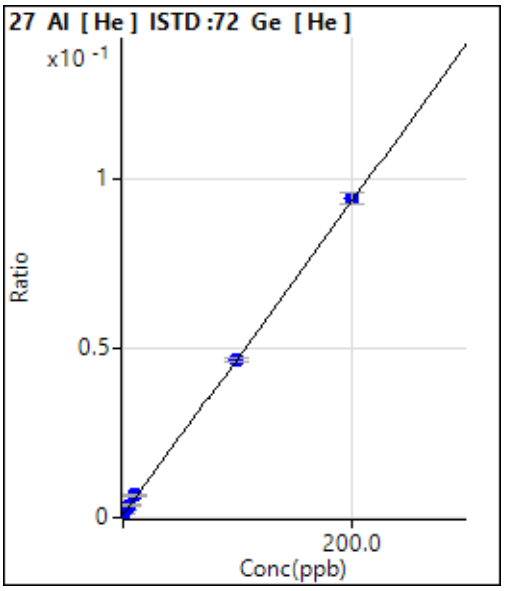


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	27428.04	0.0167	P	3.8	
2	☐	2.000	2.469	54329.47	0.0330	P	1.2	23.4
3	☐	5.000	4.961	82239.11	0.0495	P	2.6	-0.8
4	☐	10.000	9.945	137083.45	0.0824	P	1.5	-0.5
5	☐	100.000	99.263	1116201.15	0.6718	A	2.0	-0.7
6	☐	200.000	200.368	2150140.64	1.3390	A	0.4	0.2

y = 0.0066 * x + 0.0167
R = 1.0000
DL = 0.2863 ppb
BEC = 2.533 ppb

Weight: <None>
Min Conc: <None>

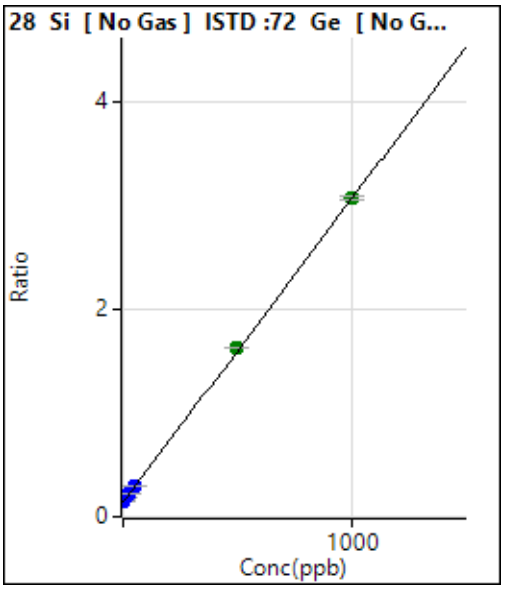
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	546.69	0.0013	P	10.8	
2	☐	2.000	1.954	936.71	0.0022	P	10.4	-2.3
3	☐	5.000	4.909	1530.11	0.0035	P	10.3	-1.8
4	☐	10.000	11.425	2820.34	0.0066	P	1.8	14.2
5	☐	100.000	97.953	20024.64	0.0466	P	3.4	-2.0
6	☐	200.000	200.955	39713.73	0.0943	P	3.9	0.5

y = 4.6305E-004 * x + 0.0013
R = 0.9999
DL = 0.8953 ppb
BEC = 2.754 ppb

Weight: <None>
Min Conc: <None>

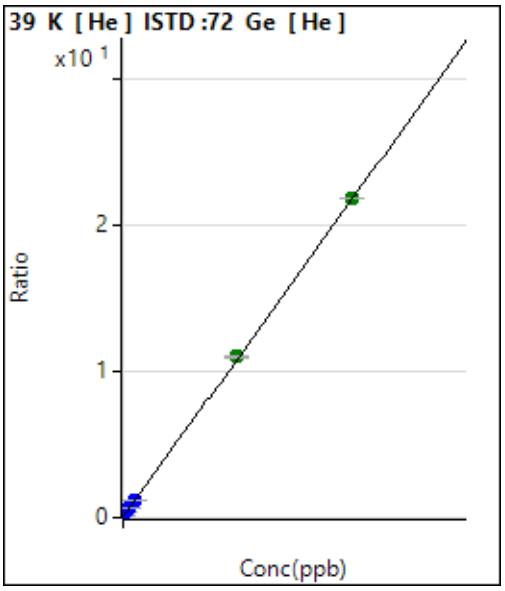


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	255640.52	0.1558	P	5.3	
2	☐	10.000	10.622	307648.20	0.1869	P	0.3	6.2
3	☐	25.000	22.013	366306.31	0.2203	P	2.0	-11.9
4	☐	50.000	46.822	487644.64	0.2929	P	0.7	-6.4
5	☐	500.000	505.336	2717696.94	1.6357	A	0.2	1.1
6	☐	1000.000	997.559	4941112.64	3.0771	A	0.8	-0.2

y = 0.0029 * x + 0.1558
R = 1.0000
DL = 8.512 ppb
BEC = 53.2 ppb

Weight: <None>
Min Conc: <None>

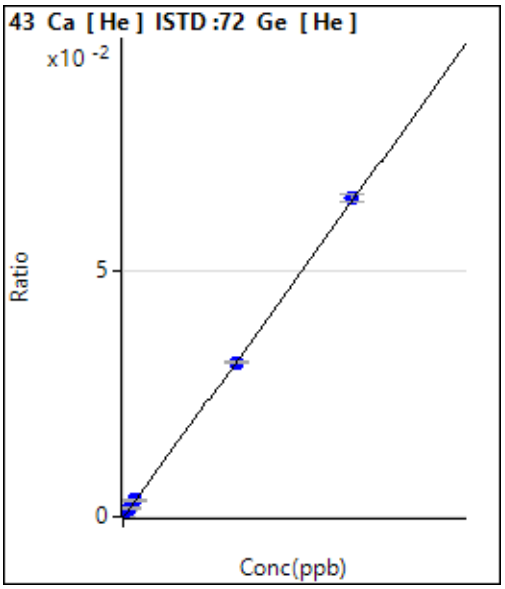
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	65036.44	0.1517	P	1.7	
2	☐	200.000	253.325	183416.25	0.4267	P	0.9	26.7
3	☐	500.000	487.523	293535.81	0.6810	P	1.7	-2.5
4	☐	1000.000	972.191	518555.67	1.2072	P	0.5	-2.8
5	☐	10000.00	10016.09	4734743.47	11.0252	A	1.3	0.2
6	☐	20000.00	19993.12	9203530.28	21.8563	A	0.5	0.0

y = 0.0011 * x + 0.1517
R = 1.0000
DL = 6.928 ppb
BEC = 139.8 ppb

Weight: <None>
Min Conc: <None>

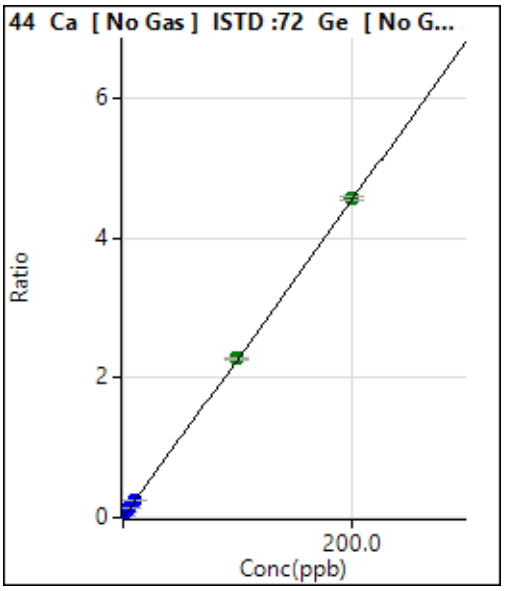


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43.33	0.0001	P	26.6	
2	☐	200.000	305.793	466.68	0.0011	P	19.0	52.9
3	☐	500.000	491.968	726.70	0.0017	P	9.7	-1.6
4	☐	1000.000	1035.615	1476.78	0.0034	P	8.7	3.6
5	☐	10000.00	9715.018	13486.81	0.0314	P	1.6	-2.8
6	☐	20000.00	20139.85	27374.25	0.0650	P	2.8	0.7

y = 3.2223E-006 * x + 1.0109E-004
R = 0.9998
DL = 25.03 ppb
BEC = 31.37 ppb

Weight: <None>
Min Conc: <None>

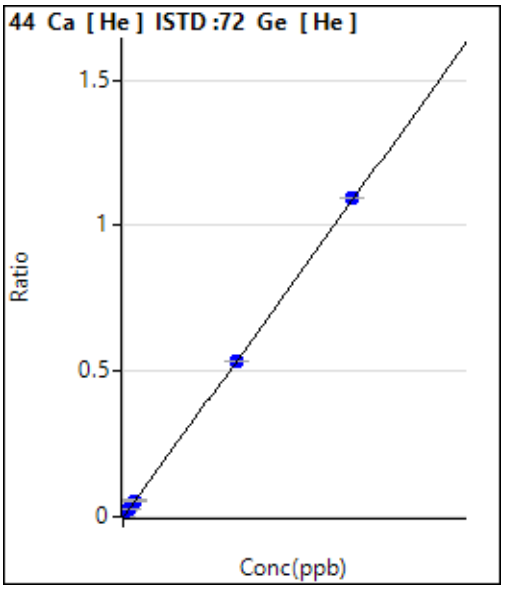
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	39223.36	0.0239	P	24.6	
2	☐	2.000	2.721	141111.44	0.0857	P	1.8	36.1
3	☐	5.000	4.614	214082.39	0.1287	P	1.8	-7.7
4	☐	10.000	9.466	397846.95	0.2390	P	0.6	-5.3
5	☐	100.000	99.518	3796434.73	2.2849	A	1.1	-0.5
6	☐	200.000	200.270	7344578.64	4.5738	A	1.3	0.1

y = 0.0227 * x + 0.0239
R = 1.0000
DL = 0.7761 ppb
BEC = 1.052 ppb

Weight: <None>
Min Conc: <None>

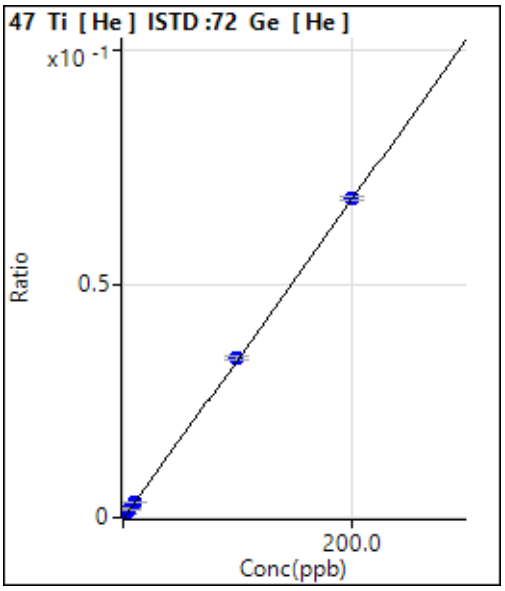


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	886.71	0.0021	P	12.7	
2	☐	200.000	282.978	7502.21	0.0175	P	7.5	41.5
3	☐	500.000	475.429	12038.81	0.0279	P	2.3	-4.9
4	☐	1000.000	985.422	23914.41	0.0557	P	3.5	-1.5
5	☐	10000.00	9795.089	229704.14	0.5349	P	0.4	-2.0
6	☐	20000.00	20102.96	461329.85	1.0955	P	0.4	0.5

y = 5.4394E-005 * x + 0.0021
R = 0.9999
DL = 14.52 ppb
BEC = 38.01 ppb

Weight: <None>
Min Conc: <None>

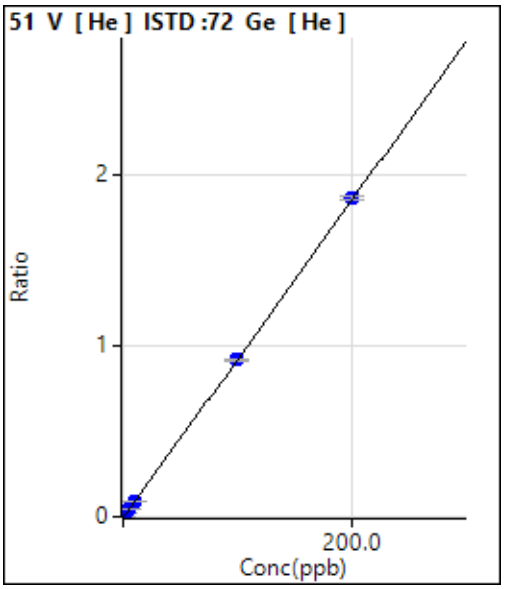
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	2.494	366.68	0.0009	P	3.2	24.7
3	☐	5.000	5.361	790.04	0.0018	P	18.2	7.2
4	☐	10.000	9.435	1386.77	0.0032	P	7.7	-5.6
5	☐	100.000	100.035	14698.03	0.0342	P	1.6	0.0
6	☐	200.000	199.997	28810.48	0.0684	P	1.7	0.0

y = 3.4212E-004 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

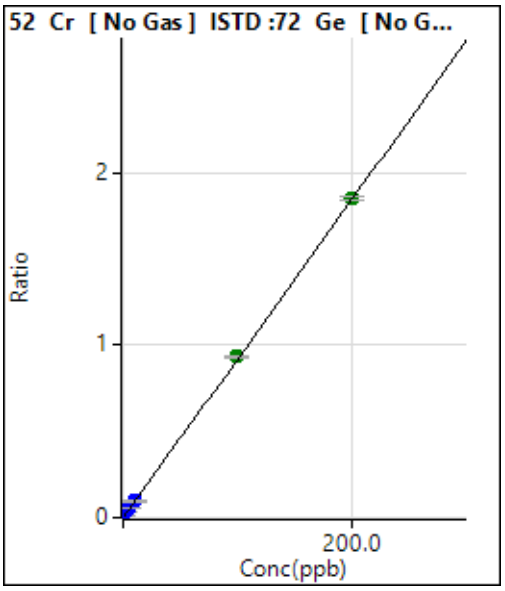


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1056.71	0.0025	P	6.1	
2	☐	2.000	2.430	10774.28	0.0251	P	1.9	21.5
3	☐	5.000	4.910	20750.21	0.0481	P	1.7	-1.8
4	☐	10.000	9.898	40613.28	0.0945	P	0.4	-1.0
5	☐	100.000	98.870	396065.52	0.9223	P	1.1	-1.1
6	☐	200.000	200.568	786721.67	1.8684	P	1.2	0.3

y = 0.0093 * x + 0.0025
R = 1.0000
DL = 0.04873 ppb
BEC = 0.265 ppb

Weight: <None>
Min Conc: <None>

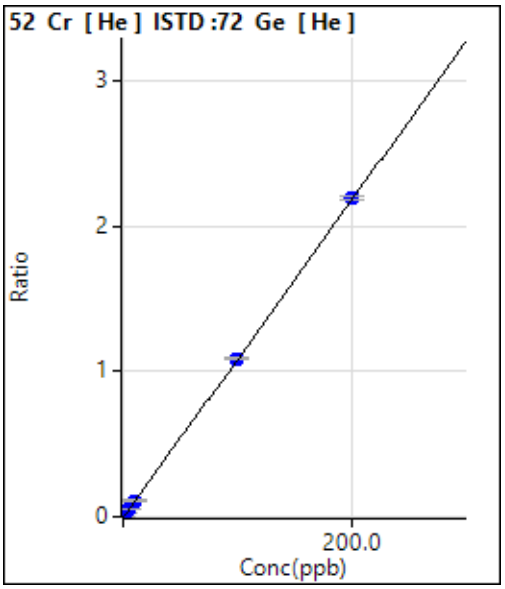
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13149.90	0.0080	P	4.2	
2	☐	2.000	2.299	48141.52	0.0292	P	2.0	15.0
3	☐	5.000	4.712	85680.49	0.0515	P	2.0	-5.8
4	☐	10.000	9.432	158341.00	0.0951	P	0.7	-5.7
5	☐	100.000	100.158	1549927.69	0.9329	A	1.2	0.2
6	☐	200.000	199.954	2977634.64	1.8543	A	0.9	0.0

y = 0.0092 * x + 0.0080
R = 1.0000
DL = 0.1091 ppb
BEC = 0.868 ppb

Weight: <None>
Min Conc: <None>

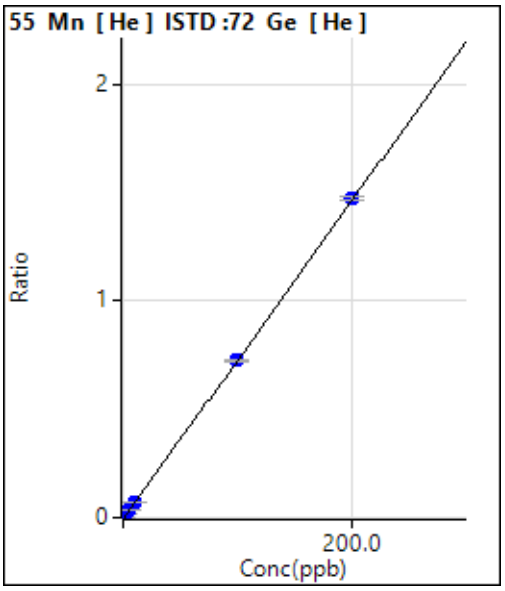


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1533.45	0.0036	P	14.8	
2	☐	2.000	2.406	12856.21	0.0299	P	2.1	20.3
3	☐	5.000	4.949	24889.53	0.0577	P	0.4	-1.0
4	☐	10.000	9.880	47981.23	0.1117	P	2.7	-1.2
5	☐	100.000	99.199	467698.70	1.0891	P	1.7	-0.8
6	☐	200.000	200.404	924952.80	2.1966	P	0.8	0.2

y = 0.0109 * x + 0.0036
R = 1.0000
DL = 0.145 ppb
BEC = 0.3271 ppb

Weight: <None>
Min Conc: <None>

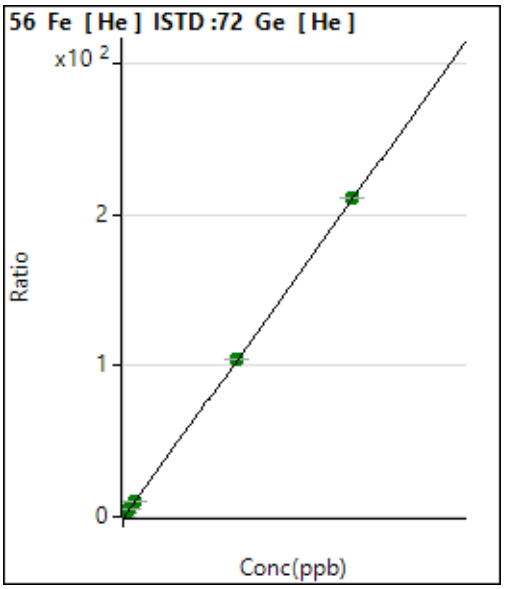
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	343.34	0.0008	P	5.9	
2	☐	2.000	2.705	8883.02	0.0207	P	2.6	35.3
3	☐	5.000	4.938	15976.29	0.0371	P	0.2	-1.2
4	☐	10.000	9.791	31232.54	0.0727	P	0.4	-2.1
5	☐	100.000	98.538	311125.05	0.7245	P	0.8	-1.5
6	☐	200.000	200.736	621107.14	1.4750	P	0.7	0.4

y = 0.0073 * x + 8.0086E-004
R = 1.0000
DL = 0.01936 ppb
BEC = 0.1091 ppb

Weight: <None>
Min Conc: <None>

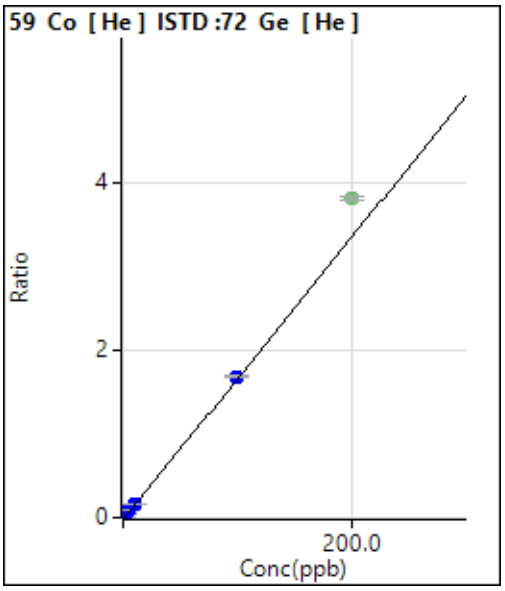


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13323.37	0.0311	P	2.5	
2	☐	200.000	263.301	1204661.23	2.8026	A	1.6	31.7
3	☐	500.000	526.954	2404416.58	5.5778	A	1.4	5.4
4	☐	1000.000	1016.407	4609167.22	10.7298	A	0.9	1.6
5	☐	10000.00	9896.057	44748616.0	104.197	A	0.6	-1.0
6	☐	20000.00	20049.84	88882518.6	211.075	A	0.6	0.2

y = 0.0105 * x + 0.0311
R = 1.0000
DL = 0.2238 ppb
BEC = 2.953 ppb

Weight: <None>
Min Conc: <None>

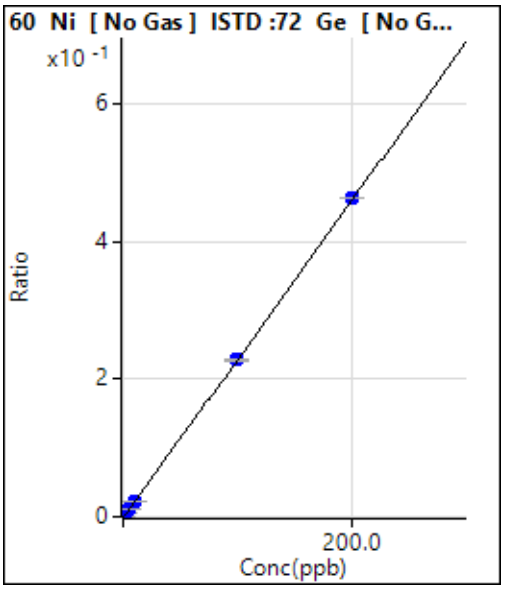
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0001	P	61.0	
2	☐	2.000	2.481	17962.08	0.0418	P	4.0	24.0
3	☐	5.000	5.003	36295.29	0.0842	P	1.5	0.1
4	☐	10.000	10.102	72975.22	0.1699	P	0.6	1.0
5	☐	100.000	99.980	721618.19	1.6803	P	1.2	0.0
6	☑	200.000		1603251.80	3.8075	A	1.3	

y = 0.0168 * x + 1.0854E-004
R = 1.0000
DL = 0.01182 ppb
BEC = 0.006458 ppb

Weight: <None>
Min Conc: <None>

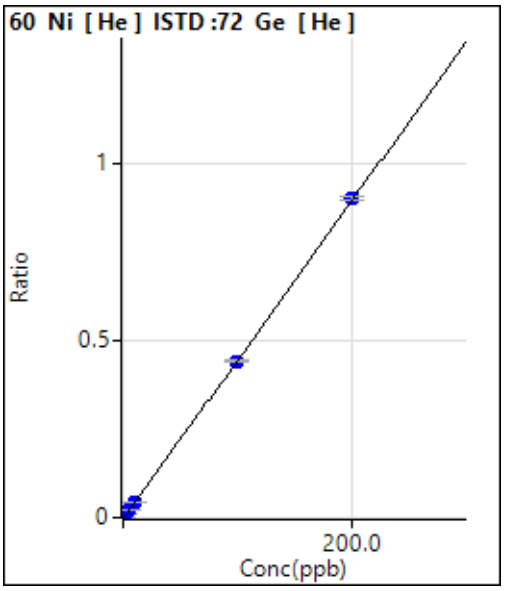


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	600.03	0.0004	P	35.2	
2	☐	2.000	2.528	10207.34	0.0062	P	1.0	26.4
3	☐	5.000	4.990	19767.89	0.0119	P	1.2	-0.2
4	☐	10.000	9.895	38638.35	0.0232	P	1.4	-1.0
5	☐	100.000	98.489	378361.73	0.2277	P	1.2	-1.5
6	☐	200.000	200.756	744756.74	0.4638	P	0.3	0.4

y = 0.0023 * x + 3.6597E-004
R = 1.0000
DL = 0.1672 ppb
BEC = 0.1585 ppb

Weight: <None>
Min Conc: <None>

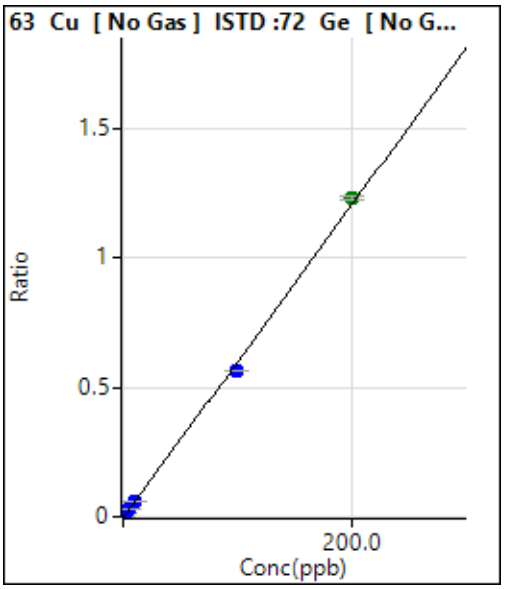
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	246.67	0.0006	P	23.7	
2	☐	2.000	2.502	5067.70	0.0118	P	2.2	25.1
3	☐	5.000	4.828	9576.86	0.0222	P	1.7	-3.4
4	☐	10.000	9.898	19303.89	0.0449	P	5.1	-1.0
5	☐	100.000	98.421	189686.73	0.4417	P	1.9	-1.6
6	☐	200.000	200.794	379220.76	0.9006	P	0.6	0.4

y = 0.0045 * x + 5.7605E-004
R = 1.0000
DL = 0.09134 ppb
BEC = 0.1285 ppb

Weight: <None>
Min Conc: <None>

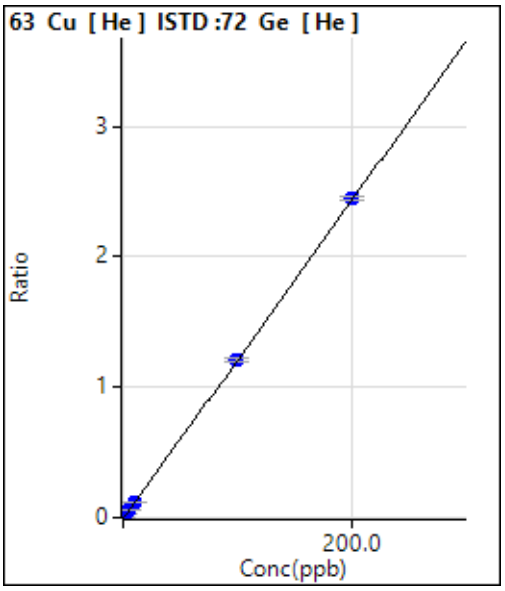


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1423.45	0.0009	P	12.4	
2	☐	2.000	2.284	24135.12	0.0147	P	1.9	14.2
3	☐	5.000	4.645	48111.93	0.0289	P	1.9	-7.1
4	☐	10.000	9.338	95359.66	0.0573	P	0.9	-6.6
5	☐	100.000	93.164	936585.06	0.5637	P	1.1	-6.8
6	☐	200.000	203.457	1975103.20	1.2300	A	1.4	1.7

y = 0.0060 * x + 8.6740E-004
R = 0.9992
DL = 0.05334 ppb
BEC = 0.1436 ppb

Weight: <None>
Min Conc: <None>

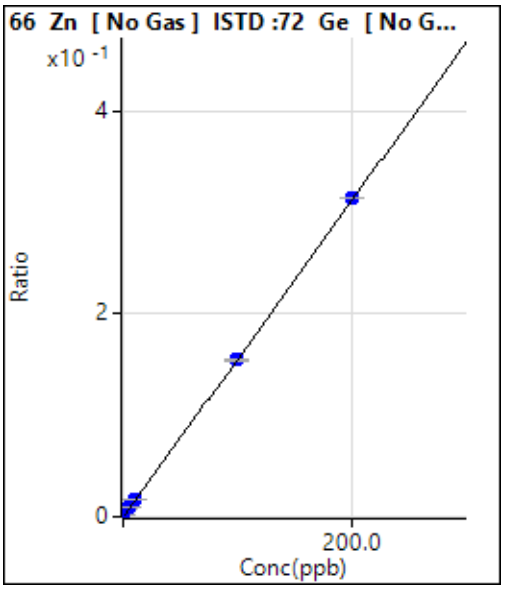
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	606.69	0.0014	P	8.1	
2	☐	2.000	2.369	13039.76	0.0303	P	2.4	18.4
3	☐	5.000	4.951	26666.45	0.0619	P	2.6	-1.0
4	☐	10.000	9.948	52789.37	0.1229	P	1.8	-0.5
5	☐	100.000	99.195	520742.92	1.2126	P	1.9	-0.8
6	☐	200.000	200.403	1031003.48	2.4485	P	0.9	0.2

y = 0.0122 * x + 0.0014
R = 1.0000
DL = 0.02823 ppb
BEC = 0.1159 ppb

Weight: <None>
Min Conc: <None>

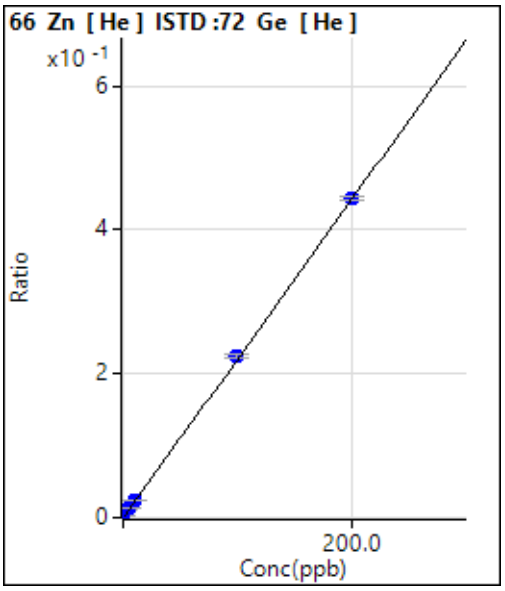


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1790.16	0.0011	P	6.6	
2	☐	2.000	3.912	11848.71	0.0072	P	2.0	95.6
3	☐	5.000	4.908	14558.01	0.0088	P	1.3	-1.8
4	☐	10.000	9.838	27377.90	0.0164	P	2.6	-1.6
5	☐	100.000	98.370	256979.08	0.1547	P	0.6	-1.6
6	☐	200.000	200.806	505140.93	0.3146	P	0.1	0.4

y = 0.0016 * x + 0.0011
R = 0.9999
DL = 0.1381 ppb
BEC = 0.6989 ppb

Weight: <None>
Min Conc: <None>

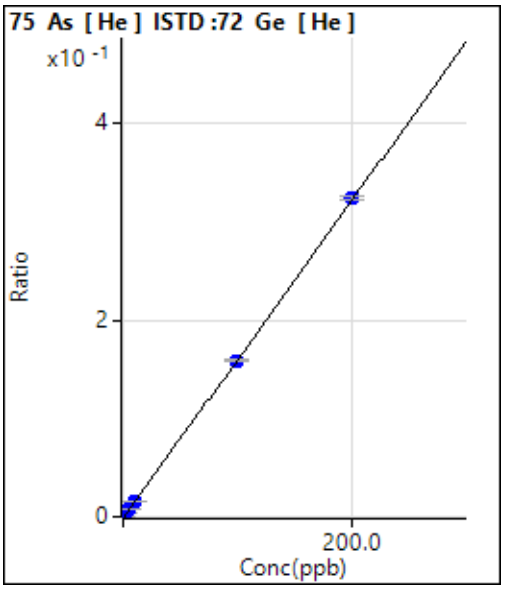
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	730.03	0.0017	P	10.1	
2	☐	2.000	3.854	4397.45	0.0102	P	3.2	92.7
3	☐	5.000	4.942	5447.87	0.0126	P	3.3	-1.2
4	☐	10.000	10.040	10274.05	0.0239	P	4.3	0.4
5	☐	100.000	100.385	96098.63	0.2238	P	2.7	0.4
6	☐	200.000	199.788	186839.01	0.4437	P	0.6	-0.1

y = 0.0022 * x + 0.0017
R = 1.0000
DL = 0.2329 ppb
BEC = 0.7702 ppb

Weight: <None>
Min Conc: <None>

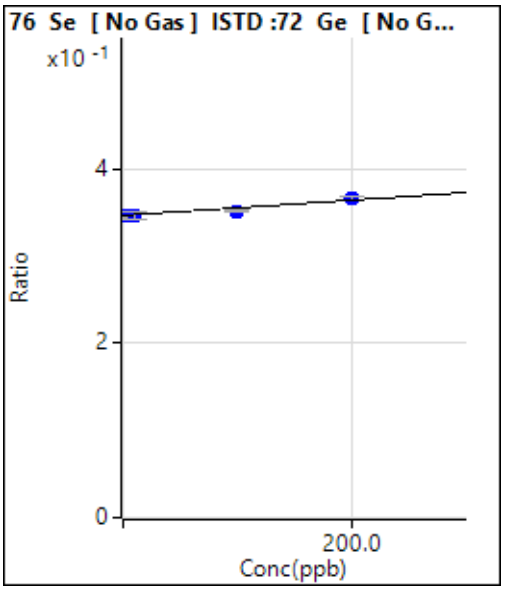


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	54.44	0.0001	P	2.8	
2	☐	2.000	2.463	1764.57	0.0041	P	2.8	23.2
3	☐	5.000	4.950	3501.58	0.0081	P	1.5	-1.0
4	☐	10.000	9.712	6793.96	0.0158	P	4.0	-2.9
5	☐	100.000	98.497	68383.17	0.1592	P	1.5	-1.5
6	☐	200.000	200.762	136613.26	0.3244	P	1.3	0.4

y = 0.0016 * x + 1.2701E-004
R = 1.0000
DL = 0.006506 ppb
BEC = 0.07863 ppb

Weight: <None>
Min Conc: <None>

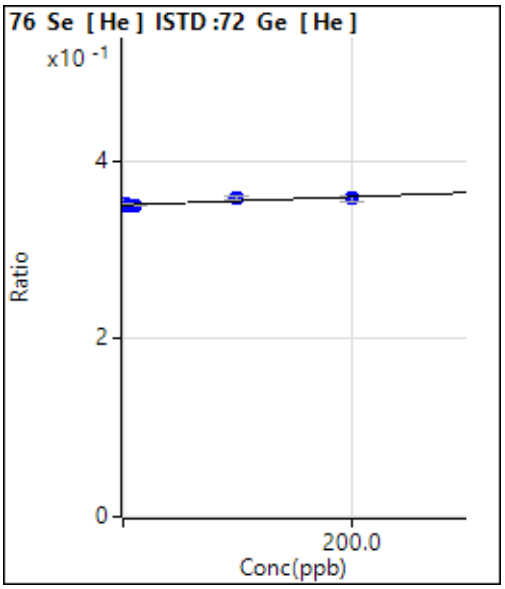
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	568809.15	0.3466	P	1.9	
2	☐	2.000	9.278	571898.82	0.3474	P	0.4	363.9
3	☐	5.000	8.452	577694.68	0.3474	P	1.9	69.0
4	☐	10.000	-1.625	576732.92	0.3465	P	2.0	-116.3
5	☐	100.000	55.270	584015.98	0.3515	P	0.3	-44.7
6	☐	200.000	222.787	588099.49	0.3662	P	0.7	11.4

y = 8.8035E-005 * x + 0.3466
R = 0.9657
DL = 229.6 ppb
BEC = 3937 ppb

Weight: <None>
Min Conc: <None>

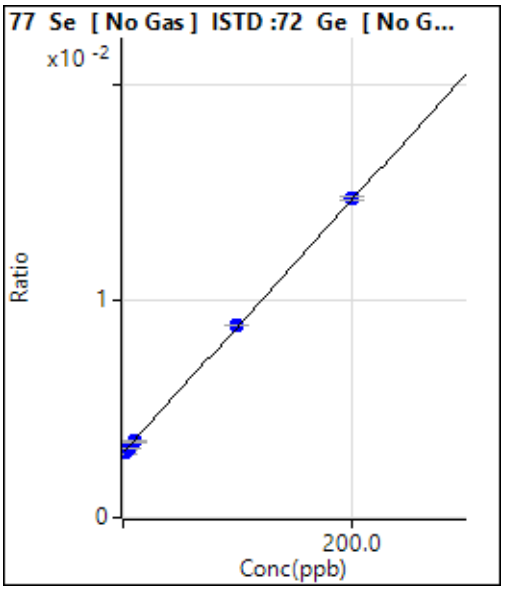


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150243.33	0.3506	P	0.8	
2	☐	2.000	54.149	151753.27	0.3531	P	2.2	2607.4
3	☐	5.000	-7.120	150974.64	0.3502	P	0.3	-242.4
4	☐	10.000	0.876	150610.39	0.3506	P	0.6	-91.2
5	☐	100.000	171.283	153991.03	0.3586	P	1.3	71.3
6	☐	200.000	164.596	150857.08	0.3583	P	1.7	-17.7

y = 4.6778E-005 * x + 0.3506
R = 0.8751
DL = 174.2 ppb
BEC = 7494 ppb

Weight: <None>
Min Conc: <None>

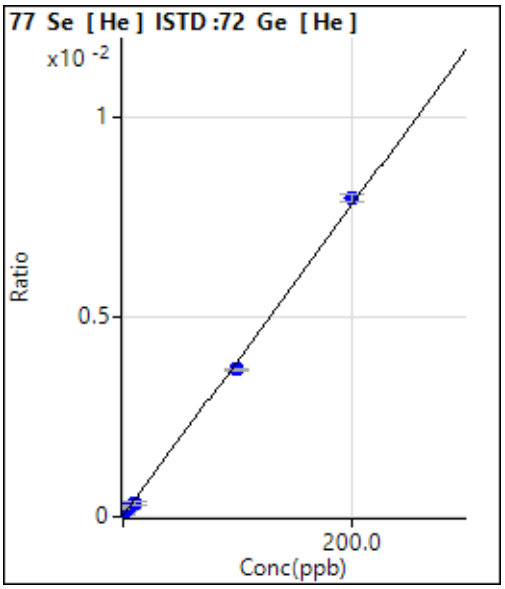
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5037.69	0.0031	P	3.2	
2	☐	2.000	-1.107	4947.65	0.0030	P	7.6	-155.4
3	☐	5.000	2.310	5331.18	0.0032	P	1.2	-53.8
4	☐	10.000	8.057	5891.39	0.0035	P	3.1	-19.4
5	☐	100.000	99.698	14744.96	0.0089	P	0.9	-0.3
6	☐	200.000	200.346	23657.71	0.0147	P	0.9	0.2

y = 5.8212E-005 * x + 0.0031
R = 0.9999
DL = 5.136 ppb
BEC = 52.75 ppb

Weight: <None>
Min Conc: <None>

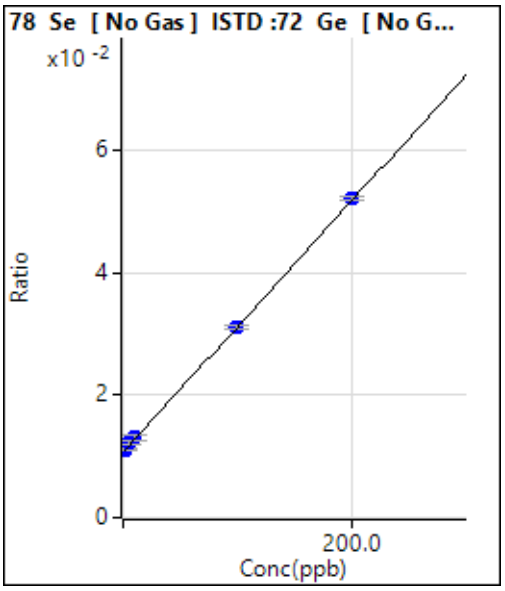


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0001	P	33.2	
2	☐	2.000	2.197	66.67	0.0002	P	17.3	9.8
3	☐	5.000	3.784	93.33	0.0002	P	12.9	-24.3
4	☐	10.000	7.202	150.00	0.0003	P	30.5	-28.0
5	☐	100.000	93.113	1580.13	0.0037	P	1.6	-6.9
6	☐	200.000	203.612	3353.81	0.0080	P	3.0	1.8

y = 3.8765E-005 * x + 6.9947E-005
R = 0.9992
DL = 1.796 ppb
BEC = 1.804 ppb

Weight: <None>
Min Conc: <None>

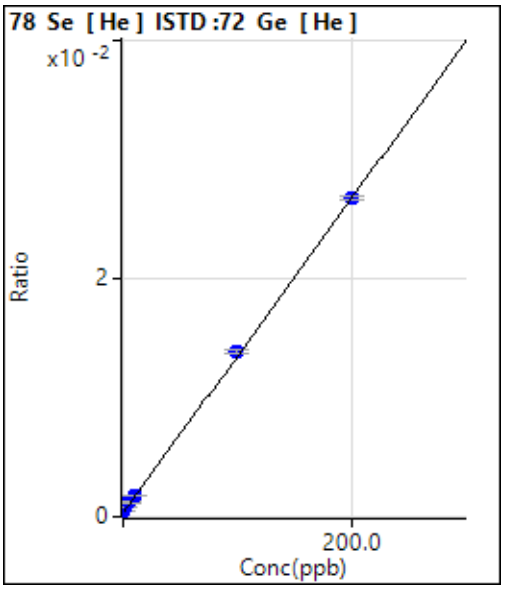
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18022.35	0.0110	P	1.8	
2	☐	2.000	0.391	18209.28	0.0111	P	3.5	-80.5
3	☐	5.000	6.111	20345.69	0.0122	P	3.6	22.2
4	☐	10.000	10.659	21904.81	0.0132	P	7.0	6.6
5	☐	100.000	98.198	51706.20	0.0311	P	1.6	-1.8
6	☐	200.000	200.856	83773.12	0.0522	P	1.0	0.4

y = 2.0505E-004 * x + 0.0110
R = 0.9999
DL = 2.875 ppb
BEC = 53.56 ppb

Weight: <None>
Min Conc: <None>

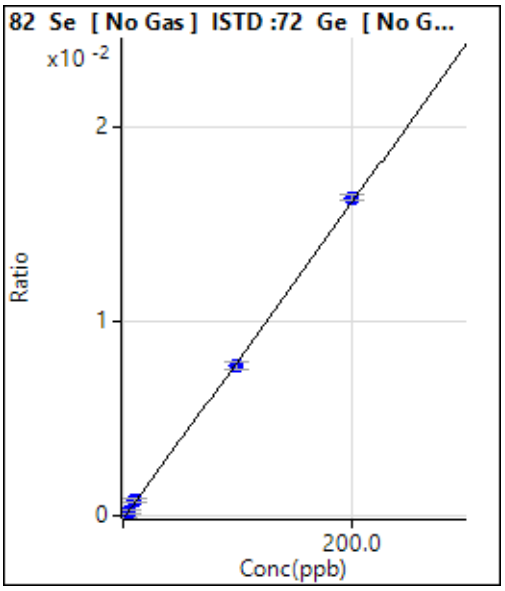


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	197.33	0.0005	P	8.5	
2	☐	2.000	2.845	359.34	0.0008	P	3.9	42.3
3	☐	5.000	5.703	522.68	0.0012	P	7.7	14.1
4	☐	10.000	10.393	786.69	0.0018	P	1.2	3.9
5	☐	100.000	101.582	5951.32	0.0139	P	1.6	1.6
6	☐	200.000	199.164	11254.72	0.0267	P	1.1	-0.4

y = 1.3189E-004 * x + 4.6064E-004
R = 1.0000
DL = 0.8877 ppb
BEC = 3.493 ppb

Weight: <None>
Min Conc: <None>

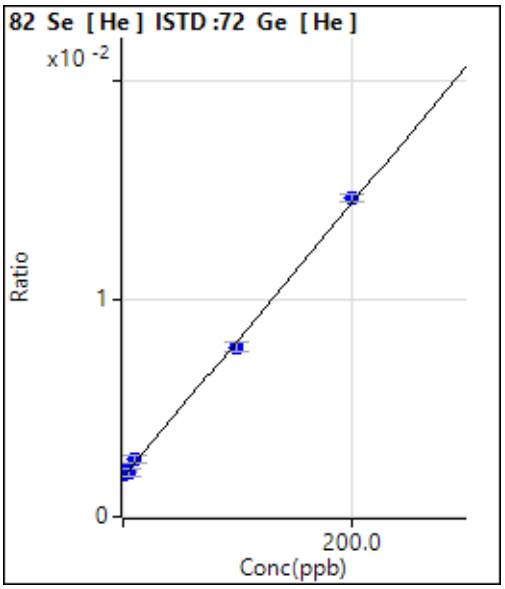
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-131.53	-0.0001	P	-224.	
2	☐	2.000	0.154	-112.84	-0.0001	P	-48.9	-92.3
3	☐	5.000	3.606	356.61	0.0002	P	93.1	-27.9
4	☐	10.000	11.227	1382.18	0.0008	P	24.3	12.3
5	☐	100.000	95.684	12808.95	0.0077	P	5.0	-4.3
6	☐	200.000	202.150	26300.29	0.0164	P	1.5	1.1

y = 8.1423E-005 * x - 8.1253E-005
R = 0.9996
DL = 6.723 ppb
BEC = -0.9979 ppb

Weight: <None>
Min Conc: <None>

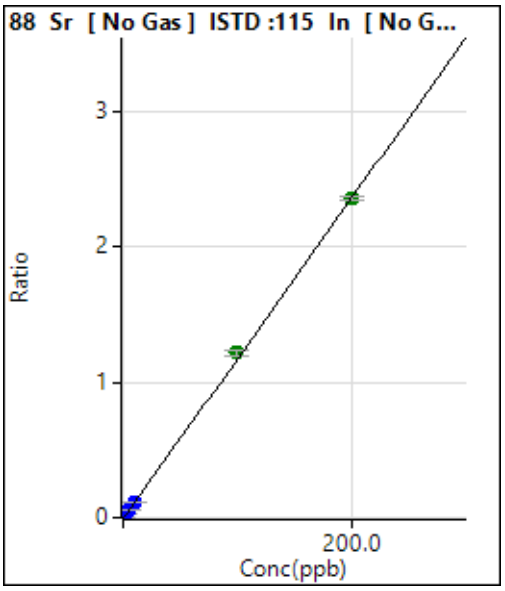


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	813.38	0.0019	P	4.3	
2	☐	2.000	2.864	893.38	0.0021	P	4.6	43.2
3	☐	5.000	2.643	890.05	0.0021	P	17.4	-47.1
4	☐	10.000	11.913	1136.73	0.0026	P	11.7	19.1
5	☐	100.000	94.002	3350.48	0.0078	P	5.3	-6.0
6	☐	200.000	202.953	6164.88	0.0146	P	2.8	1.5

y = 6.2792E-005 * x + 0.0019
R = 0.9992
DL = 3.932 ppb
BEC = 30.23 ppb

Weight: <None>
Min Conc: <None>

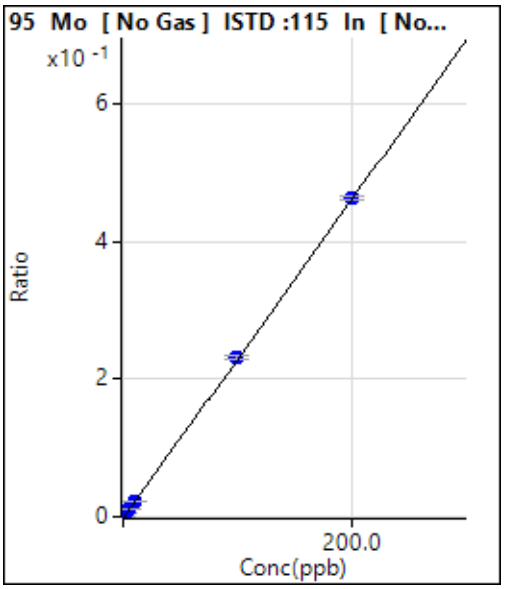
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6060.99	0.0032	P	58.7	
2	☐	2.000	2.173	57038.27	0.0289	P	1.6	8.6
3	☐	5.000	4.610	111590.01	0.0577	P	0.8	-7.8
4	☐	10.000	9.278	217716.00	0.1129	P	1.7	-7.2
5	☐	100.000	102.487	2313712.93	1.2156	A	3.0	2.5
6	☐	200.000	198.800	4437570.04	2.3550	A	1.4	-0.6

y = 0.0118 * x + 0.0032
R = 0.9999
DL = 0.4734 ppb
BEC = 0.2689 ppb

Weight: <None>
Min Conc: <None>

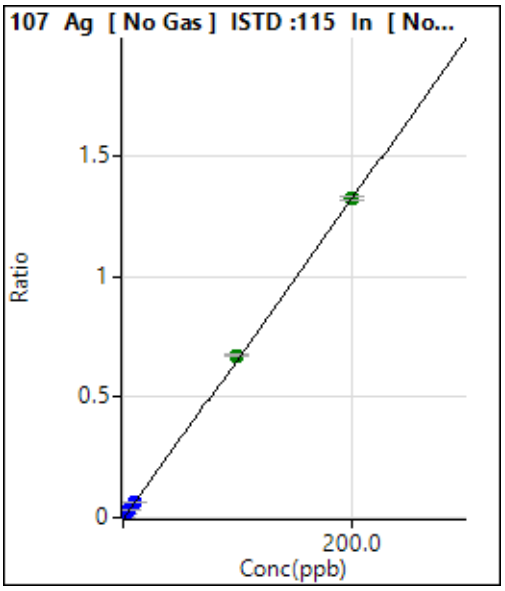


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	70.00	0.0000	P	111.5	
2	☐	2.000	2.397	11024.78	0.0056	P	1.5	19.9
3	☐	5.000	4.845	21741.35	0.0112	P	2.2	-3.1
4	☐	10.000	9.481	42360.99	0.0220	P	1.4	-5.2
5	☐	100.000	99.831	439750.20	0.2310	P	2.0	-0.2
6	☐	200.000	200.110	872576.60	0.4631	P	0.8	0.1

y = 0.0023 * x + 3.6670E-005
R = 1.0000
DL = 0.05302 ppb
BEC = 0.01585 ppb

Weight: <None>
Min Conc: <None>

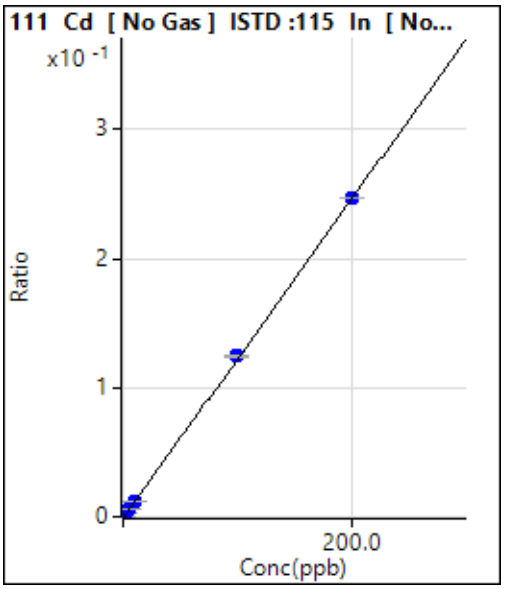
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	316.68	0.0002	P	42.4	
2	☐	2.000	2.248	29874.06	0.0151	P	4.3	12.4
3	☐	5.000	4.626	59845.49	0.0310	P	0.7	-7.5
4	☐	10.000	9.124	117390.72	0.0609	P	1.3	-8.8
5	☐	100.000	101.117	1281525.32	0.6732	A	0.8	1.1
6	☐	200.000	199.492	2502412.00	1.3280	A	1.1	-0.3

y = 0.0067 * x + 1.6697E-004
R = 1.0000
DL = 0.03189 ppb
BEC = 0.02509 ppb

Weight: <None>
Min Conc: <None>

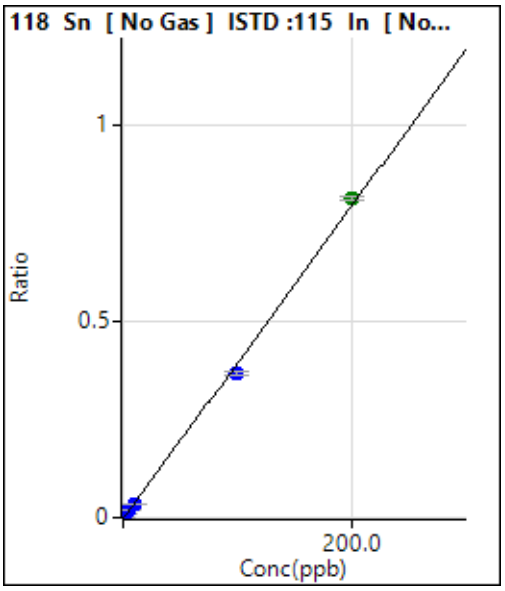


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	2.354	5751.36	0.0029	P	6.2	17.7
3	☐	5.000	4.983	11915.59	0.0062	P	1.7	-0.3
4	☐	10.000	9.680	23080.43	0.0120	P	1.7	-3.2
5	☐	100.000	100.576	236746.51	0.1244	P	1.2	0.6
6	☐	200.000	199.725	465393.09	0.2470	P	0.5	-0.1

y = 0.0012 * x + 1.7267E-006
R = 1.0000
DL = 0.007256 ppb
BEC = 0.001396 ppb

Weight: <None>
Min Conc: <None>

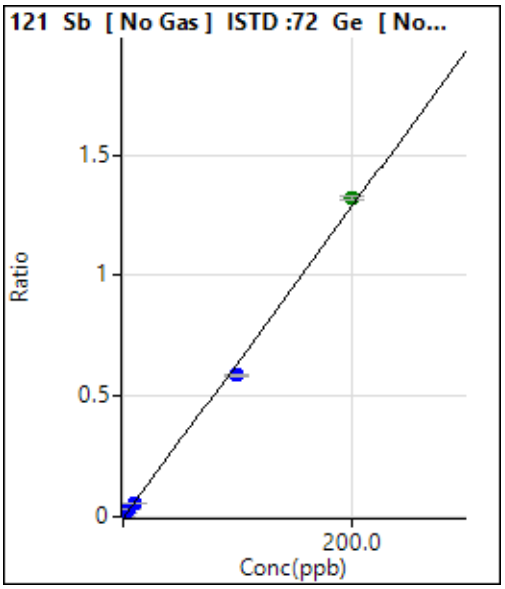
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1326.76	0.0007	P	10.6	
2	☐	2.000	2.122	18076.24	0.0092	P	3.1	6.1
3	☐	5.000	4.477	35819.19	0.0185	P	0.4	-10.5
4	☐	10.000	8.923	69841.97	0.0362	P	2.1	-10.8
5	☐	100.000	92.149	699795.90	0.3676	P	1.6	-7.9
6	☐	200.000	203.991	1531974.61	0.8130	A	0.8	2.0

y = 0.0040 * x + 7.0212E-004
R = 0.9989
DL = 0.05581 ppb
BEC = 0.1763 ppb

Weight: <None>
Min Conc: <None>

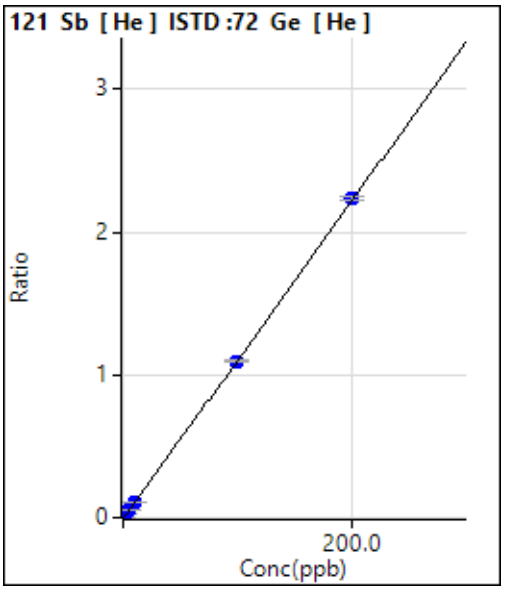


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	993.39	0.0006	P	14.1	
2	☐	2.000	2.310	25541.97	0.0155	P	4.5	15.5
3	☐	5.000	4.560	49965.38	0.0300	P	2.7	-8.8
4	☐	10.000	9.067	98437.55	0.0591	P	1.6	-9.3
5	☐	100.000	90.692	973761.03	0.5861	P	1.2	-9.3
6	☐	200.000	204.709	2123042.10	1.3221	A	1.0	2.4

y = 0.0065 * x + 6.0545E-004
R = 0.9985
DL = 0.03961 ppb
BEC = 0.09379 ppb

Weight: <None>
Min Conc: <None>

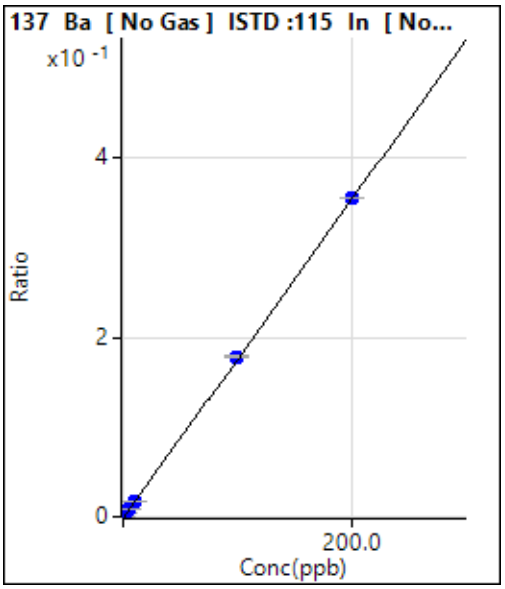
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	540.02	0.0013	P	7.5	
2	☐	2.000	2.441	12222.60	0.0284	P	2.5	22.1
3	☐	5.000	4.976	24423.06	0.0567	P	2.2	-0.5
4	☐	10.000	9.846	47629.97	0.1109	P	0.5	-1.5
5	☐	100.000	98.395	470992.86	1.0967	P	1.0	-1.6
6	☐	200.000	200.807	941929.21	2.2369	P	0.9	0.4

y = 0.0111 * x + 0.0013
R = 0.9999
DL = 0.02547 ppb
BEC = 0.1132 ppb

Weight: <None>
Min Conc: <None>

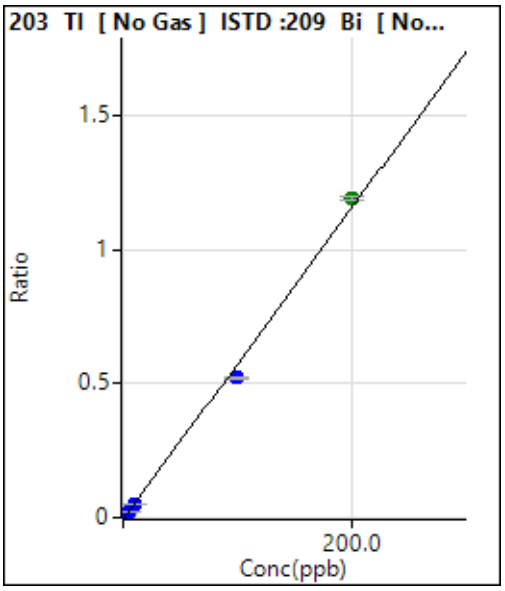


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	236.68	0.0001	P	42.3	
2	☐	2.000	2.321	8396.23	0.0043	P	1.6	16.0
3	☐	5.000	4.846	16904.60	0.0087	P	0.8	-3.1
4	☐	10.000	9.752	33680.76	0.0175	P	0.9	-2.5
5	☐	100.000	100.007	338844.25	0.1780	P	1.2	0.0
6	☐	200.000	200.009	670622.12	0.3559	P	0.2	0.0

y = 0.0018 * x + 1.2405E-004
R = 1.0000
DL = 0.08845 ppb
BEC = 0.06974 ppb

Weight: <None>
Min Conc: <None>

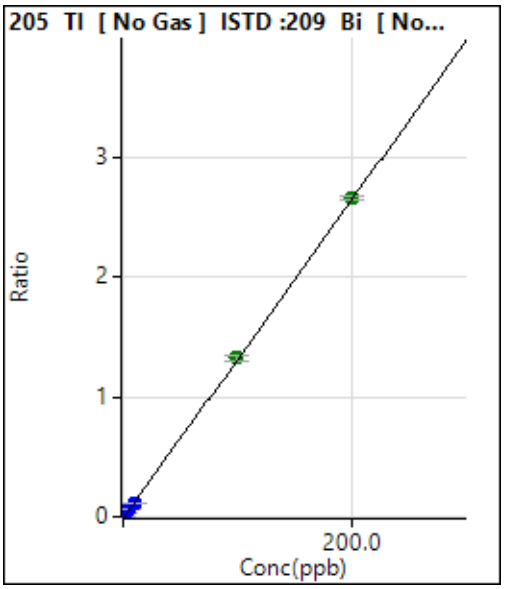
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	100.00	0.0001	P	33.3	
2	☐	2.000	2.122	22013.05	0.0124	P	2.1	6.1
3	☐	5.000	4.223	44268.64	0.0246	P	3.0	-15.5
4	☐	10.000	8.605	88515.67	0.0501	P	0.9	-13.9
5	☐	100.000	89.799	902115.92	0.5220	P	1.7	-10.2
6	☐	200.000	205.189	1988286.27	1.1927	A	1.2	2.6

y = 0.0058 * x + 5.7442E-005
R = 0.9982
DL = 0.009886 ppb
BEC = 0.009883 ppb

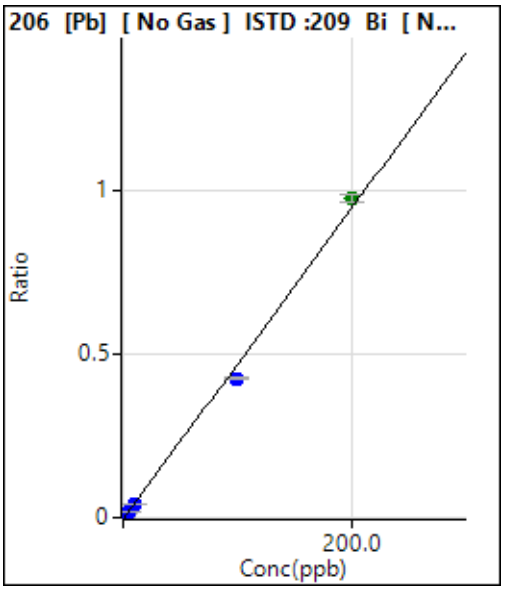
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	253.35	0.0001	P	66.0	
2	☐	2.000	2.195	52008.51	0.0293	P	1.2	9.7
3	☐	5.000	4.446	106471.84	0.0592	P	2.4	-11.1
4	☐	10.000	8.930	209823.37	0.1187	P	0.5	-10.7
5	☐	100.000	99.580	2284433.87	1.3221	A	3.8	-0.4
6	☐	200.000	200.276	4431918.99	2.6589	A	1.0	0.1

y = 0.0133 * x + 1.4518E-004
R = 1.0000
DL = 0.02165 ppb
BEC = 0.01094 ppb

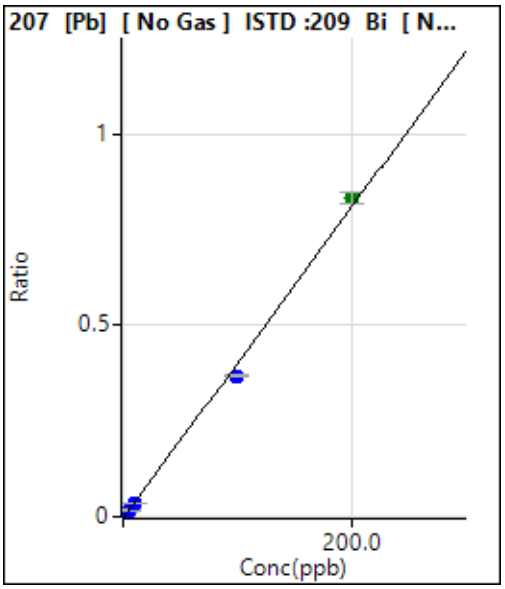
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	203.34	0.0001	P	15.2	
2	☐	2.000	2.153	18377.18	0.0103	P	2.9	7.7
3	☐	5.000	4.241	36470.44	0.0203	P	0.7	-15.2
4	☐	10.000	8.579	72259.18	0.0409	P	1.9	-14.2
5	☐	100.000	89.463	734674.78	0.4251	P	1.6	-10.5
6	☐	200.000	205.357	1626029.51	0.9757	A	2.3	2.7

y = 0.0048 * x + 1.1723E-004
R = 0.9981
DL = 0.01127 ppb
BEC = 0.02468 ppb

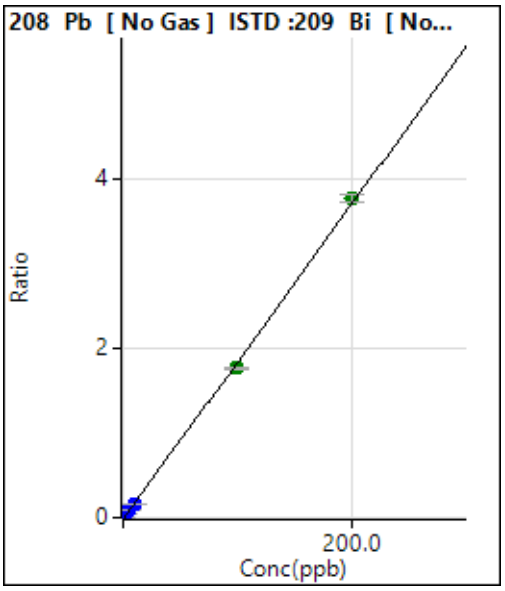
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	153.34	0.0001	P	40.0	
2	☐	2.000	2.129	15546.64	0.0088	P	4.9	6.4
3	☐	5.000	4.284	31536.99	0.0175	P	3.2	-14.3
4	☐	10.000	8.754	63139.75	0.0357	P	0.3	-12.5
5	☐	100.000	90.465	636464.52	0.3683	P	1.3	-9.5
6	☐	200.000	204.846	1389620.34	0.8338	A	4.0	2.4

y = 0.0041 * x + 8.7793E-005
R = 0.9985
DL = 0.0259 ppb
BEC = 0.02157 ppb

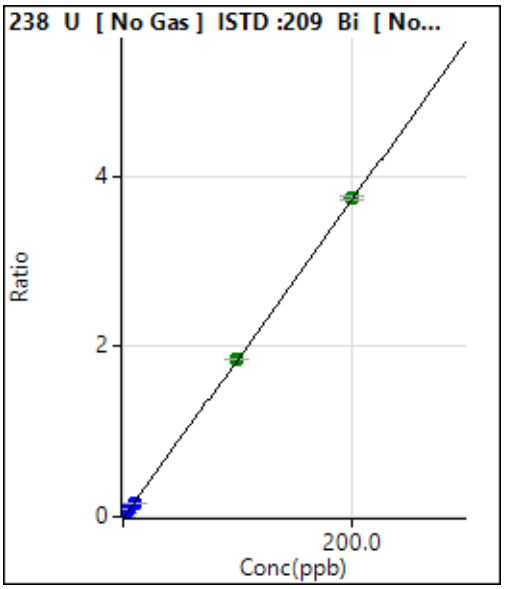
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	736.69	0.0004	P	19.1	
2	☐	2.000	2.138	71260.05	0.0401	P	1.9	6.9
3	☐	5.000	4.355	146252.66	0.0813	P	1.7	-12.9
4	☐	10.000	8.796	289429.19	0.1637	P	0.4	-12.0
5	☐	100.000	94.672	3038582.14	1.7581	A	1.0	-5.3
6	☐	200.000	202.739	6274227.82	3.7645	A	2.0	1.4

y = 0.0186 * x + 4.2356E-004
R = 0.9995
DL = 0.01307 ppb
BEC = 0.02281 ppb

Weight: <None>
Min Conc: <None>

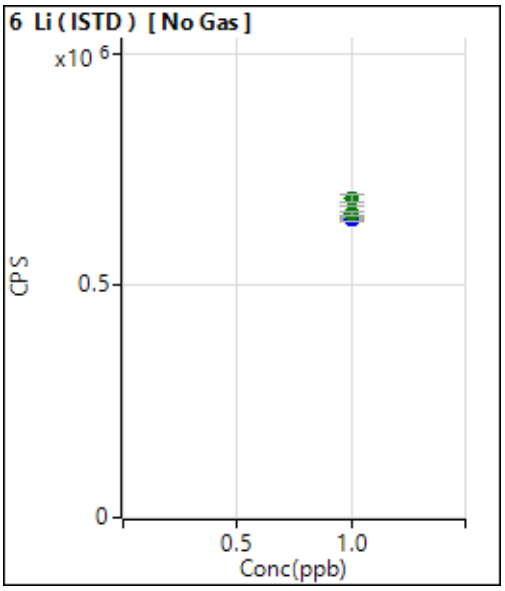


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	173.34	0.0001	P	47.1	
2	☐	2.000	2.198	73111.03	0.0412	P	0.5	9.9
3	☐	5.000	4.391	147784.51	0.0821	P	1.9	-12.2
4	☐	10.000	8.988	296937.60	0.1680	P	1.0	-10.1
5	☐	100.000	99.019	3196735.89	1.8496	A	0.7	-1.0
6	☐	200.000	200.554	6243705.95	3.7461	A	1.4	0.3

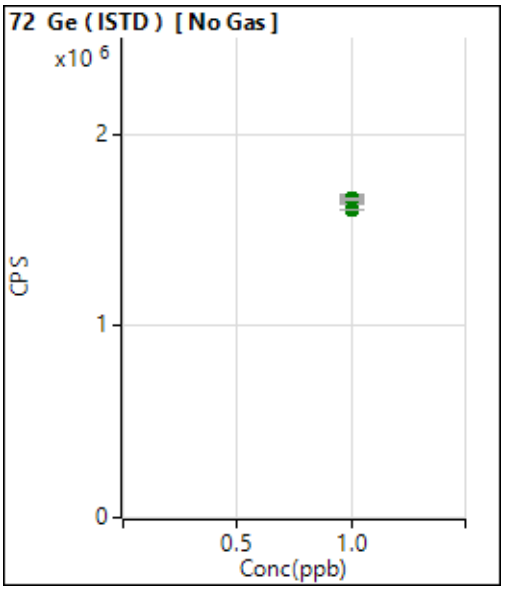
y = 0.0187 * x + 9.9495E-005
R = 1.0000
DL = 0.007528 ppb
BEC = 0.005327 ppb

Weight: <None>
Min Conc: <None>

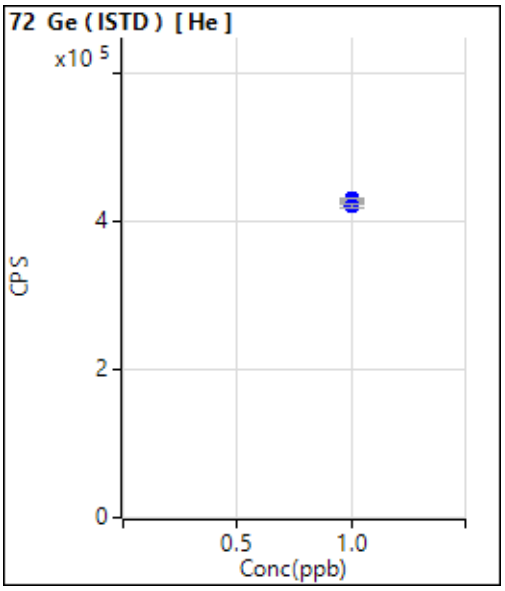
Calibration for 143_ICV.d



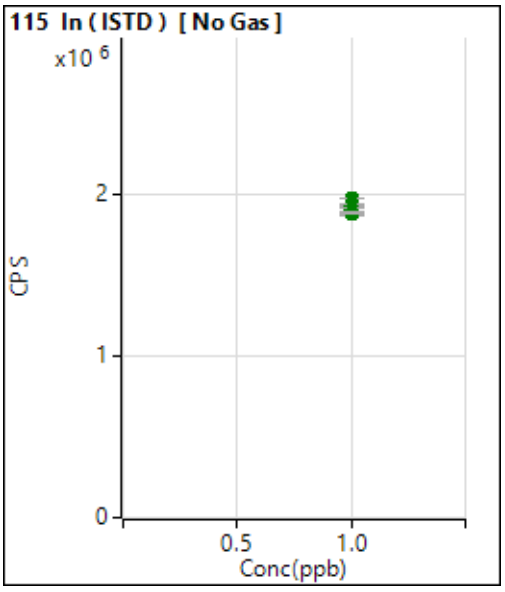
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		654203.84		M	5.1	
2	☐	1.000		642756.72		P	0.5	
3	☐	1.000		646519.35		P	0.8	
4	☐	1.000		642042.68		P	1.1	
5	☐	1.000		687374.41		A	2.1	
6	☐	1.000		654294.39		A	1.0	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1641029.93		A	0.9	
2	☐	1.000		1646033.05		A	0.9	
3	☐	1.000		1663363.15		A	1.6	
4	☐	1.000		1664939.98		A	2.0	
5	☐	1.000		1661534.92		A	0.3	
6	☐	1.000		1605769.19		A	0.1	

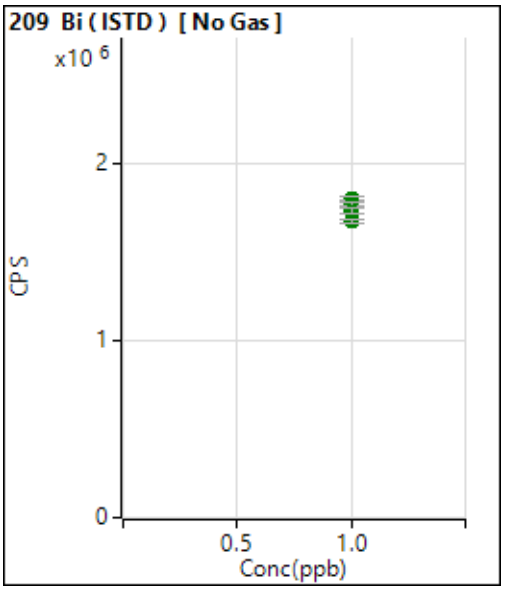


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		428589.26		P	0.9	
2	☐	1.000		429817.79		P	0.7	
3	☐	1.000		431068.07		P	0.6	
4	☐	1.000		429568.69		P	0.2	
5	☐	1.000		429476.35		P	0.9	
6	☐	1.000		421104.65		P	0.9	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1892968.90		A	3.1	
2	☐	1.000		1974579.56		A	0.4	
3	☐	1.000		1933270.49		A	0.6	
4	☐	1.000		1927907.23		A	1.2	
5	☐	1.000		1903731.32		A	1.2	
6	☐	1.000		1884405.19		A	0.5	

Calibration for 143_ICV.d



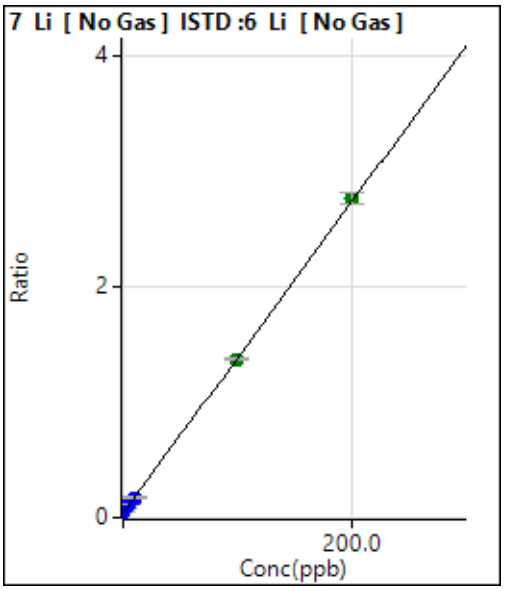
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1736706.69		A	2.1	
2	☐	1.000		1776310.76		A	0.3	
3	☐	1.000		1799894.45		A	1.6	
4	☐	1.000		1767785.81		A	0.9	
5	☐	1.000		1728457.37		A	1.4	
6	☐	1.000		1666933.10		A	1.4	

Calibration for 025_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\082222A.b\
Analysis File: 082222A.batch.bin
DA Date-Time: 08/22/2022 20:20:33
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	018CALB.d	CAL BLK	08/22/2022 12:37:46
2	019CALS.d	2/10/200	08/22/2022 12:40:06
3	020CALS.d	5/25/500	08/22/2022 12:42:24
4	021CALS.d	10/50/100	08/22/2022 12:44:42
5	022CALS.d	100/500/10K	08/22/2022 12:46:59
6	023CALS.d	200/1000/20K	08/22/2022 12:49:11

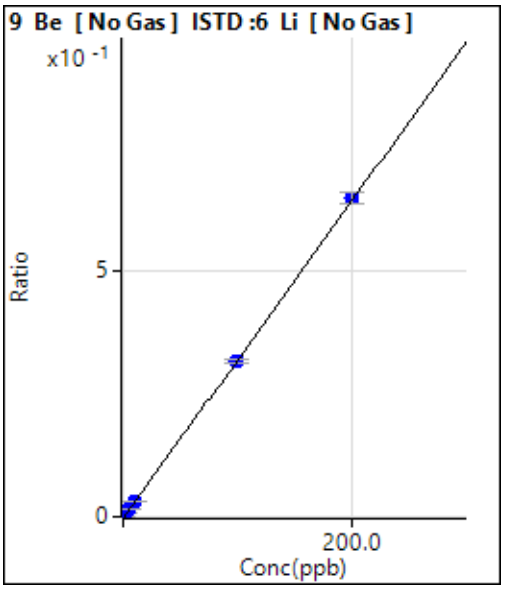
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	41136.69	0.0528	P	1.6	
2	☐	2.000	2.291	65789.77	0.0836	P	0.6	14.6
3	☐	5.000	4.766	89457.20	0.1170	P	2.0	-4.7
4	☐	10.000	9.040	134901.75	0.1746	P	2.0	-9.6
5	☐	100.000	97.553	1062663.58	1.3673	A	1.4	-2.4
6	☐	200.000	201.275	2068369.55	2.7650	A	4.0	0.6

y = 0.0135 * x + 0.0528
R = 0.9999
DL = 0.1916 ppb
BEC = 3.915 ppb

Weight: <None>
Min Conc: <None>

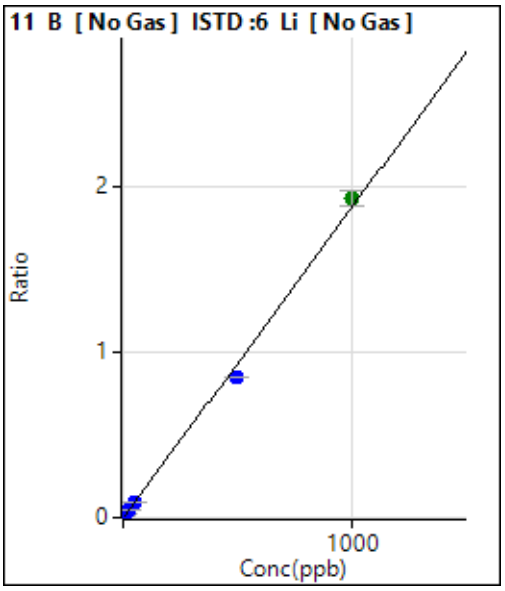


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8.33	0.0000	P	34.5	
2	☐	2.000	2.420	6133.05	0.0078	P	1.6	21.0
3	☐	5.000	4.911	12093.62	0.0158	P	0.9	-1.8
4	☐	10.000	9.822	24419.64	0.0316	P	3.6	-1.8
5	☐	100.000	98.053	245186.38	0.3155	P	1.4	-1.9
6	☐	200.000	200.980	483647.32	0.6466	P	3.6	0.5

y = 0.0032 * x + 1.0680E-005
R = 0.9999
DL = 0.003436 ppb
BEC = 0.00332 ppb

Weight: <None>
Min Conc: <None>

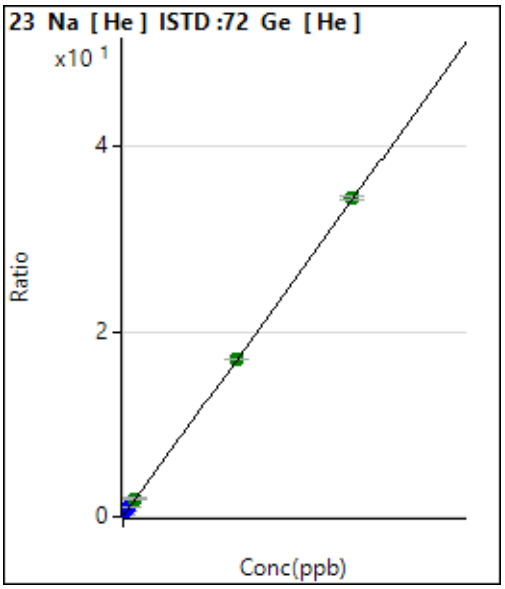
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5604.49	0.0072	P	1.1	
2	☐	10.000	10.546	21194.38	0.0269	P	1.6	5.5
3	☐	25.000	22.809	38181.79	0.0499	P	1.5	-8.8
4	☐	50.000	44.993	70684.98	0.0915	P	3.4	-10.0
5	☐	500.000	449.914	660851.18	0.8502	P	0.1	-10.0
6	☐	1000.000	1025.343	1442295.40	1.9284	A	4.3	2.5

y = 0.0019 * x + 0.0072
R = 0.9983
DL = 0.1277 ppb
BEC = 3.836 ppb

Weight: <None>
Min Conc: <None>

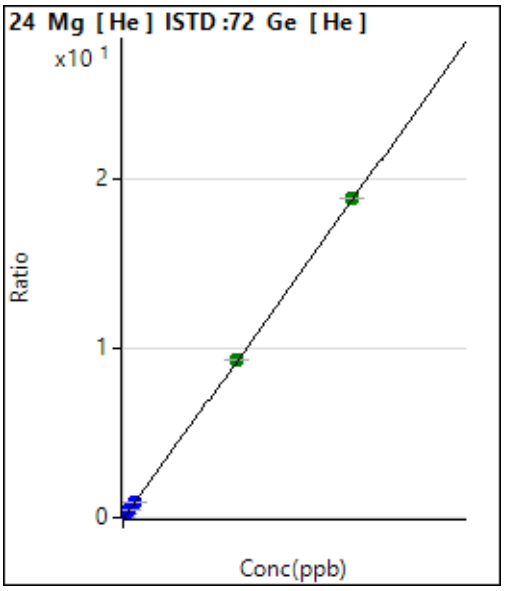


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	96217.35	0.2107	P	1.3	
2	☐	200.000	237.083	284434.93	0.6154	P	1.1	18.5
3	☐	500.000	466.293	459547.83	1.0067	P	0.9	-6.7
4	☐	1000.000	1020.761	899371.47	1.9532	A	2.3	2.1
5	☐	10000.00	9883.504	7789478.01	17.0829	A	0.4	-1.2
6	☐	20000.00	20057.68	15299572.6	34.4513	A	0.9	0.3

y = 0.0017 * x + 0.2107
R = 1.0000
DL = 4.873 ppb
BEC = 123.4 ppb

Weight: <None>
Min Conc: <None>

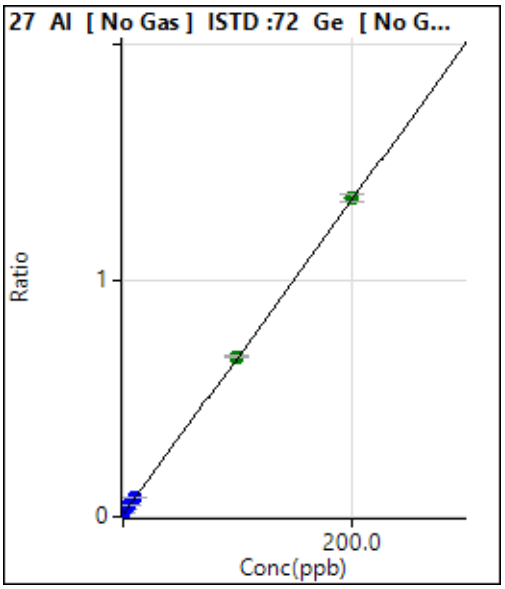
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	270.01	0.0006	P	11.6	
2	☐	200.000	238.433	103713.43	0.2244	P	1.2	19.2
3	☐	500.000	481.277	206474.83	0.4523	P	1.2	-3.7
4	☐	1000.000	944.893	408669.64	0.8875	P	1.3	-5.5
5	☐	10000.00	9892.153	4233949.52	9.2853	A	0.4	-1.1
6	☐	20000.00	20056.76	8360438.84	18.8258	A	0.5	0.3

y = 9.3860E-004 * x + 5.9149E-004
R = 1.0000
DL = 0.219 ppb
BEC = 0.6302 ppb

Weight: <None>
Min Conc: <None>

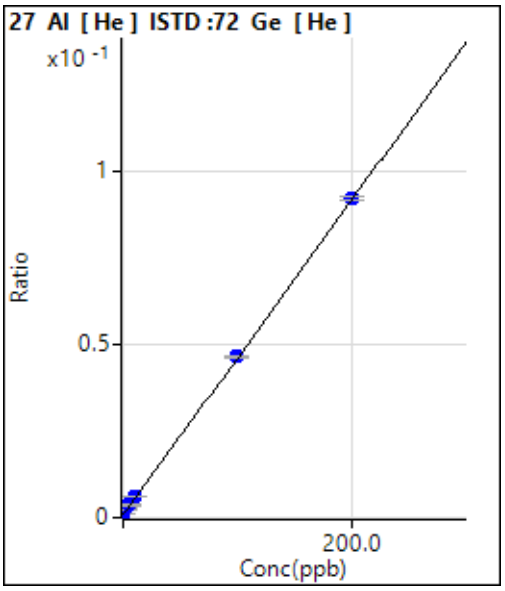


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	28607.39	0.0160	P	1.6	
2	☐	2.000	2.374	57472.09	0.0318	P	2.8	18.7
3	☐	5.000	4.814	87280.22	0.0481	P	1.7	-3.7
4	☐	10.000	9.871	146519.13	0.0817	P	1.3	-1.3
5	☐	100.000	99.215	1193475.03	0.6768	A	1.3	-0.8
6	☐	200.000	200.400	2316814.24	1.3508	A	2.3	0.2

y = 0.0067 * x + 0.0160
R = 1.0000
DL = 0.1147 ppb
BEC = 2.401 ppb

Weight: <None>
Min Conc: <None>

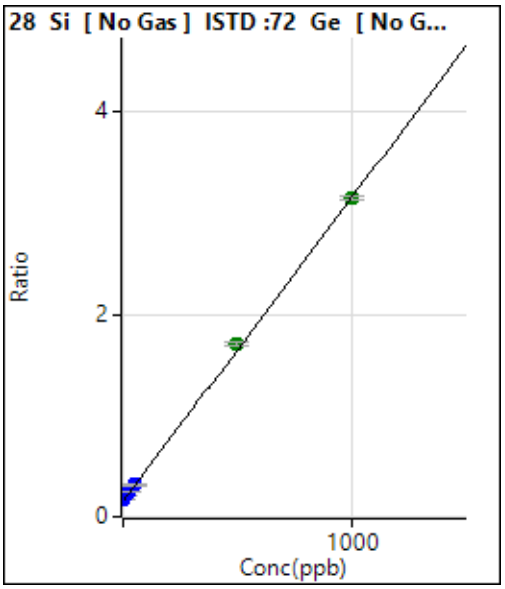
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	556.69	0.0012	P	18.9	
2	☐	2.000	2.869	1166.73	0.0025	P	7.3	43.4
3	☐	5.000	5.576	1716.81	0.0038	P	10.7	11.5
4	☐	10.000	11.071	2883.69	0.0063	P	3.9	10.7
5	☐	100.000	99.530	21233.12	0.0466	P	2.0	-0.5
6	☐	200.000	200.159	41037.55	0.0924	P	1.1	0.1

y = 4.5559E-004 * x + 0.0012
R = 1.0000
DL = 1.519 ppb
BEC = 2.674 ppb

Weight: <None>
Min Conc: <None>

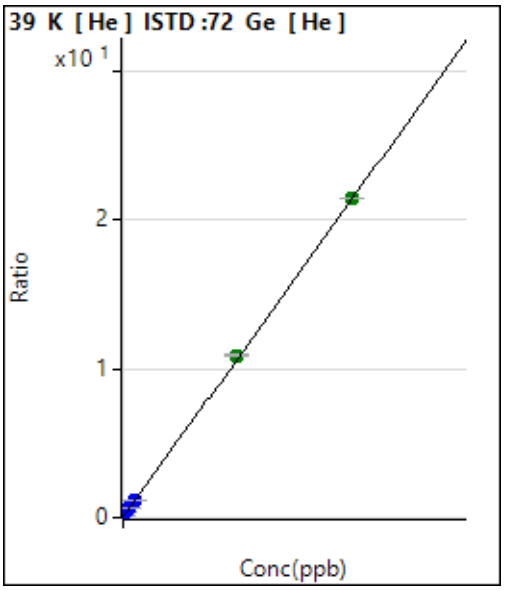


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	306156.92	0.1712	P	1.0	
2	☐	10.000	11.005	368964.51	0.2042	P	0.6	10.0
3	☐	25.000	22.718	434689.42	0.2394	P	0.3	-9.1
4	☐	50.000	47.821	564069.15	0.3147	P	1.2	-4.4
5	☐	500.000	512.533	3013888.91	1.7093	A	1.4	2.5
6	☐	1000.000	993.889	5409033.04	3.1538	A	1.3	-0.6

y = 0.0030 * x + 0.1712
R = 0.9999
DL = 1.644 ppb
BEC = 57.04 ppb

Weight: <None>
Min Conc: <None>

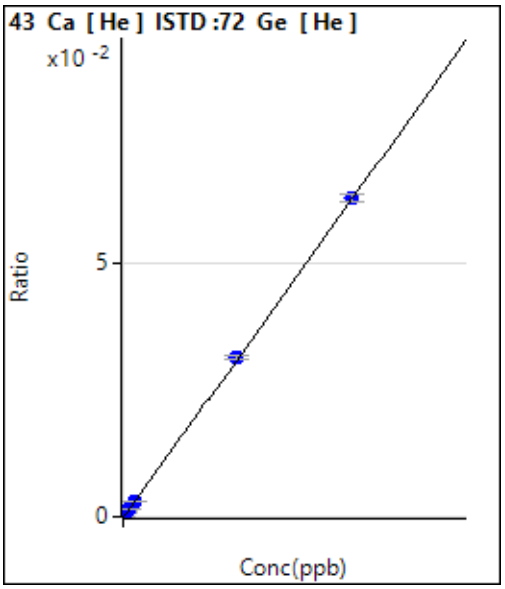
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	66614.06	0.1459	P	0.8	
2	☐	200.000	247.155	189266.11	0.4095	P	0.6	23.6
3	☐	500.000	477.596	299122.76	0.6552	P	0.4	-4.5
4	☐	1000.000	944.574	531074.03	1.1533	P	1.6	-5.5
5	☐	10000.00	10046.29	4952097.53	10.8607	A	1.2	0.5
6	☐	20000.00	19979.71	9528015.69	21.4551	A	0.5	-0.1

y = 0.0011 * x + 0.1459
R = 1.0000
DL = 3.347 ppb
BEC = 136.8 ppb

Weight: <None>
Min Conc: <None>

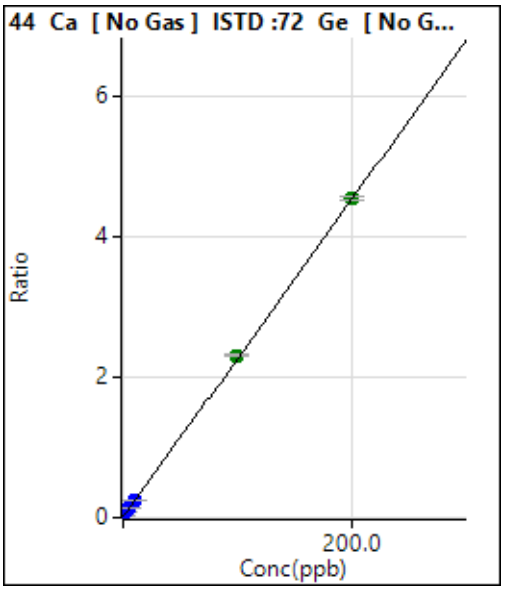


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0001	P	49.7	
2	☐	200.000	270.173	416.68	0.0009	P	15.9	35.1
3	☐	500.000	476.481	706.70	0.0015	P	17.0	-4.7
4	☐	1000.000	950.951	1400.09	0.0030	P	2.5	-4.9
5	☐	10000.00	10003.71	14364.32	0.0315	P	2.1	0.0
6	☐	20000.00	20000.48	27945.36	0.0629	P	2.7	0.0

y = 3.1438E-006 * x + 5.1169E-005
R = 1.0000
DL = 24.28 ppb
BEC = 16.28 ppb

Weight: <None>
Min Conc: <None>

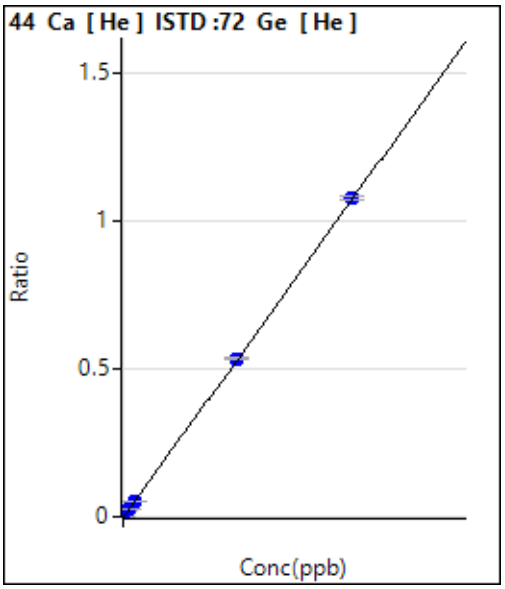
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	55458.39	0.0310	P	1.1	
2	☐	2.000	2.813	170769.13	0.0945	P	1.0	40.7
3	☐	5.000	4.645	246727.77	0.1359	P	0.8	-7.1
4	☐	10.000	9.515	440592.29	0.2458	P	1.5	-4.9
5	☐	100.000	100.575	4058718.06	2.3015	A	1.3	0.6
6	☐	200.000	199.738	7786946.97	4.5401	A	0.9	-0.1

y = 0.0226 * x + 0.0310
R = 1.0000
DL = 0.04689 ppb
BEC = 1.373 ppb

Weight: <None>
Min Conc: <None>

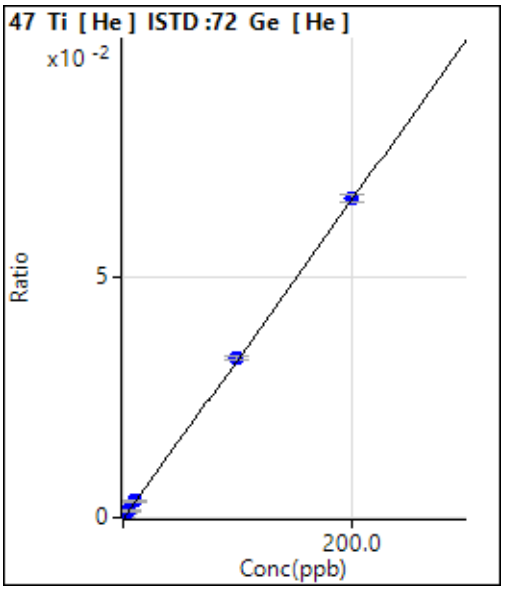


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	716.70	0.0016	P	11.8	
2	☐	200.000	285.355	7802.35	0.0169	P	1.6	42.7
3	☐	500.000	500.217	12969.65	0.0284	P	2.8	0.0
4	☐	1000.000	969.594	24679.16	0.0536	P	0.7	-3.0
5	☐	10000.00	9938.338	243844.94	0.5348	P	0.5	-0.6
6	☐	20000.00	20031.49	477968.14	1.0763	P	0.9	0.2

y = 5.3652E-005 * x + 0.0016
R = 1.0000
DL = 10.32 ppb
BEC = 29.26 ppb

Weight: <None>
Min Conc: <None>

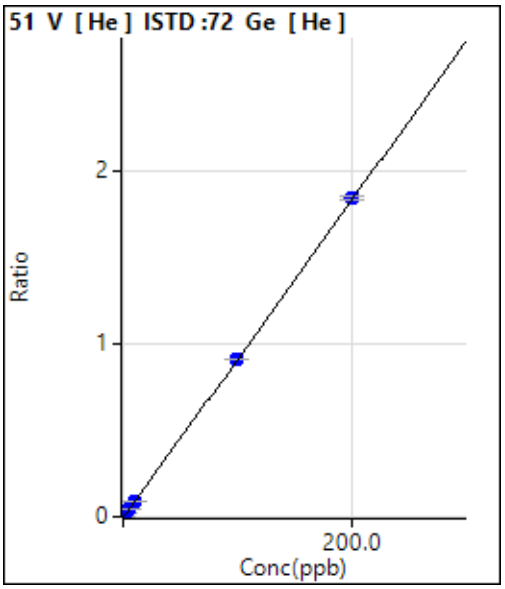
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	2.431	376.68	0.0008	P	16.1	21.6
3	☐	5.000	4.617	703.37	0.0015	P	19.0	-7.7
4	☐	10.000	10.279	1576.78	0.0034	P	5.7	2.8
5	☐	100.000	99.721	15118.55	0.0332	P	2.8	-0.3
6	☐	200.000	200.131	29548.73	0.0665	P	2.5	0.1

y = 3.3243E-004 * x + 7.3020E-006
R = 1.0000
DL = 0.1141 ppb
BEC = 0.02197 ppb

Weight: <None>
Min Conc: <None>

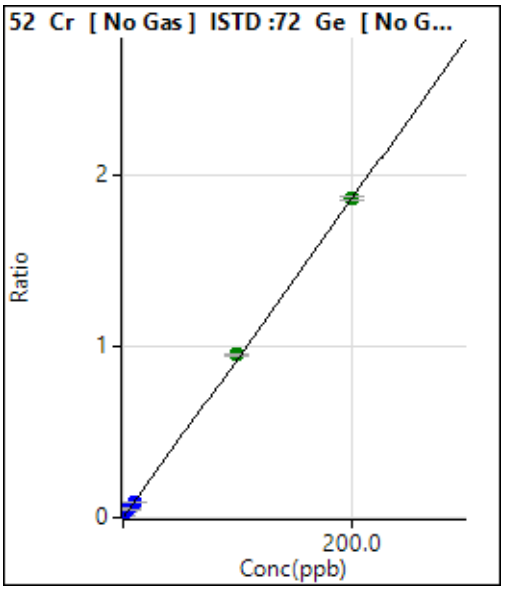


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	827.81	0.0018	P	9.0	
2	☐	2.000	2.381	10931.06	0.0237	P	3.6	19.0
3	☐	5.000	4.842	21109.63	0.0462	P	1.9	-3.2
4	☐	10.000	9.598	41388.92	0.0899	P	1.5	-4.0
5	☐	100.000	99.077	415330.89	0.9109	P	0.4	-0.9
6	☐	200.000	200.482	817687.00	1.8413	P	0.7	0.2

y = 0.0092 * x + 0.0018
R = 1.0000
DL = 0.05326 ppb
BEC = 0.1976 ppb

Weight: <None>
Min Conc: <None>

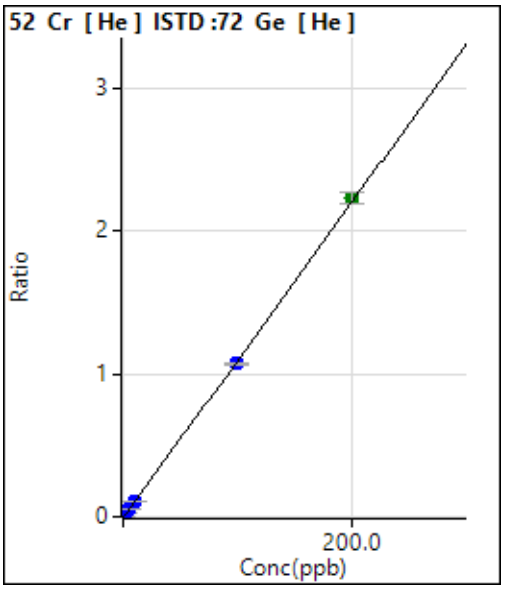
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14631.35	0.0082	P	0.2	
2	☐	2.000	2.322	53866.17	0.0298	P	2.7	16.1
3	☐	5.000	4.571	92198.87	0.0508	P	1.0	-8.6
4	☐	10.000	9.239	168946.30	0.0942	P	0.5	-7.6
5	☐	100.000	101.306	1678490.96	0.9519	A	1.7	1.3
6	☐	200.000	199.393	3199804.43	1.8657	A	0.8	-0.3

y = 0.0093 * x + 0.0082
R = 1.0000
DL = 0.004738 ppb
BEC = 0.8781 ppb

Weight: <None>
Min Conc: <None>

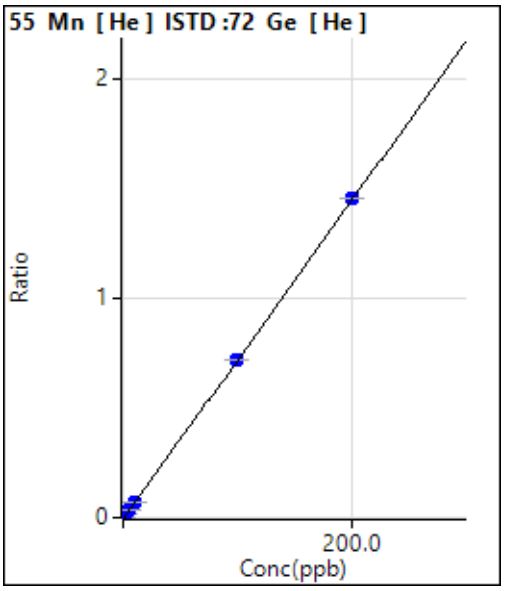


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1546.78	0.0034	P	10.5	
2	☐	2.000	2.356	13600.29	0.0294	P	3.6	17.8
3	☐	5.000	4.797	25754.56	0.0564	P	1.6	-4.1
4	☐	10.000	9.594	50403.14	0.1094	P	0.1	-4.1
5	☐	100.000	96.491	487926.50	1.0701	P	0.1	-3.5
6	☐	200.000	201.776	992042.77	2.2339	A	4.0	0.9

y = 0.0111 * x + 0.0034
R = 0.9998
DL = 0.09667 ppb
BEC = 0.3064 ppb

Weight: <None>
Min Conc: <None>

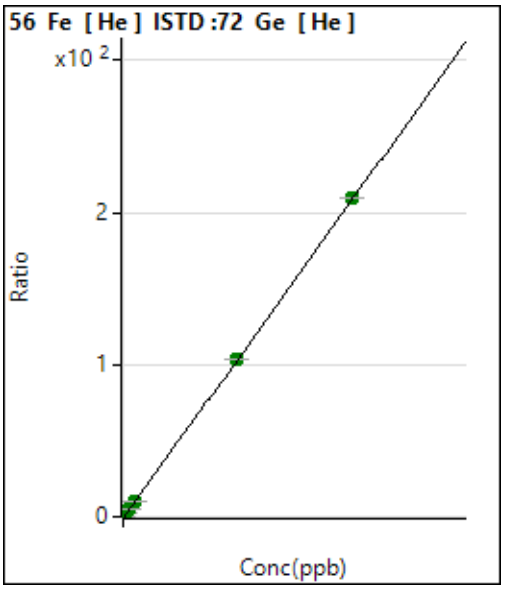
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	166.67	0.0004	P	33.5	
2	☐	2.000	2.644	9029.80	0.0195	P	2.4	32.2
3	☐	5.000	4.983	16663.74	0.0365	P	1.3	-0.3
4	☐	10.000	9.815	32953.45	0.0716	P	0.4	-1.8
5	☐	100.000	99.078	327850.42	0.7190	P	0.7	-0.9
6	☐	200.000	200.464	645869.00	1.4544	P	0.5	0.2

y = 0.0073 * x + 3.6532E-004
R = 1.0000
DL = 0.05063 ppb
BEC = 0.05037 ppb

Weight: <None>
Min Conc: <None>

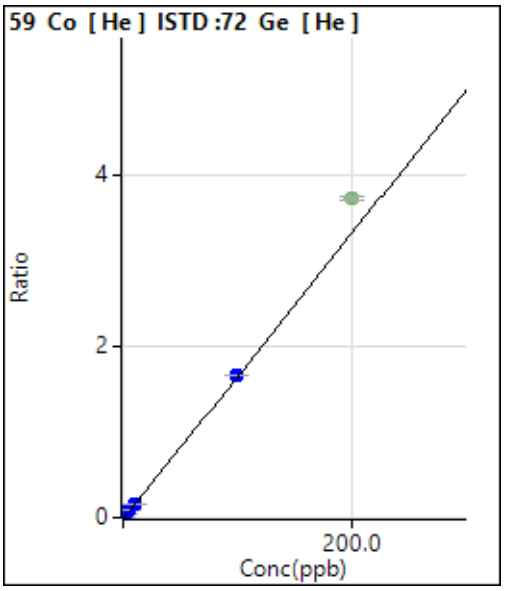


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8726.24	0.0191	P	3.5	
2	☐	200.000	254.824	1239730.84	2.6821	A	1.9	27.4
3	☐	500.000	519.783	2488477.36	5.4510	A	0.3	4.0
4	☐	1000.000	990.779	4776807.22	10.3731	A	1.4	-0.9
5	☐	10000.00	9894.729	47158105.9	103.423	A	0.6	-1.1
6	☐	20000.00	20052.05	93068928.6	209.571	A	0.6	0.3

y = 0.0105 * x + 0.0191
R = 1.0000
DL = 0.1922 ppb
BEC = 1.829 ppb

Weight: <None>
Min Conc: <None>

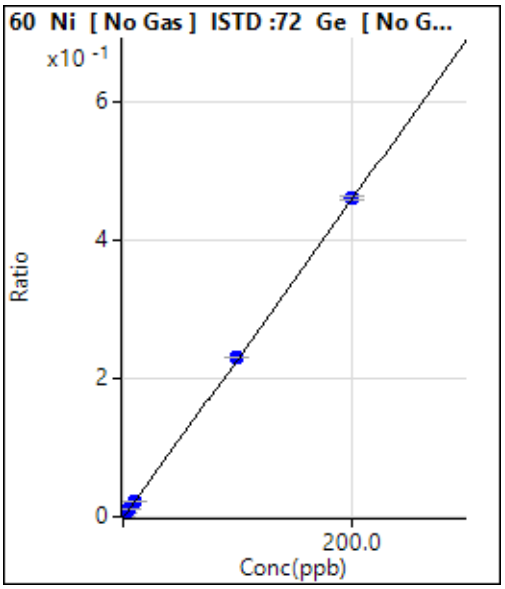
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0001	P	41.8	
2	☐	2.000	2.505	19360.62	0.0419	P	2.7	25.3
3	☐	5.000	4.972	37913.06	0.0831	P	2.9	-0.6
4	☐	10.000	9.659	74268.43	0.1613	P	1.2	-3.4
5	☐	100.000	100.025	761236.11	1.6695	P	0.4	0.0
6	☑	200.000		1657257.01	3.7318	A	0.9	

y = 0.0167 * x + 8.0369E-005
R = 1.0000
DL = 0.006045 ppb
BEC = 0.004816 ppb

Weight: <None>
Min Conc: <None>

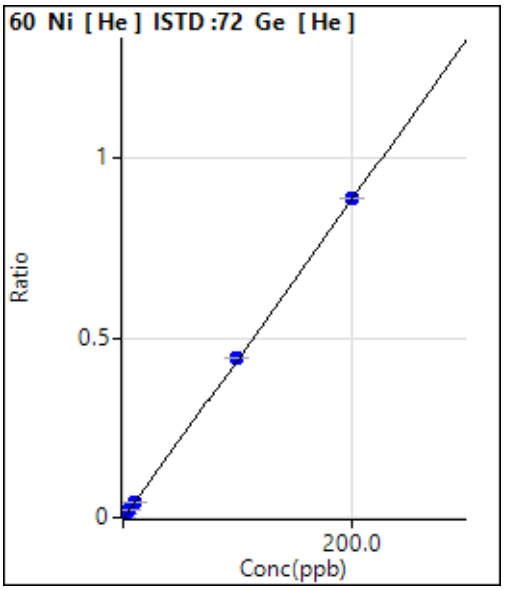


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	546.69	0.0003	P	20.6	
2	☐	2.000	2.465	10821.11	0.0060	P	3.4	23.3
3	☐	5.000	4.887	21016.47	0.0116	P	2.7	-2.3
4	☐	10.000	9.716	40697.73	0.0227	P	1.9	-2.8
5	☐	100.000	99.679	405791.48	0.2301	P	0.5	-0.3
6	☐	200.000	200.173	792045.95	0.4618	P	1.0	0.1

y = 0.0023 * x + 3.0544E-004
R = 1.0000
DL = 0.082 ppb
BEC = 0.1325 ppb

Weight: <None>
Min Conc: <None>

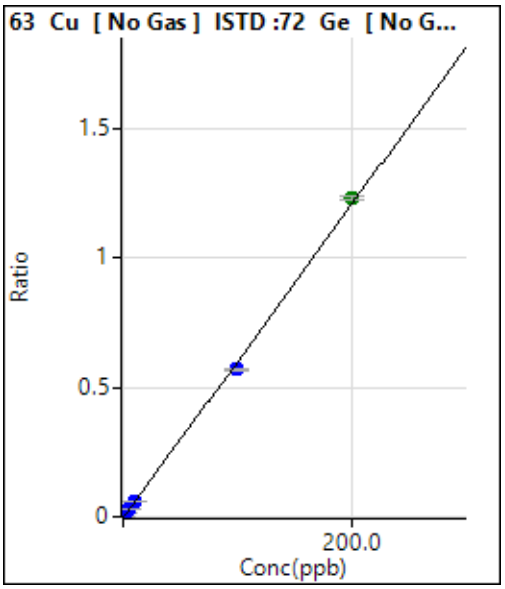
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	190.01	0.0004	P	27.3	
2	☐	2.000	2.582	5497.87	0.0119	P	1.9	29.1
3	☐	5.000	4.891	10113.93	0.0222	P	2.6	-2.2
4	☐	10.000	9.717	20081.67	0.0436	P	1.3	-2.8
5	☐	100.000	99.940	202752.24	0.4447	P	0.3	-0.1
6	☐	200.000	200.041	395072.34	0.8896	P	0.4	0.0

y = 0.0044 * x + 4.1606E-004
R = 1.0000
DL = 0.07675 ppb
BEC = 0.0936 ppb

Weight: <None>
Min Conc: <None>

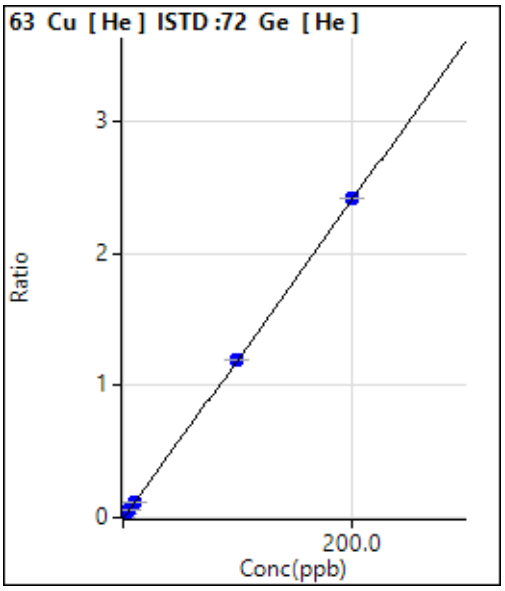


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1480.10	0.0008	P	3.4	
2	☐	2.000	2.280	26482.77	0.0147	P	5.3	14.0
3	☐	5.000	4.621	52411.27	0.0289	P	0.4	-7.6
4	☐	10.000	9.330	102944.48	0.0574	P	0.6	-6.7
5	☐	100.000	93.927	1006161.10	0.5706	P	1.3	-6.1
6	☐	200.000	203.077	2114320.44	1.2328	A	1.2	1.5

y = 0.0061 * x + 8.2736E-004
R = 0.9994
DL = 0.01383 ppb
BEC = 0.1364 ppb

Weight: <None>
Min Conc: <None>

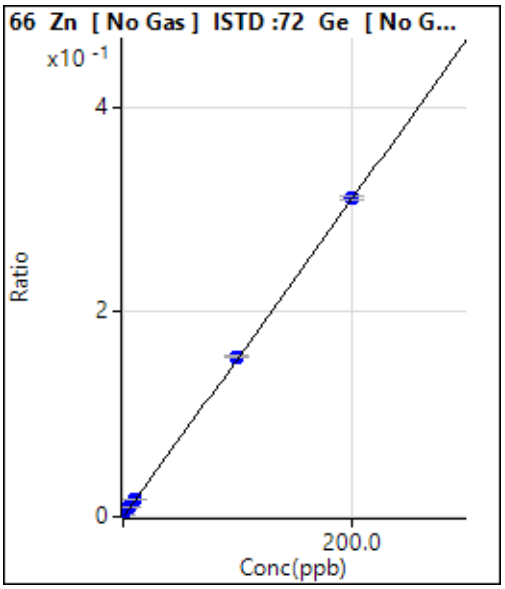
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	630.03	0.0014	P	19.4	
2	☐	2.000	2.423	14157.60	0.0306	P	1.5	21.1
3	☐	5.000	5.025	28326.53	0.0621	P	0.2	0.5
4	☐	10.000	9.809	55175.25	0.1198	P	1.6	-1.9
5	☐	100.000	99.252	547111.01	1.1999	P	0.1	-0.7
6	☐	200.000	200.379	1075127.53	2.4209	P	0.4	0.2

y = 0.0121 * x + 0.0014
R = 1.0000
DL = 0.06652 ppb
BEC = 0.1142 ppb

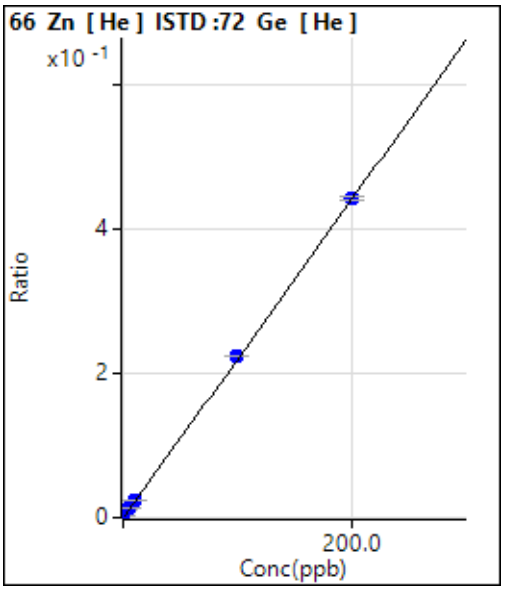
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1860.16	0.0010	P	3.2	
2	☐	2.000	3.869	12726.18	0.0070	P	0.5	93.4
3	☐	5.000	4.946	15826.15	0.0087	P	1.0	-1.1
4	☐	10.000	9.801	29124.86	0.0162	P	1.7	-2.0
5	☐	100.000	100.108	275742.87	0.1564	P	1.7	0.1
6	☐	200.000	199.938	533919.65	0.3113	P	0.8	0.0

y = 0.0016 * x + 0.0010
R = 1.0000
DL = 0.06467 ppb
BEC = 0.6701 ppb

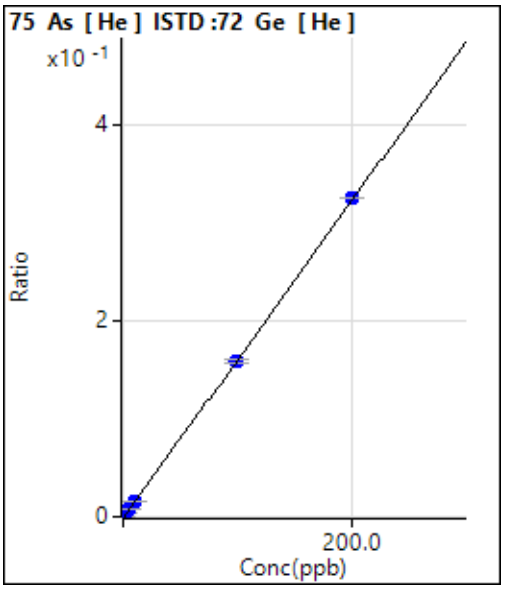
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	683.36	0.0015	P	18.7	
2	☐	2.000	3.798	4560.84	0.0099	P	8.6	89.9
3	☐	5.000	4.849	5564.58	0.0122	P	3.3	-3.0
4	☐	10.000	9.981	10827.85	0.0235	P	2.6	-0.2
5	☐	100.000	100.403	101658.49	0.2229	P	0.2	0.4
6	☐	200.000	199.785	196351.27	0.4421	P	0.8	-0.1

y = 0.0022 * x + 0.0015
R = 1.0000
DL = 0.3809 ppb
BEC = 0.6785 ppb

Weight: <None>
Min Conc: <None>

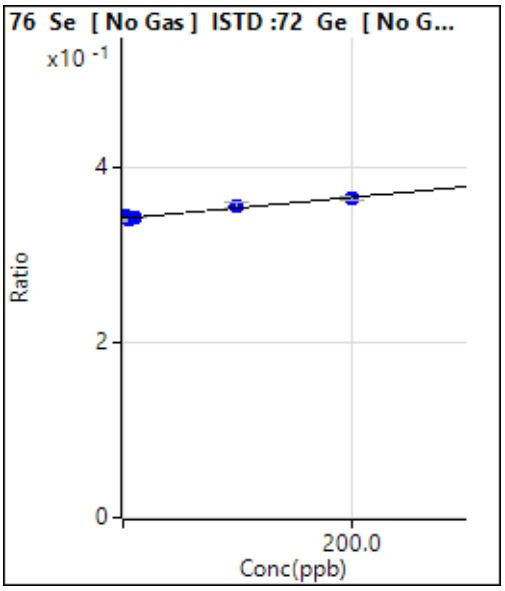


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	58.89	0.0001	P	7.0	
2	☐	2.000	2.394	1855.70	0.0040	P	5.0	19.7
3	☐	5.000	4.829	3637.17	0.0080	P	2.0	-3.4
4	☐	10.000	9.385	7074.12	0.0154	P	1.7	-6.2
5	☐	100.000	98.424	72905.62	0.1599	P	2.3	-1.6
6	☐	200.000	200.819	144820.66	0.3261	P	0.4	0.4

y = 0.0016 * x + 1.2898E-004
R = 0.9999
DL = 0.01657 ppb
BEC = 0.07946 ppb

Weight: <None>
Min Conc: <None>

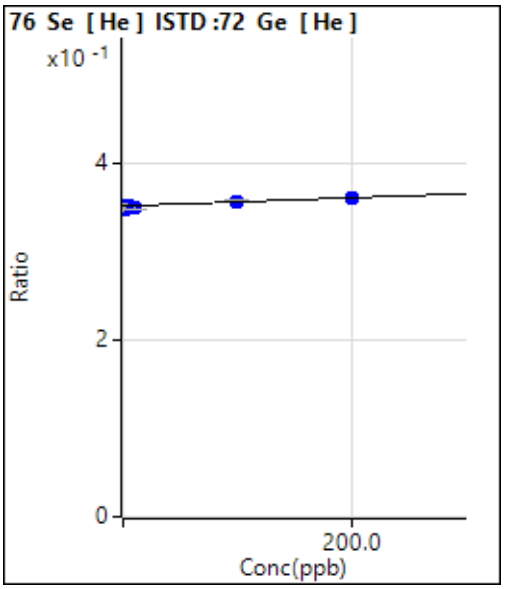
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	610810.04	0.3415	P	0.5	
2	☐	2.000	26.374	622866.83	0.3447	P	0.5	1218.7
3	☐	5.000	-10.932	617774.89	0.3402	P	0.7	-318.6
4	☐	10.000	10.490	614447.10	0.3428	P	0.4	4.9
5	☐	100.000	121.589	628197.13	0.3563	P	1.7	21.6
6	☐	200.000	189.335	625188.31	0.3645	P	1.0	-5.3

y = 1.2159E-004 * x + 0.3415
R = 0.9794
DL = 38.37 ppb
BEC = 2809 ppb

Weight: <None>
Min Conc: <None>

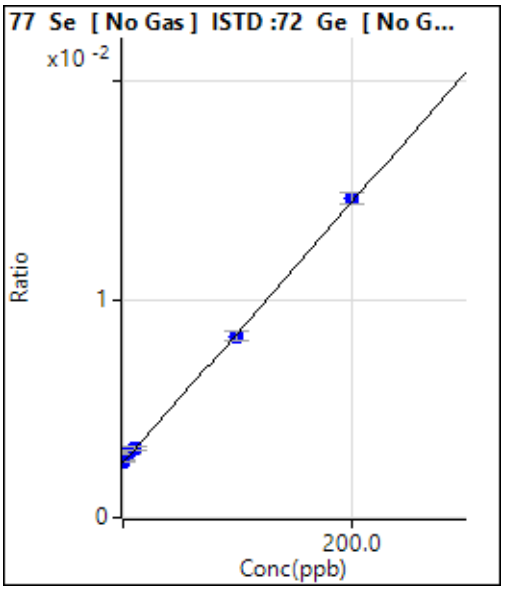


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	160725.80	0.3519	P	1.2	
2	☐	2.000	-89.143	160729.21	0.3477	P	0.9	-4557.
3	☐	5.000	4.631	160762.80	0.3522	P	0.8	-7.4
4	☐	10.000	-38.343	161276.33	0.3501	P	1.7	-483.4
5	☐	100.000	119.875	163059.36	0.3576	P	0.6	19.9
6	☐	200.000	193.400	160343.87	0.3611	P	0.4	-3.3

y = 4.7114E-005 * x + 0.3519
R = 0.9337
DL = 272.3 ppb
BEC = 7470 ppb

Weight: <None>
Min Conc: <None>

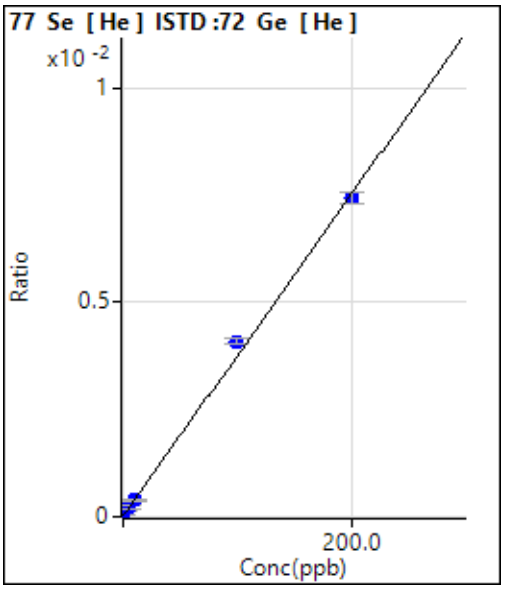
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4634.21	0.0026	P	3.9	
2	☐	2.000	5.477	5274.45	0.0029	P	2.6	173.9
3	☐	5.000	6.738	5437.85	0.0030	P	2.4	34.8
4	☐	10.000	9.865	5701.30	0.0032	P	3.5	-1.4
5	☐	100.000	96.026	14681.54	0.0083	P	6.0	-4.0
6	☐	200.000	201.916	25140.42	0.0147	P	3.3	1.0

y = 5.9754E-005 * x + 0.0026
R = 0.9995
DL = 5.135 ppb
BEC = 43.37 ppb

Weight: <None>
Min Conc: <None>

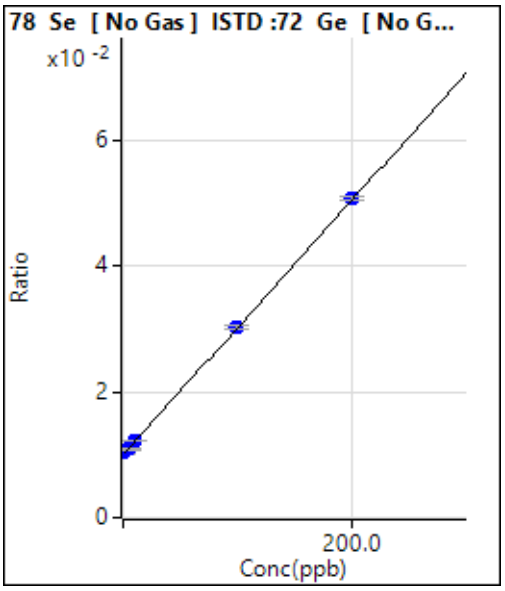


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0001	P	49.7	
2	☐	2.000	2.870	73.33	0.0002	P	39.9	43.5
3	☐	5.000	4.848	106.67	0.0002	P	37.5	-3.0
4	☐	10.000	8.845	176.67	0.0004	P	11.2	-11.6
5	☐	100.000	107.228	1860.16	0.0041	P	3.4	7.2
6	☐	200.000	196.439	3300.48	0.0074	P	3.5	-1.8

y = 3.7571E-005 * x + 5.1169E-005
R = 0.9990
DL = 2.032 ppb
BEC = 1.362 ppb

Weight: <None>
Min Conc: <None>

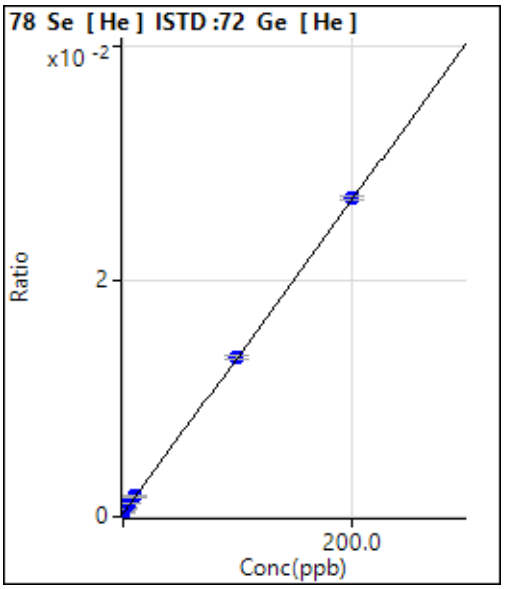
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18436.19	0.0103	P	1.5	
2	☐	2.000	2.044	19370.83	0.0107	P	0.4	2.2
3	☐	5.000	3.353	19948.38	0.0110	P	2.5	-32.9
4	☐	10.000	9.458	21901.51	0.0122	P	1.8	-5.4
5	☐	100.000	99.165	53486.33	0.0303	P	1.8	-0.8
6	☐	200.000	200.486	87123.87	0.0508	P	1.3	0.2

y = 2.0196E-004 * x + 0.0103
R = 1.0000
DL = 2.306 ppb
BEC = 51.04 ppb

Weight: <None>
Min Conc: <None>

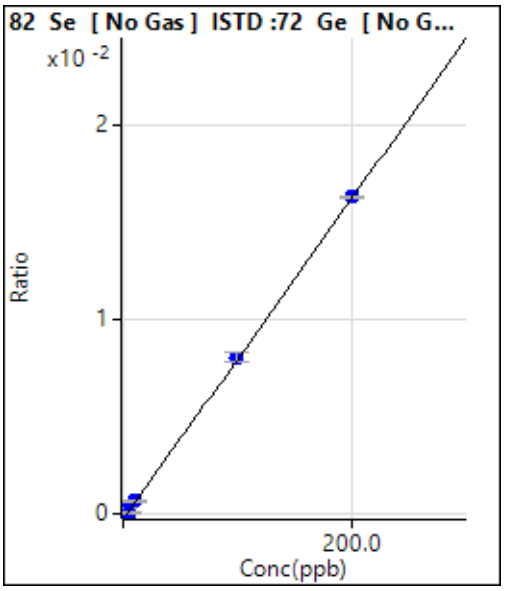


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	181.33	0.0004	P	10.3	
2	☐	2.000	2.853	358.67	0.0008	P	12.5	42.6
3	☐	5.000	5.485	514.01	0.0011	P	8.4	9.7
4	☐	10.000	9.943	791.36	0.0017	P	6.6	-0.6
5	☐	100.000	98.980	6182.10	0.0136	P	2.8	-1.0
6	☐	200.000	200.492	12014.69	0.0271	P	0.9	0.2

y = 1.3296E-004 * x + 3.9720E-004
R = 1.0000
DL = 0.9251 ppb
BEC = 2.987 ppb

Weight: <None>
Min Conc: <None>

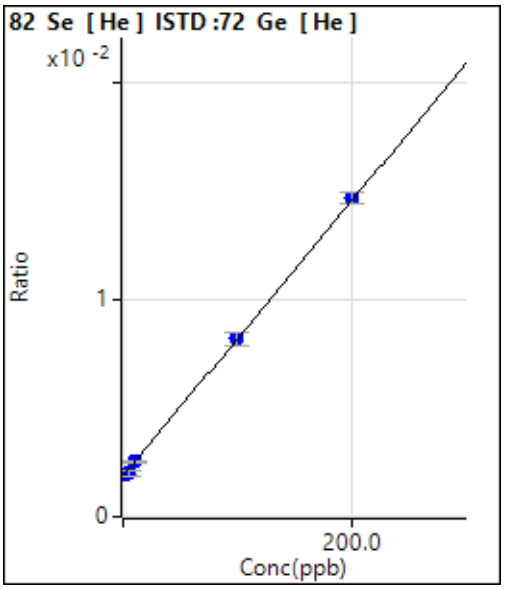
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-348.78	-0.0002	P	-44.4	
2	☐	2.000	4.745	353.18	0.0002	P	139.9	137.3
3	☐	5.000	2.830	69.70	0.0000	P	216.6	-43.4
4	☐	10.000	10.371	1182.27	0.0007	P	19.4	3.7
5	☐	100.000	100.071	14207.02	0.0081	P	5.4	0.1
6	☐	200.000	199.973	27950.12	0.0163	P	0.9	0.0

y = 8.2468E-005 * x - 1.9508E-004
R = 0.9998
DL = 3.149 ppb
BEC = -2.365 ppb

Weight: <None>
Min Conc: <None>

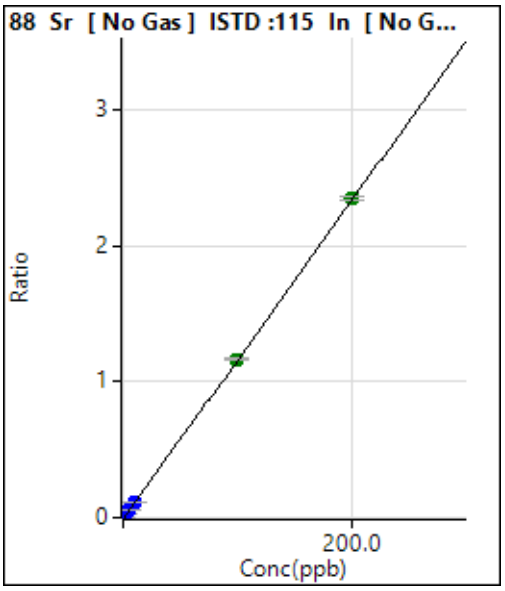


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	896.71	0.0020	P	13.6	
2	☐	2.000	-0.498	893.38	0.0019	P	4.6	-124.9
3	☐	5.000	0.475	910.05	0.0020	P	9.7	-90.5
4	☐	10.000	8.875	1163.41	0.0025	P	4.5	-11.3
5	☐	100.000	98.348	3737.25	0.0082	P	6.6	-1.7
6	☐	200.000	201.020	6528.37	0.0147	P	3.2	0.5

y = 6.3360E-005 * x + 0.0020
R = 0.9998
DL = 12.67 ppb
BEC = 31 ppb

Weight: <None>
Min Conc: <None>

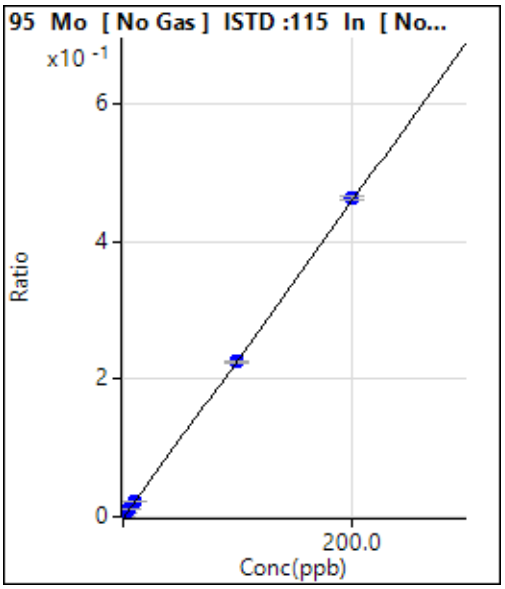
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1103.40	0.0005	P	12.7	
2	☐	2.000	2.301	58538.20	0.0276	P	2.9	15.1
3	☐	5.000	4.594	116180.61	0.0545	P	1.0	-8.1
4	☐	10.000	9.349	232143.45	0.1103	P	1.7	-6.5
5	☐	100.000	99.258	2420306.99	1.1661	A	0.8	-0.7
6	☐	200.000	200.411	4681137.43	2.3540	A	1.5	0.2

y = 0.0117 * x + 5.3040E-004
R = 1.0000
DL = 0.01716 ppb
BEC = 0.04517 ppb

Weight: <None>
Min Conc: <None>

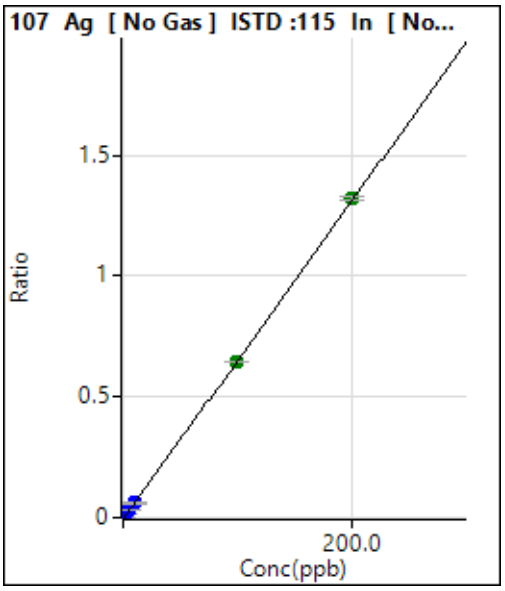


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0000	P	42.3	
2	☐	2.000	2.335	11468.45	0.0054	P	4.3	16.7
3	☐	5.000	4.611	22693.02	0.0106	P	1.2	-7.8
4	☐	10.000	9.546	46327.26	0.0220	P	1.5	-4.5
5	☐	100.000	97.611	466800.68	0.2249	P	0.9	-2.4
6	☐	200.000	201.223	921965.98	0.4636	P	0.8	0.6

y = 0.0023 * x + 1.9166E-005
R = 0.9999
DL = 0.01055 ppb
BEC = 0.008319 ppb

Weight: <None>
Min Conc: <None>

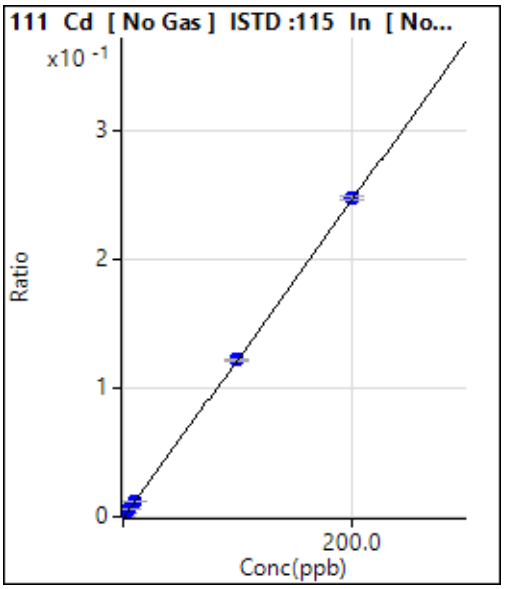
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	326.68	0.0002	P	11.9	
2	☐	2.000	2.230	31497.80	0.0148	P	1.2	11.5
3	☐	5.000	4.447	62688.62	0.0294	P	1.7	-11.1
4	☐	10.000	9.093	126157.07	0.0600	P	2.6	-9.1
5	☐	100.000	98.356	1342763.94	0.6470	A	0.4	-1.6
6	☐	200.000	200.879	2627149.65	1.3212	A	0.8	0.4

y = 0.0066 * x + 1.5715E-004
R = 0.9999
DL = 0.008503 ppb
BEC = 0.0239 ppb

Weight: <None>
Min Conc: <None>

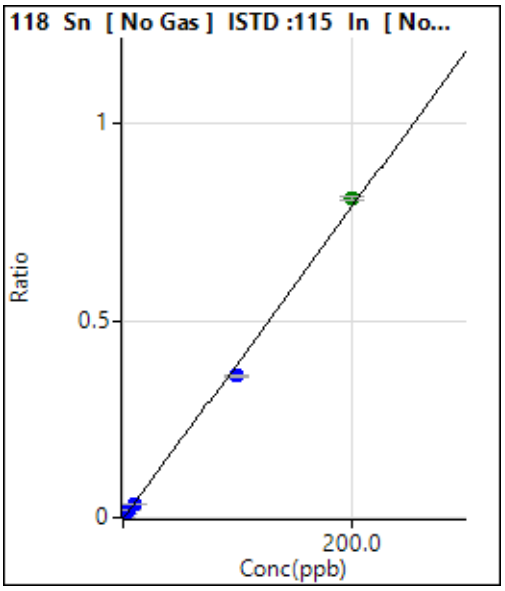


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	2.522	6615.12	0.0031	P	4.8	26.1
3	☐	5.000	4.865	12793.07	0.0060	P	4.0	-2.7
4	☐	10.000	9.713	25211.07	0.0120	P	0.9	-2.9
5	☐	100.000	98.781	252821.20	0.1218	P	1.2	-1.2
6	☐	200.000	200.622	491982.35	0.2474	P	0.6	0.3

y = 0.0012 * x + 1.6170E-006
R = 1.0000
DL = 0.006813 ppb
BEC = 0.001311 ppb

Weight: <None>
Min Conc: <None>

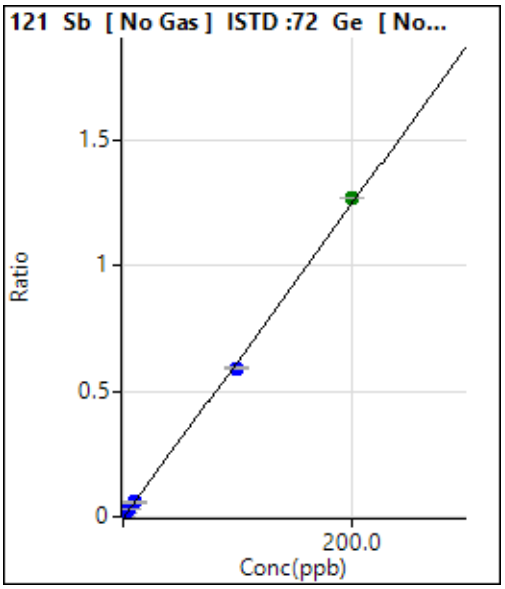
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1403.43	0.0007	P	16.7	
2	☐	2.000	2.192	19855.36	0.0093	P	1.1	9.6
3	☐	5.000	4.275	37490.48	0.0176	P	2.9	-14.5
4	☐	10.000	8.654	73461.40	0.0349	P	0.9	-13.5
5	☐	100.000	90.827	746993.35	0.3599	P	0.9	-9.2
6	☐	200.000	204.670	1611109.93	0.8102	A	0.7	2.3

y = 0.0040 * x + 6.7588E-004
R = 0.9986
DL = 0.08551 ppb
BEC = 0.1709 ppb

Weight: <None>
Min Conc: <None>

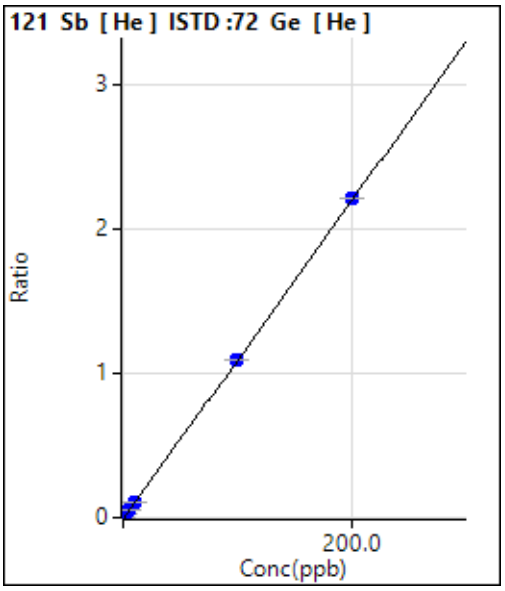


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	590.03	0.0003	P	18.2	
2	☐	2.000	2.323	26854.40	0.0149	P	1.4	16.2
3	☐	5.000	4.487	51568.19	0.0284	P	0.7	-10.3
4	☐	10.000	9.142	103106.47	0.0575	P	1.4	-8.6
5	☐	100.000	94.268	1040346.65	0.5900	P	1.1	-5.7
6	☐	200.000	202.919	2177601.74	1.2696	A	0.6	1.5

y = 0.0063 * x + 3.2971E-004
R = 0.9994
DL = 0.02874 ppb
BEC = 0.05271 ppb

Weight: <None>
Min Conc: <None>

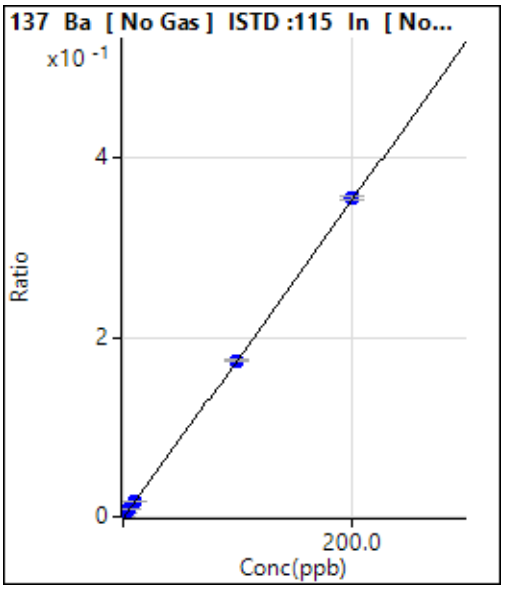
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	296.68	0.0006	P	1.6	
2	☐	2.000	2.423	12672.99	0.0274	P	2.3	21.2
3	☐	5.000	4.902	25020.70	0.0548	P	0.3	-2.0
4	☐	10.000	9.623	49262.74	0.1070	P	0.7	-3.8
5	☐	100.000	98.894	498527.92	1.0933	P	0.4	-1.1
6	☐	200.000	200.570	984432.75	2.2167	P	0.4	0.3

y = 0.0110 * x + 6.4964E-004
R = 1.0000
DL = 0.002772 ppb
BEC = 0.0588 ppb

Weight: <None>
Min Conc: <None>

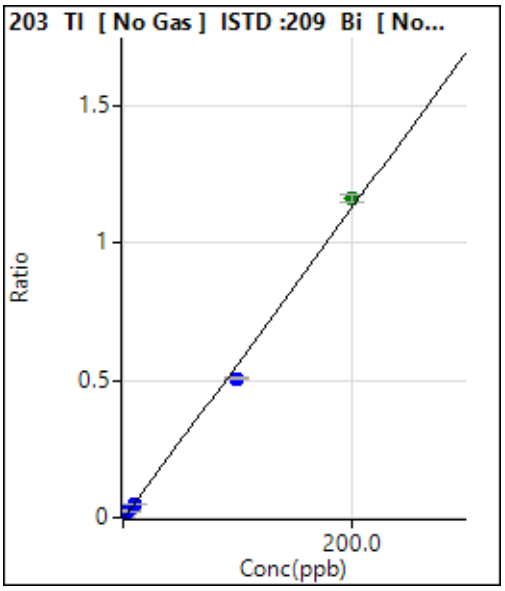


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	143.34	0.0001	P	24.8	
2	☐	2.000	2.334	8919.88	0.0042	P	0.9	16.7
3	☐	5.000	4.757	18096.17	0.0085	P	2.1	-4.9
4	☐	10.000	9.655	36097.10	0.0172	P	1.0	-3.5
5	☐	100.000	98.430	361608.34	0.1742	P	0.6	-1.6
6	☐	200.000	200.805	706675.23	0.3554	P	0.7	0.4

y = 0.0018 * x + 6.8789E-005
R = 1.0000
DL = 0.02893 ppb
BEC = 0.03888 ppb

Weight: <None>
Min Conc: <None>

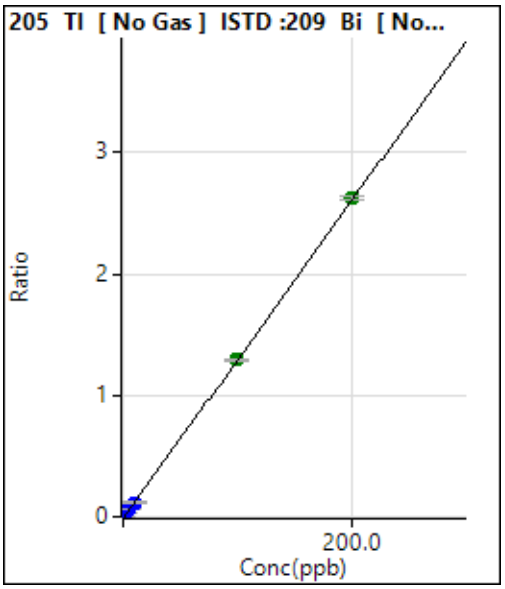
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	34.7	
2	☐	2.000	2.109	22774.40	0.0120	P	1.3	5.4
3	☐	5.000	4.379	46878.15	0.0248	P	3.7	-12.4
4	☐	10.000	8.709	92839.91	0.0493	P	1.5	-12.9
5	☐	100.000	89.301	945910.79	0.5057	P	1.2	-10.7
6	☐	200.000	205.429	2065782.16	1.1634	A	1.8	2.7

y = 0.0057 * x + 8.9151E-006
R = 0.9981
DL = 0.001637 ppb
BEC = 0.001574 ppb

Weight: <None>
Min Conc: <None>

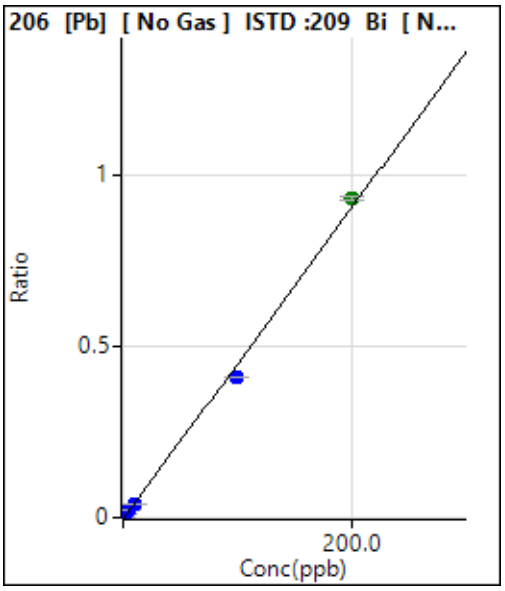


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0000	P	86.6	
2	☐	2.000	2.206	55061.60	0.0289	P	2.2	10.3
3	☐	5.000	4.488	111071.28	0.0588	P	2.9	-10.2
4	☐	10.000	9.020	222260.54	0.1181	P	2.1	-9.8
5	☐	100.000	98.679	2416161.58	1.2918	A	1.4	-1.3
6	☐	200.000	200.720	4665796.39	2.6276	A	1.7	0.4

y = 0.0131 * x + 2.1391E-005
R = 1.0000
DL = 0.004245 ppb
BEC = 0.001634 ppb

Weight: <None>
Min Conc: <None>

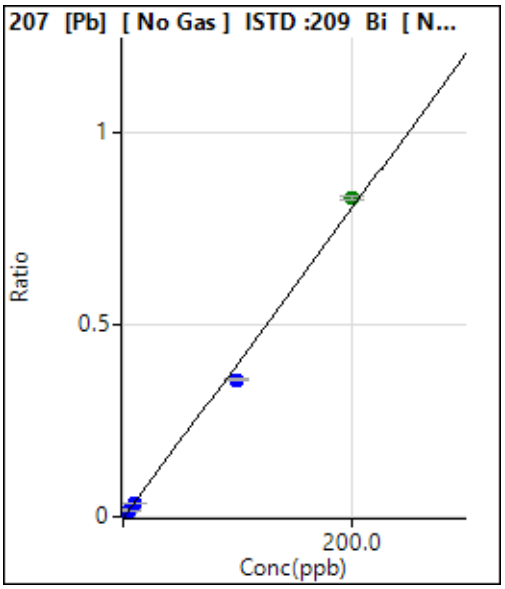
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	173.33	0.0001	P	14.6	
2	☐	2.000	2.222	19472.17	0.0102	P	1.8	11.1
3	☐	5.000	4.495	38904.32	0.0206	P	1.8	-10.1
4	☐	10.000	8.795	75618.69	0.0402	P	2.6	-12.0
5	☐	100.000	89.926	766906.65	0.4100	P	0.8	-10.1
6	☐	200.000	205.107	1660507.58	0.9350	A	0.8	2.6

y = 0.0046 * x + 9.2711E-005
R = 0.9983
DL = 0.008882 ppb
BEC = 0.02034 ppb

Weight: <None>
Min Conc: <None>

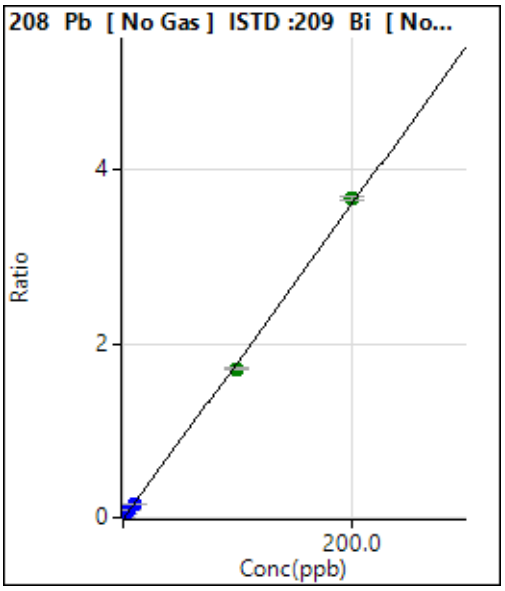


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	143.33	0.0001	P	4.0	
2	☐	2.000	2.137	16598.02	0.0087	P	2.7	6.8
3	☐	5.000	4.309	33037.61	0.0175	P	3.9	-13.8
4	☐	10.000	8.713	66389.78	0.0353	P	1.5	-12.9
5	☐	100.000	88.564	669429.10	0.3579	P	0.6	-11.4
6	☐	200.000	205.798	1476543.57	0.8315	A	1.5	2.9

y = 0.0040 * x + 7.6662E-005
R = 0.9978
DL = 0.002301 ppb
BEC = 0.01898 ppb

Weight: <None>
Min Conc: <None>

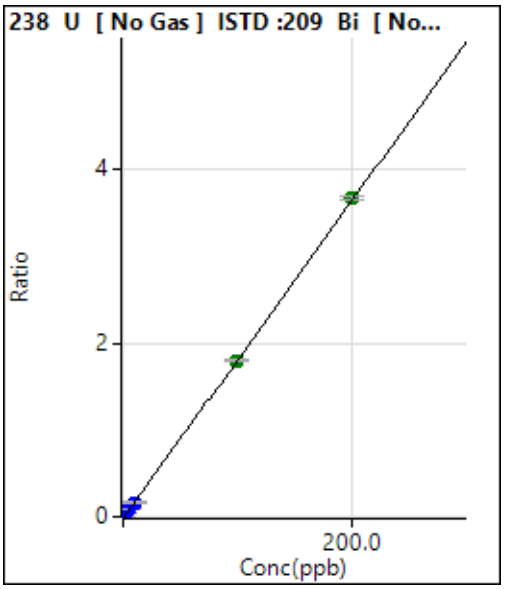
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	766.68	0.0004	P	6.0	
2	☐	2.000	2.189	76288.66	0.0400	P	1.5	9.4
3	☐	5.000	4.456	153209.79	0.0811	P	3.2	-10.9
4	☐	10.000	8.840	301948.43	0.1604	P	1.9	-11.6
5	☐	100.000	94.440	3198940.16	1.7102	A	0.7	-5.6
6	☐	200.000	202.850	6522086.83	3.6729	A	1.4	1.4

y = 0.0181 * x + 4.1006E-004
R = 0.9995
DL = 0.004104 ppb
BEC = 0.02265 ppb

Weight: <None>
Min Conc: <None>

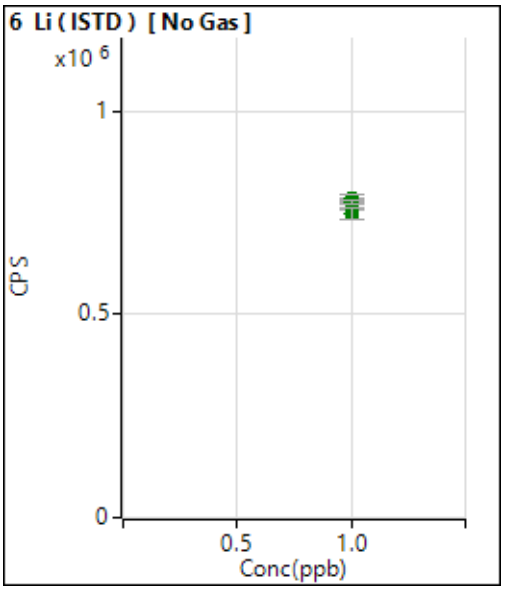


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	2.173	75773.76	0.0398	P	2.8	8.7
3	☐	5.000	4.492	155370.22	0.0822	P	2.2	-10.2
4	☐	10.000	9.063	312144.25	0.1659	P	1.0	-9.4
5	☐	100.000	98.265	3363733.91	1.7983	A	1.7	-1.7
6	☐	200.000	200.926	6530395.32	3.6771	A	1.4	0.5

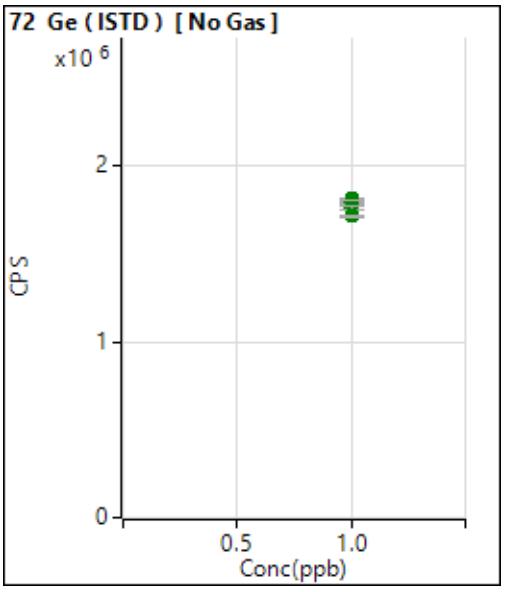
y = 0.0183 * x + 3.5654E-006
R = 0.9999
DL = 0.0005062 ppb
BEC = 0.0001948 ppb

Weight: <None>
Min Conc: <None>

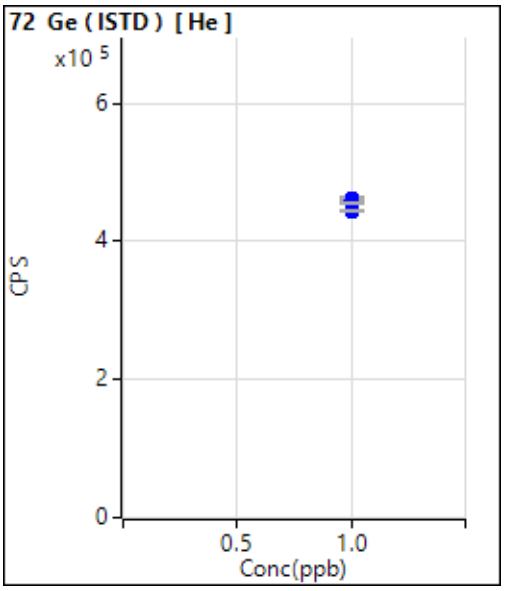
Calibration for 025_ICV.d



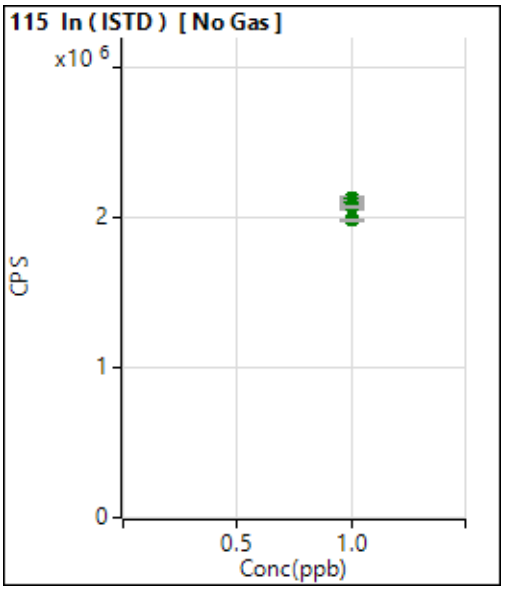
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		779901.77		A	2.3	
2	☐	1.000		786683.41		A	1.9	
3	☐	1.000		764885.19		A	1.6	
4	☐	1.000		773008.02		A	2.6	
5	☐	1.000		777283.77		A	1.3	
6	☐	1.000		748585.87		A	3.4	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1788655.65		A	0.8	
2	☐	1.000		1806932.89		A	0.7	
3	☐	1.000		1816122.99		A	0.5	
4	☐	1.000		1792612.57		A	0.8	
5	☐	1.000		1763466.22		A	1.4	
6	☐	1.000		1715150.18		A	0.4	

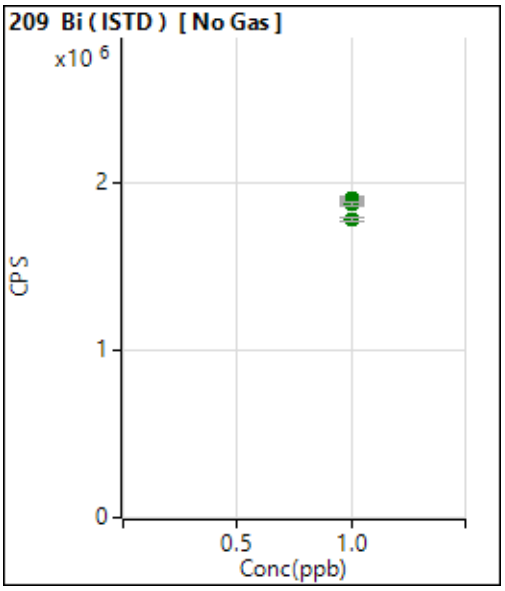


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		456662.66		P	0.5	
2	☐	1.000		462225.88		P	1.4	
3	☐	1.000		456508.14		P	0.8	
4	☐	1.000		460539.81		P	1.2	
5	☐	1.000		455980.69		P	0.4	
6	☐	1.000		444094.33		P	0.2	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		2077406.26		A	2.5	
2	☐	1.000		2125018.35		A	1.3	
3	☐	1.000		2132431.25		A	1.3	
4	☐	1.000		2104656.56		A	1.3	
5	☐	1.000		2075498.83		A	0.5	
6	☐	1.000		1988557.03		A	0.4	

Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1869675.08		A	0.0	
2	☐	1.000		1905803.93		A	1.7	
3	☐	1.000		1890434.50		A	2.0	
4	☐	1.000		1882141.85		A	1.0	
5	☐	1.000		1870567.16		A	1.0	
6	☐	1.000		1775926.79		A	1.3	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	018CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T12:37:46-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	41137	0.00
Be	9	1	No Gas	8	415.69
V	51	2	He	828	1.08
Cr	52	2	He	1547	0.69
Fe	56	2	He	8726	0.04
Se	78	2	He	181	5.45
As	75	2	He	59	11.09
Ca	44	2	He	717	1.62
Na	23	2	He	96217	0.00
Mg	24	2	He	270	4.11
K	39	2	He	66614	0.00
Mn	55	2	He	167	19.83
Co	59	2	He	37	113.62
Ni	60	2	He	190	14.39
Cu	63	2	He	630	3.15
Zn	66	2	He	683	2.73
Al	27	2	He	557	3.48
B	11	1	No Gas	5604	0.03
Al	27	1	No Gas	28607	0.01
Si	28	1	No Gas	306157	0.00
Ag	107	1	No Gas	327	3.90
Cd	111	1	No Gas	3	5196.15
Sr	88	1	No Gas	1103	1.32
Mo	95	1	No Gas	40	108.25
Sn	118	1	No Gas	1403	1.16
Sb	121	1	No Gas	590	3.16
Ba	137	1	No Gas	143	18.43
Tl	205	1	No Gas	40	216.51
Tl	203	1	No Gas	17	207.85
Pb	208	1	No Gas	767	0.79
U	238	1	No Gas	7	1299.04
Ca	43	2	He	23	212.09
Sb	121	2	He	297	0.66
Ti	47	2	He	3	5196.15
Cu	63	1	No Gas	1480	0.28

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD

Calibration Blank Report

Li	6	1	No Gas	779902	2.27
Ge	72	2	He	456663	0.48
Ge	72	1	No Gas	1788656	0.79
In	115	1	No Gas	2077406	2.48

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	No Gas	1869675	0.04

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	019CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T12:40:06-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	6133	0.01
V	51	2	He	10931	0.02
Cr	52	2	He	13600	0.03
Fe	56	2	He	1239731	0.00
Se	78	2	He	359	3.28
As	75	2	He	1856	0.29
Ca	44	2	He	7802	0.03
Na	23	2	He	284435	0.00
Mg	24	2	He	103713	0.00
K	39	2	He	189266	0.00
Mn	55	2	He	9030	0.01
Co	59	2	He	19361	0.01
Ni	60	2	He	5498	0.04
Cu	63	2	He	14158	0.01
Zn	66	2	He	4561	0.16
Al	27	2	He	1167	0.55
B	11	1	No Gas	21194	0.00
Al	27	1	No Gas	57472	0.01
Si	28	1	No Gas	368965	0.00
Ag	107	1	No Gas	31498	0.00
Cd	111	1	No Gas	6615	0.09
Sr	88	1	No Gas	58538	0.00
Mo	95	1	No Gas	11468	0.03
Sn	118	1	No Gas	19855	0.00
Sb	121	1	No Gas	26854	0.01
Ba	137	1	No Gas	8920	0.01
Tl	205	1	No Gas	55062	0.00
Tl	203	1	No Gas	22774	0.00
Pb	208	1	No Gas	76289	0.00
U	238	1	No Gas	75774	0.00
Ca	43	2	He	417	4.05
Sb	121	2	He	12673	0.01
Cu	63	1	No Gas	26483	0.02

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	786683	1.86	779902	100.87	70	120	
Ge	72	2	He	462226	1.36	456663	101.22	70	120	
Ge	72	1	No Gas	1806933	0.65	1788656	101.02	70	120	

Calibration Standard Report

In	115	1	No Gas	2125018	1.27	2077406	102.29	70	120	
Bi	209	1	No Gas	1905804	1.72	1869675	101.93	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	020CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T12:42:24-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	12094	0.01
V	51	2	He	21110	0.01
Cr	52	2	He	25755	0.01
Fe	56	2	He	2488477	0.00
Se	78	2	He	514	1.49
As	75	2	He	3637	0.05
Ca	44	2	He	12970	0.03
Na	23	2	He	459548	0.00
Mg	24	2	He	206475	0.00
K	39	2	He	299123	0.00
Mn	55	2	He	16664	0.00
Co	59	2	He	37913	0.01
Ni	60	2	He	10114	0.02
Cu	63	2	He	28327	0.00
Zn	66	2	He	5565	0.05
Al	27	2	He	1717	0.66
B	11	1	No Gas	38182	0.00
Al	27	1	No Gas	87280	0.00
Si	28	1	No Gas	434689	0.00
Ag	107	1	No Gas	62689	0.00
Cd	111	1	No Gas	12793	0.02
Sr	88	1	No Gas	116181	0.00
Mo	95	1	No Gas	22693	0.01
Sn	118	1	No Gas	37490	0.01
Sb	121	1	No Gas	51568	0.00
Ba	137	1	No Gas	18096	0.01
Tl	205	1	No Gas	111071	0.00
Tl	203	1	No Gas	46878	0.00
Pb	208	1	No Gas	153210	0.00
U	238	1	No Gas	155370	0.00
Ca	43	2	He	707	2.31
Sb	121	2	He	25021	0.00
Cu	63	1	No Gas	52411	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	764885	1.60	779902	98.07	70	120	
Ge	72	2	He	456508	0.78	456663	99.97	70	120	
Ge	72	1	No Gas	1816123	0.49	1788656	101.54	70	120	

Calibration Standard Report

In	115	1	No Gas	2132431	1.27	2077406	102.65	70	120	
Bi	209	1	No Gas	1890435	2.01	1869675	101.11	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	021CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T12:44:42-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	24420	0.00
V	51	2	He	41389	0.00
Cr	52	2	He	50403	0.00
Fe	56	2	He	4776807	0.00
Se	78	2	He	791	0.69
As	75	2	He	7074	0.01
Ca	44	2	He	24679	0.00
Na	23	2	He	899371	0.00
Mg	24	2	He	408670	0.00
K	39	2	He	531074	0.00
Mn	55	2	He	32953	0.00
Co	59	2	He	74268	0.00
Ni	60	2	He	20082	0.00
Cu	63	2	He	55175	0.00
Zn	66	2	He	10828	0.03
Al	27	2	He	2884	0.13
B	11	1	No Gas	70685	0.00
Al	27	1	No Gas	146519	0.00
Si	28	1	No Gas	564069	0.00
Ag	107	1	No Gas	126157	0.00
Cd	111	1	No Gas	25211	0.00
Sr	88	1	No Gas	232143	0.00
Mo	95	1	No Gas	46327	0.00
Sn	118	1	No Gas	73461	0.00
Sb	121	1	No Gas	103106	0.00
Ba	137	1	No Gas	36097	0.00
Tl	205	1	No Gas	222261	0.00
Tl	203	1	No Gas	92840	0.00
Pb	208	1	No Gas	301948	0.00
U	238	1	No Gas	312144	0.00
Ca	43	2	He	1400	0.09
Sb	121	2	He	49263	0.00
Cu	63	1	No Gas	102944	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	773008	2.62	779902	99.12	70	120	
Ge	72	2	He	460540	1.24	456663	100.85	70	120	
Ge	72	1	No Gas	1792613	0.83	1788656	100.22	70	120	

Calibration Standard Report

In	115	1	No Gas	2104657	1.27	2077406	101.31	70	120	
Bi	209	1	No Gas	1882142	1.03	1869675	100.67	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	022CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T12:46:59-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	245186	0.00
V	51	2	He	415331	0.00
Cr	52	2	He	487927	0.00
Fe	56	2	He	47158106	0.00
Se	78	2	He	6182	0.05
As	75	2	He	72906	0.00
Ca	44	2	He	243845	0.00
Na	23	2	He	7789478	0.00
Mg	24	2	He	4233950	0.00
K	39	2	He	4952098	0.00
Mn	55	2	He	327850	0.00
Co	59	2	He	761236	0.00
Ni	60	2	He	202752	0.00
Cu	63	2	He	547111	0.00
Zn	66	2	He	101658	0.00
Al	27	2	He	21233	0.01
B	11	1	No Gas	660851	0.00
Al	27	1	No Gas	1193475	0.00
Si	28	1	No Gas	3013889	0.00
Ag	107	1	No Gas	1342764	0.00
Cd	111	1	No Gas	252821	0.00
Sr	88	1	No Gas	2420307	0.00
Mo	95	1	No Gas	466801	0.00
Sn	118	1	No Gas	746993	0.00
Sb	121	1	No Gas	1040347	0.00
Ba	137	1	No Gas	361608	0.00
Tl	205	1	No Gas	2416162	0.00
Tl	203	1	No Gas	945911	0.00
Pb	208	1	No Gas	3198940	0.00
U	238	1	No Gas	3363734	0.00
Ca	43	2	He	14364	0.02
Sb	121	2	He	498528	0.00
Cu	63	1	No Gas	1006161	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	777284	1.33	779902	99.66	70	120	
Ge	72	2	He	455981	0.45	456663	99.85	70	120	
Ge	72	1	No Gas	1763466	1.37	1788656	98.59	70	120	

Calibration Standard Report

In	115	1	No Gas	2075499	0.51	2077406	99.91	70	120	
Bi	209	1	No Gas	1870567	1.04	1869675	100.05	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	023CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T12:49:11-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	483647	0.00
V	51	2	He	817687	0.00
Cr	52	2	He	992043	0.00
Fe	56	2	He	93068929	0.00
Se	78	2	He	12015	0.01
As	75	2	He	144821	0.00
Ca	44	2	He	477968	0.00
Na	23	2	He	15299573	0.00
Mg	24	2	He	8360439	0.00
K	39	2	He	9528016	0.00
Mn	55	2	He	645869	0.00
Co	59	2	He	1657257	0.00
Ni	60	2	He	395072	0.00
Cu	63	2	He	1075128	0.00
Zn	66	2	He	196351	0.00
Al	27	2	He	41038	0.00
B	11	1	No Gas	1442295	0.00
Al	27	1	No Gas	2316814	0.00
Si	28	1	No Gas	5409033	0.00
Ag	107	1	No Gas	2627150	0.00
Cd	111	1	No Gas	491982	0.00
Sr	88	1	No Gas	4681137	0.00
Mo	95	1	No Gas	921966	0.00
Sn	118	1	No Gas	1611110	0.00
Sb	121	1	No Gas	2177602	0.00
Ba	137	1	No Gas	706675	0.00
Tl	205	1	No Gas	4665796	0.00
Tl	203	1	No Gas	2065782	0.00
Pb	208	1	No Gas	6522087	0.00
U	238	1	No Gas	6530395	0.00
Ca	43	2	He	27945	0.01
Sb	121	2	He	984433	0.00
Cu	63	1	No Gas	2114320	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	748586	3.42	779902	95.98	70	120	
Ge	72	2	He	444094	0.23	456663	97.25	70	120	
Ge	72	1	No Gas	1715150	0.44	1788656	95.89	70	120	

Calibration Standard Report

In	115	1	No Gas	1988557	0.44	2077406	95.72	70	120	
Bi	209	1	No Gas	1775927	1.33	1869675	94.99	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	025_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T12:57:46-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	104.754	3.093	1126285	0.45	100	104.8	90	110	
Be	9	1	No Gas	105.618	3.402	261335	0.33	100	105.6	90	110	
V	51	2	He	102.061	0.806	430068	0.09	100	102.1	90	110	
Cr	52	2	He	99.982	1.587	508160	0.70	100	100.0	90	110	
Fe	56	2	He	10022.703	0.634	48020371	0.32	10000	100.2	90	110	
Se	78	2	He	106.372	1.020	6665	0.47	100	106.4	90	110	
As	75	2	He	107.128	0.810	79767	0.20	100	107.1	90	110	
Ca	44	2	He	9954.040	0.593	245526	0.93	10000	99.5	90	110	
Na	23	2	He	10052.131	1.628	7963067	2.14	10000	100.5	90	110	
Mg	24	2	He	10068.132	0.928	4332109	1.28	10000	100.7	90	110	
K	39	2	He	10115.340	0.859	5012289	1.23	10000	101.2	90	110	
Mn	55	2	He	103.713	0.750	344992	1.03	100	103.7	90	110	
Co	59	2	He	95.464	0.228	799123	0.75	100	95.5	90	110	
Ni	60	2	He	102.370	0.816	208780	1.09	100	102.4	90	110	
Cu	63	2	He	102.943	0.376	570436	0.78	100	102.9	90	110	
Zn	66	2	He	103.495	0.594	105326	1.34	100	103.5	90	110	
Al	27	2	He	103.531	0.981	22181	1.81	100	103.5	90	110	
B	11	1	No Gas	473.199	4.103	687324	1.08	500	94.6	90	110	
Al	27	1	No Gas	103.028	1.334	1247953	0.86	100	103.0	90	110	
Si	28	1	No Gas	523.127	0.503	3094148	0.50	500	104.6	90	110	
Ag	107	1	No Gas	104.352	2.357	1405443	0.75	100	104.4	90	110	
Cd	111	1	No Gas	103.469	1.482	261300	0.73	100	103.5	90	110	
Sr	88	1	No Gas	103.507	3.331	2489573	1.31	100	103.5	90	110	
Mo	95	1	No Gas	98.172	1.178	463276	1.50	100	98.2	90	110	
Sn	118	1	No Gas	94.338	1.963	765493	1.44	100	94.3	90	110	
Sb	121	1	No Gas	96.325	0.489	1071392	0.28	100	96.3	90	110	
Ba	137	1	No Gas	103.108	2.325	373695	0.20	100	103.1	90	110	
Tl	205	1	No Gas	106.137	1.282	2548222	1.53	100	106.1	90	110	
Tl	203	1	No Gas	95.588	0.953	992794	1.09	100	95.6	90	110	
Pb	208	1	No Gas	99.696	1.001	3311099	1.23	100	99.7	90	110	
U	238	1	No Gas	101.096	1.048	3393086	0.88	100	101.1	90	110	
Ca	43	2	He	9913.807	3.220	14308	2.37	10000	99.1	90	110	
Sb	121	2	He	103.275	0.475	523354	0.41	100	103.3	90	110	
Ti	47	2	He	102.625	0.995	15643	1.73	100	102.6	90	110	
Cu	63	1	No Gas	96.411	0.834	1040891	1.09	100	96.4	90	110	
Se	82	1	No Gas	102.177	5.640	14628	5.75	100	102.2	90	110	

QC ISTD Table

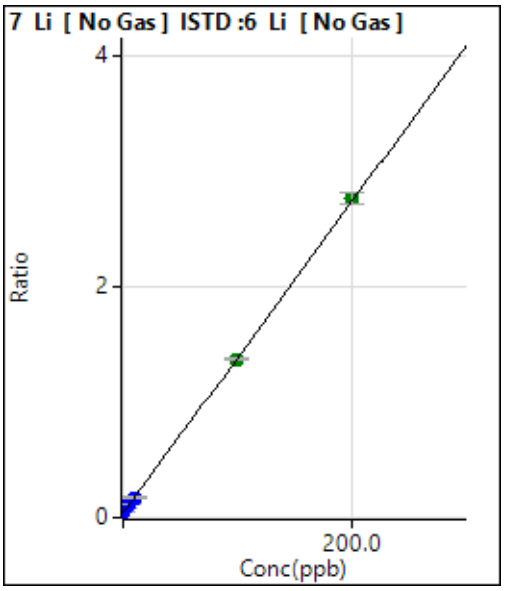
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	769612	3.20	779902	98.68	70	120	
Ge	72	2	He	458399	0.88	456663	100.38	70	120	
Ge	72	1	No Gas	1777175	0.50	1788656	99.36	70	120	
In	115	1	No Gas	2048256	2.17	2077406	98.60	70	120	
Bi	209	1	No Gas	1833986	0.25	1869675	98.09	70	120	

Calibration for 025_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\082222A.b\
Analysis File: 082222A.batch.bin
DA Date-Time: 08/22/2022 20:20:33
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	018CALB.d	CAL BLK	08/22/2022 12:37:46
2	019CALS.d	2/10/200	08/22/2022 12:40:06
3	020CALS.d	5/25/500	08/22/2022 12:42:24
4	021CALS.d	10/50/100	08/22/2022 12:44:42
5	022CALS.d	100/500/10K	08/22/2022 12:46:59
6	023CALS.d	200/1000/20K	08/22/2022 12:49:11

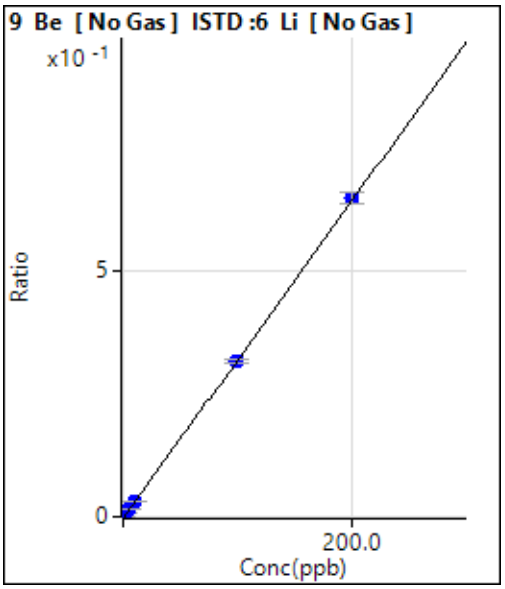
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	41136.69	0.0528	P	1.6	
2	☐	2.000	2.291	65789.77	0.0836	P	0.6	14.6
3	☐	5.000	4.766	89457.20	0.1170	P	2.0	-4.7
4	☐	10.000	9.040	134901.75	0.1746	P	2.0	-9.6
5	☐	100.000	97.553	1062663.58	1.3673	A	1.4	-2.4
6	☐	200.000	201.275	2068369.55	2.7650	A	4.0	0.6

y = 0.0135 * x + 0.0528
R = 0.9999
DL = 0.1916 ppb
BEC = 3.915 ppb

Weight: <None>
Min Conc: <None>

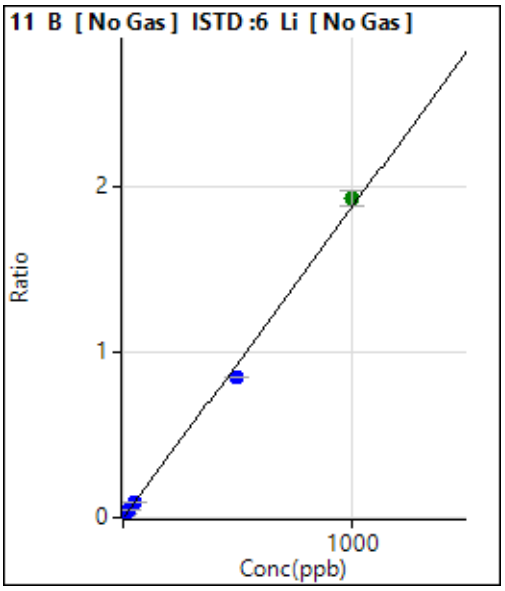


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8.33	0.0000	P	34.5	
2	☐	2.000	2.420	6133.05	0.0078	P	1.6	21.0
3	☐	5.000	4.911	12093.62	0.0158	P	0.9	-1.8
4	☐	10.000	9.822	24419.64	0.0316	P	3.6	-1.8
5	☐	100.000	98.053	245186.38	0.3155	P	1.4	-1.9
6	☐	200.000	200.980	483647.32	0.6466	P	3.6	0.5

y = 0.0032 * x + 1.0680E-005
R = 0.9999
DL = 0.003436 ppb
BEC = 0.00332 ppb

Weight: <None>
Min Conc: <None>

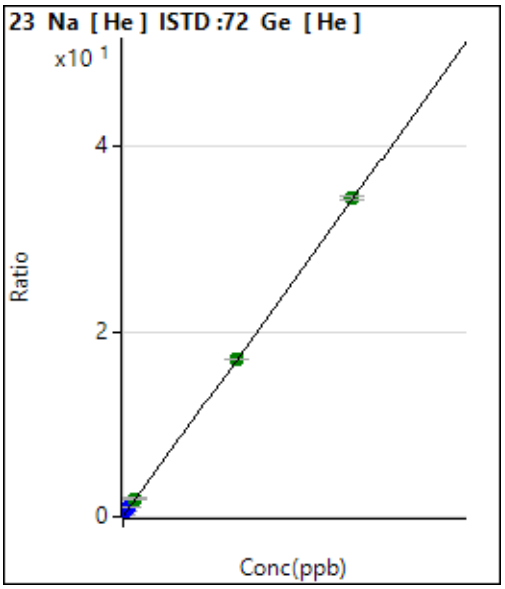
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5604.49	0.0072	P	1.1	
2	☐	10.000	10.546	21194.38	0.0269	P	1.6	5.5
3	☐	25.000	22.809	38181.79	0.0499	P	1.5	-8.8
4	☐	50.000	44.993	70684.98	0.0915	P	3.4	-10.0
5	☐	500.000	449.914	660851.18	0.8502	P	0.1	-10.0
6	☐	1000.000	1025.343	1442295.40	1.9284	A	4.3	2.5

y = 0.0019 * x + 0.0072
R = 0.9983
DL = 0.1277 ppb
BEC = 3.836 ppb

Weight: <None>
Min Conc: <None>

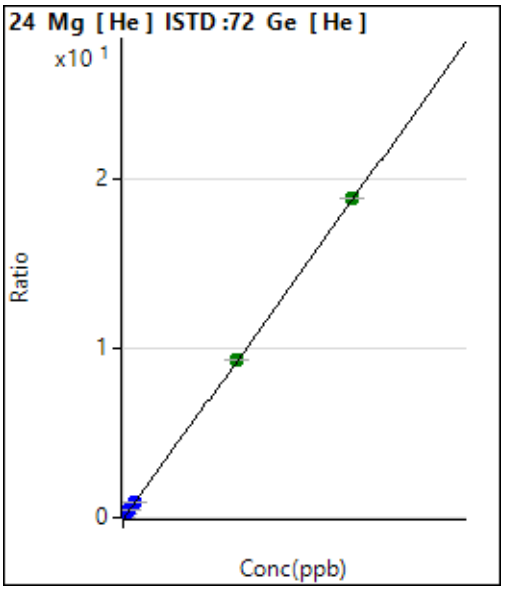


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	96217.35	0.2107	P	1.3	
2	☐	200.000	237.083	284434.93	0.6154	P	1.1	18.5
3	☐	500.000	466.293	459547.83	1.0067	P	0.9	-6.7
4	☐	1000.000	1020.761	899371.47	1.9532	A	2.3	2.1
5	☐	10000.00	9883.504	7789478.01	17.0829	A	0.4	-1.2
6	☐	20000.00	20057.68	15299572.6	34.4513	A	0.9	0.3

y = 0.0017 * x + 0.2107
R = 1.0000
DL = 4.873 ppb
BEC = 123.4 ppb

Weight: <None>
Min Conc: <None>

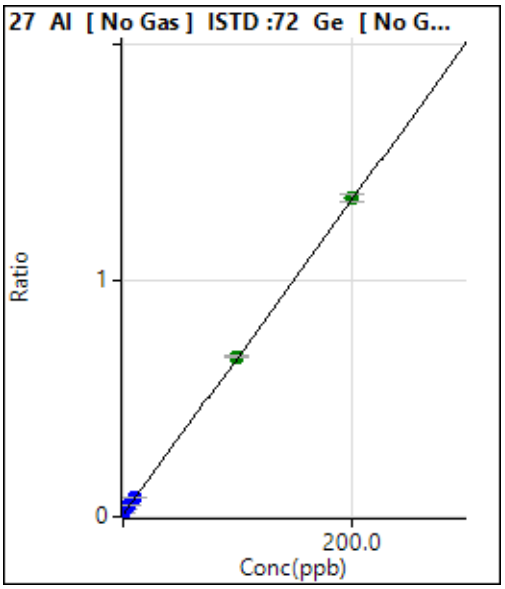
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	270.01	0.0006	P	11.6	
2	☐	200.000	238.433	103713.43	0.2244	P	1.2	19.2
3	☐	500.000	481.277	206474.83	0.4523	P	1.2	-3.7
4	☐	1000.000	944.893	408669.64	0.8875	P	1.3	-5.5
5	☐	10000.00	9892.153	4233949.52	9.2853	A	0.4	-1.1
6	☐	20000.00	20056.76	8360438.84	18.8258	A	0.5	0.3

y = 9.3860E-004 * x + 5.9149E-004
R = 1.0000
DL = 0.219 ppb
BEC = 0.6302 ppb

Weight: <None>
Min Conc: <None>

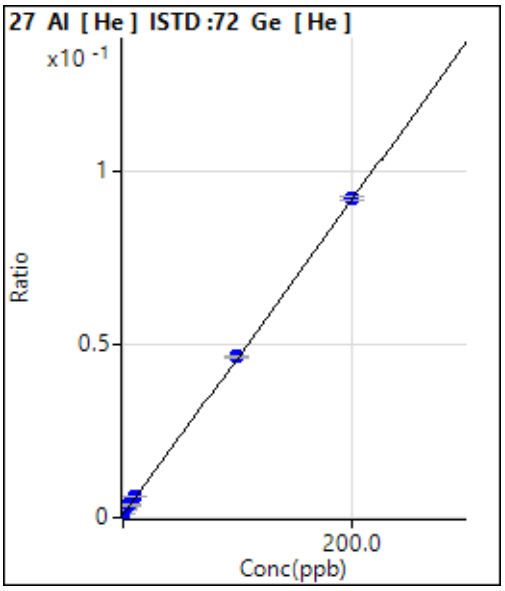


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	28607.39	0.0160	P	1.6	
2	☐	2.000	2.374	57472.09	0.0318	P	2.8	18.7
3	☐	5.000	4.814	87280.22	0.0481	P	1.7	-3.7
4	☐	10.000	9.871	146519.13	0.0817	P	1.3	-1.3
5	☐	100.000	99.215	1193475.03	0.6768	A	1.3	-0.8
6	☐	200.000	200.400	2316814.24	1.3508	A	2.3	0.2

y = 0.0067 * x + 0.0160
R = 1.0000
DL = 0.1147 ppb
BEC = 2.401 ppb

Weight: <None>
Min Conc: <None>

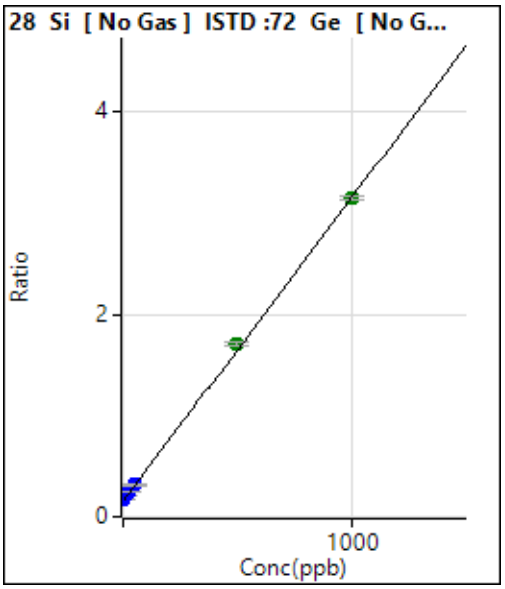
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	556.69	0.0012	P	18.9	
2	☐	2.000	2.869	1166.73	0.0025	P	7.3	43.4
3	☐	5.000	5.576	1716.81	0.0038	P	10.7	11.5
4	☐	10.000	11.071	2883.69	0.0063	P	3.9	10.7
5	☐	100.000	99.530	21233.12	0.0466	P	2.0	-0.5
6	☐	200.000	200.159	41037.55	0.0924	P	1.1	0.1

y = 4.5559E-004 * x + 0.0012
R = 1.0000
DL = 1.519 ppb
BEC = 2.674 ppb

Weight: <None>
Min Conc: <None>

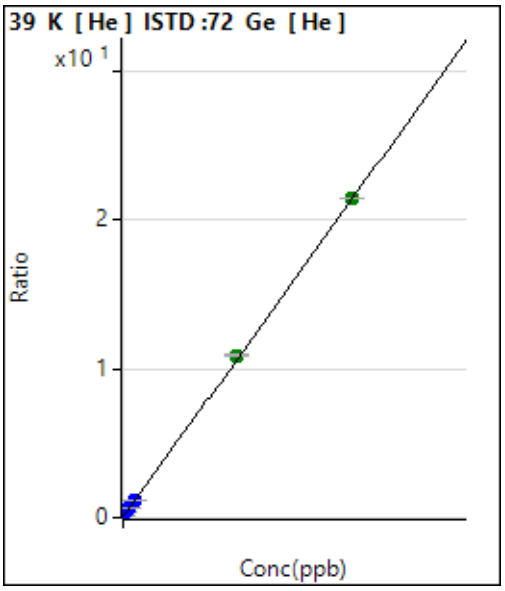


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	306156.92	0.1712	P	1.0	
2	☐	10.000	11.005	368964.51	0.2042	P	0.6	10.0
3	☐	25.000	22.718	434689.42	0.2394	P	0.3	-9.1
4	☐	50.000	47.821	564069.15	0.3147	P	1.2	-4.4
5	☐	500.000	512.533	3013888.91	1.7093	A	1.4	2.5
6	☐	1000.000	993.889	5409033.04	3.1538	A	1.3	-0.6

y = 0.0030 * x + 0.1712
R = 0.9999
DL = 1.644 ppb
BEC = 57.04 ppb

Weight: <None>
Min Conc: <None>

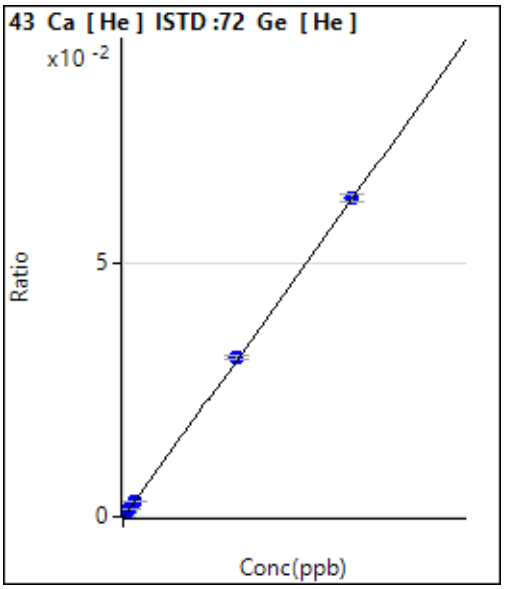
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	66614.06	0.1459	P	0.8	
2	☐	200.000	247.155	189266.11	0.4095	P	0.6	23.6
3	☐	500.000	477.596	299122.76	0.6552	P	0.4	-4.5
4	☐	1000.000	944.574	531074.03	1.1533	P	1.6	-5.5
5	☐	10000.00	10046.29	4952097.53	10.8607	A	1.2	0.5
6	☐	20000.00	19979.71	9528015.69	21.4551	A	0.5	-0.1

y = 0.0011 * x + 0.1459
R = 1.0000
DL = 3.347 ppb
BEC = 136.8 ppb

Weight: <None>
Min Conc: <None>

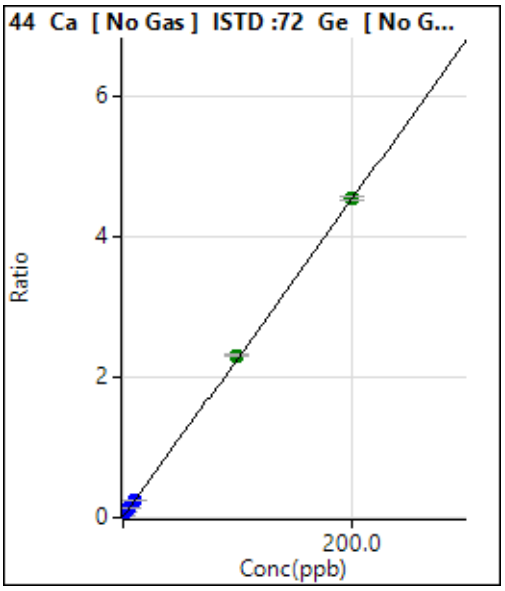


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0001	P	49.7	
2	☐	200.000	270.173	416.68	0.0009	P	15.9	35.1
3	☐	500.000	476.481	706.70	0.0015	P	17.0	-4.7
4	☐	1000.000	950.951	1400.09	0.0030	P	2.5	-4.9
5	☐	10000.00	10003.71	14364.32	0.0315	P	2.1	0.0
6	☐	20000.00	20000.48	27945.36	0.0629	P	2.7	0.0

y = 3.1438E-006 * x + 5.1169E-005
R = 1.0000
DL = 24.28 ppb
BEC = 16.28 ppb

Weight: <None>
Min Conc: <None>

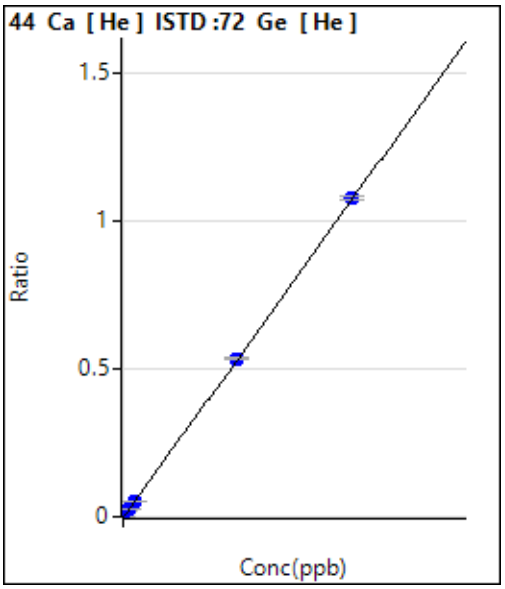
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	55458.39	0.0310	P	1.1	
2	☐	2.000	2.813	170769.13	0.0945	P	1.0	40.7
3	☐	5.000	4.645	246727.77	0.1359	P	0.8	-7.1
4	☐	10.000	9.515	440592.29	0.2458	P	1.5	-4.9
5	☐	100.000	100.575	4058718.06	2.3015	A	1.3	0.6
6	☐	200.000	199.738	7786946.97	4.5401	A	0.9	-0.1

y = 0.0226 * x + 0.0310
R = 1.0000
DL = 0.04689 ppb
BEC = 1.373 ppb

Weight: <None>
Min Conc: <None>

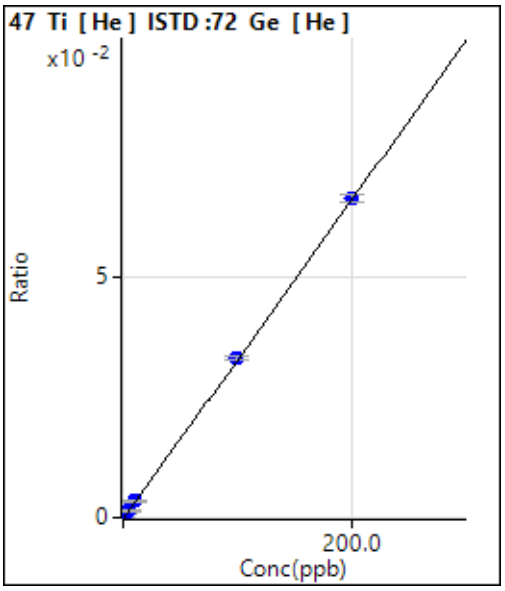


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	716.70	0.0016	P	11.8	
2	☐	200.000	285.355	7802.35	0.0169	P	1.6	42.7
3	☐	500.000	500.217	12969.65	0.0284	P	2.8	0.0
4	☐	1000.000	969.594	24679.16	0.0536	P	0.7	-3.0
5	☐	10000.00	9938.338	243844.94	0.5348	P	0.5	-0.6
6	☐	20000.00	20031.49	477968.14	1.0763	P	0.9	0.2

y = 5.3652E-005 * x + 0.0016
R = 1.0000
DL = 10.32 ppb
BEC = 29.26 ppb

Weight: <None>
Min Conc: <None>

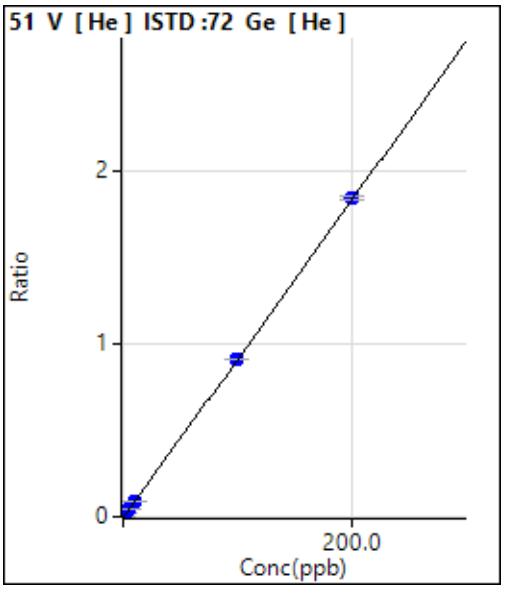
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	2.431	376.68	0.0008	P	16.1	21.6
3	☐	5.000	4.617	703.37	0.0015	P	19.0	-7.7
4	☐	10.000	10.279	1576.78	0.0034	P	5.7	2.8
5	☐	100.000	99.721	15118.55	0.0332	P	2.8	-0.3
6	☐	200.000	200.131	29548.73	0.0665	P	2.5	0.1

y = 3.3243E-004 * x + 7.3020E-006
R = 1.0000
DL = 0.1141 ppb
BEC = 0.02197 ppb

Weight: <None>
Min Conc: <None>

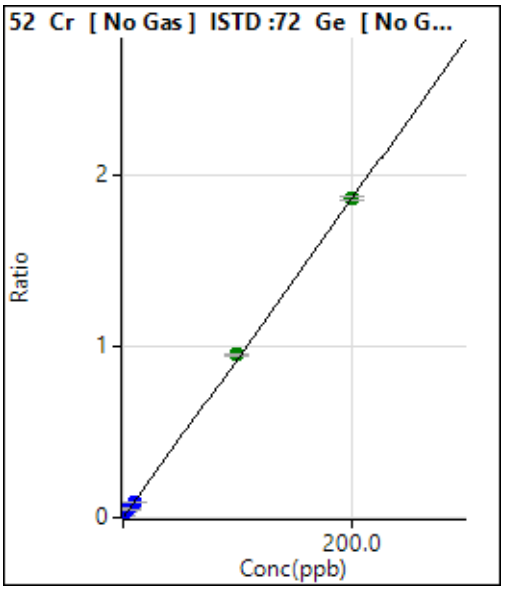


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	827.81	0.0018	P	9.0	
2	☐	2.000	2.381	10931.06	0.0237	P	3.6	19.0
3	☐	5.000	4.842	21109.63	0.0462	P	1.9	-3.2
4	☐	10.000	9.598	41388.92	0.0899	P	1.5	-4.0
5	☐	100.000	99.077	415330.89	0.9109	P	0.4	-0.9
6	☐	200.000	200.482	817687.00	1.8413	P	0.7	0.2

y = 0.0092 * x + 0.0018
R = 1.0000
DL = 0.05326 ppb
BEC = 0.1976 ppb

Weight: <None>
Min Conc: <None>

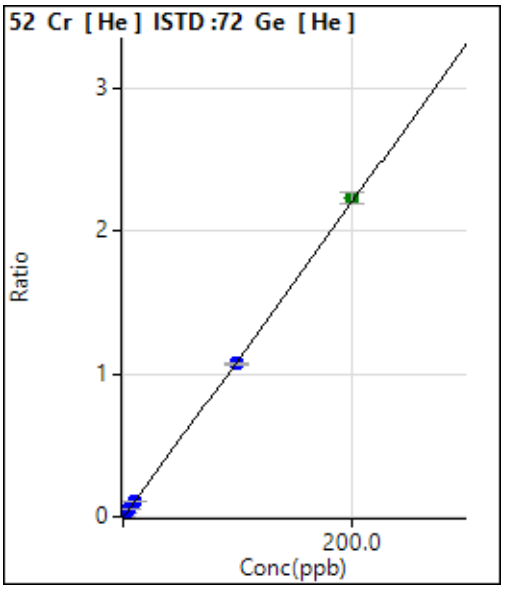
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14631.35	0.0082	P	0.2	
2	☐	2.000	2.322	53866.17	0.0298	P	2.7	16.1
3	☐	5.000	4.571	92198.87	0.0508	P	1.0	-8.6
4	☐	10.000	9.239	168946.30	0.0942	P	0.5	-7.6
5	☐	100.000	101.306	1678490.96	0.9519	A	1.7	1.3
6	☐	200.000	199.393	3199804.43	1.8657	A	0.8	-0.3

y = 0.0093 * x + 0.0082
R = 1.0000
DL = 0.004738 ppb
BEC = 0.8781 ppb

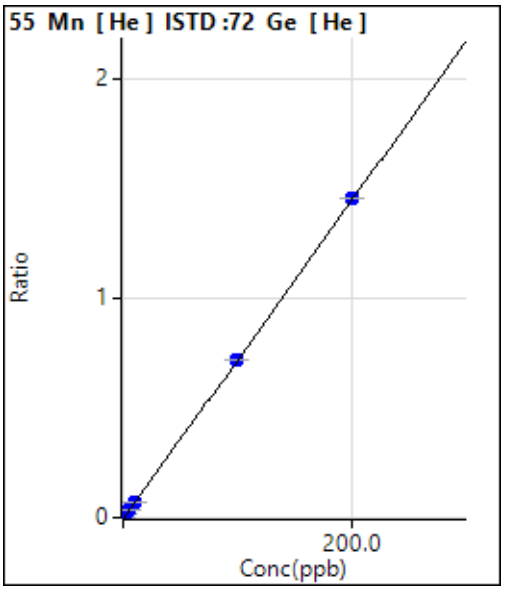
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1546.78	0.0034	P	10.5	
2	☐	2.000	2.356	13600.29	0.0294	P	3.6	17.8
3	☐	5.000	4.797	25754.56	0.0564	P	1.6	-4.1
4	☐	10.000	9.594	50403.14	0.1094	P	0.1	-4.1
5	☐	100.000	96.491	487926.50	1.0701	P	0.1	-3.5
6	☐	200.000	201.776	992042.77	2.2339	A	4.0	0.9

y = 0.0111 * x + 0.0034
R = 0.9998
DL = 0.09667 ppb
BEC = 0.3064 ppb

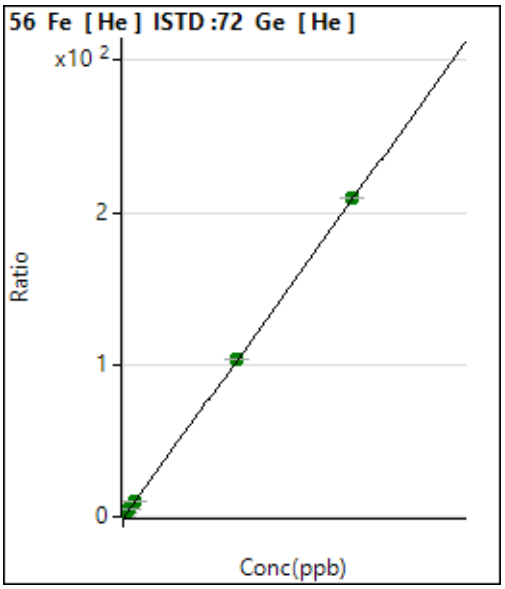
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	166.67	0.0004	P	33.5	
2	☐	2.000	2.644	9029.80	0.0195	P	2.4	32.2
3	☐	5.000	4.983	16663.74	0.0365	P	1.3	-0.3
4	☐	10.000	9.815	32953.45	0.0716	P	0.4	-1.8
5	☐	100.000	99.078	327850.42	0.7190	P	0.7	-0.9
6	☐	200.000	200.464	645869.00	1.4544	P	0.5	0.2

y = 0.0073 * x + 3.6532E-004
R = 1.0000
DL = 0.05063 ppb
BEC = 0.05037 ppb

Weight: <None>
Min Conc: <None>

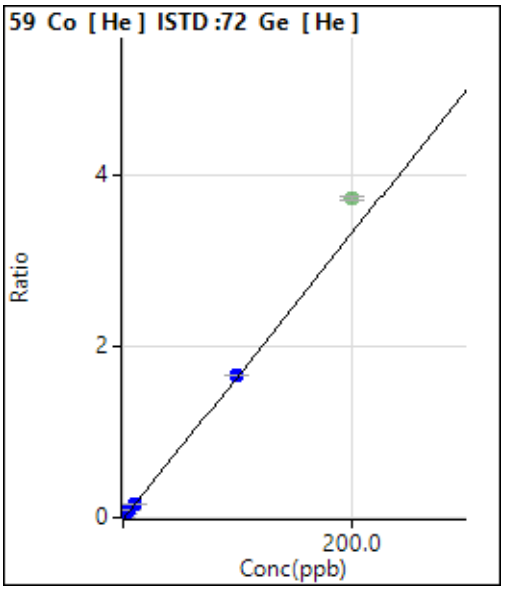


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8726.24	0.0191	P	3.5	
2	☐	200.000	254.824	1239730.84	2.6821	A	1.9	27.4
3	☐	500.000	519.783	2488477.36	5.4510	A	0.3	4.0
4	☐	1000.000	990.779	4776807.22	10.3731	A	1.4	-0.9
5	☐	10000.00	9894.729	47158105.9	103.423	A	0.6	-1.1
6	☐	20000.00	20052.05	93068928.6	209.571	A	0.6	0.3

y = 0.0105 * x + 0.0191
R = 1.0000
DL = 0.1922 ppb
BEC = 1.829 ppb

Weight: <None>
Min Conc: <None>

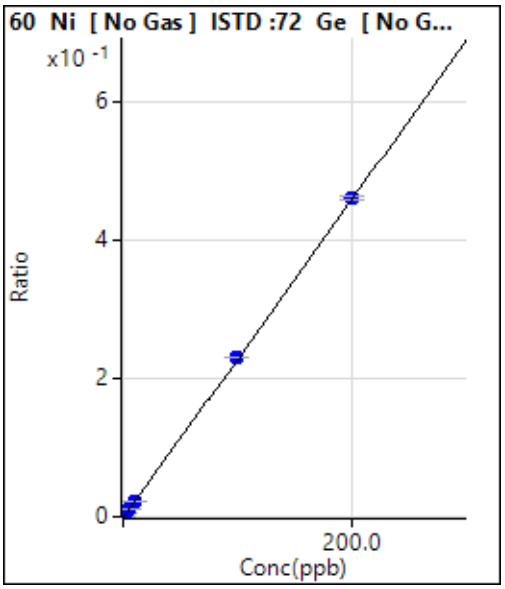
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0001	P	41.8	
2	☐	2.000	2.505	19360.62	0.0419	P	2.7	25.3
3	☐	5.000	4.972	37913.06	0.0831	P	2.9	-0.6
4	☐	10.000	9.659	74268.43	0.1613	P	1.2	-3.4
5	☐	100.000	100.025	761236.11	1.6695	P	0.4	0.0
6	☑	200.000		1657257.01	3.7318	A	0.9	

y = 0.0167 * x + 8.0369E-005
R = 1.0000
DL = 0.006045 ppb
BEC = 0.004816 ppb

Weight: <None>
Min Conc: <None>

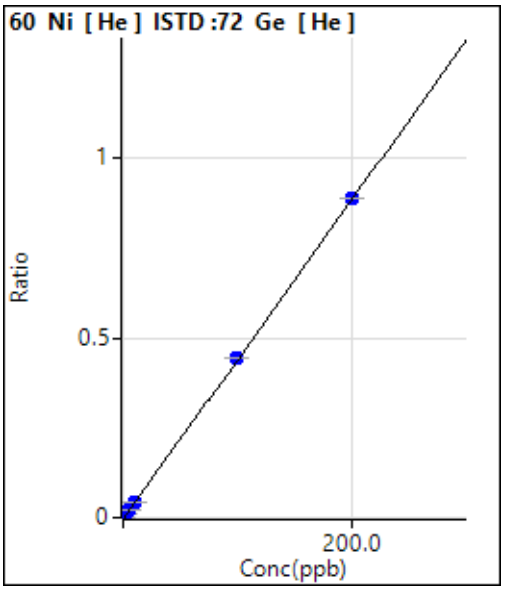


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	546.69	0.0003	P	20.6	
2	☐	2.000	2.465	10821.11	0.0060	P	3.4	23.3
3	☐	5.000	4.887	21016.47	0.0116	P	2.7	-2.3
4	☐	10.000	9.716	40697.73	0.0227	P	1.9	-2.8
5	☐	100.000	99.679	405791.48	0.2301	P	0.5	-0.3
6	☐	200.000	200.173	792045.95	0.4618	P	1.0	0.1

y = 0.0023 * x + 3.0544E-004
R = 1.0000
DL = 0.082 ppb
BEC = 0.1325 ppb

Weight: <None>
Min Conc: <None>

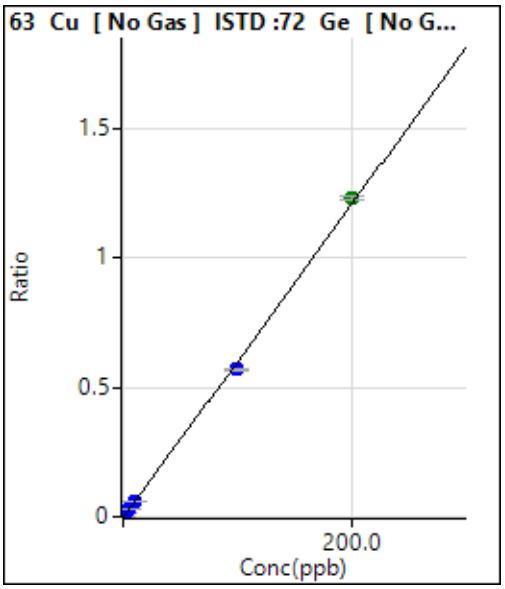
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	190.01	0.0004	P	27.3	
2	☐	2.000	2.582	5497.87	0.0119	P	1.9	29.1
3	☐	5.000	4.891	10113.93	0.0222	P	2.6	-2.2
4	☐	10.000	9.717	20081.67	0.0436	P	1.3	-2.8
5	☐	100.000	99.940	202752.24	0.4447	P	0.3	-0.1
6	☐	200.000	200.041	395072.34	0.8896	P	0.4	0.0

y = 0.0044 * x + 4.1606E-004
R = 1.0000
DL = 0.07675 ppb
BEC = 0.0936 ppb

Weight: <None>
Min Conc: <None>

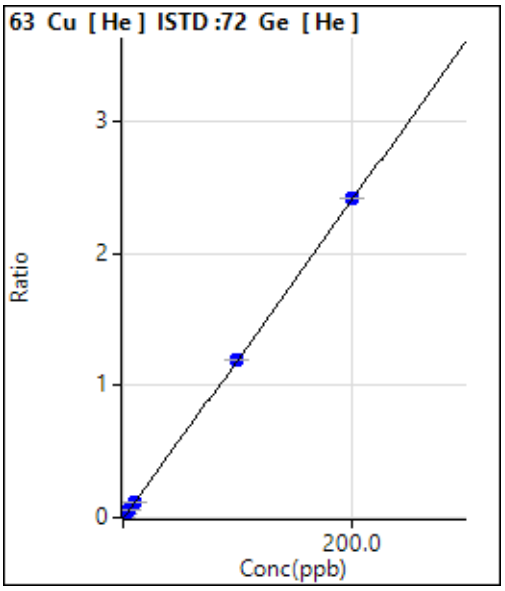


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1480.10	0.0008	P	3.4	
2	☐	2.000	2.280	26482.77	0.0147	P	5.3	14.0
3	☐	5.000	4.621	52411.27	0.0289	P	0.4	-7.6
4	☐	10.000	9.330	102944.48	0.0574	P	0.6	-6.7
5	☐	100.000	93.927	1006161.10	0.5706	P	1.3	-6.1
6	☐	200.000	203.077	2114320.44	1.2328	A	1.2	1.5

y = 0.0061 * x + 8.2736E-004
R = 0.9994
DL = 0.01383 ppb
BEC = 0.1364 ppb

Weight: <None>
Min Conc: <None>

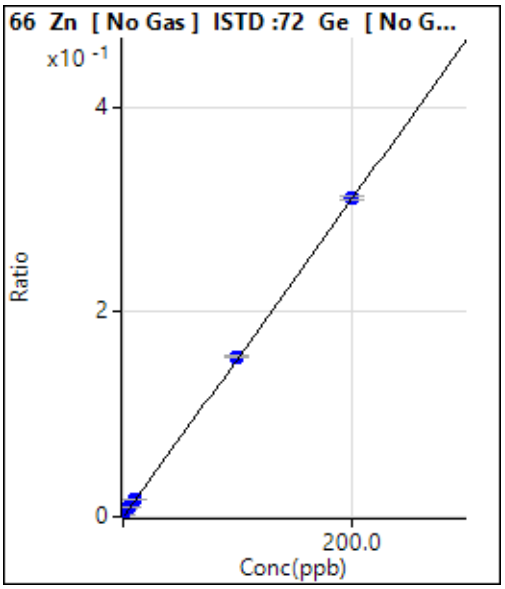
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	630.03	0.0014	P	19.4	
2	☐	2.000	2.423	14157.60	0.0306	P	1.5	21.1
3	☐	5.000	5.025	28326.53	0.0621	P	0.2	0.5
4	☐	10.000	9.809	55175.25	0.1198	P	1.6	-1.9
5	☐	100.000	99.252	547111.01	1.1999	P	0.1	-0.7
6	☐	200.000	200.379	1075127.53	2.4209	P	0.4	0.2

y = 0.0121 * x + 0.0014
R = 1.0000
DL = 0.06652 ppb
BEC = 0.1142 ppb

Weight: <None>
Min Conc: <None>

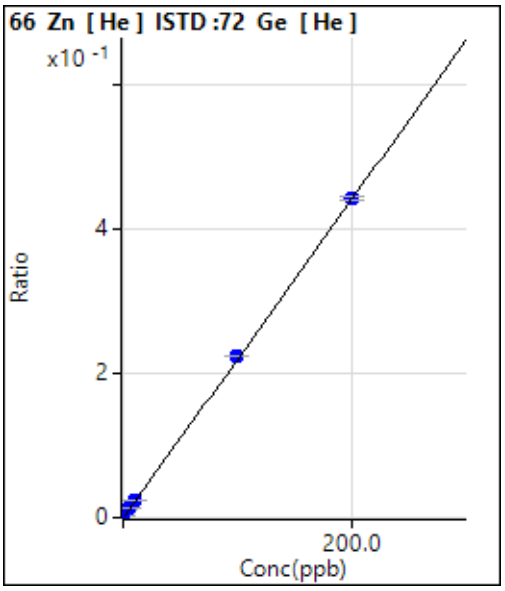


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1860.16	0.0010	P	3.2	
2	☐	2.000	3.869	12726.18	0.0070	P	0.5	93.4
3	☐	5.000	4.946	15826.15	0.0087	P	1.0	-1.1
4	☐	10.000	9.801	29124.86	0.0162	P	1.7	-2.0
5	☐	100.000	100.108	275742.87	0.1564	P	1.7	0.1
6	☐	200.000	199.938	533919.65	0.3113	P	0.8	0.0

y = 0.0016 * x + 0.0010
R = 1.0000
DL = 0.06467 ppb
BEC = 0.6701 ppb

Weight: <None>
Min Conc: <None>

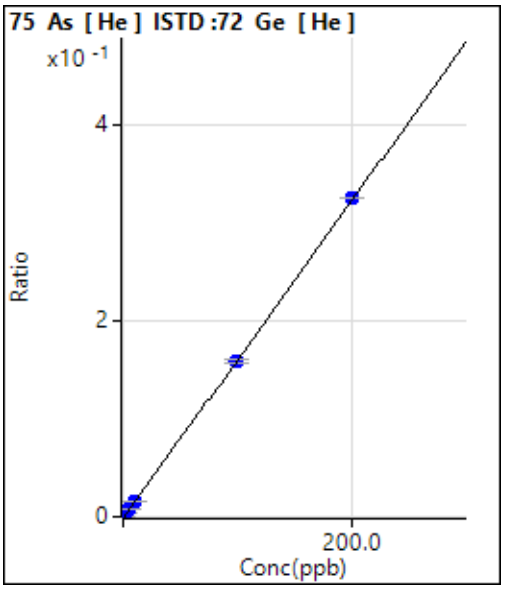
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	683.36	0.0015	P	18.7	
2	☐	2.000	3.798	4560.84	0.0099	P	8.6	89.9
3	☐	5.000	4.849	5564.58	0.0122	P	3.3	-3.0
4	☐	10.000	9.981	10827.85	0.0235	P	2.6	-0.2
5	☐	100.000	100.403	101658.49	0.2229	P	0.2	0.4
6	☐	200.000	199.785	196351.27	0.4421	P	0.8	-0.1

y = 0.0022 * x + 0.0015
R = 1.0000
DL = 0.3809 ppb
BEC = 0.6785 ppb

Weight: <None>
Min Conc: <None>

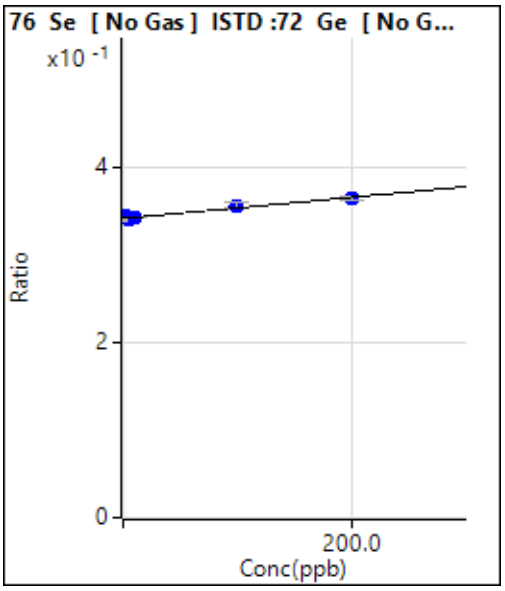


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	58.89	0.0001	P	7.0	
2	☐	2.000	2.394	1855.70	0.0040	P	5.0	19.7
3	☐	5.000	4.829	3637.17	0.0080	P	2.0	-3.4
4	☐	10.000	9.385	7074.12	0.0154	P	1.7	-6.2
5	☐	100.000	98.424	72905.62	0.1599	P	2.3	-1.6
6	☐	200.000	200.819	144820.66	0.3261	P	0.4	0.4

y = 0.0016 * x + 1.2898E-004
R = 0.9999
DL = 0.01657 ppb
BEC = 0.07946 ppb

Weight: <None>
Min Conc: <None>

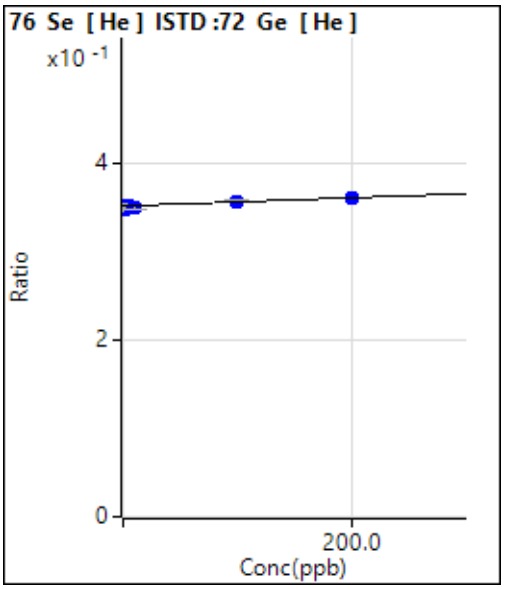
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	610810.04	0.3415	P	0.5	
2	☐	2.000	26.374	622866.83	0.3447	P	0.5	1218.7
3	☐	5.000	-10.932	617774.89	0.3402	P	0.7	-318.6
4	☐	10.000	10.490	614447.10	0.3428	P	0.4	4.9
5	☐	100.000	121.589	628197.13	0.3563	P	1.7	21.6
6	☐	200.000	189.335	625188.31	0.3645	P	1.0	-5.3

y = 1.2159E-004 * x + 0.3415
R = 0.9794
DL = 38.37 ppb
BEC = 2809 ppb

Weight: <None>
Min Conc: <None>

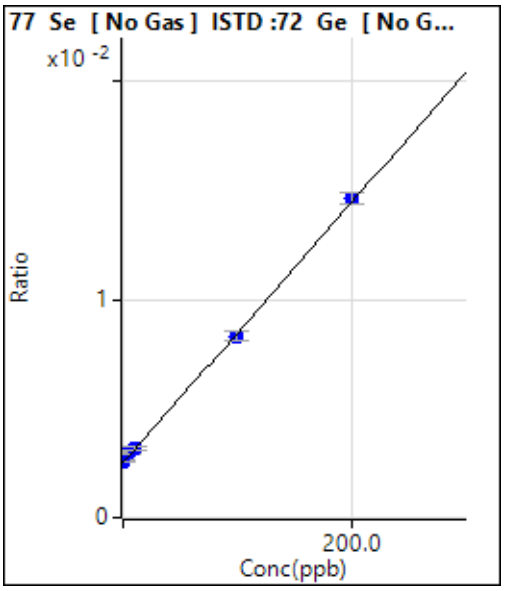


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	160725.80	0.3519	P	1.2	
2	☐	2.000	-89.143	160729.21	0.3477	P	0.9	-4557.
3	☐	5.000	4.631	160762.80	0.3522	P	0.8	-7.4
4	☐	10.000	-38.343	161276.33	0.3501	P	1.7	-483.4
5	☐	100.000	119.875	163059.36	0.3576	P	0.6	19.9
6	☐	200.000	193.400	160343.87	0.3611	P	0.4	-3.3

y = 4.7114E-005 * x + 0.3519
R = 0.9337
DL = 272.3 ppb
BEC = 7470 ppb

Weight: <None>
Min Conc: <None>

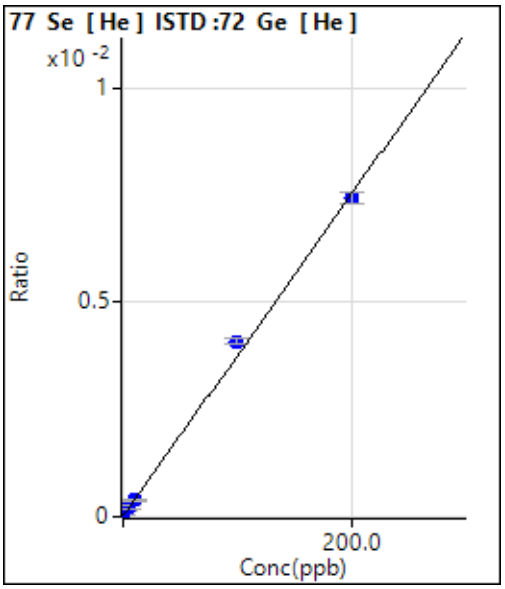
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4634.21	0.0026	P	3.9	
2	☐	2.000	5.477	5274.45	0.0029	P	2.6	173.9
3	☐	5.000	6.738	5437.85	0.0030	P	2.4	34.8
4	☐	10.000	9.865	5701.30	0.0032	P	3.5	-1.4
5	☐	100.000	96.026	14681.54	0.0083	P	6.0	-4.0
6	☐	200.000	201.916	25140.42	0.0147	P	3.3	1.0

y = 5.9754E-005 * x + 0.0026
R = 0.9995
DL = 5.135 ppb
BEC = 43.37 ppb

Weight: <None>
Min Conc: <None>

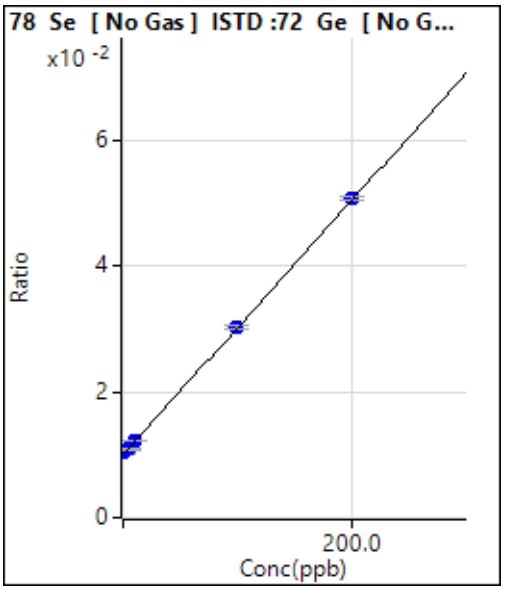


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0001	P	49.7	
2	☐	2.000	2.870	73.33	0.0002	P	39.9	43.5
3	☐	5.000	4.848	106.67	0.0002	P	37.5	-3.0
4	☐	10.000	8.845	176.67	0.0004	P	11.2	-11.6
5	☐	100.000	107.228	1860.16	0.0041	P	3.4	7.2
6	☐	200.000	196.439	3300.48	0.0074	P	3.5	-1.8

y = 3.7571E-005 * x + 5.1169E-005
R = 0.9990
DL = 2.032 ppb
BEC = 1.362 ppb

Weight: <None>
Min Conc: <None>

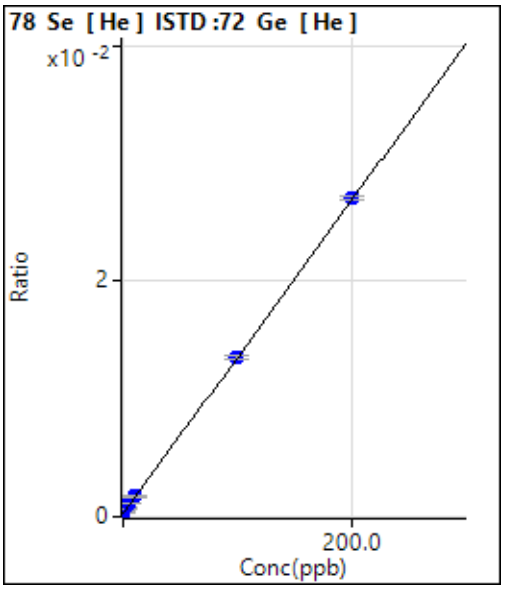
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18436.19	0.0103	P	1.5	
2	☐	2.000	2.044	19370.83	0.0107	P	0.4	2.2
3	☐	5.000	3.353	19948.38	0.0110	P	2.5	-32.9
4	☐	10.000	9.458	21901.51	0.0122	P	1.8	-5.4
5	☐	100.000	99.165	53486.33	0.0303	P	1.8	-0.8
6	☐	200.000	200.486	87123.87	0.0508	P	1.3	0.2

y = 2.0196E-004 * x + 0.0103
R = 1.0000
DL = 2.306 ppb
BEC = 51.04 ppb

Weight: <None>
Min Conc: <None>

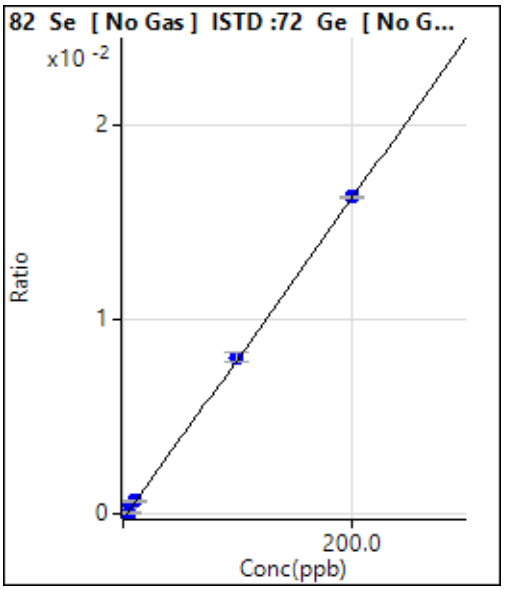


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	181.33	0.0004	P	10.3	
2	☐	2.000	2.853	358.67	0.0008	P	12.5	42.6
3	☐	5.000	5.485	514.01	0.0011	P	8.4	9.7
4	☐	10.000	9.943	791.36	0.0017	P	6.6	-0.6
5	☐	100.000	98.980	6182.10	0.0136	P	2.8	-1.0
6	☐	200.000	200.492	12014.69	0.0271	P	0.9	0.2

y = 1.3296E-004 * x + 3.9720E-004
R = 1.0000
DL = 0.9251 ppb
BEC = 2.987 ppb

Weight: <None>
Min Conc: <None>

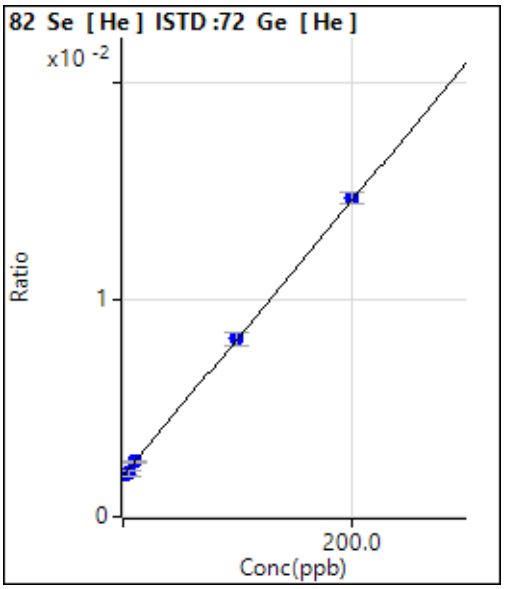
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-348.78	-0.0002	P	-44.4	
2	☐	2.000	4.745	353.18	0.0002	P	139.9	137.3
3	☐	5.000	2.830	69.70	0.0000	P	216.6	-43.4
4	☐	10.000	10.371	1182.27	0.0007	P	19.4	3.7
5	☐	100.000	100.071	14207.02	0.0081	P	5.4	0.1
6	☐	200.000	199.973	27950.12	0.0163	P	0.9	0.0

y = 8.2468E-005 * x - 1.9508E-004
R = 0.9998
DL = 3.149 ppb
BEC = -2.365 ppb

Weight: <None>
Min Conc: <None>

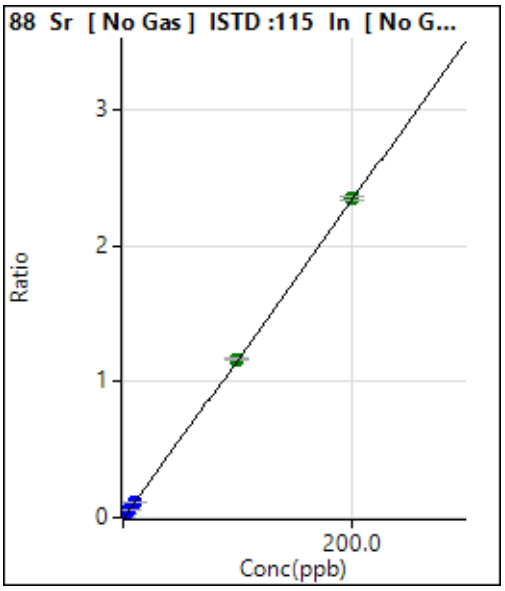


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	896.71	0.0020	P	13.6	
2	☐	2.000	-0.498	893.38	0.0019	P	4.6	-124.9
3	☐	5.000	0.475	910.05	0.0020	P	9.7	-90.5
4	☐	10.000	8.875	1163.41	0.0025	P	4.5	-11.3
5	☐	100.000	98.348	3737.25	0.0082	P	6.6	-1.7
6	☐	200.000	201.020	6528.37	0.0147	P	3.2	0.5

y = 6.3360E-005 * x + 0.0020
R = 0.9998
DL = 12.67 ppb
BEC = 31 ppb

Weight: <None>
Min Conc: <None>

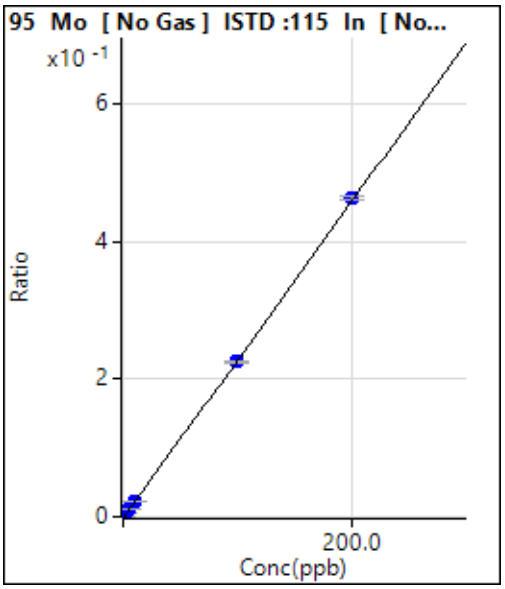
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1103.40	0.0005	P	12.7	
2	☐	2.000	2.301	58538.20	0.0276	P	2.9	15.1
3	☐	5.000	4.594	116180.61	0.0545	P	1.0	-8.1
4	☐	10.000	9.349	232143.45	0.1103	P	1.7	-6.5
5	☐	100.000	99.258	2420306.99	1.1661	A	0.8	-0.7
6	☐	200.000	200.411	4681137.43	2.3540	A	1.5	0.2

y = 0.0117 * x + 5.3040E-004
R = 1.0000
DL = 0.01716 ppb
BEC = 0.04517 ppb

Weight: <None>
Min Conc: <None>

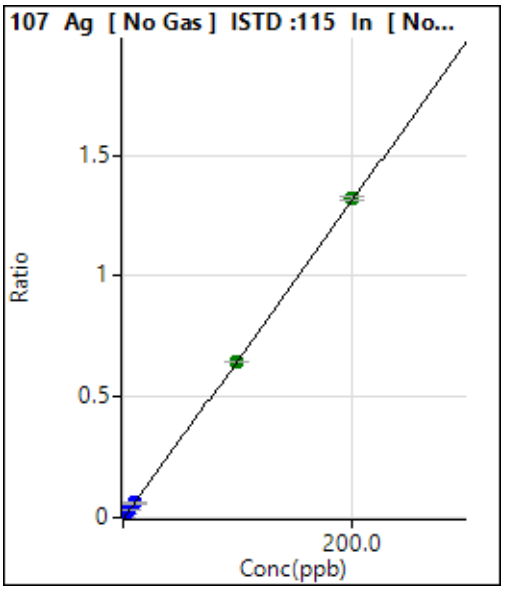


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0000	P	42.3	
2	☐	2.000	2.335	11468.45	0.0054	P	4.3	16.7
3	☐	5.000	4.611	22693.02	0.0106	P	1.2	-7.8
4	☐	10.000	9.546	46327.26	0.0220	P	1.5	-4.5
5	☐	100.000	97.611	466800.68	0.2249	P	0.9	-2.4
6	☐	200.000	201.223	921965.98	0.4636	P	0.8	0.6

y = 0.0023 * x + 1.9166E-005
R = 0.9999
DL = 0.01055 ppb
BEC = 0.008319 ppb

Weight: <None>
Min Conc: <None>

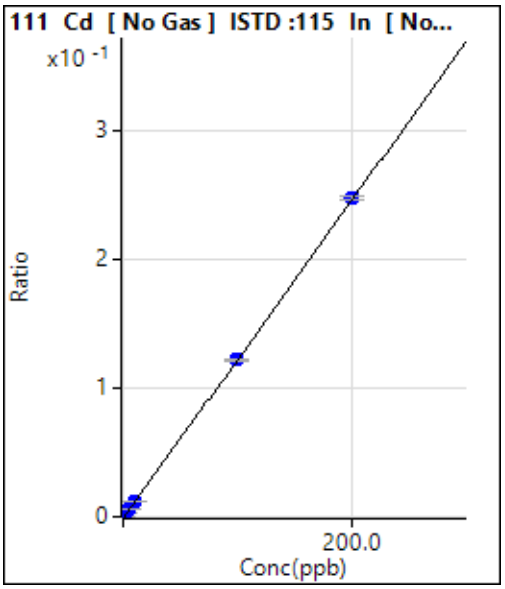
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	326.68	0.0002	P	11.9	
2	☐	2.000	2.230	31497.80	0.0148	P	1.2	11.5
3	☐	5.000	4.447	62688.62	0.0294	P	1.7	-11.1
4	☐	10.000	9.093	126157.07	0.0600	P	2.6	-9.1
5	☐	100.000	98.356	1342763.94	0.6470	A	0.4	-1.6
6	☐	200.000	200.879	2627149.65	1.3212	A	0.8	0.4

y = 0.0066 * x + 1.5715E-004
R = 0.9999
DL = 0.008503 ppb
BEC = 0.0239 ppb

Weight: <None>
Min Conc: <None>

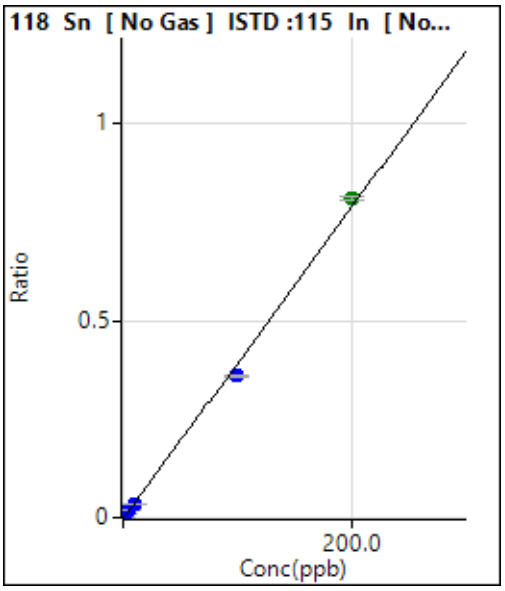


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	2.522	6615.12	0.0031	P	4.8	26.1
3	☐	5.000	4.865	12793.07	0.0060	P	4.0	-2.7
4	☐	10.000	9.713	25211.07	0.0120	P	0.9	-2.9
5	☐	100.000	98.781	252821.20	0.1218	P	1.2	-1.2
6	☐	200.000	200.622	491982.35	0.2474	P	0.6	0.3

y = 0.0012 * x + 1.6170E-006
R = 1.0000
DL = 0.006813 ppb
BEC = 0.001311 ppb

Weight: <None>
Min Conc: <None>

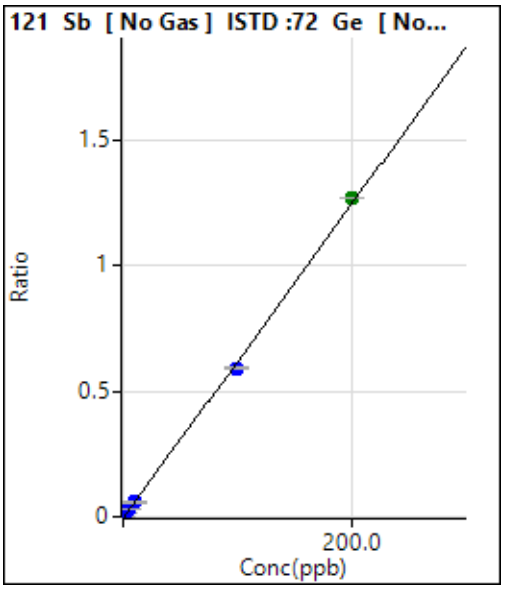
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1403.43	0.0007	P	16.7	
2	☐	2.000	2.192	19855.36	0.0093	P	1.1	9.6
3	☐	5.000	4.275	37490.48	0.0176	P	2.9	-14.5
4	☐	10.000	8.654	73461.40	0.0349	P	0.9	-13.5
5	☐	100.000	90.827	746993.35	0.3599	P	0.9	-9.2
6	☐	200.000	204.670	1611109.93	0.8102	A	0.7	2.3

y = 0.0040 * x + 6.7588E-004
R = 0.9986
DL = 0.08551 ppb
BEC = 0.1709 ppb

Weight: <None>
Min Conc: <None>

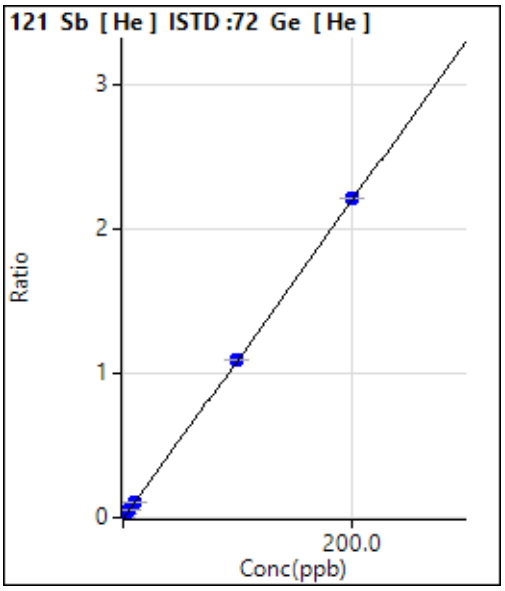


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	590.03	0.0003	P	18.2	
2	☐	2.000	2.323	26854.40	0.0149	P	1.4	16.2
3	☐	5.000	4.487	51568.19	0.0284	P	0.7	-10.3
4	☐	10.000	9.142	103106.47	0.0575	P	1.4	-8.6
5	☐	100.000	94.268	1040346.65	0.5900	P	1.1	-5.7
6	☐	200.000	202.919	2177601.74	1.2696	A	0.6	1.5

y = 0.0063 * x + 3.2971E-004
R = 0.9994
DL = 0.02874 ppb
BEC = 0.05271 ppb

Weight: <None>
Min Conc: <None>

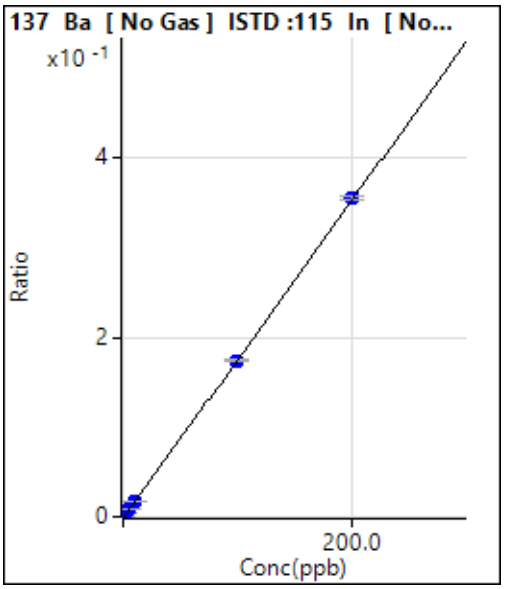
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	296.68	0.0006	P	1.6	
2	☐	2.000	2.423	12672.99	0.0274	P	2.3	21.2
3	☐	5.000	4.902	25020.70	0.0548	P	0.3	-2.0
4	☐	10.000	9.623	49262.74	0.1070	P	0.7	-3.8
5	☐	100.000	98.894	498527.92	1.0933	P	0.4	-1.1
6	☐	200.000	200.570	984432.75	2.2167	P	0.4	0.3

y = 0.0110 * x + 6.4964E-004
R = 1.0000
DL = 0.002772 ppb
BEC = 0.0588 ppb

Weight: <None>
Min Conc: <None>

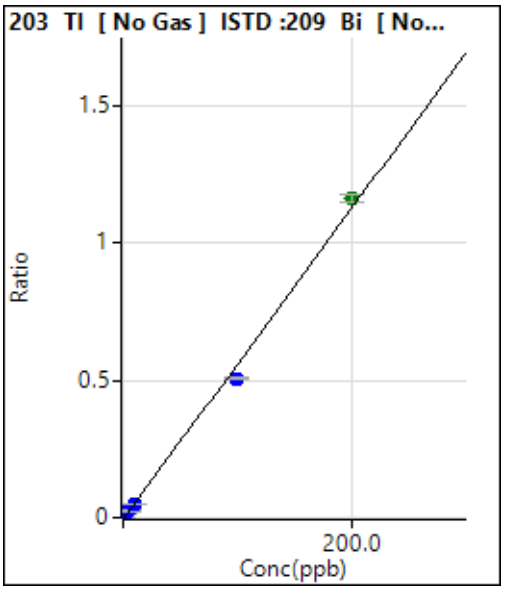


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	143.34	0.0001	P	24.8	
2	☐	2.000	2.334	8919.88	0.0042	P	0.9	16.7
3	☐	5.000	4.757	18096.17	0.0085	P	2.1	-4.9
4	☐	10.000	9.655	36097.10	0.0172	P	1.0	-3.5
5	☐	100.000	98.430	361608.34	0.1742	P	0.6	-1.6
6	☐	200.000	200.805	706675.23	0.3554	P	0.7	0.4

y = 0.0018 * x + 6.8789E-005
R = 1.0000
DL = 0.02893 ppb
BEC = 0.03888 ppb

Weight: <None>
Min Conc: <None>

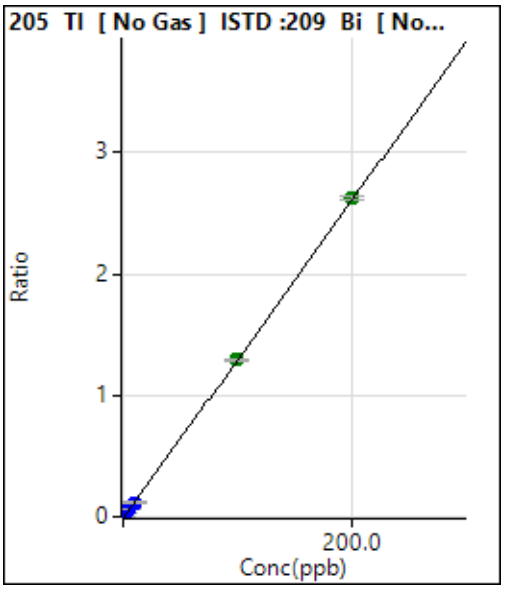
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	34.7	
2	☐	2.000	2.109	22774.40	0.0120	P	1.3	5.4
3	☐	5.000	4.379	46878.15	0.0248	P	3.7	-12.4
4	☐	10.000	8.709	92839.91	0.0493	P	1.5	-12.9
5	☐	100.000	89.301	945910.79	0.5057	P	1.2	-10.7
6	☐	200.000	205.429	2065782.16	1.1634	A	1.8	2.7

y = 0.0057 * x + 8.9151E-006
R = 0.9981
DL = 0.001637 ppb
BEC = 0.001574 ppb

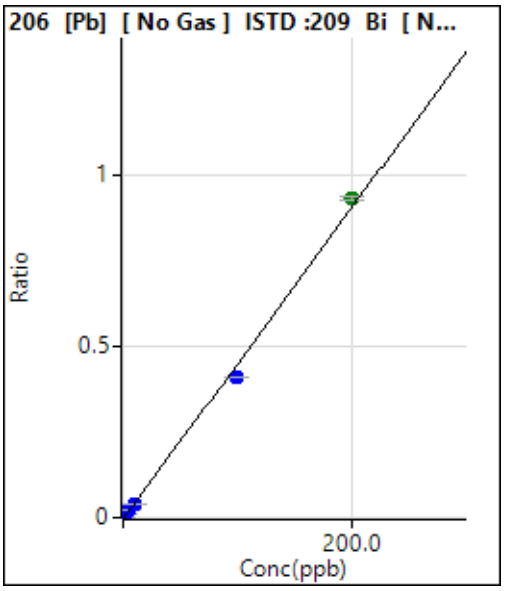
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0000	P	86.6	
2	☐	2.000	2.206	55061.60	0.0289	P	2.2	10.3
3	☐	5.000	4.488	111071.28	0.0588	P	2.9	-10.2
4	☐	10.000	9.020	222260.54	0.1181	P	2.1	-9.8
5	☐	100.000	98.679	2416161.58	1.2918	A	1.4	-1.3
6	☐	200.000	200.720	4665796.39	2.6276	A	1.7	0.4

y = 0.0131 * x + 2.1391E-005
R = 1.0000
DL = 0.004245 ppb
BEC = 0.001634 ppb

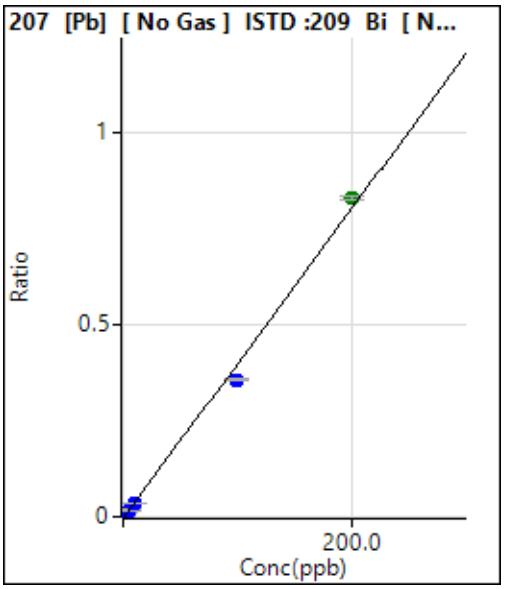
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	173.33	0.0001	P	14.6	
2	☐	2.000	2.222	19472.17	0.0102	P	1.8	11.1
3	☐	5.000	4.495	38904.32	0.0206	P	1.8	-10.1
4	☐	10.000	8.795	75618.69	0.0402	P	2.6	-12.0
5	☐	100.000	89.926	766906.65	0.4100	P	0.8	-10.1
6	☐	200.000	205.107	1660507.58	0.9350	A	0.8	2.6

y = 0.0046 * x + 9.2711E-005
R = 0.9983
DL = 0.008882 ppb
BEC = 0.02034 ppb

Weight: <None>
Min Conc: <None>

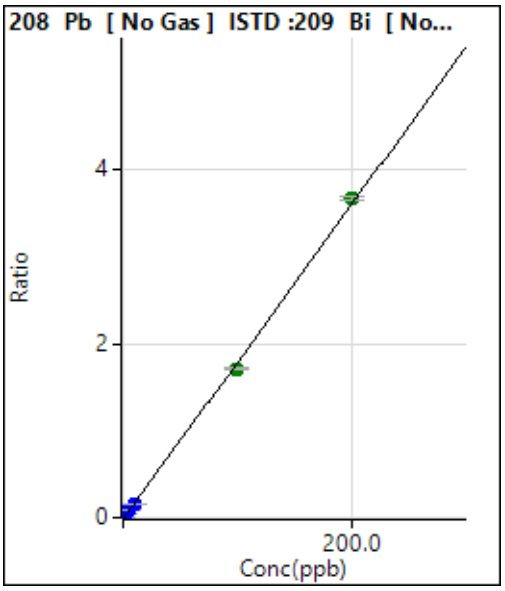


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	143.33	0.0001	P	4.0	
2	☐	2.000	2.137	16598.02	0.0087	P	2.7	6.8
3	☐	5.000	4.309	33037.61	0.0175	P	3.9	-13.8
4	☐	10.000	8.713	66389.78	0.0353	P	1.5	-12.9
5	☐	100.000	88.564	669429.10	0.3579	P	0.6	-11.4
6	☐	200.000	205.798	1476543.57	0.8315	A	1.5	2.9

y = 0.0040 * x + 7.6662E-005
R = 0.9978
DL = 0.002301 ppb
BEC = 0.01898 ppb

Weight: <None>
Min Conc: <None>

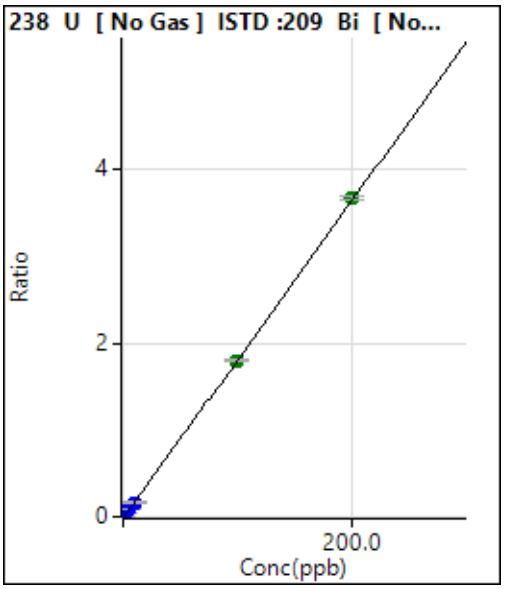
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	766.68	0.0004	P	6.0	
2	☐	2.000	2.189	76288.66	0.0400	P	1.5	9.4
3	☐	5.000	4.456	153209.79	0.0811	P	3.2	-10.9
4	☐	10.000	8.840	301948.43	0.1604	P	1.9	-11.6
5	☐	100.000	94.440	3198940.16	1.7102	A	0.7	-5.6
6	☐	200.000	202.850	6522086.83	3.6729	A	1.4	1.4

y = 0.0181 * x + 4.1006E-004
R = 0.9995
DL = 0.004104 ppb
BEC = 0.02265 ppb

Weight: <None>
Min Conc: <None>

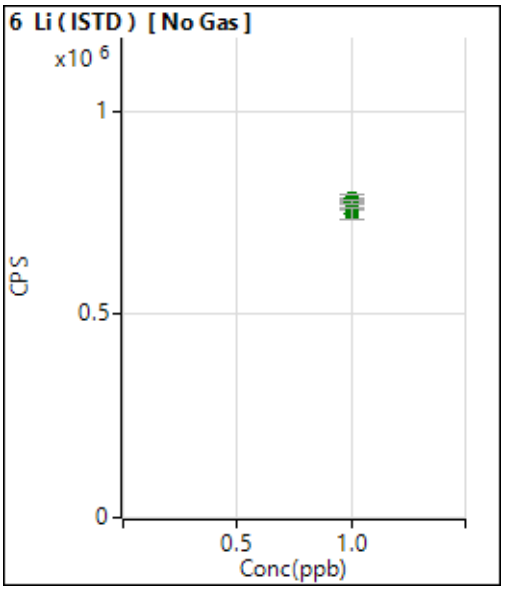


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	2.173	75773.76	0.0398	P	2.8	8.7
3	☐	5.000	4.492	155370.22	0.0822	P	2.2	-10.2
4	☐	10.000	9.063	312144.25	0.1659	P	1.0	-9.4
5	☐	100.000	98.265	3363733.91	1.7983	A	1.7	-1.7
6	☐	200.000	200.926	6530395.32	3.6771	A	1.4	0.5

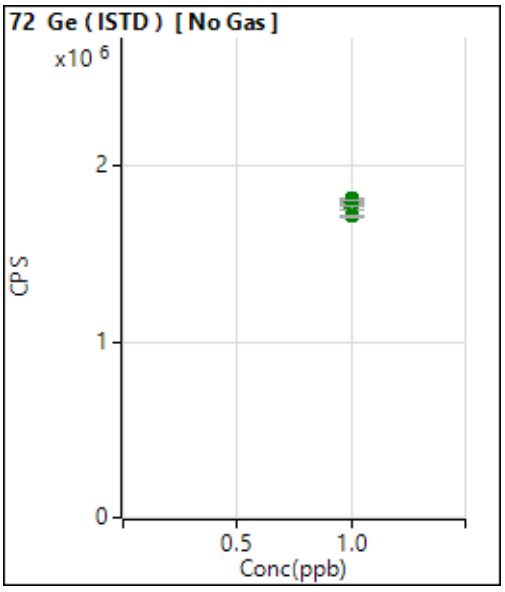
y = 0.0183 * x + 3.5654E-006
R = 0.9999
DL = 0.0005062 ppb
BEC = 0.0001948 ppb

Weight: <None>
Min Conc: <None>

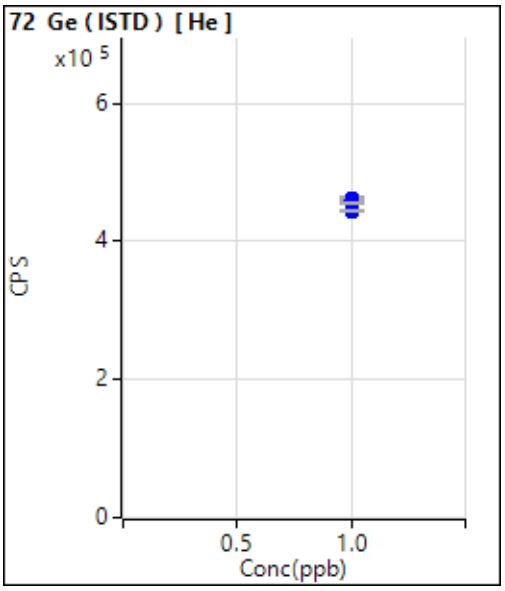
Calibration for 025_ICV.d



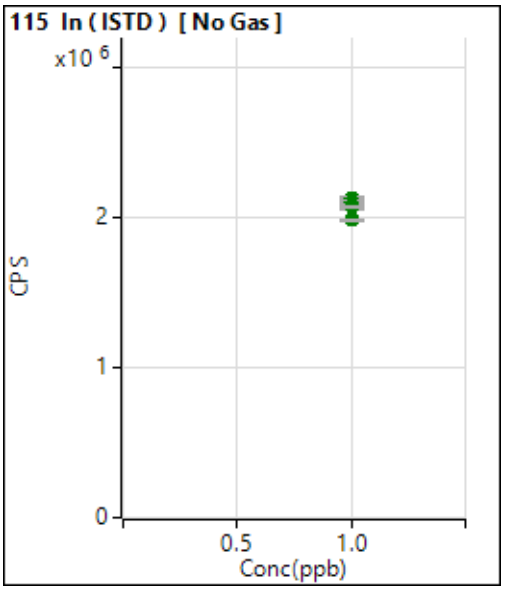
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		779901.77		A	2.3	
2	☐	1.000		786683.41		A	1.9	
3	☐	1.000		764885.19		A	1.6	
4	☐	1.000		773008.02		A	2.6	
5	☐	1.000		777283.77		A	1.3	
6	☐	1.000		748585.87		A	3.4	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1788655.65		A	0.8	
2	☐	1.000		1806932.89		A	0.7	
3	☐	1.000		1816122.99		A	0.5	
4	☐	1.000		1792612.57		A	0.8	
5	☐	1.000		1763466.22		A	1.4	
6	☐	1.000		1715150.18		A	0.4	

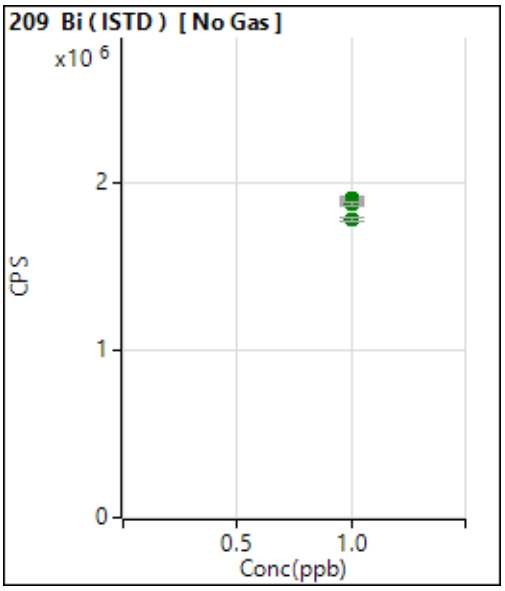


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		456662.66		P	0.5	
2	☐	1.000		462225.88		P	1.4	
3	☐	1.000		456508.14		P	0.8	
4	☐	1.000		460539.81		P	1.2	
5	☐	1.000		455980.69		P	0.4	
6	☐	1.000		444094.33		P	0.2	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		2077406.26		A	2.5	
2	☐	1.000		2125018.35		A	1.3	
3	☐	1.000		2132431.25		A	1.3	
4	☐	1.000		2104656.56		A	1.3	
5	☐	1.000		2075498.83		A	0.5	
6	☐	1.000		1988557.03		A	0.4	

Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1869675.08		A	0.0	
2	☐	1.000		1905803.93		A	1.7	
3	☐	1.000		1890434.50		A	2.0	
4	☐	1.000		1882141.85		A	1.0	
5	☐	1.000		1870567.16		A	1.0	
6	☐	1.000		1775926.79		A	1.3	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	026LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T12:59:45-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	018CALB.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	2.301	2.301	2.92	65275	0.00	2	
Be	9	1	No Gas	2.370	2.370	3.40	5950	0.04	2	
V	51	2	He	2.319	2.319	1.70	10436	0.02	2	
Cr	52	2	He	2.362	2.362	1.43	13333	0.02	2	
Fe	56	2	He	259.077	259.077	0.26	1232322	0.02	200	
Se	78	2	He	2.892	2.892	20.63	353	0.82	2	NewName Main CR1 Failed
As	75	2	He	2.383	2.383	1.67	1807	0.13	2	
Ca	44	2	He	291.692	291.692	3.11	7782	3.75	200	NewName Main CR1 Failed
Na	23	2	He	237.471	237.471	0.62	278451	0.09	200	
Mg	24	2	He	238.484	238.484	2.37	101438	0.24	200	
K	39	2	He	249.879	249.879	1.32	186381	0.13	200	
Mn	55	2	He	2.638	2.638	1.81	8813	0.03	2	NewName Main CR1 Failed
Co	59	2	He	2.294	2.294	2.87	18967	0.01	2	
Ni	60	2	He	2.480	2.480	1.44	5171	0.05	2	
Cu	63	2	He	2.416	2.416	4.40	13811	0.02	2	
Zn	66	2	He	4.057	4.057	3.69	4721	0.09	2	NewName Main CR1 Failed
Al	27	2	He	2.684	2.684	11.29	1103	0.24	2	NewName Main CR1 Failed
B	11	1	No Gas	24.287	24.287	7.07	41055	0.06	10	NewName Main CR1 Failed
Al	27	1	No Gas	2.543	2.543	1.57	57261	0.00	2	
Si	28	1	No Gas	17.318	17.318	2.06	388003	0.00	10	NewName Main CR1 Failed
Ag	107	1	No Gas	2.315	2.315	1.39	31147	0.01	2	
Cd	111	1	No Gas	2.498	2.498	0.34	6242	0.04	2	
Sr	88	1	No Gas	2.400	2.400	1.66	58143	0.00	2	
Mo	95	1	No Gas	2.535	2.535	3.35	11869	0.02	2	
Sn	118	1	No Gas	2.251	2.251	2.61	19401	0.01	2	
Sb	121	1	No Gas	2.447	2.447	2.91	27192	0.01	2	
Ba	137	1	No Gas	2.429	2.429	3.07	8843	0.03	2	
Tl	205	1	No Gas	2.242	2.242	1.59	54482	0.00	2	
Tl	203	1	No Gas	2.166	2.166	1.42	22778	0.01	2	
Pb	208	1	No Gas	2.247	2.247	0.78	76222	0.00	2	
U	238	1	No Gas	2.232	2.232	1.10	75804	0.00	2	
Ca	43	2	He	279.469	279.469	24.37	420	66.54	200	NewName Main CR1 Failed
Sb	121	2	He	2.484	2.484	2.88	12700	0.02	2	
Ti	47	2	He	2.308	2.308	15.25	350	0.66	200	
Cu	63	1	No Gas	2.372	2.372	2.95	26463	0.01	2	
Se	82	1	No Gas	1.050	1.050	204.72	-189	-0.56	2	NewName 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	779317	0.73	779902	99.92	70	120	
Ge	72	2	He	451970	0.33	456663	98.97	70	120	
Ge	72	1	No Gas	1738802	1.15	1788656	97.21	70	120	
In	115	1	No Gas	2025194	2.00	2077406	97.49	70	120	
Bi	209	1	No Gas	1855359	0.94	1869675	99.23	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	027LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T13:01:48-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	018CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.741	4.741	4.20	89553	0.01	5	
Be	9	1	No Gas	4.928	4.928	0.86	12182	0.04	5	
V	51	2	He	4.823	4.823	0.57	20871	0.02	5	
Cr	52	2	He	4.860	4.860	5.75	25871	0.02	5	
Fe	56	2	He	520.391	520.391	0.60	2472561	0.02	500	
Se	78	2	He	5.634	5.634	12.92	519	1.08	5	
As	75	2	He	5.073	5.073	5.51	3789	0.13	5	
Ca	44	2	He	495.495	495.495	2.43	12756	3.88	500	
Na	23	2	He	463.356	463.356	0.88	453820	0.10	500	
Mg	24	2	He	482.171	482.171	0.58	205310	0.23	500	
K	39	2	He	472.243	472.243	0.57	294285	0.16	500	
Mn	55	2	He	4.928	4.928	3.09	16360	0.03	5	
Co	59	2	He	4.520	4.520	1.90	37428	0.01	5	
Ni	60	2	He	5.084	5.084	1.86	10427	0.05	5	
Cu	63	2	He	4.918	4.918	1.82	27528	0.02	5	
Zn	66	2	He	5.027	5.027	1.09	5701	0.09	5	
Al	27	2	He	4.786	4.786	5.46	1540	0.31	5	
B	11	1	No Gas	28.148	28.148	1.07	46017	0.06	25	
Al	27	1	No Gas	5.106	5.106	1.74	87484	0.01	5	
Si	28	1	No Gas	26.149	26.149	3.62	436744	0.01	25	
Ag	107	1	No Gas	4.631	4.631	0.62	62508	0.01	5	
Cd	111	1	No Gas	5.027	5.027	0.77	12663	0.04	5	
Sr	88	1	No Gas	4.744	4.744	0.91	114843	0.00	5	
Mo	95	1	No Gas	4.909	4.909	0.70	23137	0.02	5	
Sn	118	1	No Gas	4.505	4.505	2.93	37765	0.01	5	
Sb	121	1	No Gas	4.672	4.672	1.10	51705	0.01	5	
Ba	137	1	No Gas	4.881	4.881	1.47	17776	0.03	5	
Tl	205	1	No Gas	4.513	4.513	2.50	109114	0.00	5	
Tl	203	1	No Gas	4.431	4.431	2.40	46343	0.01	5	
Pb	208	1	No Gas	4.507	4.507	2.74	151394	0.00	5	
U	238	1	No Gas	4.579	4.579	1.04	154745	0.00	5	
Ca	43	2	He	519.372	519.372	17.53	763	68.04	500	
Sb	121	2	He	5.073	5.073	1.99	25692	0.02	5	
Ti	47	2	He	5.467	5.467	3.06	827	0.66	5	
Cu	63	1	No Gas	4.646	4.646	1.58	50752	0.01	5	
Se	82	1	No Gas	5.895	5.895	22.86	509	1.16	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	767899	1.17	779902	98.46	70	120	
Ge	72	2	He	453061	0.55	456663	99.21	70	120	
Ge	72	1	No Gas	1749494	0.34	1788656	97.81	70	120	

Sample Report

In	115	1	No Gas	2042051	0.63	2077406	98.30	70	120	
Bi	209	1	No Gas	1846729	1.63	1869675	98.77	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	028_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T13:03:59-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	0.088	80.2	41566	2.0	0.5	
Be	9	1	No Gas	0.007	56.7	27	39.0	0.5	
V	51	2	He	-0.085	-8.5	461	6.7	2.5	
Cr	52	2	He	0.063	13.8	1823	2.8	2.5	
Fe	56	2	He	1.180	9.4	14021	3.6	100	
Se	78	2	He	0.576	15.9	211	2.9	1	
As	75	2	He	-0.018	-30.3	44	8.7	2.5	
Ca	44	2	He	-0.009	-27228.0	700	8.6	100	
Na	23	2	He	-4.730	-21.5	90371	0.5	100	
Mg	24	2	He	0.397	6.9	430	2.3	100	
K	39	2	He	-2.148	-84.2	64039	1.0	100	
Mn	55	2	He	0.047	45.5	317	22.4	2.5	
Co	59	2	He	0.009	66.5	107	44.3	2.5	
Ni	60	2	He	-0.008	-128.7	170	11.8	2.5	
Cu	63	2	He	0.021	110.0	727	17.2	1	
Zn	66	2	He	-0.119	-53.9	550	11.1	2.5	
Al	27	2	He	-1.362	-3.9	267	4.3	5	
B	11	1	No Gas	4.056	2.9	11396	1.7	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-1.062	-1.2	15582	0.5	5	
Si	28	1	No Gas	-8.150	-10.2	256397	0.7	10	
Ag	107	1	No Gas	0.000	1186.0	323	17.0	2.5	
Cd	111	1	No Gas	0.001	341.3	7	173.2	1	
Sr	88	1	No Gas	-0.017	-11.9	660	7.6	2.5	
Mo	95	1	No Gas	-0.002	-194.6	30	57.7	2.5	
Sn	118	1	No Gas	0.075	33.3	1974	10.3	5	
Sb	121	1	No Gas	0.043	44.4	1043	18.7	2.5	
Ba	137	1	No Gas	0.008	33.2	170	5.9	2.5	
Tl	205	1	No Gas	0.002	92.4	83	48.5	1	
Tl	203	1	No Gas	0.004	110.9	53	78.1	1	
Pb	208	1	No Gas	0.008	10.0	1023	1.5	2.5	
U	238	1	No Gas	0.001	56.3	43	48.0	2.5	
Ca	43	2	He	9.844	109.8	37	41.7	100	
Sb	121	2	He	0.046	18.2	517	7.8	2.5	
Ti	47	2	He	0.000	8241.7	3	173.2	2.5	
Se	82	1	No Gas	-2.262	-44.3	-666	-21.0	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	770683	0.25	779902	98.82	70	120	
Ge	72	2	He	446027	0.41	456663	97.67	70	120	
Ge	72	1	No Gas	1747827	1.29	1788656	97.72	70	120	
In	115	1	No Gas	2028019	0.11	2077406	97.62	70	120	
Bi	209	1	No Gas	1820660	1.28	1869675	97.38	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	029ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T13:09:36-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	0.632	0.6	45731	0.5	0	ICSA Main CR1 Failed
Be	9	1	No Gas	0.006	76.4	22	48.0	0	ICSA Main CR1 Failed
V	51	2	He	0.043	76.6	983	14.1	0	ICSA Main CR1 Failed
Cr	52	2	He	2.022	7.0	11478	5.6	0	ICSA Main CR1 Failed
Fe	56	2	He	98797.394	1.5	460542793	1.1	0	
Se	78	2	He	0.362	94.3	199	10.3	0	ICSA Main CR1 Failed
As	75	2	He	0.120	37.7	144	22.7	0	ICSA Main CR1 Failed
Ca	44	2	He	103306.439	1.4	2472937	0.8	0	
Na	23	2	He	100081.986	0.9	76302926	0.2	0	
Mg	24	2	He	100064.342	0.3	41895171	0.6	0	
K	39	2	He	100793.526	0.9	48016538	0.5	0	
Mn	55	2	He	0.470	10.9	1683	10.3	0	ICSA Main CR1 Failed
Co	59	2	He	0.129	22.3	1090	22.0	0	ICSA Main CR1 Failed
Ni	60	2	He	0.446	15.2	1070	13.2	0	ICSA Main CR1 Failed
Cu	63	2	He	0.172	21.6	1540	13.6	0	ICSA Main CR1 Failed
Zn	66	2	He	1.219	8.4	1867	6.0	0	ICSA Main CR1 Failed
Al	27	2	He	100904.067	0.2	20506736	0.5	0	
B	11	1	No Gas	11.019	3.3	20774	2.2	0	
Al	27	1	No Gas	93761.799	1.7	1080830384	0.4	0	
Si	28	1	No Gas	15.522	6.6	376858	0.7	0	ICSA Main CR1 Failed
Ag	107	1	No Gas	0.017	37.2	533	15.3	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	0.802	15.5	1950	14.2	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	2.315	3.0	54659	1.5	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	2111.476	0.7	9596326	1.3	0	
Sn	118	1	No Gas	0.130	9.0	2350	3.7	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.252	16.1	3294	12.2	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	1.374	3.8	4931	2.3	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.005	57.5	153	41.9	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.004	12.0	57	10.2	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.055	12.2	2500	7.2	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.022	5.1	713	5.7	0	ICSA Main CR1 Failed
Ca	43	2	He	96193.498	1.1	134916	0.8	0	
Sb	121	2	He	0.188	17.4	1213	12.6	0	ICSA Main CR1 Failed
Ti	47	2	He	2053.310	0.2	304482	0.5	0	
Se	82	1	No Gas	-0.476	-367.9	-406	-62.3	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	746356	0.41	779902	95.70	70	120	
Ge	72	2	He	446072	0.65	456663	97.68	70	120	
Ge	72	1	No Gas	1730879	1.51	1788656	96.77	70	120	
In	115	1	No Gas	1972654	1.53	2077406	94.96	70	120	
Bi	209	1	No Gas	1770073	2.12	1869675	94.67	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	030ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T13:11:41-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	102.007	2.670	1024458	1.18	100	102.0	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	101.219	2.189	233746	0.77	100	101.2	80	120	
V	51	2	He	98.944	0.460	407775	0.38	100	98.9	80	120	
Cr	52	2	He	96.672	0.495	480588	0.67	100	96.7	80	120	
Fe	56	2	He	107394.629	0.577	503123073	0.64	100	107394.6	80	120	
Se	78	2	He	96.197	2.533	5912	2.71	100	96.2	80	120	
As	75	2	He	98.326	0.435	71606	0.67	100	98.3	80	120	
Ca	44	2	He	110668.795	1.319	2662460	1.56	100	110668.8	80	120	ICSB Main CR1 Failed
Na	23	2	He	109417.977	0.364	83828299	0.47	100	109418.0	80	120	
Mg	24	2	He	108462.256	0.597	45635981	0.36	100	108462.3	80	120	
K	39	2	He	109553.586	0.876	52443564	0.64	100	109553.6	80	120	
Mn	55	2	He	98.342	0.190	319917	0.09	100	98.3	80	120	
Co	59	2	He	89.738	0.511	734620	0.27	100	89.7	80	120	
Ni	60	2	He	95.329	1.789	190139	1.56	100	95.3	80	120	
Cu	63	2	He	94.901	0.606	514312	0.47	100	94.9	80	120	
Zn	66	2	He	97.469	0.468	97042	0.71	100	97.5	80	120	
Al	27	2	He	99407.405	0.751	20302577	0.54	100	99407.4	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	500.654	1.859	678542	1.31	100	500.7	80	120	
Al	27	1	No Gas	93254.517	0.333	1054701958	0.32	100	93254.5	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	522.975	1.732	2955599	2.03	100	523.0	80	120	
Ag	107	1	No Gas	94.192	3.382	1217154	2.21	100	94.2	80	120	
Cd	111	1	No Gas	98.926	1.815	239690	0.63	100	98.9	80	120	
Sr	88	1	No Gas	104.302	1.122	2407664	0.38	100	104.3	80	120	
Mo	95	1	No Gas	2196.393	1.908	9942553	0.72	100	2196.4	80	120	
Sn	118	1	No Gas	92.004	2.036	716279	0.66	100	92.0	80	120	
Sb	121	1	No Gas	93.244	0.633	990911	0.46	100	93.2	80	120	
Ba	137	1	No Gas	101.420	1.534	352718	0.16	100	101.4	80	120	
Tl	205	1	No Gas	99.752	0.455	2248743	0.72	100	99.8	80	120	
Tl	203	1	No Gas	90.870	1.738	886134	1.03	100	90.9	80	120	
Pb	208	1	No Gas	97.335	2.442	3035035	1.57	100	97.3	80	120	
U	238	1	No Gas	103.804	0.526	3271438	0.66	100	103.8	80	120	
Ca	43	2	He	106531.914	0.398	150159	0.64	100	106531.9	80	120	
Sb	121	2	He	98.103	0.406	486198	0.28	100	98.1	80	120	
Ti	47	2	He	2141.835	0.843	319184	0.86	100	2141.8	80	120	
Cu	63	1	No Gas	90.812	0.719	936809	0.87	100	90.8	80	120	
Se	82	1	No Gas	98.977	5.006	13527	4.83	100	99.0	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	718074	3.00	779902	92.07	70	120	
Ge	72	2	He	448282	0.25	456663	98.16	70	120	
Ge	72	1	No Gas	1697955	0.56	1788656	94.93	70	120	
In	115	1	No Gas	1965049	1.37	2077406	94.59	70	120	
Bi	209	1	No Gas	1722147	1.16	1869675	92.11	70	120	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	136CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:07:01-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	Calibrate for DOD

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	35829	0.00
Be	9	1	No Gas	30	96.23
V	51	2	He	1057	0.62
Cr	52	2	He	1533	0.94
Fe	56	2	He	13323	0.02
Se	78	2	He	197	3.89
As	75	2	He	54	6.51
Ca	44	2	He	887	1.52
Na	23	2	He	113032	0.00
Mg	24	2	He	1483	0.96
K	39	2	He	65036	0.00
Mn	55	2	He	343	1.96
Co	59	2	He	47	132.55
Ni	60	2	He	247	9.35
Cu	63	2	He	607	1.37
Zn	66	2	He	730	1.31
Al	27	2	He	547	2.02
B	11	1	No Gas	5058	0.04
Al	27	1	No Gas	27428	0.01
Si	28	1	No Gas	255641	0.00
Ag	107	1	No Gas	317	13.83
Cd	111	1	No Gas	3	5196.15
Sr	88	1	No Gas	6061	1.00
Mo	95	1	No Gas	70	161.98
Sn	118	1	No Gas	1327	0.63
Sb	121	1	No Gas	993	1.40
Ba	137	1	No Gas	237	18.75
Tl	205	1	No Gas	253	26.55
Tl	203	1	No Gas	100	34.64
Pb	208	1	No Gas	737	2.77
U	238	1	No Gas	173	27.92
Ca	43	2	He	43	61.49
Sb	121	2	He	540	1.24
Cu	63	1	No Gas	1423	0.87

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	1	No Gas	654204	5.10

Calibration Blank Report

Ge	72	2	He	428589	0.86
Ge	72	1	No Gas	1641030	0.92
In	115	1	No Gas	1892969	3.15
Bi	209	1	No Gas	1736707	2.13

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	137CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:09:11-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	136CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	5566	0.05
V	51	2	He	10774	0.02
Cr	52	2	He	12856	0.02
Fe	56	2	He	1204661	0.00
Se	78	2	He	359	1.26
As	75	2	He	1765	0.12
Ca	44	2	He	7502	0.09
Na	23	2	He	290704	0.00
Mg	24	2	He	101419	0.00
K	39	2	He	183416	0.00
Mn	55	2	He	8883	0.03
Co	59	2	He	17962	0.02
Ni	60	2	He	5068	0.06
Cu	63	2	He	13040	0.01
Zn	66	2	He	4397	0.09
Al	27	2	He	937	1.05
B	11	1	No Gas	19624	0.01
Al	27	1	No Gas	54329	0.00
Si	28	1	No Gas	307648	0.00
Ag	107	1	No Gas	29874	0.02
Cd	111	1	No Gas	5751	0.10
Sr	88	1	No Gas	57038	0.00
Mo	95	1	No Gas	11025	0.01
Sn	118	1	No Gas	18076	0.02
Sb	121	1	No Gas	25542	0.01
Ba	137	1	No Gas	8396	0.02
Tl	205	1	No Gas	52009	0.00
Tl	203	1	No Gas	22013	0.01
Pb	208	1	No Gas	71260	0.00
U	238	1	No Gas	73111	0.00
Ca	43	2	He	467	3.96
Sb	121	2	He	12223	0.02
Cu	63	1	No Gas	24135	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	642757	0.51	654204	98.25	70	120	
Ge	72	2	He	429818	0.72	428589	100.29	70	120	
Ge	72	1	No Gas	1646033	0.85	1641030	100.30	70	120	

Calibration Standard Report

In	115	1	No Gas	1974580	0.38	1892969	104.31	70	120	
Bi	209	1	No Gas	1776311	0.32	1736707	102.28	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	138CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:11:20-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	136CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	11138	0.02
V	51	2	He	20750	0.01
Cr	52	2	He	24890	0.00
Fe	56	2	He	2404417	0.00
Se	78	2	He	523	1.38
As	75	2	He	3502	0.06
Ca	44	2	He	12039	0.02
Na	23	2	He	453678	0.00
Mg	24	2	He	203847	0.00
K	39	2	He	293536	0.00
Mn	55	2	He	15976	0.00
Co	59	2	He	36295	0.01
Ni	60	2	He	9577	0.02
Cu	63	2	He	26666	0.01
Zn	66	2	He	5448	0.07
Al	27	2	He	1530	0.71
B	11	1	No Gas	34708	0.01
Al	27	1	No Gas	82239	0.00
Si	28	1	No Gas	366306	0.00
Ag	107	1	No Gas	59845	0.00
Cd	111	1	No Gas	11916	0.01
Sr	88	1	No Gas	111590	0.00
Mo	95	1	No Gas	21741	0.01
Sn	118	1	No Gas	35819	0.00
Sb	121	1	No Gas	49965	0.00
Ba	137	1	No Gas	16905	0.00
Tl	205	1	No Gas	106472	0.00
Tl	203	1	No Gas	44269	0.00
Pb	208	1	No Gas	146253	0.00
U	238	1	No Gas	147785	0.00
Ca	43	2	He	727	1.26
Sb	121	2	He	24423	0.01
Cu	63	1	No Gas	48112	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	646519	0.82	654204	98.83	70	120	
Ge	72	2	He	431068	0.58	428589	100.58	70	120	
Ge	72	1	No Gas	1663363	1.58	1641030	101.36	70	120	

Calibration Standard Report

In	115	1	No Gas	1933270	0.63	1892969	102.13	70	120	
Bi	209	1	No Gas	1799894	1.61	1736707	103.64	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	139CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:13:30-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	136CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	22224	0.01
V	51	2	He	40613	0.00
Cr	52	2	He	47981	0.01
Fe	56	2	He	4609167	0.00
Se	78	2	He	787	0.13
As	75	2	He	6794	0.06
Ca	44	2	He	23914	0.02
Na	23	2	He	878190	0.00
Mg	24	2	He	403327	0.00
K	39	2	He	518556	0.00
Mn	55	2	He	31233	0.00
Co	59	2	He	72975	0.00
Ni	60	2	He	19304	0.03
Cu	63	2	He	52789	0.00
Zn	66	2	He	10274	0.04
Al	27	2	He	2820	0.06
B	11	1	No Gas	64192	0.00
Al	27	1	No Gas	137083	0.00
Si	28	1	No Gas	487645	0.00
Ag	107	1	No Gas	117391	0.00
Cd	111	1	No Gas	23080	0.01
Sr	88	1	No Gas	217716	0.00
Mo	95	1	No Gas	42361	0.00
Sn	118	1	No Gas	69842	0.00
Sb	121	1	No Gas	98438	0.00
Ba	137	1	No Gas	33681	0.00
Tl	205	1	No Gas	209823	0.00
Tl	203	1	No Gas	88516	0.00
Pb	208	1	No Gas	289429	0.00
U	238	1	No Gas	296938	0.00
Ca	43	2	He	1477	0.58
Sb	121	2	He	47630	0.00
Cu	63	1	No Gas	95360	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	642043	1.07	654204	98.14	70	120	
Ge	72	2	He	429569	0.18	428589	100.23	70	120	
Ge	72	1	No Gas	1664940	2.02	1641030	101.46	70	120	

Calibration Standard Report

In	115	1	No Gas	1927907	1.15	1892969	101.85	70	120	
Bi	209	1	No Gas	1767786	0.91	1736707	101.79	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	140CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:15:39-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	136CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	223721	0.00
V	51	2	He	396066	0.00
Cr	52	2	He	467699	0.00
Fe	56	2	He	44748616	0.00
Se	78	2	He	5951	0.02
As	75	2	He	68383	0.00
Ca	44	2	He	229704	0.00
Na	23	2	He	7589096	0.00
Mg	24	2	He	4133960	0.00
K	39	2	He	4734743	0.00
Mn	55	2	He	311125	0.00
Co	59	2	He	721618	0.00
Ni	60	2	He	189687	0.00
Cu	63	2	He	520743	0.00
Zn	66	2	He	96099	0.00
Al	27	2	He	20025	0.01
B	11	1	No Gas	598843	0.00
Al	27	1	No Gas	1116201	0.00
Si	28	1	No Gas	2717697	0.00
Ag	107	1	No Gas	1281525	0.00
Cd	111	1	No Gas	236747	0.00
Sr	88	1	No Gas	2313713	0.00
Mo	95	1	No Gas	439750	0.00
Sn	118	1	No Gas	699796	0.00
Sb	121	1	No Gas	973761	0.00
Ba	137	1	No Gas	338844	0.00
Tl	205	1	No Gas	2284434	0.00
Tl	203	1	No Gas	902116	0.00
Pb	208	1	No Gas	3038582	0.00
U	238	1	No Gas	3196736	0.00
Ca	43	2	He	13487	0.01
Sb	121	2	He	470993	0.00
Cu	63	1	No Gas	936585	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	687374	2.15	654204	105.07	70	120	
Ge	72	2	He	429476	0.89	428589	100.21	70	120	
Ge	72	1	No Gas	1661535	0.35	1641030	101.25	70	120	

Calibration Standard Report

In	115	1	No Gas	1903731	1.22	1892969	100.57	70	120	
Bi	209	1	No Gas	1728457	1.44	1736707	99.53	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	141CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:17:44-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	136CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	441698	0.00
V	51	2	He	786722	0.00
Cr	52	2	He	924953	0.00
Fe	56	2	He	88882519	0.00
Se	78	2	He	11255	0.00
As	75	2	He	136613	0.00
Ca	44	2	He	461330	0.00
Na	23	2	He	14970410	0.00
Mg	24	2	He	8092443	0.00
K	39	2	He	9203530	0.00
Mn	55	2	He	621107	0.00
Co	59	2	He	1603252	0.00
Ni	60	2	He	379221	0.00
Cu	63	2	He	1031003	0.00
Zn	66	2	He	186839	0.00
Al	27	2	He	39714	0.01
B	11	1	No Gas	1312190	0.00
Al	27	1	No Gas	2150141	0.00
Si	28	1	No Gas	4941113	0.00
Ag	107	1	No Gas	2502412	0.00
Cd	111	1	No Gas	465393	0.00
Sr	88	1	No Gas	4437570	0.00
Mo	95	1	No Gas	872577	0.00
Sn	118	1	No Gas	1531975	0.00
Sb	121	1	No Gas	2123042	0.00
Ba	137	1	No Gas	670622	0.00
Tl	205	1	No Gas	4431919	0.00
Tl	203	1	No Gas	1988286	0.00
Pb	208	1	No Gas	6274228	0.00
U	238	1	No Gas	6243706	0.00
Ca	43	2	He	27374	0.01
Sb	121	2	He	941929	0.00
Cu	63	1	No Gas	1975103	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	654294	0.96	654204	100.01	70	120	
Ge	72	2	He	421105	0.89	428589	98.25	70	120	
Ge	72	1	No Gas	1605769	0.14	1641030	97.85	70	120	

Calibration Standard Report

In	115	1	No Gas	1884405	0.49	1892969	99.55	70	120	
Bi	209	1	No Gas	1666933	1.39	1736707	95.98	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICCV
Data File Name	143_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:21:50-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	136CALB.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	104.565	0.834	1011782	1.64	100	104.6	90	110	
Be	9	1	No Gas	105.022	2.196	237474	0.39	100	105.0	90	110	
V	51	2	He	103.563	0.807	419958	0.52	100	103.6	90	110	
Cr	52	2	He	104.290	0.145	497745	0.56	100	104.3	90	110	
Fe	56	2	He	10136.572	0.856	46402534	0.44	10000	101.4	90	110	
Se	78	2	He	106.822	2.228	6326	1.86	100	106.8	90	110	
As	75	2	He	109.205	1.561	76751	1.14	100	109.2	90	110	
Ca	44	2	He	10058.083	0.835	238761	0.46	10000	100.6	90	110	
Na	23	2	He	9987.386	0.482	7755269	0.46	10000	99.9	90	110	
Mg	24	2	He	10100.637	1.641	4221612	1.99	10000	101.0	90	110	
K	39	2	He	10090.620	1.268	4828614	0.96	10000	100.9	90	110	
Mn	55	2	He	105.436	0.703	337001	0.38	100	105.4	90	110	
Co	59	2	He	105.999	0.535	774536	0.12	100	106.0	90	110	
Ni	60	2	He	104.952	1.306	204772	0.93	100	105.0	90	110	
Cu	63	2	He	104.339	0.914	554529	0.51	100	104.3	90	110	
Zn	66	2	He	106.666	0.739	103341	1.00	100	106.7	90	110	
Al	27	2	He	106.681	3.450	22031	3.17	100	106.7	90	110	
B	11	1	No Gas	481.863	4.014	636824	1.57	500	96.4	90	110	
Al	27	1	No Gas	104.091	1.553	1174524	1.73	100	104.1	90	110	
Si	28	1	No Gas	523.466	1.047	2818684	0.08	500	104.7	90	110	
Ag	107	1	No Gas	105.081	1.549	1336512	2.65	100	105.1	90	110	
Cd	111	1	No Gas	106.350	0.930	251199	0.49	100	106.3	90	110	
Sr	88	1	No Gas	103.591	0.277	2346964	0.82	100	103.6	90	110	
Mo	95	1	No Gas	100.522	0.686	444377	1.36	100	100.5	90	110	
Sn	118	1	No Gas	96.124	0.693	732466	0.40	100	96.1	90	110	
Sb	121	1	No Gas	95.285	1.089	1027705	0.08	100	95.3	90	110	
Ba	137	1	No Gas	105.954	0.869	360214	0.23	100	106.0	90	110	
Tl	205	1	No Gas	106.748	1.751	2479409	1.04	100	106.7	90	110	
Tl	203	1	No Gas	95.390	1.760	970039	1.01	100	95.4	90	110	
Pb	208	1	No Gas	98.510	1.495	3200347	0.94	100	98.5	90	110	
U	238	1	No Gas	99.215	1.036	3242226	0.80	100	99.2	90	110	
Ca	43	2	He	9779.092	2.715	13744	2.45	10000	97.8	90	110	
Sb	121	2	He	103.393	0.588	501028	0.43	100	103.4	90	110	
Ti	47	2	He	100.169	3.836	14898	3.45	100	100.2	90	110	
Cu	63	1	No Gas	98.131	0.520	990978	0.51	100	98.1	90	110	
Se	82	1	No Gas	104.029	1.224	14002	0.58	100	104.0	90	110	

QC ISTD Table

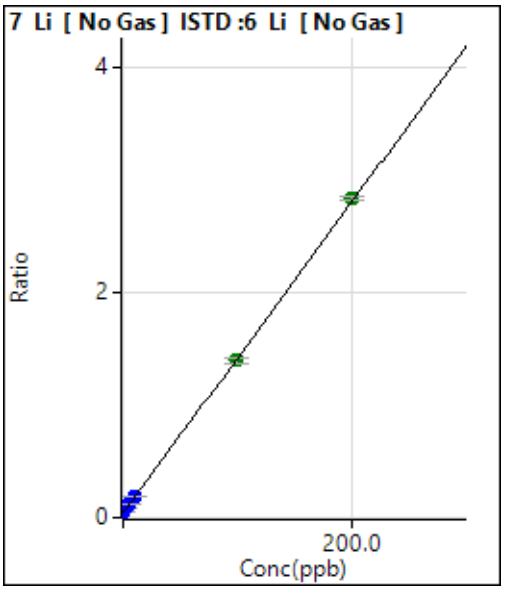
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	674805	2.43	654204	103.15	70	120	
Ge	72	2	He	434781	0.42	428589	101.44	70	120	
Ge	72	1	No Gas	1669204	1.02	1641030	101.72	70	120	
In	115	1	No Gas	1910216	1.10	1892969	100.91	70	120	
Bi	209	1	No Gas	1749539	0.76	1736707	100.74	70	120	

Calibration for 143_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\082222A.b\
Analysis File: 082222A.batch.bin
DA Date-Time: 08/22/2022 20:22:31
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	136CALB.d	CAL BLK	08/22/2022 20:07:01
2	137CALS.d	2/10/200	08/22/2022 20:09:11
3	138CALS.d	5/25/500	08/22/2022 20:11:20
4	139CALS.d	10/50/100	08/22/2022 20:13:30
5	140CALS.d	100/500/10K	08/22/2022 20:15:39
6	141CALS.d	200/1000/20K	08/22/2022 20:17:44

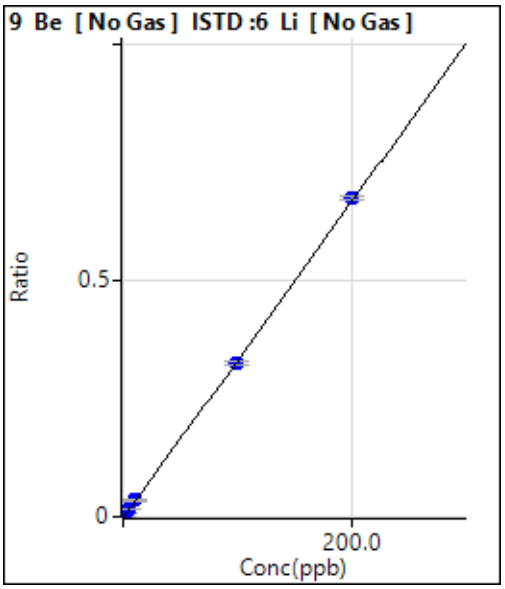
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35828.95	0.0549	P	5.5	
2	☐	2.000	2.481	57297.79	0.0891	P	0.3	24.0
3	☐	5.000	4.904	79275.14	0.1226	P	0.8	-1.9
4	☐	10.000	9.813	122261.24	0.1904	P	1.3	-1.9
5	☐	100.000	96.948	957901.00	1.3943	A	3.8	-3.1
6	☐	200.000	201.533	1857600.75	2.8393	A	1.6	0.8

y = 0.0138 * x + 0.0549
R = 0.9998
DL = 0.657 ppb
BEC = 3.971 ppb

Weight: <None>
Min Conc: <None>

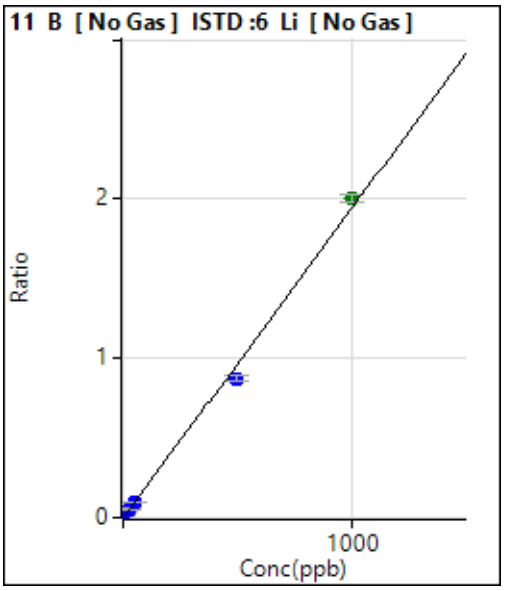


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0000	P	29.0	
2	☐	2.000	2.570	5566.15	0.0087	P	3.2	28.5
3	☐	5.000	5.127	11137.84	0.0172	P	3.1	2.5
4	☐	10.000	10.314	22224.32	0.0346	P	0.8	3.1
5	☐	100.000	97.127	223720.64	0.3256	P	2.4	-2.9
6	☐	200.000	201.412	441697.75	0.6751	P	0.7	0.7

y = 0.0034 * x + 4.5882E-005
R = 0.9998
DL = 0.0119 ppb
BEC = 0.01369 ppb

Weight: <None>
Min Conc: <None>

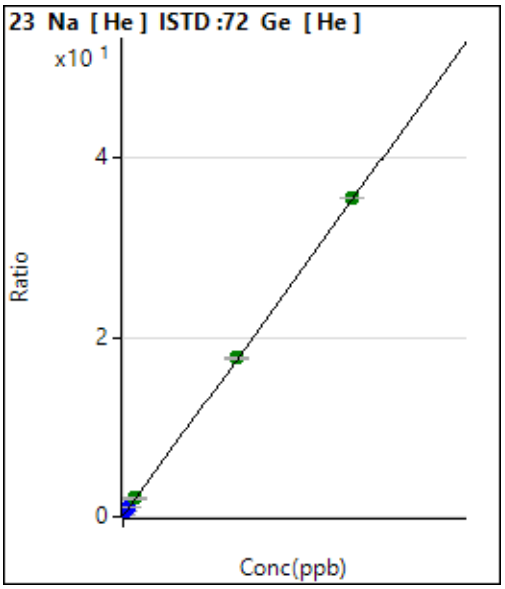
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5057.63	0.0077	P	6.0	
2	☐	10.000	11.723	19623.77	0.0305	P	1.8	17.2
3	☐	25.000	23.639	34707.87	0.0537	P	2.6	-5.4
4	☐	50.000	47.458	64192.46	0.1000	P	1.9	-5.1
5	☐	500.000	444.497	598843.28	0.8717	P	3.9	-11.1
6	☐	1000.000	1027.895	1312189.90	2.0056	A	2.6	2.8

y = 0.0019 * x + 0.0077
R = 0.9979
DL = 0.7188 ppb
BEC = 3.985 ppb

Weight: <None>
Min Conc: <None>

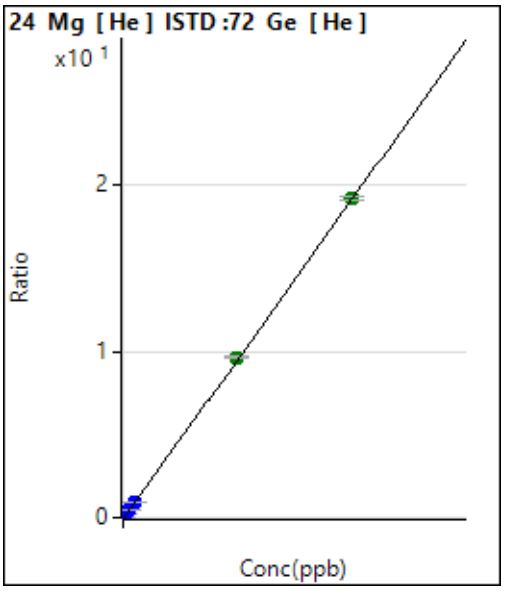


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	113031.74	0.2637	P	1.4	
2	☐	200.000	234.634	290704.16	0.6766	P	8.4	17.3
3	☐	500.000	448.263	453677.61	1.0525	P	0.6	-10.3
4	☐	1000.000	1011.984	878190.43	2.0444	A	1.0	1.2
5	☐	10000.00	9893.410	7589096.35	17.6719	A	1.4	-1.1
6	☐	20000.00	20053.64	14970410.1	35.5497	A	0.4	0.3

y = 0.0018 * x + 0.2637
R = 1.0000
DL = 6.104 ppb
BEC = 149.9 ppb

Weight: <None>
Min Conc: <None>

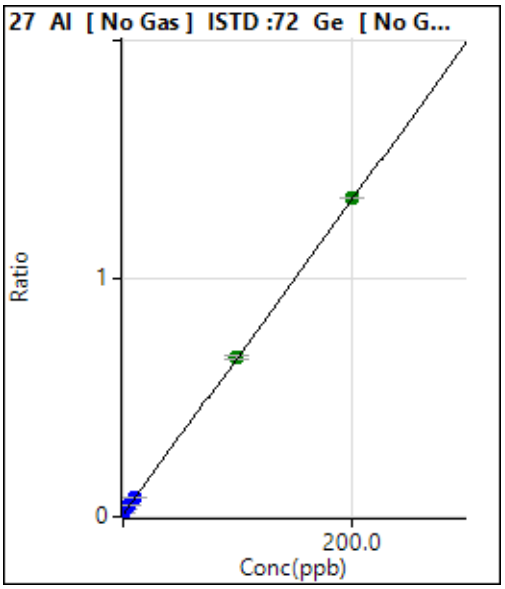
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1483.44	0.0035	P	14.1	
2	☐	200.000	241.967	101418.78	0.2360	P	1.3	21.0
3	☐	500.000	488.515	203846.72	0.4729	P	0.2	-2.3
4	☐	1000.000	973.493	403327.18	0.9389	P	0.3	-2.7
5	☐	10000.00	10013.87	4133960.04	9.6260	A	0.9	0.1
6	☐	20000.00	19994.25	8092443.42	19.2164	A	0.8	0.0

y = 9.6092E-004 * x + 0.0035
R = 1.0000
DL = 1.527 ppb
BEC = 3.601 ppb

Weight: <None>
Min Conc: <None>

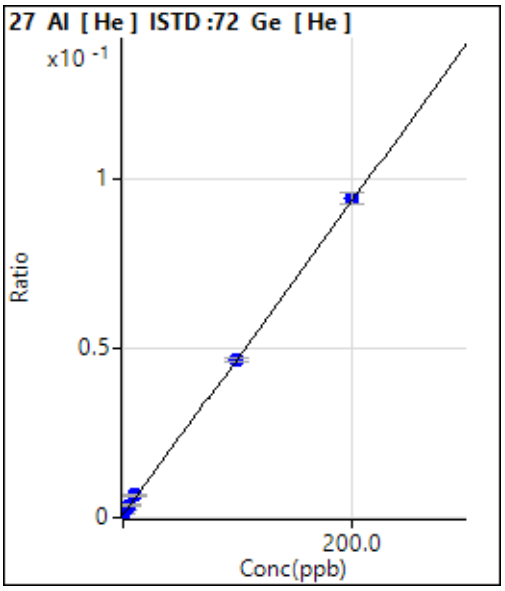


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	27428.04	0.0167	P	3.8	
2	☐	2.000	2.469	54329.47	0.0330	P	1.2	23.4
3	☐	5.000	4.961	82239.11	0.0495	P	2.6	-0.8
4	☐	10.000	9.945	137083.45	0.0824	P	1.5	-0.5
5	☐	100.000	99.263	1116201.15	0.6718	A	2.0	-0.7
6	☐	200.000	200.368	2150140.64	1.3390	A	0.4	0.2

y = 0.0066 * x + 0.0167
R = 1.0000
DL = 0.2863 ppb
BEC = 2.533 ppb

Weight: <None>
Min Conc: <None>

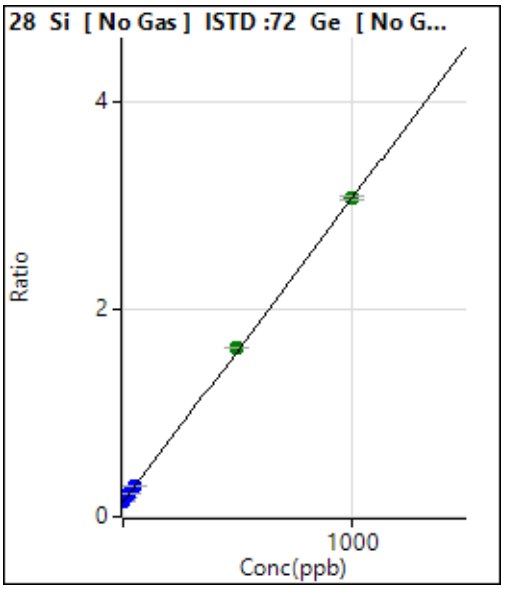
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	546.69	0.0013	P	10.8	
2	☐	2.000	1.954	936.71	0.0022	P	10.4	-2.3
3	☐	5.000	4.909	1530.11	0.0035	P	10.3	-1.8
4	☐	10.000	11.425	2820.34	0.0066	P	1.8	14.2
5	☐	100.000	97.953	20024.64	0.0466	P	3.4	-2.0
6	☐	200.000	200.955	39713.73	0.0943	P	3.9	0.5

y = 4.6305E-004 * x + 0.0013
R = 0.9999
DL = 0.8953 ppb
BEC = 2.754 ppb

Weight: <None>
Min Conc: <None>

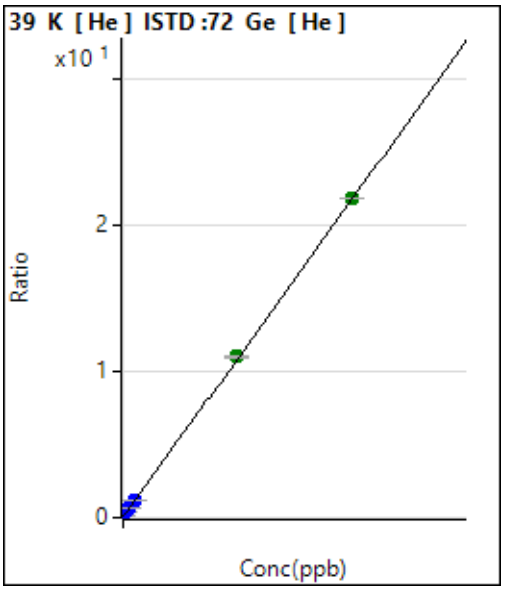


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	255640.52	0.1558	P	5.3	
2	☐	10.000	10.622	307648.20	0.1869	P	0.3	6.2
3	☐	25.000	22.013	366306.31	0.2203	P	2.0	-11.9
4	☐	50.000	46.822	487644.64	0.2929	P	0.7	-6.4
5	☐	500.000	505.336	2717696.94	1.6357	A	0.2	1.1
6	☐	1000.000	997.559	4941112.64	3.0771	A	0.8	-0.2

y = 0.0029 * x + 0.1558
R = 1.0000
DL = 8.512 ppb
BEC = 53.2 ppb

Weight: <None>
Min Conc: <None>

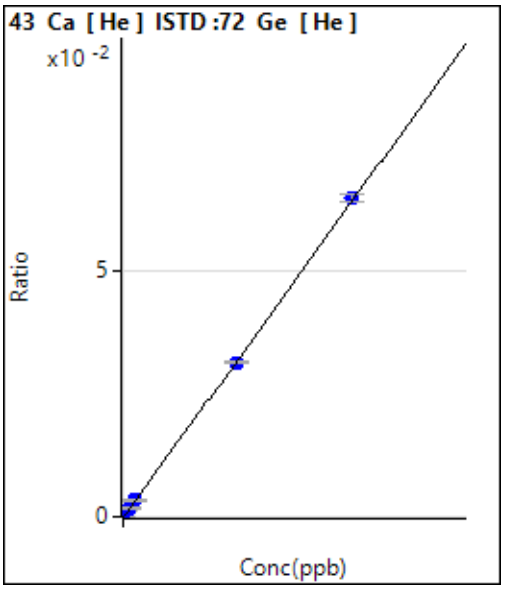
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	65036.44	0.1517	P	1.7	
2	☐	200.000	253.325	183416.25	0.4267	P	0.9	26.7
3	☐	500.000	487.523	293535.81	0.6810	P	1.7	-2.5
4	☐	1000.000	972.191	518555.67	1.2072	P	0.5	-2.8
5	☐	10000.00	10016.09	4734743.47	11.0252	A	1.3	0.2
6	☐	20000.00	19993.12	9203530.28	21.8563	A	0.5	0.0

y = 0.0011 * x + 0.1517
R = 1.0000
DL = 6.928 ppb
BEC = 139.8 ppb

Weight: <None>
Min Conc: <None>

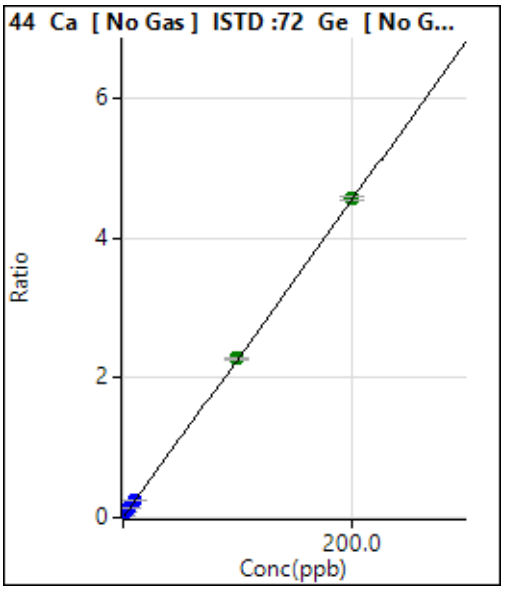


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43.33	0.0001	P	26.6	
2	☐	200.000	305.793	466.68	0.0011	P	19.0	52.9
3	☐	500.000	491.968	726.70	0.0017	P	9.7	-1.6
4	☐	1000.000	1035.615	1476.78	0.0034	P	8.7	3.6
5	☐	10000.00	9715.018	13486.81	0.0314	P	1.6	-2.8
6	☐	20000.00	20139.85	27374.25	0.0650	P	2.8	0.7

y = 3.2223E-006 * x + 1.0109E-004
R = 0.9998
DL = 25.03 ppb
BEC = 31.37 ppb

Weight: <None>
Min Conc: <None>

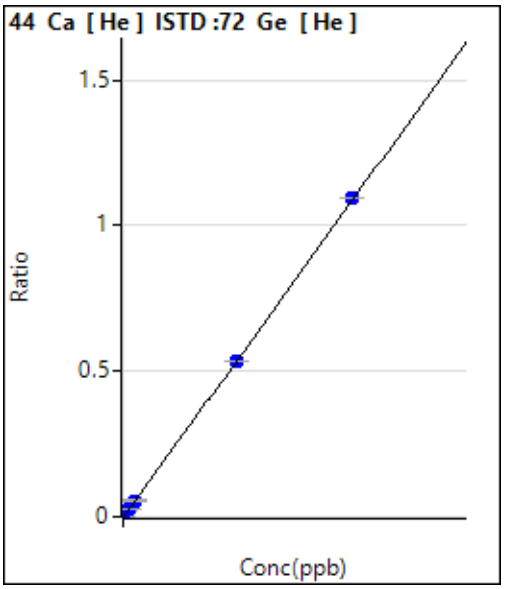
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	39223.36	0.0239	P	24.6	
2	☐	2.000	2.721	141111.44	0.0857	P	1.8	36.1
3	☐	5.000	4.614	214082.39	0.1287	P	1.8	-7.7
4	☐	10.000	9.466	397846.95	0.2390	P	0.6	-5.3
5	☐	100.000	99.518	3796434.73	2.2849	A	1.1	-0.5
6	☐	200.000	200.270	7344578.64	4.5738	A	1.3	0.1

y = 0.0227 * x + 0.0239
R = 1.0000
DL = 0.7761 ppb
BEC = 1.052 ppb

Weight: <None>
Min Conc: <None>

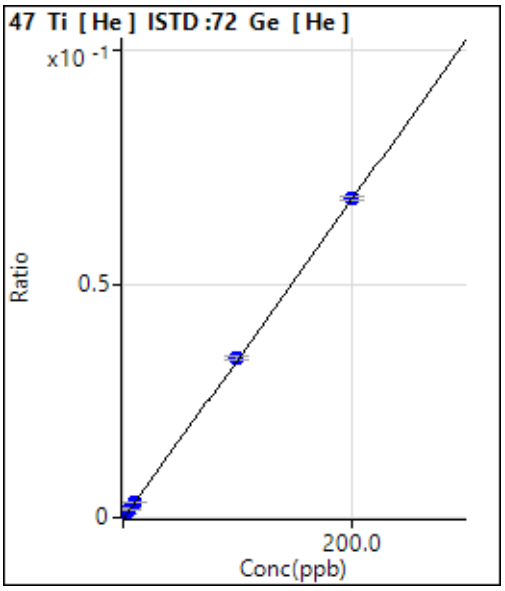


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	886.71	0.0021	P	12.7	
2	☐	200.000	282.978	7502.21	0.0175	P	7.5	41.5
3	☐	500.000	475.429	12038.81	0.0279	P	2.3	-4.9
4	☐	1000.000	985.422	23914.41	0.0557	P	3.5	-1.5
5	☐	10000.00	9795.089	229704.14	0.5349	P	0.4	-2.0
6	☐	20000.00	20102.96	461329.85	1.0955	P	0.4	0.5

y = 5.4394E-005 * x + 0.0021
R = 0.9999
DL = 14.52 ppb
BEC = 38.01 ppb

Weight: <None>
Min Conc: <None>

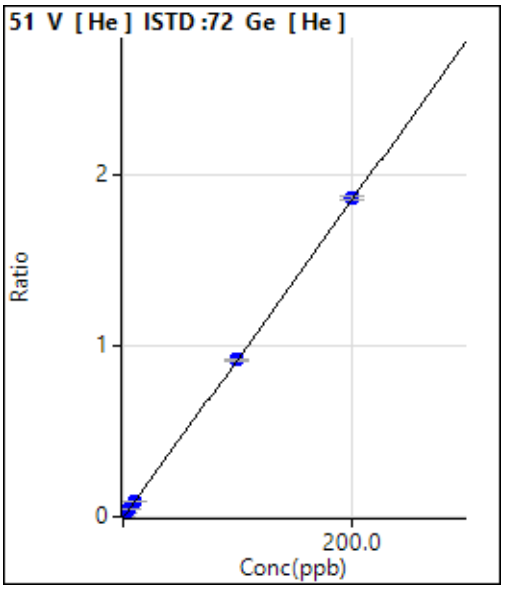
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	2.494	366.68	0.0009	P	3.2	24.7
3	☐	5.000	5.361	790.04	0.0018	P	18.2	7.2
4	☐	10.000	9.435	1386.77	0.0032	P	7.7	-5.6
5	☐	100.000	100.035	14698.03	0.0342	P	1.6	0.0
6	☐	200.000	199.997	28810.48	0.0684	P	1.7	0.0

y = 3.4212E-004 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

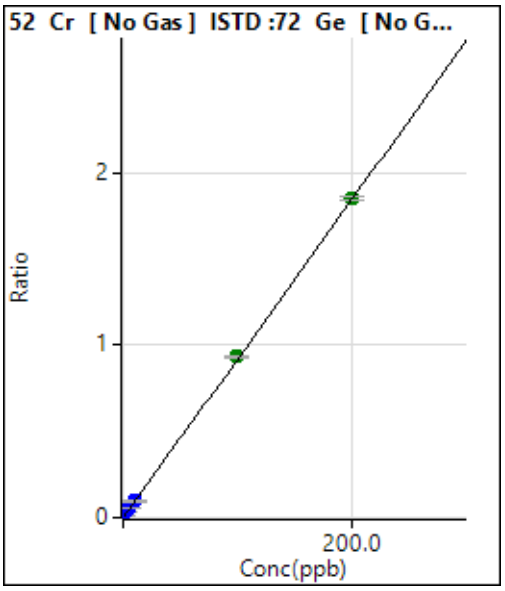


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1056.71	0.0025	P	6.1	
2	☐	2.000	2.430	10774.28	0.0251	P	1.9	21.5
3	☐	5.000	4.910	20750.21	0.0481	P	1.7	-1.8
4	☐	10.000	9.898	40613.28	0.0945	P	0.4	-1.0
5	☐	100.000	98.870	396065.52	0.9223	P	1.1	-1.1
6	☐	200.000	200.568	786721.67	1.8684	P	1.2	0.3

y = 0.0093 * x + 0.0025
R = 1.0000
DL = 0.04873 ppb
BEC = 0.265 ppb

Weight: <None>
Min Conc: <None>

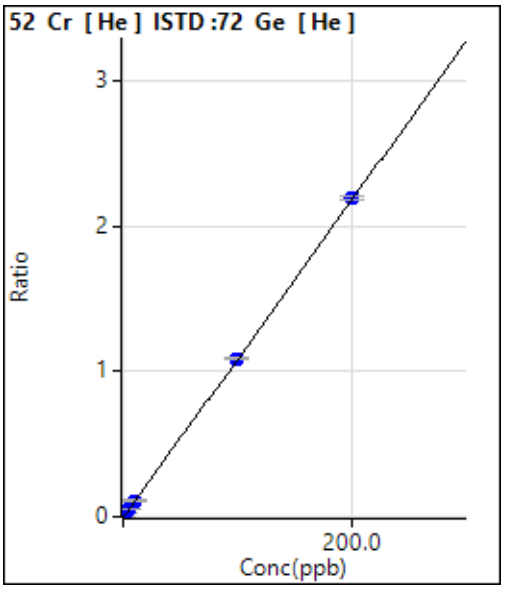
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13149.90	0.0080	P	4.2	
2	☐	2.000	2.299	48141.52	0.0292	P	2.0	15.0
3	☐	5.000	4.712	85680.49	0.0515	P	2.0	-5.8
4	☐	10.000	9.432	158341.00	0.0951	P	0.7	-5.7
5	☐	100.000	100.158	1549927.69	0.9329	A	1.2	0.2
6	☐	200.000	199.954	2977634.64	1.8543	A	0.9	0.0

y = 0.0092 * x + 0.0080
R = 1.0000
DL = 0.1091 ppb
BEC = 0.868 ppb

Weight: <None>
Min Conc: <None>

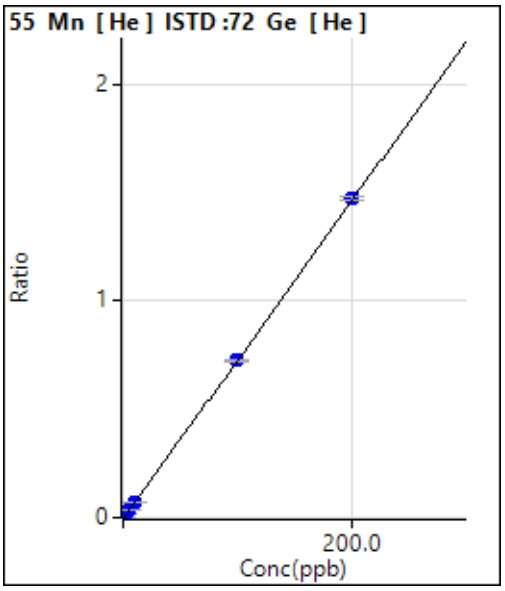


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1533.45	0.0036	P	14.8	
2	☐	2.000	2.406	12856.21	0.0299	P	2.1	20.3
3	☐	5.000	4.949	24889.53	0.0577	P	0.4	-1.0
4	☐	10.000	9.880	47981.23	0.1117	P	2.7	-1.2
5	☐	100.000	99.199	467698.70	1.0891	P	1.7	-0.8
6	☐	200.000	200.404	924952.80	2.1966	P	0.8	0.2

y = 0.0109 * x + 0.0036
R = 1.0000
DL = 0.145 ppb
BEC = 0.3271 ppb

Weight: <None>
Min Conc: <None>

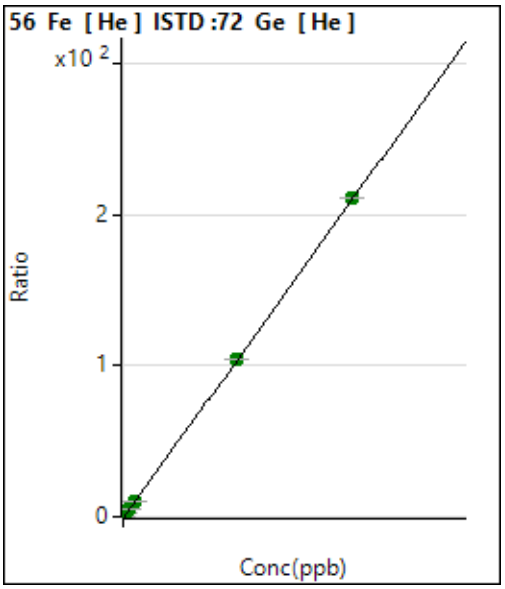
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	343.34	0.0008	P	5.9	
2	☐	2.000	2.705	8883.02	0.0207	P	2.6	35.3
3	☐	5.000	4.938	15976.29	0.0371	P	0.2	-1.2
4	☐	10.000	9.791	31232.54	0.0727	P	0.4	-2.1
5	☐	100.000	98.538	311125.05	0.7245	P	0.8	-1.5
6	☐	200.000	200.736	621107.14	1.4750	P	0.7	0.4

y = 0.0073 * x + 8.0086E-004
R = 1.0000
DL = 0.01936 ppb
BEC = 0.1091 ppb

Weight: <None>
Min Conc: <None>

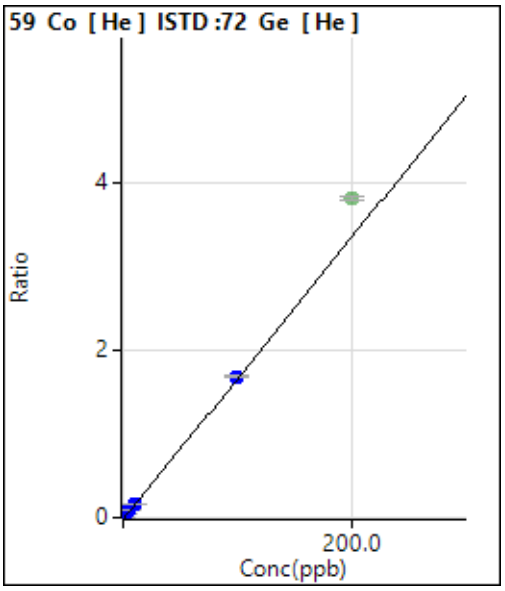


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13323.37	0.0311	P	2.5	
2	☐	200.000	263.301	1204661.23	2.8026	A	1.6	31.7
3	☐	500.000	526.954	2404416.58	5.5778	A	1.4	5.4
4	☐	1000.000	1016.407	4609167.22	10.7298	A	0.9	1.6
5	☐	10000.00	9896.057	44748616.0	104.197	A	0.6	-1.0
6	☐	20000.00	20049.84	88882518.6	211.075	A	0.6	0.2

y = 0.0105 * x + 0.0311
R = 1.0000
DL = 0.2238 ppb
BEC = 2.953 ppb

Weight: <None>
Min Conc: <None>

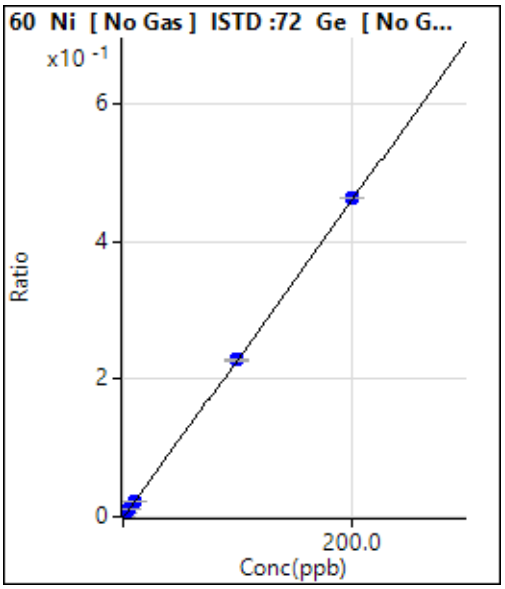
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0001	P	61.0	
2	☐	2.000	2.481	17962.08	0.0418	P	4.0	24.0
3	☐	5.000	5.003	36295.29	0.0842	P	1.5	0.1
4	☐	10.000	10.102	72975.22	0.1699	P	0.6	1.0
5	☐	100.000	99.980	721618.19	1.6803	P	1.2	0.0
6	☑	200.000		1603251.80	3.8075	A	1.3	

y = 0.0168 * x + 1.0854E-004
R = 1.0000
DL = 0.01182 ppb
BEC = 0.006458 ppb

Weight: <None>
Min Conc: <None>

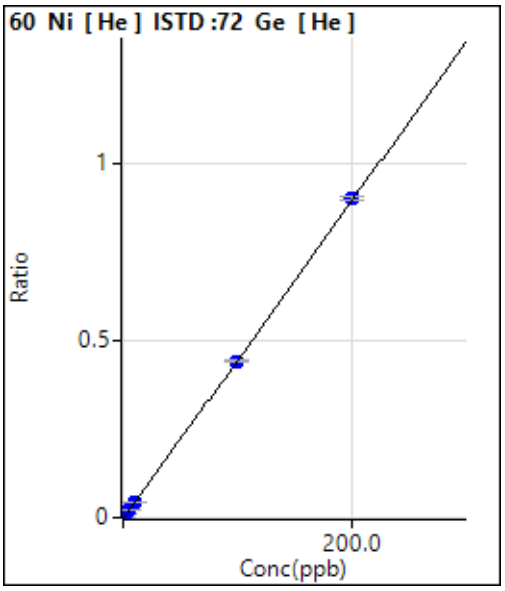


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	600.03	0.0004	P	35.2	
2	☐	2.000	2.528	10207.34	0.0062	P	1.0	26.4
3	☐	5.000	4.990	19767.89	0.0119	P	1.2	-0.2
4	☐	10.000	9.895	38638.35	0.0232	P	1.4	-1.0
5	☐	100.000	98.489	378361.73	0.2277	P	1.2	-1.5
6	☐	200.000	200.756	744756.74	0.4638	P	0.3	0.4

y = 0.0023 * x + 3.6597E-004
R = 1.0000
DL = 0.1672 ppb
BEC = 0.1585 ppb

Weight: <None>
Min Conc: <None>

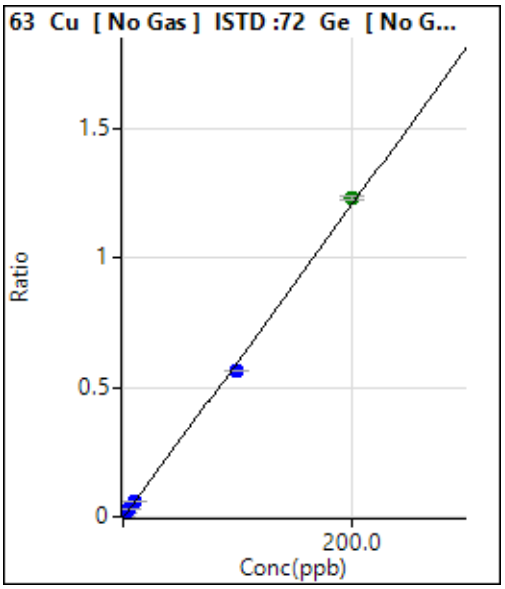
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	246.67	0.0006	P	23.7	
2	☐	2.000	2.502	5067.70	0.0118	P	2.2	25.1
3	☐	5.000	4.828	9576.86	0.0222	P	1.7	-3.4
4	☐	10.000	9.898	19303.89	0.0449	P	5.1	-1.0
5	☐	100.000	98.421	189686.73	0.4417	P	1.9	-1.6
6	☐	200.000	200.794	379220.76	0.9006	P	0.6	0.4

y = 0.0045 * x + 5.7605E-004
R = 1.0000
DL = 0.09134 ppb
BEC = 0.1285 ppb

Weight: <None>
Min Conc: <None>

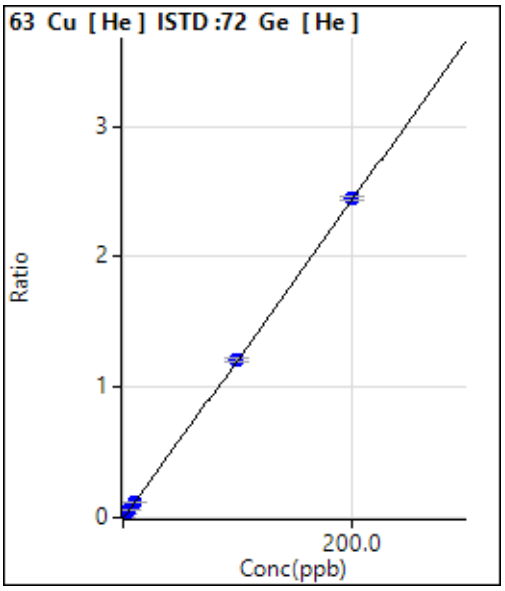


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1423.45	0.0009	P	12.4	
2	☐	2.000	2.284	24135.12	0.0147	P	1.9	14.2
3	☐	5.000	4.645	48111.93	0.0289	P	1.9	-7.1
4	☐	10.000	9.338	95359.66	0.0573	P	0.9	-6.6
5	☐	100.000	93.164	936585.06	0.5637	P	1.1	-6.8
6	☐	200.000	203.457	1975103.20	1.2300	A	1.4	1.7

y = 0.0060 * x + 8.6740E-004
R = 0.9992
DL = 0.05334 ppb
BEC = 0.1436 ppb

Weight: <None>
Min Conc: <None>

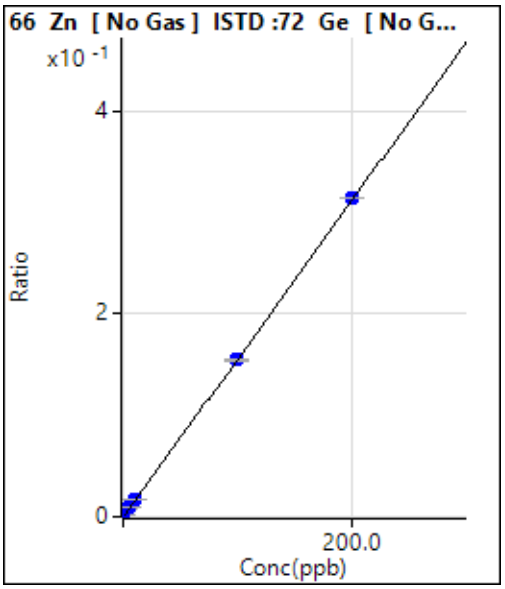
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	606.69	0.0014	P	8.1	
2	☐	2.000	2.369	13039.76	0.0303	P	2.4	18.4
3	☐	5.000	4.951	26666.45	0.0619	P	2.6	-1.0
4	☐	10.000	9.948	52789.37	0.1229	P	1.8	-0.5
5	☐	100.000	99.195	520742.92	1.2126	P	1.9	-0.8
6	☐	200.000	200.403	1031003.48	2.4485	P	0.9	0.2

y = 0.0122 * x + 0.0014
R = 1.0000
DL = 0.02823 ppb
BEC = 0.1159 ppb

Weight: <None>
Min Conc: <None>

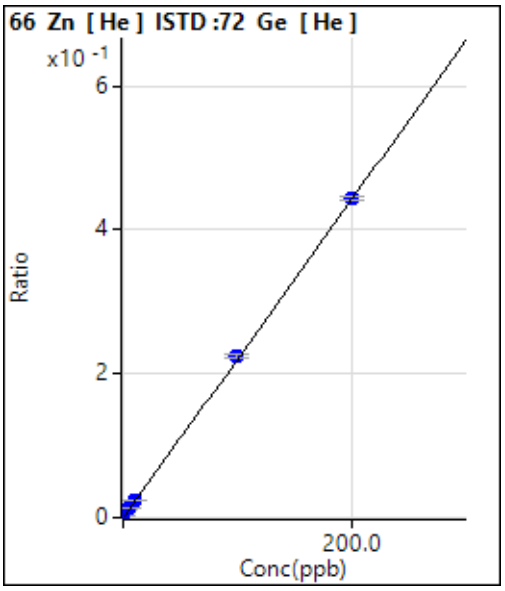


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1790.16	0.0011	P	6.6	
2	☐	2.000	3.912	11848.71	0.0072	P	2.0	95.6
3	☐	5.000	4.908	14558.01	0.0088	P	1.3	-1.8
4	☐	10.000	9.838	27377.90	0.0164	P	2.6	-1.6
5	☐	100.000	98.370	256979.08	0.1547	P	0.6	-1.6
6	☐	200.000	200.806	505140.93	0.3146	P	0.1	0.4

y = 0.0016 * x + 0.0011
R = 0.9999
DL = 0.1381 ppb
BEC = 0.6989 ppb

Weight: <None>
Min Conc: <None>

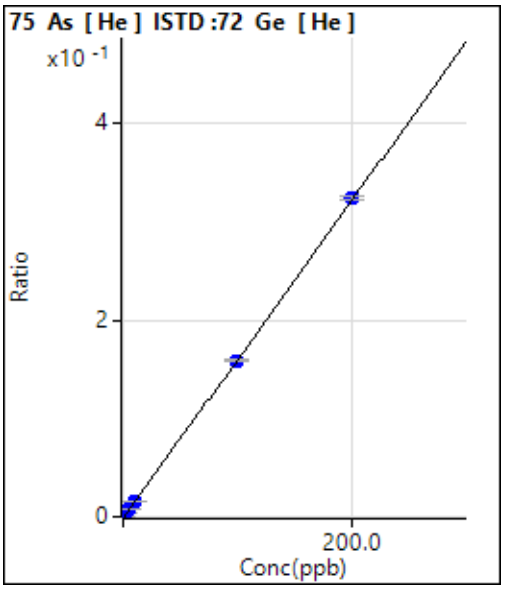
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	730.03	0.0017	P	10.1	
2	☐	2.000	3.854	4397.45	0.0102	P	3.2	92.7
3	☐	5.000	4.942	5447.87	0.0126	P	3.3	-1.2
4	☐	10.000	10.040	10274.05	0.0239	P	4.3	0.4
5	☐	100.000	100.385	96098.63	0.2238	P	2.7	0.4
6	☐	200.000	199.788	186839.01	0.4437	P	0.6	-0.1

y = 0.0022 * x + 0.0017
R = 1.0000
DL = 0.2329 ppb
BEC = 0.7702 ppb

Weight: <None>
Min Conc: <None>

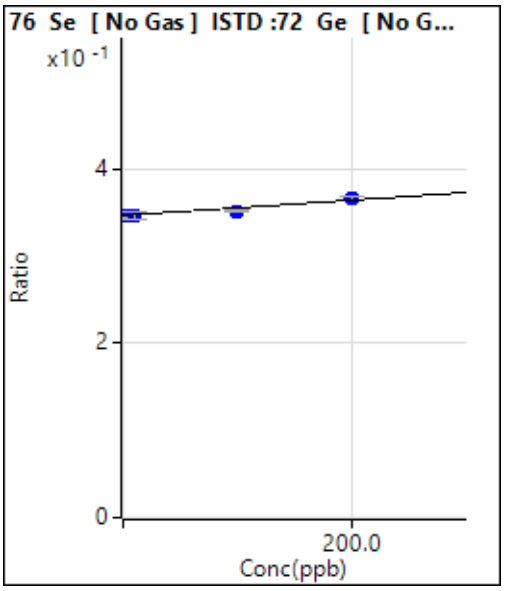


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	54.44	0.0001	P	2.8	
2	☐	2.000	2.463	1764.57	0.0041	P	2.8	23.2
3	☐	5.000	4.950	3501.58	0.0081	P	1.5	-1.0
4	☐	10.000	9.712	6793.96	0.0158	P	4.0	-2.9
5	☐	100.000	98.497	68383.17	0.1592	P	1.5	-1.5
6	☐	200.000	200.762	136613.26	0.3244	P	1.3	0.4

y = 0.0016 * x + 1.2701E-004
R = 1.0000
DL = 0.006506 ppb
BEC = 0.07863 ppb

Weight: <None>
Min Conc: <None>

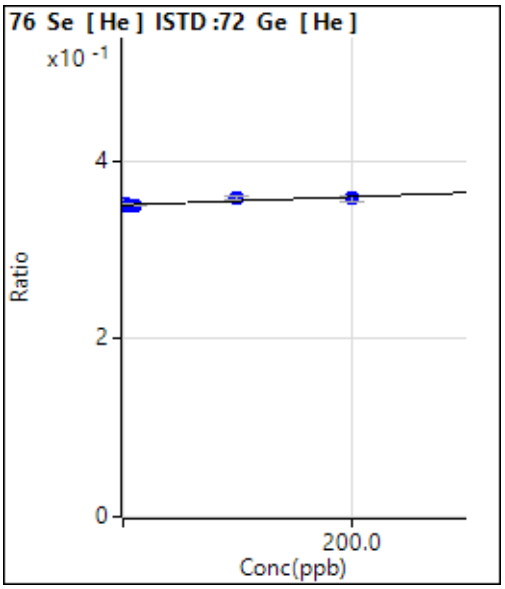
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	568809.15	0.3466	P	1.9	
2	☐	2.000	9.278	571898.82	0.3474	P	0.4	363.9
3	☐	5.000	8.452	577694.68	0.3474	P	1.9	69.0
4	☐	10.000	-1.625	576732.92	0.3465	P	2.0	-116.3
5	☐	100.000	55.270	584015.98	0.3515	P	0.3	-44.7
6	☐	200.000	222.787	588099.49	0.3662	P	0.7	11.4

y = 8.8035E-005 * x + 0.3466
R = 0.9657
DL = 229.6 ppb
BEC = 3937 ppb

Weight: <None>
Min Conc: <None>

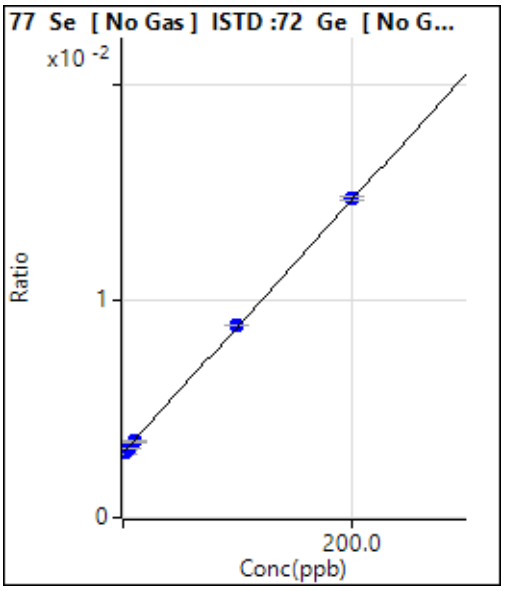


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150243.33	0.3506	P	0.8	
2	☐	2.000	54.149	151753.27	0.3531	P	2.2	2607.4
3	☐	5.000	-7.120	150974.64	0.3502	P	0.3	-242.4
4	☐	10.000	0.876	150610.39	0.3506	P	0.6	-91.2
5	☐	100.000	171.283	153991.03	0.3586	P	1.3	71.3
6	☐	200.000	164.596	150857.08	0.3583	P	1.7	-17.7

y = 4.6778E-005 * x + 0.3506
R = 0.8751
DL = 174.2 ppb
BEC = 7494 ppb

Weight: <None>
Min Conc: <None>

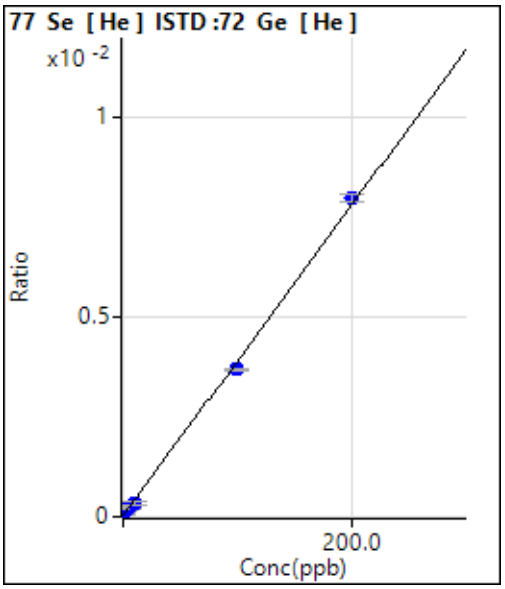
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5037.69	0.0031	P	3.2	
2	☐	2.000	-1.107	4947.65	0.0030	P	7.6	-155.4
3	☐	5.000	2.310	5331.18	0.0032	P	1.2	-53.8
4	☐	10.000	8.057	5891.39	0.0035	P	3.1	-19.4
5	☐	100.000	99.698	14744.96	0.0089	P	0.9	-0.3
6	☐	200.000	200.346	23657.71	0.0147	P	0.9	0.2

y = 5.8212E-005 * x + 0.0031
R = 0.9999
DL = 5.136 ppb
BEC = 52.75 ppb

Weight: <None>
Min Conc: <None>

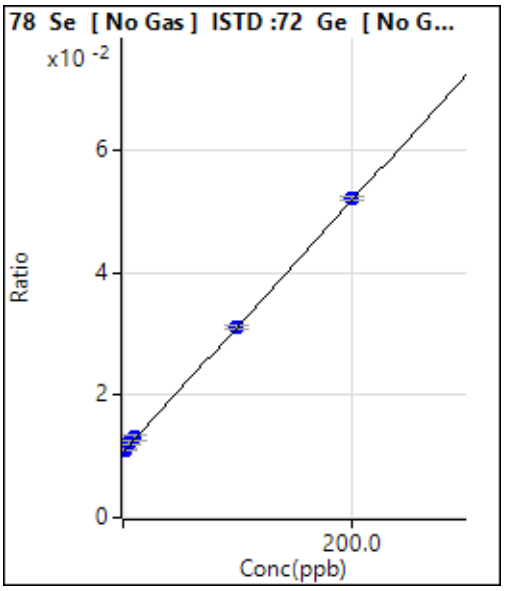


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0001	P	33.2	
2	☐	2.000	2.197	66.67	0.0002	P	17.3	9.8
3	☐	5.000	3.784	93.33	0.0002	P	12.9	-24.3
4	☐	10.000	7.202	150.00	0.0003	P	30.5	-28.0
5	☐	100.000	93.113	1580.13	0.0037	P	1.6	-6.9
6	☐	200.000	203.612	3353.81	0.0080	P	3.0	1.8

y = 3.8765E-005 * x + 6.9947E-005
R = 0.9992
DL = 1.796 ppb
BEC = 1.804 ppb

Weight: <None>
Min Conc: <None>

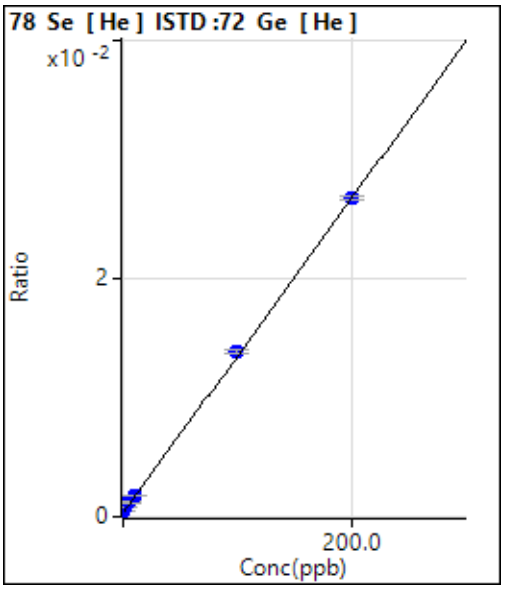
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18022.35	0.0110	P	1.8	
2	☐	2.000	0.391	18209.28	0.0111	P	3.5	-80.5
3	☐	5.000	6.111	20345.69	0.0122	P	3.6	22.2
4	☐	10.000	10.659	21904.81	0.0132	P	7.0	6.6
5	☐	100.000	98.198	51706.20	0.0311	P	1.6	-1.8
6	☐	200.000	200.856	83773.12	0.0522	P	1.0	0.4

y = 2.0505E-004 * x + 0.0110
R = 0.9999
DL = 2.875 ppb
BEC = 53.56 ppb

Weight: <None>
Min Conc: <None>

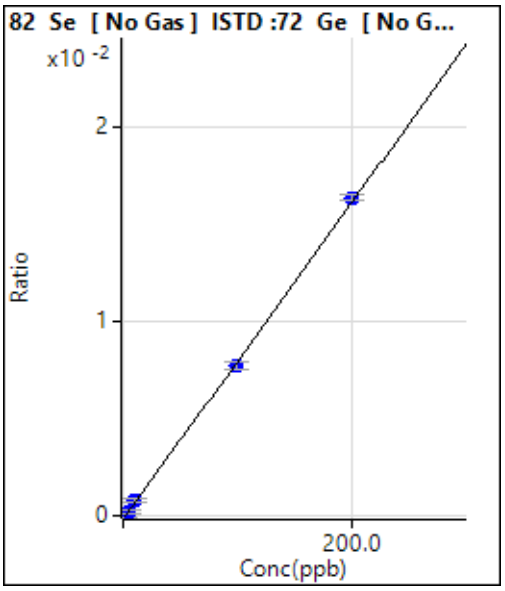


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	197.33	0.0005	P	8.5	
2	☐	2.000	2.845	359.34	0.0008	P	3.9	42.3
3	☐	5.000	5.703	522.68	0.0012	P	7.7	14.1
4	☐	10.000	10.393	786.69	0.0018	P	1.2	3.9
5	☐	100.000	101.582	5951.32	0.0139	P	1.6	1.6
6	☐	200.000	199.164	11254.72	0.0267	P	1.1	-0.4

y = 1.3189E-004 * x + 4.6064E-004
R = 1.0000
DL = 0.8877 ppb
BEC = 3.493 ppb

Weight: <None>
Min Conc: <None>

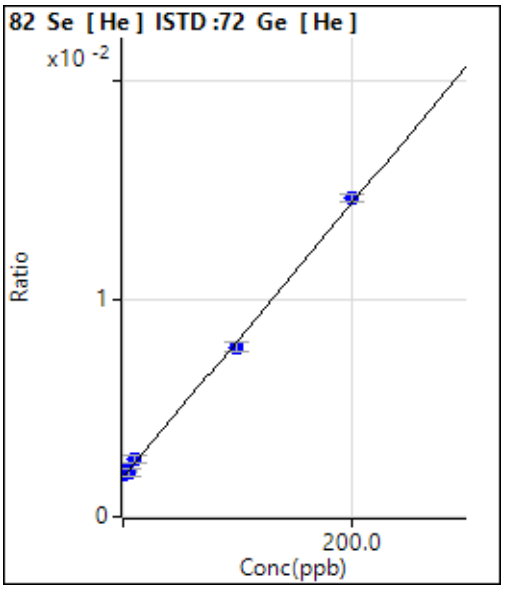
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-131.53	-0.0001	P	-224.	
2	☐	2.000	0.154	-112.84	-0.0001	P	-48.9	-92.3
3	☐	5.000	3.606	356.61	0.0002	P	93.1	-27.9
4	☐	10.000	11.227	1382.18	0.0008	P	24.3	12.3
5	☐	100.000	95.684	12808.95	0.0077	P	5.0	-4.3
6	☐	200.000	202.150	26300.29	0.0164	P	1.5	1.1

y = 8.1423E-005 * x - 8.1253E-005
R = 0.9996
DL = 6.723 ppb
BEC = -0.9979 ppb

Weight: <None>
Min Conc: <None>

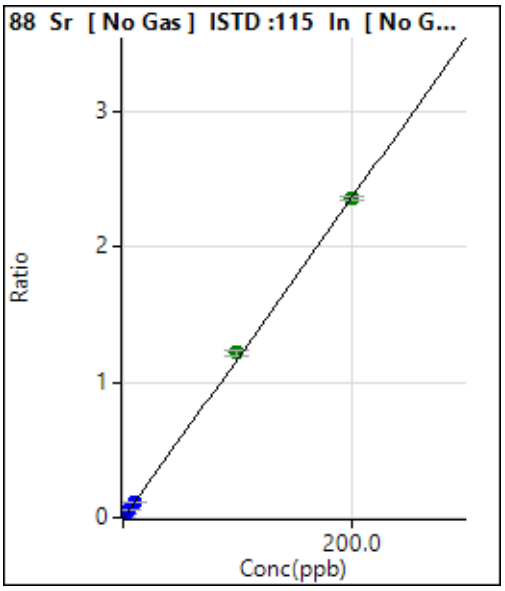


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	813.38	0.0019	P	4.3	
2	☐	2.000	2.864	893.38	0.0021	P	4.6	43.2
3	☐	5.000	2.643	890.05	0.0021	P	17.4	-47.1
4	☐	10.000	11.913	1136.73	0.0026	P	11.7	19.1
5	☐	100.000	94.002	3350.48	0.0078	P	5.3	-6.0
6	☐	200.000	202.953	6164.88	0.0146	P	2.8	1.5

y = 6.2792E-005 * x + 0.0019
R = 0.9992
DL = 3.932 ppb
BEC = 30.23 ppb

Weight: <None>
Min Conc: <None>

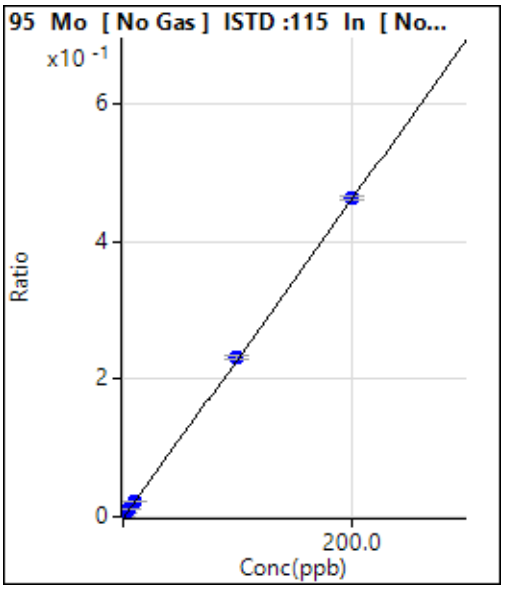
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6060.99	0.0032	P	58.7	
2	☐	2.000	2.173	57038.27	0.0289	P	1.6	8.6
3	☐	5.000	4.610	111590.01	0.0577	P	0.8	-7.8
4	☐	10.000	9.278	217716.00	0.1129	P	1.7	-7.2
5	☐	100.000	102.487	2313712.93	1.2156	A	3.0	2.5
6	☐	200.000	198.800	4437570.04	2.3550	A	1.4	-0.6

y = 0.0118 * x + 0.0032
R = 0.9999
DL = 0.4734 ppb
BEC = 0.2689 ppb

Weight: <None>
Min Conc: <None>

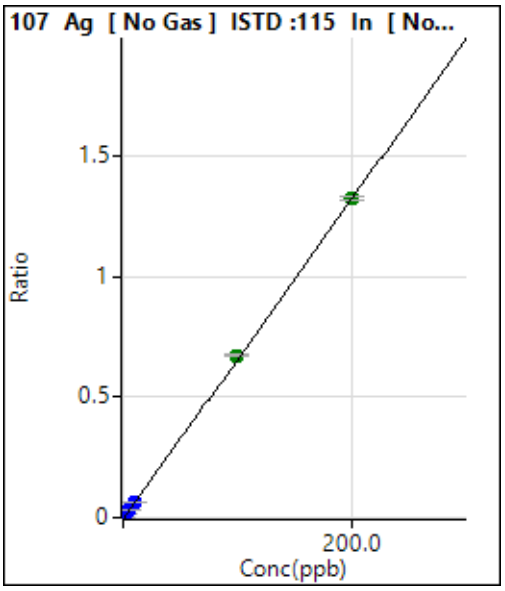


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	70.00	0.0000	P	111.5	
2	☐	2.000	2.397	11024.78	0.0056	P	1.5	19.9
3	☐	5.000	4.845	21741.35	0.0112	P	2.2	-3.1
4	☐	10.000	9.481	42360.99	0.0220	P	1.4	-5.2
5	☐	100.000	99.831	439750.20	0.2310	P	2.0	-0.2
6	☐	200.000	200.110	872576.60	0.4631	P	0.8	0.1

y = 0.0023 * x + 3.6670E-005
R = 1.0000
DL = 0.05302 ppb
BEC = 0.01585 ppb

Weight: <None>
Min Conc: <None>

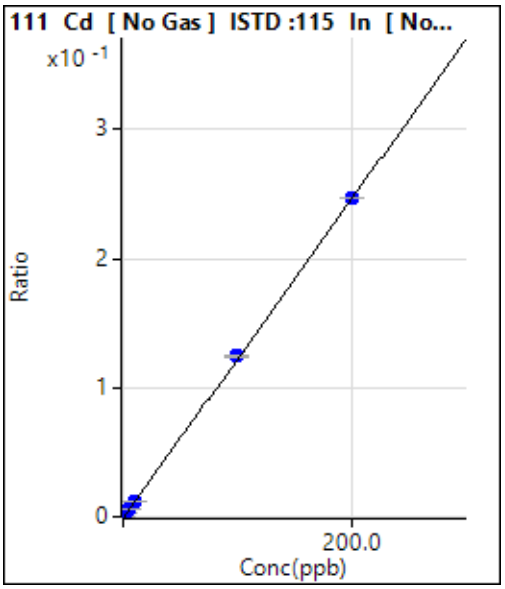
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	316.68	0.0002	P	42.4	
2	☐	2.000	2.248	29874.06	0.0151	P	4.3	12.4
3	☐	5.000	4.626	59845.49	0.0310	P	0.7	-7.5
4	☐	10.000	9.124	117390.72	0.0609	P	1.3	-8.8
5	☐	100.000	101.117	1281525.32	0.6732	A	0.8	1.1
6	☐	200.000	199.492	2502412.00	1.3280	A	1.1	-0.3

y = 0.0067 * x + 1.6697E-004
R = 1.0000
DL = 0.03189 ppb
BEC = 0.02509 ppb

Weight: <None>
Min Conc: <None>

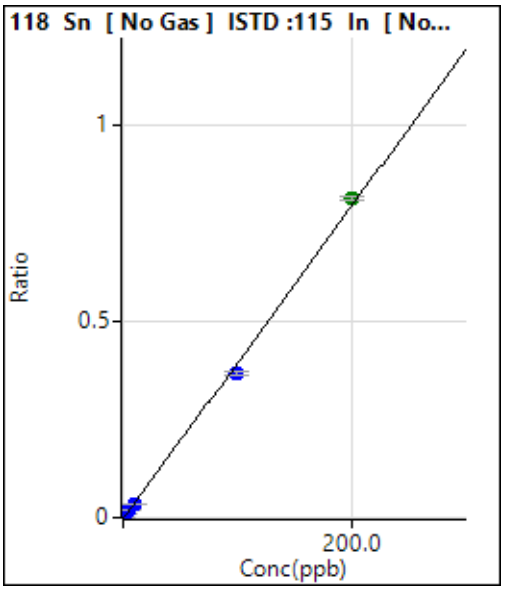


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	2.354	5751.36	0.0029	P	6.2	17.7
3	☐	5.000	4.983	11915.59	0.0062	P	1.7	-0.3
4	☐	10.000	9.680	23080.43	0.0120	P	1.7	-3.2
5	☐	100.000	100.576	236746.51	0.1244	P	1.2	0.6
6	☐	200.000	199.725	465393.09	0.2470	P	0.5	-0.1

y = 0.0012 * x + 1.7267E-006
R = 1.0000
DL = 0.007256 ppb
BEC = 0.001396 ppb

Weight: <None>
Min Conc: <None>

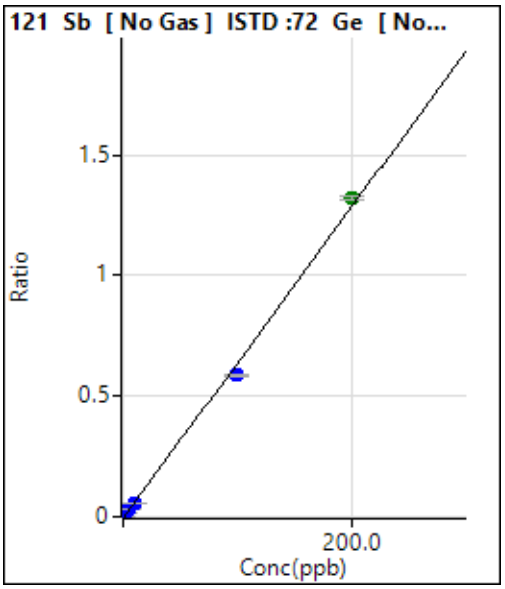
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1326.76	0.0007	P	10.6	
2	☐	2.000	2.122	18076.24	0.0092	P	3.1	6.1
3	☐	5.000	4.477	35819.19	0.0185	P	0.4	-10.5
4	☐	10.000	8.923	69841.97	0.0362	P	2.1	-10.8
5	☐	100.000	92.149	699795.90	0.3676	P	1.6	-7.9
6	☐	200.000	203.991	1531974.61	0.8130	A	0.8	2.0

y = 0.0040 * x + 7.0212E-004
R = 0.9989
DL = 0.05581 ppb
BEC = 0.1763 ppb

Weight: <None>
Min Conc: <None>

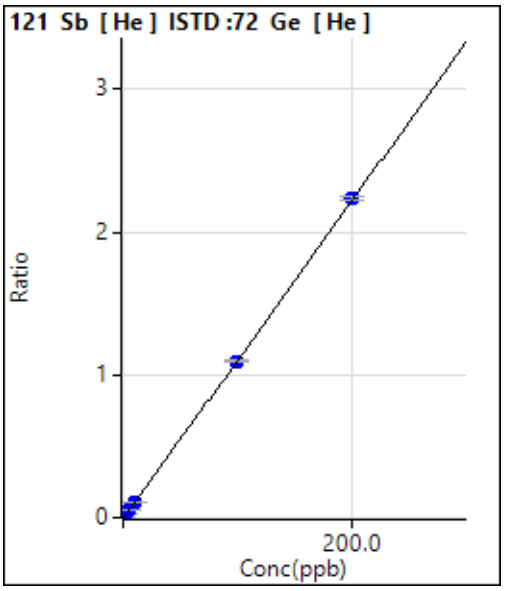


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	993.39	0.0006	P	14.1	
2	☐	2.000	2.310	25541.97	0.0155	P	4.5	15.5
3	☐	5.000	4.560	49965.38	0.0300	P	2.7	-8.8
4	☐	10.000	9.067	98437.55	0.0591	P	1.6	-9.3
5	☐	100.000	90.692	973761.03	0.5861	P	1.2	-9.3
6	☐	200.000	204.709	2123042.10	1.3221	A	1.0	2.4

y = 0.0065 * x + 6.0545E-004
R = 0.9985
DL = 0.03961 ppb
BEC = 0.09379 ppb

Weight: <None>
Min Conc: <None>

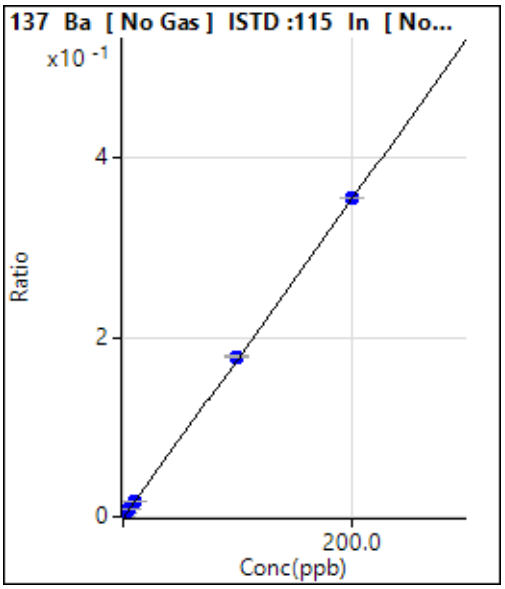
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	540.02	0.0013	P	7.5	
2	☐	2.000	2.441	12222.60	0.0284	P	2.5	22.1
3	☐	5.000	4.976	24423.06	0.0567	P	2.2	-0.5
4	☐	10.000	9.846	47629.97	0.1109	P	0.5	-1.5
5	☐	100.000	98.395	470992.86	1.0967	P	1.0	-1.6
6	☐	200.000	200.807	941929.21	2.2369	P	0.9	0.4

y = 0.0111 * x + 0.0013
R = 0.9999
DL = 0.02547 ppb
BEC = 0.1132 ppb

Weight: <None>
Min Conc: <None>

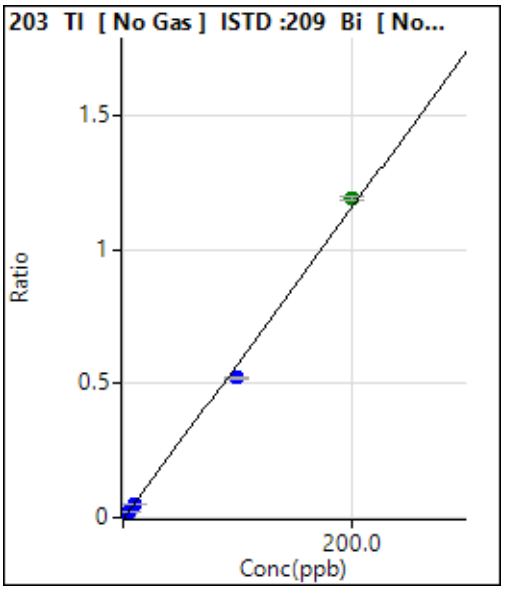


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	236.68	0.0001	P	42.3	
2	☐	2.000	2.321	8396.23	0.0043	P	1.6	16.0
3	☐	5.000	4.846	16904.60	0.0087	P	0.8	-3.1
4	☐	10.000	9.752	33680.76	0.0175	P	0.9	-2.5
5	☐	100.000	100.007	338844.25	0.1780	P	1.2	0.0
6	☐	200.000	200.009	670622.12	0.3559	P	0.2	0.0

y = 0.0018 * x + 1.2405E-004
R = 1.0000
DL = 0.08845 ppb
BEC = 0.06974 ppb

Weight: <None>
Min Conc: <None>

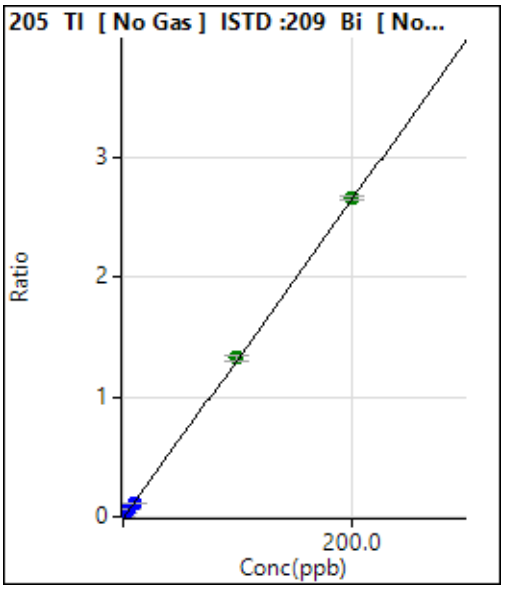
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	100.00	0.0001	P	33.3	
2	☐	2.000	2.122	22013.05	0.0124	P	2.1	6.1
3	☐	5.000	4.223	44268.64	0.0246	P	3.0	-15.5
4	☐	10.000	8.605	88515.67	0.0501	P	0.9	-13.9
5	☐	100.000	89.799	902115.92	0.5220	P	1.7	-10.2
6	☐	200.000	205.189	1988286.27	1.1927	A	1.2	2.6

y = 0.0058 * x + 5.7442E-005
R = 0.9982
DL = 0.009886 ppb
BEC = 0.009883 ppb

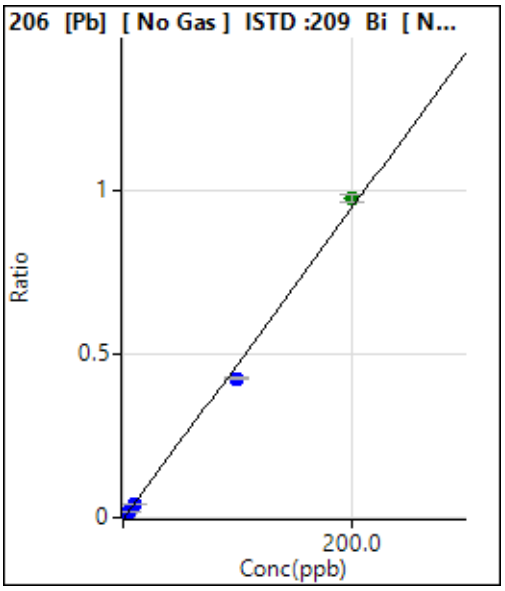
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	253.35	0.0001	P	66.0	
2	☐	2.000	2.195	52008.51	0.0293	P	1.2	9.7
3	☐	5.000	4.446	106471.84	0.0592	P	2.4	-11.1
4	☐	10.000	8.930	209823.37	0.1187	P	0.5	-10.7
5	☐	100.000	99.580	2284433.87	1.3221	A	3.8	-0.4
6	☐	200.000	200.276	4431918.99	2.6589	A	1.0	0.1

y = 0.0133 * x + 1.4518E-004
R = 1.0000
DL = 0.02165 ppb
BEC = 0.01094 ppb

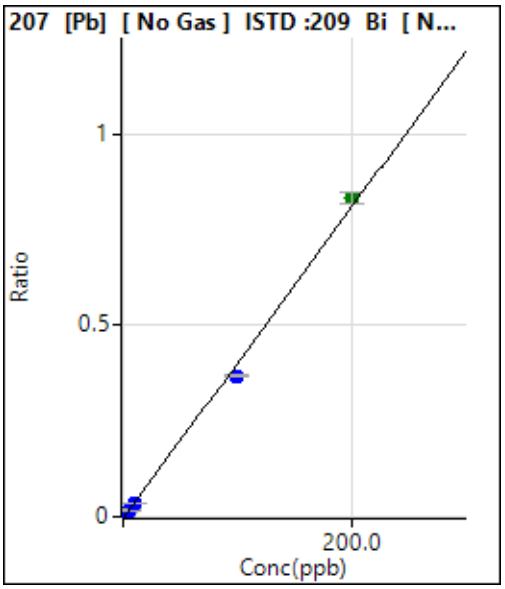
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	203.34	0.0001	P	15.2	
2	☐	2.000	2.153	18377.18	0.0103	P	2.9	7.7
3	☐	5.000	4.241	36470.44	0.0203	P	0.7	-15.2
4	☐	10.000	8.579	72259.18	0.0409	P	1.9	-14.2
5	☐	100.000	89.463	734674.78	0.4251	P	1.6	-10.5
6	☐	200.000	205.357	1626029.51	0.9757	A	2.3	2.7

y = 0.0048 * x + 1.1723E-004
R = 0.9981
DL = 0.01127 ppb
BEC = 0.02468 ppb

Weight: <None>
Min Conc: <None>

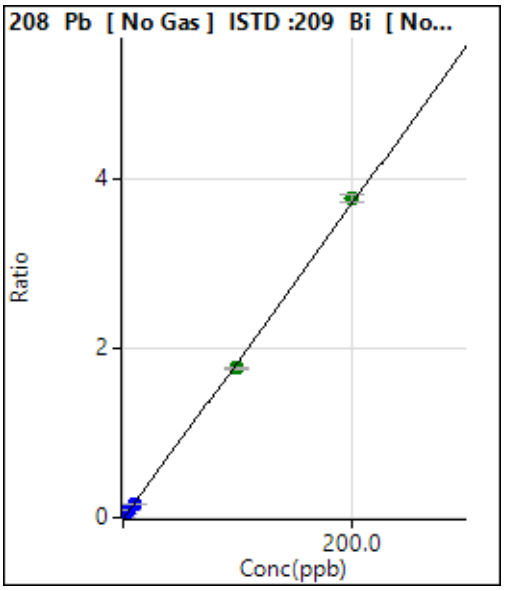


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	153.34	0.0001	P	40.0	
2	☐	2.000	2.129	15546.64	0.0088	P	4.9	6.4
3	☐	5.000	4.284	31536.99	0.0175	P	3.2	-14.3
4	☐	10.000	8.754	63139.75	0.0357	P	0.3	-12.5
5	☐	100.000	90.465	636464.52	0.3683	P	1.3	-9.5
6	☐	200.000	204.846	1389620.34	0.8338	A	4.0	2.4

y = 0.0041 * x + 8.7793E-005
R = 0.9985
DL = 0.0259 ppb
BEC = 0.02157 ppb

Weight: <None>
Min Conc: <None>

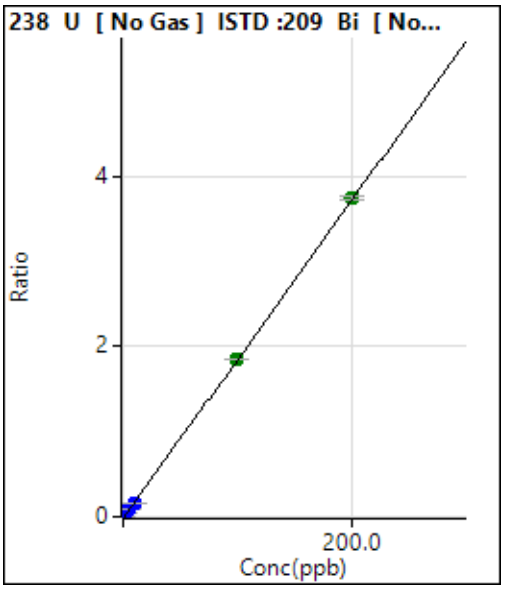
Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	736.69	0.0004	P	19.1	
2	☐	2.000	2.138	71260.05	0.0401	P	1.9	6.9
3	☐	5.000	4.355	146252.66	0.0813	P	1.7	-12.9
4	☐	10.000	8.796	289429.19	0.1637	P	0.4	-12.0
5	☐	100.000	94.672	3038582.14	1.7581	A	1.0	-5.3
6	☐	200.000	202.739	6274227.82	3.7645	A	2.0	1.4

y = 0.0186 * x + 4.2356E-004
R = 0.9995
DL = 0.01307 ppb
BEC = 0.02281 ppb

Weight: <None>
Min Conc: <None>

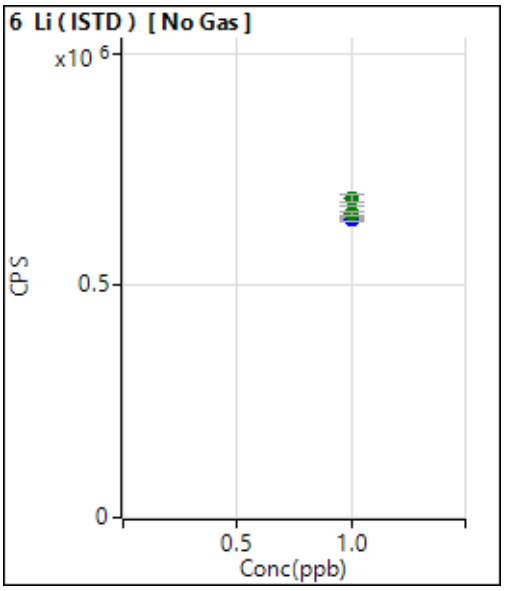


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	173.34	0.0001	P	47.1	
2	☐	2.000	2.198	73111.03	0.0412	P	0.5	9.9
3	☐	5.000	4.391	147784.51	0.0821	P	1.9	-12.2
4	☐	10.000	8.988	296937.60	0.1680	P	1.0	-10.1
5	☐	100.000	99.019	3196735.89	1.8496	A	0.7	-1.0
6	☐	200.000	200.554	6243705.95	3.7461	A	1.4	0.3

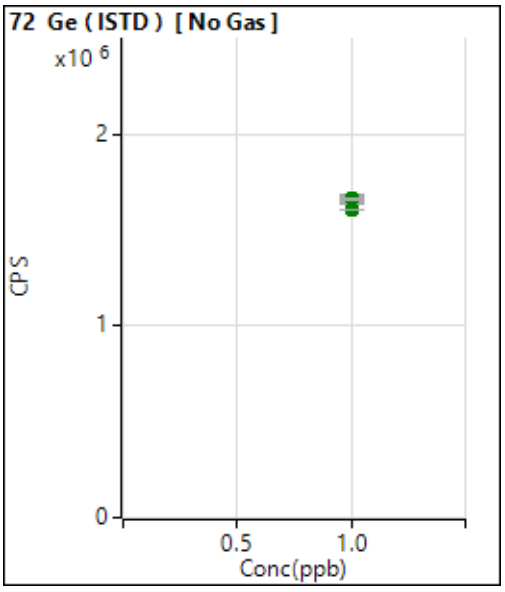
y = 0.0187 * x + 9.9495E-005
R = 1.0000
DL = 0.007528 ppb
BEC = 0.005327 ppb

Weight: <None>
Min Conc: <None>

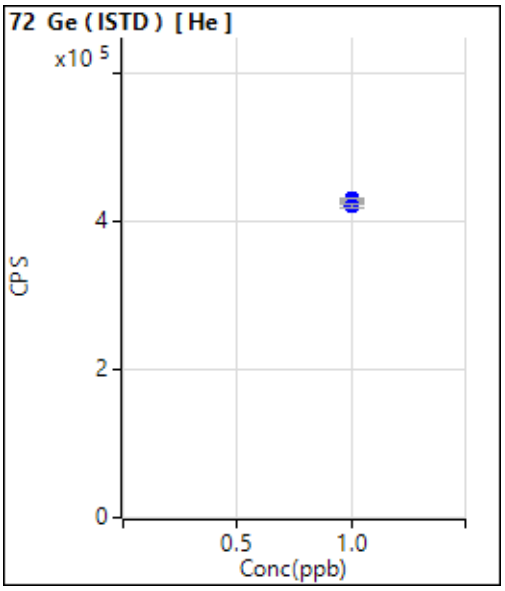
Calibration for 143_ICV.d



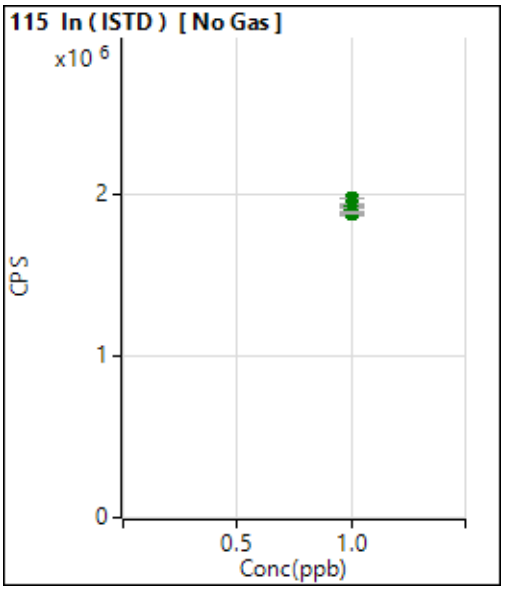
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		654203.84		M	5.1	
2	☐	1.000		642756.72		P	0.5	
3	☐	1.000		646519.35		P	0.8	
4	☐	1.000		642042.68		P	1.1	
5	☐	1.000		687374.41		A	2.1	
6	☐	1.000		654294.39		A	1.0	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1641029.93		A	0.9	
2	☐	1.000		1646033.05		A	0.9	
3	☐	1.000		1663363.15		A	1.6	
4	☐	1.000		1664939.98		A	2.0	
5	☐	1.000		1661534.92		A	0.3	
6	☐	1.000		1605769.19		A	0.1	

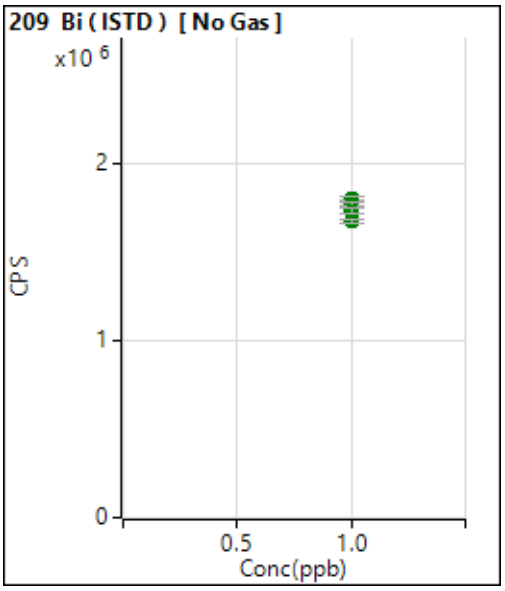


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		428589.26		P	0.9	
2	☐	1.000		429817.79		P	0.7	
3	☐	1.000		431068.07		P	0.6	
4	☐	1.000		429568.69		P	0.2	
5	☐	1.000		429476.35		P	0.9	
6	☐	1.000		421104.65		P	0.9	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1892968.90		A	3.1	
2	☐	1.000		1974579.56		A	0.4	
3	☐	1.000		1933270.49		A	0.6	
4	☐	1.000		1927907.23		A	1.2	
5	☐	1.000		1903731.32		A	1.2	
6	☐	1.000		1884405.19		A	0.5	

Calibration for 143_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1736706.69		A	2.1	
2	☐	1.000		1776310.76		A	0.3	
3	☐	1.000		1799894.45		A	1.6	
4	☐	1.000		1767785.81		A	0.9	
5	☐	1.000		1728457.37		A	1.4	
6	☐	1.000		1666933.10		A	1.4	

Sample Report

Sample Table

Sample Name	LLCCV2
Data File Name	144LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:23:50-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	136CALB.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	2.526	2.526	3.06	57822	0.00	2	
Be	9	1	No Gas	2.493	2.493	3.53	5413	0.05	2	
V	51	2	He	2.309	2.309	3.25	10255	0.02	2	
Cr	52	2	He	2.454	2.454	1.80	13030	0.02	2	
Fe	56	2	He	266.315	266.315	1.01	1213664	0.02	200	NewName Main CR1 Failed
Se	78	2	He	2.835	2.835	5.27	357	0.79	2	NewName Main CR1 Failed
As	75	2	He	2.294	2.294	3.17	1641	0.14	2	
Ca	44	2	He	303.272	303.272	4.35	7949	3.82	200	NewName Main CR1 Failed
Na	23	2	He	216.873	216.873	1.32	276313	0.08	200	
Mg	24	2	He	237.836	237.836	0.95	99339	0.24	200	
K	39	2	He	250.613	250.613	0.36	181470	0.14	200	
Mn	55	2	He	2.666	2.666	3.04	8726	0.03	2	NewName Main CR1 Failed
Co	59	2	He	2.481	2.481	1.76	17895	0.01	2	
Ni	60	2	He	2.479	2.479	1.67	5004	0.05	2	
Cu	63	2	He	2.551	2.551	1.36	13944	0.02	2	
Zn	66	2	He	3.921	3.921	6.60	4444	0.09	2	NewName Main CR1 Failed
Al	27	2	He	2.692	2.692	13.91	1080	0.25	2	NewName Main CR1 Failed
B	11	1	No Gas	28.283	28.283	7.50	40403	0.07	10	NewName Main CR1 Failed
Al	27	1	No Gas	2.505	2.505	6.68	55486	0.00	2	
Si	28	1	No Gas	14.846	14.846	13.33	332556	0.00	10	NewName Main CR1 Failed
Ag	107	1	No Gas	2.249	2.249	1.60	29624	0.01	2	
Cd	111	1	No Gas	2.516	2.516	5.94	6092	0.04	2	
Sr	88	1	No Gas	2.241	2.241	7.66	58098	0.00	2	
Mo	95	1	No Gas	2.340	2.340	5.21	10664	0.02	2	
Sn	118	1	No Gas	2.246	2.246	2.44	18877	0.01	2	
Sb	121	1	No Gas	2.254	2.254	2.91	25291	0.01	2	
Ba	137	1	No Gas	2.364	2.364	6.16	8473	0.03	2	
Tl	205	1	No Gas	2.265	2.265	0.38	52769	0.00	2	
Tl	203	1	No Gas	2.221	2.221	4.20	22641	0.01	2	
Pb	208	1	No Gas	2.245	2.245	1.33	73516	0.00	2	
U	238	1	No Gas	2.273	2.273	2.16	74295	0.00	2	
Ca	43	2	He	302.141	302.141	13.79	460	65.68	200	NewName Main CR1 Failed
Sb	121	2	He	2.484	2.484	0.74	12383	0.02	2	
Ti	47	2	He	2.481	2.481	21.65	363	0.68	200	
Cu	63	1	No Gas	2.312	2.312	2.52	24756	0.01	2	
Se	82	1	No Gas	1.912	1.912	140.85	124	1.54	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	644154	0.17	654204	98.46	70	120	
Ge	72	2	He	428191	0.46	428589	99.91	70	120	
Ge	72	1	No Gas	1669306	1.61	1641030	101.72	70	120	
In	115	1	No Gas	1956859	0.62	1892969	103.38	70	120	
Bi	209	1	No Gas	1746277	0.55	1736707	100.55	70	120	

Sample Report

Sample Table

Sample Name	LLCCV5
Data File Name	145LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:25:54-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	136CALB.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	5.031	5.031	1.79	79143	0.01	5	
Be	9	1	No Gas	5.115	5.115	2.31	10938	0.05	5	
V	51	2	He	4.860	4.860	0.51	20279	0.02	5	
Cr	52	2	He	4.999	4.999	2.76	24796	0.02	5	
Fe	56	2	He	523.524	523.524	1.16	2357167	0.02	500	
Se	78	2	He	5.246	5.246	10.44	490	1.07	5	
As	75	2	He	5.073	5.073	4.03	3540	0.14	5	
Ca	44	2	He	488.047	488.047	3.36	12169	4.01	500	
Na	23	2	He	447.828	447.828	2.44	447340	0.10	500	
Mg	24	2	He	490.999	490.999	1.28	202150	0.24	500	
K	39	2	He	480.045	480.045	1.69	286200	0.17	500	
Mn	55	2	He	4.770	4.770	4.69	15235	0.03	5	
Co	59	2	He	5.093	5.093	1.53	36452	0.01	5	
Ni	60	2	He	5.117	5.117	3.56	10004	0.05	5	
Cu	63	2	He	5.040	5.040	3.17	26773	0.02	5	
Zn	66	2	He	4.930	4.930	7.67	5361	0.09	5	
Al	27	2	He	5.387	5.387	8.67	1603	0.34	5	
B	11	1	No Gas	31.066	31.066	1.38	43350	0.07	25	
Al	27	1	No Gas	5.259	5.259	2.72	83285	0.01	5	
Si	28	1	No Gas	27.719	27.719	3.46	383798	0.01	25	
Ag	107	1	No Gas	4.685	4.685	1.03	60304	0.01	5	
Cd	111	1	No Gas	5.048	5.048	3.28	12009	0.04	5	
Sr	88	1	No Gas	4.677	4.677	1.49	112561	0.00	5	
Mo	95	1	No Gas	4.775	4.775	0.94	21327	0.02	5	
Sn	118	1	No Gas	4.547	4.547	1.26	36187	0.01	5	
Sb	121	1	No Gas	4.724	4.724	1.67	50374	0.01	5	
Ba	137	1	No Gas	4.983	4.983	1.92	17288	0.03	5	
Tl	205	1	No Gas	4.425	4.425	2.04	105776	0.00	5	
Tl	203	1	No Gas	4.286	4.286	2.85	44834	0.01	5	
Pb	208	1	No Gas	4.397	4.397	2.42	147360	0.00	5	
U	238	1	No Gas	4.406	4.406	1.64	147984	0.00	5	
Ca	43	2	He	472.401	472.401	16.65	690	68.46	500	
Sb	121	2	He	4.995	4.995	1.36	24196	0.02	5	
Ti	47	2	He	5.130	5.130	5.62	747	0.69	5	
Cu	63	1	No Gas	4.777	4.777	0.76	48142	0.01	5	
Se	82	1	No Gas	3.181	3.181	98.45	287	1.11	5	NewName2 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	636311	0.55	654204	97.26	70	120	
Ge	72	2	He	425365	1.25	428589	99.25	70	120	
Ge	72	1	No Gas	1619640	0.51	1641030	98.70	70	120	
In	115	1	No Gas	1923830	1.46	1892969	101.63	70	120	
Bi	209	1	No Gas	1796482	2.41	1736707	103.44	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICCB
Data File Name	146_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:27:57-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	136CALB.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	0.111	29.1	35583	1.0	0.5	
Be	9	1	No Gas	-0.004	-54.5	20	25.0	0.5	
V	51	2	He	-0.143	-8.1	478	10.2	2.5	
Cr	52	2	He	0.043	82.6	1707	9.7	2.5	
Fe	56	2	He	0.860	15.4	16927	3.5	100	
Se	78	2	He	0.401	98.5	217	10.7	1	
As	75	2	He	-0.013	-200.8	44	41.3	2.5	
Ca	44	2	He	-10.554	-13.3	630	5.5	100	
Na	23	2	He	-31.560	-9.2	87798	2.5	100	
Mg	24	2	He	-1.282	-14.5	940	8.0	100	
K	39	2	He	0.837	244.7	64373	0.8	100	
Mn	55	2	He	0.035	23.2	447	5.6	2.5	
Co	59	2	He	0.013	37.9	140	24.7	2.5	
Ni	60	2	He	-0.042	-48.6	163	23.2	2.5	
Cu	63	2	He	0.019	103.5	693	14.2	1	
Zn	66	2	He	-0.181	-35.3	550	11.1	2.5	
Al	27	2	He	-1.218	-34.2	300	27.3	5	
B	11	1	No Gas	6.036	3.7	12289	2.1	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-1.088	-2.7	15409	1.2	5	
Si	28	1	No Gas	-9.085	-9.5	208725	0.5	10	
Ag	107	1	No Gas	-0.002	-205.3	293	17.5	2.5	
Cd	111	1	No Gas	0.006	113.8	17	91.7	1	
Sr	88	1	No Gas	-0.197	-2.4	1620	5.9	2.5	
Mo	95	1	No Gas	0.005	105.4	93	27.0	2.5	
Sn	118	1	No Gas	0.084	40.9	1977	13.8	5	
Sb	121	1	No Gas	-0.004	-325.3	940	13.8	2.5	
Ba	137	1	No Gas	0.010	110.6	270	12.8	2.5	
Tl	205	1	No Gas	-0.001	-196.9	233	17.3	1	
Tl	203	1	No Gas	0.003	90.3	130	20.4	1	
Pb	208	1	No Gas	0.008	36.9	1017	9.5	2.5	
U	238	1	No Gas	0.001	173.3	193	15.8	2.5	
Ca	43	2	He	-9.275	-137.9	30	57.7	100	
Sb	121	2	He	-0.027	-30.8	407	9.9	2.5	
Ti	47	2	He	0.000	#DIV/0!	0	#DIV/0!	2.5	
Se	82	1	No Gas	-0.203	-500.8	-158	-85.8	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	630952	0.60	654204	96.45	70	120	
Ge	72	2	He	421745	0.68	428589	98.40	70	120	
Ge	72	1	No Gas	1615908	1.54	1641030	98.47	70	120	
In	115	1	No Gas	1909458	1.03	1892969	100.87	70	120	
Bi	209	1	No Gas	1755681	1.21	1736707	101.09	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	148_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:32:05-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	136CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	106.314	2.365	969428	1.57	100	106.3	90	110	
Be	9	1	No Gas	105.197	1.427	224355	0.24	100	105.2	90	110	
V	51	2	He	100.024	0.271	402108	0.34	100	100.0	90	110	
Cr	52	2	He	100.691	0.429	476421	0.29	100	100.7	90	110	
Fe	56	2	He	10012.533	0.543	45435236	0.37	10000	100.1	90	110	
Se	78	2	He	102.088	2.241	6001	2.08	100	102.1	90	110	
As	75	2	He	101.078	0.966	70427	1.26	100	101.1	90	110	
Ca	44	2	He	9969.889	0.279	234612	0.27	10000	99.7	90	110	
Na	23	2	He	9804.360	0.287	7548743	0.17	10000	98.0	90	110	
Mg	24	2	He	9960.924	0.840	4126734	0.93	10000	99.6	90	110	
K	39	2	He	10014.514	0.340	4751000	0.69	10000	100.1	90	110	
Mn	55	2	He	100.542	0.316	318570	0.36	100	100.5	90	110	
Co	59	2	He	102.030	0.488	739045	0.78	100	102.0	90	110	
Ni	60	2	He	100.694	0.543	194766	0.92	100	100.7	90	110	
Cu	63	2	He	100.446	0.268	529219	0.61	100	100.4	90	110	
Zn	66	2	He	100.424	1.574	96488	1.70	100	100.4	90	110	
Al	27	2	He	104.547	3.018	21413	2.84	100	104.5	90	110	
B	11	1	No Gas	477.274	0.847	595227	1.81	500	95.5	90	110	
Al	27	1	No Gas	104.190	1.697	1165709	0.35	100	104.2	90	110	
Si	28	1	No Gas	504.401	0.108	2703082	1.32	5000	10.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	102.193	1.257	1291363	0.97	100	102.2	90	110	
Cd	111	1	No Gas	102.499	0.950	240573	0.10	100	102.5	90	110	
Sr	88	1	No Gas	102.333	2.085	2303656	1.24	100	102.3	90	110	
Mo	95	1	No Gas	99.456	1.104	436852	0.08	100	99.5	90	110	
Sn	118	1	No Gas	92.482	0.278	700343	0.87	100	92.5	90	110	
Sb	121	1	No Gas	91.369	1.249	977310	0.37	100	91.4	90	110	
Ba	137	1	No Gas	100.512	0.559	339592	1.30	100	100.5	90	110	
Tl	205	1	No Gas	100.296	2.009	2317544	0.98	100	100.3	90	110	
Tl	203	1	No Gas	89.564	0.909	906184	0.70	100	89.6	90	110	CCV Main CR1-2 Failed
Pb	208	1	No Gas	94.521	1.330	3055046	0.43	100	94.5	90	110	
U	238	1	No Gas	98.259	1.461	3194361	0.44	100	98.3	90	110	
Ca	43	2	He	9706.116	2.498	13524	2.73	10000	97.1	90	110	
Sb	121	2	He	99.515	0.447	478056	0.83	100	99.5	90	110	
Ti	47	2	He	99.115	0.945	14615	1.33	100	99.1	90	110	
Cu	63	1	No Gas	94.348	1.699	944826	0.40	100	94.3	90	110	
Se	82	1	No Gas	98.868	3.128	13193	4.00	100	98.9	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	636326	1.47	654204	97.27	70	120	
Ge	72	2	He	430984	0.39	428589	100.56	70	120	
Ge	72	1	No Gas	1655368	1.30	1641030	100.87	70	120	
In	115	1	No Gas	1898151	1.04	1892969	100.27	70	120	
Bi	209	1	No Gas	1740610	1.09	1736707	100.22	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	149_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:34:04-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	136CALB.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	0.165	18.6	35939	0.5	0.5	
Be	9	1	No Gas	0.020	42.0	70	24.7	0.5	
V	51	2	He	-0.140	-17.9	492	21.3	2.5	
Cr	52	2	He	0.075	41.7	1867	9.0	2.5	
Fe	56	2	He	2.598	84.2	24826	40.7	100	
Se	78	2	He	0.253	36.9	209	3.6	2	
As	75	2	He	0.017	66.8	66	12.8	2.5	
Ca	44	2	He	-5.237	-169.2	757	28.2	100	
Na	23	2	He	-19.184	-57.2	97474	9.5	100	
Mg	24	2	He	0.760	220.4	1780	39.6	100	
K	39	2	He	2.527	68.9	65439	1.4	100	
Mn	55	2	He	0.047	117.3	487	36.6	2.5	
Co	59	2	He	0.034	64.6	290	55.5	2.5	
Ni	60	2	He	-0.018	-98.3	210	17.2	2.5	
Cu	63	2	He	0.008	118.1	643	9.1	2	
Zn	66	2	He	-0.105	-54.9	623	9.8	2.5	
Al	27	2	He	-0.680	-33.0	407	9.9	5	
B	11	1	No Gas	13.020	12.2	20786	9.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.634	-6.9	20455	1.4	5	
Si	28	1	No Gas	-8.684	-12.4	212795	0.7	10	
Ag	107	1	No Gas	0.012	10.2	460	2.2	2.5	
Cd	111	1	No Gas	0.014	69.0	37	63.0	1	
Sr	88	1	No Gas	-0.167	-3.5	2277	5.1	2.5	
Mo	95	1	No Gas	0.027	45.3	187	27.5	2.5	
Sn	118	1	No Gas	0.096	37.4	2047	12.7	5	
Sb	121	1	No Gas	0.040	12.3	1407	4.3	2.5	
Ba	137	1	No Gas	0.021	40.9	303	10.6	2.5	
Tl	205	1	No Gas	0.012	19.8	540	11.3	1	
Tl	203	1	No Gas	0.018	32.8	287	20.1	1	
Pb	208	1	No Gas	0.025	10.5	1563	6.3	2.5	
U	238	1	No Gas	0.009	23.5	483	13.8	2.5	
Ca	43	2	He	7.622	140.7	53	28.6	100	
Sb	121	2	He	0.022	86.4	640	15.4	2.5	
Ti	47	2	He	0.161	25.4	23	24.7	2.5	
Cu	63	1	No Gas	-0.032	-41.7	1097	10.5	2.5	
Se	82	1	No Gas	-0.768	-142.2	-233	-60.3	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	628878	0.27	654204	96.13	70	120	
Ge	72	2	He	423620	1.11	428589	98.84	70	120	
Ge	72	1	No Gas	1632700	1.76	1641030	99.49	70	120	
In	115	1	No Gas	1886230	1.31	1892969	99.64	70	120	
Bi	209	1	No Gas	1771401	1.27	1736707	102.00	70	120	

Sample Report

Sample Table

Sample Name	MBLK-182618
Data File Name	150SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:36:08-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 182618
ISTD Ref FileName	136CALB.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	0.109	0.109	82.81	37722	0.00	2000	
Be	9	1	No Gas	-0.003	-0.003	-90.06	25	-0.01	2000	
V	51	2	He	-0.149	-0.149	-3.63	484	-0.03	2000	
Cr	52	2	He	-0.122	-0.122	-14.01	1007	-0.01	2000	
Fe	56	2	He	1.468	1.468	6.97	20867	0.01	200000	
Se	78	2	He	0.340	0.340	187.10	227	0.15	2000	
As	75	2	He	0.010	0.010	139.15	64	0.02	2000	
Ca	44	2	He	4.633	4.633	44.66	1040	0.45	200000	
Na	23	2	He	-33.962	-33.962	-1.96	91456	-0.04	200000	
Mg	24	2	He	14.080	14.080	6.44	7619	0.18	200000	
K	39	2	He	-5.914	-5.914	-24.14	65164	-0.01	200000	
Mn	55	2	He	0.056	0.056	77.46	543	0.01	2000	
Co	59	2	He	0.008	0.008	43.60	110	0.01	2000	
Ni	60	2	He	0.002	0.002	297.20	263	0.00	2000	
Cu	63	2	He	0.136	0.136	9.75	1377	0.01	2000	
Zn	66	2	He	-0.038	-0.038	-102.59	727	-0.01	2000	
Al	27	2	He	7.024	7.024	7.72	2030	0.35	2000	
B	11	1	No Gas	4.858	4.858	1.28	11501	0.04	2000	
Al	27	1	No Gas	6.114	6.114	2.81	99956	0.01	2000	
Si	28	1	No Gas	76.938	76.938	1.45	667559	0.01	2000	
Ag	107	1	No Gas	-0.005	-0.005	-129.50	277	0.00	2000	
Cd	111	1	No Gas	0.013	0.013	62.38	37	0.04	2000	
Sr	88	1	No Gas	-0.142	-0.142	-7.92	3054	0.00	2000	
Mo	95	1	No Gas	0.009	0.009	27.58	117	0.01	2000	
Sn	118	1	No Gas	0.048	0.048	17.26	1817	0.00	2000	
Sb	121	1	No Gas	0.021	0.021	49.11	1293	0.00	2000	
Ba	137	1	No Gas	0.171	0.171	9.87	870	0.02	2000	
Tl	205	1	No Gas	0.000	0.000	7241.03	277	0.00	2000	
Tl	203	1	No Gas	0.003	0.003	146.19	140	0.00	2000	
Pb	208	1	No Gas	0.023	0.023	3.67	1597	0.00	2000	
U	238	1	No Gas	0.005	0.005	45.05	363	0.00	2000	
Ca	43	2	He	-8.304	-8.304	-48.10	33	-24.91	200000	
Sb	121	2	He	0.006	0.006	434.53	593	0.00	2000	
Ti	47	2	He	0.195	0.195	66.36	30	0.65	2000	
Cu	63	1	No Gas	0.088	0.088	25.53	2450	0.00	2000	
Zn	66	1	No Gas	-0.022	-0.022	-86.28	1850	0.00	2000	
Se	82	1	No Gas	-2.390	-2.390	-41.19	-484	0.49	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	669149	0.71	654204	102.28	70	120	
Ge	72	2	He	448419	0.46	428589	104.63	70	120	
Ge	72	1	No Gas	1751764	1.43	1641030	106.75	70	120	
In	115	1	No Gas	2034916	0.41	1892969	107.50	70	120	

Sample Report

Bi	209	1	No Gas	1895108	0.35	1736707	109.12	70	120	

Sample Report

Sample Table

Sample Name	LCS-182618
Data File Name	151SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:38:12-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 182618
ISTD Ref FileName	136CALB.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	0.175	0.175	14.41	37682	0.00	2000	
Be	9	1	No Gas	58.582	58.582	0.60	129178	0.05	2000	
V	51	2	He	54.017	54.017	0.53	228671	0.02	2000	
Cr	52	2	He	53.843	53.843	1.20	268426	0.02	2000	
Fe	56	2	He	5326.354	5326.354	0.43	25401733	0.02	200000	
Se	78	2	He	57.531	57.531	0.54	3645	1.58	2000	
As	75	2	He	55.761	55.761	1.12	40846	0.14	2000	
Ca	44	2	He	5107.108	5107.108	1.99	126729	4.03	200000	
Na	23	2	He	5231.671	5231.671	0.39	4287904	0.12	200000	
Mg	24	2	He	5437.367	5437.367	0.80	2367517	0.23	200000	
K	39	2	He	5401.931	5401.931	1.27	2724226	0.20	200000	
Mn	55	2	He	54.797	54.797	0.41	182590	0.03	2000	
Co	59	2	He	55.531	55.531	0.69	422633	0.01	2000	
Ni	60	2	He	54.376	54.376	1.08	110624	0.05	2000	
Cu	63	2	He	55.204	55.204	0.81	305880	0.02	2000	
Zn	66	2	He	56.675	56.675	2.08	57549	0.10	2000	
Al	27	2	He	109.609	109.609	0.82	23560	0.47	2000	
B	11	1	No Gas	3.256	3.256	5.40	9258	0.04	2000	
Al	27	1	No Gas	113.283	113.283	0.20	1304366	0.01	2000	
Si	28	1	No Gas	107.104	107.104	3.01	801153	0.01	2000	
Ag	107	1	No Gas	44.471	44.471	2.02	597156	0.01	2000	
Cd	111	1	No Gas	55.906	55.906	2.13	139394	0.04	2000	
Sr	88	1	No Gas	-0.080	-0.080	-93.66	4504	0.00	2000	
Mo	95	1	No Gas	52.381	52.381	1.76	244463	0.02	2000	
Sn	118	1	No Gas	0.041	0.041	2.60	1743	0.00	2000	
Sb	121	1	No Gas	50.461	50.461	0.64	556954	0.01	2000	
Ba	137	1	No Gas	54.037	54.037	1.60	194060	0.03	2000	
Tl	205	1	No Gas	51.715	51.715	4.02	1270979	0.00	2000	
Tl	203	1	No Gas	47.934	47.934	1.86	515796	0.01	2000	
Pb	208	1	No Gas	48.923	48.923	1.64	1681961	0.00	2000	
U	238	1	No Gas	0.010	0.010	110.45	530	0.00	2000	
Ca	43	2	He	4899.887	4899.887	1.79	7195	68.10	200000	
Sb	121	2	He	53.240	53.240	0.15	268981	0.02	2000	
Ti	47	2	He	54.002	54.002	4.98	8366	0.65	2000	
Cu	63	1	No Gas	53.391	53.391	0.43	551940	0.01	2000	
Zn	66	1	No Gas	57.370	57.370	1.14	154711	0.04	2000	
Se	82	1	No Gas	59.847	59.847	7.58	8176	0.73	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	657753	0.25	654204	100.54	70	120	
Ge	72	2	He	452824	0.07	428589	105.65	70	120	
Ge	72	1	No Gas	1706582	0.40	1641030	103.99	70	120	
In	115	1	No Gas	2016761	1.71	1892969	106.54	70	120	

Sample Report

Bi	209	1	No Gas	1851222	1.65	1736707	106.59	70	120	

Sample Report

Sample Table

Sample Name	HS22080472-01SD
Data File Name	153SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:42:18-05:00
Sample Type	Sample
Dilution	25
Comment	DOD TW 182618
ISTD Ref FileName	136CALB.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	1.313	32.827	6.93	47115	0.00	2000	
Be	9	1	No Gas	-0.004	-0.111	-138.28	20	-0.02	2000	
V	51	2	He	-0.106	-2.652	-25.59	648	-0.02	2000	
Cr	52	2	He	0.001	0.033	837.49	1577	0.00	2000	
Fe	56	2	He	4.616	115.411	27.92	34915	0.01	200000	
Se	78	2	He	-0.036	-0.898	-586.61	200	-0.02	2000	
As	75	2	He	0.033	0.822	95.51	79	0.04	2000	
Ca	44	2	He	687.482	17187.041	2.91	17308	3.97	200000	
Na	23	2	He	30512.392	762809.809	0.82	23666608	0.13	200000	
Mg	24	2	He	691.552	17288.804	0.96	293015	0.24	200000	
K	39	2	He	91.287	2282.185	4.10	110029	0.08	200000	
Mn	55	2	He	2.938	73.438	1.85	9814	0.03	2000	
Co	59	2	He	0.031	0.768	51.67	273	0.01	2000	
Ni	60	2	He	-0.052	-1.303	-27.46	150	-0.03	2000	
Cu	63	2	He	0.131	3.272	35.64	1320	0.01	2000	
Zn	66	2	He	0.013	0.325	762.10	760	0.00	2000	
Al	27	2	He	-0.131	-3.284	-407.94	533	-0.02	2000	
B	11	1	No Gas	3.190	79.739	10.10	8998	0.04	2000	
Al	27	1	No Gas	-0.124	-3.090	-207.44	26388	0.00	2000	
Si	28	1	No Gas	766.720	19167.990	2.14	3982212	0.02	2000	
Ag	107	1	No Gas	-0.005	-0.129	-36.72	257	0.00	2000	
Cd	111	1	No Gas	0.004	0.105	115.26	13	0.03	2000	
Sr	88	1	No Gas	15.825	395.622	0.81	368159	0.00	2000	
Mo	95	1	No Gas	0.010	0.257	68.21	117	0.01	2000	
Sn	118	1	No Gas	0.022	0.541	112.86	1523	0.00	2000	
Sb	121	1	No Gas	-0.010	-0.248	-167.81	897	0.00	2000	
Ba	137	1	No Gas	13.729	343.229	1.31	47461	0.03	2000	
Tl	205	1	No Gas	0.004	0.093	32.20	340	0.00	2000	
Tl	203	1	No Gas	0.000	-0.009	-579.82	97	0.00	2000	
Pb	208	1	No Gas	0.019	0.465	9.91	1343	0.00	2000	
U	238	1	No Gas	0.004	0.095	88.53	297	0.00	2000	
Ca	43	2	He	676.580	16914.505	11.03	1000	67.65	200000	
Sb	121	2	He	-0.017	-0.419	-166.74	470	0.00	2000	
Ti	47	2	He	0.000	0.000	#DIV/0!	0	#DIV/0!	2000	
Cu	63	1	No Gas	0.225	5.622	14.90	3694	0.01	2000	
Zn	66	1	No Gas	0.076	1.890	101.59	2007	0.00	2000	
Se	82	1	No Gas	-0.985	-24.626	-166.69	-267	0.37	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	645323	0.77	654204	98.64	70	120	
Ge	72	2	He	438679	1.12	428589	102.35	70	120	
Ge	72	1	No Gas	1658731	1.10	1641030	101.08	70	120	
In	115	1	No Gas	1933841	1.28	1892969	102.16	70	120	
Bi	209	1	No Gas	1747581	0.90	1736707	100.63	70	120	

Sample Report

Sample Table

Sample Name	HS22080472-01PDS
Data File Name	156SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:48:30-05:00
Sample Type	Sample
Dilution	5
Comment	DOD TW 182618
ISTD Ref FileName	136CALB.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	5.875	29.375	0.50	89006	0.01	2000	
Be	9	1	No Gas	109.759	548.793	0.17	240718	0.05	2000	
V	51	2	He	105.806	529.031	0.92	435719	0.02	2000	
Cr	52	2	He	104.395	521.973	0.83	506015	0.02	2000	
Fe	56	2	He	10086.894	50434.471	1.23	46895036	0.02	200000	
Se	78	2	He	106.836	534.182	1.65	6425	1.66	2000	
As	75	2	He	107.702	538.512	0.25	76881	0.14	2000	
Ca	44	2	He	13567.851	67839.254	1.21	326775	4.15	200000	
Na	23	2	He	162305.213	811526.066	1.30	126215605	0.13	200000	
Mg	24	2	He	13592.036	67960.180	1.04	5768559	0.24	200000	
K	39	2	He	10745.284	53726.418	1.36	5217610	0.21	200000	
Mn	55	2	He	119.052	595.258	0.62	386419	0.03	2000	
Co	59	2	He	104.702	523.509	1.07	776982	0.01	2000	
Ni	60	2	He	102.827	514.133	0.62	203771	0.05	2000	
Cu	63	2	He	102.882	514.409	0.57	555340	0.02	2000	
Zn	66	2	He	105.911	529.555	0.60	104215	0.10	2000	
Al	27	2	He	103.770	518.848	2.10	21781	0.48	2000	
B	11	1	No Gas	8.489	42.447	2.87	15864	0.05	2000	
Al	27	1	No Gas	104.694	523.471	0.79	1171939	0.01	2000	
Si	28	1	No Gas	4025.298	20126.488	2.12	19778240	0.02	2000	>LDR
Ag	107	1	No Gas	105.184	525.921	0.75	1315278	0.01	2000	
Cd	111	1	No Gas	107.695	538.475	0.84	250128	0.04	2000	
Sr	88	1	No Gas	88.087	440.437	1.17	1963324	0.00	2000	
Mo	95	1	No Gas	105.522	527.611	1.22	458648	0.02	2000	
Sn	118	1	No Gas	0.034	0.168	21.63	1570	0.00	2000	
Sb	121	1	No Gas	94.647	473.237	0.87	1012894	0.01	2000	
Ba	137	1	No Gas	179.797	898.983	0.31	600909	0.03	2000	
Tl	205	1	No Gas	105.267	526.333	2.53	2327332	0.00	2000	
Tl	203	1	No Gas	94.326	471.632	1.77	913096	0.01	2000	
Pb	208	1	No Gas	102.066	510.330	2.06	3156235	0.00	2000	
U	238	1	No Gas	0.007	0.034	30.01	377	0.00	2000	
Ca	43	2	He	13473.346	67366.731	4.42	19214	70.12	200000	
Sb	121	2	He	100.657	503.285	1.51	495368	0.02	2000	
Ti	47	2	He	103.057	515.285	2.55	15569	0.66	2000	
Cu	63	1	No Gas	100.622	503.108	0.85	1008148	0.01	2000	
Zn	66	1	No Gas	106.848	534.239	0.94	278051	0.04	2000	
Se	82	1	No Gas	107.140	535.698	3.89	14311	0.75	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	654276	0.55	654204	100.01	70	120	
Ge	72	2	He	441576	0.92	428589	103.03	70	120	
Ge	72	1	No Gas	1656179	1.00	1641030	100.92	70	120	
In	115	1	No Gas	1878252	0.58	1892969	99.22	70	120	
Bi	209	1	No Gas	1665569	1.59	1736707	95.90	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	157_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:50:32-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	136CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	96.973	2.724	955299	2.02	100	97.0	90	110	
Be	9	1	No Gas	97.919	1.535	224836	0.63	100	97.9	90	110	
V	51	2	He	99.892	0.773	406065	0.29	100	99.9	90	110	
Cr	52	2	He	99.953	0.181	478240	0.57	100	100.0	90	110	
Fe	56	2	He	9943.807	1.214	45626746	0.49	10000	99.4	90	110	
Se	78	2	He	103.482	3.588	6149	3.49	100	103.5	90	110	
As	75	2	He	101.930	1.314	71812	1.10	100	101.9	90	110	
Ca	44	2	He	10032.644	0.689	238722	0.05	10000	100.3	90	110	
Na	23	2	He	9936.291	1.360	7734103	0.81	10000	99.4	90	110	
Mg	24	2	He	9932.814	1.575	4160876	0.86	10000	99.3	90	110	
K	39	2	He	10085.775	1.404	4837617	0.81	10000	100.9	90	110	
Mn	55	2	He	100.889	1.175	323235	0.59	100	100.9	90	110	
Co	59	2	He	101.588	1.003	744045	0.28	100	101.6	90	110	
Ni	60	2	He	100.647	0.809	196861	1.48	100	100.6	90	110	
Cu	63	2	He	100.468	0.336	535255	0.50	100	100.5	90	110	
Zn	66	2	He	101.277	1.256	98388	1.14	100	101.3	90	110	
Al	27	2	He	106.255	4.097	21994	3.31	100	106.3	90	110	
B	11	1	No Gas	440.212	1.714	591442	1.87	500	88.0	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	105.644	3.040	1174911	2.43	100	105.6	90	110	
Si	28	1	No Gas	517.706	0.671	2751885	1.09	5000	10.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	102.490	1.720	1297137	0.50	100	102.5	90	110	
Cd	111	1	No Gas	101.480	1.402	238564	0.65	100	101.5	90	110	
Sr	88	1	No Gas	103.209	1.480	2327156	0.43	100	103.2	90	110	
Mo	95	1	No Gas	99.826	1.126	439201	0.79	100	99.8	90	110	
Sn	118	1	No Gas	92.407	1.992	700814	0.42	100	92.4	90	110	
Sb	121	1	No Gas	92.205	1.144	980712	1.01	100	92.2	90	110	
Ba	137	1	No Gas	101.274	1.510	342685	0.70	100	101.3	90	110	
Tl	205	1	No Gas	100.810	1.049	2280283	1.17	100	100.8	90	110	
Tl	203	1	No Gas	90.944	0.974	900636	0.62	100	90.9	90	110	
Pb	208	1	No Gas	95.416	0.726	3018742	0.83	100	95.4	90	110	
U	238	1	No Gas	98.777	1.270	3143236	0.75	100	98.8	90	110	
Ca	43	2	He	9953.199	2.013	14021	1.67	10000	99.5	90	110	
Sb	121	2	He	99.948	0.480	485495	0.30	100	99.9	90	110	
Ti	47	2	He	98.649	0.980	14708	0.56	100	98.6	90	110	
Cu	63	1	No Gas	95.600	1.120	951999	0.60	100	95.6	90	110	
Se	82	1	No Gas	102.650	6.558	13614	4.91	100	102.6	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	685131	2.09	654204	104.73	70	120	
Ge	72	2	He	435813	0.74	428589	101.69	70	120	
Ge	72	1	No Gas	1646095	1.69	1641030	100.31	70	120	
In	115	1	No Gas	1901332	1.56	1892969	100.44	70	120	
Bi	209	1	No Gas	1703670	0.64	1736707	98.10	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	158_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:52:31-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	136CALB.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	0.195	30.0	36671	0.9	0.5	
Be	9	1	No Gas	0.005	2.5	40	0.0	0.5	
V	51	2	He	-0.154	-6.4	447	8.6	2.5	
Cr	52	2	He	0.043	75.1	1747	9.5	2.5	
Fe	56	2	He	1.225	19.6	18951	6.5	100	
Se	78	2	He	-0.006	-5920.0	198	9.6	2	
As	75	2	He	0.009	311.9	61	32.9	2.5	
Ca	44	2	He	-10.844	-25.2	637	10.1	100	
Na	23	2	He	-10.896	-21.3	105348	1.8	100	
Mg	24	2	He	-0.508	-37.4	1280	5.5	100	
K	39	2	He	1.636	128.4	66129	0.8	100	
Mn	55	2	He	0.030	34.1	440	8.2	2.5	
Co	59	2	He	0.021	69.7	200	54.1	2.5	
Ni	60	2	He	-0.028	-141.0	193	38.8	2.5	
Cu	63	2	He	0.015	92.2	687	10.9	2	
Zn	66	2	He	0.023	375.2	757	11.5	2.5	
Al	27	2	He	-0.883	-12.3	373	5.6	5	
B	11	1	No Gas	11.168	16.1	18774	12.5	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.634	-8.7	20522	2.4	5	
Si	28	1	No Gas	-7.351	-12.1	219914	1.6	10	
Ag	107	1	No Gas	0.015	50.1	500	17.8	2.5	
Cd	111	1	No Gas	0.014	76.0	37	68.6	1	
Sr	88	1	No Gas	-0.194	-3.9	1660	9.5	2.5	
Mo	95	1	No Gas	0.011	46.2	117	17.8	2.5	
Sn	118	1	No Gas	0.090	7.0	2000	2.2	5	
Sb	121	1	No Gas	0.077	17.9	1804	7.5	2.5	
Ba	137	1	No Gas	-0.002	-934.8	227	29.4	2.5	
Tl	205	1	No Gas	0.010	33.7	490	17.8	1	
Tl	203	1	No Gas	0.012	31.4	217	17.5	1	
Pb	208	1	No Gas	0.026	12.3	1547	7.5	2.5	
U	238	1	No Gas	0.007	28.2	410	14.8	2.5	
Ca	43	2	He	-2.536	-288.2	40	25.0	100	
Sb	121	2	He	0.042	35.6	747	10.1	2.5	
Ti	47	2	He	0.090	86.6	13	86.6	2.5	
Cu	63	1	No Gas	-0.007	-173.0	1353	8.7	2.5	
Se	82	1	No Gas	0.752	144.2	-33	-437.1	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	637135	0.67	654204	97.39	70	120	
Ge	72	2	He	430802	0.83	428589	100.52	70	120	
Ge	72	1	No Gas	1637913	0.60	1641030	99.81	70	120	
In	115	1	No Gas	1886054	0.96	1892969	99.63	70	120	
Bi	209	1	No Gas	1721548	1.52	1736707	99.13	70	120	

Sample Report

Sample Table

Sample Name	HS22080522-03
Data File Name	161SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T20:58:42-05:00
Sample Type	Sample
Dilution	5
Comment	DOD TW 182618
ISTD Ref FileName	136CALB.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	80.066	400.330	3.96	798056	0.01	2000	
Be	9	1	No Gas	0.006	0.032	143.47	47	0.01	2000	
V	51	2	He	-0.143	-0.716	-4.44	497	-0.03	2000	
Cr	52	2	He	0.884	4.422	5.08	5811	0.02	2000	
Fe	56	2	He	44.354	221.772	0.63	218256	0.02	200000	
Se	78	2	He	0.476	2.379	60.37	229	0.21	2000	
As	75	2	He	0.130	0.650	19.85	148	0.09	2000	
Ca	44	2	He	6088.428	30442.142	1.37	146052	4.17	200000	
Na	23	2	He	98065.426	490327.128	0.46	75746649	0.13	200000	
Mg	24	2	He	2927.995	14639.973	1.99	1234606	0.24	200000	
K	39	2	He	21163.684	105818.420	1.52	10136046	0.21	200000	
Mn	55	2	He	3.957	19.786	1.47	13090	0.03	2000	
Co	59	2	He	0.066	0.332	18.26	537	0.01	2000	
Ni	60	2	He	0.663	3.317	14.49	1557	0.04	2000	
Cu	63	2	He	0.227	1.133	1.56	1833	0.01	2000	
Zn	66	2	He	0.698	3.488	8.45	1423	0.05	2000	
Al	27	2	He	2.800	14.000	30.47	1127	0.25	2000	
B	11	1	No Gas	131.922	659.609	1.75	181639	0.07	2000	
Al	27	1	No Gas	3.002	15.009	0.74	61091	0.00	2000	
Si	28	1	No Gas	1965.489	9827.445	0.87	9886912	0.02	2000	>LDR
Ag	107	1	No Gas	0.002	0.008	616.72	343	0.00	2000	
Cd	111	1	No Gas	0.028	0.140	29.41	70	0.04	2000	
Sr	88	1	No Gas	326.090	1630.448	0.99	7446770	0.00	2000	
Mo	95	1	No Gas	0.464	2.318	10.48	2140	0.02	2000	
Sn	118	1	No Gas	0.032	0.162	0.84	1603	0.00	2000	
Sb	121	1	No Gas	0.012	0.062	68.78	1147	0.00	2000	
Ba	137	1	No Gas	68.634	343.171	0.88	235688	0.03	2000	
Tl	205	1	No Gas	0.007	0.036	49.89	417	0.00	2000	
Tl	203	1	No Gas	0.010	0.049	77.99	197	0.00	2000	
Pb	208	1	No Gas	0.028	0.141	18.51	1633	0.00	2000	
U	238	1	No Gas	0.066	0.332	5.39	2314	0.00	2000	
Ca	43	2	He	6853.908	34269.538	1.82	9724	70.49	200000	
Sb	121	2	He	0.005	0.025	108.54	577	0.00	2000	
Ti	47	2	He	0.044	0.222	86.61	7	0.67	2000	
Cu	63	1	No Gas	0.674	3.372	3.10	8266	0.01	2000	
Zn	66	1	No Gas	0.547	2.737	6.35	3254	0.02	2000	
Se	82	1	No Gas	-1.709	-8.543	-111.93	-371	0.46	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	687838	2.90	654204	105.14	70	120	
Ge	72	2	He	438312	0.83	428589	102.27	70	120	
Ge	72	1	No Gas	1672546	1.13	1641030	101.92	70	120	
In	115	1	No Gas	1928714	0.67	1892969	101.89	70	120	

Sample Report

Bi	209	1	No Gas	1726647	2.05	1736707	99.42	70	120	

Sample Report

Sample Table

Sample Name	HS22080522-06
Data File Name	163SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T21:02:46-05:00
Sample Type	Sample
Dilution	5
Comment	DOD TW 182618
ISTD Ref FileName	136CALB.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	15.232	76.160	1.07	170595	0.01	2000	
Be	9	1	No Gas	0.016	0.082	60.24	65	0.03	2000	
V	51	2	He	0.526	2.630	2.00	3252	0.02	2000	
Cr	52	2	He	264.867	1324.336	0.95	1282182	0.02	2000	
Fe	56	2	He	4227.436	21137.182	0.67	19674365	0.02	200000	
Se	78	2	He	0.214	1.072	42.31	216	0.10	2000	
As	75	2	He	1.270	6.349	3.84	962	0.13	2000	
Ca	44	2	He	22473.363	112366.815	0.61	541019	4.15	200000	
Na	23	2	He	88428.324	442141.618	0.43	68864624	0.13	200000	
Mg	24	2	He	15079.383	75396.915	0.73	6403917	0.24	200000	
K	39	2	He	445.502	2227.509	2.10	280735	0.16	200000	
Mn	55	2	He	298.384	1491.918	0.14	968565	0.03	2000	
Co	59	2	He	3.655	18.277	2.83	27187	0.01	2000	
Ni	60	2	He	118.940	594.701	0.41	235804	0.05	2000	
Cu	63	2	He	3.742	18.708	3.76	20813	0.02	2000	
Zn	66	2	He	2.490	12.450	3.48	3187	0.08	2000	
Al	27	2	He	5.148	25.740	11.19	1617	0.32	2000	
B	11	1	No Gas	10.884	54.419	3.90	18579	0.06	2000	
Al	27	1	No Gas	5.078	25.390	1.33	84516	0.01	2000	
Si	28	1	No Gas	4496.318	22481.592	0.67	22418841	0.02	2000	>LDR
Ag	107	1	No Gas	0.002	0.010	125.27	350	0.00	2000	
Cd	111	1	No Gas	0.028	0.139	31.13	70	0.04	2000	
Sr	88	1	No Gas	410.803	2054.017	2.07	9473675	0.00	2000	
Mo	95	1	No Gas	2.383	11.913	4.51	10811	0.02	2000	
Sn	118	1	No Gas	0.113	0.563	15.60	2240	0.01	2000	
Sb	121	1	No Gas	0.043	0.214	47.93	1483	0.00	2000	
Ba	137	1	No Gas	110.695	553.477	0.38	383881	0.03	2000	
Tl	205	1	No Gas	0.006	0.031	34.57	393	0.00	2000	
Tl	203	1	No Gas	0.011	0.055	40.83	210	0.01	2000	
Pb	208	1	No Gas	0.055	0.274	10.50	2493	0.00	2000	
U	238	1	No Gas	0.039	0.197	7.80	1450	0.00	2000	
Ca	43	2	He	22886.302	114431.510	4.47	32632	70.13	200000	
Sb	121	2	He	0.048	0.240	83.93	793	0.01	2000	
Ti	47	2	He	0.022	0.110	173.21	3	0.66	2000	
Cu	63	1	No Gas	4.003	20.017	0.89	42156	0.01	2000	
Zn	66	1	No Gas	2.585	12.925	1.62	8626	0.03	2000	
Se	82	1	No Gas	-1.081	-5.404	-87.80	-285	0.38	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	642957	0.76	654204	98.28	70	120	
Ge	72	2	He	441843	0.60	428589	103.09	70	120	
Ge	72	1	No Gas	1682711	1.17	1641030	102.54	70	120	
In	115	1	No Gas	1948497	1.47	1892969	102.93	70	120	

Sample Report

Bi	209	1	No Gas	1731947	0.96	1736707	99.73	70	120	

Sample Report

Sample Table

Sample Name	HS22080522-07
Data File Name	164SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T21:04:47-05:00
Sample Type	Sample
Dilution	5
Comment	DOD TW 182618
ISTD Ref FileName	136CALB.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	16.257	81.283	1.01	179565	0.01	2000	
Be	9	1	No Gas	0.037	0.183	25.21	108	0.03	2000	
V	51	2	He	0.571	2.854	1.11	3416	0.02	2000	
Cr	52	2	He	307.266	1536.332	1.53	1478850	0.02	2000	
Fe	56	2	He	4435.922	22179.608	1.98	20526989	0.02	200000	
Se	78	2	He	0.358	1.789	97.62	223	0.16	2000	
As	75	2	He	1.381	6.907	3.93	1037	0.13	2000	
Ca	44	2	He	23634.620	118173.098	1.22	565746	4.18	200000	
Na	23	2	He	92868.407	464342.037	1.11	71912547	0.13	200000	
Mg	24	2	He	15793.503	78967.513	0.77	6669641	0.24	200000	
K	39	2	He	454.845	2274.226	1.53	283615	0.16	200000	
Mn	55	2	He	357.190	1785.951	0.59	1153039	0.03	2000	
Co	59	2	He	3.831	19.155	1.94	28333	0.01	2000	
Ni	60	2	He	125.996	629.982	1.36	248373	0.05	2000	
Cu	63	2	He	4.143	20.715	3.50	22850	0.02	2000	
Zn	66	2	He	1.578	7.890	8.08	2284	0.07	2000	
Al	27	2	He	155.425	777.127	2.30	32188	0.48	2000	
B	11	1	No Gas	10.787	53.937	1.15	18449	0.06	2000	
Al	27	1	No Gas	157.594	787.970	2.28	1761458	0.01	2000	
Si	28	1	No Gas	4758.339	23791.693	1.69	23488921	0.02	2000	>LDR
Ag	107	1	No Gas	0.007	0.035	82.11	410	0.00	2000	
Cd	111	1	No Gas	0.049	0.245	14.17	120	0.04	2000	
Sr	88	1	No Gas	432.099	2160.493	0.56	9834240	0.00	2000	
Mo	95	1	No Gas	2.440	12.201	5.45	10928	0.02	2000	
Sn	118	1	No Gas	0.107	0.536	9.07	2170	0.00	2000	
Sb	121	1	No Gas	0.046	0.230	73.60	1500	0.00	2000	
Ba	137	1	No Gas	118.307	591.537	0.29	404822	0.03	2000	
Tl	205	1	No Gas	0.023	0.115	91.72	770	0.00	2000	
Tl	203	1	No Gas	0.016	0.082	78.69	260	0.01	2000	
Pb	208	1	No Gas	0.049	0.247	54.34	2294	0.00	2000	
U	238	1	No Gas	0.050	0.249	19.94	1760	0.00	2000	
Ca	43	2	He	24158.664	120793.322	1.41	34253	70.53	200000	
Sb	121	2	He	0.047	0.235	29.18	783	0.01	2000	
Ti	47	2	He	0.089	0.444	115.34	13	0.67	2000	
Cu	63	1	No Gas	4.407	22.034	2.22	45824	0.01	2000	
Zn	66	1	No Gas	1.615	8.076	5.24	6021	0.03	2000	
Se	82	1	No Gas	-0.199	-0.993	-960.30	-159	0.12	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	642528	0.57	654204	98.22	70	120	
Ge	72	2	He	439407	1.37	428589	102.52	70	120	
Ge	72	1	No Gas	1667383	2.00	1641030	101.61	70	120	
In	115	1	No Gas	1922622	0.63	1892969	101.57	70	120	

Sample Report

Bi	209	1	No Gas	1705328	1.97	1736707	98.19	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	169_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T21:15:00-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	136CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	98.273	4.381	942316	1.16	100	98.3	90	110	
Be	9	1	No Gas	99.739	3.204	223069	0.43	100	99.7	90	110	
V	51	2	He	99.783	1.512	409352	0.41	100	99.8	90	110	
Cr	52	2	He	99.476	1.480	480338	0.76	100	99.5	90	110	
Fe	56	2	He	9938.872	2.123	46022411	0.93	10000	99.4	90	110	
Se	78	2	He	101.078	1.996	6066	1.80	100	101.1	90	110	
As	75	2	He	101.121	0.660	71904	0.73	100	101.1	90	110	
Ca	44	2	He	9920.306	1.425	238232	0.47	10000	99.2	90	110	
Na	23	2	He	9834.997	1.165	7727281	0.42	10000	98.3	90	110	
Mg	24	2	He	9952.135	1.076	4207633	0.21	10000	99.5	90	110	
K	39	2	He	10026.132	0.502	4854265	1.10	10000	100.3	90	110	
Mn	55	2	He	100.906	1.010	326281	0.25	100	100.9	90	110	
Co	59	2	He	101.981	1.609	753799	0.42	100	102.0	90	110	
Ni	60	2	He	100.634	1.973	198628	1.02	100	100.6	90	110	
Cu	63	2	He	100.307	1.604	539305	0.78	100	100.3	90	110	
Zn	66	2	He	100.114	1.067	98166	0.99	100	100.1	90	110	
Al	27	2	He	101.944	2.740	21323	2.55	100	101.9	90	110	
B	11	1	No Gas	450.464	3.719	589307	1.44	500	90.1	90	110	
Al	27	1	No Gas	105.867	0.431	1192228	1.39	100	105.9	90	110	
Si	28	1	No Gas	517.392	1.324	2784512	0.17	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	101.428	2.976	1291279	3.60	100	101.4	90	110	
Cd	111	1	No Gas	101.754	1.699	240561	0.58	100	101.8	90	110	
Sr	88	1	No Gas	103.665	0.134	2350952	1.09	100	103.7	90	110	
Mo	95	1	No Gas	99.540	0.859	440446	1.03	100	99.5	90	110	
Sn	118	1	No Gas	91.836	0.827	700532	0.74	100	91.8	90	110	
Sb	121	1	No Gas	90.650	1.482	976178	0.39	100	90.7	90	110	
Ba	137	1	No Gas	99.879	0.809	339905	0.57	100	99.9	90	110	
Tl	205	1	No Gas	99.524	0.801	2262967	0.16	100	99.5	90	110	
Tl	203	1	No Gas	89.865	0.651	894656	0.80	100	89.9	90	110	CCV Main CR1-2 Failed
Pb	208	1	No Gas	94.570	0.519	3007707	0.31	100	94.6	90	110	
U	238	1	No Gas	96.963	1.242	3101739	0.62	100	97.0	90	110	
Ca	43	2	He	9783.929	3.218	13914	4.03	10000	97.8	90	110	
Sb	121	2	He	97.702	1.106	478974	0.31	100	97.7	90	110	
Ti	47	2	He	100.510	1.166	15125	1.61	100	100.5	90	110	
Cu	63	1	No Gas	95.418	1.292	962035	0.32	100	95.4	90	110	
Se	82	1	No Gas	98.139	0.619	13182	1.62	100	98.1	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	667677	3.32	654204	102.06	70	120	
Ge	72	2	He	439859	1.20	428589	102.63	70	120	
Ge	72	1	No Gas	1666566	1.17	1641030	101.56	70	120	
In	115	1	No Gas	1912066	1.15	1892969	101.01	70	120	
Bi	209	1	No Gas	1712630	0.66	1736707	98.61	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	170_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T21:16:59-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	136CALB.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	0.185	30.0	35334	0.9	0.5	
Be	9	1	No Gas	0.011	121.9	50	52.9	0.5	
V	51	2	He	-0.128	-4.9	559	5.4	2.5	
Cr	52	2	He	0.023	127.6	1677	8.2	2.5	
Fe	56	2	He	2.593	15.1	25551	8.1	100	
Se	78	2	He	0.387	157.7	224	16.4	2	
As	75	2	He	0.008	267.7	61	24.6	2.5	
Ca	44	2	He	-6.920	-20.2	740	4.9	100	
Na	23	2	He	9.993	73.1	123082	5.1	100	
Mg	24	2	He	2.884	21.0	2727	9.8	100	
K	39	2	He	7.111	55.7	69749	1.6	100	
Mn	55	2	He	0.138	40.7	793	22.6	2.5	
Co	59	2	He	0.022	37.7	210	29.7	2.5	
Ni	60	2	He	-0.028	-155.1	197	42.6	2.5	
Cu	63	2	He	0.001	890.3	627	10.1	2	
Zn	66	2	He	0.032	124.5	777	5.8	2.5	
Al	27	2	He	-0.596	-67.2	437	17.5	5	
B	11	1	No Gas	11.475	18.5	18484	13.5	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.649	-4.9	20492	0.5	5	
Si	28	1	No Gas	-7.358	-18.7	221276	2.0	10	
Ag	107	1	No Gas	0.007	55.4	403	12.5	2.5	
Cd	111	1	No Gas	0.022	70.9	53	65.8	1	
Sr	88	1	No Gas	-0.138	-13.5	2917	15.0	2.5	
Mo	95	1	No Gas	0.009	147.6	107	51.6	2.5	
Sn	118	1	No Gas	0.056	34.3	1733	8.6	5	
Sb	121	1	No Gas	0.030	55.3	1313	13.1	2.5	
Ba	137	1	No Gas	0.054	11.4	413	5.6	2.5	
Tl	205	1	No Gas	0.013	25.5	553	13.7	1	
Tl	203	1	No Gas	0.008	128.2	177	55.8	1	
Pb	208	1	No Gas	0.020	36.9	1387	17.1	2.5	
U	238	1	No Gas	0.008	10.0	417	6.0	2.5	
Ca	43	2	He	-19.530	-21.3	17	34.6	100	
Sb	121	2	He	-0.004	-58.3	530	1.9	2.5	
Ti	47	2	He	0.022	173.2	3	173.2	2.5	
Cu	63	1	No Gas	-0.011	-83.8	1317	6.2	2.5	
Se	82	1	No Gas	-1.460	-250.4	-327	-148.4	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	615308	0.45	654204	94.05	70	120	
Ge	72	2	He	437506	1.13	428589	102.08	70	120	
Ge	72	1	No Gas	1648633	1.50	1641030	100.46	70	120	
In	115	1	No Gas	1877038	0.93	1892969	99.16	70	120	
Bi	209	1	No Gas	1730895	0.30	1736707	99.67	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	178_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T21:33:26-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	136CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	96.950	3.571	952999	2.93	100	97.0	90	110	
Be	9	1	No Gas	98.780	1.186	226324	0.30	100	98.8	90	110	
V	51	2	He	100.795	0.903	417183	0.63	100	100.8	90	110	
Cr	52	2	He	100.767	0.463	490885	0.07	100	100.8	90	110	
Fe	56	2	He	9980.842	0.389	46631749	0.25	10000	99.8	90	110	
Se	78	2	He	103.922	1.377	6286	0.90	100	103.9	90	110	
As	75	2	He	102.558	0.759	73569	0.35	100	102.6	90	110	
Ca	44	2	He	10070.430	0.197	243983	0.55	10000	100.7	90	110	
Na	23	2	He	9876.176	1.405	7827966	1.01	10000	98.8	90	110	
Mg	24	2	He	9972.648	0.235	4253821	0.26	10000	99.7	90	110	
K	39	2	He	10102.375	1.133	4933726	0.71	10000	101.0	90	110	
Mn	55	2	He	99.876	1.344	325815	0.91	100	99.9	90	110	
Co	59	2	He	101.612	0.175	757788	0.35	100	101.6	90	110	
Ni	60	2	He	101.111	0.530	201354	0.11	100	101.1	90	110	
Cu	63	2	He	100.571	0.327	545546	0.11	100	100.6	90	110	
Zn	66	2	He	99.704	1.725	98631	1.35	100	99.7	90	110	
Al	27	2	He	105.141	2.726	22168	2.24	100	105.1	90	110	
B	11	1	No Gas	441.674	1.807	592083	1.70	500	88.3	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	103.841	2.480	1199733	3.04	100	103.8	90	110	
Si	28	1	No Gas	504.162	1.685	2789191	1.61	5000	10.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	102.742	0.837	1297076	0.63	100	102.7	90	110	
Cd	111	1	No Gas	102.345	1.918	239986	1.77	100	102.3	90	110	
Sr	88	1	No Gas	104.685	2.155	2354298	1.63	100	104.7	90	110	
Mo	95	1	No Gas	100.616	0.710	441545	0.60	100	100.6	90	110	
Sn	118	1	No Gas	93.022	0.833	703724	0.29	100	93.0	90	110	
Sb	121	1	No Gas	88.889	0.903	981596	0.55	100	88.9	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	101.139	1.337	341359	0.82	100	101.1	90	110	
Tl	205	1	No Gas	99.177	1.493	2273956	1.79	100	99.2	90	110	
Tl	203	1	No Gas	89.315	1.426	896540	1.15	100	89.3	90	110	CCV Main CR1-2 Failed
Pb	208	1	No Gas	94.064	1.688	3016411	1.41	100	94.1	90	110	
U	238	1	No Gas	96.803	1.106	3122476	1.13	100	96.8	90	110	
Ca	43	2	He	10213.973	3.397	14648	2.98	10000	102.1	90	110	
Sb	121	2	He	98.320	0.925	486278	0.50	100	98.3	90	110	
Ti	47	2	He	102.305	3.374	15532	3.74	100	102.3	90	110	
Cu	63	1	No Gas	93.773	0.099	969555	0.71	100	93.8	90	110	
Se	82	1	No Gas	100.811	2.282	13886	1.56	100	100.8	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	683589	1.40	654204	104.49	70	120	
Ge	72	2	He	443738	0.43	428589	103.53	70	120	
Ge	72	1	No Gas	1708853	0.76	1641030	104.13	70	120	
In	115	1	No Gas	1896309	0.59	1892969	100.18	70	120	
Bi	209	1	No Gas	1726846	0.30	1736707	99.43	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	179_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq Date Time	2022-08-22T21:35:25-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	136CALB.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	0.174	47.4	35653	0.7	0.5	
Be	9	1	No Gas	0.029	14.2	90	11.1	0.5	
V	51	2	He	-0.137	-14.0	520	15.0	2.5	
Cr	52	2	He	0.012	150.6	1613	3.8	2.5	
Fe	56	2	He	1.197	40.4	19007	11.2	100	
Se	78	2	He	0.444	38.3	226	4.4	2	
As	75	2	He	-0.003	-803.9	53	28.6	2.5	
Ca	44	2	He	-10.032	-71.2	663	26.3	100	
Na	23	2	He	-15.554	-27.3	102850	2.4	100	
Mg	24	2	He	-0.363	-132.5	1353	13.9	100	
K	39	2	He	3.615	42.2	67750	1.3	100	
Mn	55	2	He	0.009	173.2	377	12.0	2.5	
Co	59	2	He	0.015	36.3	160	27.2	2.5	
Ni	60	2	He	-0.038	-133.3	177	54.4	2.5	
Cu	63	2	He	-0.007	-125.8	580	9.1	2	
Zn	66	2	He	-0.300	-23.7	453	16.7	2.5	
Al	27	2	He	-1.000	-33.7	353	18.8	5	
B	11	1	No Gas	10.994	16.0	18130	12.1	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.994	-3.9	16820	1.1	5	
Si	28	1	No Gas	-8.648	-8.9	216095	0.3	10	
Ag	107	1	No Gas	0.010	30.5	447	9.0	2.5	
Cd	111	1	No Gas	0.030	22.2	73	20.8	1	
Sr	88	1	No Gas	-0.157	-7.0	2530	9.6	2.5	
Mo	95	1	No Gas	0.017	83.1	143	42.1	2.5	
Sn	118	1	No Gas	0.060	37.4	1807	10.2	5	
Sb	121	1	No Gas	0.021	27.8	1230	4.9	2.5	
Ba	137	1	No Gas	0.010	78.2	273	10.6	2.5	
Tl	205	1	No Gas	0.018	14.3	663	8.8	1	
Tl	203	1	No Gas	0.019	50.9	287	33.2	1	
Pb	208	1	No Gas	0.026	24.9	1567	13.6	2.5	
U	238	1	No Gas	0.017	33.8	710	25.5	2.5	
Ca	43	2	He	-10.053	-67.5	30	33.3	100	
Sb	121	2	He	-0.014	-39.3	480	7.2	2.5	
Ti	47	2	He	0.157	65.9	23	65.5	2.5	
Cu	63	1	No Gas	-0.018	-34.3	1257	4.0	2.5	
Se	82	1	No Gas	-0.290	-1076.0	-173	-241.8	2	

QC ISTD Table

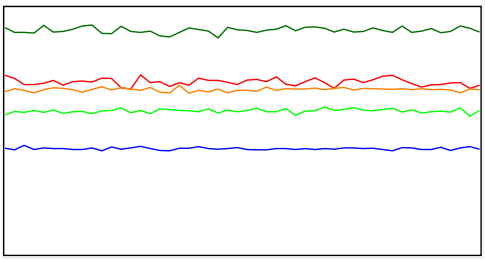
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	622650	1.54	654204	95.18	70	120	
Ge	72	2	He	435268	1.60	428589	101.56	70	120	
Ge	72	1	No Gas	1656530	1.63	1641030	100.94	70	120	
In	115	1	No Gas	1916738	0.68	1892969	101.26	70	120	
Bi	209	1	No Gas	1725213	0.43	1736707	99.34	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\082222A.b
Acq. Date-Time	08/22/2022 11:24:08
Report Comment	---
Instrument Name	G8422A SG22121190

[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	3493	34928.18		
24	20000	11621	116206.37		
59	50000	21398	213984.60		
115	50000	33374	333741.79		
208	20000	18164	181638.49		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.041	5.000	
24	1.394	5.000	
59	1.127	5.000	
115	1.056	5.000	
208	1.321	5.000	

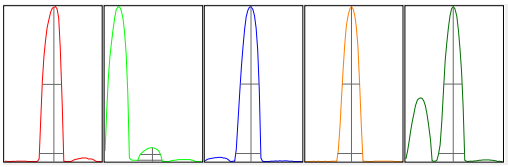
Mass	Background	Background (Required)	Background (Flag)
9	2.000		
24	0.800		
59	0.400		
115	0.900		
208	2.200		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.472 %
Doubly Charged	70 / 140 0.817 %

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	3440.55	9.05	8.90 - 9.10	
24	11669.81	24.00	23.90 - 24.10	
59	21898.29	58.95	58.90 - 59.10	
115	33768.52	114.95	114.90 - 115.10	
208	17948.16	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.59	0.737		
24	0.60	0.739		
59	0.58	0.764		
115	0.53	0.756		
208	0.56	0.791		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.85 L/min	Dilution Gas	0.20 L/min
RF Power	1550 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	10.6 V	Deflect	13.8 V
Extract 2	-200.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-75 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	122	Axis Gain	0.9994	QP Bias	-3.0 V
Mass Offset	126	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.3 mm

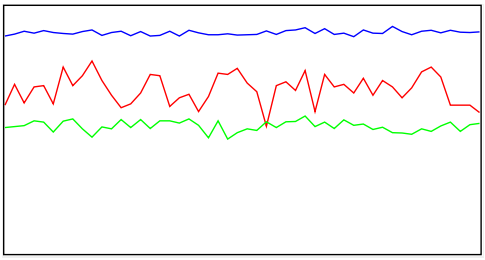
EM

Discriminator	4.4 mV	Analog HV	2112 V	Pulse HV	1056 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	133	1330.06		
24	1000	515	5149.55		
59	10000	8947	89465.16		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

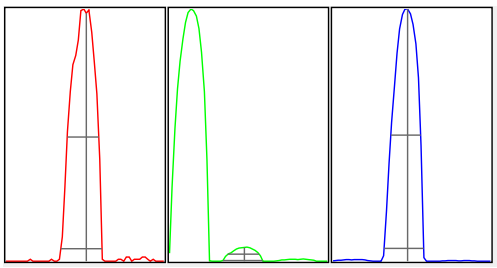
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	8.845	5.000	Fail
24	4.215	5.000	
59	1.042	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.200		
24	0.300		
59	0.100		

Oxide/Doubly Charged Ratio

Oxide 156 / 140 0.262 %
Doubly Charged 70 / 140 0.912 %

Resolution/Axis



Integration Time [sec] 0.1
Acquisition Time [sec] 22.24
Y Axis Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	119.76	9.05	8.90 - 9.10	
24	524.87	23.95	23.90 - 24.10	
59	9107.54	58.95	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.59	0.772		
24	0.59	0.743		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.56	0.738		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.85 L/min	Dilution Gas	0.20 L/min
RF Power	1550 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	9.5 V	Deflect	0.4 V
Extract 2	-200.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-85 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	4.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9994	QP Bias	-15.0 V
Mass Offset	126	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.3 mm

EM

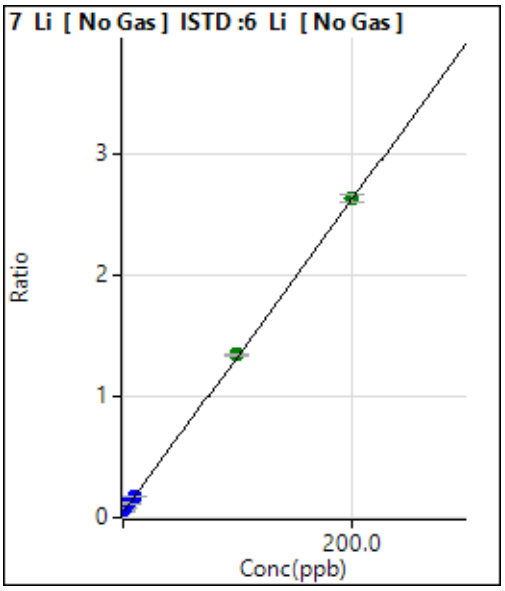
Discriminator	4.4 mV	Analog HV	2112 V	Pulse HV	1056 V

Calibration for 027_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\082322A.b\
Analysis File: 082322A.batch.bin
DA Date-Time: 08/23/2022 16:56:00
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	018CALB.d	CAL BLK	08/23/2022 11:56:38
2	025CALS.d	2/10/200	08/23/2022 12:18:35
3	020CALS.d	5/25/500	08/23/2022 12:01:17
4	021CALS.d	10/50/100	08/23/2022 12:03:35
5	022CALS.d	100/500/10K	08/23/2022 12:05:52
6	023CALS.d	200/1000/20K	08/23/2022 12:08:04

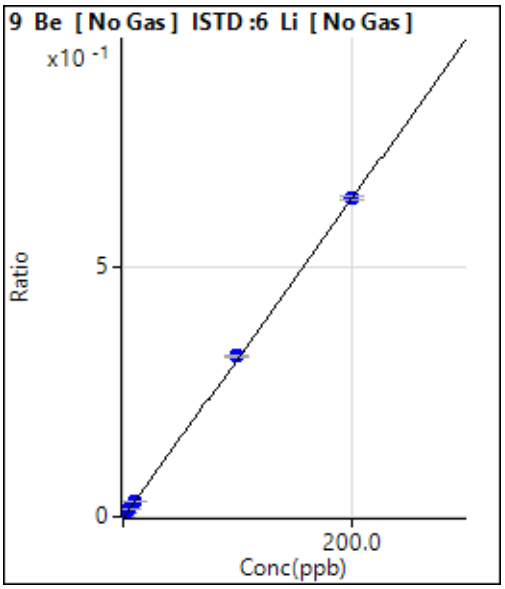
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	39627.41	0.0561	P	5.5	
2	☐	2.000	1.768	57893.61	0.0789	P	2.5	-11.6
3	☐	5.000	4.935	81298.73	0.1196	P	2.7	-1.3
4	☐	10.000	9.043	121501.18	0.1725	P	5.0	-9.6
5	☐	100.000	100.011	964275.01	1.3429	A	1.4	0.0
6	☐	200.000	200.047	1913964.97	2.6301	A	2.4	0.0

y = 0.0129 * x + 0.0561
R = 1.0000
DL = 0.7195 ppb
BEC = 4.362 ppb

Weight: <None>
Min Conc: <None>

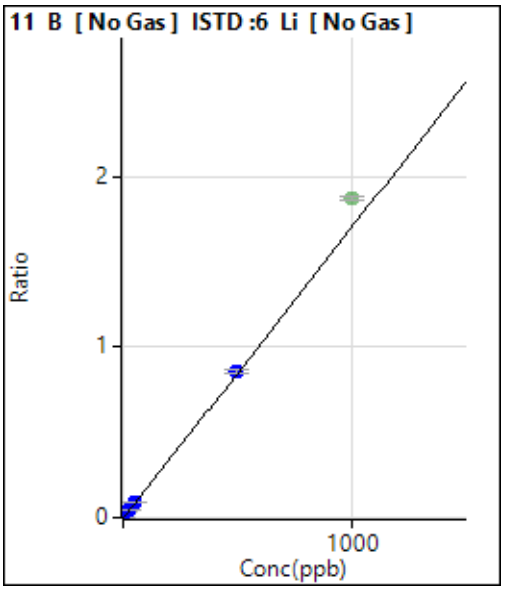


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	24.7	
2	☐	2.000	2.068	4884.23	0.0067	P	3.7	3.4
3	☐	5.000	5.199	11334.65	0.0167	P	2.1	4.0
4	☐	10.000	9.784	22064.04	0.0313	P	7.4	-2.2
5	☐	100.000	100.660	231288.15	0.3222	P	1.5	0.7
6	☐	200.000	199.675	465087.99	0.6391	P	1.2	-0.2

y = 0.0032 * x + 3.7941E-005
R = 1.0000
DL = 0.008778 ppb
BEC = 0.01186 ppb

Weight: <None>
Min Conc: <None>

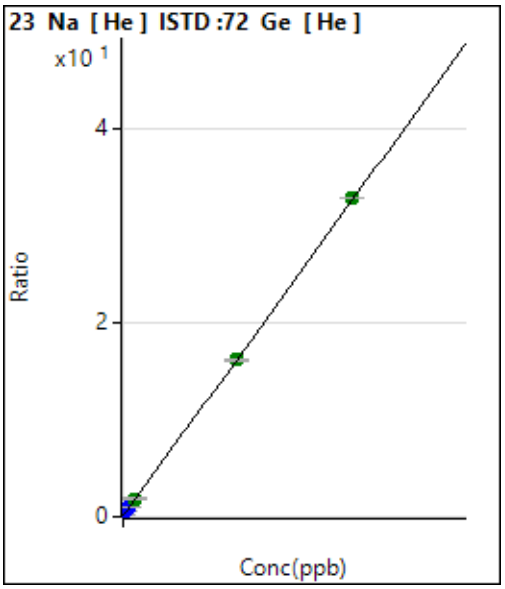
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2783.64	0.0039	P	5.9	
2	☐	10.000	14.721	21329.55	0.0291	P	2.7	47.2
3	☐	25.000	25.708	32495.91	0.0478	P	2.4	2.8
4	☐	50.000	49.569	62339.22	0.0885	P	6.4	-0.9
5	☐	500.000	499.913	615361.10	0.8572	P	1.5	0.0
6	☑	1000.000		1362985.19	1.8727	A	1.1	

y = 0.0017 * x + 0.0039
R = 1.0000
DL = 0.4104 ppb
BEC = 2.306 ppb

Weight: <None>
Min Conc: <None>

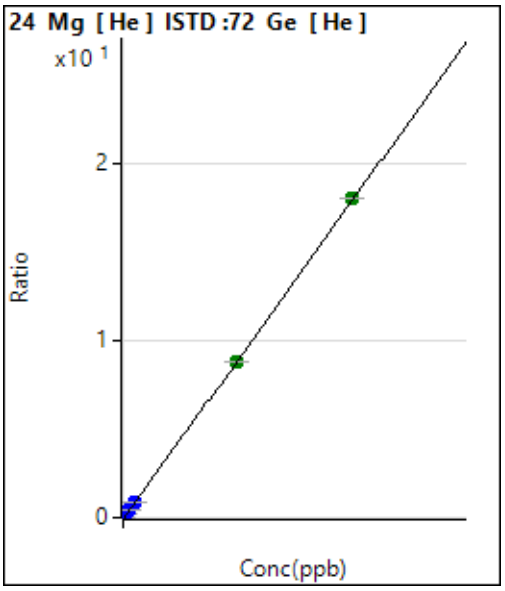


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	115515.39	0.2295	P	0.7	
2	☐	200.000	183.220	261828.98	0.5270	P	0.6	-8.4
3	☐	500.000	458.533	487322.20	0.9741	P	0.8	-8.3
4	☐	1000.000	1013.617	936687.02	1.8754	A	1.3	1.4
5	☐	10000.00	9833.702	8068826.13	16.1970	A	1.3	-1.7
6	☐	20000.00	20083.67	15984002.6	32.8403	A	0.4	0.4

y = 0.0016 * x + 0.2295
R = 1.0000
DL = 3.144 ppb
BEC = 141.4 ppb

Weight: <None>
Min Conc: <None>

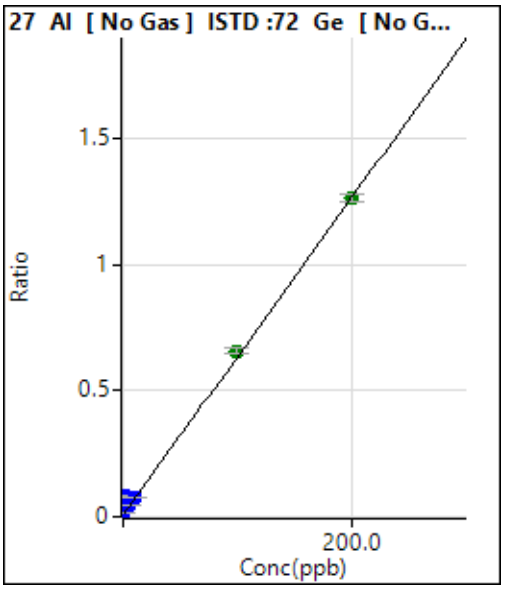
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	323.34	0.0006	P	3.8	
2	☐	200.000	195.341	87366.09	0.1759	P	1.2	-2.3
3	☐	500.000	474.154	213100.15	0.4260	P	0.4	-5.2
4	☐	1000.000	949.396	425665.05	0.8522	P	1.3	-5.1
5	☐	10000.00	9826.661	4391393.89	8.8151	A	0.6	-1.7
6	☐	20000.00	20089.89	8771039.87	18.0211	A	0.5	0.4

y = 8.9699E-004 * x + 6.4257E-004
R = 0.9999
DL = 0.08151 ppb
BEC = 0.7164 ppb

Weight: <None>
Min Conc: <None>

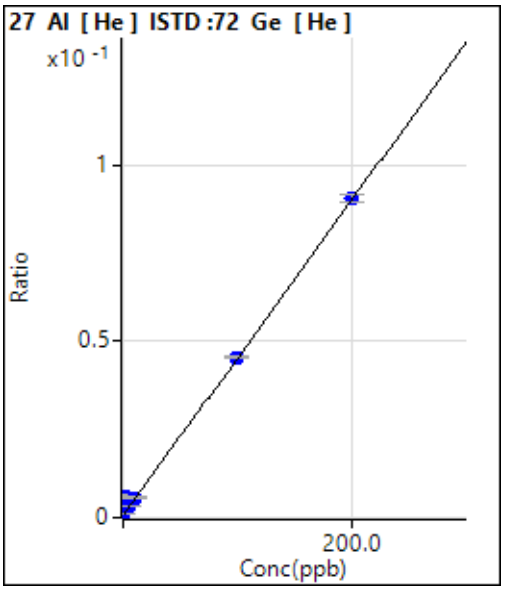


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	25821.48	0.0136	P	1.1	
2	☐	2.000	10.812	149992.86	0.0817	P	0.5	440.6
3	☐	5.000	4.956	84056.60	0.0449	P	1.8	-0.9
4	☐	10.000	9.574	139336.01	0.0739	P	0.9	-4.3
5	☐	100.000	102.236	1228020.32	0.6577	A	4.0	2.2
6	☐	200.000	198.816	2291512.88	1.2662	A	2.8	-0.6

y = 0.0063 * x + 0.0136
R = 0.9990
DL = 0.07459 ppb
BEC = 2.164 ppb

Weight: <None>
Min Conc: <None>

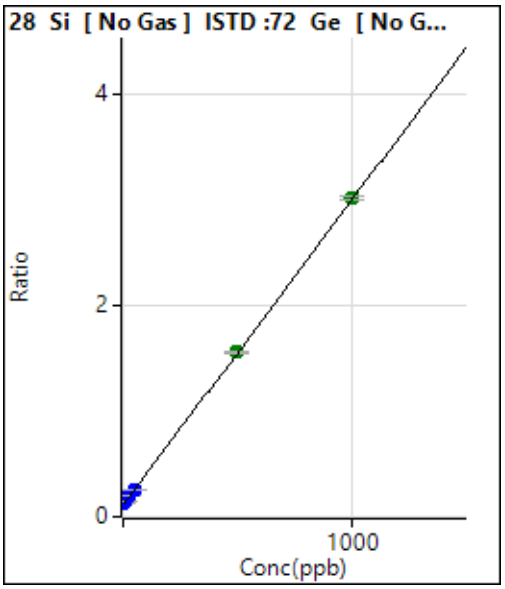
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	556.69	0.0011	P	12.1	
2	☐	2.000	11.488	3097.07	0.0062	P	6.0	474.4
3	☐	5.000	5.071	1686.80	0.0034	P	8.5	1.4
4	☐	10.000	10.286	2847.02	0.0057	P	5.2	2.9
5	☐	100.000	99.380	22651.95	0.0455	P	2.2	-0.6
6	☐	200.000	200.199	44039.95	0.0905	P	1.9	0.1

y = 4.4644E-004 * x + 0.0011
R = 0.9989
DL = 0.9018 ppb
BEC = 2.478 ppb

Weight: <None>
Min Conc: <None>

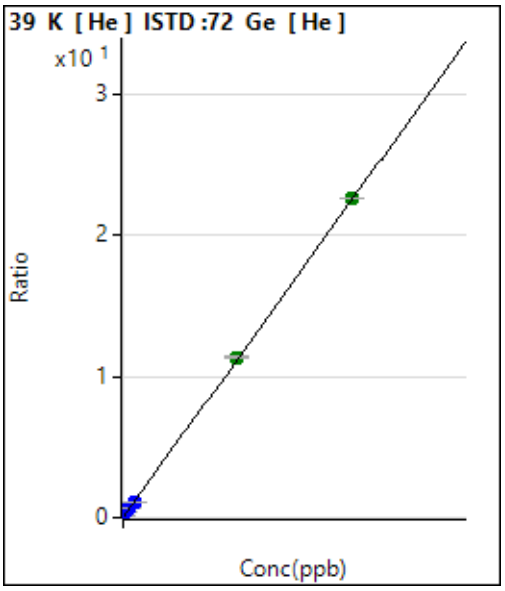


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	240032.29	0.1267	P	2.4	
2	☐	10.000	8.779	279066.13	0.1521	P	0.5	-12.2
3	☐	25.000	23.100	362514.89	0.1935	P	2.2	-7.6
4	☐	50.000	45.940	488898.33	0.2595	P	0.9	-8.1
5	☐	500.000	495.817	2912243.91	1.5595	A	1.6	-0.8
6	☐	1000.000	1002.354	5472169.92	3.0232	A	1.6	0.2

y = 0.0029 * x + 0.1267
R = 1.0000
DL = 3.094 ppb
BEC = 43.85 ppb

Weight: <None>
Min Conc: <None>

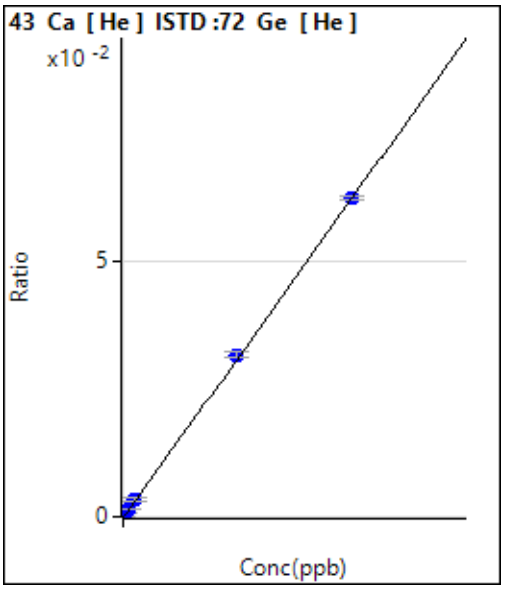
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	68034.03	0.1352	P	1.3	
2	☐	200.000	186.478	171089.75	0.3444	P	1.2	-6.8
3	☐	500.000	446.799	318404.99	0.6365	P	1.2	-10.6
4	☐	1000.000	892.216	567495.37	1.1362	P	0.7	-10.8
5	☐	10000.00	9986.499	5648741.79	11.3392	A	1.0	-0.1
6	☐	20000.00	20013.60	10994306.9	22.5887	A	0.2	0.1

y = 0.0011 * x + 0.1352
R = 1.0000
DL = 4.558 ppb
BEC = 120.5 ppb

Weight: <None>
Min Conc: <None>

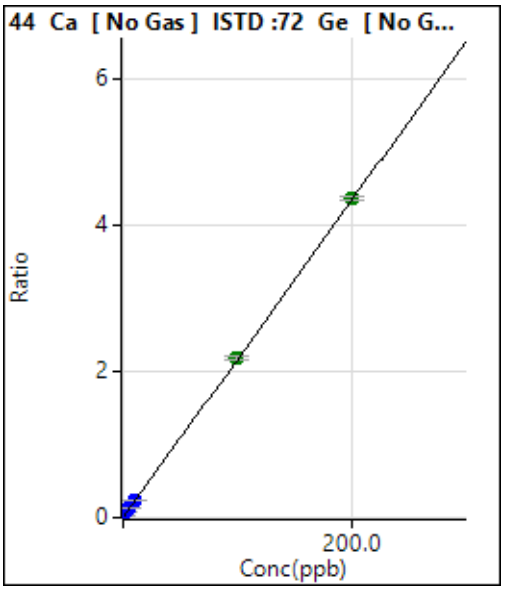


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0001	P	142.0	
2	☐	200.000	261.927	433.35	0.0009	P	6.3	31.0
3	☐	500.000	438.813	713.36	0.0014	P	2.9	-12.2
4	☐	1000.000	1061.621	1686.80	0.0034	P	13.1	6.2
5	☐	10000.00	10118.76	15799.35	0.0317	P	2.8	1.2
6	☐	20000.00	19938.44	30387.20	0.0624	P	1.2	-0.3

y = 3.1287E-006 * x + 5.2985E-005
R = 1.0000
DL = 72.17 ppb
BEC = 16.94 ppb

Weight: <None>
Min Conc: <None>

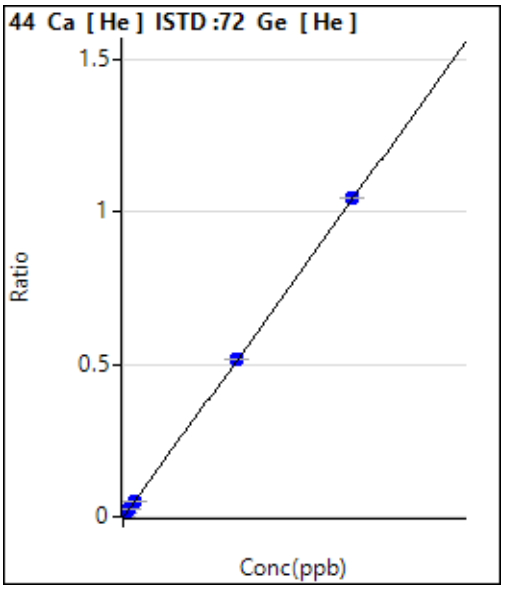
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46960.25	0.0248	P	1.1	
2	☐	2.000	2.243	134589.69	0.0733	P	1.3	12.2
3	☐	5.000	4.680	236302.31	0.1261	P	0.6	-6.4
4	☐	10.000	9.281	425277.44	0.2257	P	0.3	-7.2
5	☐	100.000	99.517	4068945.88	2.1790	A	2.3	-0.5
6	☐	200.000	200.283	7892641.13	4.3602	A	1.0	0.1

y = 0.0216 * x + 0.0248
R = 1.0000
DL = 0.03804 ppb
BEC = 1.145 ppb

Weight: <None>
Min Conc: <None>

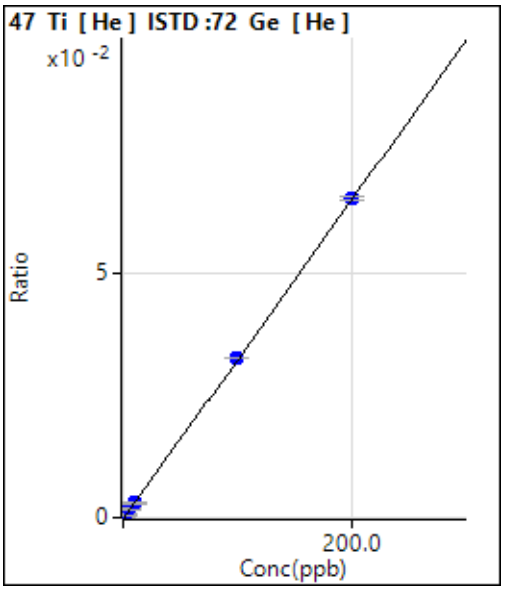


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	910.05	0.0018	P	2.3	
2	☐	200.000	226.482	6748.45	0.0136	P	1.5	13.2
3	☐	500.000	480.592	13403.40	0.0268	P	2.1	-3.9
4	☐	1000.000	969.199	26068.40	0.0522	P	2.3	-3.1
5	☐	10000.00	9901.321	257339.10	0.5166	P	0.8	-1.0
6	☐	20000.00	20051.10	508249.46	1.0442	P	0.4	0.3

y = 5.1989E-005 * x + 0.0018
R = 1.0000
DL = 2.448 ppb
BEC = 34.79 ppb

Weight: <None>
Min Conc: <None>

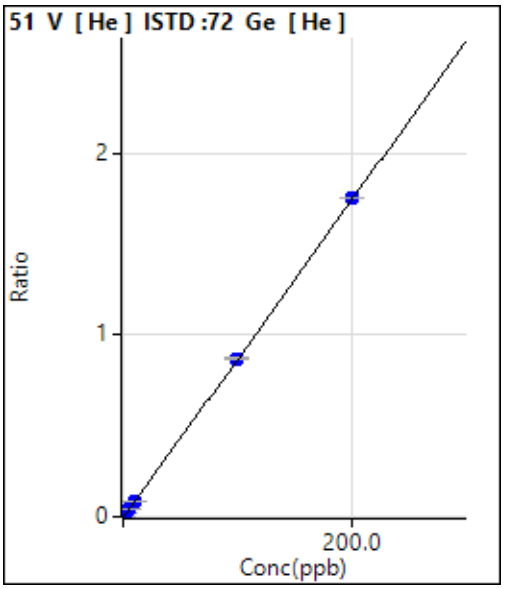
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	1.707	283.34	0.0006	P	14.8	-14.7
3	☐	5.000	5.386	886.71	0.0018	P	8.8	7.7
4	☐	10.000	9.257	1516.78	0.0030	P	13.3	-7.4
5	☐	100.000	99.928	16259.85	0.0326	P	1.0	-0.1
6	☐	200.000	200.067	31797.07	0.0653	P	0.9	0.0

y = 3.2648E-004 * x + 1.3232E-005
R = 1.0000
DL = 0.1053 ppb
BEC = 0.04053 ppb

Weight: <None>
Min Conc: <None>

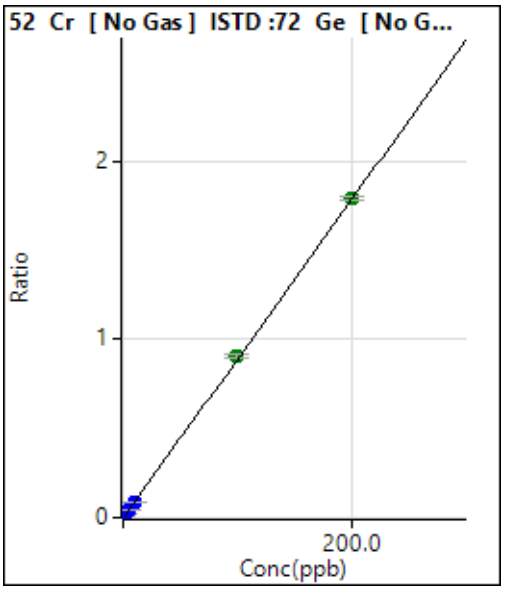


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	761.14	0.0015	P	6.2	
2	☐	2.000	1.920	9084.16	0.0183	P	0.6	-4.0
3	☐	5.000	4.712	21346.65	0.0427	P	2.5	-5.8
4	☐	10.000	9.564	42483.42	0.0851	P	1.7	-4.4
5	☐	100.000	99.263	432713.14	0.8686	P	0.7	-0.7
6	☐	200.000	200.398	852746.39	1.7521	P	0.4	0.2

y = 0.0087 * x + 0.0015
R = 1.0000
DL = 0.0324 ppb
BEC = 0.1731 ppb

Weight: <None>
Min Conc: <None>

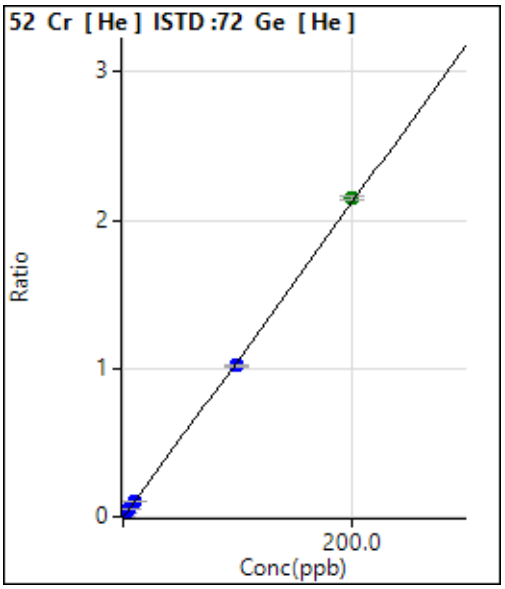
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12385.76	0.0065	P	1.7	
2	☐	2.000	1.699	39851.66	0.0217	P	2.1	-15.0
3	☐	5.000	4.583	88974.70	0.0475	P	3.3	-8.3
4	☐	10.000	9.087	165288.70	0.0877	P	0.7	-9.1
5	☐	100.000	100.562	1689945.86	0.9050	A	1.9	0.6
6	☐	200.000	199.778	3242681.41	1.7914	A	1.1	-0.1

y = 0.0089 * x + 0.0065
R = 1.0000
DL = 0.03633 ppb
BEC = 0.7318 ppb

Weight: <None>
Min Conc: <None>

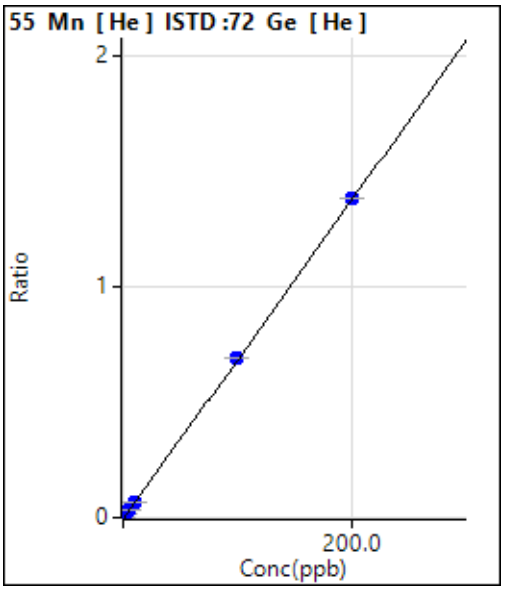


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1493.45	0.0030	P	5.4	
2	☐	2.000	1.727	10587.60	0.0213	P	4.0	-13.6
3	☐	5.000	4.625	26061.81	0.0521	P	2.1	-7.5
4	☐	10.000	9.130	49928.00	0.1000	P	1.2	-8.7
5	☐	100.000	95.750	508204.11	1.0202	P	1.1	-4.2
6	☐	200.000	202.180	1046800.64	2.1508	A	1.2	1.1

y = 0.0106 * x + 0.0030
R = 0.9997
DL = 0.04485 ppb
BEC = 0.2793 ppb

Weight: <None>
Min Conc: <None>

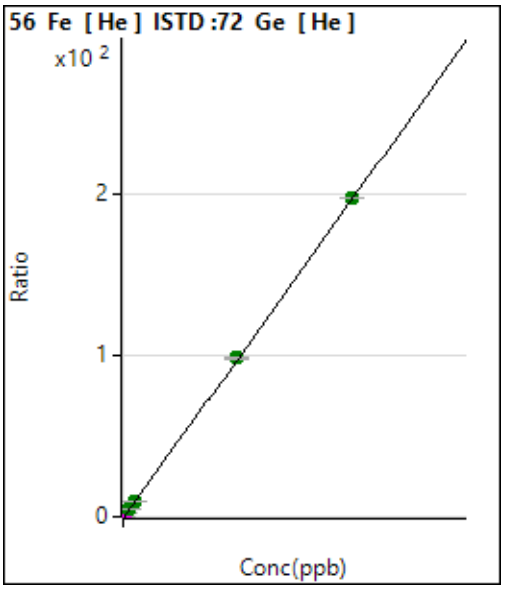
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	266.68	0.0005	P	12.9	
2	☐	2.000	1.970	7031.92	0.0142	P	4.0	-1.5
3	☐	5.000	4.945	17371.32	0.0347	P	1.2	-1.1
4	☐	10.000	9.727	33855.63	0.0678	P	2.6	-2.7
5	☐	100.000	99.620	343433.13	0.6894	P	0.2	-0.4
6	☐	200.000	200.205	674048.40	1.3849	P	0.4	0.1

y = 0.0069 * x + 5.2981E-004
R = 1.0000
DL = 0.02972 ppb
BEC = 0.07662 ppb

Weight: <None>
Min Conc: <None>

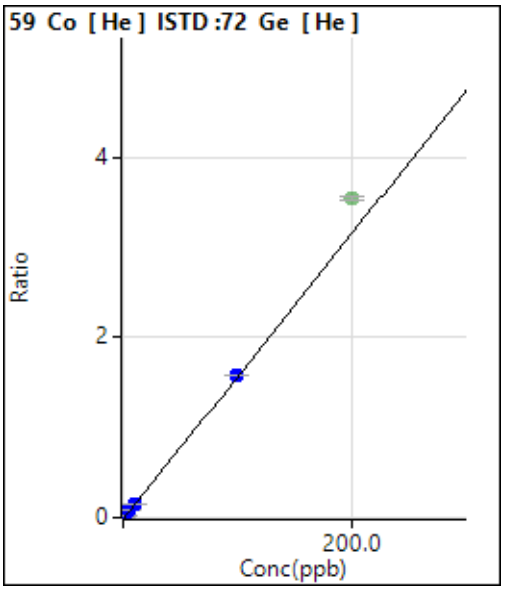


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9046.47	0.0180	P	2.0	
2	☐	200.000	195.717	968369.78	1.9493	M	2.5	-2.1
3	☐	500.000	511.273	2533056.47	5.0633	A	0.8	2.3
4	☐	1000.000	991.965	4898122.63	9.8068	A	1.1	-0.8
5	☐	10000.00	9955.601	48949927.6	98.2607	A	0.7	-0.4
6	☐	20000.00	20022.36	96175078.5	197.600	A	0.4	0.1

y = 0.0099 * x + 0.0180
R = 1.0000
DL = 0.1118 ppb
BEC = 1.822 ppb

Weight: <None>
Min Conc: <None>

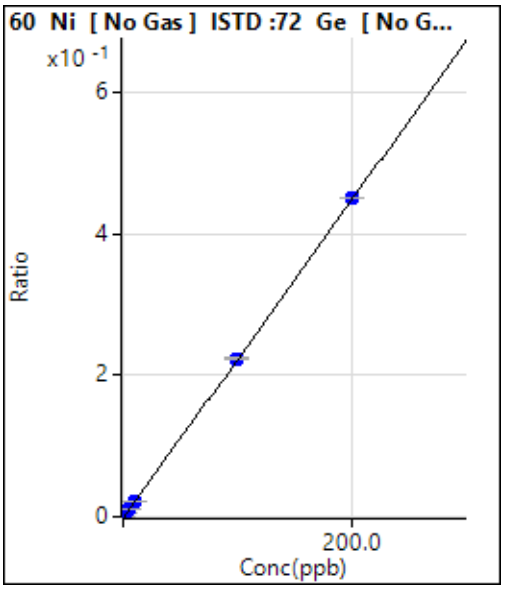
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	76.67	0.0002	P	37.7	
2	☐	2.000	1.990	15752.67	0.0317	P	0.4	-0.5
3	☐	5.000	4.932	39206.59	0.0784	P	2.0	-1.4
4	☐	10.000	9.778	77523.17	0.1552	P	3.2	-2.2
5	☐	100.000	100.026	790371.19	1.5865	P	0.2	0.0
6	☑	200.000		1727658.72	3.5495	A	1.4	

y = 0.0159 * x + 1.5236E-004
R = 1.0000
DL = 0.01086 ppb
BEC = 0.009606 ppb

Weight: <None>
Min Conc: <None>

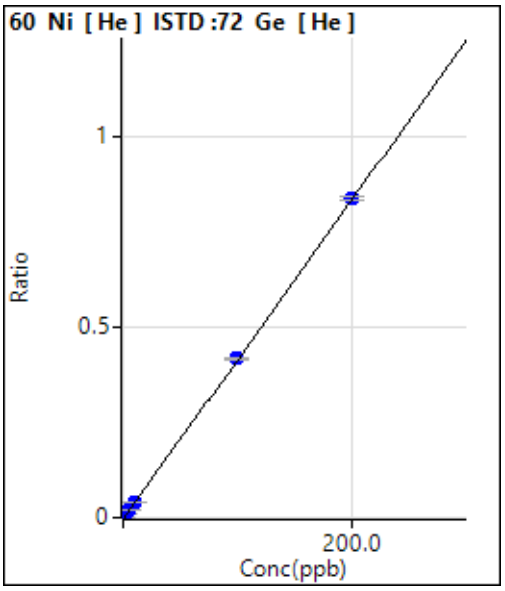


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	453.35	0.0002	P	6.2	
2	☐	2.000	1.922	8379.43	0.0046	P	3.3	-3.9
3	☐	5.000	4.930	21243.45	0.0113	P	0.9	-1.4
4	☐	10.000	9.559	40991.86	0.0218	P	1.2	-4.4
5	☐	100.000	99.392	418263.25	0.2240	P	0.3	-0.6
6	☐	200.000	200.329	816667.62	0.4512	P	0.6	0.2

y = 0.0023 * x + 2.3926E-004
R = 1.0000
DL = 0.01981 ppb
BEC = 0.1063 ppb

Weight: <None>
Min Conc: <None>

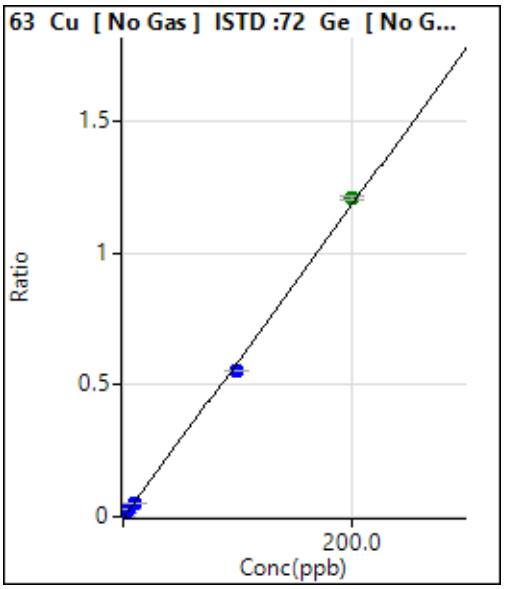
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	210.00	0.0004	P	34.6	
2	☐	2.000	1.977	4314.10	0.0087	P	9.4	-1.1
3	☐	5.000	4.922	10504.25	0.0210	P	5.4	-1.6
4	☐	10.000	9.830	20742.69	0.0415	P	0.8	-1.7
5	☐	100.000	99.656	207833.74	0.4172	P	0.8	-0.3
6	☐	200.000	200.182	407664.64	0.8376	P	0.9	0.1

y = 0.0042 * x + 4.1753E-004
R = 1.0000
DL = 0.1036 ppb
BEC = 0.09984 ppb

Weight: <None>
Min Conc: <None>

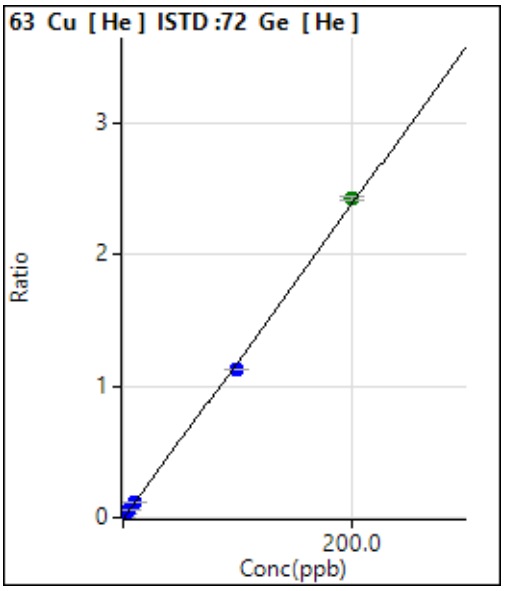


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1510.11	0.0008	P	6.1	
2	☐	2.000	1.860	21707.67	0.0118	P	1.4	-7.0
3	☐	5.000	4.550	52073.19	0.0278	P	1.7	-9.0
4	☐	10.000	8.934	101355.78	0.0538	P	1.2	-10.7
5	☐	100.000	92.908	1030767.80	0.5519	P	0.6	-7.1
6	☐	200.000	203.612	2187737.31	1.2087	A	1.2	1.8

y = 0.0059 * x + 7.9708E-004
R = 0.9991
DL = 0.02446 ppb
BEC = 0.1344 ppb

Weight: <None>
Min Conc: <None>

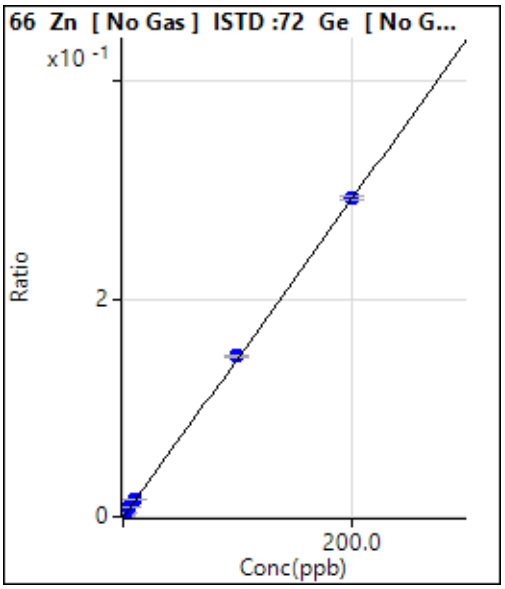
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	766.70	0.0015	P	21.4	
2	☐	2.000	1.884	11938.78	0.0240	P	3.2	-5.8
3	☐	5.000	4.668	28657.22	0.0573	P	1.8	-6.6
4	☐	10.000	9.103	55074.83	0.1103	P	0.2	-9.0
5	☐	100.000	94.195	561288.60	1.1267	P	0.7	-5.8
6	☐	200.000	202.957	1180757.59	2.4259	A	1.1	1.5

y = 0.0119 * x + 0.0015
R = 0.9994
DL = 0.08206 ppb
BEC = 0.1275 ppb

Weight: <None>
Min Conc: <None>

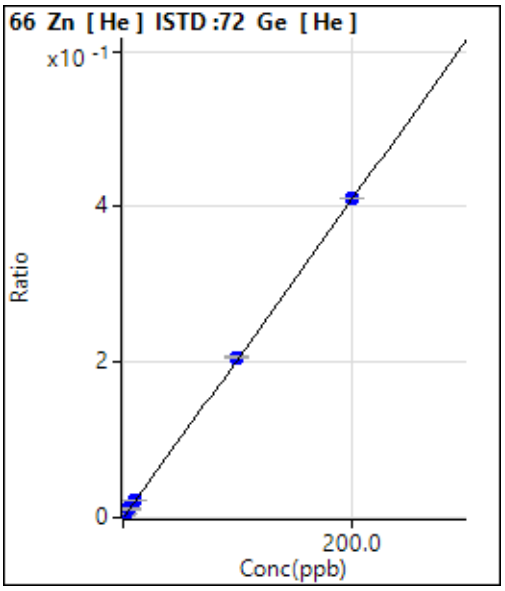


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1666.80	0.0009	P	4.8	
2	☐	2.000	1.636	6001.43	0.0033	P	3.2	-18.2
3	☐	5.000	5.116	15662.60	0.0084	P	1.0	2.3
4	☐	10.000	9.896	28911.16	0.0153	P	1.1	-1.0
5	☐	100.000	100.249	275275.18	0.1474	P	1.1	0.2
6	☐	200.000	199.882	530425.76	0.2930	P	1.2	-0.1

y = 0.0015 * x + 8.7965E-004
R = 1.0000
DL = 0.08686 ppb
BEC = 0.6018 ppb

Weight: <None>
Min Conc: <None>

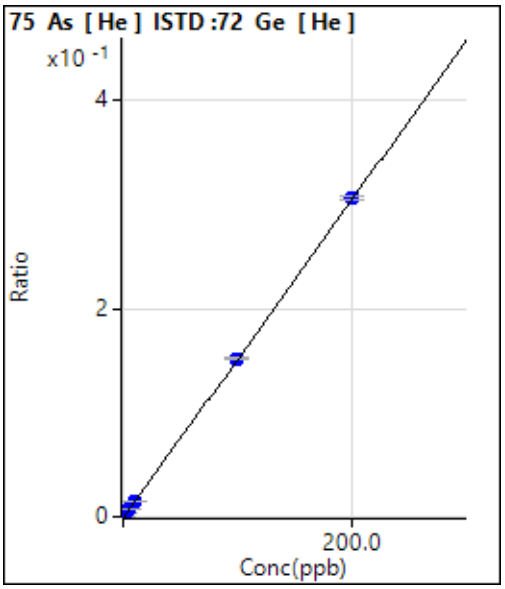
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	723.37	0.0014	P	10.5	
2	☐	2.000	1.699	2443.60	0.0049	P	3.5	-15.0
3	☐	5.000	4.811	5647.94	0.0113	P	6.1	-3.8
4	☐	10.000	10.216	11171.42	0.0224	P	2.1	2.2
5	☐	100.000	100.027	102811.58	0.2064	P	1.7	0.0
6	☐	200.000	199.984	200108.28	0.4111	P	0.1	0.0

y = 0.0020 * x + 0.0014
R = 1.0000
DL = 0.2207 ppb
BEC = 0.7015 ppb

Weight: <None>
Min Conc: <None>

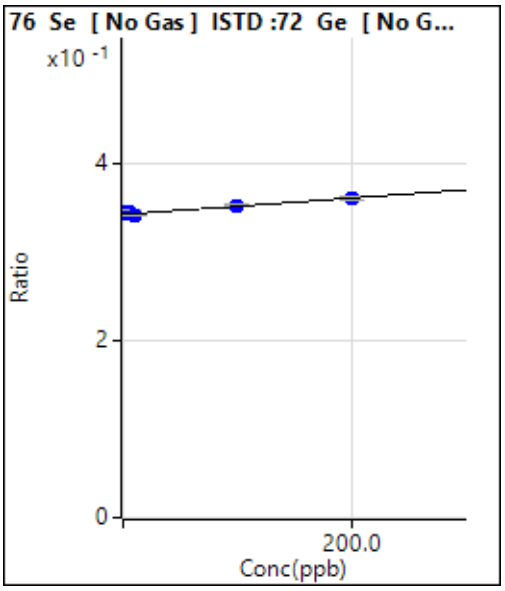


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	54.45	0.0001	P	19.7	
2	☐	2.000	1.920	1513.43	0.0030	P	1.6	-4.0
3	☐	5.000	4.810	3736.09	0.0075	P	0.4	-3.8
4	☐	10.000	9.622	7407.62	0.0148	P	0.5	-3.8
5	☐	100.000	99.325	75761.06	0.1521	P	1.2	-0.7
6	☐	200.000	200.362	149260.53	0.3067	P	0.9	0.2

y = 0.0015 * x + 1.0820E-004
R = 1.0000
DL = 0.04187 ppb
BEC = 0.07072 ppb

Weight: <None>
Min Conc: <None>

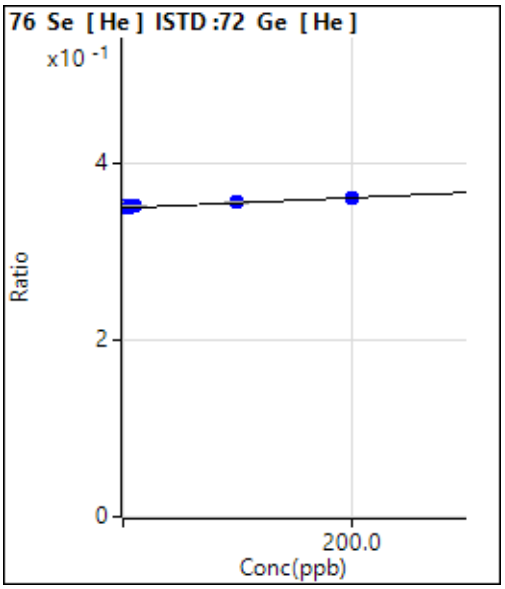
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	648911.77	0.3425	P	0.2	
2	☐	2.000	30.762	633826.06	0.3454	P	0.2	1438.1
3	☐	5.000	26.116	646454.87	0.3450	P	1.3	422.3
4	☐	10.000	-12.084	643311.00	0.3414	P	0.4	-220.8
5	☐	100.000	110.353	658979.92	0.3529	P	0.9	10.4
6	☐	200.000	195.112	653068.64	0.3608	P	1.0	-2.4

y = 9.3538E-005 * x + 0.3425
R = 0.9741
DL = 23.83 ppb
BEC = 3662 ppb

Weight: <None>
Min Conc: <None>

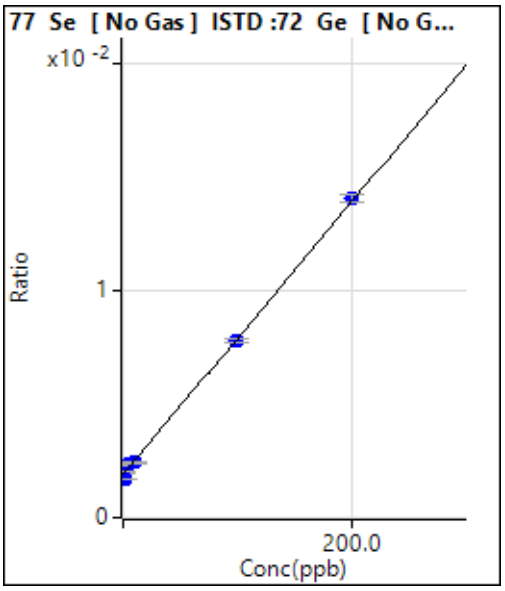


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	176246.73	0.3502	P	0.7	
2	☐	2.000	61.681	175793.67	0.3539	P	1.4	2984.0
3	☐	5.000	27.569	176027.38	0.3519	P	0.8	451.4
4	☐	10.000	45.979	176300.79	0.3529	P	0.6	359.8
5	☐	100.000	104.587	177560.42	0.3564	P	0.4	4.6
6	☐	200.000	194.746	176071.57	0.3618	P	0.4	-2.6

y = 5.9173E-005 * x + 0.3502
R = 0.9585
DL = 128.8 ppb
BEC = 5919 ppb

Weight: <None>
Min Conc: <None>

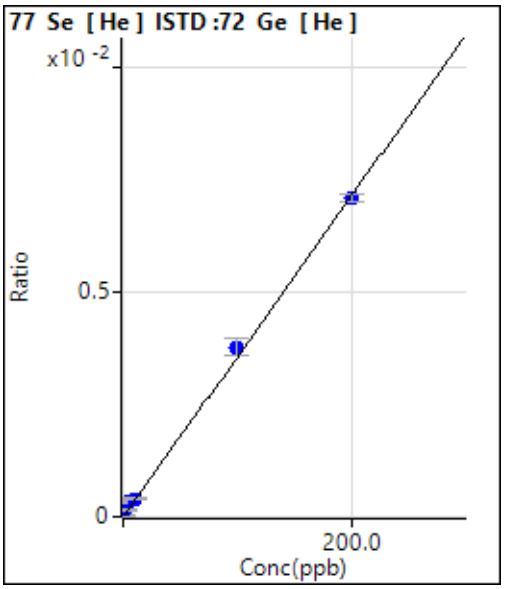
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3747.25	0.0020	P	6.1	
2	☐	2.000	-4.695	3113.75	0.0017	P	2.2	-334.8
3	☐	5.000	6.376	4420.81	0.0024	P	5.6	27.5
4	☐	10.000	7.455	4567.54	0.0024	P	5.8	-25.4
5	☐	100.000	97.370	14588.14	0.0078	P	2.2	-2.6
6	☐	200.000	201.475	25420.90	0.0140	P	2.5	0.7

y = 5.9897E-005 * x + 0.0020
R = 0.9994
DL = 6.067 ppb
BEC = 33.02 ppb

Weight: <None>
Min Conc: <None>

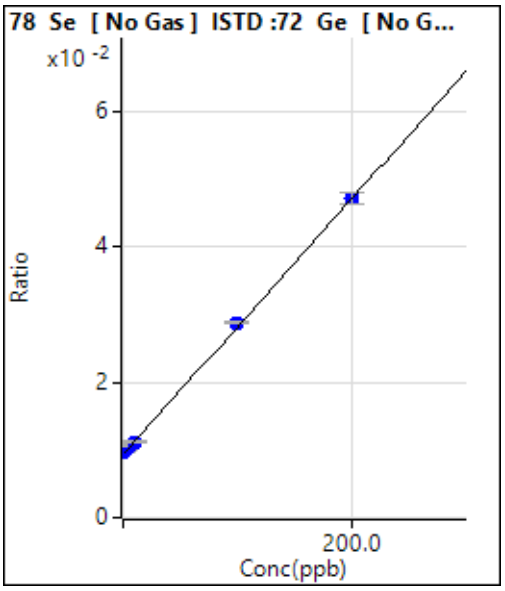


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	43.5	
2	☐	2.000	3.568	76.67	0.0002	P	20.1	78.4
3	☐	5.000	8.368	163.34	0.0003	P	21.0	67.4
4	☐	10.000	10.254	196.67	0.0004	P	6.6	2.5
5	☐	100.000	104.755	1883.49	0.0038	P	10.8	4.8
6	☐	200.000	197.510	3457.18	0.0071	P	2.1	-1.2

y = 3.5826E-005 * x + 2.6511E-005
R = 0.9996
DL = 0.9664 ppb
BEC = 0.74 ppb

Weight: <None>
Min Conc: <None>

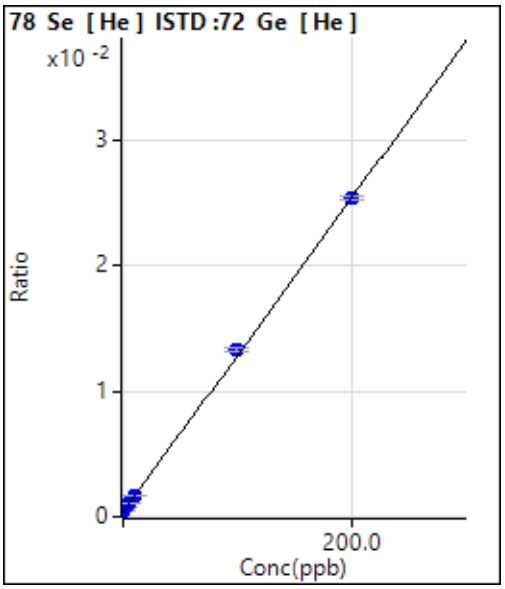
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18212.58	0.0096	P	1.7	
2	☐	2.000	1.495	18159.24	0.0099	P	0.7	-25.3
3	☐	5.000	5.097	19814.94	0.0106	P	2.2	1.9
4	☐	10.000	8.299	21063.43	0.0112	P	1.2	-17.0
5	☐	100.000	101.571	53713.83	0.0288	P	0.8	1.6
6	☐	200.000	199.302	85382.90	0.0472	P	3.5	-0.3

y = 1.8849E-004 * x + 0.0096
R = 0.9999
DL = 2.595 ppb
BEC = 51.01 ppb

Weight: <None>
Min Conc: <None>

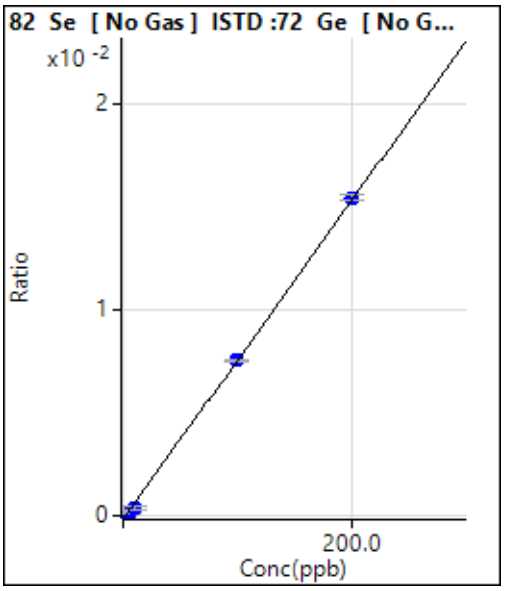


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	252.67	0.0005	P	11.8	
2	☐	2.000	1.803	361.34	0.0007	P	4.0	-9.9
3	☐	5.000	4.632	540.68	0.0011	P	5.2	-7.4
4	☐	10.000	9.440	840.03	0.0017	P	3.4	-5.6
5	☐	100.000	102.106	6606.97	0.0133	P	1.9	2.1
6	☐	200.000	198.986	12348.33	0.0254	P	1.5	-0.5

y = 1.2497E-004 * x + 5.0199E-004
R = 0.9999
DL = 1.427 ppb
BEC = 4.017 ppb

Weight: <None>
Min Conc: <None>

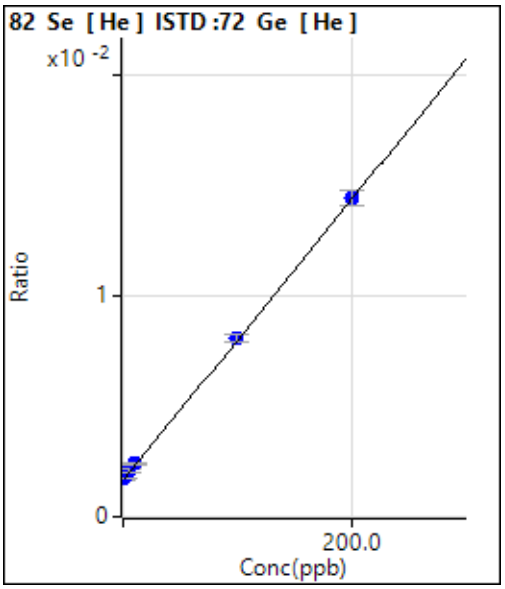
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-212.33	-0.0001	P	-275.	
2	☐	2.000	0.517	-129.70	-0.0001	P	-213.	-74.1
3	☐	5.000	2.993	226.83	0.0001	P	18.4	-40.1
4	☐	10.000	6.272	705.77	0.0004	P	35.9	-37.3
5	☐	100.000	98.734	14071.71	0.0075	P	1.7	-1.3
6	☐	200.000	200.884	27955.16	0.0154	P	2.1	0.4

y = 7.7435E-005 * x - 1.1069E-004
R = 0.9999
DL = 11.81 ppb
BEC = -1.429 ppb

Weight: <None>
Min Conc: <None>

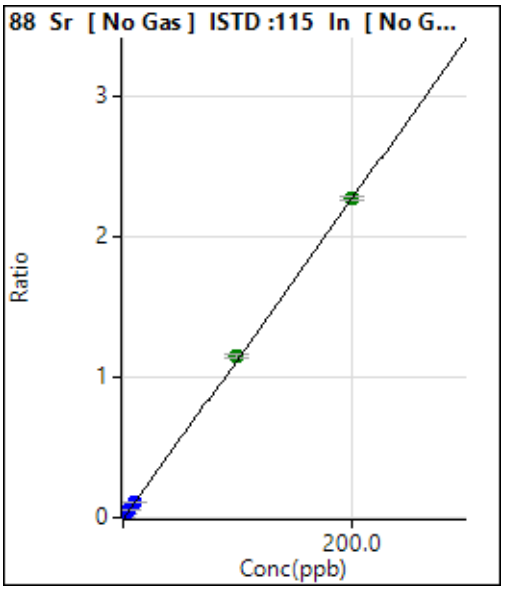


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	866.71	0.0017	P	3.8	
2	☐	2.000	1.953	916.72	0.0018	P	12.0	-2.3
3	☐	5.000	5.714	1043.39	0.0021	P	11.6	14.3
4	☐	10.000	10.513	1193.41	0.0024	P	5.8	5.1
5	☐	100.000	100.006	4017.35	0.0081	P	5.2	0.0
6	☐	200.000	199.954	7011.98	0.0144	P	4.9	0.0

y = 6.3426E-005 * x + 0.0017
R = 1.0000
DL = 3.068 ppb
BEC = 27.16 ppb

Weight: <None>
Min Conc: <None>

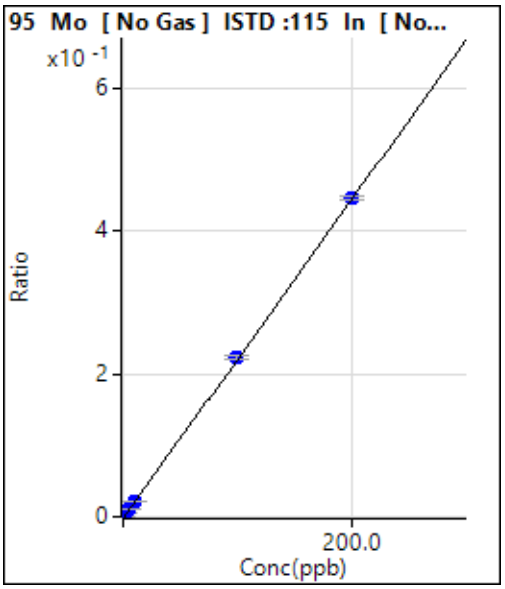
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1063.40	0.0005	P	11.8	
2	☐	2.000	2.051	49116.79	0.0239	P	0.4	2.6
3	☐	5.000	4.658	111720.05	0.0536	P	1.2	-6.8
4	☐	10.000	9.294	220710.69	0.1064	P	0.3	-7.1
5	☐	100.000	101.125	2394664.76	1.1524	A	1.8	1.1
6	☐	200.000	199.481	4616024.51	2.2727	A	1.3	-0.3

y = 0.0114 * x + 5.0731E-004
R = 1.0000
DL = 0.01581 ppb
BEC = 0.04454 ppb

Weight: <None>
Min Conc: <None>

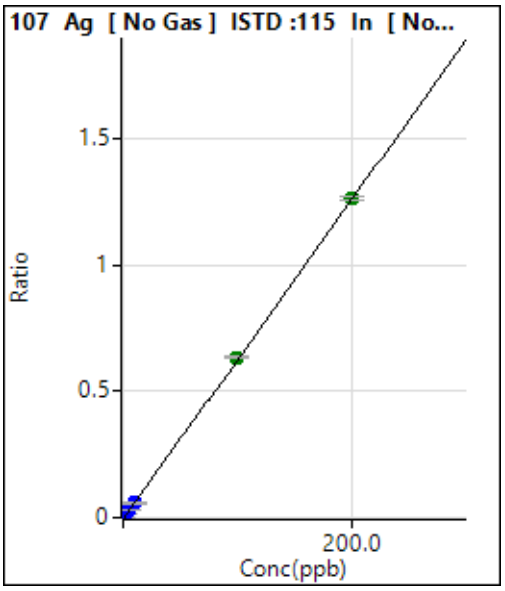


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	107.8	
2	☐	2.000	1.865	8586.24	0.0042	P	4.3	-6.8
3	☐	5.000	4.756	22168.68	0.0106	P	0.6	-4.9
4	☐	10.000	9.630	44628.31	0.0215	P	2.7	-3.7
5	☐	100.000	99.923	463556.73	0.2231	P	2.2	-0.1
6	☐	200.000	200.064	907191.99	0.4467	P	1.1	0.0

y = 0.0022 * x + 1.1178E-005
R = 1.0000
DL = 0.01619 ppb
BEC = 0.005007 ppb

Weight: <None>
Min Conc: <None>

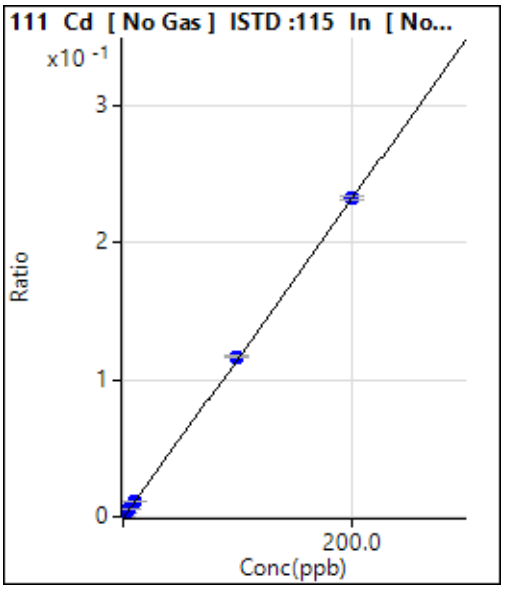
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	573.35	0.0003	P	10.6	
2	☐	2.000	1.828	24396.17	0.0119	P	0.4	-8.6
3	☐	5.000	4.539	60535.16	0.0290	P	1.5	-9.2
4	☐	10.000	9.056	119601.01	0.0576	P	2.2	-9.4
5	☐	100.000	100.407	1322337.79	0.6364	A	2.0	0.4
6	☐	200.000	199.857	2571998.19	1.2664	A	1.5	-0.1

y = 0.0063 * x + 2.7373E-004
R = 1.0000
DL = 0.01369 ppb
BEC = 0.04321 ppb

Weight: <None>
Min Conc: <None>

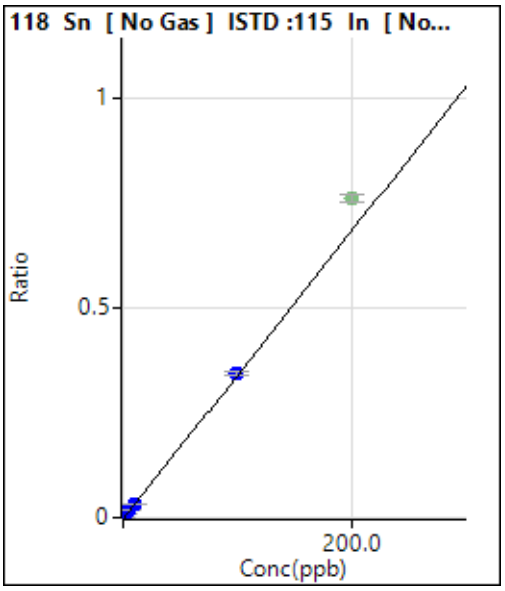


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	2.008	4804.31	0.0023	P	6.3	0.4
3	☐	5.000	4.863	11795.49	0.0057	P	1.8	-2.7
4	☐	10.000	9.824	23704.88	0.0114	P	1.3	-1.8
5	☐	100.000	100.469	242769.36	0.1168	P	2.0	0.5
6	☐	200.000	199.777	471787.86	0.2323	P	1.4	-0.1

y = 0.0012 * x + 1.5787E-006
R = 1.0000
DL = 0.007055 ppb
BEC = 0.001358 ppb

Weight: <None>
Min Conc: <None>

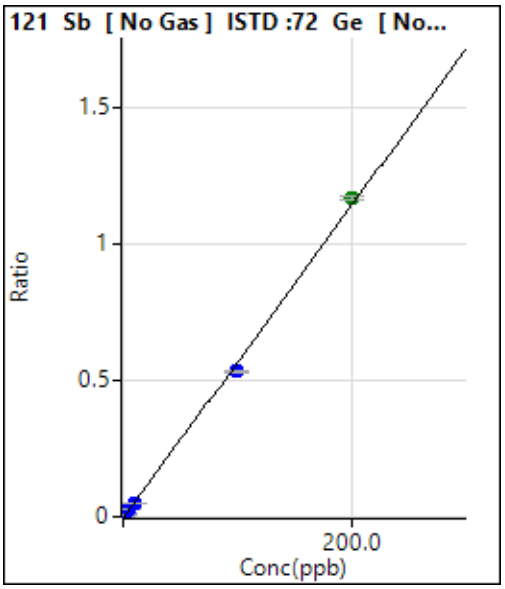
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1223.41	0.0006	P	9.2	
2	☐	2.000	2.000	15349.27	0.0075	P	1.6	0.0
3	☐	5.000	4.762	35358.18	0.0170	P	2.1	-4.8
4	☐	10.000	9.504	69010.76	0.0333	P	1.2	-5.0
5	☐	100.000	100.062	716077.93	0.3446	P	1.9	0.1
6	☑	200.000		1548352.53	0.7624	A	1.9	

y = 0.0034 * x + 5.8372E-004
R = 1.0000
DL = 0.04692 ppb
BEC = 0.1698 ppb

Weight: <None>
Min Conc: <None>

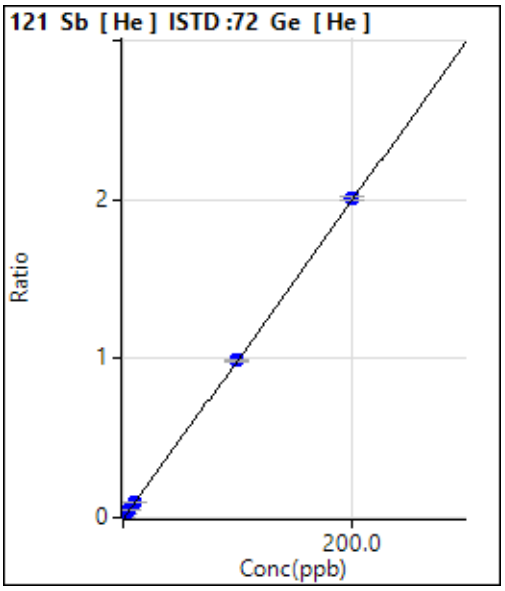


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	206.67	0.0001	P	30.8	
2	☐	2.000	1.853	19735.23	0.0108	P	5.0	-7.4
3	☐	5.000	4.507	48723.88	0.0260	P	2.8	-9.9
4	☐	10.000	9.000	97651.78	0.0518	P	0.9	-10.0
5	☐	100.000	92.733	995335.40	0.5330	P	1.1	-7.3
6	☐	200.000	203.697	2118884.66	1.1706	A	0.9	1.8

y = 0.0057 * x + 1.0896E-004
R = 0.9991
DL = 0.01754 ppb
BEC = 0.01896 ppb

Weight: <None>
Min Conc: <None>

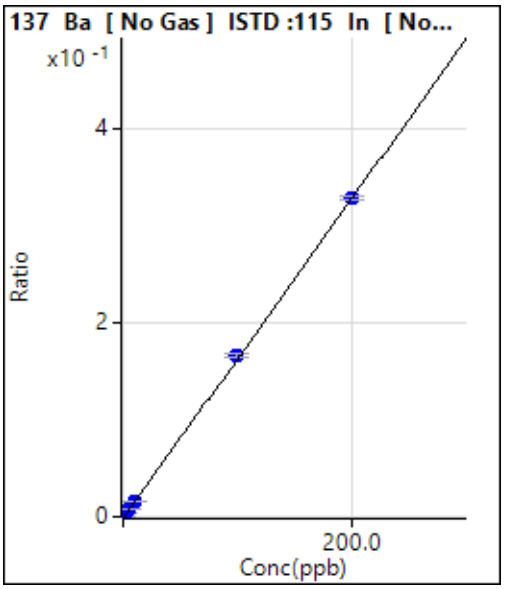
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	116.67	0.0002	P	47.3	
2	☐	2.000	1.993	10030.66	0.0202	P	4.0	-0.3
3	☐	5.000	4.966	24997.51	0.0500	P	0.8	-0.7
4	☐	10.000	9.551	47894.06	0.0959	P	0.5	-4.5
5	☐	100.000	98.656	492355.37	0.9883	P	0.5	-1.3
6	☐	200.000	200.695	978382.07	2.0102	P	0.9	0.3

y = 0.0100 * x + 2.3195E-004
R = 1.0000
DL = 0.03285 ppb
BEC = 0.02316 ppb

Weight: <None>
Min Conc: <None>

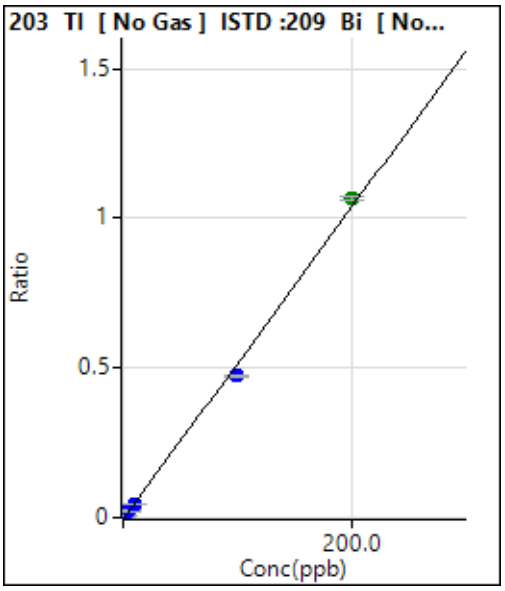


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	156.67	0.0001	P	13.8	
2	☐	2.000	2.053	7108.75	0.0035	P	5.0	2.6
3	☐	5.000	4.822	16720.95	0.0080	P	2.1	-3.6
4	☐	10.000	9.628	33059.07	0.0159	P	1.5	-3.7
5	☐	100.000	101.061	346083.24	0.1665	P	1.5	1.1
6	☐	200.000	199.492	667551.11	0.3287	P	1.6	-0.3

y = 0.0016 * x + 7.4815E-005
R = 1.0000
DL = 0.01882 ppb
BEC = 0.04542 ppb

Weight: <None>
Min Conc: <None>

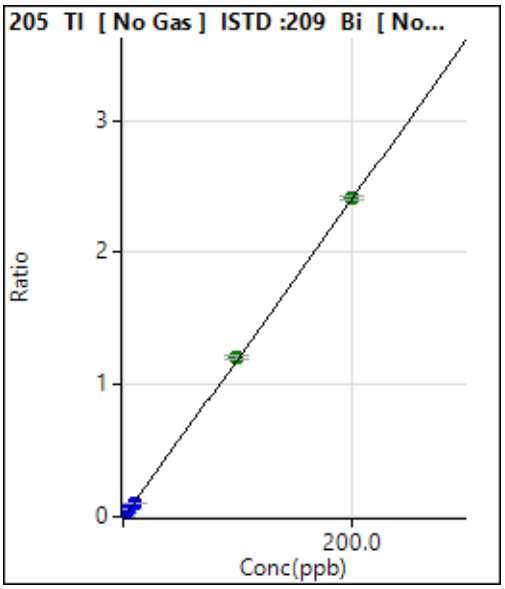
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	100.1	
2	☐	2.000	1.759	16467.82	0.0092	P	4.4	-12.0
3	☐	5.000	4.347	41435.68	0.0227	P	2.3	-13.1
4	☐	10.000	8.539	81672.47	0.0445	P	0.5	-14.6
5	☐	100.000	90.918	853228.79	0.4742	P	1.9	-9.1
6	☐	200.000	204.633	1873717.47	1.0673	A	1.3	2.3

y = 0.0052 * x + 1.0982E-005
R = 0.9986
DL = 0.006326 ppb
BEC = 0.002106 ppb

Weight: <None>
Min Conc: <None>

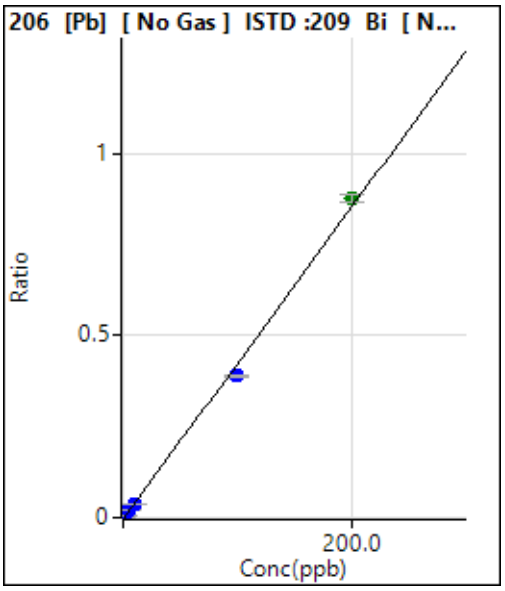


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43.33	0.0000	P	26.6	
2	☐	2.000	1.858	40191.85	0.0224	P	2.5	-7.1
3	☐	5.000	4.516	99504.66	0.0545	P	2.5	-9.7
4	☐	10.000	8.910	197014.94	0.1075	P	0.4	-10.9
5	☐	100.000	100.006	2169624.45	1.2059	A	2.1	0.0
6	☐	200.000	200.065	4235126.08	2.4123	A	1.0	0.0

y = 0.0121 * x + 2.3803E-005
R = 1.0000
DL = 0.001575 ppb
BEC = 0.001974 ppb

Weight: <None>
Min Conc: <None>

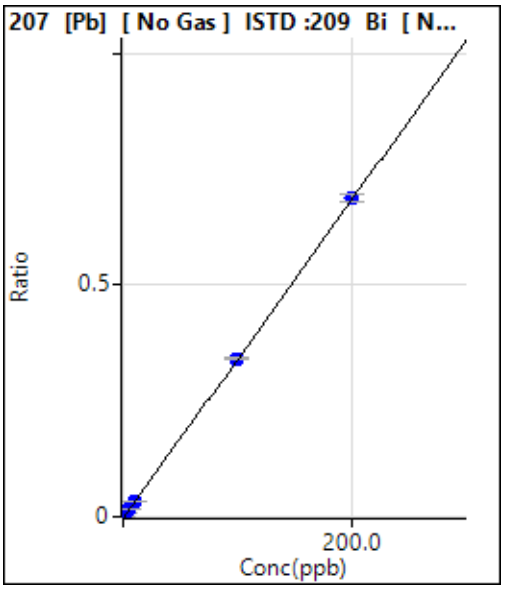
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	173.34	0.0001	P	18.7	
2	☐	2.000	1.793	13961.43	0.0078	P	2.8	-10.3
3	☐	5.000	4.448	35029.39	0.0192	P	2.8	-11.0
4	☐	10.000	8.706	68655.76	0.0374	P	0.9	-12.9
5	☐	100.000	90.964	702390.15	0.3903	P	1.3	-9.0
6	☐	200.000	204.598	1540981.12	0.8779	A	2.5	2.3

y = 0.0043 * x + 9.5241E-005
R = 0.9986
DL = 0.01243 ppb
BEC = 0.0222 ppb

Weight: <None>
Min Conc: <None>

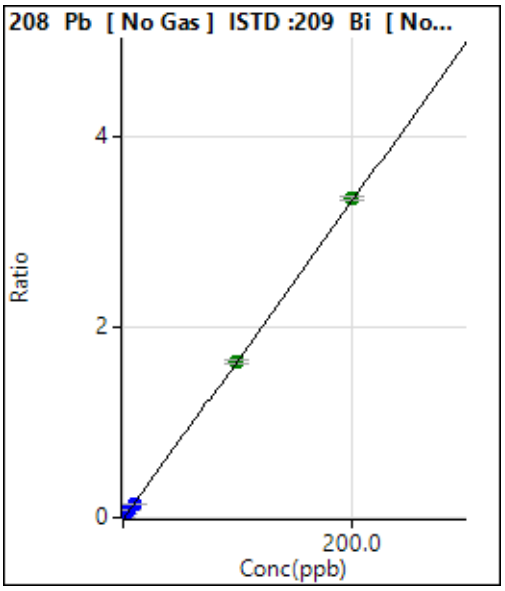


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	113.33	0.0001	P	5.2	
2	☐	2.000	1.864	11582.22	0.0065	P	1.4	-6.8
3	☐	5.000	4.788	30133.36	0.0165	P	1.3	-4.2
4	☐	10.000	9.609	60587.46	0.0330	P	1.6	-3.9
5	☐	100.000	99.445	614278.08	0.3414	P	2.1	-0.6
6	☐	200.000	200.304	1207124.54	0.6876	P	1.9	0.2

y = 0.0034 * x + 6.2264E-005
R = 1.0000
DL = 0.00282 ppb
BEC = 0.01814 ppb

Weight: <None>
Min Conc: <None>

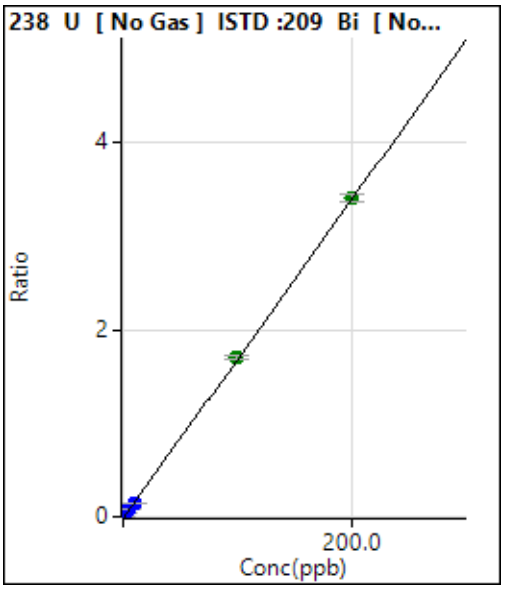
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	626.68	0.0003	P	9.6	
2	☐	2.000	1.829	55249.52	0.0308	P	0.8	-8.6
3	☐	5.000	4.528	138461.51	0.0758	P	1.0	-9.4
4	☐	10.000	8.955	274260.41	0.1496	P	0.6	-10.4
5	☐	100.000	98.029	2940299.03	1.6340	A	1.5	-2.0
6	☐	200.000	201.051	5882526.13	3.3509	A	1.6	0.5

y = 0.0167 * x + 3.4425E-004
R = 0.9999
DL = 0.005975 ppb
BEC = 0.02066 ppb

Weight: <None>
Min Conc: <None>

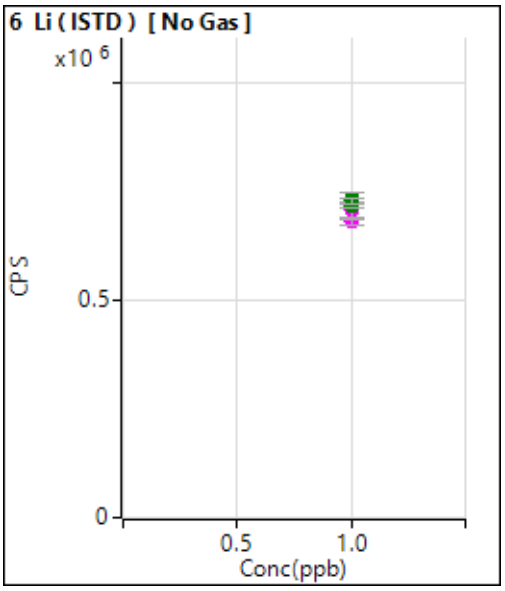


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	0.3	
2	☐	2.000	1.827	55877.73	0.0312	P	1.7	-8.7
3	☐	5.000	4.470	139319.05	0.0763	P	1.2	-10.6
4	☐	10.000	8.990	281255.10	0.1534	P	0.9	-10.1
5	☐	100.000	100.022	3070749.33	1.7067	A	1.8	0.0
6	☐	200.000	200.055	5992360.12	3.4135	A	1.8	0.0

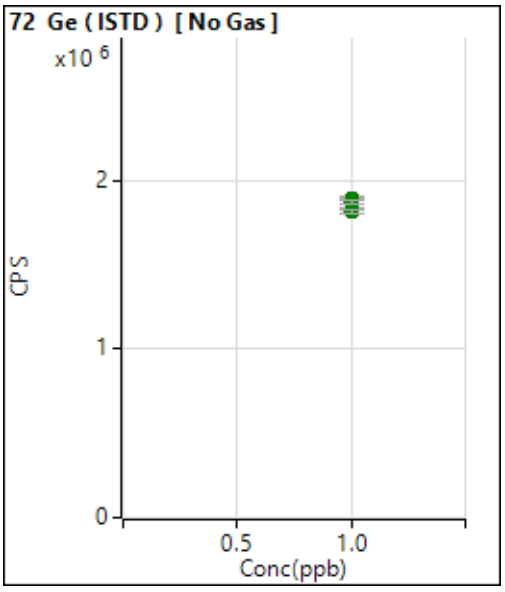
y = 0.0171 * x + 5.4938E-006
R = 1.0000
DL = 2.904E-06 ppb
BEC = 0.000322 ppb

Weight: <None>
Min Conc: <None>

Calibration for 027_ICV.d

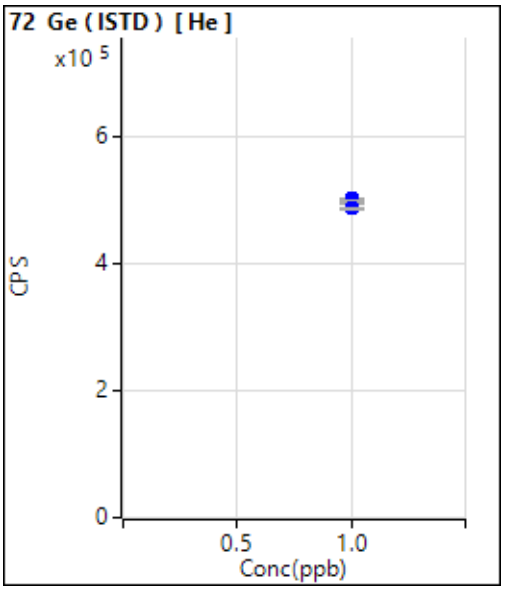


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		707162.97		M	4.5	
2	☐	1.000		734341.96		A	3.1	
3	☐	1.000		679921.55		M	2.7	
4	☐	1.000		705728.30		M	5.5	
5	☐	1.000		717957.42		A	1.2	
6	☐	1.000		727879.40		A	2.1	

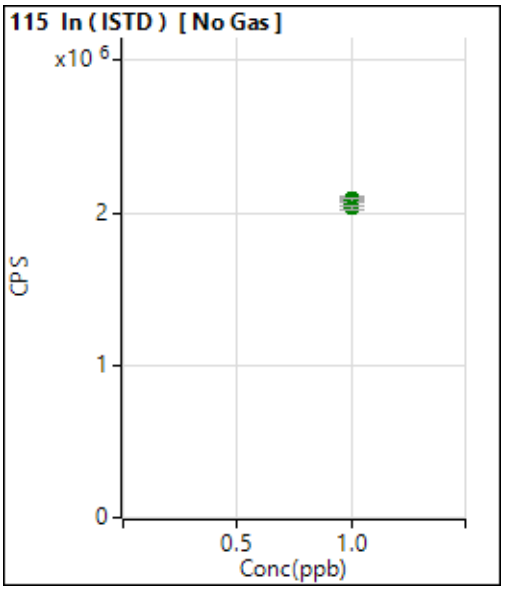


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1894389.81		A	0.8	
2	☐	1.000		1834946.07		A	0.6	
3	☐	1.000		1874036.12		A	1.1	
4	☐	1.000		1884282.00		A	0.6	
5	☐	1.000		1867616.48		A	1.1	
6	☐	1.000		1810243.62		A	1.3	

Calibration for 027_ICV.d

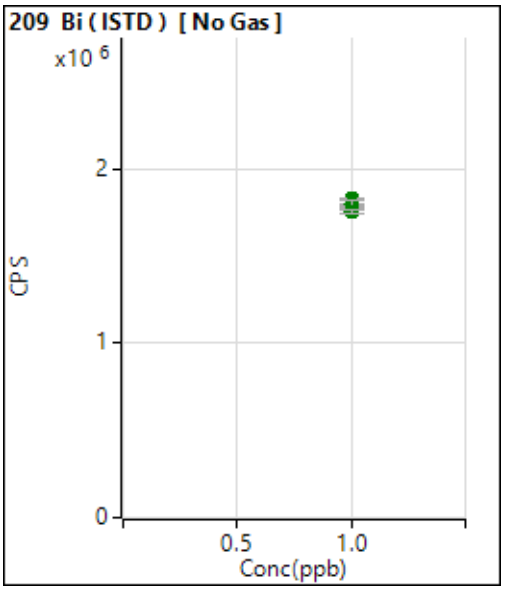


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		503235.58		P	0.2	
2	☐	1.000		496798.96		P	0.8	
3	☐	1.000		500296.88		P	0.8	
4	☐	1.000		499497.06		P	0.9	
5	☐	1.000		498178.42		P	0.7	
6	☐	1.000		486716.71		P	0.5	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		2095071.80		A	0.7	
2	☐	1.000		2057576.17		A	1.2	
3	☐	1.000		2085568.03		A	0.6	
4	☐	1.000		2074897.83		A	0.4	
5	☐	1.000		2078257.43		A	1.4	
6	☐	1.000		2031335.33		A	1.7	

Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1820259.97		A	0.3	
2	☐	1.000		1792519.87		A	0.3	
3	☐	1.000		1826739.09		A	0.8	
4	☐	1.000		1833487.79		A	0.5	
5	☐	1.000		1799733.31		A	2.3	
6	☐	1.000		1755763.72		A	1.4	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	018CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T11:56:38-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	39627	0.00
Be	9	1	No Gas	27	81.19
V	51	2	He	761	0.84
Cr	52	2	He	1493	0.36
Fe	56	2	He	9046	0.03
Se	78	2	He	253	4.79
As	75	2	He	54	36.15
Ca	44	2	He	910	0.24
Na	23	2	He	115515	0.00
Mg	24	2	He	323	1.10
K	39	2	He	68034	0.00
Mn	55	2	He	267	4.94
Co	59	2	He	77	49.11
Ni	60	2	He	210	16.35
Cu	63	2	He	767	2.81
Zn	66	2	He	723	1.48
Al	27	2	He	557	2.15
B	11	1	No Gas	2784	0.28
Al	27	1	No Gas	25821	0.00
Si	28	1	No Gas	240032	0.00
Ag	107	1	No Gas	573	1.78
Cd	111	1	No Gas	3	5196.15
Sr	88	1	No Gas	1063	1.18
Mo	95	1	No Gas	23	462.23
Sn	118	1	No Gas	1223	0.81
Sb	121	1	No Gas	207	15.23
Ba	137	1	No Gas	157	8.48
Tl	205	1	No Gas	43	61.49
Tl	203	1	No Gas	20	500.00
Pb	208	1	No Gas	627	1.56
U	238	1	No Gas	10	0.00
Ca	43	2	He	27	532.40
Sb	121	2	He	117	40.46
Ti	47	2	He	7	1299.04
Cu	63	1	No Gas	1510	0.42

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD

Calibration Blank Report

Li	6	1	No Gas	707163	4.48
Ge	72	2	He	503236	0.25
Ge	72	1	No Gas	1894390	0.77
In	115	1	No Gas	2095072	0.68

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	No Gas	1820260	0.30

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	019CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T11:58:58-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	5419	0.05
V	51	2	He	11229	0.03
Cr	52	2	He	13877	0.03
Fe	56	2	He	1271904	0.00
Se	78	2	He	370	2.46
As	75	2	He	1957	0.02
Ca	44	2	He	8653	0.02
Na	23	2	He	311525	0.00
Mg	24	2	He	105729	0.00
K	39	2	He	199604	0.00
Mn	55	2	He	9423	0.07
Co	59	2	He	19551	0.01
Ni	60	2	He	5561	0.02
Cu	63	2	He	15015	0.02
Zn	66	2	He	4838	0.10
Al	27	2	He	1180	0.50
B	11	1	No Gas	17244	0.01
Al	27	1	No Gas	54159	0.01
Si	28	1	No Gas	300387	0.00
Ag	107	1	No Gas	29968	0.01
Cd	111	1	No Gas	5835	0.06
Sr	88	1	No Gas	56985	0.00
Mo	95	1	No Gas	10895	0.03
Sn	118	1	No Gas	18119	0.01
Sb	121	1	No Gas	24807	0.00
Ba	137	1	No Gas	8303	0.02
Tl	205	1	No Gas	48585	0.00
Tl	203	1	No Gas	20804	0.01
Pb	208	1	No Gas	68869	0.00
U	238	1	No Gas	69524	0.00
Ca	43	2	He	540	2.40
Sb	121	2	He	12406	0.03
Cu	63	1	No Gas	26690	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	706795	4.80	707163	99.95	70	120	
Ge	72	2	He	501106	0.48	503236	99.58	70	120	
Ge	72	1	No Gas	1886313	1.07	1894390	99.57	70	120	

Calibration Standard Report

In	115	1	No Gas	2104865	0.49	2095072	100.47	70	120	
Bi	209	1	No Gas	1835467	1.30	1820260	100.84	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	020CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:01:17-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	11335	0.02
V	51	2	He	21347	0.01
Cr	52	2	He	26062	0.01
Fe	56	2	He	2533056	0.00
Se	78	2	He	541	0.91
As	75	2	He	3736	0.02
Ca	44	2	He	13403	0.01
Na	23	2	He	487322	0.00
Mg	24	2	He	213100	0.00
K	39	2	He	318405	0.00
Mn	55	2	He	17371	0.01
Co	59	2	He	39207	0.00
Ni	60	2	He	10504	0.04
Cu	63	2	He	28657	0.01
Zn	66	2	He	5648	0.10
Al	27	2	He	1687	0.54
B	11	1	No Gas	32496	0.00
Al	27	1	No Gas	84057	0.00
Si	28	1	No Gas	362515	0.00
Ag	107	1	No Gas	60535	0.00
Cd	111	1	No Gas	11795	0.01
Sr	88	1	No Gas	111720	0.00
Mo	95	1	No Gas	22169	0.00
Sn	118	1	No Gas	35358	0.00
Sb	121	1	No Gas	48724	0.00
Ba	137	1	No Gas	16721	0.01
Tl	205	1	No Gas	99505	0.00
Tl	203	1	No Gas	41436	0.00
Pb	208	1	No Gas	138462	0.00
U	238	1	No Gas	139319	0.00
Ca	43	2	He	713	0.41
Sb	121	2	He	24998	0.00
Cu	63	1	No Gas	52073	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	679922	2.67	707163	96.15	70	120	
Ge	72	2	He	500297	0.79	503236	99.42	70	120	
Ge	72	1	No Gas	1874036	1.07	1894390	98.93	70	120	

Calibration Standard Report

In	115	1	No Gas	2085568	0.60	2095072	99.55	70	120	
Bi	209	1	No Gas	1826739	0.76	1820260	100.36	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	021CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:03:35-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	22064	0.01
V	51	2	He	42483	0.00
Cr	52	2	He	49928	0.00
Fe	56	2	He	4898123	0.00
Se	78	2	He	840	0.45
As	75	2	He	7408	0.01
Ca	44	2	He	26068	0.01
Na	23	2	He	936687	0.00
Mg	24	2	He	425665	0.00
K	39	2	He	567495	0.00
Mn	55	2	He	33856	0.01
Co	59	2	He	77523	0.00
Ni	60	2	He	20743	0.01
Cu	63	2	He	55075	0.00
Zn	66	2	He	11171	0.02
Al	27	2	He	2847	0.21
B	11	1	No Gas	62339	0.00
Al	27	1	No Gas	139336	0.00
Si	28	1	No Gas	488898	0.00
Ag	107	1	No Gas	119601	0.00
Cd	111	1	No Gas	23705	0.01
Sr	88	1	No Gas	220711	0.00
Mo	95	1	No Gas	44628	0.01
Sn	118	1	No Gas	69011	0.00
Sb	121	1	No Gas	97652	0.00
Ba	137	1	No Gas	33059	0.00
Tl	205	1	No Gas	197015	0.00
Tl	203	1	No Gas	81672	0.00
Pb	208	1	No Gas	274260	0.00
U	238	1	No Gas	281255	0.00
Ca	43	2	He	1687	0.83
Sb	121	2	He	47894	0.00
Cu	63	1	No Gas	101356	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	705728	5.48	707163	99.80	70	120	
Ge	72	2	He	499497	0.92	503236	99.26	70	120	
Ge	72	1	No Gas	1884282	0.62	1894390	99.47	70	120	

Calibration Standard Report

In	115	1	No Gas	2074898	0.39	2095072	99.04	70	120	
Bi	209	1	No Gas	1833488	0.51	1820260	100.73	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	022CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:05:52-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	231288	0.00
V	51	2	He	432713	0.00
Cr	52	2	He	508204	0.00
Fe	56	2	He	48949928	0.00
Se	78	2	He	6607	0.03
As	75	2	He	75761	0.00
Ca	44	2	He	257339	0.00
Na	23	2	He	8068826	0.00
Mg	24	2	He	4391394	0.00
K	39	2	He	5648742	0.00
Mn	55	2	He	343433	0.00
Co	59	2	He	790371	0.00
Ni	60	2	He	207834	0.00
Cu	63	2	He	561289	0.00
Zn	66	2	He	102812	0.00
Al	27	2	He	22652	0.01
B	11	1	No Gas	615361	0.00
Al	27	1	No Gas	1228020	0.00
Si	28	1	No Gas	2912244	0.00
Ag	107	1	No Gas	1322338	0.00
Cd	111	1	No Gas	242769	0.00
Sr	88	1	No Gas	2394665	0.00
Mo	95	1	No Gas	463557	0.00
Sn	118	1	No Gas	716078	0.00
Sb	121	1	No Gas	995335	0.00
Ba	137	1	No Gas	346083	0.00
Tl	205	1	No Gas	2169624	0.00
Tl	203	1	No Gas	853229	0.00
Pb	208	1	No Gas	2940299	0.00
U	238	1	No Gas	3070749	0.00
Ca	43	2	He	15799	0.02
Sb	121	2	He	492355	0.00
Cu	63	1	No Gas	1030768	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	717957	1.19	707163	101.53	70	120	
Ge	72	2	He	498178	0.65	503236	99.00	70	120	
Ge	72	1	No Gas	1867616	1.05	1894390	98.59	70	120	

Calibration Standard Report

In	115	1	No Gas	2078257	1.39	2095072	99.20	70	120	
Bi	209	1	No Gas	1799733	2.26	1820260	98.87	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	023CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:08:04-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	465088	0.00
V	51	2	He	852746	0.00
Cr	52	2	He	1046801	0.00
Fe	56	2	He	96175079	0.00
Se	78	2	He	12348	0.02
As	75	2	He	149261	0.00
Ca	44	2	He	508249	0.00
Na	23	2	He	15984003	0.00
Mg	24	2	He	8771040	0.00
K	39	2	He	10994307	0.00
Mn	55	2	He	674048	0.00
Co	59	2	He	1727659	0.00
Ni	60	2	He	407665	0.00
Cu	63	2	He	1180758	0.00
Zn	66	2	He	200108	0.00
Al	27	2	He	44040	0.00
B	11	1	No Gas	1362985	0.00
Al	27	1	No Gas	2291513	0.00
Si	28	1	No Gas	5472170	0.00
Ag	107	1	No Gas	2571998	0.00
Cd	111	1	No Gas	471788	0.00
Sr	88	1	No Gas	4616025	0.00
Mo	95	1	No Gas	907192	0.00
Sn	118	1	No Gas	1548353	0.00
Sb	121	1	No Gas	2118885	0.00
Ba	137	1	No Gas	667551	0.00
Tl	205	1	No Gas	4235126	0.00
Tl	203	1	No Gas	1873717	0.00
Pb	208	1	No Gas	5882526	0.00
U	238	1	No Gas	5992360	0.00
Ca	43	2	He	30387	0.00
Sb	121	2	He	978382	0.00
Cu	63	1	No Gas	2187737	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	727879	2.13	707163	102.93	70	120	
Ge	72	2	He	486717	0.52	503236	96.72	70	120	
Ge	72	1	No Gas	1810244	1.31	1894390	95.56	70	120	

Calibration Standard Report

In	115	1	No Gas	2031335	1.70	2095072	96.96	70	120	
Bi	209	1	No Gas	1755764	1.37	1820260	96.46	70	120	

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	025CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:18:35-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	4884	0.02
V	51	2	He	9084	0.00
Cr	52	2	He	10588	0.03
Fe	56	2	He	968370	0.00
Se	78	2	He	361	1.19
As	75	2	He	1513	0.06
Ca	44	2	He	6748	0.03
Na	23	2	He	261829	0.00
Mg	24	2	He	87366	0.00
K	39	2	He	171090	0.00
Mn	55	2	He	7032	0.06
Co	59	2	He	15753	0.01
Ni	60	2	He	4314	0.20
Cu	63	2	He	11939	0.02
Zn	66	2	He	2444	0.17
Al	27	2	He	3097	0.18
B	11	1	No Gas	21330	0.00
Al	27	1	No Gas	149993	0.00
Si	28	1	No Gas	279066	0.00
Ag	107	1	No Gas	24396	0.01
Cd	111	1	No Gas	4804	0.11
Sr	88	1	No Gas	49117	0.00
Mo	95	1	No Gas	8586	0.04
Sn	118	1	No Gas	15349	0.02
Sb	121	1	No Gas	19735	0.03
Ba	137	1	No Gas	7109	0.05
Tl	205	1	No Gas	40192	0.01
Tl	203	1	No Gas	16468	0.02
Pb	208	1	No Gas	55250	0.00
U	238	1	No Gas	55878	0.00
Ca	43	2	He	433	1.34
Sb	121	2	He	10031	0.03
Cu	63	1	No Gas	21708	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	734342	3.10	707163	103.84	70	120	
Ge	72	2	He	496799	0.76	503236	98.72	70	120	
Ge	72	1	No Gas	1834946	0.62	1894390	96.86	70	120	

Calibration Standard Report

In	115	1	No Gas	2057576	1.21	2095072	98.21	70	120	
Bi	209	1	No Gas	1792520	0.32	1820260	98.48	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	027_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:24:36-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	104.364	2.028	1023442	2.35	100	104.4	90	110	
Be	9	1	No Gas	103.916	1.350	243306	0.91	100	103.9	90	110	
V	51	2	He	102.050	1.287	449454	0.59	100	102.1	90	110	
Cr	52	2	He	99.233	0.646	532126	0.63	100	99.2	90	110	
Fe	56	2	He	9980.514	0.651	49583253	0.35	10000	99.8	90	110	
Se	78	2	He	105.312	0.927	6878	1.68	100	105.3	90	110	
As	75	2	He	107.118	0.727	82553	0.59	100	107.1	90	110	
Ca	44	2	He	9959.956	0.988	261547	0.77	10000	99.6	90	110	
Na	23	2	He	9967.288	0.760	8261868	0.27	10000	99.7	90	110	
Mg	24	2	He	9990.013	0.600	4510851	0.50	10000	99.9	90	110	
K	39	2	He	9987.076	0.492	5708113	1.03	10000	99.9	90	110	
Mn	55	2	He	103.280	1.262	359726	0.56	100	103.3	90	110	
Co	59	2	He	103.310	0.869	824799	0.76	100	103.3	90	110	
Ni	60	2	He	100.940	1.566	212684	0.73	100	100.9	90	110	
Cu	63	2	He	97.193	1.260	585133	0.48	100	97.2	90	110	
Zn	66	2	He	104.597	1.679	108582	1.35	100	104.6	90	110	
Al	27	2	He	101.607	0.624	23390	0.58	100	101.6	90	110	
B	11	1	No Gas	465.568	1.143	628187	0.71	500	93.1	90	110	
Al	27	1	No Gas	104.986	2.483	1247773	1.49	100	105.0	90	110	
Si	28	1	No Gas	515.768	0.756	2989521	0.61	500	103.2	90	110	
Ag	107	1	No Gas	100.645	1.749	1303057	1.07	100	100.6	90	110	
Cd	111	1	No Gas	103.301	1.851	245367	0.60	100	103.3	90	110	
Sr	88	1	No Gas	103.449	0.753	2408381	0.62	100	103.4	90	110	
Mo	95	1	No Gas	98.480	1.360	449168	0.81	100	98.5	90	110	
Sn	118	1	No Gas	101.470	0.649	713941	0.70	100	101.5	90	110	
Sb	121	1	No Gas	94.013	0.940	998868	0.59	100	94.0	90	110	
Ba	137	1	No Gas	103.392	0.967	348076	0.54	100	103.4	90	110	
Tl	205	1	No Gas	107.205	0.617	2284189	0.54	100	107.2	90	110	
Tl	203	1	No Gas	96.190	1.423	886503	0.85	100	96.2	90	110	
Pb	208	1	No Gas	100.253	0.936	2952822	0.44	100	100.3	90	110	
U	238	1	No Gas	100.422	1.856	3027546	0.73	100	100.4	90	110	
Ca	43	2	He	9820.622	1.992	15492	1.85	10000	98.2	90	110	
Sb	121	2	He	101.235	1.005	510443	0.16	100	101.2	90	110	
Ti	47	2	He	97.282	0.989	15993	0.25	100	97.3	90	110	
Cu	63	1	No Gas	94.997	1.068	1043243	0.41	100	95.0	90	110	
Se	82	1	No Gas	104.429	5.674	14740	4.88	100	104.4	90	110	

QC ISTD Table

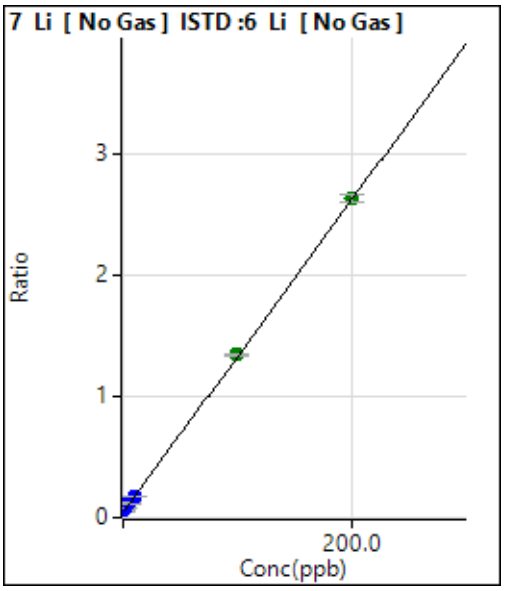
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	731541	0.43	707163	103.45	70	120	
Ge	72	2	He	503372	1.00	503236	100.03	70	120	
Ge	72	1	No Gas	1848742	0.94	1894390	97.59	70	120	
In	115	1	No Gas	2043114	1.35	2095072	97.52	70	120	
Bi	209	1	No Gas	1767137	1.16	1820260	97.08	70	120	

Calibration for 027_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\082322A.b\
Analysis File: 082322A.batch.bin
DA Date-Time: 08/23/2022 16:56:00
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	018CALB.d	CAL BLK	08/23/2022 11:56:38
2	025CALS.d	2/10/200	08/23/2022 12:18:35
3	020CALS.d	5/25/500	08/23/2022 12:01:17
4	021CALS.d	10/50/100	08/23/2022 12:03:35
5	022CALS.d	100/500/10K	08/23/2022 12:05:52
6	023CALS.d	200/1000/20K	08/23/2022 12:08:04

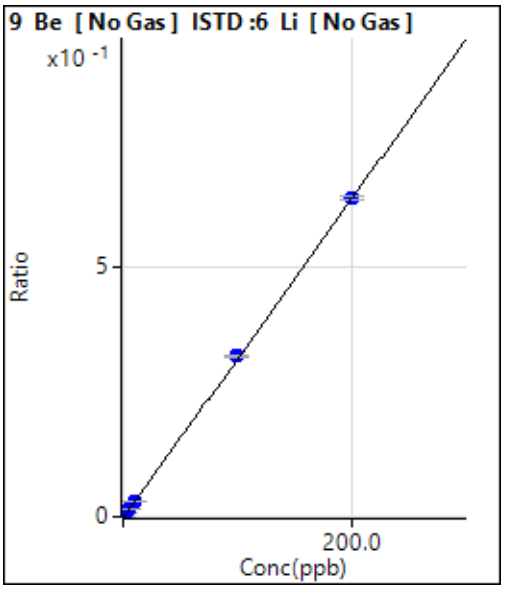
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	39627.41	0.0561	P	5.5	
2	☐	2.000	1.768	57893.61	0.0789	P	2.5	-11.6
3	☐	5.000	4.935	81298.73	0.1196	P	2.7	-1.3
4	☐	10.000	9.043	121501.18	0.1725	P	5.0	-9.6
5	☐	100.000	100.011	964275.01	1.3429	A	1.4	0.0
6	☐	200.000	200.047	1913964.97	2.6301	A	2.4	0.0

y = 0.0129 * x + 0.0561
R = 1.0000
DL = 0.7195 ppb
BEC = 4.362 ppb

Weight: <None>
Min Conc: <None>

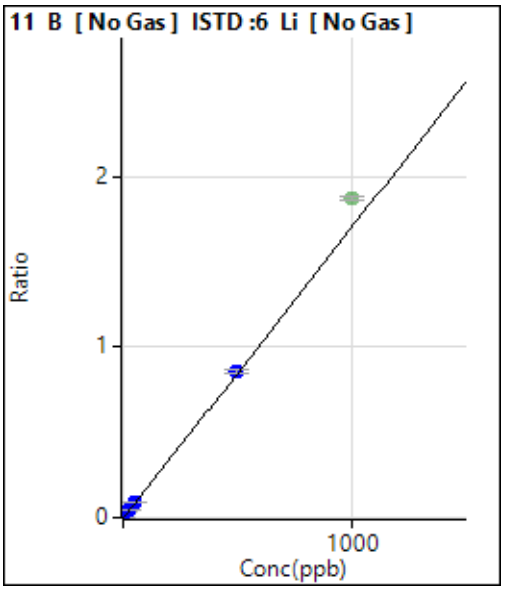


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	24.7	
2	☐	2.000	2.068	4884.23	0.0067	P	3.7	3.4
3	☐	5.000	5.199	11334.65	0.0167	P	2.1	4.0
4	☐	10.000	9.784	22064.04	0.0313	P	7.4	-2.2
5	☐	100.000	100.660	231288.15	0.3222	P	1.5	0.7
6	☐	200.000	199.675	465087.99	0.6391	P	1.2	-0.2

y = 0.0032 * x + 3.7941E-005
R = 1.0000
DL = 0.008778 ppb
BEC = 0.01186 ppb

Weight: <None>
Min Conc: <None>

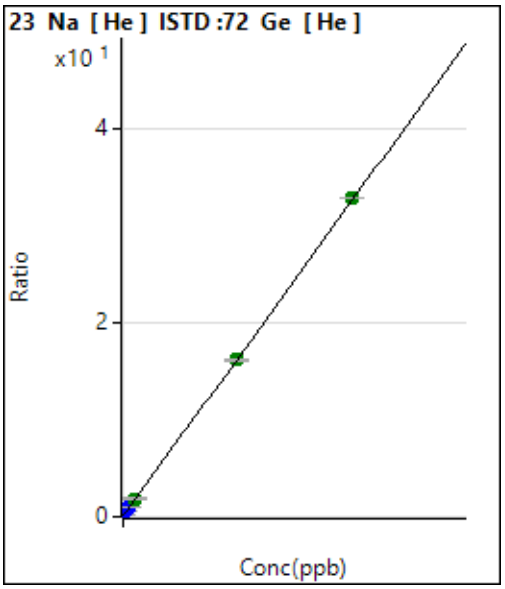
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2783.64	0.0039	P	5.9	
2	☐	10.000	14.721	21329.55	0.0291	P	2.7	47.2
3	☐	25.000	25.708	32495.91	0.0478	P	2.4	2.8
4	☐	50.000	49.569	62339.22	0.0885	P	6.4	-0.9
5	☐	500.000	499.913	615361.10	0.8572	P	1.5	0.0
6	☑	1000.000		1362985.19	1.8727	A	1.1	

y = 0.0017 * x + 0.0039
R = 1.0000
DL = 0.4104 ppb
BEC = 2.306 ppb

Weight: <None>
Min Conc: <None>

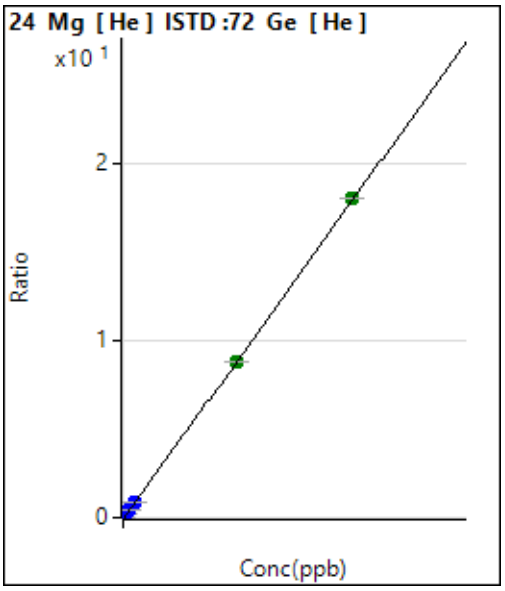


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	115515.39	0.2295	P	0.7	
2	☐	200.000	183.220	261828.98	0.5270	P	0.6	-8.4
3	☐	500.000	458.533	487322.20	0.9741	P	0.8	-8.3
4	☐	1000.000	1013.617	936687.02	1.8754	A	1.3	1.4
5	☐	10000.00	9833.702	8068826.13	16.1970	A	1.3	-1.7
6	☐	20000.00	20083.67	15984002.6	32.8403	A	0.4	0.4

y = 0.0016 * x + 0.2295
R = 1.0000
DL = 3.144 ppb
BEC = 141.4 ppb

Weight: <None>
Min Conc: <None>

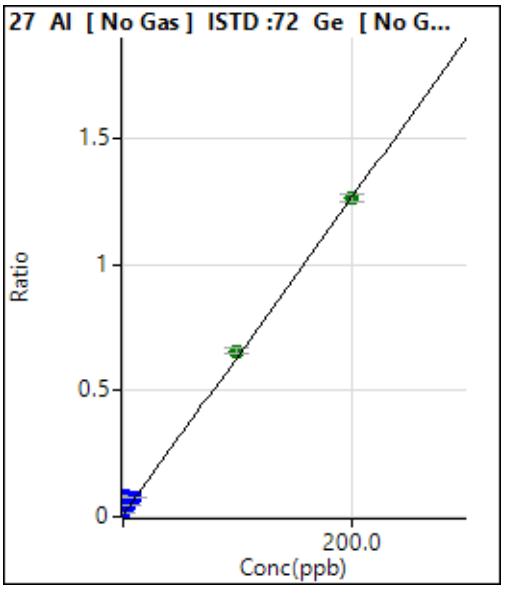
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	323.34	0.0006	P	3.8	
2	☐	200.000	195.341	87366.09	0.1759	P	1.2	-2.3
3	☐	500.000	474.154	213100.15	0.4260	P	0.4	-5.2
4	☐	1000.000	949.396	425665.05	0.8522	P	1.3	-5.1
5	☐	10000.00	9826.661	4391393.89	8.8151	A	0.6	-1.7
6	☐	20000.00	20089.89	8771039.87	18.0211	A	0.5	0.4

y = 8.9699E-004 * x + 6.4257E-004
R = 0.9999
DL = 0.08151 ppb
BEC = 0.7164 ppb

Weight: <None>
Min Conc: <None>

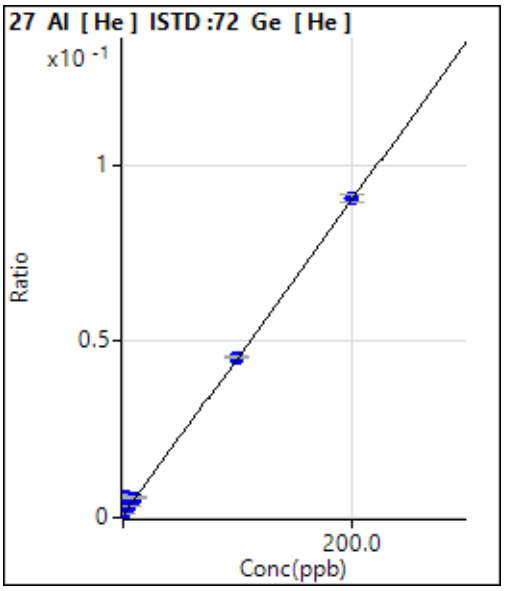


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	25821.48	0.0136	P	1.1	
2	☐	2.000	10.812	149992.86	0.0817	P	0.5	440.6
3	☐	5.000	4.956	84056.60	0.0449	P	1.8	-0.9
4	☐	10.000	9.574	139336.01	0.0739	P	0.9	-4.3
5	☐	100.000	102.236	1228020.32	0.6577	A	4.0	2.2
6	☐	200.000	198.816	2291512.88	1.2662	A	2.8	-0.6

y = 0.0063 * x + 0.0136
R = 0.9990
DL = 0.07459 ppb
BEC = 2.164 ppb

Weight: <None>
Min Conc: <None>

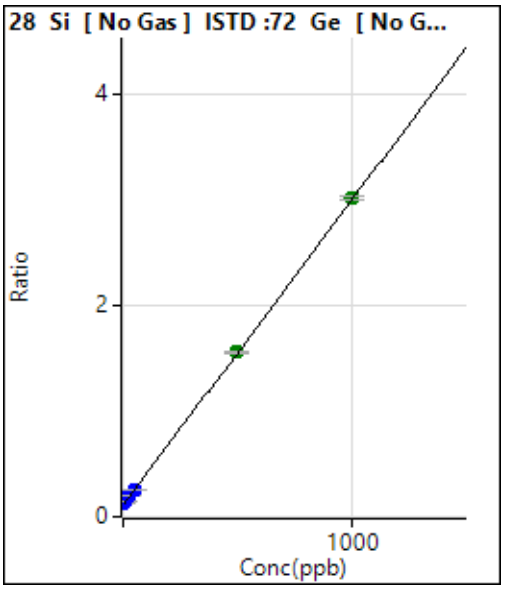
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	556.69	0.0011	P	12.1	
2	☐	2.000	11.488	3097.07	0.0062	P	6.0	474.4
3	☐	5.000	5.071	1686.80	0.0034	P	8.5	1.4
4	☐	10.000	10.286	2847.02	0.0057	P	5.2	2.9
5	☐	100.000	99.380	22651.95	0.0455	P	2.2	-0.6
6	☐	200.000	200.199	44039.95	0.0905	P	1.9	0.1

y = 4.4644E-004 * x + 0.0011
R = 0.9989
DL = 0.9018 ppb
BEC = 2.478 ppb

Weight: <None>
Min Conc: <None>

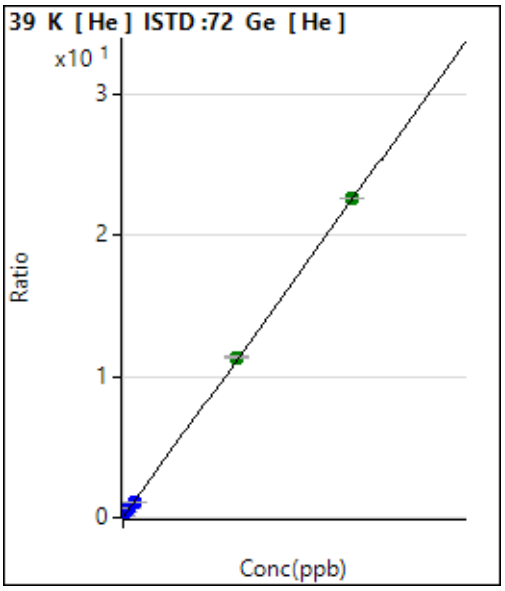


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	240032.29	0.1267	P	2.4	
2	☐	10.000	8.779	279066.13	0.1521	P	0.5	-12.2
3	☐	25.000	23.100	362514.89	0.1935	P	2.2	-7.6
4	☐	50.000	45.940	488898.33	0.2595	P	0.9	-8.1
5	☐	500.000	495.817	2912243.91	1.5595	A	1.6	-0.8
6	☐	1000.000	1002.354	5472169.92	3.0232	A	1.6	0.2

y = 0.0029 * x + 0.1267
R = 1.0000
DL = 3.094 ppb
BEC = 43.85 ppb

Weight: <None>
Min Conc: <None>

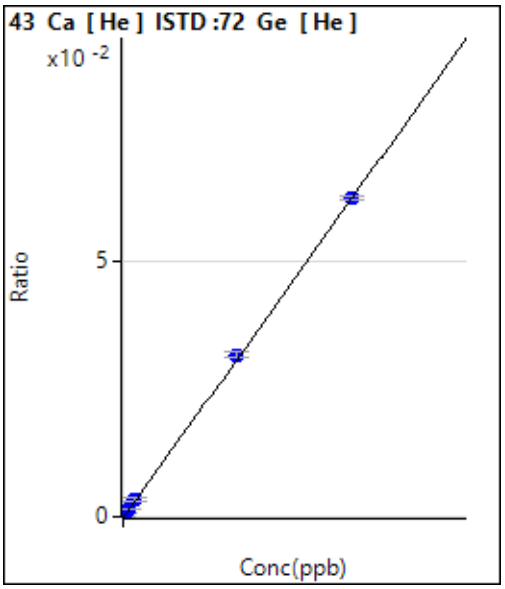
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	68034.03	0.1352	P	1.3	
2	☐	200.000	186.478	171089.75	0.3444	P	1.2	-6.8
3	☐	500.000	446.799	318404.99	0.6365	P	1.2	-10.6
4	☐	1000.000	892.216	567495.37	1.1362	P	0.7	-10.8
5	☐	10000.00	9986.499	5648741.79	11.3392	A	1.0	-0.1
6	☐	20000.00	20013.60	10994306.9	22.5887	A	0.2	0.1

y = 0.0011 * x + 0.1352
R = 1.0000
DL = 4.558 ppb
BEC = 120.5 ppb

Weight: <None>
Min Conc: <None>

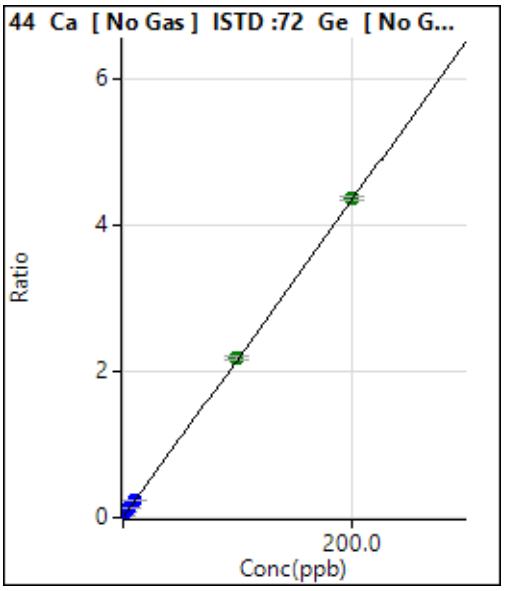


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0001	P	142.0	
2	☐	200.000	261.927	433.35	0.0009	P	6.3	31.0
3	☐	500.000	438.813	713.36	0.0014	P	2.9	-12.2
4	☐	1000.000	1061.621	1686.80	0.0034	P	13.1	6.2
5	☐	10000.00	10118.76	15799.35	0.0317	P	2.8	1.2
6	☐	20000.00	19938.44	30387.20	0.0624	P	1.2	-0.3

y = 3.1287E-006 * x + 5.2985E-005
R = 1.0000
DL = 72.17 ppb
BEC = 16.94 ppb

Weight: <None>
Min Conc: <None>

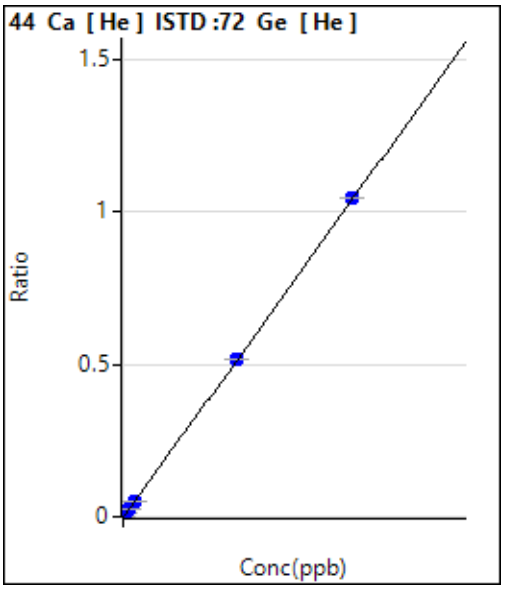
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46960.25	0.0248	P	1.1	
2	☐	2.000	2.243	134589.69	0.0733	P	1.3	12.2
3	☐	5.000	4.680	236302.31	0.1261	P	0.6	-6.4
4	☐	10.000	9.281	425277.44	0.2257	P	0.3	-7.2
5	☐	100.000	99.517	4068945.88	2.1790	A	2.3	-0.5
6	☐	200.000	200.283	7892641.13	4.3602	A	1.0	0.1

y = 0.0216 * x + 0.0248
R = 1.0000
DL = 0.03804 ppb
BEC = 1.145 ppb

Weight: <None>
Min Conc: <None>

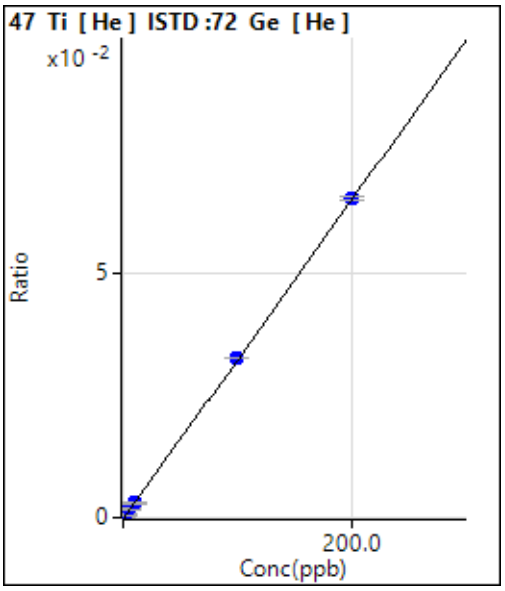


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	910.05	0.0018	P	2.3	
2	☐	200.000	226.482	6748.45	0.0136	P	1.5	13.2
3	☐	500.000	480.592	13403.40	0.0268	P	2.1	-3.9
4	☐	1000.000	969.199	26068.40	0.0522	P	2.3	-3.1
5	☐	10000.00	9901.321	257339.10	0.5166	P	0.8	-1.0
6	☐	20000.00	20051.10	508249.46	1.0442	P	0.4	0.3

y = 5.1989E-005 * x + 0.0018
R = 1.0000
DL = 2.448 ppb
BEC = 34.79 ppb

Weight: <None>
Min Conc: <None>

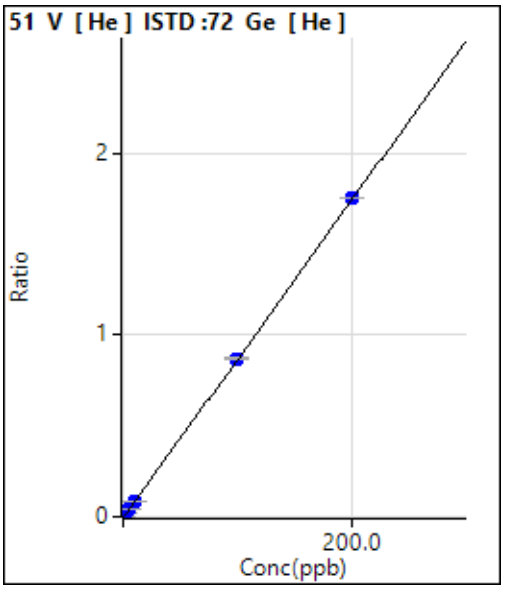
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	1.707	283.34	0.0006	P	14.8	-14.7
3	☐	5.000	5.386	886.71	0.0018	P	8.8	7.7
4	☐	10.000	9.257	1516.78	0.0030	P	13.3	-7.4
5	☐	100.000	99.928	16259.85	0.0326	P	1.0	-0.1
6	☐	200.000	200.067	31797.07	0.0653	P	0.9	0.0

y = 3.2648E-004 * x + 1.3232E-005
R = 1.0000
DL = 0.1053 ppb
BEC = 0.04053 ppb

Weight: <None>
Min Conc: <None>

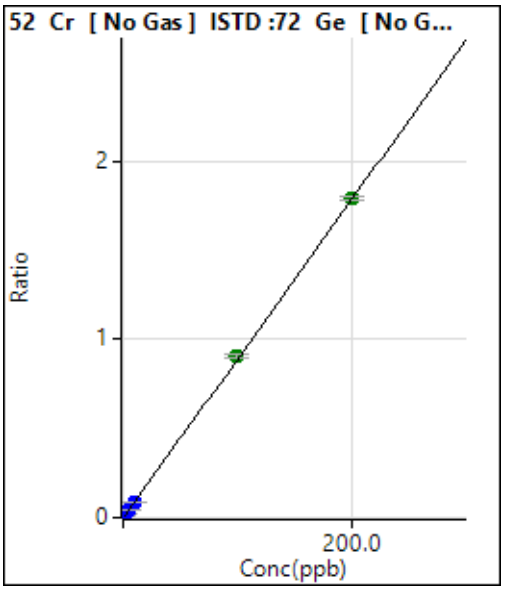


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	761.14	0.0015	P	6.2	
2	☐	2.000	1.920	9084.16	0.0183	P	0.6	-4.0
3	☐	5.000	4.712	21346.65	0.0427	P	2.5	-5.8
4	☐	10.000	9.564	42483.42	0.0851	P	1.7	-4.4
5	☐	100.000	99.263	432713.14	0.8686	P	0.7	-0.7
6	☐	200.000	200.398	852746.39	1.7521	P	0.4	0.2

y = 0.0087 * x + 0.0015
R = 1.0000
DL = 0.0324 ppb
BEC = 0.1731 ppb

Weight: <None>
Min Conc: <None>

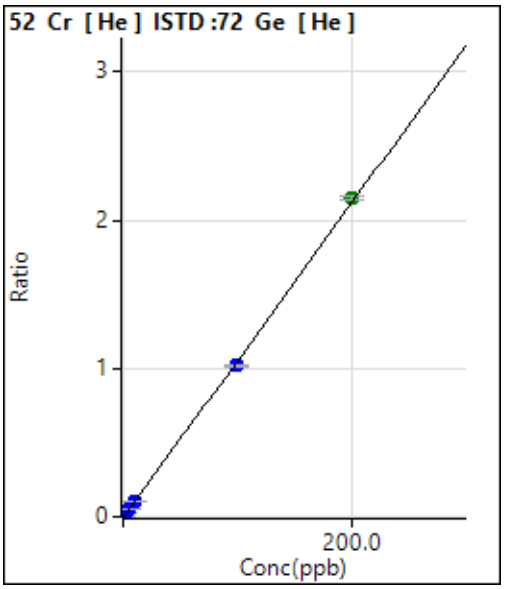
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12385.76	0.0065	P	1.7	
2	☐	2.000	1.699	39851.66	0.0217	P	2.1	-15.0
3	☐	5.000	4.583	88974.70	0.0475	P	3.3	-8.3
4	☐	10.000	9.087	165288.70	0.0877	P	0.7	-9.1
5	☐	100.000	100.562	1689945.86	0.9050	A	1.9	0.6
6	☐	200.000	199.778	3242681.41	1.7914	A	1.1	-0.1

y = 0.0089 * x + 0.0065
R = 1.0000
DL = 0.03633 ppb
BEC = 0.7318 ppb

Weight: <None>
Min Conc: <None>

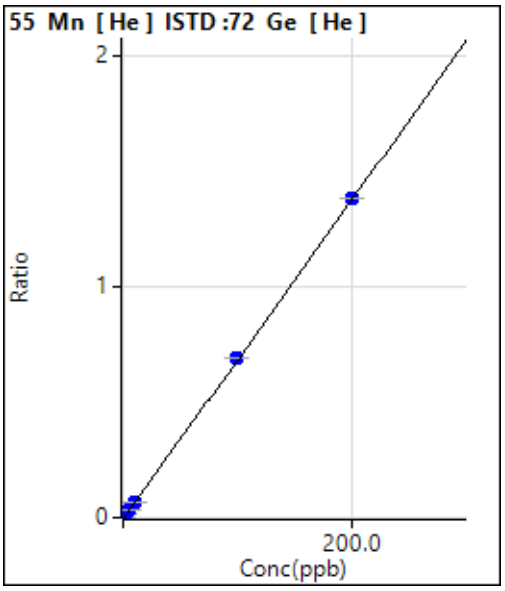


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1493.45	0.0030	P	5.4	
2	☐	2.000	1.727	10587.60	0.0213	P	4.0	-13.6
3	☐	5.000	4.625	26061.81	0.0521	P	2.1	-7.5
4	☐	10.000	9.130	49928.00	0.1000	P	1.2	-8.7
5	☐	100.000	95.750	508204.11	1.0202	P	1.1	-4.2
6	☐	200.000	202.180	1046800.64	2.1508	A	1.2	1.1

y = 0.0106 * x + 0.0030
R = 0.9997
DL = 0.04485 ppb
BEC = 0.2793 ppb

Weight: <None>
Min Conc: <None>

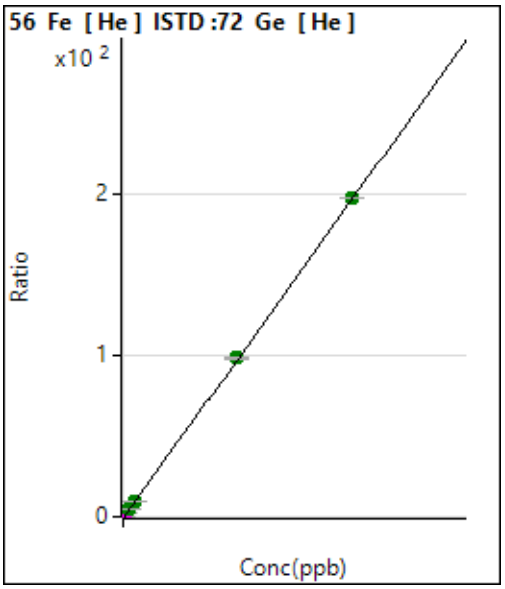
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	266.68	0.0005	P	12.9	
2	☐	2.000	1.970	7031.92	0.0142	P	4.0	-1.5
3	☐	5.000	4.945	17371.32	0.0347	P	1.2	-1.1
4	☐	10.000	9.727	33855.63	0.0678	P	2.6	-2.7
5	☐	100.000	99.620	343433.13	0.6894	P	0.2	-0.4
6	☐	200.000	200.205	674048.40	1.3849	P	0.4	0.1

y = 0.0069 * x + 5.2981E-004
R = 1.0000
DL = 0.02972 ppb
BEC = 0.07662 ppb

Weight: <None>
Min Conc: <None>

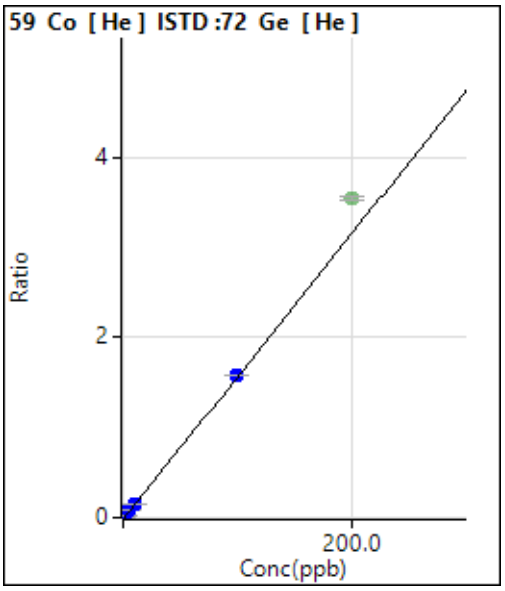


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9046.47	0.0180	P	2.0	
2	☐	200.000	195.717	968369.78	1.9493	M	2.5	-2.1
3	☐	500.000	511.273	2533056.47	5.0633	A	0.8	2.3
4	☐	1000.000	991.965	4898122.63	9.8068	A	1.1	-0.8
5	☐	10000.00	9955.601	48949927.6	98.2607	A	0.7	-0.4
6	☐	20000.00	20022.36	96175078.5	197.600	A	0.4	0.1

y = 0.0099 * x + 0.0180
R = 1.0000
DL = 0.1118 ppb
BEC = 1.822 ppb

Weight: <None>
Min Conc: <None>

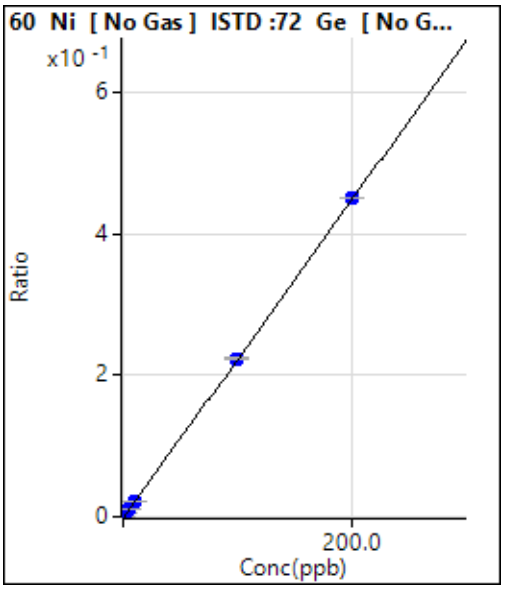
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	76.67	0.0002	P	37.7	
2	☐	2.000	1.990	15752.67	0.0317	P	0.4	-0.5
3	☐	5.000	4.932	39206.59	0.0784	P	2.0	-1.4
4	☐	10.000	9.778	77523.17	0.1552	P	3.2	-2.2
5	☐	100.000	100.026	790371.19	1.5865	P	0.2	0.0
6	☑	200.000		1727658.72	3.5495	A	1.4	

y = 0.0159 * x + 1.5236E-004
R = 1.0000
DL = 0.01086 ppb
BEC = 0.009606 ppb

Weight: <None>
Min Conc: <None>

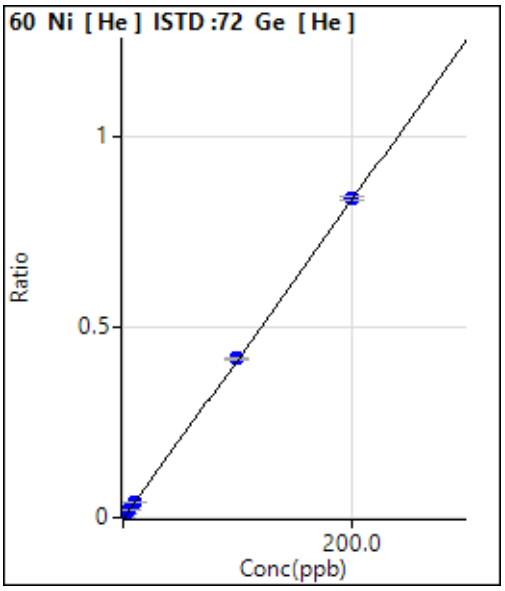


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	453.35	0.0002	P	6.2	
2	☐	2.000	1.922	8379.43	0.0046	P	3.3	-3.9
3	☐	5.000	4.930	21243.45	0.0113	P	0.9	-1.4
4	☐	10.000	9.559	40991.86	0.0218	P	1.2	-4.4
5	☐	100.000	99.392	418263.25	0.2240	P	0.3	-0.6
6	☐	200.000	200.329	816667.62	0.4512	P	0.6	0.2

y = 0.0023 * x + 2.3926E-004
R = 1.0000
DL = 0.01981 ppb
BEC = 0.1063 ppb

Weight: <None>
Min Conc: <None>

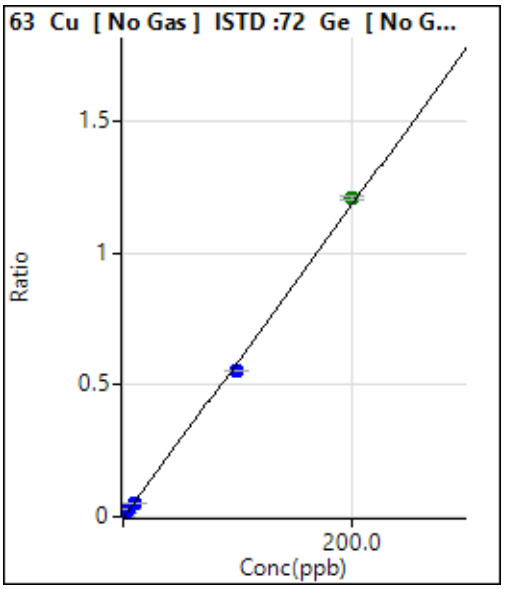
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	210.00	0.0004	P	34.6	
2	☐	2.000	1.977	4314.10	0.0087	P	9.4	-1.1
3	☐	5.000	4.922	10504.25	0.0210	P	5.4	-1.6
4	☐	10.000	9.830	20742.69	0.0415	P	0.8	-1.7
5	☐	100.000	99.656	207833.74	0.4172	P	0.8	-0.3
6	☐	200.000	200.182	407664.64	0.8376	P	0.9	0.1

y = 0.0042 * x + 4.1753E-004
R = 1.0000
DL = 0.1036 ppb
BEC = 0.09984 ppb

Weight: <None>
Min Conc: <None>

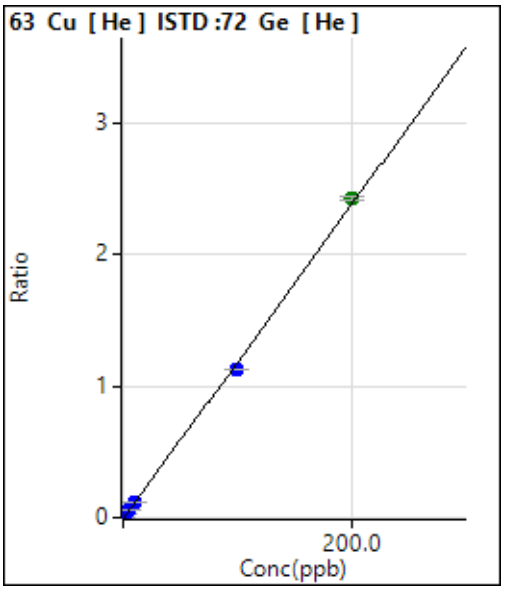


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1510.11	0.0008	P	6.1	
2	☐	2.000	1.860	21707.67	0.0118	P	1.4	-7.0
3	☐	5.000	4.550	52073.19	0.0278	P	1.7	-9.0
4	☐	10.000	8.934	101355.78	0.0538	P	1.2	-10.7
5	☐	100.000	92.908	1030767.80	0.5519	P	0.6	-7.1
6	☐	200.000	203.612	2187737.31	1.2087	A	1.2	1.8

y = 0.0059 * x + 7.9708E-004
R = 0.9991
DL = 0.02446 ppb
BEC = 0.1344 ppb

Weight: <None>
Min Conc: <None>

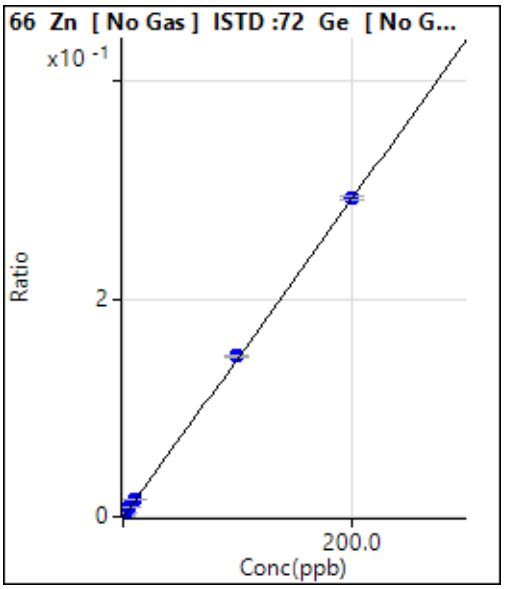
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	766.70	0.0015	P	21.4	
2	☐	2.000	1.884	11938.78	0.0240	P	3.2	-5.8
3	☐	5.000	4.668	28657.22	0.0573	P	1.8	-6.6
4	☐	10.000	9.103	55074.83	0.1103	P	0.2	-9.0
5	☐	100.000	94.195	561288.60	1.1267	P	0.7	-5.8
6	☐	200.000	202.957	1180757.59	2.4259	A	1.1	1.5

y = 0.0119 * x + 0.0015
R = 0.9994
DL = 0.08206 ppb
BEC = 0.1275 ppb

Weight: <None>
Min Conc: <None>

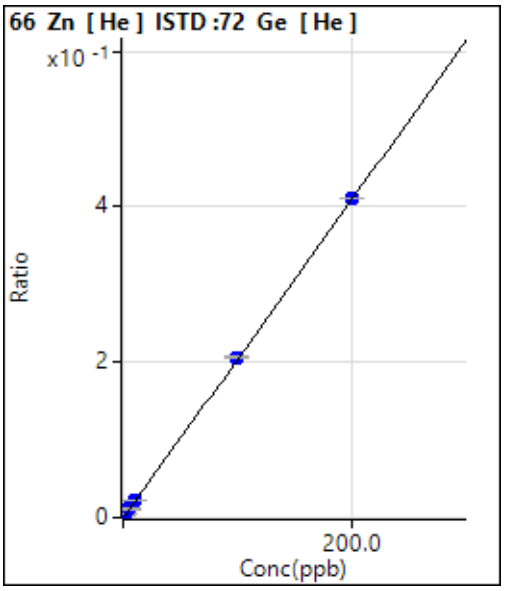


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1666.80	0.0009	P	4.8	
2	☐	2.000	1.636	6001.43	0.0033	P	3.2	-18.2
3	☐	5.000	5.116	15662.60	0.0084	P	1.0	2.3
4	☐	10.000	9.896	28911.16	0.0153	P	1.1	-1.0
5	☐	100.000	100.249	275275.18	0.1474	P	1.1	0.2
6	☐	200.000	199.882	530425.76	0.2930	P	1.2	-0.1

y = 0.0015 * x + 8.7965E-004
R = 1.0000
DL = 0.08686 ppb
BEC = 0.6018 ppb

Weight: <None>
Min Conc: <None>

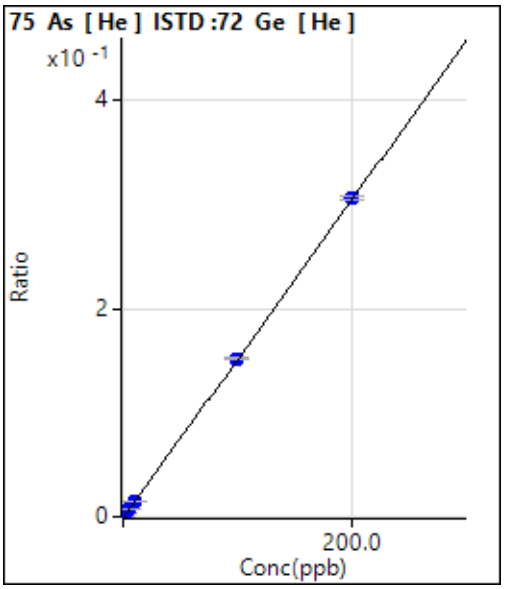
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	723.37	0.0014	P	10.5	
2	☐	2.000	1.699	2443.60	0.0049	P	3.5	-15.0
3	☐	5.000	4.811	5647.94	0.0113	P	6.1	-3.8
4	☐	10.000	10.216	11171.42	0.0224	P	2.1	2.2
5	☐	100.000	100.027	102811.58	0.2064	P	1.7	0.0
6	☐	200.000	199.984	200108.28	0.4111	P	0.1	0.0

y = 0.0020 * x + 0.0014
R = 1.0000
DL = 0.2207 ppb
BEC = 0.7015 ppb

Weight: <None>
Min Conc: <None>

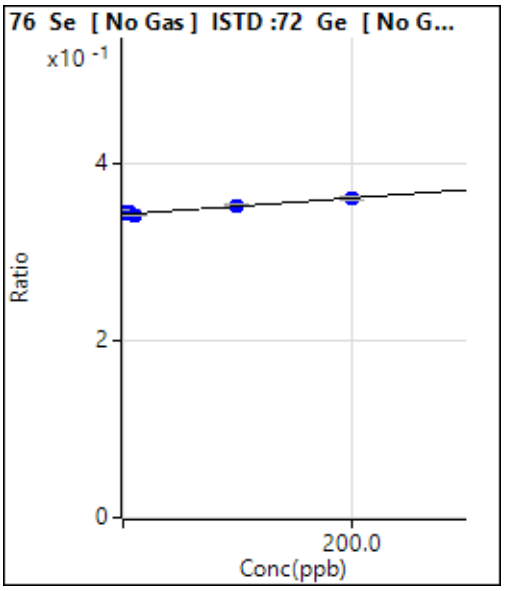


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	54.45	0.0001	P	19.7	
2	☐	2.000	1.920	1513.43	0.0030	P	1.6	-4.0
3	☐	5.000	4.810	3736.09	0.0075	P	0.4	-3.8
4	☐	10.000	9.622	7407.62	0.0148	P	0.5	-3.8
5	☐	100.000	99.325	75761.06	0.1521	P	1.2	-0.7
6	☐	200.000	200.362	149260.53	0.3067	P	0.9	0.2

y = 0.0015 * x + 1.0820E-004
R = 1.0000
DL = 0.04187 ppb
BEC = 0.07072 ppb

Weight: <None>
Min Conc: <None>

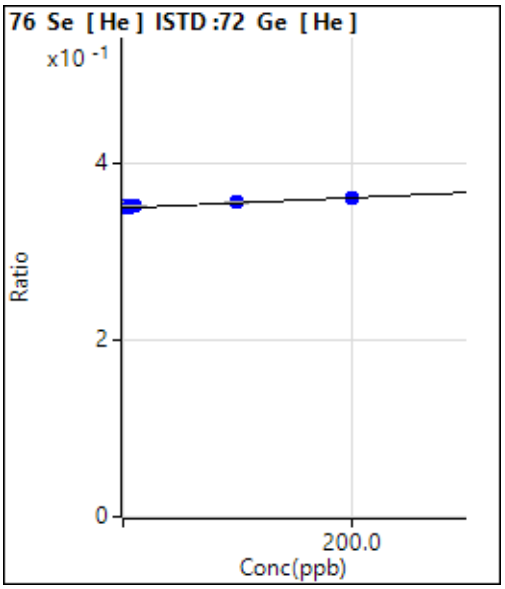
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	648911.77	0.3425	P	0.2	
2	☐	2.000	30.762	633826.06	0.3454	P	0.2	1438.1
3	☐	5.000	26.116	646454.87	0.3450	P	1.3	422.3
4	☐	10.000	-12.084	643311.00	0.3414	P	0.4	-220.8
5	☐	100.000	110.353	658979.92	0.3529	P	0.9	10.4
6	☐	200.000	195.112	653068.64	0.3608	P	1.0	-2.4

y = 9.3538E-005 * x + 0.3425
R = 0.9741
DL = 23.83 ppb
BEC = 3662 ppb

Weight: <None>
Min Conc: <None>

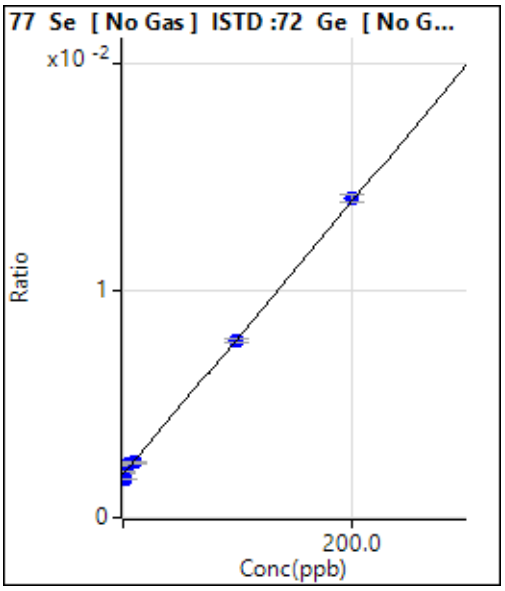


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	176246.73	0.3502	P	0.7	
2	☐	2.000	61.681	175793.67	0.3539	P	1.4	2984.0
3	☐	5.000	27.569	176027.38	0.3519	P	0.8	451.4
4	☐	10.000	45.979	176300.79	0.3529	P	0.6	359.8
5	☐	100.000	104.587	177560.42	0.3564	P	0.4	4.6
6	☐	200.000	194.746	176071.57	0.3618	P	0.4	-2.6

y = 5.9173E-005 * x + 0.3502
R = 0.9585
DL = 128.8 ppb
BEC = 5919 ppb

Weight: <None>
Min Conc: <None>

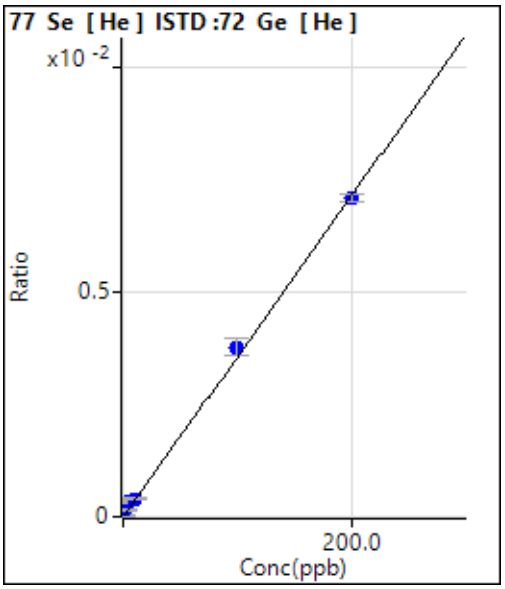
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3747.25	0.0020	P	6.1	
2	☐	2.000	-4.695	3113.75	0.0017	P	2.2	-334.8
3	☐	5.000	6.376	4420.81	0.0024	P	5.6	27.5
4	☐	10.000	7.455	4567.54	0.0024	P	5.8	-25.4
5	☐	100.000	97.370	14588.14	0.0078	P	2.2	-2.6
6	☐	200.000	201.475	25420.90	0.0140	P	2.5	0.7

y = 5.9897E-005 * x + 0.0020
R = 0.9994
DL = 6.067 ppb
BEC = 33.02 ppb

Weight: <None>
Min Conc: <None>

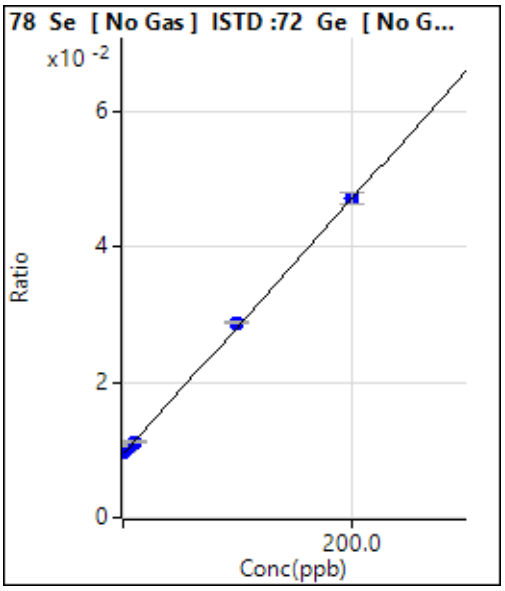


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	43.5	
2	☐	2.000	3.568	76.67	0.0002	P	20.1	78.4
3	☐	5.000	8.368	163.34	0.0003	P	21.0	67.4
4	☐	10.000	10.254	196.67	0.0004	P	6.6	2.5
5	☐	100.000	104.755	1883.49	0.0038	P	10.8	4.8
6	☐	200.000	197.510	3457.18	0.0071	P	2.1	-1.2

y = 3.5826E-005 * x + 2.6511E-005
R = 0.9996
DL = 0.9664 ppb
BEC = 0.74 ppb

Weight: <None>
Min Conc: <None>

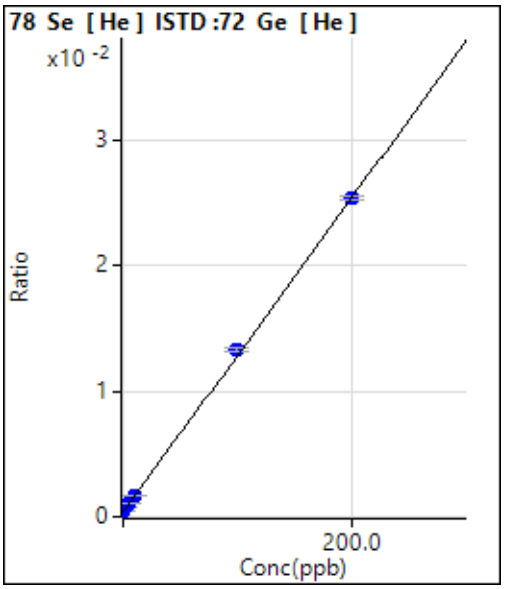
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18212.58	0.0096	P	1.7	
2	☐	2.000	1.495	18159.24	0.0099	P	0.7	-25.3
3	☐	5.000	5.097	19814.94	0.0106	P	2.2	1.9
4	☐	10.000	8.299	21063.43	0.0112	P	1.2	-17.0
5	☐	100.000	101.571	53713.83	0.0288	P	0.8	1.6
6	☐	200.000	199.302	85382.90	0.0472	P	3.5	-0.3

y = 1.8849E-004 * x + 0.0096
R = 0.9999
DL = 2.595 ppb
BEC = 51.01 ppb

Weight: <None>
Min Conc: <None>

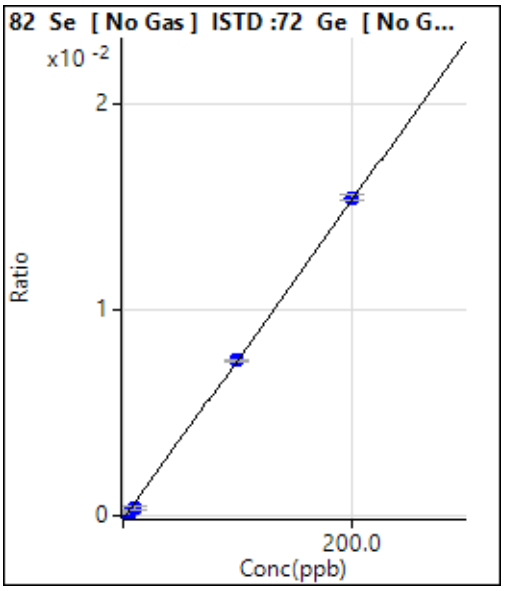


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	252.67	0.0005	P	11.8	
2	☐	2.000	1.803	361.34	0.0007	P	4.0	-9.9
3	☐	5.000	4.632	540.68	0.0011	P	5.2	-7.4
4	☐	10.000	9.440	840.03	0.0017	P	3.4	-5.6
5	☐	100.000	102.106	6606.97	0.0133	P	1.9	2.1
6	☐	200.000	198.986	12348.33	0.0254	P	1.5	-0.5

y = 1.2497E-004 * x + 5.0199E-004
R = 0.9999
DL = 1.427 ppb
BEC = 4.017 ppb

Weight: <None>
Min Conc: <None>

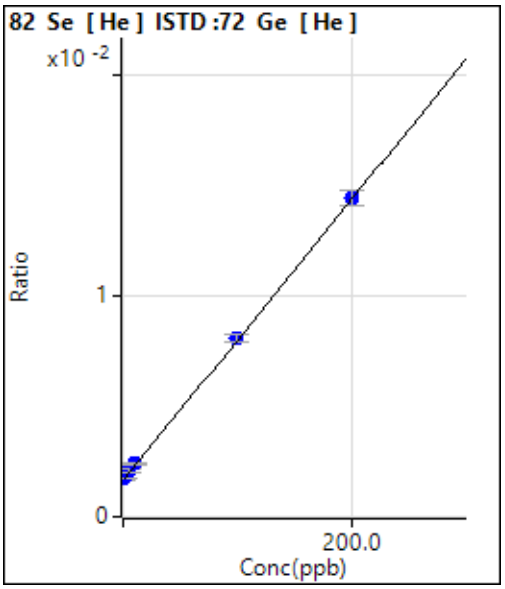
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-212.33	-0.0001	P	-275.	
2	☐	2.000	0.517	-129.70	-0.0001	P	-213.	-74.1
3	☐	5.000	2.993	226.83	0.0001	P	18.4	-40.1
4	☐	10.000	6.272	705.77	0.0004	P	35.9	-37.3
5	☐	100.000	98.734	14071.71	0.0075	P	1.7	-1.3
6	☐	200.000	200.884	27955.16	0.0154	P	2.1	0.4

y = 7.7435E-005 * x - 1.1069E-004
R = 0.9999
DL = 11.81 ppb
BEC = -1.429 ppb

Weight: <None>
Min Conc: <None>

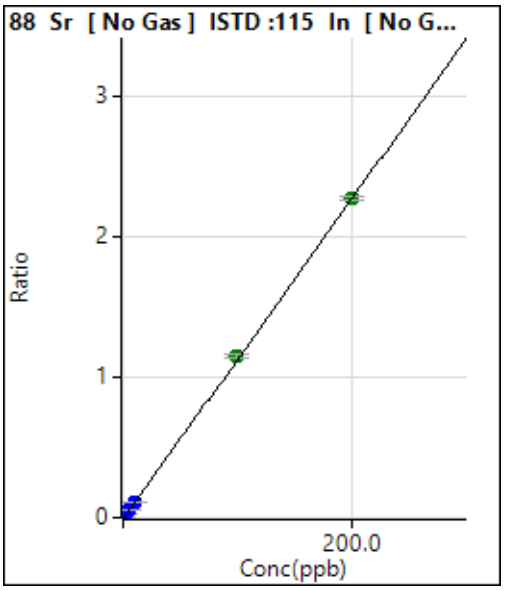


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	866.71	0.0017	P	3.8	
2	☐	2.000	1.953	916.72	0.0018	P	12.0	-2.3
3	☐	5.000	5.714	1043.39	0.0021	P	11.6	14.3
4	☐	10.000	10.513	1193.41	0.0024	P	5.8	5.1
5	☐	100.000	100.006	4017.35	0.0081	P	5.2	0.0
6	☐	200.000	199.954	7011.98	0.0144	P	4.9	0.0

y = 6.3426E-005 * x + 0.0017
R = 1.0000
DL = 3.068 ppb
BEC = 27.16 ppb

Weight: <None>
Min Conc: <None>

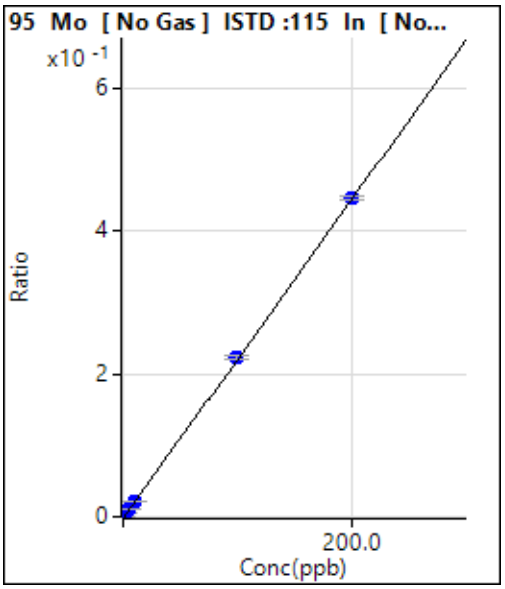
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1063.40	0.0005	P	11.8	
2	☐	2.000	2.051	49116.79	0.0239	P	0.4	2.6
3	☐	5.000	4.658	111720.05	0.0536	P	1.2	-6.8
4	☐	10.000	9.294	220710.69	0.1064	P	0.3	-7.1
5	☐	100.000	101.125	2394664.76	1.1524	A	1.8	1.1
6	☐	200.000	199.481	4616024.51	2.2727	A	1.3	-0.3

y = 0.0114 * x + 5.0731E-004
R = 1.0000
DL = 0.01581 ppb
BEC = 0.04454 ppb

Weight: <None>
Min Conc: <None>

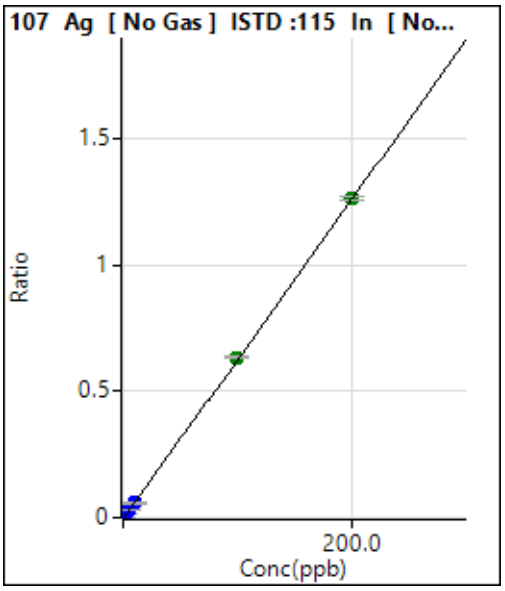


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	107.8	
2	☐	2.000	1.865	8586.24	0.0042	P	4.3	-6.8
3	☐	5.000	4.756	22168.68	0.0106	P	0.6	-4.9
4	☐	10.000	9.630	44628.31	0.0215	P	2.7	-3.7
5	☐	100.000	99.923	463556.73	0.2231	P	2.2	-0.1
6	☐	200.000	200.064	907191.99	0.4467	P	1.1	0.0

y = 0.0022 * x + 1.1178E-005
R = 1.0000
DL = 0.01619 ppb
BEC = 0.005007 ppb

Weight: <None>
Min Conc: <None>

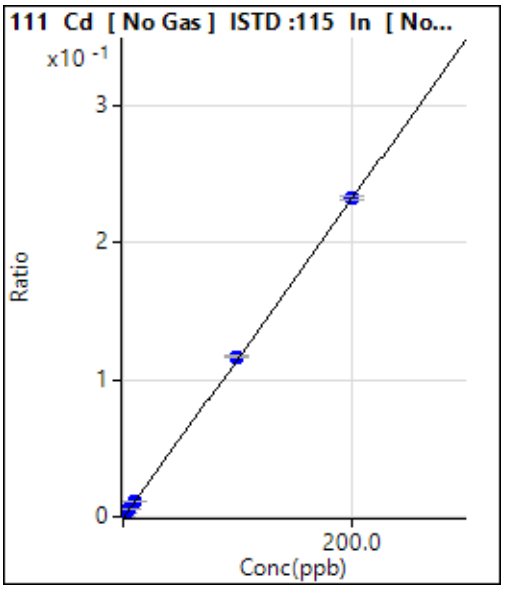
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	573.35	0.0003	P	10.6	
2	☐	2.000	1.828	24396.17	0.0119	P	0.4	-8.6
3	☐	5.000	4.539	60535.16	0.0290	P	1.5	-9.2
4	☐	10.000	9.056	119601.01	0.0576	P	2.2	-9.4
5	☐	100.000	100.407	1322337.79	0.6364	A	2.0	0.4
6	☐	200.000	199.857	2571998.19	1.2664	A	1.5	-0.1

y = 0.0063 * x + 2.7373E-004
R = 1.0000
DL = 0.01369 ppb
BEC = 0.04321 ppb

Weight: <None>
Min Conc: <None>

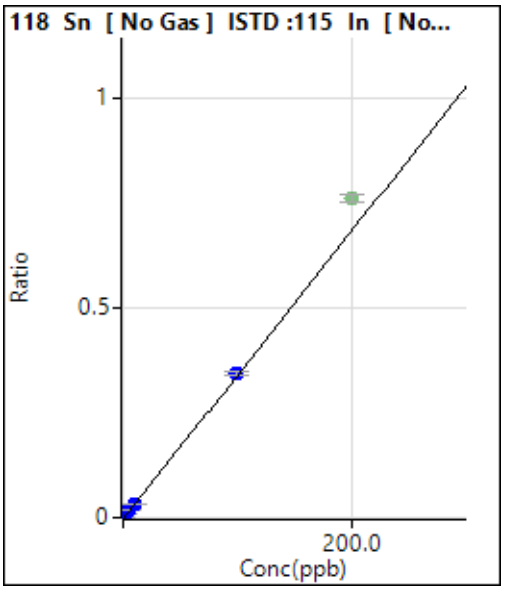


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	2.008	4804.31	0.0023	P	6.3	0.4
3	☐	5.000	4.863	11795.49	0.0057	P	1.8	-2.7
4	☐	10.000	9.824	23704.88	0.0114	P	1.3	-1.8
5	☐	100.000	100.469	242769.36	0.1168	P	2.0	0.5
6	☐	200.000	199.777	471787.86	0.2323	P	1.4	-0.1

y = 0.0012 * x + 1.5787E-006
R = 1.0000
DL = 0.007055 ppb
BEC = 0.001358 ppb

Weight: <None>
Min Conc: <None>

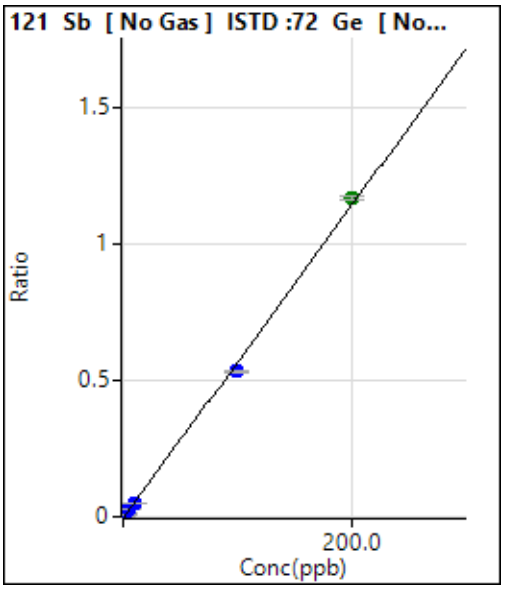
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1223.41	0.0006	P	9.2	
2	☐	2.000	2.000	15349.27	0.0075	P	1.6	0.0
3	☐	5.000	4.762	35358.18	0.0170	P	2.1	-4.8
4	☐	10.000	9.504	69010.76	0.0333	P	1.2	-5.0
5	☐	100.000	100.062	716077.93	0.3446	P	1.9	0.1
6	☑	200.000		1548352.53	0.7624	A	1.9	

y = 0.0034 * x + 5.8372E-004
R = 1.0000
DL = 0.04692 ppb
BEC = 0.1698 ppb

Weight: <None>
Min Conc: <None>

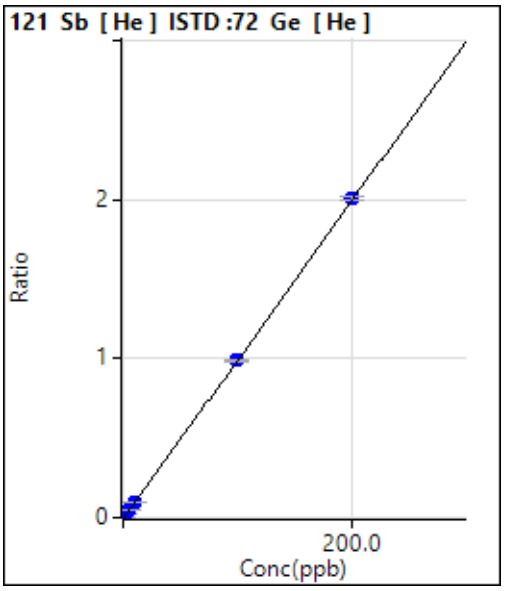


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	206.67	0.0001	P	30.8	
2	☐	2.000	1.853	19735.23	0.0108	P	5.0	-7.4
3	☐	5.000	4.507	48723.88	0.0260	P	2.8	-9.9
4	☐	10.000	9.000	97651.78	0.0518	P	0.9	-10.0
5	☐	100.000	92.733	995335.40	0.5330	P	1.1	-7.3
6	☐	200.000	203.697	2118884.66	1.1706	A	0.9	1.8

y = 0.0057 * x + 1.0896E-004
R = 0.9991
DL = 0.01754 ppb
BEC = 0.01896 ppb

Weight: <None>
Min Conc: <None>

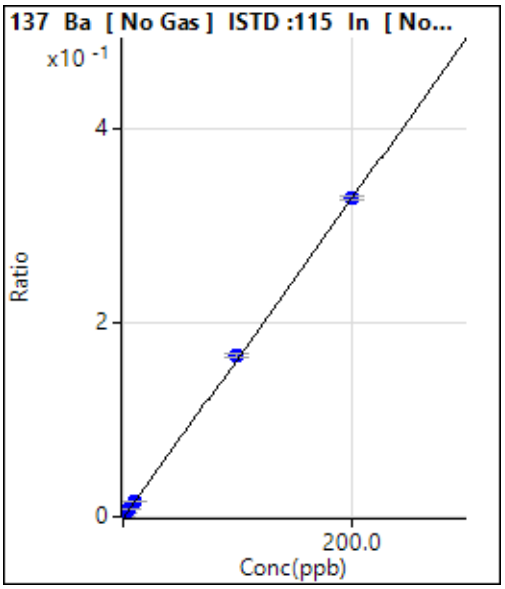
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	116.67	0.0002	P	47.3	
2	☐	2.000	1.993	10030.66	0.0202	P	4.0	-0.3
3	☐	5.000	4.966	24997.51	0.0500	P	0.8	-0.7
4	☐	10.000	9.551	47894.06	0.0959	P	0.5	-4.5
5	☐	100.000	98.656	492355.37	0.9883	P	0.5	-1.3
6	☐	200.000	200.695	978382.07	2.0102	P	0.9	0.3

y = 0.0100 * x + 2.3195E-004
R = 1.0000
DL = 0.03285 ppb
BEC = 0.02316 ppb

Weight: <None>
Min Conc: <None>

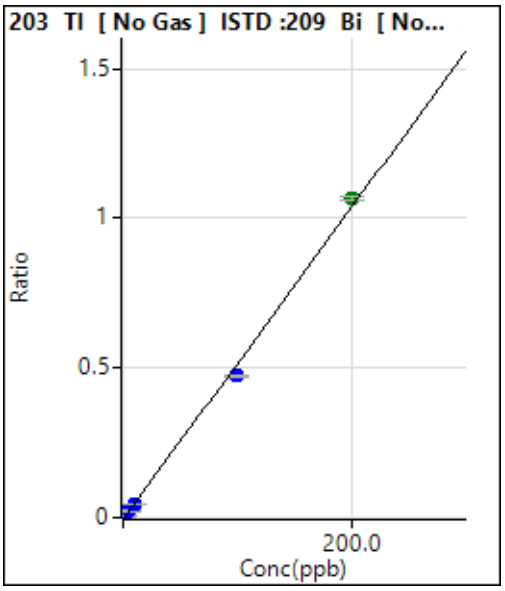


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	156.67	0.0001	P	13.8	
2	☐	2.000	2.053	7108.75	0.0035	P	5.0	2.6
3	☐	5.000	4.822	16720.95	0.0080	P	2.1	-3.6
4	☐	10.000	9.628	33059.07	0.0159	P	1.5	-3.7
5	☐	100.000	101.061	346083.24	0.1665	P	1.5	1.1
6	☐	200.000	199.492	667551.11	0.3287	P	1.6	-0.3

y = 0.0016 * x + 7.4815E-005
R = 1.0000
DL = 0.01882 ppb
BEC = 0.04542 ppb

Weight: <None>
Min Conc: <None>

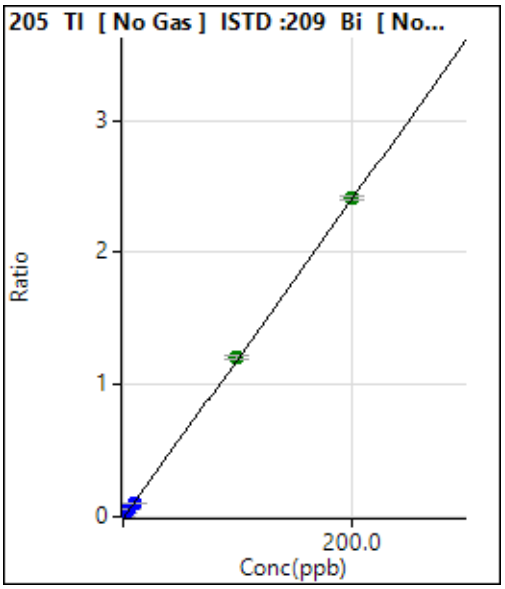
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	100.1	
2	☐	2.000	1.759	16467.82	0.0092	P	4.4	-12.0
3	☐	5.000	4.347	41435.68	0.0227	P	2.3	-13.1
4	☐	10.000	8.539	81672.47	0.0445	P	0.5	-14.6
5	☐	100.000	90.918	853228.79	0.4742	P	1.9	-9.1
6	☐	200.000	204.633	1873717.47	1.0673	A	1.3	2.3

y = 0.0052 * x + 1.0982E-005
R = 0.9986
DL = 0.006326 ppb
BEC = 0.002106 ppb

Weight: <None>
Min Conc: <None>

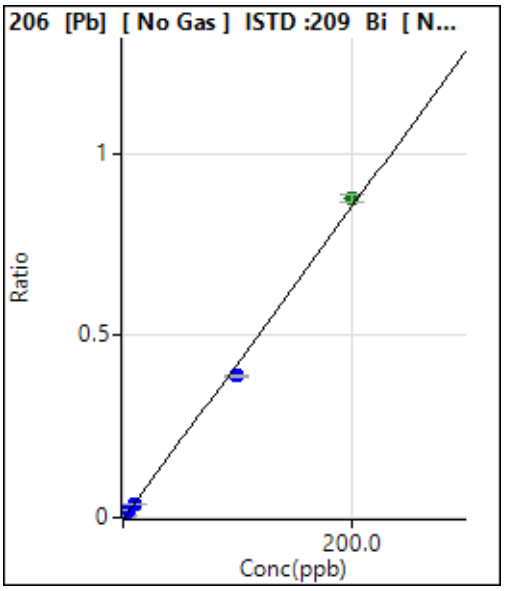


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43.33	0.0000	P	26.6	
2	☐	2.000	1.858	40191.85	0.0224	P	2.5	-7.1
3	☐	5.000	4.516	99504.66	0.0545	P	2.5	-9.7
4	☐	10.000	8.910	197014.94	0.1075	P	0.4	-10.9
5	☐	100.000	100.006	2169624.45	1.2059	A	2.1	0.0
6	☐	200.000	200.065	4235126.08	2.4123	A	1.0	0.0

y = 0.0121 * x + 2.3803E-005
R = 1.0000
DL = 0.001575 ppb
BEC = 0.001974 ppb

Weight: <None>
Min Conc: <None>

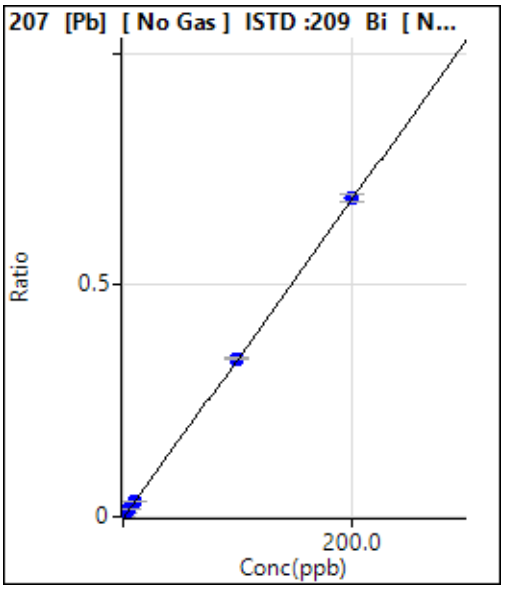
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	173.34	0.0001	P	18.7	
2	☐	2.000	1.793	13961.43	0.0078	P	2.8	-10.3
3	☐	5.000	4.448	35029.39	0.0192	P	2.8	-11.0
4	☐	10.000	8.706	68655.76	0.0374	P	0.9	-12.9
5	☐	100.000	90.964	702390.15	0.3903	P	1.3	-9.0
6	☐	200.000	204.598	1540981.12	0.8779	A	2.5	2.3

y = 0.0043 * x + 9.5241E-005
R = 0.9986
DL = 0.01243 ppb
BEC = 0.0222 ppb

Weight: <None>
Min Conc: <None>

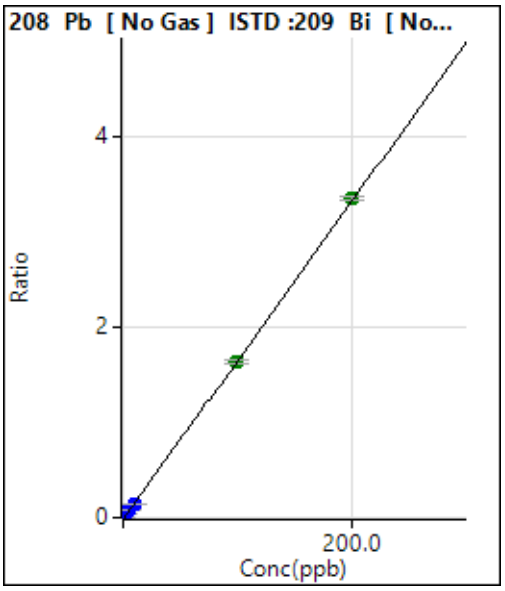


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	113.33	0.0001	P	5.2	
2	☐	2.000	1.864	11582.22	0.0065	P	1.4	-6.8
3	☐	5.000	4.788	30133.36	0.0165	P	1.3	-4.2
4	☐	10.000	9.609	60587.46	0.0330	P	1.6	-3.9
5	☐	100.000	99.445	614278.08	0.3414	P	2.1	-0.6
6	☐	200.000	200.304	1207124.54	0.6876	P	1.9	0.2

y = 0.0034 * x + 6.2264E-005
R = 1.0000
DL = 0.00282 ppb
BEC = 0.01814 ppb

Weight: <None>
Min Conc: <None>

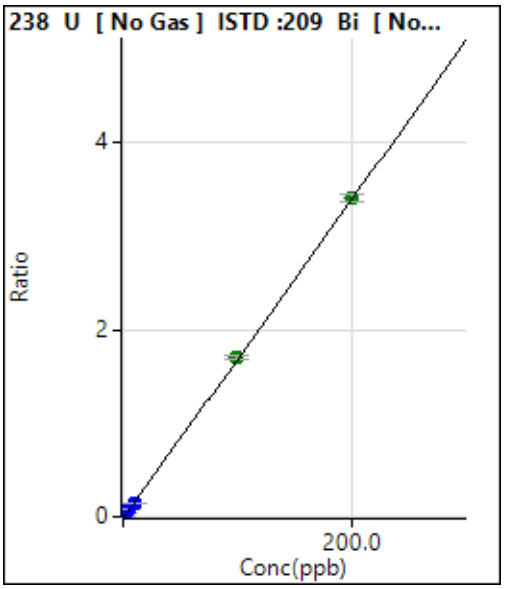
Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	626.68	0.0003	P	9.6	
2	☐	2.000	1.829	55249.52	0.0308	P	0.8	-8.6
3	☐	5.000	4.528	138461.51	0.0758	P	1.0	-9.4
4	☐	10.000	8.955	274260.41	0.1496	P	0.6	-10.4
5	☐	100.000	98.029	2940299.03	1.6340	A	1.5	-2.0
6	☐	200.000	201.051	5882526.13	3.3509	A	1.6	0.5

y = 0.0167 * x + 3.4425E-004
R = 0.9999
DL = 0.005975 ppb
BEC = 0.02066 ppb

Weight: <None>
Min Conc: <None>

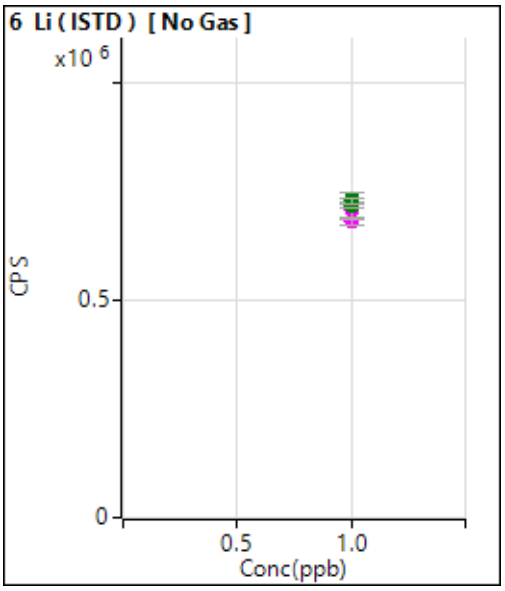


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	0.3	
2	☐	2.000	1.827	55877.73	0.0312	P	1.7	-8.7
3	☐	5.000	4.470	139319.05	0.0763	P	1.2	-10.6
4	☐	10.000	8.990	281255.10	0.1534	P	0.9	-10.1
5	☐	100.000	100.022	3070749.33	1.7067	A	1.8	0.0
6	☐	200.000	200.055	5992360.12	3.4135	A	1.8	0.0

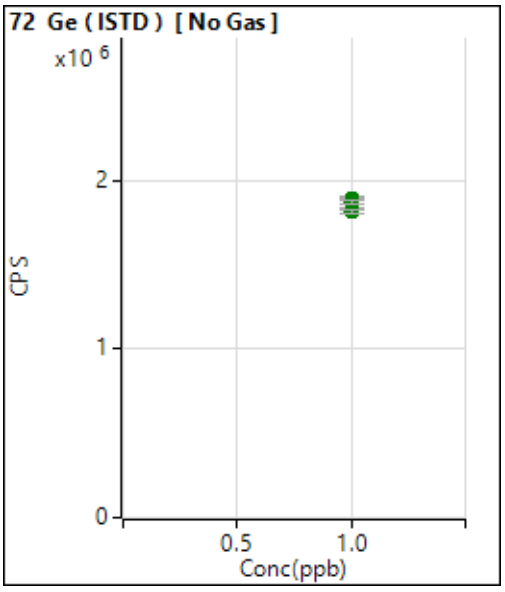
y = 0.0171 * x + 5.4938E-006
R = 1.0000
DL = 2.904E-06 ppb
BEC = 0.000322 ppb

Weight: <None>
Min Conc: <None>

Calibration for 027_ICV.d

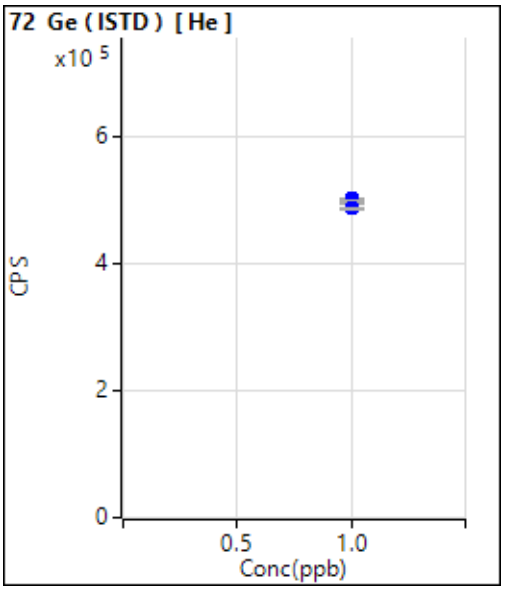


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		707162.97		M	4.5	
2	☐	1.000		734341.96		A	3.1	
3	☐	1.000		679921.55		M	2.7	
4	☐	1.000		705728.30		M	5.5	
5	☐	1.000		717957.42		A	1.2	
6	☐	1.000		727879.40		A	2.1	

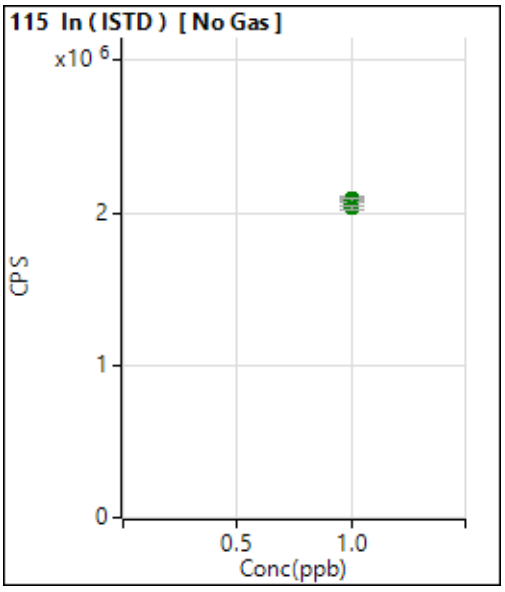


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1894389.81		A	0.8	
2	☐	1.000		1834946.07		A	0.6	
3	☐	1.000		1874036.12		A	1.1	
4	☐	1.000		1884282.00		A	0.6	
5	☐	1.000		1867616.48		A	1.1	
6	☐	1.000		1810243.62		A	1.3	

Calibration for 027_ICV.d

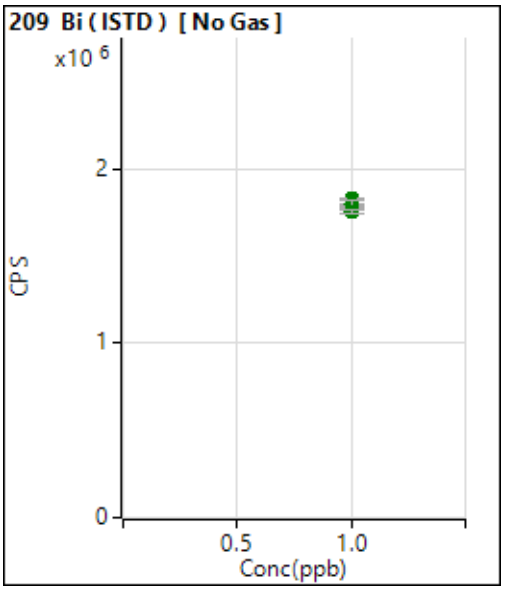


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		503235.58		P	0.2	
2	☐	1.000		496798.96		P	0.8	
3	☐	1.000		500296.88		P	0.8	
4	☐	1.000		499497.06		P	0.9	
5	☐	1.000		498178.42		P	0.7	
6	☐	1.000		486716.71		P	0.5	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		2095071.80		A	0.7	
2	☐	1.000		2057576.17		A	1.2	
3	☐	1.000		2085568.03		A	0.6	
4	☐	1.000		2074897.83		A	0.4	
5	☐	1.000		2078257.43		A	1.4	
6	☐	1.000		2031335.33		A	1.7	

Calibration for 027_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1820259.97		A	0.3	
2	☐	1.000		1792519.87		A	0.3	
3	☐	1.000		1826739.09		A	0.8	
4	☐	1.000		1833487.79		A	0.5	
5	☐	1.000		1799733.31		A	2.3	
6	☐	1.000		1755763.72		A	1.4	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	028LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:26:35-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	018CALB.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	1.695	1.695	2.89	57868	0.00	2	
Be	9	1	No Gas	1.982	1.982	2.63	4738	0.04	2	
V	51	2	He	1.889	1.889	0.98	9034	0.02	2	
Cr	52	2	He	1.697	1.697	4.27	10528	0.02	2	
Fe	56	2	He	202.926	202.926	5.85	1013624	0.02	200	
Se	78	2	He	1.537	1.537	19.32	348	0.44	2	
As	75	2	He	1.968	1.968	8.80	1565	0.13	2	
Ca	44	2	He	240.000	240.000	5.89	7165	3.35	200	
Na	23	2	He	184.075	184.075	0.58	265018	0.07	200	
Mg	24	2	He	199.008	199.008	1.43	89852	0.22	200	
K	39	2	He	191.574	191.574	1.14	175582	0.11	200	
Mn	55	2	He	2.023	2.023	2.02	7282	0.03	2	
Co	59	2	He	2.054	2.054	1.37	16414	0.01	2	
Ni	60	2	He	1.977	1.977	4.22	4357	0.05	2	
Cu	63	2	He	1.891	1.891	2.05	12096	0.02	2	
Zn	66	2	He	1.651	1.651	3.43	2417	0.07	2	
Al	27	2	He	12.180	12.180	12.72	3280	0.37	2	NewName Main CR1 Failed
B	11	1	No Gas	21.801	21.801	8.27	32633	0.07	10	NewName Main CR1 Failed
Al	27	1	No Gas	10.815	10.815	1.81	150235	0.01	2	NewName Main CR1 Failed
Si	28	1	No Gas	12.660	12.660	6.10	300057	0.00	10	
Ag	107	1	No Gas	1.806	1.806	2.44	24386	0.01	2	
Cd	111	1	No Gas	1.938	1.938	4.51	4691	0.04	2	
Sr	88	1	No Gas	2.033	2.033	2.87	49257	0.00	2	
Mo	95	1	No Gas	1.993	1.993	4.74	9283	0.02	2	
Sn	118	1	No Gas	1.939	1.939	6.52	15079	0.01	2	
Sb	121	1	No Gas	1.842	1.842	3.11	19648	0.01	2	
Ba	137	1	No Gas	2.099	2.099	1.44	7352	0.03	2	
Tl	205	1	No Gas	1.857	1.857	2.05	40245	0.00	2	
Tl	203	1	No Gas	1.817	1.817	3.64	17032	0.01	2	
Pb	208	1	No Gas	1.877	1.877	2.30	56791	0.00	2	
U	238	1	No Gas	1.847	1.847	2.61	56604	0.00	2	
Ca	43	2	He	231.403	231.403	18.38	390	59.33	200	
Sb	121	2	He	2.045	2.045	1.11	10388	0.02	2	
Ti	47	2	He	2.178	2.178	12.75	363	0.60	200	
Cu	63	1	No Gas	1.833	1.833	1.17	21447	0.01	2	
Se	82	1	No Gas	-0.264	-0.264	-1527.43	-241	0.11	2	NewName 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	742512	0.74	707163	105.00	70	120	
Ge	72	2	He	501505	0.89	503236	99.66	70	120	
Ge	72	1	No Gas	1837472	0.51	1894390	97.00	70	120	
In	115	1	No Gas	2081702	1.87	2095072	99.36	70	120	
Bi	209	1	No Gas	1795733	1.26	1820260	98.65	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	029LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:28:38-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	018CALB.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	4.499	4.499	3.19	82660	0.01	5	
Be	9	1	No Gas	4.908	4.908	4.41	11410	0.04	5	
V	51	2	He	4.809	4.809	1.66	21653	0.02	5	
Cr	52	2	He	4.694	4.694	2.94	26286	0.02	5	
Fe	56	2	He	514.551	514.551	1.59	2535030	0.02	500	
Se	78	2	He	4.389	4.389	23.92	523	0.84	5	
As	75	2	He	4.942	4.942	2.72	3816	0.13	5	
Ca	44	2	He	499.918	499.918	1.65	13830	3.61	500	
Na	23	2	He	457.531	457.531	2.01	483792	0.09	500	
Mg	24	2	He	477.786	477.786	1.09	213536	0.22	500	
K	39	2	He	457.798	457.798	0.60	322784	0.14	500	
Mn	55	2	He	4.929	4.929	2.70	17218	0.03	5	
Co	59	2	He	4.939	4.939	0.36	39046	0.01	5	
Ni	60	2	He	4.981	4.981	3.91	10571	0.05	5	
Cu	63	2	He	4.669	4.669	0.35	28507	0.02	5	
Zn	66	2	He	4.987	4.987	4.73	5798	0.09	5	
Al	27	2	He	5.373	5.373	13.05	1743	0.31	5	
B	11	1	No Gas	27.798	27.798	1.48	39860	0.07	25	
Al	27	1	No Gas	5.087	5.087	5.12	85516	0.01	5	
Si	28	1	No Gas	25.456	25.456	3.88	375051	0.01	25	
Ag	107	1	No Gas	4.527	4.527	1.00	59708	0.01	5	
Cd	111	1	No Gas	4.825	4.825	4.35	11569	0.04	5	
Sr	88	1	No Gas	4.701	4.701	0.35	111468	0.00	5	
Mo	95	1	No Gas	4.627	4.627	2.12	21324	0.02	5	
Sn	118	1	No Gas	4.794	4.794	1.25	35198	0.01	5	
Sb	121	1	No Gas	4.465	4.465	0.59	48256	0.01	5	
Ba	137	1	No Gas	4.875	4.875	2.67	16714	0.03	5	
Tl	205	1	No Gas	4.498	4.498	0.22	98329	0.00	5	
Tl	203	1	No Gas	4.277	4.277	1.05	40449	0.01	5	
Pb	208	1	No Gas	4.511	4.511	0.68	136862	0.00	5	
U	238	1	No Gas	4.462	4.462	0.82	138009	0.00	5	
Ca	43	2	He	490.722	490.722	9.51	790	62.11	500	
Sb	121	2	He	4.972	4.972	1.89	24887	0.02	5	
Ti	47	2	He	4.434	4.434	4.63	727	0.61	5	
Cu	63	1	No Gas	4.531	4.531	1.32	51826	0.01	5	
Se	82	1	No Gas	3.158	3.158	78.04	254	1.24	5	NewName2 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	725145	2.42	707163	102.54	70	120	
Ge	72	2	He	497510	0.36	503236	98.86	70	120	
Ge	72	1	No Gas	1872900	1.67	1894390	98.87	70	120	
In	115	1	No Gas	2062276	1.18	2095072	98.43	70	120	
Bi	209	1	No Gas	1812322	0.57	1820260	99.56	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	030_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:30:41-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	-0.040	-102.4	39505	0.4	0.5	
Be	9	1	No Gas	0.012	44.4	53	21.7	0.5	
V	51	2	He	-0.029	-20.7	620	4.2	2.5	
Cr	52	2	He	0.023	202.6	1583	15.0	2.5	
Fe	56	2	He	1.317	12.7	15262	5.5	100	
Se	78	2	He	-0.618	-12.2	209	2.9	1	
As	75	2	He	0.015	93.6	64	15.8	2.5	
Ca	44	2	He	-4.312	-133.7	780	18.2	100	
Na	23	2	He	-7.947	-17.4	106756	0.6	100	
Mg	24	2	He	0.611	23.5	587	10.4	100	
K	39	2	He	6.283	32.0	70095	1.5	100	
Mn	55	2	He	0.023	74.5	340	17.6	2.5	
Co	59	2	He	0.004	47.9	110	15.7	2.5	
Ni	60	2	He	-0.030	-64.0	143	28.2	2.5	
Cu	63	2	He	0.056	21.9	1080	7.4	1	
Zn	66	2	He	-0.052	-272.8	657	22.2	2.5	
Al	27	2	He	-1.388	-16.1	240	20.8	5	
B	11	1	No Gas	4.345	7.4	8464	5.5	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-0.984	-6.9	13530	4.4	5	
Si	28	1	No Gas	-6.405	-13.1	197094	0.5	10	
Ag	107	1	No Gas	0.000	-1037.3	550	3.1	2.5	
Cd	111	1	No Gas	0.017	94.4	43	87.4	1	
Sr	88	1	No Gas	-0.011	-54.8	763	18.4	2.5	
Mo	95	1	No Gas	0.013	62.8	80	45.1	2.5	
Sn	118	1	No Gas	0.085	26.7	1763	9.4	5	
Sb	121	1	No Gas	0.013	16.0	330	5.2	2.5	
Ba	137	1	No Gas	0.029	88.3	247	35.0	2.5	
Tl	205	1	No Gas	0.008	60.3	217	48.5	1	
Tl	203	1	No Gas	0.010	68.8	113	56.7	1	
Pb	208	1	No Gas	0.014	32.6	1017	12.5	2.5	
U	238	1	No Gas	0.006	57.0	187	53.9	2.5	
Ca	43	2	He	8.932	189.7	40	66.1	100	
Sb	121	2	He	0.008	51.5	153	13.6	2.5	
Ti	47	2	He	0.063	112.9	17	69.3	2.5	
Se	82	1	No Gas	-2.479	-66.2	-553	-43.1	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	710367	1.30	707163	100.45	70	120	
Ge	72	2	He	492798	0.73	503236	97.93	70	120	
Ge	72	1	No Gas	1821929	1.86	1894390	96.17	70	120	
In	115	1	No Gas	2016484	0.73	2095072	96.25	70	120	
Bi	209	1	No Gas	1783567	0.48	1820260	97.98	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	031ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:34:00-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	0.286	29.6	44527	1.3	0	ICSA Main CR1 Failed
Be	9	1	No Gas	0.004	237.7	38	61.6	0	ICSA Main CR1 Failed
V	51	2	He	0.039	25.8	890	4.9	0	ICSA Main CR1 Failed
Cr	52	2	He	2.061	4.8	11949	4.3	0	ICSA Main CR1 Failed
Fe	56	2	He	99438.929	0.4	471623326	0.9	0	
Se	78	2	He	-0.310	-13.9	223	1.9	0	ICSA Main CR1 Failed
As	75	2	He	0.094	60.5	121	35.1	0	ICSA Main CR1 Failed
Ca	44	2	He	102358.629	1.5	2558486	1.8	0	
Na	23	2	He	101011.336	0.3	78938400	0.7	0	
Mg	24	2	He	100068.980	0.6	43139643	0.5	0	
K	39	2	He	100057.305	1.4	54015863	1.5	0	
Mn	55	2	He	0.433	6.6	1693	5.3	0	ICSA Main CR1 Failed
Co	59	2	He	0.128	12.5	1047	11.4	0	ICSA Main CR1 Failed
Ni	60	2	He	0.401	8.4	1007	7.3	0	ICSA Main CR1 Failed
Cu	63	2	He	0.122	11.0	1433	4.9	0	ICSA Main CR1 Failed
Zn	66	2	He	1.228	1.1	1900	0.0	0	ICSA Main CR1 Failed
Al	27	2	He	100555.674	1.3	21576430	1.5	0	
B	11	1	No Gas	10.881	3.0	17800	0.4	0	
Al	27	1	No Gas	95414.984	1.4	1084593291	0.4	0	
Si	28	1	No Gas	16.283	9.8	313487	1.0	0	ICSA Main CR1 Failed
Ag	107	1	No Gas	0.018	20.1	780	5.9	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	0.778	2.7	1833	2.7	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	2.265	1.1	53259	1.1	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	2084.309	0.4	9420073	0.4	0	
Sn	118	1	No Gas	0.135	10.4	2120	4.6	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.099	4.4	1223	4.5	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	1.358	4.0	4681	4.0	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.009	24.1	230	19.9	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.007	73.2	83	56.7	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.062	2.9	2360	2.2	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.024	22.2	707	22.2	0	ICSA Main CR1 Failed
Ca	43	2	He	94226.596	1.4	141710	1.4	0	
Sb	121	2	He	0.115	25.1	667	20.2	0	ICSA Main CR1 Failed
Ti	47	2	He	2030.549	0.7	318612	0.8	0	
Se	82	1	No Gas	-0.229	-583.8	-234	-82.0	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	744646	2.59	707163	105.30	70	120	
Ge	72	2	He	480612	0.72	503236	95.50	70	120	
Ge	72	1	No Gas	1804593	1.82	1894390	95.26	70	120	
In	115	1	No Gas	2024427	0.05	2095072	96.63	70	120	
Bi	209	1	No Gas	1719678	0.33	1820260	94.47	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	032ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:36:05-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	100.248	3.529	929476	2.64	100	100.2	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	99.724	2.398	220425	1.39	100	99.7	80	120	
V	51	2	He	99.231	0.436	422961	0.74	100	99.2	80	120	
Cr	52	2	He	96.189	0.861	499173	0.32	100	96.2	80	120	
Fe	56	2	He	107717.215	0.944	517755219	0.36	100	107717.2	80	120	
Se	78	2	He	100.452	0.454	6360	1.16	100	100.5	80	120	
As	75	2	He	99.870	1.217	74481	0.26	100	99.9	80	120	
Ca	44	2	He	111791.686	1.350	2831642	0.27	100	111791.7	80	120	
Na	23	2	He	108934.526	0.878	86267395	0.29	100	108934.5	80	120	ICSB Main CR1 Failed
Mg	24	2	He	108177.276	0.553	47264913	0.62	100	108177.3	80	120	
K	39	2	He	108935.364	1.232	59593316	0.28	100	108935.4	80	120	
Mn	55	2	He	98.785	1.787	332945	0.64	100	98.8	80	120	
Co	59	2	He	98.236	0.993	758939	0.19	100	98.2	80	120	
Ni	60	2	He	96.077	0.787	195916	0.55	100	96.1	80	120	
Cu	63	2	He	90.525	0.340	527475	1.14	100	90.5	80	120	
Zn	66	2	He	98.473	0.800	98976	1.97	100	98.5	80	120	
Al	27	2	He	99521.826	0.430	21642701	0.76	100	99521.8	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	495.401	2.179	630864	1.29	100	495.4	80	120	
Al	27	1	No Gas	93605.478	0.791	1045832598	0.51	100	93605.5	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	513.799	0.360	2857823	0.72	100	513.8	80	120	
Ag	107	1	No Gas	87.831	1.310	1090993	1.20	100	87.8	80	120	
Cd	111	1	No Gas	98.210	1.922	223780	0.92	100	98.2	80	120	
Sr	88	1	No Gas	106.036	1.033	2368081	0.92	100	106.0	80	120	
Mo	95	1	No Gas	2211.466	1.046	9675684	0.90	100	2211.5	80	120	ICSB Main CR1 Failed
Sn	118	1	No Gas	99.417	1.717	670983	0.60	100	99.4	80	120	
Sb	121	1	No Gas	91.342	0.543	931047	1.00	100	91.3	80	120	
Ba	137	1	No Gas	101.199	1.648	326805	0.31	100	101.2	80	120	
Tl	205	1	No Gas	102.924	1.841	2062501	0.86	100	102.9	80	120	
Tl	203	1	No Gas	91.109	1.331	789778	0.47	100	91.1	80	120	
Pb	208	1	No Gas	98.717	0.662	2734894	0.74	100	98.7	80	120	
U	238	1	No Gas	103.893	1.046	2946313	0.85	100	103.9	80	120	
Ca	43	2	He	103332.836	2.362	157479	1.28	100	103332.8	80	120	
Sb	121	2	He	97.974	0.397	478070	1.00	100	98.0	80	120	
Ti	47	2	He	2111.566	0.800	335791	0.50	100	2111.6	80	120	
Cu	63	1	No Gas	88.824	0.305	935908	1.08	100	88.8	80	120	
Se	82	1	No Gas	98.865	1.079	13380	0.08	100	98.9	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	690682	1.06	707163	97.67	70	120	
Ge	72	2	He	487113	1.17	503236	96.80	70	120	
Ge	72	1	No Gas	1773520	1.04	1894390	93.62	70	120	
In	115	1	No Gas	1960062	1.94	2095072	93.56	70	120	
Bi	209	1	No Gas	1662137	1.12	1820260	91.31	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	034_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:43:30-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	99.167	2.324	903537	1.33	100	99.2	90	110	
Be	9	1	No Gas	102.895	0.957	223409	0.35	100	102.9	90	110	
V	51	2	He	97.647	0.282	427245	0.28	100	97.6	90	110	
Cr	52	2	He	94.381	0.704	502804	0.25	100	94.4	90	110	
Fe	56	2	He	9856.296	0.430	48640906	0.65	10000	98.6	90	110	
Se	78	2	He	99.123	2.964	6444	2.34	100	99.1	90	110	
As	75	2	He	99.182	0.557	75932	0.38	100	99.2	90	110	
Ca	44	2	He	9839.277	0.258	256671	0.33	10000	98.4	90	110	
Na	23	2	He	9849.553	0.368	8111507	0.79	10000	98.5	90	110	
Mg	24	2	He	9873.967	0.326	4428813	0.63	10000	98.7	90	110	
K	39	2	He	9852.884	0.408	5594629	0.16	10000	98.5	90	110	
Mn	55	2	He	98.650	0.395	341342	0.83	100	98.7	90	110	
Co	59	2	He	98.916	0.252	784477	0.75	100	98.9	90	110	
Ni	60	2	He	97.374	1.181	203820	0.93	100	97.4	90	110	
Cu	63	2	He	92.963	0.902	555987	0.59	100	93.0	90	110	
Zn	66	2	He	101.260	1.375	104440	0.93	100	101.3	90	110	
Al	27	2	He	99.674	0.775	22802	0.25	100	99.7	90	110	
B	11	1	No Gas	468.978	0.901	586845	1.85	500	93.8	90	110	
Al	27	1	No Gas	103.211	3.104	1224471	1.92	100	103.2	90	110	
Si	28	1	No Gas	499.630	0.758	2897424	1.44	5000	10.0	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.945	1.568	1272041	2.65	100	98.9	90	110	
Cd	111	1	No Gas	99.400	0.449	234418	0.88	100	99.4	90	110	
Sr	88	1	No Gas	101.280	1.015	2340807	0.82	100	101.3	90	110	
Mo	95	1	No Gas	98.640	1.573	446644	1.34	100	98.6	90	110	
Sn	118	1	No Gas	97.442	1.931	680640	1.51	100	97.4	90	110	
Sb	121	1	No Gas	90.623	0.754	960869	0.72	100	90.6	90	110	
Ba	137	1	No Gas	98.764	1.549	330078	0.74	100	98.8	90	110	
Tl	205	1	No Gas	100.785	1.720	2143909	2.03	100	100.8	90	110	
Tl	203	1	No Gas	89.485	0.751	823374	0.90	100	89.5	90	110	CCV Main CR1-2 Failed
Pb	208	1	No Gas	95.951	0.461	2821566	1.09	100	96.0	90	110	
U	238	1	No Gas	99.501	1.901	2994761	0.84	100	99.5	90	110	
Ca	43	2	He	9661.434	5.192	15142	5.49	10000	96.6	90	110	
Sb	121	2	He	97.647	0.900	489083	0.44	100	97.6	90	110	
Ti	47	2	He	95.768	2.172	15639	1.94	100	95.8	90	110	
Cu	63	1	No Gas	90.601	0.926	993004	1.15	100	90.6	90	110	
Se	82	1	No Gas	98.893	3.549	13922	3.23	100	98.9	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	678389	0.95	707163	95.93	70	120	
Ge	72	2	He	500006	0.51	503236	99.36	70	120	
Ge	72	1	No Gas	1844916	1.16	1894390	97.39	70	120	
In	115	1	No Gas	2028255	1.09	2095072	96.81	70	120	
Bi	209	1	No Gas	1764169	1.06	1820260	96.92	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	035_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T12:45:28-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	0.182	46.7	37700	1.6	0.5	
Be	9	1	No Gas	0.012	86.0	50	43.6	0.5	
V	51	2	He	0.016	33.7	822	3.1	2.5	
Cr	52	2	He	0.031	50.3	1637	5.1	2.5	
Fe	56	2	He	0.774	1.7	12719	0.1	100	
Se	78	2	He	-0.190	-282.9	237	13.7	2	
As	75	2	He	0.023	165.6	71	40.4	2.5	
Ca	44	2	He	-6.764	-26.2	723	6.5	100	
Na	23	2	He	-2.770	-60.5	111735	0.8	100	
Mg	24	2	He	0.370	76.9	483	25.9	100	
K	39	2	He	7.995	28.9	71575	1.4	100	
Mn	55	2	He	0.024	43.6	347	10.9	2.5	
Co	59	2	He	-0.002	-30.0	57	10.2	2.5	
Ni	60	2	He	-0.057	-8.2	90	11.1	2.5	
Cu	63	2	He	0.042	24.5	1007	6.5	2	
Zn	66	2	He	-0.063	-65.7	650	6.7	2.5	
Al	27	2	He	-1.335	-10.6	253	12.1	5	
B	11	1	No Gas	14.431	13.3	19617	11.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.615	-52.4	17947	20.9	5	
Si	28	1	No Gas	-10.014	-3.5	179810	0.1	10	
Ag	107	1	No Gas	0.010	96.7	690	17.6	2.5	
Cd	111	1	No Gas	0.007	119.8	20	100.0	1	
Sr	88	1	No Gas	-0.008	-82.1	843	18.4	2.5	
Mo	95	1	No Gas	0.039	12.5	200	10.0	2.5	
Sn	118	1	No Gas	0.055	21.3	1590	6.1	5	
Sb	121	1	No Gas	0.026	27.0	473	15.3	2.5	
Ba	137	1	No Gas	-0.005	-454.5	137	53.9	2.5	
Tl	205	1	No Gas	0.013	40.7	333	35.2	1	
Tl	203	1	No Gas	0.017	59.8	173	52.0	1	
Pb	208	1	No Gas	0.021	30.5	1247	14.3	2.5	
U	238	1	No Gas	0.008	77.4	267	73.3	2.5	
Ca	43	2	He	-6.179	-159.6	17	91.7	100	
Sb	121	2	He	0.010	53.4	163	15.4	2.5	
Ti	47	2	He	-0.020	-176.7	3	173.2	2.5	
Cu	63	1	No Gas	0.040	17.6	1907	4.5	2.5	
Se	82	1	No Gas	-0.854	-360.2	-328	-134.2	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	644827	0.35	707163	91.19	70	120	
Ge	72	2	He	496508	0.41	503236	98.66	70	120	
Ge	72	1	No Gas	1839038	1.08	1894390	97.08	70	120	
In	115	1	No Gas	2056469	1.10	2095072	98.16	70	120	
Bi	209	1	No Gas	1788683	1.69	1820260	98.27	70	120	

Sample Report

Sample Table

Sample Name	HS22080472-01SD
Data File Name	039SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:06:36-05:00
Sample Type	Sample
Dilution	5
Comment	DOD TW 182618
ISTD Ref FileName	018CALB.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	5.077	25.383	4.54	93007	0.01	2000	
Be	9	1	No Gas	-0.006	-0.029	-36.13	15	-0.04	2000	
V	51	2	He	0.317	1.587	7.33	2177	0.01	2000	
Cr	52	2	He	-0.042	-0.210	-50.58	1280	0.00	2000	
Fe	56	2	He	18.219	91.097	2.32	100464	0.02	200000	
Se	78	2	He	-0.373	-1.864	-46.03	231	-0.16	2000	
As	75	2	He	0.139	0.697	24.16	163	0.09	2000	
Ca	44	2	He	3623.065	18115.324	0.61	96607	3.75	200000	
Na	23	2	He	154070.949	770354.744	0.60	127210931	0.12	200000	
Mg	24	2	He	3621.001	18105.006	0.12	1650389	0.22	200000	
K	39	2	He	481.868	2409.340	1.00	343319	0.14	200000	
Mn	55	2	He	15.040	75.198	0.57	53100	0.03	2000	
Co	59	2	He	0.028	0.138	36.01	300	0.01	2000	
Ni	60	2	He	0.021	0.105	110.72	257	0.01	2000	
Cu	63	2	He	0.229	1.143	16.96	2160	0.01	2000	
Zn	66	2	He	1.205	6.026	17.63	1984	0.06	2000	
Al	27	2	He	5.310	26.552	6.77	1767	0.30	2000	
B	11	1	No Gas	10.858	54.290	3.68	18282	0.06	2000	
Al	27	1	No Gas	5.364	26.819	2.68	88504	0.01	2000	
Si	28	1	No Gas	3927.106	19635.532	0.91	21414793	0.02	2000	>LDR
Ag	107	1	No Gas	0.005	0.027	106.83	613	0.00	2000	
Cd	111	1	No Gas	0.000	0.000	2801.68	3	0.00	2000	
Sr	88	1	No Gas	88.120	440.601	2.63	1996664	0.00	2000	
Mo	95	1	No Gas	0.042	0.208	35.11	207	0.02	2000	
Sn	118	1	No Gas	-0.001	-0.003	-744.42	1157	0.00	2000	
Sb	121	1	No Gas	0.032	0.159	24.34	543	0.01	2000	
Ba	137	1	No Gas	69.300	346.501	2.27	227091	0.03	2000	
Tl	205	1	No Gas	0.001	0.006	49.75	63	0.00	2000	
Tl	203	1	No Gas	0.001	0.003	297.32	23	0.00	2000	
Pb	208	1	No Gas	0.060	0.298	8.07	2217	0.00	2000	
U	238	1	No Gas	0.005	0.024	20.59	143	0.00	2000	
Ca	43	2	He	3574.199	17870.995	0.71	5708	62.62	200000	
Sb	121	2	He	0.024	0.120	56.14	240	0.01	2000	
Ti	47	2	He	0.161	0.807	132.13	33	0.48	2000	
Cu	63	1	No Gas	0.992	4.962	2.18	12473	0.01	2000	
Zn	66	1	No Gas	1.373	6.863	9.01	5388	0.03	2000	
Se	82	1	No Gas	-1.534	-7.670	-153.86	-429	0.36	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	765980	1.45	707163	108.32	70	120	
Ge	72	2	He	508022	0.67	503236	100.95	70	120	
Ge	72	1	No Gas	1866344	1.06	1894390	98.52	70	120	
In	115	1	No Gas	1988650	1.82	2095072	94.92	70	120	
Bi	209	1	No Gas	1659159	1.00	1820260	91.15	70	120	

Sample Report

Sample Table

Sample Name	HS22080472-01MS
Data File Name	040SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:08:40-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 182618
ISTD Ref FileName	018CALB.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	25.175	25.175	1.78	292287	0.01	2000	
Be	9	1	No Gas	55.326	55.326	1.56	136205	0.04	2000	
V	51	2	He	54.718	54.718	0.33	256937	0.02	2000	
Cr	52	2	He	50.632	50.632	0.14	289814	0.02	2000	
Fe	56	2	He	5221.578	5221.578	0.44	27620120	0.02	200000	
Se	78	2	He	49.534	49.534	1.93	3586	1.38	2000	
As	75	2	He	56.546	56.546	0.47	46418	0.12	2000	
Ca	44	2	He	22560.317	22560.317	0.58	629445	3.58	200000	
Na	23	2	He	726185.017	726185.017	0.91	631940844	0.11	200000	>LDR
Mg	24	2	He	22067.449	22067.449	2.17	10605994	0.21	200000	
K	39	2	He	7895.980	7895.980	1.13	4819515	0.16	200000	
Mn	55	2	He	124.501	124.501	0.90	461572	0.03	2000	
Co	59	2	He	52.148	52.148	0.05	443262	0.01	2000	
Ni	60	2	He	50.984	50.984	0.71	114478	0.04	2000	
Cu	63	2	He	49.010	49.010	1.18	314505	0.02	2000	
Zn	66	2	He	57.990	57.990	2.75	64430	0.09	2000	
Al	27	2	He	118.756	118.756	1.72	29001	0.41	2000	
B	11	1	No Gas	38.655	38.655	3.08	57603	0.07	2000	
Al	27	1	No Gas	121.369	121.369	1.20	1477095	0.01	2000	
Si	28	1	No Gas	19420.178	19420.178	1.59	106739638	0.02	2000	>LDR
Ag	107	1	No Gas	41.192	41.192	0.51	525043	0.01	2000	
Cd	111	1	No Gas	53.965	53.965	0.79	126115	0.04	2000	
Sr	88	1	No Gas	408.862	408.862	0.72	9361502	0.00	2000	
Mo	95	1	No Gas	54.784	54.784	1.09	245843	0.02	2000	
Sn	118	1	No Gas	0.054	0.054	38.94	1543	0.00	2000	
Sb	121	1	No Gas	47.736	47.736	1.58	520768	0.01	2000	
Ba	137	1	No Gas	452.049	452.049	1.30	1496626	0.03	2000	
Tl	205	1	No Gas	51.060	51.060	0.78	997574	0.01	2000	
Tl	203	1	No Gas	49.030	49.030	0.43	414377	0.01	2000	
Pb	208	1	No Gas	51.450	51.450	1.55	1389718	0.00	2000	
U	238	1	No Gas	0.019	0.019	9.48	543	0.00	2000	
Ca	43	2	He	22380.634	22380.634	0.79	37552	59.60	200000	
Sb	121	2	He	51.955	51.955	0.66	278946	0.02	2000	
Ti	47	2	He	53.839	53.839	4.52	9427	0.57	2000	
Cu	63	1	No Gas	53.537	53.537	1.99	604210	0.01	2000	
Zn	66	1	No Gas	58.514	58.514	1.84	163972	0.04	2000	
Se	82	1	No Gas	45.496	45.496	2.56	6477	0.70	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	769225	1.96	707163	108.78	70	120	
Ge	72	2	He	535853	0.86	503236	106.48	70	120	
Ge	72	1	No Gas	1898038	1.38	1894390	100.19	70	120	
In	115	1	No Gas	2009892	0.80	2095072	95.93	70	120	
Bi	209	1	No Gas	1620346	1.03	1820260	89.02	70	120	

Sample Report

Sample Table

Sample Name	HS22080472-01PDS
Data File Name	042SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:12:46-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 182618
ISTD Ref FileName	018CALB.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	24.661	24.661	2.33	290421	0.01	2000	
Be	9	1	No Gas	108.845	108.845	2.46	270909	0.04	2000	
V	51	2	He	106.974	106.974	0.80	513870	0.02	2000	
Cr	52	2	He	99.393	99.393	0.99	581335	0.02	2000	
Fe	56	2	He	10103.219	10103.219	0.65	54746921	0.02	200000	
Se	78	2	He	108.540	108.540	1.20	7723	1.41	2000	
As	75	2	He	110.443	110.443	0.83	92837	0.12	2000	
Ca	44	2	He	27522.527	27522.527	0.32	786570	3.50	200000	
Na	23	2	He	716085.860	716085.860	1.12	638510257	0.11	200000	>LDR
Mg	24	2	He	26683.685	26683.685	1.51	13141066	0.20	200000	
K	39	2	He	13020.484	13020.484	1.19	8094245	0.16	200000	
Mn	55	2	He	174.433	174.433	0.54	662497	0.03	2000	
Co	59	2	He	102.503	102.503	0.40	892622	0.01	2000	
Ni	60	2	He	98.864	98.864	1.03	227227	0.04	2000	
Cu	63	2	He	94.339	94.339	0.62	619539	0.02	2000	
Zn	66	2	He	108.264	108.264	1.39	122563	0.09	2000	
Al	27	2	He	116.190	116.190	2.42	29087	0.40	2000	
B	11	1	No Gas	36.991	36.991	1.65	55889	0.07	2000	
Al	27	1	No Gas	120.769	120.769	2.06	1499300	0.01	2000	
Si	28	1	No Gas	19124.533	19124.533	2.07	107214515	0.02	2000	>LDR
Ag	107	1	No Gas	103.496	103.496	1.51	1303765	0.01	2000	
Cd	111	1	No Gas	105.950	105.950	0.06	244888	0.04	2000	
Sr	88	1	No Gas	410.920	410.920	0.50	9305010	0.00	2000	
Mo	95	1	No Gas	109.179	109.179	0.50	484542	0.02	2000	
Sn	118	1	No Gas	0.079	0.079	49.10	1697	0.00	2000	
Sb	121	1	No Gas	90.279	90.279	1.13	1004381	0.01	2000	
Ba	137	1	No Gas	505.456	505.456	1.36	1655275	0.03	2000	
Tl	205	1	No Gas	109.862	109.862	2.39	2068562	0.01	2000	
Tl	203	1	No Gas	97.783	97.783	1.69	796414	0.01	2000	
Pb	208	1	No Gas	108.433	108.433	2.17	2822420	0.00	2000	
U	238	1	No Gas	0.026	0.026	11.93	707	0.00	2000	
Ca	43	2	He	26753.942	26753.942	2.24	45984	58.18	200000	
Sb	121	2	He	98.260	98.260	0.36	540422	0.02	2000	
Ti	47	2	He	105.050	105.050	1.37	18836	0.56	2000	
Cu	63	1	No Gas	110.025	110.025	1.88	1264838	0.01	2000	
Zn	66	1	No Gas	109.011	109.011	0.70	310134	0.04	2000	
Se	82	1	No Gas	102.718	102.718	1.29	15186	0.68	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	778044	3.39	707163	110.02	70	120	
Ge	72	2	He	549026	0.22	503236	109.10	70	120	
Ge	72	1	No Gas	1935916	1.53	1894390	102.19	70	120	
In	115	1	No Gas	1987822	1.05	2095072	94.88	70	120	
Bi	209	1	No Gas	1561764	1.31	1820260	85.80	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	046_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:20:55-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	102.109	1.078	1024463	0.54	100	102.1	90	110	
Be	9	1	No Gas	102.885	0.694	246267	0.45	100	102.9	90	110	
V	51	2	He	100.269	0.787	451290	0.31	100	100.3	90	110	
Cr	52	2	He	95.573	0.647	523758	0.47	100	95.6	90	110	
Fe	56	2	He	10023.980	1.018	50887533	0.69	10000	100.2	90	110	
Se	78	2	He	102.653	1.737	6856	1.15	100	102.7	90	110	
As	75	2	He	102.650	0.735	80844	0.98	100	102.7	90	110	
Ca	44	2	He	10154.228	0.897	272458	0.37	10000	101.5	90	110	
Na	23	2	He	10239.995	0.517	8670685	1.11	10000	102.4	90	110	
Mg	24	2	He	10077.358	1.739	4649524	1.13	10000	100.8	90	110	
K	39	2	He	10271.614	1.496	5996706	0.98	10000	102.7	90	110	
Mn	55	2	He	102.738	0.864	365670	0.47	100	102.7	90	110	
Co	59	2	He	100.729	0.899	821763	0.31	100	100.7	90	110	
Ni	60	2	He	99.300	0.300	213823	0.67	100	99.3	90	110	
Cu	63	2	He	93.663	1.037	576244	0.43	100	93.7	90	110	
Zn	66	2	He	101.152	0.288	107332	0.81	100	101.2	90	110	
Al	27	2	He	105.094	3.699	24699	3.01	100	105.1	90	110	
B	11	1	No Gas	450.854	1.204	621991	1.00	500	90.2	90	110	
Al	27	1	No Gas	106.102	3.989	1277443	1.19	100	106.1	90	110	
Si	28	1	No Gas	528.386	3.280	3097625	1.07	5000	10.6	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	102.841	2.196	1309846	1.56	100	102.8	90	110	
Cd	111	1	No Gas	101.782	1.518	237850	1.13	100	101.8	90	110	
Sr	88	1	No Gas	105.064	1.398	2406121	0.20	100	105.1	90	110	
Mo	95	1	No Gas	100.476	0.360	450855	0.84	100	100.5	90	110	
Sn	118	1	No Gas	99.450	0.778	688380	0.48	100	99.4	90	110	
Sb	121	1	No Gas	90.328	2.684	972559	0.85	100	90.3	90	110	
Ba	137	1	No Gas	100.759	0.625	333716	0.57	100	100.8	90	110	
Tl	205	1	No Gas	106.858	0.949	2173470	0.14	100	106.9	90	110	
Tl	203	1	No Gas	93.285	1.441	820736	0.83	100	93.3	90	110	
Pb	208	1	No Gas	99.672	0.631	2802671	0.84	100	99.7	90	110	
U	238	1	No Gas	100.437	0.406	2890974	0.64	100	100.4	90	110	
Ca	43	2	He	10107.671	2.865	16293	2.86	10000	101.1	90	110	
Sb	121	2	He	98.134	0.430	505646	0.31	100	98.1	90	110	
Ti	47	2	He	99.308	1.557	16684	1.76	100	99.3	90	110	
Cu	63	1	No Gas	92.849	2.505	1033400	1.21	100	92.8	90	110	
Se	82	1	No Gas	102.484	2.197	14664	2.61	100	102.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	747863	0.99	707163	105.76	70	120	
Ge	72	2	He	514366	0.60	503236	102.21	70	120	
Ge	72	1	No Gas	1874352	3.01	1894390	98.94	70	120	
In	115	1	No Gas	2009915	1.19	2095072	95.94	70	120	
Bi	209	1	No Gas	1686960	0.88	1820260	92.68	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	047_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:22:54-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	-0.240	-48.7	40329	1.6	0.5	
Be	9	1	No Gas	0.014	130.7	63	70.8	0.5	
V	51	2	He	0.127	13.2	1333	5.7	2.5	
Cr	52	2	He	0.045	104.9	1750	14.3	2.5	
Fe	56	2	He	0.802	15.4	13163	4.9	100	
Se	78	2	He	-0.449	-98.8	227	12.2	2	
As	75	2	He	0.045	78.6	90	30.3	2.5	
Ca	44	2	He	-8.045	-48.2	707	14.3	100	
Na	23	2	He	168.811	1.1	256077	0.7	100	CCB Main CR1 Failed
Mg	24	2	He	0.380	54.5	500	19.1	100	
K	39	2	He	14.217	12.9	76846	1.2	100	
Mn	55	2	He	0.020	136.4	340	28.4	2.5	
Co	59	2	He	0.002	79.0	90	11.1	2.5	
Ni	60	2	He	-0.059	-16.7	87	24.0	2.5	
Cu	63	2	He	0.149	17.5	1677	9.3	2	
Zn	66	2	He	-0.094	-58.7	633	9.3	2.5	
Al	27	2	He	-1.172	-21.8	297	19.8	5	
B	11	1	No Gas	10.284	12.4	17361	11.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.773	-48.2	16345	26.5	5	
Si	28	1	No Gas	-4.464	-6.3	212397	1.2	10	
Ag	107	1	No Gas	0.028	90.5	910	33.5	2.5	
Cd	111	1	No Gas	0.013	53.0	33	45.8	1	
Sr	88	1	No Gas	0.005	638.5	1127	60.7	2.5	
Mo	95	1	No Gas	0.025	93.8	133	75.9	2.5	
Sn	118	1	No Gas	0.085	25.0	1767	6.6	5	
Sb	121	1	No Gas	0.042	16.8	653	11.5	2.5	
Ba	137	1	No Gas	0.007	483.1	173	63.6	2.5	
Tl	205	1	No Gas	0.017	62.0	407	55.3	1	
Tl	203	1	No Gas	0.017	69.3	170	61.1	1	
Pb	208	1	No Gas	0.020	50.5	1180	24.7	2.5	
U	238	1	No Gas	0.016	103.1	483	100.6	2.5	
Ca	43	2	He	-6.474	-148.0	17	91.7	100	
Sb	121	2	He	0.023	87.1	233	42.9	2.5	
Ti	47	2	He	0.060	115.9	17	69.3	2.5	
Cu	63	1	No Gas	0.164	18.5	3297	9.9	2.5	
Se	82	1	No Gas	-2.016	-86.7	-499	-51.4	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	760533	1.97	707163	107.55	70	120	
Ge	72	2	He	508440	0.25	503236	101.03	70	120	
Ge	72	1	No Gas	1866088	0.65	1894390	98.51	70	120	
In	115	1	No Gas	2019528	2.09	2095072	96.39	70	120	
Bi	209	1	No Gas	1739488	1.04	1820260	95.56	70	120	

Sample Report

Sample Table

Sample Name	HS22080522-03
Data File Name	049SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:27:01-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 182618
ISTD Ref FileName	018CALB.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	406.933	406.933	2.02	4055883	0.01	2000	
Be	9	1	No Gas	-0.002	-0.002	-93.41	23	-0.01	2000	
V	51	2	He	0.034	0.034	62.90	982	0.00	2000	
Cr	52	2	He	4.263	4.263	3.77	26179	0.02	2000	
Fe	56	2	He	237.749	237.749	1.19	1282755	0.02	200000	
Se	78	2	He	-0.274	-0.274	-116.29	254	-0.11	2000	
As	75	2	He	0.865	0.865	7.08	777	0.11	2000	
Ca	44	2	He	29978.273	29978.273	1.76	846566	3.54	200000	
Na	23	2	He	478439.780	478439.780	1.12	421640020	0.11	200000	>LDR
Mg	24	2	He	13564.659	13564.659	1.83	6601760	0.21	200000	
K	39	2	He	103234.548	103234.548	1.50	62914489	0.16	200000	
Mn	55	2	He	19.404	19.404	2.04	73085	0.03	2000	
Co	59	2	He	0.303	0.303	12.31	2697	0.01	2000	
Ni	60	2	He	3.131	3.131	6.03	7335	0.04	2000	
Cu	63	2	He	0.612	0.612	4.72	4794	0.01	2000	
Zn	66	2	He	3.121	3.121	4.42	4251	0.07	2000	
Al	27	2	He	20.844	20.844	3.84	5651	0.37	2000	
B	11	1	No Gas	743.437	743.437	2.10	1049157	0.07	2000	
Al	27	1	No Gas	19.101	19.101	3.66	259449	0.01	2000	
Si	28	1	No Gas	9959.399	9959.399	0.99	55989761	0.02	2000	>LDR
Ag	107	1	No Gas	0.013	0.013	18.58	723	0.00	2000	
Cd	111	1	No Gas	0.045	0.045	2.16	110	0.04	2000	
Sr	88	1	No Gas	1644.995	1644.995	1.68	38294477	0.00	2000	
Mo	95	1	No Gas	2.220	2.220	3.84	10151	0.02	2000	
Sn	118	1	No Gas	0.127	0.127	9.98	2084	0.01	2000	
Sb	121	1	No Gas	0.120	0.120	9.15	1547	0.01	2000	
Ba	137	1	No Gas	375.383	375.383	2.59	1263650	0.03	2000	
Tl	205	1	No Gas	0.001	0.001	96.64	60	0.00	2000	
Tl	203	1	No Gas	0.002	0.002	63.22	37	0.01	2000	
Pb	208	1	No Gas	0.094	0.094	9.98	3120	0.00	2000	
U	238	1	No Gas	0.314	0.314	4.53	8773	0.00	2000	
Ca	43	2	He	32686.145	32686.145	0.72	55519	58.87	200000	
Sb	121	2	He	0.111	0.111	3.43	727	0.02	2000	
Ti	47	2	He	0.203	0.203	84.78	43	0.47	2000	
Cu	63	1	No Gas	3.580	3.580	2.21	42674	0.01	2000	
Zn	66	1	No Gas	3.347	3.347	4.72	11181	0.03	2000	
Se	82	1	No Gas	-2.051	-2.051	-77.38	-520	0.39	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	766557	1.55	707163	108.40	70	120	
Ge	72	2	He	542642	1.49	503236	107.83	70	120	
Ge	72	1	No Gas	1937040	1.02	1894390	102.25	70	120	
In	115	1	No Gas	2044138	2.09	2095072	97.57	70	120	
Bi	209	1	No Gas	1637994	0.68	1820260	89.99	70	120	

Sample Report

Sample Table

Sample Name	HS22080522-04
Data File Name	050SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:29:03-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 182618
ISTD Ref FileName	018CALB.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	43.634	43.634	1.59	498400	0.01	2000	
Be	9	1	No Gas	0.087	0.087	15.96	257	0.03	2000	
V	51	2	He	0.152	0.152	6.77	1559	0.01	2000	
Cr	52	2	He	2.296	2.296	3.00	15019	0.02	2000	
Fe	56	2	He	45084.559	45084.559	0.59	244209490	0.02	200000	
Se	78	2	He	-0.245	-0.245	-199.12	259	-0.09	2000	
As	75	2	He	7.467	7.467	1.09	6330	0.12	2000	
Ca	44	2	He	38055.636	38055.636	1.22	1086978	3.50	200000	
Na	23	2	He	103590.289	103590.289	0.77	92453169	0.11	200000	
Mg	24	2	He	22563.758	22563.758	0.49	11109776	0.20	200000	
K	39	2	He	11086.194	11086.194	0.41	6901307	0.16	200000	
Mn	55	2	He	646.641	646.641	0.59	2454623	0.03	2000	
Co	59	2	He	0.832	0.832	3.58	7325	0.01	2000	
Ni	60	2	He	1.772	1.772	3.84	4297	0.04	2000	
Cu	63	2	He	0.370	0.370	1.19	3260	0.01	2000	
Zn	66	2	He	3.031	3.031	2.38	4197	0.07	2000	
Al	27	2	He	24.233	24.233	4.39	6546	0.37	2000	
B	11	1	No Gas	45.191	45.191	2.72	70147	0.06	2000	
Al	27	1	No Gas	23.797	23.797	25.69	328051	0.01	2000	
Si	28	1	No Gas	20317.024	20317.024	1.24	118183282	0.02	2000	>LDR
Ag	107	1	No Gas	0.007	0.007	68.15	670	0.00	2000	
Cd	111	1	No Gas	0.040	0.040	45.77	100	0.04	2000	
Sr	88	1	No Gas	829.731	829.731	2.74	19772949	0.00	2000	
Mo	95	1	No Gas	0.213	0.213	5.92	1020	0.02	2000	
Sn	118	1	No Gas	0.199	0.199	2.80	2654	0.01	2000	
Sb	121	1	No Gas	0.078	0.078	11.73	1120	0.01	2000	
Ba	137	1	No Gas	1194.600	1194.600	1.80	4117092	0.03	2000	
Tl	205	1	No Gas	0.002	0.002	22.42	93	0.00	2000	
Tl	203	1	No Gas	0.006	0.006	9.71	77	0.01	2000	
Pb	208	1	No Gas	0.046	0.046	0.70	1937	0.00	2000	
U	238	1	No Gas	0.047	0.047	4.33	1400	0.00	2000	
Ca	43	2	He	35737.323	35737.323	1.63	61400	58.20	200000	
Sb	121	2	He	0.085	0.085	21.66	597	0.01	2000	
Ti	47	2	He	0.332	0.332	25.99	67	0.50	2000	
Cu	63	1	No Gas	1.255	1.255	4.49	16557	0.01	2000	
Zn	66	1	No Gas	2.975	2.975	0.56	10501	0.03	2000	
Se	82	1	No Gas	-1.300	-1.300	-124.45	-424	0.31	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	807131	0.94	707163	114.14	70	120	
Ge	72	2	He	548897	0.37	503236	109.07	70	120	
Ge	72	1	No Gas	2008850	1.02	1894390	106.04	70	120	
In	115	1	No Gas	2092695	1.87	2095072	99.89	70	120	
Bi	209	1	No Gas	1739600	0.25	1820260	95.57	70	120	

Sample Report

Sample Table

Sample Name	HS22080522-06
Data File Name	051SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:31:06-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 182618
ISTD Ref FileName	018CALB.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	74.638	74.638	1.02	781800	0.01	2000	
Be	9	1	No Gas	0.056	0.056	13.41	167	0.03	2000	
V	51	2	He	3.243	3.243	1.28	15826	0.02	2000	
Cr	52	2	He	1172.084	1172.084	1.42	6605204	0.02	2000	
Fe	56	2	He	20263.090	20263.090	1.34	106056498	0.02	200000	
Se	78	2	He	-0.134	-0.134	-264.89	257	-0.05	2000	
As	75	2	He	6.282	6.282	2.03	5155	0.12	2000	
Ca	44	2	He	116841.956	116841.956	1.60	3222601	3.63	200000	
Na	23	2	He	428133.489	428133.489	1.13	368819248	0.12	200000	>LDR
Mg	24	2	He	72859.556	72859.556	0.69	34661779	0.21	200000	
K	39	2	He	2316.499	2316.499	0.82	1450083	0.16	200000	
Mn	55	2	He	1576.645	1576.645	0.76	5782408	0.03	2000	
Co	59	2	He	16.905	16.905	1.31	142276	0.01	2000	
Ni	60	2	He	614.107	614.107	0.88	1362363	0.05	2000	
Cu	63	2	He	16.130	16.130	0.39	103002	0.02	2000	
Zn	66	2	He	12.174	12.174	0.97	13991	0.09	2000	
Al	27	2	He	36.021	36.021	7.06	9117	0.40	2000	
B	11	1	No Gas	48.505	48.505	2.68	71509	0.07	2000	
Al	27	1	No Gas	34.915	34.915	11.22	447930	0.01	2000	
Si	28	1	No Gas	22696.121	22696.121	1.87	125901571	0.02	2000	>LDR
Ag	107	1	No Gas	0.011	0.011	37.13	703	0.00	2000	
Cd	111	1	No Gas	0.054	0.054	0.97	130	0.04	2000	
Sr	88	1	No Gas	2050.294	2050.294	0.89	47562346	0.00	2000	>LDR
Mo	95	1	No Gas	11.922	11.922	1.19	54227	0.02	2000	
Sn	118	1	No Gas	0.467	0.467	7.53	4458	0.01	2000	
Sb	121	1	No Gas	0.137	0.137	16.07	1713	0.01	2000	
Ba	137	1	No Gas	631.381	631.381	1.87	2118124	0.03	2000	
Tl	205	1	No Gas	0.013	0.013	9.81	300	0.00	2000	
Tl	203	1	No Gas	0.010	0.010	48.59	103	0.01	2000	
Pb	208	1	No Gas	0.212	0.212	6.65	6434	0.00	2000	
U	238	1	No Gas	0.175	0.175	5.98	4978	0.00	2000	
Ca	43	2	He	110240.650	110240.650	1.64	182946	60.26	200000	
Sb	121	2	He	0.152	0.152	7.14	930	0.02	2000	
Ti	47	2	He	0.691	0.691	31.53	127	0.55	2000	
Cu	63	1	No Gas	18.850	18.850	1.15	215788	0.01	2000	
Zn	66	1	No Gas	12.141	12.141	4.30	35674	0.03	2000	
Se	82	1	No Gas	0.991	0.991	77.30	-65	-1.52	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	769218	1.83	707163	108.78	70	120	
Ge	72	2	He	530378	0.72	503236	105.39	70	120	
Ge	72	1	No Gas	1916351	1.88	1894390	101.16	70	120	
In	115	1	No Gas	2036622	0.95	2095072	97.21	70	120	
Bi	209	1	No Gas	1661660	0.61	1820260	91.29	70	120	

Sample Report

Sample Table

Sample Name	HS22080522-07
Data File Name	052SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:33:09-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 182618
ISTD Ref FileName	018CALB.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	81.490	81.490	2.41	823674	0.01	2000	
Be	9	1	No Gas	0.082	0.082	9.06	223	0.04	2000	
V	51	2	He	3.320	3.320	1.51	16401	0.02	2000	
Cr	52	2	He	1376.256	1376.256	0.72	7859300	0.02	2000	
Fe	56	2	He	21696.682	21696.682	0.81	115079665	0.02	200000	
Se	78	2	He	-0.215	-0.215	-100.96	255	-0.08	2000	
As	75	2	He	6.562	6.562	1.89	5454	0.12	2000	
Ca	44	2	He	123737.158	123737.158	0.14	3458318	3.58	200000	
Na	23	2	He	465333.997	465333.997	0.46	406205274	0.11	200000	>LDR
Mg	24	2	He	78164.622	78164.622	0.26	37682322	0.21	200000	
K	39	2	He	2478.733	2478.733	1.63	1567215	0.16	200000	
Mn	55	2	He	1700.942	1700.942	0.80	6321429	0.03	2000	
Co	59	2	He	18.330	18.330	1.13	156322	0.01	2000	
Ni	60	2	He	673.762	673.762	2.17	1514567	0.04	2000	
Cu	63	2	He	18.177	18.177	0.13	117511	0.02	2000	
Zn	66	2	He	8.421	8.421	4.47	10044	0.08	2000	
Al	27	2	He	37.758	37.758	5.67	9654	0.39	2000	
B	11	1	No Gas	50.198	50.198	3.08	71648	0.07	2000	
Al	27	1	No Gas	34.140	34.140	4.43	437440	0.01	2000	
Si	28	1	No Gas	24171.728	24171.728	0.76	133801481	0.02	2000	>LDR
Ag	107	1	No Gas	0.013	0.013	29.52	727	0.00	2000	
Cd	111	1	No Gas	0.090	0.090	7.47	217	0.04	2000	
Sr	88	1	No Gas	2200.355	2200.355	0.36	51098656	0.00	2000	>LDR
Mo	95	1	No Gas	12.366	12.366	1.63	56302	0.02	2000	
Sn	118	1	No Gas	0.467	0.467	4.18	4464	0.01	2000	
Sb	121	1	No Gas	0.138	0.138	5.61	1727	0.01	2000	
Ba	137	1	No Gas	669.269	669.269	1.13	2247518	0.03	2000	
Tl	205	1	No Gas	0.012	0.012	3.29	283	0.00	2000	
Tl	203	1	No Gas	0.018	0.018	14.97	170	0.01	2000	
Pb	208	1	No Gas	0.191	0.191	6.39	5861	0.00	2000	
U	238	1	No Gas	0.185	0.185	6.73	5255	0.00	2000	
Ca	43	2	He	118924.891	118924.891	1.07	199999	59.46	200000	
Sb	121	2	He	0.145	0.145	7.13	903	0.02	2000	
Ti	47	2	He	0.700	0.700	13.90	130	0.54	2000	
Cu	63	1	No Gas	21.349	21.349	2.08	243679	0.01	2000	
Zn	66	1	No Gas	9.092	9.092	2.04	27094	0.03	2000	
Se	82	1	No Gas	0.653	0.653	299.72	-113	-0.58	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	745820	1.98	707163	105.47	70	120	
Ge	72	2	He	537445	0.24	503236	106.80	70	120	
Ge	72	1	No Gas	1912237	1.21	1894390	100.94	70	120	
In	115	1	No Gas	2038747	1.06	2095072	97.31	70	120	
Bi	209	1	No Gas	1661320	1.62	1820260	91.27	70	120	

Sample Report

Sample Table

Sample Name	HS22080522-11
Data File Name	053SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:35:12-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 182618
ISTD Ref FileName	018CALB.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	165.304	165.304	5.67	1530607	0.01	2000	
Be	9	1	No Gas	0.747	0.747	11.05	1700	0.04	2000	
V	51	2	He	0.562	0.562	3.51	3367	0.02	2000	
Cr	52	2	He	0.584	0.584	6.83	4804	0.01	2000	
Fe	56	2	He	312.239	312.239	1.71	1624167	0.02	200000	
Se	78	2	He	-0.026	-0.026	-586.75	261	-0.01	2000	
As	75	2	He	0.661	0.661	6.38	587	0.11	2000	
Ca	44	2	He	73301.368	73301.368	1.43	1998080	3.67	200000	
Na	23	2	He	918047.543	918047.543	0.85	781330575	0.12	200000	>LDR
Mg	24	2	He	57791.344	57791.344	0.54	27167798	0.21	200000	
K	39	2	He	683.732	683.732	1.33	472851	0.14	200000	
Mn	55	2	He	10224.353	10224.353	0.98	37050809	0.03	2000	>LDR
Co	59	2	He	64.474	64.474	1.34	535952	0.01	2000	
Ni	60	2	He	154.485	154.485	1.28	338801	0.05	2000	
Cu	63	2	He	2.299	2.299	3.06	15192	0.02	2000	
Zn	66	2	He	45.639	45.639	1.36	49755	0.09	2000	
Al	27	2	He	146.963	146.963	5.23	34970	0.42	2000	
B	11	1	No Gas	10.602	10.602	5.47	16411	0.06	2000	
Al	27	1	No Gas	134.672	134.672	7.18	1624944	0.01	2000	
Si	28	1	No Gas	37254.616	37254.616	0.76	203152784	0.02	2000	>LDR
Ag	107	1	No Gas	0.001	0.001	368.56	563	0.00	2000	
Cd	111	1	No Gas	0.209	0.209	9.56	493	0.04	2000	
Sr	88	1	No Gas	1409.773	1409.773	1.38	32423962	0.00	2000	
Mo	95	1	No Gas	0.121	0.121	15.15	567	0.02	2000	
Sn	118	1	No Gas	0.088	0.088	22.04	1787	0.00	2000	
Sb	121	1	No Gas	0.095	0.095	14.24	1230	0.01	2000	
Ba	137	1	No Gas	49.102	49.102	2.08	163439	0.03	2000	
Tl	205	1	No Gas	0.029	0.029	4.61	613	0.00	2000	
Tl	203	1	No Gas	0.032	0.032	12.67	290	0.01	2000	
Pb	208	1	No Gas	0.138	0.138	3.27	4360	0.00	2000	
U	238	1	No Gas	0.054	0.054	5.40	1517	0.00	2000	
Ca	43	2	He	68663.848	68663.848	0.93	112611	60.97	200000	
Sb	121	2	He	0.103	0.103	15.72	663	0.02	2000	
Ti	47	2	He	2.319	2.319	26.92	403	0.57	2000	
Cu	63	1	No Gas	8.127	8.127	1.68	92376	0.01	2000	
Zn	66	1	No Gas	45.883	45.883	0.54	128063	0.04	2000	
Se	82	1	No Gas	3.766	3.766	57.66	341	1.10	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	701870	3.34	707163	99.25	70	120	
Ge	72	2	He	524084	0.66	503236	104.14	70	120	
Ge	72	1	No Gas	1884884	0.13	1894390	99.50	70	120	
In	115	1	No Gas	2019284	1.46	2095072	96.38	70	120	
Bi	209	1	No Gas	1649847	0.44	1820260	90.64	70	120	

Sample Report

Sample Table

Sample Name	HS22080522-11
Data File Name	054SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:37:16-05:00
Sample Type	Sample
Dilution	50
Comment	DOD TW 182618
ISTD Ref FileName	018CALB.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	3.081	154.048	8.09	71521	0.00	2000	
Be	9	1	No Gas	0.007	0.342	159.01	45	0.02	2000	
V	51	2	He	0.065	3.270	30.27	1103	0.01	2000	
Cr	52	2	He	-0.105	-5.228	-11.73	983	-0.01	2000	
Fe	56	2	He	6.342	317.103	1.89	42667	0.01	200000	
Se	78	2	He	-0.482	-24.098	-47.55	234	-0.21	2000	
As	75	2	He	0.036	1.812	1.31	87	0.04	2000	
Ca	44	2	He	1392.085	69604.245	1.59	39290	3.54	200000	
Na	23	2	He	19323.006	966150.283	0.92	16738553	0.12	200000	
Mg	24	2	He	1153.209	57660.427	1.04	548211	0.21	200000	
K	39	2	He	28.039	1401.950	10.67	88268	0.03	200000	
Mn	55	2	He	192.686	9634.303	0.72	705948	0.03	2000	
Co	59	2	He	1.372	68.604	2.70	11605	0.01	2000	
Ni	60	2	He	3.355	167.758	2.86	7652	0.04	2000	
Cu	63	2	He	0.189	9.431	14.20	2000	0.01	2000	
Zn	66	2	He	0.454	22.676	17.52	1253	0.04	2000	
Al	27	2	He	1.385	69.226	41.49	913	0.15	2000	
B	11	1	No Gas	3.534	176.684	4.45	7786	0.05	2000	
Al	27	1	No Gas	1.561	78.040	19.48	44910	0.00	2000	
Si	28	1	No Gas	776.019	38800.948	2.79	4535623	0.02	2000	
Ag	107	1	No Gas	0.039	1.955	90.20	1087	0.00	2000	
Cd	111	1	No Gas	0.008	0.417	77.66	23	0.04	2000	
Sr	88	1	No Gas	27.868	1393.381	4.56	661931	0.00	2000	
Mo	95	1	No Gas	0.011	0.570	156.28	77	0.01	2000	
Sn	118	1	No Gas	-0.023	-1.133	-16.25	1053	0.00	2000	
Sb	121	1	No Gas	0.020	0.991	8.50	427	0.00	2000	
Ba	137	1	No Gas	1.183	59.131	27.49	4214	0.03	2000	
Tl	205	1	No Gas	0.003	0.133	180.43	97	0.00	2000	
Tl	203	1	No Gas	0.003	0.135	204.70	43	0.01	2000	
Pb	208	1	No Gas	-0.004	-0.201	-157.84	483	0.00	2000	
U	238	1	No Gas	0.003	0.135	56.65	90	0.00	2000	
Ca	43	2	He	1357.007	67850.326	3.58	2277	59.60	200000	
Sb	121	2	He	0.017	0.853	15.83	213	0.01	2000	
Ti	47	2	He	-0.041	-2.027	0.00	0	#DIV/0!	2000	
Cu	63	1	No Gas	0.479	23.932	6.09	6962	0.01	2000	
Zn	66	1	No Gas	0.773	38.665	8.66	3847	0.02	2000	
Se	82	1	No Gas	-3.756	-187.793	-7.43	-769	0.49	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	747126	2.28	707163	105.65	70	120	
Ge	72	2	He	529627	0.45	503236	105.24	70	120	
Ge	72	1	No Gas	1914763	0.98	1894390	101.08	70	120	
In	115	1	No Gas	2082169	1.38	2095072	99.38	70	120	
Bi	209	1	No Gas	1753828	2.41	1820260	96.35	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	058_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:45:27-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	102.797	3.100	1034025	0.77	100	102.8	90	110	
Be	9	1	No Gas	101.777	2.693	244328	1.18	100	101.8	90	110	
V	51	2	He	101.516	0.728	458057	0.12	100	101.5	90	110	
Cr	52	2	He	96.667	0.775	531085	0.42	100	96.7	90	110	
Fe	56	2	He	10027.166	0.873	51033296	0.06	10000	100.3	90	110	
Se	78	2	He	102.331	3.969	6852	3.11	100	102.3	90	110	
As	75	2	He	102.511	0.473	80942	1.15	100	102.5	90	110	
Ca	44	2	He	10082.981	0.669	271246	0.24	10000	100.8	90	110	
Na	23	2	He	10466.792	1.114	8882470	1.15	10000	104.7	90	110	
Mg	24	2	He	10158.340	1.303	4698989	0.93	10000	101.6	90	110	
K	39	2	He	10192.502	1.474	5966182	0.74	10000	101.9	90	110	
Mn	55	2	He	101.968	1.779	363853	1.47	100	102.0	90	110	
Co	59	2	He	100.750	0.526	824054	0.54	100	100.7	90	110	
Ni	60	2	He	99.720	0.193	215278	0.87	100	99.7	90	110	
Cu	63	2	He	94.473	1.288	582704	0.78	100	94.5	90	110	
Zn	66	2	He	103.379	0.376	109956	0.53	100	103.4	90	110	
Al	27	2	He	101.342	2.679	23901	2.47	100	101.3	90	110	
B	11	1	No Gas	447.874	2.140	619758	0.95	500	89.6	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	107.489	2.187	1302359	1.13	100	107.5	90	110	
Si	28	1	No Gas	526.022	1.387	3104771	0.58	5000	10.5	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	101.546	1.095	1311185	0.64	100	101.5	90	110	
Cd	111	1	No Gas	100.284	1.870	237556	0.87	100	100.3	90	110	
Sr	88	1	No Gas	104.734	0.261	2431807	1.31	100	104.7	90	110	
Mo	95	1	No Gas	98.923	0.766	449982	0.91	100	98.9	90	110	
Sn	118	1	No Gas	98.312	1.306	689841	0.34	100	98.3	90	110	
Sb	121	1	No Gas	89.229	1.797	966842	0.20	100	89.2	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	99.523	0.539	334151	0.54	100	99.5	90	110	
Tl	205	1	No Gas	104.547	1.828	2150891	2.10	100	104.5	90	110	
Tl	203	1	No Gas	91.480	0.949	814070	0.77	100	91.5	90	110	
Pb	208	1	No Gas	99.466	0.845	2828782	1.01	100	99.5	90	110	
U	238	1	No Gas	101.237	0.509	2947259	0.79	100	101.2	90	110	
Ca	43	2	He	9734.922	3.163	15733	2.89	10000	97.3	90	110	
Sb	121	2	He	98.217	0.761	507363	0.67	100	98.2	90	110	
Ti	47	2	He	100.035	1.471	16847	0.71	100	100.0	90	110	
Cu	63	1	No Gas	94.558	5.744	1058515	3.87	100	94.6	90	110	
Se	82	1	No Gas	97.048	1.628	13959	0.47	100	97.0	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	750324	2.51	707163	106.10	70	120	
Ge	72	2	He	515685	0.81	503236	102.47	70	120	
Ge	72	1	No Gas	1885692	1.82	1894390	99.54	70	120	
In	115	1	No Gas	2037501	1.05	2095072	97.25	70	120	
Bi	209	1	No Gas	1706174	0.31	1820260	93.73	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	059_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T13:47:26-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	-0.140	-85.1	40965	0.8	0.5	
Be	9	1	No Gas	-0.006	-34.7	13	43.3	0.5	
V	51	2	He	0.002	2950.0	769	26.5	2.5	
Cr	52	2	He	0.099	76.9	2027	20.0	2.5	
Fe	56	2	He	4.206	143.8	29954	100.2	100	
Se	78	2	He	0.440	73.3	281	6.9	2	
As	75	2	He	0.043	86.2	88	32.7	2.5	
Ca	44	2	He	2.125	879.4	967	50.5	100	
Na	23	2	He	257.856	29.3	326639	18.8	100	CCB Main CR1 Failed
Mg	24	2	He	7.917	160.4	3898	147.0	100	
K	39	2	He	22.971	43.2	81115	6.8	100	
Mn	55	2	He	0.207	122.3	987	89.2	2.5	
Co	59	2	He	0.019	192.5	230	128.3	2.5	
Ni	60	2	He	0.011	740.3	233	73.0	2.5	
Cu	63	2	He	0.154	33.6	1693	18.2	2	
Zn	66	2	He	-0.111	-39.2	610	7.1	2.5	
Al	27	2	He	-1.307	-8.8	263	9.6	5	
B	11	1	No Gas	11.107	18.5	18290	12.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.132	-4.7	12212	5.2	5	
Si	28	1	No Gas	-5.787	-6.0	206668	1.0	10	
Ag	107	1	No Gas	0.011	75.4	713	14.7	2.5	
Cd	111	1	No Gas	0.008	30.2	23	24.7	1	
Sr	88	1	No Gas	0.005	427.5	1154	39.9	2.5	
Mo	95	1	No Gas	0.008	27.0	60	16.7	2.5	
Sn	118	1	No Gas	0.058	15.8	1613	3.7	5	
Sb	121	1	No Gas	0.021	47.5	433	24.7	2.5	
Ba	137	1	No Gas	0.001	1623.7	157	24.2	2.5	
Tl	205	1	No Gas	0.007	14.9	193	13.0	1	
Tl	203	1	No Gas	0.006	80.4	77	60.2	1	
Pb	208	1	No Gas	0.003	146.1	687	18.4	2.5	
U	238	1	No Gas	0.002	38.8	80	33.1	2.5	
Ca	43	2	He	8.475	270.3	40	90.1	100	
Sb	121	2	He	0.038	65.9	307	40.8	2.5	
Ti	47	2	He	0.020	298.3	10	100.0	2.5	
Cu	63	1	No Gas	0.185	3.9	3564	2.7	2.5	
Se	82	1	No Gas	-1.581	-264.2	-437	-138.6	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	754533	3.48	707163	106.70	70	120	
Ge	72	2	He	503973	0.57	503236	100.15	70	120	
Ge	72	1	No Gas	1878872	0.45	1894390	99.18	70	120	
In	115	1	No Gas	2061626	1.16	2095072	98.40	70	120	
Bi	209	1	No Gas	1729989	1.24	1820260	95.04	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	070_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T14:33:45-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	99.181	1.398	992177	1.20	100	99.2	90	110	
Be	9	1	No Gas	100.848	2.653	240341	0.58	100	100.8	90	110	
V	51	2	He	100.982	0.944	442699	0.27	100	101.0	90	110	
Cr	52	2	He	96.474	1.306	514945	0.51	100	96.5	90	110	
Fe	56	2	He	10044.644	1.245	49668221	0.48	10000	100.4	90	110	
Se	78	2	He	101.566	2.901	6610	1.58	100	101.6	90	110	
As	75	2	He	101.473	1.262	77838	0.35	100	101.5	90	110	
Ca	44	2	He	9972.599	0.932	260667	1.13	10000	99.7	90	110	
Na	23	2	He	10473.781	1.687	8635071	0.86	10000	104.7	90	110	
Mg	24	2	He	10246.304	1.697	4604740	0.79	10000	102.5	90	110	
K	39	2	He	10031.171	1.434	5705850	0.26	10000	100.3	90	110	
Mn	55	2	He	100.807	1.313	349487	0.67	100	100.8	90	110	
Co	59	2	He	101.463	0.858	806288	0.55	100	101.5	90	110	
Ni	60	2	He	101.233	0.678	212324	0.84	100	101.2	90	110	
Cu	63	2	He	94.890	0.447	568664	0.76	100	94.9	90	110	
Zn	66	2	He	103.677	0.991	107133	0.53	100	103.7	90	110	
Al	27	2	He	103.066	2.791	23614	3.90	100	103.1	90	110	
B	11	1	No Gas	482.524	1.509	616265	1.21	500	96.5	90	110	
Al	27	1	No Gas	102.172	4.476	1242511	3.38	100	102.2	90	110	
Si	28	1	No Gas	509.133	2.242	3020974	0.53	5000	10.2	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	101.343	1.479	1300001	0.68	100	101.3	90	110	
Cd	111	1	No Gas	101.819	1.044	239636	0.65	100	101.8	90	110	
Sr	88	1	No Gas	102.607	1.373	2366720	1.12	100	102.6	90	110	
Mo	95	1	No Gas	98.864	1.300	446759	0.59	100	98.9	90	110	
Sn	118	1	No Gas	100.105	0.473	697860	0.61	100	100.1	90	110	
Sb	121	1	No Gas	89.792	2.450	975616	1.00	100	89.8	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	100.305	1.533	334585	1.64	100	100.3	90	110	
Tl	205	1	No Gas	103.600	0.758	2226264	1.67	100	103.6	90	110	
Tl	203	1	No Gas	91.498	0.188	850482	1.14	100	91.5	90	110	
Pb	208	1	No Gas	98.736	0.719	2932972	1.21	100	98.7	90	110	
U	238	1	No Gas	99.356	0.730	3021029	0.29	100	99.4	90	110	
Ca	43	2	He	9810.164	2.718	15406	3.17	10000	98.1	90	110	
Sb	121	2	He	98.435	1.026	494023	0.21	100	98.4	90	110	
Ti	47	2	He	98.848	3.042	16173	2.27	100	98.8	90	110	
Cu	63	1	No Gas	89.557	1.592	1005935	0.35	100	89.6	90	110	CCV Main CR1-2 Failed
Se	82	1	No Gas	100.176	3.456	14457	3.28	100	100.2	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	744898	2.48	707163	105.34	70	120	
Ge	72	2	He	501040	1.20	503236	99.56	70	120	
Ge	72	1	No Gas	1890948	1.56	1894390	99.82	70	120	
In	115	1	No Gas	2024188	0.81	2095072	96.62	70	120	
Bi	209	1	No Gas	1782100	1.00	1820260	97.90	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	071_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T14:35:43-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	-0.113	-47.6	38845	1.5	0.5	
Be	9	1	No Gas	0.008	99.4	45	40.1	0.5	
V	51	2	He	0.142	16.5	1345	6.2	2.5	
Cr	52	2	He	0.036	39.4	1637	5.0	2.5	
Fe	56	2	He	2.114	30.0	18928	14.9	100	
Se	78	2	He	-0.191	-49.2	233	2.6	2	
As	75	2	He	0.070	39.1	106	20.5	2.5	
Ca	44	2	He	-3.605	-166.3	790	18.3	100	
Na	23	2	He	134.604	4.6	218642	1.1	100	CCB Main CR1 Failed
Mg	24	2	He	2.726	39.6	1503	30.3	100	
K	39	2	He	11.269	18.5	72138	0.9	100	
Mn	55	2	He	0.049	52.1	423	19.1	2.5	
Co	59	2	He	0.009	43.2	143	20.1	2.5	
Ni	60	2	He	-0.024	-154.6	153	49.0	2.5	
Cu	63	2	He	0.122	14.4	1453	6.6	2	
Zn	66	2	He	-0.139	-62.5	563	16.5	2.5	
Al	27	2	He	-1.161	-23.7	287	20.4	5	
B	11	1	No Gas	12.424	17.7	17818	12.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.121	-5.0	11745	6.2	5	
Si	28	1	No Gas	-6.744	-10.3	191661	2.0	10	
Ag	107	1	No Gas	0.007	126.5	653	20.0	2.5	
Cd	111	1	No Gas	0.010	129.2	27	114.6	1	
Sr	88	1	No Gas	0.033	131.5	1800	57.4	2.5	
Mo	95	1	No Gas	0.018	43.0	107	35.5	2.5	
Sn	118	1	No Gas	0.091	21.6	1823	9.1	5	
Sb	121	1	No Gas	0.031	15.7	517	8.7	2.5	
Ba	137	1	No Gas	0.011	153.6	190	32.0	2.5	
Tl	205	1	No Gas	0.017	38.6	413	34.4	1	
Tl	203	1	No Gas	0.014	40.6	153	35.9	1	
Pb	208	1	No Gas	0.020	52.4	1217	26.6	2.5	
U	238	1	No Gas	0.013	65.3	417	64.4	2.5	
Ca	43	2	He	-6.048	-60.8	17	34.6	100	
Sb	121	2	He	0.016	25.6	190	9.1	2.5	
Ti	47	2	He	-0.020	-183.0	3	173.2	2.5	
Cu	63	1	No Gas	0.140	10.1	2910	6.6	2.5	
Se	82	1	No Gas	-1.333	-188.3	-381	-90.2	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	710659	2.71	707163	100.49	70	120	
Ge	72	2	He	488008	1.20	503236	96.97	70	120	
Ge	72	1	No Gas	1787507	1.55	1894390	94.36	70	120	
In	115	1	No Gas	2031627	1.54	2095072	96.97	70	120	
Bi	209	1	No Gas	1791082	0.80	1820260	98.40	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	082_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T15:01:09-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	105.183	3.250	901785	0.67	100	105.2	90	110	
Be	9	1	No Gas	107.495	2.441	220155	0.28	100	107.5	90	110	
V	51	2	He	101.218	0.489	437086	0.62	100	101.2	90	110	
Cr	52	2	He	97.415	0.461	512203	1.31	100	97.4	90	110	
Fe	56	2	He	10045.331	0.346	48931064	1.31	10000	100.5	90	110	
Se	78	2	He	99.324	1.587	6374	2.48	100	99.3	90	110	
As	75	2	He	101.855	0.488	76963	0.63	100	101.9	90	110	
Ca	44	2	He	9797.234	0.792	252253	0.75	10000	98.0	90	110	
Na	23	2	He	10300.859	0.997	8367534	1.03	10000	103.0	90	110	
Mg	24	2	He	10135.693	0.714	4487403	1.75	10000	101.4	90	110	
K	39	2	He	9947.124	1.072	5574063	1.06	10000	99.5	90	110	
Mn	55	2	He	100.788	0.099	344206	1.15	100	100.8	90	110	
Co	59	2	He	102.328	0.524	801021	1.50	100	102.3	90	110	
Ni	60	2	He	101.016	1.228	208687	1.01	100	101.0	90	110	
Cu	63	2	He	96.148	0.221	567557	0.98	100	96.1	90	110	
Zn	66	2	He	104.027	1.057	105888	1.57	100	104.0	90	110	
Al	27	2	He	101.812	1.320	22976	0.20	100	101.8	90	110	
B	11	1	No Gas	523.354	0.618	574272	2.03	500	104.7	90	110	
Al	27	1	No Gas	97.827	2.570	1156431	1.32	100	97.8	90	110	
Si	28	1	No Gas	483.521	2.914	2797515	1.16	5000	9.7	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.609	1.991	1309958	1.59	100	100.6	90	110	
Cd	111	1	No Gas	101.837	1.523	243266	0.90	100	101.8	90	110	
Sr	88	1	No Gas	101.180	1.283	2368782	0.74	100	101.2	90	110	
Mo	95	1	No Gas	97.240	2.271	446009	1.89	100	97.2	90	110	
Sn	118	1	No Gas	99.718	1.125	705591	1.13	100	99.7	90	110	
Sb	121	1	No Gas	93.933	1.739	991179	1.14	100	93.9	90	110	
Ba	137	1	No Gas	101.132	1.532	342385	1.07	100	101.1	90	110	
Tl	205	1	No Gas	104.509	1.222	2355224	0.76	100	104.5	90	110	
Tl	203	1	No Gas	90.878	1.801	885907	1.48	100	90.9	90	110	
Pb	208	1	No Gas	99.251	2.438	3091939	2.01	100	99.3	90	110	
U	238	1	No Gas	100.315	1.179	3199122	0.80	100	100.3	90	110	
Ca	43	2	He	9649.284	3.969	14928	4.78	10000	96.5	90	110	
Sb	121	2	He	100.131	0.451	495024	1.06	100	100.1	90	110	
Ti	47	2	He	94.987	3.828	15312	4.26	100	95.0	90	110	
Cu	63	1	No Gas	90.052	2.112	982167	0.65	100	90.1	90	110	
Se	82	1	No Gas	99.843	2.227	13994	2.93	100	99.8	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	640129	2.49	707163	90.52	70	120	
Ge	72	2	He	493518	1.09	503236	98.07	70	120	
Ge	72	1	No Gas	1836258	1.71	1894390	96.93	70	120	
In	115	1	No Gas	2054567	0.94	2095072	98.07	70	120	
Bi	209	1	No Gas	1869089	0.59	1820260	102.68	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	083_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T15:03:08-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	0.082	73.5	35226	1.5	0.5	
Be	9	1	No Gas	0.013	50.9	48	26.0	0.5	
V	51	2	He	0.020	38.0	804	4.8	2.5	
Cr	52	2	He	0.035	6.9	1590	0.6	2.5	
Fe	56	2	He	1.751	26.8	16768	12.4	100	
Se	78	2	He	-0.530	-118.3	207	17.8	2	
As	75	2	He	0.009	411.0	58	44.8	2.5	
Ca	44	2	He	-5.784	-116.9	717	22.6	100	
Na	23	2	He	90.160	8.1	178882	2.4	100	
Mg	24	2	He	2.091	33.5	1197	24.2	100	
K	39	2	He	11.161	8.1	70295	0.2	100	
Mn	55	2	He	0.081	44.9	517	22.3	2.5	
Co	59	2	He	0.007	64.7	123	26.1	2.5	
Ni	60	2	He	-0.011	-99.8	177	13.1	2.5	
Cu	63	2	He	0.087	18.1	1217	6.7	2	
Zn	66	2	He	-0.018	-387.1	667	10.0	2.5	
Al	27	2	He	-1.427	-13.6	223	18.1	5	
B	11	1	No Gas	15.854	10.7	19098	9.7	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.198	-1.6	11138	2.7	5	
Si	28	1	No Gas	-10.051	-5.4	178757	1.2	10	
Ag	107	1	No Gas	0.005	154.3	630	16.6	2.5	
Cd	111	1	No Gas	0.014	17.0	37	15.7	1	
Sr	88	1	No Gas	0.027	176.0	1665	65.9	2.5	
Mo	95	1	No Gas	0.020	38.2	113	31.0	2.5	
Sn	118	1	No Gas	0.057	40.6	1597	10.1	5	
Sb	121	1	No Gas	0.043	20.4	650	14.8	2.5	
Ba	137	1	No Gas	0.012	119.9	193	24.4	2.5	
Tl	205	1	No Gas	0.017	3.0	437	3.5	1	
Tl	203	1	No Gas	0.013	67.1	143	58.5	1	
Pb	208	1	No Gas	0.024	19.6	1397	10.4	2.5	
U	238	1	No Gas	0.009	6.3	300	5.8	2.5	
Ca	43	2	He	-1.247	-320.0	23	24.7	100	
Sb	121	2	He	0.043	55.1	313	35.0	2.5	
Ti	47	2	He	0.002	1665.0	7	86.6	2.5	
Cu	63	1	No Gas	0.061	23.9	2120	6.7	2.5	
Se	82	1	No Gas	-2.347	-28.6	-535	-17.7	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	616025	0.36	707163	87.11	70	120	
Ge	72	2	He	475900	0.78	503236	94.57	70	120	
Ge	72	1	No Gas	1830311	1.15	1894390	96.62	70	120	
In	115	1	No Gas	2050635	0.51	2095072	97.88	70	120	
Bi	209	1	No Gas	1873987	1.21	1820260	102.95	70	120	

Sample Report

Sample Table

Sample Name	HS22080472-01MSD
Data File Name	084SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T15:05:12-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 182618
ISTD Ref FileName	018CALB.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	26.636	26.636	5.18	260546	0.01	2000	
Be	9	1	No Gas	58.898	58.898	4.03	123178	0.05	2000	
V	51	2	He	55.502	55.502	0.33	247798	0.02	2000	
Cr	52	2	He	52.009	52.009	1.35	283009	0.02	2000	
Fe	56	2	He	5322.135	5322.135	0.36	26768490	0.02	200000	
Se	78	2	He	46.883	46.883	5.14	3242	1.45	2000	
As	75	2	He	56.582	56.582	0.47	44166	0.13	2000	
Ca	44	2	He	22092.463	22092.463	0.81	586111	3.77	200000	
Na	23	2	He	751605.847	751605.847	0.76	621960604	0.12	200000	>LDR
Mg	24	2	He	22587.362	22587.362	0.78	10323489	0.22	200000	
K	39	2	He	7743.465	7743.465	0.49	4495241	0.17	200000	
Mn	55	2	He	124.910	124.910	1.23	440322	0.03	2000	
Co	59	2	He	53.887	53.887	1.18	435516	0.01	2000	
Ni	60	2	He	52.697	52.697	1.73	112498	0.05	2000	
Cu	63	2	He	50.649	50.649	1.27	309036	0.02	2000	
Zn	66	2	He	59.366	59.366	0.95	62698	0.09	2000	
Al	27	2	He	117.754	117.754	0.65	27350	0.43	2000	
B	11	1	No Gas	48.257	48.257	4.03	56388	0.09	2000	
Al	27	1	No Gas	112.639	112.639	2.98	1366659	0.01	2000	
Si	28	1	No Gas	17604.418	17604.418	1.50	96379769	0.02	2000	>LDR
Ag	107	1	No Gas	40.774	40.774	0.72	531676	0.01	2000	
Cd	111	1	No Gas	54.287	54.287	0.92	129800	0.04	2000	
Sr	88	1	No Gas	397.106	397.106	0.46	9302050	0.00	2000	
Mo	95	1	No Gas	53.178	53.178	0.22	244138	0.02	2000	
Sn	118	1	No Gas	0.084	0.084	10.14	1797	0.00	2000	
Sb	121	1	No Gas	49.281	49.281	0.96	535382	0.01	2000	
Ba	137	1	No Gas	446.688	446.688	0.66	1513122	0.03	2000	
Tl	205	1	No Gas	51.796	51.796	0.97	1076191	0.00	2000	
Tl	203	1	No Gas	49.889	49.889	1.30	448349	0.01	2000	
Pb	208	1	No Gas	52.339	52.339	0.80	1503510	0.00	2000	
U	238	1	No Gas	0.027	0.027	23.74	797	0.00	2000	
Ca	43	2	He	22311.878	22311.878	1.36	35593	62.69	200000	
Sb	121	2	He	52.853	52.853	0.93	269812	0.02	2000	
Ti	47	2	He	52.505	52.505	4.25	8740	0.60	2000	
Cu	63	1	No Gas	51.308	51.308	1.05	576740	0.01	2000	
Zn	66	1	No Gas	57.841	57.841	1.27	161438	0.04	2000	
Se	82	1	No Gas	43.774	43.774	2.07	6197	0.71	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	654269	5.26	707163	92.52	70	120	
Ge	72	2	He	509521	0.86	503236	101.25	70	120	
Ge	72	1	No Gas	1890051	1.22	1894390	99.77	70	120	
In	115	1	No Gas	2056233	0.64	2095072	98.15	70	120	
Bi	209	1	No Gas	1723188	1.25	1820260	94.67	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	094_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T15:29:37-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	107.262	6.693	919421	0.19	100	107.3	90	110	
Be	9	1	No Gas	108.809	6.346	222957	0.44	100	108.8	90	110	
V	51	2	He	102.940	0.617	448248	0.81	100	102.9	90	110	
Cr	52	2	He	97.878	1.002	518915	0.50	100	97.9	90	110	
Fe	56	2	He	10199.329	0.149	50096448	0.65	10000	102.0	90	110	
Se	78	2	He	101.045	1.554	6534	1.97	100	101.0	90	110	
As	75	2	He	102.283	0.308	77936	0.49	100	102.3	90	110	
Ca	44	2	He	10018.260	0.672	260088	0.28	10000	100.2	90	110	
Na	23	2	He	10740.563	0.419	8793072	0.18	10000	107.4	90	110	
Mg	24	2	He	10389.657	0.825	4638098	0.88	10000	103.9	90	110	
K	39	2	He	10183.845	0.765	5753203	1.15	10000	101.8	90	110	
Mn	55	2	He	101.739	0.331	350359	0.61	100	101.7	90	110	
Co	59	2	He	102.945	0.772	812576	0.94	100	102.9	90	110	
Ni	60	2	He	102.089	0.443	212678	0.70	100	102.1	90	110	
Cu	63	2	He	96.487	0.344	574319	0.22	100	96.5	90	110	
Zn	66	2	He	104.880	1.061	107640	0.79	100	104.9	90	110	
Al	27	2	He	103.247	3.039	23487	2.48	100	103.2	90	110	
B	11	1	No Gas	536.018	7.997	587802	1.43	500	107.2	90	110	
Al	27	1	No Gas	101.719	1.415	1192244	0.93	100	101.7	90	110	
Si	28	1	No Gas	503.174	1.196	2879644	0.18	5000	10.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	102.685	1.097	1319763	1.36	100	102.7	90	110	
Cd	111	1	No Gas	100.404	0.778	236748	0.52	100	100.4	90	110	
Sr	88	1	No Gas	103.264	1.190	2386317	0.97	100	103.3	90	110	
Mo	95	1	No Gas	97.287	0.572	440468	0.32	100	97.3	90	110	
Sn	118	1	No Gas	98.206	0.736	685907	0.48	100	98.2	90	110	
Sb	121	1	No Gas	92.464	0.793	968142	0.55	100	92.5	90	110	
Ba	137	1	No Gas	99.007	0.837	330865	0.59	100	99.0	90	110	
Tl	205	1	No Gas	104.276	3.297	2209878	1.88	100	104.3	90	110	
Tl	203	1	No Gas	92.734	1.806	850233	0.71	100	92.7	90	110	
Pb	208	1	No Gas	101.151	1.354	2964009	1.07	100	101.2	90	110	
U	238	1	No Gas	100.718	0.838	3021496	1.91	100	100.7	90	110	
Ca	43	2	He	9717.006	0.893	15155	0.67	10000	97.2	90	110	
Sb	121	2	He	99.497	0.380	496004	0.20	100	99.5	90	110	
Ti	47	2	He	101.171	1.238	16443	0.92	100	101.2	90	110	
Cu	63	1	No Gas	90.437	0.673	978826	0.81	100	90.4	90	110	
Se	82	1	No Gas	103.725	4.706	14432	4.93	100	103.7	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	641922	6.40	707163	90.77	70	120	
Ge	72	2	He	497648	0.50	503236	98.89	70	120	
Ge	72	1	No Gas	1821860	0.99	1894390	96.17	70	120	
In	115	1	No Gas	2027917	0.26	2095072	96.79	70	120	
Bi	209	1	No Gas	1758288	2.16	1820260	96.60	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	095_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T15:31:37-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	67.4	35567	1.0	0.5	
Be	9	1	No Gas	-0.003	-88.1	17	34.6	0.5	
V	51	2	He	0.228	8.1	1672	4.3	2.5	
Cr	52	2	He	0.009	87.7	1463	3.1	2.5	
Fe	56	2	He	1.026	8.4	13403	3.2	100	
Se	78	2	He	-0.214	-101.8	227	5.7	2	
As	75	2	He	0.034	83.9	77	27.2	2.5	
Ca	44	2	He	-8.034	-28.2	663	8.6	100	
Na	23	2	He	193.973	0.8	259699	0.2	100	CCB Main CR1 Failed
Mg	24	2	He	1.232	17.6	833	10.9	100	
K	39	2	He	21.641	7.8	76059	1.0	100	
Mn	55	2	He	0.048	43.6	410	17.1	2.5	
Co	59	2	He	0.001	521.1	77	27.2	2.5	
Ni	60	2	He	-0.035	-77.2	130	40.7	2.5	
Cu	63	2	He	0.070	10.8	1123	3.7	2	
Zn	66	2	He	-0.071	-117.5	617	13.5	2.5	
Al	27	2	He	-1.304	-9.3	250	10.6	5	
B	11	1	No Gas	29.062	6.5	32915	6.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.174	-3.8	11148	5.0	5	
Si	28	1	No Gas	-9.856	-5.4	175703	2.2	10	
Ag	107	1	No Gas	-0.002	-220.3	533	10.3	2.5	
Cd	111	1	No Gas	0.003	1.3	10	0.0	1	
Sr	88	1	No Gas	-0.010	-26.8	803	8.3	2.5	
Mo	95	1	No Gas	0.012	22.2	77	15.1	2.5	
Sn	118	1	No Gas	0.075	67.6	1710	20.9	5	
Sb	121	1	No Gas	0.024	49.3	443	28.2	2.5	
Ba	137	1	No Gas	-0.012	-73.8	113	25.5	2.5	
Tl	205	1	No Gas	0.010	30.1	270	25.7	1	
Tl	203	1	No Gas	0.006	43.8	80	33.1	1	
Pb	208	1	No Gas	0.006	34.9	800	8.2	2.5	
U	238	1	No Gas	0.006	38.9	190	36.8	2.5	
Ca	43	2	He	5.428	257.6	33	62.4	100	
Sb	121	2	He	0.010	20.8	160	6.3	2.5	
Ti	47	2	He	-0.019	-192.4	3	173.2	2.5	
Cu	63	1	No Gas	0.073	14.3	2200	5.0	2.5	
Se	82	1	No Gas	-0.505	-289.1	-267	-75.2	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	614824	1.03	707163	86.94	70	120	
Ge	72	2	He	476947	0.36	503236	94.78	70	120	
Ge	72	1	No Gas	1788440	0.63	1894390	94.41	70	120	
In	115	1	No Gas	2031398	0.87	2095072	96.96	70	120	
Bi	209	1	No Gas	1800637	0.35	1820260	98.92	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	104_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T16:17:29-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	101.527	1.660	928102	0.65	100	101.5	90	110	
Be	9	1	No Gas	102.296	2.486	223014	0.41	100	102.3	90	110	
V	51	2	He	102.187	0.197	415941	0.56	100	102.2	90	110	
Cr	52	2	He	97.682	0.954	484089	0.59	100	97.7	90	110	
Fe	56	2	He	10267.988	0.393	47143306	0.90	10000	102.7	90	110	
Se	78	2	He	99.411	2.373	6013	2.33	100	99.4	90	110	
As	75	2	He	100.372	0.238	71492	0.97	100	100.4	90	110	
Ca	44	2	He	9968.101	1.116	241901	0.69	10000	99.7	90	110	
Na	23	2	He	10644.223	1.066	8146692	1.19	10000	106.4	90	110	
Mg	24	2	He	10475.288	0.836	4371110	0.41	10000	104.8	90	110	
K	39	2	He	10153.494	1.145	5362000	1.47	10000	101.5	90	110	
Mn	55	2	He	101.485	0.483	326677	0.27	100	101.5	90	110	
Co	59	2	He	103.149	0.213	761061	0.52	100	103.1	90	110	
Ni	60	2	He	101.579	0.289	197810	0.64	100	101.6	90	110	
Cu	63	2	He	96.151	0.917	534979	0.71	100	96.2	90	110	
Zn	66	2	He	103.366	1.037	99174	0.78	100	103.4	90	110	
Al	27	2	He	103.704	3.612	22048	2.80	100	103.7	90	110	
B	11	1	No Gas	488.847	0.508	571152	1.81	500	97.8	90	110	
Al	27	1	No Gas	103.153	3.113	1170344	2.04	100	103.2	90	110	
Si	28	1	No Gas	500.967	3.453	2776929	2.02	5000	10.0	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.147	1.738	1238613	0.66	100	100.1	90	110	
Cd	111	1	No Gas	100.784	0.670	228728	1.72	100	100.8	90	110	
Sr	88	1	No Gas	101.669	0.923	2261116	0.61	100	101.7	90	110	
Mo	95	1	No Gas	97.057	0.948	422891	0.15	100	97.1	90	110	
Sn	118	1	No Gas	98.699	0.687	663421	0.43	100	98.7	90	110	
Sb	121	1	No Gas	92.173	2.077	934514	1.21	100	92.2	90	110	
Ba	137	1	No Gas	99.967	0.670	321519	1.03	100	100.0	90	110	
Tl	205	1	No Gas	103.714	0.874	2219572	0.41	100	103.7	90	110	
Tl	203	1	No Gas	90.015	0.878	833343	1.45	100	90.0	90	110	
Pb	208	1	No Gas	98.661	1.063	2918839	0.76	100	98.7	90	110	
U	238	1	No Gas	101.849	0.978	3084403	0.42	100	101.8	90	110	
Ca	43	2	He	9646.817	4.261	14064	4.14	10000	96.5	90	110	
Sb	121	2	He	100.097	0.734	466433	0.24	100	100.1	90	110	
Ti	47	2	He	101.926	0.647	15486	0.76	100	101.9	90	110	
Cu	63	1	No Gas	88.303	1.654	925486	0.76	100	88.3	90	110	CCV Main CR1-2 Failed
Se	82	1	No Gas	99.400	4.173	13386	4.66	100	99.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	681370	2.24	707163	96.35	70	120	
Ge	72	2	He	465182	0.74	503236	92.44	70	120	
Ge	72	1	No Gas	1764310	1.23	1894390	93.13	70	120	
In	115	1	No Gas	1951723	1.09	2095072	93.16	70	120	
Bi	209	1	No Gas	1774924	0.71	1820260	97.51	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	105_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq Date Time	2022-08-23T16:19:38-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.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	-0.007	-1875.2	36350	1.1	0.5	
Be	9	1	No Gas	-0.001	-823.7	22	96.1	0.5	
V	51	2	He	0.202	8.8	1507	3.9	2.5	
Cr	52	2	He	0.051	39.6	1613	5.2	2.5	
Fe	56	2	He	0.629	13.7	11105	3.0	100	
Se	78	2	He	-0.303	-121.2	213	11.0	2	
As	75	2	He	0.065	30.3	96	14.5	2.5	
Ca	44	2	He	-12.843	-31.8	523	17.8	100	
Na	23	2	He	98.808	4.1	179117	0.6	100	
Mg	24	2	He	0.108	133.7	340	18.4	100	
K	39	2	He	16.220	20.3	70460	2.6	100	
Mn	55	2	He	0.052	27.3	407	9.9	2.5	
Co	59	2	He	0.000	12847.9	70	49.5	2.5	
Ni	60	2	He	-0.051	-15.6	93	16.4	2.5	
Cu	63	2	He	0.059	51.3	1023	15.9	2	
Zn	66	2	He	-0.089	-37.3	577	6.6	2.5	
Al	27	2	He	-1.357	-2.7	230	4.3	5	
B	11	1	No Gas	15.680	16.8	19856	11.4	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.138	-2.7	11388	3.5	5	
Si	28	1	No Gas	-11.982	-3.0	162329	1.3	10	
Ag	107	1	No Gas	0.005	161.5	607	15.7	2.5	
Cd	111	1	No Gas	-0.001	0.0	0	#DIV/0!	1	
Sr	88	1	No Gas	-0.007	-62.6	857	11.5	2.5	
Mo	95	1	No Gas	0.008	1.1	60	0.0	2.5	
Sn	118	1	No Gas	0.086	47.5	1763	15.8	5	
Sb	121	1	No Gas	0.031	29.3	510	18.9	2.5	
Ba	137	1	No Gas	0.006	87.4	170	10.2	2.5	
Tl	205	1	No Gas	0.011	12.2	280	9.4	1	
Tl	203	1	No Gas	0.007	22.4	83	18.3	1	
Pb	208	1	No Gas	0.009	59.0	893	16.6	2.5	
U	238	1	No Gas	0.005	40.6	177	37.7	2.5	
Ca	43	2	He	-5.279	-275.4	17	124.9	100	
Sb	121	2	He	0.018	23.1	190	9.1	2.5	
Ti	47	2	He	0.026	2.8	10	0.0	2.5	
Cu	63	1	No Gas	0.040	16.2	1827	4.1	2.5	
Se	82	1	No Gas	-2.976	-61.7	-602	-42.3	2	

QC ISTD Table

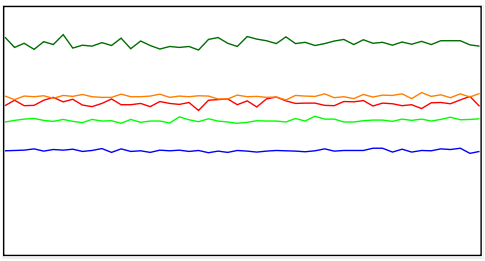
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	649090	3.85	707163	91.79	70	120	
Ge	72	2	He	459350	1.12	503236	91.28	70	120	
Ge	72	1	No Gas	1762623	0.58	1894390	93.04	70	120	
In	115	1	No Gas	2002956	0.67	2095072	95.60	70	120	
Bi	209	1	No Gas	1811829	1.38	1820260	99.54	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\082322A.b
Acq. Date-Time	08/23/2022 10:50:19
Report Comment	---
Instrument Name	G8422A SG22121190

[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	3068	30680.77		
24	20000	10854	108537.73		
59	50000	21015	210150.68		
115	50000	32026	320261.73		
208	20000	17125	171254.68		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.007	5.000	
24	1.198	5.000	
59	1.183	5.000	
115	1.013	5.000	
208	1.716	5.000	

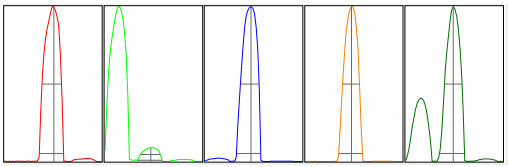
Mass	Background	Background (Required)	Background (Flag)
9	1.600		
24	0.700		
59	0.300		
115	2.400		
208	3.200		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.423 %
Doubly Charged	70 / 140 0.831 %

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	3122.06	9.05	8.90 - 9.10	
24	10743.43	23.95	23.90 - 24.10	
59	21270.33	58.95	58.90 - 59.10	
115	32162.70	114.95	114.90 - 115.10	
208	16980.99	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.59	0.740		
24	0.60	0.738		
59	0.57	0.740		
115	0.52	0.728		
208	0.54	0.765		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.85 L/min	Dilution Gas	0.20 L/min
RF Power	1550 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	10.6 V	Deflect	13.8 V
Extract 2	-200.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-75 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	123	Axis Gain	0.9994	QP Bias	-3.0 V
Mass Offset	126	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.3 mm

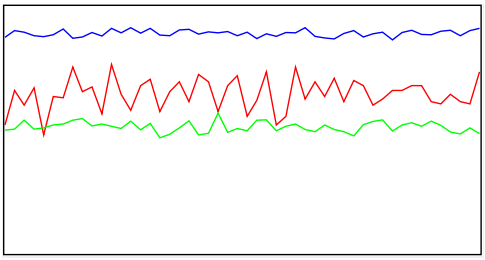
EM

Discriminator	4.4 mV	Analog HV	2112 V	Pulse HV	1056 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	129	1291.26		
24	1000	512	5120.34		
59	10000	8917	89167.46		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

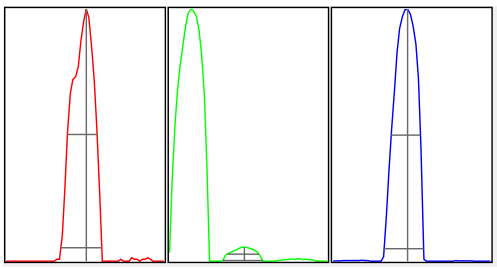
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	9.933	5.000	Fail
24	4.166	5.000	
59	1.442	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.100		
24	0.100		
59	0.000		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.262 %
Doubly Charged	70 / 140 0.938 %

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.24
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	137.76	9.05	8.90 - 9.10	
24	537.62	23.95	23.90 - 24.10	
59	9047.88	58.95	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.56	0.765		
24	0.59	0.742		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.55	0.736		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.85 L/min	Dilution Gas	0.20 L/min
RF Power	1550 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	9.5 V	Deflect	0.4 V
Extract 2	-200.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-85 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	4.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9994	QP Bias	-15.0 V
Mass Offset	126	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.3 mm

EM

Discriminator	4.4 mV	Analog HV	2112 V	Pulse HV	1056 V

HS22080522 ALS Kelso Report K2210064

ALS WO# HS22080522

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

September 02, 2022 **Analytical Report for Service Request No:** K2210064

Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

RE: HS22080522

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory September 01, 2022
For your reference, these analyses have been assigned our service request number **K2210064.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3260. You may also contact me via email at Luke.Rahn@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Luke Rahn
Project Manager

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

Table of Contents

Acronyms
Qualifiers
State Certifications, Accreditations, And Licenses
Case Narrative
Chain of Custody
Metals
Raw Data
    Metals

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
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.
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.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

1317 South 13th Ave, Kelso, WA 98626 | 1-360-577-7222 | www.alsglobal.com

Client: ALS Environmental - US
Project: HS22080522
Sample Matrix: Water

Service Request: K2210064
Date Received: 09/01/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Five water samples were received for analysis at ALS Environmental on 09/01/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by _____ Date 09/02/2022

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

K2210064

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: **Texas** **COC ID:** **19667**

SUBCONTRACT TO:

ALS Environmental Kelso
1317 S. 13th Avenue
Kelso, WA 98626

Phone: +1 360 501 3312

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	Dane J. Wacasey
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	Dane.Wacasey@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:	HS22080522
TSR:	Houston House Acct

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS22080522-03**	**18CPTMW01DW_080822**	**Water**	**08 Aug 2022 08:05**
	Mercury by 7470, DOD samples			24 Aug 2022
2.	**HS22080522-04**	**18CPTMW01SW_080822**	**Water**	**08 Aug 2022 08:50**
	Mercury by 7470, DOD samples			24 Aug 2022
3.	**HS22080522-06**	**17WW08_080822**	**Water**	**08 Aug 2022 10:20**
	Mercury by 7470, DOD samples			24 Aug 2022
4.	**HS22080522-07**	**17WW08_080822_a**	**Water**	**08 Aug 2022 10:20**
	Mercury by 7470, DOD samples			24 Aug 2022
5.	**HS22080522-11**	**18WW24_080822**	**Water**	**08 Aug 2022 13:20**
	Mercury by 7470, DOD samples			24 Aug 2022

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: **Texas**

COC ID: **19667**

Relinquished By: _____ Date/Time: AUG 2 3 2022 8.0

Received By: _____ Date/Time: 9/1/22 1010

Cooler ID(s): _____ Temperature(s): _____

PM LR

Cooler Receipt and Preservation Form

Client ALS Houston Service Request K22 100644

Received: 9/1/22 Opened: 9/1/22 By: ZH Unloaded: 9/1/22 By: ZH

1. Samples were received via? *USPS* (*Fed Ex*) *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? 1 front
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified if out of temp	Tracking Number NA	Filed
	21.4	IR2	19647			578949974353	

4. Was a Temperature Blank present in cooler? NA Y (N) If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA Y (N)
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA (Y) N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* *Baggies* (*Bubble Wrap*) *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
8. Were samples received in good condition (unbroken) NA (Y) N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA (Y) N
10. Did all sample labels and tags agree with custody papers? NA (Y) N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA (Y) N
13. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
14. Was C12/Res negative? (NA) Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? (NA) Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

RUSH

Notes, Discrepancies, Resolutions: Temp not an issue, samples for metals analysis.

1/13/22 *Page ____ of ____*

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	K2210064
Project:	HS22080522	**Date Collected:**	08/08/22 08:05
Sample Matrix:	Water	**Date Received:**	09/01/22 10:10
Sample Name:	18CPTMW01DW_080822	**Basis:**	NA
Lab Code:	K2210064-001		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Mercury	7470A	ND U	ug/L	0.20	0.05	0.02	1	09/02/22 17:11	09/02/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	K2210064
Project:	HS22080522	**Date Collected:**	08/08/22 08:50
Sample Matrix:	Water	**Date Received:**	09/01/22 10:10
Sample Name:	18CPTMW01SW_080822	**Basis:**	NA
Lab Code:	K2210064-002		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Mercury	7470A	ND U	ug/L	0.20	0.05	0.02	1	09/02/22 17:12	09/02/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	K2210064
Project:	HS22080522	**Date Collected:**	08/08/22 10:20
Sample Matrix:	Water	**Date Received:**	09/01/22 10:10
Sample Name:	17WW08_080822	**Basis:**	NA
Lab Code:	K2210064-003		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Mercury	7470A	ND U	ug/L	0.20	0.05	0.02	1	09/02/22 17:14	09/02/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	K2210064
Project:	HS22080522	**Date Collected:**	08/08/22 10:20
Sample Matrix:	Water	**Date Received:**	09/01/22 10:10
Sample Name:	17WW08_080822_a	**Basis:**	NA
Lab Code:	K2210064-004		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Mercury	7470A	ND U	ug/L	0.20	0.05	0.02	1	09/02/22 17:16	09/02/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	K2210064
Project:	HS22080522	**Date Collected:**	08/08/22 13:20
Sample Matrix:	Water	**Date Received:**	09/01/22 10:10
Sample Name:	18WW24_080822	**Basis:**	NA
Lab Code:	K2210064-005		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Mercury	7470A	ND U	ug/L	0.20	0.05	0.02	1	09/02/22 17:17	09/02/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	K2210064
Project:	HS22080522	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2214966-03		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Mercury	7470A	ND U	ug/L	0.20	0.05	0.02	1	09/02/22 16:32	09/02/22	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22080522
Sample Matrix: Water

Service Request: K2210064
Date Analyzed: 09/02/22

Lab Control Sample Summary
Total Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2214966-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Mercury	7470A	4.73	5.00	95	82-119

ALS Group USA, Corp.
dba ALS Environmental

Prep Summary Report

Client: ALS Environmental - US **Service Request:** K2210064
Project: HS22080522
Sample Matrix: Water

Metals

Extraction Lot: 405793
Analytical Method: 7470A **Extraction Date:** 09/02/22 13:45

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
18CPTMW01DW_080822	K2210064-001	8/8/22	9/1/22	10.0000 mL	10 mL	
18CPTMW01SW_080822	K2210064-002	8/8/22	9/1/22	10.0000 mL	10 mL	
17WW08_080822	K2210064-003	8/8/22	9/1/22	10.0000 mL	10 mL	
17WW08_080822_a	K2210064-004	8/8/22	9/1/22	10.0000 mL	10 mL	
18WW24_080822	K2210064-005	8/8/22	9/1/22	10.0000 mL	10 mL	
Method Blank	KQ2214966-03MB	NA	NA	10.0000 mL	10 mL	
Lab Control Sample	KQ2214966-04LCS	NA	NA	10.0000 mL	10 mL	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US **Service Request:** K2210064
Project: HS22080522

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID / Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
ICV 09/02/22 16:24						
Mercury	7470A	776342	4.88	5.00	98	90-110
CCV 09/02/22 16:29						
Mercury	7470A	776342	4.99	5.00	100	90-110
CCV 09/02/22 16:48						
Mercury	7470A	776342	4.94	5.00	99	90-110
CCV 09/02/22 17:08						
Mercury	7470A	776342	4.92	5.00	98	90-110
CCV 09/02/22 17:19						
Mercury	7470A	776342	4.91	5.00	98	90-110